

DETAILED REPORT
of
INSTRUMENT DESIGN DEVELOPMENT CENTRE

Prepared for
INTERNAL REVIEW COMMITTEE
of
IIT DELHI



21 – 22 February, 2014

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**DETAILED REPORT OF
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PREPARED FOR INTERNAL REVIEW COMMITTEE OF IITD**

1. Curriculum

1.1 List of degree programmes offered - UG + PG - and enrolment.

IDDC has only PG programmes, and offers 2 Masters Programs, and Doctoral thesis guidance, namely:

- i. MTech in Instrumentation Technology, which is interdisciplinary incorporating key disciplines of electronics, optical and mechanical instrumentation.
- ii. MDes which a Master's programme in Industrial Design.
- iii. Ph.D. programmes are offered in the fields of Electronics, Optics, Mechanical, Instrumentation and Industrial Design.

Enrolment

On average, there are 15 students being admitted in MTech Instrumentation programme each year. On average 17 students each year for Master Programme in Industrial Design. There are about 27 students enrolled for doctoral programme currently.

Following bar graph depicts the number of students enrolled each year in the two programs.

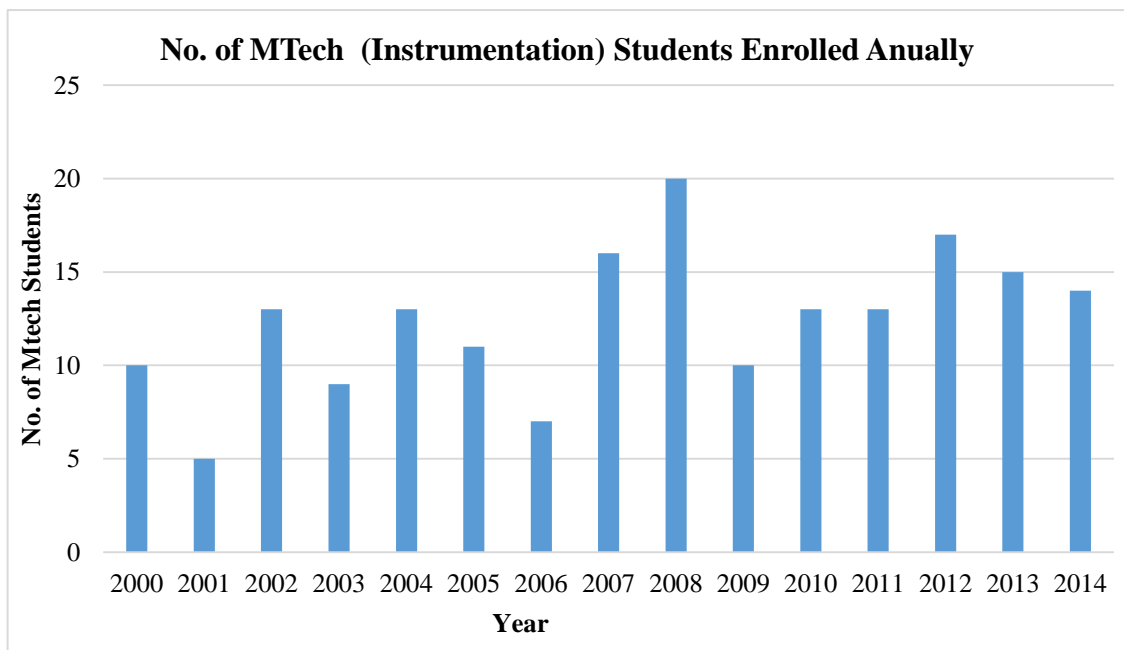


Figure 1 : No of MTech (Instrumentation) Students Enrolled Anually

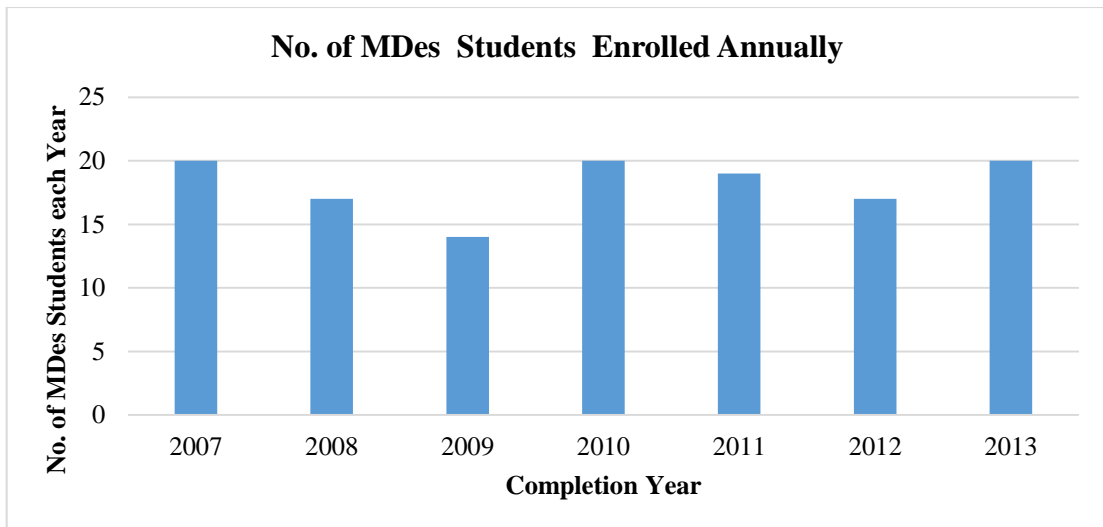


Figure 2 : No of students enrolled into MDes Programme Annually

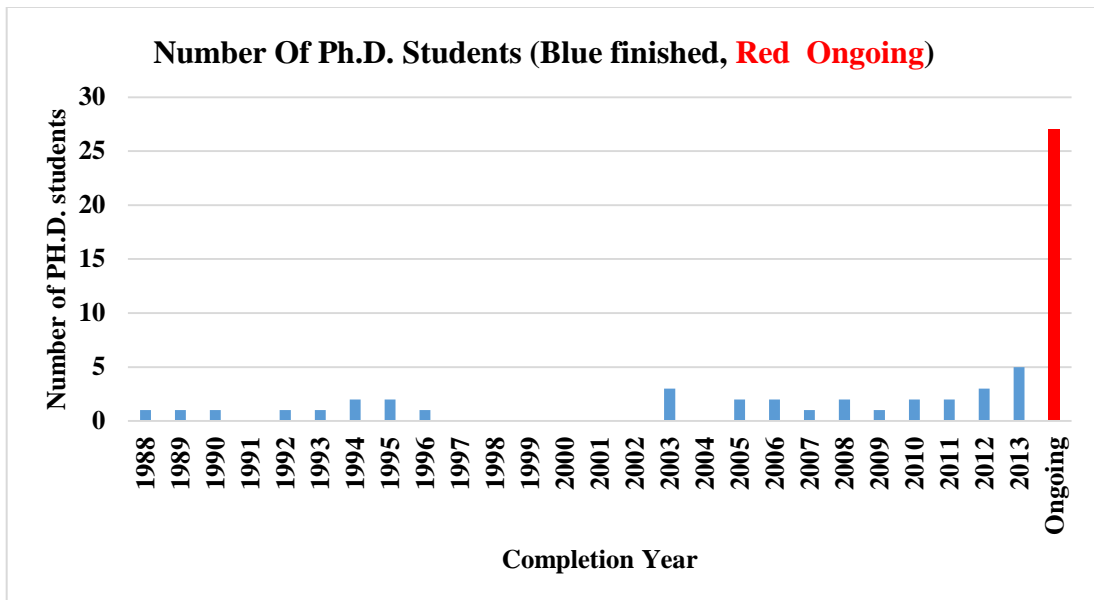


Figure 3 : Number of Ph.D. students

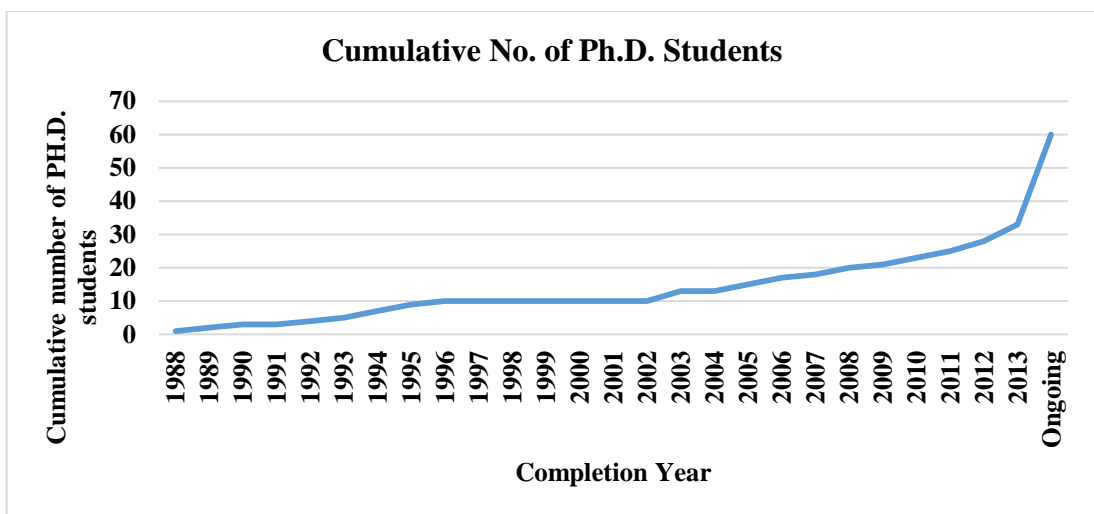


Figure 4 : Cumulative Number of Ph.D. students enrolled

From data shown in figure 3 and 4, the number of students enrolled in to PH.D. programmes has increased over the past 5 years.

1.2 Consistency of curricula with academic vision of the department.

Early 90's saw emergence of two full-fledged Masters Programs, first in Industrial Design and the second in Instrumentation Technology. These were among the first of teaching programs to be run in Centres at IIT. Over two decades both programs have grown to be very sought after. The programs are truly interdisciplinary (Appendix 19 - Syllabi): thus Masters in Design has intake from varied branches like architecture, fine art, mechanical engineering, while Masters in Instrumentation had intake from electronics, optics, mechanical, etc (Appendix 18). Specialised courses were developed to cater inputs from varied disciplines, and faculty from numerous departments at IIT contribute to these programs (Appendix 19). Over past two decades, the faculty and student manpower helped deliver numerous technology transfers (Appendix 6(a) – TOT & Appendix 8- Students Awards), and established their presence in top industries (Appendix 20 - Recruiters). The teaching, design and research skill growth in faculty has led to numerous faculty of IDDC being invited for state of art lectures, and being part of prominent technical advisory committees in national and international forums (Appendix 10 – Faculty Awards). The centre also has offered through Continuing Education Programme 168 short courses to industry personnel and faculty of other colleges (Appendix 15, 16 & 17).

1.3 Quality of programmes:

a) Periodicity of curriculum review UG and PG (relevant documents).

Each of the Master's Program is reviewed approximately every 10 years.

b) Mechanism for review at UG and PG level (relevant documents).

Industry experts and faculty from other institutions are invited to modify the curriculum

c) Coursework for each UG, PG and Ph.D. programme - Core / Elective.

Refer to Appendix 19 for syllabus of MTech, MDes and Ph.D..

d) Pre Ph.D. courses offered (in last 5yrš).

All the core courses of MTech & MDes programmes as listed in the Appendix 19 are also the pre Ph.D. courses. Students can also take courses in EE, Physics, Maths, and Mechanical as Pre-Ph.D. Courses.

e) New advances Masters I Pre-Ph.D. courses introduced in last 5 yrs.

Refer to Appendix 19 - New courses developed.

f) Overlap between courses (c) and (d) & (e), including opening latter to UG.

Being interdisciplinary some overlap to the extent of 20 % is there. However, open electives are directly taken from EE, Mechanical, Physics, & Maths.

g) Seminar series (weekly/regular) held each semester (provide /is).

Seminars consist of presentations by students in their independent study courses, mini and major project mid-semester presentations, and presentations by Ph.D. students per semesters. Besides lectures given by visiting industry / academic.

There are in total 30 seminars organised for MTech projects, 40 for MDes students, and about 12 for Ph.D. students, in each semester.

h) Placement details (as per format at Annexure- 1).

The following table contains the placement details of the shows 100% recruitment.

Prog. Type	Prog. Name	No. of graduating students	No. of Core companies that asked for program by name	No. of students selected ON-Campus	No. of non-core companies that recruited the students	No. of students in non-core companies	No. of students placed OUT of CAMPUS on Own	% Recruitment
MTech 08 - 12	Instrument Technology	60*	10*	16*	17*	21*	23*	100
MDes 2011	Industrial Design	14**	2**	2**	5**	12**	0**	100

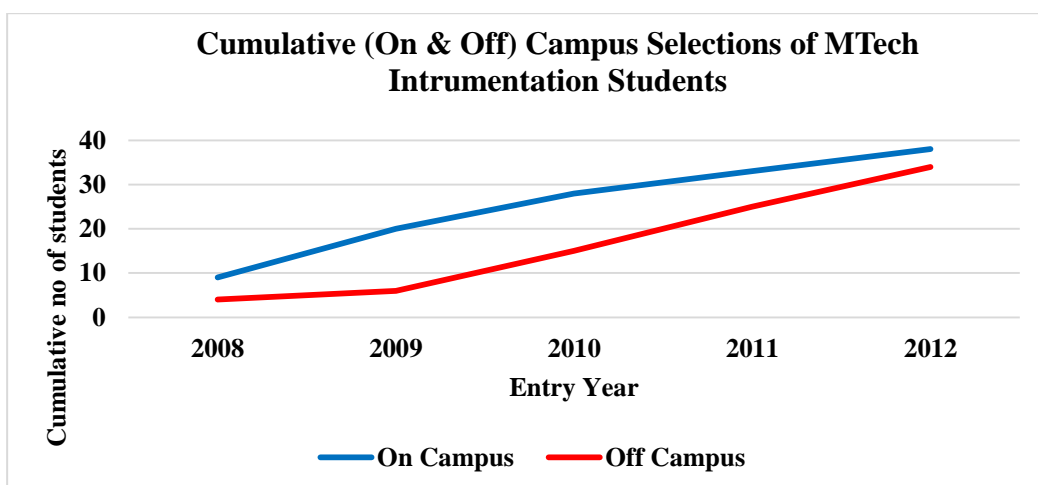
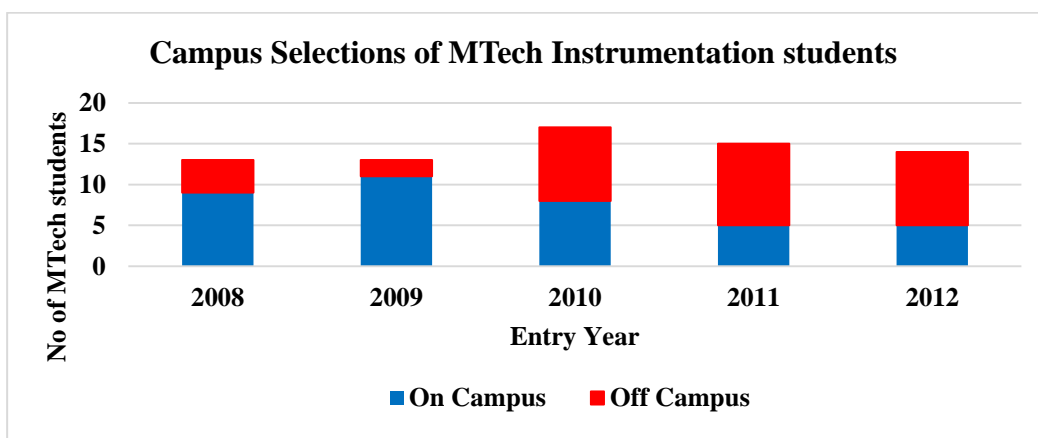
Table 1 On- Campus Placement Details of IDDC as supplied by Training Placement Cell

*The placements details given for MTech students is of years 2008 to 2012 batch.

** The placements details given for MDes. Students is of year 2011 batch.

List of Recruiters is as per Appendix 20 for IDDC.

The following graphs depicts the campus selection data of MTech Instrumentation Technology students of past 5 years. It can be seen that in view of the multi-disciplinary nature of the programme no. of students get placed of their own merit and effort in out of campus selections. However, the recruitment is 100%.



i) Relevance of UG and programmes to recruiters, potential and on-campus recruiters (as per format at Annexure-2).

Not Applicable as IDDC has no UG students

j) Benchmarking of curriculum (as per format at Annexure-3).

The curriculum is prepared and revised with help of industry experts and senior faculty in respective specializations. The student of IDDC are placed in top companies and some have received appointments in Japan, Singapore, Germany both in R&D and Core Engineering fields.

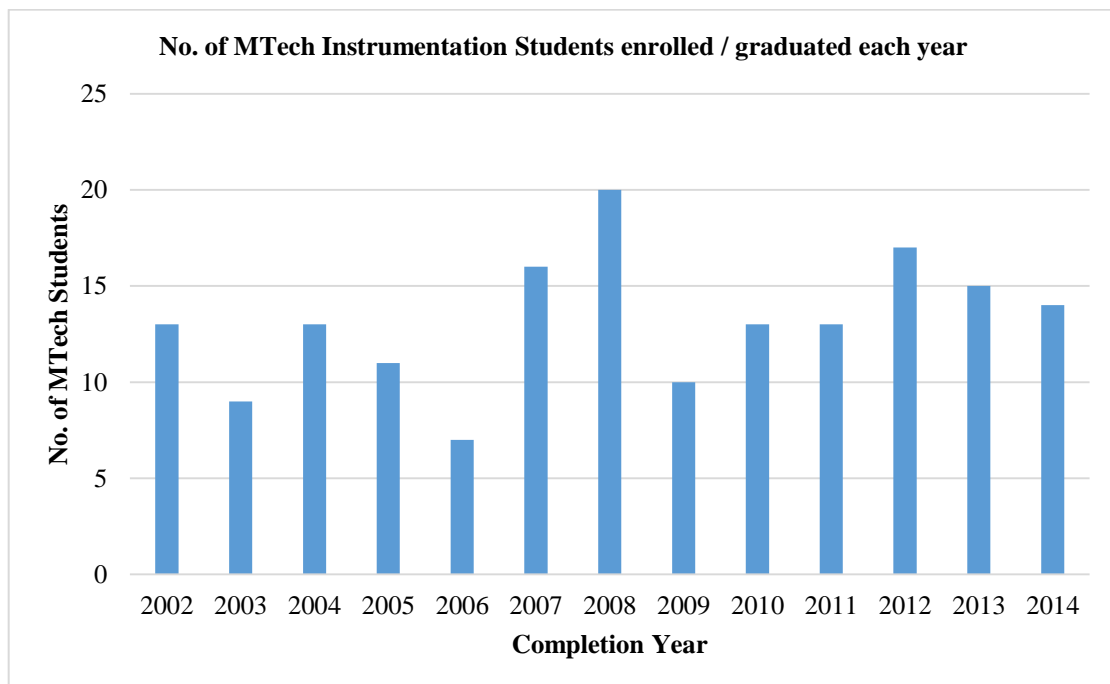
2. Teaching environment

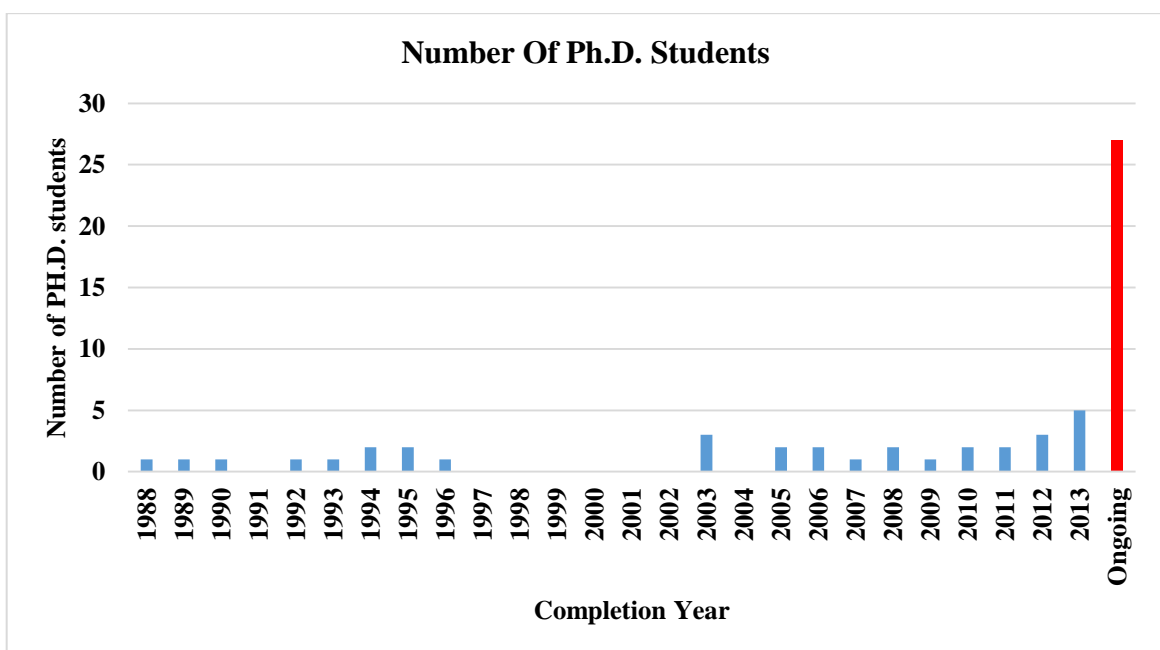
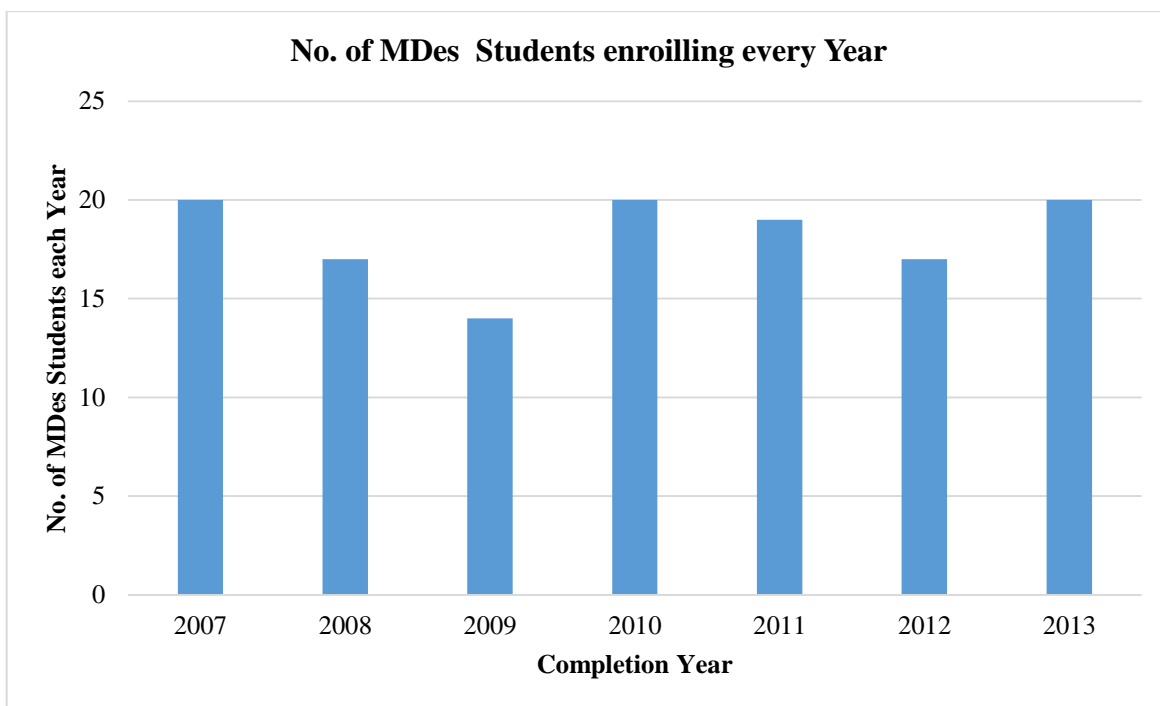
2.1 Student-Teacher ratio separately and total for UG, PG, Ph.D. (based on gross numbers and on class size basis)

There are 34 MTech students in each batch pursuing their degree under 6 faculty members. Similarly there are 34 MDes students under the guidance of 3 faculty members. A total of 27 Ph.D. students are pursuing their research under the guidance of 9 faculty members within IDDC itself. (Students are also taking courses and doing projects in EE, Mechanical, Physics, Maths departments). Faculty : Student → 1:6 & 1:12

2.2 No. of students graduated in each programme, incl. Ph.D., (data for 5yrs)

The following graphs shows the number of students graduated with MTech, MDes and Ph.D. degree from the IDDC on average around 15 students in Masters in Instrument Technology and 17 of Masters in Industrial Design and about 3 Ph.D. students per year graduate from the Centre. This has to be viewed with the faculty strength being only 10.





2.3 Student-T.A, (or student-hours/T.A.) ratio

MDes and MTech – 8hrs / week per TA
 Ph.D. – 40 hrs. / week per student

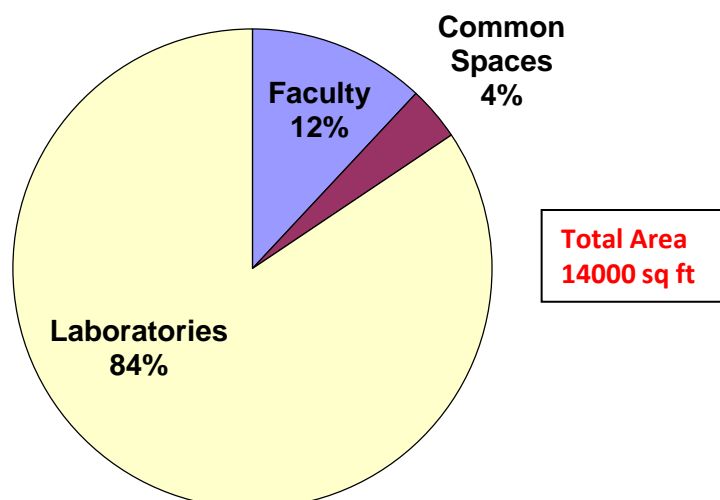
2.4 No. of skilled technical staff

SEVEN

2.5 Gross laboratory space; break-up of lab space for core UG /PG teaching

The space for the PG teaching and research labs is as below. It can be seen from the pie-chart that 84% of the space of centre is for PG teaching and Research. This works out to be about 1000 sq. ft. per faculty and about 15 sq. ft. per PG and PH.D. student.

LABORATORIES	L (ft)	B (ft)	Area (sq. ft)	Programme
Apple Mac Studio	20.7	9.4	194.58	MDes, PH.D.
Computer Lab.	27.5	12.8	352	MTech, PH.D.
Design Research Studio	21.5	19.8	425.7	MDes, PH.D.
Electronics	38.5	25.5	981.75	MTech, PH.D.
Holography	19.7	18.9	372.33	PH.D.
Industrial Design Clinic	40	35	1400	MDes, PH.D.
M D I T			3135	MTech, PH.D.
M. Des Workshop	20	17.8	356	MDes, PH.D.
NMR	28.6	33.3	952.38	MTech, PH.D.
Optics	61.8	39.6	2447.28	MTech, PH.D.
Photo Mechanical Engg.	34	20.8	707.2	MTech, PH.D.
Project / Electro-Mech Lab.	41	24	984	MTech, PH.D.
Ultrasonic Instrumentation	41	20.5	840.5	MTech, PH.D.
Samsung Lab	32.6	23	749.8	MDes, PH.D.
TOTAL Laboratories Area			13898.52	



2.6 Modernisation – UG / PG core / elective teaching laboratories in last 5 years

The table of funds released between 2008 – 2013 is given below.

- i. Non plan:- On average non planned funds that are available are 12 lacs per year which works out to be 1.2 lacs per faculty about Rs. 20,000 per PG student.
- ii. Plan Funds: - On average annual location is 30 lacs which works out to be 3 lacs per faculty and Rs. 50,000 per student.
- iii. Modernization: - Over past 5 years modernisation grants have been Rs. 292 lacs. Primarily for replacement of old and obsolete equipment for PG and research labs.
- iv. New Faculty Grant: - these grant is about 6.5 lacs per new faculty.

Budget Head	2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		Total	
	Allocation	Expenditure	Allocation	Expenditure	Allocation	Expenditure	Allocation	Expenditure	Allocation	Expenditure	Allocation	Expenditure
NPN-05 Operational Expenses	10.64	10.62	11.41	11.21	11.5	11.28	12	11.97	19	18.99	64.55	64.07
PLN05 Furniture/Fixture			0.4	0.39	0.35	0.35	2.2	2.19			2.95	2.93
PLN06 New Faculty Research Grant			9	8.8			6.5	6.5			15.5	15.3
PLN3F Upgradation of computers	1.8	0	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.36	9	6.76
PLN03 Teaching Equipment	28.1	25.81	20.9	20.2	19	14.36	31	30.8	54	51.24	153	142.41
PLN03C Teaching Equipment Capacity Modernization			43.3	43.21	25	17.55					68.3	60.76
Budget Head	40.54	36.43	86.81	85.61	57.65	45.34	53.5	53.26	74.8	71.59	313.3	292.23

2.7 Course files for each course for last 5 years

Course files are traditionally kept by respective faculty

2.8 Study materials (monographs, notes, books, videos, web-based materials. etc.) prepared

There are 63 short course notes meant for Industry professionals and faculty from other colleges. Refer Appendix 9 –Short Term Course Manuals.

There are about 10 books / monographs as per Appendix 12.

2.9 Research and Innovations in teaching-learning processes

As per Appendix 19 about 35 course were introduced for MTech Instrumentation Technology and Masters in Design which were significantly different from courses being run in IIT at the time of starting of these programmes. These course are highly inter-disciplinary in nature in the sense that not only a variety of areas become part of each course, but also the intake in these programmes is from several disciplines. Considerable efforts have been put in creating the theory and laboratory course work to meet these varied needs.

2.10 No. of students (UG/PG) who have spent at least a semester at overseas university.

Ten in DAAD programme.

2.11 No. of students (UG and PG) from overseas universities who have taken classes /project work/internship, in the department.

NIL

2.12 No. of courses taught via NKN to other institutions (enrolment)

NIL

2.13 Course feedback.

Course feedback for PG courses is taken for each course in a centrally (Online by Institute) and available in centralised data base of IIT.

2.14 Industry experts who have delivered lecture(s), seminars, discussions as part of a core/elective course - UG and PG separately.

There are 31 in National and 14 International as per Appendix 11(c) & 11 (d).

2.15 Industry exposure to students - course-related visits to factories, sites, industry exhibitions, field trips, etc. - UG and PG separately.

Students of MTech Instrument Technology / Ph.D. programmes have visited NPL, SSPL, CCRAS, CRIA, CSIO labs, DRDE, IRDE, Army Cantonments – Delhi, Ambala, M how, Army Workshop years for the purpose of project trials for research projects. The MDEs students have visited about 24 industries as per Appendix 27.

3. Research, Innovation, Design and Development

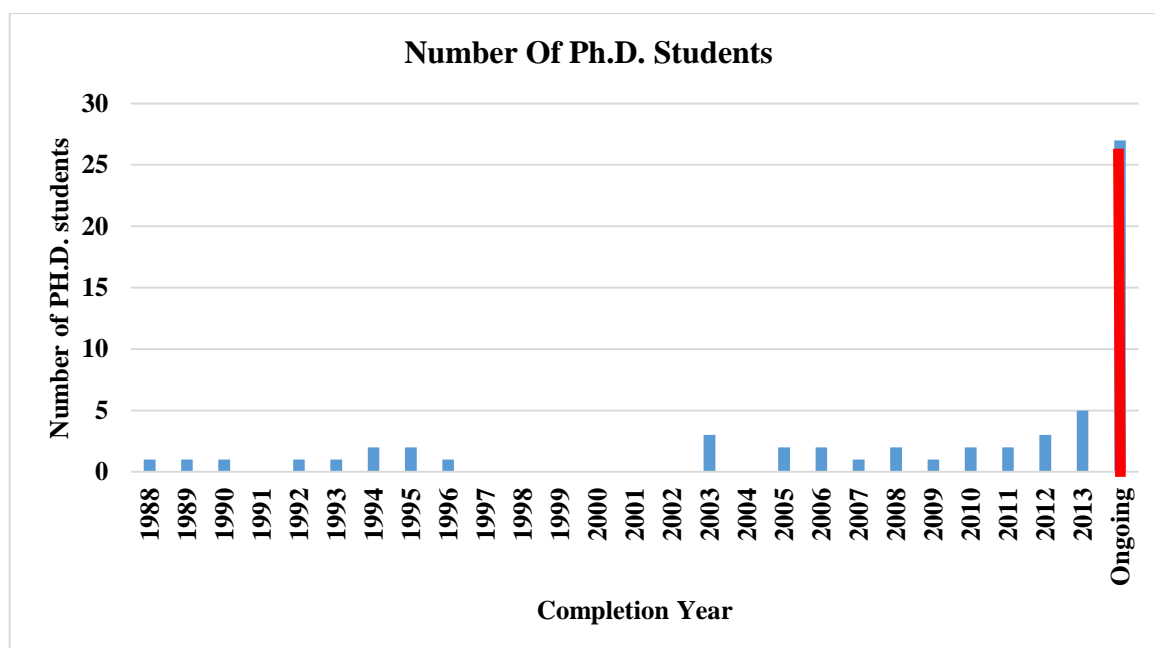
3.1 No. of Masters and Ph.D. students supported –

- i. by Institute Assistantship, (ALL as policy)
- ii. On sponsored projects, consultancies (Students given extra assistantship)
- iii. Others sources and (Industry sponsors major projects in MDES)
- iv. sponsored by external organizations (CSIR supported assistantships in Ph.D.)

3.2 No. of Ph.Ds. enrolled, graduated per faculty/year for last 5 years

Two number of Ph.D. students graduated per faculty in last 5 years.

Please refer to Appendix-7(a) Ph.D. Students with data plotted as below



3.3 Areas of research (e.g. areas listed in Prospectus, and others) by

(i) Volume (quantifiable parameters),

Number of Publications (233 Journal Publications as in Appendix – 1, and 325 Conference Publications, as in Appendix – 2)

Number of Ph.D. Students 39 completed and 27 in progress Appendix – 7(a).

(ii) Breadth, and (AREAS)

As per Appendix 30 for Areas of Research.

(iii) Years these have been research areas (as per format at Annexure-4).

The above areas are nominally listed however based upon the faculty who retire and faculty who joined the specific topics in the above areas do change and for that one can look at Appendix-7(a) Ph.D. thesis.

3.4 Publications per faculty (average per year for last five years).

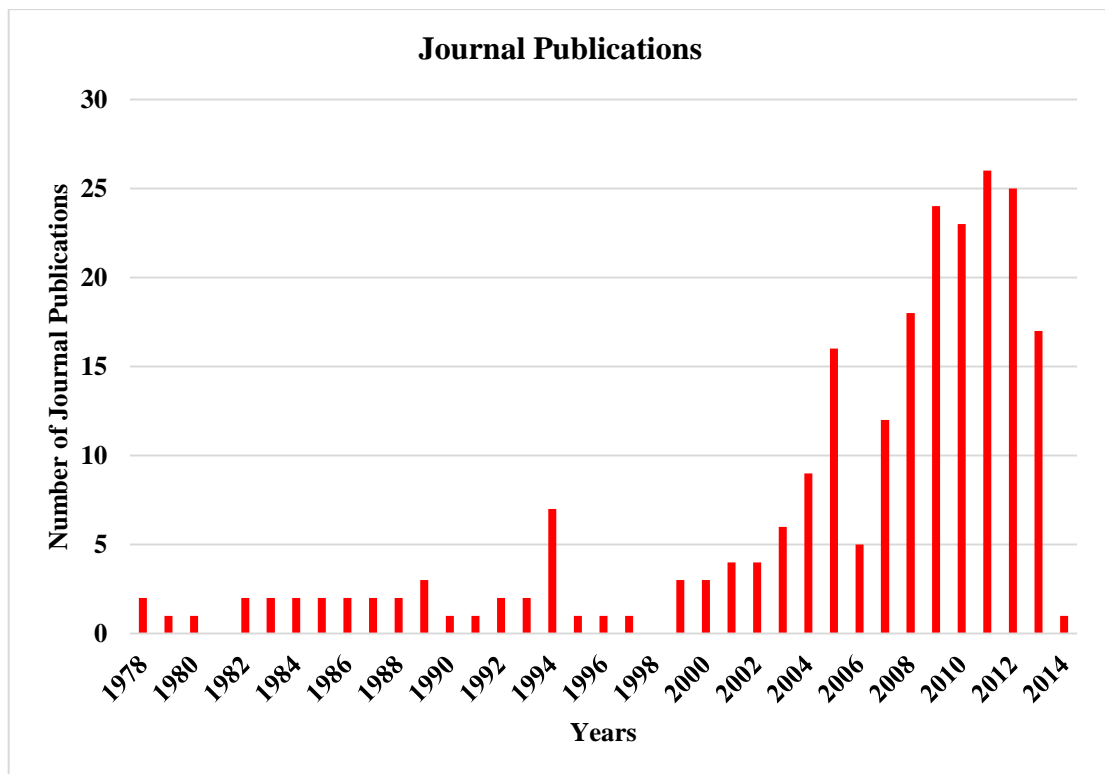
Please refer to Appendix-1 Publication. Publications by 8 faculty members (last 5 years) is 13 per year.

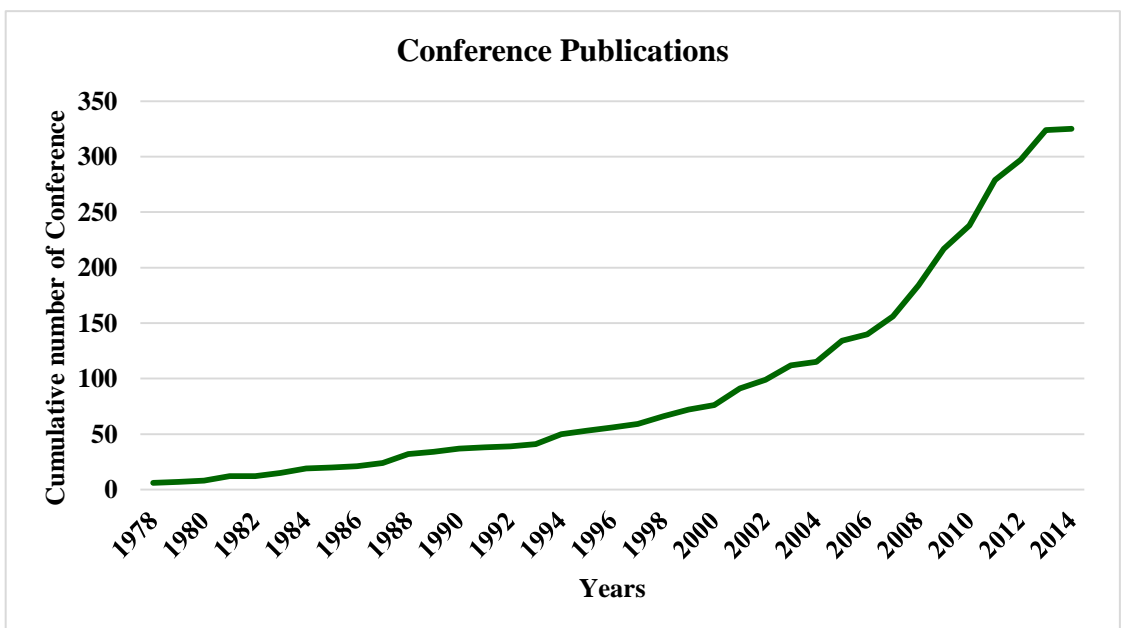
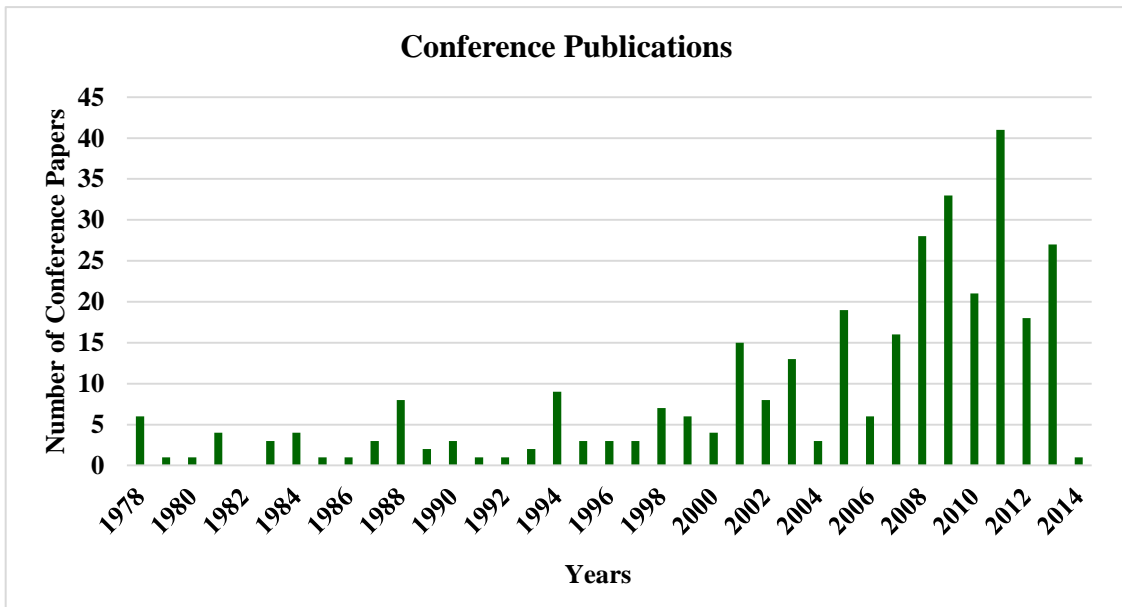
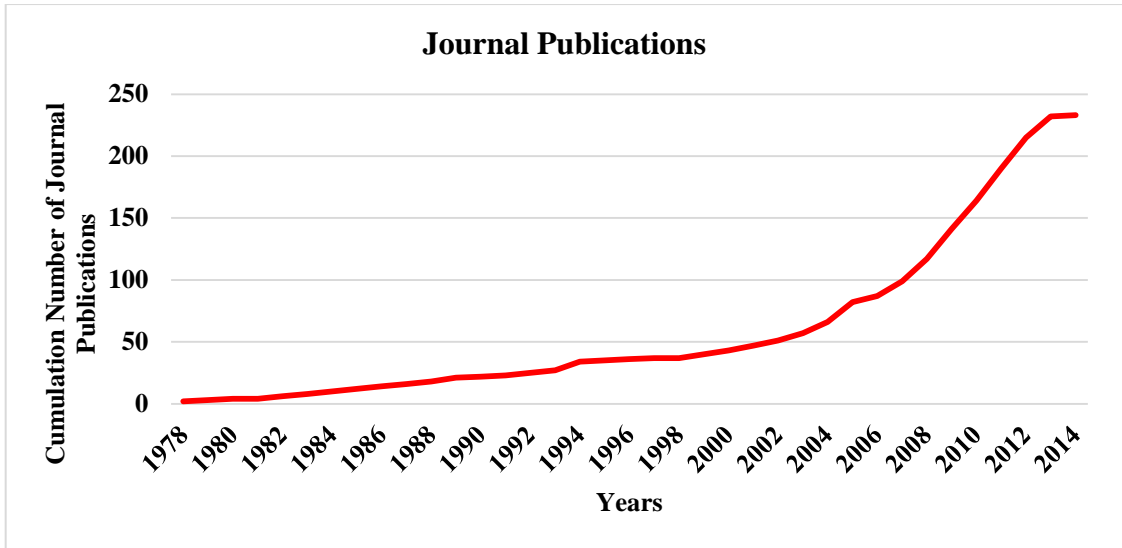
3.5 Publications (journal and conference) total and per (a) Ph.D. student, (b) Masters student, (C) UG student in top journals of repute.

233 Journal Publications (Appendix-1) which is about 4 per Ph.D. student

325 Conference Publications (Appendix-2) which is about 5 per Ph.D. student.

The following graphs shows the number of publication and conference papers over the years by the faculty member, Ph.D. students and MTech students.





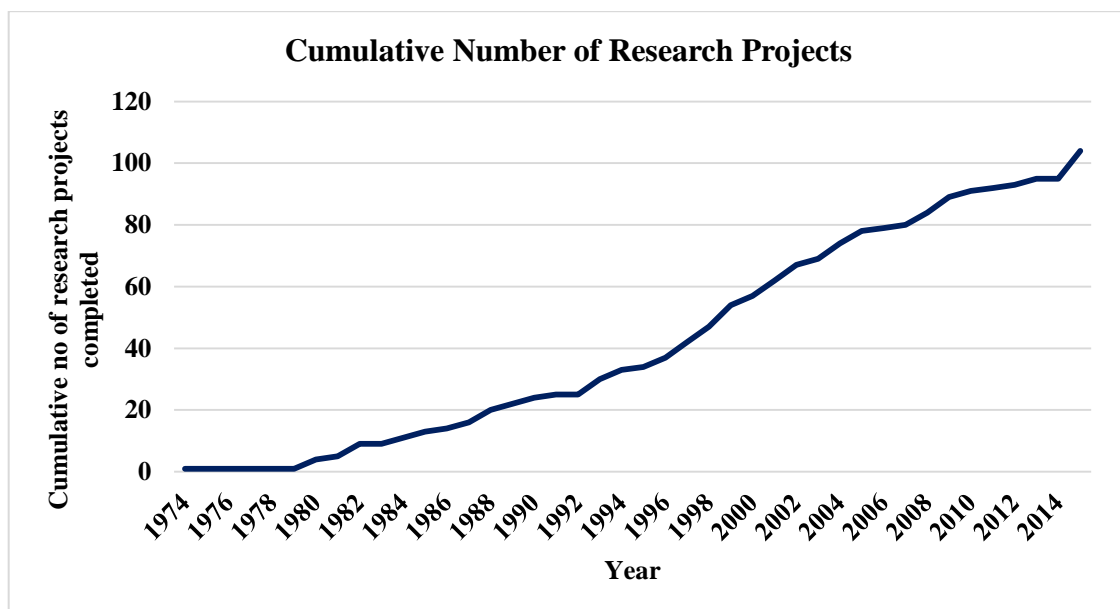
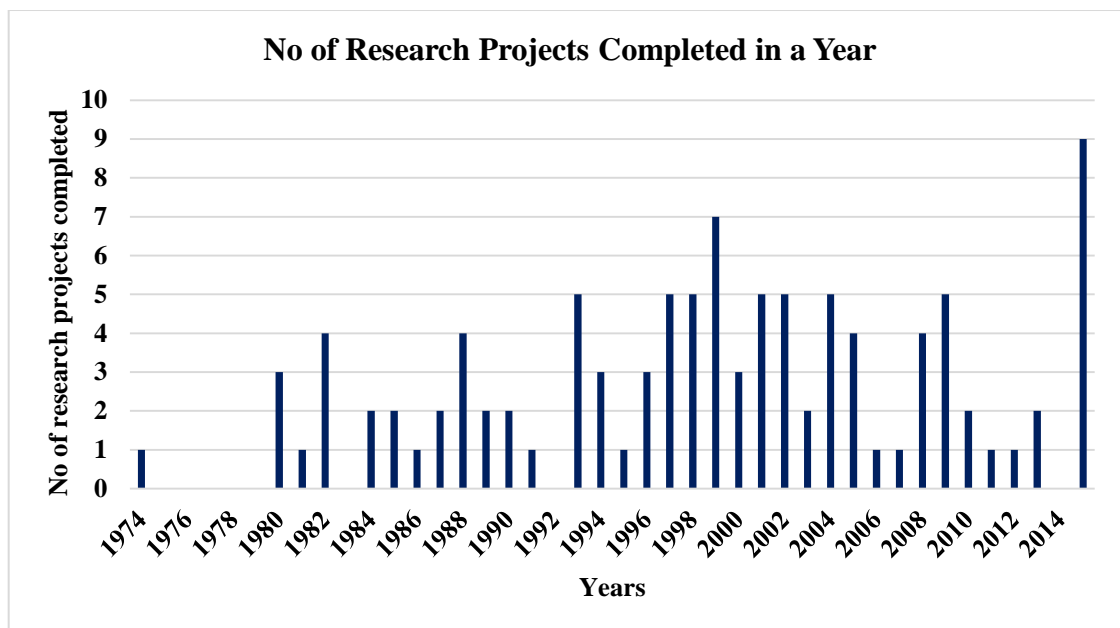
3.6 Average citation per department/centre.

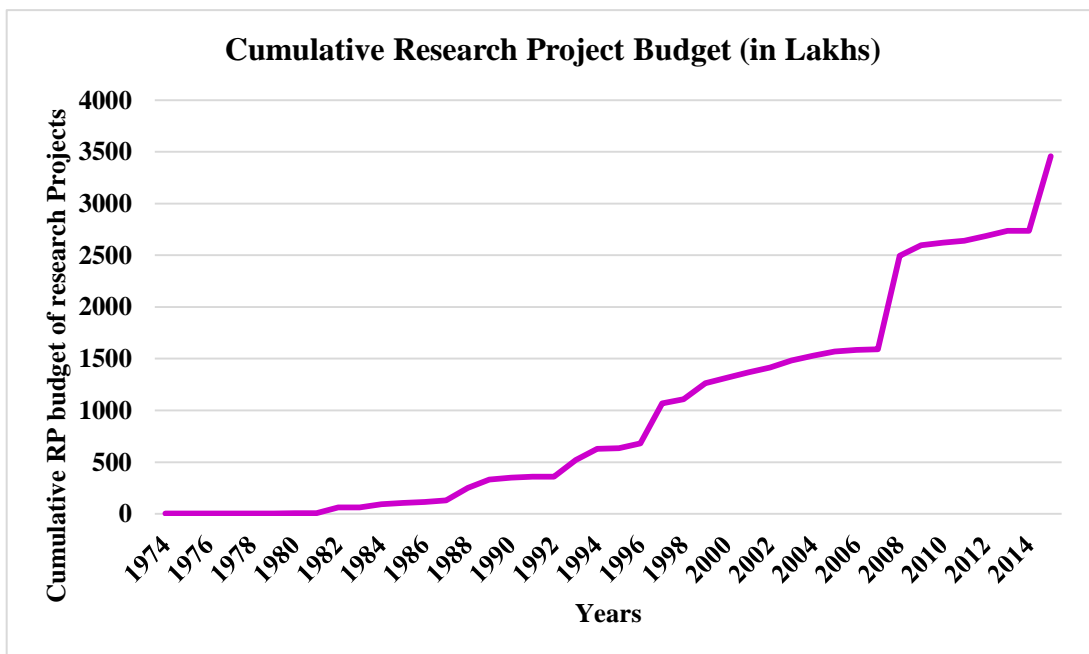
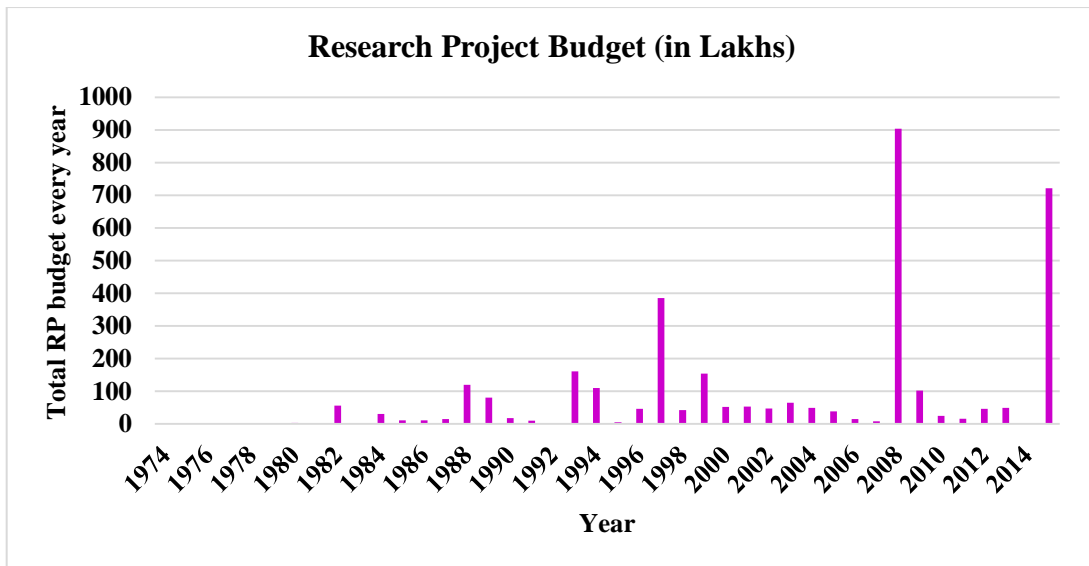
The consolidated data is not available. However in past 2 decades, there are reasonable citations per faculty but number is being collected.

3.7 Sponsored projects –

(i) Individually	73
(ii) With another faculty of the group/section of the department	64
(iii) With another faculty of another dept./centre	65

Refer to Appendix-3 for Sponsored Research projects

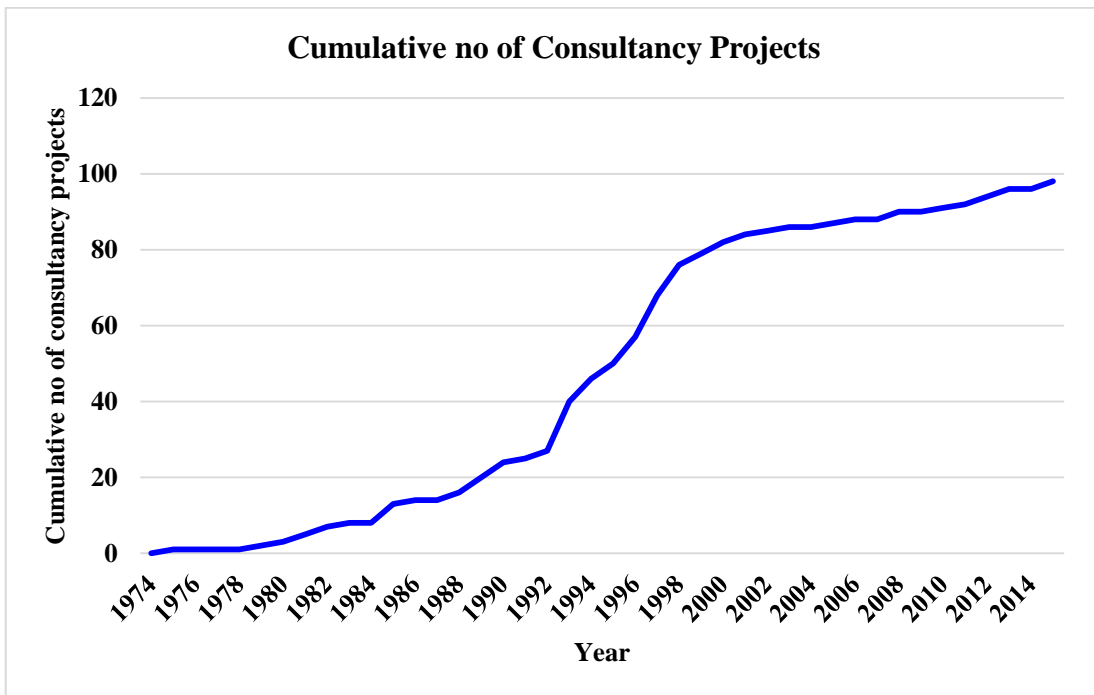
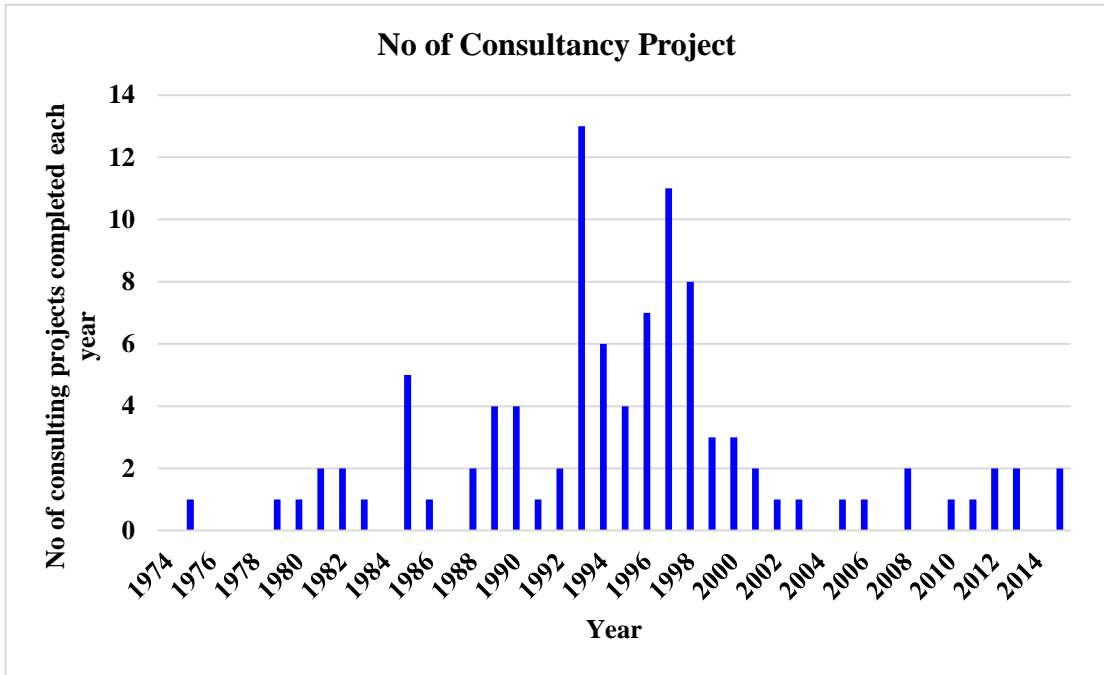


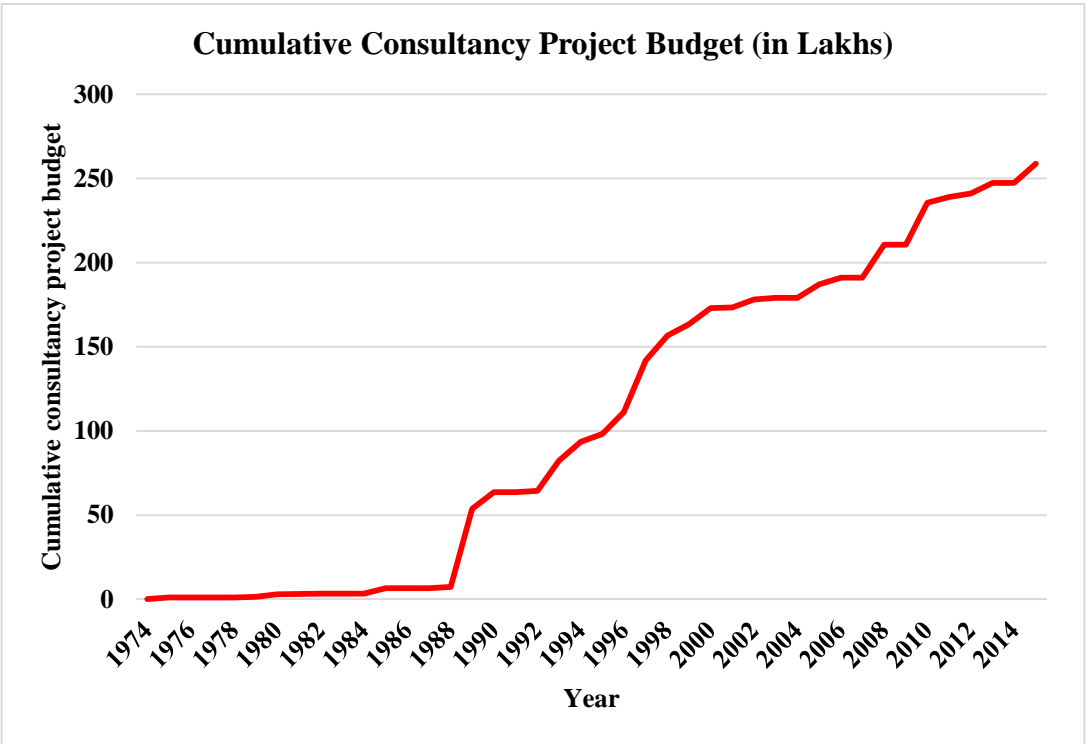
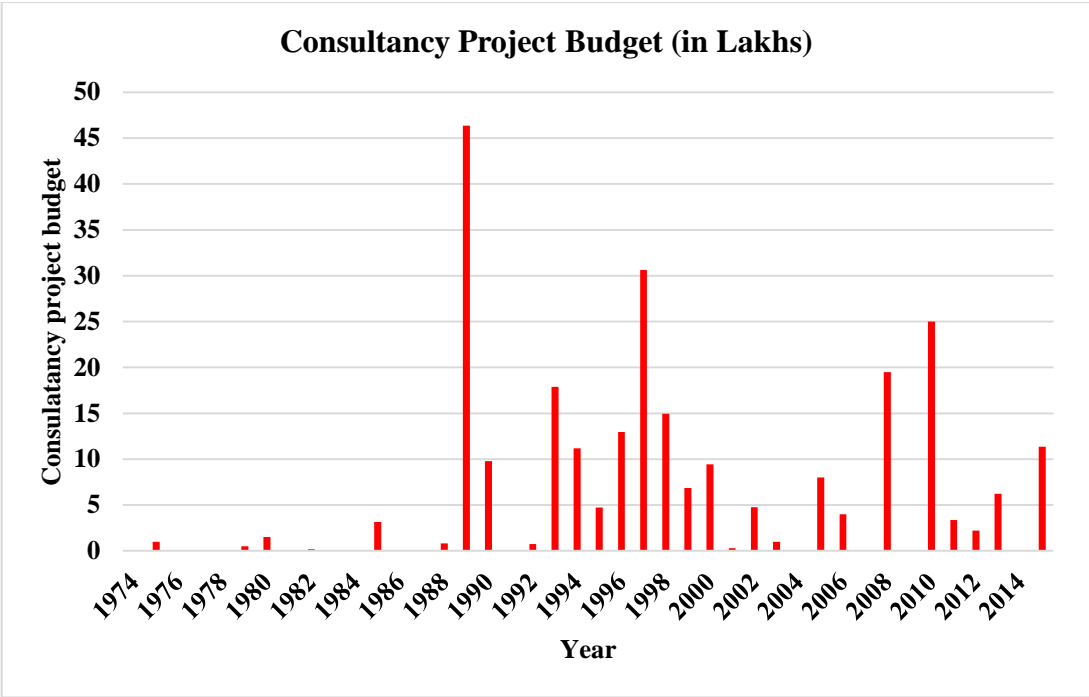


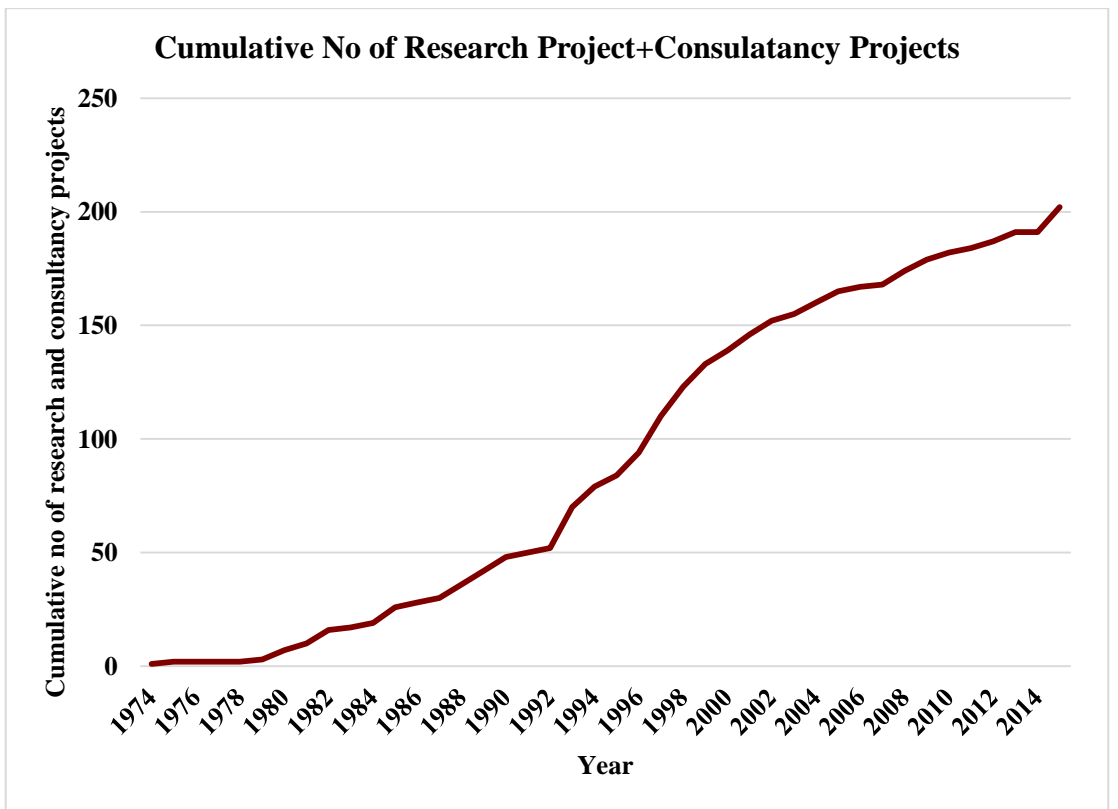
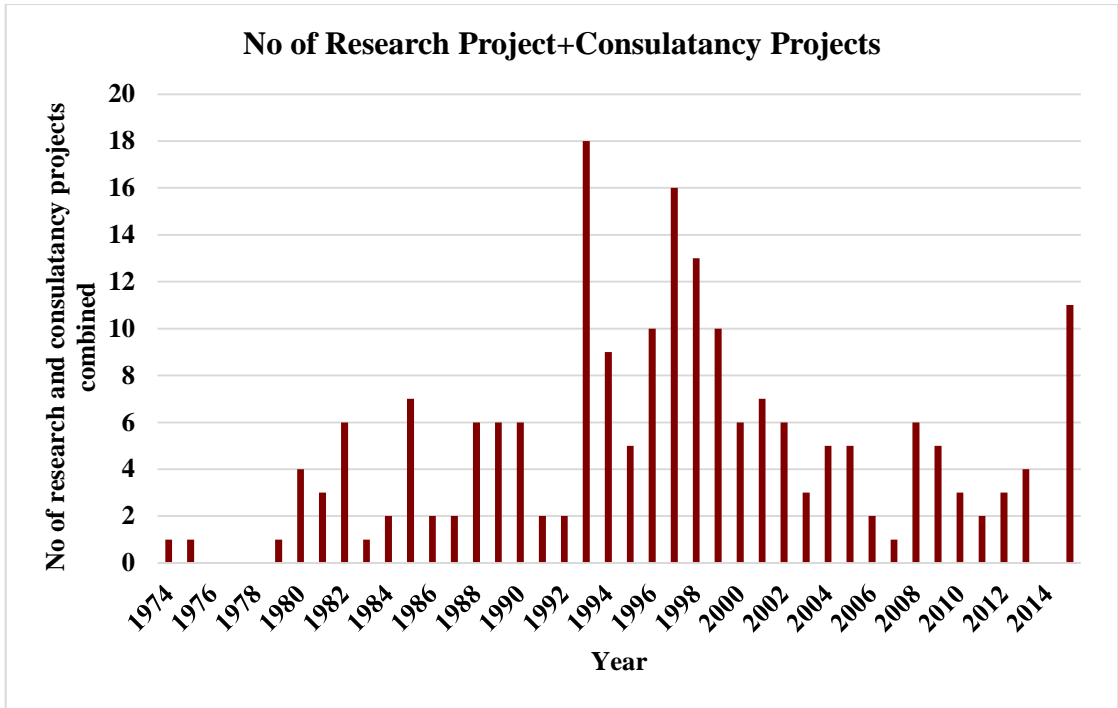
3.8 Industry consultancies

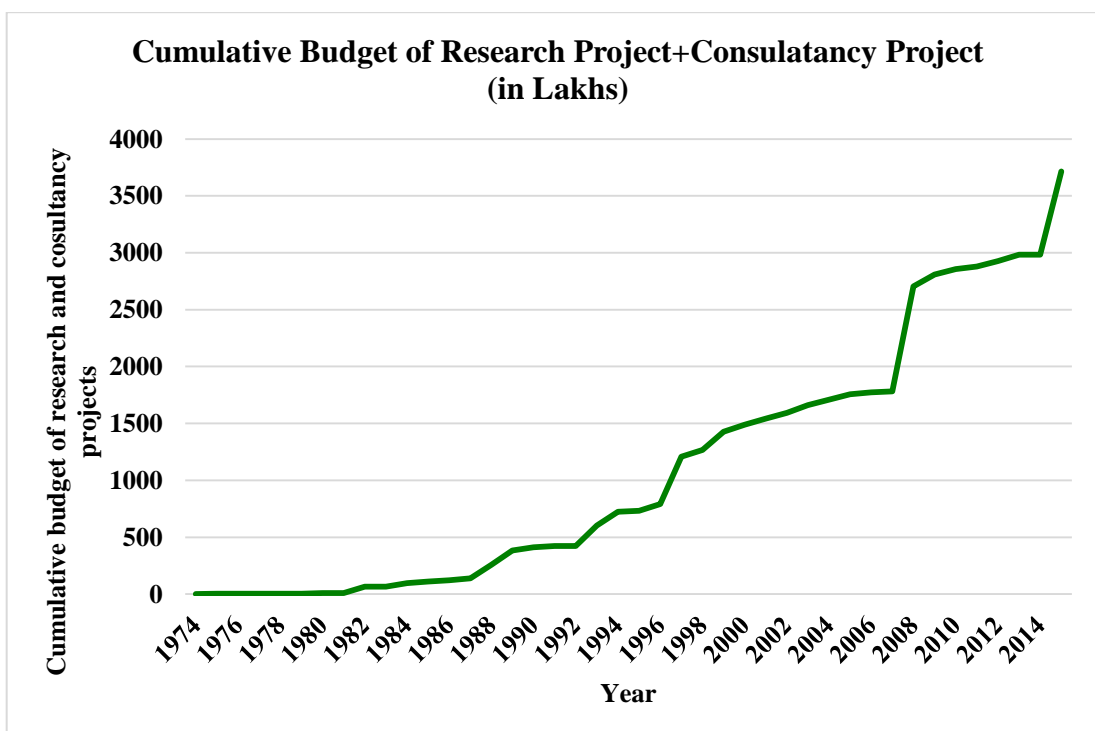
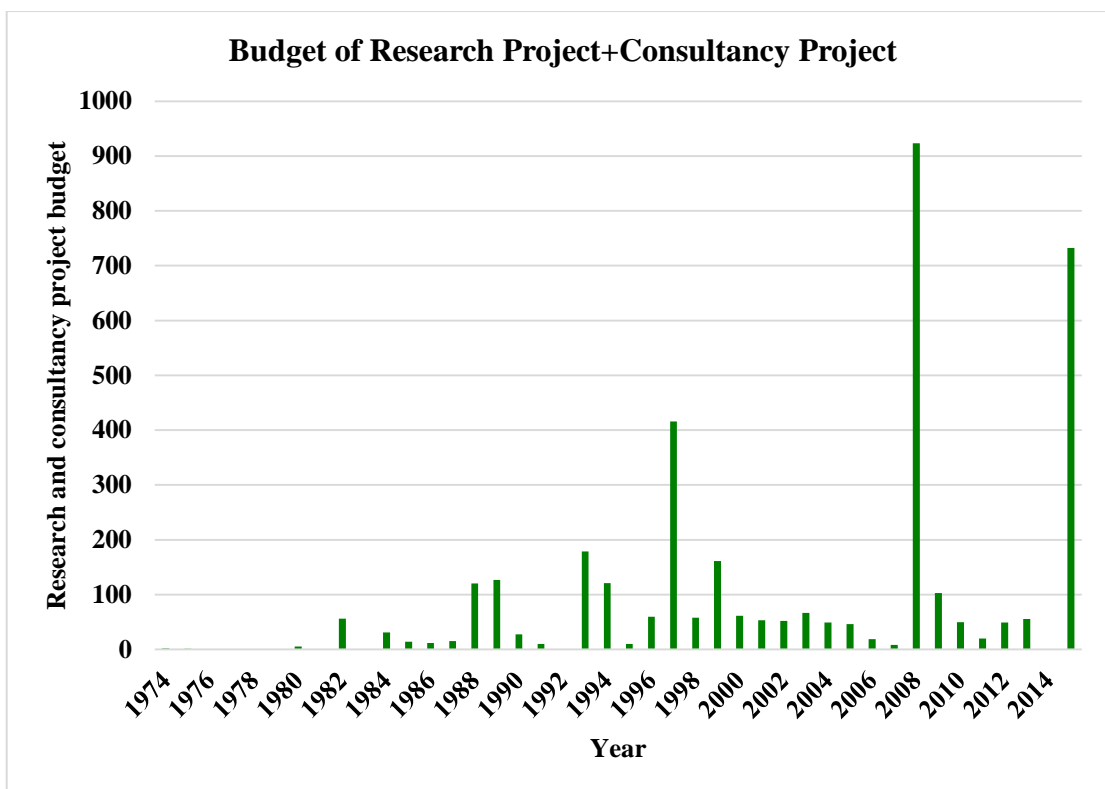
Please refer to Appendix-4 for Consultancies

The following graphs shows the number and budget of research projects and consultancy projects completed over the years.









3.9 New areas of research which are different from the faculty's Ph.D. thesis area.
As per Appendix 7(a) Ph.D. Thesis

3.10 Methodology for (i) identifying obsolescence in research areas, and (ii) identification of new areas for future research.
Left to individual faculty and research groups as matter of academic freedom

3.11 Number of large interdisciplinary projects (within department's areas, and across the institute).

There are 14 such large interdisciplinary projects. Refer to Appendix-3 Research projects and Appendix-4 Consultancy projects.

3.12 Technology developed, Technology transferred, patents filed & % granted

As per Appendix (6a) TOT and (6b) Patents granted/applied for. There are in total 35 transfer of technologies and 4 granted patents and 42 applied for.

3.13 Innovations of products, processes, designs, etc. in the department.

There are in total 35 transfer of technologies and 4 granted patents and 42 applied for. As per Appendix (6a) TOT and (6b) Patents granted/applied for.

Transfer Of Technology

- 1. Re-engineered control system for deck landing mirror sight for Indian Navy, 1977 - 1982. :** The complete system was designed, developed and productionised by IDDC and CARE, IIT Delhi, for use by Indian Navy. The systems were in active operation at aircraft carrier INS Vikrant for more than ten years. The system was awarded the Meritorious Invention award by NRDC.
- 2. NMR Spectrometer for Oilseed Characterization, 1982 to 1987:** A portable nuclear magnetic resonance spectrometer for industrial use was developed for the first time in India via a project (1982 to 1987) supported jointly by the Government of India and UNDP. This instrument was optimised for immediate application in agriculture for non-destructive characterisation of oilseeds (such as peanut, mustard, sunflower) for oil content; primarily to facilitate breeding of high yielding varieties. This instrument was extensively field tested by the Indian Agricultural Research Institute, New Delhi. Development of this instrument involved state of the start technologies in Samarium-Cobalt permanent magnets, RF power amplification and switched mode power supplies.
- 3. 0.5 to 5 KVA Electronic Inverter System 1986-87:** A rugged uninterrupted power supply (UPS) based on the latest power MOSFET devices was developed and transferred to industry in 1986-87. The system was designed to be modular so that the same circuit building blocks could be used to realize finished systems of 0.5 to 5 KVA rating by simply incorporating the appropriate power devices. This system was the first indigenously designed UPS system and has been very successful.
- 4. Omni -directional sonar receiver for Indian Navy, 1987. :** A new compact Omni-directional sonar receiver was designed for Indian Navy with funding from Department of Electronics. The know-how was transferred to Keltron for production.
- 5. Design for a MOSFET based UPS was transferred to industry in 1988 and has been in regular production since then.** This product, when introduced in 1988 was the first indigenous MOSFET based UPS product in the market and has been very successful over the last decade, leading to commercial turnover exceeding 20 crore.
- 6. Fibre optic correct sensor (up to 1000 A), 1992. :** Fibre optic current sensor for measuring current up to 100 Amps in high voltage lines has been developed. The Lab model of the equipment has been transferred to BHEL Corp. R&D, Hyderabad and tested there.
- 7. Modified sonar receiver for sonar 170-B, 1972-1994. :** The system was designed for Indian Navy and the know-how was transferred to Bharat Dynamics Ltd., Hyderabad for production. The systems were used on Indian Navy ships for about ten years.
- 8. Auto-Tilt Measuring System, 1996, Goa Shipyard Ltd., Goa. :** An eight-channel tilt measuring system capable of measuring tilt with 10 seconds of an arc resolution has

been designed, manufactured and handed over to Goa Shipyard Ltd. The system has been in active use at GSL, Goa.

9. **Inverters and UPS Systems:** Three designs have been transferred to industry under consultancy jobs (listed in Appendix B at s.no 14, 15, 16) during 1994-99 and are under regular commercial production.
10. **IMS based Sensitive Detector for Defence:** This is an Ion Mobility Spectrometer for detection of certain classified list of substances for Defence. It was implemented under three research projects, with RP 25/92 resulting in basic research and design on the working on IMS and development of key technologies.
In RP 975 Lab Prototypes were made for technical trials. In RP 1090/98 the re-engineered IMS was shown to SA to RM ("Nov 1998) and has been recommended for use in Armoured Tanks after ruggedized production and trials. Under an MOU between IITD DRDE and ECIL for Transfer of Technology by IITD and production by ECIL the technology has been transferred to ECIL.
11. **Remote Actuator for Influence Mines** Influence mines are anti-tank mines that can attack a tank belly by recognizing the magnetic signature developed under armoured tanks to which the Indian Army had no counter. The **RAIM** developed at IDDC, projects the magnetic signature of the tank ahead of it and causes pre-mature actuation of the mine. Project involved intensive investigation of magnetic signature of tanks, and technology to generate them electronically to activate mines.
12. **Digital Gauge Measurement Bore of Guns:** Many applications in which the Inner Bore of guns (artillery, tank, field, etc.) are subject to heavy stress require characterization for dimensions, wear, cracks, pitting, ovality & discoloration. IIT Delhi has developed a Sensor Head for rapid dimensional measurement & imaging of inner surface of Bores. Complete 3 Dimensional view & developed surface photographs with image processing features is quickly obtained. The device technology was handed over to EME Baroda (Army).
13. **Sarva Dhara:** The automated Sarva Dhara system can administer both Shirodhara and Sarvangana Snehana using a robotic fluid dispensation system, electronically programmed and controlled. The entire X-Y locus on the body over which the fluid has to be dispensed, suiting various patient body profiles, can be online set, stored and replayed. The setting is done easily with the help of a joystick and the user can see the path of the dispensed fluid by use of a closed circuit camera and a flat screen attached to the unit. The temperature and flow of the oil is controlled, and the oil is properly filtered. The electronic control of these parameters ensures standardized treatment. Only one trained operator is needed.
14. **Fiber optic current sensor to measure current up to 1000 Amps on high voltage lines:** This sensor is the forerunner of the sensor being developed to measure current up to 20,000 Amps on H.V. lines. This sensor design was sponsored by BHEL Corporation R&D, Division, and Hyderabad.
15. **Opto-mechanical system for plasma temperature measurement:** This system design was sponsored by BHEL Tiruchirapalli, MHD Centre.
16. **Correction lenses for colour picture tubes Sponsored by Samtel Colour Ltd. Ghaziabad, UP - 20 units were made**
17. **Hard coated special grids used in laser based alignment system and temperature profile measurement using Talbot effect.** This system design was sponsored by BHEL R&D, Hyderabad - 25 units were made.
18. **Holographic non-destructive testing technique for composite building materials - 5 composite materials were made.**

19. **Colloidal silica analyser to measure colloidal silica concentration in power station water:** The instrument is designed to monitor colloidal silica in power plant. The silica in boiler water under high temperature and pressure gets deposited on turbine blade, leading to reduction in efficiency. Maintaining silica level in boiler water is therefore necessary. This product design was sponsored by BHEL R&D, Hyderabad. 1 unit was made.
20. **Opto-mechanical drilling jig for residual stress measurements.** The jig has a flexibility of using for curved and flat surfaces. The cost of the developed jig is Rs20000 as compared to Rs2 Lakhs of imported jigs. This product design was sponsored by BHEL R&D Hyderabad - 2 units were made.
21. **Developed technology (technique and mathematical modelling) to measure temperature profile of the burner of atomic absorption spectrophotometer.** Burner was made by CSIO Chandigarh.
22. **Correction lenses for colour picture tubes** Sponsored by Samtel Colour Ltd. Ghaziabad, UP - 20 units were made.
23. **Hard coated special grids used in laser based alignment system and temperature profile measurement using Talbot effect.** This system is sponsored by BHEL R&D, Hyderabad - 25 units were made.
24. **Holographic non-destructive testing technique for composite building materials - 5** composite materials were made
25. **Automatic Telecom Cable Test System:** With the growing demand for telecommunication products, quality of telecom cable is of crucial importance. Certification of a cable requires several thousand electrical tests to be performed between each pair contained in the multi-pair cable. Test equipment for conducting such tests tends to be very expensive. A low cost, fully indigenous system for testing telecom cables has been developed in this Centre under industry support. The system has been installed and is in regular use.
26. **Colloidal Silica Analyzer:** A precision optoelectronic system for measuring very low (5 parts per billion) suspended particle concentrations in water. This system will be used by BHEL for on-line monitoring of the quality of water in power generating equipment. The instrument, developed for the first time in the country in this Centre is crucial for protecting turbines and other rotating machinery in power plants from damage due to colloidal silica in the system water.
27. **Switched Mode Power Conversion Systems:** Switched mode power conversion circuits are essential building blocks for electronic systems. A no. of designs has been transferred to industry under consultancy jobs. The designs cover very high reliability SMPS systems for communication (Garg Telecom), process control (Taylor Instruments) and laboratory instruments (Hewlett Packard India).
28. **Braille Duplication Machine:** S.K.Guha, S.K.Atreya, Sneha Ananand & G.L.Jain - M/S Indutherm
29. **Braille Duplicator Sheet** S.K.Guha, S.K.Atreya, Sneha Ananand & G.L.Jain - M/S Indutherm
30. **Haemoglobin meter** S.K.Guha, Sneha Ananand, S.K.Atreya, & G.L.Jain - M/S oriental Scientific Apparatus, Ambala
31. **Health Data Kit:** S.K.Guha, Sneha Ananand, S.K.Atreya & G.L.Jain - M/S Supertronics Engineers, Vadodara
32. **Accurate Measuring Tape for the Blind,** Registered by FITT: S.K.Atreya, Prashant Borkar
33. **Manually Operated Low Wheel Chair,** Registered by FITT : Amit Kumar, S.K.Atreya

34. **Miniaturised Michelson Interferometer with three control variables.** Name of the Industry: NVIS Technologies Pvt. Ltd., 141-B, Electronic Complex, Pardesipura, Indore-452 010, India. Members: D. S. Mehta, Tulsi Anna, and S. K. Dubey.
35. **Coated mirror integrated Miniaturised Michelson Interferometer with two level control variables.** Name of the Industry: NVIS Technologies Pvt. Ltd., 141-B, Electronic Complex, Pardesipura, Indore-452 010, India. Members: D. S. Mehta, Tulsi Anna, and S. K. Dubey.

PATENTS

I. Granted

1. **An Instrument for Measuring Torsional Properties of Fabrics and Yarns, 2002:** IIT Delhi filed a Patent on July 24, 2002 at the Patent Office, West Patel Nagar, (Patent Application No: 769/DEL/2002), for “An Instrument for Measuring Torsional Properties of Fabrics and Yarns”. Patent Number: 212557, Patentee: Indian Institute of Technology. Date of grant: 04/12/2007, for a period of 20 years from 24 day of July 2002. Torsional rigidity of fibers and yarns is an important parameter for their performance and processing. The instrument was developed jointly with Prof. P.K.Banerjee of Textile Department and was the result of B.Tech and M.Tech projects. Further refinement on this Instrument is being carried out for the purpose of commercialization.
2. **Laser Based Alignment System for Electrical Power and Other Industries** The device is suitable for the alignment of heavy electrical equipment where subunits are physically linked to operate on a single unit. This system is developed by Chandra Shakher, IIT Delhi, U.M. Chaudhari BHEL, Corporate R&D, Vikasnagar, and Hyderabad. The Patent Number is 188882, Gazette Dated Nov.16, 2002; Application Number is 436/DEL/94; Indian Classification is 1271 and International Classification is G06M01/26. The developers received NRDC award on this system for its Novelty, Technical feasibility and commercial viability of the product in August 1993.
3. **A device for measurement of wire diameter and aperture in wire sieve:** This system is developed by Chandra Shakher (IIT Delhi), Shashi K. Singh (IIT Delhi) and K.P. Chaudhary (IIT Delhi),. The Indian Patent Number is 197541 and Application Number is 869/DEL/2003 Dated July 03, 2003.
4. **Organic Pollutant Detector:** This instrument has been developed and tested under sponsorship of DRDO. Trial production will begin shortly at ECIL, Hyderabad. The technology is covered by a joint patent filed by DRDE Gwalior: **Ion mobility Spectrometric Chemical Vapour Monitor:** No 1434/DEL/2003
5. **Golden Ear System for LG India:** This is a system designed for the first time for LG India to automatically identify incoming Audio, and classify into pre-determined categories (such as Classical, Vocal, Rock, Pop etc. The concept has been patented (filed, not granted as yet): **A Method and System for Real-Time Classification of Audio Signals into Predetermined Categories:** Joint with LG Electronics, file no1118/del/2002 dated 7/11/2002.

II. Patents Filed (Awaiting Grant)

1. **System and method for real time monitoring of vibrations and large deformation in diffused materials using sequential subtraction and image enhancement:** This system is developed by Chandra Shakher, (IIT Delhi), and Rajesh Kumar (IIT Delhi). The Patent

Application Number is 925/DEL/2002 Dated Sept. 12, 2002. The patent number is awaited.

2. **Device for detecting contaminants from cotton and the process there of:** This system is developed by Chandra Shakher (IIT Delhi), Shashi K. Singh (IIT Delhi) and S.M. Ishtiaque (IIT Delhi),. The Application Number is 926/DEL/2002 Dated Sept.12, 2002.
3. **Method and System for P2P Sharing of Application** (Patent No 2664/DEL/2012) : S.K.Atreya
4. **Portable Scanner** (Patent no 2665/DEL/2012) : S.K.Atreya
5. **Power Generating Tiles** (Patent no 2666/DEL/2012) : S.K.Atreya
6. **Multi Compartment Liquid Bottle**(Patent no 2667/DEL/2012) : S.K.Atreya
7. **Nebulizer Cum Vaporizer** (Patent no 2668/DEL/2012) : S.K.Atreya
8. **Rainwater Harvesting Apparatus** (Patent No 2669/DEL/2012): S K Atreya
9. **Handheld Dishwasher** (Patent No 2390/DEL/2012): S K Atreya
10. **Telescopic Spider Web Remover and Pesticide Sprayer** (Patent no 2391/DEL/2012) : S.K.Atreya
11. **Mobile Charging with Handshaking Device** (Patent no 2392/DEL/2012) : S.K.Atreya
12. **Massager Cum Oil Applicator** (Patent no 2393/DEL/2012) : S.K.Atreya
13. **Hair Gel Applicator** (Patent no 2394/DEL/2012) : S.K.Atreya
14. **Multifunctional Contact Lense Cleaner** (Patent no 2395/DEL/2012) : S.K.Atreya
15. **Book Reading Stand With Automatic Page Turner**(Patent no 2396/DEL/2012) : S.K.Atreya
16. **Bed Reading Stand for Comfortable reading in Horizontal Position** (Patent no 2397/DEL/2012) : S.K.Atreya
17. **Selective Frequency Attenuator** (Patent no 2398/DEL/2012) : S.K.Atreya
18. **Carry bag Adaptable to Charge Electronic Devices** 2399/DEL/2012) : S.K.Atreya
19. **Device Locator** (Patent no 2400/DEL/2012) : S.K.Atreya
20. **Cooling Helmet** (Patent no 2401/DEL/2012) : S.K.Atreya
21. **Headphones** (Patent no 2402/DEL/2012) : S.K.Atreya
22. **Refill Indicator** (Patent no 2403/DEL/2012) : S.K.Atreya
23. **Water saver Water Closet** (Patent no 2404/DEL/2012) : S.K.Atreya
24. **Temperature Adjusting Water Tank** (Patent no 2405/DEL/2012): S.K.Atreya
25. **Food Decay & Narcotics Sensor** (Patent no 2406/DEL/2012) : S.K.Atreya
26. **Vampire Energy Killer** (Patent no 2407/DEL/2012) : S.K.Atreya
27. **Vehicular Speed Control System** 2408/DEL/2012) : S.K.Atreya
28. **Paddle Operated Toilet Seat** (Patent no 2409/DEL/2012) : S.K.Atreya
29. **Footwear Cleaner and Sanitizer** (Patent no 2410/DEL/2012) : S.K.Atreya
30. **Hybrid Helmet** (Patent no 2411/DEL/2012) : S.K.Atreya
31. **Retractable Two-Wheeler Cover System** (Patent no 2412/DEL/2012) : S.K.Atreya
32. **Hybrid Iron** (Patent no 2413/DEL/2012) : S.K.Atreya
33. **The Breeze Umbrella** (Patent no 2414/DEL/2012) : S.K.Atreya
34. **Economic Model Developed on Game Theory** (Patent no 2415/DEL/2012) : S.K.Atreya
35. **Interactive Projector System** (Patent no 2416/DEL/2012) : S.K.Atreya
36. **USB Flash Drive to USB Flash Drive Data Transfer Without using a Laptop or a PC** (Patent no 2417/DEL/2012) : S.K.Atreya
37. **Air Cooler** (Patent no 2418/DEL/2012) : S.K.Atreya
38. **Ergonomic Keyboard /14-02** (Patent no 7409/ (28/8/12) : S.K.Atreya
39. **An apparatus for generating phase shifting interferograms for 3-D Surface topography.** Indian Patent Appl. No. 2485/DEL/2011, Date of Filing: 30-08-2011.

Inventors: (i) Dr. D. S. Mehta, IDDC, IIT Delhi (ii) Dr. J. P. Rana, IDDC, IIT Delhi (iii) Mr. Md. Inam, IDDC, IIT Delhi (iv) Dr. A. M. Biradar, NPL, New Delhi

40. A method of evaluation and grading of Textile or Fabric or Garment Appearance. Indian Patent Appl. No. 2304/DEL/2009, Date of Filing: 09-11-2009. Inventors (i) Dr. R. S. Rengasamy (ii) Dr. D. S. Mehta (iii) Mr. H. Manikanadan

41. A method of evaluation and grading of Textile or Fabric or Garment Appearance. Indian Patent Appl. No. 2355/DEL/2009, Date of Filing: 16-11-2009. Inventors (i) Dr. R. S. Rengasamy (ii) Dr. D. S. Mehta (iii) Mr. H. Manikanadan

3.14 Availability and access to students' workshops, "tinkering laboratories" so that they may pursue their own ideas.

Masters students having extra interest are mentored by Ph.D. students in various labs – by linking with research and development projects – and work late evenings and nights in specialised labs on own.

3.15 No. of students/teams who have competed in national / international competitions, and outcome.

There are 18 awards and Design competition and best paper publications, as per Appendix 8.

3.16 No. of students who have been funded for innovating (TePP, PRISM, etc.).

NIL

4. R & D Environment

4.1 No. of post-doctoral scholars hired in the department/centre and their durations, from (i) abroad, (ii) on project, and (iii) others, and outcomes,

No Post-Doctoral positions in IDDC till late.

4.2 No. of foreign students enrolled in (i) Masters, and (ii) Ph.D. programmes.

No vacancy

4.3 No. of Indian and foreign faculty/researchers who have spent a sabbatical in the department.

Only invited lectures as per Appendix 11 (c) & 11 (d).

4.4 Sabbatical taken by faculty and where spent.

Please see individual CVs in the website.

4.5 Number of seminars given by the faculty (i) in the department, (ii) in other departments. (iii) At other institutions.

83 lectures / seminars in national and international platforms. [Refer to Appendix 11(a) & 11(b) – Delivered Lectures (International & National)].

4.6 No. of faculty/researchers/scholars invited by the department for giving (i) seminars, (ii) spending at least a week in the department.

No formal Policy. But faculty and students of IDDC attend seminars in other Depts (Mech, EE, CARE, Physics etc.). Similarly outside faculty and students come to IDDC seminars.

4.7 No. of faculty/researchers who visited the department on their initiative for giving (i) seminars, (ii) spending at least a week in the department.

As per Appendix 11(c).

4.8 Adequacy of research infrastructure.

Since IDDC has inter disciplinary post graduate and sponsored research goals, only a few specific labs have reasonable infrastructure for conducting research in modern areas. It is desirable that since instrumentation and design are important filed identified by DST, additional grants are made available in a faced manner to strengthen the infrastructure for research. Additional as in 9.1-ii.

4.9 Adequacy of technical staff - existing numbers and competency areas; competency areas in which there is a shortage.

Presently there are only 6 technical staff which is on average to per optics, electronics, Industrial Design which is a number inadequate as the respective laboratories for having specialised requirements. Specifically shortage is in Optics, and MDes.

4.10 Work space available for (a) Masters students, (b) Ph.D. students, (c) project staff (d) post-doctoral scholars.

The space for the PG teaching and Research labs is as below. It can be seen from the pie-chart that 84% of the space of centre is for PG teaching and Research. This works out to be about 1000 sq ft per faculty and about 15 sq ft per PG and PH.D. student. Refer to Appendix 23 laboratory space.

4.11 No. of national conference/workshops/seminars attended by Ph.D. students.

On average three students per year is able to attend a national conference.

4.12 No. of international overseas conference/workshops/seminars attended by Ph.D. students.

On average one student per year is able to attend an international conference.

4.13 No. of M.Tech students who have continued to Ph.D. (I) in same dept. (ii) other institutions.

About 10 Masters students / scientists in sponsored projects have continued for Ph.D. in IDDC.

4.14 No. of projects with co-guide from industry, student spends time in industry.

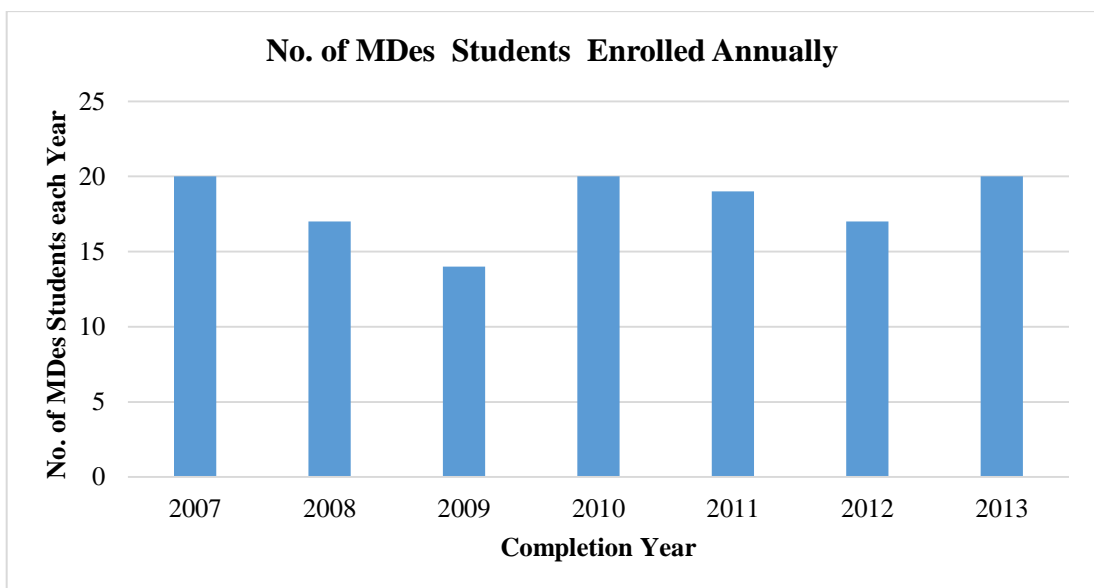
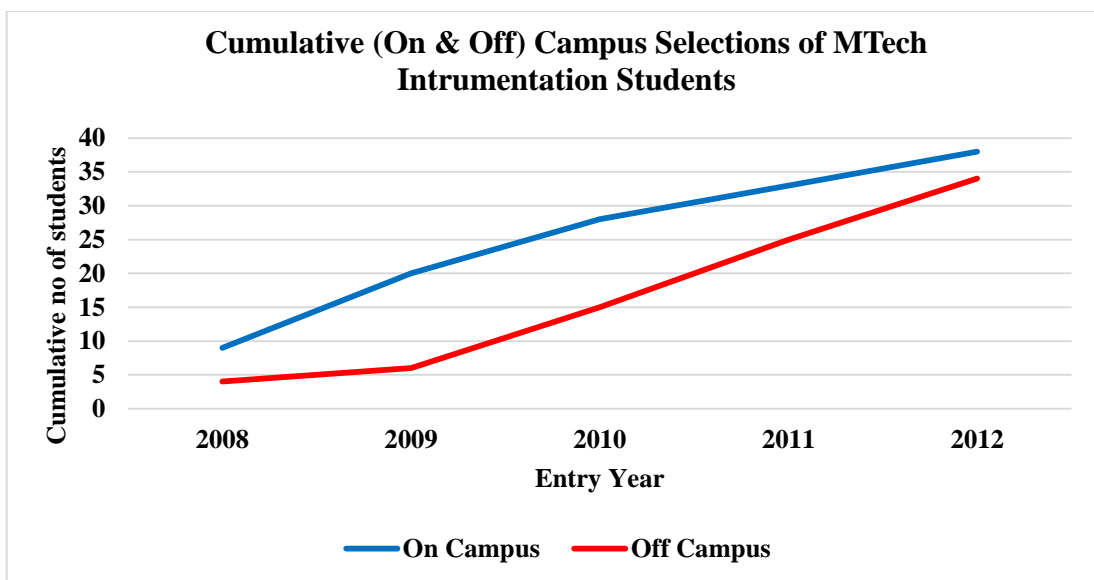
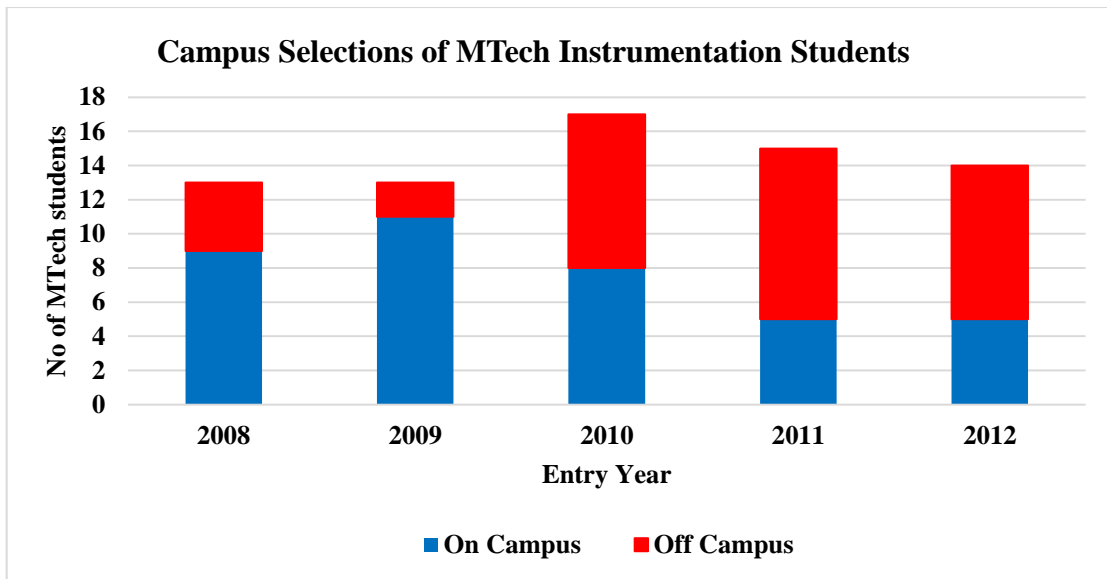
There is no consolidated data, but there have been co-supervision from NPL, CSIR and DRDO labs.

4.15 Self-assessment reports of the department/centres/schools.

There currently is no policy in Institute – earlier there were ADVISORY COMMITTEESS which conducted Review till 2002 – later replaced by Directors Visits.

4.16 Placement of MTech. and Ph.D. graduates in technical careers.

The following graphs depicts the campus selection data of MTech Instrumentation Technology students of past 5 years. It can be seen that in view of the multi-disciplinary nature of the programme no. of students get placed of their own merit and effort in out of campus selections. The recruitment is 100%.



4.17 Inter-disciplinary work -: (i) joint thesis guidance by faculty across groups /departments/centres, (ii) Proposals submitted and funded – PI CoPI and their group/department affiliations.

Please refer to Appendix-7(a) PH.D. thesis and Appendix-7(b) MTech thesis for details. And refer Appendix 3 & 4 for research projects and consultancies.

5. Outreach / External stakeholder engagement

5.1 Educational

a) Workshops/Short term courses - topical research for disseminating research of IITD.

There are 63 short course notes meant for Industry professionals and faculty from other colleges. Refer Appendix 9 –Short Term Course Manuals. There are about 10 books / monographs as per Appendix 12.

b) Workshops/Short term courses - educational methods (teaching, learning resources, pedagogy).

Please refer to Appendix-16 for IMPACT courses for faculty of RECs.

c) Learning, research material on the website.

Learning material is available only as monographs and lectures notes in printed form as per Appendix 9 & 12.

d) Science & technology for public information - on website

This is available as individual faculty information on the website.

e) Courses taught to students of other IITs/NITs/Other institutions.

There is no consolidated information available.

f) Courses taught via NKN; courses developed for NPTEL

No consolidated information is available.

g) Books, monographs, study material made available outside IITD.

Please refer to Appendix-12 Books published.

h) Experiments developed and made available to other institutions.

May see the course development for labs under project IMPACT in Appendix 15.

i) Seminars live/via NKN, web to other institutions in India/abroad

Nil

j) Reach out to schools, NCERT, KVs, etc. (e.g. K-12 programmes).

Nil

k) Mentoring of other institutions, e.g. new IITs, NITs, universities, etc. including faculty mentoring, curriculum development, laboratory development, etc.

i. Individual faculty have been on regular basis mentoring faculty from nearby engineering colleges in various subjects.

- ii. In particular the electronics group of IDDC along with electrical engg department was Resource Centre (northern node – with Jadavpur – West node , IISc – Southern node and IIT B as western node) to introduce modern syllabus in electronics, communication, computers, instrumentation in major regional Engineering Colleges and key polytechnics in India under World Bank / DOE funding.
- iii. The lecture materials and laboratory material developed in IMPACT programme is being used by many upcoming engineering colleges.

5.2 Industry collaboration

- a) **No. of students (Ph.D./Masters) directly linked to industry funded projects.**
IDDC has a quota of 2 QIPs and 2 Sponsored, 2 scientist from industries per year. Of these QIPs for colleges are regularly selected while the sponsorship from industries fluctuates.
- b) **Technology transfer**
May see Appendix 6(a).
- c) **IPR and patents**
Please refer to 6(b) Patents granted / applied for
- d) **Curriculum development /short courses for industry.**
Please refer to Appendix-9 Short Term Course Manuals and Appendices 15, 16 for IMPACT and MDIT course.
- e) **Faculty secondment to industry.**
Available in the information on faculty in individual websites.
- f) **Research projects undertaken with industry as partner.**
As per Appendix-25 Collaboration projects
- g) **Laboratories, equipment, etc. provided by industry for use in UG / PG teaching laboratories and student projects.**
 - i. HP RF Computing Lab; MDIT faculty was responsible for getting the donation of an advanced Electronic Simulation and Design station by Hewlett Packard India to the IDDCentre in 1996. This facility, costing about Rs. 25 lakhs was the first such donation by HP India under their University Support Programme in India, and was in recognition of the activities of the group in the area of electronic design.
 - ii. Under project IMPACT and Ministry of MHRD, the Manpower Development in Instrumentation Technology Lab with over 1 crore funding was provided.
 - iii. Under UK collaboration with IDDC a large number of laboratory equipment were given to all the specialised groups in IDDC.

5.3 Professional

- (a) **Service as Board, Senate, selection committee member at other IITs, NITs. And Universities.**
Prof Chandra Shakher was the member of BoG of Punjab Engineering College and Director of NIT Hamirpur. Refer to Appendix 13 for other positions.

(b) Service as Ph.D. thesis examiner at other institutions.

The faculty from IDDC are routinely examiners in other universities however consolidated data is not available.

(c) Service as technical expert on committees - MHRD, DST, DSIR, DRDO, Pan-IIT initiatives, other ministries, state and local governments.

As per Appendix 13.

Prof. Chandra Shakher

1. Member of steering committee of DST, government of India for IDP (Instruments Development Program) in the area of an analytical, food processing, environment monitoring, pollution control and laser based instrument and sensor, for period of 3 years from 1996 to 1999.

Prof. D. T. Shahani

1. Chairman, Expert Committee on Electronic Voting Machine ECI.
2. Parliament Security Technical Committee.
3. Expert Member in fields of X-ray / Millimeter Wave / Terahertz Technology (Parliament Security)
4. Technical Expert Member for Delhi Traffic Police
5. Chairman, PAC and PEC in Instrumentation Programme
6. Member in Selection Committees for Scientific & Technical Staff

Prof. A. L. Vyas

1. General Secretary: Acoustical Society of India (January 2005 to December 2006).
2. Member, Executive Council, Acoustical Society of India (1996-1998)
3. Fellow: Acoustical Society of India.
4. Fellow, IETE
5. Life Member, Ultrasonic Society of India

A. K. Agrawala

1. Member, Workshops and Clinical Services at AIIMS.
2. Chairman, Expert Committee on Electronic Voting Machine ECI.

(d) Technical expert on policy, regulatory, laws, standards committees.

(e) Member of Board/Advisory Board of public and private sector corporations.

(f) Positions (e.g. Director, Vice Chancellor, etc.) held by faculty on lien.

Prof. Chandra Shakher, Director NIT Hamirpur.

(g) Administrative positions at IIT D.

Please refer to Appendix-13 Admin Responsibilities.

Prof Chandra Shakher

1. House Master, Nilgiri House, IIT Delhi from Sept. 1, 2001 to Aug. 6, 2003.
2. Head, Computer Services Centre, IIT Delhi from Sept.1, 02 to Aug. 6, 03.
3. Chairman, Hospital Advisory Committee from Sept. 2001 to Aug. 6, 2003.

Prof. D. T. Shahani

1. Registrar IIT Delhi
2. Professor in Charge Transport at IIT Delhi.
3. Professor in Charge Security at IIT Delhi

4. Member of Space Planning Committee in IIT Delhi.
5. Chairman Estate & Works in IIT Delhi.
6. Assessment Committee member for evaluation of faculty Performance Appraisal Reports
7. R&D project review Committee Member for CSIR / DRDO projects.

Prof. Jyoti Kumar

1. Vice President BRCA 2012-present.
2. President, Dance and Drama Club, BRCA 2011-2012.
3. Member of anti-ragging team 2011, 12,13.
4. Judge at inter hostel photography competition 2011.
5. Judge at inter hostel street play competition 2012.
6. Participation in JEE 2011 and 2012.
7. Open House IDDC representative 2011, 12,13.
8. 2nd Year Student Mentor 2010-present.

Prof. A L Vyas

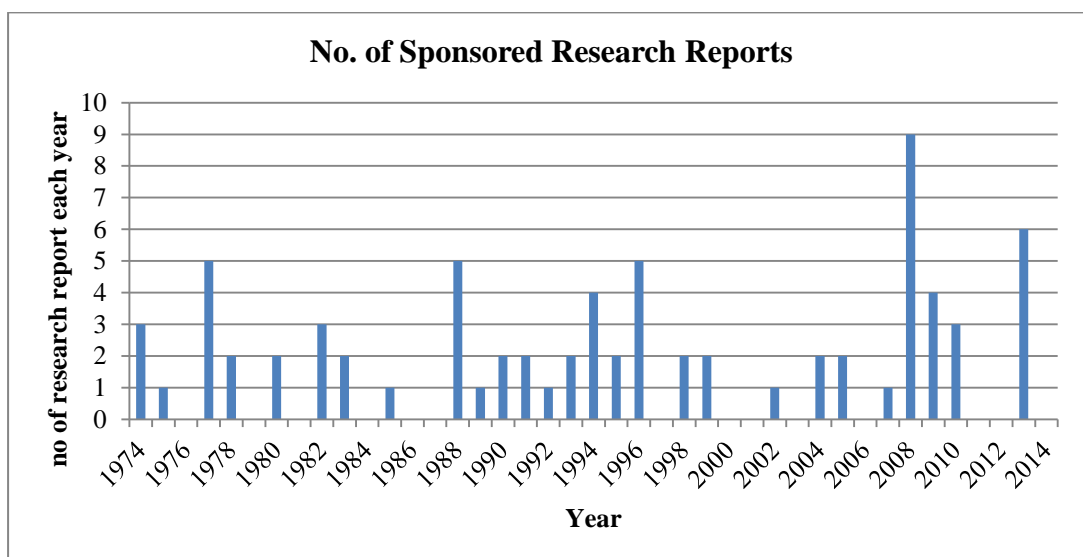
1. Professor Incharge, Planning & Publication Unit from Sept. 1998 to Sept. 2001.
2. Vice Chairman, JEE-96, JEE-97 & JEE-98 (Sept. 1995- Aug. 1998)
3. Member, BPGS, July 1898 to June 1992
4. Institute Representative and Confidential Operations for the DRDO Exams. Sept. 2004.

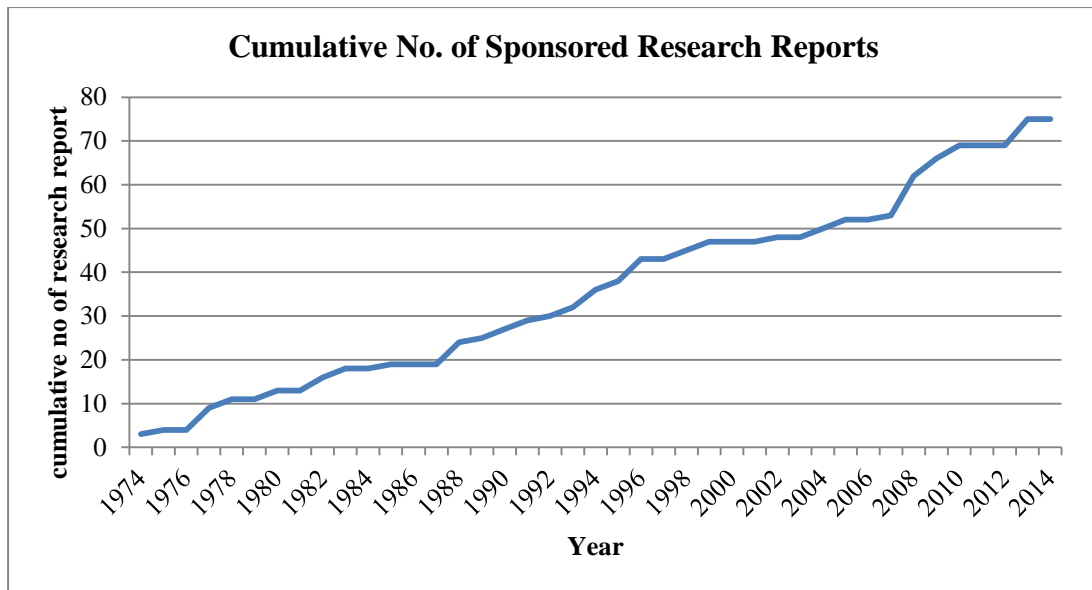
5.4 Contribution to national development goals

(a) Projects undertaken and their outcome.

The various sponsored project have led to TOTs and Patents as per Appendix 6(a) & 6(b).

Other contribution to industry via sponsored research projects are in Appendix 3 & 4 and the number of projects is given below. Refer to Appendix-5 Technical reports.





(b) Policy inputs - implications, visible impact on society.

May see Appendix 6(a) & 6(b) for TOTs and Patents.

(c) Entrepreneurship development.

The Appendix-3 Research projects and Appendix-4 consultancy projects describes the projects sponsored by government agencies for the solution of various technological problems in the sector of mechanical design, electronics, automation, electrical, etc. In certain cases, specific sensor and products are developed for the purpose and patents are filed for the same.

5.5 Alumni engagement

(a) Regular interactions / engagement with alumni and outcomes.

Informal

(b) Contributions from alumni.

No consolidate data available

5.6 Recognitions and Awards

(a) Awards to faculty.

The consolidated list of awards obtained from outside and within in IIT D is given in Appendix 10.

(b) Fellows of academies, INAE, etc.

Over 50 awards / recognitions to faculty as per Appendix-10

6. Governance

6.1 Governance

a) Organization structure - their autonomy/ terms of reference

The Centre operates under the direction of the Director, Deputy Directors, Dean PGS&R, and other Academic Office Holders. Within the Centre, we have a

Centre's Faculty Board (CFB), Centre Professorial Board (CPB), to look after all administrative/recruitment & policy issues, and CRC for overseeing Research.

b) Planning documents developed by the department - space, faculty, staff related.

There is no scope for space expansion. Faculty requirements are given to Institute bi-annually during selections

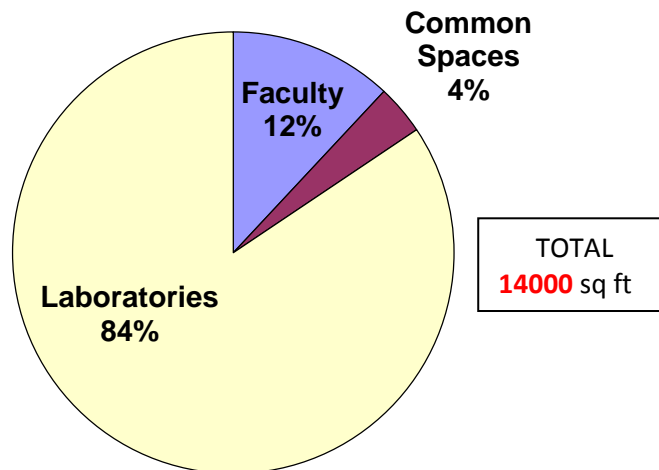
c) Records of discussions within the department - internal documents (meeting minutes, position papers, discussion papers, concept papers, etc.)

Refer to Appendix-21 CFB meets and Appendix 22 CRC meet.

d) Physical resources - percentage utilization for UG PG core and electives teaching separately, UG and PG student projects, Ph.D. student research. Projections for future.

The space for the PG teaching and research labs is as below. It can be seen from the pie-chart that 84% of the space of centre is for PG teaching and Research. This works out to be about *1000 sq ft per faculty* and about *15 sq ft per PG* and PH.D. student. Refer to Appendix 23space. Additional requested 10000 sq ft.

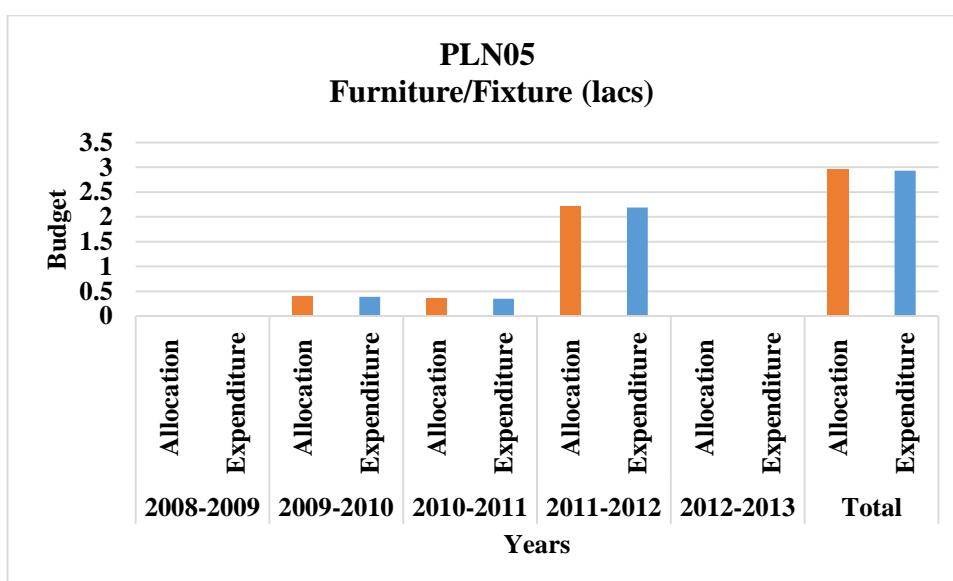
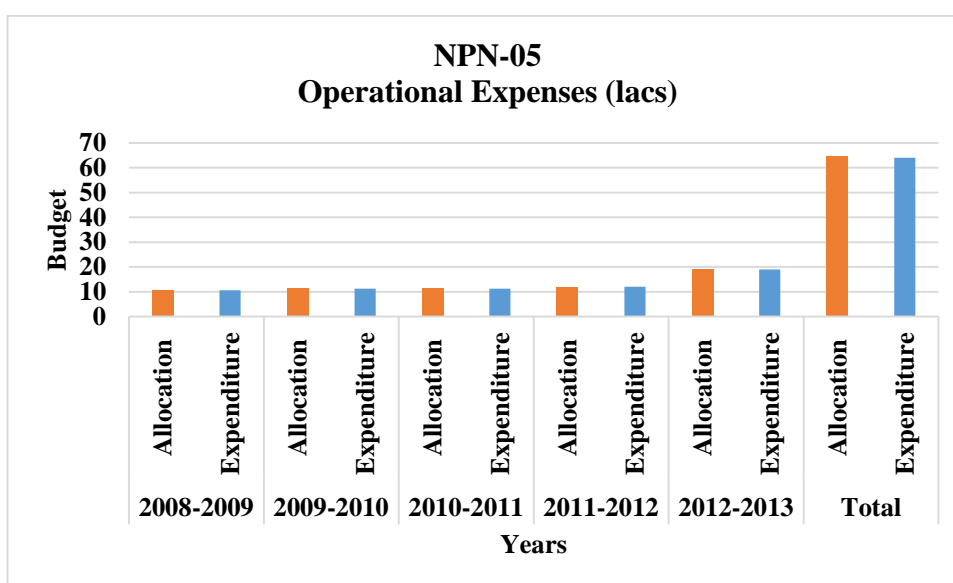
LABORATORIES	L (ft)	B (ft)	Area (sq. ft)	Programme
Apple Mac Studio	20.7	9.4	194.58	MDes, Ph.D.
Computer Lab.	27.5	12.8	352	MTech, Ph.D.
Design Research Studio	21.5	19.8	425.7	MDes, Ph.D.
Electronics	38.5	25.5	981.75	MTech, Ph.D.
Holography	19.7	18.9	372.33	PH.D.
Industrial Design Clinic	40	35	1400	MDes, Ph.D.
M D I T			3135	MTech, Ph.D.
M. Des Workshop	20	17.8	356	MDes, Ph.D.
NMR	28.6	33.3	952.38	MTech, Ph.D.
Optics	61.8	39.6	2447.28	MTech, Ph.D.
Photo Mechanical Engg.	34	20.8	707.2	MTech, Ph.D.
Project / Electro-Mech Lab.	41	24	984	MTech, Ph.D.
Ultrasonic Instrumentation	41	20.5	840.5	MTech, Ph.D.
Samsung Lab	32.6	23	749.8	MDes, Ph.D.
TOTAL Laboratories Area			13898.52	

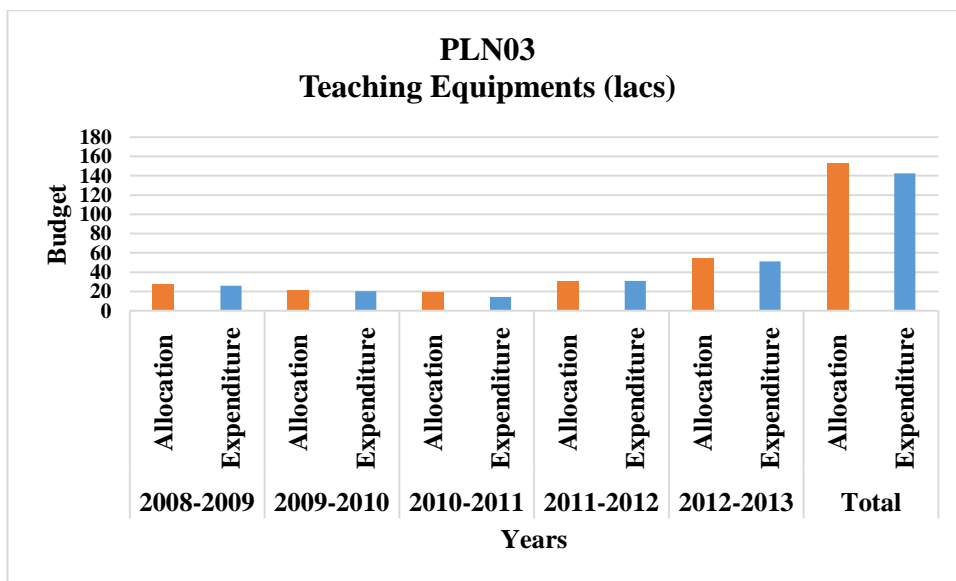
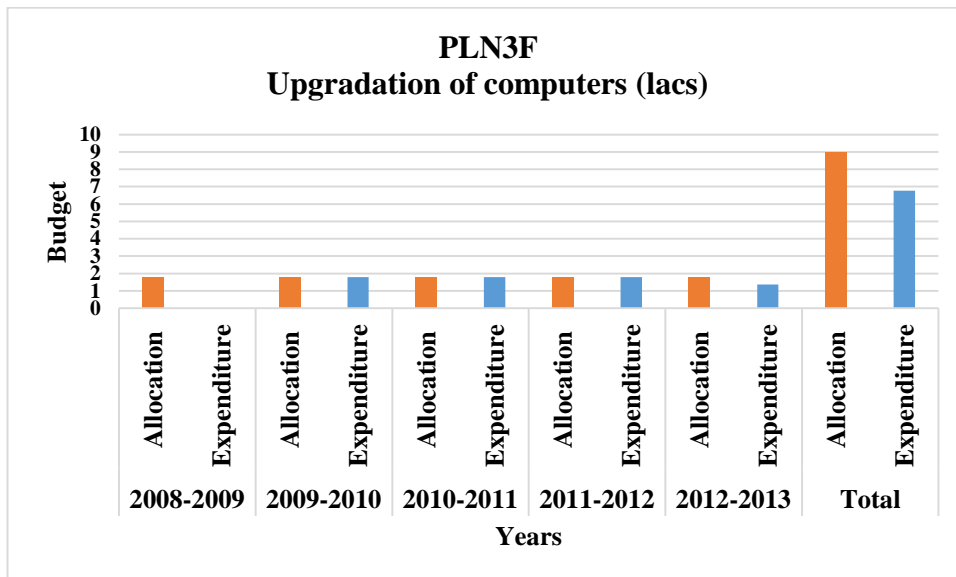
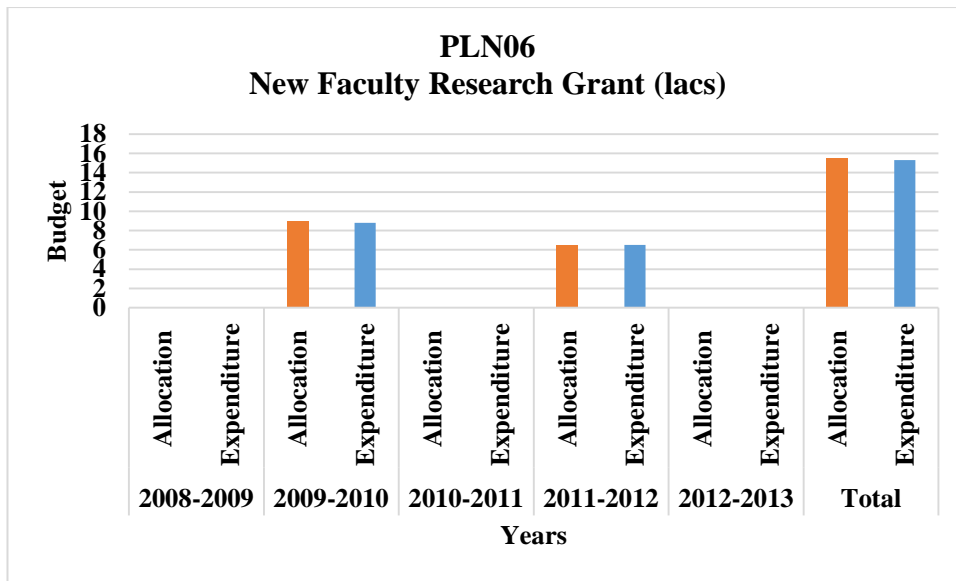


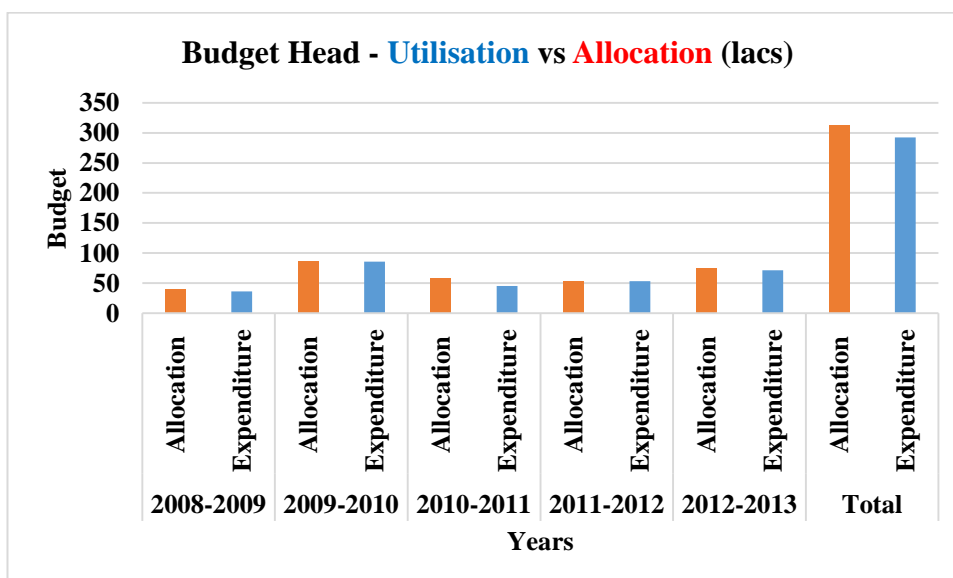
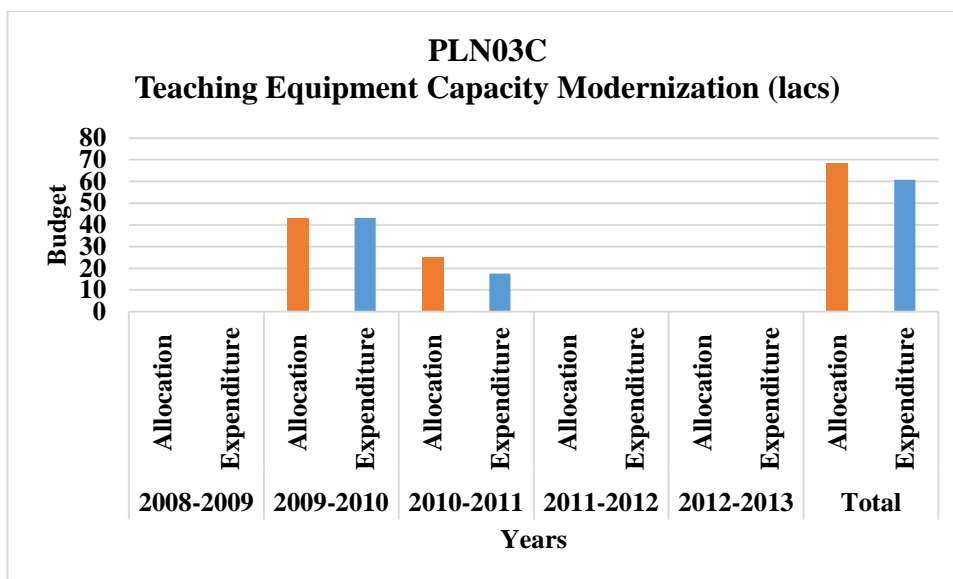
e) **Financial resources - (i) funds provided to the department, (ii) processes of distribution, (iii) funding for focus areas, (iv) funding for UG and PG core teaching laboratories. Outcomes of funds utilization. Changes in funding pattern and funds utilization, and effects on departmental strategy.**

The table of funds released between 2008 – 2013 is given below. (Appendix 20)

- i. Non plan: - On average non planned funds that are available are 12 lacs per year which works out to be 1.2 lacs per faculty about Rs. 20,000 per PG student.
- ii. Plan Funds: - On average annual location is 30 lacs which works out to be 3 lacs per faculty and Rs. 50,000 per student.
- iii. Modernization: - Over past 5 years modernisation grants have been Rs. 292 lacs. Primarily for replacement of old and obsolete equipment for PG and research labs.
- iv. New Faculty Grant: - these grant is about 6.5 lacs per new faculty.







f) Delegation of decision making within department/centre. List the processes and structures for financial and academic management, and the methodology for their review.

- (a) All Academic, Financial and Teaching related issues are handled by the Centre's Faculty Board (CFB) via frequent (as often as required) meetings.
- (b) All financial and budgetary issues are discussed in the Centre's Faculty Board (CFB) for appropriate allocations. Faculty recruitment planning is done at Professorial Board (CPB) level. These decisions are implemented by the Head of the Centre.
- (c) Centre Research Committee (CRC) for overseeing Research.

6.2 Department management and operations

(a) Organization structure - mandates, flexibility, etc.

The Centre operates under the direction of the Director, Deputy Directors, Dean PGS&R, and other Academic Office Holders. Within the Centre, we have a Centre's Faculty Board (CFB), Centre Professorial Board (CPB), to look after all administrative and policy issues, and CRC for overseeing Research.

- (b) Processes for curriculum planning.**
The teaching of various courses corresponds broadly to the approved curriculum as approved by the Senate. However, the Instructor includes topics which reflect the current state of the technology.
Every few years the curriculum review is held in which experts from industries and senior faculty from other institutions in the relevant topics are organised and the syllabi is revised. Two review have taken place and several new courses and laboratories have been added to the curriculum. Institute has provided funds for buying equipment and specialised components. Another review is in progress.
- (c) Processes and methods for teaching resources management.**
The Centre has an interdisciplinary master's program wherein many of the outside electives are from other Departments and Centres. The HR and Lab resource sharing is done by PAC (Program Advisory Committee) while Academic Planning/Execution is done by Program Executive Committee (PEC).
- (d) Guest faculty, affiliation for teaching core, elective UG & PG courses.**
Centre has practice of inviting industry experts either for teaching modules in the course or giving lectures on special topics relevant to the course. Institute has provisions to pay for guest faculty / visiting faculty for lectures.
- (e) Faculty short-listing criteria.**
Refer to Appendix 26 – Faculty shortlisting criteria
- (f) How collectiveness of the faculty has enhanced academic output and enhanced quality, etc.**
The specialised courses in Instrument Technology and Design have substantive inter- disciplinary contents and the individual modules of each course are shared by faculty having expertise in that module. Because of this the full justice is done to the course contents and people from different disciplines like physics, mechanical engg. etc. are able to take up the instrument courses while in design people from arts and architectural also take courses.
- (g) Nature, quantum and quality of support from of secretarial staff, stores and inventory management, purchases, ambience, etc.**
One stores, one office assistant, one group-IV has been given to IDDC as per norms of IIT.

6.3 Faculty

- (a) Faculty profile, and a critique of the same.**
Please see from one page CV of faculty on Website
- (b) Diversity in faculty profile by: gender, category, region, Ph.D. institution, post-doctoral institutions worked in, organizations/industry worked in, and employment prior to joining the department.**
PI see website from contact information given below on IIT website:

	<p>Chandra Shakher [Ph.D. (IIT/M)] Professor E-mail: cshakher@iddc.iitd.ac.in Area of Expertise:-Holography, Holographic Optical Elements, Fibre-optic Sensors, Optical Instrumentation. Phone number:-011-26591432</p>
	<p>Shahani D.T. [Ph.D. (IIT/D)], BTech ECE, IIT Kharagpur Professor & Head E-mail: shahani@iddc.iitd.ac.in Area of Expertise:-Electronic Instrumentation, Electromagnetics, Antennas. Phone number:-011-26591437</p>
	<p>Agarwala A.K. [M.S. (USA)] Chief Design Engineer(S.G.) E-mail: agarwala@iddc.iitd.ernet.in Area of Expertise:-Electronic Design,Instrument Design. Phone number:-011-26591428</p>
	<p>Atreya S.K. [DIIT (IIT/B), R.A.(UK)] Chief Design Engineer(S.G.) E-mail: atreya@iddc.iitd.ac.in Area of Expertise:-Industrial Design, Graphic Design, Computer Aided Design, Ergonomics Interior Design, Architecture, Instrument Enclosures, Education Technology, Software Development, HC Interaction Design. Phone number:-011-26591430</p>
	<p>Vyas A.L. [Ph.D. (IIT/D)] Professor E-mail: alvyas@iddc.iitd.ac.in Area of Expertise:-Electronic and Ultrasonic Instrumentation, Signal Processing, Sonar Systems, Transducer Design. Phone number:-011-26591442</p>
	<p>Gufran Sayeed Khan [Ph.D.(Germany)] Assistant Professor E-mail: gufrankhan@iddc.iitd.ernet.in Area of Expertise:-Optical Instrumentation, Applied Optics, Aspheric Optics, Interferometry, X-Ray Optics, Diffractive Optical Elements, Computer Generated Holography, Computer Controlled Polishing, Diamond Turning Phone number:-011-26597335</p>

	<p>Jyoti Kumar [Ph.D. (IITG)] Assistant Professor E-mail: jyoti@iddc.iitd.ac.in Area of Expertise:-Human Computer Interaction, Online customer persuasion, User Experience and Usability Engineering Methodology, Culture and Design, Sustainable Ecosystem Phone number:-011-26596735</p>
	<p>Sumer Singh [M. Des] Assistant Professor E-mail: sumerid@iddc.iitd.ac.in Area of Expertise:-Product Design, Transportation design, Design for sustainability, Design sketching, Computer Aided Surfacing, Design Innovation Phone number:-011-26596723</p>
	<p>Mehta D.S [Ph.D.] Associate Professor . (now Professor (Physics) – but R&D in IDDC E-mail: dsmehta@iddc.iitd.ac.in Area of Expertise:-Optical Coherence Tomography (OCT) and 3D-Surface Profilometry, Optical Tweezers; Trapping and Manipulation of Micro-/Nano-Particles, LCD's and OLED's. Phone number:-011-26591455</p>
	<p>Jain N.K. [Ph.D. (IIT/D)] Chief Design Engineer (S.G.) E-mail: nitinkj@iddc.iitd.ac.in, hodiddc@iddc.iitd.ac.in Area of Expertise:-Power Electronics, Switch Mode Power Conversion and Electronics Instrumentation. Phone number:-011-26591434</p>
	<p>Rakesh Kumar (recently retired) [Ph.D. (Delhi)] Chief Design Engineer(S.G) E-mail: arcs01@gmail.com Area of Expertise:-Optical Instruments Phone number:-011-26591436</p>
	<p>Singh I.P. (Recently retired but currently visiting faculty) [Ph.D. (IIT/D)] Associate Professor E-mail: ipsingh@iddc.iitd.ac.in Area of Expertise:-Mechanical Design, Instrumentation Microprocessor applications, Mechanical Properties of Polymers & Composites Energy Storage Systems, Neno Technology . Phone number:-011-26591438</p>

(c) **Procedure for faculty searches.**

Besides the normal advertisement process, the department / centre puts up its activities on website, and also in their visits to other institutions in capacity of guest lectures and or examiners take the opportunity to inform about the centres activities to the faculty and students in those institutions.

(d) **Result of faculty searches - area-wise (as in Annexure IV), number of applicants, short-listed and offered a position, their educational qualifications & experience.**

(e) **Success in recruitment (data for last 5 years), and offers that the persons had from other IITs / IISc / TIFR.**

Three Assistant Professors have joined.

(f) **Faculty lost.**

Faculty lost is primarily due to retirements. In the past 5 years, six faculty have retired from IDDC.

(g) **Faculty time utilization - in class, in meetings, project management, Ph.D. guidance, Masters Project guidance, UG project guidance.**

On the aspect of teaching each faculty has average of one lab and one course per semester. Masters projects guidance, assignments and Sponsored Research projects etc takes about three days a week and Ph.D. guidance is about one day in a week. Balance time goes in routine administrative work, meetings, guest lectures and consultancy.

(h) **Level of harmony amongst department faculty.**

The faculty routinely have common tea within respective groups and lunches on occasion of faculty guest lectures, project reviews and meeting with students.

6.4 Students

(a) **Criteria for short-listing and selecting students for admission to Masters and Ph.D. programmes of past 5 years.**

MTech and MDes students are selected by the rank list of GATE examination followed by the interview of selected students. PH.D. students are selected among the NET exam qualified students followed by the interview conducted at IDDC.

Refer to Appendix 18 MTech, MDes & PH.D. selection Criteria

(b) **Facilities provided to students and their maintenance/management system.**

Most of the laboratories are available to students for round the clock work. The funds for maintenance come from plan and non-plan.

7. Benchmarking

7.1 Identify departments/centres within IITD as peers.

Physics, Electrical Engineering, Mechanical Engineering and CARE

7.2 Identify departments/centres/schools/divisions from other IITs, IISc, NITs, private universities as peers, and reasons/criteria there for.

CEDT, IISc, Centre at other IITs.

7.3 Identify departments/centres from institutions in other countries as peers.

Imperial College UK, Cranfield Institute of Technology, Loughborough University, UK.

7.4 Define parameters for benchmarking

(i) Research: - Research relevant to the needs of Indian Industry, and currently relevant topics of international research interests.

(ii) Curriculum - separately for UG, Masters, and Ph.D. programmes: - IDDC deals with only post graduate programmes. Generating manpower which fulfils the current needs of the Indian industry. Placements are in Key industries, DRDO and CSIR labs.

(iii) teaching-learning processes: - an important aspect of the teaching activities in this Centre is the guidance of student projects which are generally configured with the current needs and interest of the Indian industry. Many have major projects linked to Sponsored Research projects.

7.5 Perform benchmarking and report the analysis/findings for the last 5 (or 10) years.

No quantitative benchmarking is available. But examination of data in Appendices on Award to Students, Placement in key companies, TOTs and patents with student participation gives a satisfactory picture qualitatively.

8. Feedback systems and results

8.1 System for feedback from UG students and its results.

No UG programme at IDDC.

8.2 System for feedback from PG. Master's and Ph.D., students, and their outcome.

Each course has a mandatory feedback provision where the course coordinator meets the students twice a semester. At end of semester the students give their feedback, optionally confidential, in an online process.

8.3 System for feedback from recruiters (i) on-campus, and (b) off-campus – separately for UG and PG graduates; and the results.

The system of feedback is informal i.e. in visits to industry / recruiters the performance of the students is enquired.

8.4 Mechanism of obtaining industry feedback and the findings.

Informal

8.5 Alumni feedback mechanism and its outcome.

Informally done with students either during their visits to IITs and when the faculty visit relevant industries.

8.6 Placement records- Ph.D, M.Tech. and B.Tech.

The following table contains the placement details of the IDDC PGs

Prog. Type	Prog. Name	No. of graduating students	No. of Core companies that asked for program by name	No. of students selected (ON-CAMPUS)	No. of non-core companies that recruited the students	No. of students in non-core companies	No. of students placed OUT of CAMPUS on Own	% employment
MTech	Instrument Technology	60*	10*	16*	17*	21*	23*	100
MDes	Industrial Design	14**	2**	2**	5**	12**	0**	100

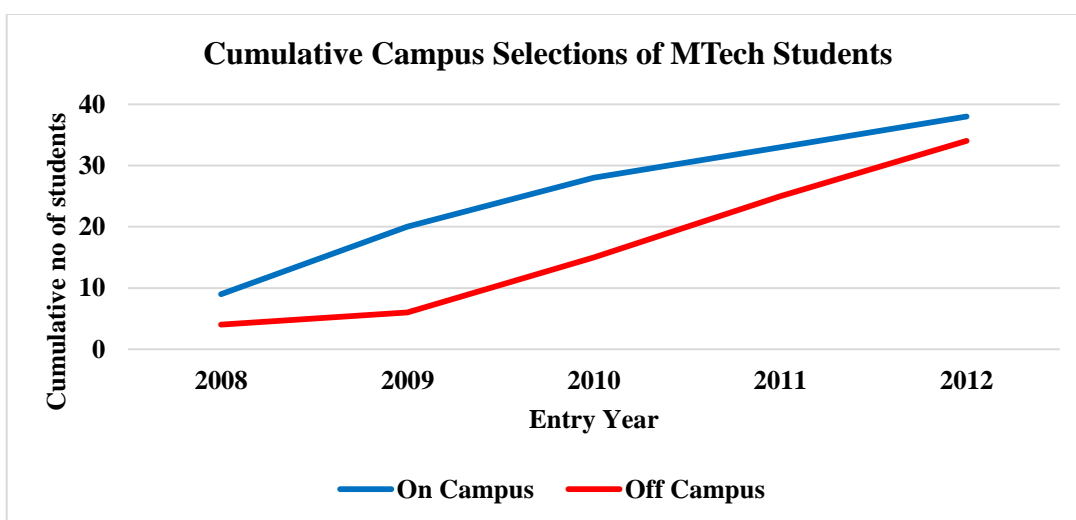
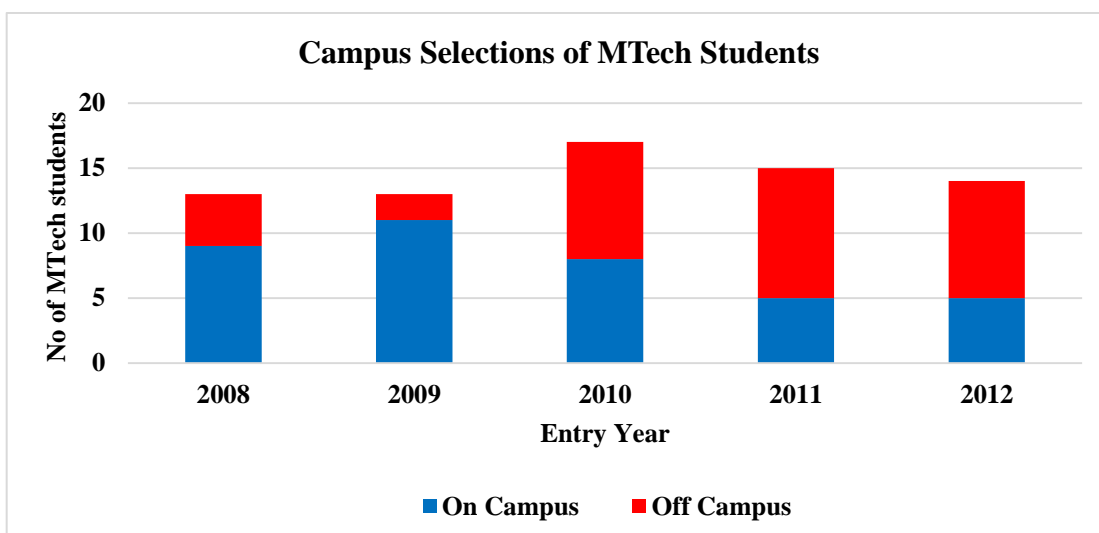
Table 2 Placement Details of IDDC PGs (100 % placements)

*The placements details given for MTech students is of years 2008 to 2012 batch.

** The placements details given for MDes. Students is of year 2011 batch.

As per Appendix 22 List of Recruiters for IDDC.

The following graphs depicts the campus selection data of MTech students of past 5 years,



9. Future vision for next 5-10 years

9.1 Goals and benchmarking for future in relation to

i. **Curricula:** - The curricula for various teaching resources is revised approximately every 10 years by inviting expert faculty, scientists from outside institutions and industry experts. A review is currently underway in 2014.

ii. **Research:** - The research topics are selected by individual faculty in state of art in respective fields. However Instrumentation Technology has been identified as area of weakness by DST (National level Science & Engineering Research Board SERB meet at Hyderabad 24 January 2014) in two ways – and advised correction by enhancing strength of manpower for research and for intensification of research in Instrumentation in numerous directions for enabling research in science and engineering. The key requirements is innovation and research in developing *array sensors* for applications in key areas of human and plant physiology, agriculture, materials. For example micro level investigation of chemical and bio-chemical reactions for e.g. by QCM, evapotranspiration and soil flux meters for agriculture, distributed sensors for atmospheric studies - for air quality and weather. Digital body and smart textiles is another wide field requiring attention. For defence, IDDC has already several TOTs and involved in User Trials.

With, IDDC faculty having NRDC, NTA awards, patents and TOTs and being unique in combination of electronics, optics, mechanical and Industrial design under one roof – being in IIT D with academic linkages with Physics, EE, Mechanical, CARE, Textiles – and collaborative ongoing work with numerous CSIR and DRDO labs – the step towards modernisation of research in Instrumentation is a natural corollary.

iii. **Outreach:** - The important TOTs and patents are direct outreach benefits to the country.

iv. **Processes for regular internal assessment:** - IIT has a well-structured system for assessment for faculty, staff and students.

9.2 Vision of curricula and teaching-learning processes - UG, PG and Ph.D.; innovations proposed. Areas identified for improvement.

It is proposed that instrumentation which has been identified as an area of weakness by DST is strengthened by review of existing criteria in light of current requirements of the country by review process as outlined in 9.1 ii Research above. Similarly, in Industrial Design MHRD has asked for specific emphasis in Design Innovation to UG students as well and the matter is currently under discussion in IIT D.

9.3 New areas for research and Masters Programme, and industry participation in these.

As in 9.1-ii Research, and 9.2 above

9.4 Projections for (i) funded projects, (ii) journal publications.

Presently on an average 3 major sponsored projects are completed. To increase this the faculty inputs to IDDC will need to be increased.

On average about 10 – 15 journal publications are occurring and to increase this number there is needs to be extra faculty inputs.

9.5 Projected graduation numbers - Ph.D., M.Tech, and B.Tech.

Needs upscaling in two ways – already the faculty to student ration is about 5:1, in PG programs in IDDC and surely a 3 fold expansion in numbers can be done in student strength. More importantly UG programs in Instrumentation and Design Innovation are overdue.

9.6 Projected faculty profile, and areas for recruitment of faculty.

There is severe shortage of faculty in electronics, optics, instrumentation and Industrial Design areas. More faculty required to double the existing strength. Areas can be worked out from examining 9.1-ii-Research above.

9.7 Infrastructure and governance - limiting factors that affect achievement of benchmarks and methods to overcome these.

- i. Faculty Strength - The major restricting factor is availability of only 10 faculty (some are already retiring) in three main areas of Optics, Electronics and Industrial Design which is sub critical.
- ii. Supporting Staff - The specialised labs have only two supporting manpower per area and this also is sub critical.
- iii. Modernisation Funds - The modernisation of several laboratories serving advanced technology and for new areas to be introduced will require substantial funding under the modernisation grant.

9.8 Working with other departments/centres and institutions in teaching and research.

IDDC is already having collaborative teaching within and outside IIT as in 9.1-ii.

9.9 New initiatives that the department/centre will undertake. See 9.2-ii Research

9.10 Outreach goals and anticipated limitations in the attainment of these implementation of corrective measures. See 9.7

10. Information in public domain

10.1 Minutes of all meetings.

Refer to Appendix 21 CFB meets and Appendix 22 CRC meets and Faculty in IIT website.

10.2 All reports archived in the central/department/centre libraries.

See Appendix 7 (a), 7(b) and 7 (c)

10.3 Past vision documents, review documents, Standing Review Committee documents.

Review reports of advisory committees available in printed form.

10.4 Any other documents developed by the department, a group/section of the department/centre. Preparation on-going for Curricula Review

APPENDICES
for
DETAILED REPORT
of
INSTRUMENT DESIGN DEVELOPMENT CENTRE

Prepared for
INTERNAL REVIEW COMMITTEE
of
IIT DELHI



21 – 22 February, 2014

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APPENDIX 1 - PUBLICATIONS

1978

1. Chandra Shakher and R. S. Sirohi, "Hologram interferometry and speckle photography combined for stress analysis", *Optik*, 51 (1978) 141-146.
2. Chandra Shakher and R.S. Sirohi, "Holomoiré interferometry applied to NDT", *Appl. Opt.*, 17(23), (1978), 3700-3702.

1979

3. Chandra Shakher and R.S. Sirohi, "Fringe control techniques applied to holographic non-destructive testing (HNDT)", *Canadian J. Phys.*, 57(12), (1979), 2155-2160.

1980

4. Chandra Shakher and R.S. Sirohi, "A simple method of fringe control in Holographic non-destructive testing", *J. Phys. E., Scientific Instrum.*, 13(3), (1980), 284-286.

1982

5. Chandra Shakher, "Laser speckle photography used for NDT of diaphragms", *Appl. Opt. (USA)*, 21(3), (1982), 367-369.
6. R.K.Mittal and I.P.Singh, "Large Deformation Behaviour of some Thermoplastics", *Polymer Engg. Sci.*, April 1982, Vol 22, pp 358-364.

1983

7. Chandra Shakher, J.N. Vaish and H.Vardhan, "A two element holographic enlarger", *J. Opt. (Paris)*, 14(5), (1983), 247-248.
8. Chandra Shakher and A.K. Agrawal, "Location and estimation of defective area in diaphragm: an a posterior moiré method", *Opt. And Laser Technology*, 15(4), (1983), 206-208.

1984

9. Chandra Shakher and G. Venkata Rao, "Use of holographic optical elements in speckle metrology", *Appl. Opt.*, 23(24), (1984), 4592-4595.
10. R.K.Mittal, I.P.Singh, S.K.Goel and T.S.Reddy, "Development of a Rig for Thermal Cutting of Glass", *J. of Prod. Engg.* (Publ. by Wiley Eastern Ltd. India), Sept 1984, vol 7, no 3, pp 96-104.

1985

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1986

13. Chandra Shakher, P.B. Godbole and B.N.Gupta, "Shearing interferometry using holo-lenses", *Appl. Opt.*, 25(15), (1986), 2477-2479.
14. R.K.Mittal and I.P.Singh, "Time Dependent Behaviour of Nylon-6 under Biaxial Loadings under a Constant Rate", *Polymer Engg. Sci.*, Feb 1986, Vol 26, No 4, pp 318-325.

1987

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1988

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1989

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25. G.Kansal, Atreya S.K., Rao P.N."Two Dimensional Thermal Analyses of Injection Moulds", Society of Plastic Engineers, USA, SPE / ANTEC, Vol. 1992, May, 1992, PP2001-2003.

1993

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27. G.Kansal, S.K.Atreya and P.N.Rao, CAD/CAM of Injection Moulds for Gears, Proceedings of 8th ISME Conference, New Delhi, March 1993, pp461-466.

1994

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31. Chandra Shakher and A.K. Nirala, "Measurement of temperature using speckle shearing interferometry", Appl. Opt., 33(11), (1994), 2125-2127. (** Results of this paper appeared on the front cover of the Journal).
32. Chandra Shakher, A. J. Pramila Daniel and A.K. Nirala, "Temperature profile measurement of axis symmetric gaseous flames using speckle photography, speckle shearing interferometry and Talbot interferometry", Optical Engineering, 33 (1994) 1983-1988.
33. R.Sharma, I.P.Singh, A.K.Tripathi and P.K.C.Pillai, "Charge-Field Hysteresis of BaTiO₃: PVDF Composites", J. of Mat. Sci., 29 (1994), pp. 995-998.
34. Ajay Somkuwar, Guha S.K. and Atreya S.K.; "Pedal Force & Muscular Activity in Human Powered Rickshaw", 1994, Ergonomics Journal, Taylor & Francis Ltd., London.

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2000

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APPENDIX 2 - CONFERENCES

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APPENDIX 3-SPONSORED RESEARCH PROJECTS

S.No.	Title	Completed / In Progress	Duration	Amount of Grant Rs. Lacs	Sponsoring Agency	Co-Investigators
1.	Modified Sonar Receiver for Sonar 170 B	Completed in Dec. 1974	2 years 6 months	2	Indian Navy	P.V.Indiresan (PI), A.J.PaulRaj I.N. A.L.Vyas B.B.Madan
2.	IFF simulator for ASW computer	Completed in Dec. 1980	5 years 2 months	0.62	Dept. of Electronics	Bharati.Bhat (PI) A.L.Vyas S.K.Kaul
3.	Design and Development of an own doppler tracking low noise receiver	Completed in Dec. 1980	4 years	2.50	Dept. of Electronics	P.V.Indiresan (PI), A.L.Vyas R.Bahl D.S.P.Varma I.N. M.Balakrishanan
4.	Trideco VLF System	Completed in 1980	1 year	0.5	Navy	D T Shahani (PI)
5.	Universal Sonar Signal Processor	Completed in Oct. 1981	3 years 8 months	0.20	Dept. of Electronics	P.V. Indiresan (PI) M. Balakrishanan G.Varkey A.L.Vyas R.Bahl
6.	Investigations of improved techniques for Omni-directional sonar	Completed in Dec. 1982	2 years 10 months	2	Dept. of Electronics	P.V.Indiresan (PI), A.L.Vyas, R.Bahl D.S.P.Varma I.N.
7.	Establishment of faculty for research and training in Underwater Electronics.	Completed in July 1982	5 Years	47	Dept. of Electronics	P.V.Indiresan (PI), A.L.Vyas all members of Signal Processing Group
8.	High Definition deep sea sonar (an Indo-UK collaborative project)	Completed in 1982	5 years	£5000/- + Visits	British Council	P.V.Indiresan (PI) B.B.Madan A.L.Vyas R.Bahl
9.	Preliminary Investigations and Model Analysis of a Flywheel Energy Storage System	Completed in 1982	2 years	2	CSIR	R. Arockiasamy (PI) I P Singh (4 others)
10.	Development of holographic grating and holographic optical elements	Completed in 1984	5 years	25	Internal Funding by CSIO Chandigarh	Chandra Shakher (PI) A.K. Agarwala J.N. Viash Susheel Kumar
11.	Holographic analysis of cover plate of water box of industrial condenser.(1984)	Completed in 1984	2 years	6	BHEL	Chandra Shakher PI G.V. Rao A.D. Baone
12.	Holographic vibrational and dynamic displacement analysis of LP Turbine-120 MW set. Proj.No:PYA-85-662-44	Completed in 1985	1.5 years	5	BHEL	Chandra Shakher PI G.V. Rao A.D. Baone
13.	Semi Active Homing Head Missile	Completed in 1985	3 years	6	DRDL	D T Shahani (PI) B Bhat
14.	High resolution sector scanning sonar	Completed in Oct. 1986	5 years 3 months	11.50	Dept. of Electronics	B.B.Madan (PI) A.L.Vyas R.Bahl Bindu Chandna Rajiv Jain
15.	Development of laser alignment system for hydro/system rotor shafts. Proj.No:QYN-87-926-44	Completed in 1987	2 years	12	BHEL	Chandra Shakher PI G.V.Rao

16.	Analysis Design and Testing of High Frequency Motors	Completed in 1987	4 years	3.5	BRNS	R. Arochiasamy (PI) I P Singh (6 others)
17.	Feasibility study of an Underwater Acoustic Imaging System	Completed in Mar. 1988	5 Years	14.62	Dept. of Electronics	A.L.Vyas (PI), M.Balakrishanan, M.Zubair B.Chandna
18.	Development of inexpensive laser based alignment instrument using self-imaging phenomenon for application in electrical industries. Proj.No:DYA-88-127-44	Completed in 1988	1.6 Years	5	BHEL	Chandra Shakher PI U.M.Chaudhari
19.	Development of Pulsed NMR Spectrometer for Oil Seed Characterisation	Completed 1988	5 Years	US \$ 410,000 + Rs. 20 lacs = 100 lakhs	UNDP/ MHRD	A K Agarwala- PI N K Jain S. Sounderpandian Late P K Sharma
20.	Microprocessor based Micro-Hydel Turbine Controller	Completed in 1988	2 Years		Govt of Meghalaya	R. Mulchandani (PI) I P Singh S K Sud
21.	Manpower development and research in Underwater Electronics	Completed in Dec. 1989	4 years 6 months	47.3	Dept. of Electronics	A.L.Vyas (PI) all the members of Signal Processing Group of Care
22.	MDIT Training to Instrumentation Manpower	Completed in 1989	6 years	33	MHRD	D T Shahani (PI)
23.	Condition monitoring of joints using laser speckle technique (R-422)	Completed in Apr. 1990	3 years	8.75	Aeronautics R&D board (AR & DB) (Ministry of Defense)	Chandra Shakher PI
24.	Design and development of Twyman Green interferometer with automatic fringe analysis capabilities (R-390)	Completed in 1990	3 Years	9	CSIR /MHRD	Chandra Shakher PI B.N. Gupta P. Singh S.K. Sud S.Swaminathan
25.	Development of Moiré and semiconductor laser interferometry and electronic systems for precision length measurement instruments	Completed in 1991	1 Year	10	Ministry of Human Resource Development	Chandra Shakher PI A.K. Agarwala N.K.Jain
26.	Condition monitoring of joints using digital speckle pattern interferometry. RP-019/93	Completed in June 1993	2 +1 year extension	9.29	Aeronautics R&D board (AR & DB) (Ministry of Defense)	Chandra Shakher PI
27.	Manpower Training in Instrument Technology	completed in 1993	7 Years	33.00	MHRD	IDDC Electronics Group
28.	Team member in other three institute projects	Completed in 1993	6 years	Approx. 100	OPTEL Telecommunication Ltd.	A.K. Ghatak PI
29.	Automatic Telecom Cable (RP036)	Completed in 1993	4 years	10	SARICON	D T Shahani (PI) A K Agarwala N K Jain R Jain
30.	Design and Development of a Laser Twymen and Green Interferometer for Optical Testing wi	Completed in 1993	4 years	8.5	CSIR	B N Gupta (PI) Chandra Shakher I P Singh S K Sud

	th On-Line fringe Analysis Capabilities					
31.	Industrial design clinic	Completed in 1994	7 years	50	MHRD	S K Atreya (PI) I P Singh
32.	Development of interferometric techniques by using semiconductor lasers and its applications in contouring of optical components and optical testing. RP-07/94.	Completed in 1994	3 years	9.93	CSIR /MHRD	Chandra Shakher PI S K Sud B.N.Gupta
33.	Development of material handling gantry robot.	Completed in 1994	3 years	50	MHRD	P N Rao (PI) I P Singh
34.	Design and development of electro-optic sensor for displacement-measurement (phase-I started) RP-74-95.	Completed in 1995 (Phase-1)	2 year	5	DST, Govt of India	Chandra Shakher PI B.N.Gupta S.K.Sud
35.	Development of a Parametric Sonar	Completed in Oct 1996	5 year 6 months	24.70	Dept. o f Electronics	A.L.Vyas (PI) V.S.Balaji Raj Arun Agrawal N.K. Jain
36.	EMPF for torpedo (RP047)	Completed in 1996	4 years	10	NSTL	D T Shahani (PI) N K Jain A K Agarwala
37.	Automatic Telecom Cable Test System (RP 036/93)	completed in 1996	4 years	12	Sericon Impex	N K Jain- PI D T Shahani A K Agarwala
38.	Resource Centre In Electronics (Project IMPACT - RP 011/91)	Completed in 1997	6 Years	350.00	DoE/ SDC/ World Bank	A K Agarwala - (PI)* N K Jain G S Visweswaran Faculty of EED and IDDC
39.	Dev. of Technology for IMS based Organic Pollutant Detector (RP 025/92)	completed in 1997	3 years	15	DRDE, Gwalior	D T Shahani- PI A K Agarwala N K Jain G R Mehta
40.	Design and development of an electro-optical sensor (RP00818)	completed in 1997	1 Year 6 Months	4.84	DST	Chandra Shakher (PI) S. K. Sud
41.	Automatic Telecom Cable Test System (RP 036/93)	Completed in 1997	4 Years	12.0	Sericon Impex	N K Jain- PI D T Shahani, A K Agarwala
42.	Flywheel energy storage systems (RP01006)	Completed in 1997	3 Months	2.65	DST	R. AROCKIASAMY
43.	Supply of two prototypes for IMS based Organic Pollutant Detector (RP 0975)	Completed in 1998	1 year	8.00	DRDE, Gwalior	D T Shahani- PI A K Agarwala, N K Jain G R Mehta
44.	Design & development of digital speckle pattern interferometer for measurement /monitoring of vibrations RP-01034	Completed in Feb. 1998	2 years	9.93	Aeronautics R&D board (AR & DB) (Ministry of Defence)	Chandra Shakher PI A.L. Vyas G.R. Mehta
45.	Electromagnetic Proximity Fuse for Torpedo (RP 47/93)	completed in 1998	3 years	10	NSTL	D T Shahani- PI A K Agarwala N K Jain G R Mehta
46.	Battery Electric Hybrid Vehicle Min of Transport (R.P.874)	completed in 1998	2 years	5	Govt. of Delhi	R.Arockiasamy(PI) S.K.Sud A.L.Vyas I P Singh

47.	Development of capability for new and industrial design of commercial products. (RP00884)	completed in 1998	2 Years	10	AICTE	L. K. das (PI)
48.	Re-engineering of IMS based Organic Pollutant Detector (RP 01090).	completed in 1999	6 months	3.25	DRDE, Gwalior	D T Shahani- PI A K Agarwala N K Jain G R Mehta
49.	Development of precision base plates for IC chip mounting (RP00898)	completed in 1999	3 Year 4 Months	5.82	Ministry of Defence	Rakesh Kumar (PI)
50.	Acoustic characterisation of under sea sediments to initiate commercial applications (RP00725)	completed in 1999	4 Years 4 Months	18	Commission of Eupropean Communities	A. L. Vyas (PI)
51.	Fuel saving through eco-friendly hybrid vehicles. (RP00880)	completed in 1999	3 Year 6 Months	50	Crompton Greaves Ltd	R. Arocktasamy (PI) D T Shahani A L Vyas I P Singh
52.	Design and development of electro-optic sensor for displacement-measurement (phase-I started) (RP-74-95)	Completed in Mar. 1999	2 years	15	DST, Govt of India	Chandra Shakher PI
53.	Mission Project - Engine modifications on a two stroke S.I. Engine to improve the fuel economy and efficiency (RP-104/95)	Completed in Mar. 1999	3 years	17	M.H.R.D, LML Ltd. IOC Ltd	R.R.Gaur (P.I) M.G.K.Babu G.S.Yadav, J.P.Subrahmanyam. Anjan Ray M.R.Ravi T.S.Bhatti.
54.	Mission Project - Design modifications for a passenger car to improve the fuel economy and efficiency (RP-093/95)	Completed in Mar. 1999	3 years	45	M.H.R.D Maruti Udyog Ltd	R.R.Gaur (P.I) M.G.K.Babu Dr S Subbarao Dr. M R Ravi T S Bhatti
55.	Special IMS CWA Sensors (RP01205)	Completed in 2000	1 year	9	DRDE	D T Shahani (PI) A K Agarwala
56.	Designing of new materials using computers as front end tool. (RP00882)	Completed in 2000	3 Years 8 Months	40	Wipro Ltd.	B. Chakravarthy (PI) R. P. Suri Ashok Misra
57.	Software engineering for telemedicine (RP01087)	Completed in 2000	2 Years	3.04	DST	N. K. Jain (PI) G. S. Visweswaran
58.	HF Circuits for SAW (RP01207)	Completed in 2001	1 year 6 Months	15	MOTOROLA	D T Shahani (PI) A K Agarwala
59.	Interferogram analysis techniques RP – 01315	Completed in Mar. 2001	3.5 years	17.77	DST, Govt of India	R.S Sirohi PI Chandra Shakher
60.	Design & development of digital speckle pattern interferometer for measurement /monitoring of vibrations RP-01034	Completed in Jan. 2001	1 year 6 months	6.63	Aeronautics R&D board (AR & DB) (Ministry of Defense)	Chandra Shakher PI
61.	Development of Miniature DC/DC Convertors (RP01231)	Completed 2001	1.5 years	4.5	S M Creative	A K Agarwala (PI) D T Shahani Co-PI
62.	Signal Processing and Hardware Engineering for Telemedicine (RP01059)	Completed in Mar. 2001	3 years	9	MHRD	A.L.Vyas (PI) S.N.Tandon
63.	Miniature Ion Mobility Sensors (RP02170)	Completed in 2002	3 year 3 months	9.5	DRDO, Ministry of Defence	D T Shahani (PI) A. K. Agarwala N. K. Jain
64.	Design and development of digital speckle pattern interferometric	Completed in 2002	1 year 9 months	6.63	Aeronautics R&D Board	R. S. Strohi (PI) Chandra Shakher

	system for measurement/monitoring of vibrations (RP01305)				(Ministry of Defence)	
65.	Development of a Golden Ear Concept for Entertainment Systems (RP01359)	Completed in 2002	9 months	5.3	L G electronics (India) Pvt. Ltd.	A. K. Agarwala (PI) D T Shahani
66.	TOT on Fabrication of IMS CWA Detection System and R&D of Advanced IMS Version (RP01206)	Completed in 2002	2 years 1 months	19.5	DRDE	D T Shahani (PI) A K Agarwala N K Jain G R Mehta
67.	Development of Dot specified SMPS power plants. (RP01173)	Completed in 2002	2 years 9 months	6.59	Central Electronics Ltd	D T Shahani A K Agarwala (PI) N K Jain
68.	Sustainability Support Scheme (Project IMPACT (RP 01070)	completed in 2003	5 years	32	DoE	N K Jain- PI G S Visweswaran
69.	Photochemical and electro-photochemical machining, a non-conventional manufacturing approach of difficult to etch materials and shapes (RP01194)	Completed in 2003	3 Years 8 Months	33.35	Dte. of training and Sponsored Res.(Min. of Defence)	Rakesh Kumar (PI)
70.	Programmable and Virtual Instruments (RP01324)	Completed in October 2004	3 years 6 months	7	MHRD	A.L.Vyas (PI) S.N.Tandon Chandra Shakher I.P.Singh
71.	Synthesized spatio-temporal optical coherence for 3-D profilometry and tomography RP- 01686	Completed in Apr. 2004	3 years	30	DST, Govt of India	Chandra Shakher PI D.S Mehta R. S. Sirohi
72.	Development of SAW Detector for Organic Pollutants in Air (RP01583)	Completed in 2004	1 year	4.9	DRDE	A. K. Agarwala (PI) D T Shahani N. K. Jain
73.	Development of a Programmable A/C Controller (RP01579)	Completed in 2004	9 months	1.2	Anergy Instruments	A. K. Agarwala (PI) D T Shahani
74.	Novel Writing cum Pointing Device for PC (RP01570)	Completed in 2004	1 year 3 months	6	Maarshan Projects B V	D T Shahani (PI) N. K. Jain A. K. Agarwala
75.	Design of low velocity and high manoeuvrability electric wheel chair for mobility within the home (RP01158)	Completed in 2005	6Years	14.61	Ministry of social justice & empowerment	L. K. Das (PI) J. K. Chatterjee
76.	Internal Stabiliser for A/C (RP 01644)	Completed in 2005	1 Year	4.0	LG Electronics	A K Agarwala PI D T Shahani
77.	Modernization of mechanical fabrication facility (RP01530)	Completed in 2005	2 Years	5	MAARSHAN PROJECTS B.V	I. P. Singh (PI) Santosh (Centre for rural development & Tech.)
78.	Development / Automation of Panchkarma Instruments (RP01694)	Completed in 2005	1 year 4 months	14.76	CCRAS	D T Shahani (PI) G S Lavekar
79.	RF Networking Technology in Instrumentation (RP01625)	Completed in 2006	2 years	15	Ministry of Human Resource Development	D T Shahani (PI)
80.	Development of Smart Sensors (RP01764)	Completed in Aug. 2007	2 years 5 months	8	MHRD	A.L.Vyas (PI) I.P.Singh
81.	Development of Digital Gauge Measuring Bore (RP01815)	Completed in 2008	2 Years 6 Months	21	Facility of weapon technology EME School Baroda	D T Shahani- PI A K Agarwala N K Jain

82.	Composite Security Plan / Security Audit of Delhi Main Junction (RP01362)	Completed in 2008	3 years 6 months	21	Ministry of Railways	D T Shahani (PI) B N Yadav
83.	Fuel savings and emission control through integrated technology on hybrid bus (RP01123)	Completed in 2008	9 Years	377.30	Oil Industry Development Board (MoPNG), New Delhi	R. Arockiasamy (PI) S. K. Sud
84.	Bamboo as a Green Engineering Material in Rural Housing and Agricultural Structural for Sustainable Economic Growth (RP02112)	Completed in 2008	4 years	484.23	Indian Council of Agriculture Research	Dr. S Sudhakar (PI) D T Shahani (Co-PI)
85.	Faculty and Curriculum Development of RBEF (RP01342)	Completed in 2009	1 year	2.3	Ritnand Balved Education Foundation	D T Shahani (PI)
86.	Development of technology for the manufacture of low cost precision medical implants and hi-tech engineering components (RP01768)	Completed in 2009	4 Years	20	MHRD	Rakesh Kumar
87.	Development of Digital holographic techniques for the contouring of diffuse objects and measurements of temperature of gaseous flames (RP02282)	Completed in Nov. 2009	3 years	37.418	DST, Govt of India	Chandra Shakher PI
88.	Propagation Studies on Mobile IED Pre- Initiator System (RP02077)	Completed in 2009	12 months	6	OC Software Engg. Corp	D T Shahani (PI) A K Agarwala
89.	Development of Data Communication for SMERCH Weapon Systems (RP02221)	Ongoing since 2009	2 years 8 months	36.75	HQ 640 EME Battalion, Ambala Cantt.	D T Shahani (PI)
90.	Fourier Transform Ion Mobility IMS MS based detector for Organic Pollutants in Air (RP01906)	Completed in 2010	2 Years	6	Ministry of Defence, Dept of Defence Res. & Development	D T Shahani (PI) A. K. Agarwala
91.	Earthquake Signature Analysis using Intelligent Techniques (RP01896)	Completed in 2010	3 year 6 months	18.51	DST	D T Shahani (PI)
92.	Mobility enhancement for elderly (RP02289)	Completed in 2011	1 year 6 months	16.52	DST	D. T. Shahani (PI) A K Agarwala N K Jain
93.	Mobile communications to improve monitoring of heart disease and diabetes (RP02007)	Completed in 2012	6 Years 11 Months	46.67	UKIERI, British Council Division	A. L. Vyas
94.	Development of swept source optical coherence scanning microscopy for 3-D surface profilometry and tomography (RP02268)	Completed in 2013	4 Years	37.36	DST	D S Mehta
95.	Design and development of light out coupling techniques for high efficiency organic light emitting devices (RP02330)	Completed in 2013	3 years	12	CSIR	D. S. Mehta (PI)
96.	Setting up a Knowledge Network on Rural Housing	Ongoing since May 2011	3 years	416	Ministry of Rural Development	Jyoti Kumar PI V M Chariar

97.	Diffractive optics as null elements for absolute aspheric metrology	Ongoing since 15 April 2013	1 year 6 months	44.44	DRDO/IRDE Dehradun	Dr. Gufran S. Khan -PI
98.	Design and development of freeform optics for imaging and non-imaging applications, under Indo-German (DST-DAAD) PPP 2012	Ongoing since 02 September 2013	2 year	10.3	DST-DAAD	Dr. Gufran S. Khan -PI
99.	Development of remote operation of anti-aircraft machine gun 12.7 mm NSVT mounted on commanders cupola Tank T-72 (RP0-2790)	Ongoing since 14 Aug. 2013	2 years	25	Army Technology Board	D T Shahani (PI)
100	Development/Automation of Ksharasutra Preparation (RP0-2677)	Ongoing since 15 Nov 2013	3 years	33.6	CCRAS	D T Shahani (PI)
101	Design Of Quartz Crystal Micromass Balance Technique For Feasibility Study Of Using Chimeric Polymer Interfacing For Biomedical Applications Including Drug Uploading Delivery Potentials In Air (RP0-2685)	Ongoing since 5 April 2013	1 year	9.84	DMSRDE	D T Shahani (PI)
102	Networked infrastructure for remote patient monitoring (RP02824)	Ongoing since 2013	2 Years	19.93 Lacs	International Division, DST	A.L. VYAS (PI)
103	Design and development of standalone solar -PV energy generating system upto 5KW (RP02576)	Ongoing since March 2012	2 Years	45.98	A.L. VYAS (PI)	A.L. VYAS (PI)
104	Wireless body area network for health monitoring (Rp02491)	Ongoing since July 2011	3 years	79.32	DST	A.L. VYAS (PI) Shniban Kishen Koul

APPENDIX 4 - CONSULTANCY PROJECTS

No	Title	Complete d/ In Progress	Duration	Amount of Grant (in Lakhs Rs.)	Sponsoring Agency	Co- Investigators
1.	Compact X Band Missile Antenna	Completed in 1975	2 years	1.0	DRDL	D T Shahani (PI)
2.	Scaled Studies on VLF	Completed in 1979	1 years	0.5	Navy	D T Shahani (PI)
3.	Model VLF Measurements	Completed in 1980	1 years	1.5	Navy	D T Shahani (PI)
4.	Design of Computer-Teleprinter Interface	Completed 1981	5 months	0.05	Audiotronics, new Delhi	A.L.Vyas (PI) M.Balakrishanan
5.	Electronic Heater Controller for a Diamond Synthesis Press	Completed 1981	0.5 year	0.05	National Physical Laboratory New Delhi	A K Agarwala(PI)
6.	Study on Development of IR Laser Based Instruments	Completed 1982	0.3 year	0.05	Electronic Systems Punjab Ltd.	A K Agarwala(PI)
7.	Redesign of Electro-hydraulic fatigue testing machine	Completed 1982	0.5 year	0.14	RDSO, Lucknow	A K Agarwala(PI)
8.	Re-commissioning of Spark Spectrometer for Metal Analysis	Completed 1983	0.1 year	0.1	Bhartiya Electric Steel Co. Faridabad	A K Agarwala(PI)
9.	Microprocessor based Auxiliary Storage completed for PDP 8 /me. (CW-136/84)	Completed in 1985	1 year	0.15	CDIL	R Mulchandani (PI) N C Kalra I P Singh
10.	Electronic Stencil Cutting Machine	Completed in 1985	1 years	0.2	IITM	D T Shahani (PI)
11.	Design of Microprocessor-Dev.-cum- Target System (CW-31/84)	Completed in 1985	1 Year	0.49	MLNREC Allahabad	R Mulchandani (PI) I P Singh
12.	Design of a High Pressure Metering Pump (CW-39/82)	Completed in 1985	1 year	0.1	ONGC Dehradun	Anand Prakash (PI) G R Mehta I P Singh
13.	Irrigation Canal Gate Control	Completed in 1985	3 years	2.2	M.P.Govt.	D T Shahani (PI)
14.	Microprocessor based Heart Rate Meter (CW-136/84)	Completed in 1986	1 year	0.05	Cardio, Control Corp. wazirpur Ind. Area, New Delhi	R Mulchandani (PI) I P Singh
15.	Design and Development of 1 KVA Electronic Inverter System	Completed in 1988	1 Year	0.18	Quasar Systems	A K Agarwala- PI N K Jain.
16.	Radar cross-section measurement of an aircraft model	Completed 1988	1 year 1 month	0.65	ADA Bangalore	A.L.Vyas (CI), R.Bahl and Navin Rajpal
17.	Design, development and manufacture of modified Control System for Deck Landing Mirror Sight For INS Vikrant	Completed 1989	9 years 8 months	22.00	I.N., Indian Navy	A.L.Vyas (CI), P.V.Indiresan, R.Bahl, M.Balakrishanan, S.Swaminathan G.Varkey
18.	Canal Gate Control System	Completed 1989	2 Years	2.25	Dept. of Irrigation, Madhya Pradesh	S Swaminathan- PI D T Shahani A K Agarwala P V Ramakrishna

19.	Re-Engineered Control System for Deck Landing Mirror Sight For INS Vikrant	Completed 1989	9 years 8 months	22.00	I.N., Indian Navy	A.L.Vyas (CI) P.V.Indiresan, R.Bahl, M.Balakrishanan S.Swaminathan G.Varkey
20.	Study on Anti-Tank Mines	Completed in 1989	1 years	0.1	DRDO	D T Shahani (PI)
21.	RAIM Design Armoured Tanks	Completed in 1990	1 years	1.0	MOD	D T Shahani (PI)
22.	Flight Time Data Recorder for Shell Fragments - 100 channels (CW-111/89)	Completed in 1990	6 Months	0.18	Raba Contel Pvt Ltd, New Delhi	I P Singh (PI) P K Sharma
23.	Software for Computer Aided design of Canals (CW-187/89)	Completed in 1990	6 Months	0.50	M/S CES Water Resources Dev. & Mgt Consultants Pvt. Ltd., N Delhi	S K Atreya (PI) I P Singh P N Rao
24.	Design of Fire Suppression System for MBT Arjun (CW4257)	Completed in 1990	1.5 years	8.0	DIFR	D T Shahani (PI)
25.	Parameter Evaluation of Heavy Current Kickless Cable (CW-100/91)	Completed in 1991	1 year	0.03	M/s Stead Fast Engineers, Farid abad	R. Arockiasamy (PI) S K Sud H Henry I P Singh
26.	High Frequency Inverter Design Studies	Completed in 1992	1 Year	0.25	Quasar Systems	A K Agarwala- PI, N K Jain.
27.	Development of Signal Conditioning Unit	Completed in 1992	6 Months	0.50	NPL	A K Agarwala- PI N K Jain.
28.	Transfer of Technology for RAIM CW 130/91	Completed in 1993	5 years	0.5	MOD	D T Shahani (PI)
29.	Learning of Technology Development Electromagnetic Interference Compatibility Th + Lab Engg Colleges	Completed in 1993	4 years	2.5	DOE/WB	D T Shahani (PI)
30.	Learning Material Development High Frequency Design Th + Lab CW 3745	Completed in 1993	4 years	1.6	DOE/WB	D T Shahani (PI)
31.	Learning Material Development Analog Electronics - I Theory Polytechnics CW 3742	Completed in 1993	4 years	1.1	DOE/WB	D T Shahani (PI)
32.	Learning Material Development Analog Electronics - I Laboratory Polytechnics CW 3257	Completed in 1993	4 years	1.0	DOE/WB	D T Shahani (PI)
33.	Learning Material Development Analog Electronics -II Theory + Laboratory Polytechnics CW 3664	Completed in 1993	4 years	2.4	DOE/WB	D T Shahani (PI)
34.	Learning Material Development Analog Electronics -II Theory + Laboratory Engg Colleges CW 3811	Completed in 1993	4 years	2.4	DOE/WB	D T Shahani (PI)
35.	Learning Material Development Analog Electronics -II Theory + Laboratory Engg Colleges CW 3777	Completed in 1993	4 years	2.4	DOE/WB	D T Shahani (PI)

36.	Learning Material Development Electronics Test & Measurement - I Theory Polytechnics CW 3652	Completed in 1993	4 years	1.1	DOE/WB	D T Shahani (PI)
37.	Learning Material Development Electronics Test & Measurement - II Theory Polytechnics CW 3656	Completed in 1993	4 years	1.1	DOE/WB	D T Shahani (PI)
38.	Computerised Evaluation of Hysteresis Parameters. (CW02666)	Completed in 1993	3 Months	0.15	Mittal Enterprise, New Delhi	S K Sud (PI) I P Singh
39.	Advice on the Sub-Assembly Testing of Wheel Balancer (CW-119/92)	Completed in 1993	1 Year	0.15	TTC Laser Machines Pvt. Ltd., New Delhi	R. Arpckiasamy (PI) S K Sud A L Vyas R. Mulchandani
40.	Automatic Telecom Cable Test	Completed 1993	1.5 Years	1.5	Incom Cables	D T Shahani- PI N K Jain A K Agarwala P V Ramakrishna R Jain
41.	Design, fabrication and supply of 2 sets of fire suppression systems for MBT Arjun	Completed in 1994	1 year	7.93	Defense Institute of Fire Research	A K Agarwala – PI D. T. Shahani N. K. Jain G R Mehta
42.	SMPS Design (6 Projects)	Completed in 1994	3 Years	1.0	Taylor Instruments, ETTDC, Hewlett Packard India, Garg Telecom, Professional Electronics Products, Sanarti International	A K Agarwala (PI) N K Jain
43.	Design of High Frequency Magnetic Components, CW3185	Completed 1994	3 weeks	0.15	Cosmo Ferrites	A K Agarwala- PI N K Jain
44.	Design Evaluation of Electronic Ballasts (2 Projects)	Completed in 1994	6 months	0.25	Abis Computers and Controls, Business Aide International	A K Agarwala- PI, N K Jain
45.	Feasibility Capacitive System for Electron Gun Control CW 3165	Completed in 1994	1 years	0.5	SAMTEL	D T Shahani (PI)
46.	Software Development of Currency Counting Machine. (CW-221/93)	Completed in 1994	3 months	0.35	M/S Methodex Infres Ltd, New Delhi	S K Sud (PI) Rakesh Jain I P Singh
47.	Inspection of Mitsubishi Comm. High Speed Web Offset Printing Press	Completed in 1995	1 week	0.50	Municipal Corp. Faridabad	B N Gupta (PI) I P Singh T K Kundra
48.	Design & Dev of Electron Gun Cap Measurement System	Completed in 1995	2.5 years	3.0	SAMTEL	D T Shahani (PI)
49.	Design of Hardware & Dev. of Software for Vacuum type Currency Counting Machine (CW 3562)	Completed in 1995	6 months	0.50	M/S Methodex Infres Ltd, New Delhi	I P Singh (PI) A L Vyas

50.	RC Block Trip Unit (CW05892)	Completed in 1995	6 months	0.73	BHEL Ltd.	D T Shahani (PI)
51.	UNESCO Training Program for LASU (Nigeria) CW 3576	Completed in 1996	0.5 years	1.5	UNESCO	D T Shahani (PI)
52.	Learning Material Development for Graduate level course on Microprocessor System Design (Theory + Lab) (CW3230)	Completed in 1996	1 years	2.06	IIT Delhi	S Chaudhary (PI) S K Sud I P Singh
53.	Inspection of Automatic Multi-Station Nut Making M/c, Model No JNF 17855	Completed in 1996	1 week	0.21	Municipal Corp. Faridabad	B N Gupta I P Singh T K Kundra
54.	Design and Fabrication of Colloidal Silica Analyser	Completed in 1996	1 Year	0.75	BHEL	Chandra shaker (PI) A K Agarwala N K Jain G R Mehta.
55.	Design, Development, Fabrication and commissioning of Auto-Tilt Measuring System (ATMS)	Completed 1996	3 years 4 months	5.00 + items of 4	Goa Shipyard Ltd, Goa	A.L.Vyas (CI) and V.S.Balaji Raj
56.	Design Validation of Electronic Thermostat	Completed 1996	0.25 years	0.3	Indfoss Pvt. Ltd.	A K Agarwala PI
57.	Development of Electron Gun capacitance measurement and adjustment system FT03/85/95	Completed 1996	1.5 years	3.15	Samtel Electronic Devices	A K Agarwala - PI D T Shahani N K Jain
58.	Learning Material Development for Polytechnic Course on "Electronic Test and Measurement"; Parts I and II (2 Projects CW 3652, 3656)	Completed in 1997	3 Years	3.2	Project IMPACT	N K Jain – PI, D T Shahani, A K Agarwala, S S Jamuar, D Nagchoudhary.
59.	Learning Material Development for Polytechnic Course on "Analog Electronics I and II"; Theory and Lab (3 Projects CW 3257, 3664, 3742)	Completed in 1997	3 Years	6.5	Project IMPACT	D T Shahani- PI, N K Jain A K Agarwala G S Visweswaran, V C Prasad.
60.	Learning Material Development for graduate Course on "Electromagnetic Compatibility", (CW 3665)	Completed in 1997		2.5	Project IMPACT	D T Shahani- PI, N. K. Jain , A. K. Agarwala, Devi Chadda, P. V. Rama Krishna, Dr Satyamurty, Avadi.
61.	Learning Material Development for Polytechnic Course on "Electronic Components & Materials" (CW 304/93)	Completed 1997	3 Years	1.6	Project IMPACT	N K Jain - PI S S Jamuar D Nagchoudhary K S P Rao
62.	Learning Material Development for degree course on "High Frequency Electronics" CW3745	Completed 1997	3 Years	2.5	Project IMPACT	A K Agarwala - PI D T Shahani S C DuttaRoy G S Visveswaran
63.	Development of Test Procedures and Test System Hardware for UPS evaluation CW 4195	Completed in 1997	0.25 years	0.25	PCQuest	A K Agarwala (PI)

64.	Screen Liner Manufacturing Technology Oil Extraction	Completed in 1997	4 years	6.0	ONGC	D T Shahani (PI)
65.	Restructuring of LMD for Colleges & Polytechnics CW 4159	Completed in 1997	3 years	6.0	DOE/WB	D T Shahani (PI)
66.	Learning material Development for Polytechnic course on Computers (Theory + Practicals) (CW3678)	Completed in 1997		2.06	IIT Delhi	I P Singh (PI) C.P.Ravikumar Mr. S.K.Sud N C Kalra
67.	Development of Test hardware for UPS and Battery Testing CW4554	Completed 1998	0.25 years	0.50	PCQuest	A K Agarwala (PI)
68.	Restructuring of Learning Materials for Engineering Colleges CW4159	Completed 1998	2.5 years	6.0	IMPACT	A K Agarwala - PI N K Jain D T Shahani
69.	High Performance UPS Architectures CW4500	Completed 1998	0.5 years	1.3	Autometers Pvt. Ltd.	A K Agarwala (PI)
70.	Generic Design of Inverters CW4358	Completed 1998	0.5 years	3.0	Luminous Electronics Pvt. Ltd.	A K Agarwala (PI)
71.	High Reliability Halogen Lamp Driver CW4062	Completed 1998	0.5 years	0.45	Matsushi International	A K Agarwala (PI)
72.	High Reliability LED Flasher	Completed 1998	0.5 years	0.40	AvaidTechnovators Pvt. Ltd.	A K Agarwala PI D T Shahani
73.	Development of Electron Gun capacitance measurement and adjustment system	Completed in 1998	2.5 years	3.15	Samtel Colours	A K Agarwala- PI D T Shahani N K Jain.
74.	Performance Testing of Condo m Vending Machine (CW 4480)	Completed in 1998	5 days	0.15	RPM Hi-Tech Chandigarh	G R Mehta (PI) Chandra Shakher I P Singh
75.	Restructuring of Learning Materials for Engineering colleges and Polytechnics (CW 4159)	Completed in 1999	3 years	6.0	Project IMPACT	A. K. Agarwala (PI) N. K. Jain D. T. Shahani
76.	Performance Testing of a Needle and Syringe Destroyer. (CW04795)	Completed in 1999	2 weeks	0.15	V.R. Engineering & Consultants	Rajan Salai (PI) K.K.Nagar Mr. G.R.Mehta Chandra Shekhar.
77.	Modified Suessen Rotor Design (FT/03/574/99/1061 dtd Sept 99)	Completed in 1999	2 Months	0.70	DRDO Hyderabad	G R Mehta (PI) Chandra Shakher I P Singh
78.	Design, fabrication and supply of 2 sets of fire suppression systems for MBT Arjun (CW 4527)	Completed in 2000	2 year	7.93	Defence Institute of Fire Research	A K Agarwala (PI) D T Shahani N K Jain G R Mehta
79.	Feasibility of Telecom Cable Testing System CW 135/91 Phase - I	Completed in 2000	0.5 years	0.5	INCOM	D T Shahani (PI)
80.	Automatic Telecom Cable Testing System CW 135/91 Phase - II	Completed in 2000	1.0 years	1.0	INCOM	D T Shahani (PI)

81.	Neo-Natal Care: Semi-open System (CW05381)	Completed in 2001	6 Months	0.10		I P Singh (PI) Sneha Prabha Chaudhary G R Mehta
82.	Advice & Training on the use of uC8751 for Industrial Applications (CW05321)	Completed in 2001	3 Months	0.20	Aura Pvt. Ltd., Noida	I P Singh (PI)
83.	Development of High Power Pulse Generator	Completed 2002	2 years	4.75	BHEL Hardwar	A K Agarwala - PI D T Shahani
84.	CW06474 DSP Based UPS	Completed in Oct 2003	6 months	1.0	Quasar Systems Pvt Ltd	A K Agarwala PI
85.	Development of WEB Based Learning Material (CWO5167)	Completed in 2005	18 months	8.00	Project INPACT SSS (RPO1070)	D T Shahani (PI)
86.	Design Verification and testing Of Thermal Conductivity Measurement System	Completed 2006	7 months	3.996	Applied Systems Lab., DRDO, Hyderabad	A.L.Vyas (CI), A.K.Gupta and I.P.Singh
87.	Design verification of ultra-compact adaptors	Completed 2008	4 months	1.5	Quadrant Pvt Ltd	A K Agarwala PI
88.	Optimisation of Telecomm Shelters	Completed 2008	2 years	18	BhartiAirtel	A K Agarwala PI Prof R S Agarwal Prof AshwiniAgrawal
89.	Design & Development of Cost Effective Equipment for Carrying out tests on bamboo joints of bamboo abd structural elements of bamboo in shrotterm and long term (MI00602)	Completed in 2010	3 years 3 months	25.00	Indian Council of Agricultural Research	D T Shahani (PI)
90.	Leak Proof Universal Adapter	Completed in May 2011	3 months	3.37	LG Electronics India Pvt. Ltd	Dr. Jyoti Kumar (PI) Sh Sumer Singh
91.	Documentation of HFI Framework	Completed in Jan 2012	1 month	.70	Human Factors International	Dr. Jyoti Kumar (PI)
92.	Training UX Professionals at HFI	Completed in June 2012	6 months	1.5	Human Factors International	Dr. Jyoti Kumar (PI)
93.	Design Awareness program in MSME cluster	Completed in 7th June 2013	6 months	1.5	PHD Chamber of Commerce	Dr. Jyoti Kumar
94.	Mosquito Repellant disbursal	Completed in 2nd April 2013	6 months	4.72	Reckitt Benckiser	Dr. Jyoti, Prof. S.R. Kale,
95.	Development of Collaterals	Ongoing since 29th July 2013	6 months	10.35	Department of electronics and Information Technology,	Dr. Jyoti Kumar
96.	Design Development of NCERT Science Lab Toolkit	Ongoing since 18th Oct 2013	6 months	1	NCERT	Dr. Jyoti Kumar

APPENDIX 5 - TECHNICAL REPORTS

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2. K Arora, D T Shahani, "Ambiguity Function Plotter", Tech. Reports, SRS 74-4, School of Radar Studies, IIT Delhi, Jan 74.
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APPENDIX 6(A) - TOT

1. Re-engineered control system for deck landing mirror sight for Indian Navy, 1977 - 1982. : The complete system was designed, developed and productionised by A K Agarwala at CARE, IIT Delhi, for use by Indian Navy. The systems were in active operation at aircraft carrier INS Vikrant for more than ten years. The system was awarded the Meritorious Invention award by NRDC.
2. NMR Spectrometer for Oilseed Characterization, 1982 to 1987: A portable nuclear magnetic resonance spectrometer for industrial use was developed for the first time in India via a project (1982 to 1987) supported jointly by the Government of India and UNDP. This instrument was optimised for immediate application in agriculture for non-destructive characterisation of oilseeds (such as peanut, mustard, sunflower) for oil content; primarily to facilitate breeding of high yielding varieties. This instrument was extensively field tested by the Indian Agricultural Research Institute, New Delhi. Development of this instrument involved state of the start technologies in Samarium-Cobalt permanent magnets, rf power amplification and switched mode power supplies.
3. 0.5 to 5 KVA Electronic Inverter System 1986-87: A rugged uninterrupted power supply (UPS) based on the latest power MOSFET devices was developed and transferred to industry in 1986-87. The system was designed to be modular so that the same circuit building blocks could be used to realize finished systems of 0.5 to 5 KVA rating by simply incorporating the appropriate power devices. This system was the first indigenously designed UPS system and has been very successful.
4. Omni-directional sonar receiver for Indian Navy, 1987. : A new compact omni-directional sonar receiver was designed for Indian Navy with funding from Department of Electronics. The know-how was transferred to Keltron for production.
5. Design for a MOSFET based UPS was transferred to industry in 1988 and has been in regular production since then. This product, when introduced in 1988 was the first indigenous MOSFET based UPS product in the market and has been very successful over the last decade, leading to commercial turnover exceeding 20 crore.
6. Fibre optic current sensor (up to 1000 A), 1992. : Fibre optic current sensor for measuring current up to 100 Amps in high voltage lines has been developed. The Lab model of the equipment has been transferred to BHEL Corp. R&D, Hyderabad and tested there.
7. Modified sonar receiver for sonar 170-B, 1972-1994. : The system was designed for Indian Navy and the know-how was transferred to Bharat Dynamics Ltd., Hyderabad for production. The systems were used on Indian Navy ships for about ten years.
8. Auto-Tilt Measuring System, 1996, Goa Shipyard Ltd., Goa. : An eight-channel tilt measuring system capable of measuring tilt with 10 seconds of an arc resolution has been designed, manufactured and handed over to Goa Shipyard Ltd. The system has been in active use at GSL, Goa.
9. Inverters and UPS Systems: Three designs have been transferred to industry under consultancy jobs (listed in Appendix B at s.no 14,15,16) during 1994-99 and are under regular commercial production.
10. IMS based Sensitive Detector for Defence: This is an Ion Mobility Spectrometer for detection of certain classified list of substances for Defence. It was implemented under three research projects, with RP 25/92 resulting in basic research and design on the working on IMS and development of key technologies. In RP 975 Lab Prototypes were made for technical trials. In RP 1090/98 the re-engineered IMS was shown to SA to RM ("Nov 1998) and has been recommended for use in Armoured Tanks after ruggedised production and trials. Under an MOU between IITD DRDE and ECIL for Transfer of Technology by IITD and production by ECIL the technology has been transferred to ECIL.
11. Remote Actuator for Influence Mines Influence mines are anti-tank mines that can attack a tank belly by recognizing the magnetic signature developed under Armoured tanks to which the Indian Army had no counter. The RAIM developed at IDDC, projects the magnetic signature of the tank ahead of it and causes pre-mature acutation of the mine. Project involved intensive investigation of magnetic signature of tanks, and technology to generate them electronically to activate mines.
12. Digital Gauge Measurement Bore of Guns: Many applications in which the Inner Bore of guns (artillery, tank, field, etc.) are subject to heavy stress require characterization for dimensions, wear, cracks, pitting, ovality & discoloration. IIT Delhi has developed a Sensor Head for rapid dimensional measurement & imaging of inner surface of Bores. Complete 3 Dimensional view & developed surface photographs with image processing features is quickly obtained. The device technology was handed over to EME Baroda (Army).
13. Sarva Dhara: The automated Sarva Dhara system can administer both Shirodhara and Sarvangana Snehana using a robotic fluid dispensation system, electronically programmed and controlled. The entire X-Y locus on the body over which the fluid has to be dispensed, suiting various patient body profiles, can be online set, stored and replayed. The setting is done easily with the help of a joystick and the user can see the path of the dispensed fluid by use of a closed circuit camera and a flat screen attached to the unit. The temperature and flow of the oil is controlled, and the oil is properly filtered. The electronic control of these parameters ensures standardized treatment. Only one trained operator is needed.

14. Fiber optic current sensor to measure current up to 1000 Amps on high voltage lines: This sensor is the forerunner of the sensor being developed to measure current up to 20,000 Amps on H.V. lines. This sensor design was sponsored by BHEL Corporation R&D, Division, Hyderabad.
15. Opto-mechanical system for plasma temperature measurement: This system design was sponsored by BHEL Tiruchirappalli, MHD Center.
16. Correction lenses for colour picture tubes Sponsored by Samtel Colour Ltd. Ghaziabad, UP - 20 units were made
17. Hard coated special grids used in laser based alignment system and temperature profile measurement using Talbot effect. This system design was sponsored by BHEL R&D, Hyderabad - 25 units were made.
18. Holographic non-destructive testing technique for composite building materials - 5 composite materials were made.
19. Colloidal silica analyzer to measure colloidal silica concentration in power station water: The instrument is designed to monitor colloidal silica in power plant. The silica in boiler water under high temperature and pressure gets deposited on turbine blade, leading to reduction in efficiency. Maintaining silica level in boiler water is therefore necessary. This product design was sponsored by BHEL R&D, Hyderabad. 1 unit was made.
20. Opto-mechanical drilling jig for residual stress measurements. The jig has a flexibility of using for curved and flat surfaces. The cost of the developed jig is Rs20000 as compared to Rs2 Lakhs of imported jigs. This product design was sponsored by BHEL R&D Hyderabad - 2 units were made.
21. Developed technology (technique and mathematical modeling) to measure temperature profile of the burner of atomic absorption spectrophotometer. Burner was made by CSIO Chandigarh.
22. Correction lenses for colour picture tubes Sponsored by Samtel Colour Ltd. Ghaziabad, UP - 20 units were made.
23. Hard coated special grids used in laser based alignment system and temperature profile measurement using Talbot effect. This system is sponsored by BHEL R&D, Hyderabad - 25 units were made.
24. Holographic non-destructive testing technique for composite building materials - 5 composite materials were made
25. Automatic Telecom Cable Test System: With the growing demand for telecommunication products, quality of telecom cable is of crucial importance. Certification of a cable requires several thousand electrical tests to be performed between each pair contained in the multi-pair cable. Test equipment for conducting such tests tends to be very expensive. A low cost, fully indigenous system for testing telecom cables has been developed in this Centre under industry support. The system has been installed and is in regular use.
26. Colloidal Silica Analyzer: A precision optoelectronic system for measuring very low (5 parts per billion) suspended particle concentrations in water. This system will be used by BHEL for on-line monitoring of the quality of water in power generating equipment. The instrument, developed for the first time in the country in this Centre is crucial for protecting turbines and other rotating machinery in power plants from damage due to colloidal silica in the system water.
27. Switched Mode Power Conversion Systems: Switched mode power conversion circuits are essential building blocks for electronic systems. A no. of designs has been transferred to industry under consultancy jobs. The designs cover very high reliability SMPS systems for communication (Garg Telecom), process control (Taylor Instruments) and laboratory instruments (Hewlett Packard India).
28. Braille Duplicaton Machine: S.K.Guha, S.K.Atreya, Sneh Ananand & G.L.Jain - M/S Indutherm
29. Braille Duplicator Sheet S.K.Guha, S.K.Atreya, Sneh Ananand & G.L.Jain - M/S Indutherm
30. Haemoglobinometer S.K.Guha, Sneh Ananand, S.K.Atreya, & G.L.Jain - M/S oriental Scientific Apparatus, Ambala
31. Health Data Kit: S.K.Guha, Sneh Ananand, S.K.Atreya & G.L.Jain - M/S Supertronics Engineers, Vadodara
32. Accurate Measuring Tape for the Blind, Registered by FITT: S.K.Atreya, Prashant Borkar
33. Manually Operated Low Wheel Chair, Registered by FITT : Amit Kumar, S.K.Atreya
34. Miniaturised Michelson Interferometer with three control variables. Name of the Industry: NVIS Technologies Pvt. Ltd., 141-B, Electronic Complex, Pardesipura, Indore-452 010, India. Members: D. S. Mehta, Tulsi Anna, and S. K. Dubey.
35. Coated mirror integrated Miniaturised Michelson Interferometer with two level control variables. Name of the Industry: NVIS Technologies Pvt. Ltd., 141-B, Electronic Complex, Pardesipura, Indore-452 010, India. Members: D. S. Mehta, Tulsi Anna, and S. K. Dubey.

APPENDIX 6(B) - PATENTS GRANTED & APPLIED FOR

I. Granted

1. An Instrument for Measuring Torsional Properties of Fabrics and Yarns, 2002: IIT Delhi filed a Patent on July 24, 2002 at the Patent Office, West Patel Nagar, (Patent Application No: 769/DEL/2002), for "An Instrument for Measuring Torsional Properties of Fabrics and Yarns". Patent Number: 212557, Patentee: Indian Institute of Technology. Date of grant: 04/12/2007, for a period of 20 years from 24 day of July 2002. Torsional rigidity of fibers and yarns is an important parameter for their performance and processing. The instrument was developed jointly with Prof. P.K.Banerjee of Textile Department and was the result of B.Tech and M.Tech projects. Further refinement on this Instrument is being carried out for the purpose of commercialization.
2. Laser Based Alignment System for Electrical Power and Other Industries The device is suitable for the alignment of heavy electrical equipment where subunits are physically linked to operate on a single unit. This system is developed by Chandra Shakher, IIT Delhi, U.M. Chaudhari BHEL, Corporate R&D, Vikasnagar, Hyderabad. The Patent Number is 188882, Gazette Dated Nov.16, 2002; Application Number is 436/DEL/94; Indian Classification is 1271 and International Classification is G06M01/26. The developers received NRDC award on this system for its Novelty, Technical feasibility and commercial viability of the product in August 1993.
3. A device for measurement of wire diameter and aperture in wire sieve: This system is developed by Chandra Shakher (IIT Delhi), Shashi K. Singh (IIT Delhi) and K.P. Chaudhary (IIT Delhi),. The Indian Patent Number is 197541 and Application Number is 869/DEL/2003 Dated July 03, 2003.
4. Organic Pollutant Detector: This instrument has been developed and tested under sponsorship of DRDO. Trial production will begin shortly at ECIL, Hyderabad. The technology is covered by a joint patent filed by DRDE Gwalior: Ion mobility Spectrometric Chemical Vapour Monitor: No 1434/DEL/2003

II. Patents Filed (Awaiting Grant)

1. Golden Ear System for LG India: This is a system designed for the first time for LGIndia to automatically identify incoming Audio, and classify into pre determined categories (such as Classical, Vocal, Rock, Pop etc. The concept has been patented (filed, not granted as yet): A Method and System for Real-Time Classification of Audio Signals into Predetermined Categories: Joint with LG Electronics, file no1118/del/2002 dated 7/11/2002.
2. System and method for real time monitoring of vibrations and large deformation in diffused materials using sequential subtraction and image enhancement: This system is developed by Chandra Shakher, (IIT Delhi), and Rajesh Kumar (IIT Delhi). The Patent Application Number is 925/DEL/2002 Dated Sept. 12, 2002. The patent number is awaited.
3. Device for detecting contaminants from cotton and the process there of: This system is developed by Chandra Shakher (IIT Delhi), Shashi K. Singh (IIT Delhi) and S.M. Ishtiaque (IIT Delhi),. The Application Number is 926/DEL/2002 Dated Sept.12, 2002.
4. Method and System for P2P Sharing of Application (Patent No 2664/DEL/2012) : S.K.Atreya
5. Portable Scanner (Patent no 2665/DEL/2012) : S.K.Atreya
6. Power Generating Tiles (Patent no 2666/DEL/2012) : S.K.Atreya
7. Multi Compartment Liquid Bottle(Patent no 2667/DEL/2012) : S.K.Atreya
8. Nebulizer Cum Vaporizer (Patent no 2668/DEL/2012) : S.K.Atreya
9. Rainwater Harvesting Appratus (Patent No 2669/DEL/2012): S K Atreya
10. Handheld Dishwasher (Patent No 2390/DEL/2012): S K Atreya
11. Telescopic Spider Web Remover and Pesticide Sprayer (Patent no 2391/DEL/2012) : S.K.Atreya
12. Mobile Charging with Handshaking Device (Patent no 2392/DEL/2012) : S.K.Atreya
13. Massager Cum Oil Applicator (Patent no 2393/DEL/2012) : S.K.Atreya
14. Hair Gel Applicator (Patent no 2394/DEL/2012) : S.K.Atreya
15. Multifunctional Contact Lense Cleaner (Patent no 2395/DEL/2012) : S.K.Atreya
16. Book Reading Stand With Automatic Page Turner(Patent no 2396/DEL/2012) : S.K.Atreya
17. Bed Reading Stand for Comfortable reading in Horizontal Position (Patent no 2397/DEL/2012) : S.K.Atreya
18. Selective Frequency Attenuator (Patent no 2398/DEL/2012) : S.K.Atreya
19. Carrybag Adapatable to Charge Electronic Devices 2399/DEL/2012) : S.K.Atreya
20. Device Locator (Patent no 2400/DEL/2012) : S.K.Atreya
21. Cooling Helmet (Patent no 2401/DEL/2012) : S.K.Atreya
22. Headphones (Patent no 2402/DEL/2012) : S.K.Atreya
23. Refill Indicator (Patent no 2403/DEL/2012) : S.K.Atreya
24. Watersaver Water Closet (Patent no 2404/DEL/2012) : S.K.Atreya
25. Temperature Adjusting Water Tank (Patent no 2405/DEL/2012): S.K.Atreya

26. Food Decay & Narcotics Sensor (Patent no 2406/DEL/2012) : S.K.Atreya
27. Vampire Energy Killer (Patent no 2407/DEL/2012) : S.K.Atreya
28. Vehicular Speed Control System 2408/DEL/2012) : S.K.Atreya
29. Paddle Operated Toilet Seat (Patent no 2409/DEL/2012) : S.K.Atreya
30. Footwear Cleaner and Sanitizer (Patent no 2410/DEL/2012) : S.K.Atreya
31. Hybrid Helmet (Patent no 2411/DEL/2012) : S.K.Atreya
32. Retractable Two-Wheeler Cover System (Patent no 2412/DEL/2012) : S.K.Atreya
33. Hybrid Iron (Patent no 2413/DEL/2012) : S.K.Atreya
34. The Breeze Umbrella (Patent no 2414/DEL/2012) : S.K.Atreya
35. Economic Model Developed on Game Theory (Patent no 2415/DEL/2012) : S.K.Atreya
36. Interactive Projector System (Patent no 2416/DEL/2012) : S.K.Atreya
37. USB Flash Drive to USB Flash Drive Data Transfer Without using a Laptop or a PC (Patent no 2417/DEL/2012) : S.K.Atreya
38. Air Cooler (Patent no 2418/DEL/2012) : S.K.Atreya
39. Ergonomic Keyboard /14-02 (Patent no 7409/ (28/8/12) : S.K.Atreya
40. An apparatus for generating phase shifting interferograms for 3-D Surface topography.Indian Patent Appl. No. 2485/DEL/2011, Date of Filing: 30-08-2011. Inventors: (i) Dr. D. S. Mehta, IDDC, IIT Delhi (ii) Dr.J. P. Rana, IDDC, IIT Delhi (iii) Mr. Md. Inam, IDDC, IIT Delhi (iv) Dr. A. M. Biradar, NPL, New Delhi
41. A method of evaluation and grading of Textile or Fabric or Garment Appearance. Indian Patent Appl. No. 2304/DEL/2009, Date of Filing : 09-11-2009. Inventors (i) Dr. R. S. Rengasamy (ii) Dr. D. S. Mehta (iii) Mr. H. Manikanadan
42. A method of evaluation and grading of Textile or Fabric or Garment Appearance. Indian Patent Appl. No. 2355/DEL/2009, Date of Filing : 16-11-2009. Inventors (i) Dr. R. S. Rengasamy (ii) Dr. D. S. Mehta (iii) Mr. H. Manikanadan

APPENDIX 7(a) - PHD THESIS

I. Completed

1988

1. S. V RamaGopal, "A study of some basic configurations of photographic system", Year of completion: 1988, Supervisors: Prof. B. N. Gupta

1989

2. Varun Jeoti, Year of completion: 1989, Supervisors: D T Shahani, P Sudhakar, Jhunjunwalla (IIT M)

1990

3. L. S. Tanwar, "An electro-optical sensor for length metrological applications", Year of completion: 1990, Supervisors: Prof. B. N. Gupta

1992

4. Harilal Yadav, "Holographic lenses in speckle metrology and solar concentration", Year of completion: 1992, Supervisors: Prof. Chandra Shakher and Prof. B. N. Gupta.

1993

5. A J. Pramila Deniel, "Diffractive optical elements in speckle metrology and temperature measurement", Year of completion: 1993, Supervisors: Prof. Chandra Shakher.

1994

6. M. K. Mittal, "Design & studies of cinematographic/photographic objectives", Year of completion: 1994, Supervisors: Prof. B. N. Gupta
7. Rakesh Sharma, "Studies on NMR Relaxation Times of Biological Tissue and MR- Biochemical Correlation in Medicine", Year of completion: 1994, Supervisors: A K Agarwala

1995

8. A K Nirala, "Laser speckle techniques temperature profile measurement", Year of completion: 1995, Supervisors: Prof Chandra Shakher and Prof. B. N. Gupta.
9. D. Ravi, "Application of laser speckle and acoustic emission techniques to study crack propagation", Year of completion: 1995, Supervisors: Prof Chandra Shakher and Prof. Sethuramiya

1996

10. Gayatri Kansal, "Some Aspects of Computer Aided Design of Injection Moulds", Year of completion: 1996, Supervisors: P N Rao

2003

11. Shashi Prakash, "Scientific and engineering applications of diffractive optical elements", Year of completion: 2003, Supervisor: Prof Chandra Shakher.
12. Madhuri Thakur, "Applications of Lau-Phase Interferometry in optical metrology", Year of completion: 2003, Supervisors: Prof Chandra Shakher and Prof. A. L. Vyas.
13. Rajesh Kumar, "Measurement/monitoring of vibrations using Digital Speckle Pattern Interferometry", Year of completion: 2003, Supervisors: Prof Chandra Shakher and Dr. I.P. Singh.

2005

14. Shakeb Ahmed Khan, "Applications of Artificial Neural Networks (ANN) in Instrumentation", Year of completion: 2005, Supervisors: A K Agarwala and Prof. D T Shahani
15. Saba Mirza, Year of completion: 2005, Supervisors: Prof Chandra Shakher

2006

16. Priti Singh, "Applications of Shear Interferometry in optical metrology", Year of completion: 2006, Supervisors: Prof. Chandra Shakher and Prof. R. S. Sirohi.
17. Saba Kazmi, "Use of phase shifting Talbot Interferometry for surface profiling and DSPI for monitoring/ measurement of vibration", Year of completion: 2006, Supervisors: Prof. Chandra Shakher and Prof. A. L. Vyas.

2007

18. Huidrom Lokeshwor Singh, Year of completion: 2007, Supervisors: L K Das

2008

19. Mosarraf Hossain, "Applications of digital holography in optical metrology and information reduction", Year of completion: 2008, Supervisors: Prof. Chandra Shakher and Prof. D. S. Mehta.
20. K .P. Chaudhary, "Investigations on some opto-electronic techniques for dimensional metrology", Year of completion: 2008, Supervisors: Prof. Chandra Shakher and Dr. L. S. Tanwar.

2009

21. S L Patil, "A Low loss Push Pull Boost converter", Year of completion: 2009, Supervisors: A K Agarwala.
22. Satish Kumar Dubey, "Development of full-field swept-source optical coherence tomographic system for scientific and engineering applications", Supervisor: D S Mehta, 2009.
23. Md. Mosarraf Hossain, "Applications of digital holography in optical metrology and information reduction" (Jointly with Prof. Chandra Shakher) Supervisor: D S Mehta, 2009.

2010

24. Khaja SKSS Hameed, "Soil Moisture Measurement using Capacitance Techniques", Year of completion: 2010, Supervisor: A K Agarwala
25. Madhusudan Joshi, "Investigations on encryption techniques for coloured and gray scale images in Fourier and Fractional Fourier domain", Year of Completion: 2010, Supervisors: Prof. Chandra Shakher and co-guidance of Kehar Singh.
26. Jai Prakash, "Effect of nano-materials on the electro-optical properties of deformed helix ferroelectric liquid crystals and their applications" (Synopsis submitted, Jointly with Dr. A. M. Birader NPL, New Delhi) Supervisor: D S Mehta, 2010.

2011

27. Gyanendra Sheoran, "Scientific and industrial applications of digital holography", Year of completion: 2011, Supervisors: Prof. Chandra Shakher.
28. Alka Nigam, "Intelligent Oscilloscope Triggering Schemes", Year of Completion: 2011, Supervisors: Prof Shakeb Khan, Jamia Milia, under the guidance of A K Agarwala

2012

29. Ranjeet Kumar, "Optical trapping of mesoscopic transparent metallic particles by spatially structured laser beam and characterization of trapped RBCs", Year of Completion: 2012, Supervisors: Prof Chandra Shakher and co-guidance of D S Mehta.
30. Tulsi Anna , "Full-field frequency domain optical coherence microscopy for simultaneous topography and tomography of engineering and biological materials", Year of Completion: 2012, Supervisor: Prof Chandra Shakher and co-guidance of D S Mehta.
31. Dhawal Gupta, "Signature Recognition & Analysis using intelligent techniques", Year of Completion: June 2012, Supervisor: Dr. D T shahani and co-guidance of Shakeb A Khan.
32. Ranjeet Kumar, "Optical trapping of mesoscopic transparent/metallic particles by spatially structured laser beam and characterization of trapped RBCs" (Jointly with Prof. Chandra Shakher, IDDC, IIT Delhi) Supervisor: D S Mehta, 2012.
33. Ms. Tulsi Anna, "Full-field frequency domain optical coherence microscopy for simultaneous topography and tomography of engineering and biological materials," (Jointly with Prof. Chandra Shakher, IDDC, IIT Delhi) Supervisor: D S Mehta, 2012.

2013

34. P. Packiam, "Control of Single Stage Voltage Source Inverter-fed Photovoltaic Water Pump: Simulation and Microcontroller based Hardware Implementation", Year of Completion: 2013, Supervisor: Dr. N.K. Jain
35. Shobhna Sharma , "Measurement of temperature of gaseous flames using digital holographic interferometry", Year of Completion: 2013 , Supervisor: Prof Chandra Shakher.
36. Hardik Jeetendra Pandya, "Novel Techniques for MEMS-Based VOC Sensors using Nanostructured Metal Oxides", Year of Completion: 2013, Supervisors: Prof. A.L.Vyas, IDDC and Prof. Sudhir Chandra, CARE
37. Vivek Kumar, "Development of modified bamboo fiber reinforced plastic nanocomposites and study of their dielectric, mechanical and thermal properties", Year of completion: 2013 , Supervisors: Dr. Rakesh Kumar
38. Bhaskarkumar Vinodchandra Thakkar, "Studies on Wrist Pulse Signals in Healthy and Unhealthy subjects", Year of Completion: 2013, Supervisor: Prof. A. L. Vyas
39. Sanjeev Kumar Shrivastava, "Investigation of Mechanical Behaviour of Hybrid Polymer Nanocomposites",
40. Rina Sharma, "Development and characterization of BTiO₃: PVDF composites for pyroelectric transducers", Supervisors: Dr. P.K.Sharma
41. Ajay Kumar Somkuwar, "Some Studies for Optimisation of Energy Consumption and Muscular Stress in Cycle Riksha Operation"
42. Arunandan Kumar, "Studies on the Electro-optical Properties of Organic light-emitting diodes" (Dr. M. N. Kamalasanan, NPL New Delhi) Supervisor: D S Mehta, 2013.

2014

43. Sushil Chandra, Year of Completion: 07/02/2014 (Thesis submission)
44. Ahmad Afsari, : Investigations into the workpiece accuracy in cylindrical grinding", Supervisors: Prof. U.R.K.Rao (Mechanical Engineering)
45. Vishal Srivastava, "Wide-field low coherence interference microscopy for quantitative imaging of biological and industrial objects" Supervisor: D S Mehta, 2014.
46. Rakhi Grover, "Studies on the improvement of efficiency and life time of Organic light emitting devices" (Thesis Submitted) Supervisor: D S Mehta, 2014.

II. In Progress

1. Vaneet, “Design of Energy Efficient Embedded Controlled Sensor Networks”, Supervisors: Dr. I.P. Singh and Mr. S.K. Sud
2. Mumtaz Ahmad, “Composites for high performance structures and cutting materials from composite tool materials” , Supervisors: Dr. I. P. Singh and Prof. R. Sagar (Mechanical Dept.)
3. Sakshi Gupta, “Laser based explosive detection” ,Supervisors: Prof. D. S. Mehta and Dr. M. N. Reddy LASTECH, New Delhi.
4. Rajesh Kumar ,“Modelling and Simulation of Renewal Energy Sources for the Design of Hybrid Power Plants” ,Supervisors: A K Agarwala.
5. Aniruddha Muley , “Metal matrix composites” ,Supervisors: Dr. I. P. Singh and Dr. S. Arvindan (Mechanical Department)
6. Neha Adhikari ,“Investigations on Stand-alone Low Power Renewable Energy Systems” ,Supervisors: Prof. A. L. Vyas
7. Vishal Srivastava ,“Wide-field low coherence interference microscopy for quantitative imaging of biological and industrial objects” ,Supervisors: Prof. D. S Mehta
8. Gyanendra Singh ,“Optical Interferometric Characterization of LEDs and OLEDs” ,Supervisors: Prof. D. S Mehta
9. Mohammad Inam ,“Optical interferometric studies of nematic liquid-crystal materials and their applications” ,Supervisors: Prof. D. S Mehta
10. Rakhi Grover ,“Studies on the improvement of efficiency and life time of Organic light emitting devices” ,Supervisors: Prof. D. S Mehta and Dr. M. N. Kamlasanan, NPL, New Delhi
11. Arun Kumar Verma ,“Power quality improvement in a grid interface solar photovoltaic power generating system” ,Supervisors: Prof. D.T.Shahani
12. Veeranchi Pandya ,“High efficiency solar photovoltaic micro-inverters with isolated output” ,Supervisors: A.K.Agarwal
13. Varun Kumar ,“Digital holography and its applications in optical metrology” , Supervisors: Prof Chandra Shaker
14. Sumer Singh , “A Framework for Environmental Impact Assessment of Consumer Products” , Supervisors: Dr. Jyoti Kumar and Prof. Madhusudan Rao (Mechanical Engineering)
15. Manoj Kumar, “Optical metrology using Digital Speckle Pattern Interferometry and Digital Holography”, Supervisors: Prof Chandra Shaker and Gufran S. Khan
16. Anuj Kumar , “Development of Electronic Nose for Environmental Monitoring”, Supervisor: Prof Chandra Shaker and Co-guide Mr. S.K.Sud
17. Aarti Prakash Khare, “Evaluation matrix for E-Learning in Vocational Courses in Animation”, Supervisors: Dr. Jyoti Kumar
18. Daliramu Burada, “Metrology of Freeform Optics using non-null techniques” , Supervisors: Dr. Gufran S Khan
19. Shilpi Agarwal, “Optical metrology using interferometric techniques” , Supervisors: Prof Chandra Shaker
20. Naveen Kumar, “Measurement of Efficiency in Human machine Interactions in Plant Automation” , Supervisors: Dr. Jyoti Kumar
21. Kamal K. Pant, “Fabrication and Characterization of free form optics”, Supervisors: Dr. Gufran S. Khan and Prof. Chandra Shaker
22. Jitesh Khatri, “Use of Soft Computing Techniques in Product Form generation”, Supervisors: Dr. Jyoti Kumar
23. Raj Kumar Garg, “Integration of Renewable Energy sources in the smart grid”, Supervisors: Prof. D. T.Shahani and coguidance of Prof Bhim Singh
24. Govind Prasad Bidua, Supervisors: Prof. D. T. Shahani
25. Madhu Jain, Supervisors: Dr. N. K. Jain
26. Sheo Shankar Prasad, Supervisors: S. K. Atrey
27. Veerabhadrapa S T, Supervisors: Prof. A.L. Vyas
28. Mohamd. Inaam, Liquid-Crystal Optical Devices and Applications, Supervisor: D S Mehta
29. Gyanendra Singh, Optical Interferometric Characterization of LEDs and OLEDs, Supervisor: D S Mehta
30. Mrs. Sakshi Gupta, Laser based explosive detection, Dr. M. N. Reddy LASTECH, New Delhi, Supervisor: D S Mehta

APPENDIX 7(B) - M TECH THESIS

2009

1. Arun Kant Singh, Design and Development of Data Logger, Supervisor: Sh. A.K. Agarwala, 2009
2. Mohammad Inam, Development of Compact and Low-cost Fluorescence Detection System without using Excitation and Emission Filters for Sensor Application, Supervisor: Dr. D.S. Mehta, 2009
3. Snehasis Roy, Instrument for Measuring Torsional Properties of Fibers and Yarns, Supervisor: Dr. I.P. Singh, 2009
4. Vikash Kumar, Development of Grating based Transducer for the Measurement of Displacement, Supervisor: Dr. Rakesh Kumar, Mr. S.K. Sud, 2009
5. Pushpendra Kr.Meena, Development of Interferometric Fringe Projection System for 3D-shape Measurement of Discontinuous Objects, Supervisor: Dr. D.S. Mehta, 2009
6. Madhuri B, Implementation of Mobile Communications in Health Monitoring Systems , Supervisor: Dr. A.L. Vyas, 2009
7. Sanjay Kumar Sharma, Design and Implementation of Wireless Body Sensor Network for Health Monitoring , Supervisor: Dr. A.L. Vyas, 2009
8. Satyabarta Patel, Microcontroller based X-Y Positioning System – X positioning implementation, Supervisor: Dr. I.P.Singh, 2009

2010

10. Bharathkumar Hegde , Maximum Power Point Tracking (Mppt) Solar Charge Controller, 2010
11. Anup Kumar Sharma , Development Of Spectral Domain Low Coherence Interferometry System For The Study Of Multilayer Structure, 2010
12. Kulkarni Amol Vijay , Force Measuring System Using Load Cell, 2010
13. Chakresh Mishra , Motion Control Of Linear Slide Based On Hctl – 1100 Chip, 2010
14. Sushil Kumar Semwal , Investigation Of Energy Scavenging In Integrated Circuits, 2010
15. Das Devarshi Mrinal , Hybrid Charge Controller, 2010
16. Varun Kumar , Dynamic Deformation Studies Of Large Objects By Using Fringe Projection Profilometry, 2010
17. Vinay Kumar , Measurement Of Strains In Natural Fiber Reinforced Plastic Composite Plates Using Moiré Technique, 2010

2011

18. Kumari Ruchi , Development Of Data Communication Device For Replacement Of Device T-237, Weapon Systems, Ambala Cant, 2011
19. Vikas Gupta , Wrist-Worn Integrated Health Monitoring Device Ecg Signal And Heart Rate, 2011
20. Hima Bindu Meda , Mirocontroller Based V/F Control Of Induction Motor By Using Svpwm Technique., 2011
21. Saurabh Chadha , Traffic Control System, 2011
22. Supriya Karnani , Mobility Enhancement For Elderly (Isolated Word Speech Recognition For Voice Control Of Wheelchair), 2011
23. Mohammad Nasir Hossain , Vibration Monitoring System Using Ti Msp430, 2011
24. Vaibhav Pandey , Hybrid Solar Lighting System, 2011
25. Charu Utkarsh , Finger Print Recognition System, 2011
26. Jitendra Prasad , Maximum Power Point Tracker Charge Controller, 2011
27. Ramkumar .S , Mobility Aid For The Elderly, 2011
28. Ravindra Kumar Kaushal , Linear Motion Control Using Hctl1100, 2011
29. Umesh Kumar Maurya , Solar Tracking System, 2011
30. Tammalla Vasu , Force Measuring System Using Load Cell Based On Shear, 2011

2012

32. Fahim., Wireless Sensor Networking For Saw Sensor Module, 2012
33. Arup Sankar Bhaumik., Design And Implementation Of Sensor Nodes For Wireless Body Area Network, 2012
34. Silky Mohanty, Weather Collection And Transmission Via Gsm, 2012
35. Balar Bharat Dharamshibhai., Data Acquisition System And Transmission Via Serial And Ethernet, 2012

36. P. Prashant Kumar, Development Of Data Transmission Equipment For Communication In A Weapon System, 2012
37. Chetan Das., Data Acquisition And Transmission Via Gsm, 2012
38. Arun Kumar Behara., Auto Feeding Of Flight Machine Datafor Weapon System Usingoptical Recognition , 2012
39. Vinod Kumar Gambhir., Solar Micro-Inverter, 2012
40. Neeraj Kumar Singh., Desiging Of The Flow Meter And Microcontroller Interfacing With Flow Meter, 2012
41. Kosuru Trinadhachari., Desiging A Communication Protocol For A Smart Card, 2012
42. Himanshu Kumar, Corona Ionisation Miniaturized Ion Mobility Spectrometer Sensor For Chemical Detection, 2012
43. Polumatla Priyanka., Design Of Stand Alone Transient Vibration Monitoring System, 2012
44. Satyaveer Singh Chauhan., Wireless Electrical Device Controller, 2012
45. Arpit Agarwal., Battery Powered Solar Refrigerator, 2012
46. Arun Kumar A., Inmtrusion Detection In Open Field, 2012
47. Kshetrimayum Milan Singh., Biomedical Data Transmission Through Mobile Network, 2012
48. Deepak Yadav., Multi Utility Sensor System , 2012

2013

49. Vranda Sharma , “Thermal Control” Subsystem For Quartz Crystal Microbalance Technique Process For Development Of Biochemical Sensor”, 2013
50. Arya Sree T , “Design And Implementation Of A Dc Picoampere Current Measuring Instrument”, 2013
51. Mukul Dhar Sharma, “Detection Of Human Instrusion And Position Of Intrusion Usinmg Seismic Sensor”, 2013
52. Souvik Haldar , “Semi-Automatic Positioning Control Of Gun”, 2013
53. Abhishek R , 2013
54. Fatesh Kumar Sahu, “Design Of Microcontroller Based Laser Driver Circuit”, 2013
55. Shivam Katiyar , “Design Analysis And Application Of Mlse Based Fir Filter”, 2013
56. Ramendra Singh , “High Precision Active Bridge Amplifier”, 2013
57. Komal Soni , “Design And Charectarisation Of Quartz Crystal Oscillator Module For Quarts Crystal Micro-Mass Balance Techniique Based Biomedical Sensor”, 2013
58. Peeyush Kumar , “Public Information Display System With Gsm And Gps Connectivity”, 2013
59. Devesh Kumar , “Best Phase Selector Based On Microcontroller”, 2013
60. Nikhil Sharma , “Automatic System To Measure Mosfet Parameters”, 2013
61. Tarun Saha , “Thermocouple Based Precision Temperature Sensor”, 2013
62. Satish Jaiswal , “Design And Development Of High Efficiency Solar Powered Led Based Tube Light”, 2013
63. Viwek Mahto , “Microcontroller Based Standalone Blast Pressure Recorder”, 2013
64. Arun Kumar , “Development Of Digital Visual Interface For Spatial Light Moduator”, 2013

APPENDIX 7(C) - M.DES THESIS

2011

1. Yashwant Suthar, Affective Semantics in Exterior Forms of Automobiles: An Experimental Study, 2011
2. Kiran G, Redesign of a Bike, 2011
3. Karthik , Design of Futuristic Vehicle, 2011
4. Shivam Nigam, Lifestyle Furniture, 2011
5. Sachin C, Personal Mobility Vehicle, 2011
6. Bibhas Ranjan Sethi, Shoe Storage Unit for Temples, 2011
7. Shubham Ranjan, Design of a Ticket Vending Machine
8. Yogesh Kabale, Design of a Cooking Gear, 2011

2012

9. Taniya Vij, Parichay A Mobile Creche, 2012
10. Ajay Kumar, Design Of Semi Automatic Wasing Machiine (Sawm), 2012
11. Mohit Gupta, Setting Up An Information Portal For The Rural Housing Knowledge Network, 2012
12. Pawar Parag Prabhakar, Styling Of Scooter For Male Youth In India, 2012
13. Priya Saini, Designing Of A Cruiser Bike For Hero Motocorp, 2012
14. Prithviraj Patowary, Design Of A Kit For Alternate Learning In Children Of The Age Group Of 2-3 Years, 2012
15. Mukesh Prasad Sharma, Designing A Medical Emergency Motorcycle, 2012
16. Pallavi Gautam, Royal Enfield Scooter Design For Youth Of Age 18-25, 2012
17. Subhasis Bhattacharjee, Futuristic Concept Car Interior For Indian Urban Young Professional, 2012
18. Swati Gupta, Designing A Document Sharing Machine And Its Protocol, E-Dakia –“ An Online Postal Service For Non- Internet Consumers, 2012
19. Arunnivas A, Hero Concept Bike 2020, 2012
20. Jaunani S., Design Of A Mobile Application For Diet Planning Based On Ayurveda, 2012
21. Ihjas Aslam. C. S, Share Cab Design- “A Public Transport Solution With Emergency Response Capability”, 2012
22. Swati Kashyap, Design Of A Digital Experience System For Cosmetic Store- “A Digital System For Trying Cosmetic In Augmented Way In Order To Increase The Retail Sales, 2012
23. Ashlesha Yadav, Design For Disruption In Packaging Kyso- Knock Yourself Out , 2012
24. Amit Verma, An Education Computer Application For School Girls, 2012
25. Sonal Singh, Mello Flo Office Lighting Fixture Design, 2012

2013

26. Pawan Hamilpure, Exterior Styling Of Future Hatchback 2020, 2013
27. Rama Chandra Murmu, SUV Design, 2013
28. Shrikant Sathe, Exterior Styling Of A Luxury Sedan For The Near Future, 2013
29. Shruti Gokhale, "Plasticab" - Redesigning Of Cycle Rickshaw, 2013
30. Dhaneesh P, "Design A Two Wheeler For Ladies", 2013
31. Supriyo Roy, Customer Service Gamification - Improving Productivity Using Game Design Principles Over Customer Service Sector, 2013
32. Ameya Vivek Baporikar, Designing Of A Interest Focus Collaborative Tool For Students, 2013
33. Utsav Das, System Design For Terminally-Ill Cancer Patient, 2013
34. Sneha Maji, Design Of A Smart Phone App To Capture Notes, Audio And Photo Enabling Mobile Based Learning For Students In Universities, 2013
35. Abhishek Chouksey, Enthusiast's Tool For Over Clocking, 2013
36. Gulmohar Khan, Water Storage Cum Filtration Kit For Temporary Stay Scenario In India, 2013
37. Nidhy Haridas, Redesigning The Official Website Of Kerala Tourism, 2013
38. Swati Minz, Design Of User Interface For Philips Support Connect To Be Used By Service Engineers, 2013
39. Kaushik Datta, User Interface Design Of An Android Based Tablet For Lighting Control In Hotels, 2013
40. Amar Verma, An Infotainment And Emotional Response Monitoring BMI System, For Cancer Patients Under Palliative Care In Hospice Establishments., 2013
41. Mohana Krishnan, Design Of Song Discovery Feature(S) And Responsive Layout For 'Gaana+' Website, 2013
42. Jomy Joseph, Bicycle Design For Tomboys, 2013
43. Satheesh S, Branding & Marketing Collaterals Design For Electronics India, 2013
44. Monisha Pattnaik, Inspirational Book Design For L&T Idpl, O&M Centre, 2013
45. Ankur Singh, Character Animation For Entertainment Sector, 2013

APPENDIX 8 – STUDENTS’ AWARDS

I. Awards Received by M.Des Students from 2011 - 2013

2011

1. Design for Asia Award, Shubham Ranjan, 2011
2. SIAM ADC Design Challenge, Kiran Gopinath, 2011

2012

3. Packinova, Parag Pawar, 2012
4. Design for Asia (DFA), Mohit Gupta, 2012
5. Samsung Smart TV Apps Design Contest, Mohit Gupta, 2012
6. Samsung Innovation Awards, Juanani, 2012
7. SIAM ADC design Challenge, Ankur Singh Singar, 2012
8. ITC Jar Design Contest, Utsav Das, 2012
9. ITC Jar Design Contest, Gulmohar Khan, 2012

2013

10. Yahoo hack You , Supriyo Roy, Monisha, Amya, 2013
11. Electrolux Design Challenge, Trideep Sarkar , 2013

II. Awards Received by PG Students from 2008 – 2013

2007

1. Best ORAL Presentation Award “*Dynamics of bistability in deformed helix ferroelectric liquid crystal*”, A. Choudhary, J. Prakash, D. S. Mehta and A. M. Biradar, Proc. of 14th National Liquid Crystal Conference, North Bengal University, Silliguri, North Bengal, India, “Dewan Jawhar Lal Nayer Memorial Prize” by Liquid Crystal Society of India, Dec. (2007).

2008

2. T. Anna, J. Prakash, A.M. Biradar, D. S. Mehta and C. Shakher, “Contrast enhancement using gold nano-particles in biological images in swept-source OCT,” Proceedings of International Conference on Fiber-optics and Photonics, Best Poster Award Certificate of Excellence from SPIE, USA, Cash Prize Rs. 10,000.00 IIT Delhi, India, pp. 334, Dec.13-17 (2008).

2009

3. T. Anna, D. S. Mehta and C. Shakher, “Full field swept-source optical coherence tomographic system for surface profilometry of microlens arrays” Proc. of International Conference on Optics and Photonics held at CSIO, Chandigarh, India, from 30 Oct. to- Nov. 1, 2009, *Best Student Paper Award SPIE, USA, Cash Prize Rs. 5000.00.*

2011

4. Vishal Srivastava and Dalip Singh Mehta, “*Single shot off-axis low coherence interference microscopy for quantitative phase imaging*,” XXXVI Optical Society of India Symposium Frontiers in Optics and Photonics (FOP11), IIT Delhi, India December 2-5 (2011). (Best poster award).

2012

5. T. Anna, D. S. Mehta, C. Shakher, Best paper award entitled “*Full-field frequency domain optical coherence tomography*” on National Science Day (28 February), IIT Delhi, New Delhi, India 2012.

2013

6. V. Srivastava, M. Inam, Brijesh Kumar Singh, and D. S. Mehta, *High-resolution corneal topography and tomography of fish eye using full-field white light interference microscopy and colour fringe analysis*, Best Poster Paper Award, WRAP 2013, Workshop on Recent Advances in Photonics, Dec. 17-18, 2013, IIT Delhi, India.
7. Vishal Srivastava and D. S. Mehta, *High-resolution, non-contact quantitative phase imaging of biological objects*, Runners-up best project, Alumni Association Award, Open House, April 27, 2013.

APPENDIX 9 –SHORT TERM COURSE MANUALS

I. Short Term Courses

1997

1. Computer Aided Graphic Design, , 2 Weeks 1997, Co-ordinators: Dr. S K Atrey
2. Advanced course on AutoCAD, PDP, 3Weeks 1997, Co-ordinators: Dr. S K Atrey
3. Design School each, , 6 months 1997 – 98, Co-ordinators: Dr. S K Atrey

1996

4. Computer Aided Design, , 2 Weeks 1996, Co-ordinators: Dr. S K Atrey
5. Using AutoCAD, , 2 Weeks 1996, Co-ordinators: Dr. S K Atrey

1993

6. Computer Aided Design, , 4 Weeks 1993, Co-ordinators: Dr. S K Atrey
7. A Course on AutoCAD, , 4 Weeks 1993, Co-ordinators: Dr. S K Atrey
8. Computer Aided Graphic Design, , 2 Weeks 1993, Co-ordinators: Dr. S K Atrey
9. Computer Aided Product Design, , 2 Weeks 1993, Co-ordinators: Dr. S K Atrey

1992

10. PC Based Data Acquisition - 1 Week Short Course for Researchers and Engineers: July 1992 (as Teaching faculty)
11. Power Supply Servicing Camp - 1 week Short Course for IIT Technicians : June 1992 (as Coordinator)

1991

12. Computer Aided Data Acquisition - 1 Week Short Course for Researchers and Engineers: October 1991 (as Teaching faculty)
13. Introduction to Analytical Instruments 2 - Week Short Course for Researchers and Engineers, with Dr. G Currell (Bristol Polytechnic): September 1991 (as Teaching faculty)
14. Design of Switched Mode Power Supplies 2 - Week Short Course for Industry Designers: July 1991 (as Teaching faculty)
15. Servicing Techniques - Electronic Equipment -2 Week Short Course for Industry Technicians: July 1991 (as Coordinator)
16. Using PSPICE - CAD Techniques in Electronics Design - 2 Week Short Course for IIT faculty, with Dr J Branson (Loughborough): April 1991 (as Teaching faculty)
17. Transducer Instrumentation: 1 Week Short Course for Researchers and Engineers: March 1991 (as Coordinator)

1990

18. Appreciation course in Electronic Aided Measurements - 1 Week Short Course for Researchers and Engineers: December 1990 (as Coordinator)
19. Electronic Measurement Techniques & Equipment Maintenance - 2 Week Summer School for Teachers of Engineering Colleges: July 1990 (as Coordinator)
20. Data Acquisition and Computer Aided Measurements - 1 Week Short Course for Scientists and Engineers: May 1990. (as Teaching faculty)
21. Electronic Equipment Operation & Servicing -2 Week Short Course for experienced Technicians of IIT Delhi: December 1989 (as Coordinator)
22. Design of Switched Mode Power Supplies" -2 Week Short Course for Industry R & D Engineers: November 1989 (as Teaching faculty)
23. Power Supplies Inverters Converters & UPS" - 1 Week Short Course for Engineers and Students of CEDT, Srinagar: October 1989 (as Coordinator)
24. Electronic Signal Processing in Measurement Instrumentation - 1 Week Short Course for Scientists and Engineers: October 1989.
25. Design of Switched Mode Power Supplies - 2 Week Short Course for Industry R & D Engineers: March 1989. (as Teaching faculty)
26. Design of Switched mode Power Supplies" - 2 Week Short Course for Design Engineers Of E T & T Corpn. Delhi: July 1989 (as Teaching faculty)
27. Electronic Equipment Servicing - 2 Week Short Course for Industry Engineers: March 1989. (as Coordinator)

1989

28. One Day Seminar on Product Design, PDP, 1 Day 1989, Co-ordinators: Dr. S K Atrey
29. Current Techniques in Industrial Design, PDP, 1 Week 1989, Co-ordinators: Dr. S K Atrey

1988

30. Electronic Equipment Servicing - 2 Week Short Course for Industry Engineers: December 1988 (as Coordinator)
31. Electronic Aided Measurements & Transducer Applications - 1 Week Short Course for Scientists & Engineers: October 1988 (as Coordinator)

32. Electronic Aided Measurements & Transducer Applications - 1 Week Short Course for Scientists & Engineers: October 1988 (repeat) (as Coordinator)
33. Computer Aided Measurements & Electronics Aids - 1 Week Short Course for Scientists & Engineers: March 1988. (as Teaching faculty)
34. Training in Computer Aided Design, Fee, 8 Weeks 1988, Co-ordinators: Dr. S K Atrey

1987

35. Refresher Course in Servicing Higher Level Equipment - 1 Week Short Course for experienced Technicians: December 1987 (as Coordinator)
36. Sensors & Monitors in Biochemical/Biological Reactions- 3 Week Course for Scientists & Engineers: December 1987 (with BERC) (as Teaching faculty)
37. Transducers Applications & Selection - 1 Week Short Course for Scientists & Engineers: September 1987 (as Coordinator)
38. Survey of Electronics Practices - 2 Week Short Course for Small Industries Development Officers (Min. of Industries): August 1987.(as Coordinator)
39. Transducers Principles & Electronic Interfacing - 1 Week Short Course for Scientists & Engineers: March 1987.(as Coordinator)
40. Electronics Test & Measurement Equipment Servicing - 5 Month Training for ITI/Diploma Technicians: May 1986-January 1987.(as Coordinator)
41. Industrial Design Exposition, Fee, 2 Weeks 1987, Co-ordinators: Dr. S K Atrey
42. Advanced Training in Industrial Design, PDP, 2 Weeks 1987, Co-ordinators: Dr. S K Atrey
43. Industrial Product Design, PDP , 2 Weeks 1987, Co-ordinators: Dr. S K Atrey

1986

44. Use & Specification of Common Electronic Based Test & Measurement Equipment - 1 Week Short Course for Scientists & Engineers: September 1986 (as Coordinator)
45. A Workshop on Industrial Design, CEP, 2 Weeks 1986, Co-ordinators: Dr. S K Atrey
46. Industrial Design for Engineers, CEP, 2 Weeks 1986, Co-ordinators: Dr. S K Atrey

1985

47. Electronics Test & Measurement Equipment Servicing - 6 Month Training for ITI/Diploma Technicians: August 1985-February 1986 (as Coordinator).
48. Instrumentation Program – Restructuring in the Light of New Developments, May 1985, Co-ordinators: Dr. B N Gupta, Mr. S K Sud, Dr. I P Singh.

1984

49. Precision Measurement Techniques, Dec. 1984, QIP Winter School. Co-ordinators: Dr. B N Gupta, Mr. R Mulchandani, Dr. I P Singh.

1983

50. Engineering Measurements by Modern Optical Techniques, June 1983, ISTE Summer School, Co-ordinators: Dr. B N Gupta, Mr. S K Sud, Dr. I P Singh.

- Entrepreneur Development Programmes, GOI, 1989-1999, Co-ordinators: Dr. S K Atrey
- One week course under CEP for the Industry, Microprocessors: Fundamentals and Programming. Co-ordinators: Mr. R. Mulchandani and Dr. I P Singh. Four other faculty members were involved. Four such courses were conducted (1984-1988).

II. Courses for Teachers of Regional Engg Colleges & Polytechnics under World Bank (1992-1999)

1992

1. Electronic Components and Materials- 8 Week Instruction Enhancement Programme for Polytechnic Teachers; May-July, 1992

1994

2. "Analog Electronics I" 8 Week Instruction Enhancement Programme for Polytechnic Teachers; March-May, 1994.
3. "Electronic Test and Measurement I" 8 Week Instruction Enhancement Programme for Polytechnic Teachers; July-Sept. 1994.
4. Computers (Theory + Lab)
Instruction enhancement programme of 8 weeks for Polytechnic Course under Project IMPACT (RP011/91) from 14th November 1994 to 6th January 1995. Total outlay was 2 lacs. Co-ordinators were Dr. I.P.Singh for Theory and Dr. C.P.Ravikumar for Laboratory. Three other persons involved.

1995

5. "Electronic Test and Measurement II" 8 Week Instruction Enhancement Programme for Polytechnic Teachers; Aug.-Sept. 1995; Coordinator.

6. "Analog Electronics II" 8 Week Instruction Enhancement Programme for Polytechnic Teachers; October-December, 1995.
- 1996**
7. "Electromagnetic Compatibility" 8 Week Instruction Enhancement Programme for College Teachers; January-March, 1996.
 8. "High Frequency Electronics", 8 weeks Instruction Enhancement Programme for College Teachers; April-May, 1996
 9. "Analog Electronics" 4 Week Instruction Enhancement Programme for Polytechnic Teachers; July-August 1996.
- 1997**
10. "Simulation and Design of Electronic Circuits" 2 Week Instruction Enhancement Programme for College Teachers; February, 1997.
- 1998**
11. "Advanced Instrumentation" 3 Week Instruction Enhancement Programme for Polytechnic Teachers; October-November, 1998.
- 1999**
12. Advanced Microprocessors --
Instruction enhancement programme for Polytechnic teachers, under project Impact SSS (RP010 70) from Nov.15 to Dec. 03, 1999 at IDDC. The total outlay was Rs. 1.25 lacs. Six persons were involved.
- 2000**
13. "RF Microwave circuits" One week Instruction Enhancement Programme for College teachers; December 2000.

APPENDIX 10 - FACULTY AWARDS

1. Mr. D. T. Shahani was IITKgp Silver Medalist - 1st class 1st B Tech in 1973.
2. Mr. A. K. Agarwala received Outstanding teaching award; Rensselaer University, Troy NY 12180 for teaching of Physics to Undergraduates, 1975
3. Mr. D. T. Shahani was IITKgp Silver Medalist - 1st class 1st B Tech in 1973.
4. NRDC Meritorious Invention Award (1982) for Design and Development of "Re-engineered control system for Deck Landing Mirror Site", for INS Vikrant, Indian Navy to Mr. A. L. Vyas.
 - a) The complete system was designed, developed and productionised at CARE, IIT Delhi, for use by Indian Navy. The systems were in active operation at aircraft carrier INS Vikrant for more than ten years
5. Mr. A. K. Agarwala played a major role in the planning, procuring, furnishing and making operational the following lab facilities at IDDCentre:
 - a) A fully equipped laboratory, consisting of test & measurement and computing equipment for electronic design between 1982-84. A new lab space was constructed and equipment worth about Rs.1 crore was procured and installed with funds from UNIDO and MHRD.
 - b) A laboratory for manpower training in Instrument Technology with inputs of about Rs.1 crore from British Council and MHRD, from 1985-90 (approximately). This lab has been used extensively for short term courses for training of manpower. Presently the facility is being used to run the lab courses for the M.Tech programme in Instrument Technology.
 - c) An ultra modern electronics teaching and design lab at IDDCentre with extensive computing facilities integrated with electronic test equipment; established with inputs of over 1 crore from DOE through project Impact, 1992-1995. (Co-workers: D T Shahani, N K Jain)
6. Mr. N. K. Jain Played a major role in the planning, procuring, furnishing and making operational the following lab facilities at IDDCentre:
7. Between 1982-84, developed a fully equipped electronics design laboratory, in a newly constructed lab space. Equipment worth about Rs.1 crore was procured and installed with funds from UNIDO and MHRD. Co-worker: A K Agarwala
8. A laboratory for manpower training in Instrument Technology with inputs of about Rs.1 crore from British Council and MHRD, from 1985-90 (approximately). This lab has been used extensively for short term courses for training of manpower. Presently the facility is being used to run the lab courses for the M.Tech. programme in Instrument Technology. Co-workers: A K Agarwala, D T Shahani.
9. An ultra modern electronics teaching and design lab at IDDCentre with extensive computing facilities integrated with electronic test equipment; established with inputs of over 1 crore from DOE through project Impact, 1992-1995.
10. Mr. A. K. Agarwala was Part of a 2 member team constituted to study the operation of the Workshops and Clinical Services at AIIMS and to suggest improvements; March 1985
11. Mr. Chandra Shakher was Chairman of a Session in an International Conference on Laser Technologies in Industry June 6-8, 1988, Porto, Portugal. Conference was sponsored by Commission of European Communities, European Physical Society, and International Society of Photo- Optical Engineers etc.
12. Mr. Chandra Shakher was Chairman of Session in an International Workshop on Holography and Speckle Phenomena and their Industrial Applications, December 12-17 (1988), IIT Madras.
13. Mr. A. K. Agarwala was Head, IDDCentre, 1989-92
14. Mr. D. T. Shahani received Outstanding Instructional Element (Teaching at IIT D) in 1991.
15. Mr. D. T. Shahani received Outstanding Development & Technology in EM Systems in 1993.
16. Mr. Chandra Shakher Received NRDC Independence Day Award 1993 for development of laser based alignment system for electrical power machinery and other industries for Novelty, Technical Feasibility and Commercial Viability of the product. The device is suitable for alignment of heavy electrical equipment where sub units are physically linked to operate on a single common axis.
17. Mr. Chandra Shakher received Institute Outstanding Faculty Award for 1994-1995, for significant research and development work in holographic techniques and laser based systems.
18. Mr. A. K. Agarwala was part of a 3 member team to study the Electronics and Mechanical Workshop facilities at NCERT and to suggest re-organisation.(April 1996)
19. In HP RF Computing Lab; Mr. A. K. Agarwala was responsible for the donation of an advanced Electronic Simulation and Design station by Hewlett Packard India to the IDDCentre in 1996. This facility, costing about Rs. 25 lakhs was the first such donation by HP India under their University Support Programme in India, and was in recognition of the activities of the group in the area of electronic design.
20. Mr. A. L. Vyas was Member, Executive Council, Acoustical Society of India (1996-1998)
21. Mr. Chandra Shakher was Chairman of a Session in the International Conference on Optics and Opto-Electronics ICOL 98 held at Instrument Research Development Establishment, Dehradun (India) from December 9-12 (1998).

22. Mr. A. L. Vyas was Organising Secretary : International Conference on Laser Applications and Optical Metrology (ICLOAM-03), December 1-4, 2003 at IIT Delhi
23. Mr. Chandra Shakher was Chairman of Organizing Committee of International Conference on “Laser applications and optical metrology (ICLAOM-03)”, held at IIT Delhi from December 1 to 4, 2003.
24. Mr. Chandra Shakher was Member of Program Committee of the International Conference on “Interferometry XII: Applications”, Organized by SPIE, from 2-8-2004 to 6-8-2004 at Denver, Colorado, USA
25. Fellow, Indian National Academy of Engineering (INAE) – Mr. Chandra Shakher Elected as a Fellow in 2005.
26. Mr. A. L. Vyas was General Secretary: Acoustical Society of India (January 2005 to December 2006)
27. Mr. A. L. Vyas was Chairman, Technical Committee, National Symposium on Acoustics (NSA-2006) being jointly organized by Acoustical Society of India and Nation Physical Laboratory, November 15-17, 2006.
28. Mr. Chandra Shakher Delivered plenary talk on,” Advances in optical metrology,” at M. S. University Baroda, XXXII Optical Society of India Symposium on contemporary optics and applications held at M. S. University Vadodara from 2-3-2007 to 3-3-2007.
29. Mr. Chandra Shakher was Chairman of a session in the International Symposium on Laser Metrology (LM2008), held at Nanyang Technological University, Singapore from June 30 to July 02, 2008.
30. Mr. Chandra Shakher Delivered invited talk on “Application of DSPI in determination of elastic modulus using plate vibration”, held in Athens (Greece), from Sept.17-19, 2009 by Academy of Athens in a “Symposium on Recent Advances in Mechanics” organized by Academy of Athens and Technical University of Athens, on the occasion of Birth centenary of Academician Pericles S. Theocaris.
31. Mr. D. T. Shahani received Excellence in Teaching (IIT Delhi, Golden Jubilee Year) in 2011.
32. SPIE Fellow 2011 – Mr. Chandra Shakher Elected as fellow for achievements in enriching the field of Speckle Metrology by inventing techniques of measurement.
33. Mr. Chandra Shakher Delivered invited talk on,” Solar holography : A fresh look on the use of volume phase transmission holographic lenses for photovoltaic concentrator applications ,” in Dept. of Atomic Energy(DAE) – Board of Research in Nuclear Sciences (BRNS), Symposium(NLS-20) on 10-1-2012 held at Anna University, Chennai from Jan.9 to Jan. 12, 2012.
34. Mr. Chandra Shakher was Keynote speaker at, “5 International Conference on Optical measurement techniques for structures and systems- (OPTIMESS 2012) on, “Interferometric techniques for measurement of temperature and temperature profile of gaseous flames”, held at, Antwerp- Belgium from April 4-5, 2012.
35. Mr. Chandra Shakher Invited speaker at, Renewable Energy and the Environment © OSA 2012, on “Solar Holography: A Fresh Look on the Use of Volume Phase Transmission Holographic Lenses for Photovoltaic Concentrator Applications”, held at Eindhoven, Netherlands from 11th– 15th November 2012
36. Mr. Chandra Shakher Delivered a lecture on “Interferometric techniques for measurement of temperature and temperature profile of gaseous flames”, at Niigata University, Japan on 07 June, 2013.
37. Mr. Chandra Shakher Delivered a lecture on “Digital holographic interferometric techniques for measurement of temperature and temperature profile of gaseous flames”, at University of Kobe, Japan on 13 June, 2013
38. Mr. Chandra Shakher Delivered a lecture on “Solar holography: A relook on the use of volume phase transmission holographic lenses for photovoltaic concentrator applications” at University of Kobe, Japan on 13 June, 2013.
39. Mr. Chandra Shakher Delivered a lecture on “Interferometric techniques for measurement of temperature and temperature profile of gaseous flames”, at Kyoto Institute of Technology, Japan on 14 June, 2013.
40. Mr. Chandra Shakher Delivered a lecture on “Solar holography: A relook on the use of volume phase transmission holographic lenses for photovoltaic concentrator applications” at Kyoto Institute of Technology, Japan on 14 June, 2013
41. Mr. Chandra Shakher was at Centre of Applied Research and Education (CORE) to give Seminar at Utsunomiya University Japan on 26 June, 2013 -
 - a) Interferometric techniques for measurement of temperature and temperature profile of gaseous flames.
 - b) Solar holography: A relook on the use of volume phase transmission holographic lenses for photovoltaic concentrator applications.
42. Mr. A. L. Vyas was Fellow :Acoustical Society of India.
43. Mr. A. L. Vyas was Fellow, IETE
44. Mr. A. L. Vyas was Life Member, Ultrasonic Society of India
45. German Academic Exchange Service (DAAD) Re-invitation fellowship to Mr. Gufran Sayeed Khan
46. NASA postdoctoral Program (NPP) Fellowship to Mr. Gufran Sayeed Khan
47. International Max Planck Research School (IMPRS) fellowship to Mr. Gufran Sayeed Khan
48. German Academic Exchange Service (DAAD) fellowship to Mr. Gufran Sayeed Khan
49. University Grants Commission (UGC), India, scholarship for postgraduate engineering students selected through GATE to Mr. Gufran Sayeed Khan
50. Dr. D S Mehta received Teaching Excellence Award 2013, Indian Institute of Technology Delhi India.

51. Dr. D S Mehta awarded “FY 2010 JSPS Invitation Fellowship Program for Research in Japan (Short term)” research fellowship for two months to be started from May 27, 2010 at The University of Electro-Communications, Chofu, Tokyo, Japan.
52. Dr. D S Mehta chaired a Session in the 8th Pacific Rim Conference on Lasers and Electro-Optics (CLEO®/Pacific Rim 2009) held from August 30th to September 3rd, 2009 at Shanghai International Convention Center in Shanghai, China. Session Name: Frequency Comb Metrology.
53. Dr. D S Mehta chaired a Session in International Conference on Quantum electronics 2005 and the Pacific Rim Conference on Lasers and Electro-Optics 2005 (IQEC/CLEO-PR 2005) held from July 11-15 at Toshi Center Kaikan, Tokyo, Japan. Session Name: [C15] Advanced Optical Reflectometry.
54. Dr. D S Mehta session as co-chair, on the International Conference on Optics & Photonics ICOP-2009, Central Scientific Instruments Organisation (CSIO), Chandigarh, India, October 30 – November 1, 2009.
55. Prof. Chandra Sekhar received Institute Outstanding Faculty Award for 1994-1995, for significant research and development work in holographic techniques and laser based systems.
56. Prof. Chandra Sekhar received NRDC Independence Day Award 1993 for development of laser based alignment system for electrical power machinery and other industries for Novelty, Technical Feasibility and Commercial Viability of the product. The device is suitable for alignment of heavy electrical equipment where sub units are physically linked to operate on a single common axis.

APPENDIX 11(A) – DELIVERED LECTURES (INTERNATIONAL)

1979 – 1980

1. Dr. N. K. Jain in connection with the Indo – UK collaboration on Computerised Numerical Control of Machine Tools, visited the Department of Engineering Production, University of Loughborough, Leicestershire, UK for a period of 9 months as a Commonwealth Fellow for training in application of microprocessor in numerical control of machine tools (1979-1980).

1988

2. Prof. Chandra Shakher was Chairman of a Session in an International Conference on Laser Technologies in Industry June 6-8, 1988, Porto, Portugal. Conference was sponsored by Commission of European Communities, European Physical Society, and International Society of Photo- Optical Engineers etc.

1996

3. Prof. Chandra Shakher visited Mechanical Engineering Laboratory of Agency of Industrial Technology and Science, Tsukuba, Japan from as a guest researcher and delivered a talk on testing of off-axis parabola by holoshear lenses and also developed their holoshear lens and used the same for testing, MEL (Agency of Industrial Science and Technology), Japan, 28-11-96 to 24-12-1996

2001

4. Prof. Chandra Shakher delivered lecture on Measurement of vibration and temperature using optical technique, and Improvement of signal to noise ratio in DSPI fringe using wavelet transform at University of Industrial Technology, Hashimoto, Sangamihara, Kanagawa (Japan), 6-07-2001, 1 hour
5. Prof. Chandra Shakher delivered lecture on Measurement/ monitoring of vibration using Talbot Interferometry and DSPI, Institute of Physical and Chemical Research (RIKEN), Japan, 4-07-2001, 1 hour
6. Prof. Chandra Shakher delivered lecture at University of Electro-Communications, Chofu, Japan on (1) Imaging in White light using Holography Optical Elements, 5-07-2001, 1 hour (2) Speckle Metrology using Holography Lenses, 5-07-2001, 1 hour (3) Measurement of Temperature using Lau Phase Interferometry, 6-07-2001, 1 hour
7. Prof. Chandra Shakher delivered lecture on Optical interferometric technique for monitoring vibrations, Mechanical Engineering lab – (AIST), Tsukuba Ibaraki, Ken Japan, 10-07-2001, 1 hour talk
8. Prof. Chandra Shakher delivered lecture on Fiber optic based sensor to measure high currents on high voltage lines, Gumma University, Kiryu, Gunma 376-0053, 13-07-2001, 1 hour talk

2003

9. Prof. Chandra Shakher delivered lecture on BSO Crystal based Sensor for measurement of high currents on high voltage lines, University of Industrial Technology, Hashimoto, Sangamihara, Kanagawa (Japan), One hour talk during the visit under JSPS, invitation programme, 24-05-2003 to 24-07-2003.

2005

10. International Conference on Quantum Electronics and the Pacific Rim Conference on Lasers and Electro-Optics (IQEC/CLEO-PR 2005), July 11-15, 2005, Toshi Center Kaikan, Tokyo, Japan. “Recent trends in shearing interferometry: some new applications.”
11. Prof. D S Mehta chaired a session in International Conference on Quantum Electronics 2005 and the Pacific Rim Conference on Lasers and Electro-Optics 2005 (IQEC/CLEO-PR 2005) held from July 11-15 at Toshi Center Kaikan, Tokyo, Japan. Session Name: [C15] Advanced Optical Reflectometry.
12. Prof. D S Mehta delivered lecture at International Conference on Quantum Electronics and the Pacific Rim Conference on Lasers and Electro-Optics (IQEC/CLEO-PR 2005), July 11-15, 2005, Toshi Center Kaikan, Tokyo, Japan.

2008

13. Prof. Chandra Shakher was Chairman of a session in the International Symposium on Laser Metrology (LM2008), held at Nanyang Technological University, Singapore from June 30 to July 02, 2008.
14. Prof. Sayeed Khan Gufran delivered lecture at Postdoctoral Fellow, NASA Postdoctoral Program at Marshall Space Flight Center (MSFC), Huntsville, Alabama, USA from Oct. 2008 to Feb 2011.
15. National Laser Symposium (NLS -2008), LASTEC, Delhi, India, “Full-field frequency-domain optical coherence tomography and its applications in forensic sciences and engineering materials.”
16. TBRL, Chandigarh, in the CEP course on “Laser Safety” 2008, “Laser Applications and Laser Safety”.
17. Workshop on laser spectroscopy and nano-photonics, March 14 - 15, 2008, Indian Institute of Technology Delhi, India, “Organic electroluminescence devices: Strategies in the enhancement of light outcoupling efficiency.”
18. International Symposium on Advances in Fingerprint Identification, Feb. 8 – 10, 2008, Panjab University Patiala, Panjab, India. “Application of full-field swept-source optical coherence tomography for latent fingerprint detection.”

19. Optics and Photonics Japan 2008, Nov. 4 – 6, 2008, Tsukuba, Japan, “Development of full-field swept-source optical coherence tomography and its applications in forensic sciences and composite materials.”
20. Prof. D S Mehta delivered lecture at Optics and Photonics Japan 2008, Nov. 4 -6, 2008, Tsukuba, Japan.

2009

21. Prof. Chandra Shakher delivered invited talk on “Application of DSPI in determination of elastic modulus using plate vibration”, held in Athens (Greece), from Sept.17-19, 2009 by Academy of Athens in a “Symposium on Recent Advances in Mechanics” organized by Academy of Athens and Technical University of Athens, on the occasion of Birth centenary of Academician Pericles S. Theocaris.
22. Prof. Chandra Shakher delivered lecture on “Application of Digital Speckle Pattern Interferometry(DSPI) for determination of elastic modulus using plate vibration”, Symposium on Recent Advances in Mechanics dedicated to Late Academician – Prof. Pericles S. Theocaris held From Sept 17-19, 2009, Athens, Greece, 18-09-2009
23. Prof. Sayeed Khan Gufran delivered lecture at Postdoctoral Fellow, NASA Postdoctoral Program at Marshall Space Flight Center (MSFC), Huntsville, Alabama, USA from Oct. 2008 to Feb 2011.
24. International Conference on Optics and Photonics, CSIO, Chandigarh, Oct. 30- Nov. 1, 2009, “Simultaneous Multiple Trapping and Pattern Formation Of Micro-/Nano-Particles And Biological Cells Using Modulated Laser Beams”.
25. National Conference on Laser Applications, 2009, Meerut Univ. Meerut, “Multiple trapping and pattern formation of micro- and nano-particles using conventional and interferometric optical tweezers”.
26. Conference on Lasers and Electro-Optics/Pacific Rim (CLEO/PR) Shanghai, China, August 30, 2009, “Applications of Full-Field Swept-Source Optical Coherence Tomography For Non-Destructive Testing And Evaluation”.
27. 4th Asia Pacific Rim Symposium on Biophotonics (APBP-2009), South Korea, “Scientific and Engineering Applications of Full-Field Swept-Source Optical Coherence Tomography.”
28. Prof. D S Mehta chaired a Session in the The 8th Pacific Rim Conference on Lasers and Electro-Optics (CLEO@/Pacific Rim 2009) held from August 30th to September 3rd, 2009 at Shanghai International Convention Center in Shanghai, China. Session Name: Frequency Comb Metrology.
29. Prof. D S Mehta delivered lecture at Tokyo Institute of Technology, Tokyo Japan Dec. 9-12, 2009, The Tokyo Tech-UNESCO Fellows Symposium for Development of Human Resources and Research Network in Science and Technology.
30. Prof. D S Mehta delivered lecture at Institute of Fine Mechanics and Optics, Shanghai, China and Conference on Lasers and Electro-Optics/Pacific Rim (CLEO/PR) Shanghai, China, August 30-Sept.3, 2009.
31. Prof. D S Mehta delivered lecture at 4th Asian Pacific Rim Symposium on Bio photonics (APBP-2009), May 27-29, 2009, Jeju, South Korea.

2010

32. LASTEC, Delhi, India, 12-08-2010, “Biomedical Applications of Lasers” A CEP course on “Emerging Applications of Lasers” LASTEC during 09 – 13th August 2010.
33. National Conference on "VLSI, MEMS and NEMS" (VMN'2010), to be held on September 23-24, 2010 at Amity School of Engineering and Technology (ASET), Amity University Campus, Sec-125 Noida “Organic light emitting diodes and applications,”.
34. International Conference on Nano Sensors & Technology (ICNST – 2010) October 28-30, 2010, CSIO, Chandigarh, India “Effect of nano-materials on the electro-optical properties of display devices and technologies”.
35. Faculty of Engineering, University of Neegata, Neegata, Japan, June 10, 2010 - June 12, 2010, “Full-field Swept-Sou Prof. D S Mehta delivered lecture at rce Optical Coherence Tomography for Non-Destructive Testing and Evaluation & Optical Tweezers and Applications”.
36. Center for Optical Research & Education, University of Utsunomiya, Japan, June 28, 2010, “Simultaneous Topography and Tomography of Industrial Objects Using Full-field Swept-Source OCT & Multiple Trapping and Manipulation of Micro- and Nano-particles and Biological Cells Using Deformed and Modulated Laser Beams”.
37. University of Tsukuba, Japan. July 15, 2010, “Low Coherence Interferometry for Non-Destructive Testing and Evaluation & Strategies in Single Beam Optical Tweezers for Multiple Trapping and Pattern Formation”.
38. University of Electro-communications, Chofu, Tokyo, Japan, July 20, 2010, “Full-field OCT Microscopy for Simultaneous Phase and Amplitude Imaging & Optical Tweezers: A Non-Contact and Non-Invasive Bio-Photonics Tool Kit”.
39. Prof. D S Mehta delivered lecture at the University of Electro-Communications, Department of Information Science, Chofugaoka, Chofu, Tokyo, Short-term JSPS Fellowship, May 27, 2010– July 25, 2010.

2011

40. Prof. Sayeed Khan Gufran delivered lecture at Postdoctoral Fellow, NASA Postdoctoral Program at Marshall Space Flight Center (MSFC), Huntsville, Alabama, USA from Oct. 2008 to Feb 2011.
41. XXXV Optical Society of India Symposium- International Conference on Contemporary Trends in Optics and Optoelectronics to be held between January 17-19, 2011 at Indian Institute of Space Science and Technology (IIST), VSSC Thiruvananthapuram, “High-resolution Quantitative Phase Microscopy.
42. Optical Tweezers: A Non-Contact and Non-Invasive Bio-Photonics Tool Kit”. National Conference on “Advancements in Convergence of Technologies – 2011” *organized by Amity University Haryana, September 2011.

2012

43. Prof. Chandra Shakher was Keynote speaker at, “5 International Conference on Optical measurement techniques for structures and systems- (OPTIMESS 2012) on, “Interferometric techniques for measurement of temperature and temperature profile of gaseous flames”, held at, Antwerp- Belgium from April 4-5, 2012
44. Prof. Chandra Shakher was invited speaker at, Renewable Energy and the Environment © OSA 2012, on “Solar Holography: A Fresh Look on the Use of Volume Phase Transmission Holographic Lenses for Photovoltaic Concentrator Applications”, held at Eindhoven, Netherlands from 11th– 15th November 2012
45. Prof. Sayeed Khan Gufran delivered lecture at DAAD re-invitation fellowship from 17th May to 18th July 2012: Visited Technical University of Ilmenau, Germany, and worked on Development of diffractive optics based null interferometric technique for metrology of freeform optics.
46. High-resolution Optical Coherence Tomography and Quantitative Phase Microscopy, National Workshop on Biomedical Imaging and Signal Processing, IIT Delhi, October 12, 2012.

2013

47. Prof. Chandra Shakher delivered invited talk, “ Interferometric techniques for measurement of temperature and temperature profile of gaseous flame”, Niigata University, 07-06-2013, 90 minute
48. Prof. Chandra Shakher delivered invited talk on, “ Digital holographic interferometry for temperature and temperature profile of gaseous flames” , 13-06-2013, Kobe University
49. Prof. Chandra Shakher delivered lecture on “Interferometric techniques for measurement of temperature and temperature profile of gaseous flames”, at Kyoto Institute of Technology, Japan on 14 June, 2013.
50. Prof. Chandra Shakher delivered a lecture on “Solar holography: A relook on the use of volume phase transmission holographic lenses for photovoltaic concentrator applications” at Kyoto Institute of Technology, Japan on 14 June, 2013.
51. Prof. Chandra Shakher delivered invited talk on, “ Digital holographic interferometry for temperature and temperature profile of gaseous flames”, CORE Utsunomiya University, 26-06-2013
52. Dr. N. K. Jain for the project Development of NMR Spectrometer for Oilseed Characterization, Visited the Magnet Centre, Sunderland Polytechnic, Sunderland UK for a period of 6 months as an UN Fellow to design a precision permanent magnet system for the pulsed NMR being developed

APPENDIX 11(B) – DELIVERED LECTURES (NATIONAL)

1995

1. Industrial applications of lasers, SAIL, Ranchi, 02-02-1995, 2 hours
2. Lecture on “Fiber Optic Current Sensor/ Crystal based Current Sensor”, For OPTEL Engineers, 02/09/1995
3. Holographic Non-destructive evaluation, Bhopal BHEL, 28-11-1995, 1.5 hours talk
4. Fiber Optic Current Sensor, BHEL Bhopal, 28-11-1995, 1.5 hours talk
5. Laser based alignment system for electrical power and other industries, BHEL Bhopal, 29-11-1995, 1.5 hours talk
6. Measurement of temperature of burners using optical techniques, BHEL Bhopal, 29-11-1995, 1.5 hours talk
7. Invited lecture on “Laser Based Instrumentation for Industrial Applications”, LASTEC (Laser Science and Technology centre) Metcalfe House, DRDO, 14-10-1995, 2 hours

1996

8. Talk on Industrial Applications of Holography, Thapar Institute Patiala, 17-06-1996, 2.5 hours talk
9. Keynote address on “Laser and their Industrial Applications.”, Thapar Institute Patiala, 17-06-1996, 30 minutes

1998

10. Interferometry by Laser and their Industrial Applications, Ministry of Defense, Metcalfe House, 19-8-1998, 2 hours
11. Instrument aspects of optical fiber in QIP summer school on “Experiment methods in analysis.”, Applied Mechanics Dept., IIT Delhi, 15-7-1998, 2 hours

1999

12. Laser based instrumentation for industrial applications, Laser Science and Technology Centre (Defense Science Centre), DRDO Metcalfe House, Delhi -54, 14-10-1999, 2 hours

2000

13. Invited lecture, Laser Based Vibration Detector, Regional seminar on condition monitoring and safety engineers organized by-National Productivity Council, 15-03-2000, 1.5 hours.
14. Invited Talk Measurement of vibration using optical electronic techniques at IRDE Dehradun, IRDE Dehradun, National Symposium Instrumentation, 31-08-2000, 40 minutes.

2002

15. Invited Lectures on
 - (1). Measurement/ monitoring of vibration using Classical Interferometry, Talbot Interferometry, and DSPI, SLIET, Longowal, 14-01-2002, 1.5 hours
 - (2) Measurement of temperature and temperature profile using Optical Technique, SLIET, Longowal, 15-01-2002, 1.5 hours
16. Invited Lecture, “Fundamental of Holography”, Govt. P.G College Alwar Rajasthan

2005

17. Invited talk : on Measurement of temperature and temperature profile of gaseous flame, International Conference on Optics and Opto-electronics held at IRDE Dehradun, 15-12-2005, 30 minutes

2006

18. Invited talk in DST SERC school on Optical Metrology and Diffractive Optics on the topic , “Measurement of Temperature and Temperature Gradient”, DST, SERC School, 29-12-2006

2007

19. Delivered plenary talk on,” Advances in optical metrology,” at M. S. University Baroda, XXXII Optical Society of India Symposium on contemporary optics and applications held at M. S. University Vadodara from 2-3-2007 to 3-3-2007.

2009

20. Invited talk Interferometric method for measurement of temperature and temperature profile of gaseous flame, International Conference on Optics and Photonics (ICOP, 2009) during 30 Oct. to 1st Nov. 2009 The Conference was a part of Golden Jubilee Celebration of CSIO Chandigarh, 30-10-2009, 40 minutes
21. Delivered talks on
 - (1).Phase Shifting Talbot Interferometry for profiling- 90 minutes talk, SLIET, Longowal, 28-07-2009
 - (2). Role of Conventional Holography, TV Holography and Digital Holography in metrology- 3 Hours talk, SLIET, Longowal, 29-07-2009
 - (3). Optical Technique for Temperature Measurement- 90 minutes talk, SLIET, Longowal, 30-07-2009

2010

22. Invited talk on “ Measurement of temperature and temperature profile using Optical techniques”, 2nd National Conference on Precision manufacturing (NCPM) held during 26th- 27th March 2010, SLIET, Longowal, 26-03-2010
23. Delivered invited talk on “ Magneto-optic current sensor for CT applications”, BHEL corporation R & D division, Hyderabad, 90 min, 21-10-10 to 22-10-10

2011

24. Delivered invited talk in OSI symposium, 16-01-2011
25. Delivered invited talk on “ Magneto-optic current sensor to measure high current on high voltage line”, NIT Hamirpur, 02-05-2011
26. Invited talk on “ Holography and Prospects”, INSPIRE programme of DST at BHU, 10-06-2011, 3 hours
27. Invited lecture on “ Holographic interferometry” in SERC school at Calcutta, 30-12-2011, 2 hours

2012

28. Delivered invited talk on, “ Solar holography : A fresh look on the use of volume phase transmission holographic lenses for photovoltaic concentrator applications ,” in Dept. of Atomic Energy(DAE) – Board of Research in Nuclear Sciences (BRNS), Symposium(NLS-20) on 10-1-2012 held at Anna University, Chennai from Jan.9 to Jan. 12, 2012.
29. Keynote speaker at, International conference on Renewable energy and the environment OSA 2012 on, “ Solar holography : A fresh look on the use of volume phase transmission holographic lenses for photovoltaic concentrator application”, Eindhoven, Netherland, 11-11-2012 to 15-11-2012

2013

30. Inaugural talk in a conference, “ Advances in technology for future scenario” entitled “ The concentration spectral filtering and tracking of sun energy for photovoltaic applications”, Modinagar, 10-08-2013
31. Keynote speaker at National workshop on Renewable energy at Jawahar Lal Nehru govt. Engg. College, Sundernagar, 02-03-2013

APPENDIX 11(C) –INVITED LECTURES (NATIONAL)

I. Guest Lecturers in M.Des. Programme in last 3 years

1. Parag Ananad, Product Form and Aesthetics, DIP 741, SPA
2. Naveen Rampal, Advanced Form Studies, DIP 841, Lezero Lightings
3. Rahul Tyagi, Materials and Processes, DIL 782, Freelancer
4. Pratyay Cakravarti , Communication and presentation skills, DIP 751, Nexus Design
5. G.V. Soumitri , Product Form and Aesthetics, DIP 741, RMIT, Australia
6. Raja Thomas, Prototype and Die development, DIL 762, TU Delf
7. Saurabh Singh, Applied Ergonomics, DIL 731, Saar Marm
8. Sunil Singh, Invited Faculty Seminar, DIS 802, Accenture
9. Navendu Tripathi , Framework of Design, DIL 711,
10. Amit Sharma, Framework of Design, DIL 711, Stanford Biodesign fellow
11. Sachin C, Invited Faculty Seminar, DIS 802, GM
12. Shiva, Prototype and Die development, DIL 762, Royal Enfield
13. Satya Sheelan, Product Form and Aesthetics, DIP 741, Ashok Leyland
14. Pankaj Sharma, Prototype and Die development, DIL 762, Insa Exhibitions
15. Ashish Jayswal, Prototype and Die development, DIL 762, Maruti Suzuki
16. Saugata Karmkar, Applied Ergonomics, DIL 731, IIT Guwahati
17. D. Uday Kumar, Product Systems and Services , DIP 811, IIT Guwahati
18. Harsh Kamble , Product Systems and Services , DIP 811, Bajaj Auto
19. Karthik , Advanced Materials , DIL 782, Central Leather Research Institute
20. Bindoo Ranjan, Invited Faculty Seminar, DIS 802, NID MSME
21. Vishwajit Panwar, Framework of Design, DIL 711, Doorset
22. Mizoriki Saan, Prototype and Die development, DIL 762, Maruti Suzuki, Japan
23. Chris Fabian, Framework of Design, DIL 711, UNISEF
24. Varun Aggarawal, Studies in Product Configuration and Detailing, DIP 742, Dassault System
25. Avijit Padun, Product Systems and Services , DIP 811, Dasmania Design
26. Chandrashekhar, Product Systems and Services , DIP 811, Shades Design Studio
27. Jagjeet Rana , Communication and presentation skills, DIP 751, Maruti Suzuki
28. Shailendra P, Prototype and Die development, DIL 762, Maruti Suzuki

II. Guest Lecturers in M.Tech. Programme

1. Invited speaker at Techfest 2013 on “Holo solar Concentrator” and Chief guest in the prize distribution and valedictory function
2. Guest of Honour for the inauguration function of national Conference on design, Dynamic, and manufacturing (NCDDM) at SLIET, Longowal held during 16th to 17th March 2007.
3. Chief Guest in the inaugural function of AICTE Sponsored Staff Development Programme (SDP) on “Measurement and Testing Technique in Mechanical Engineering” Delivered 20 min. Talk at SLIET, Longowal held during 27-07-2009 to 31-07-2009.

APPENDIX 11(D) – INVITED LECTURES (INTERNATIONAL)

1. Invited talks during the Workshop On "Mobile Communications for Health Monitoring" organised by Prof. Vyas IDDC and UKIERI project Activities, 13/11/07 - 22/11/07. Faculty was as follows.
 - a) Bryan Woodward, Loughborough University UK
 - b) Dr. Sekharjit Datta, Loughborough University UK
 - c) Fadlee Rasid (LU), Loughborough University UK
 - d) Paul Harvey (LU), Loughborough University UK
 - e) Robert Istepanian, Kingston University, London
 - f) Tim Ellis (KU), Kingston University, London
 - g) Omar Farooq, Aligarh Muslim University, Aligarh
2. Invited lectures for the course IDL 811 and UKIERI Project activity, 22/11/08 - 29/10/08. Faculty was as follows.
 - a) Bryan Woodward, Loughborough University UK
 - b) Dr. Sekharjit Datta, Loughborough University UK
 - c) Paul Harvey (LU), Loughborough University UK
 - d) Omar Farooq, Aligarh Muslim University, Aligarh
3. To work on the UKIERI project under the exchange programme, 22/11/08 - 31/01/09. Faculty was as Paul Harvey (LU), Loughborough University UK.
4. Invited lectures for UKIERI Project meetings, 25/11/09 - 8/12/09. Faculty was as follows.
 - a) Bryan Woodward, Loughborough University UK
 - b) Dr. Sekharjit Datta, Loughborough University UK
 - c) Paul Harvey (LU), Loughborough University UK
 - d) Omar Farooq, Aligarh Muslim University, Aligarh
5. Invited lectures for UKIERI Project meetings, 17/11/2013 - 26/11/2013. Faculty was as follows.
 - a) Bryan Woodward, Loughborough University UK
 - b) Dr. Sekharjit Datta, Loughborough University UK
 - c) Paul Harvey (LU), Loughborough University UK
6. Dr. G Currell (Bristol Polytechnic): September 1991
7. Dr J Branson (Loughborough): April 1991
8. Prof. Mitsuo Takeda, University of Utsunomiya, CORE, Utsunomiya, Japan /Formerly at the University of Electrocommunications, Chofu, Japan. January 2012.
9. Prof. M. Fujigaki, Dept. of Opto-Mechatronics, Faculty of Systems Engineering, Wakayama University, Wakayama, Japan. August 29, 2013.
10. Prof. Mitsuo Takeda, Centre for Optical Research and Education Utsunomiya University, Utsunomiya Japan, visited IDD Centre, Indian Institute of Technology Delhi and delivered a talk on "Coherence Holography" on 07-01-2013.
11. Prof. Motoharu Fujigaki, Dept. of Opto-Mechatronics, Faculty of Systems Engineering, Wakayama University, Japan visited IDD Centre, Indian Institute of Technology Delhi on 30th August 2013.
12. Prof. MORIMOTO, Yoshiharu (Harry MOIRE), Vice-President of Wakayama University, Executive Director for Research, Liaison and International Exchange of Wakayama University, Japan Dept. of Opto-Mechatronics, Faculty of Systems Engineering, Wakayama University, Sakaedani, Wakayama 640-8510, JAPAN visited IDD Centre, Indian Institute of Technology Delhi in 2008.
13. Dr. Kiyofumi Matsuda, Director of Optical engineering and information Technology, Mechanical Engineering Laboratory, Agency of Industrial Science and Technology (AIST), Tsukuba, Japan visited IDD Centre, Indian Institute of Technology Delhi, in December 1998.
14. Prof. Robin W. Smith Faculty of Natural Sciences, Department of Physics Blackett Laboratory, Imperial College, London visited IDD Centre, Indian Institute of Technology Delhi, on 15th December 1992 for 10 days.

APPENDIX 12 – BOOKS PUBLISHED

1993

1. Chandra Shakher, “Speckle metrology using holo lenses” 10th chapter in a book on “Speckle Metrology” Ed. R. S. Sirohi, publisher Marcel Dekker, Inc. (USA), pp 473 - 506 (1993).

1994

2. Instrumentation and Measurement, IETE, 1994, AMIETE (Distance Education), **D T Shahani (Ed)**, P V Ramakrishna

1997

3. Electromagnetic Interference Compatibility, DOE/ISTE, 1997, B Tech, **D T Shahani (Ed)**, A K Agarwala, Devi Chadda, Satyamurty CVRDE, N K Jain
4. High Frequency Electronics, DOE/ISTE, 1997, B Tech, D T Shahani, **A K Agarwala(Ed)**, S C Dutta Roy, G Vishwesaran
5. Analog Electronics -II (Theory + Lab), DOE/ISTE, 1997, Diploma, **D T Shahani (Ed)**, A K Agarwala, G Vishwesaran, N K Jain
6. Electronics Test & Measurement – I, DOE/ISTE, 1997, Diploma, D T Shahani (Ed), A K Agarwala, **N K Jain (Ed)**, S S Jmuar, S Swaminathan
7. Electronics Test & Measurement –II, DOE/ISTE, 1997, Diploma, D T Shahani (Ed), A K Agarwala, **N K Jain (Ed)**, S S Jmuar

2004

8. Chandra Shakher and Ajoy Ghatak, “Holography Techniques/Overview” article no. OPTC 00699, Encyclopaedia of Modern Optics, Elsevier, December 2004, pp 58-64.

2008

9. Chandra Shakher and R. S. Sirohi, “Flame temperature measurement using speckle techniques” 20th chapter in a book on “ New Directions in Holography and Speckles” Ed. H. John Caulfield and Chandra S. Vikram Publisher American Scientific Publishers, pp 376-389 (2008).

2010

10. Development of Data Springer Logger for Indoor Environment [Ch. 5- Machine Learning & Systems Engineering], 2010, I P Singh, S K Sud, **Anuj Kumar(Ed)**

APPENDIX 13 - ADMINISTRATIVE RESPONSIBILITY

Service as Board, Senate, selection committee member at other IITs, NITs. And Universities

1. Prof. Chandra Shakher

1. Member (Nominee of Director IIT Delhi) Board of Governors, Punjab Engineering College, Chandigarh from 2005-2008.
2. Director, National Institute of Technology, Hamirpur (Himachal Pradesh) since Aug. 7, 2003 to Dec.31, 2004.

Service as technical experts on committee

1. Prof. Chandra Shakher

1. Member of steering committee of DST, government of India for IDP (Instruments Development Program) in the area of an analytical, food processing, environment monitoring, pollution control and laser based instrument and sensor, for period of 3 years from 1996 to 1999.
2. Chairman of 'Technical Committee' for procurement of 'Binocular Microscopes' under 'World Bank' aide RNTC Project of TB division of Ministry of Health and Family Welfare. Rs 60 Crores. 1996-1997.
3. Chairperson for evaluation technical bid for items under modernization plan –
 - i. Aspheric surface generation machine.
 - ii. Optical system analyzer
 - iii. He Cd Laser System
 - iv. Lens centring and edging machine.
CSIO Chandigarh, 1999-2000.
Rs. 3.5 crores.

2. Prof. D. T. Shahani

1. Chairman, election committee of India.
2. Parliament Security Technical Committee.
3. Expert Member in fields of X-ray / Millimeter Wave / Terahertz Technology
4. Member Expert Committee on Electronic Voting Machines
5. Expert Member for assisting Delhi Traffic Police
6. Chairman, PAC and PEC in Instrumentation Programme
7. Assistance in Selection for Scientific & Technical Staff

3. Dr. A. L. Vyas

1. General Secretary: Acoustical Society of India (January 2005 to December 2006).
2. Member, Executive Council, Acoustical Society of India (1996-1998)
3. Fellow: Acoustical Society of India.
4. Fellow, IETE
5. Life Member, Ultrasonic Society of India

4. A. K. Agrawala

1. Member, Workshops and Clinical Services at AIIMS.

Positions held by faculty on lien.

1. Prof Chandra Shakher

1. House Master, Nilgiri House, IIT Delhi from Sept. 1,2001 to Aug. 6, 2003.
2. Head, Computer Services Centre, IIT Delhi from Sept.1, 2002 to Aug. 6, 2003.
3. Chairman, Hospital Advisory Committee from Sept. 2001 to Aug. 6, 2003.

2. Prof. D. T. Shahani

1. Registrar IIT Delhi
2. Professor in Charge Transport at IIT Delhi.
3. Professor in Charge Security at IIT Delhi
4. Member of Space Planning Committee in IIT Delhi.
5. Chairman Estate & Works in IIT Delhi.
6. Assessment Committee member for evaluation of Performance Appraisal Reports
7. R&D project review Committee Member

3. Prof. Jyoti Kumar

1. Vice President BRCA 2012-present.
2. President, Dance and Drama Club, BRCA 2011-2012.

3. Member of anti-ragging team 2011, 12,13.
4. Judge at inter hostel photography competition 2011.
5. Judge at inter hostel street play competition 2012.
6. Participation in JEE 2011 and 2012.
7. Open House IDDC representative 2011, 12,13.
8. 2nd Year Student Mentor 2010-present.

4. Dr. A L Vyas

1. Officer Incharge, Planning & Publication Unit from Sept. 1998 to Sept. 2001.
2. Vice Chairman, JEE-96, JEE-97 & JEE-98 (Sept. 1995- Aug. 1998)
3. Member, BPGS, July 1898 to June 1992
4. Institute Representative and Confidential Operations for the DRDO Exams., Sept. 2004.

Responsibilities within IDDC

1. Prof. Chandra Shakher

1. Chairman, Center's Research Committee from 1997 to 2000.
2. Program Coordinator, M Tech. Instrument Technology (Interdisciplinary) for 5 years from 1997 to 2002.
3. Head, Instrument Design Development Centre, IIT Delhi for 3 years from Sept.1997 to Aug. 2000 and Acting Head from June 1997 to Aug.1997.
4. MTech program coordinator from Sept. 1997 to Aug. 2002.

2. A. K. Agrawala

1. Head of IDDC for a period of 3 years from 1989 to 92.

3. Prof. D. T. Shahani

1. Head of IDDC for a term of 3 years since to .Also the current head of IDDC since Sept. 2013.
2. Member of Centre's Research Committee

4. Gufran

1. In charge optical workshop since July 2011.
2. Convenor of Center's Research Committee since Oct. 2012.
3. Physical facility in charge since June 2011.

5. Prof. Jyoti Kumar

1. Photography exhibition on 'IITD campus' was organized on Open House 2012.
2. Secretary, Faculty Board Jan 2012 - present.
3. Training and Placement in charge for M.Des 2012- present.
4. Time table in charge for M.Des 2010-present.
5. UX lab in charge 2011-present.

6. Dr. N. K. Jain

1. Head of IDDC for 3 years from 2009 to 2012.

7. Dr. A. L. Vyas

1. Program coordinator of MTech in Instrument Technology since Sept. 2002.
2. Convener, CRC, IDDC (July 1989 to June 1992 & May 1995 to July 1998)
3. Member, CRC, IDDC (July 1989 to Aug. 2000 & Sept. 2002 to date)
4. Lab Incharge, Advanced Instrumentation Laboratory since 2002.
5. Lab Incharge, Ultrasonic Instrumentation Lab since 1992

APPENDIX 14 - FACULTY PROFILE

	<p>Chandra Shakher [Ph.D. (IIT/M)] Professor E-mail: cshakher@iddc.iitd.ac.in Area of Expertise:-Holography, Holographic Optical Elements, Fibre-optic Sensors, Optical Instrumentation. Phone number:-011-26591432</p>
	<p>Shahani D.T. [Ph.D. (IIT/D)] Professor E-mail: shahani@iddc.iitd.ac.in Area of Expertise:-Electronic Instrumentation, Electromagnetics, Antennas. Phone number:-011-26591437</p>
	<p>Agarwala A.K. [M.S. (USA)] Chief Design Engineer(S.G.) E-mail: agarwala@iddc.iitd.ernet.in Area of Expertise:-Electronic Design, Instrument Design. Phone number:-011-26591428</p>
	<p>Atreya S.K. [DIIT (IIT/B),R.A.(UK)] Chief Design Engineer(S.G.) E-mail: atreya@iddc.iitd.ac.in Area of Expertise:-Industrial Design, Graphic Design, Computer Aided Design, Ergonomics Interior Design, Architecture, Instrument Enclosures, Education Technology, Software Development, HC Interaction Design. Phone number:-011-26591430</p>
	<p>Vyas A.L. [Ph.D. (IIT/D)] Professor E-mail: alvyas@iddc.iitd.ac.in Area of Expertise:-Electronic and Ultrasonic Instrumentation, Signal Processing, Sonar Systems, Transducer Design. Phone number:-011-26591442</p>
	<p>Gufran Sayeed Khan [Ph.D.(Germany)] Assistant Professor E-mail: gufranskhan@iddc.iitd.ernet.in Area of Expertise:-Optical Instrumentation, Applied Optics, Aspheric Optics, Interferometry, X-Ray Optics, Diffractive Optical Elements, Computer Generated Holography, Computer Controlled Polishing, Diamond Turning Phone number:-011-26597335</p>
	<p>Jyoti Kumar [Ph.D. (IITG)] Assistant Professor E-mail: jyoti@iddc.iitd.ac.in Area of Expertise:-Human Computer Interaction, Online customer persuasion, User Experience and Usability Engineering Methodology, Culture and Design, Sustainable Ecosystem Phone number:-011-26596735</p>

	<p>Sumer Singh [M. Des] Assistant Professor E-mail: sumerid@iddc.iitd.ac.in Area of Expertise:-Product Design, Transportation design, Design for sustainability, Design sketching, Computer Aided Surfacing, Design Innovation Phone number:-011-26596723</p>
	<p>Mehta D.S. [Ph.D.] Associate Professor E-mail: dsmehta@iddc.iitd.ac.in Area of Expertise:-Optical Coherence Tomography (OCT) and 3D-Surface Profilometry, Optical Tweezers; Trapping and Manipulation of Micro-/Nano-Particles, LCD's and OLED's. Phone number:-011-26591455</p>
	<p>Jain N.K. [Ph.D. (IIT/D)] Chief Design Engineer (S.G.) & Head E-mail: nitinkj@iddc.iitd.ac.in, hodiddc@iddc.iitd.ac.in Area of Expertise:-Power Electronics, Switch Mode Power Conversion and Electronics Instrumentation. Phone number:-011-26591434</p>
	<p>Rakesh Kumar [Ph.D. (Delhi)] Chief Design Engineer(S.G) E-mail: arcs01@gmail.com Area of Expertise:-Optical Instruments Phone number:-011-26591436</p>
	<p>Singh I.P. [Ph.D. (IIT/D)] Associate Professor E-mail: ipsingh@iddc.iitd.ac.in Area of Expertise:-Mechanical Design, Instrumentation Microprocessor applications, Mechanical Properties of Polymers & Composites Energy Storage Systems, Neno Technology . Phone number:-011-26591438</p>

**APPENDIX 15 - IMPACT COURSES
(SHORT TERM COURSES FOR INDUSTRIES)**

1994

1. Electronics & Measurement - I - 8 weeks July -Sep 94 for teachers of Polytechnics under IMPACT (Prof D. T. Shahani as Teaching faculty)
2. Analog Electronics - I - 8 weeks March - May 94 for teachers of Polytechnics under IMPACT (Prof D. T. Shahani as Coordinator)
3. Analog Electronics - I - 8 weeks June - Aug 95 for Engineering College teachers under IMPACT (Prof D. T. Shahani as Teaching faculty)

1995

4. Analog Electronics - II- 8 weeks Nov - Dec 95 for teachers of Polytechnics under IMPACT (Prof D. T. Shahani as Coordinator)
5. Electronics & Measurement - II 8 weeks Aug -Sep 95 for teachers of Polytechnics under IMPACT (Prof D. T. Shahani as faculty)
6. Analog Electronics - II- 8 weeks June - Aug 95 for Engineering College Teachers under IMPACT (Prof D. T. Shahani as Teaching faculty)
7. Instruction enhancement programme of 8 weeks for Polytechnic Course on -Computers (Theory + Lab)- under Project IMPACT (RP011/91) from 14th November 1994 to 6th January 1995. Total outlay was 2 lacs. Co-ordinators were Dr. I.P.Singh for Theory and Dr. C.P.Ravikumar for Laboratory. Three other persons involved.

1996

8. Analog Electronics - 4 weeks July - Aug 96 for teachers of Polytechnics under IMPACT (Prof D. T. Shahani as Coordinator)
9. High Frequency Electronics - 8 weeks cours Apr-May 96, for Engineering College Teachers under IMPACT (Prof D. T. Shahani as Teaching faculty)
10. Electromagnetic Interference & Compatibility - 8 weeks Jan- Mar 96 for Engineering College Teachers under IMPACT (Prof D. T. Shahani as Coordinator)
11. Repeat instruction enhancement programme of 4 weeks for Polytechnic Course on -Computers (Theory + Lab)- under Project IMPACT (RP011/91) from 30th September 1996 to 26th October 1996. Total outlay was 1.4 lacs. Co-ordinators were Dr. I.P.Singh for Theory and Dr. C.P.Ravikumar for Laboratory. Three other persons involved.

1997

12. A short course on the use of MS Word - Sept 13-19, 1997 for Senior Administrative Officers of IIT Delhi, (Prof D. T. Shahani as Co-coordinator)
13. Simulation and Design of Electronic Circuits - 2 weeks February 97 for Engineering College Teachers under IMPACT, (Prof D. T. Shahani as Teaching faculty)
14. Analog Electronics II, Deptt. of Electronics, 1997, Diploma, 4 Co-authors, Prof. A K Agarwal
15. HF Electronics, Deptt. of Electronics, 1997, Degree, 4 Co-authors, Prof. A K Agarwal
16. Electromagnetic Compatibility, Deptt. of Electronics, 1997, Degree, 4 Co-authors, Prof. A K Agarwal

1998

17. Advanced Instrumentation - 3 weeks course November 1998, for Polytechnic Teachers under IMPACT (Prof D. T. Shahani as Co-coordinator)

1999

18. Instruction enhancement programme on - Advanced Microprocessors for Polytechnic teachers, under project Impact SSS (RP01070) from Nov.15 to Dec. 03, 1999 at IDDC. The total outlay was Rs. 1.25 lacs. Six persons were involved.

APPENDIX 16 - MDIT COURSES (SHORT TERM COURSES FOR IIT)

1977

1. Sonar Signal Processing, Nov.28-Dec.9, 1977. Dr. A L Vyas

1980

2. Sonar Systems, June 30-July 5, 1980. Dr. A L Vyas

1982

3. ISTE sponsored course on Current Trends in Instrumentation: 4 weeks: May-June, 1982 Dr. A K Agarwal
4. ISTE sponsored course on Current Trends in Instrumentation: 4 weeks: May-June, 1982 Dr. N K Jain
5. Digital techniques for sonar signal processing, Dec.13-Dec.23, 1982. Dr. A L Vyas

1983

6. Engineering Measurements by Modern Optical Techniques, June 1983, ISTE Summer School, Co-ordinators: Dr. B N Gupta, Mr. S K Sud, Dr. I P Singh.

1984

7. Precision Measurement Techniques, Dec. 1984, QIP Winter School. Co-ordinators: Dr. B N Gupta, Mr. R Mulchandani, Dr. I P Singh.

1985

8. Electronics Test & Measurement Equipment Servicing - 6 Month Training for ITI/Diploma Technicians: August 1985-February 1986 (Prof. D. T. Shahani as Coordinator).
9. Instrumentation Program – Restructuring in the Light of New Developments, May 1985, Co-ordinators: Dr. B N Gupta, Mr. S K Sud, Dr. I P Singh.
10. Introduction to Computers , Nov.25-29, 1985. Dr. A L Vyas

1986

11. Use & Specification of Common Electronic Based Test & Measurement Equipment - 1 Week Short Course for Scientists & Engineers: September 1986 (Prof. D. T. Shahani as Coordinator)
12. A Workshop on Industrial Design, CEP, 2 Weeks 1986, Prof. S K Atrey
13. Industrial Design for Engineers, CEP, 2 Weeks 1986, Prof. S K Atrey
14. Electronics Test & Measurement Equipment Servicing - 6 Month Training for IIT Delhi Technical Staff: August 1985-February 1986. Dr. A K Agarwal
15. Use & Specification of Common Electronic Based Test & Measurement Equipment - 1 Week Short Course for Scientists & Engineers: September 1986. Dr. A K Agarwal
16. Electronics Test & Measurement Equipment Servicing - 6 Month Training for IIT Delhi Technical Staff: August 1985-February 1986. Dr. N K Jain
17. Use & Specification of Common Electronic Based Test & Measurement Equipment - 1 Week Short Course for Scientists & Engineers: September 1986. Dr. N K Jain

1987

18. Refresher Course in Servicing Higher Level Equipment - 1 Week Short Course for experienced Technicians: December 1987 (Prof. D. T. Shahani as Coordinator)
19. Sensors & Monitors in Biochemical/Biological Reactions- 3 Week Course for Scientists & Engineers: December 1987 (with BERC) (Prof. D. T. Shahani as Teaching faculty)
20. Transducers Applications & Selection - 1 Week Short Course for Scientists & Engineers: September 1987 (Prof. D. T. Shahani as Coordinator)
21. Survey of Electronics Practices - 2 Week Short Course for Small Industries Development Officers (Min. of Industries): August 1987.(Prof. D. T. Shahani as Coordinator)
22. Transducers Principles & Electronic Interfacing - 1 Week Short Course for Scientists & Engineers: March 1987.(Prof. D. T. Shahani as Coordinator)
23. Electronics Test & Measurement Equipment Servicing - 5 Month Training for ITI/Diploma Technicians: May 1986-January 1987.(Prof. D. T. Shahani as Coordinator)
24. Industrial Design Exposition, Fee, 2 Weeks 1987, Prof. S K Atrey
25. Advanced Training in Industrial Design, PDP, 2 Weeks 1987, Prof. S K Atrey
26. Industrial Product Design, PDP , 2 Weeks 1987, Prof. S K Atrey
27. Electronics Test & Measurement Equipment Servicing - 5 Month Training for IIT Technical Staff: May 1986-January 1987. Dr. A K Agarwal
28. Transducers Principles & Electronic Interfacing - 1 Week Short Course for Scientists & Engineers: March 1987. Dr. A K Agarwal
29. Design of Switched Mode Power Supplies - 1 week Short Course for Engineers of All India Radio: April 1987 Dr. A K Agarwal
30. Survey of Electronics Practices - 2 Week Short Course for Small Industries Development Officers (Min. of Industries): August 1987. Dr. A K Agarwal
31. Transducers Applications & Selection - 1 Week Short Course for Scientists & Engineers: September 1987. Dr. A K Agarwal

32. Refresher Course in Servicing Higher Level Equipment - 1 Week Short Course for experienced Technicians: December 1987. Dr. A K Agarwal
33. Electronics Test & Measurement Equipment Servicing - 5 Month Training for IIT Technical Staff: May 1986-January 1987. Dr. N K Jain
34. Transducers Principles & Electronic Interfacing - 1 Week Short Course for Scientists & Engineers: March 1987. Dr. N K Jain
35. Design of Switched Mode Power Supplies - 1 week Short Course for Engineers of All India Radio: April 1987 Dr. N K Jain
36. Survey of Electronics Practices - 2 Week Short Course for Small Industries Development Officers (Min. of Industries): August 1987. Dr. N K Jain
37. Transducers Applications & Selection - 1 Week Short Course for Scientists & Engineers: September 1987. Dr. N K Jain
38. Refresher Course in Servicing Higher Level Equipment - 1 Week Short Course for experieced Technicians: December 1987. Dr. N K Jain

1988

39. Electronic Equipment Servicing - 2 Week Short Course for Industry Engineers: December 1988 (Prof. D. T. Shahani as Coordinator)
40. Electronic Aided Measurements & Transducer Applications - 1 Week Short Course for Scientists & Engineers: October 1988 (Prof. D. T. Shahani as Coordinator)
41. Electronic Aided Measurements & Transducer Applications - 1 Week Short Course for Scientists & Engineers: October 1988 (repeat) (Prof. D. T. Shahani as Coordinator)
42. Computer Aided Measurements & Electronics Aids - 1 Week Short Course for Scientists & Engineers: March 1988. (Prof. D. T. Shahani as Teaching faculty)
43. Training in Computer Aided Design, Fee, 8 Weeks 1988, Prof. S K Atrey
44. Electronic Equipment Servicing - 2 Week Short Course for Industry Engineers: December 1988. Dr. A K Agarwal
45. Computer Aided Measurements & Electronics Aids - 1 Week Short Course for Scientists & Engineers: March 1988. Dr. A K Agarwal
46. Electronic Aided Measurements & Transducer Applications - 1 Week Short Course for Scientists & Engineers: October 1988. Dr. A K Agarwal
47. Electronic Equipment Servicing - 2 Week Short Course for Industry Engineers: December 1988. Dr. N K Jain
48. Computer Aided Measurements & Electronics Aids - 1 Week Short Course for Scientists & Engineers: March 1988. Dr. N K Jain
49. Electronic Aided Measurements & Transducer Applications - 1 Week Short Course for Scientists & Engineers: October 1988. Dr. N K Jain

1989

50. One Day Seminar on Product Design, PDP, 1 Day 1989, Prof. S K Atrey
51. Current Techniques in Industrial Design, PDP, 1 Week 1989, Prof. S K Atrey
52. Electronic Equipment Servicing - 2 Week Short Course for Industry Engineers: March 1989. Dr. A K Agarwal
53. Design of Switched Mode Power Supplies - 2 Week Short Course for Industry R & D Engineers: March 1989. Dr. A K Agarwal
54. Design of Magnetic Components - 1 day course at Cosmo Ferrites, Parwanoo, Himachal Pradesh: March 1989 Dr. A K Agarwal
55. Design of Switched mode Power Supplies - 2 Week Short Course for Design Engineers of E T & T Corpn. Delhi: July 1989. Dr. A K Agarwal
56. Electronic Signal Processing in Measurement Instrumentation - 1 Week Short Course for Scientists and Engineers: Oct. 1989. Dr. A K Agarwal
57. Design of Switched Mode Power Supplies - 2 Week Short Course for Industry R & D Engineers: Nov. 1989. Dr. A K Agarwal
58. Electronic Equipment Operation & Servicing - 2 Week Short Electronic Equipment Servicing - 2 Week Short Course for Industry Engineers: March 1989. Dr. N K Jain
59. Design of Switched Mode Power Supplies - 2 Week Short Course for Industry R & D Engineers: March 1989. Dr. N K Jain
60. Design of Switched mode Power Supplies - 2 Week Short Course for Design Engineers of E T & T Corpn. Delhi: July 1989. Dr. N K Jain
61. Electronic Signal Processing in Measurement Instrumentation - 1 Week Short Course for Scientists and Engineers: Oct. 1989. Dr. N K Jain
62. Design of Switched Mode Power Supplies - 2 Week Short Course for Industry R & D Engineers: Nov. 1989. Dr. N K Jain
63. Electronic Equipment Operation & Servicing - 2 Week Short Course for experienced Technicians of IIT

Delhi: Dec. 1989. Dr. N K Jain

64. Course for experienced Technicians of IIT Delhi: Dec. 1989. Dr. A K Agarwal
65. Signal Processing in Digital Communication, July 10-July 15, 1989. Dr. A L Vyas

1990

66. Appreciation course in Electronic Aided Measurements - 1 Week Short Course for Researchers and Engineers: December 1990 (Prof. D. T. Shahani as Coordinator)
67. Electronic Measurement Techniques & Equipment Maintenance - 2 Week Summer School for Teachers of Engineering Colleges: July 1990 (Prof. D. T. Shahani as Coordinator)
68. Data Acquisition and Computer Aided Measurements - 1 Week Short Course for Scientists and Engineers: May 1990. (Prof. D. T. Shahani as Teaching faculty)
69. Electronic Equipment Operation & Servicing -2 Week Short Course for experienced Technicians of IIT Delhi: December 1989 (Prof. D. T. Shahani as Coordinator)
70. Design of Switched Mode Power Supplies" -2 Week Short Course for Industry R & D Engineers: November 1989 (Prof. D. T. Shahani as Teaching faculty)
71. Power Supplies Inverters Converters & UPS" - 1 Week Short Course for Engineers and Students of CEDT, Srinagar: October 1989 (Prof. D. T. Shahani as Coordinator)
72. Electronic Signal Processing in Measurement Instrumentation - 1 Week Short Course for Scientists and Engineers: October 1989. Prof. D. T. Shahani
73. Design of Switched Mode Power Supplies - 2 Week Short Course for Industry R & D Engineers: March 1989. (Prof. D. T. Shahani as Teaching faculty)
74. Design of Switched mode Power Supplies" - 2 Week Short Course for Design Engineers Of E T & T Corpn. Delhi: July 1989 (Prof. D. T. Shahani as Teaching faculty)
75. Electronic Equipment Servicing - 2 Week Short Course for Industry Engineers: March 1989. (Prof. D. T. Shahani as Coordinator)
76. Data Acquisition and Computer Aided Measurements - 1 Week Short Course for Scientists and Engineers: May 1990. Dr. A K Agarwal
77. Electronic Measurement Techniques & Equipment Maintenance - 2 Week Summer School for Teachers of Engineering Colleges: July 1990. Dr. A K Agarwal
78. Appreciation course in Electronic Aided Measurements - 1 Week Short Course for Researchers and Engineers: Dec. 1990. Dr. A K Agarwal
79. Data Acquisition and Computer Aided Measurements - 1 Week Short Course for Scientists and Engineers: May 1990. Dr. N K Jain
80. Electronic Measurement Techniques & Equipment Maintenance - 2 Week Summer School for Teachers of Engineering Colleges: July 1990. Dr. N K Jain
81. Appreciation course in Electronic Aided Measurements - 1 Week Short Course for Researchers and Engineers: Dec. 1990. Dr. N K Jain

1991

82. Computer Aided Data Acquisition - 1 Week Short Course for Researchers and Engineers: October 1991 (Prof. D. T. Shahani as Teaching faculty)
83. Introduction to Analytical Instruments 2 - Week Short Course for Researchers and Engineers, with Dr. G Currell (Bristol Polytechnic): September 1991 (Prof. D. T. Shahani as Teaching faculty)
84. Design of Switched Mode Power Supplies 2 - Week Short Course for Industry Designers: July 1991 (Prof. D. T. Shahani as Teaching faculty)
85. Servicing Techniques - Electronic Equipment -2 Week Short Course for Industry Technicians: July 1991 (Prof. D. T. Shahani as Coordinator)
86. Using PSPICE - CAD Techniques in Electronics Design - 2 Week Short Course for IIT faculty, with Dr J Branson (Loughborough): April 1991 (Prof. D. T. Shahani as Teaching faculty)
87. Transducer Instrumentation: 1 Week Short Course for Researchers and Engineers: March 1991 (Prof. D. T. Shahani as Coordinator)
88. Transducer Instrumentation - 1 Week Short Course for Researchers and Engineers: March 1991. Dr. A K Agarwal
89. Using PSPICE - CAD Techniques in Electronics Design - 2 Week Short Course for IIT faculty, with Dr J Branson: April 1991. Dr. A K Agarwal
90. Design of Switched Mode Power Supplies - 2 Week Short Course for Industry Designers: July 1991. Dr. A K Agarwal
91. Servicing Techniques - Electronic Equipment - 2 Week Short Course for Industry Technicians: July 1991. Dr. A K Agarwal
92. Computer Aided Data Acquisition - 1 Week Short Course for Researchers and Engineers: October 1991. Dr. A K Agarwal
93. Transducer Instrumentation - 1 Week Short Course for Researchers and Engineers: March 1991. Dr. N K Jain
94. Using PSPICE - CAD Techniques in Electronics Design - 2 Week Short Course for IIT faculty, with Dr

- J Branson: April 1991. Dr. N K Jain
95. Design of Switched Mode Power Supplies - 2 Week Short Course for Industry Designers: July 1991. Dr. N K Jain
 96. Servicing Techniques - Electronic Equipment - 2 Week Short Course for Industry Technicians: July 1991. Dr. N K Jain
 97. Computer Aided Data Acquisition - 1 Week Short Course for Researchers and Engineers: October 1991. Dr. N K Jain
- 1992**
98. PC Based Data Acquisition - 1 Week Short Course for Researchers and Engineers: July 1992 (Prof. D. T. Shahani as Teaching faculty)
 99. Power Supply Servicing Camp - 1 week Short Course for IIT Technicians : June 1992 (Prof. D. T. Shahani as Coordinator)
 100. PC Based Data Acquisition - 1 Week Short Course for Researchers and Engineers: July 1992. Dr. A K Agarwal
 101. PC Based Data Acquisition - 1 Week Short Course for Researchers and Engineers: July 1992. Dr. N K Jain
 102. Electronic Components and Materials- 8 Week Instruction Enhancement Programme for Polytechnic Teachers; May-July, 1992 Dr. N K Jain
- 1993**
103. Computer Aided Design, Fee, 4 Weeks 1993, Prof. S K Atrey
 104. A Course on AutoCAD, Fee, 4 Weeks 1993, Prof. S K Atrey
 105. Computer Aided Graphic Design, Fee, 2 Weeks 1993, Prof. S K Atrey
 106. Computer Aided Product Design, Fee, 2 Weeks 1993, Prof. S K Atrey
- 1994**
107. "Analog Electronics I" 8 Week Instruction Enhancement Programme for Polytechnic Teachers; March-May, 1994. Dr. A K Agarwal
 108. Design of HF magnetic Components - 3 day short course for engineers from Cosmo Ferrites: September 1994 Dr. A K Agarwal
 109. "Electronic Test and Measurement I" 8 Week Instruction Enhancement Programme for Polytechnic Teachers; July-Sept. 1994. Dr. A K Agarwal
 110. "Analog Electronics I" 8 Week Instruction Enhancement Programme for Polytechnic Teachers; March-May, 1994. Dr. N K Jain
 111. "Electronic Test and Measurement I" 8 Week Instruction Enhancement Programme for Polytechnic Teachers; July-Sept. 1994. Dr. N K Jain
- 1995**
112. "Electronic Test and Measurement II" 8 Week Instruction Enhancement Programme for Polytechnic Teachers; Aug.-Sept. 1995; Dr. A K Agarwal
 113. "Analog Electronics II" 8 Week Instruction Enhancement Programme for Polytechnic Teachers; October-December, 1995. Dr. A K Agarwal
 114. "Electronic Test and Measurement II" 8 Week Instruction Enhancement Programme for Polytechnic Teachers; Aug.-Sept. 1995; Coordinator. Dr. N K Jain
 115. "Analog Electronics II" 8 Week Instruction Enhancement Programme for Polytechnic Teachers; October-December, 1995. Dr. N K Jain
- 1996**
116. Computer Aided Design, Fee, 2 Weeks 1996, Prof. S K Atrey
 117. Using AutoCAD, Fee, 2 Weeks 1996, Prof. S K Atrey
 118. "Electromagnetic Compatibility" 8 Week Instruction Enhancement Programme for College Teachers; January-March, 1996. Dr. A K Agarwal
 119. "High Frequency Electronics", 8 weeks Instruction Enhancement Programme for College Teachers; April-May, 1996 Dr. A K Agarwal
 120. "Analog Electronics" 4 Week Instruction Enhancement Programme for Polytechnic Teachers; July-August 1996. Dr. A K Agarwal
 121. "Electromagnetic Compatibility" 8 Week Instruction Enhancement Programme for College Teachers; January-March, 1996. Dr. N K Jain
 122. "High Frequency Electronics", 8 weeks Instruction Enhancement Programme for College Teachers; April-May, 1996 Dr. N K Jain
 123. "Analog Electronics" 4 Week Instruction Enhancement Programme for Polytechnic Teachers; July-August 1996. Dr. N K Jain
- 1997**
124. Computer Aided Graphic Design, Fee, 2 Weeks 1997, Prof. S K Atrey
 125. Advanced course on AutoCAD, PDP, 3Weeks 1997, Prof. S K Atrey
 126. Design School each, Fee, 6 months 1997 – 98, Prof. S K Atrey

127. "Simulation and Design of Electronic Circuits" 2 Week Instruction Enhancement Programme for College Teachers; February, 1997. Dr. A K Agarwal
128. "Simulation and Design of Electronic Circuits" 2 Week Instruction Enhancement Programme for College Teachers; February, 1997. Dr. N K Jain
129. Passive Sonars, May 25-June 3, 1987. Dr. A L Vyas
- 1998**
130. "Advanced Instrumentation" 3 Week Instruction Enhancement Programme for Polytechnic Teachers; October-November, 1998. Dr. A K Agarwal
131. "Advanced Instrumentation" 3 Week Instruction Enhancement Programme for Polytechnic Teachers; October-November, 1998. Dr. N K Jain
- 2000**
132. "RF Microwave circuits" One week Instruction Enhancement Programme for College teachers; December 2000. Dr. N K Jain
- 1989-1999**
133. Entrepreneur Development Programmes, GOI, 1989-1999, Prof. S K Atrey
- 1984 - 1988**
134. One week course under CEP for the Industry, Microprocessors: Fundamentals and Programming. Co-ordinators: Mr. R. Mulchandani and Dr. I P Singh. Four other faculty members were involved. Four such courses were conducted (1984-1988).

APPENDIX 17 – INDUSTRIAL DESIGN COURSES

1. Industrial Design of Instruments, ISTE, 4 Weeks , S.K.Atreya
2. Industrial Design Aspects of Instruments, QIP, 2 Weeks , S.K.Atreya
3. Instrumentation: Industrial Design Aspects, QIP, 2 Weeks , S.K.Atreya
4. Fundamentals of Personal Computers, IDDC, 3 Days, S.K.Atreya
5. Programming Personal Computers, IDDC, 5 Days, S.K.Atreya
6. Using Personal Computers for Engineering Product Design, QIP, 2 Weeks, S.K.Atreya, P.K.Sharma
7. Using Personal Computers for Product Design, QIP, 2 Weeks, S.K.Atreya
8. Product Development, QIP, 4 Weeks, S.K.Atreya
9. Intensive Foundation Course on AutoCAD, IIT, 2 Weeks, S.K.Atreya
10. Using Personal Computers for Engg. Design, QIP, 2 Weeks, S.K.Atreya
11. Industrial Design of Instruments, QIP, 2 Weeks, S.K.Atreya
12. Environmental Ethics, ISTE, 1-15 June 1995, S.K.Atreya
13. Product Development QIP, 2-14 June 2003, S.K.Atreya
14. Design School on Integrated Product Development, QIP, 6-18 June 2006, S.K.Atreya
15. Creativity and Innovation, QIP, Dec 4-18 2012, S.K.Atreya
16. Creativity and Innovation QIP, June 1-14, 2012, S.K.Atreya

APPENDIX 18 – MTECH, MDES & PHD SELECTION CRITERIA

I. Short-listing criteria for Ph. D. applicants

For Full-Time With Institute Assistantship:

General Candidates:

M. Sc. Physics with at least 73 % aggregate marks (or equivalent CGPA 8.0 on a 10 point scale) **PLUS** a valid GATE Score ≥ 400 or a valid CSIR/UGC/NET Certificate with JRF, **and** first division in the relevant preceding degrees and 10 +2.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 73% aggregate marks (or equivalent CGPA 8.0 on a 10 point scale) **and** first division in the relevant preceding degrees and 10+2.

OR

B. Tech. in relevant branch of Engineering with at least 75 % aggregate marks (or equivalent CGPA of 8.5 on a 10 point scale) **PLUS** a valid GATE score ≥ 500 or a valid CSIR/UGC/NET Certificate with JRF, **and** first division in 10+2. For all **B. Techs. from Centrally Funded Technical Institutes** graduating with a CGPA of 8.5 or above, the requirement of qualification through a national examination is waived off.

OBC (non-creamy layer)/Minority Candidates:

M. Sc. Physics with at least 73% aggregate marks or equivalent CGPA 8.0 on a 10 point scale plus a Valid GATE Score ≥ 360 or a valid CSIR/UGC/NET Certificate with JRF, **and** first division in preceding degrees and 10+2.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 73 % aggregate marks (or equivalent CGPA 8.0 on a 10 point scale), **and** first division in the relevant preceding degrees and 10 + 2.

OR

B. Tech. in relevant branch of Engineering with at least 75 % aggregate marks (or equivalent CGPA of 8.5 on a 10 point scale) **PLUS** a valid GATE score ≥ 450 or a valid CSIR/UGC/NET Certificate with JRF, **and** first division in 10+2. For all **B. Techs. from Centrally Funded Technical Institutes** graduating with a CGPA of 8.5 or above, the requirement of qualification through a national examination is waived off.

SC/ST/PH Candidates:

M. Sc. Physics with at least 58% aggregate marks (or equivalent CGPA of 6.6 on a 10 point scale) **PLUS** a valid GATE Score ≥ 300 or a valid CSIR/UGC/NET Certificate with JRF and minimum 55% in preceding degrees.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 58% aggregate marks (or equivalent CGPA of 6.6 on a 10 point scale) and minimum 55% in preceding degrees.

OR

B. Tech. in relevant branch of Engineering with at least 70 % aggregate marks (or equivalent CGPA of 7.5 on a 10 point scale) **PLUS** a valid GATE score ≥ 350 or a valid CSIR/UGC/NET Certificate with JRF, and first division in 10+2. For all **B. Techs. From Centrally Funded Technical Institutes** graduating with a CGPA of 8.0 or above, the requirement of qualification through a national examination is waived off.

Part-Time Sponsored Candidates:

Candidates of all categories (GE/OBC/SC/ST/PH) as per Institute norms, but the short-listing criteria will be as above, except for the requirement of GATE Score. After the qualifying degree they should have minimum 5 years of relevant working experience in Govt. Laboratories and Industries of Repute.

NOTE: There will be no direct admission to the above Programme. Candidates, whose M. Tech. / M. Sc. results are not yet declared, will be provisionally short-listed for the interview, provided they have secured the necessary aggregate marks or equivalent CGPA in the results declared so far for the qualifying degree.

II. Short listing criteria for M. Des. programme

General:

CEED Score ≥ 55 and minimum 60% or 6.75 CGPA on 10 point scale or equivalent in the qualifying exam;

OBC:

CEED Score ≥ 50 and minimum 60% or 6.75 CGPA on 10 point scale or equivalent in the qualifying exam;

SC:

CEED Score ≥ 45 and minimum 55% or 6.25 CGPA on 10 point scale or equivalent in the qualifying exam;

ST:

CEED Score ≥ 30 and minimum 55% or 6.25 CGPA on 10 point scale or equivalent in the qualifying exam.

III. Short listing criteria for M. Tech. programme**General:**

Gate Score ≥ 650 and minimum 70% or 7.5 CGPA on 10 point scale or equivalent in the qualifying exam;

OBC:

Gate Score ≥ 550 and minimum 70% or 7.5 CGPA on 10 point scale or equivalent in the qualifying exam;

SC:

Gate Score ≥ 400 and minimum 60% or 6.75 CGPA on 10 point scale or equivalent in the qualifying exam;

ST & PH:

Gate Score ≥ 300 and minimum 60% or 6.75 CGPA on 10 point scale or equivalent in the qualifying exam.

APPENDIX 19 – SYLLABUS OF MTECH, MDES & PHD PROGRAMME

I. Master of Design in Industrial Design

Programme Core (PC)

S.No. Sub. Code Subjects

1. DIC701 Seminars
2. DIL711 Framework of Design
3. DIP721 Exploratory Product Design Methods
4. DIL731 Applied Ergonomics 2
5. DIP781 Engineering Function, Materials and Processes
6. DIP751 Communication and Presentation Skills
7. DIP741 Product Form and Aesthetics
8. DIP791 Product Interface Design (Project-I)
9. DIL782 Advance Materials, Mfg. Process and Finishes
10. DIP742 Studies in Product Config. and Detailing
11. DIL752 Computer Aided Product Design
12. DIL762 Prototype and Die Development
13. DIC702 Seminar (Product in Usage)
14. DID792 Project-II
15. DIP811 Product Systems Services and Environment
16. DIP841 Advanced Form Studies
17. DID891 Project -III
18. DIS802 Invited Faculty Seminars
19. DIS812 Placement/Degree Show
20. DID892 Major project

Programme Electives (PE)

1. DIR853 Computer Aided Industrial Design
2. DIR843 Exhibitions and Environment Design
3. DIR855 Creative Marketing Communication
4. DIR857 Animation
5. DIR859 Media Studies
6. DIR813 Designing for Sustainable Development
7. DIR833 Designing for Export
8. DIR821 Design Management and Profess. Practice

II. Master of Technology in Instrumentation Technology

Programme Core (PC)

Sub. Code.	Subjects
1. DP703	Instrument Technology Laboratory 1
2. IDP704	Instrument Technology Laboratory 2
3. IDP705	Advanced Instrument Technology Laboratory
4. IDL711	Instrumentation Transducers
5. IDL712	Electronic Techniques for Signal Conditioning and Interfacing
6. IDL714	Instrument Design and Simulations
7. IDL734	Laser Based Instrumentation
8. JTD801	Major Project Part 1 (JID)
9. JTD802	Major Project Part 2 (JID)

Programme Electives (PE)

1. IDL713 Advanced Electronic Components and Circuits
2. IDL716 Quality Control and Standardization
3. IDL720N Independent Study
4. IDL721N Material and Mechanical Design (for non-mechanical students only)
5. IDL722 Precision Measurement Systems
6. IDL724 Advanced Fabrication and Finishing
7. IDL730 Photochemical Machining
8. IDL731 Optical Components and Basic Instruments
9. IDL732 Optical Material and Techniques
10. IDL735 Scientific and Engineering Applications of Moire Patterns

- | | |
|-------------|--|
| 11. IDL 734 | Optical 3D-surface profilometry and tomography** |
| 12. IDL 736 | Information display devices and technologies** |
| 13. IDL741 | Instrument Organization and Ergonomics |
| 14. IDL742 | Industrial Design Practice |
| 15. IDL811 | Selected Topics in Instrumentation |
| 16. IDC812 | Term Paper and Seminar (JID) |
| 17. EEL801 | Microprocessor Based System Design |
| 18. EEL836 | Biomedical Electronics |
| 19. MEL731N | Design of Mechanism and Manipulators |
| 20. MEL786F | Industrial Inspection |
| 21. AML880F | Computer Aided Design |
| 22. OE720 | Integrated Optics(PH) |
| 23. PHL836 | Optical Instrumentation and Metrology |

** Newly developed courses

III. PHD COURSES

As instructed by the PHD supervisors.

IV. NEW COURSES DEVELOPED

1. IDL-734- Optical 3D-surface profilometry and tomography
2. IDL-736- Information display devices and technologies

APPENDIX 20 - LIST OF RECRUITERS FOR IDDC

The following table list the name of the **core companies** that recruited the MTech and MDes students of the IDDC,

S. No.	Name of Core Companies	Programme Type	Programme name
1.	Mahindra & Mahindra Ltd	MTech	Instrument Technology
2.	Intel Corporation	MTech	Instrument technology
3.	Eaton Technologies Pvt. Ltd.	MTech	Instrument Technology
4.	Mechatronics Test Equipment Pvt. Ltd.	MTech	Instrument Technology
5.	Samsung India Software Operations Pvt. Ltd	MTech	Instrument Technology
6.	Aptina imaging	MTech	Instrument Technology
7.	Ecosense Sustainable Solutions Pvt. Ltd.	MTech	Instrument Technology
8.	AMD India Pvt.Ltd	MTech	Instrument Technology
9.	Bosch India	MTech	Instrument Technology
10.	Toshiba Corporation	MTech	Instrument Technology
11.	General Motors	MDes	Industrial design
12.	Hero Motocorp Ltd	MDes	Industrial design

The following table list the name of the **non-core companies** that recruited the MTech and MDes students of the IDDC

S. No.	Name of Non-core Companies	Programme Type	Programme name
1.	Itass India Pvt Ltd.	MTech	Instrument Technology
2.	Cypress Semiconductors Pvt. Ltd	MTech	Instrument Technology
3.	Oracle India Pvt Ltd	MTech	Instrument Technology
4.	Deloitte	MTech	Instrument Technology
5.	Samsung India Software Operations Pvt. Ltd	MTech	Instrument Technology
6.	Cognizant Technology Solutions	MTech	Instrument Technology
		MDes	Industrial Design
7.	Tejas Networks ltd	MTech	Instrument Technology
8.	Cisco systems (India) Pvt Ltd	MTech	Instrument Technology
9.	Polaris Software Lab Ltd	MTech	Instrument Technology
10.	TCE Consulting Engineers Limited	MTech	Instrument Technology
11.	De Core Sc.& Tech.Ltd	MTech	Instrument Technology
12.	Tata Consultancy Services	MTech	Instrument Technology
13.	Sharda Group of Institutions	MTech	Instrument Technology
14.	KIIT University	MTech	Instrument Technology
15.	Mangalayatan University, Aligarh	MTech	Instrument Technology
16.	Saroj Educational Group	MTech	Instrument Technology
17.	IBM India (ISL)	MTech	Instrument Technology
18.	Mindtree Ltd	MDes	Industrial Design
19.	Amazon Development Centre Pvt. Ltd	MDes	Industrial Design
20.	Ibibo Group	MDes	Industrial Design
21.	Infosys Limited	MDes	Industrial Design

APPENDIX 21 – CFB MEETS

Instrument Design Development Centre

Date: 19-10-2010

Subject: Minutes of Faculty Board Meeting held on October 12, 2010 at 12.00 Noon.

Faculty board meeting was held on October 12, 2010 (Tuesday) at 12.00 Noon in IDDC Head's Room. As the quorum was not complete, the meeting was adjourned and was reconvened at 12:30 pm. The following faculty members attended the meeting.

1. Dr. N. K. Jain,	Head IDDC
2. Dr. Rakesh Kumar	Member
3. Sh. A. K. Agarwala	Member
4. Dr. D. S. Mehta	Secretary FB

Prof. Chandra Shakher, Prof. D. T. Shahani, Prof. A. L. Vyas, Dr. I. P. Singh and Sh. S. K. Atreya could not attend the meeting. The minutes of the meeting are the following;

1. The minutes of meeting held on 13th September 2010 were confirmed as circulated.
2. As the list of Quality Publications for the purpose of faculty selection/recruitment from many faculty members is still awaited, the head requested all the faculty members to provide list as soon as possible.
3. The requirement submitted by all the faculty members for the plan funds was discussed. The Utilization of plan funds for M. Des. was deferred for the next meeting. As decided in the previous meeting the plan fund for M. Tech. Instrument Technology and Departmental Research work allocated have been Rs. 5.0 lakhs each. The distribution of these plan funds (PLN03/CIDD) was discussed and the following distribution was made.

Sh. A. K. Agarwala:

1. 50 MHz, 30 A current probe - Rs. 2.00 Lakhs
2. Kits and tools - Rs. 1.00 Lakh

Prof. A. L. Vyas

1. DSP Kits - Rs. 1.50 Lakh

Dr. I. P. Singh

1. 8085 Kits - Rs. 0.40 Lakh

Prof. Chandra Shakher / Dr. D. S. Mehta

1. BSO Crystal or LASER - Rs. 1.50 Lakh

Class room, Office, committee room etc.

1. Desk Top computers, 2 Nos. - Rs. 0.60 Lakh
2. Lap Top 1 No. - Rs. 0.40 Lakh
3. LCD Projector etc. - Rs. 1.00 Lakh.

4. Head informed that the centre has received Rs. 25 lakhs under the capacity expansion category for the financial year 2010-2011 for M. Tech. Instrument Technology and M. Des. It was decided that both M. Des. and M.Tech. (Instrument Technology) will be allocated Rs. 12.50 lakhs each. The distribution of funds for various activities for the M. Des. program was deferred for the next meeting.

The committee discussed the requirements submitted by the faculty members for the allocation of Capacity Expansion Funds. The requirement submitted by the faculty members was Rs. 23.60 lakhs. This included Rs. 8.00 lakhs for PSPICE licences. The committee decided that the following items which are urgently needed for classes and projects be procured from the capacity expansion funds for the M.Tech. Instrument Technology program.

Prof. A L Vyas:

1. DSP & UC Kits - Rs. 0.60 Lakh
2. 50/100 MHz Oscilloscope - Rs. 1.00 Lakh
3. Function Generators - Rs. 0.50 Lakh

Dr. I P Singh

- | | |
|------------------------|-----------------|
| 1. DSP Kits | - Rs. 1.00 Lakh |
| 2. PIC Compiler etc. | - Rs. 1.00 Lakh |
| 3. Desk Top PCs 3 Nos. | - Rs. 1.00 Lakh |

Sh. A K Agarwala

- | | |
|----------------------------|-----------------|
| 1. DSP & FPGA Kits | - Rs. 2.00 Lakh |
| 2. Real time Emulator etc. | - Rs. 2.00 Lakh |

Prof. Chandra Shakher / Dr. D S Mehta

- | | |
|---|-----------------|
| 1. Microscope Objectives, Spatial Filter etc. | - Rs. 1.00 Lakh |
| 2. Spatial Filter mounts | - Rs. 1.00 Lakh |
| 3. Mounts for Lens etc. | - Rs. 1.50 Lakh |

The meeting ended with thanks to the chair.

D. S. Mehta
Convener FB

Instrument Design Development Centre

Date: 05-10-2010

Subject: Faculty Board Meeting on October 12, 2010 (Tuesday) at 12.00 Noon

Next Faculty Board meeting will be held on **October 12, 2010 (Tuesday) at 12.00 Noon** in the head's room.

The agenda for the meeting is as follows:

1. Confirmation of the minutes of the last meeting held on **September 13, 2010**.
2. Preparation of list of **Quality Publications** for the purpose of faculty selection/recruitment.
3. Discussion on the **Utilization of plan funds (PLN03)**.
4. Discussion on the distribution of **Capacity Expansion funds**.
5. Discussion on the note regarding the role of SRC the same was circulated among faculty members for their opinion.
6. Any other matter.

All Faculty members requested to attend.

Instrument Design Development Centre

Date: 11-11-2010

Subject: Minutes of Faculty Board Meeting on Nov. 16, 2010 (Tuesday) at 11.00 A.M.

Next Faculty Board meeting will be held on **Nov. 16, 2010 (Tuesday) at 11.00 A.M.** in the head's room. The agenda for the meeting is as follows:

1. Confirmation of the minutes of the last meeting held on **October 12, 2010**.
2. Discussion on the preparation of write up about IDDC for the Golden Jubilee Volume on the evolution of IIT (D).
3. Discussion on the publication of at least one paper before the submission of Ph. D. Synopsis to improve the quality of Ph. D. thesis.
4. Discussion on the new courses floated by various Department Centers.
5. Any other matter.

All Faculty members are requested to attend.

D. S. Mehta
Member Secretary, FB

I Instrument Design Development Centre

Date: 10-01-2011

Subject: Minutes of Faculty Board Meeting.

Faculty board meeting was held on **Nov. 19, 2010 (Friday) at 11.00 A.M.** in the head's room. The

Following members attended the meeting;

- | | |
|--------------------------|---------------------|
| 1. Dr. N. K. Jain, | Head IDDC |
| 2. Prof. Chandra Shakher | Member |
| 3. Prof. A. L. Vyas | Member |
| 4. Dr. D. S. Mehta | Member Secretary FB |

The following are the minutes of the meeting;

1. The minutes of the last meeting held on **October 12, 2010** were confirmed as circulated.
2. The preparation of write up about IDDC for the Golden Jubilee Volume on the evolution of IIT (D) was discussed and it was decided that all IDDC faculty be requested to give the write up about the same.
3. The following new courses floated by various Department/Centers were discussed;
 - i. Therapeutic Delivery -----Center for Biomedical Engineering
 - ii. Fundamentals of Aerosol: Monitoring and Modelling ----- Dept. of Civil Engg.
 - iii. Cryptography and Computer Security -----Dept. of Computer Science and Engg.
 - iv. Advanced Computer Networks----- Dept. of Computer Science and Engg.

All the courses were discussed and found no overlap with existing courses of IDDC.

Meeting ended with thanks to the Chair.

D. S. Mehta
Member Secretary, FB

Instrument Design Development Centre

Date: 11-01-2011

Subject: Faculty Board Meeting on January 20, 2011 (Thursday) at 4.00 P.M.

Next Faculty Board meeting will be held on **January 20, 2011 (Thursday) at 4.00 P.M.** in the head's room. The agenda for the meeting is as follows:

1. Confirmation of the minutes of the last meeting held on **November 19, 2010**.
2. Welcome to newly joined Faculty.
3. Discussion on the preparation of write up about IDDC for the Golden Jubilee Volume on the evolution of IIT (D).
4. Discussion on the utilization of funds and purchase of equipments.
5. Any other matter.

All Faculty members are requested to attend.

D. S. Mehta
Member Secretary, FB

Instrument Design Development Centre

Date: 20-01-2011

Subject: Faculty Board Meeting Postponed.

The Faculty Board meeting scheduled on January 20, 2011 (Thursday) at 4.00 P.M. could not be held as a number of Faculty members could not attend the meeting.

The Next Faculty Board meeting will now be held on January 27, 2011 (Thursday) at 4.00 P.M. in IDDC Head's room.

. The agenda for the meeting is as follows:

1. Confirmation of the minutes of the last meeting held on **November 19, 2010**.
2. Welcome to newly joined Faculty.
3. Discussion on the preparation of write up about IDDC for the Golden Jubilee Volume on the evolution of IIT (D).
4. Discussion on the utilization of funds and purchase of equipments.
5. Any other matter.

All Faculty members are requested to attend.

D. S. Mehta
Member Secretary, FB

Instrument Design Development Centre

Date: 28-01-2011

Subject: Faculty Board Meeting on 04-02-2011

The Next Faculty Board meeting will be held on February 04, 2011 (Friday) at 3.00 P.M. in IDDC Head's room.

. The agenda for the meeting is as follows:

1. Confirmation of the minutes of the last meeting held on **November 19, 2010**.
2. Welcome to newly joined Faculty.
3. Discussion on the preparation of write up about IDDC for the Golden Jubilee Volume on the evolution of IIT (D).
4. Discussion on the utilization of funds and purchase of equipments.
5. Discussion on notice for Faculty selections.
5. Any other matter.

All Faculty members are requested to attend.

D. S. Mehta
Member Secretary, FB

Instrument Design Development Centre

Date: 09-02-2011

Subject: Minutes of Faculty Board Meeting held on 04-02-2011

Faculty board meeting was held on February 04, 2011 (Friday) at 3.00 P.M. in IDDC Head's room. The following members attended the meeting;

Following members attended the meeting;

- | | |
|---------------------|---------------------|
| 1. Dr. N. K. Jain, | Head IDDC |
| 2. Sh. S. K. Atreya | Member |
| 3. Dr. I.P. Singh | Member |
| 4. Dr. Jyoti Kumar | Member |
| 5. Sh. Sumer Singh | Member |
| 6. Dr. D. S. Mehta | Member Secretary FB |

Other members could not attend the meeting. The following are the minutes of the meeting;

1. The minutes of the last meeting held on **November 19, 2010** were confirmed as circulated.
2. The Faculty Board welcomed the newly joined faculty.
3. The preparation of write up about IDDC for the Golden Jubilee Volume on the evolution of IIT (D) was again discussed and in the last meeting all IDDC faculty were requested to give the write up about the same. So far no information has been received it was decided that a reminder will be send.
4. Utilization of funds and purchase of equipments was discussed and all the faculty members were requested to expedite the purchase of equipments.
5. Formulation of search committee for the selections Assistant Professors (Entry level):
The following search committee was formulated:

Prof. Chandra Shakher	Chairman
Prof. A. L Vyas	Member (Electronics)
Dr. N. Jain	Member (Electrical)
Dr. I. P. Singh	Member (Mechanical)
Dr. D. S. Mehta	Member (Optics)
Sh. S. K. Atreya	Member (Design)
Dr. Jyoti Kumar	Member (Design)
6. The revision of existing procedure for admission to M. Tech./M.S (R)/M. Des. Programmes that: "Whether the Deptt./Centers should be given the option to offer direct admission to M. Tech./M.S. (R)/M. Des. Candidates, fulfilling the minimum eligibility requirement/ shortlisting criterion of the department/center based on GATE score only. There will be no test/interview for these candidates". Was discussed in the meeting. Faculty board did not agree with the above and decided that the present procedure of Deptt./Center Test /Interview should continue apart from the GATE score.
7. A request from the Office DD (F) for the nominations for the award of Doctorate Degree Honoris Causa at Convocation 2011 was received and discussed in the meeting. The faculty did not find any suitable candidate for the nominations.
8. Nomination for Outstanding Young Faculty Fellowship was discussed. The Faculty Board;
9. Nomination for Distinguished Alumini Award:
10. Invitation for proposals for conducting short-term courses under Quality Improvement Programme during the year 2011 – 2012.
11. The following new courses floated by various Department/Centers were discussed;
 - i. Sml781 Macroeconomic Analysis for BusinessDeptt. Management
 - ii. Solar Thermal Power GenerationEnergy Studies
 - iii. Distributed and Sustainable EnergyEnergy Studies
 - iv. Political Ecology of Water. Deptt. Of Humanities
 - v. Structure and Properties of Polymer.....Deptt. of Chemical Engg.

All the courses were discussed and found no overlap with existing courses of IDDC.

Meeting ended with thanks to the Chair.

D. S. Mehta
Member Secretary, FB

Instrument Design Development Centre

Date: 21-03-2011

Subject: Faculty Board Meeting on March 30, 2011

The Next Faculty Board meeting will be held on March 30, 2011 (Wednesday) at 3.00 P.M. in IDDC Head's room.

. The agenda for the meeting is as follows:

1. Confirmation of the minutes of the last meeting held on February 04, 2011 (Friday)
2. Welcome to newly joined Faculty.
3. To finalize the budget requirement for the year 2011 – 2012.
4. Discussion on the finalization of dates for test/interview of M. Tech./M. Des. admission.
5. Discussion on the new courses.
6. Any other matter.

All Faculty members are requested to attend.

D. S. Mehta
Member Secretary, FB

Note: All faculty members are requested to kindly submit the budget requirement before 30th March, 2011.

Subject: Minutes of Faculty Board Meeting held on 30-03-2011

Faculty board meeting was held on March 30, 2011 (Wednesday) at 3.00 P.M. in IDDC Head's room. The following members attended the meeting;

Following members attended the meeting;

- | | |
|--------------------------|---------------------|
| 1. Dr. N. K. Jain, | Head IDDC |
| 2. Prof. Chandra Shakher | Member |
| 3. Prof. A. L. Vyas | Member |
| 4. Dr. I.P. Singh | Member |
| 5. Dr. Jyoti Kumar | Member |
| 6. Sh. Sumer Singh | Member |
| 7. Dr. Gufran S. Khan | Member |
| 8. Dr. D. S. Mehta | Member Secretary FB |

Other members could not attend the meeting. The following are the minutes of the meeting;

1. The minutes of the last meeting held on 04-02-2011 were confirmed as circulated.
2. The Faculty Board welcomed the newly joined faculty Dr. Gufran S. Khan.
3. The faculty board approved the budget requirement for the year 2011 – 2012 as per the sheet attached.
4. The faculty board discussed the finalization of dates for test/interview of M. Tech. (Instrument Technology) and M. Des. admission for the year 2011-2012. The Faculty Board decided the following dates;
 - i. M. Tech. instrument technology ; June 01, 2011.
 - ii. M. Des. programme June 03, 2011.
5. The faculty board discussed the matter regarding redefining the role of SRC and decided the following;
 - i. Ph. D. supervisor should remain the examiner of the thesis.
 - ii. No SRC member should act as an examiner of the Ph. D. thesis.
 - iii. Chairman CRC/DRC or HOC/HOD should be the chairman of Ph.D. viva board.
 - iv. Ph. D. viva is open and all the SRC members may attend the Ph. D. viva. However, the examiners (External and Supervisor (S)) should only evaluate the candidate.
6. The following new courses floated by various Department/Centers were discussed;
 - i. Theatre of the absurd..... Deptt. Of Humanities
 - ii. Fantasy Literature..... Deptt. Of Humanities
 - iii. Fundamentals of Atmosphere and Ocean..... Centre for Atmospheric Science
 - iv. Climate Change: Centre for Atmospheric Science
 - v. Modern Biology for Engineers.....School of Biological Sciences
 - vi. High Dimensional Biology..... School of Biological Sciences
 - vii. Introduction to Practical Modern Biology... School of Biological Sciences

All the courses were discussed and found no overlap with existing courses of IDDC.

Meeting ended with thanks to the Chair.

D. S. Mehta
Member Secretary, FB

Instrument Design Development Centre

Date: 04-04-2011

Subject: Minutes of Faculty Board Meeting held on 30-03-2011.

Faculty board meeting was held on March 30, 2011 (Wednesday) at 3.00 P.M. in IDDC Head's room. The following members attended the meeting;

- | | |
|--------------------------|---------------------|
| 1. Dr. N. K. Jain, | Head IDDC |
| 2. Prof. Chandra Shakher | Member |
| 3. Prof. A. L. Vyas | Member |
| 4. Dr. I. P. Singh | Member |
| 5. Dr. Jyoti Kumar | Member |
| 6. Sh. Sumer Singh | Member |
| 7. Dr. Gufran S. Khan | Member |
| 8. Dr. D. S. Mehta | Member Secretary FB |

Other members could not attend the meeting. The following are the minutes of the meeting;

- Minutes of the last meeting held on 04-02-2011 were confirmed as circulated.
- Faculty Board welcomed the newly joined faculty Dr. Gufran S. Khan.
- Faculty board approved the budget requirement for the year 2011 – 2012 as per the sheet attached.
- Faculty board discussed the finalization of dates for test/interview of M. Tech. (Instrument Technology) and M. Des. Admission for the year 2011-2012. The Faculty Board decided the following dates;
M. Tech. Instrument Technology; June 01, 2011.
M. Des. Programme: June 03, 2011.
- Faculty board discussed the matter regarding redefining the role of SRC and decided the following;
 - Ph. D. supervisor should remain the examiner of the thesis.
 - No SRC member should act as an examiner of the Ph. D. thesis.
 - Chairman CRC/DRC or HOC/HOD should be the chairman of Ph.D. viva board.
 - Ph. D. viva is open and all the SRC members may attend the Ph. D. viva. However, the examiners (External and Supervisor (S)) should only evaluate the candidate.
- Following new courses floated by various Department/Centers were discussed;
 - Theatre of the absurd..... Deptt. Of Humanities
 - Fantasy Literature..... Deptt. Of Humanities
 - Fundamentals of Atmosphere and Ocean..... Centre for Atmospheric Science
 - Climate Change: Centre for Atmospheric Science
 - Modern Biology for Engineers..... School of Biological Sciences
 - High Dimensional Biology..... School of Biological Sciences
 - Introduction to Practical Modern Biology... School of Biological Sciences

All these courses were discussed and found no overlap with existing courses of IDDC.

- Request of some of the faculty members to accommodate elsewhere one of the staff members attached to the M. Des. studio was discussed and was agreed to.

Meeting ended with thanks to the Chair.

D. S. Mehta
Member Secretary, FB

Instrument Design Development Centre

Date: 04-05-2011

Subject: Faculty Board Meeting on May 10, 2011

The Next Faculty Board meeting will be held on May 10, 2011 (Tuesday) at 12.00 Noon in IDDC Head's room.

. The agenda for the meeting is as follows:

1. Confirmation of the minutes of the last meeting held on March 30, 2011.
2. Discussion on the budget requirement for the Design Degree Show 2011.
3. Discussion on the proposal for Academic Performance Monitoring of the Students.
4. Utilization of Professional Development Allowance (PDA).
5. Any other matter.

All Faculty members are requested to attend.

D. S. Mehta
Member Secretary, FB

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Instrument Design Development Centre

Date: 09-05-2011

Subject: Faculty Board Meeting postponed.

The Faculty Board meeting scheduled to be held on May 10, 2011 (Tuesday) at 12.00 Noon in IDDC Committee room will now be held May 11, 2011 (Wednesday) at 12.00 Noon.

. The agenda for the meeting is as follows:

1. Confirmation of the minutes of the last meeting held on March 30, 2011.
2. Discussion on the budget requirement for the Design Degree Show 2011.
3. Discussion on the proposal for Academic Performance Monitoring of the Students.
4. Utilization of Professional Development Allowance (PDA).
5. Any other matter.

All Faculty members are requested to attend.

D. S. Mehta
Member Secretary, FB

Copy to All Faculty.

Subject: Minutes of Faculty Board Meeting held on May 10, 2011

Faculty board meeting was held on May 10, 2011 (Tuesday) at 12.00 Noon in IDDC Head's room. The following members attended the meeting;

1. Dr. N. K. Jain,	Head IDDC
2. Prof. Chandra Shakher	Member
3. Prof. A. L. Vyas	Member
4. Sh. Arun Kumar Agarwala	Member
5. Dr. I.P. Singh	Member
6. Sh. S. K. Atreya	Member
7. Dr. Jyoti Kumar	Member
8. Sh. Sumer Singh	Member
9. Dr. Gufran S. Khan	Member
10. Dr. D. S. Mehta	Member Secretary FB

The following are the minutes of the meeting;

1. The minutes of the last meeting held on 30-03-2011 were confirmed as circulated.
2. Head IDDC informed the committee that following interim sanction of plan and non-plan funds for the academic year 2011-2012 has been made by the Institute:
 - i. Plan Funds (PLN03) = 9.0 Lakhs
 - ii. Non-Plan Funds (NPN03) = 5.0 lakhs.

He further informed that the interim sanction is usually about 50% of the total sanction.

The faculty board discussed the allocation of non plan funds and decided that for the expected sanction of Rs. 10.00 Lakh of non plan funds following distribution be made:

M.Tech. Instrument Technology-	Rs. 3.0 Lakhs
M. Des. -	Rs. 3.0 Lakhs
Common purpose and Research -	Rs. 4.0 Lakhs

3. The faculty board discussed the budget proposal from design group for holding Design Degree Show. The faculty board felt that a part of the budget requirement for the degree show could be met by getting sponsorship from Industry. However, the budget requirements of the Design degree show be met from the non plan budget allocation for the M Des activities.
4. The proposal for Academic Performance Monitoring of the poor Students was discussed and it was decided that any abnormal and poor performance of the students be informed to Co-coordinator/ Head/ Attendance Incharge. This was decided to set-up some monitoring system for the poor students.
5. A note from DD (F) regarding the utilization of Professional Development Allowance (PDA) was discussed and it was informed that the PDA should be spent as per rules.
6. The Head informed the Faculty Board regarding the need for a faculty member to be appointed as In-charge Physical facility for the center. The FB unanimously selected Dr. Gufran Khan the Physical facility in-charge for the Center.

The meeting Ended with Thanks to the Chair.

D. S. Mehta
Member Secretary, FB

Instrument Design Development Centre

Date: 24-06-2011

Subject: Faculty Board Meeting on June 30, 2011

The Next Faculty Board meeting will be held on June 30, 2011 (Thursday) at 11.00 A.M. in IDDC Head's room.

. The agenda for the meeting is as follows:

1. Confirmation of the minutes of the last meeting held on May 10, 2011.
2. Discussion on the preparation of information for annual convocation 2011.
3. Discussion on the 12th Five Year Plan Document.
4. Any other matter.

All Faculty members are requested to attend.

D. S. Mehta
Member Secretary, FB

Copy to All Faculty.

Instrument Design Development Centre

Date: 15-07-2011

Sub.: Minutes of Faculty Board Meeting held on June 30, 2011

Faculty board meeting was held on June 30, 2011 (Thursday) at 11.00 A. M. in IDDC Head's room. The following members attended the meeting;

1. Dr. N. K. Jain,	Head IDDC
2. Prof. A. L. Vyas	Member
3. Sh. Arun Kumar Agarwala	Member
4. Dr. I. P. Singh	Member
5. Sh. S. K. Atreya	Member
6. Dr. Gufran S. Khan	Member
7. Dr. D. S. Mehta	Member Secretary FB

The following are the minutes of the meeting;

1. The minutes of the last meeting held on May 10, 2011 were confirmed as circulated.
2. The faculty board discussed the information required for the annual convocation 2011. All the faculty members of IDDC were requested to provide the required information as per the note circulated on June 30, 2011 by July 5, 2011.
3. A note from planning unit was received regarding the plans to prepare the 12th Five Year plan document. The faculty discussed the issue and following committee was constituted to prepare the 12th Five year plan document for the IDDC;
 - i. Sh. A. K. Agarwala
 - ii. Dr. I. P. Singh
 - iii. Sh. S. K. Atreya
 - iv. Dr. D. S. Mehta
 - v. Dr. Gufran S. Khan

The faculty board decided that the above committee will prepare the document by 5th July 2011 for sending it to planning unit.

4. The Head IDDC informed faculty board regarding information required for new website the Institute. All faculty members were requested to update the information on the new website.

The meeting ended with thanks to the Chair.

D. S. Mehta
Member Secretary, FB

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Date: 18-07-2011

Subject: Faculty Board Meeting on July 25, 2011

The Next Faculty Board meeting will be held on July 25, 2011 (Monday) at 4.00 P.M. in IDDC Head's room.

. The agenda for the meeting is as follows:

1. Confirmation of the minutes of the last meeting held on June 30, 2011.
2. Discussion on the distribution of funds received under PLN03/NPN05 for the 2011-2012.
3. Discussion on the information required for the new website.
4. Discussion on the note received from Sh. S. K. Atreya regarding the requirement of space in the IIT Exhibition Hall for the display of design products and models.
5. Discussion on the on the requirement of research proposals from GAIL (INDIA) LTD.
6. Any other matter.

All Faculty members are requested to attend.

D. S. Mehta
Member Secretary, FB

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Sub.: Minutes of Faculty Board Meeting held on July 25, 2011

Faculty board (FB) meeting was held on **July 25, 2011 (Monday) at 4.00 P.M.** in IDDC Head's room. The following members attended the meeting;

1. Dr. N. K. Jain,	Head IDDC
2. Prof. A. L. Vyas	Member
3. Prof. Chandra Shakher	Member
4. Dr. I. P. Singh	Member
5. Sh. S. K. Atreya	Member
6. Dr. Gufran S. Khan	Member
7. Dr. Jyoti Kumar	Member
8. Mr. Sumer Singh	Member
9. Dr. D. S. Mehta	Member Secretary FB

The following are the minutes of the meeting;

- 1. The minutes of the last meeting held on June 30, 2011 were confirmed as circulated.**
- 2. The Head IDDC informed the FB regarding the allocation of funds for the year 2011-2012.** Total funds released for IDDC are as follows:

PLN-03	Rs. 31.00 lakhs
NPN-05	Rs. 12.00 Lakhs
PLN-03F	Rs. 1.80 Lakhs

No separate funds under capacity expansion will be allocated from the current year.

2.1 Schedule for expenditure:

1. 30% by 31st August 2011
2. 60% by 31st October 2011
3. 90% by 31st December 2011

2.2 Distribution of Funds under PLN-03: The FB discussed and finalized the distribution of funds under PLN-03 as follows:

- a. Rs. 4.00 for day-to-day working of the center.
- b. Rs. 9.00 Lakhs for M. Tech. Instrument Technology.
- c. Rs. 9.00 Lakhs for M. Des.
- d. Rs. 9.00 for research activities.

The list of items to be purchased will be decided in the next FB meeting to be held on 03-08-2011 (Wednesday).

2.3 Distribution of Funds under NPN-05: The FB discussed and finalized the distribution of funds under NPN-05 as follows:

- i. Rs. 3.00 for day-to-day working of the center.
- ii. Rs. 3.00 Lakhs for M. Tech. Instrument Technology.
- iii. Rs. 3.00 Lakhs for M. Des.
- iv. Rs. 3.00 for research.

2.3 Distribution of funds under PLN-03F: The FB decided funds received under the PLN-03F will be utilized for the purchase of personal computers/laptop for new faculty members Dr. G. S. Khan, Dr. Jyoti Kumar, and Sh. Sumer Singh.

3. The Head IDDC informed faculty board regarding information required for new website the Institute. All faculty members were requested to update their webpage as soon as possible on the new website.
4. The FB discussed the note received from Sh. S. K. Atreya regarding the requirement of space in the IIT Exhibition Hall for the display of design products and models. The FB is of the opinion that there should be a common place in the Institute to display/demonstrate innovative and commercially viable products designed developed by IIT Delhi community.
5. The head informed the FB that nominations for the Senate membership from outside IIT Delhi are required and the faculty members are requested to give nominations for the same.
6. The FB discussed the following two courses floated by the Department of Mathematics;
 - i. Mathematical Theory of Coding
 - ii. Financial Derivatives and Modeling and Pricing.
 - iii. Both the courses were discussed and found no overlap with existing courses of IDDC.
7. The FB discussed the matter regarding redefining the role of SRC and the same was discussed in the FB meeting held on 30-03-2011. It is strongly felt that in the SRC the expert members should be from the department/center or outside in the relevant area of research.

The meeting ended with thanks to the Chair.

D. S. Mehta, Member Secretary, FB, Copy to All Faculty.

Instrument Design Development Centre

Date: 28-07-2011

Subject: Faculty Board Meeting on August 03, 2011

The Next Faculty Board meeting will be held on August 03, 2011 (Wednesday) at 4.00 P.M. in IDDC Head's room.

. The agenda for the meeting is as follows:

1. Confirmation of the minutes of the last meeting held on July 25, 2011.
2. Discussion on the distribution of funds received under PLN03 for the 2011-2012.
3. Any other matter with the permission of the chair.

All Faculty members are requested to attend.

D. S. Mehta
Member Secretary, FB

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Instrument Design Development Centre

Date: 01-08-2011

Subject: Faculty Board Meeting Postponed

Due to the meeting of Head IDDC with the Director on August 03, 2011 (Wednesday) at 3.00 P.M. the scheduled Faculty Board meeting is postponed.

The Faculty board meeting will now be held on August 04, 2011 (Thursday) at 4.00 P.M. in IDDC Head's room.

. The agenda for the meeting is as follows:

1. Confirmation of the minutes of the last meeting held on July 25, 2011.
2. Discussion on the distribution of funds received under PLN03 for the 2011-2012.
3. Any other matter with the permission of the chair.

All Faculty members are requested to attend.

D. S. Mehta
Member Secretary, FB

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Sub.: Minutes of Faculty Board Meeting held on August 04, 2011.

Faculty board (FB) meeting was held on **August 04, 2011 (Thursday) at 4.00 P.M.** in IDDC Head's room. The following members attended the meeting;

1. Dr. N. K. Jain,	Head IDDC
2. Prof. A. L. Vyas	Member
3. Prof. Chandra Shakher	Member
4. Sh. A.K. Agarwala	Member
5. Sh. S. K. Atreya	Member
6. Dr. Gufran S. Khan	Member
7. Dr. Jyoti Kumar	Member
8. Mr. Sumer Singh	Member
9. Dr. D. S. Mehta	Member Secretary FB

The following are the minutes of the meeting;

1. The minutes of the last meeting held on July 25, 2011 were confirmed as circulated.
2. Allocation of funds PLN-03 for the year 2011-2012: The FB approved the allocation of the following funds under PLN-03:

M. Des:

3D-Printer	Rs. 1.20 Lakhs
3D TV + Video editing equipment	Rs. 1.10 Lakhs
Tablet PC	Rs. 0.90 Lakh
Portable Projector	Rs. 0.20 Lakh
Desktop 3D Printer	Rs. 1.20 Lakhs
Data Gloves	Rs. 0.40 Lakh
Arduino Boards for Interaction	Rs. 1.00 Lakhs
Touch screen monitors	Rs. 3.00 Lakhs

M. Tech. Instrument Technology:

Precision Optical Components	Rs. 4.00 Lakhs
4 Ch. 100 MHz Oscilloscope	Rs. 1.00 Lakhs
UC/ DSP & Interface Boards etc.	Rs. 1.50 Lakhs
Strain Recorder, Oscilloscope etc.	Rs. 1.50 Lakhs

FB decided that a separate request will be made to the Planning Unit for the purchase of P-Spice Software and that the distribution of funds for research will be discussed in the next FB meeting.

3. Nominations for Golden Jubilee Awards:

The FB nominated the following staff members for the Golden Jubilee Award:

- i. Mr. G. S. Rawat
- ii. Mr. M. Khan
- iii. Mr. R. P. Sud
- iv. Mr. R. L. Kapur
- v. Mr. Kanchi Ram

4. The FB nominated Sh. A. K. Agarwala for IRD membership for the year 2011-2012.
5. The FB discussed the following course floated by the Department of Civil Engineering: CEL 867 Sustainable materials and green Buildings and found no overlap with existing courses of IDDC.
6. A request from Dr. Kiran Seth, course coordinator for the course DIR 857 titled "Animation" held last semester, for payment of remuneration to visiting/ guest faculty Mr. Nitin Donde was discussed. The faculty board resolved that payment of remuneration can be recommended if prior approval from competent authority for engaging Mr. Nitin Donde as visiting/ guest faculty has been obtained. CFB asked the Head to request Dr. Seth to provide the required information.

The meeting ended with thanks to the Chair.

D. S. Mehta
Member Secretary, FB

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Instrument Design Development Centre

Date: 16-09-2011

Subject: Faculty Board Meeting on Sept. 23, 2011

The Next Faculty Board meeting will be held on September 23, 2011 (Friday) at 4.00 P.M. in IDDC Head's room.

. The agenda for the meeting is as follows:

1. Confirmation of the minutes of the last meeting held on August 4, 2011.
2. Discussion on the overlap on the contents of UG & PG courses.
3. Discussion on the information required for the annual progress report 2010-2011..
4. Discussion on the recommendation for invited faculty for M. Des.
5. Discussion on the nominations for the positions of Chair Professors.
6. Discussion on the new courses floated by Department/Center.
7. Any other matter.

All Faculty members are requested to attend.

D. S. Mehta
Member Secretary, FB

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Instrument Design Development Centre

Date: 22-09-2011

Subject: Faculty Board Meeting Postponed.

The Faculty Board meeting scheduled to be held on September 23, 2011 (Friday) at 4.00 P.M. in IDDC Head's room is postponed due to Dr. A.P.J. Abdul Kalam's Lecture at 4.30 P.M.

The next Faculty board meeting will now be held on Sept. 28,2011 (Wednesday) 4.00 P.M. in IDDC Head's room.

. The agenda for the meeting is as follows:

1. Confirmation of the minutes of the last meeting held on August 4, 2011.
2. Discussion on the overlap on the contents of UG & PG courses.
3. Discussion on the information required for the annual progress report 2010-2011.
4. Discussion on the recommendation for invited faculty for M. Des.
5. Discussion on the nominations for the positions of Chair Professors.
6. Discussion on the new courses floated by Department/Center.
7. Any other matter.

All Faculty members are requested to attend.

D. S. Mehta
Member Secretary, FB

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Instrument Design Development Centre

Date: 26-09-2011

Subject: Faculty Board Meeting Preponed.

The Faculty Board meeting scheduled to be held on September 28, 2011 (Friday) at 4.00 P.M. in IDDC Head's room is preponed due to some due to some urgent meetings on Sept.28,2011.

The next Faculty board meeting will now be held on Sept. 27, 2011 (Tuesday) 4.00 P.M. in IDDC Head's room.

. The agenda for the meeting is as follows:

1. Confirmation of the minutes of the last meeting held on August 4, 2011.
2. Discussion on the plan submitted by architect for the new engineering block.
3. Discussion on the overlap on the contents of UG & PG courses.
4. Discussion on the information required for the annual progress report 2010-2011.
5. Discussion on the recommendation for invited faculty for M. Des.
6. Discussion on the nominations for the positions of Chair Professors.
7. Discussion on the new courses floated by Department/Center.
8. Any other matter.

All Faculty members are requested to attend.

D. S. Mehta
Member Secretary, FB

Copy to All Faculty.

Sub.: Minutes of Faculty Board Meeting held on September 27, 2011.

Faculty board (FB) meeting was held on **September 27, 2011 (Tuesday) at 4.00 P.M.** in IDDC Head's room. The following members attended the meeting;

1. Dr. N. K. Jain,	Head IDDC
2. Prof. Chandra Shakher	Member
3. Prof. A. L. Vyas	Member
4. Sh. A.K. Agarwala	Member
5. Dr. Gufran S. Khan	Member
6. Dr. Jyoti Kumar	Member
7. Mr. Sumer Singh	Member
8. Dr. D. S. Mehta	Member Secretary FB

The following are the minutes of the meeting;

1. The minutes of the last meeting held on August 4, 2011 were confirmed as circulated.
- 2. Discussion on the plan submitted by architect for the new engineering block**

The Faculty board thoroughly examined and discussed the space allocation plans in the second and third floor of new engineering block. The faculty board decided the following;

- i. The space allocated for IDDC in the previous plan was 3271 Sq. meter. (approx. 35,300 Sq. ft.). However in the present plan the space allocated to IDDC is only 32,800 Sq. ft., which is 2500 sq. ft. less than the previous plan.
- ii. The space allocation for the following laboratories and rooms has not been shown in the proposed plan:
 - a. Laser Applications and Holography Laboratory,
 - b. Faculty Rooms (13 rooms),
 - c. Office of Head IDDC,
 - d. IDDC Office, and
 - e. IDDC Store room.

The competent authority shall be requested to incorporate the corrections as pointed out above in the proposed plan submitted by architect for the new engineering block.

3. Discussion on the overlap on the contents of UG & PG courses

A note from the office of the Deans of UGS and PGS was received regarding the overlap of the content of courses in various Department/Centre/Schools. The matter was discussed and it was decided that for any possible overlap of M. Tech. Instrument Technology courses, Dr. G. S. Khan and Sh. A. K. Agarwala will study the course contents and submit their report by 07-10-2011. Dr. Jyoti Kumar was requested to study the course contents of M. Des. Programme and submit the report by 07-10-2011.

4. Discussion on the information required for the annual progress report 2010-2011

The FB decided that all the faculty members provide information by 05-10-2011.

5. Discussion on the recommendation for invited faculty for M. Des.

The FB discussed the appointment of the following visiting faculty for teaching assignment in M. Des. for the current semester.

1. Mr. Naveen Rampal
2. Mr. Parag Anand
3. Mr. Rahul Tyagi
4. Mr. Pratyay Chakravorty.

Head IDDC informed that these visiting faculty members have been appointed in the previous years for teaching M. Des. Courses. In view of this the FB recommended the appointment of these visiting faculty members.

6. Discussion on the nominations for the positions of Chair Professors.

A note from the planning unit was received regarding the nominations for different Chairs at the Institute. The same was discussed and no expert was found in the relevant area.

7. A new course floated by Bharti School (JMD 792 minor Project) was discussed and found no overlap with existing courses of IDDC.

8. Discussion on BPGS note about category "V" courses;

The matter was discussed and the FB decided that such “V” category courses having substantial overlap with existing regular lecture courses should not be allowed to be floated.

9. Any other matter

The Head IDDC informed about the position of expenditure under plan funds (PLN03) and requested the faculty members to expedite the procurement process to meet the dead lines set by the Institute. The meeting ended with thanks to the Chair.

D. S. Mehta
Member Secretary, FB

Copy to All Faculty.

Instrument Design Development Centre

Date: 02-11-2011

Subject: Faculty Board Meeting on Nov. 09, 2011

The Next Faculty Board meeting will be held on Nov. 09, 2011 (Wednesday) at 4.00 P.M. in IDDC Head's room.

. The agenda for the meeting is as follows:

1. Confirmation of the minutes of the last meeting held on September 27, 2011.
2. Formulation of CRC.
3. Discussion on the note received from ministry on the expenditure.
4. Discussion on the new courses floated by Department/Center.
5. Discussion on the information required for Golden Jubilee Year demo.
6. Any other matter.

All Faculty members are requested to attend.

D. S. Mehta
Member Secretary, FB

Copy to All Faculty.

Instrument Design Development Centre

Date: 11-11-2011

Subject: Extended Faculty Board Meeting on Nov. 14, 2011

The extended Faculty Board meeting will be held on Nov. 14, 2011 (Monday) at 4.00 P.M. in IDDC Head's room.

. The agenda for the meeting is as follows:

1. Formulation of CRC.
2. Discussion on the note received from ministry on the expenditure.
3. Discussion on the information required for Golden Jubilee Year demo.
4. Any other matter.

All Faculty members are requested to attend.

D. S. Mehta
Member Secretary, FB

Copy to All Faculty.

Instrument Design Development Centre

Date: 24-11-2011

Sub.: Minutes of Faculty Board Meeting held on November 09, 2011.

Faculty board (FB) meeting was held on **November 09, 2011 (Wednesday) at 4.00 P.M.** in IDDC Head's room. The following members attended the meeting;

1. Dr. N. K. Jain,	Head IDDC
2. Prof. A. L. Vyas	Member
3. Dr. I. P. Singh	Member
4. Dr. Gufran S. Khan	Member
5. Dr. D. S. Mehta	Member Secretary FB

The following are the minutes of the meeting;

1. The minutes of the last meeting held on September 27, 2011 were confirmed as circulated.
2. **Formulation of CRC:** The CRC of the Centre was formulated as follows;

1. Prof. A. L. Vyas	Chairman
2. Prof. M. R. Shenoy, Physics	Member
3. Prof. Bhim Singh, Electrical Engineering	Member
4. Prof. Naresh Bhatnagar, Mechanical Engineering	Member
5. Prof. Chandra Shakher	Member
6. Prof. D. T. Shahani	Member
7. Dr. N. K. Jain	Member
8. Dr. I. P. Singh	Member
9. Sh. A. K. Agarwala	Member
10. Sh. S. K. Atreya	Member
11. Dr. D. S. Mehta	Convener

3. **New Secretary Faculty Board:** The faculty board decided that Dr. Jyoti Kumar would be new secretary board.
4. The Faculty board discussed the revision of Undergraduate Curriculum 2011 and no comments were made.
5. A note received from the co-ordination section regarding the expenditure management-Economy Measures and rationalization of Expenditure: The Head IDDC briefly informed regarding the expenditure management and for more details please see the copy attached.
6. **A new course HUL 317 floated by Department of Humanities & Social Sciences (Applied Positive Psychology) was discussed and found no overlap with existing courses of IDDC.**
The meeting ended with thanks to the Chair.

D. S. Mehta
Member Secretary, FB

Instrument Design Development Centre

Date: 30-11-2011

Sub.: Minutes of Faculty Board Meeting held on November 09, 2011.

Faculty board (FB) meeting was held on **November 09, 2011 (Wednesday) at 4.00 P.M.** in IDDC Head's room. The following members attended the meeting;

1. Dr. N. K. Jain,	Head IDDC
2. Prof. A. L. Vyas	Member
3. Dr. I. P. Singh	Member
4. Dr. Gufran S. Khan	Member
5. Dr. Jyoti Kumar	Member
6. Dr. D. S. Mehta	Member Secretary FB

The following are the minutes of the meeting;

1. The minutes of the last meeting held on September 27, 2011 were confirmed as circulated.
2. **Formulation of CRC:** The CRC of the Centre was formulated as follows;

1. Prof. A. L. Vyas	Chairman
2. Prof. M. R. Shenoy, Physics	Member
3. Prof. Bhim Singh, Electrical Engineering	Member
4. Prof. N. Bhatnagar, Mechanical Engineering	Member
5. Prof. Chandra Shakher	Member
6. Prof. D. T. Shahani	Member
7. Dr. N. K. Jain	Member
8. Dr. I. P. Singh	Member
9. Sh. A. K. Agarwala	Member
10. Sh. S. K. Atreya	Member
11. Dr. Gufran S. Khan	Member
12. Dr. Jyoti Kumar	Member
13. Dr. D. S. Mehta	Convener
3. **New Secretary Faculty Board:** The faculty board decided that Dr. Jyoti Kumar would be new secretary board.
4. The Faculty board discussed the revision of Undergraduate Curriculum 2011 and no comments were made.
5. A note received from the co-ordination section regarding the expenditure management-Economy Measures and rationalization of Expenditure: The Head IDDC briefly informed regarding the expenditure management and for more details please see the copy attached.
6. A new course HUL 317 floated by Department of Humanities & Social Sciences (Applied Positive Psychology) was discussed and found no overlap with existing courses of IDDC.
The meeting ended with thanks to the Chair.

D. S. Mehta
Member Secretary, FB

Instrument Design Development Centre

Sub.: Minutes of Faculty Board Meeting held on February 07, 2012.

Date: 08-02-2012

Faculty board (FB) meeting was held on **February 07, 2012 (Tuesday) at 3.00 P.M.** in IDDC Head's room. The following members attended the meeting;

1. Dr. N. K. Jain,	Head IDDC
2. Prof. A. L. Vyas	Member
3. Prof. Chandra Shakher	Member
3. Dr. I. P. Singh	Member
4. Dr. A.K Agarwala	Member
5. Dr. D. S. Mehta	Member
6. Dr. Gufran S. Khan	Member
7. Dr. Jyoti Kumar	Member Secretary FB

The following are the minutes of the meeting:

- Budget and Expenditure:** The faculty board approved following proposals for purchase subject to availability of funds
 - Proposal by Prof. A L Vyas for purchase of Solar array simulator, PWM Inverter and DC to DC converter with estimated cost INR two lakhs.
 - Proposal of Dr. G.S. Khan for purchase of mechanical mounts and blue laser for optics lab with estimated cost INR 1.8 lakhs
 - Proposal of Dr. I P Singh for purchase of micro controller boards with estimated cost INR 0.8 lakhs.
 - Proposal by Dr. J. Kumar for purchase of digital SLR for design studio with estimated cost INR 0.8 lakhs.
 - Proposal by Sh. A.K Agarwala for purchase of power electronic simulation software for NMR labs with estimated cost INR 0.8 lakhs.
- Student Nomination:** The faculty board recommended PhD student, Tulsii Anna, Entry No. IDZ8154, from IDDC for science day celebration to be held at the institute.
- New Courses :** New courses EEL 737 and CSL 341 was discussed and found to have no overlap with existing courses of IDDC hence the board has no objection to floating of the courses.
- Funds for Guest Lecturers:** The board recommended that with list of instructors invited, the budget proposal for guest lecturers as part of course DIR 857, being coordinated by Dr. Jyoti Kumar, be sent to competent authority for approval.
- Optics lab In-Charge:** The board recommended that Dr. G.S. Khan be appointed In-Charge for the optics lab.
- Sharing Staff Time:** The board recommended that Sh. HoRam, staff working with Dr. I.P Singh, should help Prof. A.L Vyas for two mornings in the week.
- Faculty Room Allocation:** The board decided that the two recently vacated faculty rooms by Prof. S.K. Sood and Prof. L.K. Das be allocated to the two new faculty members, Sh. S. Singh and Dr. J. Kumar respectively.

The meeting ended with thanks to the Chair.

Jyoti Kumar
Member Secretary, FB

Instrument Design Development Centre

Sub.: Minutes of Faculty Board Meeting held on March 09/14, 2012.

Date: 16-03-2012

Faculty board (FB) meeting was held on **March 09 (Friday, at 3.00 P.M) and extended special meeting on March 14 (Wednesday, at 4PM), 2012.** in IDDC Head's room. The following members attended the meeting;

1. Dr. N. K. Jain,	Head IDDC
2. Prof . Chandra Shakher	Member
3. Dr. I. P. Singh	Member
4. Sh. S. K. Atreya	Member
5. Dr. D. S. Mehta	Member
6. Dr. Gufran S. Khan	Member
7. Sh. Sumer Singh	Member
8. Dr. Jyoti Kumar	Member Secretary FB

The following are the minutes of the meeting:

1. Minutes of the last meeting held on 07 Feb 2012 were confirmed.
2. **Faculty Recruitment:** The board recommended that the faculty members would forward the names of the concerned people likely to aid in the faculty recruitment process to the HOC for follow up.
3. **Open House Representatives:** Sh. Sumer Singh and Dr. Gufran Khan were recommended by the board to represent IDDC for open house.
4. **QIP Proposal:** QIP proposal made by Sh S.K. Atreya was forwarded by the board.
5. **Member for NID governing council:** The board recommended the name of Sh. S.K. Atreya for consideration in the list of Design engineers as a member for nomination of governing council of NID.
6. **Chairman Estate and Works visit:** The board recommended that any date after 10th of April may be forwarded to the estate office for their visit to the centre.
7. **Proposal for new Labs :** Board suggested to call for another special faculty board meeting to discuss proposals for Labs at IDDC. The special meeting was later convened on Wednesday, 14th march 4PM. In the meeting, in light of different proposals made by faculty, the board decided that the new lab proposals should be from research groups rather than from an individual faculty members. Also, the proposals must clearly state how the lab is proposed to be used for teaching and reached purpose.
8. **Budget proposals:** The chairman brought to notice of the members the institute's invitation for proposals of budgets for next financial year from the centre. All the members were requested to submit their budget proposals by 22nd march to the head and a special meeting will be held on 22nd March to discuss the proposals.

The meeting ended with thanks to the Chair.

-All Faculty members

Jyoti Kumar
Member Secretary, FB

Instrument Design Development Centre

Sub.: Minutes of Faculty Board Meeting held on April 19, 2012.

Date: 24-04-2012

Faculty board (FB) meeting was held on **April 19, 2012 (Thursday) at 3.00 P.M.** in IDDC Head's room. The following members attended the meeting;

- | | |
|-----------------------|------------------|
| 1. Dr. N. K. Jain, | Head IDDC |
| 2. Dr. I. P. Singh | Member |
| 3. Dr. A.K Agarwala | Member |
| 4. Dr. D. S. Mehta | Member |
| 5. Dr. Gufran S. Khan | Member |
| 6. Sh Sumer Singh | Member |
| 7. Dr. Jyoti Kumar | Member Secretary |

The following are the minutes of the meeting:

- Budget and Expenditure:** The head informed that Rs.15.00 lakhs have been received as initial sanction for the NPN03 budget. The faculty board discussed and approved the following proposals for purchase of equipments subject to availability of funds in the first phase of purchases.

Sr. No.	Item	Total Cost Rs.	Location	Faculty Involved	Purpose	Priority
1	Computers-5 Nos. for replacement of old ones + LAN	2.50 L	M. Tech. Lab	A K Agarwala, A L Vyas	IDP 705, IDL 714, Students Use	I
2	UPS 3 KVA for replacement	0.60 L	NMR Lab	A K Agarwala, N K Jain	Lab essentials	I
3	Misc. Items Replacements	1.00 L	Adv. Instrumentation Lab	Prof. A L Vyas	Lab essentials	I
4	Pulse/ Function Generator	1.75 L	MDIT Lab	Prof. D T Shahani, N K Jain	IDP 703, IDP 704, IDP 705, Student Projects	I
5	He-Ne Laser	0.75 L	WS 133	Prof Chandra Shakher, Dr D S Mehta, Dr G S Khan	IDP 703, IDP 704, IDP 705	I
6	Spatial filter and pinhole assembly	0.75 L	WS 133	Prof Chandra Shakher, Dr D S Mehta, Dr G S Khan	IDP 703, IDP 704, IDP 705	I
7	Mechanical & Magnetic mounts	1.5 L	WS 133	Prof Chandra Shakher, Dr D S Mehta, Dr G S Khan	IDP 703, IDP 704, IDP 705	I
8	Translation stages	0.75 L	WS 133	Prof Chandra Shakher, Dr D S Mehta, Dr G S Khan	IDP 703, IDP 704, IDP 705	I
9	Precise Micrometer screws	0.60 L	WS 133	Prof Chandra Shakher, Dr D S Mehta, Dr G S Khan	IDP 703, IDP 704, IDP 705	I
10	SLR Camera	1.30 L	Industrial Design Clinic	S.K. Atreya	DIP 721	I
11	Camera Nikon D-7000, Lenses for Camera, Lense Filters	1.50 L	M.Des Studio	Jyoti Kumar	DIP 711, DIP 731	I
12	Industrial Oven	1.00 L	M.Des Studio	Sumer Singh	DIP 762	I
13	Adobe Creative Suite (Licence)	0.50 L	Apple MAC LAB	Sumer Singh	DIP 751	I

14	Router for sensor networking	0.72 L	Electronics Lab	I P Singh	PhD and M.Tech projects	I
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1. **Open House:** The open House representatives, Dr. G. Khan and Mr. S. Singh informed the FB about the IDDC participation in Open House through poster presentations by students of M.Tech, M.Des and Phd, Lab Demos at Optics, holography and UX labs, & Design Degree Show.
2. **Director's visit to US for faculty recruitment:** Sh. Sumer Singh and Dr. D.S. Mehta were appointed as IDDC representatives to coordinate with the DD(F) office for identification of candidates for faculty position.
3. **Space Requirements for the centre:** The board discussed the space used by different facilities at IDDC. The long term and short term future requirements of the centre in terms of the space allotment and utilization were discussed. The board decided a meeting will be held on Thursday, April 26th, 2012 at 3:00 pm to discuss and finalize the future requirements of the centre.
4. **Preferred Journals for recruitment:** The board discussed the need for identification of preferred journals in each area of interest at IDDC to be used as an aid in faculty recruitment process and requested the members to send the same to HOC by 24th April.
5. **New Admin Structure:** The Chairman informed the board of the new admin structure to be placed at the institute level.
6. **Guest Faculty:** The board approved Mr. Atul Sinha and Mr. George Emmanuel as guest lecturer for 'DIR 857 Animation' course.

The meeting ended with thanks to the Chair.

Jyoti Kumar
Member Secretary, FB

- All Faculty members

Instrument Design Development Centre

Sub.: Minutes of Faculty Board Meeting held on July 26, 2012.

Date: 30-07-2012

Faculty board (FB) meeting was held on **February 07, 2012 (Tuesday) at 3.00 P.M.** in IDDC Head's room.

The following members attended the meeting;

1. Dr. N. K. Jain,	Head IDDC
2. Prof. A. L. Vyas	Member
3. Prof. Chandra Shakher	Member
4. Sh. S.K. Atreya	member
5. Dr. I. P. Singh	Member
6. Sh. A.K Agarwala	Member
7. Dr. D. S. Mehta	Member
8. Dr. G. S. Khan	Member
9. Sh. S. Singh	Member
10. Dr. Jyoti Kumar	Member Secretary FB

The following are the minutes of the meeting:

- 1. Nomination of member of staff for Senate :** The faculty board proposed the name of Dr. D.S Mehta as nominee from centre for member of staff for senate.
- 2. New elective course by CSE:** The board did not find any overlap with the IDDC courses and hence raised no objection to the proposed elective.
- 3. Intimation to Assistant professors of BOG Resolution:** Assistant professors in the centre were informed of the BOG resolution and were encourage to apply if they fulfill the criteria in the resolution.
- 4. Intimation of decisions in HODs meeting:** HOC informed the decisions taken in the HOD's meeting held on 13th and 17th July respectively. Members were requested to send in their requirement for technical staff in light of the retiring staff at the earliest.
- 5. Discussion on proposal from INSDAG for academic tie up:** Sh. S.K. Atreya and industrial design group showed interest in taking the project further hence they were requested to take it forward.
- 6. Discussion on proposal from GSECL for research project:** The proposal was not found related to the expertise in the centre, rather related to civil department, hence it was recommended to be forwarded to Civil department
- 7. Invitation from Library of congress for contributions:** The board was informed about the invitation and the members suggested that it should be at the discretion of individuals to communicate their work.
- 8. Discussion on budget:** HOC informed the board about availability of 50 lakhs under PLN-03 and requested the members to initiate the purchase at the earliest so as to complete the purchase of bulk items by 30th August. An additional requirement for Solar Array Simulator and PP software, together estimated to cost 1.8Lakhs was raised by Sh. A.K Agarwala, which the board approved of.
- 9. New course proposal:** Sh. S.K. Atreya proposed to the board a new course on creativity and innovation. A copy of the course was asked to be circulated among all faculty members for perusal and the same is proposed to be discussed in the next meeting.

The meeting ended with thanks to the Chair.

Jyoti Kumar
Member Secretary, FB

Instrument Design Development Centre

Sub.: Minutes of Centre's Faculty Board Meeting held on Sept 27, 2012.

Date: 28-09-2012

Centre's Faculty board (CFB) meeting was held on **Sept 27, 2012 (Thursday) at 4.30 P.M.** in IDDC Head's room. The following members attended the meeting:

- | | |
|---------------------------|----------------------|
| 1. Prof. D.T. Shahani | Head IDDC |
| 2. Dr. N. K. Jain, | Member |
| 3. Prof. A. L. Vyas | Member |
| 4. Prof . Chandra Shakher | Member |
| 5. Dr. I. P. Singh | Member |
| 6. Sh. A.K Agarwala | Member |
| 7. Dr. D. S. Mehta | Member |
| 8. Dr. Gufran S. Khan | Member |
| 9. Sh. Sumer Singh | Member |
| 10. Dr. Jyoti Kumar | Member Secretary CFB |

The following are the minutes of the meeting:

7. **Welcome to new Head:** CFB welcomed the new head of IDDC and thanked previous Head Dr. N.K Jain, for his contributions to the Centre.
8. **Recommendation of CFB for IDDC CRC membership:** CFB discussed the names for new CRC as the term of present CRC is expiring on 30th Sept 2012. The CFB expressed appreciation for contributions of outgoing CRC members, in particular Prof A L Vyas (outgoing chairman of CRC) and Dr D S Mehta (outgoing CRC Convener).

For the IDDC CRC, the CFB unanimously recommended:

- (a) Prof Chandra Shakher (Chairman CRC, and Centre's representative to BPGS)
- (b) Prof D T Shahani (HOD IDDC)
- (c) Dr. N K Jain (Program Coordinator, M Tech Instrumentation & M Des)
- (d) Dr. Gufran Khan (Secretary / Convener IDDC CRC)
- (e) *Other CFB faculty as CRC members:*
 - (i) Prof A L Vyas
 - (ii) Shri A K Agarwala
 - (iii) Shri S K Atreya
 - (iv) Dr. I P Singh
 - (v) Dr D S Mehta
 - (vi) Dr. Jyoti Kumar
- (f) *Cognate Dept faculty as CRC members:*
 - (i) Prof. M R Shenoy (Physics)
 - (ii) Prof. G S Vishwesaran (EE)
 - (iii) Prof P V Madhusudan Rao (ME)
 - (iv) Prof Naresh Bhatnagar (ME & Head MFF)
 - (v) Prof M S Kulkarni (ME)

9. **CFB Convener:** CFB unanimously approved Dr. Jyoti Kumar to be CFB secretary / convener.

10. **New Faculty Grant:** The board agreed to forward the proposal by Sh. Sumer Singh for IRD new faculty grant of INR 1 Lakh.

11. **Free Slot for Centre's Meeting:** The board agreed to hold routine meetings of the CFB and CRC & other meetings on Thursdays 3 to 5 pm.

12. **Other matters:**

- (i) The Board discussed the seepage of water from cooler and the unclean state of toilets at the centre and decided to take it up with the IITD estate and works department.
- (ii) Sh. Sumer Singh was requested to do needful to improve/ change the "IDDC" sign-board at entry.
- (iii) Head informed that HOD intranet site of IDDC was having some access problems due to which a number of important matters that needed consideration of CFB were delayed & CSC help was requested. CFB will soon take up these issues in near future
- (iv) Head requested that in forwarding requisitions for NR purchases, faculty should mention the *item serial number* in earlier CFB minutes that had approved the spending of 2012-13 budget, so that items as approved by CFB were procured.

Instrument Design Development Centre

Sub.: Minutes of Faculty Board Meeting held on Sept 27, 2012.

Date: 28-09-2012

Centre's Faculty board (CFB) meeting was held on **Sept 27, 2012 (Thursday) at 4.30 P.M.** in IDDC Head's room. The following members attended the meeting:

11. Prof. D.T. Sahani	Head IDDC
12. Dr. N. K. Jain,	Member
13. Prof. A. L. Vyas	Member
14. Prof. Chandra Shakher	Member
15. Dr. I. P. Singh	Member
16. Dr. A.K Agarwala	Member
17. Dr. D. S. Mehta	Member
18. Dr. Gufran S. Khan	Member
19. Sh. Sumer Singh	Member
20. Dr. Jyoti Kumar	Member Secretary FB

The following are the minutes of the meeting:

- 13. Welcome to new Head:** The faculty board welcomed the new head of IDDC and extended wishes. The previous head Dr. N.K Jain was thanked and congratulated for his contributions by the board.
- 14. Nomination of CRC Chairman:** The faculty board discussed the need to propose the names for new Chairman CRC and BPGS representative in light of the fact that the terms of the present CRC is expiring on 30th Sept 2012. The board agreed to propose the name of Prof. Chandra Shakher for both the posts unanimously.
- 15. Nomination of CRC Convener:** Dr. Gufran Khan was nominated as convener for the CRC by the board.
- 16. Nomination of CRC members:** Board agreed to invite Prof. P V M Rao (Mech), Dr. M S Kulkarni (Mech), Dr. N Bhatnagar (Mech) and Prof. M R Shenoy (Physics) as CRC members for the centre.
- 17. New Faculty Grant:** The board agreed to forward the proposal by Sh. Sumer Singh for IRD new faculty grant of INR 1 Lakh.
- 18. Slot for Meeting:** The board agreed to hold routine meetings of the CFB and CRC meetings on Thursdays 3 to 5 pm.
- 19. Water Cooler Seepage:** The Board discussed the matter of seepage of water from cooler at the centre and decided to take it up with the IITD estate and works department.

The meeting ended with thanks to the Chair.

Jyoti Kumar
Member Secretary, FB

Instrument Design Development Centre

Sub.: Minutes of Centre's Faculty Board Meeting held on Oct 08, 2012.

Date: 08-10-2012

Centre's Faculty board (CFB) meeting was held on **Oct 8 2012 (Monday) at 1030 am.** in IDDC Head's room. The following members attended the meeting:

21. Prof. D.T. Shahani	Head IDDC
22. Dr. N. K. Jain,	Member
23. Prof. A. L. Vyas	Member
24. Prof . Chandra Shakher	Member
25. Dr. I. P. Singh	Member
26. Sh. A.K. Agarwala	Member
27. Sh. S.K. Atreya	Member
28. Dr. D. S. Mehta	Member
29. Dr. Gufran S. Khan	Member
30. Sh. Sumer Singh	Member
31. Dr. Jyoti Kumar	Member Secretary CFB

The following are the minutes of the meeting:

20. **Nomination of Students for 'Kizuna Project', Japan:** The board decided that the highest CGPA students, one each from M.Tech and M.Des 2nd year batches will be forwarded from the centre for consideration. Names of Arya Sree T (2011JID3351, M.Tech, 3rd Sem, CGPA 9.73) and Shrikant Sathe (2011 JDS6017,M.Des, 3rd Sem, CGPA 9.41) were identified to suit the criteria and have been recommended. (cc Dean Student Affairs)
21. **Nomination for Committee on Faculty Affairs:** Dr. Gufran S. Khan was nominated by the board for representing IDDC in the Committee on Faculty Affairs. (Minutes to be sent to Dean Faculty)
22. **Nomination to Alumni Affairs Committee :** Dr. A. L. Vyas was nominated by the board to continue represent the centre in the Alumni Affairs committee. (Minutes to be sent to Dean Alumni Affairs)
23. **Computer Purchase for Faculty (PLN 03/F):** Based on the data of earlier years utilization by Dr N K Jain (ex-HOD), the CFB agreed on the names of Prof. A.K. Agarwala, Prof. Chandra Shakher, and Prof. D T Shahani who would avail the funds under PLN03/F, for purchase of new computer systems for faculty of centre. (Action Prof. AK Agarwala to kindly coordinate the specs and procurement)
24. **IRD New Faculty Grant:** The board agreed to forward the request by Dr. Jyoti Kumar to IRD for availing funds of INR 1 Lakh, under New Faculty Grant.
25. **IDDC Committee room infrastructure:** The board agreed to pursue installation of motorized screen and ceiling mounted projector in committee room

Meeting ended with thanks to the Chair.

Dr. Jyoti Kumar
(IDDC CFB Convener)

Copy: (by email & print) **CFB members** of IDDC
Dean Student Affairs (for kind consideration of point 1, the CFB recommendations of IDDC CFB)
Dean Faculty (for kind consideration of point 2, the CFB recommendations of IDDC CFB)
Dean Alumni Affairs (for kind consideration of point 3, the CFB recommendations of IDDC CFB)

Instrument Design Development Centre

Sub.: Minutes of Centre's Faculty Board Meeting held on Nov 08, 2012.

Date: 08-11-2012

Centre's Faculty board (CFB) meeting was held on **Nov 08, 2012 (Thursday) at 3.00 P.M.** in IDDC Head's room. The following members attended the meeting:

41. Prof. D.T. Shahani	Head IDDC
42. Dr. N. K. Jain,	Member
43. Dr. I. P. Singh	Member
44. Sh. A.K Agarwala	Member
45. Sh. S.K. Atreya	Member
46. Dr. D. S. Mehta	Member
47. Dr. Gufran S. Khan	Member
48. Sh. Sumer Singh	Member
49. Dr. Jyoti Kumar	Member Secretary CFB

Prof Chandra Shakher and Prof A L Vyas could not attend the meeting being on ex-India visit.

The following are the minutes of the meeting:

5. **SC/ST/OBS/PH recruitment drive:** The FB decided that the various research groups within the centre will identify the priority of the research areas and will inform the CFB in the next meeting date to report the same will be 19th Nov, Monday at 4PM. Faculty requested to discuss among themselves in detail so that the requirement can be sent priority-wise.
6. **Surrendering of supporting technical manpower from Centre:** The head informed the board that a meeting was convened by DD(O) in September 2012, of HODs of ME, Workshop and IDDC where they were informed that there was a decision of ECS (in 2008) to change the technical manpower strength in Departments and Centers as per the table received from DD(O), wherein the Centres' staff by 2014-15 would need to be reduced from the current 17 to only 6. Head informed the faculty that he had told the DD(O) in the meet that to the best of his knowledge the basis for such a drastic reduction was not discussed in IDDC, and that the background of any formulation for the reduction be kindly provided to him so that he can initiate a more informed discussion in his Centre. However there was no additional information received from DD(O) and a reminder was received recently due to which the current CFB was convened. Head informed the Centre that the only known fact was that MHRD had asked IIT to observe 1:1.1 ratio between academic faculty and non-academic staff, and this would apply to all staff whether in administration, works, security or technical. DD(O) had informed that only about 300 technical manpower may be available to the whole of IIT to be distributed amongst Dept / Centres. The following points were discussed /raised on this matter:
 - a. **Information to Centre on Quota Rationale:** The ex-HOC clarified that other than a mention (in 2008) that there may be a reduction in staff no rationale was intimated as to the basis of revised strength of six to the Centre. Ex-Convener CFB and other faculty also appeared to be in dark about the rationale with which the number of technical staff for the centre has been fixed at six. The faculty suggested that as the manpower strength was a very critical issue the Head again request the DD(O) for this information and come back to the CFB so that the faculty can decide with more awareness.
 - b. **Requirements on Manpower type due to Specific Nature of the Centres' Activities :** Board also observed that IDDC is a multidisciplinary group of faculty, and the Centre is highly hardware intensive where both the Instrument design and Industrial design activities require intensive and varied skilled technical support for even in teaching/laboratory courses. For example in Instrumentation program, students from varied backgrounds (physics, mechanical, electronics, etc) are taken, and have to receive practical training in varied areas like optics, mechanical, electronics and product design, in which they have no prior exposure. As a further instance, in optics, the skills needed to conduct optical workshop, and the skill needed to train in laser systems area – skills that are acquired by technical staff over long period of training, and so the two types of work cannot be handled by a single technician, nor for that matter this can be handled by student TAs, or the faculty alone. Further as many students do not have prior experience the faculty cannot run the courses and projects without technical support. This true to similar or greater extent in other areas. Same requirement is also true for the Industrial Design

program. In addition numerous staff in Mechanical fabrication facility have actually been serving the rest of Institutes PG students over years and so clubbing them as exclusive IDDC staff was not correct. Hence the faculty would like to be clear as to how these concerns have been considered in arriving at the revised reduced numbers being proposed for technical manpower at IDDC.

- c. **Request by Head to Identify similar activities (for clubbing staff) and minimum essential technical staff for IDDC:** Notwithstanding the above concerns and considering the fact that in future Centre would need to work with a reduced work force, the head urged the faculty members to discuss / identify activities performed by each research / teaching / area group in the centre and then mutually identify the exclusive areas (wrt skills needed) and also the overlaps in activities so that a reduced list of technical staff could be arrived at. The faculty requested that they would need for this exercise about a month or so, and that in meantime the Head may get more information on the rationale. Head also informed the faculty that the time frame for suggested reduction in staff as per the ECS minutes was 2014, and so they could make a time – graded plan, surrendering staff gradually, as immediate sudden change in staff strength was obviously not possible in one go. Further he would try to get more information on rationale from DD(O).

The board agreed to re-discuss this issue in light of facts accumulated till next meeting.

7. **New Course Proposal:** CFB discussed and agreed to forward the course titled “Creativity and Innovation” proposed by Prof. S.K. Atreya for further considerations and Shri Atreya agreed with the suggestion that the course would be a core elective and he would submit the proposal to this effect.
8. **IDDC Equipment relocation:** CFB agreed on the suggestion by Prof. S.K. Atreya to shift Vacuum Forming Machine to Industrial Design Studio.

Meeting ended with thanks to the Chair.

Dr. Jyoti Kumar
(IDDC CFB Convener)

Copy: (by email & print)

CFB members of IDDC

DD Operations

(for kind consideration of point 2)

Dean Academic

(for kind consideration of point 3)

Instrument Design Development Centre

Sub.: Minutes of Centre's Faculty Board Meeting held on Jan 30, 2013.

Date: 30-01-2013

Centre's Faculty board (CFB) meeting was held on **Jan 30, 2013 (Thursday) at 3.00 P.M.** in IDDC Head's room. The following members attended the meeting:

50. Prof. D.T. Shahani	Head IDDC
51. Prof . Chandra Shakher	Member
52. Prof. A. L. Vyas	Member
53. Dr. N. K. Jain,	Member
54. Sh. A.K Agarwala	Member
55. Dr. Gufran S. Khan	Member
56. Sh. Sumer Singh	Member
57. Dr. Jyoti Kumar	Member Secretary CFB

The following are the minutes of the meeting:

9. **Departmental Space Audit:** Head of the centre informed the board about the communication from the Space Audit Committee regarding need to measure the space utilized by the centre. The Head requested the faculty to do approximate internal area measurement of their respective labs and submit at earliest in Feb 2013. The board agreed that the task of measurement of space under heads of a) Faculty space b) Research Lab c) Teaching Lab d) Utility Space and d) Student space will be taken by the three research groups in the centre. The groups will report to the board about their space utilization by 28th February 2013.
10. **Nomination of students for S.N. Bose Scholar's Program:** The head informed the board of note received from Indo-US S&T Forum regarding invitation to nominate 5-10 meritorious students from Bachelor and Masters program from institute for summer internship at Wisconsin-Madison and partner universities. The faculty were requested to do individual assessments and suggest for nominations by the next CFB meeting.
11. **ECS minutes (Nov 2008) requiring IDDC to Surrender of Technical Manpower from IDDC:**
 - a. **Background:** Head informed the board that vide note 12.09.2012/ 3104 from DDO, the centre was advised that as per ECS minutes of 20/11/2008, the centre was entitled to have only 6 technical manpower as a target for 2014-15 and beyond. In this respect a meeting of faculty board of the centre was held on 08/11/2012 where faculty were requested to identify and discuss among the research groups of the technical manpower involved in their research and teaching activities so as to identify any overlaps of activities and identification of individual staff members who can be surrendered. The faculty had then requested 2 months time to respond to the issue.
 - b. **Discussion:** In the meeting it was identified that as per records, there are only 15 technical support staff in IDDC as below:

S.No.	Name	Employee Code	Date of retirement	Section
1.	Prem Nath	25655	31.12.2013	Welding
2.	Daya Ram Kukreti	25641	31.05.2014	Fitting
3.	Amarjit Singh	25658	31.01.2017	Grinding
4.	Surender Kumar Sharma	25708	30.09.2018	Turning
5.	Kunj Bihari	25662	31.03.2022	Carpentry
6.	Suresh Sharma	26398	31.12.2032	Milling
7.	Ashok Kumar Saxena	25709	31.05.2014	Design Studio
8.	Shiv Kumar Sharma	25070	30.06.2016	Design Studio
9.	P.B. Pandey	26286	31.01.2020	Design Studio
10.	V.K. Gandhi	26211	28.02.2020	NMR
11.	Masood Ali	26036	30.06.2019	MDIT
12.	Horam	26285	31.01.2028	Electronics
13.	Lalit Kumar Verma	26210	31.07.2022	Project
14.	S.C. Bansal	26195	31.01.2018	Optics
15.	Surender Kumar	26514	28.02.2022	Optics

The faculty board noted that of the above list, six staff members (SI Nos 1 to 6) were from the mechanical fabrication facility (MFN) which over many years were working for PG students of the IIT Delhi fraternity in general, helping with their Masters and PhD projects, and in that context were not exclusively dedicated to IDDC work. Further, the board noted that the MFN staff strength had been reducing without replenishment over years and the present staff strength is not sufficient to fulfill MFN goals. Till recently IDDC Mechanical Engineering faculty were Coordinators of the MFN unit. However, with the retirement of Prof I P Singh, Prof. N. Bhatnagar of Mechanical

Engineering Department was appointed as coordinator MFN. Hence, the staff in MFN has been working under Mech Engg Professor for the Institute. The CFB recommended that as Prof. I P Singh and Prof. Bhatnagar had mutually decided that till June 2013, that is, till Prof I P Singh is in IIT (post retirement), he will locally coordinate MFN and thereafter Prof. Bhatnagar will take full charge, hence in the list above, 6 members of staff, (Sl Nos 1 to 6) may be taken away from IDDC after June 2013.

Of the balance 9 technical staff members, it is noted that all these were in various labs and intimately linked to Masters, PhD student labs and therefore needed suitable additional time for consideration for phased release to arrive at final sanctioned 6 staff strength by ECS. Below is the group wise status of the staff requirements.

- i. **Product Design Group:** Staff working in this M Des program right now are : (i) Sh. Ashok Kumar Saxena (Sl. No.7) who is retiring on 31.05.2014 and he along with (ii) Shiv Kumar Sharma (Sl. No. 8) is intimately linked with design program which is very intensive in practical skills like model making etc. where there is already shortage of faculty and technical staff. Hence, the CFB recommended that these two staff members continue in IDDC. However, (iii) Mr. P.B. Pandey (Sl. No. 9) can be surrendered by Sept 2013.
 - ii. **Electronics Group:** Four staff members V.K. Gandhi, Masood Ali, Horam and Lalit Kumar Verma (Sl. Nos. 10-13) are intimately linked with teaching hence they should continue with iddc.
 - iii. **Optics Group:** Two staff members, S.C. Bansal and Surender Kumar (Sl. Nos. 14-15) are intimately linked with teaching hence they should continue with iddc.
- c. **Recommendations:**
- i. Sl. Nos. 1 to 6 may be shifted from IDDC after July 2013.
 - ii. Sl. No. 9 may be shifted with immediate effect.
 - iii. Sl. No. 7 will anyway retire in 2013, hence no need to surrender and the balance 7, namely sl. Nos. 8 and 10 to 15, will continue in IDDC till 2014 end. The board agreed to take the decision on the additional one person to be surrendered in Dec 2014.

Table of staff to be surrendered in 2013

S.No.	Name	Employee Code	Date of retirement	Surrender Plan
1.	Prem Nath	25655	31.12.2013	July 2013
2.	Daya Ram Kukreti	25641	31.05.2014	July 2013
3.	Amarjit Singh	25658	31.01.2017	July 2013
4.	Surender Kumar Sharma	25708	30.09.2018	July 2013
5.	Kunj Bihari	25662	31.03.2022	July 2013
6.	Suresh Sharma	26398	31.12.2032	July 2013
7.	P.B. Pandey	26286	31.01.2020	Immediate

Table of staff to continue in IDDC and decision to be taken in Dec 2014

S.No.	Name	Employee Code	Date of retirement	
1.	Ashok Kumar Saxena	25709	31.05.2014	Retiring in IDDC in May 2014
2.	Shiv Kumar Sharma	25070	30.06.2016	To be decided in Dec 2014
3.	V.K. Gandhi	26211	28.02.2020	To be decided in Dec 2014
4.	Masood Ali	26036	30.06.2019	To be decided in Dec 2014
5.	Horam	26285	31.01.2028	To be decided in Dec 2014
6.	Lalit Kumar Verma	26210	31.07.2022	To be decided in Dec 2014
7.	S.C. Bansal	26195	31.01.2018	To be decided in Dec 2014
8.	Surender Kumar	26514	28.02.2022	To be decided in Dec 2014

The faculty board requested the head to communicate the above recommendations in 3(c) to DDO.

Meeting ended with thanks to the Chair.

Dr. Jyoti Kumar

Copy: (by email & print) **CFB members** of IDDC (IDDC CFB Convener)
(print) **DD Operations** (for kind consideration of point 3, c)

Instrument Design Development Centre

Sub.: Minutes of Centre's Faculty Board Meeting held on Jan 30, 2013.

Date: 30-01-2013

Centre's Faculty board (CFB) meeting was held on **Nov 08, 2012 (Thursday) at 3.00 P.M.** in IDDC Head's room. The following members attended the meeting:

58. Prof. D.T. Shahani	Head IDDC
59. Prof . Chandra Shakher	Member
60. Prof. A. L. Vyas	Member
61. Dr. N. K. Jain,	Member
62. Sh. A.K Agarwala	Member
63. Dr. Gufran S. Khan	Member
64. Sh. Sumer Singh	Member
65. Dr. Jyoti Kumar	Member Secretary CFB

The following are the minutes of the meeting:

12. **Departmental Space Audit:** Head of the centre informed the board of the communication from the Space Audit Committee regarding need to measure the space utilized by the centre. The board agreed that the task of measurement of space under heads of a) Faculty space b) Research Lab c) Teaching Lab d) Utility Space and d) Student space will be taken by the three research groups in the centre. The groups will report to the board about their space utilization by 28th February 2013.
13. **Nomination of students for S.N. Bose Scholar's Program:** The head informed the board of note received from Indo-US S&T Forum regarding invitation to nominate 5-10 meritorious students from Bachelor and Masters program from institute for summer internship at Wisconsin-Madison and partner universities. The faculty were requested to do individual assessments and suggest for nominations by the next CFB meeting.
14. **Surrender of Technical Manpower from IDDC:** Head informed the board that vide note 12.09.2012/ 3104 from DDO, the centre was advised that as per ECS minutes of 20/11/2008, the centre was entitled to have only 6 technical manpower as a target for 2014-15 and beyond. In this respect a meeting of faculty board of the centre was held on 08/11/2012 where faculty were requested to identify and discuss among the research groups of the technical manpower involved in their research and teaching activities so as to identify any overlaps of activities and identification of individual staff members who can be surrendered.
 - a. In the meeting it was identified that as per records, there are only 15 technical support staff in IDDC. The faculty board noted that the mechanical fabrication facility in- charge from Sept 2012 is Prof. N. Bhatnagar of Mechanical Engineering Department. Hence, the 6 technical staff members from IDDC are under administrative charge of Prof. Bhatnagar for any job assignments. The board also noted that Prof. IP Singh from IDDC, the previous in-charge of the mechanical fabrication lab, shares some of the administrative responsibilities as an understanding between him and Prof. Bhatnagar. Hence, the CFB felt that as the most immediate technical staff surrender step for these 6 staff members be considered for surrender by Sept 2013.
 - b. Of the balance 9 technical staff members it is noted that Sh. Ashok Kumar Saxena is retiring on 31.05.2014 and he is intimately linked with design program where there is already dearth of faculty and technical staff. Hence it is requested that he be allowed to retire from the centre.
 - c. Of the remaining 8 members, Mr. P.B. Pandey can be surrendered by Sept 2013.
 - d. Of the balance 7 technical staff CFB was requested by the head to see how the work can be redistributed. After reassessment, the CFB will rediscuss the matter academic year 2014-15.

Meeting ended with thanks to the Chair.

Dr. Jyoti Kumar
(IDDC CFB Convener)

Copy: (by email & print) **CFB members of IDDC**
DD Operations (for kind consideration of point 3)

Instrument Design Development Centre

Sub.: Minutes of Centre's Faculty Board Meeting held on April 15, 2013.

Date: 15-04-2013

Centre's Faculty board (CFB) meeting was held on **April 15 2012 (Monday) at 12pm** in IDDC Head's room. The following members attended the meeting:

66. Prof. D.T. Shahani	Head IDDC
67. Dr. N. K. Jain,	Member
68. Prof. A. L. Vyas	Member
69. Prof. Chandra Shakher	Member
70. Dr. I. P. Singh	Member
71. Sh. A.K. Agarwala	Member
72. Dr. Gufran S. Khan	Member
73. Sh. Sumer Singh	Member
74. Dr. Jyoti Kumar	Member Secretary CFB

The following are the minutes of the meeting:

26. **Discussion on budget for FY 2013-14:** The faculty board discussed the budget requirements for FY 2013-14. The board decided to send the requirements initially for the first half of the year. Recurring and non recurring expenses for courses being taught next semester were listed as per the requirements of different course coordinators and a final list of items has been prepared. The list has been attached with the minutes.
27. **Discussion on Environmental Health and Lab Safety Unit (EHLSU):** The board discussed and appraised the efforts being taken by the institute for the lab safety. The board decided to take following actions towards EHLSU:
 - a. Dr. Gufran Khan was nominated as the In-Charge from IDDC for safe working in Labs. He will coordinate with the central team of EHLSU.
 - b. All lab in-charges were requested to share information about usage of any hazardous substances in the their labs.
 - c. All lab in-charges were requested to develop and share modalities for safer working in the labs.
 - d. All lab in-charges were requested collate information on lab safety and develop protocols of use of lab equipments. They were also requested to raise any requirements from lab towards making the lab a safer place to work.
28. **Departmental Space Audit:** The board agreed to submit the space being used by various faculty/ labs by 26th April.

Meeting ended with thanks to the Chair.

Dr. Jyoti Kumar
(IDDC CFB Convener)

Copy: (by email & print) **CFB members** of IDDC
In-charge Planning (for kind consideration of point 1, the
CFB recommendations of IDDC CFB)
DD Operations (for kind consideration of point 2.a, the CFB
recommendations of IDDC CFB)

Budget Requirement till August 2013 for IDDC (Non Recurring)

Sl No.	Items Required	Course	Faculty Involved	Budget Required	Priority
1	UPS, Drill	IDP 705	Prof. D.T. Shahani, Dr. N. K. Jain, Prof. A. L. Vyas, Sh. A.K. Agarwala	3.75 L	1
2	ALV, DSP equipments	NMR Lab			
3					
5	Precision Mechanical mounts for holding achromatic lenses, polarizing optics.	WS 133 and WS132 (optical workshop)	Dr. Gufran Khan and Prof. Chandra Shakher	1.5 L	1
6	Abbe Refractometers			0.75 L	1
7	He-Ne Laser			2L	1
8	Eye Tracker License	DIL 711	Dr. Jyoti Kumar	1L	1
9	Manikins	DIP 751	Sh. Sumer Singh	1L	1
10	Spray Paint Booth	DIL 731	Sh. S.K. Attreya	1L	1
11	Sundry wearable mechanical parts	Mechanical workshop	Sh. IP Singh	.5 L	1
12	Projector	Committee room	All Faculty	1L	1
Total				12.5	

Budget Requirement till August 2013 for IDDC (Recurring)

Sl No.	Items Required	Course	Faculty Involved	Budget Required	Priority
1	Grinding and polishing materials, diamond paste for polishing metals, polishing pads, polyurethane pads, tissues, glass cutters, safety accessories		Dr. Gufran Khan and Prof. Chandra Shakher	.25	1
2	Repair and maintenance of grinding and polishing machines in optical workshop		Dr. Gufran Khan and Prof. Chandra Shakher	1.5	1
3	Arduino Boards	DIL 711	Dr. Jyoti Kumar	.5 L	1
4	Foam, Wood, Acrylic Sheets, POP	DIL 711, DIP 751, DIL 731	Sh. Sumer Singh, Sh. S.K. Atreya, Dr. Jyoti Kumar	1.0 L	1
5	Repair of Vaccum forming machine			0.5 L	1
6	Marker Pens and paper	DIP 751	Sh. Sumer Singh	0.5 L	1
7	Mechanical Workshop		Dr. I.P. Singh	0.5	1
8					
9					
10					
11					
12					

Budget Requirement for upgrade of labs for IDDC

Sl No.	Items Required	Course	Faculty Involved	Budget Required	Priority
1	Pressure sensitive Touch Screen Monitor HD	DIP 751	Sh. Sumer Singh	3.2 L	1
2	Face Recognition Software	DIP 721	Dr. Jyoti Kumar	7.0 L	1
3	Affectiva Emotion Sensor	DIL 711	Dr. Jyoti Kumar	4.0 L	2
5	Projector for Design Studio	DIL 721	Sh. S.K. Atreya	1.0 L	1
6	Tablet Digitizer	DIL 721	Sh. S.K. Atreya	2.0 L	1
7	Computers 15	DIL 752	Sh. S.K. Atreya	5 L	2
	Segway	DIP 811	Sh. Sumer Singh	5L	2
8	Precision Mechanical mounts such as Rotation stages, Tilt and tilt mounts, Five axis mounts, Goniometers etc.		Dr. Gufran Khan and Prof. Chandra Shakher	2.5 L	1
9	Linear encoder			2.25 L	1
10	CCD Camera			1.5 L	1
11	He-Ne Laser			2.0 L	1
12					

Instrument Design Development Centre

Sub.: Minutes of Centre's Faculty Board Meeting held on August 06, 2013.

Date: 07-08-2013

Centre's Faculty board (CFB) meeting was held on **August 6 2013 (Tuesday) at 4pm** in IDDC Head's room. The following members attended the meeting:

75. Prof. D.T. Shahani	Head IDDC
76. Dr. N. K. Jain,	Member
77. Prof. A. L. Vyas	Member
78. Prof. Chandra Shakher	Member
79. Dr. I. P. Singh	Member
80. Sh. Sumer Singh	Member
81. Dr. Jyoti Kumar	Member Secretary CFB

The following are the minutes of the meeting:

29. **Discussion on Internal Review of IITD:** The faculty board discussed the requirements for the internal review of IITD. The Board decided that every faculty member will create their report comprising of contributions/achievements. The faculty board decided that the individual reports be submitted by august end to the CFB convener. Further, it was decided that the research groups would propose the list of names of the reviewers external to IITD for the centre.
30. **Merger of IDDC Computer Lab and Room no. WS119:** The board discussed the need to rejuvenate the computer lab at IDDC. It also identified that the room needs to be extended to accommodate more students. The board therefore decided that the room no. WS 119, erstwhile 'Nano composites Material Fabrication Laboratory' be merged with the computer lab.
31. **Discussion on 3-year Part Time:** The board discussed the proposal to introduce 3-year part time M.Tech program as approved by the senate and the members agreed to implement this in the IDDC. The faculty members were requested to identify the no. of such assistantship positions required in their labs. The Faculty Board agreed to decide the total no. of such positions to be offered from IDDC in next board meeting.
32. **Discussion on Courses Floated by other Departments:** The board discussed the course nos. EEL-795, HUL 714, AML 740 and CSL 791. The board identified that there were no significant overlaps with the present courses of the centre and hence has no objection against the course being floated.

Meeting ended with thanks to the Chair.

Dr. Jyoti Kumar
(IDDC CFB Convener)

Copy: (by email & print) **CFB members** of IDDC
PG Section (for kind consideration of point 4, the CFB
recommendations of IDDC CFB)

Instrument Design Development Centre

Date: 01-10-2013

Sub.: Minutes of Centre's Faculty Board Meeting held on Sept 30, 2013.

Centre's Faculty board (CFB) meeting was held on **Sept 30 2013 (Monday) at 3pm** in IDDC Head's room. The following members attended the meeting:

82. Prof. D.T. Shahani	Head IDDC
83. Prof. A. L. Vyas	Member
84. Prof. Chandra Shakher	Member
85. Dr. N. K. Jain,	Member
86. Shri A K Agarwala	Member
87. Sh. S.K. Atreya	Member
88. Dr. G. S. Khan	Member
89. Dr. I. P. Singh	Member
90. Sh. Sumer Singh	Member
91. Dr. Jyoti Kumar	Member Secretary CFB

The following are the minutes of the meeting:

33. Discussion on Budget for IDDC for Sept'13-March'14: The faculty board discussed the budget requirements for the second half of the academic year 13-14. A note with details of the fund requested will be circulated shortly by the HOC.

34. Reconstitution of CRC: CFB discussed the names for new CRC as the term of present CRC is expiring on 30th Sept 2013. The board agreed to continue the members of the present CRC and hence the CFB unanimously recommended:

(g) Prof Chandra Shakher	(Chairman CRC, and Centre's representative to BPGS)
(h) Prof D T Shahani	(HOD IDDC)
(i) Dr. N K Jain	(Program Coordinator, M Tech Instrumentation & M Des)
(j) Dr. Gufran Khan	(Secretary / Convener IDDC CRC)

(k) *Other CFB faculty as CRC members:*

- (vii) Prof A L Vyas
- (viii) Shri A K Agarwala
- (ix) Shri S K Atreya
- (x) Dr. Jyoti Kumar

(l) *Cognate Dept faculty as CRC members:*

- (vi) Prof. M R Shenoy (Physics)
- (vii) Prof. G S Vishwesaran (EE)
- (viii) Prof P V Madhusudan Rao (ME)
- (ix) Prof Naresh Bhatnagar (ME & Head MFF)
- (x) Prof M S Kulkarni (ME)

35. Discussion on Courses Floated by Mathematics Department: The board observed no significant overlap between the proposed courses by the mathematics department namely, MAL 742, 743, 751,761,861 & 862 and IDDC courses and therefore is no objection.

36. Discussion on formation of BAP: The board welcomed the move and recommended that IDDC should have two representatives in the BAP.

37. Information from 5th faculty affairs meeting: Board was appraised of the discussions in the faculty affairs meeting. The board welcomed the efforts of the faculty affairs and noted that IDDC should request to horticulture department for maintenance of IDDC lawns.

38. Others

- a. **Discussion on DRDO invitation for soft skill development courses:** CFB invited interested faculty to put up proposals for the courses in the DRDO circular.
- b. **PhD Viva request:** All faculty were informed to arrange Viva of awaiting PhD candidates before 18th Oct '13 as per the official note.
- c. **Advertisement for Post Doc Fellows:** CFB requested all faculty to give feedback by 8th Oct to the HOC for the advertisement to be floated.
- d. **Initiating proposal for Bachelors program at IDDC:** It was observed that new opportunities to start bachelor programs in instrumentation and Industrial design have emerged since the last efforts were made. Prof. Atreya observed that "there is an urgent and emerging need for Industrial designers in the Indian context and design professionals are in much demand in Industry. He also mentioned that IIT Guwahati has a B.Des program and IIT Bombay, IIITDM Jabalpur, and other institutes are starting B.Des programmes shortly. The need for starting such a programme was

iterated by members of design fraternity at recently concluded CEED meeting at Jabalpur. Therefore, the proposal for a B.Des programme which earlier had been forwarded by IDDC to the institute, is needed to be followed more vigorously". Also, Prof. Sahani stressed that "instrumentation is being taught at B.Tech levels in many prestigious colleges and universities and it is a very important component of the industrial development. Hence, a program in B.Tech instrumentation should also be followed vigorously".

With respect to above discussion, the faculty board nominated Prof. S.K. Atreya to formulate the B.Des program and Dr. Gufran S. Khan to do the same for instrumentation and present to the CFB at the earliest.

- e. **Three year part time M.Tech and M. Des.:** In follow up of the last CFB meeting, as per the recommendation of the senate, the board agreed to initiate 3 year part time positions with a maximum limit on intake as 4 for instrumentation technology and 6 for Industrial design programs per year from next academic session.

Meeting ended with thanks to the Chair.

Copy: (by email & print)

CFB members of IDDC

Planning Unit

(for consideration of point 1)

Dean Academics

(for consideration of point 2 and 4)

PG Section

(for consideration of point 3,

and 6 e)

**Dr. Jyoti Kumar
(IDDC CFB
Convener)**

Instrument Design Development Centre

Date: 01-10-2013

Sub.: Minutes of Centre's Faculty Board Meeting held on Sept 30, 2013.

Centre's Faculty board (CFB) meeting was held on **Sept 30 2013 (Monday) at 3pm** in IDDC Head's room. The following members attended the meeting:

92. Prof. D.T. Shahani	Head IDDC
93. Prof. A. L. Vyas	Member
94. Prof. Chandra Shakher	Member
95. Dr. N. K. Jain,	Member
96. Shri A K Agarwala	Member
97. Sh. S.K. Atreya	Member
98. Dr. G. S. Khan	Member
99. Dr. I. P. Singh	Member
100. Sh. Sumer Singh	Member
101. Dr. Jyoti Kumar	Member Secretary CFB

The following are the minutes of the meeting:

39. Discussion on Budget for IDDC for Sept'13-March'14: The faculty board discussed the budget requirements for the second half of the academic year 13-14. A note with details of the fund requested will be circulated shortly by the HOC.

40. Reconstitution of CRC: CFB discussed the names for new CRC as the term of present CRC is expiring on 30th Sept 2013. The board agreed to continue the members of the present CRC and hence the CFB unanimously recommended:

- | | |
|--------------------------|---|
| (m) Prof Chandra Shakher | (Chairman CRC, and Centre's representative to BPGS) |
| (n) Prof D T Shahani | (HOD IDDC) |
| (o) Dr. N K Jain | (Program Coordinator, M Tech Instrumentation & M Des) |
| (p) Dr. Gufran Khan | (Secretary / Convener IDDC CRC) |

(q) *Other CFB faculty as CRC members:*

- | |
|-------------------------|
| (xi) Prof A L Vyas |
| (xii) Shri A K Agarwala |
| (xiii) Shri S K Atreya |
| (xiv) Dr. Jyoti Kumar |

(r) *Cognate Dept faculty as CRC members:*

- | | |
|--------------------------------|-----------------|
| (xi) Prof. M R Shenoy | (Physics) |
| (xii) Prof. G S Vishwesaran | (EE) |
| (xiii) Prof P V Madhusudan Rao | (ME) |
| (xiv) Prof Naresh Bhatnagar | (ME & Head MFF) |
| (xv) Prof M S Kulkarni | (ME) |

41. Discussion on Courses Floated by Mathematic Department: The board observed no significant overlap between the proposed courses by the mathematics department namely, MAL 742, 743, 751, 761, 861 and 862 and IDDC courses and therefore has no objection.

42. Discussion on formation of BAP: The board welcomed the move and recommended that IDDC should have two representatives in the BAP.

43. Information from 5th faculty affairs meeting: Board was appraised of the discussions in the faculty affairs meeting. The board welcomed the efforts of the faculty affairs and noted that IDDC should request to horticulture for maintenance of IDDC lawns.

44. Others

- Discussion on DRDO invitation for soft skill development courses:** CFB invited interested faculty to put up proposals for the courses.
- PhD Viva request:** All faculty were informed to arrange Viva of awaiting PhD candidates before 18th Oct '13 as per the official note.
- Advertisement for Post Doc Fellows:** CFB requested all faculty to give feedback by 8th Oct to the HOC for the advertisement to be floated.
- Reinitiating of proposal for Bachelors program at IDDC:** The board observed that new opportunities to start a bachelors programs in instrumentation and Industrial design have emerged since the last efforts were made. The board agreed to reinitiate the efforts and requested interested faculty to lead the proposals.
- Three year part time M.Tech and M. Des.:** In follow up of the last CFB meeting, as per the recommendation of the senate, the board agreed to initiate 3 year part time positions with a

maximum limit on intake as 4 for instrumentation technology and 6 for Industrial design programs per year from next academic session.

Meeting ended with thanks to the Chair.

Copy: (by email & print)

CFB members of IDDC

Planning Unit (for consideration of point 1)

Dean Academics (for consideration of point 2 and 4)

PG Section (for consideration of point 3, and 6 e)

Dr. Jyoti Kumar
(IDDC CFB
Convener)

Instrument Design Development Centre

Sub.: Minutes of Centre's Faculty Board Meeting held on February 03, 2014.

Date: 03-02-2014

Centre's Faculty board (CFB) meeting was held on **February 03, 2014 (Tuesday) at 3pm** in IDDC Head's room. The following members attended the meeting:

102.Prof. D.T. Shahani	Head IDDC
103.Dr. N. K. Jain,	Member
104.Sh. Sumer Singh	Member
105.Dr. Gufran Khan	Member
106.Sh. Sumer Singh	Member
107.Dr. Jyoti Kumar	Member Secretary CFB

The following are the minutes of the meeting:

45. **Discussion on Fund Requirement for the centre:** The head invited the faculty from the M.Des. program to propose the requirements. The faculty expressed the requirements as tabulated in table 1, the board agreed to forward the requirements to planning unit for sanction of the same.
46. **Discussion on urgent need of non plan funds for the centre:** The faculty members raised the issue of urgent need of the non plan budget funds as the centre's both programs are dependent on hands on exercises by students where the consumable requirements are considerable. The board agreed to forward the requirement to the planning unit.
47. **Request for one page CV:** The head requested all the faculty members to urgently communicate their one page CV's to the heads office in soft copy for the centre's review.

Item	Estimated Cost	Faculty	Courses	Justification
Laser Cutting Machine	4.0 L	JK	DIP 892, DIP 791, DIP 841	To create custom patterns in acrylic, thick paper, thin metal towards development of forms in products
Cintique Monitor	3.5 L	SKA	DIP 752	CAD rendering
LED 55" monitor	2.0 L	SS	All Courses	Presentation of the lecture components of studio courses
Short Focus LED Projector	1.0 L	SS	All Courses	Presentation of the lecture components of studio courses
3D Printer	2.0 L	SKA	DIP 791, DIP 841	For creation of low fidelity plastic models and prototypes of design concepts.
Automatic Potter's Wheel	1.0 L	SS	DIP 781	For development of clay models of design concepts
Paper Mache Shop with accessories	1.0 L	SS	DIP 781	For development of paper models of design concepts
A3 Scanner	0.5 L	SS	All Courses	For scanning of sketches towards digital prototype development
A3 Printer	0.5 L	SS	All Courses	Printing of digital sketches and renderings
UPS	0.5 L	JK	UX Lab, DIS 802	For power back up of PCs.
Rendering Spray Brush	0.5 L	SS	DIP 751	For hand renderings
PA system	0.5 L	SS	All Courses	For Audio visual presentations and visiting faculty seminars
RO system	0.5 L	SS	M.Des Studio	For potable water for studio
Ergonomics Software	0.5 L	JK	DIL 731	For teaching basic anthropometry concepts to M.Des students
Tablet PC	1.0 L	SKA	DIP 721	For simulation of design methods
Biometric system and Security camera	1.0 L	JK	All courses	for Design Studio

APPENDIX 22 – CRC MEETS

Instrument Design Development Centre (IDDC)

Date: Sept. 8, 2003

Subject: Minutes of CRC Meeting held on 8th September 2003 at 12.00 Noon in the Head's Room of IDDC.

A CRC Meeting was held in the Head's Room of IDDC at 12.00 Noon on Monday the 8th September, 2003. The following members attended the meeting:

1. Prof. D. T. Shahani,	Chairman, CRC
2. Dr. A. L. Vyas,	Head, IDDC
3. Dr. Rakesh Kumar,	Member
4. Dr. I. P. Singh	Member
5. Sh. L. K. Das	Member
6. Dr. D. S. Mehta	Convener, CRC
7. Sh. A. K. Agarwal	Special Invitee
8. Prof. Anurag Sharma	(External Expert), Physics Department.

The Committee thanked the outgoing Dr. Rakesh Kumar, Chairman, CRC and Dr. I. P. Singh, Convener CRC, for their smooth conduct of CRC during their tenure and also welcomed Prof. D. T. Shahani, as new Chairman CRC and Dr. D. S. Mehta as new convener of CRC.

The main agendas of the meeting were the following:

A. Discussion on the MHRD projects proposed by the IDDC faculty.

Two projects were received and discussed in the meeting. CRC recommended both the projects be submitted to IRD, IIT Delhi for further processing.

S. No.	Project Title	Name of the Principal Investigator	Category	Amount (Rs.) in Lakhs
1.	RF-Networking Technologies	Sh. A. K. Agarwal (MDIT)	R & D	19.5
2.	Development of 3-D Non-conventional photomechanical fabrication facility	Dr. Rakesh Kumar (Optics)	R & D	20.0

B. Discussion on the extension of the scholarship/assistantship of Mr. Shukla (Research Scholar, IDDC)

CRC requested to the Supervisor (Dr. I. P. Singh) to convene the SRC meeting to specify unfinished work and get time frame of completion of the same from the student. This agenda and other issues raised in this matter would be subsequently discussed.

The meeting ended with a vote of thanks to the chair.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: Oct. 14, 2003

Subject: CRC Meeting on 20th October 2003 at 12.00 Noon in the Head's Room of IDDC.

A CRC Meeting will be held in the Head's Room of IDDC at 12.00 Noon on Monday the 20th October, 2003. The following are the main agenda of the meeting:

1. Additional Ph. D. Supervisor of Mrs. Priti Singh, Ph. D. Student, IDDC, as Prof. Chandra Shakher joined NIT, Hamirpur in lieu.
2. Consideration of application of Mr. Shailendra Shukla with respect to his Ph. D. work.

To all members

- | | |
|-------------------------|--|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Dr. I. P. Singh | Member |
| 5. Sh. L. K. Das | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |
| 7. Prof. Anurag Sharma | (External Expert), Physics Department. |

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: Oct. 20, 2003

Subject: Minutes of CRC Meeting held on 20th October, 2003 at 12.00 Noon in the Head's Room of IDDC.

A CRC Meeting was held in the Head's Room of IDDC at 12.00 Noon on Monday the 20th October, 2003. The following members attended the meeting:

1. Prof. D. T. Shahani,	Chairman, CRC
2. Dr. A. L. Vyas,	Head, IDDC
3. Dr. Rakesh Kumar,	Member
4. Dr. I. P. Singh	Member
5. Dr. D. S. Mehta	Convener, CRC

Shree. L. K. Das (Member) and Prof. Anurag Sharma (External Expert), Physics Department could not attend the meeting.

1. In response to the various representations made by Mr. Shailendra Shukla regarding his Ph. D. work, the committee noted that the two documents have been received are as follows;
 - i. Mr. Shailendra Shukla has given a letter (copy of the letter enclosed) of unconditional apology for certain events of the past and shown willingness to attend any work given by supervisors for his Ph. D. His letter is forwarded by CRC to his supervisors for their considerations and comments.
 - ii. In response to CRC's suggestions, the SRC for Mr. Shailendra Shukla met on 14-10-2003 and have made very specific recommendations for work to be finished by Mr. Shailendra Shukla. The committee noted that the work plan has been specified, and the time frame for the review of the work (i.e. Dec. 2003 and June 2004) has also been specified (as per attached minutes of SRC meeting).

The CRC recommends that the student work in co-operative mode and attend the unfinished work specified by SRC and Supervisors at the earliest.

2. A request was received from Prof. Chandra Shakher that in view of his being away on lien, his Ph. D. student Mrs. Priti Singh have two additional supervisors, namely, Prof. R. S. Sirohi (Director), and Prof. Ajit Kumar (Physics Department). The committee recommends above two additional supervisors for Mrs. Priti Singh. The request for additional supervisors is to be send to PG section for due approval.

The meeting ended with thanks to the chair.

(D. S. Mehta)
Convener, CRC

Enclosure:

1. Copy of the letter of Mr. Shailendra Shukla.
2. Copy of SRC minutes of Mr. Shailendra Shukla.

Instrument Design Development Centre (IDDC)

Date: Dec. 5, 2003

Subject: CRC Meeting on 8th December 2003 at 12.00 Noon in the Committee Room of IDDC.

A CRC Meeting will be held in the Committee Room of IDDC at 12.00 Noon on Monday the 8th December 2003. The following are the main agenda of the meeting:

1. Moderation of the grades.
2. Synopsis of Mr. Shakeb Khan (Ph. D. student IDDC).
3. Ph. D. progress reports of Research Scholars.

To all members and course Supervisors

- | | |
|-------------------------|--|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Dr. I. P. Singh | Member |
| 5. Sh. L. K. Das | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |
| 7. Prof. Anurag Sharma | (External Expert), Physics Department. |
| 8. Sh. N. K. Jain | |
| 9. Sh. A. K. Agarwala | |

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: Dec. 9, 2003

Subject: CRC Meeting on 12th December 2003 at 10.00 A.M. in the Committee Room of IDDC.

A CRC Meeting will be held in the Committee Room of IDDC at 10.00 A. M. on Friday the 12th December 2003. The following are the main agenda of the meeting:

1. **Selection of Ph. D. Candidates for IDDC.** (The applications may be seen in Dr. Mehta's Room (WS-122)).

All Faculty of IDDC are invited to participate.

CRC Members

- | | |
|-------------------------|--|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Dr. I. P. Singh | Member |
| 5. Sh. L. K. Das | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |
| 7. Prof. Anurag Sharma | (External Expert), Physics Department. |

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: Dec. 8, 2003

Subject: Minutes of CRC Meeting of 8th December 2003 at 12.00 Noon in the Committee Room of IDDC.

In the CRC meet Prof. Anurag Sharma and Sh. L. K. Das could not attend. The following decisions were taken:

1. Moderation of the grades was conducted.
2. Synopsis of Mr. Shakeb Khan (Ph. D. student IDDC): It was informed by supervisors that his synopsis presentation was successfully over. The CRC advised that list of examiners and Synopsis copies be submitted to it as per norms.
3. Ph. D. progress reports of Research Scholars: All students to submit progress reports at earliest and supervisors to kindly forward the same keeping in mind schedules announced
4. A short duration RP project on Automated Voltage Stabilisers for Acs being sponsored by LG Electronics, under Shri A K Agarwala was reviewed by the committee and recommended for processing to IRD.

Copy to all CRC Members

- | | |
|-------------------------|--|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Dr. I. P. Singh | Member |
| 5. Sh. L. K. Das | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |
| 7. Prof. Anurag Sharma | (External Expert), Physics Department. |

Invitees Course Supervisors

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: Dec. 8, 2003

Subject: Minutes of CRC Meeting of 28th November 2003 at 12.00 Noon in the IDDC Head's Room.

A CRC meeting was held on 28th November 2003 at 12.00 Noon in the IDDC Head's Room for the selection of candidates for Ph. D. in IDDC. The selection was done as per Institute norms. The following candidates were short listed and called for interview to be held on 12th December, 2003 at 10.00 A.M.

1. Mr. Hirok Majumdar
2. Mr. Kasojjala Santhhosh Kumar
3. Mr. Alex P. James
4. Mr. Achintya Kuma Sarkar
5. Mr. Ramesh Chand

Copy to all CRC Members

- | | |
|-------------------------|--|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Dr. I. P. Singh | Member |
| 5. Sh. L. K. Das | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |
| 7. Prof. Anurag Sharma | (External Expert), Physics Department. |

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: Dec. 17, 2003

Subject: CRC Meeting on 22nd December 2003 at 12.00 Noon in the IDDC Heads Room.

A CRC Meeting will be held in the IDDC Heads Room at 12.00 Noon on Monday the 22nd December 2003. The following are the main agenda of the meeting:

- 1. Extension of Institute fellowship for Mrs. Priti Singh and Mrs. Saba (Ph. D. students Laser applications and Holography Lab) for 5th Year.**
- 2. Discussion on the progress reports of the Ph. D. students.**

All CRC Members

- | | |
|-------------------------|--|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Dr. I. P. Singh | Member |
| 5. Sh. L. K. Das | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |
| 7. Prof. Anurag Sharma | (External Expert), Physics Department. |

Convener, CRC

(D. S. Mehta)

Instrument Design Development Centre (IDDC)

Date: Dec. 12, 2003

Subject: Minutes of CRC Meeting held on December 12, 2003 at 10.00 A. M. in the IDDC Heads Room.

The following members of the CRC and Faculty of IDDC were present.

- | | |
|-------------------------|---------------|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Dr. I. P. Singh | Member |
| 5. Dr. D. S. Mehta | Convener, CRC |
| 6. Sh. S. K. Atreya | Faculty, IDDC |

Prof. Anurag Sharma and Sh. L. K. Das could not attend the meeting. The following were the agenda of the meeting:

- A. Test /Interview of the shortlisted candidates for Ph. D. programme.
- B. Synopsis of the Thesis and appointment of Examinors of Mr. Shakeb Khan (Ph. D. student Entry No. 1999RID-006).

A. Total five candidates were shortlisted for the test/interview and were called for the interview. The following two candidates were attended the test/interview:

1. Mr. Hirok Majumdar
2. Mr. Kasojjala Santhhosh Kumar

After conducting test/interview the CRC found neither of the candidates suitable for admission to the Ph. D. programme in IDDC.

B. The CRC recommends the list of examiners submitted by the supervisors as per Institute norms.

Copy to all CRC Members

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: Dec. 22, 2003

Subject: Minutes of the CRC Meeting held on 22nd December 2003 at 12.00 Noon in the IDDC Heads Room.

A CRC Meeting was held in the IDDC Heads Room at 12.00 Noon on Monday the 22nd December 2003. The following members were present in the meeting:

- | | |
|---|--|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Dr. I. P. Singh | Member |
| 5. Sh. L. K. Das | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |
| 7. Prof. Anurag Sharma | (External Expert), Physics Department. |
| 8. Prof. Chandra Shakher (on lien from IIT Delhi as, Director NIT Hamirpur, Supervisor, Mrs. Saba Mirza, Mrs. Priti Singh, Mr. K. P. Chaudhury, Mr. Musarraf, & Mr. Madhusudan) Special Invitee | |

The following decisions were taken:

- A. With the recommendations of Ph. D. supervisors of Ms. Saba Mirza (1999RID004) that her work was very satisfactory and only small additional work remained, CRC strongly recommends the extension of Institute Fellowship for Ms. Saba Mirza (1999RID004) for another six months in order to complete her Ph. D. work. Request of Ms. Saba Mirza alongwith her progress report forwarded by Supervisors is attached for favourable necessary action.
- B. Ms. Priti Singh (1999RID005) was financially supported by CSIR to carry out her Research Work in IDDC for three years and ten months. CSIR has discontinued her fellowship because of the completion of the Tenure of 5 years inclusive 1.5 years M. Tech. In view of the fact that during her selection in 1999 CRC has clearly recommended that in event of CSIR fellowship being discontinued she is eligible for Institute fellowship (copy of then CRC minutes of 1999 attached) and her satisfactory work as per standards of Institute, CRC strongly recommends Institute Fellowship for another one year so that she can finish her Ph. D. work. Request of Ms. Priti Singh alongwith her progress report forwarded by Supervisors is attached for favourable necessary action.
- C. The CRC recommends the following SRC committee for Mr. Madhusudan Joshi for the comprehensive examination:

- | | |
|--------------------------|--|
| 1. Prof. D. T. Shahani, | Chairman, CRC/ (or his nominee) |
| 2. Prof. Chandra Shakher | Supervisor |
| 3. Prof. Kehar Singh | Supervisor |
| 4. Dr. D. S. Mehta | Internal Expert |
| 5. Dr. P. Senthilkumaran | (External Expert), Physics Department. |

- D. Discussion on Mr. S. Shukla (Res. Schol. IDDC)

- (a) Chairman apprised the members that CRC based on research review by SRC for Mr Shukla had in Oct 2003 had recommended that the pending work including experiments to be repeated be done by the student and periodic review be conducted say in Dec. 03 and June 04. A request from the student for access to experimental set ups in CES routed through Head IDDC was brought to the notice of members wherein as per enclosure of the letter of request and comments of co-supervisor in CES certain reservations had been expressed, and thus till date the experiments in question had not been done. Secondly despite request of CRC IDDC to continue guidance, Prof. G. N. Tiwari (CES) had again reiterated his decision to discontinue guidance to Mr. Shukla. Chairman requested members for their advice in this matter.

- (b) Prof. Anurag Sharma, suggested that in view of above situation, the SRC for the student be convened at the earliest and considering all above problems, a very clear assessment and plan of work be recommended by SRC so that all the issues, namely (i) what precisely is the balance theoretical work, (ii) experimental work inclusive of how it could be finished in view of CES comments (iii) One co-supervisor wanting to withdraw, all these issues could all be very clearly delineated keeping in view that over 4 years of research had already been completed and the student is without fellowship.
- (c) The CRC members agreed to recommendations as in (b) above and it was suggested that a meeting of SRC with adequate notice be called and review done by about 15 Jan 04. Dr I P Singh (Ph. D. supervisor in IDDC) has marked the progress as satisfactory during 1st Sem. 2003, the same was being recommended to PG section.

E. Convener CRC informed members that the PG section as per institute norms has short listed and forwarded 5 names for QIP candidates wanting to do Ph. D in IDDC. Members felt that as there were only few candidates the norms for short listing as followed by PG section may be retained and all 5 candidates be called for interview.

Convener, CRC

(D. S. Mehta)

Instrument Design Development Centre (IDDC)

Date: January 9, 2004

Subject: CRC Meeting on 14th January 2004 at 10.00 A.M. in the Committee Room of IDDC.

A CRC Meeting will be held in the Committee Room of IDDC at 10.00 A. M. on Wednesday the 14th January, 2004. The following are the main agenda of the meeting:

2. **Selection of Ph. D. Candidates for IDDC under QIP Programme** (The applications may be seen in IDDC office).

All Faculty of IDDC are invited to participate.

CRC Members

- | | |
|-------------------------|--|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Dr. I. P. Singh | Member |
| 5. Sh. L. K. Das | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |
| 7. Prof. Anurag Sharma | (External Expert), Physics Department. |

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: January 14, 2004

Subject: Minutes of CRC Meeting held on January 14, 2004 at 10.00 A. M. in the IDDC Heads Room.

The following members of the CRC and Faculty of IDDC were present.

- | | |
|-------------------------|---------------|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Dr. I. P. Singh | Member |
| 5. Dr. D. S. Mehta | Convener, CRC |
| 6. Sh. A. K. Agarwala | Faculty, IDDC |
| 7. Sh. N. K. Jain | Faculty, IDDC |

Prof. Anurag Sharma and Sh. L. K. Das could not attend the meeting. The main agenda of the meeting was test /Interview of the short listed candidates for Ph. D. under QIP programme.

A. Total five candidates were shortlisted for the test/interview and all of the candidates were called for the interview. The following four candidates were attended the test/interview:

1. Mr. Adhyaru Dipak Mukundray
2. Mr. Dalal Chirag Shirish
3. Smt. Patri Sunanda Kumari
4. Mr. Tadamalle Ashok P.

After conducting test/interview the CRC found none of the candidates suitable for admission to the Ph. D. in IDDC under QIP programme

B. On the requisition of Mr. Ahteshamul Haque Ph. D. student of IDDC (2003IDZ0001) to waive- off course HU810, the CRC recommended the request of Mr. Ahteshamul Haque for the wave off course HU810. Copy of his request forwarded by his Ph. D. supervisor is attached.

B. The Chairman informed;

1(a) The progress report of Mr. Shailendra Shukla which was sent to Prof. G. N. Tiwari (Co-supervisor of Mr. Shukla) for his comments were received where in he re-iterated that he is no longer the supervisor of Mr. Shukla and so had no comments on the progress report of Mr. Shukla. The student had also written an application regarding to the change of supervisor.

(b) This matter had briefly come up in the BPGS meeting of 9-01-04 and BPGS is awaiting for the response from the Centre. It was noted that the matter is under consideration of SRC.

2. Two proposals: "Development of Indo-Belarus Laser Technology unit at IIT Delhi", and "A Vishwakarma portal for empowerment of artisans" were received and are circulated among the CRC members for their comments. CRC members are requested to give their comments urgently in three days.

The minutes have the concurrence of the chairman.

Copy to all CRC Members

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: January 20, 2004

Subject: CRC Meeting on 22nd January 2004 at 12.00 NOON in the Committee Room of IDDC.

A CRC Meeting will be held in the Committee Room of IDDC at 12.00 Noon on Thursday the 22nd January, 2004. The following are the main agenda of the meeting:

1. Ratifications of minutes dated January 14, 2004
2. Discussions on the Project Proposal
- A. Development of Indo-Belarus Laser Technology unit at IIT Delhi.
- B. A Vishwakarma portal for empowerment of artisans.
3. Any Other Information with the permission of the Chairman.

All Faculty of IDDC are invited to participate.

CRC Members

- | | |
|-------------------------|--|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Dr. I. P. Singh | Member |
| 5. Sh. L. K. Das | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |
| 7. Prof. Anurag Sharma | (External Expert), Physics Department. |

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: January 22, 2004

Subject: Minutes of CRC Meeting held on January 22, 2004 at 12.00 Noon in the IDDC Heads Room.

The following members of the CRC and Faculty of IDDC were present.

- | | |
|-------------------------|---------------|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Sh L. K. Das | Member |
| 4. Dr. Rakesh Kumar, | Member |
| 5. Dr. I. P. Singh | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |

Prof. Anurag Sharma (External Expert) could not attend the meeting. Following are the minutes of the meeting:

1. The minutes of the last CRC meet were ratified.

2. Two proposals were discussed:

(A) "Development of Indo-Belarus Laser Technology unit at IIT Delhi", Dr. A. L. Vyas informed the members that in the past year and half some visits had taken place from IIT Delhi to Belarus and as per some understanding between the two Governments, DST had identified IIT Delhi for a collaborative programme, and the Director, IIT Delhi being the programme co-ordinator had nominated faculty from IDDC, CAS and Physics Dept. for specific contributions and Dr. A. L. Vyas for overall project co-ordination. Dr. A. L. Vyas also clarified that the additional space requirements for this activity will be catered to by the IIT Delhi and consequently no space as such was being asked in IDDC. The CRC members welcomed such a collaboration and expressed that the proposal should continue as per the advice of the Director.

(B) "A Vishwakarma portal for empowerment of artisans" were circulated among the CRC members for their comments. It was noted that Shri L. K. Das had clarified that no additional space was being asked from IDDC, Shri L. K. Das and Shri. S. K. Sud were the PI and Co-PI respectively. In view of this the project was recommended for further processing.

3. Any other point:

Dr. I. P. Singh has given some comments/suggestions about the minutes of the CRC meeting held on Dec. 22, 2003 and the same were read among the CRC members. It was noted that these points had already been discussed in earlier CRC meetings and Dr. I. P. Singh clarified that he was not asking any modifications of the minutes.

Copy to all CRC Members

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: March 1, 2004

Subject: CRC Meeting on 8th March 2004 at 4.00 P.M. in the Committee Room of IDDC.

A CRC Meeting will be held in the Committee Room of IDDC at 4.00 P.M. on Monday the 8th March 2004. The following are the main agenda of the meeting:

1. Ratifications of minutes dated January 22, 2004.
2. Discussion on the SRC report of Mr. Shailendra Shukla.
3. Extension of the Institute fellowship for Mrs. Priti Singh.
4. Any Other Information with the permission of the Chairman.

All Faculty of IDDC are invited to participate.

CRC Members

- | | |
|-------------------------|--|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Dr. I. P. Singh | Member |
| 5. Sh. L. K. Das | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |
| 7. Prof. Anurag Sharma | (External Expert), Physics Department. |

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: March 11, 2004

Subject: Minutes of CRC Meeting held on March 8, 2004 at 4.00 P.M. in the IDDC Heads Room.

The following members of the CRC were present.

1. Prof. D. T. Shahani,	Chairman, CRC
2. Dr. A. L. Vyas,	Head, IDDC
3. Sh L. K. Das	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. I. P. Singh	Member
6. Dr. D. S. Mehta	Convener, CRC
7. Prof. Anurag Sharma (Physics Department)	External Expert

1. Ratifications of minutes dated January 22, 2004.

The minutes of the CRC of meeting 22-01-2004 were ratified and the modified version (Bold) of the 2 (A) minute is as follows: "Development of Indo-Belarus Laser Technology unit at IIT Delhi", Dr. A. L. Vyas informed the members that in the past year and half some visits had taken place from IIT Delhi to Belarus and as per understanding between the two Governments, DST had identified IIT Delhi for a collaborative programme, and the Director, IIT Delhi being the programme co-ordinator had nominated various faculty from IDDC, CAS and Physics Dept. for specific contributions; and Dr. A. L. Vyas nominated as P. I. Dr. A. L. Vyas also clarified that the additional space requirements for this activity will be catered to by the IIT Delhi separately and consequently no space as such was being asked from IDDC. **The CRC members welcomed the draft proposal which will be duly processed by the CRC when it is submitted in the final form.**

2. With respect to the queries regarding the case of Mr. Shailendra Shukla Ph. D. Scholar (IDDC) raised in CRC meet of Dec. 22, 2003 and the Dean PGS, the following actions were reported by his Ph.D Supervisor:

- A. The detailed progress evaluated by SRC held on 3-03-2004 of Mr. Shailendra Shukla was presented by Dr. I. P. Singh (Supervisor) to the CRC members. The report has evaluated past work and also recommended further work to be done by the student.
- B. The Supervisor clarified that the experimental set-up in question will be available to Mr. Shukla for the validation of the data as asked by SRC but the dates for experimentation will be decided by him and the experiment/validation be conducted under his supervision.
- C. As Prof. G. N. Tiwari (Co-supervisor of Mr. Shailendra Shukla) continued his repeated requests for the withdrawal as the co-supervisor of Mr. Shailendra Shukla despite several appeals to the contrary by CRC, the CRC formally accepted withdrawal of Prof. G. N. Tiwari from co-supervisor ship of Mr. Shailendra Shukla.

In view of the above, the CRC members requested Dr. I. P. Singh to give his clarifications to CRC on the arrangements for supervision of Mr. Shukla on accounts of withdrawal of Prof. G.N. Tiwari. Dr. I. P. Singh taking into account the student's representation to the Dean PG has responded by withdrawing from Supervisorship of Mr. Shailendra Shukla as per grounds in his withdrawal note. **The CRC recommended forwarding above documents and recommendations to Dean PG for further necessary action.**

Cont.....

3. **Extension of the Institute Fellowship of Ms. Priti Singh (1999RID005):** With the recommendations of Ph. D. supervisor of Ms. Priti Singh (1999RID005) that her work was very satisfactory and only small additional work remained, CRC strongly recommends the extension of Institute Fellowship for Ms. Priti Singh (1999RID005) for another six months in order to complete her Ph. D. work. Request of Ms. Priti Singh along with her progress report forwarded by Supervisor is attached for favourable necessary action.

4. **A Project Proposal** on VLF propagation studies for Indian Navy was received from Prof. D. T. Shahani and was circulated among the CRC members for their comments. CRC members welcomed proposal and recommended for further processing with due elaboration on the man posts. The final proposal will be submitted to CRC for record.

CRC members are requested to forward their comments if any on the above minutes.

The meeting ended with thanks to Chair.

(D. S. Mehta)

Convener, CRC

Instrument Design Development Centre (IDDC)

Date: March 29, 2004

Subject: An urgent CRC Meeting on 31st March 2004 at 12.00 Noon in the IDDC Heads Room.

The last date for the submission of the proposals for MHRD is on 31st March, 2004. In view of this an urgent CRC Meeting will be held in the IDDC Heads Room at 12.00 Noon on Wednesday the 31st March 2004 to discuss the proposals. The following are the main agenda of the meeting:

1. Ratifications of minutes dated March 11, 2004.
2. Discussion on the proposals titled
 - a) "Firing Range Measurement System", submitted by Prof. D. T. Shahani (PI).
 - b) "Development of Smart Sensors," Submitted by Dr. A. L. Vyas (PI).
 - c) "Development of Supercontinuum Generation Laser Source for High-resolution Interferometric Imaging," Submitted by Dr. D. S. Mehta (PI).
 - d) "Development of Technology for the manufacture of medical implants of Engineering Components" Submitted by Dr. Rakesh Kumar.
3. Any Other Information with the permission of the Chairman.

All Faculty of IDDC are invited to participate.

CRC Members

- | | |
|-------------------------|--|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Dr. I. P. Singh | Member |
| 5. Sh. L. K. Das | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |
| 7. Prof. Anurag Sharma | (External Expert), Physics Department. |

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: March 31, 2004

Subject: Minutes of CRC Meeting held on March 31, 2004 at 12.00 Noon in IDDC Heads Room.

The following members of the CRC were present.

- | | |
|-------------------------|---------------|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Sh L. K. Das | Member |
| 4. Dr. Rakesh Kumar, | Member |
| 5. Dr. I. P. Singh | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |

Prof. Anurag Sharma (Physics Department) External Expert could not attend the meeting.

1. Ratifications of minutes dated March 11, 2004.

The minutes of the CRC meeting held on were ratified and the modified version (Bold) last para of the minute 2 is as follows: "In view of the above, the CRC members requested Dr. I. P. Singh to give his clarifications to CRC on the arrangements for supervision of Mr. Shukla on accounts of withdrawal of Prof. G.N. Tiwari. **The CRC recommended that Dr. I. P. Singh's response along with the minutes should be forwarded to the Dean PG.**

2. The Chairman, CRC, informed that in case of Mr. Shailendra Shukla:

- i) During the BPGS meeting held on 24th March, 2004, it was recommended by the committee that the Dean PG will constitute a committee to oversee the students work.
- ii) The registration of the student will remain with the IDDC.

3. Project Proposals:

A) A Draft Project Proposal on "Firing Range Measurement System", was received from Prof. D. T. Shahani and was circulated among the CRC members for their comments. CRC members welcomed proposal and recommended for further processing. The project is being submitted to Indian Army.

B. MHRD Projects:

The following three proposals were received from the Faculty of IDDC under various categories:

1. R & D Category:

- a) "Development of smart sensors," submitted by Dr. A. L. Vyas (PI).
- b) "Development of technology for the manufacture of medical implants of engineering components" submitted by Dr. Rakesh Kumar (PI)

2. Thrust Areas (Communications Engg.: Photonics and Optical Communications)

- a) "Development of an advanced Supercontinuum (ultra broad-band) laser source for high-resolution bio-medical imaging and photonic device testing," submitted by Dr. D. S. Mehta (PI).

The respective PIs made a brief presentation about their projects. In view of the significance of the respective areas, CRC strongly recommends that all the above three projects be forwarded to IRD for further processing.

The meeting was ended with the vote of thanks to the Chair.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: March 31, 2004

Subject: Submission of project proposals.

This is with reference to your letter no.:IITD/IRD/M-114/9421 dated 24-02-2004 regarding the proposals invited on MOD, R & D and Thrust Area Schemes of MHRD. The following three proposals were received from the Faculty of IDDC under various categories:

1. R & D Category:

- c) "Development of smart sensors," Submitted by Dr. A. L. Vyas (PI).
- d) "Development of technology for the manufacture of medical implants of engineering components" Submitted by Dr. Rakesh Kumar (PI)

2. Thrust Areas (Communications Engg.: Photonics and Optical Communications)

- b) "Development of an advanced Supercontinuum (ultra broad-band) laser source for high-resolution bio-medical imaging and photonic device testing," Submitted by Dr. D. S. Mehta (PI)

Attached please find the project proposals (two copies each) along with the CRC minutes for further processing.

Through Head, IDDC

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: April 6, 2004

Subject: An urgent CRC Meeting on April 6, 2004 at 5.00 P.M. in the IDDC Heads Room.

An Urgent CRC meeting is being held in the Head, IDDC room on April 6, 2004 at 5.00 P.M. The main agenda of the meeting is the following;

1. Discussion on the project proposals titled
 - a) "Design based Employment / Management Strategies for Employment" submitted by Sh. S. K. Atreya, to MHRD.
2. Any Other Information with the permission of the Chairman.

All Faculty of IDDC are invited to participate.

CRC Members

- | | |
|-------------------------|--|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Dr. I. P. Singh | Member |
| 5. Sh. L. K. Das | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |
| 7. Prof. Anurag Sharma | (External Expert), Physics Department. |

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: April, 6, 2004

Subject: Minutes of CRC Meeting held on April 6, 2004 in IDDC Heads Room.

The following members of the CRC were present.

- | | |
|-------------------------|---------------|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Sh L. K. Das | Member |
| 4. Dr. Rakesh Kumar, | Member |
| 5. Dr. I. P. Singh | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |

Prof. Anurag Sharma (Physics Department) External Expert could not attend the meeting.

The main agenda of the Meeting was Discussion on the project proposal titled “Design based Employment / Management Strategies for Employment” submitted by Sh. S. K. Atreya, to MHRD.

1. The Proposal was discussed and the CRC noted:

- a. The proposal was not submitted to the Centre in time, rather it was directly sent to the Director’s Office, from where it was sent back for Centre’s consideration.
- b. No additional space can be provided by IDDC. Any additional space required to run the project, the Institute will need to look into it.
- c. The total Budget of the proposal (Rs. 60 Lacs) is more than the maximum limit of the budget (Rs. 15 Lacs) under thrust area.

CRC recommends the proposal to be forwarded to Dean IRD.

2. The Chairman CRC informed about the new course no. EEP-776 (Wireless Communications Laboratory) floated by the Electrical Engineering Department. The CRC members welcomed the new course.

The meeting ended with vote thanks to Chair.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: April 6, 2004

Subject: An urgent CRC Meeting on April 15, 2004 immediately after the Faculty Board meeting in the IDDC Heads Room.

An Urgent CRC meeting is being held in the Head, IDDC room on April 15, 2004 immediately after the faculty board meeting being held at 12.00 Noon. The main agenda of the meeting is the following;

1. Discussion on the Bio-Data of Mr. Assayeh Abebe Kassa from Ethiopia for admission to M. Tech. Programme in Instrument Technology. The Bio-data is forwarded by Dean BPGS.
2. Any Other Information with the permission of the Chairman.

All the CRC members are requested to stay back for CRC meet just after FB meeting is over.

CRC Members

- | | |
|-------------------------|--|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Dr. I. P. Singh | Member |
| 5. Sh. L. K. Das | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |
| 7. Prof. Anurag Sharma | (External Expert), Physics Department. |

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: April 16, 2004

Subject: Minutes of CRC Meeting held on April 15, 2004 in IDDC Heads Room.

The following members of the CRC were present.

- | | |
|-------------------------|---------------|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Sh L. K. Das | Member |
| 4. Dr. Rakesh Kumar, | Member |
| 5. Dr. I. P. Singh | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |

Prof. Anurag Sharma (Physics Department) External Expert could not attend the meeting.

The main agenda of the Meeting was Discussion on the Bio-Data of Mr. Assayeh Abebe Kassa from Ethiopia who has applied for admission in M. Tech. Programme in Instrument Technology.

The Bio-data was discussed in the CRC meeting and it was noted that the qualifying degree of Mr. Assayeh Abebe Kassa is in the field of Design and Development of Architecture and Town Planning which is not suitable for M. Tech. Programme in Instrument Technology. However, the CRC members felt that his candidature may be considered for Masters in Industrial Design (M. Des.) programme. It was therefore recommended that his bio-data be forwarded to the co-ordinator M. Des. programme for further consideration.

The meeting ended with the vote of thanks to the chair.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: April 26, 2004

Subject: An urgent CRC Meeting on April 29, at 12.00 Noon in the IDDC Heads Room.

An Urgent CRC meeting is being held in the Head, IDDC room on April 29, 2004 (Thursday). The main agenda of the meeting are the following;

- 1. Discussion/finalization of shortlisting criteria for M. Tech. Programme in Instrument Technology.**
- 2. Discussion and finalization of shortlisting criteria for Ph. D. Programme.**
- 3. Finalization of the dates of written test/interview for M. Tech. and Ph. D. Candidates.**
- 4. Any other information with the permission of the Chairman.**

All the CRC members are requested to attend the meeting.

CRC Members

- | | |
|-------------------------|--|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Dr. I. P. Singh | Member |
| 5. Sh. L. K. Das | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |
| 7. Prof. Anurag Sharma | (External Expert), Physics Department. |

(D. S. Mehta)
Convener, CRC

Date: May 12, 2004

Subject: Minutes of CRC Meeting held on April 29, 2004 in IDDC Heads Room.

The following members of the CRC were present.

1. Prof. D. T. Shahani,	Chairman, CRC
2. Dr. A. L. Vyas,	Head, IDDC
3. Dr. Rakesh Kumar,	Member
4. Dr. I. P. Singh	Member
5. Dr. D. S. Mehta	Convener, CRC

Sh. L. K. Das (Member IDDC), and Prof. Anurag Sharma (Physics Department) External Expert could not attend the meeting.

A. Discussion on the shortlisting criteria for admission in M. Tech. Programme in Instrument Technology and Ph. D. Programme. The committee decided the following shortlisting criteria:

1. For admission in M. Tech. Programme in Instrument Technology: (i) Candidates having minimum 70% marks in relevant Graduation and 97.5 % in GATE score for general category candidates and (ii) Minimum 60% marks in relevant graduation and 85 % in Gate Score, for SC/ST candidates, be called for Test/Interview.
2. The Test/Interview for M. Tech. admission will be held on 10th June, 2004.
3. For admission in Ph. D. Programme in IDDC, Candidates having minimum criteria as per the Institute Norms will be called for interview.
4. The Test/Interview for admission in Ph. D. will be held on 8th June, 2004.

B) The committee approved following SRC for Comprehensive examination/Assessment /Evaluation of Mr. Mosaraf Hosain Ph. D. student of IDDC.

SRC Members

1. Chairman CRC or His Nominee
2. Dr. A. L. Vyas, (IDDC)
3. Prof. Chandra Shakher, Supervisor (On-lien, Director, N. I. T. Hamirpur)
4. Dr. D. S. Mehta, (Co-supervisor, IDDC)
5. Prof. B. P. Pal, (External Expert, Physics Department)

The meeting ended with vote of thanks to the Chair.

All CRC Members

Convener, CRC

(D. S. Mehta)

Instrument Design Development Centre (IDDC)

Date: June 8, 2004

Subject: CRC Meeting on June 8, 2004 (Tuesday) at 10.00 A. M. in the IDDC Heads Room.

CRC meeting is being held in the Head, IDDC room on June 8, 2004 (Tuesday) at 10.00 A. M. The main agenda of the meeting are;

1. **Test/Interview for the selection of candidates for the admission in Ph. D. programme.**
2. **Discussion on the Research Plan of Mr. Mosarraf Hossain Ph. D. student IDDC.**
3. **Any other information with the permission of the Chairman.**

All CRC members and faculty of IDDC are requested to make it convenient to attend the meeting. List of the candidates selected for Test/Interview for Ph. D. is in Office, Head IDDC.

CRC Members

- | | |
|-------------------------|--|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Dr. I. P. Singh | Member |
| 5. Sh. L. K. Das | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |
| 7. Prof. Anurag Sharma | (External Expert), Physics Department. |

Copy to all Faculty of IDDC

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: June 9, 2004

Subject: Minutes of CRC Meeting held on June 8, 2004 in IDDC Heads Room.

The following members of the CRC were present.

- | | |
|-------------------------|---------------|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Sh. L. K. Das | Member |
| 4. Dr. Rakesh Kumar, | Member |
| 5. Dr. I. P. Singh | Member |
| 6. Sh. A. K. Agarwal | Faculty, IDDC |
| 7. Dr. D. S. Mehta | Convener, CRC |
| 7. | |

Prof. Anurag Sharma (Physics Department) External Expert could not attend the meeting.

The following were the agenda of the meeting:

- A. Test/Interview of the short listed candidates for Ph. D. programme.
- B. Discussion on the Research Plan of Mr. Musarraf Hossain, Ph. D. student IDDC.

A. Total seven candidates were short listed for the test/interview and all the seven candidates were called for the test/interview. The following six candidates attended the test/interview:

1. Mr. Satish Kumar Dubey
2. Mr. Sudheer Kumar Jawla
3. Mr. Amitoj Singh
4. Mr. Santosh Kumar Singh
5. Mr. V. Saravanan
6. Mr. Pradeep Kumar Kushwaha

Mr. Ashok Kumar did not attend the test/interview.

After conducting test/interview the CRC found the following four candidates suitable for the admission to Ph. D. programme in IDDC.

1. Mr. Satish Kumar Dubey (Full-time, Institute Scholarship)
2. Mr. Amitoj Singh (Part-time)
3. Mr. V. Saravanan (Full-time, Institute Scholarship)
4. Mr. Pradeep Kumar Kushwaha (Full-time, Institute Scholarship)

B. The research plan submitted by Mr. Mosarraf Hossain to SRC on 29-5-2004 and duly approved by SRC was presented to CRC and the CRC recommended the same be forwarded to PGS& R section for further necessary action.

The meeting ended with thanks to the Chair.

(D. S. Mehta)

Convener CRC

Instrument Design Development Centre (IDDC)

Date: July 8, 2004

Subject: CRC Meeting on July 9, 2004 (Friday) at 4.00 P. M. in the IDDC Heads Room.

An urgent CRC meeting is being held in the Head, IDDC room on July 9, 2004 (Friday) at 4.00 P. M. The main agenda of the meeting are;

1. **Discussion on the project proposal “Design and development of WIND \ SUN \ MANUAL based portable power source for illumination \ communication \ info entertainment” under the Technology Development missions during the 9th plan.**
2. **Any other information with the permission of the Chairman.**

All CRC members are requested to make it convenient to attend the meeting.

CRC Members

- | | |
|-------------------------|--|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Dr. I. P. Singh | Member |
| 5. Sh. L. K. Das | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |
| 7. Prof. Anurag Sharma | (External Expert), Physics Department. |

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: July 9, 2004

Subject: CRC Meeting on July 9, 2004 (Friday) at 4.00 P. M. in the IDDC Heads Room.

CRC meeting was being held in the Head, IDDC room on July 9, 2004 (Friday) at 4.00 P. M. The following members attended the meeting:

- | | |
|-------------------------|---------------|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Sh. L. K. Das | Member |
| 5. Dr. D. S. Mehta | Convener, CRC |

Dr. I. P. Singh (member) and Prof. Anurag Sharma (External Expert), Physics Department could not attend the meeting. The following are the minutes of the meeting:

The following two proposals were received from the Faculty of IDDC under the Technology Development Missions During the 9th Plan, MHRD, Govt. of India.

1. "Design and Development of WIND \ SUN \ MANUAL based portable power source for illumination\communication \ info entertainment" submitted by Sh. L. K. Das (PI), under the mission area of Green Technology.
2. "Technology development for the manufacture of low-cost medical implants" submitted by Dr. Rakesh Kumar (PI), under the mission area of Health Care Technology.

The respective PIs made a brief presentation about their projects. It was also noted that both the PIs had clarified that no additional space was being asked from IDDC. In view of the significance of the respective areas, CRC strongly recommends that both the projects be forwarded to IRD for further processing.

The meeting was ended with the vote of thanks to the Chair.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: June 9, 2004

Subject: Submission of project proposals.

This is with reference to your letter no.:IITD/IRD/M-144/2539 dated 22-06-2004 regarding the proposals invited under the Technology Development Mission and Sub-Mission Phase-II. The following two proposals were received from the Faculty of IDDC:

1. "Design and Development of WIND \ SUN \ MANUAL based portable power source for illumination\communication \ info entertainment" submitted by Sh. L. K. Das (PI), under the mission area of Green Technology.
2. "Technology development for the manufacture of low-cost medical implants" submitted by Dr. Rakesh Kumar (PI), under the mission area of Health Care Technology.

Attached please find the project proposals along with the CRC minutes for further processing.

Through Head, IDDC

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: July 15, 2004

Subject: CRC Meeting on July 21, 2004 (Wednesday) at 11.00 A. M. in the IDDC Heads Room.

CRC meeting is being held in the Head, IDDC room on July 21, 2004 (Wednesday) at 11.00 A. M. The main agenda of the meeting are;

- 1. Discussion on the progress reports of the Ph. D. students of IDDC.**
- 2. Any other information with the permission of the Chairman.**

All CRC members are requested to make it convenient to attend the meeting.

CRC Members

- | | |
|-------------------------|--|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Dr. I. P. Singh | Member |
| 5. Sh. L. K. Das | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |
| 7. Prof. Anurag Sharma | (External Expert), Physics Department. |

(D. S. Mehta)
Convener, CRC

National Institute of Technology, Hamirpur

Date: 20-6-2004

To,

The Chairman CRC

Instrument Design Development Centre (IDDC)

Indian Institute of Technology Delhi

Hauz Khas, New Delhi – 110 016,

Dear Sir,

I have joined as Director NIT Hamirpur on 7-08-2004 and I am on lien from I. I. T. Delhi.

Mr. K. P. Chaudhary (1998RID002) is working with me for his Ph. D. Thesis. In view of my absence from the Institute on-lien, Dr. D. S. Mehta may kindly be caretaker Supervisor of Mr. K. P. Chaudhary.

Thanking you,

Sincerely Yours

(Chandra Shakher)

On Lien from I.I.T. Delhi

Director N. I. T. Hamirpur,

Himanchal Pradesh.

Copy to:

1. Head IDDC,
2. Dean PGS & R
3. Dr. D. S. Mehta

Date: July 21, 2004

Subject: Minutes of CRC Meeting held on July 21, 2004 (Wednesday) at 11.00 A. M. in the IDDC Heads Room.

CRC meeting was held in the Head, IDDC room on July 21, 2004 (Wednesday) at 11.00 A. M. The following members attended the meeting:

1. Prof. D. T. Shahani,	Chairman, CRC
2. Dr. A. L. Vyas,	Head, IDDC
3. Dr. Rakesh Kumar,	Member
4. Dr. I. P. Singh	Member
5. Dr. D. S. Mehta	Convener, CRC

Sh. L. K. Das (member) and Prof. Anurag Sharma (External Expert), Physics Department could not attend the meeting. The following are the minutes of the meeting:

1. The progress reports submitted by the Ph. D. students of the IDDC were discussed in the CRC and all the reports were found satisfactory and the grades are to be forwarded to PG section.
2. With the recommendations of Ph. D. supervisors of Ms. Saba Mirza (1999RID004) that her work was very satisfactory and only small additional work remained, CRC strongly recommended the extension of Institute Fellowship for Ms. Saba Mirza (1999RID004) for another six months in order to complete her Ph. D. work. Request of Ms. Saba Mirza alongwith her progress report forwarded by Supervisors is attached for favourable necessary action.
3. The committee considered the note of the Prof. Chandra Shakher (Director, N. I. T. Hamirpur) to CRC that in view of the absence of Prof. Chandra Shakher (Supervisor Mr. K. P. Chaudhary) on lien from IIT Delhi, Dr. D. S. Mehta (IDDC) will be the caretaker Supervisor of Mr. K. P. Chaudhary. The committee recommends the same for the approval of PGS & R.

The meeting ended with the vote of thanks to the Chair.

(D. S. Mehta)
Convener, CRC

Date: Aug 18, 2004

Subject: Minutes of CRC Meeting held on Aug. 18, 2004 (Wednesday) at 12.00 Noon in the IDDC Committee Room.

CRC meeting was held on Aug. 18, 2004 (Wednesday) at 12.00 Noon in the IDDC Committee Room. The following members attended the meeting:

1. Prof. D. T. Shahani,	Chairman, CRC
2. Dr. A. L. Vyas,	Head, IDDC
3. Sh. L. K. Das	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. I. P. Singh	Member
6. Dr. D. S. Mehta	Convener, CRC

Prof. Anurag Sharma (External Expert), Physics Department could not attend the meeting. The following are the minutes of the meeting:

A. Project Proposals:

The following two proposals were received from the Faculty of IDDC:

- 1. “Modernization of Ayurvedic Treatments via Electronic Instrumentation” submitted by Prof. D. T. Shahani (PI), MDIT, IDDC, submitted to CCRAS.**
- 2. “DEVELOPMENT OF ORGANIC / POLYMERIC ELECTROLUMINESCENT DEVICES” submitted by Dr. D. S. Mehta (PI), Laser Applications and Holography Lab., a joint project proposal under MoU between IIT Delhi and NPL New Delhi.**

The respective PIs made a brief presentation about their projects. It was also noted that both the PIs had clarified that no additional space was being asked from IDDC. In view of the significance of the respective areas, CRC strongly recommends that both the projects and the project (1) be forwarded to IRD and project (2) be forwarded to the Co-ordinator MoU between IIT Delhi and NPL New Delhi for further processing.

B. A request from Mr. Sanjaykumar Limaji Patil, Ph. D. student under QIP programme in IDDC, regarding the exemption of the Audit Course HUL 810, was received and was discussed in the meeting. On the basis of Mr. Patil’s 11 years of teaching experience the Committee recommends Mr. Patil’s exemption from the aforesaid course.

C. The Chairman informed the CRC about the note from CSC regarding the clearing the disc space on ccsun 50 (Sun E4K) system to be given to the new comers joining the Institute in July 2004. The note was circulated among the faculty members and the research scholars of IDDC for necessary action.

The meeting was ended with the vote of thanks to the Chair.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: Aug 16, 2004

Subject: CRC Meeting on Aug. 18, 2004 (Wednesday) at 12.00 Noon in the IDDC Heads Room.

An urgent CRC meeting is being held in the Head, IDDC room on Aug. 18, 2004 (Wednesday) at 12.00 Noon. The main agenda of the meeting are;

1. Discussion on the project proposal “Modernization of Ayurvedic Treatments via Electronic Instrumentation” submitted by Prof. D. T. Shahani, MDIT, IDDC.
2. Discussion on the joint project proposal between IIT Delhi and NPL New Delhi “DEVELOPMENT OF ORGANIC / POLYMERIC ELECTROLUMINESCENT DEVICES” submitted by Dr. D. S. Mehta, Laser Applications and Holography Lab.
3. Any other information with the permission of the Chairman.

All CRC members are requested to make it convenient to attend the meeting.

CRC Members

- | | |
|-------------------------|--|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Dr. I. P. Singh | Member |
| 5. Sh. L. K. Das | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |
| 7. Prof. Anurag Sharma | (External Expert), Physics Department. |

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: Aug. 18, 2004

Subject: Submission of joint project proposal under MoU between IIT Delhi and NPL New Delhi

The following project proposal was received from the Faculty of IDDC under MoU between IIT Delhi and NPL New Delhi:

1. **“DEVELOPMENT OF ORGANIC / POLYMERIC ELECTROLUMINESCENT DEVICES”
submitted by Dr. D. S. Mehta (PI), Laser Applications and Holography Lab., IDDC.**

Attached please find the project proposal along with the CRC minutes (A) for further processing.

Through Head, IDDC

(D. S. Mehta)
Convener, CRC

Co-ordinator MoU, between IIT Delhi and NPL New Delhi.

Instrument Design Development Centre (IDDC)

Date: Nov. 25, 2004

Subject: CRC Meeting on Nov. 30, 2004 (Tuesday) at 11.00 A. M. in the IDDC Heads Room.

CRC meeting is being held in the Head, IDDC room on Nov. 30, 2004 (Tuesday) at 11.00 A. M. The main agenda of the meeting are;

- 1. Discussion and finalization of shortlisting criteria for Ph. D. Programme for II-semester 200-2005. Seven applications are received for Ph. D. Programme for II-semester 200-2005.**
- 2. Approval of CRC for the appointment of Supervisors of the following Ph. D. scholars joined IDDC during Ist semester 2004-2005.**

1. Mr. Ahteshamul Haque
2. Mr. Patil Sanjay Kumar Limaji
3. Mr. Satish Kumar Dubey
4. Mr. Amitoj Singh
5. Mr. V. Saravanan
6. Mr. Pradeep Kumar Kushwaha

- 3. Any other information with the permission of the Chairman.**

All CRC members are requested to make it convenient to attend the meeting.

CRC Members

- | | |
|-------------------------|--|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Dr. I. P. Singh | Member |
| 5. Sh. L. K. Das | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |
| 7. Prof. Anurag Sharma | (External Expert), Physics Department. |

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 8-12- 2004

Subject: CRC Meeting on Dec. 9, 2004 (Thursday) at 2.30P. M. in the IDDC Committee Room.

CRC meeting is being held on Dec. 9, 2004 (Thursday) at 2.30P. M. in the IDDC Committee Room. The main agenda of the meeting are;

1. **Moderation of grades.**
2. **Approval of CRC for the appointment of Supervisors of the following Ph. D. scholars joined IDDC during Ist semester 2004-2005.**

1. Mr. Ahteshamul Haque
2. Mr. Patil Sanjay Kumar Limaji
3. Mr. Satish Kumar Dubey
4. Mr. Amitoj Singh
5. Mr. V. Saravanan
6. Mr. Pradeep Kumar Kushwaha

3. **Any other information with the permission of the Chairman.**

All CRC members and faculty of IDDC are requested to make it convenient to attend the meeting.

CRC Members

- | | |
|-------------------------|--|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Dr. I. P. Singh | Member |
| 5. Sh. L. K. Das | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |
| 7. Prof. Anurag Sharma | (External Expert), Physics Department. |

All Faculty Members of IDDC

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: Dec.9, 2004

Subject: Minutes of CRC Meeting held on Nov. 30, 2004 (Tuesday) at 11.00 A. M. in the IDDC Heads Room.

CRC meeting was held in the Head, IDDC room on Nov. 30, 2004 (Tuesday) at 11.00 A. M. The following members were present.

- | | |
|-------------------------|---------------|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Dr. I. P. Singh | Member |
| 5. Dr. D. S. Mehta | Convener, CRC |

Sh. L. K. Das (IDDC) and Prof. Anurag Sharma (External Expert), Physics Department could not attend the meeting.

Discussion on the short listing criteria for admission in Ph. D. Programme for Semester -II.

The committee decided the following short listing criteria:

1. For admission in Ph. D. Programme in IDDC, the existing criteria in IDDC, i.e., Candidates having minimum criteria as per the Institute Norms will be called for interview.
2. The Test/Interview for admission in Ph. D. will be held on 17th Decembere, 2004.

The meeting ended with thanks to chair.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: Dec. 16, 2004

Subject: CRC Meeting on Dec. 17, 2004 (Friday) at 11.00 A. M. in the IDDC Heads Room.

CRC meeting is being held in the Head, IDDC room on Dec. 17, 2004 (Friday) at 11.00 A. M. The main agenda of the meeting are;

- 1. Test/Interview for the selection of candidates for the admission in Ph. D. programme for II-semester 200-2005 .**
- 2. Approval of CRC for the appointment of Supervisors of the following Ph. D. scholars joined IDDC during Ist semester 2004-2005.**
 - 1.Mr. Ahteshamul Haque
 2. Mr. Patil Sanjay Kumar Limaji
 3. Mr. Satish Kumar Dubey
 4. Mr. Amitoj Singh
 5. Mr. V. Saravanan
 6. Mr. Pradeep Kumar Kushwaha
- 3. Discussion on the progress reports of the Ph. D. students of IDDC.**
- 4. Any other information with the permission of the Chairman.**

All CRC members and faculty of IDDC are requested to make it convenient to attend the meeting. Xerox copy of the Bio-data of candidates selected for Test/Interview for Ph. D. are in the Office, Head IDDC.

CRC Members

- | | |
|-------------------------|--|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Dr. I. P. Singh | Member |
| 5. Sh. L. K. Das | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |
| 7. Prof. Anurag Sharma | (External Expert), Physics Department. |

Copy to all Faculty of IDDC

(D. S. Mehta)
Convener, CRC

Date: Dec. 21, 2004

Subject: Minutes of the CRC Meeting held on Dec. 17, 2004 (Friday) at 11.00 A. M. in the IDDC Heads Room.

CRC meeting was held in the Head, IDDC room on Dec. 17, 2004 (Friday) at 11.00 A. M. The following members of the CRC were present.

1. Prof. D. T. Shahani,	Chairman, CRC
2. Dr. A. L. Vyas,	Head, IDDC
3. Dr. Rakesh Kumar,	Member
4. Dr. I. P. Singh	Member
5. Dr. D. S. Mehta	Convener, CRC

Sh. L. K. Das (IDDC), and Prof. Anurag Sharma (Physics Department) External Expert could not attend the meeting.

The following were the agenda of the meeting:

1. **Test/Interview for the selection of candidates for the admission in Ph. D. programme for II-semester 200-2005 .**
2. **Approval of CRC for the appointment of Supervisors of the following Ph. D. scholars joined IDDC during Ist semester 2004-2005.**
3. **Discussion on the progress reports of the Ph. D. students of IDDC.**

A. All the seven candidates who applied were short listed and called for test/interview. Six candidates were under General Category and one candidate was under SC category. All the seven candidates as below were called for the test/interview and all of them attended the test/interview:

General Category

1. Mr. Pijush Kanti Bhattacharjee
2. Mr. Pankaj Kumar
3. Mr. Shyam Mohan Parashar
4. Mr. Dhawal Gupta
5. Mr. Sanjiv Kumar Srivastava
6. Ms. Anupama

SC Category

1. Achintya Kumar Sarkar

During the interview it was found that some candidates had their No Objection Certificate (NOC) under process /not in exact format, ad the committee decided that they will any way examine the candidates for the academical potential and the offer will be given only to those who submit the NOC.

After conducting test/interview the CRC found the following candidates suitable for the admission to Ph. D. programme in IDDC for II-semester 200-2005.

- | | | |
|-----------------------|--------------------|------------|
| 1. Mr. Dhawal Gupta* | (General Category) | -Part-time |
| 2. Mr. Pankaj Kumar** | (General Category) | -Part-time |

*In the case of Mr. Dhawal Gupta, since his No Objection Certificate (NOC) from IRD (IIT Delhi) was in process it was decided to forward his application to PG section only after his submitting the NOC.

** In the case of Mr. Pankaj Kumar the NOC was not as per IIT format, and he was advised to send the NOC in proper format as required by IIT, and the offer to him will be made only after submitting the proper NOC.

B. Appointment of Supervisors of the following Ph. D. scholars joined IDDC during Ist semester 2004-2005 was discussed and approved by CRC.

Ph.D. Candidate	Supervisor
1. Mr. Ahteshamul Haque	(Sh. A. K. Agarwala)
2. Mr. Patil Sanjay Kumar Limaji	(Sh. A. K. Agarwala)
3. Mr. Satish Kumar Dubey	(Dr. D. S. Mehta)
4. Mr. Amitoj Singh	(Sh. L.K.Das)
5. Mr. V. Saravanan	(Dr. A. L. Vyas)
6. Mr. Pradeep Kumar Kushwaha	(Dr. Rakesh Kumar)

C. The progress reports submitted by the Ph. D. students of the IDDC were discussed in the CRC and all the reports were found satisfactory and the grades are to be forwarded to PG section.

The meeting ended with thanks to the Chair.

Convener CRC

(D. S. Mehta)

Date: Dec. 22, 2004

To the Co-ordinator
QIP Programme,
IIT Delhi

Sub. Advance admission in Ph. D. under QIP for the year 2005-2006.

With reference to your note No. IITD/QIP/Ph.D./2005-2006/790; Dated 24-11-2004 a total 09 applications were received from your office in IDDC for advance admission in Ph.D. degree programme under QIP for the year 2005-2006.

The shortlisting criteria for calling test/interview for Ph.D. Programme under QIP was discussed among the CRC members. All the 09 candidates were found suitable as per Institute norms and all the 09 candidates are being called for Test/Interview to be held on 12-01-2005.

D. S. Mehta
Convener, CRC

Instrument design Development Centre

Date: Dec. 24-12-2004

Sub. Ph. D. Test/Interview under QIP programme on Jan. 12, 2005 at 10.00 A. M.

There are 09 applicants for the 2005-2006 QIP Ph. D. programme. Details are attached. The Applications of the candidates are kept in the IDDC Office.

The Ph. D. interviews are scheduled on January 12, 2005 at 10.AM. in the IDDC Committee room.

All IDDC Faculty

D. S. Mehta
Convener, CRC

Instrument design Development Centre

Date: Dec. 24-12-2004

Sub. CRC meeting on Jan. 12, 2005 at 10.00 A. M.

CRC meeting is being held in the IDDC Head's room on Jan. 12, 2005 (Wednesday) at 10.00 A. M. The main agenda of the meeting are;

1. **Test/Interview for the selection of candidates for the admission in Ph. D. under QIP programme for 2005-2006.** There are 09 applicants for the 2005-2006 QIP Ph. D. programme. Copy of the Applications of the candidates are kept in the IDDC Office.
2. **In the mean time some general applications for the admission in Ph. D. for II-semester 2004-2005 were received, test/Interview for the selection of these candidates will also be held after the test/interview of candidates under QIP programme.**
3. **Any other information with the permission of the Chairman.**

All CRC members and faculty of IDDC are requested to make it convenient to attend the meeting. Xerox copy of the Bio-data of candidates selected for Test/Interview for Ph. D. are in the Office, Head IDDC.

Copy to all CRC members

Copy all IDDC Faculty

IDDC notice board

D. S. Mehta
Convener, CRC

Instrument Design Development Centre (IDDC)
Indian Institute of Technology Delhi

Date: January 17, 2005

Subject: Minutes of the CRC Meeting held on January 12, 2005 (Wednesday) at 10.00 A. M. in the IDDC Head's Room.

CRC meeting was held on January 12, 2005 (Wednesday) at 10.00 A. M. in the IDDC Head's Room. The following members of the CRC and faculty of IDDC were present in the meeting.

CRC Members:

1. Prof. D. T. Shahani,	Chairman, CRC
2. Dr. A. L. Vyas,	Head, IDDC
3. Dr. Rakesh Kumar,	Member
4. Sh. L. K. Das	Member
5. Dr. I. P. Singh	Member
6. Dr. D. S. Mehta	Convener, CRC
7. Prof. Chandra Shakher	Invitee
8. Dr. N. K. Jain	Invitee

Prof. Anurag Sharma (Physics Department) External Expert could not attend the meeting.

The following were the agenda of the meeting:

- 1. Test/Interview for the selection of candidates for the admission in Ph. D. under QIP programme for 2005-2006.**
- 2. Test/interview for general applications for the admission in Ph. D. for II-semester 2004-2005 after the QIP programme.**

A. Under the QIP programme all the 09 candidates who applied were short listed and called for test/interview. Seven candidates were under General Category and one candidate each was under ST and SC category.

Sl. No.	Application No.	Name of the candidate	GE/SC/ST/OBC
1.	P009	Mr. Milind R Bongulwar	GE
2.	P085	Mr. Gopilal G. Bhutada	GE
3.	P105	Mr. Radheshyam Gamad	ST
4.	P187	Mr. Palan Nitin Gangaram	GE
5.	P206	Mr. Mahesh Kumar Gupta	GE
6.	P243	Mr. Madhu Singh	GE
7.	P263	Mr. Jibukumar M.G.	GE
8.	P359	Mr. Nandakumar	GE
9.	P397	Mr. Dheeraj Kumar Palwalia	SC

The following 07 candidates under QIP programme attended the test/interview:

Sl. No.	Application No.	Name of the candidate	GE/SC/ST/OBC
1.	P009	Mr. Milind R Bongulwar	GE

2.	P085	Mr. Gopilal G. Bhutada	GE	
3.	P105	Mr. Radheshyam Gamad		ST
5.	P206	Mr. Mahesh Kumar Gupta	GE	
6.	P243	Mr. Madhu Singh		GE
7.	P263	Mr. Jibukumar M.G.		GE
9.	P397	Mr. Dheeraj Kumar Palwalia	SC	

After conducting test/interview the committee recommended the following candidate for the advance admission to Ph. D. programme for 2006-2007 under QIP.

1. Mr. Mahesh Kumar Gupta - Application No. (P206)

B. The following candidate had applied for admission in Ph. D. for II-semester 2004-2005 and was called for test/interview on 12-01-2005;

1. Mr. Dhananjay Kumar Singh (General Category)

None came for test/interview and hence none was selected.

The meeting ended with thanks to Chair.

(D. S. Mehta)

Convener CRC

Instrument Design Development Centre (IDDC)

Date: January 17, 2005

This is regarding the applications forms for the appointment of Supervisors which we sent PG section recently. They have returned the forms and given the new form for the same.

Kindly fill-up the enclosed form and intimate the SRC members and submit to the undersigned latest by January 21, 2005.

(D. S. Mehta)

Convener CRC

Instrument Design Development Centre (IDDC)

Date: January 17, 2005

This is regarding the applications forms for the appointment of Supervisors which we sent PG section recently. They have returned the forms and given the new form for the same.

Kindly fill-up the enclosed form and intimate the SRC members and submit to the undersigned latest by January 21, 2005.

(D. S. Mehta)

Convener CRC

Instrument Design Development Centre (IDDC)

Date: January 17, 2005

This is regarding the applications forms for the appointment of Supervisors which we sent PG section recently. They have returned the forms and given the new form for the same.

Kindly fill-up the enclosed form and intimate the SRC members and submit to the undersigned latest by January 21, 2005.

(D. S. Mehta)

Convener CRC

Instrument Design Development Centre (IDDC)

Date: January 17, 2005

This is regarding the applications forms for the appointment of Supervisors which we sent PG section recently. They have returned the forms and given the new form for the same.

Kindly fill-up the enclosed form and intimate the SRC members and submit to the undersigned latest by January 21, 2005.

(D. S. Mehta)

Convener CRC

Instrument Design Development Centre (IDDC)

Date: January 17, 2005

This is regarding the applications forms for the appointment of Supervisors which we sent PG section recently. They have returned the forms and given the new form for the same.

Kindly fill-up the enclosed form and intimate the SRC members and submit to the undersigned latest by January 21, 2005.

(D. S. Mehta)

Convener CRC

Instrument Design Development Centre (IDDC)

Date: January 17, 2005

This is regarding the applications forms for the appointment of Supervisors which we sent PG section recently. They have returned the forms and given the new form for the same.

Kindly fill-up the enclosed form and intimate the SRC members and submit to the undersigned latest by January 21, 2005.

(D. S. Mehta)

Convener CRC

Instrument Design Development Centre (IDDC)

Date: January 17, 2005

To the Co-ordinator
QIP Programme,
IIT Delhi

Sub. Advance admission in Ph. D. under QIP for the year 2005-2006.

With reference to your note No. IITD/QIP/Ph.D./2005-2006/790; Dated 24-11-2004 enclosed please find the list of candidates who were called and did not attend/attended interview (Proforma –P1) and list of candidates who are recommended for consideration (Proforma-P2) for advance admission to Ph. D. degree programme along with the CRC minute A.

Also enclosed please find all the 09 applications received from your office in IDDC for advance admission in Ph.D. degree programme under QIP for the year 2005-2006.

D. S. Mehta
Convener, CRC

Through Head IDDC

Instrument Design Development Centre (IDDC)

Date: January 27, 2005

Subject: An urgent CRC Meeting on January 27, 2005 at 12.00 Noon in the IDDC Heads Room.

An Urgent CRC meeting is being held in the Head, IDDC room January 27, 2005 at 12.00 Noon The main agenda of the meeting is the following;

1. Discussion on the project proposals titled
“Design based Employment / Management Strategies for Employment” submitted by Sh. S. K. Atreya, to MHRD.
2. Any Other Information with the permission of the Chairman.

All Faculty of IDDC are invited to participate.

CRC Members

- | | |
|-------------------------|--|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Dr. I. P. Singh | Member |
| 5. Sh. L. K. Das | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |
| 7. Prof. Anurag Sharma | (External Expert), Physics Department. |

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: January 27, 2005

Kindly give your comments/suggestions by Monday 10.00 A.M. (Jan. 31, 2005) on the project entitled “Page projector for village schools” submitted by Dr. S. K. Atreya to the Department of Science and Technology.

(D. S. Mehta)
Convener CRC

Instrument Design Development Centre (IDDC)

Date: January 27, 2005

Kindly give your comments/suggestions by Monday 10.00 A.M. (Jan. 31, 2005) on the project entitled “Page projector for village schools” submitted by Dr. S. K. Atreya to the Department of Science and Technology.

(D. S. Mehta)
Convener CRC

Instrument Design Development Centre (IDDC)

Date: January 27, 2005

Kindly give your comments/suggestions by Monday 10.00 A.M. (Jan. 31, 2005) on the project entitled "Page projector for village schools" submitted by Dr. S. K. Atreya to the Department of Science and Technology.

(D. S. Mehta)

Convener CRC

Instrument Design Development Centre (IDDC)

Date: January 27, 2005

Kindly give your comments/suggestions by Monday 10.00 A.M. (Jan. 31, 2005) on the project entitled "Page projector for village schools" submitted by Dr. S. K. Atreya to the Department of Science and Technology.

(D. S. Mehta)

Convener CRC

Instrument Design Development Centre (IDDC)

Date: 27-01- 2005

Subject: CRC Meeting on January 31, 2005, Monday, at 12.00 noon in the IDDC Committee Room.

CRC meeting is being held on January 31, 2005, Monday, at 12.00 Noon in the IDDC Committee Room. The main agenda of the meeting are;

1. **Discussion on the project proposal entitled "Page projector for village schools" submitted by Dr. S. K. Atreya to the Department of Science and Technology.**
2. **Discussion about the SRC's report of Mrs. Saba Mirza and Mrs. Priti Singh on their Synopsis and the appointment of Supervisors.**
3. **Approval of CRC for the appointment of Supervisors of the following Ph. D. scholars joined IDDC during Ist semester 2004-2005.**
 1. Mr. Ahteshamul Haque
 2. Mr. Patil Sanjay Kumar Limaji
 3. Mr. Satish Kumar Dubey
 4. Mr. Amitoj Singh
 5. Mr. V. Saravanan
 6. Mr. Pradeep Kumar Kushwaha
4. **Any other information with the permission of the Chairman.**

All CRC members are requested to make it convenient to attend the meeting.

CRC Members

- | | |
|-------------------------|--|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Dr. I. P. Singh | Member |
| 5. Sh. L. K. Das | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |
| 7. Prof. Anurag Sharma | (External Expert), Physics Department. |

(D. S. Mehta)
Convener, CRC

Date: 31-01- 2005

Subject: CRC Meeting on January 31, 2005, Monday, at 12.00 noon in the IDDC Heads Room.

CRC meeting was held on January 31, 2005, Monday, at 12.00 Noon in the IDDC Heads Room. The following members were present in the meeting

1. Prof. D. T. Shahani,	Chairman, CRC
2. Dr. A. L. Vyas,	Head, IDDC
3. Dr. Rakesh Kumar,	Member
4. Dr. I. P. Singh	Member
5. Sh. L. K. Das	Member
6. Dr. D. S. Mehta	Convener, CRC

Prof. Anurag Sharma (External Expert), Physics Department could not attend the meeting. The following are the minutes of the meeting:

A. Project Proposals:

The following proposal was received from the Faculty of IDDC:

“Page projector for village schools” submitted by Sh. S. K. Atreya to the Department of Science and Technology.

The proposal was discussed among the CRC members and CRC observed certain points on the proposal specially the requirement of extra space from the centre for running the project. The PI was requested to consider these points in the proposal and PI agreed to make these changes in the project and stated that no extra space is required for the project. The corrected version of the project is being submitted in the afternoon on 31-01-05. In view of the significance of the area CRC recommends that the project be forwarded to IRD.

B. The SRC’s reports of Mrs. Saba Mirza and Mrs. Priti Singh on their Synopsis and the appointment of the thesis examiners were discussed in CRC and CRC recommends the list of examiners and the list be forwarded to PG Section

C. Approval of CRC for the appointment of Supervisors and formulation of Student Research Committee of the following Ph. D. scholars who joined IDDC during Ist semester 2004-2005 was discussed and the CRC recommends the same be forwarded to PG section.

1. Mr. Ahteshamul Haque
2. Mr. Patil Sanjay Kumar Limaji
3. Mr. Satish Kumar Dubey
4. Mr. Amitoj Singh
5. Mr. Pradeep Kumar Kushwaha

D. Note regarding the appointment of Dr. D. S. Mehta as Joint Supervisor for Mr. K. P. Chaudhury (Ph. D. Student, IDDC) was discussed among CRC members and CRC with the consent of Dr. D. S. Mehta decided that since Prof. Chandra Shakher has joined back IDDC, he may kindly continue sole supervisor of Mr. K. P. Chaudhury.

The meeting ended with thanks to Chair.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: Jan. 31, 2005

Subject: Submission of project proposal.

The following project proposal 26 pages was received from the Faculty of IDDC

1. **“Page projector for village schools” submitted by Sh. S. K. Atreya to the Department of Science and Technology.**

Attached please find the project proposal along with the CRC minutes (A) for further processing.

Through Head, IDDC

(D. S. Mehta)
Convener, CRC

Dean IRD

Enclosures:

1. Project proposal.
2. Certificate from PI that no extra space from the Centre is required.
3. A Approval of Prof. K. K. Chaudhury's involvement.
4. CRC minutes

Instrument Design Development Centre (IDDC)

Date: Feb. 1, 2005

Subject: Synopsis and List of Ph. D. thesis examiners

Enclosed please find the list of thesis examiners of Mrs. Saba Mirza and Mrs. Priti Singh along with Eight copies of their Synopsis and CRC minutes (B) for further necessary action.

(D. S. Mehta)
Convener, CRC

Dean IRD

Enclosures:

1. Synopsis of the thesis.
2. List of examiners.
3. CRC minutes.

Instrument Design Development Centre (IDDC)

Date: Feb. 1, 2005

Enclosed please find the duly filled application form for the appointment of Supervisors and formulation of Student Research Committee (SRC) of the following Ph. D. scholars who joined IDDC during 1st semester 2004-2005.

1. Mr. Ahteshamul Haque
2. Mr. Patil Sanjay Kumar Limaji
3. Mr. Satish Kumar Dubey
4. Mr. Amitoj Singh
5. Mr. Pradeep Kumar Kushwaha

(D. S. Mehta)
Convener, CRC

Dean IRD

Enclosures:

1. Application forms
2. CRC minutes (Minute 'C').

Instrument Design Development Centre (IDDC)

Date: Feb. 2, 2005

This is regarding the appointment of co-supervisor of Sh. K. P. Chaudhury (Entry no. 1998RID002) Ph. D. student of IDDC, attached herewith please find the CRC minutes (Minute 'D').

(D. S. Mehta)
Convener, CRC

PG Section

Instrument Design Development Centre (IDDC)

Date: February 4, 2005

Kindly give your comments/suggestions by Wednesday 3.00 P.M.. (Feb. 4 2005) on the project entitled “Asian-European multi-polar network for curricula development focused on the Design of Sustainable Product Service Systems” submitted by Sh. L. K. Das, under Asia EU scheme.

(D. S. Mehta)
Convener CRC

Instrument Design Development Centre (IDDC)

Date: February 4, 2005

Kindly give your comments/suggestions by Wednesday 3.00 P.M.. (Feb. 4 2005) on the project entitled “Asian-European multi-polar network for curricula development focused on the Design of Sustainable Product Service Systems” submitted by Sh. L. K. Das, under Asia EU scheme.

(D. S. Mehta)
Convener CRC

Instrument Design Development Centre (IDDC)

Date: February 4, 2005

Kindly give your comments/suggestions by Wednesday 3.00 P.M.. (Feb. 4 2005) on the project entitled “Asian-European multi-polar network for curricula development focused on the Design of Sustainable Product Service Systems” submitted by Sh. L. K. Das, under Asia EU scheme.

(D. S. Mehta)
Convener CRC

Instrument Design Development Centre (IDDC)

Date: February 4, 2005

Kindly give your comments/suggestions by Wednesday 3.00 P.M.. (Feb. 4 2005) on the project entitled “Asian-European multi-polar network for curricula development focused on the Design of Sustainable Product Service Systems” submitted by Sh. L. K. Das, under Asia EU scheme.

(D. S. Mehta)
Convener CRC

Instrument Design Development Centre (IDDC)

Date: 8-02- 2005

Subject: CRC Meeting on February 11, 2005 (Friday) at 10.00 A.M. in the IDDC Committee Room.

CRC meeting is being held on February 11, 2005 (Friday) at 10.00 A.M. in the IDDC Committee Room. The main agenda of the meeting are;

1. Discussion on the project proposal entitled “Asian-European multi-polar network for curricula development focused on the Design of Sustainable Product Service Systems” submitted by Sh. L. K. Das, under Asia EU scheme.
2. Any other information with the permission of the Chairman.

All CRC members are requested to make it convenient to attend the meeting.

CRC Members

- | | |
|-------------------------|--|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Dr. I. P. Singh | Member |
| 5. Sh. L. K. Das | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |
| 7. Prof. Anurag Sharma | (External Expert), Physics Department. |

(D. S. Mehta)
Convener, CRC

Date: 11-02- 2005

Subject: Minutes of CRC Meeting held on February 11, 2005 (Friday) at 10.00 A.M. in the IDDC Committee Room.

CRC meeting was held on February 11, 2005 (Friday) at 10.00 A.M. in the IDDC Committee Room. The following members attended the meeting:

- | | |
|-------------------------|---------------|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Sh. L. K. Das | Member |
| 5. Dr. D. S. Mehta | Convener, CRC |

Dr. I. P. Singh (IDDC) and Prof. Anurag Sharma (External Expert), Physics Department, could not attend the meeting. The following are the minutes of the meeting.

The Project Proposal entitled “Asian-European multi-polar network for curricula development focused on the Design of Sustainable Product Service Systems” submitted by Sh. L. K. Das, under Asia-EU scheme, was circulated among the CRC members for their comments and the same was discussed in the CRC meeting. It was noted that the PI had clarified that no additional space and manpower was being asked from IDDC.

The CRC in principle recommends the aforementioned proposal by the competent authority in IIT Delhi for further necessary processing.

It was also noted that this being a draft proposal and to be submitted by seven participating International Organizations, the final consolidated version of the proposal as prepared by the participating Organizations may be put forward to CRC, IDDC.

The meeting ended with thanks to Chair.

Convener, CRC

(D. S. Mehta)

Instrument Design Development Centre (IDDC)

Date: April 27, 2005

Subject: An urgent CRC Meeting on April 29, at 3.00 P.M in the IDDC Heads Room.

An Urgent CRC meeting is being held in the Head, IDDC room on April 29, 2005 (Friday). The main agenda of the meeting are the following;

1. **Discussion/finalization of shortlisting criteria for M. Tech. Programme in Instrument Technology.**
2. **Discussion and finalization of shortlisting criteria for Ph. D. Programme.**
3. **Finalization of the dates of written test/interview for M. Tech. and Ph. D. Candidates.**
4. **Any other information with the permission of the Chairman.**

All the CRC members are requested to attend the meeting.

CRC Members

- | | |
|-------------------------|--|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Dr. I. P. Singh | Member |
| 5. Sh. L. K. Das | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |
| 7. Prof. Anurag Sharma | (External Expert), Physics Department. |

(D. S. Mehta)
Convener, CRC

Date: April 29, 2005

Subject: CRC meeting postponed.

CRC meeting which was supposed to be held on April 29, 2005 (Friday) at 3.00 PM is postponed. The meeting will be held now on 02-05-2005 (Monday) at 3.00 P.M. in the IDDC committee room. The main agenda of the meeting are the following;

1. **Discussion/finalization of shortlisting criteria for M. Tech. Programme in Instrument Technology.**
2. **Discussion and finalization of shortlisting criteria for Ph. D. Programme.**
3. **Finalization of the dates of written test/interview for M. Tech. and Ph. D. Candidates.**
4. **Any other information with the permission of the Chairman.**

All the CRC members are requested to attend the meeting.

CRC Members

- | | |
|-------------------------|--|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Dr. I. P. Singh | Member |
| 5. Sh. L. K. Das | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |
| 7. Prof. Anurag Sharma | (External Expert), Physics Department. |

(D. S. Mehta)
Convener, CRC

Date: May 13, 2005

Subject: Minutes of CRC Meeting held on May 02, 2005 in IDDC Heads Room.

The following members of the CRC were present.

1. Prof. D. T. Shahani,	Chairman, CRC
2. Dr. A. L. Vyas,	Head, IDDC
3. Dr. Rakesh Kumar,	Member
4. Dr. I. P. Singh	Member
5. Dr. D. S. Mehta	Convener, CRC

Sh. L. K. Das (Member IDDC), and Prof. Anurag Sharma (Physics Department) External Expert could not attend the meeting.

A. Discussion on the shortlisting criteria for admission in M. Tech. Programme in Instrument Technology and Ph. D. Programme. The committee decided the following shortlisting criteria:

1. For admission in M. Tech. Programme in Instrument Technology: (i) Candidates having minimum 70% marks in relevant Graduation and 97.5 % in GATE score for GE category, (ii) Minimum 60% marks in relevant graduation and 85 % in Gate Score, for SC/ST candidates, (iii) for sponsored full-time candidates having minimum 70% marks in relevant Graduation for GE category and 60% marks in relevant graduation for SC/ST category, and (iv) for self-supporting category minimum 80% in relevant Graduation for general candidates and minimum 75 % for SC/ST candidates, be called for Test/Interview.
2. The Test/Interview for M. Tech. admission will be held on 2nd June, 2005.
3. For admission in Ph. D. Programme in IDDC, Candidates having minimum criteria as per the Institute Norms in the relevant field will be called for test/interview.
4. The Test/Interview for admission in Ph. D. will be held on 6th June, 2005.

B) The Head, IDDC informed CRC members that the following two Proposals have been awarded by the MHRD;

1. "Development of smart sensors," submitted by Dr. A. L. Vyas (PI).
2. "Development of technology for the manufacture of medical implants of engineering components" submitted by Dr. Rakesh Kumar (PI)

The committee congratulated the respective PIs and the meeting ended with vote of thanks to the Chair. The minutes have the concurrence of the chairman.

All CRC Members

Convener, CRC

(D. S. Mehta)

Instrument Design Development Centre (IDDC)

Date: June 3, 2005

Subject: CRC Meeting on June 6, 2005 at 10.00 A.M. in the IDDC Heads Room.

CRC Meeting will be held in the IDDC Heads Room at 10.00 A. M. on Monday June 6, 2005. The following are the main agenda of the meeting:

- 1. Selection of Ph. D. Candidates for IDDC.** The list of the short listed candidates is attached. The applications may be seen in IDDC Office.

CRC Members

- | | |
|-------------------------|--|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Dr. I. P. Singh | Member |
| 5. Sh. L. K. Das | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |
| 7. Prof. Anurag Sharma | (External Expert), Physics Department. |

All Faculty of IDDC are invited to participate.

Convener, CRC

(D. S. Mehta)

All CRC
All Faculty of IDDC

Date: June 10, 2005

Subject: Minutes of the CRC Meeting held on June 6, 2005 (Monday) at 10.00 A. M. in the IDDC Heads Room.

CRC meeting was held in the Head, IDDC room on June 6, 2005 (Monday) at 10.00 A. M. The following members of the CRC and faculty of IDDC were present.

1. Prof. D. T. Shahani,	Chairman, CRC
2. Dr. A. L. Vyas,	Head, IDDC
3. Dr. Rakesh Kumar,	Member
4. Sh. L. K. Das	Member
5. Dr. I. P. Singh	Member
6. Dr. D. S. Mehta	Convener, CRC
7. Prof. Chandra Shakher	Professor, IDDC
8. Sh. A. K. Agarwala	CDE (SG)

Prof. Anurag Sharma (Physics Department) External Expert could not attend the meeting.

The following were the agenda of the meeting:

Test/Interview for the selection of candidates for the admission in Ph. D. programme for I-semester 2005-2006.

A. Total 13 applications were received from P.G. Section out of which 9 candidates were under General Category and 4 candidates were SC category. Total 11 candidates were short listed and called for test/interview out of which seven candidates were under General Category and four candidates were under SC category. Eight candidates as below attended the test/interview:

General Category

1. Mr. Santosh Kumar Singh	(General Category)
2. Mr. Gyanendra Sheoran	(General Category)
3. Mr. Mahender Singh Bist	(General Category)
4. Mr. Dhawal Gupta	(General Category)
5. Mr. Sanjeev Kumar Srivastava	(General Category)

SC Category

6. Mr. Pradeep Sagar	(SC Category)
7. Mr. Sunil Kumar	(SC Category)
8. Mr. Pankaj Kumar	(SC Category)

After conducting test/interview the CRC found the following candidates suitable for the admission to Ph. D. programme in IDDC for I-semester 2005-2006.

a) General Category Candidates

1. Mr. Dhawal Gupta	Part-time
2. Mr. Sanjeev Kumar Srivastava	Institute Scholar (FT)
3. Mr. Gyanendra Sheoran	Institute Scholar (FT)
4. Mr. Santosh Kumar Singh*	Part-time

b) SC/ST Candidates

Nil

* In the case of Mr. Santosh Kumar Singh the NOC was not as per IIT format, and he was advised to send the NOC in proper format as required by IIT, and the offer to him will be made only after submitting the proper NOC.

B. Discussion on Ph.D. Application of Mr. Dhawal Gupta

Prof. D. T. Shahani (PI), under whom Mr. Dhawal Gupta is working explained his case to the CRC. After deliberations the committee recommended the following:

1. The Committee noted that Mr. Dhawal Gupta had 87.7% marks in B. Tech. 2.5 years experience in R & D job before joining IRD and additional 1 year (since May 2004) R & D experience in IRD Projects at IIT Delhi. Hence he fulfils the “Academic” requirements for Ph. D. at IIT Delhi after B. Tech. without GATE in 2004 itself (namely 2 years R&D experience and 7.5 CGPA).
2. The committee further noted that Mr. Dhawal Gupta was selected in IDDC Ph.D. interview in Dec 2004 but was not issued ‘NOC’ on account that he had spent “less than one year in IRD projects”. The selection committee has again selected him for admission to Ph. D. programme subject to his receiving “NOC” from IRD.
3. The committee noted that the above “1 year in IRD projects criteria” was not an administrative requirement since a candidate with either B. Tech. with GATE or M. Tech. did not have to wait for 1-year work in IRD. In this respect the present interpretation of the said criteria does not take into account the 2.5 years of R & D experience before joining IIT Delhi while it should.
4. The committee felt that in view of the candidate satisfying the academic criteria of 2 year R&D experience and CGPA, his case for admission to Ph.D. program be considered favourably by the competent authority, either on basis of existing academic criteria which he satisfies or waiving of 2-3 months at IIT in view of his already having 2.5 years of R&D experience.

The meeting ended with thanks to the Chair.

Convener CRC

(D. S. Mehta)

Instrument Design Development Centre

Date: 13-06-2005

Sh. A. K. Agarwala (Supervisor)
Sh. Ahteshamul Haque (Ph. D. Student)

Kindly submit the progress report to the undersigned by 1st July, 2005.

D. S. Mehta

Convener, CRC

Instrument Design Development Centre

Date: 13-06-2005

Sh. A. K. Agarwala (Supervisor)
Sh. Patil Sanjay Kumar Limaji (Ph. D. Student)

Kindly submit the progress report to the undersigned by 1st July, 2005.

D. S. Mehta

Convener, CRC

Instrument Design Development Centre

Date: 13-06-2005

Prof. Chandra Shakher (Supervisor)
Sh. K. P. Chaudhary (Ph. D. Student)
Sh. Madhusudan (Ph. D. Student)
Md. Mosarraf Hossain (Ph. D. Student)

Kindly submit the progress report to the undersigned by 1st July, 2005.

D. S. Mehta

Convener, CRC

Instrument Design Development Centre

Date: 13-06-2005

Dr. Rakesh Kumar (Supervisor)
Sh. Pradeep Kumar Kushwaha (Ph. D. Student)

Kindly submit the progress report to the undersigned by 1st July, 2005.

D. S. Mehta

Convener, CRC

Instrument Design Development Centre

Date: 13-06-2005

Sh. L. K. Das (Supervisor)
Sh. Amitoj Singh (Ph. D. Student)

Kindly submit the progress report to the undersigned by 1st July, 2005.

D. S. Mehta

Convener, CRC

Instrument Design Development Centre

Date: 13-06-2005

Sh. K. P. Chaudhary,
Scientist 'F'
Length and Dimensional Standards
National Physical Laboratory,
Dr. K. S. Krishnan Road, New Delhi – 110 012

Enclosed please find the Progress Report Form. Kindly submit the progress report to the undersigned by 1st July, 2005.

D. S. Mehta

Convener, CRC

Copy to:

Prof. Chandra Shakher (Supervisor), IDDC, IIT Delhi

Instrument Design Development Centre (IDDC)

Date: July 8, 2005

Subject: CRC Meeting on July 14, 2005 at 12.00 Noon in the IDDC Heads Room.

CRC Meeting will be held in the IDDC Heads Room at 12.00 Noon on Thursday July 14, 2005. The following are the main agenda of the meeting:

1. Discussion on the progress reports of the Ph. D. students of IDDC.

CRC Members

- | | |
|-------------------------|--|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Dr. I. P. Singh | Member |
| 5. Sh. L. K. Das | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |
| 7. Prof. Anurag Sharma | (External Expert), Physics Department. |

Convener, CRC

(D. S. Mehta)

All CRC

Instrument Design Development Centre (IDDC)

Date: July 18, 2005

Subject: CRC Meeting on July 19, 2005 at 4.00 P.M. in the IDDC Heads Room.

CRC Meeting will be held in the IDDC Heads Room at 4.00 P.M. Tuesday, July 19, 2005. The following are the main agenda of the meeting:

- 1. Discussion on the synopsis of Sh. K. P. Chaudhary, Ph. D. student of IDDC.**
- 2. Finalization of short listing criteria for the newly submitted Ph. D. applications.**
- 3. Any other information with the permission of the Chairman.**

CRC Members

- | | |
|--------------------------|--|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Dr. I. P. Singh | Member |
| 5. Sh. L. K. Das | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |
| 7. Prof. Anurag Sharma | (External Expert), Physics Department. |
| 8. Prof. Chandra Shakher | Special Invitee |

Convener, CRC

(D. S. Mehta)

All CRC members and Prof. Chandra Shakher

Date: July 8, 2005

Subject: CRC Meeting on July 26, 2005 (Tuesday) at 11.00 A.M. in the IDDC Heads Room.

CRC Meeting will be held in the IDDC Heads Room at 11.00 A. M. on Tuesday, July 26, 2005. The following are the main agenda of the meeting:

1. Test/Interview of Ph. D. Candidate(s) Mr. B. Saravanan.

CRC Members

- | | |
|-------------------------|--|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Dr. I. P. Singh | Member |
| 5. Sh. L. K. Das | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |
| 7. Prof. Anurag Sharma | (External Expert), Physics Department. |

All Faculty of IDDC are invited to participate.

Discussion on the synopsis of Sh. K. P. Chaudhary, Ph. D. student of IDDC

Convener, CRC

(D. S. Mehta)

All CRC

Date: July 19, 2005

Subject: Minutes of the CRC Meeting held on July 19, 2005 (Tuesday) at 4.00 P. M. in the IDDC Heads Room.

CRC meeting was held in the Head, IDDC room on July 19, 2005 (Tuesday) at 4.00 P. M. The following members of the CRC and faculty of IDDC were present.

- | | |
|--------------------------|-----------------|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Sh. L. K. Das | Member |
| 5. Dr. I. P. Singh | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |
| 7. Prof. Chandra Shakher | Special Invitee |

Prof. Anurag Sharma (Physics Department) External Expert could not attend the meeting.

A. Discussion on the synopsis of Sh. K. P. Chaudhary, Ph. D. student of IDDC

The Synopsis and panel of examiners for the above candidate has been approved by CRC and enclosed for further necessary action.

B. Finalization of short listing criteria for the newly submitted Ph. D. applications.

The short listing criteria for newly submitted Ph. D. application of Mr. Nandan Singh Bist was discussed and the committee decided the same criteria as decided in the CRC meeting held on May 13, 2005 be applied. The committee decided that the above candidate satisfies the criteria and be called for interview to held on July 26, 2005.

The meeting ended with thanks to the Chair.

Convener CRC

(D. S. Mehta)

Instrument Design Development Centre (IDDC)

Date: July 22, 2005

Subject: CRC Meeting on July 26, 2005 at 11.00 A.M. in the IDDC Heads Room.

CRC Meeting will be held in the IDDC Heads Room at 11.00 A. M. on Tuesday June 26, 2005. The following are the main agenda of the meeting:

1. **Selection of Ph. D. Candidates for IDDC.** The following two candidates have been short listed for the Interview. The applications may be seen in IDDC Office.
2. **Discussion on the project proposal “MEMS based Micro-cantiliver for chemical and Biochemical sensors:** being submitted by Dr. Sudhir Chandra, CARE, and Dr. A. L. Vyas is one of the Co-PI of the project.

CRC Members

- | | |
|-------------------------|--|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Dr. I. P. Singh | Member |
| 5. Sh. L. K. Das | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |
| 7. Prof. Anurag Sharma | (External Expert), Physics Department. |

All Faculty of IDDC are invited to participate.

Convener, CRC

(D. S. Mehta)

All CRC
All Faculty of IDDC

Instrument Design Development Centre (IDDC)

Date: Nov. 21, 2005

Subject: CRC Meeting on Nov. 23, 2005 at 12.00 Noon in the IDDC Heads Room.

CRC Meeting will be held in the IDDC Heads Room at 12.00 Noon. Wednesday, Nov. 23, 2005. The following are the main agenda of the meeting:

- 1. Finalization of short listing criteria for the newly submitted Ph. D. applications.**
- 2. Any other information with the permission of the Chairman.**

CRC Members

- | | |
|-------------------------|--|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Prof. K. Gupta | (External Expert), Mechanical Engg. Department |
| 4. Dr. Rakesh Kumar, | Member |
| 5. Dr. I. P. Singh | Member |
| 6. Sh. L. K. Das | Member |
| 7. Dr. D. S. Mehta | Convener, CRC |
| . | |

Convener, CRC

(D. S. Mehta)

All CRC members.

Date: Nov. 24, 2005

Subject: Minutes of CRC Meeting held on Nov. 23, 2005 at 12.00 Noon in the IDDC Heads Room.

CRC Meeting was held in the IDDC Heads Room at 12.00 Noon. Wednesday, Nov. 23, 2005. The following CRC members attended the meeting:

1. Prof. D. T. Shahani,	Chairman, CRC
2. Dr. A. L. Vyas,	Head, IDDC
3. Prof. K. Gupta	(External Expert), Mechanical Engg. Department
4. Dr. Rakesh Kumar,	Member
5. Dr. I. P. Singh	Member
6. Sh. L. K. Das	Member
7. Dr. D. S. Mehta	Convener, CRC

The Committee thanked Prof. Anurag Sharma (Physics Department), External Expert of previous CRC for his valuable contribution and also welcomed Prof. K. Gupta (Mechanical Engg. Department) as new External Expert of present CRC.

The following are minutes of the meeting:

A. Finalization of short listing criteria for the submitted Ph. D. applications for II Semester 2005-2006.

The short listing criteria for submitted Ph. D. applications were discussed and the committee decided that the candidates having minimum criteria as per the Institute Norms in the relevant fields will be called for test/interview. Total 5 Ph. D. applications (General Category) were received from PG Section and all five applications were studied/discussed and all five applications were found suitable as per the Institute norms. The committee decided all five candidates will be called for test/interview.

B. The Test/Interview for admission in Ph. D. for II Semester 2005-2006 will be held on 19-12-2005 (Monday) at 10.00 A.M. in IDDC Committee Room.

C. Approval of CRC for the appointment of Supervisors and formulation of Student Research Committee (SRC) of the following Ph. D. scholars who joined IDDC during Ist semester 2005-2006 was discussed and the CRC recommends the same be forwarded to PG section.

1. Sanjeev Kumar Srivastava (2005 IDZ 8170)
2. Gyanendra Sheoran (2005 IDZ 8171)

The meeting ended with thanks to the Chair.

Convener, CRC

(D. S. Mehta)

Instrument Design Development Centre (IDDC)

Date: Dec. 2, 2005

Subject: CRC Meeting on Dec. 6, 2005 at 12.00 Noon in the IDDC Heads Room.

CRC Meeting will be held in the IDDC Heads Room at 12.00 Noon. Tuesday, Dec. 2, 2005. The following are the main agenda of the meeting:

- 1. Discussion on the project proposal under INSA – JSPS Joint Research Project for FY 2006 entitled: “High speed / Real Time Fringe analysis using Image Processing Technique”**
- 3. Any other information with the permission of the Chairman.**

CRC Members

- | | |
|-------------------------|--|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Prof. K. Gupta | (External Expert), Mechanical Engg. Department |
| 4. Dr. Rakesh Kumar, | Member |
| 5. Dr. I. P. Singh | Member |
| 6. Sh. L. K. Das | Member |
| 7. Dr. D. S. Mehta | Convener, CRC |

Convener, CRC

(D. S. Mehta)

All CRC members.

Date: Dec. 6, 2005

Subject: Minutes of CRC Meeting held on Dec. 6, 2005 at 12.00 Noon in the IDDC Heads Room.

CRC Meeting was held in the IDDC Heads Room at 12.00 Noon, Tuesday, Dec. 6, 2005. The following members attended the meeting;

- | | |
|-------------------------|--|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Prof. K. Gupta | (External Expert), Mechanical Engg. Department |
| 4. Dr. Rakesh Kumar, | Member |
| 5. Dr. I. P. Singh | Member |
| 6. Sh. L. K. Das | Member |
| 7. Dr. D. S. Mehta | Convener, CRC |

The following are the minutes of the meeting;

- A.** The Project proposal entitled: **“High speed / Real Time Fringe analysis using Image Processing Technique”** submitted by Prof. Chandra Shakher (PI) and Dr. D. S. Mehta (Co-PI) under **INSA – JSPS Joint Research Project for FY 2006**, was circulated among the CRC members for their comments and the same was discussed in the CRC meeting. It was noted that the PI and Co-PI had clarified that no additional space and manpower was being asked from IDDC. The CRC recommends the aforementioned proposal for further necessary processing.
- B.** The research plan submitted by Mr. Satish Kumar Dubey to SRC on 28-11-2005 and duly approved by SRC was presented to CRC and the CRC recommended the same be forwarded to PGS& R section for further necessary action.

The meeting ended with thanks to the Chair.

Convener, CRC

(D. S. Mehta)

Instrument Design Development Centre (IDDC)

Date: Dec. 6, 2005

Subject: Submission of joint project proposal under **INSA – JSPS Joint Research Project for FY 2006.**

The following project proposal was received from the Faculty of IDDC under **INSA – JSPS Joint Research Project for FY 2006.**

1. **“High speed / Real Time Fringe analysis using Image Processing Technique”.**

Attached please find the project proposal along with the CRC minutes (A) for further processing.

Through Head, IDDC

(D. S. Mehta)
Convener, CRC

Dean IRD

Instrument Design Development Centre (IDDC)

Date: Dec. 6, 2005

Subject: Moderation committee meeting on 8th December 2005 at 11.00 A. M. in the Committee Room of IDDC.

Meeting will be held in the Committee Room of IDDC at 11.00 A. M. on Thursday the 8th December 2005 for MODERATION OF GRADES. All course supervisors and faculty members are requested to kindly make it convenient to attend the meeting.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: Dec. 9, 2005

Subject: CRC Meeting on December 19, 2005 at 10.00 A.M. in the IDDC Heads Room.

CRC Meeting will be held in the IDDC Heads Room at 10.00 A. M. on Monday December 19, 2005. The following are the main agenda of the meeting:

- 1. Selection of Ph. D. Candidates for IDDC.** The list of the short listed candidates is attached. The applications may be seen in IDDC Office.

CRC Members

- | | |
|-------------------------|---------------|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Prof. K. Gupta | Member |
| 4. Dr. Rakesh Kumar, | Member |
| 5. Dr. I. P. Singh | Member |
| 6. Sh. L. K. Das | Member |
| 7. Dr. D. S. Mehta | Convener, CRC |

All Faculty of IDDC are invited to participate.

Convener, CRC

(D. S. Mehta)

All CRC
All Faculty of IDDC

Date: Dec. 19, 2005

Subject: Minutes of the CRC Meeting held on Dec. 19, 2005 (Monday) at 10.00 A. M. in the IDDC Heads Room.

CRC meeting was held in the Head, IDDC room on Dec. 19, 2005 (Monday) at 10.00 A. M. The following members of the CRC and faculty of IDDC were present.

1. Prof. D. T. Shahani,	Chairman, CRC
2. Dr. A. L. Vyas,	Head, IDDC
3. Dr. Rakesh Kumar,	Member
4. Sh. L. K. Das	Member
5. Dr. I. P. Singh	Member
6. Dr. D. S. Mehta	Convener, CRC
7. Sh. A. K. Agarwala	CDE (SG)
8. Sh. S. K. Atreya	Assos. Professor
9. Sh. S. K. Sud	CDE

Prof. K. Gupta (Department Mechanical Engg.) External Expert could not attend the meeting. The following are the Minutes of the meeting:

A. Test/Interview for the selection of candidates for the admission in Ph. D. programme for II-semester 2005-2006. Total 5 applications were received from P.G. Section. All 5 candidates were under General Category. All 5 candidates were short listed and called for test/interview. Four (4) candidates as below attended the test/interview:

1. Mr. Anuj Kumar	(General Category)
2. Mr. Updesh Verma	(General Category)
3. Mr. Manoj Kumar Singh	(General Category)
4. Mr. Ranjeet Kumar	(General Category)

After conducting test/interview CRC found the following candidates suitable for the admission to Ph. D. programme in IDDC for II-semester 2005-2006.

1. Mr. Anuj Kumar	(Full Time)
2. Mr. Manoj Kumar Singh	(Full Time)
3. Mr. Ranjeet Kumar	(Full Time)

B. The CRC was informed by Supervisor of Mr. Patil Sanjay Kumar Limaji (Ph. D. student IDDC) that he has cleared the written test Comprehensive, while the Oral viva-voce was fixed on 20th Dec. 2005, on account of the availability of SRC members. The CRC recommended that if the comprehensive report was satisfactory same may be forwarded by Chairman CRC to PG Section. Similarly for some Ph. D. students whose progress report was still due similar action may be taken.

The meeting ended with thanks to the Chair.

(D. S. Mehta)

Convener CRC

Instrument Design Development Centre (IDDC)

Date: Dec. 22, 2005

Subject: Addendum to the minutes of the CRC Meeting held on Dec. 19, 2005 (Monday) at 10.00 A. M. in the IDDC Heads Room.

CRC meeting was held in the Head, IDDC room on Dec. 19, 2005 (Monday) at 10.00 A. M. The following members of the CRC and faculty of IDDC were present.

- | | |
|-------------------------|------------------|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Sh. L. K. Das | Member |
| 5. Dr. I. P. Singh | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |
| 7. Sh. A. K. Agarwala | CDE (SG) |
| 8. Sh. S. K. Atreya | Assos. Professor |
| 9. Sh. S. K. Sud | CDE |

The following are the addendum to minutes of the meeting:

- C. Approval of CRC for the appointment of Supervisors and formulation of Student Research Committee (SRC) of the Mr. Dhawal Gupta (2005IDZ8169) Ph. D. scholar who joined IDDC during Ist semester 2005-2006 was discussed and the CRC recommends the same be forwarded to PG section.

Convener CRC

(D. S. Mehta)

Date: Jan. 9, 2006

Subject: CRC Meeting on January 11, 2006 at 10.00 A.M. in the IDDC Heads Room.

CRC Meeting will be held in the IDDC Heads Room at 10.00 A. M. on Wednesday January 11, 2006. The following are the main agenda of the meeting:

- 1. Test/ Interview of Ph. D. Candidates under QIP programme.**
- 2. Discussion on the project Proposal entitled “Development of a Low-cost Online LCD Projector” submitted by Sh. S. K. Atreya (PI) and Dr. I. P. Singh (Co-PI) for DST.**

CRC Members

- | | |
|-------------------------|---------------|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Prof. K. Gupta | Member |
| 4. Dr. Rakesh Kumar, | Member |
| 5. Dr. I. P. Singh | Member |
| 6. Sh. L. K. Das | Member |
| 7. Dr. D. S. Mehta | Convener, CRC |

Convener, CRC

(D. S. Mehta)

All CRC

Date: Jan. 19, 2006

Subject: Minutes of CRC Meeting held on January 11, 2006 at 10.00 A.M. in the IDDC Heads Room.

CRC Meeting was held in the IDDC Heads Room at 10.00 A. M. on Wednesday January 11, 2006. The following members of the CRC and faculty of IDDC were present.

1. Prof. D. T. Shahani,	Chairman, CRC
2. Dr. A. L. Vyas,	Head, IDDC
3. Dr. Rakesh Kumar,	Member
4. Dr. I. P. Singh	Member
5. Sh. L. K. Das	Member
6. Dr. D. S. Mehta	Convener, CRC
7. Prof. Chandra Shakher	Professor IDDC
8. Sh. S. K. Atreya	Assos. Professor
9. Sh. S. K. Sud	CDE.
10. Sh N. K. Jain	CDE

The following are the minutes of the meeting:

A. Test/ Interview of Ph. D. Candidates under QIP programme: Under the QIP programme all the 06 candidates who applied were short listed and called for test/interview. Four candidates were under General Category and two candidates under OBC.

Sl. No.	Application No.	Name of the candidate	GE/SC/ST/OBC
1.	50377	Mr. Sheo Shanker Prasad	GE
2.	50508	Mr. Bhaskar Vinodchandra Thakker	GE
3.	50571	Mr. Shah Hetal Naginbhai	GE
4.	50636	Mr. Sharanbasappa K. Aurad	GE
5.	51133	Mr. Rangraju H. G.	OBC
6.	51231	Mr. Narendra C. P.	OBC

The following 05 candidates under QIP programme attended the test/interview:

Sl. No.	Application No.	Name of the candidate	GE/SC/ST/OBC
1.	50377	Mr. Sheo Shanker Prasad	GE
2.	50508	Mr. Bhaskar Vinodchandra Thakker	GE
3.	50571	Mr. Shah Hetal Naginbhai	GE
4.	51133	Mr. Rangraju H. G.	OBC
5.	51231	Mr. Narendra C. P.	OBC

After conducting test/interview the committee recommended the following candidate for the advance admission to Ph. D. programme for 2006-2007 under QIP.

Sl. No.	Application No.	Name of the candidate	GE/SC/ST/OBC
1.	50508	Mr. Bhaskar Vinodchandra Thakker	GE
2.	50377	Mr. Sheo Shanker Prasad	GE
3.	50571	Mr. Shah Hetal Naginbhai	GE

B. Discussion on the project Proposal entitled “Development of a Low-cost Online LCD Projector” submitted by Sh. S. K. Atreya (PI) and Dr. I. P. Singh (Co-PI) for DST.

The proposal submitted vide note of Shri Atreya dated 9-1-06 was circulated among the CRC members for their comments and the same was discussed in the CRC meeting. As per his note he has got signed the proposal from Shri M S Sodha and Shri P K Katti to collaborating investigators, and that he has reserved some honorarium for them.

In response to points raised by CRC members the PI and Co-PI clarified that

- (a) no additional space and manpower was being asked from IDDC.
- (b) they proposed to obtain/fabricate optical components from outside sources and not from the optics section in IDDC.
- (c) they also clarified that only those expert faculty/Labs. would be mentioned in the revised proposal who were consulted and are likely to be contributing in the project.
- (d) Cost range of currently available projectors would be corrected.
- (e) Corrections in bio-data will be done and biodata of Co-PI will be added

The CRC recommended that the PI of the project may make above modifications as suggested in CRC and re-submit the same for onward forwarding to IRD.

Convener, CRC

(D. S. Mehta)

Instrument Design Development Centre (IDDC)

Date: Feb. 2, 2006

Mr. S. K. Atreya has submitted a research proposal on “Development of Instrument for Treatment of Fluoride Water in six Villages of Sikar District of Rajasthan”. The project is being submitted to DST. Kindly give Comments/Observations by 10.00 A. M. Feb. 8, 2006.

CRC Members

1. Prof. D. T. Shahani,	Chairman, CRC
2. Dr. A. L. Vyas,	Head, IDDC
3. Prof. K. Gupta	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. I. P. Singh	Member
6. Sh. L. K. Das	Member
7. Dr. D. S. Mehta	Convener, CRC

Instrument Design Development Centre (IDDC)

Date: Feb. 6, 2006

Subject: CRC Meeting on February 8, 2006 at 11.00 A.M. in the IDDC Heads Room.

CRC Meeting will be held in the IDDC Heads Room at 11.00 A. M. on Wednesday February 8, 2006. The following are the main agenda of the meeting:

- 1. Approval of Research plan of Mr. Pradeep Kumar Kushwaha (2004IDZ8051) Ph. D. student of IDDC.**
- 2. Discussion on the project Proposal entitled “Development of Instrument for Treatment of Fluoride Water in six Villages of Sikar District of Rajasthan” submitted by Sh. S. K. Atreya (PI) for DST.**
- 3. Any other information with the permission of the Chairman.**

CRC Members

1. Prof. D. T. Shahani,	Chairman, CRC
2. Dr. A. L. Vyas,	Head, IDDC
3. Prof. K. Gupta	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. I. P. Singh	Member
6. Sh. L. K. Das	Member
7. Dr. D. S. Mehta	Convener, CRC

(D. S. Mehta)

Convener, CRC

Date: Feb. 8, 2006

Subject: Minutes of CRC Meeting held on Feb. 8, 2006 at 11.00 A.M. in the IDDC Heads Room.

CRC Meeting was held in the IDDC Heads Room at 11.00 A. M. on Wednesday Feb. 8, 2006. The following members of the CRC and faculty of IDDC were present.

1. Prof. D. T. Shahani,	Chairman, CRC
2. Dr. A. L. Vyas,	Head, IDDC
3. Prof. K. Gupta	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. I. P. Singh	Member
6. Dr. D. S. Mehta	Convener, CRC
7. Sh. S. K. Atreya	Special Invitee

Sh. L. K. Das could not attend the meeting. The following are the minutes of the meeting.

1. Discussion on the project proposal submitted by Sh. S. K. Atreya (PI) for DST.

For the proposal “**Development of Instrument for Treatment of Fluoride Water in six Villages of Sikar District of Rajasthan**” by **Sh. S. K. Atreya** made for DST, Govt. India submitted to CRC on 6-02-2006 with request for urgent processing. The proposal was circulated among the CRC members for their comments and the same was discussed in the CRC meeting on 8-02-2006. The recommendations of CRC are:

- (a) No additional space and manpower was being asked by the PI from IDDC.
- (b) In Page No.16 comments on Budget to Nuchem be removed. Spending of Budget should as per IIT Delhi Norms.
- (c) On Page No. 17 Manpower designations and Salaries should as per IRD, Norms.
- (d). Modified proposal on above lines to be submitted by PI for onward processing by IRD.

2. The research plan submitted by **Mr. Pradeep Kumar Kushwaha (2004IDZ8051) Ph. D. student of IDDC** to SRC on 24-1-2006 and duly approved by SRC was presented to CRC and the CRC recommended the same be forwarded to PGS& R section for further necessary action.

3. CRC recommended that notes dated 09-12-2006 and 20-12-2006 from Academic & Examination Section (PGS) be circulated among CRC members for their views for weeks time.

Convener, CRC

(D. S. Mehta)

Instrument Design Development Centre (IDDC)

Date: March 1, 2006

Subject: CRC Meeting on March 6, 2006 at 11.30 A.M. in the IDDC Heads Room.

CRC Meeting will be held in the IDDC Heads Room at 11.30 A. M. on Monday March 6, 2006. The following are the main agenda of the meeting:

- 1. Discussion on the project Proposal entitled “Earthquake signature analysis using intelligent techniques” submitted by Prof. D. T. Shahani (PI) for DST.**
- 2. Any other information with the permission of the Chairman.**

CRC Members

- | | |
|-------------------------|---------------|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Prof. K. Gupta | Member |
| 4. Dr. Rakesh Kumar, | Member |
| 5. Dr. I. P. Singh | Member |
| 6. Sh. L. K. Das | Member |
| 7. Dr. D. S. Mehta | Convener, CRC |

Convener, CRC

(D. S. Mehta)

Instrument Design Development Centre (IDDC)

Date: March 6, 2006

Subject: Minutes of CRC Meeting held on March 6, 2006 at 11.30 A. M. in the IDDC Heads Room.

CRC Meeting was held in the IDDC Heads Room on March 6, 2006 at 11.30 A. M. The following members attended the meeting;

- | | |
|-------------------------|---------------|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Prof. K. Gupta | Member |
| 4. Dr. Rakesh Kumar, | Member |
| 5. Dr. I. P. Singh | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |

Sh. L. K. Das could not attend the meeting. The following are the minutes of the meeting;

The Project proposal entitled: “**Earthquake signature analysis using intelligent techniques**” submitted by **Prof. D. T. Shahani (PI) for DST**”, was circulated among the CRC members for their comments and the same was discussed in the CRC meeting. It was noted that the PI had clarified that no additional space and manpower was being asked from IDDC. The CRC recommends the aforementioned proposal for further necessary processing.

The meeting ended with thanks to the Chair.

Convener, CRC

(D. S. Mehta)

Instrument Design Development Centre (IDDC)

Date: April 19, 2006

Subject: CRC Meeting on April 24, 2006 at 12.00 Noon in the IDDC Heads Room.

CRC Meeting will be held in the IDDC Heads Room at 12.00 Noon on Monday April 24, 2006. The following are the main agenda of the meeting:

- 1. Approval of CRC for the appointment of Supervisors and SRC of the Ph. D. scholars joined IDDC during IInd-semester 2005-2006.**
- 2. Discussion on the medical leave of Mr. Y. V. V. M. Pavan Kumar (2004JID2348), M. Tech. Student.**
- 3. Any other information with the permission of the Chairman.**

CRC Members

1. Prof. D. T. Shahani,	Chairman, CRC
2. Dr. A. L. Vyas,	Head, IDDC
3. Prof. K. Gupta	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. I. P. Singh	Member
6. Sh. L. K. Das	Member
7. Dr. D. S. Mehta	Convener, CRC

Convener, CRC

(D. S. Mehta)

Instrument Design Development Centre (IDDC)

Date: April 28, 2006

Subject: Minutes of CRC Meeting held on April 25, 2006 at 11.00 A. M. in the IDDC Heads Room.

CRC Meeting was held in the IDDC Heads Room on April 25, 2006 at 11.00 A. M. The following members attended the meeting:

1. Prof. D. T. Shahani,	Chairman, CRC
2. Dr. A. L. Vyas,	Head, IDDC
3. Prof. K. Gupta	Member
4. Sh. L. K. Das	Member
5. Dr. I. P. Singh	Member
6. Dr. D. S. Mehta	Convener, CRC

Dr. Rakesh Kumar could not attend the meeting. The following are the minutes of the meeting:

A. Approval of CRC for the appointment of Supervisors and formulation of Student Research Committee (SRC) of the following Ph. D. scholar who joined IDDC during IInd semester 2005-2006 was discussed and the CRC recommends the same be forwarded to PG section.

1. Mr. Anuj Kumar (2005IDZ8273)
2. Mr. Manoj Kumar Singh (2005IDZ8274)
3. Mr. Ranjeet Kumar (2005IDZ8275)

B. Medical leave application of M. Tech. student Instrument Technology was discussed in the CRC and the details are given below:

Name of Student: Mr. Y. V. V. M. Pavan Kumar (2004JID2348)
Courses taken by student in Semester - II: Nil
Project: Major Project Part – II under the supervision of Dr. A. K. Agarwala
Medical Leave Application: January 10, 2006 – March 30, 2006
Type of Medical Treatment: Kidney Transplant
As per medical certificate (copy attached) the student is fit to carry on his work from March 30, 2006.

Attachments: 1. Leave application of student.
2. Copy of medical certificates.
3. Discharge Summary

The committee recommended that the student be allowed to join the M. Tech. Course and complete his major project during the summer vacation well in time before the start of next academic session and his medical leave application be forwarded to Dean PG for final decision.

C. *Dr. A. L. Vyas informed Committee that a project proposal entitled: Development of sensors for Bio-analytes based on SAW and MEMS Technologies, is being submitted to DST by Dr. Nivedita K. Gohil (Principal Investigator) Centre for Biomedical Engineering, IIT Delhi. The investigating team requested Dr. A. L. Vyas to be Co-investigator of the proposal. The committee welcomed the project and recommended for further processing.*

The meeting ended with thanks to the chair.

Convener, CRC

(D. S. Mehta)

Instrument Design Development Centre (IDDC)

Date: May 1, 2006

Enclosed please find the duly filled application forms for the appointment of Supervisors and formulation of Student Research Committee (SRC) of the following Ph. D. scholars who joined IDDC during IInd semester 2005-2006.

- | | |
|--------------------------|---------------|
| 1. Mr. Anuj Kumar | (2005IDZ8273) |
| 2. Mr. Manoj Kumar Singh | (2005IDZ8274) |
| 3. Mr. Ranjeet Kumar | (2005IDZ8275) |

(D. S. Mehta)
Convener, CRC

Dean PGS

Enclosures:

1. Application forms
2. CRC minutes (Minute 'A').

Instrument Design Development Centre (IDDC)

Date: May 1, 2006

Enclosed please find the Medical leave application of M. Tech. student Instrument Technology of IDDC.
The details are given below.

Name of Student: Mr. Y. V. V. M. Pavan Kumar (2004JID2348)
Courses taken by student in Semester - II: Nil
Project: Major Project Part – II under the supervision of Dr. A. K. Agarwala
Medical Leave Application: January 10, 2006 – March 30, 2006
Type of Medical Treatment: Kidney Transplant
As per medical certificate (copy attached) the student is fit to carry on his work from March 30, 2006.

Convener, CRC

(D. S. Mehta)

Dean PGS

Enclosures:

1. Leave application of student.
2. Copy of medical certificates.
3. Discharge Summary
4. CRC minutes (Minute 'B').

Instrument Design Development Centre (IDDC)

Date: May 2, 2006

Subject: An urgent CRC Meeting on May 4, 2006 (Thursday), at 10.30 A.M. in the IDDC Heads Room.

An Urgent CRC meeting is being held in the Head, IDDC room on May 4, 2006 (Thursday), at 10.30 A.M.. The main agenda of the meeting are the following;

1. **Discussion/finalization of short-listing criteria for M. Tech. Programme in Instrument Technology.**
2. **Discussion and finalization of short-listing criteria for Ph. D. Programme.**
3. **Finalization of the dates of written test/interview for M. Tech. and Ph. D. Candidates.**
4. **Any other information with the permission of the Chairman.**

All the CRC members are requested to attend the meeting.

All CRC Members

- | | |
|-------------------------|---------------|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Prof. K. Gupta | Member |
| 4. Dr. Rakesh Kumar, | Member |
| 5. Dr. I. P. Singh | Member |
| 6. Sh. L. K. Das | Member |
| 7. Dr. D. S. Mehta | Convener, CRC |

(D. S. Mehta)
Convener, CRC

Date: May 5 2006

Subject: Minutes of CRC Meeting held on May 04, 2006 in IDDC Heads Room.

The following members of the CRC were present.

1. Prof. D. T. Shahani,	Chairman, CRC
2. Dr. A. L. Vyas,	Head, IDDC
3. Prof. K. Gupta	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. I. P. Singh	Member
6. Dr. D. S. Mehta	Convener, CRC
Sh. L. K. Das could not attend the meeting.	

The short-listing criteria for admission in M. Tech. Programme in Instrument Technology and Ph. D. Programme for the Ist-Semester 2006-2007 was discussed and the committee decided the following short-listing criteria:

A. M. Tech. Programme in Instrument Technology:

1. General Category (GE): minimum 60% marks in relevant Graduation and GATE score equal to 425.
2. SC/ST/PH Category: minimum 55 % marks in relevant graduation and GATE Score equal to 275
3. Self-supporting category minimum 80 % marks in relevant graduation.
4. The Test/Interview for M. Tech. admission will be held on 1st June, 2006 (Thursday).

B. Ph. D. Programme in IDDC:

1. General Category (GE): minimum 60% marks in relevant Graduation and GATE score equal to 300.
2. SC/ST/PH Category: minimum 55 % marks in relevant graduation and GATE Score equal to 200.
3. Part-Time candidates: As per Institute Norms.
4. The Test/Interview for admission in Ph. D. will be held on 6th June, 2006 (Tuesday).

All CRC Members

Convener, CRC

(D. S. Mehta)

Date: May 5 2006

The short-listing criteria for admission in M. Tech. Programme in Instrument Technology and Ph. D. Programme for the Ist-Semester 2006-2007:

B. M. Tech. Programme in Instrument Technology:

1. General Category (GE): minimum 60% marks in relevant Graduation and GATE score equal to 425.
2. SC/ST/PH Category: minimum 55 % marks in relevant graduation and GATE Score equal to 275
3. Self-supporting category minimum 80 % marks in relevant graduation.

B. Ph. D. Programme in IDDC:

1. General Category (GE): minimum 60% marks in relevant Graduation and GATE score equal to 300.
2. SC/ST/PH Category: minimum 55 % marks in relevant graduation and GATE Score equal to 200.
3. Part-Time candidates: As per Institute Norms.

Head, IDDC

(A. L. Vyas)

Instrument Design Development Centre (IDDC)

Date: May 12, 2006

Subject: Moderation committee meeting on 15th May 2006 at 11.00 A. M. in the Committee Room of IDDC.

Meeting will be held in the Committee Room of IDDC at 11.00 A. M. on Monday the 15th May 2006 for MODERATION OF GRADES. All course supervisors and faculty members are requested to kindly make it convenient to attend the meeting.

Convener, CRC

(D. S. Mehta)

Instrument Design Development Centre (IDDC)

Date: May 26, 2006

Subject: An urgent CRC Meeting on May 29, 2006 (Monday), at 11.30 A.M. in the IDDC Heads Room.

An Urgent CRC meeting is being held in the Head, IDDC room on May 29, 2006 (Monday), at 11.30 A.M. The main agenda of the meeting is to discuss matter relating to M. Tech. Viva scheduled on May 31st, 2006.

All the CRC members are requested to attend the meeting.

All CRC Members

1. Prof. D. T. Shahani,	Chairman, CRC
2. Dr. A. L. Vyas,	Head, IDDC
3. Prof. K. Gupta	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. I. P. Singh	Member
6. Sh. L. K. Das	Member
7. Dr. D. S. Mehta	Convener, CRC

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: May 29, 2006

Subject: Minutes of CRC Meeting held on May 29, 2006 in IDDC Heads Room.

An Urgent CRC meeting was held in the Head, IDDC room on May 29, 2006 (Monday), at 11.30 A.M. The following members of the CRC were present.

1. Prof. D. T. Shahani,	Chairman, CRC
2. Dr. A. L. Vyas,	Head, IDDC
3. Dr. Rakesh Kumar,	Member
4. Dr. I. P. Singh	Member
5. Dr. D. S. Mehta	Convener, CRC
6. Prof. Chandra Shakher	Special Invitee

Sh. L. K. Das and Prof. K. Gupta could not attend the meeting.

The following M. Tech. Students were not able to finish their M. Tech. in the scheduled time due to problems related to the failure of Equipment/delayed procurement of Sensors.

Name of the student	Supervisor
1. Mr. N. Bala Siva Kumar (2004JID2349)	Prof. Chandra Shakher
2. Mr. Lakshmana Babu Chimata (2004JID2350)	Prof. D. T. Shahani
3. Mr. N. Satyanarayana (2004 2683)	Prof. D. T. Shahani

CRC discussed the request of the students duly endorsed by the Supervisors that on account of the failure in Equipment for S. No. 1 and delayed Import of Sensors for S. Nos. 2 & 3 the M. Tech. Project of the above students got delayed beyond the control of the Students.

The CRC recommended that an additional time upto 4 weeks be given in interest of quality M. Tech. Project.

The meeting ended with thanks to the chair.

Convener, CRC

(D. S. Mehta)

Instrument Design Development Centre (IDDC)

Date: May, 30, 2006

Subject: CRC Meeting on June 6, 2006 at 10.00 A.M. in the IDDC Head's Room.

CRC Meeting will be held in the IDDC Head's Room at 10.00 A. M. on Tuesday, June 6, 2006. The agenda of the meeting is:

- 1. Selection of Ph. D. Candidates for IDDC.** The list of the short-listed candidates is attached. Applications may be seen in IDDC Office.

CRC Members

1. Prof. D. T. Shahani,	Chairman, CRC
2. Dr. A. L. Vyas,	Head, IDDC
3. Prof. K. Gupta	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. I. P. Singh	Member
6. Sh. L. K. Das	Member
7. Dr. D. S. Mehta	Convener, CRC

All Faculty of IDDC are invited to participate.

Convener, CRC

(D. S. Mehta)

All CRC
All Faculty of IDDC

Instrument Design Development Centre (IDDC)

Date: May 29, 2006

Subject: Minutes of PEC Meeting held on May 29, 2006 in IDDC Heads Room.

An Urgent PEC meeting was held in the Head, IDDC room on May 29, 2006 (Monday), at 11.30 A.M. The following members of the PEC were present.

- | | |
|--------------------------|---------------|
| 1. Dr. A. L. Vyas | Chairman |
| 2. Prof. Chandra Shakher | Member |
| 3. Prof. D. T. Shahani | Member |
| 4. Dr. Rakesh Kumar | Member |
| 5. Dr. I. P. Singh | Member |
| 6. Dr. D. S. Mehta | Convener, PEC |

The following M. Tech. students were not able to finish their M. Tech. projects in the scheduled time due to problems related to the failure of Equipment/delayed procurement of Sensors.

Name of the student	Supervisor
1. Mr. N. Bala Siva Kumar (2004JID2349)	Prof. Chandra Shakher
2. Mr. Lakshmana Babu Chimata (2004JID2350)	Prof. D. T. Shahani
3. Mr. N. Satyanarayana (2004 2683)	Prof. D. T. Shahani

PEC discussed the request of the students duly endorsed by the Supervisors that on account of the failure in Equipment for S. No. 1 and delayed Import of Sensors for S. Nos. 2 & 3 the M. Tech. Project of the above students got delayed beyond the control of the students.

The PEC recommended that an additional time upto 4 weeks be given in interest of quality M. Tech. Project.

The meeting ended with thanks to the chair.

Convener, PEC

(D. S. Mehta)

Instrument Design Development Centre (IDDC)

Date: June 15, 2006

Subject: Minutes of CRC Meeting held on June 15, 2006 (Thursday), at 4.00 P.M. in the IDDC Heads Room.

An Urgent CRC meeting was held in the Head, IDDC room on June 15, 2006 (Thursday), at 4.00 P.M. The following CRC members were present in the meeting:

CRC Members

1. Prof. D. T. Shahani,	Chairman, CRC
2. Dr. A. L. Vyas,	Head, IDDC
3. Prof. K. Gupta	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. I. P. Singh	Member
6. Sh. L. K. Das	Member
7. Dr. D. S. Mehta	Convener, CRC

Prof. K. Gupta could not attend the meeting. The following are the minutes of the meeting:

1. The CRC examined the case of Mr. Sushil Chandra who had applied for Ph. D. (Part Time, Self Supporting) in IDDC and appeared for test/interview held on June 6, 2006. He had not submitted all the documents on 6-06-2006, however, the candidate's interview was conducted.
2. On receiving all documents subsequently it was found that the candidate's M. S. was Distance Learning Program.

The CRC on 15-06-2006 observed from the documents submitted that since the M. S. program taken by the candidate was entirely Distance Learning without practical component in the Dissertation and also that the candidate's next lower degree was B. Tech. with only 68% marks which was below the Institute's norm for part time Ph. D. with B. Tech. (min 75%) he was not eligible for admission to Ph. D. programme at IDDC, IIT Delhi.

These minutes has the concurrence of the Chairman.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: June 15, 2006

Subject: An urgent CRC Meeting on June 15, 2006 (Thursday), at 4.00 P.M. in the IDDC Heads Room.

An Urgent CRC meeting is being held in the Head, IDDC room on June 15, 2006 (Thursday), at 4.00 P.M. The main agenda of the meeting is to discuss matter relating to Ph. D. selection held on June 6, 2006.

All the CRC members are requested to attend the meeting.

All CRC Members

1. Prof. D. T. Shahani,	Chairman, CRC
2. Dr. A. L. Vyas,	Head, IDDC
3. Prof. K. Gupta	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. I. P. Singh	Member
6. Sh. L. K. Das	Member
7. Dr. D. S. Mehta	Convener, CRC

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre

Date: 16-06-2006

Attached please find the form for the progress report of Ph. D. student. Kindly submit the progress report to the undersigned by 10th, July, 2006.

D. S. Mehta
Convener, CRC

Prof. Kehar Singh (Supervisor)- Physics Department

Sh. Madhusudan Joshi (2001RID001)- Ph. D. Student (IDDC)

Instrument Design Development Centre (IDDC)

Date: July 6, 2006

Subject: An urgent CRC Meeting on July 7, 2006 (Friday), at 12.00 Noon in the IDDC Heads Room.

An Urgent CRC meeting is being held in the Head, IDDC room on July 7, 2006 (Friday), at 12.00 Noon. The main agenda of the meeting is to discuss the Nomination for FITT Award for the best Industry Relevant Ph. D. project.

All the CRC members are requested to attend the meeting.

All CRC Members

- | | |
|---------------------------|----------------------|
| 1. Prof. Chandra Shakher, | Acting Chairman, CRC |
| 2. | |
| 3. Prof. K. Gupta | Member |
| 4. Dr. Rakesh Kumar, | Member |
| 5. Dr. I. P. Singh | Member |
| 5. Sh. L. K. Das | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |

Convener, CRC

(D. S. Mehta)

Instrument Design Development Centre (IDDC)

Date: July 7, 2006

Subject: Minutes of CRC Meeting held on July 7, 2006 (Friday), at 12.00 Noon in the IDDC Head's Room.

An urgent CRC meeting was held in the Head, IDDC room on July 7, 2006 (Friday), at 12.00 Noon. The following CRC members were present in the meeting:

CRC Members

- | | |
|---------------------------|---------------|
| 1. Prof. Chandra Shakher, | Acting, Head |
| 2. Dr. Rakesh Kumar, | Member |
| 3. Prof. K. Gupta | Member |
| 4. Dr. I. P. Singh | Member |
| 5. Sh. L. K. Das | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |

Prof. D. T. Shahani, Chairman, CRC was on leave and Prof. Chandra Shakher Acting Head, chaired the meeting. Application of Dr. (Ms.) Priti Singh who has applied for FITT Award for the best Industry Relevant Ph. D. project entitled "Applications of Shear Interferometry in Optical Metrology" was discussed in the meeting and CRC unanimously recommended Dr. (Ms.) Priti Singh for FITT Award for her Industry Relevant Ph. D. project.

The meeting ended with thanks to the Chair.

Convener, CRC

(D. S. Mehta)

Instrument Design Development Centre (IDDC)

Date: July 7, 2006

Enclosed please find the application of Dr. (Ms.) Priti Singh for FITT Award for the best Industry Relevant Ph. D. project entitled "Applications of Shear Interferometry in Optical Metrology" along with the recommendations of CRC.

(D. S. Mehta)
Convener, CRC

AR PGS

Instrument Design Development Centre (IDDC)

Date: July 17, 2006

Subject: CRC Meeting on July 18, 2006 (Tuesday), at 12.00 Noon in the IDDC Head's Room.

CRC meeting is being held in the Head, IDDC room on July 18, 2006 (Tuesday), at 12.00 Noon. The following are the agenda of the meeting;

1. Discussion on the progress report of Ph. D. students.
2. Conversion of part-time Ph. D. from full-time of Mr. Mosarraf Hossain, Ph. D. student IDDC.
3. Any other information with the permission of the Chairman.

Prof. D. T. Shahani, Chairman, CRC is on leave and Prof. Chandra Shakher Acting Head, will chair the meeting. All the CRC members are requested to attend the meeting.

All CRC Members

- | | |
|---------------------------|---------------|
| 1. Prof. Chandra Shakher, | Acting Head |
| 2. Dr. Rakesh Kumar, | Member |
| 3. Prof. K. Gupta | Member |
| 4. Sh. L. K. Das | Member |
| 5. Dr. I. P. Singh | Member |
| 6. Dr. D. S. Mehta | Convener, CRC |

Convener, CRC

(D. S. Mehta)

Date: July 18, 2006

Subject: Minutes of CRC Meeting held on July 18, 2006 (Tuesday), at 12.00 Noon in the IDDC Head's Room.

CRC meeting was held in the Head, IDDC room on July 18, 2006 (Tuesday), at 12.00 Noon. The following members attended the meeting:

1. Prof. Chandra Shakher,	Acting Head
2. Dr. Rakesh Kumar,	Member
3. Sh. L. K. Das	Member
4. Sh. A. K. Agarwala	Special Invitee
5. Dr. D. S. Mehta	Convener, CRC

Dr. I. P. Singh and Prof. K. Gupta could not attend the meeting. Prof. D. T. Shahani, Chairman, CRC was on leave and Prof. Chandra Shakher Acting Head, chaired the meeting. The following are the minutes of the meeting:

1. Progress reports submitted by the Ph. D. students of IDDC were discussed in the CRC. The reports were found satisfactory. The grades are forwarded to PG section.
2. Mr. Ahteshamul Haque Ph. D. student of IDDC (2003IDZ0001) could not submit the progress report. Sh. A. K. Agarwala, Ph. D. Supervisor of Mr. Ahteshamul Haque informed CRC that Mr. Ahteshamul Haque has recently changed the Job. Because of this reason he requires No Objection Certificate (NOC) from his new employer to continue his Ph. D. programme. Till date he could not submit the NOC therefore he has not submitted the progress report. **CRC recommended that he should be given 45 days to submit NOC from his new employer along with the progress report.**
3. Mr. Mosarraf Hossain (2002 RID 001) Ph. D. student of IDDC has joined Job in Vikram Sarabhai Space Centre of ISRO. Request from Mr. Mosarraf Hossain (2002 RID 001) for the conversion of full-time to part-time Ph. D. was discussed in the CRC. Since the Ph. D. work of Mr. Mosarraf Hossain is in advanced stage and he has already completed the required course work and passed comprehensive examination. **CRC recommends that his Ph. D. status be converted from regular Research Scholar to part-time Research Scholar.** Request of Mr. Mosarraf Hossain for the conversion of his Ph. D. from full-time to part-time forwarded by his Ph. D. supervisors and the No Objection Certificate (NOC) from Vikram Sarabhai Space Centre of ISRO is attached herewith.
4. Request of Mr. S. Khaja Syed Shahul Hameed (2005IDZ 8262) Ph. D. student of IDDC to waive-off course HUL 810 was received and discussed in the CRC. CRC has not acceded to his request. **CRC felt that it is essential for him to study the course (HUL 810).**

Meeting ended with thanks to the Chair.

Convener, CRC

(D. S. Mehta)

Date: Aug. 14, 2006

Subject: CRC Meeting on Aug. 21, 2006 (Monday), at 12.00 Noon in the IDDC Heads Room.

CRC meeting is being held in the Head, IDDC room on Aug. 21, 2006 (Monday), at 12.00 Noon. The main agenda of the meeting are the discussion on the two project proposals submitted by Prof. D. T. Shahani. The project proposals have been circulated among the CRC members for their comments and suggestions. The titles of the projects are:

1. Localized heating of bamboo through Microwaves and RF induction for bending and shaping of bamboo.
2. Fourier transform Ion Mobility IMS based Detector for Organic Pollutents in Air.

All the CRC members are requested to attend the meeting.

All CRC Members

- | | |
|-------------------------|---------------|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Prof. K. Gupta | Member |
| 4. Dr. Rakesh Kumar, | Member |
| 5. Dr. I. P. Singh | Member |
| 6. Sh. L. K. Das | Member |
| 7. Dr. D. S. Mehta | Convener, CRC |

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: Aug. 21, 2006

Subject: Minutes of CRC Meeting held on Aug. 21, 2006 (Monday), at 12.00 Noon in the IDDC Heads Room.

CRC meeting was held in the Head, IDDC room on Aug. 21, 2006 (Monday), at 12.00 Noon. The following members attended the meeting:

- | | |
|-------------------------|---------------|
| 1. Prof. D. T. Shahani, | Chairman, CRC |
| 2. Dr. A. L. Vyas, | Head, IDDC |
| 3. Dr. Rakesh Kumar, | Member |
| 4. Sh. L. K. Das | Member |
| 5. Dr. D. S. Mehta | Convener, CRC |

Prof. K. Gupta was on leave and Dr. I. P. Singh could not attend the meeting. The following are the minutes of the meeting:

- A. The following two project proposals were submitted by Prof. D. T. Shahani (PI) and were circulated among the CRC members for their comments
1. Localized heating of bamboo through Microwaves and RF induction for bending and shaping of bamboo.
 2. Fourier transform Ion Mobility IMS based Detector for Organic Pollutants in Air.

Both the proposals were discussed in the CRC meeting. It was noted that the PI had clarified that no additional space and manpower was being asked from IDDC for running the above projects. The CRC recommends the aforementioned proposals for further necessary processing.

- B. Application from Shri A. K. Agarwala Ph. D. Supervisor of Mr. Ahteshamul Haque Ph. D. student of IDDC (2003IDZ0001) was received and CRC noted that Mr. Ahteshamul Haque Ph. D. student of IDDC (2003IDZ0001) is unable to continue his Ph. D. work from now on. CRC suggests that his application be forwarded to PG section for further necessary action.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 21-11-2006

Subject: CRC Meeting on Nov. 23, 2006, at 10.00 A. M.

CRC meeting is being held on November 23, 2006 (Thursday), at 10.00 A. M. in the Head, IDDC room. The main agenda of the meeting are the following;

1. Discussion and finalization of short-listing criteria for newly submitted Ph. D. applications and finalization of the date of written test/interview for Ph. D.
2. Discussion on the request of Mr. Anuj Kumar for the waive-off of Communications skill course (HUL810).
3. Approval of CRC for the Student Research Committee (SRC) of the Ph. D. scholars joined IDDC during Ist semester 2006-2007.
4. Any other information with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

- | | |
|------------------------------------|------------------|
| 1. Sh. L. K. Das | Chairman |
| 2. Prof. Chandra Shakher | Member |
| 3. Prof. T. K. Kundra, Mech. Engg. | Member |
| 4. Dr. Rakesh Kumar, | Member |
| 5. Dr. I. P. Singh | Member |
| 6. Sh. S. K. Sud | Member |
| 7. Dr. D. S. Mehta | Member-Secretary |

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 23-11-2006

Subject: Minutes of CRC meeting held on Nov. 23, 2006, at 10.00 A. M.

CRC meeting was held on November 23, 2006 (Thursday), at 10.00 A. M. in the Head, IDDC room. The following members attended the meeting;

1. Sh. L. K. Das	Chairman
2. Dr. Rakesh Kumar,	Member
3. Dr. I. P. Singh	Member
4. Sh. S. K. Sud	Member
5. Dr. D. S. Mehta	Member-Secretary

Prof. Chandra Shakher and Prof. T. K. Kundra, could not attend the meeting. The following are the minutes of the meeting;

- A.** Short-listing criteria for the Ph. D. programme for IInd Semester 2006-2007 was discussed and the committee decided the following short-listing criteria:
1. General Category (GE): minimum CGPA 6.75 on a 10-point scale or 60% marks in Qualifying Degree and GATE score equal to 300.
 2. SC/ST/PH Category: minimum CGPA 6.25 on a 10-point scale or 55 % marks in relevant graduation and GATE Score equal to 200.
 3. Part-Time candidates: As per Institute Norms.
 4. The Test/Interview for admission in Ph. D. is proposed to be held on 5th Dec., 2006 (Tuesday), 10.00 A. M. due to non-availability of some of the CRC Members and Faculty during the Test/Interview period (11 - 15, Dec., 2006) fixed by the Institute for Ph. D.

Total 2 Ph. D. applications (General Category) were received from PG Section and both the applications were studied/discussed. The applications are available in the IDDC office. The details of the applications are given below:

1. **Mr. P. Packiam (GE)**, M. Tech. (2002, Instrumentation, DAVV Indore, CGPA 8.71/10), GATE Percentile = 71.8. He has applied for full-time with assistantship.
2. **Mr. Prashant Chauhan (GE)**, M. Tech. (2001, Engg. Systems, Dayalbag Univ. Agra, 64.3 %), Experience = 8 Years. He has applied for PT.

Both the applications were found suitable as per the aforementioned short-listing criteria. The committee decided both the candidates be called for test/interview.

- B.** A request from Mr. Anuj Kumar, Ph. D. student in IDDC, regarding the exemption of the Audit Course HUL 810, was received and was discussed in the meeting. In view of Mr. Anuj Kumar having done similar course HS 501 Technical Communications from IIT Roorkee (Copy of grade sheet attached) the Committee recommends Mr. Anuj Kumar's exemption from the aforesaid course.
- C.** Approval of CRC for the appointment of Supervisors and formulation of Student Research Committee (SRC) of the following Ph. D. scholar who joined IDDC during Ist semester 2006-2007 was discussed and the CRC recommends the same be forwarded to PG section.

- | | |
|--------------------|---------------|
| 1. Km. Tulsi | (2006IDZ8154) |
| 2. Mr. Jai Prakash | (2006IDZ8155) |

The meeting ended with thanks to chair.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: Nov. 24, 2006

Enclosed please find the duly filled application forms for the appointment of Supervisors and formulation of Student Research Committee (SRC) of the following Ph. D. scholars who joined IDDC during Ist semester 2006-2007.

1. Km. Tulsi (2006IDZ8154)
2. Mr. Jai Prakash (2006IDZ8155)

(D. S. Mehta)
Convener, CRC

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Enclosures:

1. Application forms
2. CRC minutes (Minute 'C').

Date: Dec. 1, 2006

Subject: CRC Meeting on December 5, 2006 at 10.00 A.M. in the IDDC Head's Room.

CRC Meeting will be held in the IDDC Head's Room at 10.00 A. M. on Tuesday, December 5, 2006. The agenda of the meeting is:

- A. Selection of Ph. D. Candidates for IDDC.** The following two candidates have been short-listed for test/interview for Ph. D. Copy of the applications may be seen in IDDC Office.

The details of the applications are:

1. Mr. P. Packiam (GE), M. Tech. (2002, Instrumentation, DAVV Indore, CGPA 8.71/10), GATE Percentile = 71.8. He has applied for full-time with assistantship.

2. Mr. Prashant Chauhan (GE), M. Tech. (2001, Engg. Systems, Dayalbag Univ. Agra, 64.3 %), Experience = 8 Years. He has applied for part-time

B. Any other information with the permission of the Chairman

CRC Members

1. Sh. L. K. Das	Chairman
2. Prof. Chandra Shakher	Member
3. Prof. T. K. Kundra, Mech. Engg.	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. I. P. Singh	Member
6. Sh. S. K. Sud	Member
7. Dr. D. S. Mehta	Member-Secretary

All Faculty of IDDC are invited to participate.

(D. S. Mehta)

Convener, CRC

All CRC
All Faculty of IDDC

Selection of Ph. D. Candidates for IDDC. The following two candidates have been short-listed for test/interview for Ph. D. Copy of the applications may be seen in IDDC Office.

The details of the applications are:

1. Mr. P. Packiam (GE), M. Tech. (2002, Instrumentation, DAVV Indore, CGPA 8.71/10), GATE Percentile = 71.8. He has applied for full-time with assistantship.

2. Mr. Prashant Chauhan (GE), M. Tech. (2001, Engg. Systems, Dayalbag Univ. Agra, 64.3 %), Experience = 8 Years. He has applied for part-time

Instrument Design Development Centre (IDDC)

Date: Dec. 14, 2006

Subject: Urgent CRC Meeting on December 15, 2006 at 11.00 A.M. in the IDDC Head's Room.

An urgent CRC Meeting will be held in the IDDC Head's Room at 11.00 A. M. on Friday, December 15, 2006. The main agenda of the meeting are:

- A. Short-listing of Ph. D. Candidates under Quality Improvement programme for IDDC.** Total 09 applications have been received for Ph. D. under Quality Improvement Programme.
- B. Discussion on the Progress reports of the Ph. D. students of IDDC.**
- C. Discussion of the Memorandum of Understanding (MoU) between CSIO Chandigarh and Indian Institute of Technology Delhi.**
- D. Any other information with the permission of the Chairman**

CRC Members

- | | |
|------------------------------------|------------------|
| 1. Sh. L. K. Das | Chairman |
| 2. Prof. Chandra Shakher | Member |
| 3. Prof. T. K. Kundra, Mech. Engg. | Member |
| 4. Dr. Rakesh Kumar, | Member |
| 5. Dr. I. P. Singh | Member |
| 6. Sh. S. K. Sud | Member |
| 7. Dr. D. S. Mehta | Member-Secretary |

Convener, CRC

(D. S. Mehta)

Date: Dec. 18, 2006

Subject: Minutes of CRC Meeting held on December 15, 2006 at 11.00 A.M. in the IDDC Head's Room.

CRC meeting was held on December 15, 2006 (Friday), at 11.00 A. M. in the Head, IDDC room. The following members attended the meeting;

1. Sh. L. K. Das	Chairman
2. Prof. Chandra Shakher	Member
3. Dr. Rakesh Kumar,	Member
4. Sh. S. K. Sud	Member
5. Dr. D. S. Mehta	Member-Secretary

Dr. I. P. Singh and Prof. T. K. Kundra, could not attend the meeting. The following are the minutes of the meeting;

- A. Short-listing criteria for the Ph. D. candidates under Quality Improvement programme was discussed and CRC re-iterated that the short-listing criteria as followed in the previous year, that is, as per the minimum Institute criteria should be followed for QIP candidates. All the 09 Applications received from PG section satisfy the aforementioned criteria and all the 09 candidates are being called for test/interview scheduled on 24-01-2007 (Wednesday).
- B. Progress reports submitted by all the Ph. D. students of IDDC were discussed in the CRC and as per the recommendations of their respective supervisors the reports were found satisfactory. CRC recommended that the grades of all the students be forwarded to PG section. However one of the supervisor Dr. A. L. Vyas has made specific comments about the Ph. D. student Mr. Anuj Kumar (2005IDZ8273) "The performance is satisfactory. However he needs to put-in additional efforts to speed up the progress". CRC discussed and made the observation that the Supervisor should be requested to ask the candidate "Mr. Anuj Kumar (2005IDZ8273)" to put-in additional efforts to speed up the progress of his research work.
- C. CRC discussed the Memorandum of Understanding (MoU) between CSIO Chandigarh and Indian Institute of Technology Delhi. In principle CRC agrees for such an MoU between CSIO Chandigarh and IIT Delhi. However, CRC felt that the execution part of the MoU should be looked into detail. Therefore CRC recommends that the copy of the MoU should be circulated to all the Faculty for their comments and suggestions and then take up the matter in a joint meeting with Prof. Anurag Sharma and Prof. Sneha Anand.
- D. A request from Sh. L. K. Das (Supervisor) for holding the comprehensive examination of Mr. Amitoj Singh (2004IDZ8052) Ph. D. Student (Part-Time) of IDDC in the month of February 2007 was received and discussed in the CRC. CRC decided that the same be forwarded to PG section for necessary approval.

The Meeting ended with the thanks to the chair.

(D. S. Mehta)

Convener, CRC

Date: Dec. 18, 2006

To the Co-ordinator
QIP Programme,
IIT Delhi

Sub. Advance admission in Ph. D. under QIP for the year 2007-2008.

With reference to your note No. IITD/QIP/Ph.D./2007-2008/0746; Dated 11-12-2006 a total 09 applications were received from your office in IDDC for advance admission in Ph.D. degree programme under QIP for the year 2007-2008.

The shortlisting criteria for calling test/interview for Ph.D. Programme under QIP was discussed among the CRC members. All the 09 candidates were found suitable as per Institute norms and all the 09 candidates are being called for Test/Interview to be held on 24-01-2007.

D. S. Mehta
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: Jan. 22, 2007

Subject: CRC Meeting on January 24, 2007 at 3.00 P.M. in the IDDC Heads Room.

CRC Meeting will be held in the IDDC Heads Room at 3.00 P. M. on Wednesday January 24, 2007. The following are the main agenda of the meeting:

A. Test/ Interview of Ph. D. Candidates under QIP programme. Total 09 candidates have been short-listed for test/interview. Application details of these candidates can be found in IDDC Office.

B. Approval of Research Plan of Mr. Sanjeev Kumar Srivastava (2005 IDZ 8170) AND Mr. Gyanendra Sheoran (2005IDZ8171) Ph. D. Students of IDDC.

C. Any other information with the permission of the Chairman

CRC Members

1. Sh. L. K. Das	Chairman
2. Prof. Chandra Shakher	Member
3. Prof. T. K. Kundra, Mech. Engg.	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. I. P. Singh	Member
6. Sh. S. K. Sud	Member
7. Dr. D. S. Mehta	Member-Secretary

All Faculty of IDDC are invited to participate.

Convener, CRC

(D. S. Mehta)

All CRC
All Faculty of IDDC

Instrument Design Development Centre (IDDC)

Date: January 25, 2007

Subject: Minutes of the CRC Meeting held on January 24, 2007 (Wednesday) at 3.00 P. M. in the IDDC Head's Room.

CRC meeting was held on January 24, 2007 (Wednesday) at 3.00 P. M. in the IDDC Head's Room. The following members of the CRC and faculty of IDDC were present in the meeting.

CRC Members:

1. Sh. L. K. Das	Chairman
2. Prof. Chandra Shakher	Member
3. Dr. Rakesh Kumar,	Member
4. Dr. I. P. Singh	Member
5. Dr. D. S. Mehta	Member-Secretary
6. Prof. D. T. Shahani,	Invitee
7. Sh. A. K. Agarwala	Invitee
8. Dr. A. L. Vyas,	Invitee
9. Dr. N. K. Jain	Invitee

A. Under the QIP programme all the 09 candidates who applied were short listed and called for test/interview. Five candidates were under General Category, two candidates under SC category, and one candidate each was under ST and OBC category.

Sl. No.	Application No.	Name of the candidate	GE/SC/ST/OBC
1.	50002	Mr. Desh Deepak Sharma	GE
2.	50020	Mr. Yatendra Kumar	SC
3.	50198	Mr. Jeebanand Panda	GE
4.	50263	Mr. Santosh Kumar Singh	GE
5.	50500	Mr. G. Mallesham	SC
6.	50548	Mr. P. Packiam	OBC
7.	50784	Mr. Viranchi Pandya	GE
8.	51086	Mr. Bhukya Mangu	ST
9.	51109	Mr. Namrata Kapur	GE

The following 06 candidates under QIP programme attended the test/interview:

Sl. No.	Application No.	Name of the candidate	GE/SC/ST/OBC
1.	50002	Mr. Desh Deepak Sharma	GE
2.	50020	Mr. Yatendra Kumar	SC
3.	50198	Mr. Jeebanand Panda	GE
4.	50784	Mr. Viranchi Pandya	GE
5.	51086	Mr. Bhukya Mangu	ST
6.	51109	Mr. Namrata Kapur	GE

After conducting test/interview the committee recommended the following candidate for the advance admission to Ph. D. programme for 2007-2008 under QIP.

Sl. No.	Application No.	Name of the candidate	GE/SC/ST/OBC
1.	50002	Mr. Desh Deepak Sharma	GE
2.	50020	Mr. Yatendra Kumar	SC

B. The research plan submitted by Sanjeev Kumar Srivastava (2005 IDZ 8170) to SRC on 12-01-2007 and duly approved by SRC was presented to CRC and the CRC recommended the same be forwarded to PGS& R section for further necessary action.

- C. The research plan submitted by Gyanendra Sheoran (2005 IDZ 8171) to SRC on 19-01-2007 and duly approved by SRC was presented to CRC and the CRC recommended the same be forwarded to PGS& R section for further necessary action.
- D. A Indo-UK Sponsored Research Proposal on “**Mobil Communications to improve Monitoring of Heart Disease and Diabetes**” being submitted to British Council for funding by Dr. A. L. Vyas Indian Principal Researcher was received and circulated among CRC members for their comments and the same was discussed in the CRC meeting. It was noted that the PI had clarified that no additional space and manpower was being asked from IDDC. The CRC recommends the aforementioned proposal for further necessary processing.
- E. Dr. A. L. Vyas (Invitee) informed Committee that a project proposal entitled: Design and Development of prototype micro-fluidic MEMS, a MoU project between BARC and IIT Delhi is being submitted to DST by Dr. Sudhir Chandra (Principal Investigator), CARE, IIT Delhi) and Dr. V. K. Suri (PI) BARC. The investigating team requested Dr. A. L. Vyas to be Co-investigator of the proposal. The committee welcomed the project and recommended for further processing.

(D. S. Mehta)

Convener CRC

The meeting ended with thanks to Chair.

Subject: CRC Meeting on March 8, 2007 at 4.00 P.M. in the IDDC Heads Room.

CRC meeting was held on March, 2007 (Wednesday) at 3.00 P. M. in the IDDC Head's Room. The following members of the CRC and faculty of IDDC were present in the meeting.

A. Approval of Research Plan of.

B. Approval of SRC of Mr. P. Packiam Research Scholar joined Dec. 2006

C. Discussion on the proposal from Dean PGS& R regarding the improvement of the quality of Ph. D.

D. Any other information with the permission of the Chairman

CRC Members

1. Sh. L. K. Das	Chairman
2. Prof. Chandra Shakher	Member
3. Prof. T. K. Kundra, Mech. Engg.	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. I. P. Singh	Member
6. Sh. S. K. Sud	Member
7. Dr. D. S. Mehta	Member-Secretary

Convener, CRC

(D. S. Mehta)

All CRC

Subject: Minutes of the CRC meeting held on March 8, 2007 at 4.00 P.M. in the IDDC Heads Room.

CRC meeting was held on March 8, 2007 (Thursday) at 4.00 P. M. in the IDDC Head's Room. The following members of the CRC attended the meeting.

1. Sh. L. K. Das	Chairman
2. Dr. Rakesh Kumar,	Member
3. Dr. I. P. Singh	Member
4. Sh. S. K. Sud	Member
5. Dr. D. S. Mehta	Member-Secretary

- A. The research plan submitted by **Mr. Manoj Kumar Singh (2005 IDZ 8274)** to SRC on 01-03-2007 and duly approved by SRC was presented to CRC and the CRC recommended the same be forwarded to PGS & R section for further necessary action.
- B. Approval of CRC for the appointment of Supervisors and formulation of Student Research Committee (SRC) of **Mr. P. Packiam (2006 IDZ 8191)** Ph. D. scholar who joined IDDC during Ist semester 2006-2007 was discussed and the CRC recommends the same be forwarded to PG section.
- C. A request from **Mr. P. Packiam (2006 IDZ 8191)** Ph. D. student in IDDC, regarding the exemption of the Audit Course HUL 810, was received and discussed in the meeting. The CRC has not acceded to his request. CRC decided that the student is advised to take the course (HUL 810) to improve his communications skill further.
- D. Chairman CRC informed the committee that there are currently 16 research students (13 Full-time and 3 part-time) working in IDDC and there should be monthly seminar by the research students in their respective area of research in the centre. The committee welcomed the proposal and decided that research student should deliver seminar in their respective area of research in the centre to improve the interaction among the students and faculty.
- E. Proposal from Dean PGS& R regarding the improvement of the quality of Ph. D. was circulated among the CRC and Faculty members of IDDC and the same was discussed in the CRC. The CRC deliberated on the proposal in greater detail. After considering all pros and cons, concluded that the proposal is an excellent idea. It would encourage publications in quality Journals and would provide milestones that will act as encouragement for the Ph.D. scholars. The members felt that in cases where the research scholar is working on a central idea, achievement of one comprehensive publication may be considered for the award of Ph. D. on the basis of one external examiner's report. The members felt that grant of patents/commercialisation of know how/design developed should also be considered favourably towards speedy grant of Ph. D. It is also recommended that CRC may be empowered to review the list of Refereed Journals at any later date if necessary. It was also felt that the Ph. D. thesis being a coherent documentary record of the research done by individual, it should be examined properly, any relaxation in the examination process may dilute the standard of the of the Ph. D. thesis. The CRC supports the proposal in principle.
- F. Dr. D. S. Mehta informed Committee that a project proposal entitled: Evaluation of seam pucker using 3D profiling to create data base on pucker ratings for quality assurance in garment production is being submitted to Ministry of Communications and Information Technology, Department of Information Technology by Dr. R. S. Rengasamy (Principal Investigator), Department of Textile, IIT Delhi). The PI requested Dr. D. S. Mehta to help in developing optical 3D profiling technique for the project and be Co-investigator of the proposal. The committee welcomed the project and recommended for further processing.

These minutes has the concurrence of the Chairman.

(D. S. Mehta)
Convener CRC

Date: April 3, 2007

Subject: CRC Meeting on April 4, 2007 at 4.00 P.M. in the IDDC Heads Room.

CRC meeting will be held on April 4, 2007 (Wednesday) at 4.00 P. M. in the IDDC Head's Room. The agenda of the meeting is:

A. Approval of Research Plan of Mr. Amitoj Singh research Scholar IDDC.

B. Any other information with the permission of the Chairman

CRC Members

1. Sh. L. K. Das	Chairman
2. Prof. Chandra Shakher	Member
3. Prof. T. K. Kundra, Mech. Engg.	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. I. P. Singh	Member
6. Sh. S. K. Sud	Member
7. Dr. D. S. Mehta	Member-Secretary

Convener, CRC

(D. S. Mehta)

All CRC

Date: May 4, 2007

Subject: An urgent CRC Meeting on May 8, 2006 (Tuesday) at 4.00 P.M. in the IDDC Heads Room.

An Urgent CRC meeting is being held in the Head, IDDC room on May 8, 2006 (Tuesday) at 4.00 P.M. The main agenda of the meeting are the following;

1. **Discussion and finalization of short-listing criteria for Ph. D. Programme.**
2. **Finalization of the dates of written test/interview for Ph. D. Candidates.**
3. **Any other information with the permission of the Chairman.**

All the CRC members are requested to attend the meeting.

CRC Members

- | | |
|------------------------------------|------------------|
| 1. Sh. L. K. Das | Chairman |
| 2. Prof. Chandra Shakher | Member |
| 3. Prof. T. K. Kundra, Mech. Engg. | Member |
| 4. Dr. Rakesh Kumar, | Member |
| 5. Dr. I. P. Singh | Member |
| 6. Sh. S. K. Sud | Member |
| 7. Dr. D. S. Mehta | Member-Secretary |

(D. S. Mehta)
Convener, CRC

Ph. D. Programme in IDDC Last Year Criteria:(Institute Norms)

1. General Category (GE): minimum 60% marks in relevant Post Graduation and GATE score greater than equal to 300.
2. SC/ST/PH Category: minimum 55 % marks in relevant Post Graduation and GATE Score greater than equal to 200.
3. Part-Time candidates: As per Institute Norms.

Subject: Minutes of the CRC meeting held on May 8, 2007 (Tuesday) at 4.00 P.M. in the IDDC Heads Room.

CRC meeting was held on May 8, 2007 (Tuesday) at 4.00 P.M. in the IDDC Head's Room. The following members of the CRC attended the meeting.

1. Sh. L. K. Das	Chairman
2. Prof. Chandra Shakher	Member
3. Dr. Rakesh Kumar,	Member
4. Dr. I. P. Singh	Member
5. Sh. S. K. Sud	Member
6. Dr. D. S. Mehta	Member-Secretary

A. The short-listing criteria for admission in Ph. D. Programme for the Ist Semester 2007-2008 was discussed and the committee decided the following short-listing criteria:

General Candidates:

M. Sc. Physics with at least 65% aggregate marks or equivalent CGPA 7.12 on a 10 point scale Plus a Valid GATE Score ≥ 400 or a valid CSIR/UGC/NET Certificate with JRF.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 60 % aggregate marks or equivalent CGPA 6.75 on a 10 point scale.

OR

B. Tech. in relevant branch of Engineering or Physics with at least 75 % or equivalent CGPA of 8.5 on a 10 point scale PLUS a valid GATE score ≥ 500 or a valid CSIR/UGC/NET Certificate with JRF.

SC/ST/PH Candidates:

M. Sc. Physics with at least 60% aggregate marks or equivalent CGPA of 6.75 on a 10 point scale Plus a Valid GATE Score ≥ 300 or a valid CSIR/UGC/NET Certificate with JRF.

OR

M. Tech. in relevant branch with at least 55 % aggregate marks or equivalent CGPA of 6.25 on a 10 point scale.

OR

B. Tech. In relevant branch with at least 70 % or equivalent CGPA of 7.5 on a 10 point scale PLUS a valid GATE score ≥ 350 or a valid CSIR/UGC/NET Certificate with JRF.

Part-Time Candidates:

As per Institute norms, but the short-listing criteria will be as above, except for the requirement of GATE Score. There will be no admission on a self-sponsored basis, and there will be no direct admission to the above Programme.

NOTE:

Candidates, whose M. Tech. / M. Sc. results are not yet declared, will be provisionally short-listed for the interview, provided they have secured the necessary aggregate marks or equivalent CGPA in the results declared so far for the qualifying degree.

B. The Test/Interview for admission in Ph. D. will be held on 1st, June, 2007 (Friday).

C. Approval of CRC for the appointment of Supervisors and formulation of Student Research Committee (SRC) of **Mr. S. Khaja Syed Shahul Hameed (2005 IDZ 8262)** Ph. D. Scholar IDDC was discussed and the CRC recommends the same be forwarded to PG section.

D. S. Mehta
Convener CRC

Instrument Design Development Centre (IDDC)

Date: May 14, 2007

Enclosed please find the duly filled application forms for the appointment of Supervisors and formulation of Student Research Committee (SRC) of Mr. S. Khaja, Syed Shahul Hameed (2005 IDZ8262), Ph. D. scholar of IDDC.

(D. S. Mehta)
Convener, CRC

Dean PGS & R

Enclosures:

1. Application forms
2. CRC minutes (Minute 'C').

Instrument Design Development Centre (IDDC)

Date: May 28, 2007

Subject: CRC Meeting on 1st June, 2007 at 10.00 A.M. in the IDDC Head's Room.

CRC Meeting will be held in the IDDC Head's Room at 10.00 A. M. on Friday, 1st June, 2007. The agenda of the meeting is:

- 1. Selection of Ph. D. Candidates for IDDC.** Applications of short-listed candidates may be seen in IDDC Office.
- 2. Any other information with the permission of the Chairman.**

CRC Members

- | | |
|------------------------------------|------------------|
| 1. Sh. L. K. Das | Chairman |
| 2. Prof. Chandra Shakher | Member |
| 3. Prof. T. K. Kundra, Mech. Engg. | Member |
| 4. Dr. Rakesh Kumar, | Member |
| 5. Dr. I. P. Singh | Member |
| 6. Sh. S. K. Sud | Member |
| 7. Dr. D. S. Mehta | Member-Secretary |

All Faculty of IDDC are invited to participate.

Convener, CRC

(D. S. Mehta)

All CRC members
All Faculty of IDDC

Instrument Design Development Centre

Date: 07-06-2007

Sh. A. K. Agarwala (Supervisor)
Sh. Patil Sanjay Kumar Limaji (Ph. D. Student)
Sh. Khaja Syed Shahul Hameed S (Ph. D. Student)

Enclosed please find the Progress report form of the Ph. D. scholars for 2nd Semester 2006-2007. Kindly submit the progress report to the undersigned by 10th, July, 2007.

D. S. Mehta

Convener, CRC

Instrument Design Development Centre

Date: 07-06-2007

Dr. A. L. Vyas (Supervisor)
Mr. Anuj Kumar (Ph. D. Student)

Enclosed please find Progress report form of the Ph. D. scholars for 2nd Semester 2006-2007. Kindly submit the progress report to the undersigned by 10th, July, 2007.

D. S. Mehta

Convener, CRC

Instrument Design Development Centre

Date: 07-06-2007

Prof. Chandra Shakher (Supervisor)
Sh. Madhusudan (Ph. D. Student)
Md. Mosarraf Hossain (Ph. D. Student)
Mr. Gyanendra (Ph. D. Student)

Enclosed please find the Progress report form of the Ph. D. scholars for 2nd Semester 2006-2007. Kindly submit the progress report to the undersigned by 10th, July, 2007.

D. S. Mehta

Convener, CRC

Instrument Design Development Centre

Date: 07-06-2007

Prof. Kehar Singh (Supervisor), Dept. of Physics

Sh. Madhusudan (Ph. D. Student)

Enclosed please find the Progress report form of the Ph. D. scholars for 2nd Semester 2006-2007. Kindly submit the progress report to the undersigned by 10th, July, 2007.

D. S. Mehta

Convener, CRC

Instrument Design Development Centre

Date: 07-06-2007

Dr. Rakesh Kumar (Supervisor)

Sh. Pradeep Kumar Kushwaha (Ph. D. Student)

Enclosed please find the Progress report form of the Ph. D. scholars for 2nd Semester 2006-2007. Kindly submit the progress report to the undersigned by 10th, July, 2007.

D. S. Mehta

Convener, CRC

Instrument Design Development Centre

Date: 07-06-2007

Sh. L. K. Das (Supervisor)

Sh. Amitoj Singh (Ph. D. Student)

Enclosed please find the Progress report form of the Ph. D. scholars for 2nd Semester 2006-2007. Kindly submit the progress report to the undersigned by 10th, July, 2007.

D. S. Mehta

Convener, CRC

Instrument Design Development Centre

Date: 07-06-2007

Sh. S. K. Atreya (Supervisor)
Mr. Manoj Kumar Singh (Ph. D. Student)

Enclosed please find the Progress report form of the Ph. D. scholars for 2nd Semester 2006-2007. Kindly submit the progress report to the undersigned by 10th, July, 2007.

D. S. Mehta

Convener, CRC

Instrument Design Development Centre

Date: 07-06-2007

Dr. I. P. Singh (Supervisor)
Mr. Sanjeev Kumar Srivastava (Ph. D. Student)

Enclosed please find the Progress report form of the Ph. D. scholars for 2nd Semester 2006-2007. Kindly submit the progress report to the undersigned by 10th, July, 2007.

D. S. Mehta

Convener, CRC

Instrument Design Development Centre

Date: 07-06-2007

Dr. N. K. Jain (Supervisor)
Mr. Packiam (Ph. D. Student)

Enclosed please find the Progress report form of the Ph. D. scholars for 2nd Semester 2006-2007. Kindly submit the progress report to the undersigned by 10th, July, 2007.

D. S. Mehta

Convener, CRC

Instrument Design Development Centre

Date: 07-06-2007

Prof. D. T. Shahni (Supervisor)
Mr. Dhawal Gupta (Ph. D. Student)

Enclosed please find the Progress report form of the Ph. D. scholars for 2nd Semester 2006-2007. Kindly submit the progress report to the undersigned by 10th, July, 2007.

D. S. Mehta

Convener, CRC

Instrument Design Development Centre

Date: 15-06-2007

Subject: CRC Meeting on 18th, June, 2007 at 12.00 Noon in the IDDC Head's Room.

CRC Meeting will be held in the IDDC Head's Room at 12.00 Noon on Monday, 18th, June, 2007. The agenda of the meeting is:

- A. **Re-formulation of SRC of Mr. Ranjeet Kumar (Ph. D. student for IDDC).**
- B. **Any other information with the permission of the Chairman.**

CRC Members

- | | |
|------------------------------------|------------------|
| 1. Sh. L. K. Das | Chairman |
| 2. Prof. Chandra Shakher | Member |
| 3. Prof. T. K. Kundra, Mech. Engg. | Member |
| 4. Dr. Rakesh Kumar, | Member |
| 5. Dr. I. P. Singh | Member |
| 6. Sh. S. K. Sud | Member |
| 7. Dr. D. S. Mehta | Member-Secretary |

Convener, CRC

(D. S. Mehta)

All CRC members

Instrument Design Development Centre

Date: 15-06-2007

Mr. Ranjeet Kumar (2005 IDZ 8275) joined IDDC as Ph. D. student on 2nd, January 2006. The student is completing one and half year on 1st July, 2007. The following SRC of Mr. Ranjeet Kumar was formulated and approved by Dean PGS & R.

SRC Members

1. Chairman CRC or His Nominee
2. Dr. A. L. Vyas (Internal Expert)
3. Dr. Joby Joseph, Physics Department (External Expert)
4. Dr. D. S. Mehta (Supervisor)
5. Prof. Chandra Shakher (Supervisor).

One of the members Dr. Joby Joseph, (External Expert, Department of Physics) has gone abroad. In view of this it is suggested that Prof. M. R. Shenoy (Department of Physics) may please be inducted as SRC member in lieu of Dr. Joby Joseph.

D. S. Mehta)
Supervisor

Chairman CRC

AR (PGS & R)

Instrument Design Development Centre

Date: 20-06-2007

Subject: Urgent CRC Meeting on 21, June, 2007 at 11.00 A.M. in the IDDC Head's Room.

An urgent CRC meeting will be held in the IDDC Head's Room at 21, June, 2007 at 11.00 A.M. The agenda of the meeting is:

- A. Mr. Vaneet was selected as Sponsored full-time Ph. D. candidate for IDDC in the Ph. D. Test/Interview held on Friday, 1st June, 2007. The candidate is requesting to convert it into part-time sponsored candidate for Ph. D. This has to be discussed in the CRC.
- B. Any other information with the permission of the Chairman.

CRC Members

- | | |
|------------------------------------|------------------|
| 1. Sh. L. K. Das | Chairman |
| 2. Prof. Chandra Shakher | Member |
| 3. Prof. T. K. Kundra, Mech. Engg. | Member |
| 4. Dr. Rakesh Kumar, | Member |
| 5. Dr. I. P. Singh | Member |
| 6. Sh. S. K. Sud | Member |
| 7. Dr. D. S. Mehta | Member-Secretary |

(D. S. Mehta)

Convener, CRC
All CRC members

Instrument Design Development Centre

Date: 21-06-2007

Subject: Minutes of CRC Meeting held on 21, June, 2007 at 11.00 A.M. in the IDDC Head's Room.

CRC meeting was held in the IDDC Head's Room at 21, June, 2007 at 11.00 A.M. The following members attended the meeting.

- | | |
|----------------------|------------------|
| 1. Sh. L. K. Das | Chairman |
| 2. Dr. Rakesh Kumar, | Member |
| 3. Sh. S. K. Sud | Member |
| 4. Dr. D. S. Mehta | Member-Secretary |

The following are the minutes of the meeting;

- A. Mr. Vaneet (2007 IDZ 8181) was selected as Sponsored full-time Ph. D. candidate for IDDC in the Ph. D. Test/Interview held on Friday, 1st June, 2007. However, the candidate later requested that his selection be converted into part-time candidate for Ph. D. in IDDC. Since he is working in an Educational Institute and also composed a book on Micro-processors, the CRC permits his registration as a part-time candidate and his application be forwarded to PG section for further necessary action. No objection Certificate from his employer is attached.
- B. Mr. H. Lokeshwar Singh (2007 IDZ 8182) was selected as Sponsored full-time Ph. D. candidate for IDDC in the Ph. D. Test/Interview held on Friday, 1st June, 2007. A request from Mr. H. Lokeshwar Singh was received that he has applied for No Objection Certificate (NOC) from his employer and he should be allowed to deposit fee by 27th July, 2007 after getting NOC from his employer. The CRC permits him to deposit fee by 27th July, 2007 after getting NOC from his employer subject to acceptance of same by PGS & R.
- C. CRC also decided that Mr. Vaneet would be working with Dr. I. P. Singh and Sh. S. K. Sud, unless they taking him as a part-time candidate in which case Dr. A. L. Vyas will have the first right.

Convener, CRC
Chairman CRC

D. S. Mehta)

Instrument Design Development Centre (IDDC)

Date: June 25, 2007

Enclosed please find the application of Mr. Vaneet (Entry No. 2007 IDZ 8181) and CRC minute 'A' for the conversion of Ph. D. from full-time sponsored candidate to part-time. All the necessary documents are attached.

(D. S. Mehta)
Convener, CRC

Dean PGS & R

Enclosures:

1. Ph. D. Application form Original.
2. Application of Mr. Vaneet
3. CRC minutes (Minute 'A').

Instrument Design Development Centre (IDDC)

Date: June 25, 2007

Enclosed please find the application of Mr. H. Lokeshwar Singh (2007 IDZ 8182) who was selected as Sponsored full-time Ph. D. candidate for IDDC in the Ph. D. Test/Interview held on Friday, 1st June, 2007. A request from Mr. H. Lokeshwar Singh was received that he has applied for No Objection Certificate (NOC) from his employer and he should be allowed to deposit fee by 27th July, 2007 after getting NOC from his employer. The matter was discussed in the CRC and CRC permits him to deposit fee by 27th July, 2007 after getting NOC from his employer subject to acceptance of same by PGS & R.

(D. S. Mehta)
Convener, CRC

Dean PGS & R

Enclosures:

1. Ph. D. Application form Original.
2. Application of Mr. H. Lokeshwar Singh
3. CRC minutes (Minute 'B').

Instrument Design Development Centre

Date: 20-06-2007

Subject: Urgent CRC Meeting on 21, June, 2007 at 11.00 A.M. in the IDDC Head's Room.

An urgent CRC meeting will be held in the IDDC Head's Room at 21, June, 2007 at 11.00 A.M. The agenda of the meeting is:

- B.** Mr. Vaneet was selected as Sponsored full-time Ph. D. candidate for IDDC in the Ph. D. Test/Interview held on Friday, 1st June, 2007. The candidate is requesting to convert it into part-time sponsored candidate for Ph. D. This has to be discussed in the CRC.
- B.** Any other information with the permission of the Chairman.

CRC Members

- | | |
|------------------------------------|------------------|
| 1. Sh. L. K. Das | Chairman |
| 2. Prof. Chandra Shakher | Member |
| 3. Prof. T. K. Kundra, Mech. Engg. | Member |
| 4. Dr. Rakesh Kumar, | Member |
| 5. Dr. I. P. Singh | Member |
| 6. Sh. S. K. Sud | Member |
| 7. Dr. D. S. Mehta | Member-Secretary |

(D. S. Mehta)

Convener, CRC

All CRC members

Instrument Design Development Centre

Date: 29-06-2007

Subject: Urgent CRC Meeting on July 2, 2007 at 4.00 P.M. in the IDDC Head's Room.

An urgent CRC meeting will be held in the IDDC Head's Room July 2, 2007 at 4.00 P.M. To discuss the project proposal on "Propagation studies on mobile IED pre-initiator system" submitted by Prof. D. T. Shahani. The copy of the proposal has been submitted among CRC members for their comments and suggestions.

CRC Members

- | | |
|------------------------------------|------------------|
| 1. Sh. L. K. Das | Chairman |
| 2. Prof. Chandra Shakher | Member |
| 3. Prof. T. K. Kundra, Mech. Engg. | Member |
| 4. Dr. Rakesh Kumar, | Member |
| 5. Dr. I. P. Singh | Member |
| 6. Sh. S. K. Sud | Member |
| 7. Dr. D. S. Mehta | Member-Secretary |

(D. S. Mehta)

Convener, CRC

All CRC members

Instrument Design Development Centre

Date: 29-06-2007

Subject: Urgent CRC Meeting on July 2, 2007 at 4.00 P.M. in the IDDC Head's Room.

An urgent CRC meeting will be held in the IDDC Head's Room July 2, 2007 at 4.00 P.M. To discuss the project proposal on "Propagation studies on mobile IED pre-initiator system" submitted by Prof. D. T. Shahani. The copy of the proposal has been submitted among CRC members for their comments and suggestions.

CRC Members

- | | |
|------------------------------------|------------------|
| 1. Sh. L. K. Das | Chairman |
| 2. Prof. Chandra Shakher | Member |
| 3. Prof. T. K. Kundra, Mech. Engg. | Member |
| 4. Dr. Rakesh Kumar, | Member |
| 5. Dr. I. P. Singh | Member |
| 6. Sh. S. K. Sud | Member |
| 7. Dr. D. S. Mehta | Member-Secretary |

(D. S. Mehta)

Convener, CRC

All CRC members

Instrument Design Development Centre

Date: 2-07-2007

Subject: Minutes of CRC Meeting held on July 2, 2007 at 4.00 P.M. in the IDDC Head's Room.

CRC meeting was held in the IDDC Head's Room July 2, 2007 at 4.00 P.M. The following members attended the meeting;

CRC Members

- | | |
|----------------------|------------------|
| 1. Sh. L. K. Das | Chairman |
| 2. Dr. Rakesh Kumar, | Member |
| 3. Sh. S. K. Sud | Member |
| 4. Dr. D. S. Mehta | Member-Secretary |

A joint proposal between IIT Delhi, IIT Kanpur, BEL and ACE Mhow entitled "**Propagation studies on mobile IED pre-initiator system**" was received and the same was circulated among the CRC members for their comments. The project proposal was then discussed in the CRC meeting. CRC noted that the PI (Prof. D. T. Shahani) had clarified that no additional space and manpower was being asked from IDDC. The CRC recommends the aforementioned proposal for further necessary processing.

(D. S. Mehta)

Convener, CRC

All CRC members

Instrument Design Development Centre

Date: 17-07-2007

Subject: CRC Meeting on 20th, July, 2007 at 12.00 Noon in the IDDC Head's Room.

CRC Meeting will be held in the IDDC Head's Room at 12.00 Noon on Friday, 20th, July, 2007. The agenda of the meeting is:

- A. Discussion on the progress report of Ph. D. students for IDDC.**
- B. Any other information with the permission of the Chairman.**

CRC Members

- | | |
|------------------------------------|------------------|
| 1. Sh. L. K. Das | Chairman |
| 2. Prof. Chandra Shakher | Member |
| 3. Prof. T. K. Kundra, Mech. Engg. | Member |
| 4. Dr. Rakesh Kumar, | Member |
| 5. Dr. I. P. Singh | Member |
| 6. Sh. S. K. Sud | Member |
| 7. Dr. D. S. Mehta | Member-Secretary |

Convener, CRC

(D. S. Mehta)

All CRC members

Instrument Design Development Centre

Date: 20-07-2007

Subject: Minutes of CRC Meeting held on 20th, July, 2007 at 9.30 A. M. in the IDDC Head's Room.

CRC meeting scheduled to be held at 12.00 Noon on Friday, 20th, July, 2007 was pre-poned due to some unavoidable circumstances. The meeting was held at 9.30 A. M. on Friday, 20th, July, 2007. The following members attended the meeting:

- | | |
|--------------------|------------------|
| 1. Sh. L. K. Das | Chairman |
| 2. Dr. I. P. Singh | Member |
| 3. Sh. S. K. Sud | Member |
| 4. Dr. D. S. Mehta | Member-Secretary |

Progress reports submitted by all the Ph. D. students of IDDC were discussed in the CRC and as per the recommendations of their respective supervisors the reports were found satisfactory. CRC recommended that the grades of all the students be forwarded to PG section. However one of the supervisor Dr. A. L. Vyas is abroad and hence the Ph. D. student Mr. Anuj Kumar (2005IDZ8273) could not submit the progress report. The same will be discussed later and sent to PG section.

Convener, CRC

(D. S. Mehta)

Instrument Design Development Centre (IDDC)

Date: July 20, 2007

To,
The Dean,
PG Section,
Indian Institute of Technology Delhi

Sub.: Grades of Ph. D. students of IDDC.

Attached please find the grades of the progress report of Ph. D. Students of IDDC alongwith the minutes of CRC for further necessary action.

(D. S. Mehta)
Convener, CRC

Enclosures:

1. Progress report.
2. CRC minutes.

Instrument Design Development Centre

Date: 26-07-2007

Subject: CRC Meeting on 27th, July, 2007 at 11.00 A. M. in the IDDC Head's Room.

An urgent CRC meeting will be held in the IDDC Head's Room at 11.00 A. M. Friday, 27th, July, 2007. The agenda of the meeting is:

- 1. To discuss the case of Mr. Anuj Kumar (2005IDZ8273) and the associated comprehensive examination.**
- B. Any other information with the permission of the Chairman.**

CRC Members

1. Sh. L. K. Das	Chairman
2. Prof. Chandra Shakher	Member
3. Prof. T. K. Kundra, Mech. Engg.	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. I. P. Singh	Member
6. Sh. S. K. Sud	Member
7. Dr. D. S. Mehta	Member-Secretary
8. Dr. A. L. Vyas	Special Invitee

Convener, CRC

(D. S. Mehta)

Copy to:

1. All CRC members.
2. Dr. A. L. Vyas

Instrument Design Development Centre

Date: 27-07-2007

Subject: Minutes of CRC meeting held on 27th, July, 2007 at 11.00 A. M. in the IDDC Head's Room.

CRC meeting was held in the IDDC Head's Room at 11.00 A. M. Friday, 27th, July, 2007. The main agenda of the meeting was to discuss the case of Mr. Anuj Kumar (2005IDZ8273) research scholar of IDDC. The following members attended the meeting

1. Sh. L. K. Das	Chairman
2. Prof. Chandra Shakher	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. I. P. Singh	Member
6. Sh. S. K. Sud	Member
7. Dr. D. S. Mehta	Member-Secretary
8. Dr. A. L. Vyas	Special Invitee

Dr. A. L. Vyas briefed the committee about Mr. Anuj Kumar. His performance in course work and subsequent progress reports were also reviewed. The chairman also discussed with Dr. Sudhir Chandra (CARE) about his assessment of Mr. Anuj Kumar under whom he had done some fabrication work of MEMS sensor.

Keeping all aspects in view it was decided that the student be advised to continue his current field of research under Dr. A. L. Vyas. In case for some reasons it is not possible to continue research in the current area, then he is advised to choose any other research problem and supervisor in area of electronics in IDDC.

If he wishes to choose any research area other than electronics for which he was selected earlier, in that case he will be required to take fresh admission and pursue course work as necessary.

The student is advised to communicate his decision to the Chairman CRC by 06-08-2007 (Monday).

Convener, CRC

(D. S. Mehta)

Copy to:

1. All CRC members.
2. Dr. A. L. Vyas
3. Mr. Anuj Kumar

(Sh. L.K. Das)
Chairman CRC

Instrument Design Development Centre

Date: 08-08-2007

Subject: CRC Meeting on 10th, Aug, 2007 at 3.00 P. M. in the IDDC Head's Room.

CRC meeting will be held in the IDDC Head's Room at 3.00 P. M. Friday, 10th, Aug., 2007. The agenda of the meeting are:

- 1. To discuss the case of Mr. Anuj Kumar (2005IDZ8273) and the associated comprehensive examination and change of supervisor.**
- 2. Approval of research plan of Mr. Ranjeet Kumar and Khaja syed shahul Hameed.**
- 3. Discussion and finalization of short-listing criteria and dates of written test/interview for two Ph. D. applications received recently.**
- 4. Any other information with the permission of the Chairman.**

All CRC Members

1. Sh. L. K. Das	Chairman
2. Prof. Chandra Shakher	Member
3. Prof. T. K. Kundra, Mech. Engg.	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. I. P. Singh	Member
6. Sh. S. K. Sud	Member
7. Dr. D. S. Mehta	Member-Secretary

All CRC members are requested to make it convenient to attend the meeting.

Convener, CRC

(D. S. Mehta)

Copy to all CRC members.

Instrument Design Development Centre

Date: 13-08-2007

Subject: Minutes of CRC Meeting held on 10th, Aug, 2007 at 3.00 P. M. in the IDDC Head's Room.

CRC meeting was held in the IDDC Head's Room at 3.00 P. M. Friday, 10th, Aug., 2007. The following members attended the meeting.

1. Sh. L. K. Das	Chairman
2. Dr. Rakesh Kumar,	Member
3. Sh. S. K. Sud	Member
4. Dr. D. S. Mehta	Member-Secretary

The following are the minutes of the meeting;

1. The CRC discussed the issue of Mr. Anuj Kumar (2005IDZ8273) research scholar IDDC. Keeping in-view of his past 3 semesters progress reports it was resolved that he may be permitted to work under Sh. S. K. Sud and Dr. I. P. Singh in the area of electronics for which he was selected earlier. The committee felt that Mr. Anuj Kumar (2005IDZ8273) be given extra-time till 31-03-2008 to clear his comprehensive examination.
2. The research plan submitted by Ranjeet Kumar (2005 IDZ 8275) to SRC on 07-08-2007 and duly approved by SRC was presented to CRC and the CRC recommended the same be forwarded to PGS& R section for further necessary action.
3. The research plan submitted by Khaja Syed Shahul Hameed (2005 IDZ 8262) to SRC on 07-08-2007 and duly approved by SRC was presented to CRC and the CRC recommended the same be forwarded to PGS& R section for further necessary action.
4. A request from Sheo Shanker Prasad (2007 IDZ 8204) Ph. D. student in IDDC under QIP programme, regarding the exemption of the Audit Course HUL 810, was received and discussed in the meeting. CRC decided that the student is advised to take the course (HUL 810) and as a teacher it will benefit him.
5. Two new open elective courses: 1. Optical three-D surface profilometry and tomography and 2. Information display devices and technologies, submitted by Dr. D. S. Mehta were discussed in the meeting. The committee welcomed the new courses and decided to circulate both the courses among faculty members of IDDC for their suggestions and comments.
6. The short-listing criteria and dates of written test/interview for two Ph. D. applications received recently was discussed. The committee decided that the same short-listing criteria which was decided on May 8, 2007 for Ph. D. applications for Ist Semester 2007 is applicable for both the candidates. The date of test/interview was fixed on September 11, 2007 (Tuesday) 11.00 A. M.

Convener, CRC

(D. S. Mehta)

(Sh. L.K. Das)
Chairman CRC

Copy to:

1. All CRC members.

Instrument Design Development Centre

Date: 07-09-2007

Subject: CRC Meeting on 11th Sept. 2007 at 11.00 A. M. in the IDDC Head's Room.

CRC meeting will be held in the IDDC Head's Room at 11.00 A. M. Tuesday, 11th Sept., 2007. The agenda of the meeting are:

- 1. Ph. D. interview of two candidates who have applied for Ph.D. in IDDC recently. The applications of the candidates are in IDDC office.**
- 2. Any other information with the permission of the Chairman.**

All CRC Members

1. Sh. L. K. Das	Chairman
2. Prof. Chandra Shakher	Member
3. Prof. T. K. Kundra, Mech. Engg.	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. I. P. Singh	Member
6. Sh. S. K. Sud	Member
7. Dr. D. S. Mehta	Member-Secretary

All Faculty of IDDC are invited to participate.

Convener, CRC

(D. S. Mehta)

All CRC members
All Faculty of IDDC

Instrument Design Development Centre (IDDC)

Date: Sept. 10, 2007

To,
The Dean,
PG Section,
Indian Institute of Technology Delhi

Sub.: Progress report of Mr. Anuj Kumar Ph. D. students of IDDC.

Attached please find the progress report of the last semester of Mr. Anuj Kumar (2005IDZ8273) Ph. D. Student of IDDC. The observation of the supervisor of Mr. Anuj Kumar was deliberated by CRC and the CRC recommended the change of supervisor and an extension of time for the comprehensive exam of Mr. Anuj Kumar. The same has been duly approved by Dean PGS & R (Copy of approval attached).

(D. S. Mehta)
Convener, CRC

Chairman CRC

Enclosures:

1. Progress report.
2. CRC minutes.
3. Copy of approval of Dean PGS& R.

Instrument Design Development Centre

Date: 17-10-2007

Subject: CRC Meeting on 19th October, 2007 at 11.00 A. M. in the IDDC Head's Room.

CRC meeting will be held in the IDDC Head's Room at 11.00 A. M. Friday, 19th October, 2007. The agenda of the meeting are:

- 1. Approval of the re-formulation of SRC of Mr. Anuj Kumar Research Scholar IDDC**
- 2. Any other information with the permission of the Chairman.**

All CRC Members

- | | |
|------------------------------------|------------------|
| 1. Sh. L. K. Das | Chairman |
| 2. Prof. Chandra Shakher | Member |
| 3. Prof. T. K. Kundra, Mech. Engg. | Member |
| 4. Dr. Rakesh Kumar, | Member |
| 5. Dr. I. P. Singh | Member |
| 6. Sh. S. K. Sud | Member |
| 7. Dr. D. S. Mehta | Member-Secretary |

(D. S. Mehta)

Convener, CRC

All CRC members

Instrument Design Development Centre

Date: 23-10-2007

Subject: Minutes of CRC Meeting held on 19th October, 2007 at 11.00 A. M. in the IDDC Head's Room.

CRC meeting was held in the IDDC Head's Room at 11.00 A. M. Friday, 19th October, 2007. The following members attended the meeting;

1. Sh. L. K. Das	Chairman
2. Dr. Rakesh Kumar,	Member
3. Dr. I. P. Singh	Member
4. Sh. S. K. Sud	Member
5. Sh. A. K. Agarwala	Special Invitee
5. Dr. D. S. Mehta	Member-Secretary

1. CRC discussed the re-appointment of Supervisors and re-formulation of Student Research Committee (SRC) of Mr. Anuj Kumar (2005IDZ8273) and the CRC recommends the same be forwarded to PG section.
2. CRC also discussed the appointment of Supervisor and formulation of Student Research Committee (SRC) of Mr. Bhaskarkumar Vinodchandra Thakker (2007 IDZ 8202) and the CRC recommends the same be forwarded to PG section.
3. Two new open elective courses: 1. Information display devices and technologies; and 2. Optical three-D surface profilometry and tomography submitted by Dr. D. S. Mehta were circulated among the faculty members for their comments and suggestions. The committee welcomed the new courses and recommended that the new courses be forwarded to PG section for further necessary action.

The meeting ended with thanks to the Chair.

Convener, CRC

(D. S. Mehta)

Instrument Design Development Centre

Date: 12-11-2007

Subject: CRC Meeting on 15th November, 2007 at 10.00 A. M. in the IDDC Head's Room.

CRC meeting will be held in the IDDC Head's Room at 10.00 A. M., Thursday, 15th November, 2007. The agenda of the meeting are:

1. Approval of Synopsis of the Ph. D. thesis of Mr. Sanjay Kumar Patil (2004 IDZ 8118) Research Scholar IDDC.
2. Discussion on the project proposal on "Design and development of light out-coupling techniques for high-efficiency organic light-emitting devices" submitted by Dr. D. S. Mehta. The copy of the proposal has been circulated among CRC members for their comments and suggestions.
3. Any other information with the permission of the Chairman.

All CRC Members

1. Sh. L. K. Das	Chairman
2. Prof. D. T. Shahani	Member
3. Prof. Chandra Shakher	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. I. P. Singh	Member
6. Sh. S. K. Sud	Member
7. Sh. A. K. Agarwala	Member
8. Dr. A. L. Vyas	Member
9. Dr. N. K. Jain	Member
10. Sh. S. K. Atreya	Member
11. Dr. D. S. Mehta	Member-Secretary

(D. S. Mehta)

Convener, CRC
All CRC members

Instrument Design Development Centre

Date: 14-11-2007

Subject: CRC meeting postponed.

Due to the Seminar on 15th Nov. 2007 on “Communication Technologies for Health Monitoring” the CRC meeting scheduled to be held on 15th, Nov. 2007 has been postponed. The CRC meeting will now be held on Tuesday, 20th November, 2007 in the IDDC Head’s Room at 10.00 A. M. The agenda of the meeting are:

1. Approval of Synopsis of the Ph. D. thesis of Mr. Sanjay Kumar Patil (2004 IDZ 8118) Research Scholar IDDC.
2. Discussion on the project proposal on “Design and development of light out-coupling techniques for high-efficiency organic light-emitting devices” submitted by Dr. D. S. Mehta. The copy of the proposal has been circulated among CRC members for their comments and suggestions.
3. Any other information with the permission of the Chairman.

All CRC Members

1. Sh. L. K. Das	Chairman
2. Prof. D. T. Shahani	Member
3. Prof. Chandra Shakher	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. I. P. Singh	Member
6. Sh. S. K. Sud	Member
7. Sh. A. K. Agarwala	Member
8. Dr. A. L. Vyas	Member
9. Dr. N. K. Jain	Member
10. Sh. S. K. Atreya	Member
11. Dr. D. S. Mehta	Member-Secretary

(D. S. Mehta)

Convener, CRC
All CRC members

Instrument Design Development Centre

Date: 20-11-2007

Subject: CRC meeting postponed.

Due to some unavoidable circumstances the CRC meeting scheduled to be held on 20th, Nov. 2007 could not be held. The CRC meeting will now be held on Thursday, 22nd November, 2007 in the IDDC Head's Room at 10.00 A. M. The agenda of the meeting are:

1. Approval of Synopsis of the Ph. D. thesis of Mr. Sanjay Kumar Patil (2004 IDZ 8118) Research Scholar IDDC.
2. Discussion on the project proposal on "Design and development of light out-coupling techniques for high-efficiency organic light-emitting devices" submitted by Dr. D. S. Mehta. The copy of the proposal has been circulated among CRC members for their comments and suggestions.
3. Any other information with the permission of the Chairman.

All CRC Members

1. Sh. L. K. Das	Chairman
2. Prof. D. T. Shahani	Member
3. Prof. Chandra Shakher	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. I. P. Singh	Member
6. Sh. S. K. Sud	Member
7. Sh. A. K. Agarwala	Member
8. Dr. A. L. Vyas	Member
9. Dr. N. K. Jain	Member
10. Sh. S. K. Atreya	Member
11. Dr. D. S. Mehta	Member-Secretary

(D. S. Mehta)

Convener, CRC
All CRC members

Instrument Design Development Centre

Date: 23-11-2007

Subject: Minutes of CRC meeting.

CRC meeting was held in the IDDC Head's Room at 10.00 A. M. Thursday, 22nd, November 2007. The following members attended the meeting;

1. Sh. L. K. Das	Chairman
2. Dr. Rakesh Kumar,	Member
3. Dr. I. P. Singh	Member
4. Sh. S. K. Sud	Member
5. Dr. N. K. Jain	Member
6. Dr. D. S. Mehta	Member-Secretary

The following are the minutes of the meeting;

1. The SRC's report of Mr. Sanjay Kumar Patil (2004 IDZ 8118) on his Synopsis and the appointment of the thesis examiners were discussed in the meeting and CRC recommends the list of examiners be forwarded to PG Section for further necessary action.
2. A request from Mr. Bhasker Thakkar (2007 IDZ 8202) Ph. D. student in IDDC under QIP programme, regarding the exemption of the Audit Course HUL 810, was received and discussed in the meeting. The CRC has not acceded to his request. CRC decided that the student is advised to take the course (HUL 810) to improve his communications skill further.
3. Project proposal on "Design and development of light out-coupling techniques for high-efficiency organic light-emitting devices" submitted by Dr. D. S. Mehta (PI) and Prof. Chandra Shakher (Co-PI) for CSIR was circulated among the CRC members for their comments and the same was discussed in the CRC meeting. It was noted that the PI had clarified that no additional space and manpower was being asked from IDDC. The CRC recommends the aforementioned proposal for further necessary processing.
4. Approval of CRC for the appointment of Supervisors and formulation of Student Research Committee (SRC) of **Mr. Mumtaz Ahmad (2007 IDZ 8223)** Ph. D. scholar IDDC was discussed and the CRC recommends the same be forwarded to PG section.
5. D. S. Mehta informed the committee that the progress report forms for Ph. D. students have been received from PG section and same are being circulated among Ph. D. students. The last date for submitting the duly completed progress report form is 11-12-2007.

The meeting ended with thanks to the Chair.

(D. S. Mehta)

Convener, CRC

All CRC members

Instrument Design Development Centre

Date: 23-11-2007

Attached please find the form for the progress report of Ph. D. student. Kindly submit the progress report to the undersigned by 11th, December 2007.

D. S. Mehta
Convener, CRC

All Research Scholars of IDDC.

Instrument Design Development Centre (IDDC)

Date: 23-11-2007

Subject: Synopsis and List of Ph. D. thesis examiners

Enclosed please find the list of thesis examiners of Mr. Mr. Sanjay Kumar Patil (2004 IDZ 8118) along with his Synopsis and CRC minutes (1) for further necessary action.

(D. S. Mehta)
Convener, CRC

PG Section

Enclosures:

1. Synopsis of the thesis.
2. List of examiners.
3. CRC minutes.

Instrument Design Development Centre

Date: 30-11-2007

Ms. Tulsi Anna (2006 IDZ 8154) joined IDDC as Ph. D. student on 26th July 2006. The student is completing one and half year on 25th January 2008. The following SRC of Ms. Tulsi Anna was formulated and approved by Dean PGS & R.

SRC Members

1. Chairman CRC or His Nominee
2. Dr. A. L. Vyas (Internal Expert)
3. Prof. B. P. Pal, Physics Department (External Expert)
4. Dr. D. S. Mehta (Supervisor)
5. Prof. Chandra Shakher (Supervisor).

One of the members Prof. B. P. Pal (External Expert, Department of Physics) is on leave upto May 2008. In view of this it is suggested that Dr. P. Senthilkumaran (Department of Physics) may please be inducted as SRC member in lieu of Prof. B. P. Pal.

(D. S. Mehta)
Supervisor

Chairman CRC

AR (PGS & R)

Instrument Design Development Centre

Date: 03-12-2007

Subject: Ph. D. Interview on 11-12-2007.

CRC meeting will be held on Tuesday, 11th, December 2007 in the IDDC Head's Room at 3.00 P. M. The agenda of the meeting are:

1. **Selection of Ph. D. Candidates for IDDC for IInd Semester 2007-2008.** Applications of short-listed candidates may be seen in IDDC Office.
2. Any other information with the permission of the Chairman.

All CRC Members and Faculty of IDDC

1. Sh. L. K. Das	Chairman
2. Prof. D. T. Shahani	Member
3. Prof. Chandra Shakher	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. I. P. Singh	Member
6. Sh. S. K. Sud	Member
7. Sh. A. K. Agarwala	Member
8. Dr. A. L. Vyas	Member
9. Dr. N. K. Jain	Member
10. Sh. S. K. Atreya	Member
11. Dr. D. S. Mehta	Member-Secretary

Convener, CRC

(D. S. Mehta)

Instrument Design Development Centre

Date: 17-12-2007

Subject: Minutes of CRC meeting held on 11-12-2007.

CRC meeting was held on Tuesday, 11th December 2007 in the IDDC Head's Room at 3.00 P. M. The agenda of the meeting was the selection of Ph. D. Candidates for IDDC for IInd Semester 2007-2008.

Total 07 applications were received from P.G. Section out of which 06 candidates were under General Category and 01 candidate was SC category. As per the shortlisting criteria set by the CRC a total 06 candidates were short listed and called for interview out of which five candidates were under General Category and one candidate was under SC category. Two candidates attended the test/interview.

1. Mr. S. Chandra Sekaran
2. Mrs. Arati Nilesh Kane

After the interview Mrs. Arati Nilesh Kane was found suitable for the admission in Ph. D. under the part-time category.

All CRC Members and Faculty of IDDC

1. Sh. L. K. Das	Chairman
2. Prof. D. T. Shahani	Member
3. Prof. Chandra Shakher	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. I. P. Singh	Member
6. Sh. S. K. Sud	Member
7. Sh. A. K. Agarwala	Member
8. Dr. A. L. Vyas	Member
9. Dr. N. K. Jain	Member
10. Sh. S. K. Atreya	Member
11. Dr. D. S. Mehta	Member-Secretary

Convener, CRC

(D. S. Mehta)

Instrument Design Development Centre (IDDC)

Date: Dec. 10, 2007

Subject: Moderation committee meeting on 10th December 2007 at 12.15 P. M. in the Committee Room of IDDC.

Meeting will be held in the Committee Room of IDDC at 12.15 P. M. on Monday the 10th December 2007 for MODERATION OF GRADES. All course supervisors and faculty members are requested to kindly make it convenient to attend the meeting.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre

Date: 10-12-2007

Subject: Ph. D. Interview on 11-12-2007.

Ph. D. Test/Interview on Tuesday, 11th, December 2007 at 3.00 P.M. in the IDDC Head's Room at 3.00 P. M. Applications of short-listed candidates may be seen in IDDC Office.

All CRC Members and Faculty of IDDC are requested to participate in the interview.

Convener, CRC

(D. S. Mehta)

IDDC Notice Board

Instrument Design Development Centre

Date: 17-12-2007

Subject: CRC meeting on 20-12-2007.

CRC meeting will be held on Thursday, 20th, December 2007 in the IDDC Head's Room at 11.00 A. M. The agenda of the meeting are:

1. **Discussion on the progress report of Ph. D. students of IDDC.**
2. Any other information with the permission of the Chairman.

All CRC Members

1. Sh. L. K. Das	Chairman
2. Prof. D. T. Shahani	Member
3. Prof. Chandra Shakher	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. I. P. Singh	Member
6. Sh. S. K. Sud	Member
7. Sh. A. K. Agarwala	Member
8. Dr. A. L. Vyas	Member
9. Dr. N. K. Jain	Member
10. Sh. S. K. Atreya	Member
11. Dr. D. S. Mehta	Member-Secretary

Convener, CRC

(D. S. Mehta)

Instrument Design Development Centre (IDDC)

Date: Dec. 20, 2007

Subject: Minutes of CRC Meeting held on December 20, 2007 at 11.00 A.M. in the IDDC Head's Room.

CRC meeting was held on December 20, 2007 (Thursday), at 11.00 A. M. in the Head, IDDC room. The following members attended the meeting;

1. Sh. L. K. Das	Chairman
2. Dr. Rakesh Kumar,	Member
3. Dr. I. P. Singh	Member
4. Sh. S. K. Sud	Member
5. Sh. N. K. Jain	Member
6. Dr. D. S. Mehta	Member-Secretary

The following are the minutes of the meeting;

- A.** Progress reports submitted by the Ph. D. students of IDDC were discussed in the CRC and as per the recommendations of their respective supervisors the reports were found satisfactory. CRC recommended that the grades of all the students be forwarded to PG section. However, the progress report of one of the Ph. D. student Mr. Madhusudan Joshi (2001RID 001) was not discussed in CRC as Prof. Chandra Shakher wanted to discuss with Prof. Kehar Singh who is out of station to attend the OSI symposium. The same will be discussed later and sent to PG section.
- B.** Short-listing criteria for the Ph. D. candidates under Quality Improvement programme was discussed and CRC re-iterated that the short-listing criteria as followed in the previous year, that is, as per the minimum Institute criteria should be followed for QIP candidates. All the 06 Applications received from PG section satisfy the aforementioned criteria and all the 06 candidates are being called for test/interview scheduled on 25-01-2008 (Friday).

The meeting ended with the thanks to the chair.

Convener, CRC

(D. S. Mehta)

Instrument Design Development Centre (IDDC)

Date: Dec. 28, 2007

To,
The Dean,
PG Section,
Indian Institute of Technology Delhi

Sub.: Grades of Ph. D. students of IDDC.

Attached please find the grades of the progress report of Mr. Madhusudan Joshi (2001RID 001) Ph. D. Students of IDDC for further necessary action.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: Dec. 28, 2007

To,
The Dean,
PG Section,
Indian Institute of Technology Delhi

Sub.: Grades of Ph. D. students of IDDC.

Attached please find the grades of the progress report of Ph. D. Students of IDDC alongwith the CRC minutes (A) for further necessary action.

(D. S. Mehta)
Convener, CRC

Enclosures:

1. Progress report.
2. CRC minutes.

Instrument Design Development Centre

Date: 08-01-2008

Subject: CRC meeting on 11-01-2008.

CRC meeting will be held on Friday, 11th, January 2008 in the IDDC Head's Room at 12.00 Noon. The agenda of the meeting are:

1. **Discussion on the project proposal "Development of hybrid polymer nano-composite for structural applications" submitted by Dr. I. P. Singh (PI).**
2. **Approval of the Synopsis of Ph. D. thesis entitled "Applications of digital holography in optical metrology and information reduction" of Md. Mosarraf Huossain.**
3. **Any other information with the permission of the Chairman.**

All CRC Members

1. Sh. L. K. Das	Chairman
2. Prof. D. T. Shahani	Member
3. Prof. Chandra Shakher	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. I. P. Singh	Member
6. Sh. S. K. Sud	Member
7. Sh. A. K. Agarwala	Member
8. Dr. A. L. Vyas	Member
9. Dr. N. K. Jain	Member
10. Sh. S. K. Atreya	Member
11. Dr. D. S. Mehta	Member-Secretary

(D. S. Mehta)

Convener, CRC

Instrument Design Development Centre

Date: 11-01-2008

Subject: CRC meeting postponed.

Today's CRC meeting has been postponed to Thursday, January 17, 2008 at 4.00 P.M. in IDDC heads room. The agenda of the meeting are:

1. **Discussion on the project proposal "Development of hybrid polymer nano-composite for structural applications" submitted by Dr. I. P. Singh (PI).**
2. **Approval of the Synopsis of Ph. D. thesis entitled "Applications of digital holography in optical metrology and information reduction" of Md. Mosarraf Huossain.**
3. **Any other information with the permission of the Chairman.**

All CRC Members

1. Sh. L. K. Das	Chairman
2. Prof. D. T. Shahani	Member
3. Prof. Chandra Shakher	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. I. P. Singh	Member
6. Sh. S. K. Sud	Member
7. Sh. A. K. Agarwala	Member
8. Dr. A. L. Vyas	Member
9. Dr. N. K. Jain	Member
10. Sh. S. K. Atreya	Member
11. Dr. D. S. Mehta	Member-Secretary

(D. S. Mehta)

Convener, CRC

Instrument Design Development Centre

Date: 18-01-2008

Subject: Minutes of CRC meeting.

CRC meeting was held in the IDDC Head's Room at 4.00 P. M. Thursday, 17th, January 2008. The following members attended the meeting;

1. Sh. L. K. Das	Chairman
2. Dr. Rakesh Kumar,	Member
3. Dr. I. P. Singh	Member
4. Sh. S. K. Sud	Member
5. Dr. N. K. Jain	Member
6. Dr. D. S. Mehta	Member-Secretary

The following are the minutes of the meeting;

1. Project proposal on the “**Development of hybrid polymer nano-composite for structural applications**” submitted by **Dr. I. P. Singh (PI)** for DST was circulated among the CRC members for their comments and the same was discussed in the CRC meeting. It was noted that the PI had clarified that no additional space and manpower was being asked from IDDC. The CRC recommends the aforementioned proposal for further necessary processing.
2. The SRC's report of Md. Mosarraf Hossain on his Ph. D. Synopsis entitled “**Applications of digital holography in optical metrology and information reduction**” and the appointment of the thesis examiners were discussed in the meeting and CRC recommends that Synopsis and the list of examiners be forwarded to PG Section for further necessary action.
3. D. S. Mehta informed the committee that Mr. Jai Prakash (Research Scholar, IDDC) under the joint Supervision with Dr. A. M. Biradar, Scientist 'F' NPL, New Delhi would also be going to work in NPL frequently to carry out experimental work in Dr. A. M. Biradar's Lab. The Committee approved the same.

The meeting ended with thanks to the Chair.

(D. S. Mehta)

Convener, CRC
All CRC members

Instrument Design Development Centre

Date: 11-01-2008

Subject: CRC meeting postponed.

Today's CRC meeting has been postponed to Thursday, January 17, 2008 at 4.00 P.M. in IDDC heads room. The agenda of the meeting are:

1. **Discussion on the project proposal "Development of hybrid polymer nano-composite for structural applications" submitted by Dr. I. P. Singh (PI).**
2. **Approval of the Synopsis of Ph. D. thesis entitled "Applications of digital holography in optical metrology and information reduction" of Md. Mosarraf Huossain.**
3. **Any other information with the permission of the Chairman.**

All CRC Members

1. Sh. L. K. Das	Chairman
2. Prof. D. T. Shahani	Member
3. Prof. Chandra Shakher	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. I. P. Singh	Member
6. Sh. S. K. Sud	Member
7. Sh. A. K. Agarwala	Member
8. Dr. A. L. Vyas	Member
9. Dr. N. K. Jain	Member
10. Sh. S. K. Atreya	Member
11. Dr. D. S. Mehta	Member-Secretary

Convener, CRC

(D. S. Mehta)

Instrument Design Development Centre

Date: 18-01-2008

Subject: Test/ Interview of Ph. D. Candidates under QIP programme on 25-01-2008.

Ph. D. Test/Interview of Candidates under QIP programme on Friday, 25th, January 2008 at 10.00 A.M. in the IDDC Head's Room. Applications of short-listed candidates may be seen in IDDC Office.

All CRC Members and Faculty of IDDC are requested to participate in the interview.

Convener, CRC

(D. S. Mehta)

IDDC Notice Board

Instrument Design Development Centre

Date: 01-02-2008

Subject: CRC meeting on February 8, 2008.

CRC meeting will be held on Friday, February 8, 2008 at 4. 00 P.M. in IDDC heads room. The agenda of the meeting are:

1. **Discussion on the project proposal “Modernization of Ayurvedic treatments..... ” submitted by Prof. D. T. Shahani (PI).**
2. **Discussion on the project proposal “Development of digital holographic techniques.....” submitted by Prof. Chandra Shakher (PI).**
3. **Approval of the Synopsis of Ph. D. thesis entitled “DEVELOPMENT OF FULL-FIELD SWEPT-SOURCE OPTICAL COHERENCE TOMOGRAPHIC SYSTEM FOR SCIENTIFIC AND ENGINEERING APPLICATIONS” of Mr. Satish Kumar Dubey.**
4. **Approval of Research Plan of Mr. Jai Prakash Rana and Ms. Tulsi Anna Ph. D. Students of IDDC.**
5. **Any other information with the permission of the Chairman.**

All CRC Members

1. Sh. L. K. Das	Chairman
2. Prof. D. T. Shahani	Member
3. Prof. Chandra Shakher	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. I. P. Singh	Member
6. Sh. S. K. Sud	Member
7. Sh. A. K. Agarwala	Member
8. Dr. A. L. Vyas	Member
9. Dr. N. K. Jain	Member
10. Sh. S. K. Atreya	Member
11. Dr. D. S. Mehta	Member-Secretary

Convener, CRC

(D. S. Mehta)

Instrument Design Development Centre

Date: 01-02-2008

Subject: CRC meeting on February 8, 2008.

CRC meeting will be held on Friday, February 8, 2008 at 4. 00 P.M. in IDDC heads room. The agenda of the meeting are:

1. **Discussion on the project proposal “Modernization of Ayurvedic treatments..... ” submitted by Prof. D. T. Shahani (PI).**
2. **Discussion on the project proposal “Development of digital holographic techniques.....” submitted by Prof. Chandra Shakher (PI).**
3. **Approval of the Synopsis of Ph. D. thesis entitled “DEVELOPMENT OF FULL-FIELD SWEPT-SOURCE OPTICAL COHERENCE TOMOGRAPHIC SYSTEM FOR SCIENTIFIC AND ENGINEERING APPLICATIONS” of Mr. Satish Kumar Dubey.**
4. **Approval of Research Plan of Mr. Jai Prakash Rana and Ms. Tulsi Anna Ph. D. Students of IDDC.**
5. **Any other information with the permission of the Chairman.**

All CRC Members

1. Sh. L. K. Das	Chairman
2. Prof. D. T. Shahani	Member
3. Prof. Chandra Shakher	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. I. P. Singh	Member
6. Sh. S. K. Sud	Member
7. Sh. A. K. Agarwala	Member
8. Dr. A. L. Vyas	Member
9. Dr. N. K. Jain	Member
10. Sh. S. K. Atreya	Member
11. Dr. D. S. Mehta	Member-Secretary

Convener, CRC

(D. S. Mehta)

Instrument Design Development Centre

Date: 12-02-2008

Subject: Minutes of CRC meeting held on February 8, 2008.

CRC meeting was held in the IDDC Head's Room at 4.00 P. M. Friday 8th, February 2008. The following members attended the meeting;

1. Sh. L. K. Das	Chairman
2. Dr. Rakesh Kumar,	Member
3. Dr. I. P. Singh	Member
4. Sh. S. K. Sud	Member
5. Dr. N. K. Jain	Member
6. Dr. D. S. Mehta	Member-Secretary

The following are the minutes of the meeting;

Project proposal on the “**Modernization of Ayurvedic treatments via electronic instrumentation**” submitted by **Prof. D. T. Shahani (PI)** was circulated among the CRC members for their comments and the same was discussed in the CRC meeting. It was noted that the PI had clarified that no additional space and manpower was being asked from IDDC. The CRC recommends the aforementioned proposal for further necessary processing.

Project proposal on the “**Development of digital holographic techniques and their applications for the study of vibrations, contouring of diffused objects and measurement of temperature in fluids (liquids and gaseous flame)**” submitted by **Prof. Chandra Shakher (PI)** was circulated among the CRC members for their comments and the same was discussed in the CRC meeting. It was noted that the PI had clarified that no additional space and manpower was being asked from IDDC. The CRC recommends the aforementioned proposal for further necessary processing.

The SRC's report of Mr. Satish Kumar Dubey on his Ph. D. Synopsis entitled “**Development of full-field swept-source optical coherence tomographic system for scientific and engineering applications**” and the appointment of the thesis examiners were discussed in the meeting and CRC recommends that Synopsis and the list of examiners be forwarded to PG Section for further necessary action.

The research plan submitted by Mr. Jai Prakash Rana (2006 IDZ 8155) to SRC on 18-01-2008 and duly approved by SRC was presented to CRC and the CRC recommended the same be forwarded to PGS& R section for further necessary action.

The research plan submitted by Km. Tulsi Anna (2006 IDZ 8154) to SRC on 25-01-2008 and duly approved by SRC was presented to CRC and the CRC recommended the same be forwarded to PGS& R section for further necessary action.

CRC decided that faculty board meeting may please be convened for formalizing the starting of MS(R) programme in the Centre. A note from the office of Dean PGS & R regarding MS (R) is attached herewith. The members felt that in view of very limited number of assistantships in M. Tech. 9(Instrument Technology)/ M. Des. Program and excellent placement opportunities, there may not be many takers unless the intake in these programs is increased. More assistantships needs to be allocated under these programs.

(a) Head IDDC circulated a note on 17-1-2008 among faculty members regarding the placement of Ph. D. scholars in Industry for comments and suggestions. The same was discussed in the CRC and it may be worthwhile considering how our research scholars can find good employment in Industry. Perhaps after synopsis approval they should together with thesis writing, work towards exploring linkage between their research work and the industry, and explore placement. After, synopsis submission, they can be enrolled with T & P with advice on the type of industry that would be interested in their type of research work.

(b) It will further our effort for excellence in research education if we facilitate IIT postgraduates working in the industry/ education / research to join Ph. D. programs at IIT Delhi as part-time research scholars. A student who has done his / her post graduation from IITs has already gone through the rigour of IIT education. For such students, full-time or part-time, they may be permitted to register for independent study courses requiring preparation of term paper, seminar or problem solving. Suitable courses can be designed. They will be required to take minor / major examination and this evaluation could be written / oral. Such a provision will encourage many candidates with IIT educational background, working in the industry to opt for Doctorate level education.

(D. S. Mehta)

Convener, CRC
Chairman CRC

Copy to:

1. All CRC Members.
2. Dean, BPGS & R regarding point No. 6 & 7.

Instrument Design Development Centre (IDDC)

Date: Feb. 13, 2008

Sub.: Research plan of Km. Tulsi Anna (2006 IDZ 8154)

Attached please find the result of the comprehensive examination of Km. Tulsi Anna (2006 IDZ 8154) and copy of the research plan along with the minutes of CRC further necessary action.

(D. S. Mehta)
Convener, CRC

AR, PGS & R

Instrument Design Development Centre (IDDC)

Date: Feb. 13, 2008

Sub.: Research plan of Mr. Jai Prakash Rana (2006 IDZ 8155)

Attached please find the result of the comprehensive examination of Mr. Jai Prakash Rana (2006 IDZ 8155) and copy of the research plan along with the minutes of CRC further necessary action.

(D. S. Mehta)
Convener, CRC

AR, PGS & R

Instrument Design Development Centre

Date: 29-02-2008

Subject: Minutes of CRC meeting held on February 29, 2008.

CRC meeting was held in the IDDC Head's Room at 3.30 P. M. Friday 29th, February 2008. The following members attended the meeting;

1. Sh. L. K. Das	Chairman
2. Dr. Rakesh Kumar,	Member
3. Sh. A. K. Agarwala	Member
4. Dr. I. P. Singh	Member
5. Sh. S. K. Sud	Member
6. Dr. N. K. Jain	Member
7. Dr. D. S. Mehta	Member-Secretary

The following are the minutes of the meeting;

1. Project proposal on the “**Control and analysis of solar power fed solid state AC drive for three-phase induction motor**” submitted by **Dr. N. K. Jain (PI) and Dr. I. P. Singh (Co-PI)** was circulated among the CRC members for their comments and the same was discussed in the CRC meeting. It was noted that the PI had clarified that no additional space and manpower was being asked from IDDC. The CRC recommends the aforementioned proposal for further necessary processing.

The meeting ended with thanks to Chair.

(D. S. Mehta)

Convener, CRC

Instrument Design Development Centre

Date: 12-03-2008

Subject: CRC meeting on March 20, 2008.

CRC meeting will be held on Thursday, March 20, 2008 at 4. 00 P.M. in the room of Head IDDC. The agenda of the meeting are:

1. Conversion of full-time Ph. D. to part-time of Mr. Satish Kumar Dubey, Ph. D. student IDDC.
2. Any other information with the permission of the Chairman.

All CRC Members

1. Sh. L. K. Das	Chairman
2. Prof. D. T. Shahani	Member
3. Prof. Chandra Shakher	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. I. P. Singh	Member
6. Sh. S. K. Sud	Member
7. Sh. A. K. Agarwala	Member
8. Dr. A. L. Vyas	Member
9. Dr. N. K. Jain	Member
10. Sh. S. K. Atreya	Member
11. Dr. D. S. Mehta	Member-Secretary

(D. S. Mehta)

Convener, CRC

Instrument Design Development Centre

Date: 12-03-2008

Mr. Satish Kumar Dubey (2004 IDZ 8053) a Ph. D. student of IDDC has joined the CSIO Chandigarh as Scientist 'B' on 20-02-2008. The request of Mr. Satish Kumar Dubey (2004 IDZ 8053) for the conversion of his Ph. D. from full-time to part-time is being considered in the CRC. The decision of CRC will then be conveyed to PG section. It is also requested to kindly stop his teaching assistantship w. e. f. 19-02-2008.

(D. S. Mehta)
Supervisor

Through Head, IDDC

PG Section

Instrument Design Development Centre (IDDC)

Date: April. 28, 2008

Subject: CRC Meeting on May 2, 2008 (Friday) at 4.00 P.M. in the IDDC Heads Room.

CRC meeting is being held in the Head, IDDC room on May 2, 2008 (Friday) at 4.00 P.M. The main agenda of the meeting are the following;

- 1. Discussion and finalization of short-listing criteria for admission in Ph. D. Programme for Ist Semester 2008-2009.**
- 2. Finalization of the dates of written test/interview for Ph. D. Candidates.**
- 3. Any other information with the permission of the Chairman.**

All the CRC members are requested to attend the meeting.

All CRC Members

- | | |
|--------------------------|------------------|
| 1. Sh. L. K. Das | Chairman |
| 2. Prof. D. T. Shahani | Member |
| 3. Prof. Chandra Shakher | Member |
| 4. Dr. Rakesh Kumar, | Member |
| 5. Dr. A. L. Vyas | Member |
| 6. Dr. I. P. Singh | Member |
| 7. Sh. S. K. Sud | Member |
| 8. Sh. A. K. Agarwala | Member |
| 9. Dr. N. K. Jain | Member |
| 10. Sh. S. K. Atreya | Member |
| 11. Dr. D. S. Mehta | Member-Secretary |

Convener, CRC

(D. S. Mehta)

Date: April. 30, 2008

Subject: CRC Meeting Pre-poned

CRC meeting is being held in the IDDC Head's room on May 2, 2008 (Friday) at 12.00 Noon. The meeting scheduled to be held on May 2, 2008 (Friday) at 4.00 P.M. has been preponed due to non-availability of some of the members.

The main agenda of the meeting are the following;

Discussion and finalization of short-listing criteria for admission in Ph. D. Programme for Ist Semester 2008-2009.

Finalization of the dates of written test/interview for Ph. D. Candidates.

Any other information with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

1. Sh. L. K. Das	Chairman
2. Prof. D. T. Shahani	Member
3. Prof. Chandra Shakher	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. A. L. Vyas	Member
6. Dr. I. P. Singh	Member
7. Sh. S. K. Sud	Member
8. Sh. A. K. Agarwala	Member
9. Dr. N. K. Jain	Member
10. Sh. S. K. Atreya	Member
11. Dr. D. S. Mehta	Member-Secretary

Convener, CRC

(D. S. Mehta)

Subject: Minutes of the CRC meeting held on May 02, 2008 (Friday) at 12.00 Noon in the IDDC Head's Room.

CRC meeting was held on May 02, 2008 (Friday) at 4.00 P.M. in the IDDC Head's Room. The following members of the CRC attended the meeting.

1. Sh. L. K. Das	Chairman
2. Prof. Chandra Shakher	Member
3. Dr. Rakesh Kumar	Member
4. Dr. I. P. Singh	Member
5. Dr. A. L. Vyas	Member
6. Dr. N. K. Jain	Member
7. Dr. D. S. Mehta	Member-Secretary

A. The short-listing criteria for admission in Ph. D. Programme for the Ist Semester 2008-2009 was discussed and the committee decided the following short-listing criteria:

General Candidates:

M. Sc. Physics with at least 65% aggregate marks or equivalent CGPA 7.12 on a 10 point scale Plus a Valid GATE Score \geq 400 or a valid CSIR/UGC/NET Certificate with JRF.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 60 % aggregate marks or equivalent CGPA 6.75 on a 10 point scale.

OR

B. Tech. in relevant branch of Engineering or Physics with at least 75 % or equivalent CGPA of 8.5 on a 10 point scale PLUS a valid GATE score \geq 500 or a valid CSIR/UGC/NET Certificate with JRF.

SC/ST/PH Candidates:

M. Sc. Physics with at least 60% aggregate marks or equivalent CGPA of 6.75 on a 10 point scale Plus a Valid GATE Score \geq 300 or a valid CSIR/UGC/NET Certificate with JRF.

OR

M. Tech. in relevant branch with at least 55 % aggregate marks or equivalent CGPA of 6.25 on a 10 point scale.

OR

B. Tech. In relevant branch with at least 70 % or equivalent CGPA of 7.5 on a 10 point scale PLUS a valid GATE score \geq 350 or a valid CSIR/UGC/NET Certificate with JRF.

Part-Time Candidates:

As per Institute norms, but the short-listing criteria will be as above, except for the requirement of GATE Score. There will be no admission on a self-sponsored basis, and there will be no direct admission to the above Programme.

NOTE:

Candidates, whose M. Tech. / M. Sc. results are not yet declared, will be provisionally short-listed for the interview, provided they have secured the necessary aggregate marks or equivalent CGPA in the results declared so far for the qualifying degree.

B. The Test/Interview for admission in Ph. D. will be held on 19th, May 2008 (Monday).

D. S. Mehta
Convener CRC

Instrument Design Development Centre

Date: 13-05-2008

Subject: Test/ Interview of Ph. D. Candidates on 19-05-2008, 10.00 A.M.

Test/Interview of Ph. D. Candidates will be held on Monday 19th, May 2008 at 10.00 A. M. onwards in the IDDC Head's Room. Applications of short-listed candidates may be seen in IDDC Office.

All CRC Members and Faculty of IDDC are requested to participate in the interview.

(D. S. Mehta)

Convener, CRC

IDDC Notice Board

Instrument Design Development Centre

Date: 04-06-2008

Attached please find the form for the progress report of Ph. D. student. Kindly submit the progress report to the undersigned by 1st, July 2008.

D. S. Mehta
Convener, CRC
All Research Scholars of IDDC.

Instrument Design Development Centre (IDDC)

Date: July 10, 2008

Subject: CRC Meeting on July 18, 2008 at 12.00 NOON

CRC meeting is being held in the IDDC Head's room on July 12, 2008 (Friday) at 12.00 Noon. The main agenda of the meeting are the following;

1. Discussion on the progress reports of Ph.D. students of IDDC.
2. Approval of Research Plan of Mr. P. Packiam Ph. D. Student of IDDC.
3. Discussion on the Scheme for young Scientists and Professionals floated by DST.
4. Discussion on the project proposal "Development of swept-source optical coherence scanning microscopy....." submitted by Dr. D. S. Mehta.
5. Any other information with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

- | | |
|--------------------------|------------------|
| 1. Sh. L. K. Das | Chairman |
| 2. Prof. D. T. Shahani | Member |
| 3. Prof. Chandra Shakher | Member |
| 4. Dr. Rakesh Kumar, | Member |
| 5. Dr. A. L. Vyas | Member |
| 6. Dr. I. P. Singh | Member |
| 7. Sh. S. K. Sud | Member |
| 8. Sh. A. K. Agarwala | Member |
| 9. Dr. N. K. Jain | Member |
| 10. Sh. S. K. Atreya | Member |
| 11. Dr. D. S. Mehta | Member-Secretary |

Convener, CRC

(D. S. Mehta)

Date: Aug. 6, 2008

Subject: Minutes of CRC Meeting held on July 18, 2008 at 12.00 Noon.

CRC meeting was held in the IDDC Head's Room at 12.00 noon Friday, 18th July 2008. The following members attended the meeting;

1. Sh. L. K. Das	Chairman
2. Dr. Rakesh Kumar,	Member
3. Sh. S. K. Sud	Member
4. Dr. N. K. Jain	Member
5. Dr. D. S. Mehta	Member-Secretary
6. Mr. Amitoj Singh	Special Invitee

The following are the minutes of the meeting:

1. Progress reports submitted by the Ph. D. students of IDDC were discussed in the CRC and as per the recommendations of their respective supervisors the reports were found satisfactory. CRC recommended that the grades of all the students be forwarded to PG section.
2. The research plan submitted by Mr. Packiam (2006 IDZ 8191) to SRC on 25-06-2008 and duly approved by SRC was presented to CRC and the CRC recommended the same be forwarded to PGS& R section for further necessary action.
3. With the recommendation of Ph. D. supervisor of Mr. Pradeep Kumar Kushwaha (2004IDZ8051) Ph. D. student of IDDC that his work was very satisfactory and some additional work remained, CRC strongly recommends the extension of Institute Fellowship for Mr. Pradeep Kumar Kushwaha (2004IDZ8051) for six months in order to complete his Ph. D. work. Request of Mr. Pradeep Kumar Kushwaha (2004IDZ8051) alongwith his progress report forwarded by Supervisor is attached for favourable necessary action.
4. Project proposal on the "Development of swept-source optical coherence scanning microscopy for three-dimensional surface profilometry and tomography" submitted by Dr. D. S. Mehta (PI) was circulated among the CRC members for their comments and the same was discussed in the CRC meeting. It was noted that the PI had clarified that no additional space and manpower was being asked from IDDC. The CRC recommends the aforementioned proposal for further necessary processing.
5. Request for Research grant of Rs. 100,000.00 for New faculty (RGNF) was received from Mr. Amitoj Singh (New Faculty joined IDDC on 22nd, April 2008) and the same was discussed in the CRC. The CRC members welcomed the proposal and recommended the same be forwarded to IRD for necessary action.

The meeting ended with thanks to the chair.

Convener, CRC

(D. S. Mehta)

Instrument Design Development Centre (IDDC)

Date: July 21, 2008

To,
The Dean,
PG Section,
Indian Institute of Technology Delhi

Sub.: Grades of Ph. D. students of IDDC.

Attached please find the grades of the progress report of Ph. D. Students of IDDC alongwith the minutes of CRC for further necessary action.

(D. S. Mehta)
Convener, CRC

Enclosures:

1. Progress report.
2. CRC minutes.

Instrument Design Development Centre (IDDC)

Date: July 21, 2008

Sub.: Research plan of Mr. Packiam (2006 IDZ 8191)

Attached please find the result of the comprehensive examination of Mr. Packiam (2006 IDZ 8191) and copy of the research plan along with the minutes of CRC for further necessary action.

(D. S. Mehta)
Convener, CRC

AR, PGS & R

Instrument Design Development Centre (IDDC)

Date: July 21, 2008

Sub.: Extension of institute fellowship of Mr. Pradeep Kumar Kushwaha (2004IDZ8051) Ph. D. student of IDDC.

Attached please find the request of Mr. Pradeep Kumar Kushwaha (2004IDZ8051) for the extension of Institute fellowship along with the minutes of CRC for further necessary action.

(D. S. Mehta)
Convener, CRC

AR, PGS & R

Date: Aug. 06, 2008

Subject: CRC Meeting on Aug. 11, 2008 at 12.00 NOON

CRC meeting is being held in the IDDC Head's room on Aug.11, 2008 at 12.00 NOON (Monday) at 12.00 Noon. The main agenda of the meeting are the following;

1. Discussion on the project proposal "Design, Development, Pilot Testing and Documentation of Waterless Urinal Prototypes," submitted by Dr. V. M. Chariar PI-CRDT and Sh. L. K. Das Co-PI IDDC.
2. Discussion on the project proposal "Advanced Development in EV Technology" submitted by Prof. R. Arockiasamy (PI).
3. Discussion on the short-listing of a Ph. D. candidate (Mr. S. Ramesh Saktivel) and Finalization of the dates of written test/interview for his interview.
4. Any other information with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

- | | |
|--------------------------|------------------|
| 1. Sh. L. K. Das | Chairman |
| 2. Prof. D. T. Shahani | Member |
| 3. Prof. Chandra Shakher | Member |
| 4. Dr. Rakesh Kumar, | Member |
| 5. Dr. A. L. Vyas | Member |
| 6. Dr. I. P. Singh | Member |
| 7. Sh. S. K. Sud | Member |
| 8. Sh. A. K. Agarwala | Member |
| 9. Dr. N. K. Jain | Member |
| 10. Sh. S. K. Atreya | Member |
| 11. Dr. D. S. Mehta | Member-Secretary |

Convener, CRC

(D. S. Mehta)

Date: Aug. 11, 2008

Subject: Minutes of CRC Meeting held on Aug. 11, 2008 at 12.00 Noon.

CRC meeting was held in the IDDC Head's Room at 12.00 noon Monday, 11th Aug. 2008. The following members attended the meeting;

1. Sh. L. K. Das	Chairman
2. Dr. Rakesh Kumar,	Member
3. Dr. N. K. Jain	Member
4. Sh. S. K. Atreya	Member
5. Dr. D. S. Mehta	Member-Secretary

The following are the minutes of the meeting:

1. Project proposal on the “**Design, Development, Pilot Testing and Documentation of Waterless Urinal Prototypes,**” submitted by **Dr. V. M. Chariar PI-CRDT and Sh. L. K. Das Co-PI IDDC** was circulated among the CRC members for their comments and the same was discussed in the CRC meeting. It was noted that the Co-PI had clarified that no additional space and manpower was being asked from IDDC. The CRC recommends the aforementioned proposal for further necessary processing.
2. Project proposal “**Advanced Development in EV Technology**” submitted by **Prof. R. Arockiasamy (PI)** was circulated among the CRC members for their comments and the same was discussed in the CRC meeting. It was noted that the Co-PI had clarified that no additional space and manpower was being asked from IDDC. The CRC recommends the aforementioned proposal for further necessary processing.

The meeting ended with thanks to the chair.

Convener, CRC

(D. S. Mehta)

Instrument Design Development Centre (IDDC)

Date: Sept. 18, 2008

Subject: CRC Meeting on Sept. 23, 2008 at 4.00 P.M.

CRC meeting is being held in the IDDC Head's room on Sept. 23, 2008 (Tuesday) at 4.00 P.M. The main agenda of the meeting are the following;

3. Discussion on the project proposal "Development of data communication device," submitted by Prof. D. T. Shahani PI.
4. Discussion on the project proposal "Development/Automation of Kshar Sutra preparation," submitted by Prof. D. T. Shahani PI.
5. Discussion on the project proposal "Automation of panchakarma biomedical instrumentation," submitted by Prof. D. T. Shahani PI.
6. Formulation of Student Research Committee of Mr. Vaneet Singh research scholar IDDC.
5. Any other information with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

1. Sh. L. K. Das	Chairman
2. Prof. D. T. Shahani	Member
3. Prof. Chandra Shakher	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. A. L. Vyas	Member
6. Dr. I. P. Singh	Member
7. Sh. S. K. Sud	Member
8. Sh. A. K. Agarwala	Member
9. Dr. N. K. Jain	Member
10. Sh. S. K. Atreya	Member
11. Dr. D. S. Mehta	Member-Secretary

Convener, CRC

(D. S. Mehta)

Date: Sept. 24, 2008

Subject: Minutes of CRC Meeting held on Sept. 23, 2008.

CRC meeting was held in the IDDC Head's Room at 4.00 P.M. Tuesday 23rd Sept 2008. The following members attended the meeting;

1. Sh. L. K. Das	Chairman
2. Dr. Rakesh Kumar,	Member
3. Dr. N. K. Jain	Member
4. Sh. S. K. Sud	Special Invitee
5. Dr. D. S. Mehta	Member-Secretary

The following are the minutes of the meeting:

1. Project proposal on the “**Development of data communication device for SMERCH weapon system**,” submitted by Prof. D. T. Shahani (P.I.) was circulated among the CRC members for their comments and the same was discussed in the CRC meeting. It was noted that the PI had clarified that no additional space and manpower was being asked from IDDC. The CRC recommends the aforementioned proposal for further necessary processing.
2. Project proposal on the “**Development/Automation of Kshar Sutra preparation**,” submitted by Prof. D. T. Shahani (P.I.) was circulated among the CRC members for their comments and the same was discussed in the CRC meeting. It was noted that the PI had clarified that no additional space and manpower was being asked from IDDC. The CRC recommends the aforementioned proposal for further necessary processing.
3. Project proposal on the “**Automation of panchakarma biomedical instrumentation**” submitted by Prof. D. T. Shahani (P.I.) was circulated among the CRC members for their comments and the same was discussed in the CRC meeting. It was noted that the PI had clarified that no additional space and manpower was being asked from IDDC. The CRC recommends the aforementioned proposal for further necessary processing.
4. Approval of CRC for the appointment of Supervisors and formulation of Student Research Committee (SRC) of **Mr. Vaneet Singh (2007 IDZ 8181)** Ph. D. scholar IDDC was discussed and the CRC recommends the same be forwarded to PG section.
5. Ph. D. application of Mr. Rajesh Kumar received from PG section was discussed in the CRC and CRC suggested that the same will be considered for short-listing alongwith the other Ph.D. applications which will be received for admission for Ph. D. for IInd semester 2008-2009 and it was decided that the candidate be informed about the same.

The meeting ended with thanks to the chair.

Convener, CRC

(D. S. Mehta)

Instrument Design Development Centre (IDDC)

Date: Sept. 26, 2008

Subject: Urgent CRC Meeting on Sept. 29, 2008 at 4.00 P.M.

CRC meeting is being held in the IDDC Head's room on Sept. 29, 2008 (Monday) at 4.00 P.M. The main agenda of the meeting are the following;

7. Discussion on the project proposal "Mobility enhancement for the elderly," submitted by Prof. D. T. Shahani PI.
8. Discussion on the project proposal "Vision enhancement for the elderly," submitted by Prof. D. T. Shahani PI.
9. Any other information with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

1. Sh. L. K. Das	Chairman
2. Prof. D. T. Shahani	Member
3. Prof. Chandra Shakher	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. A. L. Vyas	Member
6. Dr. I. P. Singh	Member
7. Sh. S. K. Sud	Member
8. Sh. A. K. Agarwala	Member
9. Dr. N. K. Jain	Member
10. Sh. S. K. Atreya	Member
11. Dr. D. S. Mehta	Member-Secretary

Convener, CRC

(D. S. Mehta)

Instrument Design Development Centre (IDDC)

Date: Oct. 6, 2008

Subject: Minutes of CRC Meeting held on Sept. 29, 2008 at 4.00 P.M.

CRC meeting was held in the IDDC Head's Room at 4.00 P.M. Monday 29th Sept 2008. The following members attended the meeting;

1. Sh. L. K. Das	Chairman
2. Dr. Rakesh Kumar,	Member
3. Sh. A. K. Agarwala	Member
4. Dr. I. P. Singh	Member
5. Sh. S. K. Sud	Special Invitee
6. Dr. D. S. Mehta	Member-Secretary

The following are the minutes of the meeting:

1. Project proposal on the “**Mobility enhancement for the elderly**,” submitted by Prof. D. T. Shahani (P.I.) was circulated among the CRC members for their comments and the same was discussed in the CRC meeting. It was noted that the PI had clarified that no additional space and manpower was being asked from IDDC. The CRC recommends the aforementioned proposal for further necessary processing.
2. Project proposal on the “**Vision enhancement for the elderly**,” submitted by Prof. D. T. Shahani (P.I.) was circulated among the CRC members for their comments and the same was discussed in the CRC meeting. It was noted that the PI had clarified that no additional space and manpower was being asked from IDDC. The CRC recommends the aforementioned proposal for further necessary processing.
3. The communication received from Mr. Amitoj Singh, Ph.D. student IDDC regarding his apprehension that his research problem on the study of Color and emotion in the context of mobike has also been assigned by his SRC member Mr. S. K. Atreya to one of his Ph.D. student working at BIT's Pilani. The CRC considered the same and recommended that Mr. S. K. Atreya may be replaced by Prof. Amulya Khurana from HSS in the SRC of Mr. Amitoj Singh.
The meeting ended with thanks to the chair.

L. K. Das
Chairman CRC

(D. S. Mehta)

Convener, CRC

Instrument Design Development Centre (IDDC)

Date: Nov. 10, 2008

Subject: CRC Meeting on Nov. 14, 2008 at 4.00 P.M.

CRC meeting is being held in the IDDC Head's room on Nov. 14, 2008 (Friday) at 4.00 P.M. The main agenda of the meeting are the following;

1. Approval of the Synopsis of Ph. D. thesis entitled "**Investigations on Encryption Techniques for Colored and Gray Scale Images in Fourier- and Fractional Fourier Domains**" of Mr. Madhusudan Joshi (REGN. No. 2001RID001).
2. Approval of Research Plan of Mr. Mumtaz Ahmad (REGN. No. 2007 IDZ 8223) Ph. D. Student of IDDC.
3. Any other information with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

1. Sh. L. K. Das	Chairman
2. Prof. D. T. Shahani	Member
3. Prof. Chandra Shakher	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. A. L. Vyas	Member
6. Dr. I. P. Singh	Member
7. Sh. S. K. Sud	Member
8. Sh. A. K. Agarwala	Member
9. Dr. N. K. Jain	Member
10. Sh. S. K. Atreya	Member
11. Dr. D. S. Mehta	Member-Secretary

Convener, CRC

(D. S. Mehta)

Instrument Design Development Centre (IDDC)

Date: Nov.17, 2008

Subject: Minutes of CRC Meeting held on Nov. 14, 2008 at 4.30 P.M.

CRC meeting was held in the IDDC Head's Room at 4.30 P.M. Friday 14th Sept. 2008. The following members attended the meeting;

1. Sh. L. K. Das	Chairman
2. Dr. Rakesh Kumar,	Member
3. Dr. I. P. Singh	Member
4. Sh. S. K. Sud	Special Invitee
5. Dr. D. S. Mehta	Member-Secretary

The following are the minutes of the meeting:

1. The SRC's report of **Mr. Madhusudan Joshi (REGN. No. 2001RID001)** on his Ph. D. Synopsis entitled "**Investigations on Encryption Techniques for Colored and Gray Scale Images in Fourier- and Fractional Fourier Domains**" and the appointment of the thesis examiners were discussed in the meeting and CRC recommends that Synopsis and the list of examiners be forwarded to PG Section for further necessary action.
2. The research plan submitted by Mr. Mumtaz Ahmad (REGN. No. 2007 IDZ 8223) to SRC on 05-11-2008 and duly approved by SRC was presented to CRC and the CRC recommended the same be forwarded to PGS& R section for further necessary action.
3. Approval of CRC for the appointment of Supervisors and formulation of Student Research Committee (SRC) of **Mr. Vivek Kumar (2008 IDZ 8124)** Ph. D. scholar IDDC was discussed and the CRC recommends the same be forwarded to PG section.
4. Approval of CRC for the appointment of Supervisors and formulation of Student Research Committee (SRC) of **Mr. Arunandan Kumar (2008 IDZ 8126)** Ph. D. scholar IDDC was discussed and the CRC recommends the same be forwarded to PG section.

The meeting ended with thanks to the chair.

Convener, CRC

(D. S. Mehta)

Instrument Design Development Centre (IDDC)

Date: 17-11-2008

Subject: Submission of synopsis and List of Ph. D. thesis examiners of Mr. Madhusudan Joshi (REGN. No. 2001RID001)

Enclosed please find the list of thesis examiners of Mr. Madhusudan Joshi (REGN. No. 2001RID001) along with two copies of Synopsis entitled “**Investigations on Encryption Techniques for Colored and Gray Scale Images in Fourier- and Fractional Fourier Domains**” and CRC minutes (1) for further necessary action.

(D. S. Mehta)
Convener, CRC

DR PGS & R

Enclosures:

1. List of examiners.
2. Synopsis of the thesis
3. CRC minutes.

Instrument Design Development Centre (IDDC)

Date: Nov. 17, 2008

Sub.: Research plan of Mr. Mumtaz Ahmad (REGN. No. 2007 IDZ 8223).

Attached please find the result of the comprehensive examination of Mr. Mumtaz Ahmad (REGN. No. 2007 IDZ 8223) and copy of the research plan along with the minutes (2) of CRC for further necessary action.

(D. S. Mehta)
Convener, CRC

DR, PGS & R

Enclosures:

1. Research Plan
2. Result of Comprehensive Examination
3. CRC minutes.

Instrument Design Development Centre (IDDC)

Date: Nov.17, 2008

Enclosed please find the duly filled application form for the appointment of Supervisors and formulation of Student Research Committee (SRC) of the following Ph. D. scholars who joined IDDC during the Ist semester 2008.

1. **Mr. Vivek Kumar (2008 IDZ 8124)**
2. **Mr. Arunandan Kumar (2008 IDZ 8126)**

(D. S. Mehta)
Convener, CRC

DR, PGS & R

Enclosures:

1. Application forms
2. CRC minutes (Minutes '3 & 4').

Date: Nov. 19, 2008

Subject: CRC Meeting on Nov. 24, 2008 at 4.00 P.M.

CRC meeting is being held in the IDDC Head's room on Nov. 24, 2008 (Monday) at 4.00 P.M. The main agenda of the meeting are the following;

1. Approval of CRC for the appointment of Supervisors and formulation of Student Research Committee (SRC) of **Mr. Hardik Pandya** Ph. D. scholar IDDC
2. Discussion on the project proposal "**Miniature Ion Mobility Sensors,**" submitted by Prof. D. T. Shahani (PI).
3. Any other information with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

1. Sh. L. K. Das	Chairman
2. Prof. D. T. Shahani	Member
3. Prof. Chandra Shakher	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. A. L. Vyas	Member
6. Dr. I. P. Singh	Member
7. Sh. S. K. Sud	Member
8. Sh. A. K. Agarwala	Member
9. Dr. N. K. Jain	Member
10. Sh. S. K. Atreya	Member
11. Dr. D. S. Mehta	Member-Secretary

Convener, CRC

(D. S. Mehta)

Instrument Design Development Centre (IDDC)

Date: Nov. 24 , 2008

Subject: Minutes of CRC Meeting held on Nov. 24, 2008 at 4.00 P.M.

CRC meeting was held in the IDDC Head's Room at 4.00 P.M. Monday 24th Nov. 2008. The following members attended the meeting;

1. Sh. L. K. Das	Chairman
2. Dr. Rakesh Kumar,	Member
3. Dr. I. P. Singh	Member
4. Dr. N. K. Jain	Member
5. Sh. S. K. Sud	Special Invitee
6. Dr. D. S. Mehta	Member-Secretary

The following are the minutes of the meeting:

1. Project proposal on the "**Miniature Ion Mobility Sensors**," submitted by Prof. D. T. Shahani (P.I.) was circulated among the CRC members for their comments and the same was discussed in the CRC meeting. It was noted that the PI had clarified that no additional space and manpower was being asked from IDDC. The CRC recommends the aforementioned proposal for further necessary processing.
2. Approval of CRC for the appointment of Supervisors and formulation of Student Research Committee (SRC) of **Mr. Hadik Jeetendra Pandya (2008 IDZ 8125)** Ph. D. scholar IDDC was discussed and the CRC recommends the same be forwarded to PG section.

The meeting ended with thanks to the chair.

(D. S. Mehta)

Convener, CRC

Instrument Design Development Centre (IDDC)

Date: Nov.25, 2008

Enclosed please find the duly filled application form for the appointment of Supervisors and formulation of Student Research Committee (SRC) of **Mr. Hadik Jeetendra Pandya (2008 IDZ 8125)** Ph. D. scholar who joined IDDC during the Ist semester 2008.

(D. S. Mehta)
Convener, CRC

DR, PGS & R

Enclosures:

1. Application form
2. CRC minutes (Minute 2).

Instrument Design Development Centre (IDDC)

Date: Nov. 25, 2008

Subject: CRC meeting on Nov. 28, 2008, 3.30 P.M.

CRC meeting is being held in the IDDC Head's room on Nov. 28, 2008 (Friday) at 3.30 P.M.

The main agenda of the meeting are the following;

- 1. Discussion and finalization of short-listing criteria for admission in Ph. D. Programme for IInd Semester 2008-2009.**
- 2. Finalization of the dates of written test/interview for Ph. D. Candidates.**
- 3. Any other information with the permission of the Chairman.**

All the CRC members are requested to attend the meeting.

All CRC Members

- | | |
|--------------------------|------------------|
| 1. Sh. L. K. Das | Chairman |
| 2. Prof. D. T. Shahani | Member |
| 3. Prof. Chandra Shakher | Member |
| 4. Dr. Rakesh Kumar, | Member |
| 5. Dr. A. L. Vyas | Member |
| 6. Dr. I. P. Singh | Member |
| 7. Sh. S. K. Sud | Member |
| 8. Sh. A. K. Agarwala | Member |
| 9. Dr. N. K. Jain | Member |
| 10. Sh. S. K. Atreya | Member |
| 11. Dr. D. S. Mehta | Member-Secretary |

(D. S. Mehta)
Convener, CRC

Subject: Minutes of CRC Meeting held on Nov. 28, 2008 at 3.30 P.M.

CRC meeting was held in the IDDC Head's Room at 3.30 P.M. Friday 28th Nov. 2008. The following members attended the meeting;

1. Sh. L. K. Das	Chairman
2. Dr. Rakesh Kumar,	Member
3. Dr. I. P. Singh	Member
4. Dr. N. K. Jain	Member
5. Sh. S. K. Sud	Special Invitee
6. Dr. D. S. Mehta	Member-Secretary

The following are the minutes of the meeting:

- A. The short-listing criteria for admission in Ph. D. Programme for the Ist Semester 2008-2009 was discussed and the committee decided the following short-listing criteria:

General Candidates:

M. Sc. Physics with at least 65% aggregate marks or equivalent CGPA 7.12 on a 10 point scale Plus a Valid GATE Score \geq 400 or a valid CSIR/UGC/NET Certificate with JRF.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 60 % aggregate marks or equivalent CGPA 6.75 on a 10 point scale.

OR

B. Tech. in relevant branch of Engineering or Physics with at least 75 % or equivalent CGPA of 8.5 on a 10 point scale PLUS a valid GATE score \geq 500 or a valid CSIR/UGC/NET Certificate with JRF.

SC/ST/PH Candidates:

M. Sc. Physics with at least 60% aggregate marks or equivalent CGPA of 6.75 on a 10 point scale Plus a Valid GATE Score \geq 300 or a valid CSIR/UGC/NET Certificate with JRF.

OR

M. Tech. in relevant branch with at least 55 % aggregate marks or equivalent CGPA of 6.25 on a 10 point scale.

OR

B. Tech. In relevant branch with at least 70 % or equivalent CGPA of 7.5 on a 10 point scale PLUS a valid GATE score \geq 350 or a valid CSIR/UGC/NET Certificate with JRF.

Part-Time Candidates:

As per Institute norms, but the short-listing criteria will be as above, except for the requirement of GATE Score. There will be no admission on a self-sponsored basis, and there will be no direct admission to the above Programme.

NOTE:

Candidates, whose M. Tech. / M. Sc. results are not yet declared, will be provisionally short-listed for the interview, provided they have secured the necessary aggregate marks or equivalent CGPA in the results declared so far for the qualifying degree.

- B. The Test/Interview for admission in Ph. D. will be held on 19th, Dec. 2008 (Friday), 10.00 A. M. Onwards.

C. Project proposal on the “**Pre Commercial Trial of Electric Vehicles**,” submitted by Prof. Arockiasamy (P.I.) & Sh. S. K. Sud (Co-PI) to MNRE was circulated among the CRC members for their comments and the same was discussed in the CRC meeting. It was noted that the PI had clarified that no additional space and manpower was being asked from IDDC. The CRC recommends the aforementioned proposal for further necessary processing.

D. Approval of CRC for the appointment of Supervisors and formulation of Student Research Committee (SRC) of **Mr. Sheo Shanker Prasad (2007 IDZ 8204)** Ph. D. scholar IDDC was discussed and the CRC recommends the same be forwarded to PG section.

The meeting ended with thanks to the chair.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre

Date: 28-11-2008

Subject: Test/ Interview of Ph. D. Candidates on 19-12-2008, 10.00 A.M.

Test/Interview of Ph. D. Candidates will be held on Friday 19th, December 2008 at 10.00 A. M. onwards in the IDDC Head's Room. Applications of short-listed candidates may be seen in IDDC Office.

All CRC Members and Faculty of IDDC are requested to participate in the interview.

(D. S. Mehta)

Convener, CRC

All Faculty

IDDC Notice Board

Instrument Design Development Centre (IDDC)

Date: Dec. 2, 2008

Enclosed please find the duly filled application form for the appointment of Supervisors and formulation of Student Research Committee (SRC) of **Mr. Sheo Shanker Prasad (2007 IDZ 8204)** Ph. D. scholar IDDC.

(D. S. Mehta)
Convener, CRC

DR, PGS & R

Enclosures:

1. Application form
2. CRC minutes (Minute 2).

Instrument Design Development Centre

Date: 22-12-2008

Subject: Test/ Interview of Ph. D. Candidates under QIP programme on 19-01-2009.

Ph. D. Test/Interview of Candidates under QIP programme on 19th January 2009 at 4.00 P.M. in the IDDC Head's Room. Applications of short-listed candidates may be seen in IDDC Office.

All CRC Members and Faculty of IDDC are requested to participate in the interview.

(D. S. Mehta)

Convener, CRC

IDDC Notice Board

Instrument Design Development Centre (IDDC)

Date: Dec. 19, 2008

To the Co-ordinator
QIP Programme,
IIT Delhi

Sub. Advance admission in Ph. D. under QIP for the year 2009-2010.

With reference to your note No. IITD/QIP/Ph.D./2008/PQIP/537; Dated 15-12-2008 a total 03 (Three) applications were received from your office in IDDC for advance admission in Ph.D. degree programme under QIP for the year 2009-2010.

The shortlisting criteria for calling test/interview for Ph.D. Programme under QIP was discussed among the CRC members. All the 03 candidates were found suitable as per Institute norms and all the 03 candidates are being called for Test/Interview to be held on 19-01-2009. Enclosed please find the list of the candidates being called for interview.

Date of Interview: 19-01-2009 (Monday)

Time: 4.00 P.m.

Venue: IDDC Head's room

D. S. Mehta
Convener, CRC

Date: Dec. 23, 2008

Subject: CRC meeting on Dec. 26, 2008, 11.00 A. M.

CRC meeting is being held in the IDDC Head's room on Dec. 26, 2008 (Friday) at 11.00 A. M.

The main agenda of the meeting are the following:

1. Discussion on progress report of Ph. D. students for the Ist Semester 2008-2009.
2. Discussion on the project proposal: Development of three-dimensional optical tweezers system for trapping and manipulation of biological cells and organelles using nano-structured substrates.
3. Any other information with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

1. Sh. L. K. Das	Chairman
2. Prof. D. T. Shahani	Member
3. Prof. Chandra Shakher	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. A. L. Vyas	Member
6. Dr. I. P. Singh	Member
7. Sh. S. K. Sud	Member
8. Sh. A. K. Agarwala	Member
9. Dr. N. K. Jain	Member
10. Sh. S. K. Atreya	Member
11. Dr. D. S. Mehta	Member-Secretary

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: Dec. 26, 2008

Subject: Minutes of CRC Meeting held on Dec.26, 2008 at 11.00 A.M.

CRC meeting was held in the IDDC Head's Room at 11.00 A.M. Friday, 26th Dec. 2008. The following members attended the meeting;

1. Sh. L. K. Das	Chairman
2. Dr. N. K. Jain	Member
3. Dr. I. P. Singh	Member
4. Sh. S. K. Sud	Member
5. Dr. D. S. Mehta	Member-Secretary

The following are the minutes of the meeting:

1. Progress reports submitted by the Ph. D. students of IDDC were discussed in the CRC and as per the recommendations of their respective supervisors all the reports were found satisfactory. CRC recommended that the grades of all the students be forwarded to PG section.
2. Project proposal on the "Development of three-dimensional optical tweezers system for trapping and manipulation of biological cells and organelles using nano-structured substrates" submitted by Dr. D. S. Mehta (PI) was circulated among the CRC members for their comments and the same was discussed in the CRC meeting. It was noted that the PI had clarified that no additional space and manpower was being asked from IDDC. The CRC recommends the aforementioned proposal for further necessary processing.
3. CRC discussed the
The meeting ended with thanks to the chair.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: Dec. 26, 2008

To,
The Dean,
PG Section,
Indian Institute of Technology Delhi

Sub.: Grades of Ph. D. students of IDDC.

Attached please find the grades of the progress report of Ph. D. Students of IDDC alongwith the minutes of CRC for further necessary action.

(D. S. Mehta)
Convener, CRC

Enclosures:

1. Progress report.
2. CRC minutes (1).

Instrument Design Development Centre (IDDC)

Date: 23rd Jan., 2009

Subject: CRC meeting on Jan. 27, 2009, 4.00 P. M.

CRC meeting is being held in the IDDC Head's room on Jan. 27, 2009, 4.00 P. M. (Tuesday) at 4.00 P. M.

The main agenda of the meeting are the following;

1. Approval of Research Plan of Mr. Sheo Shanker Prasad (REGN. No. 2007 IDZ 8204) Ph. D. Student of IDDC.
2. Discussion on the request of Mr. Huidram Lokeshwor Singh (2007 IDZ 8182) for the extension of comprehensive examination by three months.
3. Any other information with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

1. Sh. L. K. Das	Chairman
2. Prof. D. T. Shahani	Member
3. Prof. Chandra Shakher	Member
4. Dr. Rakesh Kumar,	Member
5. Dr. A. L. Vyas	Member
6. Dr. I. P. Singh	Member
7. Sh. S. K. Sud	Member
8. Sh. A. K. Agarwala	Member
9. Dr. N. K. Jain	Member
10. Sh. S. K. Atreya	Member
11. Dr. D. S. Mehta	Member-Secretary

(D. S. Mehta)
Convener, CRC

Date: Dec. 26, 2008

Subject: Minutes of CRC Meeting held on Dec.26, 2008 at 11.00 A.M.

CRC meeting was held in the IDDC Head's Room at 11.00 A.M. Friday, 26th Dec. 2008. The following members attended the meeting;

1. Sh. L. K. Das	Chairman
2. Dr. N. K. Jain	Member
3. Dr. I. P. Singh	Member
4. Sh. S. K. Sud	Member
5. Dr. D. S. Mehta	Member-Secretary

The following are the minutes of the meeting:

1. Progress reports submitted by the Ph. D. students of IDDC were discussed in the CRC and as per the recommendations of their respective supervisors all the reports were found satisfactory. CRC recommended that the grades of all the students be forwarded to PG section.
2. Project proposal on the "Development of three-dimensional optical tweezers system for trapping and manipulation of biological cells and organelles using nano-structured substrates" submitted by Dr. D. S. Mehta (PI) was circulated among the CRC members for their comments and the same was discussed in the CRC meeting. It was noted that the PI had clarified that no additional space and manpower was being asked from IDDC. The CRC recommends the aforementioned proposal for further necessary processing.
3. CRC discussed the NOC submitted by Mr. Dhawal Gupta (Part-time) Ph.D. student IDDC, IIT Delhi from his new employer. Since Mr. Dhawal Gupta has completed required course work, successfully completed comprehensive examination and his research work is in advanced stage he is allowed to continue at part-time research scholar. In view of above the CRC decided that the NOC be forwarded PG section for further necessary action.

The meeting ended with thanks to the chair.

(D. S. Mehta)
Convener, CRC

Date: Jan. 28, 2009

Subject: Minutes of CRC Meeting held on January 27, 2009 at 4.00P.M.

CRC meeting was held in the IDDC Head's room on Jan. 27, 2009, 4.00 P. M. (Tuesday) at 4.00 P. M. The following members attended the meeting;

1. Sh. L. K. Das	Chairman
2. Dr. N. K. Jain	Member
3. Dr. I. P. Singh	Member
4. Dr. Rakesh Kumar	Member
5. Sh. A. K. Agarwala	Member
6. Sh. S. K. Sud	Special Invitee
7. Dr. D. S. Mehta	Member-Secretary

The following are the minutes of the meeting:

1. With the recommendation of Ph. D. supervisor of **Mr. Pradeep Kumar Kushwaha (2004IDZ8051)** Ph. D. student of IDDC that his work was very satisfactory and some additional work remained, CRC strongly recommends the extension of Institute Fellowship for Mr. Pradeep Kumar Kushwaha (2004IDZ8051) for another six months in order to complete his Ph. D. work. Request of Mr. Pradeep Kumar Kushwaha (2004IDZ8051) alongwith his progress report forwarded by Supervisor is attached for favourable necessary action.
2. The research plan submitted by **Mr. Bhaskar Kumar Vinodchandra Thakker (REGN. No. 2007 IDZ 8202)** to SRC on 05-01-2009 and duly approved by SRC was presented to CRC and the CRC recommended the same be forwarded to PGS& R section for further necessary action.
3. Request from **Mr. Khaja Syed Shahul Hameed S. (Entry No. 2005 IDZ8262)** forwarded by his Supervisor (Sh. A. K. Agarwala) regarding the conversion from full-time research scholar (Sponsored category) to part-time was received and the same was discussed in the CRC. The CRC agreed to his request and recommended the same be forwarded to PGS& R section for further necessary action.
4. Chairman CRC presented a project proposal on the "**Design of innovative closed-loop ecological sanitation solutions and their techno-economic evaluation,**" submitted by **Dr. V. M. Chariar PI-CRDT and Sh. L. K. Das Co-PI IDDC.** The same was discussed in the CRC meeting. It was noted that the Co-PI had clarified that no additional space and manpower was being asked from IDDC. The CRC recommends the aforementioned proposal for further necessary processing.
5. The request of **Mr. Huidram Lokeshwor Singh (2007 IDZ 8182)** for another three months for his comprehensive was considered. It was observed that Mr. Lokeshwar is not on institute fellowship. He joined as a part-time sponsored candidate. Recently he has taken research leave from his parent organization. CRC discussed the request letter of **Mr. Huidram Lokeshwor Singh (2007 IDZ 8182)** for the extension of comprehensive examination by three months CRC agreed to his request and recommended the same be forwarded to PGS& R section for further necessary action.

The meeting ended with thanks to the chair.

(D. S. Mehta)
Convener, CRC

5. CRC discussed the request letter of **Mr. Huidram Lokeshwor Singh (2007 IDZ 8182)** for the extension of comprehensive examination by three months as presently he is involved in rigorous

computer programming for pothole detection. CRC agreed to his request and recommended the same be forwarded to PGS& R section for further necessary action.

6. Approval of Research Plan of Mr. Sheo Shanker Prasad (REGN. No. 2007 IDZ 8204) Ph. D. Student of IDDC.

The Chairman briefed the members regarding the role of SRC as discussed in the last executive committee of the senate, and the importance of SRC in enhancing the doctoral degree standards at IIT Delhi. The Chairman senate expressed the desire that SRC should take the onus of quality standards of the synopsis before it is forwarded for examiners consent to examine the thesis. The CRC members while expressing gratitude to Prof Banewat for associating with the IDDC research programme, felt that his withdrawal should not be hurriedly accepted. He is an expert on research in engineering education as is evident from the bibliography appended to the research proposal submitted by Mr. Sheo Shanker. The Chairman was requested to obtain a detailed appraisal of his assessment in this context and his suggestions as to how we can improve the functioning of SRC.

The Chairman further explained to the members that it is important that date for Comprehensive Examination should be set only after eliciting everyone's convenience. Unfortunately, in this particular case Mr. Atreya has been doing otherwise. The present comprehensive examination was set on the same date and time as the PhD interviews for QIP applicants.

It is in the interest of the research student and the IDDC research programme that we should not rush things through effort should be made to enhance standards.

The meeting ended with thanks to the chair.

Chairman CRC

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: Feb. 2, 2009

Sub.: Research plan of **Mr. Bhaskar Kumar Vinodchandra Thakker (REGN. No. 2007 IDZ 8202)**

Attached please find the result of the comprehensive examination of **Mr. Bhaskar Kumar Vinodchandra Thakker (REGN. No. 2007 IDZ 8202)** and copy of the research plan along with the minutes (Minute No. 2) of CRC further necessary action.

(D. S. Mehta)
Convener, CRC

DR, PGS & R

Instrument Design Development Centre (IDDC)

Date: Feb. 2, 2009

Sub.: Extension of institute fellowship of **Mr. Pradeep Kumar Kushwaha (2004IDZ8051)** full-time Ph. D. student of IDDC.

Attached please find the request of **Mr. Pradeep Kumar Kushwaha (2004IDZ8051)** for the extension of Institute fellowship along with the minutes (Minute No. 1) of CRC for further necessary action.

(D. S. Mehta)
Convener, CRC

DR, PGS & R

Instrument Design Development Centre (IDDC)

Date: Feb. 2, 2009

Sub.: Conversion of full-time Ph. D. to Part-time Ph. D. **Mr. Khaja Syed Shahul Hameed S. (Entry No. 2005 IDZ8262)** Ph. D. student of IDDC.

Attached please find the request from **Mr. Khaja Syed Shahul Hameed S. (Entry No. 2005 IDZ8262)** forwarded by his Supervisor (Sh. A. K. Agarwala) regarding the conversion from full-time research scholar (Sponsored category) to part-time along with the minutes 9Minute No. 3) of CRC for further necessary action.

(D. S. Mehta)
Convener, CRC

DR, PGS & R

Instrument Design Development Centre (IDDC)

Date: Feb. 2, 2009

Sub.: NOC from New Employer of Mr. Dhawal Gupta (2005IDZ8169) Part-time research scholar of IDDC.

Attached please find the No Objection Certificate (NOC) from new employer of Mr. Dhawal Gupta, Part-time Ph. D. Student of IDDC along with the minutes (Minute No. 3) of CRC further necessary action.

(D. S. Mehta)
Convener, CRC

DR, PGS & R

Instrument Design Development Centre (IDDC)

Date: Feb. 2, 2009

Sub.: Request for extension of comprehensive examination of Mr. **Huidram Lokeshwor Singh (2007 IDZ 8182)**, Part-time research scholar of IDDC.

Attached please find the request for extension of comprehensive examination for three months of Mr. **Huidram Lokeshwor Singh (2007 IDZ 8182)** Part-time Ph. D. Student of IDDC along with the minutes (Minute No. 5) of CRC further necessary action.

(D. S. Mehta)
Convener, CRC

DR, PGS & R

Instrument Design Development Centre (IDDC)

Date: 10-02-2009

Subject: Urgent CRC meeting on Feb. 12, 2009, 4.00 P. M.

An urgent CRC meeting is being held in the IDDC Head's room on Feb. 12, 2009 (Thursday) 4.00 P. M.

The main agenda of the meeting are the following:

1. Discussion on the approval of Research Plan of Mr. Sheo Shanker Prasad (REGN. No. 2007 IDZ 8204) Ph. D. Student of IDDC.
2. Any other information with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

- | | |
|--------------------------|----------|
| 1. Sh. L. K. Das | Chairman |
| 2. Dr. Rakesh Kumar | Member |
| 3. Prof. D. T. Shahani | Member |
| 4. Prof. Chandra Shakher | Member |
| 5. Dr. Rakesh Kumar, | Member |
| 6. Dr. A. L. Vyas | Member |

7. Dr. I. P. Singh	Member
8. Sh. A. K. Agarwala	Member
9. Dr. N. K. Jain	Member
10. Sh. S. K. Atreya	Member
11. Dr. D. S. Mehta	Member-Secretary

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: Feb. 12, 2009

Subject: Minutes of CRC Meeting held on February 12, 2009 at 4.00P.M.

CRC meeting was held in the IDDC Head's room on Feb. 12, 2009, 4.00 P. M. (Thursday) at 4.00 P. M. The following members attended the meeting;

1. Sh. L. K. Das	Chairman
2. Dr. Rakesh Kumar	Member
3. Prof. Chandra Shakher	Member
4. Dr. A. L. Vyas	Member
5. Dr. I. P. Singh	Member
6. Sh. A. K. Agarwala	Member
7. Dr. N. K. Jain	Member
8. Sh. S. K. Atreya	Member
9. Dr. D. S. Mehta	Member-Secretary

The following are the minutes of the meeting:

Request from Dr. S. K. Atreya regarding the change of the external expert of SRC of QIP research scholar Mr. Sheo Shanker Prasad (REGN. No. 2007 IDZ 8204) Ph. D. Student of IDDC was agreed and the new SRC will be as follows

1. Prof. Y. Nath (External Expert)- Chairman	Applied Mechanics
2. Prof. Chandra Shakher (Internal Expert)	Member
3. Chairman CRC or his Nominee	Member
4. Mr. S. K. Atreya	Supervisor, Co-ordinator SRC.

Dean PGS & R is requested to approve aforementioned SRC and also may kindly extend date of Comprehensive Examination of Mr. Sheo Shanker Prasad upto 31st March 2009.

CRC recommended to forward the request to Dean PGS & R for necessary action.

The meeting ended with thanks to the chair.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 15-04-2009

Subject: CRC meeting on April 20, 2009, 4.00 P. M.

CRC meeting is being held in the IDDC Head's room on April 20, 2009 (Monday) 4.00 P. M.

The main agenda of the meeting are the following;

1. **Approval of the Synopsis of Ph. D. thesis entitled "Development of an Emotion Centred Research Framework for Product Styling: A case study on Motorbikes in India" of Mr. Amitoj Singh**
2. **Discussion on the formulation of SRC of Mr. Anirudha Vinayak Muley Ph. D. student of IDDC.**
3. Any other information with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

- | | |
|--------------------------|------------------|
| 1. Sh. L. K. Das | Chairman |
| 2. Prof. D. T. Shahani | Member |
| 3. Prof. Chandra Shakher | Member |
| 4. Dr. Rakesh Kumar, | Member |
| 5. Dr. A. L. Vyas | Member |
| 6. Dr. I. P. Singh | Member |
| 7. Sh. A. K. Agarwala | Member |
| 8. Dr. N. K. Jain | Member |
| 9. Sh. S. K. Atreya | Member |
| 10. Dr. D. S. Mehta | Member-Secretary |

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: April 21, 2009

Subject: Minutes of CRC Meeting held on April 20, 2009, 4.00 P. M.

CRC meeting was held in the IDDC Head's Room at 4.00 P. M. Monday, 20th April 2009. The following members attended the meeting;

1. Sh. L. K. Das	Chairman
2. Dr. Rakesh Kumar	Member
3. Dr. N. K. Jain	Member
4. Dr. A. K. Agarwala	Member
5. Dr. D. S. Mehta	Member-Secretary

The following are the minutes of the meeting:

1. The SRC's report of Mr. Amitoj Singh on his Ph. D. Synopsis entitled "**Development of an Emotion Centred Research Framework for Product Styling: A case study on Motorbikes in India**" and the appointment of the thesis examiners were discussed in the meeting and CRC recommends that Synopsis and the list of examiners be forwarded to PG Section for further necessary action.
2. Approval of CRC for the appointment of Supervisors and formulation of Student Research Committee (SRC) of the following Ph. D. scholars who joined IDDC recently was discussed and the CRC recommends the same be forwarded to PG section.
 - i. Mr. Aniruddha Vinayak Muley (2008IDZ8399)
 - ii. Mrs. Sakshi Gupta (2008IDZ8397)
 - iii. Mr. Sugandh Malhotra (2008IDZ8127)
 - iv. Mr. Vikas Kumar Vyas (2008 IDZ 8396)
3. A request from Mrs. Sakshi Gupta, Ph. D. student (Part-time) in IDDC, regarding the exemption of the Audit Course HUL 810, was received and was discussed in the meeting. In view of Mrs. Sakshi Gupta having four years of R & D experience as a Scientist at Laser Science and Technology Centre, DRDO and have six publications in International and National Conferences and Magazines the Committee recommends Mrs. Sakshi Gupta's exemption from the aforesaid course.
4. Conversion from full-time research scholar (Sponsored category) to part-time of **Mr. Khaja Syed Shahul Hameed S. (Entry No. 2005 IDZ8262)** was discussed in the CRC. The CRC agreed to his request and recommended the same be forwarded to PGS& R section for further necessary action. NOC from his current employer also attached herewith.

The meeting ended with thanks to the chair.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: April 22, 2009

Enclosed please find the duly filled application forms for the appointment of Supervisors and formulation of Student Research Committee (SRC) of the following Ph. D. scholars who joined IDDC during IInd semester 2008-2009.

- i. Mr. Aniruddha Vinayak Muley (2008IDZ8399)
- ii. Mrs. Sakshi Gupta (2008IDZ8397)

- iii. Mr. Sugandh Malhotra (2008IDZ8127)
- iv. Mr. Vikas Kumar Vyas (2008 IDZ 8396)

(D. S. Mehta)
Convener, CRC

DR PGS & R

Enclosures:

1. Application forms
2. CRC minutes (Minute '2').

Instrument Design Development Centre (IDDC)

Date: April 24, 2009

Subject: CRC Meeting on April 29, 2009 (Wednesday) at 4.00 P.M. in the IDDC Heads Room.

CRC meeting is being held in the Head, IDDC room on April 29, 2009 (Wednesday) at 4.00 P.M. The main agenda of the meeting are the following;

- 1. Discussion and finalization of short-listing criteria for Ph. D. Programme for Ist Semester.**
- 2. Finalization of the dates of written test/interview for Ph. D. Candidates.**
- 3. Any other information with the permission of the Chairman.**

All the CRC members are requested to attend the meeting.

All CRC Members

- | | |
|--------------------------|----------|
| 1. Sh. L. K. Das | Chairman |
| 2. Prof. D. T. Shahani | Member |
| 3. Prof. Chandra Shakher | Member |
| 4. Dr. Rakesh Kumar, | Member |

5. Dr. A. L. Vyas	Member
6. Dr. I. P. Singh	Member
7. Sh. A. K. Agarwala	Member
8. Dr. N. K. Jain	Member
9. Sh. S. K. Atreya	Member
10. Dr. D. S. Mehta	Member-Secretary

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: April 29, 2009

Subject: Minutes of CRC Meeting held on April 29, 2009 at 4.00 P.M.

CRC meeting was held in the IDDC Head's Room at 4.00 P.M. Wednesday 29th April 2009. The following members attended the meeting;

1. Sh. L. K. Das	Chairman
2. Dr. Rakesh Kumar,	Member
3. Dr. I. P. Singh	Member
4. Dr. D. S. Mehta	Member-Secretary

The following are the minutes of the meeting:

- A.** The short-listing criteria for admission in Ph. D. Programme for the Ist Semester 2009-2010 was discussed and the committee decided that the same criteria which was followed last year will be used for short listing the Ph. D. candidates for test/interview. The short-listing criteria is the following;

General Candidates:

M. Sc. Physics with at least 65% aggregate marks or equivalent CGPA 7.12 on a 10 point scale Plus a Valid GATE Score \geq 400 or a valid CSIR/UGC/NET Certificate with JRF.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 60 % aggregate marks or equivalent CGPA 6.75 on a 10 point scale.

OR

B. Tech. in relevant branch of Engineering or Physics with at least 75 % or equivalent CGPA of 8.5 on a 10 point scale PLUS a valid GATE score \geq 500 or a valid CSIR/UGC/NET Certificate with JRF.

OBC (non-creamy layer) Candidates

M. Sc. Physics with at least 60% aggregate marks or equivalent CGPA 6.75 on a 10 point scale Plus a Valid GATE Score \geq 360 or a valid CSIR/UGC/NET Certificate with JRF.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 60 % aggregate marks or equivalent CGPA 6.75 on a 10 point scale.

OR

B. Tech. In relevant branch of Engineering or Physics with at least 70 % or equivalent CGPA of 7.5 on a 10 point scale PLUS a valid GATE score ≥ 450 or a valid CSIR/UGC/NET Certificate with JRF.

SC/ST/PH Candidates:

M. Sc. Physics with at least 60% aggregate marks or equivalent CGPA of 6.75 on a 10 point scale Plus a Valid GATE Score ≥ 300 or a valid CSIR/UGC/NET Certificate with JRF.

OR

M. Tech. in relevant branch with at least 55 % aggregate marks or equivalent CGPA of 6.25 on a 10 point scale.

OR

B. Tech. In relevant branch with at least 70 % or equivalent CGPA of 7.5 on a 10 point scale PLUS a valid GATE score ≥ 350 or a valid CSIR/UGC/NET Certificate with JRF.

B.Techs. From IITs:

For all B.Techs. from IITs: as per Institute Criteria (Please see information Brochure Page. No. 4).

Part-Time Candidates:

As per Institute norms, but the short-listing criteria will be as above, except for the requirement of GATE Score. There will be no admission on a self-sponsored basis, and there will be no direct admission to the above Programme.

NOTE:

Candidates, whose M. Tech. / M. Sc. results are not yet declared, will be provisionally short-listed for the interview, provided they have secured the necessary aggregate marks or equivalent CGPA in the results declared so far for the qualifying degree.

B. The Test/Interview for admission in Ph. D. will be held on **2nd June 2009 (Tuesday), 10.00 A. M.** Onwards.

C. CRC discussed the request from Dr. Kiran Seth regarding the course “Animation and Filmmaking Course DIR 857. The CRC considered the observations of Dr. Kiran Seth and recommended that since this course does not require any prerequisite Science, Technology and Maths and it introduces the students to hands-on animation techniques. In view of the same the registration to the above course may be relaxed for all students of B. Tech. and M. Sc.

The meeting ended with thanks to the Chair.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: May 6, 2009

Subject: CRC Meeting on May 12, 2009 (Tuesday) at 4.00 P.M. in the IDDC Heads Room.

CRC meeting is being held in the Head, IDDC room on May 12, 2009 (Tuesday) at 4.00 P.M. The main agenda of the meeting are the following;

1. Discussion on the approval of Research Plan of Mr. Huidram Lokeshwar Singh Ph. D. Student of IDDC.
2. Discussion on the formulation of SRC of Mr. Rajesh Kumar, Ph. D. student of IDDC.
3. Any other information with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

- | | |
|--------------------------|------------------|
| 1. Dr. N. K. Jain | Chairman |
| 2. Prof. D. T. Shahani | Member |
| 3. Prof. Chandra Shakher | Member |
| 4. Dr. Rakesh Kumar, | Member |
| 5. Dr. A. L. Vyas | Member |
| 6. Dr. I. P. Singh | Member |
| 7. Sh. A. K. Agarwala | Member |
| 8. Sh. S. K. Atreya | Member |
| 9. Dr. D. S. Mehta | Member-Secretary |

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 17-06-2009

Subject: CRC meeting on June 22, 2009, 4.00 P. M.

CRC meeting is being held in the IDDC Head's room on June 22, 2009 (Monday) 4.00 P. M.

The main agenda of the meeting are the following:

Discussion on the progress report of Ph.D. students.

Discussion on the MoU project between IDDC, IIT Delhi and State Academy of Visual Arts, Stuttgart, Germany.

3. Any other information with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

1. Dr. N. K. Jain	Chairman
2. Prof. D. T. Shahani	Member
3. Prof. Chandra Shakher	Member
4. Dr. Rakesh Kumar	Member
5. Dr. A. L. Vyas	Member
6. Dr. I. P. Singh	Member
7. Sh. A. K. Agarwala	Member
8. Sh. S. K. Atreya	Member
9. Dr. D. S. Mehta	Member-Secretary

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre

Date: 22-06-2009

Kindly submit the progress report of your Ph.D. work (IInd Semester 2008-2009) electronically and printout the hard copy of the same (approved and signed by your respective supervisors) to the undersigned by **10th, July 2009**.

Instructions:

1. The students would create a progress report document in pdf format containing details of technical progress as well as course work. This pdf file is submitted and separately publications are entered in the system. For this the students should log on to academic site [http//10.80.23.78/academic](http://10.80.23.78/academic).
2. A consolidated print out of Progress Report including publications be taken by the students and submitted to the Centre by **10-07-2009**.

D. S. Mehta
Convener, CRC
All Research Scholars of IDDC.

Instrument Design Development Centre (IDDC)

Date: 23-06-2009

Subject: Minutes of CRC meeting held on June 22, 2009, 4.00 P. M.

CRC meeting was held in the IDDC Head's room on June 22, 2009 (Monday) 4.00 P. M. The following CRC members attended the meeting.

- | | |
|-----------------------|------------------|
| 1. Dr. N. K. Jain | Chairman |
| 2. Dr. I. P. Singh | Member |
| 3. Sh. A. K. Agarwala | Member |
| 4. Dr. D. S. Mehta | Member-Secretary |

The minutes of the meeting are the following;

An MoU project between IDDC, IIT Delhi and State Academy of Visual Arts, Stuttgart, Germany, submitted by Sh. L. K. Das was received and was circulated among the CRC members for their comments. The comments were received from the CRC members and both the proposal and the comments were discussed in the CRC meeting. The CRC decided the following;

1. The Co-ordinator M. Des. should forward the proposal.
2. Some provisions of the proposal are not clear. Therefore, the proposal should be whetted by the PEC M. Des.
3. The approval of Competent Financial Authority should be obtained regarding the financial implications, like fee waiver etc.

After implementing aforementioned points the proposal should be put-up to CRC again.

The meeting ended with thanks to the Chair.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 16-07-2009

Subject: CRC meeting on July 20, 2009, 12.00 Noon.

CRC meeting is being held in the IDDC Head's room on July 20, 2009 (Monday) 12.00 Noon

The main agenda of the meeting are the following;

1. Discussion on the progress report of Ph.D. students.
2. Any other information with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

- | | |
|--------------------------|------------------|
| 1. Dr. N. K. Jain | Chairman |
| 2. Prof. D. T. Shahani | Member |
| 3. Prof. Chandra Shakher | Member |
| 4. Dr. Rakesh Kumar | Member |
| 5. Dr. A. L. Vyas | Member |
| 6. Dr. I. P. Singh | Member |
| 7. Sh. A. K. Agarwala | Member |
| 8. Sh. S. K. Atreya | Member |
| 9. Dr. D. S. Mehta | Member-Secretary |

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: July 20, 2009

Subject: Minutes of CRC Meeting held on July 20, 2009 at 12.00 Noon.

CRC meeting was held in the IDDC Head's Room on July 20, 2009 (Monday) at 12.00 Noon. The following members attended the meeting;

1. Dr. N. K. Jain	Chairman
2. Dr. I. P. Singh	Member
3. Sh. S. K. Atreya	Member
4. Sh. A. K. Agarwala	Member
5. Dr. D. S. Mehta	Member-Secretary

The following are the minutes of the meeting:

1. Progress reports submitted by the Ph. D. students of IDDC for the 2nd Semester 2008 – 2009 were received and were discussed in the CRC and as per the recommendations of their respective supervisors all the reports were found satisfactory. CRC recommended that the grades of all the students be forwarded to PG section for further necessary action.
1. With the recommendation of Ph. D. supervisor of Mr. Gyanendra Sheoran (2005IDZ8171) Ph. D. student of IDDC that his work was very satisfactory and some additional work remained, CRC strongly recommends the extension of Institute Fellowship for Mr. Gyanendra Sheoran (2005IDZ8171) for six months in order to complete his Ph. D. work. Request of Mr. Gyanendra Sheoran (2005IDZ8171) alongwith his progress report forwarded by Supervisor is attached for favourable necessary action.
2. With the recommendation of Ph. D. supervisor of Mr. Sanjeev Kumar Srivastava (2005IDZ8170) Ph. D. student of IDDC that his work was very satisfactory and some additional work remained, CRC strongly recommends the extension of Institute Fellowship for Mr. Sanjeev Kumar Srivastava (2005IDZ8170) for six months in order to complete his Ph. D. work. Request of Mr. Sanjeev Kumar Srivastava (2005IDZ8170) alongwith his progress report forwarded by Supervisor is attached for favourable necessary action.

The meeting ended with thanks to the Chair.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: July 20, 2009

To,
The Dean,
PG Section,
Indian Institute of Technology Delhi

Sub.: Grades of Ph. D. students of IDDC.

Attached please find the grades of the progress report of Ph. D. Students of IDDC alongwith the minutes of CRC for further necessary action.

(D. S. Mehta)
Convener, CRC

Enclosures:

1. Progress report.
2. CRC minutes.

Instrument Design Development Centre (IDDC)

Date: July 22, 2009

Sub.: Extension of institute fellowship of **Mr. Sanjeev Kumar Srivastava (2005IDZ8170) full-time** Ph. D. student of IDDC.

Attached please find the request of **Mr. Sanjeev Kumar Srivastava (2005IDZ8170)** for the extension of Institute fellowship along with the minutes (Minute No. 3) of CRC for further necessary action.

(D. S. Mehta)
Convener, CRC

DR, PGS & R

Instrument Design Development Centre (IDDC)

Date: July 22, 2009

Sub.: Extension of institute fellowship of **Mr. Gyanendra Sheoran (2005IDZ8171)** full-time Ph. D. student of IDDC.

Attached please find the request of **Mr. Gyanendra Sheoran (2005IDZ8171)** for the extension of Institute fellowship along with the minutes (Minute No. 2) of CRC for further necessary action.

(D. S. Mehta)
Convener, CRC

DR, PGS & R

Instrument Design Development Centre (IDDC)

Date: 11-08-2009

Subject: CRC meeting on August 17, 2009, 4.00 P.M.

CRC meeting is being held in the IDDC Head's room on August 17, 2009 (Monday) 4.00 P.M.
The main agenda of the meeting are the following;

1. Discussion on the approval of research plan of Mr. Vaneet (2007 IDZ 8181).
2. Any other information with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

- | | |
|--------------------------|------------------|
| 1. Dr. N. K. Jain | Chairman |
| 2. Prof. D. T. Shahani | Member |
| 3. Prof. Chandra Shakher | Member |
| 4. Dr. Rakesh Kumar | Member |
| 5. Dr. A. L. Vyas | Member |
| 6. Dr. I. P. Singh | Member |
| 7. Sh. A. K. Agarwala | Member |
| 8. Sh. S. K. Atreya | Member |
| 9. Dr. D. S. Mehta | Member-Secretary |

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 18-08-2009

Subject: Minutes of CRC meeting held on August 17, 2009, 4.30 P.M.

Due to lack of quorum the CRC meeting could not be held at 4.00 P.M. The CRC meeting was re-convened at 4.30 P.M. in the IDDC Head's room on August 17, 2009 (Monday). The following members attended the meeting;

- | | |
|---------------------|------------------|
| 1. Dr. N. K. Jain | Chairman |
| 2. Dr. Rakesh Kumar | Member |
| 3. Dr. I. P. Singh | Member |
| 4. Dr. D. S. Mehta | Member-Secretary |

1. The CRC discussed the research plan submitted by Mr. Vaneet (2007 IDZ 8181) to SRC on 24-07-2009 and duly approved by SRC and the CRC recommended the same be forwarded to PGS& R section for further necessary action.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: Aug. 18, 2009

Sub.: Research plan of Mr. Vaneet (2007 IDZ 8181).

Attached please find the result of the comprehensive examination of Mr. Vaneet (2007 IDZ 8181) and copy of the research plan along with the minutes (Minute No. 1) of CRC further necessary action.

(D. S. Mehta)
Convener, CRC

DR, PGS & R

Instrument Design Development Centre

Date: 20-08-2009

To,
The Programme Co-ordinator
M. Des.

A MoU project between IDDC, IIT Delhi and State Academy of Visual Arts, Stuttgart, Germany was received and discussed in the CRC on June 23-06-2009. The copy of CRC minutes are attached herewith. Kindly send the PEC minutes ASAP.

(N. K. Jain)
Chairman, CRC

Instrument Design Development Centre (IDDC)

Date: 03-11-2009

Subject: CRC meeting on November 10, 2009, at 4.00 P.M.

CRC meeting is being held in the IDDC Head's room on November 10, 2009 (Tuesday) 4.00 P.M.
The main agenda of the meeting are the following:

1. Discussion on the approval of Synopsis and Panel of Examiners of Ph. D. thesis of Mr. S. Khaja Syed Shahul Hameed (2005 IDZ 8262).
2. Discussion on appointment of Co-supervisor Mr. Vikas Kumar Vyas (2008IDZ8396).
3. Formulation of SRC of Ph. D. students joined in July 2009.
4. Any other information with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

- | | |
|--|----------|
| 1. Prof. A. L. Vyas | Chairman |
| 2. Prof. M. R. Shenoy, Physics | Member |
| 3. Prof. G. S. Visweswaran, Electrical Engineering | Member |
| 4. Prof. Y. Nath, Applied Mechanics | Member |
| 5. Prof. Chandra Shakher | Member |
| 6. Prof. D. T. Shahani | Member |
| 7. Dr. N. K. Jain | Member |
| 8. Dr. I. P. Singh | Member |
| 9. Dr. Rakesh Kumar | Member |
| 10. Sh. A. K. Agarwala | Member |
| 11. Sh. S. K. Atreya | Member |
| 12. Dr. D. S. Mehta | Convener |

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 05-11-2009

Subject: CRC meeting preponed.

CRC meeting preponed due to pre-occupation of Chairman CRC. The meeting will be held on **Nov. 09, 2009 (Monday) 4.00 P.M.** instead of November 10, 2009 (Tuesday). The meeting will be held in the IDDC Head's room. The main agenda of the meeting are the following;

1. Discussion on the approval of Synopsis and Panel of Examiners of Ph. D. thesis of Mr. S. Khaja Syed Shahul Hameed (2005 IDZ 8262).
2. Discussion on appointment of Co-supervisor of Mr. Vikas Kumar Vyas (2008IDZ8396).
3. Discussion on the request of Mr. Pardeep Kumar Kushwaha (2004IDZ8051) for the conversion of his registration from full-time to part-time.
4. Formulation of SRC of Ph. D. students joined in July 2009.
5. Any other information with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

1. Prof. A. L. Vyas	Chairman
2. Prof. M. R. Shenoy, Physics	Member
3. Prof. G. S. Visweswaran, Electrical Engineering	Member
4. Prof. Y. Nath, Applied Mechanics	Member
5. Prof. Chandra Shakher	Member
6. Prof. D. T. Shahani	Member
7. Dr. N. K. Jain	Member
8. Dr. I. P. Singh	Member
9. Dr. Rakesh Kumar	Member
10. Sh. A. K. Agarwala	Member
11. Sh. S. K. Atreya	Member
12. Dr. D. S. Mehta	Convener

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 11-11-2009

Subject: Minutes of CRC meeting held on November 9, 2009, at 4.00 P. M.

CRC meeting was held in the IDDC Head's room on November 9, 2009 (Monday) at 4.00 P. M. The following CRC members attended the meeting.

1. Prof. A. L. Vyas	Chairman
2. Prof. M. R. Shenoy, Physics	Member
3. Prof. Y. Nath, Applied Mechanics	Member
4. Prof. Chandra Shakher	Member
5. Dr. N. K. Jain	Member
6. Dr. I. P. Singh	Member
7. Dr. Rakesh Kumar	Member
8. Sh. S. K. Atreya	Member
9. Dr. D. S. Mehta	Convener

Prof. G. S. Visweswaran, (Dept. of Electrical Engineering), Prof. D. T. Shahani (IDDC) and Sh. A. K. Agarwala (IDDC) could not attend the meeting.

The minutes of the meeting are the following;

1. The SRC's report of Mr. S. Khaja Syed Shahul Hameed (2005 IDZ 8262) on his Ph. D. Synopsis entitled "**Soil Moisture measurement using capacitance techniques**" and the appointment of the thesis examiners were discussed in the meeting and CRC recommends that the Synopsis and the list of examiners be forwarded to PG Section for further necessary action.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 12-11-2009

Subject: Submission of synopsis and List of Ph. D. thesis examiners of Mr. S. Khaja Syed Shahul Hameed (2005 IDZ 8262).

Enclosed please find the list of Ph. D. thesis examiners of **Mr. S. Khaja Syed Shahul Hameed (2005 IDZ 8262)** along with two copies of Synopsis entitled "**Soil Moisture easurement using capacitance techniques**" and CRC minutes (1) for further necessary action.

(D. S. Mehta)
Convener, CRC

DR PGS & R

Enclosures:

1. List of examiners (Two Copies).

2. Synopsis of the thesis (Two Copies)
2. CRC minutes.

Instrument Design Development Centre (IDDC)

Date: 20-11-2009

Subject: Minutes of CRC meeting held on November 9, 2009, at 4.00 P. M.

CRC meeting was held in the IDDC Head's room on November 9, 2009 (Monday) at 4.00 P. M.
The following CRC members attended the meeting.

1. Prof. A. L. Vyas	Chairman
2. Prof. M. R. Shenoy, Physics	Member
3. Prof. Y. Nath, Applied Mechanics	Member
4. Prof. Chandra Shakher	Member
5. Dr. N. K. Jain	Member
6. Dr. I. P. Singh	Member
7. Dr. Rakesh Kumar	Member
8. Sh. S. K. Atreya	Member
9. Dr. D. S. Mehta	Convener

Prof. G. S. Visweswaran (Dept. of Electrical Engineering), Prof. D. T. Shahani (IDDC) and Sh. A. K. Agarwala (IDDC) could not attend the meeting.

The minutes of the meeting are the following;

1. SRC's report of Mr. S. Khaja Syed Shahul Hameed (2005 IDZ 8262) on his Ph. D. Synopsis entitled "**Soil Moisture measurement using capacitance techniques**" and the appointment of the thesis examiners were discussed in the meeting and CRC recommends that Synopsis and the list of examiners be forwarded to PG Section for further necessary action.
2. **The request of Sh. L. K. Das (IDDC) for the appointment of Co-supervisor of Mr. Vikas Kumar Vyas (2008IDZ8396) was received and discussed in the meeting. Sh L. K. Das has requested that Dr. Vijay M. Charier, Asst. Prof., RDAT be appointed as Ph. D. co-supervisor of Mr. Vikas Kumar Vyas. The committee agreed that Dr. Vijay M. Charier of RDAT may be appointed as co-supervisor. It was further pointed out that as per norms, there is a need to appoint an additional supervisor from within IDDC as Sh. L. K. Das has retired. This was also confirmed from DR (PGS & R) telephonically. In view of this the committee decided that Sh. L. K. Das is requested to suggest an additional supervisor from IDDC itself.**
3. The request of Mr. Pardeep Kumar Kushwaha (2004IDZ8051) for the conversion of his Ph. D. registration from full-time to part-time was discussed. As per norms, the status can be changed to part-time when either the Synopsis has been submitted or the candidate has got a job and satisfies the criteria for part-time registration. The student is advised to resubmit the request as and when he satisfies any one of the above criteria.
4. Approval of CRC for the appointment of Supervisors and formulation of Student Research Committee (SRC) of the following Ph. D. scholars who joined IDDC in July 2009 was discussed and the CRC recommends the same be forwarded to PG section.
 1. Ms. Shobhana Sharma (2009IDZ8217)
 2. Ms. Neha Adhikari (2009 IDZ 8218)
 3. Mr. Vishal Srivastava (2009 IDZ 8219)
 4. Mr. Gyanendra Singh (2009 IDZ 8220)
 5. Mr. Mohamad Inam (2009IDZ 8221)
 6. Ms. Rakhi Grover (2009 IDZ 8222)

7. Mr. Veerabhadrappa S. T. (2009 8260)
5. An MoU project between IDDC, IIT Delhi and State Academy of Visual Arts, Stuttgart, Germany, submitted by Sh. N. K. Jain (M. Des. Programme Co-ordinator) was received and CRC decided that the MoU project be circulated among the CRC members for their comments and suggestions. After receiving their comments and suggestions the proposal will be discussed in the next CRC meeting.

The meeting ended with thanks to the Chair.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: November 23, 2009

Enclosed please find the duly filled application forms for the appointment of Supervisors and formulation of Student Research Committee (SRC) of the following Ph. D. scholars who joined IDDC during Ist semester 2009-2010.

1. Ms. Shobhana Sharma (2009IDZ8217)
2. Ms. Neha Adhikari (2009 IDZ 8218)
3. Mr. Vishal Srivastava (2009 IDZ 8219)
4. Mr. Gyanendra Singh (2009 IDZ 8220)
5. Mr. Mohamad Inam (2009IDZ 8221)
6. Ms. Rakhi Grover (2009 IDZ 8222)
7. Mr. Veerabhadrappa S. T. (2009 8260)

(D. S. Mehta)
Convener, CRC

DR PGS & R

Enclosures:

1. Application forms
2. CRC minutes (Minute '4').

Instrument Design Development Centre (IDDC)

Date: 27-11-2009

Subject: CRC meeting on 02-12-2009, 10.30 A. M., IDDC Committee Room.

CRC meeting is being held on December 02, 2009 (Tuesday) at 10.30 A.M. The meeting will be held in the IDDC Committee Room. The main agenda of the meeting are the following;

1. Discussion on the approval of Synopsis and Panel of Examiners of Ph. D. thesis of Mr. Pardeep Kumar Kushwaha (2004IDZ8051).
2. Discussion and finalization of short-listing criteria for Ph. D. Programme for IInd Semester.
3. Finalization of the dates of written test/interview for Ph. D. Candidates.
4. Any other information with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

- | | |
|--|----------|
| 1. Prof. A. L. Vyas | Chairman |
| 2. Prof. M. R. Shenoy, Physics | Member |
| 3. Prof. G. S. Visweswaran, Electrical Engineering | Member |
| 4. Prof. Y. Nath, Applied Mechanics | Member |
| 5. Prof. Chandra Shakher | Member |
| 6. Prof. D. T. Shahani | Member |
| 7. Dr. N. K. Jain | Member |
| 8. Dr. I. P. Singh | Member |
| 9. Dr. Rakesh Kumar | Member |
| 10. Sh. A. K. Agarwala | Member |
| 11. Sh. S. K. Atreya | Member |
| 12. Dr. D. S. Mehta | Convener |

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 27-11-2009

Subject: Moderation Committee meeting on 02-12-2009, 11.00 A. M., IDDC Committee Room.

Moderation committee meeting is being held on December 02, 2009 (Tuesday) at 11.00 A.M. The meeting will be held in the IDDC Committee Room.

Agenda: Moderation of Grades.

All Faculty/PEC/CRC members are requested to attend the meeting.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 27-11-2009

Subject: PEC meeting on 02-12-2009, 12.00 Noon, IDDC Committee Room.

PEC meeting is being held on December 02, 2009 (Tuesday) at 12.00 Noon. The meeting will be held in the IDDC Committee Room. The main agenda of the meeting are the following;

1. Discussion on the utilization funds for the financial year 2009-2010 of Teaching programme M. Tech. Instrument Technology.
2. Any other information with the permission of the Chairman.

All the PEC members are requested to attend the meeting.

PEC Members

1. Prof. D. T. Shahani	Chairman
2. Prof. A. L. Vyas	Member
3. Sh. A. K. Agarwala	Member
4. Prof. Chandra Shakher	Member
5. Dr. Rakesh Kumar	Member
6. Dr. I. P. Singh	Member
7. Dr. N. K. Jain	Member
8. Sh. S. K. Atreya	Member
9. Prof. G. S. Visweswaran, Electrical Engineering	Member
10. Prof. Anurag Sharma, Dept. of Physics	Member
11. Prof. S. K. Koul, CARE	Member
12. Prof. K. Gupta, Dept. Mech. Engg.	Member
13. Dr. D. S. Mehta	Member

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 02-12-2009

Subject: The post-poned CRC meeting will be held 03-12-2009, 12.00 Noon, IDDC Head's Room.

The post-poned CRC meeting will be held on December 03, 2009 (Thursday) at 12.00 Noon. The meeting will be held in the IDDC Head's Room. The main agenda of the meeting are the following;

1. Discussion on the approval of Synopsis and Panel of Examiners of Ph. D. thesis of Mr. Pardeep Kumar Kushwaha (2004IDZ8051).
2. Discussion and finalization of short-listing criteria for Ph. D. Programme for IInd Semester.
3. Finalization of the dates of written test/interview for Ph. D. Candidates.
4. Any other information with the permission of the Chairman.
Application details of Ph. D. candidates is attached herewith.

All the CRC members are requested to attend the meeting.

All CRC Members

1. Prof. A. L. Vyas	Chairman
2. Prof. M. R. Shenoy, Physics	Member
3. Prof. G. S. Visweswaran, Electrical Engineering	Member
4. Prof. Y. Nath, Applied Mechanics	Member
5. Prof. Chandra Shakher	Member
6. Prof. D. T. Shahani	Member
7. Dr. N. K. Jain	Member
8. Dr. I. P. Singh	Member
9. Dr. Rakesh Kumar	Member

10. Sh. A. K. Agarwala
11. Sh. S. K. Atreya
12. Dr. D. S. Mehta

Member
Member
Convener

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 02-12-2009

Subject: The post-poned CRC meeting will be held 03-12-2009, 12.00 Noon, IDDC Head's Room.

The post-poned CRC meeting will be held on December 03, 2009 (Thursday) at 12.00 Noon. The meeting will be held in the IDDC Head's Room. The main agenda of the meeting are the following;

4. Discussion on the approval of Synopsis and Panel of Examiners of Ph. D. thesis of Mr. Pardeep Kumar Kushwaha (2004IDZ8051).
5. Discussion and finalization of short-listing criteria for Ph. D. Programme for IInd Semester.
6. Finalization of the dates of written test/interview for Ph. D. Candidates.
4. Any other information with the permission of the Chairman.
Application details of Ph. D. candidates is attached herewith.

All the CRC members are requested to attend the meeting.

All CRC Members

- | | |
|--|----------|
| 1. Prof. A. L. Vyas | Chairman |
| 2. Prof. M. R. Shenoy, Physics | Member |
| 3. Prof. G. S. Visweswaran, Electrical Engineering | Member |
| 4. Prof. Y. Nath, Applied Mechanics | Member |
| 5. Prof. Chandra Shakher | Member |
| 6. Prof. D. T. Shahani | Member |
| 7. Dr. N. K. Jain | Member |
| 8. Dr. I. P. Singh | Member |
| 9. Dr. Rakesh Kumar | Member |
| 10. Sh. A. K. Agarwala | Member |
| 11. Sh. S. K. Atreya | Member |
| 12. Dr. D. S. Mehta | Convener |

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 07-12-2009

Subject: Submission of synopsis and List of Ph. D. thesis examiners of Mr. Pardeep Kumar Kushwaha (2004 IDZ 8051).

Enclosed please find the list of Ph. D. thesis examiners of **Mr. Pardeep Kumar Kushwaha (2004 IDZ 8051)** along with two copies of Synopsis entitled “**Development of modified bamboo reinforced plastic composites and study of their properties**” and CRC minutes (1) for further necessary action.

(D. S. Mehta)
Convener, CRC

DR PGS & R

Enclosures:

1. List of examiners (Two Copies).
2. Synopsis of the thesis (Two Copies)
3. CRC minutes.

Instrument Design Development Centre (IDDC)

Date: 07-12-2009

Subject: Minutes of CRC meeting held on 03-12-2009, at 12.00 Noon.

CRC meeting was held in the IDDC Head's room on 03-12-2009 (Thursday) at 12.00 Noon.
The following CRC members attended the meeting;

- | | |
|--------------------------|----------|
| 1. Prof. A. L. Vyas | Chairman |
| 2. Dr. N. K. Jain | Member |
| 3. Prof. Chandra Shakher | Member |

4. Sh. A. K. Agarwala	Member
5. Dr. I. P. Singh	Member
6. Sh. S. K. Atreya	Member
7. Dr. D. S. Mehta	Convener

Prof. G. S. Visweswaran, (Dept. of Electrical Engineering), Prof. M. R. Shenoy (Dept. of Physics), Prof. Y. Nath (Applied Mechanics), Prof. D. T. Shahani (IDDC) and Dr. Rakesh Kumar (IDDC) could not attend the meeting.

The minutes of the meeting are the following;

1. The SRC's report of **Mr. Pardeep Kumar Kushwaha (2004 IDZ 8051)** on his Ph. D. Synopsis entitled "**Development of modified bamboo reinforced plastic composites and study of their properties**" and the appointment of the thesis examiners were discussed in the meeting and CRC recommends that the Synopsis and the list of examiners be forwarded to PG Section for further necessary action.
2. The short-listing criteria for admission in Ph. D. Programme for the IInd Semester 2009-2010 was discussed and the committee decided the following short-listing criteria:

General Candidates:

M. Sc. Physics with at least 70% aggregate marks or equivalent CGPA 7.5 on a 10 point scale plus a Valid GATE Score ≥ 400 or a valid CSIR/UGC/NET Certificate with JRF and first division in preceding degrees.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 70 % aggregate marks or equivalent CGPA 7.5 on a 10 point scale and first division in preceding degrees.

OR

B. Tech. in relevant branch of Engineering or Physics with at least 75 % or equivalent CGPA of 8.5 on a 10 point scale PLUS a valid GATE score ≥ 500 or a valid CSIR/UGC/NET Certificate with JRF and first division in preceding degrees.

OBC (non-creamy layer) Candidates:

M. Sc. Physics with at least 70% aggregate marks or equivalent CGPA 7.5 on a 10 point scale plus a Valid GATE Score ≥ 360 or a valid CSIR/UGC/NET Certificate with JRF and first division in preceding degrees.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 70 % aggregate marks or equivalent CGPA 7.5 on a 10 point scale and first division in preceding degrees.

OR

B. Tech. in relevant branch of Engineering or Physics with at least 75 % or equivalent CGPA of 8.5 on a 10 point scale PLUS a valid GATE score ≥ 450 or a valid CSIR/UGC/NET Certificate with JRF and first division in preceding degrees.

SC/ST/PH Candidates:

M. Sc. Physics with at least 65% aggregate marks or equivalent CGPA of 7.12 on a 10 point scale Plus a Valid GATE Score ≥ 300 or a valid CSIR/UGC/NET Certificate with JRF and first division in preceding degrees.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 65 % aggregate marks or equivalent CGPA of 7.12 on a 10 point scale and first division in preceding degrees.

OR

B. Tech. in relevant branch of Engineering or Physics with at least 70 % or equivalent CGPA of 7.5 on a 10 point scale PLUS a valid GATE score ≥ 350 or a valid CSIR/UGC/NET Certificate with JRF and first division in preceding degrees.

B. Techs. From IITs:

For all B. Techs. from IITs: as per Institute Criteria (Please see information Brochure Page. No. 4) and first division in preceding degrees.

Part-Time Candidates:

As per Institute norms, but the short-listing criteria will be as above, except for the requirement of GATE Score. There will be no direct admission to the above Programme.

NOTE:

Candidates, whose M. Tech. / M. Sc. results are not yet declared, will be provisionally short-listed for the interview, provided they have secured the necessary aggregate marks or equivalent CGPA in the results declared so far for the qualifying degree.

- 3. It was decided that the test /interview for Ph. D. admission will be held on 18th December 2009 (Friday) 10.00 A. M. Onwards.**

Venue: Instrument Design Development Centre (IDDC), Room No. WS -145 (Office of Head IDDC).

4. The request of Mr. Pardeep Kumar Kushwaha (2004IDZ8051) for the conversion of his Ph. D. registration from full-time to part-time was discussed. Mr. As per norms, the status can be changed to part-time when either the Synopsis has been submitted or the candidate has got a job and satisfies the criteria for part-time registration. The student is advised to resubmit the request as and when he satisfies any one of the above criteria.

The meeting ended with thanks to the chair.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 03-12-2009

A proposal on Co-operation agreement between State Academy of Visual Art, Stuttgart and I. I. T. Delhi was circulated among CRC members on 12-11-2009. Please give your comments and suggestions to the undersigned by 14-12-2009, 5.30 P.M.

All CRC Members

1. Prof. A. L. Vyas	Chairman
2. Prof. M. R. Shenoy, Physics	Member
3. Prof. G. S. Visweswaran, Electrical Engineering	Member
4. Prof. Y. Nath, Applied Mechanics	Member
5. Prof. Chandra Shakher	Member
6. Prof. D. T. Shahani	Member
7. Dr. N. K. Jain	Member

8. Dr. I. P. Singh	Member
9. Dr. Rakesh Kumar	Member
10. Sh. A. K. Agarwala	Member
11. Sh. S. K. Atreya	Member
12. Dr. D. S. Mehta	Convener

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 15-12-2009

Subject: Urgent CRC meeting on 17-12-2009, 12.00 Noon, IDDC Head's Room.

An CRC meeting will be held on December 17, 2009 (Thursday) at 12.00 Noon. The meeting will be held in the IDDC Head's Room. The main agenda of the meeting are the following;

1. Discussion and finalization of short-listing criteria for Ph. D. candidates under QIP Programme.
2. Discussion on the conversion from full-time to part-time Ph. D. of Mr. Pardeep Kumar Kushwaha (2004IDZ8051).
3. Discussion on the MoU project between IDDC, IIT Delhi and State Academy of Visual Arts, Stuttgart, Germany.
4. Discussion on the extension of Institute Assistantship of the following Ph. D. students:
 - i. Mr. Anuj Kumar (2005 IDZ 8273).
 - ii. Mr. Manoj Kumar Singh (2005 IDZ 8274)
5. Any other information with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

1. Prof. A. L. Vyas	Chairman
2. Prof. M. R. Shenoy, Physics	Member
3. Prof. G. S. Visweswaran, Electrical Engineering	Member
4. Prof. Y. Nath, Applied Mechanics	Member
5. Prof. Chandra Shakher	Member
6. Prof. D. T. Shahani	Member

7. Dr. N. K. Jain	Member
8. Dr. I. P. Singh	Member
9. Dr. Rakesh Kumar	Member
10. Sh. A. K. Agarwala	Member
11. Sh. S. K. Atreya	Member
12. Dr. D. S. Mehta	Convener

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 21-12-2009

Subject: Minutes of CRC meeting held on 17-12-2009, at 12.00 Noon.

CRC meeting was held in the IDDC Head's room on 17-12-2009 (Thursday) at 12.00 Noon.
The following CRC members attended the meeting;

1. Prof. A. L. Vyas	Chairman
2. Dr. N. K. Jain	Member
3. Sh. A. K. Agarwala	Member
4. Dr. Rakesh Kumar	Member
5. Prof. M. R. Shenoy	Member
6. Dr. I. P. Singh	Member
7. Sh. S. K. Atreya	Member
8. Dr. D. S. Mehta	Convener

Prof. G. S. Visweswaran, (Dept. of Electrical Engineering), Prof. Chandra Shakher (IDDC), Prof. Y. Nath (Applied Mechanics), and Prof. D. T. Shahani (IDDC) could not attend the meeting.

The minutes of the meeting are the following;

1. The request from Mr. Pardeep Kumar Kushwaha (2004 IDZ 8051) for the conversion of his Ph. D. registration from full-time to part-time was received and discussed in the meeting. Since Mr. Pardeep Kumar Kushwaha has submitted his Ph. D. Synopsis the CRC recommends that his Ph. D. registration be converted from full-time to part-time and his request be forwarded to PG section for further necessary action.
2. Short-listing criteria for Ph. D. candidates under QIP Programme for advanced admission in 2010 was discussed and finalized. The CRC recommends the same criteria be followed as discussed and finalised on 03-12-2009 CRC meeting.
3. The MoU between IDDC, IIT Delhi and State Academy of Visual Arts, Stuttgart, Germany was briefly discussed. The CRC observed that this an academic proposal for MoU and not a sponsored project. It should be discussed in professorial committee.

The CRC also decided that in future one week's time will be given to give the feedback/comments on the project proposals. The members can however give their comments before the next meeting.

4. Request from the following Ph. D. students for the extension of Institute Assistantship was received and discussed in the meeting:
 - i. Mr. Anuj Kumar (2005 IDZ 8273).
 - ii. Mr. Manoj Kumar Singh (2005 IDZ 8274)
 - iii. Mr. Sanjeev Kumar Srivastava (2005 IDZ 8170)
 - iv. Mr. Ranjeet Kumar (2005 IDZ 8275)

- v. Mr. Gyanendra Sheoran (2005 IDZ 8171)

With the recommendation of their respective supervisors that the students work was satisfactory and some additional work remained, CRC recommends the extension of Institute Fellowship for the aforementioned Ph. D. students for another six months in order to complete their Ph. D. work. The request of the students alongwith their progress report forwarded by Supervisor is attached for favourable necessary action.

It was also decided that in future, for extension beyond four years, a detailed consolidated report routed through SRC will be required for consideration. P.T.O.

5. Approval of CRC for the appointment of Supervisors and formulation of Student Research Committee (SRC) of Mr. Rajesh Kumar (2008 IDZ 8398) Ph. D. scholar of IDDC was discussed and the CRC recommends the same to be forwarded to PG section for necessary action.
6. A fresh application of Mr. Ajay Kumar for admission to Ph. D. programme (IDZ) during IInd Semester 2009-2010 was received and his application was scrutinised and the student did not qualify the Centre's short-listing criteria finalized on 03-12-2009 and hence his application was rejected.
7. SRC's report of Mr. Manoj Kumar Singh (2005 IDZ 8274) on his Ph. D. Synopsis entitled "Bioclimatic Design of Built-Environment for North-East India" and the appointment of the thesis examiners were discussed in the meeting and CRC recommends that Synopsis and the list of examiners be forwarded to PG Section for further necessary action.
8. The case of Chakresh Misra, a 2nd Year M. Tech. student (Instrument Technology), received back from Dean, PGS&R was discussed. It was decided to give him some more time to work on the Major Project part-I and his viva examination be conducted before the end of semester. In the mean time he be given I grade.

The meeting ended with thanks to the Chair.

(D. S. Mehta)
Convener CRC

Instrument Design Development Centre

Date: 21-12-2009

Mr. Pardeep Kumar Kushwaha (2004 IDZ 8051) Ph. D. student of IDDC has submitted his Ph.D. Synopsis on 29-10-2009. The request of Mr. Pardeep Kumar Kushwaha (2004 IDZ 8051) for the conversion of his Ph. D. from full-time to part-time was discussed in the CRC. Enclosed please find the request of Mr. Pardeep Kumar Kushwaha (2004 IDZ 8051) and CRC minutes (minute 1) for further necessary action.

(D. S. Mehta)
Convenor CRC

DR, PGS & R

Instrument Design Development Centre (IDDC)

Date: 21-12-2009

Subject: Urgent CRC meeting on 23-12-2009, 10.00 A. M., IDDC Committee Room.

An urgent CRC meeting will be held on December 23, 2009 (Wednesday) at 10.00 A. M. The meeting will be held in the IDDC Committee Room. The main agenda of the meeting are the following;

1. Discussion on the progress report of Ist semester 2009-2010 of Ph. D. students of IDDC.
2. Any other information with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

1. Prof. A. L. Vyas	Chairman
2. Prof. M. R. Shenoy, Physics	Member
3. Prof. G. S. Visweswaran, Electrical Engineering	Member
4. Prof. Y. Nath, Applied Mechanics	Member
5. Prof. Chandra Shakher	Member
6. Prof. D. T. Shahani	Member
7. Dr. N. K. Jain	Member
8. Dr. I. P. Singh	Member
9. Dr. Rakesh Kumar	Member
10. Sh. A. K. Agarwala	Member
11. Sh. S. K. Atreya	Member
12. Dr. D. S. Mehta	Convener

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: Dec.22, 2009

Enclosed please find the duly filled application forms for the appointment of Supervisor and formulation of Student Research Committee (SRC) of **Mr. Rajesh Kumar (2008 IDZ 8398)** the Ph. D. student IDDC.

(D. S. Mehta)
Convener, CRC

DR PGS & R

Enclosures:

1. Application forms
2. CRC minutes (Minute '5').

Instrument Design Development Centre (IDDC)

Date: Dec. 23, 2009

Sub.: Extension of Institute Assistantship of full-time Ph. D. students of IDDC.

Enclosed please find the request for the extension of Institute Assistantship along with the minutes (Minute No. 4) of CRC of the following full-time Ph. D. students of IDDC for further necessary action.

- i. Mr. Anuj Kumar (2005 IDZ 8273).
- ii. Mr. Manoj Kumar Singh (2005 IDZ 8274)
- iii. Mr. Sanjeev Kumar Srivastava (2005 IDZ 8170)
- iv. Mr. Ranjeet Kumar (2005 IDZ 8275)
- v. Mr. Gyanendra Sheoran (2005 IDZ 8171)

(D. S. Mehta)
Convener, CRC

DR, PGS & R

Instrument Design Development Centre (IDDC)

Date: Dec. 23, 2009

To,
The Dean,
PG Section,
Indian Institute of Technology Delhi

Sub.: Grades of Ph. D. students of IDDC.

Attached please find the grades of the progress report of Ph. D. Students of IDDC alongwith the minutes of CRC for further necessary action.

(D. S. Mehta)
Convener, CRC

Enclosures:

1. Progress report.
2. CRC minutes.

Instrument Design Development Centre (IDDC)

Date: 23-12-2009

Subject: Minutes of CRC meeting on 23-12-2009, 10.00 A. M., IDDC Committee Room.

CRC meeting scheduled to be held on December 23, 2009 (Wednesday) at 10.00 A. M. was adjourned for half an hour and the meeting was reconvened at 10.30 A. M. Following CRC members attended the meeting.

1. Prof. A. L. Vyas	Chairman
2. Dr. I. P. Singh	Member
3. Sh. A. K. Agarwala	Member
4. Dr. D. S. Mehta	Convener

1. Progress reports submitted by the Ph. D. students of IDDC for the Ist Semester 2009 – 2010 were received and were discussed in the CRC and as per the recommendations of their respective supervisors all the reports were found satisfactory except Mr. Sheo Shanker Prasad (REGN. No. 2007 IDZ 8204) Ph. D. scholar under QIP programme which was unsatisfactory. CRC recommended that the grades of all the students be forwarded to PG section for further necessary action.
2. CRC decided that Ph. D. student Mr. Sheo Shanker Prasad (REGN. No. 2007 IDZ 8204) be asked to submit the comprehensive report on the work done so far through SRC.

The meeting ended with a vote of thanks to the Chair.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 23-12-2009

Subject: Submission of synopsis and List of Ph. D. thesis examiners of Mr. Manoj Kumar Singh (2005 IDZ 8274)

Enclosed please find the list of Ph. D. thesis examiners of Mr. Manoj Kumar Singh (2005 IDZ 8274) along with two copies of Synopsis entitled “**Bioclimatic Design of Built-Environment for North-East India**” and CRC minutes (7) for further necessary action.

(D. S. Mehta)
Convener, CRC

DR PGS & R

Enclosures:

1. List of examiners.
2. Synopsis of the thesis (Two Copies)
5. CRC minutes.

Instrument Design Development Centre (IDDC)

Date: 12-01-2010

Subject: CRC meeting on 18-01-2010 (Monday), 3.00 P. M., IDDC Committee Room.

CRC meeting is being held on January 18, 2010 (Monday) at 3.00 P.M. The meeting will be held in the IDDC Committee Room. The main agenda of the meeting are the following;

1. Test/Interview of Ph. D. candidates under QIP Programme for advanced admission in 2010. Details of Applications of the candidates are available in IDDC office.
2. Discussion on the approval of Synopsis and Panel of Examiners of Ph. D. thesis of Mr. Sanjeev Kumar Srivastava (2005 IDZ 8170).
3. Discussion on the application of Ms. Alka Rani for admission to Ph. D. programme.
4. Any other information with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

1. Prof. A. L. Vyas	Chairman
2. Prof. M. R. Shenoy, Physics	Member
3. Prof. G. S. Visweswaran, Electrical Engineering	Member
4. Prof. Y. Nath, Applied Mechanics	Member
5. Prof. Chandra Shakher	Member
6. Prof. D. T. Shahani	Member
7. Dr. N. K. Jain	Member
8. Dr. I. P. Singh	Member
9. Dr. Rakesh Kumar	Member
10. Sh. A. K. Agarwala	Member
11. Sh. S. K. Atreya	Member
12. Dr. D. S. Mehta	Convener

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 21-01-2010

Subject: Minutes of CRC meeting held on 18-01-2010 (Monday), 3.00 P. M., IDDC Head's Room.

CRC meeting was held on January 18, 2010 (Monday) at 3.00 P.M. in Head's Room. The following members attended the meeting.

1. Prof. A. L. Vyas	Chairman
2. Prof. Y. Nath, Applied Mechanics	Member
3. Prof. Chandra Shakher	Member
4. Dr. N. K. Jain	Member
5. Dr. I. P. Singh	Member

The following are the minutes of the meeting;

1. Interview of Ph. D. of candidates under QIP Programme for advanced admission in 2010 conducted. Two candidates came for interview and only one candidate Mr. Lokesh Jain (Application No. 50094) attended the Interview and was not found suitable. Mr. Manas Kumar Bera came and marked his attendance but did not appear for the interview. After marking attendance he went away and did not return. The committee waited for him more than half an hour before marking him absent.
2. The panel of Examiner's of the Synopsis of the Ph. D. thesis (Investigation of Mechanical behaviour of hybrid polymer nanocomposites) of Mr. Sanjeev Kumar Srivastava (2005 IDZ 8170) was discussed and CRC recommends that Synopsis and the list of examiners be forwarded to PG Section for further necessary action.
3. Application of Ms. Alka Rani for admission to Ph. D. programme for Semester-II 2009 -2010 was discussed. The committee decided that her application be sent back to PG Section with the remark that the same candidate was interviewed on **18th December 2009** and was not found suitable.

(Prof. A. L. Vyas)
Chairman, CRC

Instrument Design Development Centre (IDDC)

Date: 27-01-2010

Subject: Submission of synopsis and list of Ph. D. thesis examiners of Mr. Sanjeev Kumar Srivastava (2005 IDZ 8170).

Enclosed please find the list of Ph. D. thesis examiners of Mr. Sanjeev Kumar Srivastava (2005 IDZ 8170) along with two copies of Synopsis entitled “**Investigation of Mechanical behaviour of hybrid polymer nano-composites**” and CRC minutes (02) for further necessary action.

(D. S. Mehta)
Convener, CRC

DR PGS & R

Enclosures:

1. CRC minutes
2. List of examiners
3. Synopsis of the thesis (Two Copies)

Instrument Design Development Centre (IDDC)

Date: 18-02-2010

Subject: CRC meeting on 24-02-2010 (Wednesday), 4.00 P. M., IDDC Committee Room.

Meeting of CRC is scheduled to be held on February 24, 2010 (Wednesday) at 4.00 P.M. The meeting will be held in the IDDC Committee Room. The agenda for the meeting is as given below:

4. Discussion on the Panel of Examiners of Ph. D. thesis of Mr. Manoj Kumar Singh (2005 IDZ 8274) for his Ph. D. Synopsis entitled “Bioclimatic Design of Built-Environment for North-East India”.
5. Discussion on the approval of Synopsis and Panel of Examiners of Ph. D. thesis of Mr. Jai Prakash Rana (2006IDZ8155) of his Synopsis entitled “Effect of nano-materials on the electro-optical properties of deformed helix ferroelectric liquid crystals and their applications”.
6. Discussion on the Comprehensive examination of Mr Vivek Kumar (2008IDZ8124).
7. Research Proposal “OMEGA : To develop high efficiency, low cost solar grid tie inverter with MPPT” submitted by Shri A.K.Agrawala.
8. Any other information with the permission of the Chairman.

All CRC members are requested to make it convenient to attend the meeting.

All CRC Members

- | | |
|--|----------|
| 1. Prof. A. L. Vyas | Chairman |
| 2. Prof. M. R. Shenoy, Physics | Member |
| 3. Prof. G. S. Visweswaran, Electrical Engineering | Member |

4. Prof. Y. Nath, Applied Mechanics	Member
5. Prof. Chandra Shakher	Member
6. Prof. D. T. Shahani	Member
7. Dr. N. K. Jain	Member
8. Dr. I. P. Singh	Member
9. Dr. Rakesh Kumar	Member
10. Sh. A. K. Agarwalla	Member
11. Sh. S. K. Atreya	Member
12. Dr. D. S. Mehta	Convener

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 05-03-2010

Subject: Minutes of CRC meeting held on 24-02-2010 (Wednesday), 4.00 P. M., IDDC Head's Room.

CRC meeting was held in the IDDC Head's room on 24-02-2010 (Wednesday), 4.00 P. M. The following CRC members attended the meeting;

1. Prof. A. L. Vyas	Chairman
2. Dr. N. K. Jain	Member
3. Dr. Rakesh Kumar	Member
4. Dr. I. P. Singh	Member
5. Sh. A. K. Agarwala	Member
6. Sh. S. K. Atreya	Member
7. Dr. D. S. Mehta	Convener

Prof. G. S. Visweswaran, (Dept. of Electrical Engineering), Prof. M. R. Shenoy (Dept. of Physics), Prof. Y. Nath (Applied Mechanics), Prof. Chandra Shakher (IDDC), and Prof. D. T. Shahani (IDDC) could not attend the meeting.

The minutes of the meeting are the following;

1. New list of the Panel of Examiners of Ph. D. thesis of **Mr. Manoj Kumar Singh (2005 IDZ 8274)** for his Ph. D. Synopsis entitled "**Bioclimatic Design of Built-Environment for North-East India**" was discussed and the CRC recommends that the list of examiners be forwarded to PG Section for further necessary action.
2. The SRC's report of **Mr. Jai Prakash (2006IDZ8155)** on his Ph. D. Synopsis entitled "**Effect of nano-materials on the electro-optical properties of deformed helix ferroelectric liquid crystals and their applications**" and the appointment of the thesis examiners were discussed in the meeting and CRC recommends that the Synopsis and the list of examiners be forwarded to PG Section for further necessary action.
3. The minutes of Comprehensive examination and research plan submitted by **Mr Vivek Kumar (2008IDZ8124)** to SRC on 25-01-2010 was presented to CRC and the CRC recommended that the same be forwarded to PG section for further necessary action.
4. Project proposal "**OMEGA: To develop high efficiency, low cost solar grid tie inverter with MPPT**" submitted by **Shri A. K. Agrawala (PI)** was circulated among the CRC members for their comments and the same was discussed in the CRC meeting. It was noted that the PI had clarified that no additional space and manpower was being asked from IDDC. The CRC recommends the aforementioned proposal be forwarded to FITT for further necessary processing.
5. Project proposal entitled "**Wireless Body Area Network for Health Monitoring**" submitted by **Prof. A. L. Vyas (PI)** was received and discussed in the CRC meeting. It was noted that the PI had clarified

that no additional space and manpower was being asked from IDDC. The CRC recommends the aforementioned proposal be forwarded to IRD for further necessary processing.

6. It was further decided that in future only two page summary of the sponsored project be circulated for feedback/comments of the members.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 25-02-2010

Subject: Submission of new list of Ph. D. thesis examiners of Mr. Manoj Kumar Singh (2005 IDZ 8274).

Enclosed please find the New list of the Panel of Examiners of Ph. D. thesis of **Mr. Manoj Kumar Singh (2005 IDZ 8274)** for his Ph. D. Synopsis entitled “**Bioclimatic Design of Built-Environment for North-East India**” and CRC minutes (01) for further necessary action.

(D. S. Mehta)
Convener, CRC

DR PGS & R

Enclosures:

1. New List of examiners
2. CRC minutes

Instrument Design Development Centre (IDDC)

Date: Feb. 25, 2010

Sub.: Research plan of **Mr Vivek Kumar (2008IDZ8124)**.

Attached please find the result of the comprehensive examination of **Mr Vivek Kumar (2008IDZ8124)** and copy of the research plan along with the minutes (Minute No. 03) of CRC further necessary action.

(D. S. Mehta)
Convener, CRC

DR, PGS & R

Enclosures:

1. Result of Comprehensive Examination
2. CRC Minutes
3. Research Plan.

Instrument Design Development Centre (IDDC)

Date: 25-02-2010

Subject: Submission of Ph. D. synopsis and list of Ph. D. thesis examiners of Mr. Jai Prakash (2006IDZ8155).

Enclosed please find the list of Ph. D. thesis examiners and two hard copies of Synopsis of **Mr. Jai Prakash (2006IDZ8155)** on his Ph. D. Synopsis entitled “**Effect of nano-materials on the electro-optical properties of deformed helix ferroelectric liquid crystals and their applications**” and CRC minutes (02) for further necessary action.

(D. S. Mehta)
Convener, CRC

DR PGS & R

Enclosures:

1. List of examiners
2. CRC minutes
3. Synopsis of the thesis (Two Copies)

Instrument Design Development Centre (IDDC)

Date: 30-04-2010

Subject: CRC meeting will be held on 05-05-2010, 4.00P.M., IDDC Head's Room.

CRC meeting will be held on May 05, 2010 (Wednesday) at 4.00 P.M. in the IDDC Head's Room. The main agenda of the meeting are the following:

1. Discussion and finalization of short-listing criteria for Ph. D. Programme for Ist Semester 2010-2011. Application details of Ph. D. candidates can be obtained from IDDC Office.
2. Finalization of the dates of written test/interview for Ph. D. Candidates.
3. Discussion on the approval of Synopsis and Panel of Examiners of Ph. D. thesis of Mr. Gyanendra Sheoran (2004IDZ8051).
4. Any other information with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

- | | |
|--|----------|
| 1. Prof. A. L. Vyas | Chairman |
| 2. Prof. M. R. Shenoy, Physics | Member |
| 3. Prof. G. S. Visweswaran, Electrical Engineering | Member |
| 4. Prof. Y. Nath, Applied Mechanics | Member |
| 5. Prof. Chandra Shakher | Member |
| 6. Prof. D. T. Shahani | Member |
| 7. Dr. N. K. Jain | Member |
| 8. Dr. I. P. Singh | Member |
| 9. Dr. Rakesh Kumar | Member |
| 10. Sh. A. K. Agarwala | Member |
| 11. Sh. S. K. Atreya | Member |
| 12. Dr. D. S. Mehta | Convener |

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 3-05-2010

Subject: CRC meeting preponed.

CRC meeting scheduled to be held on May 05, 2010 (Wednesday) at 4.00 P.M. in the IDDC Head's Room will now be held at 3.00 P.M. May 05, 2010 (Wednesday).

This change is due to Faculty Forum Meeting (General Body) scheduled to be held at 4.00 P.M. May 05, 2010 (Wednesday). The main agenda of the meeting are the following;

1. Discussion and finalization of short-listing criteria for Ph. D. Programme for Ist Semester 2010-2011. Application details of Ph. D. candidates can be obtained from IDDC Office.
2. Finalization of the dates of written test/interview for Ph. D. Candidates.
3. Discussion on the approval of Synopsis and Panel of Examiners of Ph. D. thesis of Mr. Gyanendra Sheoran (2004IDZ8051).
4. Any other information with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

1. Prof. A. L. Vyas	Chairman
2. Prof. M. R. Shenoy, Physics	Member
3. Prof. G. S. Visweswaran, Electrical Engineering	Member
4. Prof. Y. Nath, Applied Mechanics	Member
5. Prof. Chandra Shakher	Member
6. Prof. D. T. Shahani	Member
7. Dr. N. K. Jain	Member
8. Dr. I. P. Singh	Member
9. Dr. Rakesh Kumar	Member
10. Sh. A. K. Agarwala	Member
11. Sh. S. K. Atreya	Member
12. Dr. D. S. Mehta	Convener

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 06-05-2010

Subject: Minutes of CRC meeting held on 05-05-2010, at 3.00 P.M..

CRC meeting was held in the IDDC Head's room on 05-05-2010 (Wednesday), at 3.00 P.M.
The following CRC members attended the meeting;

1. Prof. A. L. Vyas	Chairman
2. Dr. N. K. Jain	Member
3. Prof. Chandra Shakher	Member
4. Dr. I. P. Singh	Member
5. Sh. S. K. Atreya	Member
6. Dr. D. S. Mehta	Convener

Other CRC members could not attend the meeting.

The minutes of the meeting are the following;

1. The short-listing criteria for admission in Ph. D. Programme for the Ist Semester 2010-2011 was discussed and the committee decided the following short-listing criteria:

General Candidates:

M. Sc. Physics with at least 73 % aggregate marks or equivalent CGPA 8.0 on a 10 point scale plus a Valid GATE Score ≥ 400 or a valid CSIR/UGC/NET Certificate with JRF and first division in preceding degrees.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 73 % aggregate marks or equivalent CGPA 8.0 on a 10 point scale and first division in preceding degrees.

OR

B. Tech. in relevant branch of Engineering or Physics with at least 78 % or equivalent CGPA of 8.7 on a 10 point scale PLUS a valid GATE score ≥ 500 or a valid CSIR/UGC/NET Certificate with JRF and first division in preceding degrees.

OBC (*non-creamy layer*) Candidates:

M. Sc. Physics with at least 73 % aggregate marks or equivalent CGPA 8.0 on a 10 point scale plus a Valid GATE Score ≥ 360 or a valid CSIR/UGC/NET Certificate with JRF and first division in preceding degrees.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 73 % aggregate marks or equivalent CGPA 8.0 on a 10 point scale and first division in preceding degrees.

OR

B. Tech. in relevant branch of Engineering or Physics with at least 78 % or equivalent CGPA of 8.7 on a 10 point scale PLUS a valid GATE score ≥ 450 or a valid CSIR/UGC/NET Certificate with JRF and first division in preceding degrees.

SC/ST/PH Candidates:

M. Sc. Physics with at least 68 % aggregate marks or equivalent CGPA of 7.3 on a 10 point scale Plus a Valid GATE Score ≥ 300 or a valid CSIR/UGC/NET Certificate with JRF and first division in preceding degrees.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 68 % aggregate marks or equivalent CGPA of 7.3 on a 10 point scale and first division in preceding degrees.

OR

B. Tech. in relevant branch of Engineering or Physics with at least 73 % or equivalent CGPA of 8.0 on a 10 point scale PLUS a valid GATE score ≥ 350 or a valid CSIR/UGC/NET Certificate with JRF and first division in preceding degrees.

B. Techs. From IITs:

For all B. Techs. from IITs: as per Institute Criteria (Please see information Brochure Page. No. 4) and first division in preceding degrees.

Part-Time Candidates:

As per Institute norms, but the short-listing criteria will be as above, except for the requirement of GATE Score. There will be no direct admission to the above Programme.

NOTE:

Candidates, whose M. Tech. / M. Sc. results are not yet declared, will be provisionally short-listed for the interview, provided they have secured the necessary aggregate marks or equivalent CGPA in the results declared so far for the qualifying degree.

2. It was decided that the test /interview for Ph. D. admission will be held on 24th May 2010 (Monday) 9.30 A. M. Onwards.

Venue: Instrument Design Development Centre (IDDC), Room No. WS -145 (Office of Head IDDC).

3. The SRC's report of **Mr. Gyanendra Sheoran (2005IDZ8171)** on his Ph. D. Synopsis entitled "**Scientific and Industrial Applications of Digital Holography**" and the appointment of the thesis examiners were discussed in the meeting and CRC recommends that the Synopsis and the approved list of examiners be forwarded to PG Section for further necessary action.

It was further decided that in future to maintain the confidentiality of the Ph.D. thesis examiners the CRC decided the list of Ph.D. thesis examiners should be opened and discussed and will be closed in CRC meeting itself.

4. Discussion regarding the issuing of CRC minutes to Ph.D. students: CRC convener informed that during the past several days some Ph.D. students have been demanding CRC minutes. The CRC discussed the issue and decided that CRC minutes can not be given to Students.

Further, it was also noted that some research scholars have been coming directly to CRC convener for their SRC or related administrative issues. The matter was discussed in the CRC and CRC decided that every paper coming from Research Scholars should be forwarded by their respective Supervisors and all the correspondences should be made through the OFFICE of Head IDDC.

5. A note regarding the admission of past Ph. D. candidates was received from Mr. S. K. Atreya the CRC decided that issue will be discussed in the coming CRC meeting.

The meeting ended with thanks to the chair.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 10-05-2010

Subject: Moderation Committee/PEC meeting on 11-05-2010, 11.00 A. M., IDDC Committee Room.

Moderation committee and PEC meeting will be held on 11-05-2010, (Tuesday) at 11.00 A.M. The meeting will be held in the IDDC Committee Room.

Agenda of the meeting:

1. **Moderation of Grades.**
2. **Discussion and finalization of short-listing criteria for M.Tech. (Instrument Technology) Programme for Ist Semester 2010-2011.**
3. **Finalization of the dates of written test/interview for Ph. D. Candidates.**

All Faculty/PEC/CRC members are requested to attend the meeting.

PEC Members

1. Prof. D. T. Shahani	Chairman
2. Prof. A. L. Vyas	Member
3. Sh. A. K. Agarwala	Member
4. Prof. Chandra Shakher	Member
5. Dr. Rakesh Kumar	Member
6. Dr. I. P. Singh	Member
7. Dr. N. K. Jain	Member
8. Sh. S. K. Atreya	Member
9. Prof. G. S. Visweswaran, Electrical Engineering	Member
10. Prof. Anurag Sharma, Dept. of Physics	Member
11. Prof. S. K. Koul, CARE	Member
12. Prof. K. Gupta, Dept. Mech. Engg.	Member
13. Dr. D. S. Mehta	Member

D. S. Mehta)
Convener, CRC

Instrument Design Development Centre

Date: 21-05-2010

Subject: Test/ Interview of Ph. D. Candidates on 24-05-2010.

Ph. D. Test/Interview of Candidates under QIP programme on 19th January 2009 at 4.00 P.M. in the IDDC Head's Room. Applications of short-listed candidates may be seen in IDDC Office.

All CRC Members and Faculty of IDDC are requested to participate in the interview.

Convener, CRC

(D. S. Mehta)

IDDC Notice Board

Instrument Design Development Centre

Date: 21-05-2010

Subject: Test/ Interview of Ph. D. Candidates on 24-05-2010, 9.30 A.M. onwards.

Test/Interview of Ph. D. Candidates will be held on Monday 24th, May 2010 at 9.30 A. M. onwards in the IDDC Head's Room. Applications of short-listed candidates may be seen in IDDC Office.

All CRC Members and Faculty of IDDC are requested to participate in the interview.

Convener, CRC

(D. S. Mehta)

All Faculty

IDDC Notice Board

Instrument Design Development Centre (IDDC)

Date: 25-05-2010

Subject: Minutes of CRC meeting held on 25-05-2010 (Tuesday), 3.00 P. M., IDDC Head's Room.

CRC meeting was held in the IDDC Head's room on 25-05-2010 (Tuesday), 3.00 P. M. The following CRC members attended the meeting;

1. Prof. A. L. Vyas	Chairman
2. Prof. Chandra Shakher	Member
3. Prof. D. T. Shahani	Member
4. Sh. A. K. Agarwala	Member
5. Sh. S. K. Atreya	Member
6. Dr. I. P. Singh	Member
7. Dr. D. S. Mehta	Convener

Prof. G. S. Visweswaran, (Dept. of Electrical Engineering), Prof. M. R. Shenoy (Dept. of Physics), Prof. Y. Nath (Applied Mechanics), and Dr. Rakesh Kumar (IDDC) could not attend the meeting.

The minutes of the meeting are the following;

1. In view of the non-availability of Institute fellowship seats in the centre the CRC decides that the request for the allocation of two additional seats should be made from dean PGSR
2. With immediate effect the CRC decided that in the centre each faculty should have a maximum of two Ph. D. students with fellowship (Institute/ CSIR/UGC/QIP) and at a time with a maximum of 3.5 students including part time.
3. Regarding the Ph. D students whose Ph. D. supervisors has retired in the recent past a detail research plan be requested from the Ph. D. students and their respective supervisors to put up the CRC for discussion and fixing of additional supervisors from IDDC/ Institute.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: July 29, 2010

Sub.: Extension of Institute Assistantship of full-time Ph. D. students of IDDC.

Enclosed please find the request for the extension of Institute Assistantship along with the minutes (Minute No. 3) of CRC of the following full-time Ph. D. students of IDDC for further necessary action.

1. Mr. Ranjeet Kumar (2005 IDZ 8275)
2. Tulsi Anna (2006 IDZ 8154)
3. Mr. Manoj Kumar Singh (2005 IDZ 8274)

(D. S. Mehta)
Convener, CRC

DR, PGS & R

Instrument Design Development Centre (IDDC)

Date: July 29, 2010

To,
The Dean,
PG Section,
Indian Institute of Technology Delhi

Sub.: Grades of Ph. D. students of IDDC.

Attached please find the grades of the progress report of Ph. D. Students of IDDC alongwith the minutes of CRC for further necessary action.

(D. S. Mehta)
Convener, CRC

Enclosures:

1. Progress report.
2. CRC minutes.

Instrument Design Development Centre (IDDC)

Date: July 29, 2010

Sub.: Extension of CSIR fellowship of Mr. Jai Prakash (2006IDZ8155) Ph. D. student of IDDC.

Enclosed please find the request for the extension of CSIR fellowship of Mr. Jai Prakash (2006IDZ8155) along with the minutes (Minute No. 2) of CRC of the following full-time Ph. D. students of IDDC for further necessary action.

1. Mr. Jai Prakash (2006IDZ8155).

(D. S. Mehta)
Convener, CRC

DR, PGS & R

Instrument Design Development Centre (IDDC)

Date: 09-08-2010

Subject: CRC meeting on August 19, 2010.

The next CRC meeting will be held on August 19, 2010 (Thursday) at 4.00 P.M. in the IDDC Committee Room.

1. Discussion on the extension of Institute Assistantship of the following Ph. D. students:
 - i. Mr. Anuj Kumar (2005 IDZ 8273).
2. Discussion on the approval of research plan of Mr. Hardik Pandya (2008 IDZ 8125).
3. Discussion on the letter received from Dean PGS & R regarding the addition of permanent faculty as supervisor of the Ph. D. students enrolled with retired faculty.
4. Any other information with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

- | | |
|--|----------|
| 1. Prof. A. L. Vyas | Chairman |
| 2. Prof. M. R. Shenoy, Physics | Member |
| 3. Prof. G. S. Visweswaran, Electrical Engineering | Member |
| 4. Prof. Y. Nath, Applied Mechanics | Member |
| 5. Prof. Chandra Shakher | Member |
| 6. Prof. D. T. Shahani | Member |
| 7. Dr. N. K. Jain | Member |
| 8. Dr. I. P. Singh | Member |
| 9. Dr. Rakesh Kumar | Member |
| 10. Sh. A. K. Agarwala | Member |
| 11. Sh. S. K. Atreya | Member |
| 12. Dr. D. S. Mehta | Convener |

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 21-07-2010

Subject: CRC meeting on 23-07-2010 (Friday), 12.00 Noon in I DDC Committee Room.

Meeting of CRC is scheduled to be held on July 23, 2010 (Friday) at 12.00 Noon. The meeting will be held in the IDDC Committee Room to discuss the following agenda:

9. Discussion on the Progress report of PhD Students.
10. Discussion on the extension of CSIR fellowship of Mr Jai Prakash Rana for another semester.
11. Extension of Assistantship beyond a period of 4 years
12. Request for the Conversion of Status from Full-Time to Part-Time.
13. Request for the conversion of Part-Time status to Full-Time status with Assistance ship
14. Discussion of the letter from Sh. L.K. Das regarding the addition of permanent faculty as supervisor
15. Any other information with the permission of the Chairman.

All CRC members are requested to make it convenient to attend the meeting.

(A.L.Vyas)
Chairman,
CRC

All CRC Members

- | | |
|--|----------|
| 1. Prof. A. L. Vyas | Chairman |
| 2. Prof. M. R. Shenoy, Physics | Member |
| 3. Prof. G. S. Visweswaran, Electrical Engineering | Member |
| 4. Prof. Y. Nath, Applied Mechanics | Member |
| 5. Prof. Chandra Shakher | Member |
| 6. Prof. D. T. Shahani | Member |
| 7. Dr. N. K. Jain | Member |
| 8. Dr. I. P. Singh | Member |
| 9. Dr. Rakesh Kumar | Member |
| 10. Sh. A. K. Agarwalla | Member |
| 11. Sh. S. K. Atreya | Member |
| 12. Dr. D. S. Mehta | Convener |

Instrument Design Development Centre (IDDC)

Date: 26-07-2010

Subject: Minutes of CRC meeting held on 23-07-2010 (Friday), 12.00 Noon in the IDDC Committee Room.

CRC meeting was held in the Committee Room of IDDC on 23-07-2010 (Friday), 12.00 Noon. The following members attended the meeting;

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| 1. Prof. A. L. Vyas | Chairman |
|---------------------|----------|

- | | |
|-------------------------|--------|
| 2. Prof Chandra Shakher | Member |
| 3. Dr. I. P. Singh | Member |
| 4. Sh. A. K. Agarwala | Member |

Other members could not attend the meeting due to their pre-occupation.

The following are the minutes of the meeting:

4. Discussion on the Progress report of PhD Students.

The progress reports of The Research Scholars were discussed and approved.

It was also pointed out that three Research scholars have not submitted the reports. It was decided to inform their supervisors.

5. Extension of CSIR fellowship of Mr Jai Prakash Rana (2006IDZ8155) for another semester.

The CRC decided to recommend for the extension of the CSIR fellowships as per rules.

6. Extension of Institute Assistantship beyond a period of four years

The request for the extension of the Institute Assistantship from the following students was discussed:

- | | | |
|------|-------------------|-------------|
| i. | Ranjeet Kumar | 2005IDZ8275 |
| ii. | Tulsi Anna | 2006IDZ8154 |
| iii. | Manoj Kumar Singh | 2005IDZ8274 |

It was decided to recommend their cases for further extension of the Institute Assistantship for another Semester.

Contd.... 2

7. Request from Ms Sutapa Pati (2008IDZ8128) for the Conversion of Status from Part-Time to Full-Time.

The CRC observed that she is not yet entitled for the conversion from part-time to full time as she has not cleared the Comprehensive Examination.

Further CRC noted that the request has been sent directly (without the signature of the supervisor). She is therefore advised that in future all communications be sent through the Supervisor.

8. Discussion of the letter from Sh. L.K. Das regarding the addition of permanent faculty as supervisor

As per the decision of CRC held on 25.5.2010, Sh. L. K. Das was requested to suggest the names of regular faculty as additional supervisors for his PhD students. Sh. L. K. Das has replied that he does not see any need for another supervisor. The letter was discussed in CRC. The CRC re-iterated that he may be requested again to give the names of appropriate supervisors.

In the mean time a letter has been received from Dean PGS&R regarding the appointment of regular faculty as an additional supervisor for the students who are being supervised by retired. The same has been forwarded to Sh. L. K. Das and Sh. S. K. Sud.

9. Request for the conversion from full-time to part-time Ph. D. was received from the following Ph. D. students;

1. Bhaskerkumar Vinodchandra Thakker (2007 IDZ 8202).
2. Mumtaz Ahmed (2007 IDZ 8223).
3. Sheo Shanker Prasad (2007 IDZ 8204)

The committee discussed the request and recommends the conversion from full-time to part-time Ph. D. of above students as per Institute Norms and the same be forwarded to PG section for necessary action.

The meeting ended with a vote of thanks to the Chair

(A. L. Vyas)
Chairman,
CRC

All CRC members

1. Prof. A. L. Vyas	Chairman
2. Prof. M. R. Shenoy, Physics	Member
3. Prof. G. S. Visweswaran, Electrical Engineering	Member
4. Prof. Y. Nath, Applied Mechanics	Member
5. Prof. Chandra Shakher	Member
6. Prof. D. T. Shahani	Member
7. Dr. N. K. Jain	Member
8. Dr. I. P. Singh	Member
9. Dr. Rakesh Kumar	Member
10. Sh. A. K. Agarwalla	Member
11. Sh. S. K. Atreya	Member
12. Dr. D. S. Mehta	Convener

Instrument Design Development Centre (IDDC)

Date: 18-08-2010

Attached please find the request from the following Ph. D. students forwarded by their respective Supervisors regarding the conversion from full-time research scholar to part-time along with the CRC minutes (Minute No. 9) of CRC for further necessary action.

1. Bhaskerkumar Vinodchandra Thakker (2007 IDZ 8202).
2. Mumtaz Ahmed (2007 IDZ 8223).
3. Sheo Shanker Prasad (2007 IDZ 8204)

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 26-07-2010

Subject: Addendum to the minutes of CRC issued on 26-07-2010.

The following item was also discussed in the CRC meeting held in the Committee Room of IDDC on 23-07-2010 (Friday), 12.00 Noon.

9. Request for the conversion from full-time to part-time Ph. D. was received from the following Ph. D. students;

1. Bhaskerkumar Vinodchandra Thakker (2007 IDZ 8202).
2. Mumtaz Ahmed (2007 IDZ 8223).
3. Sheo Shanker Prasad (2007 IDZ 8204)

The committee discussed the request and recommends the conversion from full-time to part-time Ph. D. of above students as per Institute Norms and the same be forwarded to PG section for necessary action.

The meeting ended with a vote of thanks to the Chair

(A. L. Vyas)
Chairman,
CRC

All CRC members

- | | |
|--|----------|
| 1. Prof. A. L. Vyas | Chairman |
| 2. Prof. M. R. Shenoy, Physics | Member |
| 3. Prof. G. S. Visweswaran, Electrical Engineering | Member |
| 4. Prof. Y. Nath, Applied Mechanics | Member |
| 5. Prof. Chandra Shakher | Member |
| 6. Prof. D. T. Shahani | Member |
| 7. Dr. N. K. Jain | Member |
| 8. Dr. I. P. Singh | Member |
| 9. Dr. Rakesh Kumar | Member |
| 10. Sh. A. K. Agarwalla | Member |
| 11. Sh. S. K. Atreya | Member |
| 12. Dr. D. S. Mehta | Convener |

Date: 16-08-2010

Subject: CRC meeting on August 19, 2010, 4.30 P.M.

Due to faculty presentations the CRC meeting scheduled to be held on August 19, 2010 (Thursday) at 4.00 P.M. will now be held on August 19, 2010, 4.30 P.M. (Thursday).

1. Discussion on the extension of Institute Assistantship of the following Ph. D. students:
 - i. Mr. Anuj Kumar (2005 IDZ 8273).
4. Discussion on the approval of research plan of Mr. Hardik Pandya (2008 IDZ 8125).
5. Discussion on the letter received from Dean PGS & R regarding the addition of permanent faculty as supervisor of the Ph. D. students enrolled with retired faculty.
4. Any other information with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

- | | |
|--|----------|
| 1. Prof. A. L. Vyas | Chairman |
| 2. Prof. M. R. Shenoy, Physics | Member |
| 3. Prof. G. S. Visweswaran, Electrical Engineering | Member |
| 4. Prof. Y. Nath, Applied Mechanics | Member |
| 5. Prof. Chandra Shakher | Member |
| 6. Prof. D. T. Shahani | Member |
| 7. Dr. N. K. Jain | Member |
| 8. Dr. I. P. Singh | Member |
| 9. Dr. Rakesh Kumar | Member |
| 10. Sh. A. K. Agarwala | Member |
| 11. Sh. S. K. Atreya | Member |
| 12. Dr. D. S. Mehta | Convener |

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 20-08-2010

Subject: Minutes of CRC meeting held on August 19, 2010, 4.30 P.M.

CRC meeting was held in the Committee Room of IDDC on August 19, 2010, 4.30 P.M.
The following members attended the meeting;

- | | |
|-------------------------------------|----------|
| 1. Prof. A. L. Vyas | Chairman |
| 2. Prof. M. R. Shenoy, Physics | Member |
| 3. Prof. Y. Nath, Applied Mechanics | Member |
| 4. Prof. Chandra Shakher | Member |
| 5. Dr. N. K. Jain | Member |
| 6. Dr. I. P. Singh | Member |

7. Sh. A. K. Agarwala	Member
8. Sh. S. K. Atreya	Member
9. Dr. D. S. Mehta	Convener

Other members could not attend the meeting due to their pre-occupation.
The following are the minutes of the meeting:

1. Extension of Institute Assistantship Mr. Anuj Kumar (2005 IDZ 8273).

The request for the extension of the Institute Assistantship from Mr. Anuj Kumar (2005 IDZ 8273) Ph. D. student of IDDC was received and discussed. It was decided to recommend his case for further extension of the Institute Assistantship for another Semester.

2. Approval of Research Plan of Mr. Hardik Pandya (2008 IDZ 8125).

The minutes of Comprehensive examination and research plan submitted by Mr. Hardik Pandya (2008 IDZ 8125) to SRC held on 02-08-2010 was presented to CRC and the CRC recommended that the same be forwarded to PG section for further necessary action.

3. Apoinmtment Supervisor of the following Ph. D. students:

1. Mr. Huidram Lokeshwar Singh (PT)
2. Ms. Sutapa Pati (PT)
3. Mr. Sugandh Malhotra (PT)

A letter received from Dean PGS & R regarding the addition of permanent faculty as supervisor of the Ph. D. students enrolled with retired faculty (Sh. L. K. Das and Sh. S. K. Sud) was discussed. CRC requested Sh. L. K. Das to suggest the permanent faculty as main Supervisor of above students. Sh. L. K. Das suggested four names (Dr. Vijay Kumar Charier, RDAT), Prof. P.L. Dhar, Mechanical Engineering), and Prof. Rukmani B. Nair, & Prof. Anuradha Sharma from Humanities & Social Sciences). CRC decided Dr, Vijay Kumar Charier, RDAT should be requested for the appointment of main supervisor of the above three Ph. D. students and the students be transferred to RDAT. CRC authorised Chairman CRC and the Head IDDC together to take the final the final decision in these matters and should inform CRC the final decision.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 20-08-2010

Subject: Minutes of CRC meeting held on August 19, 2010, 4.30 P.M.

CRC meeting was held in the Committee Room of IDDC on August 19, 2010, 4.30 P.M.
The following members attended the meeting;

1. Prof. A. L. Vyas	Chairman
2. Prof. M. R. Shenoy, Physics	Member
3. Prof. Y. Nath, Applied Mechanics	Member
4. Prof. Chandra Shakher	Member
5. Dr. N. K. Jain	Member
6. Dr. I. P. Singh	Member
7. Sh. A. K. Agarwala	Member
8. Sh. S. K. Atreya	Member
9. Dr. D. S. Mehta	Convener

Other members could not attend the meeting due to their pre-occupation.
The following are the minutes of the meeting:

4. Extension of Institute Assistantship Mr. Anuj Kumar (2005 IDZ 8273).

The request for the extension of the Institute Assistantship from Mr. Anuj Kumar (2005 IDZ 8273) Ph. D. student of IDDC was received and discussed. It was decided to recommend his case for further extension of the Institute Assistantship for another Semester and the same be forwarded to PG section for further necessary action.

5. Approval of Research Plan of Mr. Hardik Pandya (2008 IDZ 8125).

The minutes of Comprehensive examination and research plan submitted by Mr. Hardik Pandya (2008 IDZ 8125) to SRC held on 02-08-2010 was presented to CRC and the CRC recommended that the same be forwarded to PG section for further necessary action.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 20-08-2010

Subject: Minutes of CRC meeting held on August 19, 2010, 4.30 P.M.

CRC meeting was held in the Committee Room of IDDC on August 19, 2010, 4.30 P.M.
The following members attended the meeting;

1. Prof. A. L. Vyas	Chairman
2. Prof. M. R. Shenoy, Physics	Member
3. Prof. Y. Nath, Applied Mechanics	Member
4. Prof. Chandra Shakher	Member
5. Dr. N. K. Jain	Member
6. Dr. I. P. Singh	Member
7. Sh. A. K. Agarwala	Member
8. Sh. S. K. Atreya	Member
9. Dr. D. S. Mehta	Convener

Other members could not attend the meeting due to their pre-occupation.
The following are the minutes of the meeting:

1. Extension of Institute Assistantship Mr. Anuj Kumar (2005 IDZ 8273)

The request for the extension of the Institute Assistantship from Mr. Anuj Kumar (2005 IDZ 8273) Ph. D. student of IDDC was received and discussed. It was decided to recommend his case for further extension

of the Institute Assistantship for another Semester and the same be forwarded to PG section for further necessary action.

2. Approval of Research Plan of Mr. Hardik Pandya (2008 IDZ 8125)

The minutes of Comprehensive examination and research plan submitted by Mr. Hardik Pandya (2008 IDZ 8125) to SRC held on 02-08-2010 was presented to CRC and the CRC recommended that the same be forwarded to PG section for further necessary action.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: August 25, 2010

Sub.: Extension of Institute Assistantship of Mr. Anuj Kumar (2005 IDZ 8273) Ph. D. student of IDDC.

Enclosed please find the request for the extension of the Institute Assistantship from Mr. Anuj Kumar (2005 IDZ 8273) Ph. D. student of IDDC along with the minutes (Minute No. 1) of CRC meeting for further necessary action.

(D. S. Mehta)
Convener, CRC

DR, PGS & R

Instrument Design Development Centre (IDDC)

Date: August 25, 2010

Sub.: Research plan of **Mr. Hardik Pandya (2008 IDZ 8125)**.

Attached please find the result of the comprehensive examination of **Mr. Hardik Pandya (2008 IDZ 8125)** and copy of the research plan along with the minutes (Minute No. 02) of CRC further necessary action.

(D. S. Mehta)
Convener, CRC

DR, PGS & R

Enclosures:

- 1.Result of Comprehensive Examination
- 2.CRC Mintutes
- 3.Research Plan.

Instrument Design Development Centre (IDDC)

Date: 01-10-2010

Attached please find the request from the following Ph. D. student forwarded by his Supervisor regarding the conversion from full-time research scholar to part-time along with the CRC minutes (Minute No. 9) of CRC for further necessary action.

1. Bhaskerkumar Vinodchandra Thakker (2007 IDZ 8202).

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 21-10-2010

Attached please find the request from the following Ph. D. student forwarded by his Supervisor regarding the conversion from full-time research scholar to part-time along with the CRC minutes (Minute No. 9) of CRC for further necessary action.

1. Mumtaz Ahmed (2007 IDZ 8223).

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 27-10-2010

Subject: CRC meeting on Nov. 04, 2010, 4.0 P.M.

CRC meeting will be held on Nov. 04, 2010 (Thursday) at 4.00 P.M. in the IDDC Head's Room. The main agenda of the meeting are the following;

1. Discussion on the approval of research plan of Mr. Arunandan Kumar (2008 IDZ 8126).
2. Discussion on the addition of permanent faculty as supervisor of the Mr. Huidram Lokeswar Singh (Ph. D. student IDDC) enrolled with retired faculty.
3. Discussion on the request of Mr. V.C. Pandya (Ph. D. student IDDC under sponsored category) for Institute Assistantship.
4. Any other information with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

1. Prof. A. L. Vyas	Chairman
2. Prof. M. R. Shenoy, Physics	Member
3. Prof. G. S. Visweswaran, Electrical Engineering	Member
4. Prof. Y. Nath, Applied Mechanics	Member
5. Prof. Chandra Shakher	Member
6. Prof. D. T. Shahani	Member
7. Dr. N. K. Jain	Member
8. Dr. I. P. Singh	Member
9. Dr. Rakesh Kumar	Member
10. Sh. A. K. Agarwala	Member
11. Sh. S. K. Atreya	Member
12. Dr. D. S. Mehta	Convener

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 28-10-2010

Attached please find the request from the following Ph. D. student forwarded by his Supervisor regarding the conversion from full-time research scholar to part-time along with the CRC minutes (Minute No. 9) of CRC for further necessary action.

1. Prof. Sheo Shankar Prasad (2007 IDZ 8204).

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 15-11-2010

Subject: CRC meeting on Nov. 19, 2010, 12.00 Noon.

CRC meeting will be held on Nov. 19, 2010 (Friday) at 12.00 Noon in the IDDC Head's Room. The main agenda of the meeting are the following;

1. Formulation and approval of SRC of Ms. Madhu Jain part-time Ph. D. student of IDDC.
2. Discussion on the addition of permanent faculty as supervisor of the Mr. Huidram Lokeswar Singh (Ph. D. student IDDC) enrolled with retired faculty.
3. Discussion on the request of Mr. V.C. Pandya (Ph. D. student IDDC under sponsored category) for Institute Assistantship.
4. Discussion on the approval of research plan of Mr. Arunandan Kumar (2008 IDZ 8126) part-time Ph.D. student of IDDC.
5. Discussion on the approval of Research Plan of Ms. Shobhana Sharma (2009 IDZ 8217).
6. Discussion on the request for the conversion from Full-Time to Part-Time Ph. D. of Mr. Ranjeet Kumar.
7. Any other information with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

1. Prof. A. L. Vyas	Chairman
2. Prof. M. R. Shenoy, Physics	Member
3. Prof. G. S. Visweswaran, Electrical Engineering	Member
4. Prof. Y. Nath, Applied Mechanics	Member
5. Prof. Chandra Shakher	Member
6. Prof. D. T. Shahani	Member
7. Dr. N. K. Jain	Member
8. Dr. I. P. Singh	Member
9. Dr. Rakesh Kumar	Special Invitee
10. Sh. A. K. Agarwala	Member
11. Sh. S. K. Atreya	Member
12. Dr. D. S. Mehta	Convener

(D. S. Mehta)

Instrument Design Development Centre (IDDC)

Date: 23-11-2010

Subject: Draft Minutes of CRC meeting held on Nov. 19, 2010, 12.00 at Noon.

CRC meeting was held on Nov. 19, 2010 (Friday) at 12.00 Noon in the IDDC Head's Room. The following members attended the meeting;

1. Prof. A. L. Vyas	Chairman
2. Prof. Y. Nath, Applied Mechanics	Member
3. Prof. Chandra Shakher	Member
4. Dr. N. K. Jain	Member
5. Sh. A. K. Agarwala	Member
6. Dr. D. S. Mehta	Convener

Other members could not attend the meeting. The following are the minutes of the meeting.

1. The appointment of Supervisors and formulation of Student Research Committee (SRC) of Ms. Madhu Jain part-time Ph. D. student of IDDC was discussed and the CRC recommends that the same be forwarded to PG section for necessary action.
2. CRC discussed the addition of permanent faculty as main supervisor of Mr. Huidram Lokeswar Singh (Ph. D. student IDDC) enrolled with presently retired faculty. CRC decided that as per Institute Rules a permanent faculty should be appointed as main supervisor in such cases. CRC decided that Sh. L. K. Das is suggested to give the name of a permanent faculty member to be appointed as main supervisor of Mr. Huidram Lokeswar Singh (Part-time Ph. D. student) within two weeks. CRC further decided that in case the suggestion does not come within next two weeks, Dr. V. M. Charier be requested to be the main supervisor of Mr. Huidram Lokeswar Singh.
3. The request of Mr. V.C. Pandya (Ph. D. student IDDC under sponsored category) for Institute Assistantship was discussed. The CRC did not recommend the request of Mr. V. C. Pandya.
4. The research plan submitted by **Mr. Arunandan Kumar (2008 IDZ 8126)** to SRC and duly approved by SRC was presented to CRC and the CRC recommended the same be forwarded to PGS & R section for further necessary action.
5. The research plan submitted by **Ms. Shobhana Sharma (2009 IDZ 8217)** to SRC and duly approved by SRC was presented to CRC and the CRC recommended the same be forwarded to PGS & R section for further necessary action.
6. Conversion from full-time research scholar (Institute Assistantship) to part-time of **Mr. Ranjeet Kumar** was discussed in the CRC. The CRC agreed to his request and recommended the same be forwarded to PGS & R section for further necessary action.

The meeting ended with thanks to the Chair.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 23-11-2010

Attached please find the request Mr. Ranjeet Kumar (**2005IDZ8275**) Ph. D. student of IDDC, forwarded by his Supervisors regarding the conversion from full-time research scholar to part-time along with the CRC minutes (Minute No. 6) of CRC for further necessary action.

(D. S. Mehta)
Convener, CRC

DR PGS & R

Instrument Design Development Centre (IDDC)

Date: Nov. 23, 2010

Sub.: Research plan of **Mr. Arunandan Kumar (2008 IDZ 8126)**

Attached please find the result of the comprehensive examination of **Mr. Arunandan Kumar (2008 IDZ 8126)** and copy of the research plan along with the minutes (Minute No. 04) of CRC for further necessary action.

(D. S. Mehta)
Convener, CRC

DR, PGS & R

Enclosures:

- 1.Result of Comprehensive Examination
- 2.CRC Mintutes
- 3.Research Plan.

Instrument Design Development Centre (IDDC)

Date: Nov. 23, 2010

Sub.: Research plan of **Ms. Shobhana Sharma (2009 IDZ 8217)**

Attached please find the result of the comprehensive examination of **Ms. Shobhana Sharma (2009 IDZ 8217)** and copy of the research plan along with the minutes (Minute No. 05) of CRC for further necessary action.

(D. S. Mehta)
Convener, CRC

DR, PGS & R

Enclosures:

- 1.Result of Comprehensive Examination
- 2.CRC Mintutes
- 3.Research Plan.

Instrument Design Development Centre (IDDC)

Date: Dec. 2, 2008

Enclosed please find the duly filled application form for the appointment of Supervisors and formulation of Student Research Committee (SRC) of **Mr. Sheo Shanker Prasad (2007 IDZ 8204)** Ph. D. scholar IDDC.

(D. S. Mehta)
Convener, CRC

DR, PGS & R

Enclosures:

1. Application form
2. CRC minutes (Minute 2).

Instrument Design Development Centre (IDDC)

Date: 25-11-2010

Subject: CRC meeting on 29-11-2010, 11.30 A. M., IDDC Committee Room.

An urgent CRC meeting will be held on 29-11-2010, 11.30 A. M., IDDC Committee Room

Agenda of the meeting:

1. Discussion and finalization of short-listing criteria for Ph.D. Programme for IInd Semester 2010-2011.
2. Finalization of the dates of written test/interview for Ph. D. Candidates.
3. Any other information with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

1. Prof. A. L. Vyas	Chairman
2. Prof. M. R. Shenoy, Physics	Member
3. Prof. G. S. Visweswaran, Electrical Engineering	Member
4. Prof. Y. Nath, Applied Mechanics	Member
5. Prof. Chandra Shakher	Member
6. Prof. D. T. Shahani	Member
7. Dr. N. K. Jain	Member
8. Dr. I. P. Singh	Member
9. Dr. Rakesh Kumar	Special Invitee
10. Sh. A. K. Agarwala	Member
11. Sh. S. K. Atreya	Member
12. Dr. D. S. Mehta	Convener

D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 20-12-2010

Subject: Minutes of CRC meeting held on Dec., 8, 2010, 10.00 A. M.

CRC meeting was held on Dec. 8, 2010 (Wednesday) at 10.00 A.M.in the IDDC Head's Room. The following members attended the meeting;

1. Prof. A. L. Vyas	Chairman
2. Prof. Chandra Shakher	Member
3. Dr. N. K. Jain	Member
4. Sh. A. K. Agarwala	Member
5. Prof. D. T. Shahani	Member
6. Sh. S. K. Atreya	Member
7. Dr. D. S. Mehta	Convener

Other members could not attend the meeting. The following are the minutes of the meeting.

1. Interview for the selection of Ph.D. candidates for IInd semester 2010-2011 was conducted and the following candidates were selected provisionally.

1. Varun Kumar - UGC fellowship
2. Raj Kumar Garg - Part-Time

2. The SRC's report of **Manoj Kumar Singh** on his Ph. D. Synopsis entitled "**Bioclimatic Design of Built Environment for North East India.**" and the appointment of the thesis examiners were discussed in the meeting and CRC recommends that the Synopsis and the approved list of examiners be forwarded to PG Section for further necessary action.

Meeting ended with thanks to the chair.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 20-12-2010

Subject: CRC meeting on 23-12-2010, IDDC Head's Room.

An urgent CRC meeting will be held on 23-12-2010, 4.00 P.M. IDDC Head's Room.

Agenda of the meeting:

1. Discussion on the progress report of IInd semester 2010-2011 of Ph. D. students of IDDC.
2. Any other information with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

1. Prof. A. L. Vyas	Chairman
2. Prof. M. R. Shenoy, Physics	Member
3. Prof. G. S. Visweswaran, Electrical Engineering	Member
4. Prof. Y. Nath, Applied Mechanics	Member
5. Prof. Chandra Shakher	Member
6. Prof. D. T. Shahani	Member
7. Dr. N. K. Jain	Member
8. Dr. I. P. Singh	Member
9. Dr. Rakesh Kumar	Special Invitee
10. Sh. A. K. Agarwala	Member
11. Sh. S. K. Atreya	Member
12. Dr. D. S. Mehta	Convener

D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 22-12-2010

Subject: CRC meeting on 23-12-2010, IDDC Head's Room at 5.00 P.M.

Due to some unavoidable circumstances the CRC meeting scheduled to be held on 23-12-2010, at 4.00 P.M. IDDC Head's Room is postponed.

The CRC meeting will now be held at 5.00 P.M. 23-12-2010 in IDDC Head's room.

Agenda of the meeting:

1. Discussion on the progress report of IInd semester 2010-2011 of Ph. D. students of IDDC.
2. Any other information with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

1. Prof. A. L. Vyas	Chairman
2. Prof. M. R. Shenoy, Physics	Member
3. Prof. G. S. Visweswaran, Electrical Engineering	Member
4. Prof. Y. Nath, Applied Mechanics	Member
5. Prof. Chandra Shakher	Member
6. Prof. D. T. Shahani	Member
7. Dr. N. K. Jain	Member
8. Dr. I. P. Singh	Member
9. Dr. Rakesh Kumar	Special Invitee
10. Sh. A. K. Agarwala	Member
11. Sh. S. K. Atreya	Member
12. Dr. D. S. Mehta	Convener

D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 27-12-2010

Subject: Minutes of CRC meeting on 23-12-2010, 5.00 P. M., IDDC Head's Room.

CRC meeting was held on December 23, 2010 (Thursday) at 5.00 P. M. Following CRC members attended the meeting.

1. Prof. A. L. Vyas	Chairman
2. Prof. Chandra Shakher	Member
3. Dr. N. K. Jain	Member
4. Dr. D. S. Mehta	Convener

Other members could join the meeting. The following are the minutes of the meeting.

1. Progress reports of Ph. D. students of IDDC for the Ist Semester 2010 – 2011

Progress reports submitted by the Ph. D. students of IDDC for the Ist Semester 2010 – 2011 were received and discussed in the CRC and as per the recommendations of their respective supervisors all the reports were found satisfactory. CRC recommended that the grades of all the students be forwarded to PG section for further necessary action.

2. Extension of Institute Assistantship beyond four years:

Extension of Institute Assistantship was received and discussed in the meeting:

1. Ms. Tulsi Anna (2006 IDZ 8154)
2. Mr. P. Packiam (2006 IDZ 8191)

With the recommendation of their respective supervisors that the students work was satisfactory and some additional work remained, CRC recommends the extension of Institute Fellowship for the aforementioned Ph. D. students for another six months in order to complete their Ph. D. work. The progress report of the students with recommendations of the supervisor are attached for necessary action.

3. It was also decided that all the Ph. D. students must give open seminar every year after passing the comprehensive examination. For extension beyond four years, a detailed consolidated report routed through SRC and seminar every semester 3 weeks prior to registration will be required for consideration.

4. Request from Sh. L. K. Das for change of external expert in the SRC of Ms Sutapa Pati.

The request for the change of external expert was discussed and recommended the change of external expert. Prof. Anuradha Sharma, HSS who was external expert of Ms. Sutapa Pati is no longer associated with IIT Delhi. In view of this the external expert of Ms. Sutapa Pati should be changed from Prof. Anuradha Sharma to Prof. Amulya Khurana, HSS.

5. Addition of regular faculty as supervisor for the PhD student Mr. Huidram Lockswer Singh (2007IDZ8182)

The CRC discussed the suggestion of Shri L.K.Das for inclusion of Prof. P.V.M. Rao as external expert and Dr. Savita Goel as a supervisor. The CRC decided that Dr Savita Goel should continue as an external expert and Prof. P.V.M. Rao be included as an additional supervisor after discussions with Prof. P.V.M. Rao.

The meeting ended with a vote of thanks to the Chair.

(D. S. Mehta)
Convener, CRC

6. One in number application for admission to Part-Time PhD programme was received from PG section. On scrutiny it was found the the candidates does not satisfy the shortlisting criterion set by the Centre.

Instrument Design Development Centre (IDDC)

Date: Dec. 27, 2010

To,
The Dean,
PG Section,
Indian Institute of Technology Delhi

Sub.: Grades of Ph. D. students of IDDC.

Attached please find the grades of the progress report of Ph. D. Students of IDDC alongwith the minutes of CRC (Minute No. 01) for further necessary action.

(D. S. Mehta)
Convener, CRC

Enclosures:

1. Progress report.
2. CRC minutes.

Instrument Design Development Centre (IDDC)

Date: Dec. 27, 2010

Sub.: Extension of Institute Assistantship of full-time Ph. D. students of IDDC.

Enclosed please find the request for the extension of Institute Assistantship along with the minutes (Minute No. 02) of CRC of the following full-time Ph. D. students of IDDC for further necessary action.

- a. Ms. Tulsi Anna (2006 IDZ 8154)
- b. Mr. P. Packiam (2006 IDZ 8191)

(D. S. Mehta)
Convener, CRC

DR, PGS & R

Instrument Design Development Centre (IDDC)

Date: 04-01-2011

Subject: CRC meeting on 10-01-2011, IDDC Head's Room at 3.30 P.M.

CRC meeting will be held on 10-01-2011 at 3.30 P.M. IDDC Head's Room.

Agenda of the meeting:

1. Discussion and finalization of short-listing criteria for Ph. D. candidates under QIP Programme.
2. Any other information with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

1. Prof. A. L. Vyas

Chairman

2. Prof. M. R. Shenoy, Physics	Member
3. Prof. G. S. Visweswaran, Electrical Engineering	Member
4. Prof. Y. Nath, Applied Mechanics	Member
5. Prof. Chandra Shakher	Member
6. Prof. D. T. Shahani	Member
7. Dr. N. K. Jain	Member
8. Dr. I. P. Singh	Member
9. Dr. Rakesh Kumar	Special Invitee
10. Sh. A. K. Agarwala	Member
11. Sh. S. K. Atreya	Member
12. Dr. D. S. Mehta	Convener

D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 28-01-2011

Subject: Minutes of CRC meeting held on 10-01-2011, IDDC Head's Room at 3.30 P.M.

CRC meeting was held on 10-01-2011 at 3.30 P.M. IDDC Head's Room. The following members attended the meeting.

1. Prof. A. L. Vyas	Chairman
2. Prof. M. R. Shenoy, Physics	Member
3. Prof. Y. Nath, Applied Mechanics	Member
4. Dr. N. K. Jain	Member
5. Dr. I. P. Singh	Member
6. Sh. S. K. Atreya	Member
7. Dr. D. S. Mehta	Convener

Other members could not attend the meeting. The following are the minutes of the meeting;

1. Short-listing criteria for Ph. D. candidates.

The short-listing criteria for advanced admission in Ph. D. under QIP Programme for the year 2011-2012 was discussed and the committee decided the following short-listing criteria:

Short-listing criteria for Ph. D. candidates under QIP for the year 2011:

General Candidates:

M. Sc. Physics with at least 70 % aggregate marks or equivalent CGPA 7.5 on a 10 point scale plus a Valid GATE Score ≥ 400 or a valid CSIR/UGC/NET Certificate with JRF and first division in the relevant preceding degrees.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 70 % aggregate marks or equivalent CGPA 7.5 on a 10 point scale and first division in the relevant preceding degrees.

OR

B. Tech. in relevant branch of Engineering or Physics with at least 75 % or equivalent CGPA of 8.5 on a 10 point scale PLUS a valid GATE score ≥ 500 or a valid CSIR/UGC/NET Certificate with JRF and first division in the relevant preceding degrees.

OBC (non-creamy layer) Candidates:

M. Sc. Physics with at least 70 % aggregate marks or equivalent CGPA 7.5 on a 10 point scale plus a Valid GATE Score ≥ 360 or a valid CSIR/UGC/NET Certificate with JRF and first division in preceding degrees.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 70 % aggregate marks or equivalent CGPA 7.5 on a 10 point scale and first division in the relevant preceding degrees.

OR

B. Tech. in relevant branch of Engineering or Physics with at least 75 % or equivalent CGPA of 8.5 on a 10 point scale PLUS a valid GATE score ≥ 450 or a valid CSIR/UGC/NET Certificate with JRF and first division in the relevant preceding degrees.

SC/ST/PH Candidates:

M. Sc. Physics with at least 65 % aggregate marks or equivalent CGPA of 7.2 on a 10 point scale Plus a Valid GATE Score ≥ 300 or a valid CSIR/UGC/NET Certificate with JRF and first division in the relevant preceding degrees.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 65 % aggregate marks or equivalent CGPA of 7.2 on a 10 point scale and first division in the relevant preceding degrees.

OR

B. Tech. in relevant branch of Engineering or Physics with at least 70 % or equivalent CGPA of 7.5 on a 10 point scale PLUS a valid GATE score ≥ 350 or a valid CSIR/UGC/NET Certificate with JRF and first division in the relevant preceding degrees.

NOTE:

Candidates, whose M. Tech. / M. Sc. results are not yet declared, will be provisionally short-listed for the interview, provided they have secured the necessary aggregate marks or equivalent CGPA in the results declared so far for the qualifying degree.

2. Approval of Research Plans

The result of Comprehensive examination and research plan submitted by Ms. Sutapa Pati (2008 IDZ 8128) and Mr. Sugandh Malhotra (2008 IDZ 8127) to SRC held on 07-01-2011 was presented to CRC and the CRC recommended that the same be forwarded to PG section for further necessary action.

The CRC, further recommended after clarification from PG section, that the sequence of supervisors for both the students will be as given below;

1. Dr. V. M. Charier, Supervisor (1)
2. Shri L. K. Das, Supervisor (2)

3. Addition of Second Supervisor for the Research Scholar Mr. Veerabhadrapa S.T. Registration No. 2009 IDZ 8260.

Request from Prof. A. L. Vyas, Supervisor of Mr. Veerabhadrapa S.T. Registration No. 2009 IDZ 8260 for the additional Supervisor of the Student was received and discussed. The committee approved the inclusion of additional Supervisor (Prof. Sneh Anand, Center for Biomedical Engineering) and this is also within the time limit of 18 Months of student's registration.

The committee also approved the new SRC for the same student in view of the change in additional supervisor.

The meeting ended with thanks to the Chair.

D. S. Mehta)
Secretary CRC

Instrument Design Development Centre (IDDC)

Date: January 31, 2011

Sub.: Research plans of Ms. Sutapa Pati (2008 IDZ 8128) and Mr. Sugandh Malhotra (2008 IDZ 8127)

Attached please find the results of the comprehensive examination of Ms. Sutapa Pati (2008 IDZ 8128) and Mr. Sugandh Malhotra (2008 IDZ 8127) and copy of the research plan along with the minutes (Minute No. 05) of CRC for further necessary action.

(D. S. Mehta)
Convener, CRC

DR, PGS & R

Enclosures:

- 1.Result of Comprehensive Examination
- 2.CRC Mintutes (Minute 02)
- 3.Research Plan.

Instrument Design Development Centre (IDDC)

Date: 01-02-2011

Subject: CRC meeting on 09-02-2011, IDDC Head's Room at 4.0 P.M.

CRC meeting will be held on 09-02-2011 (Wednesday), IDDC Head's Room at 4.0 P.M.

Agenda of the meeting:

1. Discussion on the approval of Synopsis and Panel of Examiners of Ph. D. thesis of Mr. Ranjeet Kumar (2005IDZ8275).
2. Formulation and approval of SRC of Arun Kumar Verma Ph. D. student of IDDC.
3. Discussion on the approval of research plan of Md. Inam.
4. Discussion on the approval of research plan of Neha Adhikari.
5. Discussion on the approval of research plan of Mrs. Sakshi Gupta.
6. Request from Mr. Varun Kumar regarding the joining report and submission of fee.
7. Shortlisting of new Ph. D. application received from Mr. Abhay Gusain.
8. Any other item with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

- | | |
|--|----------|
| 1. Prof. A. L. Vyas | Chairman |
| 2. Prof. M. R. Shenoy, Physics | Member |
| 3. Prof. G. S. Visweswaran, Electrical Engineering | Member |
| 4. Prof. Y. Nath, Applied Mechanics | Member |
| 5. Prof. Chandra Shakher | Member |
| 6. Prof. D. T. Shahani | Member |
| 7. Dr. N. K. Jain | Member |
| 8. Dr. I. P. Singh | Member |
| 9. Sh. A. K. Agarwala | Member |
| 10. Sh. S. K. Atreya | Member |
| 11. Dr. D. S. Mehta | Convener |

D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 04-02-2011

To,
AR PGS & R
Indian Institute of Technology Delhi

Attached please find the request of Mr. Varun Kumar (2010 IDZ 8716) regarding the joining Institute as Ph. D. student duly forwarded by Supervisor and Chairman CRC for further necessary action.

D. S. Mehta
Secretary CRC

Instrument Design Development Centre (IDDC)

Date: 17-02-2011

Subject: Minutes of CRC meeting held on 09-02-2011, IDDC Head's Room at 4.0 P.M.

CRC meeting was held on 09-02-2011 (Wednesday), IDDC Head's Room at 4.0 P.M. The following members attended the meeting;

1. Prof. A. L. Vyas
2. Dr. N. K. Jain
3. Prof. Chandra Shakher

Chairman
Member
Member

4. Dr. I. P. Singh	Member
5. Sh. S. K. Atreya	Member
6. Dr. D. S. Mehta	Convener

Other members could not attend the meeting. The following are the minutes of the meeting;

1. Discussion on the approval of Synopsis and Panel of Examiners of Ph. D. thesis of Mr. Ranjeet Kumar (2005IDZ8275):

The SRC's report of Mr. Ranjeet Kumar (2005IDZ8275) on his Ph. D. Synopsis entitled "**Optical manipulation of mesoscopic transparent/metallic particles by spatially structured laser beam and characterization of trapped RBC's**" and the appointment of the thesis examiners were discussed in the meeting and CRC recommends that the Synopsis and the list of examiners be forwarded to PG Section for further necessary action.

2. Formulation and approval of SRC of Arun Kumar Verma Ph. D. student of IDDC:

The appointment of Supervisors and formulation of Student Research Committee (SRC) of Arun Kumar Verma full-time Ph. D. student of IDDC was discussed and the CRC recommends that the same be forwarded to PG section for further necessary action.

3. Discussion on the approval of research plan of Md. Inam, Neha Adhikari and Mrs. Sakshi Gupta:

CRC decided the research plans of Md. Inam, Neha Adhikari and Mrs. Sakshi Gupta should be circulated among CRC members for their valuable comments and suggestions for week's time and the same will be discussed in the next CRC meeting.

4. Discussion on new Ph. D. application received from Mr. Abhay Gusain:

CRC decided that the Ph.D. application will be processed on receiving sufficient number of applications. This application be kept pending till that time.

5. CRC discussed the addition of permanent faculty as main supervisor of Mr. Vivek Kumar (Ph. D. student IDDC) enrolled with presently retired faculty. CRC decided that as per Institute Rules a permanent faculty should be appointed as main supervisor in such cases. CRC decided that Dr. Rakesh Kumar be requested to give the name of a permanent faculty member to be appointed as main supervisor of Mr. Vivek Kumar (Full-time Ph. D. student) within one week.

4. Item for information:

Chairman CRC informed that request from Mr. Varun Kumar regarding the joining report and submission of fee was forwarded to PG section for needfull.

Meeting ended with thanks to the chair.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 10-02-2011

Subject: Submission of Ph. D. synopsis and list of Ph. D. thesis examiners of Mr. Ranjeet Kumar (2005IDZ8275).

Enclosed please find the list of Ph. D. thesis examiners and two hard copies of Synopsis of Mr. Ranjeet Kumar (2005IDZ8275) on his Ph. D. Synopsis entitled "**Optical manipulation of mesoscopic ansparent/ metallic particles by spatially structured laser beam and characterization of trapped RBC's**" and CRC minutes (01) for further necessary action.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: February 17, 2011

Enclosed please find the duly filled application form for the appointment of Supervisors and formulation of Student Research Committee (SRC) of **Mr. Arun Kumar Verma (2010 IDZ 8168)** Ph. D. scholar IDDC.

(D. S. Mehta)
Convener,
CRC

DR, PGS & R

Enclosures:

1. Application form
2. CRC minutes (Minute 2).

All CRC Members

1. Prof. A. L. Vyas	Chairman
2. Prof. M. R. Shenoy, Physics	Member
3. Prof. G. S. Visweswaran, Electrical Engineering	Member
4. Prof. Y. Nath, Applied Mechanics	Member
5. Prof. Chandra Shakher	Member
6. Prof. D. T. Shahani	Member
7. Dr. N. K. Jain	Member
8. Dr. I. P. Singh	Member
9. Sh. A. K. Agarwala	Member
10. Sh. S. K. Atreya	Member
11. Dr. D. S. Mehta	Convener

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Instrument Design Development Centre (IDDC)

Date: 12-01-2010

Subject: CRC meeting on 18-01-2010 (Monday), 3.00 P. M., IDDC Committee Room.

CRC meeting is being held on January 18, 2010 (Monday) at 3.00 P.M. The meeting will be held in the IDDC Committee Room. The main agenda of the meeting are the following;

16. Test/Interview of Ph. D. candidates under QIP Programme for advanced admission in 2010. Details of Applications of the candidates are available in IDDC office.
17. Discussion on the approval of Synopsis and Panel of Examiners of Ph. D. thesis of Mr. Sanjeev Kumar Srivastava (2005 IDZ 8170).
18. Discussion on the application of Ms. Alka Rani for admission to Ph. D. programme.
4. Any other information with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

- | | |
|--|----------|
| 1. Prof. A. L. Vyas | Chairman |
| 2. Prof. M. R. Shenoy, Physics | Member |
| 3. Prof. G. S. Visweswaran, Electrical Engineering | Member |
| 4. Prof. Y. Nath, Applied Mechanics | Member |
| 5. Prof. Chandra Shakher | Member |
| 6. Prof. D. T. Shahani | Member |
| 7. Dr. N. K. Jain | Member |
| 8. Dr. I. P. Singh | Member |
| 9. Dr. Rakesh Kumar | Member |
| 10. Sh. A. K. Agarwala | Member |
| 11. Sh. S. K. Atreya | Member |
| 12. Dr. D. S. Mehta | Convener |

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre

Subject: CRC meeting on 03-03-2011 (Thursday), 10.00 A. M., IDDC Head's Room.

CRC meeting is being held on March 03, 2011 (Thursday) at 10.00 A.M. IDDC Head's Room. The main agenda of the meeting are the following;

1. Test/Interview of Ph. D. candidates under QIP Programme for advanced admission in 2011. Details of Applications of the candidates are available in IDDC office.
2. Any other item with the permission of the Chairman.

All IDDC Faculty and all the CRC members are requested to attend the meeting.

All CRC Members

1. Prof. A. L. Vyas	Chairman
2. Prof. M. R. Shenoy, Physics	Member
3. Prof. G. S. Visweswaran, Electrical Engineering	Member
4. Prof. Y. Nath, Applied Mechanics	Member
5. Prof. Chandra Shakher	Member
6. Prof. D. T. Shahani	Member
7. Dr. N. K. Jain	Member
8. Dr. I. P. Singh	Member
9. Dr. Rakesh Kumar	Member
10. Sh. A. K. Agarwala	Member
11. Sh. S. K. Atreya	Member
12. Dr. D. S. Mehta	Convener

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 22-03-2011

Subject: CRC meeting on 28-03-2011, IDDC Head's Room at 4.0 P.M.

CRC meeting will be held on 28-03-2011 (Monday), IDDC Head's Room at 4.0 P.M.

Agenda of the meeting:

1. Discussion on the approval of research plans of the following research scholars:
 - i. Md. Inam
 - ii. Neha Adhikari
 - iii. Mrs. Sakshi Gupta
 - iv. Aniruddha Vinayak Muley
 - v. Vishal Srivastava
2. Discussion on the appointment of Ph. D. supervisors and formulation of SRC of Mr. Sumer Singh.
3. Discussion on the request of Ms. Sutapa Pati, for conversion of the status of Ph.D. from part-time to full-time with fellowship.
4. Approval for participating in the project proposal entitled "Development of an instrument to measure optical cover of fabrics" submitted by Prof. R. S. Rengasamy, Textile Department.
5. Any other item with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

1. Prof. A. L. Vyas	Chairman
2. Prof. M. R. Shenoy, Physics	Member
3. Prof. G. S. Visweswaran, Electrical Engineering	Member
4. Prof. Y. Nath, Applied Mechanics	Member
5. Prof. Chandra Shakher	Member
6. Prof. D. T. Shahani	Member
7. Dr. N. K. Jain	Member
8. Dr. I. P. Singh	Member
9. Sh. A. K. Agarwala	Member
10. Sh. S. K. Atreya	Member
11. Dr. D. S. Mehta	Convener

D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 31-03-2011

Subject: Minutes of CRC meeting held on 28-03-2011, IDDC Head's Room at 4.0 P.M.

CRC meeting was held on 28-03-2011 (Monday), IDDC Head's Room at 4.0 P.M. The following members attended the meeting;

1. Prof. A. L. Vyas	Chairman
2. Prof. M. R. Shenoy, Physics	Member
3. Dr. N. K. Jain	Member
4. Dr. I. P. Singh	Member
5. Dr. D. S. Mehta	Convener

1. Discussion on the approval of research plans of the following research scholars:

- i. Md. Inam
- ii. Neha Adhikari
- iii. Mrs. Sakshi Gupta
- iv. Aniruddha Vinayak Muley
- v. Vishal Srivastava

The research plans submitted by the aforementioned students to SRC and duly approved by SRC were circulated among the CRC members for their comments and suggestions. Some corrections were suggested by Prof. M. R. Shenoy. CRC decided that the students be asked to incorporate the corrections suggested by members. All the research plans were presented to CRC and the CRC recommended that the research proposals duly modified/corrected be forwarded to PGS & R section for further necessary action.

2. Discussion on the appointment of Ph. D. supervisors and formulation of SRC of Mr. Sumer Singh.

The appointment of Supervisors and formulation of Student Research Committee (SRC) of Mr. Sumer Singh part-time Ph. D. student of IDDC was discussed and the CRC recommends that the same be forwarded to PG section for necessary action.

3. Discussion on the request for the change of Outside Expert on the SRC of Mr. S.T. Veerabhadrapa (2009IDZ8260) .

The members were informed that before holding the Oral Comprehensive examination of Mr Veerabhadrapa, the supervisor has taken the consent from the majority of CRC members for including Dr. Ashutosh Mishra, Centre for Biomedical Engineering as an Outside Expert in place of Dr Nivedita K.Gohil of Centre for Biomedical Engineering. The same was approved by the CRC.

4. Discussion on the request of Ms. Sutapa Pati (2008IDZ8128), for conversion of the status of Ph.D. from part-time to full-time with fellowship.

The matter was discussed in the CRC and the CRC decided that the student is required to clarify the following;

- (a) Status of sponsorship from the employer.
- (b) In the next CRC meeting the student is required to be available for appearing before the committee for further clarification.

Contd. on page 2

5. Approval for participating in the project proposal entitled "Development of an instrument to measure optical cover of fabrics" submitted by Prof. R. S. Rengasamy, Textile Department.

The aforementioned proposal was circulated among CRC members for their comments and suggestions. Some members suggested corrections in the Title and some clarification. The Co-PI agreed to implement the same. The CRC approved/recommends the participation of Dr. D. S. Mehta in the project. The Co-PI also informed the committee that no additional space and manpower from IDDC is required for implementing the project.

6. Discussion on the approval of Synopsis and Panel of Examiners of Ph. D. thesis of Mr. Anuj Kumar (2005IDZ8273):

The SRC's report of **Mr. Anuj Kumar (2005IDZ8273)** on his Ph. D. Synopsis entitled "**Development of Indoor Environment Monitoring System and its Application**" and the appointment of the thesis examiners were discussed in the meeting and CRC recommends that the Synopsis and the list of examiners be forwarded to PG Section for further necessary action.

7. Addition of regular faculty as supervisor for the Ph.D. student Mr. Huidram Lockswer Singh (2007IDZ8182)

The CRC discussed the suggestion of Shri L.K.Das for inclusion of Dr. Jyoti Kumar (IDDC) as supervisor. The CRC decided that Dr. Jyoti Kumar be included as an additional supervisor for Mr. Huidram Lockswer Singh (2007IDZ8182).

8. Addition of regular faculty as supervisor for the Ph.D. student Mr. Vivek Kumar (2008IDZ8124).

The CRC discussed the addition of permanent faculty as main supervisor for Mr. Vivek Kumar (Ph. D. student IDDC) registered with Dr. Rakesh Kumar who has since retired. The CRC decided that Dr. N. K. Jain be added as an additional supervisor for Mr. Vivek Kumar.

The Meeting ended with thanks to the Chair.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 31-03-2011

Subject: Submission of Ph. D. synopsis and list of Ph. D. thesis examiners of **Mr. Anuj Kumar (2005IDZ8273)**.

Enclosed please find the list of Ph. D. thesis examiners and two hard copies of Synopsis of **Mr. Anuj Kumar (2005IDZ8273)** on his Ph. D. Synopsis entitled "**Development of Indoor Environment Monitoring System and its Application**" and CRC minutes (08) for further necessary action.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: April 19, 2011

Sub.: Research plan of Ph.D. student of IDDC

Attached please find the result of the comprehensive examination of the following Ph. D. Student and copy of the research plan along with the minutes (Minute No. 01) of CRC for further necessary action.

Ph.D. student:

Md. Inam

(D. S. Mehta)
Convener, CRC

DR, PGS & R

Enclosures:

1. Results of Comprehensive Examination
2. CRC Minutes

3. Research Plans

Instrument Design Development Centre (IDDC)

Date: April 26, 2011

Sub.: Addition of Supervisor for **Mr. Huidram Lokeswer Singh (2005IDZ8273)**.

As decided by CRC (Minute No. 07, copy enclosed) Dr. Jyoti Kumar (IDDC) be added as an additional supervisor of **Mr. Huidram Lokeswer Singh (2005IDZ8273)**.

(D. S. Mehta)
Convener,
CRC

Through Head, IDDC

DR, PGS & R

Enclosures:

1. CRC minutes (Minute 07).

Instrument Design Development Centre (IDDC)

Date: April 26, 2011

Sub.: Addition of Supervisor for **Mr. Vivek Kumar (2008IDZ8124)**.

As decided by CRC (Minute No. 08, copy enclosed) Dr. Dr. N. K. Jain (IDDC) be added as an additional supervisor of **Mr. Vivek Kumar (2008IDZ8124)**.

(D. S. Mehta)
Convener,
CRC

Through Head, IDDC

DR, PGS & R

Enclosures:

1. CRC minutes (Minute 08).

To,
Ms. Sutapa Pati (2008IDZ8128)
Part-time Ph. D. Student IDDC

Date: April 26, 2011

This is with reference to your letter dated 03-03-2011 for conversion of the status of Ph.D. from part-time to full-time with fellowship.

The matter was discussed in the CRC and the CRC decided that you are required to clarify the following;

1. Status of sponsorship from the employer.
2. In the next CRC meeting the you will be required to be available for appearing before the committee for further clarification.

(D. S. Mehta)
Convener, CRC

Ms. Sutapa Pati

Instrument Design Development Centre (IDDC)

Date: 09-05-2011

Subject: CRC meeting on 13-05-2011 (Friday), IDDC Head's Room at 4.00 P.M.

CRC meeting will be held on 13-05-2011, IDDC Head's Room at 4.00 P.M.

Agenda of the meeting:

1. Discussion and finalization of short-listing criteria for Ph. D. candidates for the year 2011-2012.
2. Finalization of Test/Interview dates for Ph. D. selection.
3. Discussion on the request of Ms. Sutapa Pati, for conversion of the status of Ph.D. from part-time to full-time with fellowship.
4. Formulation and approval of SRC of Pandya Viranchi C., Ph. D. student of IDDC.
5. Formulation and approval of SRC of Raj Kumar Garg, Ph. D. student of IDDC.
6. Any other matter with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

1. Prof. A. L. Vyas	Chairman
2. Prof. M. R. Shenoy, Physics	Member
3. Prof. G. S. Visweswaran, Electrical Engineering	Member
4. Prof. Y. Nath, Applied Mechanics	Member
5. Prof. Chandra Shakher	Member
6. Prof. D. T. Shahani	Member
7. Dr. N. K. Jain	Member
8. Dr. I. P. Singh	Member
9. Dr. Rakesh Kumar	Special Invitee
10. Sh. A. K. Agarwala	Member
11. Sh. S. K. Atreya	Member
12. Dr. D. S. Mehta	Convener

D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 20-05-2011

Subject: Minutes of CRC meeting held on 13-05-2011 (Friday), IDDC Head's Room at 4.00 P.M.

CRC meeting was held on 13-05-2011 (Friday), IDDC Head's Room at 4.0 P.M. The following members attended the meeting;

1. Prof. A. L. Vyas	Chairman
2. Prof. Chandra Shakher	Member
3. Prof. M. R. Shenoy, Physics	Member
4. Dr. N. K. Jain	Member
5. Dr. I. P. Singh	Member
6. Dr. D. S. Mehta	Convener

Other members could not attend the meeting. The following are the minutes of the meeting;

1. Discussion and finalization of short-listing criteria for Ph. D. applicants for Ist Semester 2011-2012.

The short-listing criteria for Ph. D. applicants for Ist Semester 2011-2012 were discussed and the committee decided the following short-listing criteria:

General Candidates:

M. Sc. Physics with at least 70 % aggregate marks (or equivalent CGPA 7.5 on a 10 point scale) **PLUS** a valid GATE Score ≥ 400 or a valid CSIR/UGC/NET Certificate with JRF, **and** first division in the relevant preceding degrees.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 70 % aggregate marks (or equivalent CGPA 7.5 on a 10 point scale) **and** first division in the relevant preceding degrees.

OR

B. Tech. in relevant branch of Engineering with at least 75 % aggregate marks (or equivalent CGPA of 8.5 on a 10 point scale) **PLUS** a valid GATE score ≥ 500 or a valid CSIR/UGC/NET Certificate with JRF, **and** first division in Class 10 and +2.

OBC (non-creamy layer) Candidates:

M. Sc. Physics with at least 70 % aggregate marks or equivalent CGPA 7.5 on a 10 point scale plus a Valid GATE Score ≥ 360 or a valid CSIR/UGC/NET Certificate with JRF, **and** first division in preceding degrees.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 70 % aggregate marks (or equivalent CGPA 7.5 on a 10 point scale), **and** first division in the relevant preceding degrees.

OR

B. Tech. in relevant branch of Engineering with at least 75 % aggregate marks (or equivalent CGPA of 8.5 on a 10 point scale) **PLUS** a valid GATE score ≥ 450 or a valid CSIR/UGC/NET Certificate with JRF, **and** first division in Class 10 and +2.

SC/ST/PH Candidates:

M. Sc. Physics with at least 55 % aggregate marks (or equivalent CGPA of 6.25 on a 10 point scale) **PLUS** a valid GATE Score ≥ 300 or a valid CSIR/UGC/NET Certificate with JRF.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 55 % aggregate marks (or equivalent CGPA of 6.25 on a 10 point scale).

OR

B. Tech. in relevant branch of Engineering with at least 70 % aggregate marks (or equivalent CGPA of 7.5 on a 10 point scale) **PLUS** a valid GATE score ≥ 350 or a valid CSIR/UGC/NET Certificate with JRF, and first division in Class 10 and +2.

Part-Time Candidates:

As per Institute norms, but the short-listing criteria will be as above, except for the requirement of GATE Score. There will be no direct admission to the above Programme.

NOTE: Candidates, whose M. Tech. / M. Sc. results are not yet declared, will be provisionally short-listed for the interview, provided they have secured the necessary aggregate marks or equivalent CGPA in the results declared so far for the qualifying degree.

The committee also decided that only those applications will be considered who has the qualifying degree in the relevant branch of Engineering or Physics and relevant research areas of IDDC published in the information brochure first semester 2011-2012.

2. Finalization of Test/Interview dates for Ph. D. selection.

The committee decided that the Test/Interview of Ph. D. candidates will be held on June 02-06-2011 (10.00 A.M. Onwards).

3. Discussion on the request of Ms. Sutapa Pati, for conversion of the status of Ph.D. from part-time to full-time with fellowship.

The matter was discussed in the CRC. After discussion in CRC and talking to the student, the CRC advised that the student be requested to submit the followings for considering the issue further;

- (a) Relieving letter from her previous employer.
- (b) Project employment details (Appointment Letter etc).
- (c) Consolidated research report (max. 10 pages) on the work done by her upto now.

4. Formulation and approval of SRC of the following Ph. D. students of IDDC.

1. Pandya Viranchi C. (Full-time under QIP)
2. Raj Kumar Garg (Part-time)
3. Varun Kumar (Full-time)

The appointment of Supervisors and formulation of Student Research Committee (SRC) of the aforementioned Ph.D. students of IDDC were discussed and the CRC recommends that the same be forwarded to PG section for necessary action.

The Meeting ended with thanks to the Chair.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: May 23, 2011

Enclosed please find the duly filled application forms for the appointment of Supervisors and formulation of Student Research Committee (s) (SRC) of the following Ph. D. scholars of IDDC.

1. Pandya Viranchi C. (2010 IDZ 8169) (Full-time under QIP)
2. Raj Kumar Garg (2010 IDZ 8717) (Part-time)
3. Varun Kumar (2010 IDZ 8716) (Full-time)

(D. S. Mehta)
Convener,
CRC

DR, PGS & R

Enclosures:

1. Application form
2. CRC minutes (Minute 4)

Instrument Design Development Centre (IDDC)

Date: 30-05-2011

Subject: CRC meeting on 13-05-2011 (Friday), IDDC Head's Room at 4.00 P.M.

CRC meeting will be held on 13-05-2011, IDDC Head's Room at 4.00 P.M.

Agenda of the meeting:

1. Discussion and finalization of short-listing criteria for Ph. D. candidates for the year 2011-2012.
2. Finalization of Test/Interview dates for Ph. D. selection.
3. Discussion on the request of Ms. Sutapa Pati, for conversion of the status of Ph.D. from part-time to full-time with fellowship.
4. Formulation and approval of SRC of Pandya Viranchi C., Ph. D. student of IDDC.
5. Formulation and approval of SRC of Raj Kumar Garg, Ph. D. student of IDDC.
6. Any other matter with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

- | | |
|--|-----------------|
| 1. Prof. A. L. Vyas | Chairman |
| 2. Prof. M. R. Shenoy, Physics | Member |
| 3. Prof. G. S. Visweswaran, Electrical Engineering | Member |
| 4. Prof. Y. Nath, Applied Mechanics | Member |
| 5. Prof. Chandra Shakher | Member |
| 6. Prof. D. T. Shahani | Member |
| 7. Dr. N. K. Jain | Member |
| 8. Dr. I. P. Singh | Member |
| 9. Dr. Rakesh Kumar | Special Invitee |
| 10. Sh. A. K. Agarwala | Member |
| 11. Sh. S. K. Atreya | Member |
| 12. Dr. D. S. Mehta | Convener |

D. S. Mehta)
Convener, CRC

Instrument Design Development Centre

Date: 30-05-2011

Subject: Test/ Interview of Ph. D. Candidates on 02-06-2011 (Thursday), 10.00 A.M. onwards.

Test/Interview of Ph. D. Candidates will be held on Thursday 2nd, June 2011 at 10.00 A. M. onwards in the IDDC Head's Room. Applications of short-listed candidates may be seen in IDDC Office.

All CRC Members and Faculty (Dr. Gufran Khan and Dr. Jyoti Kumar) of IDDC are requested to participate in the interview.

(D. S. Mehta)

Convener, CRC

Copy to:

- 1. All CRC Members**
- 2. Dr. Gufran Khan**
- 3. Dr. Jyoti Kumar**
- 4. IDDC Notice Board**

Instrument Design Development Centre

Date: 15-06-2011

Sub.: Appointment of Supervisor and transfer of Ph. D. Students to Center for Rural Development and Technology (RDAT).

Reference: Telephonic Conversation with Dean PGS & R.

Dr. V. M. Charier was appointed as main supervisor of Ms. Sutapa Pati (Part-time) and Mr. Sugandh Malhotra (Part-time) Ph. D. students of IDDC. CRC also further decided that both the students be transferred to RDAT.

The RDAT in their CRC meeting held on December 1, 2010 did not agree for the transfer of these students to their centre.

All the relevant papers are enclosed herewith for necessary advice/action on the subject.

Chairman CRC

Through Head IDDC

Dean PGS & R

Instrument Design Development Centre (IDDC)

Date: 30-06-2011

Subject: CRC meeting on 07-07-2011 (Thursday), IDDC Head's Room at 4.00 P.M.

CRC meeting will be held on 07-07-2011, IDDC Head's Room at 4.00 P.M.

Agenda of the meeting:

1. Discussion on the progress reports of Ph. D. students of IDDC for IInd Semester 2010-2011.

2. Discussion on the approval of Synopsis and Panel of Examiners of Ph. D. thesis of Ms. Tulsi Anna (2006IDZ8154).
3. Discussion on the approval of research plans of the following research scholars:
 - i. Mr. Veer Bhadrappa
 - ii. Mr. Gyanendra Singh
4. Discussion on the extension of Institute Assistantship of Mr. P. Packiam (2006 IDZ 8191) for another six months.
5. Discussion on the request of Ms. Sutapa Pati, for conversion of the status of Ph. D. from part-time to full-time with fellowship.
6. Any other matter with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

1. Prof. A. L. Vyas	Chairman
2. Prof. M. R. Shenoy, Physics	Member
3. Prof. G. S. Visweswaran, Electrical Engineering	Member
4. Prof. Y. Nath, Applied Mechanics	Member
5. Prof. Chandra Shakher	Member
6. Prof. D. T. Shahani	Member
7. Dr. N. K. Jain	Member
8. Dr. I. P. Singh	Member
9. Sh. A. K. Agarwala	Member
10. Sh. S. K. Atreya	Member
11. Dr. D. S. Mehta	Convener

D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 04-07-2011

Subject: CRC meeting preponed.

CRC meeting scheduled to be held on 07-07-2011, at 4.00 P.M. will now be held at 12.00 Noon, 07-07-2011, in IDDC Head's Room.

Agenda of the meeting:

1. Discussion on the progress reports of Ph. D. students of IDDC for IInd Semester 2010-2011.
2. Discussion on the approval of Synopsis and Panel of Examiners of Ph. D. thesis of Ms. Tulsi Anna (2006IDZ8154).
3. Discussion on the approval of research plans of the following research scholars:
 - i. Mr. Veer Bhadrappa
 - ii. Mr. Gyanendra Singh
4. Discussion on the extension of Institute Assistantship of Mr. P. Packiam (2006 IDZ 8191) for another six months.
5. Discussion on the request of Ms. Sutapa Pati, for conversion of the status of Ph. D. from part-time to full-time with fellowship.
6. Any other matter with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

1. Prof. A. L. Vyas	Chairman
2. Prof. M. R. Shenoy, Physics	Member
3. Prof. G. S. Visweswaran, Electrical Engineering	Member
4. Prof. Y. Nath, Applied Mechanics	Member
5. Prof. Chandra Shakher	Member
6. Prof. D. T. Shahani	Member
7. Dr. N. K. Jain	Member
8. Dr. I. P. Singh	Member
9. Sh. A. K. Agarwala	Member
10. Sh. S. K. Atreya	Member
11. Dr. D. S. Mehta	Convener

D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 11-07-2011

Subject: Minutes of CRC meeting on 07-07-2011, 4.00 P. M., IDDC Head's Room.

CRC meeting was held on July 07, 2011 (Thursday) at 4.00 P. M. The following CRC members attended the meeting.

1. Prof. A. L. Vyas	Chairman
2. Prof. M. R. Shenoy, Physics	Member
3. Prof. D. T. Shahani	Member
4. Dr. I. P. Singh	Member
5. Sh. A. K. Agarwala	Member
6. Sh. S. K. Atreya	Member
7. Dr. D. S. Mehta	Convener

Other members could not join the meeting. The following are the minutes of the meeting.

1. Progress reports of Ph. D. students of IDDC for the IInd Semester 2010 – 2011

Progress reports submitted by the Ph. D. students of IDDC for the IInd Semester 2010 – 2011 were received and discussed in the CRC meeting and as per the recommendations of their respective supervisors all the reports were found satisfactory. CRC recommended that the grades of all the students be forwarded to PG section for further necessary action.

2. Discussion on the approval of Synopsis and Panel of Examiners of Ph. D. thesis of Ms. Tulsi Anna (2006 IDZ 8154):

The SRC's report of Ms. Tulsi Anna (2006 IDZ 8154) on her Ph. D. Synopsis entitled "**Full-Field frequency-domain optical coherence microscopy for simultaneous topography and tomography of engineering and biological materials**" and the appointment of the thesis examiners were discussed in the meeting and CRC recommends that the Synopsis and the list of examiners be forwarded to PG Section for further necessary action.

3. Discussion on the approval of research plans of the following research scholars:

- i. Mr. Veer Bhadrappa
- ii. Mr. Gyanendra Singh

The research plans submitted by the aforementioned students to SRC and duly approved by SRC were circulated among the CRC members for their comments and suggestions. Some corrections were suggested by Prof. M. R. Shenoy. CRC decided that the students be asked to incorporate the corrections suggested by members. All the research plans were presented to CRC and the CRC recommended that the research proposals duly modified/corrected be forwarded to PGS & R section for further necessary action.

4. Extension of Institute Assistantship beyond four and half years:

Request for the extension of Institute Assistantship was received from Mr. P. Packiam (2006 IDZ 8191) and same was discussed in the meeting. With the recommendation of his supervisors that the student's work was satisfactory and some additional work remained, CRC recommends the extension of Institute Fellowship for the aforementioned Ph. D. student for another six months in order to complete their Ph. D. work. The progress report of the students with recommendations of the supervisor are attached for necessary action.

5. Discussion on the request of Ms. Sutapa Pati, for conversion of the status of Ph.D. from part-time to full-time with fellowship.

The matter was discussed in the CRC. The members requested some additional information, such as, minutes of selection committee, selection criteria during the time of her selection as part-time student for further discussion on the subject.

The meeting ended with thanks to the chair.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: July 11, 2011

To,
The Dean,
PG Section,
Indian Institute of Technology Delhi

Sub.: Grades of Ph. D. students of IDDC.

Attached please find the grades of the progress report of Ph. D. Students of IDDC alongwith the minutes of CRC for further necessary action.

(D. S. Mehta)
Convener, CRC

Enclosures:

1. Progress report.
2. CRC minutes (Minute No. 1).

Instrument Design Development Centre (IDDC)

Date: July 25, 2011

Subject: Submission of Ph. D. synopsis and list of Ph. D. thesis examiners of **Ms. Tulsi Anna (2006 IDZ 8154)**.

Enclosed please find the list of Ph. D. thesis examiners and two hard copies of Synopsis of **Ms. Tulsi Anna (2006 IDZ 8154)** on her Ph. D. Synopsis entitled **“Full-Field frequency-domain optical coherence microscopy for simultaneous topography and tomography of engineering and biological materials”** and CRC minutes (02) for further necessary action.

(D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: July 12, 2011

Sub.: Research plan of Ph.D. student of IDDC

Attached please find the result of the comprehensive examination of the following Ph. D. Student and copy of the research plan along with the minutes (Minute No. 03) of CRC for further necessary action.

Ph.D. student:

Mr. Gyanendra Singh

(D. S. Mehta)
Convener, CRC

DR, PGS & R

Enclosures:

1. Results of Comprehensive Examination
2. CRC Minutes
3. Research Plans

Instrument Design Development Centre (IDDC)

Date: July 11, 2011

Sub.: Extension of Institute Assistantship of full-time Ph. D. student of IDDC.

Enclosed please find the request of Mr. P. Packiam (2006 IDZ 8191) for the extension of Institute Assistantship along with the minutes (Minute No. 04) of CRC of the full-time Ph. D. student of IDDC for further necessary action.

(D. S. Mehta)
Convener, CRC

DR, PGS & R

Instrument Design Development Centre (IDDC)

Date: Aug. 04, 2011

Sub.: Research plan of Ph.D. student of IDDC

Attached please find the result of the comprehensive examination of Mr. Veerabhadrapa S. T. Ph. D. student of IDDC and copy of the research plan along with the minutes (Minute No. 03) of CRC for further necessary action.

(D. S. Mehta)
Convener, CRC

DR, PGS & R

Enclosures:

1. Results of Comprehensive Examination
2. CRC Minutes
3. Research Plans

Instrument Design Development Centre (IDDC)

Date: 04-08-2011

Subject: CRC meeting on 11-08-2011.

Next CRC meeting will be held on 11-08-2011, at 4.00 P.M. in IDDC Head's Room.

Agenda of the meeting:

1. Discussion on the request of Ms. Sutapa Pati, for conversion of the status of Ph. D. from part-time to full-time with fellowship.
2. Discussion on the project proposal entitled "Design and development of stand alone solar PV energy generation system" to be submitted to DST.
3. Discussion on the project proposal entitled "A Business case for remote monitoring of patients".
4. Pending issue of the appointment of joint supervisor of Mr. Huidram Lokeshwer Singh.
5. Any other matter with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

- | | |
|--|----------|
| 1. Prof. A. L. Vyas | Chairman |
| 2. Prof. M. R. Shenoy, Physics | Member |
| 3. Prof. G. S. Visweswaran, Electrical Engineering | Member |
| 4. Prof. Y. Nath, Applied Mechanics | Member |
| 5. Prof. Chandra Shakher | Member |
| 6. Prof. D. T. Shahani | Member |
| 7. Dr. N. K. Jain | Member |
| 8. Dr. I. P. Singh | Member |

9. Sh. A. K. Agarwala
10. Sh. S. K. Atreya
11. Dr. D. S. Mehta

Member
Member
Convener

D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 18-08-2011

Subject: Minutes of CRC meeting held on 11-08-2011, at 4.00 P.M. in IDDC Head's Room.

CRC meeting was held on 11-08-2011, at 4.00 P.M. in IDDC Head's Room. The following CRC members attended the meeting.

1. Prof. A. L. Vyas	Chairman
2. Prof. M. R. Shenoy, Physics	Member
3. Prof. D. T. Shahani	Member
4. Dr. I. P. Singh	Member
5. Sh. A. K. Agarwala	Member
6. Sh. S. K. Atreya	Member
7. Dr. D. S. Mehta	Convener

Other members could not join the meeting. The following are the minutes of the meeting.

1. Discussion on the project proposal:

- 1.1 Project proposal entitled “**Design and development of stand alone solar PV energy generation system**” to be submitted to DST by **Prof. A. L. Vyas (PI)** was received and discussed in the CRC meeting. It was noted that the PI had clarified that no additional space and manpower was being asked from IDDC. The CRC recommends the aforementioned proposal be forwarded to IRD for further necessary processing.
- 1.2 Project proposal entitled “**A Business case for remote monitoring of patients**” submitted by **Prof. A. L. Vyas (PI)** was received and discussed in the CRC meeting. It was noted that the PI had clarified that no additional space and manpower was being asked from IDDC. The CRC recommends the aforementioned proposal be forwarded to IRD for further necessary processing.
2. **Discussion on the request of Ms. Sutapa Pati, for conversion of the status of Ph. D. from part-time to full-time with fellowship:** The CRC discussed issue and decided that since the student's case is being transferred to RDAT (**Case pending in Dean's Office**) as IDDC does not have expert regular faculty in her Ph. D. research area, the student's request for conversion from part-time to full-time should be made to RDAT.
3. **Discussion on the pending issue of the appointment of joint supervisor of Mr. Huidram Lokeshwer Singh:** In view of the norms of the Institute to appoint regular faculty as joint supervisor in cases where the supervisors have retired, the CRC of the Centre appointed Dr. Jyoti Kumar as joint supervisor on the suggestion of Head IDDC, as the retired supervisor did not suggest any name for additional supervisor. The PG section may take it up for the needful.

The meeting ended with thanks to the Chair.

D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: Aug. 29, 2011

The following is the excerpt of the CRC meeting held on 11-08-2011, regarding the request of Ms. Sutapa Pati, for conversion of the status of Ph. D. from part-time to full-time with fellowship.

“The CRC discussed issue and decided that since the student’s case is being transferred to RDAT (Case pending in Dean’s Office) as IDDC does not have expert regular faculty in her Ph. D. research area, the student’s request for conversion from part-time to full-time should be made to RDAT”.

(D. S. Mehta)
Convener, CRC

Through Head IDDC

DR, PGS & R

Copy to Student through Supervisor

Instrument Design Development Centre (IDDC)

Date: Sept.02, 2011

The following is the excerpt of the CRC meeting held on 11-08-2011, regarding the appointment of joint supervisor of Mr. Huidram Lokeshwer Singh.

“In view of the norms of the Institute to appoint regular faculty as joint supervisor in cases where the supervisors have retired, the CRC of the Centre appointed Dr. Jyoti Kumar as joint supervisor on the suggestion of Head IDDC, as the retired supervisor did not suggest any name for additional supervisor. The PG section may take it up for the needful”.

(D. S. Mehta)
Convener, CRC

Through Head IDDC

DR, PGS & R

Copy to Student through Supervisor

Instrument Design Development Centre (IDDC)

Date: 05-09-2011

Subject: CRC meeting on 09-09-2011.

Next CRC meeting will be held on 09-09-2011 (Friday) at 4.00 P.M. in IDDC Head's Room.

Agenda of the meeting:

1. Discussion on the project proposal entitled **“Development /Automation of Kshar Sutra Preparation”** to be submitted to the Department of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy (AYUSH).
2. Any other matter with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

1. Prof. A. L. Vyas	Chairman
2. Prof. M. R. Shenoy, Physics	Member
3. Prof. G. S. Visweswaran, Electrical Engineering	Member
4. Prof. Y. Nath, Applied Mechanics	Member
5. Prof. Chandra Shakher	Member
6. Prof. D. T. Shahani	Member
7. Dr. N. K. Jain	Member
8. Dr. I. P. Singh	Member
9. Sh. A. K. Agarwala	Member
10. Sh. S. K. Atreya	Member
11. Dr. D. S. Mehta	Convener

D. S. Mehta)
Convener, CRC

Instrument Design Development Centre

Date: 09-09-2011

1. The request dated 18-06-2010 from Ms Sutapa Pati (2008IDZ8128) for the Conversion of Status from Part-Time to Full-Time was discussed in the CRC meeting held on 23-07-2010 and The CRC observed that she is not yet entitled for the conversion from part-time to full time as she has not cleared the Comprehensive Examination. Further CRC noted that the request has been sent directly (without the signature of the supervisor). She is therefore advised that in future all communications be sent through the Supervisor (the CRC minutes are enclosed).
2. After the completion of Completion of comprehensive examination her case was again discussed in the meeting held on 28-03-2011 on the request of Ms. Sutapa Pati (2008IDZ8128), for conversion of the status of Ph.D. from part-time to full-time with fellowship and the CRC decided that the student is required to clarify the following;
 - (c) Status of sponsorship from the employer.
 - (d) In the next CRC meeting the student is required to be available for appearing before the committee for further clarification.CRC minutes enclosed.
3. After receiving the information on the above points it was found that she resigned from the job on August 2010 but never informed CRC till 28-04-2011. Her case was again discussed in the CRC meeting held on 13-05-2011. The matter was discussed in the CRC. After discussion in CRC and talking to the student, the CRC advised that the student be requested to submit the followings for considering the issue further;
 - (b) Relieving letter from her previous employer.
 - (b) Project employment details (Appointment Letter etc).
 - (c) Consolidated research report (max. 10 pages) on the work done by her upto now.
4. After reciving above documents "The CRC discussed the issue on the meeting held on 11-08-2011 and decided that since the student's case is being transferred to RDAT (Case pending in Dean's Office) as IDDC does not have expert regular faculty in her Ph. D. research area, the student's request for conversion from part-time to full-time should be made to RDAT".

Instrument Design Development Centre

Date: 09-09-2011

Since 20th Nov. 2009 (more than two months) the CRC has been requesting to Sh L. K. Das (CRC Minutes enclosed) for the appointment of a regular faculty as main supervisor (As per Institute rule no. R.7.5 (II) page no. 8) of Mr. H. Lokeshwar Singh as Sh. L. K. Das has retired. But Sh L. K. Das has not heard the suggestion/decision of CRC. He was always using the delaying practice so that as per Institute rules a proper supervisor can not be appointed.

After receiving letter (copy attached) from Dean, PGS & R on 01-07-2010 to appoint the regular faculty as main supervisor of Sh. H. Lokeshwar Singh, CRC again requested to Sh. L. K. Das and he had not agreed/accepted the CRC. In view of this CRC in its wisdom has appointed Dr. Jyoti Kumar of IDDC as main supervisor of Mr. H. Lokeshwar Singh (Copy of the Minutes attached). This decision of CRC should be implemented. Further this type of delaying practice by any supervisor should not be allowed.

Chairman CRC.

To,
DR PGS & R

Instrument Design Development Centre

Date: 09-09-2011

1. Since 20th Nov. 2009 (more than twenty months) the CRC has been requesting to Sh L. K. Das (CRC Minutes enclosed) for the appointment of a regular faculty as main supervisor (As per the Institute rule no. R.7.5 (II) page no. 8) of Mr. H. Lokeshwar Singh as Sh. L. K. Das has retired. But Sh L. K. Das has not heard the suggestion/decision of CRC. He was always using the delaying practice so that as per Institute rules a proper supervisor can not be appointed.

After receiving letter (copy attached) from Dean, PGS & R on 01-07-2010 to appoint the regular faculty as main supervisor of Sh. H. Lokeshwar Singh, CRC again requested to Sh. L. K. Das and he had not agreed/accepted the CRC. In view of this CRC in its wisdom has appointed Dr. Jyoti Kumar of IDDC as main supervisor of Mr. H. Lokeshwar Singh (Copy of the Minutes attached). This decision of CRC should be implemented. Further this type of delaying practice by any supervisor should not be allowed.

2.1 The request dated 18-06-2010 from Ms Sutapa Pati (2008IDZ8128) for the Conversion of Status from Part-Time to Full-Time was discussed in the CRC meeting held on 23-07-2010 in the CRC did not agree for the said conversion (CRC minutes enclosed).

2.2 On 03-03-2011 she again requested the same after the completion of comprehensive examination her case was again discussed in the meeting held on 28-03-2011 for conversion of the status of Ph.D. from part-time to full-time with fellowship and the CRC decided that the student is required to clarify the following;

- (e) Status of sponsorship from the employer.
- (f) In the next CRC meeting the student is required to be available for appearing before the committee for further clarification.

CRC minutes enclosed.

2.3 As per the letter dated 08-04-2011 on receiving the information on the above points and her personal appointment in CRC it was found that she had resigned from the job on August 2010 but never informed CRC till 08-04-2011. Her case was again discussed in the CRC meeting held on 13-05-2011. The matter was discussed in the CRC. After discussion in CRC and talking to the student, the CRC advised that the student be requested to submit the followings for considering the issue further;

- (c) Relieving letter from her previous employer.
- (b) Project employment details (Appointment Letter etc).
- (c) Consolidated research report (max. 10 pages) on the work done by her upto now.

2.4 The documents of Ms. Sutapa Pati for transfer from IDDC to RDAT have been sent to Dean PGS & R on 15-06-2011.

2.5 On 11-07-2011 the issue was also slightly discussed in the CRC meeting and the members sought some more information.

2.6 After receiving above documents "The CRC discussed the issue on the meeting held on 11-08-2011 and decided that since the student's case is being transferred to RDAT (Case pending in Dean's Office) as IDDC does not have expert regular faculty in her Ph. D. research area, the student's request for conversion from part-time to full-time should be made to RDAT".

Chairman CRC

Dean PGS & R

Instrument Design Development Centre

Date: 12-09-2011

1. The request dated 18-06-2010 from Ms Sutapa Pati (2008IDZ8128) for the Conversion of Status from Part-Time to Full-Time was received and discussed in the CRC meeting held on 23-07-2010 and the CRC did not agree for the said conversion (CRC minutes enclosed).
2. On 03-03-2011 she again requested the same after the completion of comprehensive examination and her case was again discussed in the CRC meeting held on 28-03-2011 for conversion of the status of Ph.D.

from part-time to full-time with fellowship and the CRC decided that the student is required to clarify the following;

- (g) Status of sponsorship from the employer.
- (h) In the next CRC meeting the student is required to be available for appearing before the committee for further clarification.

CRC minutes enclosed.

3. As per the letter dated 08-04-2011 on receiving the information on the above points and her personal appointment in CRC it was found that she had resigned from the job on August 2010 but never informed CRC till 08-04-2011. Her case was again discussed in the CRC meeting held on 13-05-2011. The matter was discussed in the CRC. After discussion in CRC and talking to the student, the CRC advised that the student be requested to submit the followings for considering the issue further;
 - (d) Relieving letter from her previous employer.
 - (b) Project employment details (Appointment Letter etc).
 - (c) Consolidated research report (max. 10 pages) on the work done by her upto now.
4. The documents of Ms. Sutapa Pati for transfer from IDDC to RDAT have been sent to Dean PGS & R on 15-06-2011.
5. On 11-07-2011 the issue was also slightly discussed in the CRC meeting and the members sought some more information.
6. Finally, after receiving above documents "The CRC discussed the issue on the meeting held on 11-08-2011 and decided that since the student's case is being transferred to RDAT (Case pending in Dean's Office) as IDDC does not have expert regular faculty in her Ph. D. research area, the student's request for conversion from part-time to full-time should be made to RDAT".

Convener CRC

Dean PGS & R

Instrument Design Development Centre (IDDC)

Date: 16-09-2011

Subject: Minutes of CRC meeting held on 09-09-2011, at 4.00 P.M. in IDDC Head's Room.

CRC meeting was held on 11-08-2011, at 4.00 P.M. in IDDC Head's Room. The following CRC members attended the meeting.

1. Prof. A. L. Vyas

Chairman

2. Prof. D. T. Shahani	Member
3. Prof. Chandra Shakher	Member
4. Dr. N.K. Jain	Member
5. Dr. I. P. Singh	Member
6. Sh. S. K. Atreya	Member
7. Dr. D. S. Mehta	Convener

Other members could not join the meeting. The following are the minutes of the meeting.

Project proposal entitled “**Development /Automation of Kshar Sutra Preparation**” to be submitted to the Department of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy (AYUSH) by **Prof. D. T. Shahni (PI)** was received and discussed in the CRC meeting. It was noted that the PI had clarified that no additional space and manpower was being asked from IDDC. The CRC recommends the aforementioned proposal be forwarded to IRD for further necessary processing.

The meeting ended with thanks to the Chair.

D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 12-12-2011

Subject: CRC meeting on 01-12-2011 (Thursday), IDDC Committee Room at 11.00 A.M.

Urgent CRC meeting will be held on 01-12-2011 (Thursday), IDDC Committee Room at 11.00 A.M.

Agenda of the meeting:

1. Discussion and finalization of short-listing criteria for Ph. D. candidates for the IInd Semester 2011-2012.
2. Finalization of Test/Interview dates for Ph. D. selection.
3. Formulation and approval of SRC of Aarati Prakash Khare, Ph. D. student of IDDC.
4. Any other matter with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

1. Prof. A. L. Vyas	Chairman
2. Prof. M. R. Shenoy, Physics	Member
3. Prof. G. S. Visweswaran, Electrical Engineering	Member
4. Prof. Chandra Shakher	Member
5. Prof. D. T. Shahani	Member

6. Dr. N. K. Jain	Member
7. Dr. I. P. Singh	Member
8. Dr. Rakesh Kumar	Special Invitee
9. Sh. A. K. Agarwala	Member
10. Sh. S. K. Atreya	Member
11. Dr. D. S. Mehta	Convener

D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 16-12-2011

Subject: Minutes of CRC meeting held on 01-12-2011 (Thursday), IDDC Committee Room at 11.00 A.M.

CRC meeting was held 01-12-2011 (Thursday), IDDC Committee Room at 11.00 A.M. to discuss and finalize the short-listing criteria for Ph. D. candidates for the IInd Semester 2011-2012. The extended meeting of the CRC was again held on 02-12-2011 (Friday) 12.00 Noon. The following members attended the meeting:

1. Prof. A. L. Vyas	Chairman
2. Prof. Chandra Shakher	Member
3. Prof. D. T. Shahani	Member
4. Dr. N. K. Jain	Member
5. Dr. I. P. Singh	Member
6. Dr. Gufran S. Khan	Member
7. Dr. D. S. Mehta	Convener

A. The committee discussed and decided the following short-listing criteria for Ph. D. applicants for IInd Semester 2011-2012 in IDDC.

For Full-Time With Institute Assistantship:

General Candidates:

M. Sc. Physics with at least 74 % aggregate marks (or equivalent CGPA 8.3 on a 10 point scale) **PLUS** a valid GATE Score ≥ 400 or a valid CSIR/UGC/NET Certificate with JRF, **and** first division in the relevant preceding degrees.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 74 % aggregate marks (or equivalent CGPA 8.3 on a 10 point scale) **and** first division in the relevant preceding degrees.

OR

B. Tech. in relevant branch of Engineering with at least 75 % aggregate marks (or equivalent CGPA of 8.5 on a 10 point scale) **PLUS** a valid GATE score ≥ 500 or a valid CSIR/UGC/NET Certificate with JRF, **and** first division in Class 10 and +2.

For all **B. Techs. from IITs** graduating with a CGPA of 8.5 or above, the requirement of qualification through a national examination is waived off.

OBC (non-creamy layer) Candidates:

M. Sc. Physics with at least 74% aggregate marks or equivalent CGPA 8.3 on a 10 point scale plus a Valid GATE Score ≥ 360 or a valid CSIR/UGC/NET Certificate with JRF, **and** first division in preceding degrees.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 74 % aggregate marks (or equivalent CGPA 8.3 on a 10 point scale), **and** first division in the relevant preceding degrees.

OR

B. Tech. in relevant branch of Engineering with at least 75 % aggregate marks (or equivalent CGPA of 8.5 on a 10 point scale) **PLUS** a valid GATE score ≥ 450 **or** a valid CSIR/UGC/NET Certificate with JRF, **and** first division in Class 10 and +2.

For all **B. Techs. from IITs** graduating with a CGPA of 8.5 or above, the requirement of qualification through a national examination is waived off.

SC/ST/PH Candidates:

M. Sc. Physics with at least 60% aggregate marks (or equivalent CGPA of 6.75 on a 10 point scale) **PLUS** a valid GATE Score ≥ 300 or a valid CSIR/UGC/NET Certificate with JRF.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 60% aggregate marks (or equivalent CGPA of 6.75 on a 10 point scale).

OR

B. Tech. in relevant branch of Engineering with at least 70 % aggregate marks (or equivalent CGPA of 7.5 on a 10 point scale) **PLUS** a valid GATE score ≥ 350 or a valid CSIR/UGC/NET Certificate with JRF, and first division in Class 10 and +2.

For all **B. Techs. from IITs** graduating with a CGPA of 7.5 or above, the requirement of qualification through a national examination is waived off.

Part-Time Sponsored Candidates:

Candidates of all categories (GE/OBC/SC/ST/PH) should have minimum 5 years working experience in Govt. Laboratories and Industries of Repute.

General Candidates:

M. Sc. Physics with at least 70 % aggregate marks (or equivalent CGPA 7.5 on a 10 point scale) **and** first division in the relevant preceding degrees.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 70 % aggregate marks (or equivalent CGPA 7.5 on a 10 point scale) **and** first division in the relevant preceding degrees.

OR

B. Tech. in relevant branch of Engineering with at least 70 % aggregate marks (or equivalent CGPA of 7.5 on a 10 point scale) **and** first division in Class 10 and +2.

OBC (non-creamy layer) Candidates:

Same As Above.

SC/ST/PH Candidates:

M. Sc. Physics with at least 60% aggregate marks (or equivalent CGPA of 6.75 on a 10 point scale).

OR

M. Tech. in relevant branch of Engineering or Physics with at least 60% aggregate marks (or equivalent CGPA of 6.75 on a 10 point scale).

OR

B. Tech. in relevant branch of Engineering with at least 70 % aggregate marks (or equivalent CGPA of 7.5 on a 10 point scale) and first division in Class 10 and +2.

NOTE: There will be no direct admission to the above Programme. Candidates, whose M. Tech. / M. Sc. results are not yet declared, will be provisionally short-listed for the interview, provided they have secured the necessary aggregate marks or equivalent CGPA in the results declared so far for the qualifying degree.

B. The committee decided that the Interviews to be held on Friday, Dec. 23, 2011 from 11.00 AM onwards.

The meeting ended with thanks to the Chair.

(D. S. Mehta)
Convener CRC

Instrument Design Development Centre (IDDC)

Date: 13-12-2011

Subject: CRC meeting on 19-12-2011 (Monday), IDDC Head's Room at 12.00 Noon.

CRC meeting will be held on 19-12-2011 (Monday), IDDC Head's Room at 12.00 Noon

Agenda of the meeting:

1. Discussion and approval of Progress reports (Ist Semester 2011-2012) of Ph.D. Students.
2. Discussion on the approval of research plan of Ms. Rakhi Grover.
3. Formulation and approval of SRC of newly joined Ph. D. student of IDDC.
4. Discussion on the approval of Synopsis and Panel of Examiners of Ph. D. thesis of the following students:
 - i. **Mr. Bhaskar Kumar Vinodchandra Thakker (REGN. No. 2007 IDZ 8202)**
 - ii. **Mr. Hardik Pandya (2008 IDZ 8125)**
5. Any other matter with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

- | | |
|---|----------|
| 1. Prof. A. L. Vyas | Chairman |
| 2. Prof. M. R. Shenoy, Physics | Member |
| 3. Prof. Bhim Singh, Electrical Engineering | Member |
| 4. Prof. Naresh Bhatnagar | Member |
| 5. Prof. Chandra Shakher | Member |
| 6. Prof. D. T. Shahani | Member |
| 7. Dr. N. K. Jain | Member |
| 8. Dr. I. P. Singh | Member |
| 9. Sh. A. K. Agarwala | Member |
| 10. Sh. S. K. Atreya | Member |
| 11. Dr. G. S. Khan | Member |
| 12. Dr. Jyoti Kumar | Member |
| 13. Dr. D. S. Mehta | Convener |

D. S. Mehta)
Convener, CRC

Date: 20-12-2011

Subject: Minutes of the CRC meeting held on 19-12-2011 (Monday), IDDC Head's Room at 12.00 Noon.

CRC meeting was held on 19-12-2011 (Monday), IDDC Head's Room at 12.00 Noon. The following members attended the meeting:

1. Prof. A. L. Vyas	Chairman
2. Prof. Chandra Shakher	Member
3. Dr. N. K. Jain	Member
4. Sh. A. K. Agarwala	Member
5. Sh. S. K. Atreya	Member
6. Dr. G. S. Khan	Member
7. Dr. D. S. Mehta	Convener

Other members could not join the meeting. The following are the minutes of the meeting.

1. Progress reports of Ph. D. students of IDDC for the Ist Semester 2011 – 2012

Progress reports submitted by the Ph. D. students of IDDC for the Ist Semester 2011 – 2012 were received and discussed in the CRC meeting. As per the recommendations of their respective supervisors all the reports were found satisfactory. CRC recommended that the grades of all the students be forwarded to PG section for further necessary action.

2. Discussion on the approval of research plan of Ms. Rakhi Grover (2009 IDZ 8222)

The research plan submitted by Ms. Rakhi Grover (2009 IDZ 8222) to SRC and duly approved by SRC were circulated among the CRC members for their comments and suggestions. No comments/suggestions were received. The research plan was presented to CRC and the CRC recommended that the research proposal be forwarded to PGS & R section for further necessary action.

3. Other items to be discussed in the next meeting of CRC.

D. S. Mehta)
Convener, CRC

Instrument Design Development Centre

Date: 20-12-2011

Subject: Test/ Interview of Ph. D. Candidates on 23-12-2011 (Friday), 11.00 A.M. onwards.

Test/Interview of Ph. D. Candidates will be held on Friday 23rd, December 2011 at 11.00 A. M. onwards in the IDDC Head's Room. Applications of short-listed candidates may be seen in IDDC Office.

All CRC Members and Faculty of IDDC are requested to participate in the interview.

(D. S. Mehta)

Convener, CRC

Copy to:

- 1. All CRC Members and Faculty of IDDC**
- 2. IDDC Notice Board**

Instrument Design Development Centre (IDDC)

Date: Dec. 20, 2011

To,
The Dean,
PG Section,
Indian Institute of Technology Delhi

Sub.: Grades of Ph. D. students of IDDC.

Attached please find the grades of the progress report of Ph. D. Students of IDDC alongwith the minutes of CRC (Minute 01) for further necessary action.

(D. S. Mehta)
Convener, CRC

Enclosures:

1. Progress report.
2. CRC minutes (Minute No. 1).

Instrument Design Development Centre (IDDC)

Date: Dec. 20, 2011

Sub.: Research plan of Ph.D. student of IDDC

Attached please find the result of the comprehensive examination of the following Ph. D. Student and copy of the research plan along with the minutes (Minute No. 02) of CRC for further necessary action.

Ph.D. student:

Ms. Rakhi Grover (2009 IDZ 8222)

(D. S. Mehta)
Convener, CRC

DR, PGS & R

Enclosures:

1. Results of Comprehensive Examination
2. CRC Minutes
3. Research Plan

Instrument Design Development Centre (IDDC)

Date: 12-01-2012

Subject: Minutes of CRC meeting held on 11-01-2012 (Wednesday).

CRC meeting was held on 11-01-2011 (Wednesday), IDDC Head's Room at 12.00 Noon. The following members attended the meeting:

1. Prof. A. L. Vyas	Chairman
2. Prof. M. R. Shenoy	Member
3. Dr. N. K. Jain	Member
4. Sh. A. K. Agarwala	Member
5. Dr. I. P. Singh	Member
6. Sh. S. K. Atreya	Member
7. Dr. G. S. Khan	Member
8. Dr. D. S. Mehta	Convener

Other members could not join the meeting. The following items were discussed;

1. Formulation and approval of SRC of Aarti Prakash Khare Ph. D. student of IDDC:

The appointment of Supervisors and formulation of Student Research Committee (SRC) of **Aarti Prakash Khare (2011 IDZ 8219)** full-time Ph. D. student of IDDC was discussed. The Supervisor (Dr. Jyoti Kumar) of the student has suggested two external experts; Dr. P. Vigneswara Ilavarasan (HSS) and Dr. V. M. Chariar (CRDT). Based on the expertise related to the research area of the student the CRC decided that Dr. P. Vigneswara Ilavarasan (HSS) would be the external expert of the student and the CRC recommends that the same be forwarded to PG section for further necessary action.

2. Formulation and approval of SRC of Ankita Gaur Ph. D. student of IDDC:

The appointment of Supervisors and formulation of Student Research Committee (SRC) of **Ankita Gaur (2011 IDZ 8220)** Part-time Ph. D. student of IDDC was discussed and decided the following SRC members (Prof. A. L. Vyas, Chairman CRC, Prof. Chandra Shakher (Internal Expert), Prof. Joby Joseph (External Expert, Dept. of Physics), and Dr. Gufran Khan (Supervisor) and the CRC recommends that the same be forwarded to PG section for further necessary action.

3. Discussion on the approval of Synopsis and Panel of Examiners of Ph. D. thesis of Mr. Hardik Jeetendra Pandya (2008 IDZ 8125):

The SRC's report of Mr. Hardik Jeetendra Pandya (2008 IDZ 8125) on his Ph. D. Synopsis entitled "**Novel Techniques for MEMS-based Sensors Using Nanostructured Metal Oxides**" and the appointment of the thesis examiners were discussed in the meeting and CRC recommends that the Synopsis and the list of examiners be forwarded to PG Section for further necessary action.

4. Discussion on the approval of Synopsis and Panel of Examiners of Ph. D. thesis of Mr. Bhasker Thakker (2007 IDZ 8202):

The SRC's report of **Mr. Bhasker Thakker (2007 IDZ 8202)** on his Ph. D. Synopsis entitled "**Studies on Wrist Pulse Signals in Healthy and Unhealthy Subjects**" and the appointment of the thesis examiners were discussed in the meeting and CRC recommends that the Synopsis and the list of examiners be forwarded to PG Section for further necessary action.

5. Discussion and finalization of short-listing criteria for Ph. D. candidates under QIP category for the advance admission 2012-2013.

Short-listing Criteria for Ph. D. candidates under QIP category for the advance admission 2012-2013 was discussed and the CRC decided the following shortlisting criteria;

General Candidates:

M. Sc. Physics with at least 74 % aggregate marks (or equivalent CGPA 8.3 on a 10 point scale) **and** first division in the relevant preceding degrees.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 74 % aggregate marks (or equivalent CGPA 8.3 on a 10 point scale) **and** first division in the relevant preceding degrees.

OR

B. Tech. in relevant branch of Engineering with at least 75 % aggregate marks (or equivalent CGPA of 8.5 on a 10 point scale) **and** first division in Class 10 and +2.

For all **B. Techs. from IITs** graduating with a CGPA of 8.5 or above, the requirement of qualification through a national examination is waived off.

OBC (non-creamy layer) Candidates:

M. Sc. Physics with at least 74% aggregate marks or equivalent CGPA 8.3 on a 10 point scale **and** first division in preceding degrees.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 74 % aggregate marks (or equivalent CGPA 8.3 on a 10 point scale), **and** first division in the relevant preceding degrees.

OR

B. Tech. in relevant branch of Engineering with at least 75 % aggregate marks (or equivalent CGPA of 8.5 on a 10 point scale) **and** first division in Class 10 and +2.

For all **B. Techs. from IITs** graduating with a CGPA of 8.5 or above, the requirement of qualification through a national examination is waived off.

SC/ST/PH Candidates:

M. Sc. Physics with at least 60% aggregate marks (or equivalent CGPA of 6.75 on a 10 point scale).

OR

M. Tech. in relevant branch of Engineering or Physics with at least 60% aggregate marks (or equivalent CGPA of 6.75 on a 10 point scale).

OR

B. Tech. in relevant branch of Engineering with at least 70 % aggregate marks (or equivalent CGPA of 7.5 on a 10 point scale) **and** first division in Class 10 and +2.

For all **B. Techs. from IITs** graduating with a CGPA of 7.5 or above, the requirement of qualification through a national examination is waived off.

8. A letter from Mr. Govind Prasad Bidua Ph. D. student of IDDC forwarded by his supervisor was received requesting to start his course work from July 2012 instead of January 2012.

CRC discussed his request and decided that Mr. Govind Prasad Bidua be allowed to take his course work from July 2012 instead of January 2012. He would however be required to complete the comprehensive examination within the time limit set by the Institute.

Meeting ended with thanks to the Chair.

D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 12-01-2012

Subject: CRC meeting on 11-01-2012 (Wednesday), IDDC Head's Room at 12.00 Noon.

CRC meeting will be held on 11-01-2012 (Wednesday), IDDC Head's Room at 12.00 Noon.

Pending Issues:

1. Formulation and approval of SRC of newly joined Ph. D. student of IDDC.
2. Discussion on the approval of Synopsis and Panel of Examiners of Ph. D. thesis of the following students:

- i. **Mr. Bhaskar Kumar Vinodchandra Thakker (REGN. No. 2007 IDZ 8202)**
- ii. **Mr. Hardik Pandya (2008 IDZ 8125)**

New Items to be Discussed:

1. Discussion and finalization of short-listing criteria for Ph. D. candidates under QIP category for the advance admission 2012-2013.
2. Discussion on the the request of Mr. Govind Prasad Bidua to start his course work from July 2012.
3. Any other matter with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

- | | |
|--|----------|
| 1. Prof. A. L. Vyas | Chairman |
| 2. Prof. M. R. Shenoy, Physics | Member |
| 3. Prof. Bhim Singh, Electrical Engineering | Member |
| 4. Prof. Naresh Bhatnagar , Mechanical Engineering | Member |
| 5. Prof. Chandra Shakher | Member |
| 6. Prof. D. T. Shahani | Member |
| 7. Dr. N. K. Jain | Member |
| 8. Dr. I. P. Singh | Member |
| 9. Sh. A. K. Agarwala | Member |
| 10. Sh. S. K. Atreya | Member |
| 11. Dr. G. S. Khan | Member |
| 12. Dr. Jyoti Kumar | Member |
| 13. Dr. D. S. Mehta | Convener |

D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: January 16, 2012

Enclosed please find the duly filled application forms for the appointment of Supervisors and formulation of Student Research Committee (s) (SRC) of the following Ph. D. scholars of IDDC.

1. Aarti Prakash Khare (2011 IDZ 8219) (Full-time)
2. Ankita Gaur (2011 IDZ 8220) (Part-time)

(D. S. Mehta)
Convener,
CRC

DR, PGS & R

Enclosures:

1. Application forms
2. CRC minutes (Minute 1 & 2)

Instrument Design Development Centre (IDDC)

Date: January 16, 2012

Enclosed please find the letter from Mr. Govind Prasad Bidua Ph. D. student of IDDC forwarded by his supervisor requesting to start his course work from July 2012 instead of January 2012 along with CRC minutes (Minute No. 8) for further necessary action.

(D. S. Mehta)
Convener,
CRC

DR, PGS & R

Enclosures:

1. Request Letter
2. CRC minutes (Minute No. 8)

Instrument Design Development Centre (IDDC)

Date: 16-01-2012

Subject: Submission of Ph. D. synopsis and list of Ph. D. thesis examiners of **Mr. Hardik Jeetendra Pandya (2008 IDZ 812)**.

Enclosed please find the list of Ph. D. thesis examiners and two hard copies of Synopsis of **Mr. Hardik Jeetendra Pandya (2008 IDZ 8125)** of his Ph. D. Synopsis entitled “**Novel Techniques for MEMS-based Sensors Using Nanostructured Metal Oxides**” and CRC minutes (03) for further necessary action.

(D. S. Mehta)
Convener, CRC

Dean PGS & R

Instrument Design Development Centre (IDDC)

Date: 16-01-2011

Subject: Submission of Ph. D. synopsis and list of Ph. D. thesis examiners of **Mr. Bhasker Thakker (2007 IDZ 8202)**.

Enclosed please find the list of Ph. D. thesis examiners and two hard copies of Synopsis of **Mr. Bhasker Thakker (2007 IDZ 8202)** of his Ph. D. Synopsis entitled “**Studies on Wrist Pulse Signals in Healthy and Unhealthy Subjects**” and CRC minutes (04) for further necessary action.

(D. S. Mehta)
Convener, CRC

Dean PGS & R

Instrument Design Development Centre (IDDC)

Date: 08-02-2012

Subject: CRC meeting on 16-02-2012 (Thursday), IDDC Head’s Room at 4.00P.M.

CRC meeting will be held on 16-02-2012 (Thursday), IDDC Head’s Room at 4.00P.M.

Agenda:

1. Formulation and approval of SRC of newly joined Ph. D. student of IDDC.
2. Discussion on the approval of Synopsis and Panel of Examiners of Ph. D. thesis of the following students:
 - i. **Mr. Packiam**
 - ii. **Mr. Dhawal Gupta**
 - iii. **Arunandan Kumar**
3. Any other matter with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

- | | |
|--------------------------------|----------|
| 1. Prof. A. L. Vyas | Chairman |
| 2. Prof. M. R. Shenoy, Physics | Member |

3. Prof. Bhim Singh, Electrical Engineering	Member
4. Prof. Naresh Bhatnagar , Mechanical Engineering	Member
5. Prof. Chandra Shakher	Member
6. Prof. D. T. Shahani	Member
7. Dr. N. K. Jain	Member
8. Dr. I. P. Singh	Member
9. Sh. A. K. Agarwala	Member
10. Sh. S. K. Atreya	Member
11. Dr. G. S. Khan	Member
12. Dr. Jyoti Kumar	Member
13. Dr. D. S. Mehta	Convener

D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 21-02-2012

Subject: Minutes of the CRC meeting held on 16-02-2012 (Thursday), IDDC Head's Room at 4.00P.M.

CRC meeting was held on 16-02-2012 (Thursday), IDDC Head's Room at 4.00P.M. The following members attended the meeting:

1. Prof. A. L. Vyas	Chairman
2. Dr. N. K. Jain	Member
3. Dr. I. P. Singh	Member
4. Dr. G. S. Khan	Member
5. Dr. D. S. Mehta	Convener

Due to lack of quorum the meeting was adjourned and was reconvened at 4.30 P.M.
The following are the minutes of the meeting.

1. Formulation and approval of SRC of Manoj Kumar (2011 IDZ 8218) Ph. D. student of IDDC:

The appointment of Supervisors and formulation of Student Research Committee (SRC) of **Manoj Kumar (2011 IDZ 8218)** full-time Ph. D. student of IDDC was discussed and decided the following SRC members (Prof. A. L. Vyas, Chairman CRC, Dr. D. S. Mehta (Internal Expert), Prof. M. R. Shenoy (External Expert, Dept. of Physics), Prof. Chandra Shakher (Supervisor) and Dr. Gufran Khan (Supervisor) and the CRC recommends that the same be forwarded to PG section for further necessary action.

2. Discussion on the approval of Synopsis and Panel of Examiners of Ph. D. thesis of Mr. Packiam (2006 IDZ 8191):

The SRC's report of **Mr. Packiam (2006 IDZ 8191)** on his Ph. D. Synopsis entitled "**Control of single stage voltage source inverter-fed photovoltaic water pumping system: Simulation and microcontroller based hardware implementation**" and the appointment of the thesis examiners were discussed in the meeting and CRC recommends that the Synopsis and the list of examiners be forwarded to PG Section for further necessary action.

3. **Discussion on the approval of Synopsis and Panel of Examiners of Ph. D. thesis of Mr. Dhawal Gupta (2005 IDZ 8169):**

The SRC's report of **Mr. Dhawal Gupta (2005 IDZ 8169)** on his Ph. D. Synopsis entitled "**Improved algorithms for using random emission anomalies as reliable precursors to earthquakes using statistical and artificial neural networks**" and the appointment of the thesis examiners were discussed in the meeting and CRC recommends that the Synopsis and the list of examiners be forwarded to PG Section for further necessary action.

4. **Discussion on the approval of Synopsis and Panel of Examiners of Ph. D. thesis of Mr. Arunandan Kumar (2008 IDZ 8126):**

The SRC's report of **Mr. Arunandan Kumar (2008 IDZ 8126)** on his Ph. D. Synopsis entitled "**Electro-optical studies of organic light emitting devices for efficiency enhancement**" and the appointment of the thesis examiners were discussed in the meeting and CRC recommends that the Synopsis and the list of examiners be forwarded to PG Section for further necessary action.

The meeting ended with thanks to the chair.

D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 23-02-2012

Subject: Submission of Ph. D. synopsis and list of Ph. D. thesis examiners of **Mr. Packiam (2006 IDZ 8191)**.

Enclosed please find the list of Ph. D. thesis examiners, two hard copies and soft copy (CD) of the Synopsis of **Mr. Packiam (2006 IDZ 8191)** of his Ph. D. thesis entitled "**Control of single stage voltage source inverter-fed photovoltaic water pumping system: Simulation and microcontroller based hardware implementation**" and CRC minutes (02) for further necessary action.

(D. S. Mehta)
Convener, CRC

Dean PGS & R

Encl.:

1. List of Ph.D. thesis examiners.
2. Two hard copies of synopsis.
3. Soft copy in CD.

Instrument Design Development Centre (IDDC)

Date: 23-02-2012

Subject: Submission of Ph. D. synopsis and list of Ph. D. thesis examiners of **Mr. Dhawal Gupta (2005 IDZ 8169)**.

Enclosed please find the list of Ph. D. thesis examiners, two hard copies and soft copy (CD) of the Synopsis of **Mr. Dhawal Gupta (2005 IDZ 8169)** of his Ph. D. thesis entitled “**Improved algorithms for using random emission anomalies as reliable precursors to earthquakes using statistical and artificial neural networks**” and CRC minutes (03) for further necessary action.

(D. S. Mehta)
Convener, CRC

Dean PGS & R

Encl.:

1. List of Ph.D. thesis examiners.
2. Two hard copies of synopsis.
3. Soft copy in CD.

Instrument Design Development Centre (IDDC)

Date: 12-03-2012

Subject: Submission of Ph. D. synopsis and list of Ph. D. thesis examiners of **Mr. Arunandan Kumar (2008 IDZ 8126)**.

Enclosed please find the list of Ph. D. thesis examiners, and two hard copies of the Synopsis of **Mr. Arunandan Kumar (2008 IDZ 8126)** of his Ph. D. thesis entitled “**Electro-optical studies of organic light emitting devices for efficiency enhancement**” and CRC minutes (04) for further necessary action.

(D. S. Mehta)
Convener, CRC

Dean PGS & R

Encl.:

1. List of Ph.D. thesis examiners.
2. Two hard copies of synopsis.

Instrument Design Development Centre (IDDC)

Date: 23-02-2012

Enclosed please find the duly filled application forms for the appointment of Supervisors and formulation of Student Research Committee (s) (SRC) of the following Ph. D. scholar of IDDC.

Manoj Kumar (2011 IDZ 8218)

(D. S. Mehta)
Convener,
CRC

DR, PGS & R

Enclosures:

1. Application form
2. CRC minutes (Minute 1)

Instrument Design Development Centre

Date: 05-03-2012

Subject: Test/ Interview of Ph. D. Candidates under QIP programme on 14-03-2012.

Ph. D. Test/Interview of Candidates under QIP programme on 14-03-2012 (Wednesday) at 11:00 A.M. in the IDDC Head's Room. Applications of short-listed candidates may be seen in IDDC Office.

All CRC Members and Faculty of IDDC are requested to participate in the interview.

(D. S. Mehta)

Convener, CRC

**Copy to All Faculty
IDDC Notice Board**

Date: 27-03-2012

Subject: CRC meeting on 29-03-2012 (Thursday), IDDC Head's Room at 4.30 P.M.

CRC meeting will be held on 29-03-2012 (Thursday), IDDC Head's Room at 4.30 P.M.

Agenda:

1. Discussion on the approval of research plan of Mr. Viranchi Chudamanibhai Panda (2010IDZ8169).
2. Discussion on the project proposal entitled "Networking infrastructure for the remote monitoring of patients" to be submitted to DST under UKIERI program..
3. Any other matter with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

1. Prof. A. L. Vyas	Chairman
2. Prof. M. R. Shenoy, Physics	Member
3. Prof. Bhim Singh, Electrical Engineering	Member
4. Prof. Naresh Bhatnagar , Mechanical Engineering	Member
5. Prof. Chandra Shakher	Member
6. Prof. D. T. Shahani	Member
7. Dr. N. K. Jain	Member
8. Dr. I. P. Singh	Member
9. Sh. A. K. Agarwala	Member
10. Sh. S. K. Atreya	Member
11. Dr. G. S. Khan	Member
12. Dr. Jyoti Kumar	Member
13. Dr. D. S. Mehta	Convener

D. S. Mehta)
Convener, CRC

Date: 28-03-2012

Subject: CRC meeting postponed.

CRC meeting scheduled to be held on 29-03-2012 (Thursday) is postponed due to BPGS & R meeting on 29-03-2012 at 3.00 P.M.

CRC meeting will now be held on 30-03-2012 (Friday), IDDC Head's Room at 3.00 P.M.

Agenda:

1. Discussion on the approval of research plan of Mr. Viranchi Chudamanibhai Panda (2010IDZ8169).
2. Discussion on the project proposal entitled “Networking infrastructure for the remote monitoring of patients” to be submitted to DST under UKIERI program.
3. Any other matter with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

- | | |
|--|----------|
| 1. Prof. A. L. Vyas | Chairman |
| 2. Prof. M. R. Shenoy, Physics | Member |
| 3. Prof. Bhim Singh, Electrical Engineering | Member |
| 4. Prof. Naresh Bhatnagar , Mechanical Engineering | Member |
| 5. Prof. Chandra Shakher | Member |
| 6. Prof. D. T. Shahani | Member |
| 7. Dr. N. K. Jain | Member |
| 8. Dr. I. P. Singh | Member |
| 9. Sh. A. K. Agarwala | Member |
| 10. Sh. S. K. Atreya | Member |
| 11. Dr. G. S. Khan | Member |
| 12. Dr. Jyoti Kumar | Member |
| 13. Dr. D. S. Mehta | Convener |

D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

IDDC/CRC/

Date: 02-04-2012

Subject: Minutes of the CRC meeting.

CRC meeting was held on 30-03-2012 (Friday) in IDDC Head’s Room at 3.00P.M. The following members attended the meeting:

- | | |
|-----------------------|----------|
| 1. Prof. A. L. Vyas | Chairman |
| 2. Dr. N. K. Jain | Member |
| 3. Prof. M. R. Shenoy | Member |
| 4. Sh. A. K. Agarwala | Member |
| 5. Sh. S. K. Atreya | Member |
| 6. Dr. I. P. Singh | Member |
| 7. Dr. G. S. Khan | Member |
| 8. Dr. D. S. Mehta | Convener |

Other members could not attend the meeting. The following are the minutes of the meeting;

1. **Discussion on the approval of research plan of Mr. Viranchi Chudamanibhai Pandya (2010IDZ8169)**

The research plan submitted by Mr. Viranchi Chud amanibhai Pandya (2010IDZ8169) to SRC and duly approved by SRC was circulated among the CRC members for their comments and suggestions. No comments/suggestions were received. The research plan was presented to CRC and the CRC recommended that the research plan be forwarded to PGS & R section for further necessary action.

2. Discussion on the approval of project proposal:

Project proposal entitled “**Networking infrastructure for the remote monitoring of patients**” to be submitted to DST under UKIERI program by Prof. A. L. Vyas (PI) was received and discussed in the CRC meeting. It was noted that the PI had clarified that no additional space and manpower was being asked from IDDC. The CRC recommends the aforementioned proposal be forwarded to IRD for further necessary processing.

The meeting ended with thanks to the chair.

(D. S.
Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: April 03, 2012

Sub.: Research plan of Ph.D. student of IDDC

Attached please find the result of the comprehensive examination of the following Ph. D. Student and copy of the research plan along with the minutes (Minute No. 01) of CRC for further necessary action.

Ph.D. student:

Mr. Viranchi Chud amanibhai Pandya (2010IDZ8169)

(D. S. Mehta)
Convener, CRC

DR, PGS & R

Enclosures:

1. Results of Comprehensive Examination
2. CRC Minutes
3. Research Plan

Instrument Design Development Centre (IDDC)

Date: 07-05-2012

Subject: CRC meeting on 11-05-2012 (Friday), IDDC Committee Room at 3.00 P.M.

CRC meeting will be held on 11-05-2012 (Friday), IDDC Committee Room at 3.00 P.M.

Agenda of the meeting:

1. Discussion and finalization of short-listing criteria for Ph. D. candidates for the Ist Semester 2012-2013.
2. Finalization of Test/Interview dates for Ph. D. selection.
3. Discussion on the approval of research plan of Mr. Rajesh Kumar (Entry No. 2008 IDZ 8398).
4. Discussion and approval of “MoU for undertaking technology research project on development and fabrication of remote operation of anti aircraft machine gun.” Submitted by Prof. D. T. Shahani.
4. Any other matter with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

1. Prof. A. L. Vyas	Chairman
2. Prof. M. R. Shenoy, Physics	Member
3. Prof. G. S. Visweswaran, Electrical Engineering	Member
4. Prof. Chandra Shakher	Member
5. Prof. D. T. Shahani	Member
6. Dr. N. K. Jain	Member
7. Dr. I. P. Singh	Member
8. Sh. A. K. Agarwala	Member
9. Sh. S. K. Atreya	Member
10. Dr. G. S. Khan	Member
11. Dr. Jyoti Kumar	Member
12. Dr. D. S. Mehta	Convener

D. S. Mehta)
Convener, CRC

Subject: Minutes of CRC meeting held on 11-05-2012 (Friday), IDDC Head's Room at 3.00 P.M.

CRC meeting was held on 11-05-2012 (Friday), IDDC Head's Room at 3.00 P.M. The following members attended the meeting:

1. Prof. A. L. Vyas	Chairman
2. Dr. N. K. Jain	Member
3. Dr. I. P. Singh	Member
4. Dr. G. S. Khan	Member
5. Dr. D. S. Mehta	Convener

Due to lack of quorum the meeting was adjourned and was reconvened at 3.30 P.M. The following are the minutes of the meeting.

1. The committee discussed and decided the following short-listing criteria for Ph. D. applicants for Ist Semester 2012-2013 in IDDC.

For Full-Time With Institute Assistantship:

General Candidates:

M. Sc. Physics with at least 73 % aggregate marks (or equivalent CGPA 8.0 on a 10 point scale) **PLUS** a valid GATE Score ≥ 400 or a valid CSIR/UGC/NET Certificate with JRF, **and** first division in the relevant preceding degrees and 10 +2.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 73% aggregate marks (or equivalent CGPA 8.0 on a 10 point scale) **and** first division in the relevant preceding degrees and 10+2.

OR

B. Tech. in relevant branch of Engineering with at least 75 % aggregate marks (or equivalent CGPA of 8.5 on a 10 point scale) **PLUS** a valid GATE score ≥ 500 or a valid CSIR/UGC/NET Certificate with JRF, **and** first division in Class 10 and +2.

For all **B. Techs. from IITs** graduating with a CGPA of 8.5 or above, the requirement of qualification through a national examination is waived off.

OBC (non-creamy layer)/Minority Candidates:

M. Sc. Physics with at least 73% aggregate marks or equivalent CGPA 8.0 on a 10 point scale plus a Valid GATE Score ≥ 360 or a valid CSIR/UGC/NET Certificate with JRF, **and** first division in preceding degrees and 10+2.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 73 % aggregate marks (or equivalent CGPA 8.0 on a 10 point scale), **and** first division in the relevant preceding degrees and 10 + 2.

OR

B. Tech. in relevant branch of Engineering with at least 75 % aggregate marks (or equivalent CGPA of 8.5 on a 10 point scale) **PLUS** a valid GATE score ≥ 450 **or** a valid CSIR/UGC/NET Certificate with JRF, **and** first division in Class 10 and +2.

For all **B. Techs. from IITs** graduating with a CGPA of 8.5 or above, the requirement of qualification through a national examination is waived off.

SC/ST/PH Candidates:

M. Sc. Physics with at least 58% aggregate marks (or equivalent CGPA of 6.6 on a 10 point scale) **PLUS** a valid GATE Score ≥ 300 or a valid CSIR/UGC/NET Certificate with JRF and minimum 55% in preceding degrees.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 58% aggregate marks (or equivalent CGPA of 6.6 on a 10 point scale) and minimum 55% in preceding degrees.

OR

B. Tech. in relevant branch of Engineering with at least 70 % aggregate marks (or equivalent CGPA of 7.5 on a 10 point scale) **PLUS** a valid GATE score ≥ 350 or a valid CSIR/UGC/NET Certificate with JRF, **and** first division in Class 10 and +2.

For all ***B. Techs. from IITs*** graduating with a CGPA of 7.5 or above, the requirement of qualification through a national examination is waived off.

Part-Time Sponsored Candidates:

Candidates of all categories (GE/OBC/SC/ST/PH) as per Institute norms, but the short-listing criteria will be as above, except for the requirement of GATE Score and should have minimum 5 years working experience in Govt. Laboratories and Industries of Repute.

NOTE: There will be no direct admission to the above Programme. Candidates, whose M. Tech. / M. Sc. results are not yet declared, will be provisionally short-listed for the interview, provided they have secured the necessary aggregate marks or equivalent CGPA in the results declared so far for the qualifying degree.

2. The committee decided that the Interviews to be held on Friday, June 01, 2012 from 10.00 AM onwards.

3. Discussion on the approval of research plan of Mr. Rajesh Kumar (Entry No. 2008 IDZ 8398)

The research plan submitted by Mr. Rajesh Kumar (Entry No. 2008 IDZ 8398) to SRC and duly approved by SRC was circulated among the CRC members for their comments and suggestions. No comments/suggestions were received. The research plan was presented to CRC and the CRC recommended that the research plan be forwarded to PGS & R section for further necessary action.

4. Discussion on the approval of project proposal

Project proposal entitled “MoU for undertaking technology research project on development and fabrication of remote operation of anti aircraft machine gun.” Submitted by Prof. D. T. Shahani (**PI**) was received and discussed in the CRC meeting. It was noted that the PI had clarified that no additional space and manpower was being asked from IDDC. The CRC recommends the aforementioned proposal be forwarded to IRD for further necessary processing.

The meeting ended with thanks to the Chair.

(D. S. Mehta)
Convener CRC

Instrument Design Development Centre (IDDC)

Date: May 16, 2012

Sub.: Research plan of Ph.D. student of IDDC

Attached please find the result of the comprehensive examination of the following Ph. D. Student and copy of the research plan along with the minutes (Minute No. 03) of CRC for further necessary action.

Ph.D. student:

Mr. Rajesh Kumar (Entry No. 2008 IDZ 8398)

(D. S. Mehta)
Convener, CRC

DR, PGS & R

Enclosures:

1. Results of Comprehensive Examination
2. CRC Minutes
3. Research Plan

Instrument Design Development Centre

Date: 28-05-2012

Subject: Test/ Interview of Ph. D. Candidates on 01-06-2012.

Test/Interview of Ph. D. Candidates on 01-06-2012 (Friday) at 10:00 A.M. onwards in the IDDC Head's Room. Applications of short-listed candidates may be seen in IDDC Office.

All CRC Members and Faculty of IDDC are requested to participate in the Test/Interview.

(D. S. Mehta)

Convener, CRC

**Copy to All Faculty
IDDC Notice Board**

Instrument Design Development Centre

Date: 04-06-2012

Sub.: Format for Progress Report of the Ph.D. Scholars

Kindly submit your progress report of IInd semester 2011-2012 as per the following format.

1. Topic of Research
2. Course work done
3. Literature survey
4. Details of research done during the last semester: Experimental/Simulation).
5. List of publications (peer reviewed Journals and National /International Conferences).
6. Plan for next semester.

Total no. of pages of research report should be 10 – 15 pages.

Research scholars who have completed four years and requesting for extension for fellowship for the next semester should submit a consolidated research work done during the entire four years duly signed by SRC members.

Kindly upload your progress report by July 06, 2012 and hard copy should also reach to the undersigned by July 6, 2012. For more details please see the attached page.

(D.S. Mehta)
Convener CRC

Instrument Design Development Centre (IDDC)

Date: 05-06-2012

Subject: CRC meeting on 11-06-2012 (Monday), IDDC Committee Room at 11.00 A.M.

CRC meeting will be held on 11-06-2012 (Monday), IDDC Committee Room at 11.00 A.M.

Agenda of the meeting:

1. Discussion on the approval of research plan of Mr. Arun Kumar Verma.
2. Discussion on the approval of Synopsis and Panel of Examiners of Ph. D. thesis of the following students:
 - i. Mr. Huidram Lokeshwar Singh
 - ii. Mr. Vivek Kumar
3. Any other matter with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

- | | |
|--|----------|
| 1. Prof. A. L. Vyas | Chairman |
| 2. Prof. M. R. Shenoy, Physics | Member |
| 3. Prof. Bhim Singh, Electrical Engineering | Member |
| 4. Prof. Naresh Bhatnagar , Mechanical Engineering | Member |
| 5. Prof. Chandra Shakher | Member |
| 6. Prof. D. T. Shahani | Member |
| 7. Dr. N. K. Jain | Member |
| 8. Dr. I. P. Singh | Member |
| 9. Sh. A. K. Agarwala | Member |
| 10. Sh. S. K. Atreya | Member |
| 11. Dr. G. S. Khan | Member |
| 12. Dr. Jyoti Kumar | Member |
| 13. Dr. D. S. Mehta | Convener |

D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

IDDC/CRC/

Date: 12-06-2012

Subject: Minutes of the CRC meeting.

CRC meeting was held on 11-06-2012 (Monday), IDDC Committee Room at 11.00 A.M.
The following members attended the meeting:

1. Prof. A. L. Vyas	Chairman
2. Dr. N. K. Jain	Member
3. Prof. M. R. Shenoy	Member
4. Prof. Chandra Shakher	Member
5. Dr. I. P. Singh	Member
6. Dr. Jyoti Kumar	Member
7. Dr. D. S. Mehta	Convener

Other members could not attend the meeting. The following are the minutes of the meeting;

1. Discussion on the approval of research plan of Mr. Arun Kumar Verma (2010IDZ8168)

The research plan submitted by **Mr. Arun Kumar Verma (2010IDZ8168)** to SRC and duly approved by SRC was circulated among the CRC members for their comments and suggestions. The research plan was presented to CRC and the CRC recommended that the research plan be forwarded to PGS & R section for further necessary action.

2. Discussion on the approval of Synopsis and Panel of Examiners of Ph. D. thesis of Mr. Huidrom Lokeshwor Singh (2007 IDZ 8182):

The SRC's report of **Mr. Huidrom Lokeshwor Singh (2007 IDZ 8182)** on his Ph. D. Synopsis entitled "**An improved method for automated evaluation of critical road surface distresses using video image based techniques**" and the appointment of the thesis examiners were discussed in the meeting and CRC recommends that the Synopsis and the list of examiners be forwarded to PG Section for further necessary action.

3. Discussion on the approval of Synopsis and Panel of Examiners of Ph. D. thesis of Mr. Vivek Kumar (2008 IDZ 8124):

The SRC's report of **Mr. Vivek Kumar (2008 IDZ 8124)** on his Ph. D. Synopsis entitled "**Development of Modified bamboo fiber reinforced plastic nanocomposites and study of their dielectric, mechanical and thermal properties**" and the appointment of the thesis examiners were discussed in the meeting and CRC recommends that the Synopsis and the list of examiners be forwarded to PG Section for further necessary action.

4. Discussion on the approval of project proposal:

Project proposal entitled "**Utilization of Quartz Crystal Micro-mass (QCM) balance technique for study of CNT activated chimeric polymers interface, for biomedical applications including toxin scavenging and drug delivery potentials**" by **Prof. Prof. D. T. Shahani (PI)** was received and discussed in the CRC meeting. It was noted that the PI had clarified that no additional space and manpower was being asked from IDDC. The CRC recommends the aforementioned proposal be forwarded to IRD for further necessary processing.

The meeting ended with thanks to the chair.

(D. S.
Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: June 14, 2012

Sub.: Research plan of Ph.D. student of IDDC

Attached please find the result of the comprehensive examination of the following Ph. D. Student and copy of the research plan along with the minutes (Minute No. 01) of CRC for further necessary action.

Ph.D. student:

Mr. Arun Kumar Verma (2010IDZ8168)

(D. S. Mehta)
Convener, CRC

DR, PGS & R

Enclosures:

1. Results of Comprehensive Examination
2. CRC Minutes
3. Research Plan

Instrument Design Development Centre (IDDC)

Date: 14-06-2012

Subject: Submission of Ph. D. synopsis and list of Ph. D. thesis examiners of **Mr. Vivek Kumar (2008 IDZ 8124)**.

Enclosed please find the list of Ph. D. thesis examiners, and two hard copies of the Synopsis of **Mr. Vivek Kumar (2008 IDZ 8124)** of his Ph. D. thesis entitled “**Development of Modified bamboo fiber reinforced plastic nanocomposites and study of their dielectric, mechanical and thermal properties**” and CRC minutes (03) for further necessary action.

(D. S. Mehta)
Convener, CRC

Dean PGS & R

Encl.:

1. List of Ph.D. thesis examiners.
2. Two hard copies of synopsis.

Instrument Design Development Centre (IDDC)

Date: 18-06-2012

Subject: Submission of Ph. D. synopsis and list of Ph. D. thesis examiners of **Mr. Huidrom Lokeshwor Singh (2007 IDZ 8182)**.

Enclosed please find the list of Ph. D. thesis examiners, and two hard copies of the Synopsis of **Mr. Huidrom Lokeshwor Singh (2007 IDZ 8182)** of his Ph. D. thesis entitled “**An improved method for automated evaluation of critical road surface distresses using video image based techniques**” and CRC minutes (02) for further necessary action.

(D. S. Mehta)
Convener, CRC

Dean PGS & R

Encl.:

1. List of Ph.D. thesis examiners.
2. Two hard copies of synopsis.

Instrument Design Development Centre (IDDC)

Date: 09-07-2012

Subject: CRC meeting on 16-07-2012 (Monday), IDDC Committee Room at 11.00 A.M.

CRC meeting will be held on 16-07-2012 (Monday), IDDC Committee Room at 11.00 A.M.
Prof. Chandra Shakher will be the chairman of the meeting.

Agenda of the meeting:

1. Discussion on the approval of research plan of Mr. Varun Kumar.
2. Discussion and approval of Progress reports (IInd Semester 2011-2012) of Ph.D. Students.
3. Any other matter with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

1. Prof. A. L. Vyas	Chairman
2. Prof. M. R. Shenoy, Physics	Member
3. Prof. Bhim Singh, Electrical Engineering	Member
4. Prof. Naresh Bhatnagar, Mechanical Engineering	Member
5. Prof. Chandra Shakher	Member
5. Prof. D. T. Shahani	Member
6. Dr. N. K. Jain	Member
7. Dr. I. P. Singh	Member
8. Sh. A. K. Agarwala	Member
9. Sh. S. K. Atreya	Member
10. Dr. G. S. Khan	Member
11. Dr. Jyoti Kumar	Member
12. Dr. D. S. Mehta	Convener

D. S. Mehta)
Convener, CRC

Subject: Minutes of CRC meeting held on 16-07-2012 (Monday), IDDC Head's Room at 11.00 A.M.

CRC meeting was held on 16-07-2012 (Monday), IDDC Head's Room at 11.00 A.M. Due to lack of quorum the meeting was adjourned and was reconvened at 11.30 A.M. Following members attended the meeting:

1. Prof. Chandra Shakher	Chairman
2. Prof. D. T. Shahani	Member
3. Dr. I. P. Singh	Member
4. Sh. S. K. Atreya	Member
5. Dr. D. S. Mehta	Convener

Prof. A. L. Vyas, Dr. N. K. Jain, Prof. Bhim Singh and Dr. G. S. Khan, could not attend the meeting due to Ex-India Leave. Prof. M. R. Shenoy (Dept. of Physics), Prof. Naresh Bhatnagar (Dept. of Mechanical Engineering), Sh. A. K. Agarwala (IDDC), and Dr. Jyoti Kumar (IDDC) could not attend the meeting due to their busy schedule. The following are the minutes of the meeting;

1. Discussion on the approval of research plan of Mr. Varun Kumar (Entry No. 2010 IDZ 8716)

The research plan submitted by Mr. Varun Kumar (Entry No. 2010 IDZ 8716) duly approved by SRC was recommended by CRC for further necessary action.

2. Progress reports of Ph. D. students of IDDC for the IInd Semester 2011 – 2012

Progress reports submitted by the Ph. D. students of IDDC for the IInd Semester 2011 – 2012 were received and discussed in the CRC meeting. Except for Mr. Anuruddh Vinayak Muley all the student's reports were found satisfactory. CRC recommended that the grades of all the students be forwarded to PG section for further necessary action.

3. Extension of Institute Assistantship beyond four and half years:

Request for the extension of Institute Assistantship was received from Mr. Vivek Kumar (2008 IDZ 8124) and same was discussed in the meeting. With the recommendation of his supervisors and SRC that the student's work was satisfactory and some additional work remained, CRC recommends the extension of Institute Fellowship for the aforementioned Ph. D. student for another six months in order to complete his Ph. D. work. The progress report of the student with the recommendations of the supervisors is attached for necessary action.

The meeting ended with thanks to the Chair.

(D. S. Mehta)
Convener CRC

Attached please find the result of the comprehensive examination of the following Ph. D. Student and copy of the research plan along with the minutes (Minute No. 01) of CRC for further necessary action.

Ph.D. student:

Mr. Varun Kumar (Entry No. 2010 IDZ 8716)

(D. S. Mehta)
Convener, CRC

DR, PGS & R

Enclosures:

1. Results of Comprehensive Examination
2. CRC Minutes
3. Research Plan

Instrument Design Development Centre (IDDC)

Date: July 16, 2012

To,
The Dean,
PG Section,
Indian Institute of Technology Delhi

Sub.: Grades of Ph. D. students of IDDC.

Attached please find the grades of the progress report of Ph. D. Students of IDDC alongwith the minutes of CRC (Minute 02) for further necessary action.

(D. S. Mehta)
Convener, CRC

Enclosures:

1. Progress report.
2. CRC minutes (Minute No. 2).

Instrument Design Development Centre (IDDC)

Date: July 16, 2012

Sub.: Extension of Institute Assistantship of full-time Ph. D. students of IDDC.

Enclosed please find the request for the extension of Institute Assistantship along with the minutes (Minute No. 03) of CRC of the following full-time Ph. D. students of IDDC for further necessary action.

Mr. Vivek Kumar (2008 IDZ 8124)

(D. S. Mehta)
Convener, CRC

DR, PGS & R

Instrument Design Development Centre (IDDC)

Date: 08-08-2012

Subject: CRC meeting on 16-08-2012 (Thursday), IDDC Head's Room at 3.00 P.M.

CRC meeting will be held on 16-08-2012 (Thursday), IDDC Head's Room at 3.00 P.M.

Agenda of the meeting:

1. Discussion on the shortlisting of a newly received Ph. D. application.
2. Discussion on the approval for the inclusion of an additional internal expert in SRC Mr. Varun Kumar.
3. Discussion and approval of conversion of Ph. D. registration of Mr. Veerabhadrapa S. T. from full-time to part time.
4. Any other matter with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

1. Prof. A. L. Vyas	Chairman
2. Prof. M. R. Shenoy, Physics	Member
3. Prof. Bhim Singh, Electrical Engineering	Member
4. Prof. Naresh Bhatnagar , Mechanical Engineering	Member
5. Prof. Chandra Shakher	Member
5. Prof. D. T. Shahani	Member
6. Dr. N. K. Jain	Member
7. Dr. I. P. Singh	Member
8. Sh. A. K. Agarwala	Member
9. Sh. S. K. Atreya	Member
10. Dr. G. S. Khan	Member
11. Dr. Jyoti Kumar	Member
12. Dr. D. S. Mehta	Convener

D. S. Mehta)
Convener, CRC

Subject: Minutes of CRC meeting

CRC meeting was held on 16-08-2012 (Thursday), IDDC Head's Room at 3.00 P.M. The following members attended the meeting;

1. Prof. A. L. Vyas	Chairman
2. Dr. N. K. Jain	Member
3. Dr. I. P. Singh	Member
4. Sh. A. K. Agarwala	Member
5. Dr. G. S. Khan	Member
6. Dr. D. S. Mehta	Convener

Other members could not attend the meeting. Following are the minutes of the meeting;

1. Application of Ms. Ashu Soni for admission to Ph. D. programme for the Ist Semester 2012 -2013 was discussed. The committee decided that her application be sent back to PG Section with the remark that the same candidate was interviewed on **01-06-2012 (Friday)** and was not found suitable.
2. **Discussion on the inclusion of an additional member in the SRC of Mr. Varun Kumar:**
Inclusion of Dr. D. S. Mehta, as an additional expert in field from Dept./Centre internal expert in the SRC of Mr. Varun Kumar was discussed and the same was agreed and the same be forwarded to PG Section for necessary action. The new SRC of Mr. Varun Kumar is the following:
 1. Prof. A. L. Vyas (Chairman CRC),
 2. Dr. G. S. Khan (Expert in the field from the Dept./Centre),
 3. Prof. M. R. Shenoy (Institute Faculty Expert) .
 4. Dr. D. S. Mehta (Expert in the field from the Dept./Centre)
 5. Prof. Chandra Shakher (Supervisor).
3. Request for the conversion from full-time to part-time Ph. D. registration was received from Mr. Veerabhadrappa S. T. (Ph. D. student under QIP). The committee discussed the request and recommends the conversion from full-time to part-time Ph. D. of above student as per Institute Norms and the same be forwarded to PG section for necessary action. The student has already joined in Institute after completing three year as full-time Ph. D.
4. Request from Sh. S. K. Atreya for the inclusion of Prof. R. K. Panday as Institute Expert in the SRC of Mr. Sheo Shanker Prasad (2007 IDZ8204) was received. The committee discussed the request and recommends the inclusion of Prof. R. K. Panday (Applied Mechanics) as an Institute Expert in place of Prof. Yogendra Nath as he has retired. The request letter is forwarded to PG section for necessary action.

Meeting ended with thanks to the chair.

D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: Sept. 04, 2012

This is with reference to your note no. IITD/A&E(PGS)/C/2012/2207 enclosed please find the Ph. D. Application of Ms. Ashu Soni along with the minutes (Minute No. 01) of CRC of for further necessary action.

(D. S. Mehta)
Convener, CRC

DR, PGS & R

Instrument Design Development Centre (IDDC)

Date: Sept. 04, 2012

Enclosed please find the inclusion of an additional expert in field from Dept./Centre internal expert in the SRC of Mr. Varun Kumar along with the minutes (Minute No. 02) of CRC of for further necessary action.

(D. S. Mehta)
Convener, CRC

DR, PGS & R

Instrument Design Development Centre (IDDC)

Date: Sept. 04, 2012

Enclosed please the request for the conversion from full-time to part-time Ph. D. registration of Mr. Veerabhadrapa S. T. (Ph. D. student under QIP) along with the minutes (Minute No. 03) of CRC of for further necessary action.

(D. S. Mehta)
Convener, CRC

DR, PGS & R

Instrument Design Development Centre (IDDC)

Date: Sept. 04, 2012

Enclosed please the request from Sh. S. K. Atreya for the inclusion of Prof. R. K. Panday as Institute Expert in the SRC of Mr. Sheo Shanker Prasad (2007 IDZ8204) along with the minutes (Minute No. 04) of CRC for further necessary action.

(D. S. Mehta)
Convener, CRC

DR, PGS & R

Instrument Design Development Centre (IDDC)

Date: 13-09-2012

Subject: Urgent CRC meeting on 13-09-2012 (Thursday), IDDC Head's Room at 4.15 P.M.

An urgent CRC meeting will be held on 13-09-2012 (Thursday), IDDC Head's Room at 4.15 P.M.

Agenda of the meeting:

1. Discussion and approval of project proposal entitled "Feasibility study of electrical energy collection from dancing platform", Submitted by Prof. D. T. Shahani (PI) to FITT.
2. Any other matter with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

- | | |
|---|----------|
| 1. Prof. A. L. Vyas | Chairman |
| 2. Prof. M. R. Shenoy, Physics | Member |
| 3. Prof. Bhim Singh, Electrical Engineering | Member |
| 4. Prof. Naresh Bhatnagar, Mechanical Engineering | Member |
| 5. Prof. Chandra Shakher | Member |
| 5. Prof. D. T. Shahani | Member |
| 6. Dr. N. K. Jain | Member |
| 7. Dr. I. P. Singh | Member |
| 8. Sh. A. K. Agarwala | Member |
| 9. Sh. S. K. Atreya | Member |
| 10. Dr. G. S. Khan | Member |
| 11. Dr. Jyoti Kumar | Member |
| 12. Dr. D. S. Mehta | Convener |

D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 14-09-2012

Subject: Minutes of CRC meeting

CRC meeting was held on 14-09-2012 (Friday), IDDC Head's Room at 4.00 P.M. The following members attended the meeting;

1. Prof. A. L. Vyas	Chairman
2. Dr. N. K. Jain	Member
3. Prof. Naresh Bhatnagar	Member
4. Dr. I. P. Singh	Member
5. Dr. G. S. Khan	Member
6. Dr. D. S. Mehta	Convener

Prof. D. T. Shahani attended the meeting as **PI** invitee. Other members could not attend the meeting. Following are the minutes of the meeting;

Discussion on the project proposal:

Project proposal entitled “**Feasibility study of electrical energy collection from dancing platform**”, Submitted by **Prof. D. T. Shahani (PI) to FITT** was received and circulated among CRC members for their comments and suggestions. No comments/suggestions were received and the proposal was discussed in the CRC meeting. It was noted that the PI had clarified that no additional space and manpower is required for implementing the project. The CRC recommends the aforementioned proposal be forwarded to **FITT** for further necessary processing.

Meeting ended with thanks to the Chair.

D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 21-09-2012

Subject: CRC meeting on 27-09-2012 (Thursday), IDDC Head's Room at 4.00 P.M.

CRC meeting will be held on 27-09-2012 (Thursday), IDDC Head's Room at 4.00 P.M.

Agenda of the meeting:

1. Discussion and approval of project proposal entitled “Diffractive optics as null elements for absolute aspheric metrology”, Submitted by Dr. G. S. Khan (PI) to IRDE (DRDO).
2. Any other matter with the permission of the Chairman.

All the CRC members are requested to attend the meeting.

All CRC Members

1. Prof. A. L. Vyas	Chairman
2. Prof. M. R. Shenoy, Physics	Member
3. Prof. Bhim Singh, Electrical Engineering	Member
4. Prof. Naresh Bhatnagar , Mechanical Engineering	Member
5. Prof. Chandra Shakher	Member
5. Prof. D. T. Shahani	Member
6. Dr. N. K. Jain	Member
7. Dr. I. P. Singh	Member
8. Sh. A. K. Agarwala	Member
9. Sh. S. K. Atreya	Member
10. Dr. G. S. Khan	Member
11. Dr. Jyoti Kumar	Member
12. Dr. D. S. Mehta	Convener

D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 03-10-2012

Subject: Minutes of CRC meeting

CRC meeting was held on 27-09-2012 (Thursday), IDDC Head's Room at 4.00 P.M. The following members attended the meeting;

1. Prof. A. L. Vyas	Chairman
2. Prof. Chandra Shakher	Member
3. Prof. D. T. Shahani	Member
4. Dr. N. K. Jain	Member
5. Sh. A. K. Agarwala	Member
6. Dr. I. P. Singh	Member
7. Dr. G. S. Khan	Member
8. Dr. Jyoti Kumar	Member
9. Dr. D. S. Mehta	Convener

Other members could not attend the meeting. Following are the minutes of the meeting;

1. Discussion on the project proposal:

Project proposal entitled “**Diffraction optics as null elements for absolute aspheric metrology**”, Submitted by **Dr. G. S. Khan (PI) to IRDE (DRDO)**” was received and circulated among CRC members for their comments and suggestions. No comments/suggestions were received and the proposal was discussed in the CRC meeting. It was noted that the PI had clarified that no additional space and manpower is required for implementing the project. The CRC recommends the aforementioned proposal be forwarded to **IRD** for further necessary processing.

2. **Formulation and approval of SRC of Shilpi Agarawal Ph. D. student of IDDC:**

The appointment of Supervisors and formulation of Student Research Committee (SRC) of **Shilpi Agarawal (2012 IDZ 8294)** Full-time Ph. D. student of IDDC was discussed and decided the following SRC members (Prof. A. L. Vyas, Chairman CRC, Dr. Gufran Khan & Dr. D. S. Mehta (Internal Experts), Prof. M. R. Shenoy (External Expert, Dept. of Physics), and Prof. Chandra Shakher (Supervisor) and the CRC recommends that the same be forwarded to PG section for further necessary action.

3. **Discussion on the approval of research plan of Mr. Raj Kumar Garg (2010IDZ8717)**

The research plan submitted by **Mr. Raj Kumar Garg (2010IDZ8717)** to SRC and duly approved by SRC was circulated among the CRC members for their comments and suggestions. No comments/suggestions were received. The research plan was presented to CRC and the CRC recommended that the research plan be forwarded to PGS & R section for further necessary action.

4. **Discussion on the approval of Synopsis and Panel of Examiners of Ph. D. thesis of Ms. Sutapa Pati (2008 IDZ 8128):**

The SRC's report of **Ms. Sutapa Pati (2008 IDZ 8128)** on her Ph. D. Synopsis entitled "**Values-centred Desin Framework for Sustainability**" and the appointment of the thesis examiners were received and discussed in the meeting. CRC expressed the reservation for choose three exmanor's, one from abroad (Examinor No. 2) and two from India (Examinor No. 1 & 3), as they have been the part of IDDC/ IIT Delhi previously. The supervisors were not available to justify/clarify the choice of examiners. The Commtee decided to forward the observation (list of examiners and Synopsis) for the Dean's consideration.

Meeting ended with thanks to the Chair.

D. S. Mehta)
Convener, CRC

Instrument Design Development Centre (IDDC)

Date: 26-11-2012

Subject: Minutes of CRC meeting held on 26-11-2012 (Monday), in the room of Head, IDDC at 11.30 P.M.

CRC meeting was held on 26-11-2012 (Monday), in the room of Head, IDDC at 11.30 P.M.

The following members attended the meeting:

1. Prof. Chandra Shakher	Chairman
2. Prof. D.T Shahani	Member
3. Dr. N. K. Jain	Member
4. Prof M.R Shenoy	Member
5. Prof. P V Madhusudan Rao	Member
6. Dr. D. S. Mehta	Member
7. Dr. G. S. Khan	Convener

1. The committee discussed short-listing criteria for Ph. D. applicants for IInd Semester 2012-2013 in IDDC and decided to keep it same as it was for the Ist semester 2012-2013. The following is the criteria:

For Full-Time With Institute Assistantship:

General Candidates:

M. Sc. Physics with at least 73 % aggregate marks (or equivalent CGPA 8.0 on a 10 point scale) **PLUS** a valid GATE Score ≥ 400 or a valid CSIR/UGC/NET Certificate with JRF, **and** first division in the relevant preceding degrees and 10 +2.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 73% aggregate marks (or equivalent CGPA 8.0 on a 10 point scale) **and** first division in the relevant preceding degrees and 10+2.

OR

B. Tech. in relevant branch of Engineering with at least 75 % aggregate marks (or equivalent CGPA of 8.5 on a 10 point scale) **PLUS** a valid GATE score ≥ 500 or a valid CSIR/UGC/NET Certificate with JRF, **and** first division in Class 10 and 10+2. For all **B. Techs. from IITs** graduating with a CGPA of 8.5 or above, the requirement of qualification through a national examination is waived off.

OBC (non-creamy layer)/Minority Candidates:

M. Sc. Physics with at least 73% aggregate marks or equivalent CGPA 8.0 on a 10 point scale plus a Valid GATE Score ≥ 360 or a valid CSIR/UGC/NET Certificate with JRF, **and** first division in preceding degrees and 10+2.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 73 % aggregate marks (or equivalent CGPA 8.0 on a 10 point scale), **and** first division in the relevant preceding degrees and 10 + 2.

OR

B. Tech. in relevant branch of Engineering with at least 75 % aggregate marks (or equivalent CGPA of 8.5 on a 10 point scale) **PLUS** a valid GATE score ≥ 450 **or** a valid CSIR/UGC/NET Certificate with JRF, **and** first division in Class 10 and 10+2. For all **B. Techs. from IITs** graduating with a CGPA of 8.5 or above, the requirement of qualification through a national examination is waived off.

SC/ST/PH Candidates:

M. Sc. Physics with at least 58% aggregate marks (or equivalent CGPA of 6.6 on a 10 point scale) **PLUS** a valid GATE Score ≥ 300 or a valid CSIR/UGC/NET Certificate with JRF and minimum 55% in preceding degrees.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 58% aggregate marks (or equivalent CGPA of 6.6 on a 10 point scale) and minimum 55% in preceding degrees.

OR

B. Tech. in relevant branch of Engineering with at least 70 % aggregate marks (or equivalent CGPA of 7.5 on a 10 point scale) **PLUS** a valid GATE score ≥ 350 or a valid CSIR/UGC/NET Certificate with JRF, and first division in Class 10 and +2. For all **B. Techs. from IITs** graduating with a CGPA of 7.5 or above, the requirement of qualification through a national examination is waived off.

Part-Time Sponsored Candidates:

Candidates of all categories (GE/OBC/SC/ST/PH) as per Institute norms, but the short-listing criteria will be as above, except for the requirement of GATE Score and should have minimum 5 years working experience in Govt. Laboratories and Industries of Repute.

NOTE: There will be no direct admission to the above Programme. Candidates, whose M. Tech. / M. Sc. results are not yet declared, will be provisionally short-listed for the interview, provided they have secured the necessary aggregate marks or equivalent CGPA in the results declared so far for the qualifying degree.

2. The committee decided that the Interviews to be held on Wednesday, December 12, 2012 from 10.30 AM onwards.

3. Discussion on the approval of research plan of Ms. Madhu Jain (Entry No. 2010IDZ8170)

The research plan submitted by Ms. Madhu Jain (Entry No. 2010IDZ8170) is approved.

4. Discussion on the approval of project proposal

Project proposal entitled “**Design and development of freeform optics for imaging and non-imaging applications**” by Dr. Gufran S. Khan (PI) for **DST-DAAD joint programme** was received and circulated among CRC members for their comments and suggestions. No comments/suggestions were received. Since the project is for exchange of manpower for short durations, no additional space is required. The CRC recommends the proposal be forwarded to **IRD** for further necessary processing.

(Gufran Sayeed Khan)
Convener CRC

The short-listing criteria for Ph. D. applicants under QIP for the year 2013-2014 in IDDC

General/OBC Candidates:

M. Sc. Physics with at least 60 % in aggregate marks (or equivalent CGPA 6.75 on a 10 point scale)

OR

M. Tech. in relevant branch of Engineering or Physics with at least 60% aggregate marks (or equivalent CGPA 6.75 on a 10 point scale)

OR

B. Tech. in relevant branch of Engineering with at least 70 % aggregate marks (or equivalent CGPA of 7.5 on a 10 point scale)

SC/ST/PH Candidates:

M. Sc. Physics with at least 55 % in aggregate marks (or equivalent CGPA 6.25 on a 10 point scale)

OR

M. Tech. in relevant branch of Engineering or Physics with at least 55% aggregate marks (or equivalent CGPA 6.25 on a 10 point scale)

OR

B. Tech. in relevant branch of Engineering with at least 65% aggregate marks (or equivalent CGPA of 7.0 on a 10 point scale)

(Gufran Sayeed Khan)

Convener CRC

Instrument Design Development Centre (IDDC)

Date: 28-12-2012

Subject: Minutes of CRC meeting held on 28-12-2012 (Friday), in the room of Head, IDDC at 4.00 P.M.

CRC meeting was held on 28-12-2012 (Friday), in the room of Head, IDDC at 4.00 P.M.

The following members attended the meeting:

1. Prof. Chandra Shakher	Chairman
2. Prof. D.T Shahani	Member
3. Dr. I. P. Singh	Member
4. Prof M.R Shenoy	Member
5. Shri A K Agarwala	Member
6. Prof. A.L Vyas	Member
7. Dr. Jyoti Kumar	Member
8. Dr. G. S. Khan	Convener

1. The committee discussed short-listing criteria for Ph. D. applicants under QIP for the year 2013-2014 in IDDC and decided to keep it as the minimum Institute criteria. The following is the criteria:

General/OBC Candidates:

M. Sc. Physics with at least 60 % in aggregate marks (or equivalent CGPA 6.75 on a 10 point scale)

OR

M. Tech. in relevant branch of Engineering or Physics with at least 60% aggregate marks (or equivalent CGPA 6.75 on a 10 point scale)

OR

B. Tech. in relevant branch of Engineering with at least 70 % aggregate marks (or equivalent CGPA of 7.5 on a 10 point scale)

SC/ST/PH Candidates:

M. Sc. Physics with at least 55 % in aggregate marks (or equivalent CGPA 6.25 on a 10 point scale)

OR

M. Tech. in relevant branch of Engineering or Physics with at least 55% aggregate marks (or equivalent CGPA 6.25 on a 10 point scale)

OR

B. Tech. in relevant branch of Engineering with at least 65% aggregate marks (or equivalent CGPA of 7.0 on a 10 point scale)

2. Discussion on the approval of research plan of Mr. Manoj Kumar (Entry No. 2011IDZ8218)

The research plan submitted by Mr. Manoj Kumar (Entry No. 2011IDZ8218) is approved.

3. Discussion on the approval of Synopsis and panel of examiners of Ph.D thesis of Ms Shobhna Sharma (Entry No. 2009IDZ8217)

The synopsis and panel of examiners of Ph.D thesis of Ms Shobhna Sharma (Entry No. 2009IDZ8217) are approved.

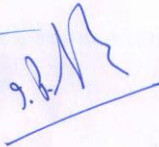
Handwritten signatures and dates in blue ink at the bottom of the page. One signature includes the date 28/12/2012.

4. Discussion on the progress reports of PhD students for Ist semester 2012-2013

The progress reports of PhD students for Ist semester 2012-2013 are approved.


(Gufran Sayeed Khan)
Convener CRC










C. Shafiq



Instrument Design Development Centre (IDDC)

Date: 14-02-2013

Subject: Minutes of CRC meeting held on 14-02-2013 (Thursday), in the room of Head, IDDC at 03.30 P.M.

CRC meeting was held on 14-02-2013 (Thursday), in the room of Head, IDDC at 03.30 P.M.
The following members attended the meeting:

1. Prof. Chandra Shakher	Chairman
2. Prof. D.T Shahani	Head, IDDC
3. Dr. N. K. Jain	Member
4. Shri A K Agarwala	Member
5. Prof. P V Madhusudan Rao	Member
6. Dr. I. P. Singh	Member
7. Dr Jyoti Kumar	Member
8. Dr. G. S. Khan	Convener

1. The CRC nominated Ms Shobhna Sharma (2009IDZ8217) and Mr. Arun Kumar Verma (2010IDZ8168) for lecture/poster presentations in National Science Day Celebration.
2. The CRC finalized the content to be published in Information brochure for the purpose of admissions to PG/PhD students. The following is the approved content:
CAD and Simulation of Electronic Systems, Microprocessor Applications, Power Electronics and Control, Electric Drives, Electromagnetic Sensors and Instrumentation, Smart Sensors and Sensors Networks, Digital System Design and DSP Applications, Digital Holography, Digital Speckle Pattern Interferometry, Flame Tomography, Optical Coherence Tomography, Fiber-Optic Sensors, Optical Metrology, Diffractive, Aspheric and Freeform Optics .
Computer Aided Product Design, Ergonomics, Graphic Design, Human Computer Interface, Design and Culture, Design for user Experience, customer persuasion and e-commerce, Soft computing, Design for sustainability.
3. **Regarding request of Mr Gyanendra Singh (2009IDZ8220) for the Financial assistance for the academic semester (IInd) 2012-2013**
The CRC advised that the student make a presentation to SRC and submit its report to CRC. The CRC authorized the Chairman to forward the request to Dean, if recommendations of SRC are positive.
4. **Discussion on the approval of research plan of Mr. Sumer Singh (Entry No. 2010IDZ8841)**
The research plan submitted by Mr. Sumer Singh (Entry No. 2010IDZ8841) is approved.
5. **Discussion on a consultancy project proposal by Dr. Jyoti Kumar**
The CRC decided that the consultancy project proposal by Dr. Jyoti Kumar should be sent to all the CRC members and after three working days if no comments are received the Chairman/Head IDDC will take necessary action.

(Gufran Sayeed Khan)
Convener CRC

Instrument Design Development Centre (IDDC)

Date: 21-02-2013

Subject: Minutes of CRC meeting for selection of PhD candidates under QIP programme

CRC meeting was held on 14-02-2013 (Thursday), in the room of Head, IDDC at 02.30 P.M, for conducting Interviews for admission to Ph.D Degree Programme under QIP for the year 2013.

The following members attended the meeting:

- | | |
|--------------------------|------------|
| 1. Prof. Chandra Shakher | Chairman |
| 2. Prof. D.T Shahani | Head, IDDC |
| 3. Prof. A. L. Vyas | Member |
| 4. Shri S K Atreya | Member |
| 5. Dr. I. P. Singh | Member |
| 6. Dr. G. S. Khan | Convener |

Seven candidates were called for the interviews. Four candidates appeared before the committee. The committee did not find anyone suitable for the admission.

Enclosed are the recommendations of the committee. All the applications are also enclosed herewith.

(Gufran Sayeed Khan)
Convener CRC

Subject: Minutes of CRC meeting held on 21-03-2013 (Thursday), in the room of Head, IDDC at 04.00 P.M.

CRC meeting was held on 21-03-2013 (Thursday), in the room of Head, IDDC at 04.00 P.M.
The following members attended the meeting:

1. Prof. Chandra Shakher	Chairman
2. Prof. D.T Shahani	Head, IDDC
3. Prof. A L Vyas	Member
4. Prof. M.R Shenoy	Member
5. Dr. N. K. Jain	Member
6. Dr. I. P. Singh	Member
7. Dr. G. S. Khan	Convener

6. Discussion on the approval of research plan of Ms. Aarti Prakash Khare (Entry No. 2011IDZ8219)
The research plan submitted by **Ms. Aarti Prakash Khare (Entry No. 2011IDZ8219)** is approved.

7. Discussion on the approval of Synopsis and panel of examiners of Ph.D thesis of Mr. Vishal Srivastava (2009IDZ8219)
The synopsis and panel of examiners of Ph.D thesis of Mr. Vishal Srivastava (2009IDZ8219) are approved.

8. Discussion on the project proposal entitled submitted by Dr Gufran Khan
Project proposal entitled “*Freeform Optics for Advanced Manufacturing (FOAM)-Design, Manufacturing and Characterization*” by Dr. Gufran S. Khan (PI) **for Indo German Science and Technology Centre (IGSTC) joint programme** was received and circulated among CRC members for their comments and suggestions.
The CRC recommends the proposal be forwarded to IRD for further necessary processing.
In case the project is awarded, before the start of the project, IPR issues must be addressed as per IIT guidelines/practices in the presence of IIT Delhi IPR representative.

9. Discussion on the SRC formation for Mr. Daliramu Burada
The SRC for Mr Daliramu Burada (2012IDZ8121) prepared by the supervisor is approved.

(Gufran Sayeed Khan)
Convener CRC

Subject: Minutes of CRC meeting held on 02-05-2013 (Thursday), in the room of Head, IDDC at 4:00 P.M.

CRC meeting was held on 02-05-2013 (Thursday), in the room of Head, IDDC at 4:00 P.M.

The following members attended the meeting:

1. Prof. Chandra Shakher	Chairman
2. Prof. D.T Shahani	Head, IDDC
3. Dr. N. K. Jain	Member
4. Prof A.L.Vyas	Member
5. Dr. I.P Singh	Member
6. Prof. P V Madhusudan Rao	Member
7. Shri A K Agarwala	Member
8. Dr. D. S. Mehta	Member
9. Dr. G. S. Khan	Convener

1. The committee discussed short-listing criteria for Ph. D. applicants for Ist Semester 2013-2014 in IDDC. The following is the criteria:

For Full-Time With Institute Assistantship:

General Candidates:

M. Sc. Physics with at least 73 % aggregate marks (or equivalent CGPA 8.0 on a 10 point scale) **PLUS** a valid GATE Score ≥ 400 or a valid CSIR/UGC/NET Certificate with JRF, **and** first division in the relevant preceding degrees and 10 +2.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 73% aggregate marks (or equivalent CGPA 8.0 on a 10 point scale) **and** first division in the relevant preceding degrees and 10+2.

OR

B. Tech. in relevant branch of Engineering with at least 75 % aggregate marks (or equivalent CGPA of 8.5 on a 10 point scale) **PLUS** a valid GATE score ≥ 500 or a valid CSIR/UGC/NET Certificate with JRF, **and** first division in 10+2. For all **B. Techs. from IITs** graduating with a CGPA of 8.5 or above, the requirement of qualification through a national examination is waived off.

OBC (non-creamy layer)/Minority Candidates:

M. Sc. Physics with at least 73% aggregate marks or equivalent CGPA 8.0 on a 10 point scale plus a Valid GATE Score ≥ 360 or a valid CSIR/UGC/NET Certificate with JRF, **and** first division in preceding degrees and 10+2.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 73 % aggregate marks (or equivalent CGPA 8.0 on a 10 point scale), **and** first division in the relevant preceding degrees and 10 + 2.

OR

B. Tech. in relevant branch of Engineering with at least 75 % aggregate marks (or equivalent CGPA of 8.5 on a 10 point scale) **PLUS** a valid GATE score ≥ 450 or a valid CSIR/UGC/NET Certificate with JRF, **and** first division in 10+2. For all **B. Techs. from IITs** graduating with a CGPA of 8.5 or above, the requirement of qualification through a national examination is waived off.

SC/ST/PH Candidates:

M. Sc. Physics with at least 58% aggregate marks (or equivalent CGPA of 6.6 on a 10 point scale) **PLUS** a valid GATE Score ≥ 300 or a valid CSIR/UGC/NET Certificate with JRF and minimum 55% in preceding degrees.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 58% aggregate marks (or equivalent CGPA of 6.6 on a 10 point scale) and minimum 55% in preceding degrees.

OR

B. Tech. in relevant branch of Engineering with at least 70 % aggregate marks (or equivalent CGPA of 7.5 on a 10 point scale) **PLUS** a valid GATE score ≥ 350 or a valid CSIR/UGC/NET Certificate with JRF, and first division in 10+2. For all **B. Techs. from IITs** graduating with a CGPA of 8.0 or above, the requirement of qualification through a national examination is waived off.

Part-Time Sponsored Candidates:

Candidates of all categories (GE/OBC/SC/ST/PH) as per Institute norms, but the short-listing criteria will be as above, except for the requirement of GATE Score. After the qualifying degree they should have minimum 5 years of relevant working experience in Govt. Laboratories and Industries of Repute.

NOTE: There will be no direct admission to the above Programme. Candidates, whose M. Tech. / M. Sc. results are not yet declared, will be provisionally short-listed for the interview, provided they have secured the necessary aggregate marks or equivalent CGPA in the results declared so far for the qualifying degree.

2. **The committee decided that the Interviews to be held on Tuesday, May 21, 2013 from 10.30 AM onwards.**
3. **Discussion on the approval of Synopsis and panel of examiners of Ph.D thesis of Ms. Sutapa Pati (2008IDZ8128)**
The synopsis and panel of examiners of Ph.D thesis of Ms. Sutapa Pati (2008IDZ8128) are approved.
4. **It is decided that all the Ph.D students must deliver seminar in the presence of SRC members at least once in a year.**

(Gufran Sayeed Khan)
Convener CRC

Instrument Design Development Centre (IDDC)

Date: 27-06-2013

Subject: Minutes of CRC meeting held on 26-06-2013 (Thursday), in the room of Head, IDDC at 4:00 P.M.

CRC meeting was held on 26-06-2013 (Wednesday), in the room of Head, IDDC at 4:00 P.M.

The following members attended the meeting:

1. Prof. A. L. Vyas	Chairman
2. Prof. D.T Shahani	Head, IDDC
3. Dr. I.P Singh	Member
4. Shri A K Agarwala	Member
5. Dr. D. S. Mehta	Member
6. Dr. G. S. Khan	Convener

1. **Discussion on the approval of Synopsis and panel of examiners of Ph.D thesis of Ms. Rakhi Grover (2009IDZ8222)**

The synopsis and panel of examiners of Ph.D thesis of Ms. **Rakhi Grover (2009IDZ8222)** are approved.

2. Change in SRC Ms Sakshi Gupta (2008IDZ8397)

In view of the retirement of one of the SRC member (Dr. Rakesh Kumar, Internal Expert, IDDC), the proposal of inducting Dr. Gufran Sayeed Khan of IDDC as Internal expert is approved.

3. Discussion on the approval of Research Project proposal from Prof. D. T. Shahani

Project proposal entitled “**Design and development of Automated radio relay (RR) link establishment system**” by Prof D. T. Shahani (PI) was received and circulated among CRC members for their comments and suggestions. No comments/suggestions were received. The CRC recommends the proposal be forwarded to **IRD** for further necessary processing.

(Gufran Sayeed Khan)
Convener CRC

Instrument Design Development Centre (IDDC)

Date: 05-09-2013

Subject: Minutes of CRC meeting held on 04-09-2013

A CRC meeting was held on 04-09-2013(Wednesday), in the office of Head, IDDC at 4:00 P.M.

The following members attended the meeting:

1. Prof. Chandra Shakher	Chairman
2. Prof. A. L. Vyas	Member
3. Prof. M.R. Shenoy	Member
4. Dr. I.P Singh	Member
5. Shri A K Agarwala	Member
6. Dr. N. K. Jain	Member
7. Sh. S.K Atreya	Member
8. Dr. G. S. Khan	Convener

1. Synopsis and panel of examiners of Ph.D thesis of Mr. Mumtaz Ahmad (2007 IDZ 8223).

It is observed that one of the Indian examiners is now retired and has no affiliation with any institute. Therefore, the Supervisor (Dr. I. P. Singh) was requested to provide another name. CRC has authorized the Chairman to do the needful after receiving the other name.

2. Synopsis and panel of examiners of Ph.D thesis of Mr. Vaneet (2007IDZ8181)

The synopsis and panel of examiners of Ph.D thesis of Mr. Vaneet (2007IDZ8181) are approved.

3. Request of Md. Inam (2009IDZ8221) for extension of fellowship for six months (upto December)

Some CRC members pointed out that the comprehensive report was not up to the mark. The aim of the work was not clear and also there are many errors in the report. The student is advised to incorporate the suggestions and submit the updated report. The extension of fellowship for six months (up to December) is recommended but will be conveyed to PG Section only after receiving the updated report. The CRC authorized the Chairman to process the case after receiving the satisfactory modified report.

4. Research Project proposal from Prof. Chandra Shakher

Project proposal entitled “**Testing of micro-optics using digital holographic interferometry**” by Prof Chandra Shakher (PI) was received and circulated among CRC members for their comments and suggestions. No comments/suggestions were received. The CRC recommends the proposal be forwarded to **IRD** for further necessary processing.

5. Request of Mr Kamal Pant (2013IDZ8152) to waive off the audit course HUL 810 Communication Skills.

The request of Mr Kamal Pant (2013IDZ8152) to waive off the HUL 810 communication skill course was placed before the CRC. The CRC asked Mr. Kamal Pant to deliver a 20 minutes presentation on any topic on optical engineering before a committee comprising of three CRC members. The comments of the committee will be placed before the CRC for further action.

6. Application of Mr Abhishek . R (2011JID3350) for Dr Shankar Dayal Sharma Gold Medal for M.Tech students for academic year 2012-13

The application of Mr Abhishek . R (2011JID3350) was discussed, and is forwarded for consideration for Dr Shankar Dayal Sharma Gold Medal for M.Tech students for academic year 2012-13

7. Application of Mr Hardik Jeetendra Pandya for FITT award for best industry relevant projects for PhD and M.tech/M.Tech (Dual Degree)/ M.S (R)/M.Des/ M.B.A degree in IIT Delhi

The application of Mr Hardik Jeetendra Pandya was discussed, and is forwarded for FITT award for consideration best industry relevant projects for PhD and M. Tech/M. Tech (Dual Degree)/ M.S (R)/M.Des/ M.B.A degree in IIT Delhi

(Gufran Sayeed Khan)
Convener CRC

Subject: Minutes of CRC meeting held on 25-11-2013 (Monday), in the room of Head, IDDC at 3:00 P.M.

CRC meeting was held on 25-11-2013 (Monday), in the room of Head, IDDC at 3:00 P.M.

The following members attended the meeting:

1. Prof. Chandra Shakher	Chairman
2. Prof. D.T Shahani	Head, IDDC
3. Prof A.L.Vyas	Member
4. Prof. M R Shenoy	Member
5. Sh. S.K. Atreya	Member
7. Shri A K Agarwala	Member
8. Dr. Jyoti Kumar	Member
9. Dr. G. S. Khan	Convener

1. Extension of fellowship for six months (upto December) of M/s Neha Adhikari (2009IDZ8218)

The extension of fellowship of M/s Neha Adhikari (2009IDZ8218) for six months (up to December) is recommended

2. Request of Mr Kamal Pant (2013IDZ8152) to waive off the HUL 810 communication skill course.

The CRC recommended waiving off the HUL 810 communication skill course for Mr Kamal Pant (2013IDZ8152)

3. Research project proposal entitled “Design and development of digital holographic microscope for cell imaging” proposed by Prof. Chandra Shakher

Project proposal entitled “Design and development of digital holographic microscope for cell imaging” by Prof Chandra Shakher (PI) was received and circulated among CRC members for their comments and suggestions. No comments/suggestions were received. The CRC recommends the proposal be forwarded to **IRD** for further processing.

4. Research project proposal entitled “Broad bandwidth high diffraction efficiency thick phase transmission holographic optical element to concentrate solar energy for photovoltaic (PV) applications” proposed by Prof. Chandra Shakher

Project proposal entitled “Broad bandwidth high diffraction efficiency thick phase transmission holographic optical element to concentrate solar energy for photovoltaic (PV) applications” by Prof Chandra Shakher (PI) was received and circulated among CRC members for their comments and suggestions. No comments/suggestions were received. The CRC recommends the proposal be forwarded to **IRD** for further processing.

5. Synopsis and panel of examiners of Ph.D thesis of Mr. Viranchi Pandya (2010 IDZ 8169).

The synopsis and panel of examiners of Ph.D thesis of Mr. Viranchi Pandya (2010 IDZ 8169) are approved.

6. Inclusion of Co-Supervisor and SRC formation for Mr Govind Bidua (2011IDZ8464)

Mr. Govind Bidua (2011IDZ8464) joined the centre on 02/01/2012. However, he requested to start the course work from the 1st semester 2012-13 instead of the IInd semester 2011-12. His request was considered and agreed to subject to the condition that he will have to complete the Comprehensive examination within the time limits as per rules (Ref: IITD/A&E(PGS)/A-2/2012/327).

His request through the supervisor of inclusion of Co-supervisor and SRC formation is considered and approved. He was advised and he committed to complete his comprehensive exam on or before Dec 31, 2013

7. SRC formation of Mr Shridutt Vyas (2013IDZ8154)

The SRC for Mr Shridutt Vyas (2013IDZ8154) suggested by the supervisors is approved.

8. Change in SRC for Mr Veerabhadrapa (2009IDZ8260)

As one of the SRC member (Dr. Ashutosh Mishra, Assistant Professor CBME, External Expert) left the institute, the proposal of inducting Dr. S. M. K. Rehman of CBME as External expert is approved.

9. Short-listing criteria for Ph. D. applicants for IInd Semester 2013-2014

The committee discussed short-listing criteria for Ph. D. applicants for IInd Semester 2013- 2014 in IDDC and decided to keep it the same as it was for the Ist Semester 2013-2014.

The following is the criteria:

For Full-Time With Institute Assistantship:

General Candidates:

M. Sc. Physics with at least 73 % aggregate marks (or equivalent CGPA 8.0 on a 10 point scale) **PLUS** a valid GATE Score ≥ 400 or a valid CSIR/UGC/NET Certificate with JRF, **and** first division in the relevant preceding degrees and 10+2.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 73% aggregate marks (or equivalent CGPA 8.0 on a 10 point scale) **and** first division in the relevant preceding degrees and 10+2.

OR

B. Tech. in relevant branch of Engineering with at least 75 % aggregate marks (or equivalent CGPA of 8.5 on a 10 point scale) **PLUS** a valid GATE score ≥ 500 or a valid CSIR/UGC/NET Certificate with JRF, **and** first division in 10+2. For all ***B. Techs. from Centrally Funded Technical Institutes*** graduating with a CGPA of 8.5 or above, the requirement of qualification through a national examination is waived off.

OBC (non-creamy layer)/Minority Candidates:

M. Sc. Physics with at least 73% aggregate marks or equivalent CGPA 8.0 on a 10 point scale plus a Valid GATE Score ≥ 360 or a valid CSIR/UGC/NET Certificate with JRF, **and** first division in preceding degrees and 10+2.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 73 % aggregate marks (or equivalent CGPA 8.0 on a 10 point scale), **and** first division in the relevant preceding degrees and 10 + 2.

OR

B. Tech. in relevant branch of Engineering with at least 75 % aggregate marks (or equivalent CGPA of 8.5 on a 10 point scale) **PLUS** a valid GATE score ≥ 450 **or** a valid CSIR/UGC/NET Certificate with JRF, **and** first division in 10+2. For all ***B. Techs. from Centrally Funded Technical Institutes*** graduating with a CGPA of 8.5 or above, the requirement of qualification through a national examination is waived off.

SC/ST/PH Candidates:

M. Sc. Physics with at least 58% aggregate marks (or equivalent CGPA of 6.6 on a 10 point scale) **PLUS** a valid GATE Score ≥ 300 or a valid CSIR/UGC/NET Certificate with JRF and minimum 55% in preceding degrees.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 58% aggregate marks (or equivalent CGPA of 6.6 on a 10 point scale) and minimum 55% in preceding degrees.

OR

B. Tech. in relevant branch of Engineering with at least 70 % aggregate marks (or equivalent CGPA of 7.5 on a 10 point scale) **PLUS** a valid GATE score ≥ 350 or a valid CSIR/UGC/NET Certificate with JRF, and first division in 10+2. For all ***B. Techs. from Centrally Funded Technical Institutes*** graduating with a CGPA of 8.0 or above, the requirement of qualification through a national examination is waived off.

Part-Time Sponsored Candidates:

Candidates of all categories (GE/OBC/SC/ST/PH) as per Institute norms, but the short-listing criteria will be as above, except for the requirement of GATE Score. After the qualifying degree they should have minimum 5 years of relevant working experience in Govt. Laboratories and Industries of Repute.

NOTE: There will be no direct admission to the above Programme. Candidates, whose M. Tech. / M. Sc. results are not yet declared, will be provisionally short-listed for the interview, provided they have secured the necessary aggregate marks or equivalent CGPA in the results declared so far for the qualifying degree.

10. **The committee decided that the Interviews to be held on Wednesday, December 18, 2013 from 10.30 AM onwards.**

Subject: Minutes of CRC meeting held on 18-12-2013 (Wednesday), in the room of Head, IDDC at 1:00 P.M.

CRC meeting was held on 18-12-2013 (Wednesday), in the room of Head, IDDC at 1:00 P.M.

The following members attended the meeting:

1. Prof. Chandra Shakher	Chairman
2. Prof. D.T Shahani	Head, IDDC
3. Prof A.L.Vyas	Member
4. Sh. S.K. Atreya	Member
5. Shri A K Agarwala	Member
6. Dr. N.K.Jain	Member
7. Dr. G. S. Khan	Convener

11. Research project proposal entitled “High Performance and Long-lifetime Actuator Valves Based on Smart Alloys” proposed by Prof. D.T.Shahani

Project proposal entitled “**High Performance and Long-lifetime Actuator Valves Based on Smart Alloys**” proposed by Prof. D.T.Shahani as one of the collaborator under Global Innovation Initiative (GII) with City University London, UK and Northeastern University Boston, US was received and circulated among CRC members for their comments and suggestions. The received comments regarding the absence of financial summary were communicated to the P.I.

The CRC recommends the proposal be forwarded to **IRD** for further processing.

12. Synopsis and panel of examiners of Ph.D thesis of Ms. Neha Adhikari (2009 IDZ 8218).

The synopsis and panel of examiners of Ph.D thesis of Ms. Neha Adhikari (2009 IDZ 8218) are approved.

13. Conversion of PhD Registration of Ms. Neha Adhikari (2009 IDZ 8218) from to full-time to part-time.

The request of conversion of PhD Registration of Ms. Neha Adhikari (2009 IDZ 8218) from to full-time to part-time is considered and recommended by CRC.

14. Synopsis and panel of examiners of Ph.D thesis of Ms. Madhu Jain (2010IDZ 8170).

The synopsis and panel of examiners of Ph.D thesis of Ms. Madhu Jain (2010IDZ 8170) are approved.

15. Progress report of Ph.D Scholars for Ist semester 2013-14

One student, Mr Jitesh Khatri did not yet submit the progress. Mr Govind Bidua has submitted the report which was to be reviewed by SRC. The SRC approval by Dean (Academics) is awaited. The progress reports of rest of the PhD students for Ist semester 2013-2014 are approved.

16. Extension of fellowship for six months of Mr.Varun Kumar (2009IDZ8218)

The request of Extension of fellowship for six months of Mr. Varun Kumar (2009IDZ8218) is considered. The CRC suggested that the request should be routed through SRC after making a presented on the progress of the work.

17. Short-listing criteria for Ph. D. applicants under QIP for the year 2013-2014 in IDDC

The committee discussed short-listing criteria for Ph. D. Applicants under QIP for the year 2013- 2014 in IDDC and decided to keep it the same as it is for the IIInd Semester 2013-2014 except the requirements of GATE and CSIR.

The following is the criteria:

General Candidates:

M.Sc. Physics with at least 73 % aggregate marks (or equivalent CGPA 8.0 on a 10 point scale) **and** first division in the relevant preceding degrees.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 73% aggregate marks (or equivalent CGPA 8.0 on a 10 point scale) **and** first division in the relevant preceding degrees.

OR

B. Tech. in relevant branch of Engineering with at least 75 % aggregate marks (or equivalent CGPA of 8.5 on a 10 point scale) **and** first division in 10+2. For all ***B. Techs. from Centrally Funded Technical Institutes*** graduating with a CGPA of 8.5 or above

OBC (non-creamy layer)/Minority Candidates:

M. Sc. Physics with at least 73% aggregate marks or equivalent CGPA 8.0 on a 10 point scale **and** first division in preceding degrees.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 73 % aggregate marks (or equivalent CGPA 8.0 on a 10 point scale), **and** first division in the relevant preceding degrees.

OR

B. Tech. in relevant branch of Engineering with at least 75 % aggregate marks (or equivalent CGPA of 8.5 on a 10 point scale) **and** first division in 10+2. For all ***B. Techs. from Centrally Funded Technical Institutes*** graduating with a CGPA of 8.5 or above.

SC/ST/PH Candidates:

M. Sc. Physics with at least 58% aggregate marks (or equivalent CGPA of 6.6 on a 10 point scale) and minimum 55% in preceding degrees.

OR

M. Tech. in relevant branch of Engineering or Physics with at least 58% aggregate marks (or equivalent CGPA of 6.6 on a 10 point scale) and minimum 55% in preceding degrees.

OR

B. Tech. in relevant branch of Engineering with at least 70 % aggregate marks (or equivalent CGPA of 7.5 on a 10 point scale) and first division in 10+2. For all ***B. Techs. from Centrally Funded Technical Institutes*** graduating with a CGPA of 8.0 or above.

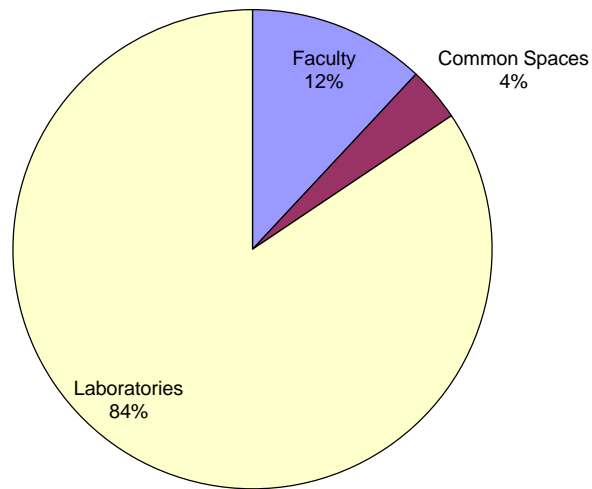
Gufran S Khan
CRC Convenor

APPENDIX 23 - LABORATORY SPACE

LABORATORIES	L (ft)	B (ft)	Area (sq. ft)	Programme
Apple Mac Studio	20.7	9.4	194.58	MDes, PHD
Computer Lab.	27.5	12.8	352	MTech, PHD
Design Research Studio	21.5	19.8	425.7	MDes, PHD
Electronics	38.5	25.5	981.75	MTech, PHD
Holography	19.7	18.9	372.33	PHD
Industrial Design Clinic	40	35	1400	MDes, PHD
M D I T			3135	MTech, PHD
M. Des Workshop	20	17.8	356	MDes, PHD
NMR	28.6	33.3	952.38	MTech, PHD
Optics	61.8	39.6	2447.28	MTech, PHD
Photo Mechanical Engg.	34	20.8	707.2	MTech, PHD
Project / Electro-Mech Lab.	41	24	984	MTech, PHD
Ultrasonic Instrumentation	41	20.5	840.5	MTech, PHD
Samsung Lab	32.6	23	749.8	MDes, PHD
Laboratories Area			13898.52	

Instrument Design Development Centre

IDDC



APPENDIX 24 – COURSES TAUGHT

JYOTI KUMAR

Teaching Contribution: 21 courses taught between Dec 2010 and Jan 2014

	Course	UG/ PG	Sem	No of times Taught	Typical Strength	Weekly Load (LTP)
1	DIL782 Advanced Materials Processes and Finishes	PG	Even	2	20	2-0-3
2	DIC 702 Seminar (Product in Usage and Beyond)	PG	Even	2	20	0-0-2
3	DIL 711 Framework of Design	PG	Odd	3	20	2-0-4
4	DIP 721 Applied Ergonomics	PG	Odd	3	20	2-0-3
5	DIP 841 Advanced Form Studies	PG	Odd	2	20	1-0-5
6	DID 891 Project 3 (Coordination)	PG	Odd	2	20	0-1-15
7	DIP-742 Product Configuration and Detailing	PG	Even	3	20	1-0-5
8	DID-892 Major Project (Coordination)	PG	Even	2	20	0-1-36
9	DIR 857 Animation	UG	Even	1	30	1-0-3
10	NIN 100 Professional Ethics and Social Responsibility	UG	Odd	1	20	0-0-2

A K AGARWALA

M. Tech. Level at IIT Delhi

1. CY707: Basic Electronics (July 1981)
2. CY707: Basic Electronics (July 1982)
3. ID703: Instrument Technology Lab (July 1995, shared)
4. ID704: Instrument Technology Lab (Dec 1995, shared)
5. ID711: Instrumentation Transducers (July 1996)
6. ID714: Computer Aided Instrument Design (Dec 1996)
7. ID714: Computer Aided Instrument Design (Dec 1997)
8. EE833: Switchmode Power Conversion (Dec 1998)
9. EE833: Switchmode Power Conversion (Jan 1999)
10. EE833: Switchmode Power Conversion (July 1999)
11. EE833: Switchmode Power Conversion (Jan 2000)
12. EE833: Switchmode Power Conversion (Jan 2001)
13. EE833: Switchmode Power Conversion (Jan 2002)
14. ID714: Computer Aided Instrument Design (Jan 2004)
15. ID705 (shared): Advanced Instrument Technology Lab (July 2004)
16. ID714: Computer Aided Instrument Design (Jan 2005)
17. ID705 (shared): Advanced Instrument Technology Lab (July 2005)
18. ID714: Computer Aided Instrument Design (Jan 2006)
19. ID705: (shared): Advanced Instrument Technology Lab (July 2006)
20. ID714: Computer Aided Instrument Design (Jan 07)
21. ID705: (shared): Advanced Instrument Technology Lab (July 07)
22. ID714: Computer Aided Instrument Design (Jan 08)
23. ID705: (shared): Advanced Instrument Technology Lab (July 08)
24. ID714: ID714: Computer Aided Instrument Design (Jan 09)
25. ID705: (shared): Advanced Instrument Technology Lab (July 09)
26. ID714: Computer Aided Instrument Design (Jan 10)
27. ID705: (shared): Advanced Instrument Technology Lab (July 10)
28. ID714: Computer Aided Instrument Design (Jan 11)
29. ID705: (shared): Advanced Instrument Technology Lab (July 11)
30. ID714: Computer Aided Instrument Design (Jan 12)
31. ID705: (shared): Advanced Instrument Technology Lab (July 12)
32. ID714: Computer Aided Instrument Design (Jan 13)
33. ID705: (shared): Advanced Instrument Technology Lab (July 13)

CHANDRA SHAKHAR

M.Tech / Pre-Ph.D Level:

1. Optical Components and Basic Instruments.

2. Laser Based Instrumentation.
3. Optical Workshop Technology.
4. Holography and its Applications.

GUFRA

1. Selected Topics in Applied Optics (PHL 759)
2. Scientific and Engineering Applications of Moire Patterns (IDL 735)
3. Optical Workshop (PHP 763)
4. Advanced Optical Workshop (PHP 853)
5. Instrument Technology Laboratory I (IDP 703)
6. Instrument Technology Laboratory II (IDP 705)

S K ATREY

<i>Course No.</i>	<i>Subject</i>	<i>Credits</i>	<i>Year</i>
AM 230	Design Engineering	3 (3-0-0)	1980
AM 230	Design Engineering	3 (3-0-0)	1981
AM 230	Design Engineering	3 (3-0-0)	1982
AM 211	Engineering Graphics	3 (1-0-4)	1983
AM 651	Design Methods	3 (3-0-0)	1983
AM 651	Design Methods	3 (3-0-0)	1984
AM 680	Experimental Design Project	3 (1-0-4)	1984
AM 777	Product Aesthetics Workshop	3 (1-0-4)	1986
AM 779	Freehand Sketching	2 (0-0-4)	1986
AM 779	Product Aesthetics Workshop	3 (1-0-4)	1987
AM 777	Freehand Sketching	2 (0-0-4)	1987
AM 651	Design Methods	3 (3-0-0)	1988
AM 779	Product Aesthetics Workshop	3 (1-0-4)	1988
AM 779	Product Aesthetics Workshop	3 (1-0-4)	1991
AM 777	Freehand Sketching	2 (0-0-4)	1991
AM 779	Product Aesthetics Workshop	3 (1-0-4)	1992
AM 779	Product Aesthetics Workshop	3 (1-0-4)	1993
DI 711	Frame Work Of Design	4 (2-0-4)	1994
DI 721	Exploratory Product Design Methods	3 (1-0-4)	1994
DI 731	Applied Ergonomics	3.5 (2-0-3)	1994
ID 751	Instrument Organization & Ergonomics	3 (2-0-2)	1994
DI 742	Studies In Product Configuration & Detailing	3.5 (1-0-5)	1994
DI 751	Communication And Presentation Techniques	4 (1-0-6)	1995
DI 753	Computer-Aided Product Design	3 (1-0-4)	1995
DI 721	Exploratory Product Design Methods	3 (1-0-4)	1995
DI 721	Exploratory Product Design Methods	3 (1-0-4)	1995
DI 841	Advanced Form Studies	3.5 (1-0-5)	1995
ID 751	Instrument Organization And Ergonomics	3 (2-0-2)	1995
DI 721	Exploratory Product Design Methods	3 (1-0-4)	1996
ID 701	Seminar	1 (0-0-2)	1996
DI 759	Media Studies	2.5 (1-0-3)	1996
DI 712	Design For Environment And Human Care	4 (2-0-4)	1996
DI 712	Design For Environment And Human Care	4 (2-0-4)	1997
DI 721	Exploratory Product Design Methods	3 (1-0-4)	1997
ID 751	Instrument Organization And Ergonomics	3 (2-0-2)	1997
DI 759	Media Studies	2.5 (1-0-3)	1998
DI 762	Prototype And Die Development	2.5 (1-0-3)	1998
DI 751	Communication And Presentation Skills	4 (1-0-6)	1998
ID 751	Instrument Organization And Ergonomics	3 (2-0-2)	1998
DI 721	Exploratory Product Design Methods	3 (1-0-4)	1998
DI 762	Prototype And Die Development	2.5 (1-0-3)	1999
DI 812	Placement / Degree Show	2 (0-0-4)	1999
DI 751	Communication And Presentation Skills	4 (1-0-6)	1999

ID 751	Instrument Organization And Ergonomics	3 (2-0-2)	1999
DI 812	Placement and Degree show	2 (0-0-4)	1999
DI 721	Exploratory Product Design Methods	3 (1-0-4)	1999
DI 762	Prototype And Die Development	2.5 (1-0-3)	2000
DI 751	Communication And Presentation Skills	4 (1-0-6)	2000
ID 751	Instrument Organization And Ergonomics	3 (2-0-2)	2000
DI 759	Media Studies	2.5 (1-0-3)	2000
DI 802	Invited Faculty Seminar	1 (1-0-0)	2001
DI 762	Prototype And Die Development	2.5 (1-0-3)	2001
DI 759	Engg Materials Processes and Finishes	2.5 (1-0-3)	2002
DI 701	Product Interface Design	3.5 (1-0-7)	2002
DI 702	Seminar	1 (0-0-2)	2003
DI 782	Advanced Materials Processes and Finishes	3.5 (1-0-4)	2003
DIP 721	Exploratory Product Design Methods	3 (1-0-4)	2003
DIP 791	Product Interface Design	4 (1-0-6)	2003
DID 892	Major Project Coordination	19 (0-1-36)	2004
DIP 721	Exploratory Product Design Methods	3 (1-0-4)	2004
DIP 791	Product Interface Design	4 (1-0-6)	2004
DIP 841	Advanced Form Studies	3.5(1-0-5)	2004
DIP 721	Exploratory Product Design Methods		2005
DIL 782	Advanced Material Processes and Finishes		2006

Same Courses taught from 2006 to 2014.

A L VYAS

1982-1983:	EE616R : Arrays and Transducers, 1.5 credits (3L)
1983-1984:	EE616R : Arrays and Transducers, 3 credits (3L)
1984-1985:	EE616R: Arrays and Transducers, 3 credits (3L)
1985-1986:	EE616R: Arrays and Transducers, 3 credits (3L), EE614R: Sonar Signal Processing (Shared), 1.5 credits (3L)
1986-1987:	EE765: Sonar System Engineering, 3 credits (3L)
1987-1988:	EE765: Sonar System Engineering, 3 credits (3L)
1988-1989:	EE811: Misc. Underwater Systems (Shared), 1 credit (3L); EE765 Sonar System Engineering, 3 credits (3L)
1989-1990:	EE811: Misc. Underwater Systems, 1 credit (3L); EE765 Sonar System Engineering, 3 credits (3L)
1993-1994:	EE811: Misc. Underwater Systems, 1 credit (3L); EE765 Sonar System Engineering, 2 credits (3L);
1994-1995:	EE811: Misc. Underwater Systems (Shared), 1 credits (3L), EE765: Sonar System Engineering (Shared), 2 credits (3L)
1995-1996:	ID713: Advanced Electronic components and circuits, 2 credits (3L); EE811: Misc. Underwater Systems (Shared), 1 credit (3L); EE765: Sonar System Engineering (Shared), 3 credits (3L)
1996-1997:	ID713: Advanced Electronic components & circuits, 3 credits (3L); EE811: Misc. Underwater Systems (Shared), 1 credit (3L);
1997-1998:	ID713: Advanced Electronic components & circuits, 3 credits (3L); EE811: Misc. Underwater Systems (Shared), 1 credit (3L)
1998-1999:	ID713: Advanced Electronic components & circuits, 2 credits (3L); EE811: Misc. Underwater Systems (Shared), 0.5 credits (3L), ID811: Selected Topics in Instrumentation, 1 credit (3L); EE765: Sonar System Engineering (Shared), 1 credit (3L)
1999-2000:	ID713: Advanced Electronic components & circuits, 2 credits (3L); EE811: Misc. Underwater Systems (Shared), 2 credits (3L)
2000-2001:	ID713: Advanced Electronic components & circuits, 2 credits (3L); ID811: Selected Topics in Instrumentation, 2 credits (3L)
2001-2002:	ID713: Advanced Electronic components & circuits, 2 credits (3L) ID811 Selected Topics in Instrumentation, 2 credits (3L) IDP851 Major Project Part I, coordinator (12 P) IDP852 Major Project Part II, coordinator (24 P)
2002-2003	ID713 Advanced Electronic components & circuits, 2 credits (3L)

- ID811 Selected Topics in Instrumentation, 2 credits (3L)
- IDP851 Major Project Part I, Coordinator (6 Credits)
- IDP852 Major Project Part-II, Coordinator (12 Credits)
- 2003-2004 ID713 Advanced Electronic components & circuits, 2 credits (3L)
- ID811 Selected Topics in Instrumentation, 2 credits (3L)
- ID705 Advance Instrumentation Laboratory, 2 credits (8 P)
- IDP851 Major Project Part I, Coordinator (12 P)
- IDP852 Major Project Part-II, Coordinator (24 P)
- 2004-2005 IDP705 Advance Instrumentation Laboratory, 2 credits (4 Credits)
- JTD801 Major Project Part I, Coordinator (6Credits)
- JTD802 Major Project Part-II, Coordinator (12 Credits)
- 2005-2006 IDL713 Advanced Electronic components & circuits, 2 credits (3L)
- IDP705 Advance Instrumentation Laboratory, 2 credits (8P)
- IDL811 Selected Topics in Instrumentation, 2 credits (3L)
- JTD801 Major Project Part I, Coordinator (6Credits)
- JTD802 Major Project Part-II, Coordinator (12 Credits)

I P SINGH

1. 'µP applications to Manufacturing', MEL432 (3-0-2), for B.Tech. Mechanical and Manufacturing disciplines.
2. 'Precision Measurement Systems', IDL722 (3-0-0), an program elective for M.Tech (JID) & an open elective.
3. 'Materials and Mechanical Design', IDL721 (3-0-2), a bridge course for M.Tech (JID).
4. Experimental Methods AM260, Manuf. Processes ME140, Product Reliability AM842, Seminars DIC701 & 702.
5. Instr. Tech. Labs-IDP704 & IDP705, Signal Conditioning & Interfacing IDL712, etc.

D S MEHTA

1. Statistical and Quantum Optics (PHL755)
2. Laser Systems and Applications (PHL752)
3. Optical 3D-surface profilometry and tomography (IDL736).
4. Information Display Devices and Technologies (IDL737)
5. Optical Components and Instruments (IDL731)
6. Laser Based Instrumentation and Holography (IDL734)
7. Advanced Optical Instrumentation (IDP-705)

SUMER SINGH

1. DIP 741: Product Form and Aesthetics
2. DIP 751: Communication and presentation Skills
3. DIP781: Engineering Function, Materials and Processes
4. DIP 811: Product Systems Services and Environment

APPENDIX 25 - COLLABORATION PROJECTS

1. Improvement of Stability of Fibre Optic Current Sensor, C.Shakher (CI) and A.L.Vyas, BHEL R&D, Feb. 1995 to Apr. 1997 for Rs. 2.50 lacs +Equipment.
2. Fibre optic system for monitoring HV lines, C. Shekhar (CI), K.Tyagarajan, A.L.Vyas and U.M.Chaudhary (BHEL), BHEL R&D, Feb. 1991 to Sep. 1982 Rs. 3.90 lacs +Equipment of 18.32 lacs.
3. Design Verification and testing Of Thermal Conductivity Measurement System, A.L.Vyas (CI), A.K.Gupta and I.P.Singh, Applied Systems Lab., DRDO, Hyderabad, Oct. 2005 to July 2006 for Rs.3.996 lacs.
4. Design, Development, Fabrication and commissioning of Auto-Tilt Measuring System (ATMS), A.L.Vyas (CI) and V.S.Balaji Raj, Goa Shipyard Ltd, Goa, Dec. 1992 to Mar. 1996 Total funding Rs.5.00 lacs + items of Rs 4 Lacs. The complete system was designed manufactured and supplied to Goa Shipyard Ltd. The system is being used for aligning the various platforms on the ships.
5. Design of Computer-Teleprinter Interface, A.L.Vyas (PI) and M.Balakrishanan, Audiotronics, new Delhi, Sep.1980 to Feb. 1981, Rs.0.05 lacs.
6. Organic pollutant detector in air done with DRDE Gwalior in six projects between 1999 – 2010 wherein one patent has been granted, one applied for and transfer of technology done to ECIL.
7. Digital gauge measuring system for Army guns done in collaboration with EME school, Baroda.

Short-listing criteria used by department/ centre/ school

IIT Delhi, Department/Centre/School: *Instrument Design Development Centre*

Institute-level short-listing criteria:**MINIMUM SHORT-LISTING CRITERIA FOR AN ASSISTANT PROFESSOR (other than for ASSISTANT PROFESSOR OF “INDUSTRIAL DESIGN” IN IDDC):**

- Ph.D. with three years experience, and
- First class or equivalent grade in all degrees in respective discipline, with a consistently good academic record, and
- Maximum age is 35 years (to be relaxed by 5 years in case of persons with physical disability), and
- At least 4 publications (of which at least 2 should be in reputed journals).

MINIMUM SHORT-LISTING CRITERIA FOR AN ASSISTANT PROFESSOR OF “INDUSTRIAL DESIGN” IN IDDC):

- M.Des. Degree or equivalent with five years post M.Des. experience in research, design or consultancy, and
- First class or equivalent grade in all degrees in respective discipline, with a consistently good academic record, and
- Maximum age is 35 years (to be relaxed by 5 years in case of persons with physical disability), and
- Record of significant and quality work in research, industrial design or development as evidenced by (including) awards, designs that in production, patents, design registrations, and/or publications.

MINIMUM SHORT-LISTING CRITERIA FOR AN ASSOCIATE PROFESSOR:

1. Ph.D. with 8 years experience of which at least 3 years should be as an Assistant Professor or equivalent, and
2. First class or equivalent grade in all degrees in respective discipline, with a consistently good academic record – not applicable to internal candidates (one who holds a regular faculty position in IIT Delhi), and
3. At least 10 publications (of which at least 4 should be in reputed journals), and
4. Should have guided at least one Ph.D. student, possibly jointly with another faculty/researcher, and
5. Completed at least one sponsored R&D project as a PI, or completed two sponsored R&D project as a Co-PI, or completed two consultancy projects as a CI.

MINIMUM SHORT-LISTING CRITERIA FOR A PROFESSOR

1. Ph.D. with 10 years experience of which either
 - a. at least 3 years should be as an Associate Professor or equivalent, or
 - b. at least 8 years should be as an Assistant Professor or equivalent (in case where the post of Associate Professor or equivalent does not exist), and
2. First class or equivalent grade in all degrees in respective discipline, with a consistently good academic record – not applicable to internal candidates (one who holds a regular faculty position in IIT Delhi), and
3. At least 20 publications (of which at least 8 should be in reputed journals), and
4. Should have guided independently at least one Ph.D. student, or have guided at least two Ph.D. students jointly with other faculty/researchers, and
5. Completed:
 - a. One sponsored R&D project as a PI, and
 - b. One more sponsored R&D project as a PI, or two sponsored R&D projects as a Co-PI, or two consultancy projects as CI.

For the post of an Assistant Professor, Associate Professor or a Professor one may consider an outstanding Engineer/technologist from the industry who may or may not have a Ph. D. Such a person should have made a significant contribution to research, innovation or generation of new knowledge while working in a responsible position in a company with an established reputation and significant revenue. His/her contribution should be adequately documented by way of awards, designs that are in production, patents, design registrations, and/or publications. The contribution and position occupied by him/her earlier should be consistent with the academic position for which he/she is being considered.

Notes:

1. It is desirable that each department/centre attempt to prepare an exhaustive list of journals of repute. This may be done on the basis of citation index or impact factor. Wherever possible an attempt could also be made to do a citation analysis of three papers identified by the candidate to be his/her best (the latter is particularly relevant for appointment as Associate of full Professor).
2. While short-listing an internal candidate (one who holds a regular faculty position in IIT Delhi) for the post of Associate Professor or Professor, the department or center must certify that the candidate has a consistent record of good teaching. Such a determination may be based on student feedback available to the department/center. The selection committee will, of course, base its judgment on the information available in the self-appraisal forms.
3. A patent once issued may be treated at par with a paper in reputed journal. However at most 2 patents may be considered towards satisfying the minimum laid down criterion for papers in a reputed journal.
4. Before it can be considered towards satisfying the short-listing criteria, a sponsored R&D project (of minimum value Rs. 10 lakhs or more) must have resulted in some visible impact measured by (a) one or more research publications, (b) filing of one or more patents, or (b) development and transfer of some technology to industry. Similarly, before it can be considered towards satisfying the short-listing criteria, a consultancy project (of minimum value of Rs. 1 lakh or so) should involve some form of innovative (or creative) development of significantly valuable advice or help to an organization. In any case the measured impact of the sponsored R&D project or the consulting assignment should be clearly identified while short-listing the candidate.
5. Generally, there will be no relaxation on the required number of Ph.D. students guided. However, in a department or center where the number of available Ph.D. candidates in the last 5 years was inadequate, or when the candidate is from an industry background, then this requirement may be relaxed provided there is sufficient evidence of independent research on the part of the candidate during this period. Specifically, in such cases one "independent Ph.D. guidance" may be relaxed to one "joint Ph.D. guidance" provided the candidate has published at least 3 papers in journals of repute over and above the required minimum number of papers. (See also note 6 below).
6. In case a candidate fails to satisfy any one of the listed short-listed criterion, but who
 - a. has an exceptionally strong academic background (this is limited to an applicant for the post of an Assistant Professor), or
 - b. has made exceptional research contributions as evidenced by papers in reputed journals, or
 - c. has consistently excelled in teaching as evidenced by student feedback, or
 - d. has made exceptionally significant and lasting contribution to curriculum and/or lab development, or
 - e. has made exceptionally significant contribution to technology development as evidenced by filing of patents or technology transfer to industry.Then his/her application may be referred to the Director, with proper justification and documentation, for his consideration whether the candidate may be (or may not be) short-listed.

APPENDIX 27 - INDUSTRIES VISITED BY STUDENTS

I. List of Industries Visited by M.Des Students in past 2011 – 2013

Sl. No.	Industry Name	Years
1	Maruti Suzuki	2012,2013
2	Samsung India	2011
3	Doorset	2013
4	Three generations	2011
5	Bhandari Deepak Industries (P) Ltd.	2011
6	Bittinia Mofa Equipments	2011
7	Rainbow Home Products	2011
8	Cozy Auto	2011
9	Sv Enterprises	2011
10	Golden Textiles	2011
11	Him Engineers India Pvt. Ltd.	2012
12	Landmark Crafts Pvt. Ltd.	2012
13	Bnal Prefab Private Limited	2012
14	Steelbird Hi-Tech India Ltd.	2012
15	Supreme Engravers	2012
16	Jkd Metals	2012
17	Thakur Poly Packs	2012
18	Unique Hydraulics Pvt. Ltd.	2012
19	V K Textiles (Printing Vision)	2012
20	Hindustan Tin Works	2012, 2013
21	Bi Square Systems	2013
22	LG electronics	2011
23	Bharat Seats	2011
24	Kshetrapal Gola associates	2012

APPENDIX 28 – STUDENTS DONE THESIS OUTSIDE INSTITUTION

M.Tech. THESIS SUPERVISED (DAAD Fellowship): 5

Avijit Prakash	Ongoing	Measurement of Nanometric 3 D displacement using correlation and digital holography	2013-14	Dr. Giancarlo Pedrine (University of Stittgart, Germany)
Kanika Singh	Completed	Design and development of fractally coated electrodes and associated micro amplifier for bioelectrical measurements in mobile systems	2002	Prof. Armin Bolz MIT, Kurlruhe Germany
Amber Kumar	Completed	Microcontroller in intelligent home appliances	2001	Prof.Dr.Ing G. Seliger Production Technology Centre Berlin
Chanchal Pandey	Completed	Application of sensors for active data provision for product disassembly	2000	Prof.Dr.Ing G. Seliger Production Technology Centre Berlin
Hussain Nawaz Zaidi	Completed	Passive and active data provision for product disassembly	1999	Prof.Dr.Ing G. Seliger Production Technology Centre Berlin
Mohanish V Masalawala	Completed	Consesus and Formaion Building of Multi agent system	2007	Prof. Listmann N K Jain
V. Hari Krishna		Time-Frequency Analysis of Impact-Echo signals using Hilbert-Huang Transformations	2005	A.L.Vyas, IDDC and H.Wiggenhauser, Germany
K. Murali Krishna		“Design of the main application software for the embedded Watchdog agent (EWA) Life Cycle Unit (LCU) for the performance Assessment and prediction of mobile components”	2005	Supervisor: A.L.Vyas and G.Seliger, Germany
Priyadip Ray		“The design and implementation of flexible Network independent life cycle unit (LCU) for distributed diagnostics	2004	Supervisor: A.L.Vyas and G.Seliger, Germany
Anil Kumar Singh		“Design and Development of a System for Intelligent Data Acquisition and Data Storage in an Embedded System (LCU) in a Washing Machine	2002	Supervisor: A.L.Vyas and G.Seliger, Germany

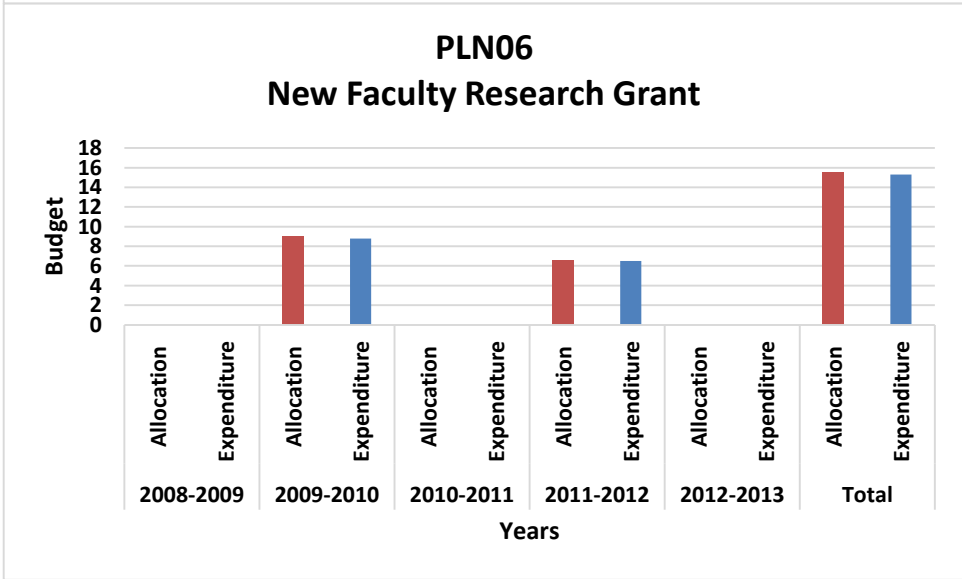
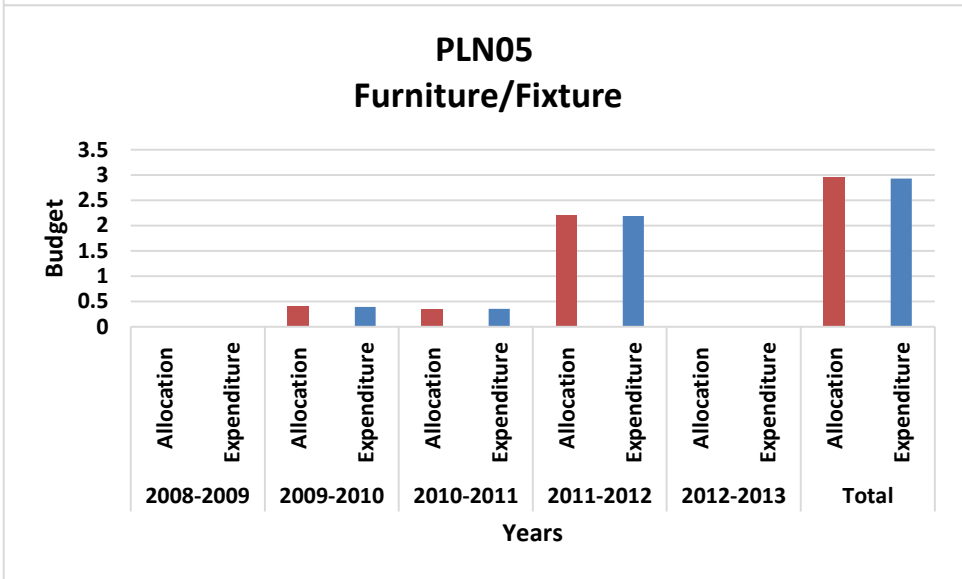
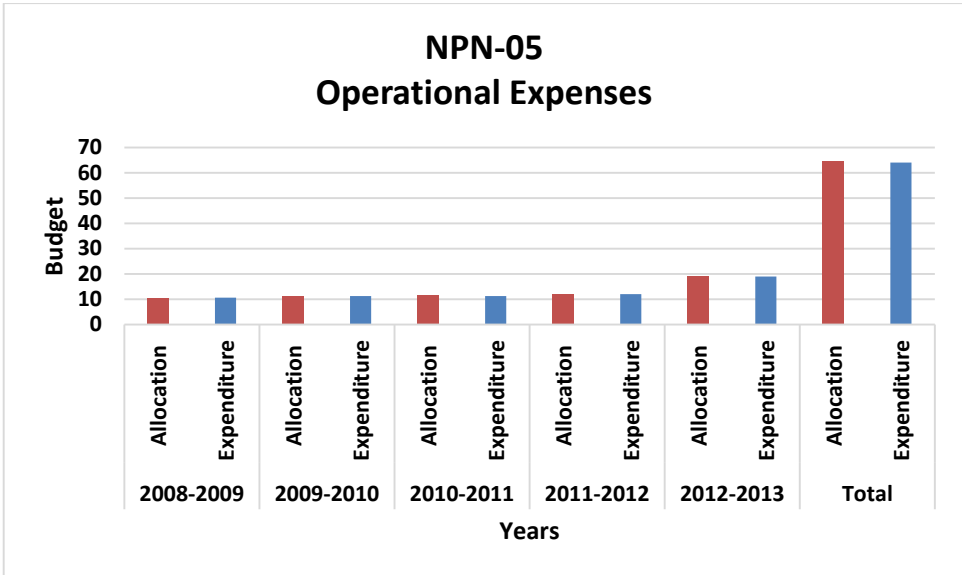
M.Tech. Students (Outside Institutions): 8

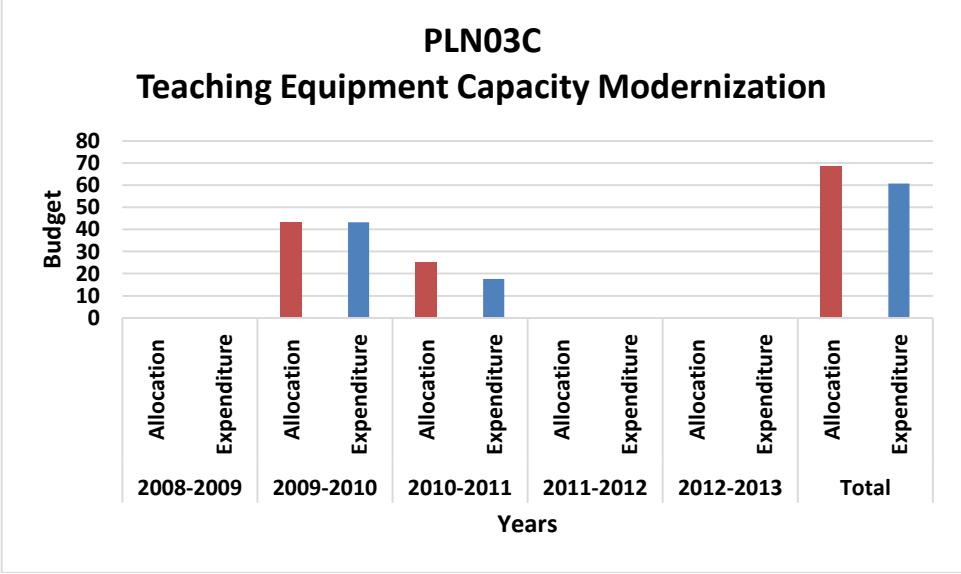
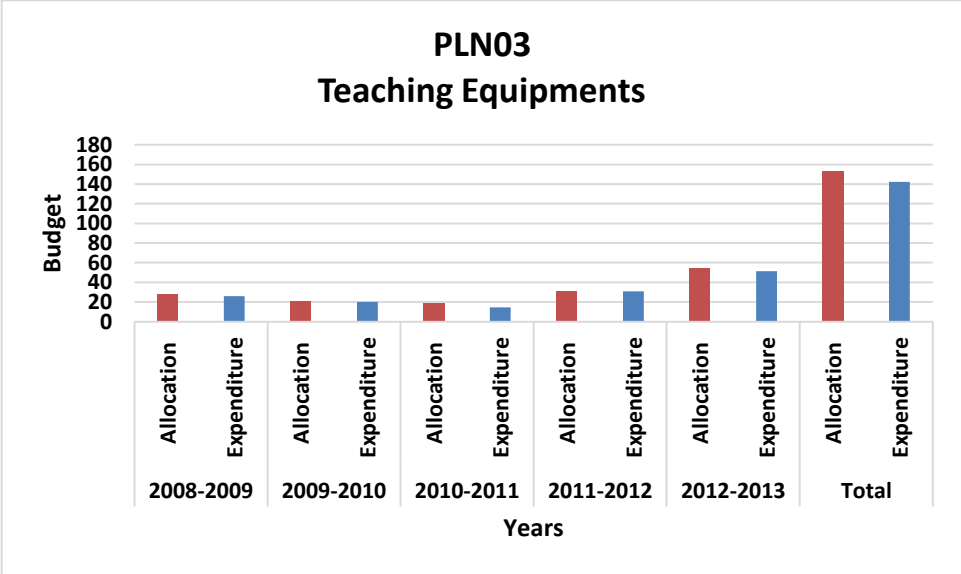
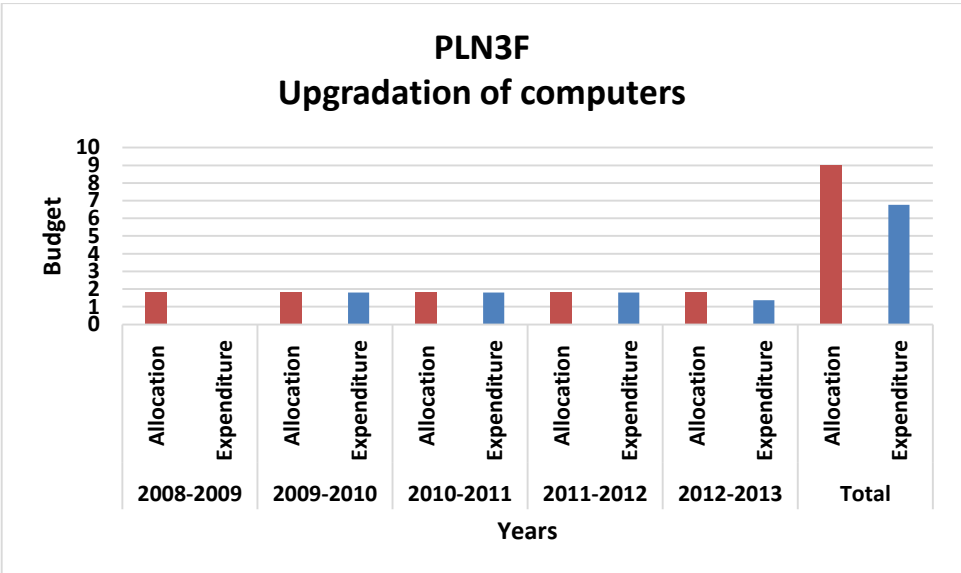
1	Sruthi Prasood	Completed	Digital holography and its application for the measurement of temperature of gaseous flame	2013	-
2	Divya Kumar	Completed	Measurement of temperature and temperature profile of gaseous flames using digital holography	2012	Dr. J. K. Quamara Dept. of Physics, NIT, Kurukshetra
3.	Kanchan Kumar Agarwal	Completed	Measurement of temperature and temperature profile around current carrying wire using digital holography	2012	Dr. Ashavani Kumar Dept. of Physics, NIT, Kurukshetra

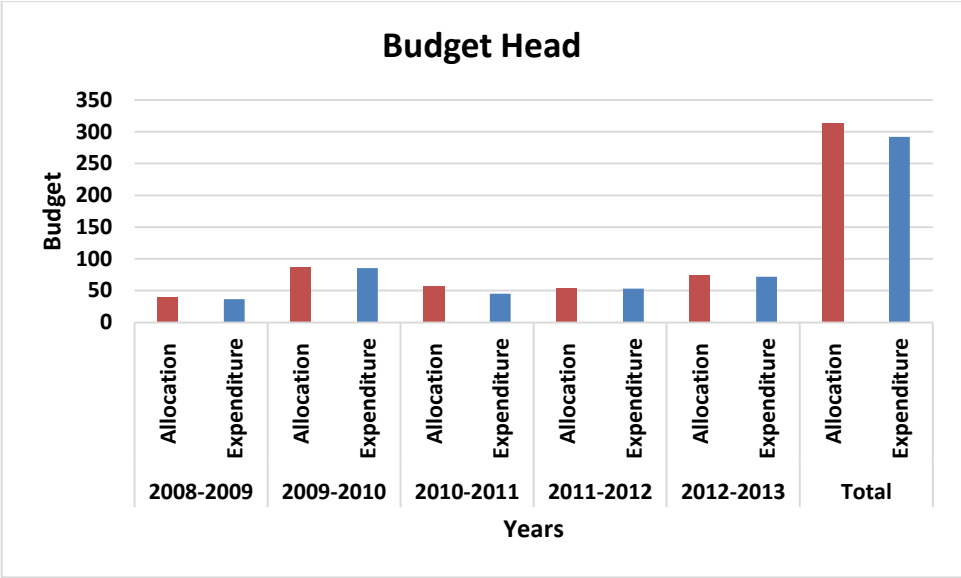
4.	Manoj Kumar	Completed	Temperature measurement of gaseous flame using Digital Speckle Pattern Interferometry	2011	Dr. R. P. Chauhan Dept. of Physics, NIT, Kurukshetra
5.	Ashish Chamoli	Completed	Measurement /Monitoring of Vibration Using DSPI	2010	Prof. B. K. Kaushik, Dept. of Physics, NIT, Kurukshetra
6.	Shobhna Sharma	Completed	Digital holography and its application in contouring of diffused object	2009	Dr. Ajay Shankar Department of applied physics, Guru Jambheshwar University of Science and Technology Hisar
7.	Kumresh Kumar Gaur	Completed	Resonator Isolation system for high power laser	2003	A.K.Srivastava Scientist D LASTEC, DRDO, Delhi
8.	R. Shankra Kumar	Completed	Implementation of correction of halo effect in speckle correlation fringes	1993	S. Natarajan, P.K.Palaniswamy Physics Dept. College of Engineering Madras

APPENDIX 29 – FUNDS RELEASED TO IDDC IN THE YEARS 2008 - 2013

Budget Head	2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		Total	
	Allo catio n	Expe nditur e	Allo catio n	Expe nditur e	Allo catio n	Expe nditur e	Allo catio n	Expe nditur e	Allo catio n	Expe nditur e	Allo catio n	Expe nditur e
NPN-05 Operati onal Expense s	10.6 4	10.62	11.4 1	11.21	11.5	11.28	12	11.97	19	18.99	64.5 5	64.07
PLN05 Furnitur e/Fixtur e			0.4	0.39	0.35	0.35	2.2	2.19			2.95	2.93
PLN06 New Faculty Researc h Grant			9	8.8			6.5	6.5			15.5	15.3
PLN3F Upgrada tion of compute rs	1.8	0	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.36	9	6.76
PLN03 Teachin g Equipm ents	28.1	25.81	20.9	20.2	19	14.36	31	30.8	54	51.24	153	142.4 1
PLN03 C Teachin g Equipm ent Capacit y Moderni zation			43.3	43.21	25	17.55					68.3	60.76
Budget Head	40.5 4	36.43	86.8 1	85.61	57.6 5	45.34	53.5	53.26	74.8	71.59	313. 3	292.2 3







APPENDIX 30 – RESEARCH AREAS

Instrument Design & Development Centre [Code IDZ]:

CAD and Simulation of Electronic Systems, Microprocessor Applications, Power Electronics and Control, Electric Drives, Electromagnetic Sensors and Instrumentation, Smart Sensors and Sensors Networks, Digital System Design and DSP Applications, Digital Holography, Digital Speckle Pattern Interferometry, Flame Tomography, Optical Coherence Tomography, Fiber-Optic Sensors, Optical Metrology, Diffractive, Aspheric and Freeform Optics .

Computer Aided Product Design, Ergonomics, Graphic Design, Human Computer Interface, Design and Culture, Design for user Experience, customer persuasion and e-commerce, Soft computing, Design for sustainability.