



Annual Report 2017-2018

(April 1, 2017 - March 31, 2018)



INDIAN INSTITUTE OF TECHNOLOGY DELHI

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Published by:

**Publication Cell for and on behalf of
Indian Institute of Technology Delhi**

Hauz Khas, New Delhi-110 016, INDIA

Tele: (91) 011-2659 1999, (91) 011-2659 7135

Fax: (91) 011-2658 2037, (91) 011-2658 2277

E-mail: webmaster@admin.iitd.ac.in

Printed at:

Nutech Print Services

Okhla, Phase-II, New Delhi-110020.



www.iitd.ac.in

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Our Vision

“ To contribute to India and the World through excellence in scientific and technical education and research; to serve as a valuable resource for industry and society; and remain a source of pride for all Indians. ”



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Director : Prof. V. Ramgopal Rao

“ *IIT Delhi is a unique institution and a dream destination for those who wish to be leaders in science, technology and management, we are committed to provide excellent human resources to meet national needs and global expectations. Our faculty is one of the finest in the country and is recognized internationally for their quality of research, teaching and curriculum development.* ”

Director's Report

IIT Delhi is pleased to release its Annual Report for the year 2017-2018 and I am delighted to share with you the highlights of our major activities, achievements, initiatives and future plans.

At the outset, it is a great pleasure and privilege for me to share that IIT Delhi has achieved the rank of 172 in the QS World University Rankings 2018. It may be noted that IIT Delhi is one of the three Indian Institutes in the top 200 of this ranking, the other two being IIT Bombay and IISc Bangalore. Multiple engineering departments of IIT Delhi have however been ranked in the top 100 in the QS World ranking for this year. I am also pleased to share here that IIT Delhi is ranked first among engineering colleges in India for 2018 by India Today. The Institute is also ranked third among engineering colleges by the National Institutional Ranking Framework (NIRF) in 2018 and Fourth overall.

Over the years, at IIT Delhi, we have built a robust research tradition, which can be seen by the inspiring statistics in terms of different research parameters. Specially, we have continuously enhanced our credentials in research as evidenced by way of publications, citations and Ph.Ds per faculty, which are among the highest for any institution in India and compare favorably with the best in the world. Our target of continuously searching for and significantly increasing the intake of quality candidates into our Ph.D. programmes is on the right course and we have grown to a significant level in this direction over the past few years. Over 60% of the students currently on rolls at IIT Delhi are post-graduate students.

IIT Delhi is committed to provide excellent human resource to meet national needs and global expectations. It is a unique institution and a dream destination for those who wish to be leaders in science, technology and management. IIT Delhi is internationally recognized for delivering excellent education at the undergraduate and postgraduate levels, while endeavoring to become a great research institution. While excellence has many parameters, setting up of state-of-the-art teaching and research infrastructure does require resources. With the support from the Government of India, industry and the alumni, IIT Delhi has been able to create an excellent infrastructure. While the Government has supported us with generous funding for which we are grateful, our alumni have extended noteworthy support to the institute.

The collective vision of IIT Delhi is to be a leading academic institution in the world by advancing knowledge through high impact research and impart quality education to

produce technologically adept and socially conscious professionals, and by catalyzing innovation-driven entrepreneurship, thereby addressing strategic goals of the nation and needs of global society. Our endeavour is to raise the bar and set higher benchmarks for ourselves and for the rest of the country. The last one year has been no exception. We have done pretty well in all aspects of institutional activities, be it teaching, research or outreach activities.

Our faculty is one of the finest in the country and is recognized internationally for their quality of research, teaching and curriculum development. They also contribute greatly for the development of the nation by being associated with a large number of decision making bodies, providing crucial guidance and advice on policy matters and technical issues. Many faculty members received honours/ awards and were elected Fellows of several professional national/ international bodies during the year.

For the year 2017-2018, the actual recurring expenditure was to the extent of Rs. 472.1 crores and the non-recurring expenditure was to the tune of Rs. 156.9 crores. The Institute generated about 23% of the actual recurring expenditure through internal revenue generation from fees, sponsored research, consultancies and continuing education programmes. During the year 2017-2018 under report, 282 Sponsored Research Projects with a total funding of Rs. 415.47 crores and about 333 consultancy projects with a total value of Rs. 34.26 crores were undertaken by the Institute. 35 Collaborative Sponsored Research Projects and 2 Consultancy Jobs with international funds were also undertaken by the Institute. The collaborating countries include United States, Netherlands, France, Sweden, United Kingdom, Canada, The Netherlands, Ethiopia, Sri Lanka, Korea, Italy, Egypt, Tunisia, Latvia and Argentina.

In order to jump start the research activities of newly joined faculty members, IIT Delhi provides a seed research funding to the new faculty upon joining the Institute to the tune of Rs. 50 lakhs or more when necessary. We are expecting our sponsored R&D funding to cross Rs.500 crores in the coming year. This growth has become possible mainly because of our increased push for research and development activities in the Institute.

As the Research and Development activities are seeing a robust growth at IIT Delhi, our focus has also been to strengthen the "Relevance & Delivery" aspects of our research. IIT Delhi has been entrusted with the responsibility of being the nodal coordinating institution for the country by MHRD for the Unnat Bharat Abhiyan (UBA) programme

Director's Report

of Govt. of India. Till date, a network of 1832 Participating Institutions (PIs) with 9060 villages have been adopted under the Unnat Bharat Abhiyan. There are 11 Subject Expert Groups (SEGs) working on the subject specific development problems and providing technical solutions. Our Centre for Rural Development and Technology (CRDT), which is coordinating the UBA programme, has also been making rapid strides in developing technologies for the upliftment of rural areas through development of innovative technologies. MHRD through a letter has asked all institutions of higher learning in the country to study the CRDT model at IIT Delhi and create similar centres in their respective institutions.

IIT Delhi has many Centers of Excellence (CoEs) carrying out cutting edge research in interdisciplinary areas, with more than half of these CoEs coming into existence in the last two years. These CoEs are funded by industries, alumni and government. The CoEs are currently working on aspects such as air pollution, 5G technologies, Industry 4.0, Renewable energies etc. In the last one year, we have also operationalized two new departments, namely the Department of Design and the Department of Materials Science and Engineering, and two new Schools, namely the School of Interdisciplinary Research and the School of Public Policy. Faculty recruitments and student admissions are in full swing in these 4 new academic entities. IIT Delhi is also contemplating starting of two new centres, one for electrical vehicles and the other for Internet of Things technologies. A new CoE for Artificial Intelligence is also on the cards.

Some of the major research initiatives undertaken by the Institute include – Faculty Interdisciplinary Research Project to enhance interdisciplinary and collaborative research interest in the Institute; Multi institutional collaborations for undertaking joint research projects with eminent institutions such as All India Institute of Medical Sciences, Indian Council of Agricultural Research, and All India Institute of Ayurveda; 1-2-3-4 Discover and Learn Projects Scheme to enhance research aptitude among undergraduate students and increase the component of 'learning by research'; IRD Student Startup Action Scheme; Summer Undergraduate Research Award; IRD Early-Doc Fellowship Scheme to support Ph.D. students after the successful completion of Ph.D. Viva-Voce examination to complete the manuscript writing related to thesis work; Research Excellence Travel Award to top 20% of Ph.D. students who are within five years of their registration.

Major research initiatives of IIT Delhi spanned from setting up a major research centre named "Joint Advanced Technology Centre (JATC)" in collaboration with DRDO to setting up of a Common Engineering Facility Centre (CEFC)

in collaboration with Automation Industry Association (AIA). The agreement for setting up of DRDO-Joint Advanced Technology Centre (JATC) was signed and projects totaling over Rs. 170 crores have been approved by DRDO for the year 2017-18.

During the past one year, the Institute has made significant efforts to connect with the industry. The major initiatives and the activities of the Institute for collaboration with industry include the Postgraduate Executive Program in collaboration with NITIE, Mumbai in Visionary Leadership of Manufacturing; Common Engineering Facility Centre in collaboration with Automation Industry Association; and active participation in the Uchhatar Avishkar Yojana and the IMPRINT schemes of MHRD. There are also multiple Centers of Excellence created with participation of external agencies and industries at IIT Delhi.

Inter-disciplinary research is so critical for addressing the real challenges of the society. In the 194th meeting of the Board of Governors held on 4th Aug'17, IIT Delhi Board has approved the School of Interdisciplinary Research (SIRe) and creation of a new "Department of Design". These two new academic entities which are expected to start their operations in 2018-19 are expected to give a major boost to the interdisciplinary research and product development activities across the institute. To promote inter-disciplinary research, IIT Delhi has started a new scheme named Faculty Interdisciplinary Research Projects (FIRP). Faculty members from two different departments/Centres can come together and write a high quality proposal for which IIT Delhi will provide a seed grant. This year IIT Delhi received about 90 projects and after an external review, IRD Unit of IIT Delhi approved 30 of them. Faculty from almost all entities and disciplines of the Institute have been involved. It is expected that each of the FIRP funded faculty members would seek support from external agencies within a year.

At IIT Delhi, we have started a new research project initiative called 1-2-3-4 Discover & Learn. Students drawn from different years come together and work on a problem ensuring continuity, under a faculty member's mentorship with the eventual goal to address a societal problem through a prototype development. Based on an overwhelming response, around 40 such projects are in operation at present in the Institute. Interestingly approved projects cover a wide variety of societal needs ranging from assistance to older people to smart grids, from rural needs to prosthetics.

Among notable foreign research collaborations, IIT Delhi Nanoscale Research Facility (NRF) and the Bio-Nano Electronics Research Centre (BNERC) of Toyo University, Japan offers an access to IITD researchers to access some high end facilities in BNERC using a web based interface.

Director's Report

As part of our society connect initiative, IIT Delhi jointly with its alumni has also started a Women Entrepreneurship & Empowerment (WEE) programme which is helping women from various walks of life to become entrepreneurs. Second batch of WEE students have gone through this programme and many of them have successfully launched their ventures. WEE programme is being mentored by IIT Delhi with active participation of IIT Delhi alumni. WEE is now helping other IITs on the women entrepreneurship activities.

In a move to reach out to a large number of engineering students studying in colleges with limited resources, MHRD launched a virtual laboratory scheme. Coordinated by IIT Delhi, nearly one hundred and forty virtual laboratories have been set up in the IITs and some partner institutions across India under the project.

Another outreach activity IIT Delhi is coordinating is the IIT-Professor Assisted Learning (IIT-PAL) which has been launched under the Swayam Prabha initiative of HRD ministry. All an IIT-JEE aspirant needs is internet connectivity or a DTH setup for TV to access the IIT-PAL content on the Swayam Prabha channels of Govt. of India. From the comfort of their homes, JEE aspirants in the villages/ towns/cities can now watch lectures on physics, chemistry, mathematics and biology taught by the selected IIT professors based on the 11th and 12th standard NCERT text books. Over 700 hours of video content is currently available for free online under the IIT-PAL initiative.

IIT Delhi is coordinating the flagship Unnat Bharat Abhiyan (UBA) program of Ministry of HRD, Govt. of India. The program aims to bring a transformational change in rural development by active participation of higher academic institutions with local communities, and reorientation of curricula and R&D design of knowledge institutions.

Institute has been organizing Open House to exhibit an extensive collection of innovative research and product development projects since last ten consecutive years. The eleventh edition of Open House was held successfully on 22nd April, 2017. Open House targets, among other audiences, young school kids in NCR region and the footfall is approx. 5000 visitors in a day.

IIT-Delhi has registered around 30% increase in the total number of women candidates admitted this year through JEE. The actual number increased from 70 in 2016 to 93 in 2017. PG and Ph.D. programs are continuously seeing an increase in number of women candidates which stands at around 25% at present.

IIT Delhi in collaboration with NITIE, Mumbai has launched a Post-graduate program (Executive) in "Visionary leadership for Manufacturing (PGPEX- VLFM)" and first batch of 17 students have been admitted.

Under its 'SAMARTH Udyog' initiative, Department of Heavy Industry, Government of India has approved the setting up of a Common Engineering Facility Centre (CEFC) at IIT Delhi in collaboration with Automation Industry Association (AIA) with a total funding of about Rs. 35 Crore. Under the Uchatar Avishkar Yojana and the IMPRINT schemes of M H R D, there are currently 50 projects at IIT Delhi involving industry collaborators with a total approved project outlay of Rs. 47 crores. Union Minister for Human Resource Development (HRD) Prakash Javadekar launched the Sumant Sinha ReNew Centre of Excellence for Energy & Environment, established jointly with ReNew Power Ventures Pvt. Ltd. and IIT Delhi on September 12, 2017. The symbiosis between the scientific talent at IIT Delhi and industrial expertise at ReNew Power will build an innovative platform for research in renewable energy.

IIT Delhi has also started an Industry Day from this year. Over 170 industries have participated in the first ever Industry Day held at IIT Delhi on September 23, 2017. This gave an opportunity for the industry community to know the research that is happening at IITD. One of the expected outcomes of this initiative is improved placement opportunities for Ph.D. students through exposure of their work to industry. This will henceforth be a regular calendar event at IIT Delhi.

Engagements with Industry are critical for placement of students after graduation. The T&P Unit received job requisitions from 373 Companies for 543 job profiles. Approximately 89.6% students who registered for placement got placed through T&P. Others were placed through off-campus recruitments. A start-up intern and job fair was held in April, 2018 in collaboration with the Entrepreneurship Development Cell (eDC) of IIT Delhi. A Career Conclave based on the theme "Careers in the Industry 4.0 Era" was held to help the student body as a whole to gain fresh insights into the employers' perspective on potential recruits by interacting with opportunity providers and talent custodians from industry prior to the start of interview processes. Another new initiative introduced this year included a Campus to Corporate workshop on "Ways of Winning @ Work" held in April, 2018 to help students transition from academic to work life by sensitizing them to behavioral norms expected by organizations from professionals in the work environment.

To enhance the efficiency of our employees, many training programmes are regularly conducted including Executive Development programs for the officers. To encourage the employees to work in Hindi and also in compliance with the direction of the government, special training programmes were also conducted for use of Hindi in official transactions. The Institute is in the advanced stage of implementing the

Director's Report

ERP System for a paperless work environment to automate its operations in all the functional areas. It has already implemented some modules online. The recruitment process for staff is in full swing as per the Recruitment Rules approved by the Board of Governors which will equip the Institute with adequate manpower for efficient functioning.

The Institute extends good medical facilities to the serving and retired employees through IIT Hospital, CGHS recognized hospitals and medical insurance scheme. The Hospital is well equipped to take care of primary emergencies.

With the support from the Government, industry and the alumni, IIT Delhi has been able to create state-of-the-art teaching and research infrastructure. While the Government has supported us with generous funding for which we are grateful, our alumni have extended significant support to the Institute. Our alumni have given donations to help us take some of our important projects forward, in addition to instituting Chairs and the Young Faculty Incentive Fellowships, both of which help us to reward our bright faculty for their outstanding performance. The Institute has also made consistent efforts in upgrading its infrastructure to cater to the needs of its expansion plans and for better amenities. Besides planning and building new hostels and additional academic space, the Institute is also engaged in a massive exercise of renovation of old houses, hostels and sports facilities.

IIT Delhi lays great emphasis on interaction between the alumni and the alma mater. We are proud of our alumni and their achievements. The success of the alumni is one of the most important yardsticks by which we measure our achievements. "Alumni Day" was celebrated on 17th December 2017. The theme was "Role of Alumni in Elevating Brand IITD to Gen X". Alumni Day celebration

had a participation of Alumni representing well over half a century. The Chief Guest was Sh. Jayant Sinha, Minister of Civil Aviation who is an alumnus of the Institute. Multiple reunions of different batches were held during the year.

The 48th Convocation of the Institute was held on 4th November, 2017. Shri Ram Nath Kovind, Hon'ble President of India and Visitor was the Chief Guest. The Institute recognizes the outstanding contributions made by the alumni in various areas by conferring the Distinguished Alumni Awards each year. This award is the highest honor conferred by the Institution to its alumni to recognize their achievements and outstanding contributions to academics, business, profession and/or public service. At the 48th Convocation, the Distinguished Alumni Awards were conferred on Prof. Saumitra Dutta (Dean, Cornell University), Mr. Sunil Sood (MD & CEO, Vodafone India Ltd.), Mr. Saurabh Mittal (Founder & Chairman, Mission Holdings) and Dr. Kiran Bedi (Lieutenant Governor, Puducherry).

Finally, I would like to acknowledge the support received in abundant measure from the Ministry of Human Resource Development, the various sponsoring agencies, the collaborating industries, institutions and alumni. I also personally acknowledge the support and encouragement I have received from the Chairman and Members of the Board of Governors, and from all my colleagues, and extend my appreciation to the students for their exemplary behavior and their contributions towards enriching the campus life.

Wishing IIT Delhi to reach new heights!

Jai Hind!

Director

Indian Institute of Technology Delhi

Email: director@admin.iitd.ac.in

Our Mission

- To generate new knowledge by engaging in cutting-edge research and to promote academic growth by offering state-of-the-art undergraduate, postgraduate and doctoral programmes;
- To identify, based on an informed perception of Indian, regional and global needs, areas of specialization upon which the Institute can concentrate;
- To undertake collaborative projects which offer opportunities for long-term interaction with academia and industry;
- To develop human potential to its fullest extent so that intellectually capable and imaginatively gifted leaders can emerge in a range of professions.

”



About us

Dreaming big.....



In the formative stages : Prof. R. N. Dogra, the founding Director, IIT Delhi detailing the model of the Institute's building

HISTORY

The concept of the IITs was first introduced in a report in the year 1945 by Shri. N.M. Sircar, then member of Education on Viceroy's Executive Council. Following his recommendations, the first Indian Institute of Technology was established in the year 1950 in Kharagpur. In his report, Shri Sircar had suggested that such Institutes should also be started in different parts of the country. The Government having accepted these recommendations of the Sircar Committee decided to establish more Institutes of Technology with the assistance of friendly countries who were prepared to help. The first offer of help came from USSR who agreed to collaborate in the establishment of an Institute through UNESCO at Bombay. This was followed by the Institutes of Technology at Madras, Kanpur and Delhi with collaborations with West Germany, USA and UK, respectively.

The Institute was later declared an Institute of National Importance under the "Institutes of Technology (Amendment) Act, 1963", re-named as "Indian Institute of Technology Delhi", and accorded the status of a deemed university.

Decades later, the sixth IIT was established in Guwahati (1994). India's first technical institute, set up in 1847 and known as the Thomson College of Engineering and subsequently the University of Roorkee, was ordained as the seventh IIT in September 2001. In the year 2008, six new IITs were started: IIT Bhubaneswar, IIT Gandhinagar, IIT Hyderabad, IIT Patna, IIT Jodhpur and IIT Ropar. This was followed by two more IITs in 2009: IIT Indore and IIT Mandi. In 2012, Institute of Technology, BHU was designated the sixteenth IIT. Other six new IITs in Tirupati, Palakkad, Dhanbad, Bhilai, Goa and Jammu, were established in 2015-16, along with the conversion of ISM Dhanbad to IIT.

Presently Indian Institute of Technology Delhi is one of the Twenty Three Institutes of excellence for higher education, research and development in science, engineering and technology and in management in India; the others are at Bhilai, Varanasi, Bhubaneswar, Bombay, Dhanbad, Dharwad, Gandhinagar, Goa, Guwahati, Hyderabad, Indore, Jammu, Jodhpur, Kanpur, Kharagpur, Madras, Mandi, Palakkad, Patna, Roorkee, Ropar and Tirupati.

About us

STATUS

Indian Institute of Technology Delhi is an autonomous statutory organisation of the Government of India functioning within the "Institutes of Technology Act, 1961" as amended by the "Institutes of Technology (Amendment) Act, 1963". It is accorded the status of a deemed university with

powers to frame its own academic policy, to conduct its own examinations, and to award its own degrees. The Twenty Three Institutes of Technology are coordinated by an apex body known as IIT Council with the Minister for Human Resource Development of the Government of India as its Chairman.

OBJECTIVES

The objectives of the Institute include :

- Offering instruction in applied sciences, engineering and technology, and management at a level comparable to the very best anywhere in the world;
- Providing leadership in curriculum planning, laboratory development and examination system;
- Developing programmes for faculty development both for its own staff and for teachers of other engineering institutions;
- Developing close collaboration with industry through exchange of personnel and undertaking consultancy projects;
- Developing strong collaboration links with other academic and research institutions in the country and abroad;
- Developing a continuing education programme for employed engineers and making it available both on campus and by distance learning techniques at off campus locations;
- Preparing manpower for the unorganised sector and for self-employment.



CAMPUS

The Institute campus extends over an area of 320 acres. Tastefully laid out with the picturesque landscape and with numerous buildings of various types and, with clean and wide roads, the campus presents a spectacle of harmony in architecture and natural beauty. The campus area has been divided into four functional zones:

- Residential zone for students;
- Residential zone for the faculty and other supporting staff;
- Academic zone for academic buildings and workshops; and
- Cultural-cum-social and recreational zone for students.



IIT Delhi Campus Map

The site being longitudinal in shape, the academic and social-cum-cultural zones have been located mid-way between the two residential zones in order to reduce walking distance. The campus provides several essential amenities for community living like hospital, shopping centre, banks, post office, community centre, staff club, students activities centre, stadium and playing fields etc.

IIT Delhi has been extending its boundaries. One extension campus has been established in Sonapat, Haryana over 50 acres of land allocated by Haryana Govt. A Technopark filled with high class facilities has been set-up there. Another extension campus will come up in near future in Jhajjar, Haryana over 50 acres of land

BOARD OF GOVERNORS AND ITS COMMITTEES

IIT Delhi is an autonomous organisation of the Government of India. Responsibility for the general superintendence, direction and control of the affairs of the Institute is vested in the Board of Governors. The Board functions through its standing committees — the Finance Committee, the Buildings & Works Committee and other committees which may be constituted to consider specific issues. The compositions of the Board of Governors during the period from April 1, 2017 to March 31, 2018 is as follows:

BOARD OF GOVERNORS



Kumar Mangalam Birla
Chairman

V. Ramgopal Rao
Punya S. Srivastava (Ms.)
Akshai Aggarwal

Shashi Wadhwa (Ms.)
S.K. Sopory
Vijay Thadani

Sanjeev Sanghi / Nalin Pant
Anurag Sharma / S.V. Veeravalli
Sandeep Chatterjee, Secretary

ADMINISTRATION

The Director is the principal academic and executive officer of the Institute and is responsible for the proper administration of the Institute and for the imparting of instruction and maintenance of discipline therein. He is assisted in his day to day work by Deputy Director(s), Registrar, Deans, Associate Deans and senior faculty of the Institute. The senior members of the Administration during the period from April 1, 2017 to March 31, 2018 are as follows:

DIRECTOR



V. Ramgopal Rao
Director
(13-04-2016 to Present)

DEPUTY DIRECTORS



Ashok Gupta
D. D. (Operations)
(01-07-2016 to Present)



M. Balakrishnan
D. D. (Strategy & Planning)
(01-07-2016 to Present)

DEANS



Bhim Singh
Dean, Academics
(16-08-2016 to Present)



Sandeep Sen
Dean, Faculty
(16-08-2016 to Present)



B.R. Mehta
Dean, R & D
(16-08-2016 to Present)



T.R. Sreekrishnan
Dean, Student Affairs
(16-08-2016 to Present)



V.K. Agarwal
Dean, Infrastructure
(16-08-2016 to Present)



Sanjeev Sanghi
Dean, AA & IP
(16-08-2016 to Present)

ASSOCIATE DEANS



Shantanu Roy
Asso. Dean, Acad. (PGR)
(16-08-2016 to Present)



Joby Joseph
Asso. Dean, Acad. (Curri.)
(16-08-2016 to Present)



Subrat Kar
Asso. Dean, Faculty
(01-08-2017 to Present)



Suddhastwa Basu
Asso. Dean, R&D
(16-08-2016 to 08-02-2018)



S.K. Khare
Asso. Dean, R&D
(09-02-2018 to Present)



A.K. Saroha
Asso. Dean, S.A. (H.M.)
(16-08-2016 to Present)



James Gomes
Asso. Dean, S.A. (Events)
(16-08-2016 to Present)



Sangeeta Kohli
Asso. Dean, S.A. (Welfare)
(16-08-2016 to Present)



B.J. Alappat
Asso. Dean, Infrastructure
(16-08-2016 to 03-09-2017)



Bishwajit Kundu
Asso. Dean, Infrastructure
(04-09-2017 to Present)



Deepti Gupta
Asso. Dean, Infrastructure
(16-08-2016 to Present)



Anurag S. Rathore
Asso. Dean, Corporate Relations
(16-08-2016 to Present)

REGISTRAR



Sandeep Chatterjee

Academic Units at IIT Delhi

(April 1, 2017 - March 31, 2018)

The major academic units of the Institute are the departments, centres and schools. Interdisciplinary research is organized in programmes. The various academic units are listed below. The activities of departments include teaching at all levels and research. The centres focus on interdisciplinary research and some teaching, mostly at the postgraduate level.

Departments	Interdisciplinary Centres	Schools
1. Applied Mechanics	1. Applied Research in Electronics	1. Bharti School of Telecommunication Technology and Management
2. Biochemical Engineering and Biotechnology	2. Atmospheric Sciences	2. Amar Nath and Shashi Khosla School of Information Technology
3. Chemical Engineering	3. Biomedical Engineering	3. Kusuma School of Biological Sciences
4. Chemistry	4. Energy Studies	4. School of Interdisciplinary Research
5. Civil Engineering	5. Industrial Tribology Machine Dynamics and Maintenance Engineering Centre	5. School of Public Policy
6. Computer Science and Engineering	6. Instrument Design & Development Centre	
7. Design	7. Polymer Science and Engineering	
8. Electrical Engineering	8. Rural Development and Technology	
9. Humanities and Social Sciences	9. National Resource Centre for Value Education in Engineering	
10. Management Studies		
11. Material Science and Engineering		
12. Mathematics		
13. Mechanical Engineering		
14. Physics		
15. Textile Technology		

IIT Delhi has 15 departments. Each department has its own administration structure with the Head of the Department (HoD) at the top of it. The (HoD) heads the department appointed for a period of two years (extendable by one more year) after which a new head is appointed. Each department offers a programmes (at the undergraduate or post-graduate level), some departments such as Mechanical Engineering Department, offer two or more undergraduate level programmes and some departments collaborate with each other to offer a joint programme. An example of the latter is the M.Tech. in Optoelectronics and Optical Communications programmes which is offered by the Department of Physics and Department of Electrical Engineering. The DMS (Department of Management Studies), IIT Delhi came into existence in 1993 by an amendment to IIT Delhi statutes. The department offers a two year full time MBA programme with focus on Management Systems, a two year full time MBA with focus on Telecommunication Systems Management and a three year part time (evening) MBA programme with focus on Technology Management. Two new departments namely the Department of Design and Department of Materials Science & Engineering have been established during the period.

An interdisciplinary centre differs from a department in the fact that it deals with an overlap of two or more disciplines of engineering or science. Similar to the departments, the centres also offer programmes though they offer these courses only at the post-graduation level.

Two new schools namely School of Interdisciplinary Research and School of Public Policy have been established during the period.

Current Degree Programmes

(April 1, 2017 - March 31, 2018)

The Institute offers undergraduate and postgraduate programmes in a number of areas leading to the degrees of B.Tech./M.Sc./M.Tech./M.S.(R)/DIIT/M.Des./MBA and Ph.D. in Science, Engineering & Technology and Management. The primary objective of these teaching programmes is to offer instruction in applied sciences, engineering, and management at a level comparable to the very best anywhere in the world. This is achieved through an undergraduate curriculum which places a strong emphasis on the understanding of fundamental principles as well as specialised knowledge, a postgraduate programme, distinguished by its interdisciplinary approach and emphasis on research.

Pedagogy

Teaching at the Institute incorporates a cohesive, contextual and nurturing environment for learning. The emphasis is on self-motivated learning by using information, experience and practice. The teaching methodology aims at using the inputs from core functional areas to interdisciplinary issues and problem solving. Students undertake classroom and workshop assignments, conduct field observations, make presentations and participate in group discussions and seminars and are encouraged to develop industry linkages.

Evaluation

The academic year consists of two semesters and a summer term. The education system is organised around a credit

system which ensures continuous evaluation a student's performance and provides flexibility to choose courses of interest and to progress at an optimum pace suited to a student's ability or convenience. Each course is assigned certain number of credits depending upon the class contact hours. A minimum number of credits and CGPA are to be completed satisfactorily in order to qualify for the award of a degree.

The medium of instruction is English.

Curriculum Development

The Senate of the Institute is constantly engaged in reviewing and approving new courses to improve the curriculum. This year several new minor area programmes have been designed with a view to offer a second area of specialization.

Under a new Academic Welfare Scheme introduced by the Institute this year for weak students, a special student advisor is identified in each department for students who need special help, at the beginning of each semester. Special extra classes are being conducted for such students and the student advisor closely monitors the attendance and performance of these students and also provides support to help improve their performance.

The undergraduate and postgraduate programmes are managed by the Board of Academic Programmes (BAP). The composition of BAP as on 31.03.2018 is as follows:

BOARD OF ACADEMIC PROGRAMMES (BAP)			
Prof. Bhim Singh, Chairman	Prof. S. Dharmaraja	Prof. Jyoti Kumar	Mr. Abhinav Arora
Prof. S. Basu	Prof. Anima Nagar	Mr. Pardeep Kumar Gupta	Mr. Saket Saurabh
Prof. Paresh Chokshi	Prof. T.R. Sreekrishnan	Prof. Shouribrata Chatterjee	Mr. Shrish Shukla
Prof. Sanjiva Prasad	Prof. D. Sundar	Prof. Parag Singla	Mr. Rupesh Karture
Prof. Amitabha Bagchi	Prof. Anupam Dewan	Prof. C.S. Dey	Mr. Kushal Sagani
Prof. J.T. Shahu	Prof. S. Nagendran	Prof. Lallan Kumar	Ms. Priyanshi Mishra
Prof. S. Bishnoi	Prof. Kamlesh Singh	Prof. Anurag Singh Rathore	Prof. K.A. Subramanyan
Prof. Jayadeva	Prof. Ravi Shankar	Prof. Aditya Mittal	Prof. G.S. Khan
Prof. A.R. Abhyankar	Prof. A.D. Rao	Prof. Apurba Das	Prof. Abhisek Dixit
Prof. A. Ray	Prof. Veena Koul	Prof. I.N. Kar	Prof. R.K. Varshney
Prof. Sujeet K. Sinha	Prof. T.C. Kandpal	Prof. Shantanu Roy	Prof. Anoop Chawla
Prof. Pankaj Srivastava	Prof. Arun Kumar	Prof. Joby Joseph	Mr. Suresh Gohar
Prof. Kedar Khare	Prof. Hariprasad P.	Prof. Mukul Sarkar	Mr. Atul Vyas, Secretary
Prof. Apurba Das	Prof. B.K. Satapathy	Prof. Anupam Shukla	
Prof. Samrat Mukhopadhyay	Prof. Deepak Kumar	Mr. Sarthak Tyagi	

Current Degree Programmes

Below is the list of courses offered currently.

UNDERGRADUATE STUDIES*

Bachelor of Technology [B.Tech.] Duration : 4 years	Dual Degree Programme [B.Tech. and M.Tech.] Duration : 5 years
Biochemical Engineering & Biotechnology	B.Tech. and M.Tech. in Biochemical Engineering & Biotechnology
Chemical Engineering	
Civil Engineering	B.Tech. and M.Tech. in Chemical Engineering
Computer Science & Engineering	
Electrical Engineering	
Electrical Engineering (Power and Automation)	B.Tech. and M.Tech. in Computer Science & Engineering
Engineering Physics	
Mathematics & Computing	
Mechanical Engineering	
Production and Industrial Engineering	B.Tech. and M.Tech. in Mathematics & Computing
Textile Technology	

* Admission to the first year of the four year B.Tech., 5-year dual degree programmes is made through a Joint Entrance Examination (JEE) Advanced which is common for all the Indian Institutes of Technology.

POSTGRADUATE STUDIES & RESEARCH (MASTERS PROGRAMMES)**

M.Sc. 2 years	M.Tech. 2 years	M.S. (Research) 2 years	M.Des. 2 years
1. Chemistry 2. Mathematics 3. Physics	1. Engineering Analysis and Design 2. Biomedical Engineering 3. Chemical Engineering 4. Molecular Engineering: Chemical Synthesis and Analysis 5. Construction Technology and Management 6. Geotechnical & Geoenvironmental Engineering 7. Structural Engineering 8. Water Resources Engineering 9. Construction Engineering and Management 10. Rock Engineering of Underground Structures 11. Environmental Engineering and Management 12. Transportation Engineering 13. Computer Science & Engineering 14. Control and Automation 15. Communications Engineering 16. Power Electronics, Electrical Machines & Drives 17. Computer Technology 18. Integrated Electronics & Circuits 19. Power Systems 20. Thermal Engineering 21. Production Engineering 22. Industrial Engineering 23. Mechanical Design 24. Tele-communication Technology and Management 25. VLSI Tools and Design 26. Radio Frequency Design & Technology 27. Solid State Materials 28. Applied Optics 29. Atmospheric Oceanic Science Technology 30. Fibre Science & Technology 31. Textile Engineering 32. Textile Chemical Processing 33. Energy Studies 34. Industrial Tribology & Maintenance Engineering 35. Polymer Science & Technology 36. Opto-electronics & Optical Communication 37. Instrument Technology	1. Applied Mechanics 2. Biochemical Engg. & Biotechnology 3. Chemical Engineering 4. Computer Science & Engineering 5. Electrical Engineering 6. Civil Engineering 7. Mechanical Engineering 8. Telecommunication Technology and Management 9. Biological Sciences 10. Information Technology	1. Industrial Design

Current Degree Programmes

contd.

POSTGRADUATE STUDIES & RESEARCH (MASTERS PROGRAMMES)**

M.B.A.	M.B.A.	D.I.I.T.
2 years Full Time	3 years Part Time	1½ years
1. Management Systems	1. Technology Management	1. Naval Construction
2. Telecommunication Systems Management		

**The admission to full-time M.Tech. programmes is made on the basis of performance in the Graduate Aptitude Test in Engineering (GATE) — an All India entrance test—and interview at the Institute. A limited number of students are also admitted on part-time basis from amongst working professionals along with the regular full-time students, subject to their satisfying certain academic and experience requirements.

DOCTORATE PROGRAMMES

The Institute offers research opportunities for doctoral research in all its Departments/Centres/Schools. Creative and productive enquiry is the basic concept underlying the research work. In order to overcome any deficiency in the breadth of fundamental training or proper foundation for advanced work, special preliminary or pre-doctoral courses are suggested by each department/centre/school. The award of Ph.D. is in recognition of high achievements, independent research and application of scientific knowledge to the solution of technical and scientific problems. The Institute lays special emphasis on India-centric research activities.

The following Departments / Centres / Schools of the Institute offer the Doctorate programme:

DEPARTMENTS / CENTRES / SCHOOLS	
Applied Mechanics	Textile Technology
Biochemical Engineering and Biotechnology	Applied Research in Electronics
Chemical Engineering	Atmospheric Sciences
Chemistry	Biomedical Engineering
Civil Engineering	Energy Studies
Computer Science and Engineering	Industrial Tribology, Machine Dynamics & Maintenance Engineering
Design	Instrument Design and Development
Electrical Engineering	Polymer Science and Engineering
Humanities and Social Sciences	Rural Development and Technology
Management Studies	National Resource Centre for Value Education in Engineering
Material Science and Engineering	Amar Nath and Shashi Khosla School of Information Technology
Mathematics	Bharti School of Telecommunication Technology and Management
Mechanical Engineering	Kusuma School of Biological Sciences
Physics	School of Interdisciplinary Research

BOARD OF EDUCATIONAL AND RESEARCH PLANNING (BERP)

Board of Educational and Research Planning is the chief planning and policy making body of the institute for its teaching and research activities. Head of the Planning unit is the Member - Secretary of BERP. The planning unit prepared ground work for all the matters to be considered by BERP. The recommendations of BERP are forwarded to the Senate for approval. BERP is also responsible for the short and long term educational and research planning of the institute. The composition of the Board of Educational and Research Planning as on March 31, 2018 is as follows:

BOARD OF EDUCATIONAL AND RESEARCH PLANNING		
V. Ramgopal Rao, Director (Chairman) M. Balakrishnan, Dy. Director (Strategy & Planning) Ashok Gupta, Dy. Director (Operations) Bhim Singh, Dean (Academics) Sandeep Sen, Dean (Faculty)	B.R. Mehta, Dean (R&D) T.R. Sreekrishnan, Dean (Student Affairs) Sanjeev Sanghi, Dean (AA&IP) V.K. Agarwal, Dean (Infrastructure)	S.R. Kale, Nominee of Senate N.G. Ramesh, Nominee of Senate Satyawati Sharma (Ms.), Nominee of Senate K.C. Iyer, (Member-Secretary)



5. Performance Highlights

(April 1, 2017 - March 31, 2018)

Performance Statistics

(April 1, 2017- March 31, 2018)

1

According to India Today and Outlook India, IIT Delhi has been ranked in the First Position amongst all the Engineering Colleges in India.

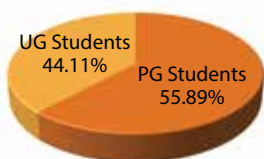


Female Students

20.40%

Male Students

79.60%



8754

Total students on roll

3861

UG students on roll

2446

Research Scholars on roll

2447

PG students on roll

1785

Female students

71

Foreign students from 10 countries



306

Scholars received the Ph.D. degree



133

Awards/scholarships/medals given at the Undergraduate and Postgraduate level. In addition, the Institute has a "Loan Scholarship Scheme" which makes it more affordable for the students who take loan from banks.

639

Research Scholar Admissions



23

New faculty members joined the institute this year.

1339

PG Admissions

851

UG Admissions

461

Faculty and Academic Staff

610

Non-academic Staff

2831

Total Admissions

99

Faculty Fellows under CEP

Performance Statistics

107

Operational MoUs/Agreements with Foreign Institutions/Organisation

282

New Sponsored Research Projects with a total funding of ₹415.47 crores.

39

MoUs/Agreements Indian Institutions/Organizations



333

Consultancy Jobs with a total value of ₹34.26 crores.



2070

Research articles published by the faculty members and researchers of the institute in international journals

37

Collaborative Projects/Consultancies with International Funding



1800

Articles indexed in Scopus, an international indexing service in Science & Technology and Social Sciences



92

Titles of E-books added under the Central Library Collection

1626

Printed books added under the Central Library Collection

32

New Courses Proposed/Initiated/Developed by Faculty

373

Companies visited for Placement



33

QIP/CEP Courses

829

Total Job Offers

44

Major New Equipment Installed

765

Total Placements

540

UG Placements



157

Seminars/Conferences/Workshops/Lectures

225

PG Placements

Admissions

(April 1, 2017 - March 31, 2018)

Academic programmes at IITD cover a wide range of science and engineering disciplines. In IITD's Bachelor's programmes, which are the most sought after even on global scales, and for which the entry is through the Joint Entrance Examination, the intake has steadily increased for the last few years and during the year 2017-2018, 3,861 UG students were on roll. These figures include 385 female students. The enrolment of postgraduate students during the year 2017-2018 was 4893. These figures include 1,400 female students. There were 71 foreign students from 10 countries pursuing undergraduate and postgraduate education at the Institute during the year 2017-2018. In order to make IIT Delhi of more international in character and to make better use of international intellectual resources, administration is constantly working towards increasing the strength of international students and faculty in the campus.

The Ministry of Human Resource Development, Government of India, has emphasized the need to increase the admission of foreign nationals under the self-financing scheme. The Institute has taken necessary steps in this regard and we hope to increase the strength of the foreign nationals in the coming years.

ADMISSION PROCEDURE

Undergraduate

Admission to all Undergraduate Programmes listed before are made through the Joint Entrance Examination (JEE) Advanced. The eligibility for appearing for JEE is as follows:

- The minimum academic qualification is the final examination of 10+2 system or its equivalent. The candidates belonging to the general category and OBC must secure a minimum of 60% marks in aggregate in their Qualifying Examination. Candidates belonging to SC, ST and PD categories must secure a minimum of 55% marks in aggregate in the

Qualifying Examination. If any Board awards only letter grades without providing an equivalent percentage of marks on the grade sheet, the candidate should obtain a certificate from the Board specifying equivalent marks, and submit it at the time of counselling.

Those appearing in 10+2 final or its equivalent examination may also appear in JEE for consideration of Provisional admission. All provisional admissions stand cancelled if proof of having passed the qualifying examination (10+2 or equivalent) is not submitted before September 30th of the year in which admission is sought.

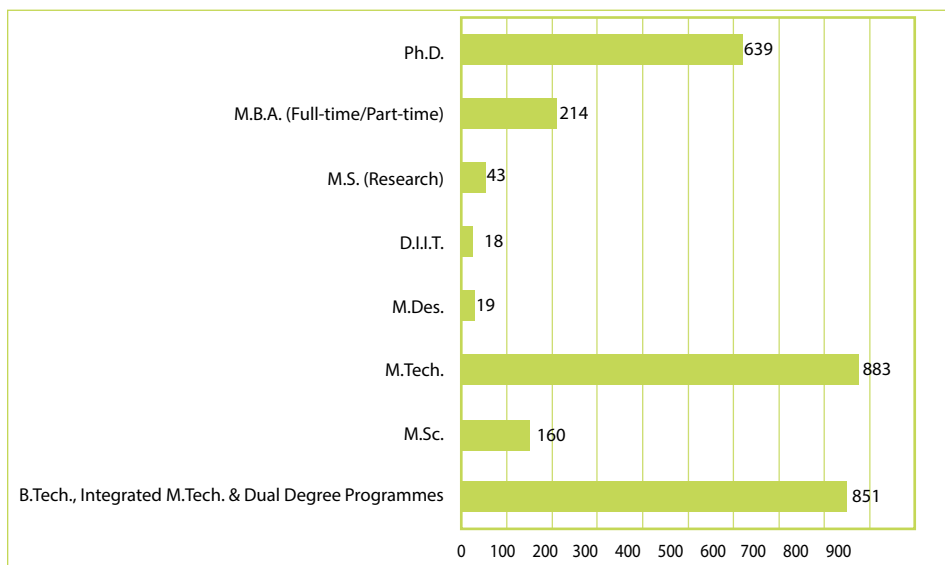
Postgraduate

The admission to full-time M.Tech. programmes is made on the basis of performance in the Graduate Aptitude Test in Engineering (GATE) — an All India entrance test, and interview at the Institute. A limited number of students are also admitted on part-time basis from amongst working professionals along with the regular full-time students, subject to their satisfying certain academic and experience requirements.

Admission to the 2-year M.Des. Programme in Industrial Design is made on the basis of CEED.

All applications are processed by the concerned Department/Centre/School/Programme and shortlisted applicants are called for a written test and/or interview. The date for test / interview is communicated by the Department/Centre/School Programme. Selected candidates are given offer letters by the Departments/Centres/Schools after approval of the selection by the Dean, Academics. They are required to pay the first installment of fees by a given date, failing which their admission offer stands automatically cancelled. Seats so released are then offered to wait listed candidates.

Fig. 1: Programme wise details of total number of admissions in 2017-2018.



Admissions

COURSES AND ADMISSIONS

Following Tables (I, II, III) give the details regarding the admissions in the given period in different courses offered at IIT Delhi. Table IV and V shows the total number of students enrolled in different departments and centres. Category-wise distribution of students in different programmes is given in Table VI.

Table I: Break-up of Admissions through Joint Entrance Examination during 2017-2018 according to the Various Disciplines

Discipline	Sanctioned Strength	Actual Admissions
B.Tech. in Biochemical Engineering and Biotechnology (BB1)	45	46
B.Tech. in Chemical Engineering (CH1)	75	74
B.Tech. in Civil Engineering (CE1)	105	105
B.Tech. in Computer Science & Engineering (CS1)	68	70
B.Tech. in Electrical Engineering (EE1)	75	75
B. Tech. in Electrical Engineering (Power and Automation) (EE3)	45	45
B. Tech. in Mathematics & Computer Applications (MT1)	36	35
B.Tech. in Mechanical Engineering (ME1)	68	68
B.Tech. in Production Engineering (ME2)	67	67
B.Tech. in Engineering Physics (PH1)	60	59
B.Tech. in Textile Technology (TT1)	105	104
M.Tech. in Mathematics & Computer Applications (5-year Integrated) (MT6)	20	20
B.Tech. and M.Tech. in Computer Science & Engineering (5-year Dual Degree) (CS5)	22	22
B.Tech. and M.Tech. in Chemical Engg. (5-year Dual Degree) (CH7)	45	44
B.Tech. and M.Tech. in Biochemical Engineering and Biotechnology (5-year dual Degree) (BB5)	15	14

Table II: Students Admitted to First Year of the M.Tech./M.Des./M.S.(R)/D.I.I.T./M.B.A./M.Sc. Programmes as on August 01, 2017 (the last date for late registration in 1st Semester 2017-2018)

Programme	Students with Institute Assistantship	Others (including part-time students)	Total
Master of Technology (M.Tech.)			
Department of Applied Mechanics			
Engineering Analysis and Design (AMA)	60	2	62
Department of Chemical Engineering			
Chemical Engineering (CHE)	34	2	36
Department of Chemistry			
Molecular Engg.: Chemical Synthesis and Analysis (CYM)	12	0	12
Department of Civil Engineering			
Geotechnical & Geoenvironmental Engineering (CEG)	14	4	18
Structural Engineering (CES)	17	15	32
Water Resources Engineering (CEW)	26	0	26
Rock Engineering & Underground Structures (CEU)	24	2	26
Construction Engineering and Management (CET)	23	7	30
Construction Technology and Management (CEC)	0	29	29
Environmental Engineering and Management (CEV)	16	2	18
Transportation Engineering (CEP)	18	7	25

Admissions

Table II, contd.

Department of Computer Science & Engineering			
Computer Science & Engineering (MCS)	27	11	38
Department of Electrical Engineering			
Integrated Electronics & Circuits (EEN)	11	9	20
Communications Engineering (EEE)	09	6	15
Control & Automation (EEA)	09	4	13
Power Electronics, Electrical Machines & Drives (EEP)	08	7	15
Computer Technology (EET)	23	3	26
Power System (EES)	06	9	15
Department of Mechanical Engineering			
Thermal Engineering (MET)	28	11	39
Mechanical Design (MEM)	24	17	41
Production Engineering (MEP)	10	4	14
Industrial Engineering (MEE)	7	4	11
Department of Physics			
Applied Optics (PHA)	19	5	24
Solid State Materials (PHM)	18	1	19
Department of Textile Technology			
Textile Engineering (TTE)	16	9	25
Fibre Science & Technology (TTF)	17	0	17
Textile Chemical Processing (TTC)	12	0	12
Centre for Applied Research in Electronics			
Radio Frequency Design and Technology (CRF)	15	11	26
Centre for Atmospheric Sciences			
Atmospheric-Oceanic Science & Technology (AST)	14	5	19
Biomedical Engineering (BMT)	8	0	8
Interdisciplinary Programmes			
Energy Studies (JES)	19	3	22
Industrial Tribology & Maintenance Engineering (JIT)	15	1	16
Instrument Technology (JID)	12	2	14
Polymer Science & Technology (JPT)	15	4	19
Opto-electronics & Optical Communication (JOP)	16	3	19
VLSI Design Tools & Technology (JVL)	0	9	9
Bharti School of Telecommunication Technology & Management			
Telecommunication Technology and Management (JTM)	9	1	10
Total	626	205	831
Master of Design			
Industrial Design (JDS)	16	2	18
Master of Science			
Chemistry (CYS)	2	52	54
Mathematics (MAS)	0	54	54
Physics (PHS)	10	42	52
Master of Science (Research)			
Mechanical Engineering (MEY)	4	2	6
Civil Engineering (CEY)	0	4	4
Amar Nath and Shashi Khosla School of Information Tech. (SIY)	1	3	4

Admissions

Table II, contd.

Bharti School of Telecommunication Tech. & Mgmt. (BSY)	0	4	4
Kusuma School of Biological Sciences (BLY)	4	1	5
Applied Mechanics (AMY)	2	1	3
Computer Science & Engineering (CSY)	0	1	1
Electrical Engineering (EEY)	6	7	13
Chemical Engineering (CHY)	0	0	0
Biochemical Engineering & Biotechnology (BEY)	3	0	3
Master of Business Administration (MBA)			
Technology Management (SMN)	0	60	60
Management Systems (SMF)	0	115	115
Telecommunication Systems Management (SMT)	0	29	29
D.I.I.T.			
Naval Construction (AMX)	0	31	31
Total	674	665	1339

Table III : Research Scholars Admitted in both the Semesters of the Session 2017-2018

Department/Centre/School	Semester-I			Semester-II			Total
	Institute Supported Scholars	Scholars Supported from Other Sources	Other Incl. Part Time Students	Institute Supported Scholars	Scholars Supported from Other Sources	Other Incl. Part Time Students	
Applied Mechanics (AMZ)	9	2	3	6	0	2	22
Biochemical Engg. & Biotech. (BEZ)	7	5	0	2	0	1	15
Chemical Engineering (CHZ)	15	16	1	8	7	3	50
Chemistry (CYZ)	3	14	0	1	7	1	26
Civil Engineering (CEZ)	13	8	7	7	5	4	44
Computer Science & Engg. (CSZ)	6	1	0	1	0	0	8
Electrical Engineering (EEZ)	34	15	9	6	9	6	79
Humanities & Social Sciences (HUZ)	8	11	3	3	4	2	31
Management Studies (SMZ)	14	2	5	13	8	6	48
Mathematics (MAZ)	7	8	1	1	5	0	22
Mechanical Engineering (MEZ)	23	2	4	9	8	1	47
Physics (PHZ)	7	30	5	6	11	0	59
Textile Technology (TTZ)	8	2	1	4	6	3	24
Applied Research in Electronics (CRZ)	3	1	2	3	1	1	11
Atmospheric Sciences (ASZ)	7	1	1	4	2	1	16
Biomedical Engineering (BMZ)	5	5	0	3	0	0	13
Energy Studies (ESZ)	10	1	0	3	5	1	20
Polymer Science & Engg. (PTZ)	7	7	0	1	1	1	17
Rural Development & Tech. (RDZ)	11	14	5	2	3	5	40
Indl. Tribology, Machine Dynamics & Maintenance Engg. Centre (ITZ)	4	0	0	2	0	0	6
Instrumentation Design Development Centre (IDZ)	1	0	1	1	1	0	4
School of Biological Sciences (BLZ)	2	4	0	1	1	0	8
Bharti School of Telecommunication Tech. & Mgmt. (BSZ)	5	0	3	4	2	2	16
Transportation Research & Injury Prevention Programmes (TRZ)	0	0	0	1	0	0	1
Amar Nath and Shashi Khosla School of IT (ANZ)	1	2	0	0	0	0	3
School of Interdisciplinary Research (SRZ)	0	0	0	0	9	0	9
Total	210	151	51	92	95	40	639

Admissions

Table IV : Total number of M.Tech./M.S.(R)/M.Sc./D.I.I.T./M.B.A. Students on Rolls as on July 31, 2017 (the last date for late registration in 1st Semester, 2017-2018)

Programme	Institute Supported Students	Students Supported from Other Sources (Include Part-time)	Total
Master of Technology (M.Tech.)			
Department of Applied Mechanics			
Engineering Analysis and Design (AMA)	60	2	62
Engineering Mechanics (AME)	20	3	23
Design Engineering (AMD)	25	2	27
Department of Chemical Engineering			
Chemical Engineering (CHE)	54	4	58
Department of Chemistry			
Molecular Engg. : Chemical Synthesis and Analysis (CYM)	23	0	23
Department of Civil Engineering			
Geotechnical & Geoenvironment Engineering (CEG)	28	5	33
Rock Engineering Underground Structures (CEU)	44	7	51
Structural Engineering (CES)	35	30	65
Water Resources Engineering (CEW)	36	0	36
Environmental Engineering and Management (CEV)	31	6	37
Construction Engineering and Management (CET)	40	9	49
Construction Technology and Management (CEC)	0	61	61
Transportation Engineering (CEP)	32	22	54
Department of Computer Science & Engineering			
Computer Science & Engineering (MCS)	57	20	77
Department of Electrical Engineering			
Integrated Electronics & Circuits (EEN)	21	11	32
Communications Engineering (EEE)	27	12	39
Control & Automation (EEA)	20	8	28
Power Electronics, Electrical Machines & Drives (EEP)	15	9	24
Computer Technology (EET)	38	7	45
Power Systems (EES)	13	17	30
Department of Mechanical Engineering			
Thermal Engineering (MET)	38	14	52
Mechanical Design (MEM)	38	21	59
Production Engineering (MEP)	36	6	42
Industrial Engineering (MEE)	14	5	19
Department of Physics			
Applied Optics (PHA)	31	5	36
Solid State Materials (PHM)	32	3	35
Department of Textile Technology			
Textile Chemical Processing (TTC)	12	0	12
Textile Engineering (TTE)	30	10	40
Fibre Science & Technology (TTF)	31	1	32

Admissions

Table IV, contd.

Centre for Atmospheric Sciences			
Atmospheric-Oceanic Science & Technology (AST)	26	6	32
Centre for Applied Research in Electronics			
Radio Frequency Design and Technology (CRF)	28	24	52
Centre for Bio-medical Engineering (BMT)	8	0	8
Interdisciplinary Programmes			
Computer Applications (JCA)	1	0	1
Energy Studies (JES)	39	4	43
Instrument Technology (JID)	23	4	27
Industrial Tribology & Maintenance Engineering (JIT)	25	4	29
Polymer Science & Technology (JPT)	37	4	41
Opto Electronics & Optical Communication (JOP)	41	9	50
VLSI Design Tools and Technology (JVL)	1	21	22
Energy and Environmental Management (JEN)	0	4	4
Industrial Design (JDS)	37	2	39
Bharti School of Telecommunication Technology & Management			
Telecommunication Technology and Management (JTM)	29	2	31
Total	1176	384	1560
Master of Business Administration			
Management Studies	0	388	388
D.I.I.T.			
Naval Construction (AMX)	0	58	58
Master of Science			
Chemistry (CYS)	28	83	111
Mathematics (MAS)	22	91	113
Physics (PHS)	28	82	110
Master of Science (Research)			
Applied Mechanics (AMY)	2	0	2
Biochemical Engineering & Biotechnology (BEY)	14	1	15
Chemical Engineering (CHY)	0	0	0
Computer Science & Engineering (CSY)	4	9	13
Civil Engineering (CEY)	1	3	4
Electrical Engineering (EEY)	10	25	35
Mechanical Engineering (MEY)	7	7	14
Bharti School of Telecommunication Technology & Management (BSY)	1	9	10
Kusuma School of Biological Sciences (BLY)	5	1	6
Amar Nath & Shashi Khosla School of Information Technology (SIY)	0	8	8
Total	1298	1149	2447

Admissions

Table V : Research Scholars on the Institute Rolls as on July 31, 2017 (the last date for late registration in the 1st semester, 2017-2018)

Department/Centre/School	Institute Scholarships	Others Scholarships	Part-Time Students	Total
Applied Mechanics (AMZ)	44	11	36	91
Biochemical Engineering & Biotechnology (BEZ)	35	22	5	62
Chemical Engineering (CHZ)	62	62	34	158
Chemistry (CZY)	37	82	9	128
Civil Engineering (CEZ)	94	53	101	248
Computer Science & Engineering (CSZ)	27	18	8	53
Electrical Engineering (EEZ)	157	102	103	362
Humanities & Social Sciences (HUZ)	51	33	32	116
Management Studies (SMZ)	54	21	60	135
Mathematics (MAZ)	18	33	7	58
Mechanical Engineering (MEZ)	107	37	52	196
Physics (PHZ)	63	105	33	201
Textile Technology (TTZ)	25	21	10	56
Centre for Applied Research in Electronics (CRZ)	21	11	16	48
Centre for Atmospheric Sciences (ASZ)	32	11	7	50
Centre for Biomedical Engineering (BMZ)	26	17	18	61
Centre for Energy Studies (ESZ)	42	23	33	98
Centre for Polymer Science & Engineering (PTZ)	24	15	2	41
Centre for Rural Development & Technology (RDZ)	35	30	19	84
National Resource Centre for Value Education in Engg. (NRZ)	0	0	6	6
Transportation Research & Injury Prevention Prog. (TRZ)	4	1	3	8
Instrument Design & Development Centre (IDZ)	11	0	10	21
Industrial Tribology, Machine Dynamics & Maintenance Engineering Centre (ITZ)	15	4	2	21
Kusuma School of Biological Sciences (BLZ)	23	40	5	68
Bharti School of Telecommunication Tech. & Mgmt. (BSZ)	20	5	22	47
Amar Nath and Shashi Khosla School of IT (ANZ)	12	8	9	29
Total	1039	765	642	2446

Table VI : Category and Gender wise distribution of enrolled students in UG and PG courses

Programme	General		OBC		SC		ST		PH		Total		Grand Total
	M	F	M	F	M	F	M	F	M	F	M	F	
P.G.	1217	352	417	83	211	51	74	28	11	3	1930	517	2447
Ph.D.	1179	723	261	102	106	50	13	8	4	0	1563	883	2446
Total (a)	2396	1075	678	185	317	101	87	36	15	3	3493	1400	4893
B.Tech. (b)	1629	201	926	82	549	56	283	41	89	5	3476	385	3861
Total (a+b)	4025	1276	1604	267	866	157	370	77	104	8	6969	1785	8754

Academic Performance

(April 1, 2017 - March 31, 2018)

All the IITs follow the credits system of performance evaluation, with proportional weighting of courses based on their importance. The total marks (usually out of 100) form the basis of grades, with a grade value (out of 10) assigned to a range of marks. Sometimes, relative grading is done considering the overall performance of the whole class.

1941 candidates awarded of various degrees and diplomas of the Institute at the 48th Annual Convocation held in November 2017. Details of the same are given in Figure 2 and Tables I, II and III.

Fig. 2: Programme wise details of total degrees/diplomas given in 2017-2018.

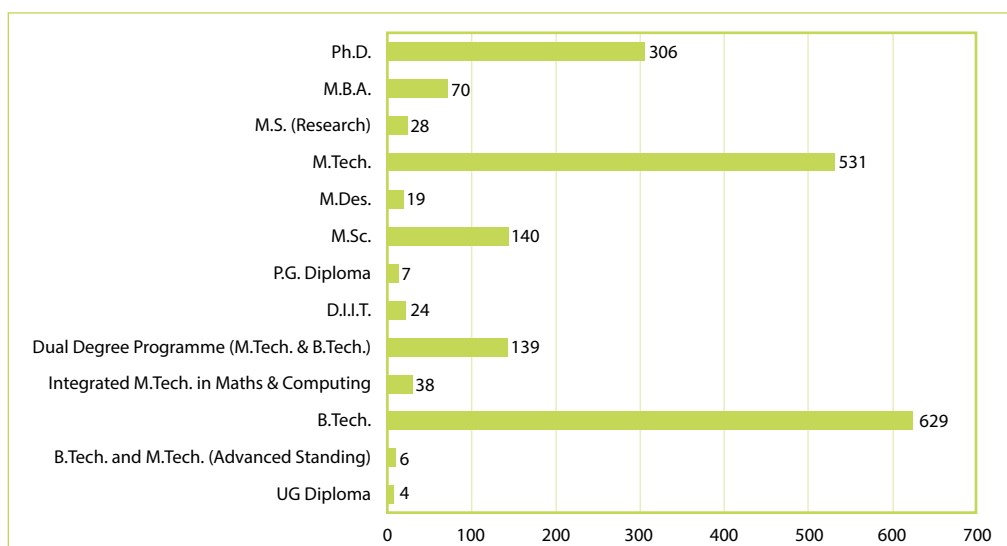


Table I : Number of Undergraduate Students Awarded of Degrees/Diplomas in Convocation 2017

Discipline	No. of Students Passed
5 Year Dual Degree / Integrated	
B.Tech. in Biochemical Engineering & Biotechnology and M.Tech. in Biochemical Engineering & Biotechnology	35 (32+3*)
B.Tech. and M. Tech. in Chemical Engineering	51
B.Tech. in Computer Science & Engineering and M.Tech. in Computer Science & Engineering	26
B.Tech. in Electrical Engineering and M.Tech. in Information and communication	27
M.Tech. in Mathematics and Computing	38
B.Tech. Degree	
Civil Engineering	98
Chemical Engineering	73
Computer Science & Engineering	68
Electrical Engineering	80
Electrical Engineering (Power & Automation)	28
Mechanical Engineering	95
Production and Industrial Engineering	49
Engineering Physics	55
Textile Technology	83
B.Tech. and M.Tech. (Advanced Standing)	6
Diploma (Undergraduate)	4
Total	817

* (only B.Tech. degree awarded)

Table II : Number of Students Awarded of Degrees/Diplomas in 2017

Programme		No. of Degrees/Diplomas Awarded
(a)	Master of Technology	
	Engineering Mechanics (AME)	16
	Design Engineering (AMD)	15
	Molecular Engineering: Chemical Synthesis & Analysis (CYM)	15
	Chemical Engineering (CHE)	11
	Construction Technology & Management (CEC)	28
	Geotechnical and Geoenvironmental Engineering (CEG)	10
	Structural Engineering (CES)	24 (+1)*
	Water Resources Engineering (CEW)	10 (+1)*
	Rock Engineering & Underground Structures (CEU)	17
	Construction Engineering and Management (CET)	12
	Environmental Engineering and Management (CEV)	15 (+2)*
	Transportation Engineering (CEP)	11
	Computer Science & Engineering (MCS)	28
	Control and Automation (EEA)	9
	Communications Engineering (EEE)	13
	Power Electronics, Electrical Machines & Drives (EEP)	12
	Computer Technology (EET)	25
	Integrated Electronics & Circuits (EEN)	10
	Power Systems (EES)	4 (+1)*
	Thermal Engineering (MET)	14
	Production Engineering (MEP)	14
	Industrial Engineering (MEE)	6
	Mechanical Design (MEM)	12
	Energy and Environmental Management (Evening) (JEN)	15
	Atmospheric-Ocean Sciences and Technology (AST)	7
	Instrument Technology (JID)	11
	Applied Optics (PHA)	6
	Solid State Materials (PHM)	14
	Fibre Science & Technology (TTF)	15
	Textile Engineering (TTE)	18
	Radio Frequency Design and Technology (CRF)	31
	Energy Studies (JES)	19
	Industrial Tribology & Maintenance Engineering (JIT)	11
	Polymer Science & Technology (JPT)	17
	Opto-Electronics & Optical Communication (JOP)	15
	VLSI Design Tools and Technology (JVL)	7
	Telecommunication Technology and Management (JTM)	13 (+2)*
	Computer Applications (JCA)	1
(b)	Master of Business Administration	
	Management Systems (SMF)	37
	Technology Management (SMN)	24
	Telecommunication System Management (SMT)	9
(c)	D.I.I.T. (2-Year)	
	Naval Construction (AMX)	0 (+24)*
(d)	Master of Science	140
(e)	Master of Design	19
(f)	Master of Science (Research)	
	Amar Nath & Shashi Khosla School of IT (SIY)	1
	Civil Engineering (CEY)	0
	Chemical Engineering (CHY)	0
	Biochemical Engineering & Biotechnology (BEY)	8
	Applied Mechanics (AMY)	2
	Electrical Engineering (EEY)	7
	Computer Science and Engineering (CSY)	1
	Mechanical Engineering (MEY)	6
	Bharti School of Telecommunication Technology & Management (BSY)	1
	School of Biological Science (BLY)	2
	Total	531 (+31)*

* (Diplomas Awarded)

Academic Performance

Table III : Number of Ph.D. Degrees Awarded in 2017

Department/Centre/School	No. of Degrees Awarded
Applied Mechanics (AMZ)	13
Biochemical Engineering & Biotechnology (BEZ)	9
Chemical Engineering (CHZ)	22
Chemistry (CYZ)	28
Civil Engineering (CEZ)	24
Computer Science & Engineering (CSZ)	10
Electrical Engineering (EEZ)	30
Humanities & Social Sciences (HUZ)	3
Management Studies (SMZ)	12
Mathematics (MAZ)	14
Mechanical Engineering (MEZ)	22
Physics (PHZ)	19
Textile Technology (TTZ)	13
Centre for Applied Research in Electronics (CRZ)	3
Centre for Biomedical Engineering (BMZ)	9
Centre for Energy Studies (ESZ)	25
Industrial Tribology, Machine Dynamics & Maintenance Engineering Centre (ITZ)	2
Instrument Design Development Centre (IDZ)	0
Centre for Polymer Science & Engineering (PTZ)	7
Centre for Rural Development & Technology (RDZ)	11
Transportation Res. & Injury Prevention Programme (TRZ)	2
Centre for Atmospheric Sciences (ASZ)	5
Bharti School of Telecommunication Technology and Management (BSZ)	6
Kusuma School of Biological Sciences (BLZ)	15
Amar Nath & Shashi Khosla School of IT (ITZ)	2
Total	306



Academic Performance

For each semester, the students are graded on a scale of 0 to 10 based on their performance, by taking a weighted average of the grade points from all the courses, with their respective credit points. Each semester evaluation is done independently and then the weighted average over all semesters is used to calculate the cumulative grade point average (CGPA). The following table gives the Discipline-wise break-up of CGPA for the two Academic Semesters:

**Table IV: Discipline-wise break-up of CGPA for the two Academic Semesters (Undergraduate Courses)
[Academic Session 2016-2017 (2013 Entry Students)]**

Discipline	10.00-9.00	8.99-8.00	7.99-7.00	6.99-6.00	5.99-5.00	4.99-4.00	3.99-3.00	2.99-2.00	Less than 2.00	Total
First Semester										
Dual-Degree in Biochemical Engineering & Biotechnology (BB5)*	1	3	10	11	13	5	0	0	0	43
Civil Engineering (CE1)	3	21	31	31	13	6	0	0	0	105
Chemical Engineering (CH1)	5	12	23	14	17	2	0	0	0	73
Dual Degree in Chemical Engg. (CH7)	0	7	21	11	8	1	0	0	0	48
Computer Science & Engineering (CS1)	16	16	19	11	2	0	0	0	0	64
Dual-Degree in Computer Science & Engineering (CS5)	7	10	5	7	4	0	0	0	0	33
Electrical Engineering (EE1)	11	23	26	18	10	2	0	0	0	90
Electrical Engineering (Power) & Automation (EE3)	4	4	12	7	5	1	0	0	0	33
Mechanical Engineering (ME1)	9	28	29	22	14	2	0	0	0	104
Mechanical Engineering (ME2)	1	10	14	11	7	2	0	0	0	45
Mathematics and Computing (MT6)	2	14	11	5	15	0	0	0	0	47
Engineering Physics (PH1)	3	10	21	15	9	1	0	0	0	59
Textile Engineering (TT1)	2	12	24	24	23	1	0	0	0	86
Total	64	170	246	187	140	23	0	0	0	830
Second Semester										
Dual-Degree in Biochemical Engineering & Biotechnology (BB5)	1	4	9	12	10	6	0	0	0	42
Civil Engineering (CE1)	3	20	32	32	13	5	0	0	0	105
Chemical Engineering (CH1)	5	12	25	12	17	2	0	0	0	73
Dual-Degree in Chemical Engg. (CH7)	1	6	21	10	9	1	0	0	0	48
Computer Science & Engineering (CS1)	16	18	16	11	3	0	0	0	0	64
Dual-Degree in Computer Science & Engineering (CS5)	9	8	5	8	3	0	0	0	0	33
Electrical Engineering (EE1)	11	23	25	19	10	2	0	0	0	90
Electrical Engineering Power & Automation (EE3)	5	3	11	8	5	1	0	0	0	33
Mechanical Engineering (ME1)	11	28	27	22	12	4	0	0	0	104
Mechanical Engineering (ME2)	1	10	15	11	6	2	0	0	0	45
Mathematics and Computing (MT6)	2	16	9	6	13	0	0	0	0	46
Engineering Physics (PH1)	3	12	19	13	10	1	0	0	0	58
Textile Engineering (TT1)	2	11	21	27	25	0	0	0	0	86
Total	70	171	235	191	136	24	0	0	0	827

Academic Performance

Table V : Academic Performance of 1st year Students of Postgraduate Programmes

Department/Centre/School	Programme	No. of students admitted (2017)	No. of students qualified to continue*
Master of Technology			
Applied Mechanics	Engineering Analysis and Design (AMA)	62	46
Chemical Engineering	Chemical Engineering (CHE)	36	26
Chemistry	Molecular Engineering: Chemical Synthesis and Analysis (CYM)	12	11
Civil Engineering	Construction Technology and Management (CEC)	29	28
	Geotechnical & Geoenvironmental Engineering (CEG)	18	13
	Structural Engineering (CES)	32	22
	Water Resources Engineering (CEW)	26	17
	Construction Engineering and Management (CET)	30	26
	Rock Engineering of Underground Structures (CEU)	26	22
	Environmental Engineering and Management (CEV)	18	16
	Transportation Engineering (CEP)	25	17
Computer Science & Engineering	Computer Science & Engineering (MCS)	38	36
Electrical Engineering	Control and Automation (EEA)	13	11
	Communications Engineering (EEE)	15	15
	Power Electronics, Electrical Machines & Drives (EEP)	15	14
	Computer Technology (EET)	26	23
	Integrated Electronics & Circuits (EEN)	20	16
	Power Systems (EES)	15	12
Mechanical Engineering	Thermal Engineering (MET)	39	31
	Production Engineering (MEP)	14	11
	Industrial Engineering (MEE)	11	11
	Mechanical Design (MEM)	41	32
Physics	Solid State Materials (PHM)	19	18
	Applied Optics (PHA)	24	21
Bharti School of Telecomm. Technology and Mgmt.	Telecommunication Technology and Management (JTM)	10	10
Applied Research in Electronics	Radio Frequency Design & Technology (CRF)	26	25
Atmospheric Sciences	Atmospheric Oceanic Science & Technology (AST)	19	14
Biomedical Engineering	Biomedical Engineering (BMT)	8	7
Textile Technology	Fibre Science & Technology (TTF)	17	17
	Textile Engineering (TTE)	25	22
	Textile Chemical Processing (TTC)	12	12
Interdisciplinary Programme	Energy Studies (JES)	22	19
	Industrial Tribology & Maintenance Engineering (JIT)	16	12
	Polymer Science & Technology (JPT)	19	18
	Opto-electronics & Optical Communication (JOP)	19	19
	Instrument Technology (JID)	14	10
	VLSI Design Tools and Technology (JVL)	9	9

Academic Performance

contd.

Master of Science (Research)			
	Applied Mechanics (AMY)	1	1
	Amar Nath & Shashi Khosla School of Information Technology (SIY)	2	2
	Computer Science & Engineering (CSY)	1	0
	Chemical Engineering (CHY)	0	0
	Civil Engineering (CEY)	1	1
	Biochemical Engineering & Biotechnology (BEY)	6	6
	Bharti School of Telecommunication Tech. & Mgmt. (BSY)	3	3
	Kusuma School of Biological Sciences (BLY)	4	4
	Mechanical Engineering (MEY)	5	5
	Electrical Engineering (EEY)	6	6
Master of Design			
	Industrial Design (JDS)	18	17
D.I.I.T. (2 year)			
	Naval Construction (AMX)	31	31
Master of Science			
	Chemistry (CYS)	54	52
	Mathematics (MAS)	54	51
	Physics (PHS)	52	50
Master of Business Administration			
	Technology Management (SMN)	60	59
	Management Systems (SMF)	115	113
	Telecommunication Systems Management (SMT)	29	28
Total		1339	1118

*The remaining students either left the Institute or failed to meet the minimum C.G.P.A. requirements to continue in the next semester.



Internship and Placement

(April 1, 2017 - March 31, 2018)

Training & Placement

Training & Placement activities are guided by an Institute Level Committee consisting of Faculty members and students. The student committees, i.e. Central Committee at the Institute level, as well as Nucleus Committees at departmental level, actively participated in the Training & Placement activities.

As in the past, the Training and Placement Unit continued to plan, organise and consolidate the Training and Placement activities for students. It actively interacted with various industrial, technical, management and research organisations in the country. The dual aim of establishing this rapport is to ensure that students are given adequate technical exposure/ industrial training and subsequently get employment in organisations which match their aspirations and objectives.

As in previous years, web based placement services were provided using the internal T&P server this year as well. The students got all information on their desktop PCs / laptops, they applied on-line, and could see the progress of their application including the final results. The companies too were issued user name and password for accessing and short-listing CVs and uploading their presentations and files. This considerably reduced the conventional pre-placement talks on the campus. The analysis of the past training and placement activities was presented to the students to help them decide their future course of action. Constant liaison with industries was maintained throughout the year to ensure adequate placement and internship opportunities for student across sectors.

This office also organised some pre-placement workshops, panel discussions, practice test series and career counselling talks by distinguished persons from reputed technical, industrial, management and research organisations for the benefit of the students. Some of the Institute alumni who are holding very senior positions in private and public sector organisations were also invited to share their personal experiences with the student community of the Institute.

Many new initiatives to increase operational efficiency at the ground level were also initiated by this unit during this year like automating student slotting for interviews, etc. T&P participated actively in "Industry Day" of the institute which was held in September, 2017 by Office of Corporate Relations, IIT Delhi to increase outreach of job opportunities for Ph.D. scholars. Like last year, the unit also held a startup intern and job fair in April, 2018 in collaboration with the Entrepreneurship Development Cell (eDC) of IIT Delhi.

Other new flagship initiatives held this year included a Career Conclave based on the theme "Careers in the Age of Industry 4.0" held in November, 2017 to help the student body as a whole to gain fresh insights into the employers' perspective on potential recruits by interacting with opportunity providers and talent custodians from industry prior to the start of interview processes. This also had the aim of sensitising students to enable them to make more informed career choices. Another new initiative introduced this year included a Campus to Corporate workshop on "Ways of Winning @ Work" held in April, 2018 to help students transition from academic to work life by sensitising them to behavioural norms expected by organisations from professionals in the work environment.

Training / Internship

A personal dialogue with top executives of a large number of industries resulted in better understanding of their functional requirements and training activities. This effort also helped the T&P Unit in the effective planning of summer practical training for 2nd, 3rd and 4th year B.Tech./Dual degree/ Integrated M.Tech. students, besides obtaining a good number of stipends and other facilities such as transport, accommodation, etc.

Training rules as per the new curriculum guidelines have been implemented. Detailed instructions to students were also issued prior to the commencement of the training programme. It was also clarified to students that DPE norms would apply for availing NGU credits for internships.

Placement

A letter of invitation for Campus Interviews was sent to a large number of public and private sector organisations especially to those which visited the Institute for campus interviews during the last three years. A large number of them gave electronic copies of their job profiles which were made available to the students through the internal web server. This vigorous drive resulted in requisitions being obtained from industries from 373 Companies for 543 job profiles with selections on 229 profiles as a result of which 765 students were placed. A total of 829 job offers were received (56 students got multiple jobs). 36 students got selected for opportunities abroad. Approximately 89.6% students who availed T&P services got placed through T&P. The remaining opted for higher studies/ research or are preparing for civil services or are working on their own startup ideas or got jobs through their own contacts/efforts. The sector-wise distribution of profiles opened for placement are given in Table V.

Internship and Placement

Table V : Sector-wise distribution of Profiles Opened for Placement

Sector	Profiles Opened	Students Placed
Analytics	107	133
Consulting	37	64
Core (Technical)	164	273
Finance	20	26
Information Technology	129	187
Teaching & Research	17	1
Other	69	81
Total	543	765

Ground rules for placement evolved in consultation with the students and faculty members led to a just and equitable distribution of job opportunities amongst the student community.

The discipline wise break-up of the campus placement position is shown in Table VI and VII.

Table VI : Discipline-wise break-up of On-Campus Placement Position of B.Tech. / Dual degree and 5-year integrated M.Tech. Students during 2017-18

Discipline	No. of Students Registered	No. of Effective Placements*	No. of Students with more than one job**
(a) B.Tech.			
Bio-chemical & Bio-technology	19	19	1
Chemical Engineering	52	50	4
Civil Engineering	36	32	0
Computer Science & Engineering	68	67	12
Electrical Engineering	61	60	7
Electrical Engineering (Power & Automation)	34	34	4
Mechanical Engineering	45	43	0
Mathematics & Computing	30	30	4
Industrial & Production Engineering	36	31	0
Textile Technology	44	40	0
Physics Engineering	26	25	0
(b) Dual / 5-Year Integrated M.Tech. Programmes			
Mathematics & Computer Appn.	38	36	2
Biochemical Engineering & Biotechnology	14	14	1
Chemical Engineering / Dual Degree	30	28	1
Computer Science & Engineering / Dual Degree (CO)	29	29	6
Advanced Standing (CSA, CSB, CSC, CEA)	2	2	0
Total	564	540	42

* Others got placement via off-campus mode. (Some would have gone for higher studies/research or for Civil Services or are working on their own startup ideas or got jobs through their own contacts/efforts.)

** This is because more than one company declared the results on the same day.

Internship and Placement

Table VII : On-campus Placement Position of M.Tech. Students during 2017-18

Department / Interdisciplinary Programme	No. of Students Registered	No. of Effective Placements*	No. of Students with More than one job**
Applied Mechanics	28	23	1
Atmospheric Oceanic Science & Technology	6	3	-
Chemical Engineering	11	5	-
Civil Engineering	19	13	-
Computer Science & Engineering	30	30	3
Electrical Engineering	40	39	3
Mechanical Engineering	32	20	-
Textile Technology	18	13	-
Energy Studies	11	10	1
ITMMEC	8	4	-
Opto-electronics and Optical Communication	16	10	-
Polymer Science & Technology	13	3	-
Instrument Technology	7	5	-
VLSI	6	6	-
CRF (CARE)	8	8	1
Chemistry	1	-	-
Telecommunications	11	10	2
Total	265	202	11

* Others have got placement via off-campus mode. (Some would have gone for higher studies/research or for Civil Services or are working on their own startup ideas or got jobs through their own contacts/efforts.)

** This is because more than one company declared the results on the same day.

1. In addition 12 M.Des, 02 M.Sc. and 08 MS Research students also were placed through our campus activities.
2. Total Jobs = B.Tech. + Dual Degree + M.Tech. + M.Sc. + M.S.(R) + M.Des. = 431+109+202+6+5+12= 765
3. This data is for students who opted for placement through T&P only - excluding DMS. DMS runs its placement process separately.
4. Data on students finally joining the jobs opted on campus not available with T&P.

Ph.D. placements were also facilitated by T&P. Ph.D. profiles were made available to organisations through T&P and scholars were subsequently contacted directly by organizations for further processes.



Scholarships, Assistantships and Awards

(April 1, 2017 - March 31, 2018)

The Institute believes in the maxim that no deserving student, however weak in financial backing, should be denied the opportunity of education at IIT Delhi. To encourage and to provide financial incentives to meritorious students and assistance to the needy students of the institute, individuals, trusts and organisations have been instituting scholarships, awards, etc. at the Institute. At present, there are 133 awards/scholarships/medals being given at the Undergraduate and Postgraduate level. This is in addition to more than 2166 awards instituted by the Institute directly in the form of merit-cum-means scholarships, cash prizes and freeships.

Two New (UG) scholarships instituted this year: Alumni Scholarship and Swami Shivananda Scholarship.

Below is a summary of cash prizes and merit-cum means scholarships offered to B.Tech. students during the session 2017-2018.

Scholarships / Assistantships / Freeships and Awards

Table I : Number of Cash Prizes Merit-cum-Means Scholarships/Freeships offered to B.Tech. Students during the Session 2017-2018

Class	Cash Prizes (SCHII028)	No. of Scholarships Awarded (SCHII035/SCHII059)	Free Mess Services (SCHII036)	Freeships for General & OBC (SCHOI305)	UG TA (SCHII045/SCHII054/SCHII057/SCHII058/SCG11060/SCH11060)	Sponsored Awards/ Fellowships/ Scholarships*
Year I	65	354	50	0	0	37
Year II	103	279	39	0	0	16
Year III	100	123	36	0	0	18
Year IV	101	112	47	0	32	33
Year V	60	1	5	0	217	2
Backlog	12	0	0	0	8	0
Total	441	869	177	0	257	106

Table II : Assistantships to Dual Degree and Advanced Standing Students during the Session 2017-2018

Course	No. of Assistantships Renewed (SCHII045/SCHII058/SCHII057)	No. of Assistantships Awarded (SCHII045/SCHII058/SCHII057)
Biochemical Engineering & Biotechnology (BB5)	14	47
Computer Science & Engineering (CS5)	19	43
Electrical Engineering (EE5)	0	0
Chemical Engineering (CH7)	36	75
Mathematics and Computing (MT6/MT5)	22	59
Advanced Standing	0	1
Total	91	225

Scholarships, Assistantships and Awards

Students pursuing M.Tech./M.Des./M.S.(R) are eligible for institute assistantship at the time of admission. However, for continuation of the assistantship they have to maintain a minimum SGPA (semester grade point average) at the end of every semester. The table below shows the assistantship awarded to 2017 entry students and renewed to the existing students. A total of 647 students were awarded assistantship in 2017-18.

Table III: Assistantships Offered to the Students of M.Tech./M.Des./M.S.(R) Programmes during the Session 2017-2018.

Programme	No. of Assistantships Renewed (Old)	No. of Assistantships Awarded (first year) 2017
Master of Technology (M.Tech.)		
Engineering Analysis & Design (AMA)	0	60
Chemical Engineering (CHE)	24	34
Molecular Engineering : Chemical Synthesis & Analysis (CYM)	11	12
Geotechnical and Geoenvironmental Engineering (CEG)	14	14
Structural Engineering (CES)	17	17
Construction Engineering and Management (CET)	17	23
Environmental Engineering and Management (CEV)	16	16
Rock Engineering and Underground Structures (CEU)	20	24
Water Resources Engineering (CEW)	9	26
Transportation Engineering (CEP)	14	18
Computer Science & Engineering (MCS)	30	27
Power Electronics, Electrical Machines & Drives (EEP)	8	8
Communications Engineering (EEE)	19	9
Control and Automation (EEA)	11	9
Computer Technology (EET)	16	23
Power System (EES)	11	6
Integrated Electronics & Circuits (EEN)	11	11
Thermal Engineering (MET)	11	28
Production Engineering (MEP)	26	10
Industrial Engineering (MEE)	6	7
Mechanical Design (MEM)	15	24
Applied Optics (PHA)	13	19
Solid State Materials (PHM)	14	18
Textile Engineering (TTE)	14	16
Textile Chemical Processing (TTC)	0	12
Fibre Science & Technology (TTF)	14	17
Atmospheric-Oceanic Science & Technology (AST)	12	14
Radio Frequency Design and Technology (CRF)	14	15
Biomedical Engineering (BMT)	0	8

Scholarships, Assistantships and Awards

contd.

Energy Studies (JES)	20	19
Computer Application (JCA)	1	0
Industrial Tribology & Maintenance Engineering (JIT)	10	15
Polymer Science & Technology (JPT)	22	15
Opto-electronics & Optical Communication (JOP)	26	16
Instrument Technology (JID)	11	12
Telecommunication Technology and Management (JTM)	21	9
Master of Design		
Industrial Design (JDS)	21	16
Master of Science (Research)		
Biochemical Engineering & Biotechnology (BEY)	7	6
Bharti School of Telecommunication Technology & Management (BSY)	2	0
Amar Nath & Shashi Khosla School of Information Technology (SIY)	0	1
Computer Science & Engineering (CSY)	3	0
Civil Engineering (CEY)	1	0
Electrical Engineering (EEY)	7	3
Chemical Engineering (CHY)	0	0
Mechanical Engineering (MEY)	4	4
Applied Mechanical (AMY)	1	2
Biological Sciences (BLY)	0	4
Total	544	647

List of the merit-cum-means scholarships awarded for M.Sc. is as follows:

Table IV : Merit-cum-means Scholarships Awarded to M.Sc. Students

		2016	2017
Chemistry	Year I	14	14
	Year II	14	14
Mathematics	Year I	08	13
	Year II	11	12
Physics	Year I	08	09
	Year II	12	06
Total		67	68

Nine M.Tech. students of the Institute had gone to Germany under the DAAD Scholarship Scheme to do part of their thesis research under the Indo-

German collaboration program. The 16th batch of 13 students for this year has been selected and they departed in September 2017.

Scholarships, Assistantships and Awards

STUDENT'S AWARDS/ACHIEVEMENTS/PAPERS

Chemical Engineering

- Rohini Singh won 2nd Prize in Oral Presentation on Research Scholar's day at IIT Delhi. This prize was given after a rigorous competition among all PG students across the institute.
- Tanmay Mathur won the BOSS award for the best MTP thesis in the Chemical Engineering Department.
- Rohini won 1st prize in the Departmental Poster Competition hosted by IChE-NCR chapter, during IITD's annual Open House 2017.
- Shephali Singh and Prateek Khatri won the best paper award in CHEMCON-2017.
- Abhishek Aggarwal from Chemical Engineering Department attended a "14-day International Climate Change Antarctica Expedition" from 27 February - 12 March 2018, in which he gained knowledge about the irreversible impact of climate change in the Antarctica.

Chemistry

- Anirban Das presented a poster titled "Photoelectrocatalytic studies on Titania supported Au Nanoparticles" at ICONSAT2018 held at Bengaluru.
- Vaishali Sethi visited Photon Factory, KEK, Japan to perform Synchrotron Small-angle X-ray measurement from 27th February to 2nd March 2018.
- Oral presentation by Kasinath Ojha on "Multi-Doped Carbon-Based Composites for Oxygen Reduction Reactions" at the 9th International conference on Advanced Nano Materials (ANM2017) during 19th July to 21st July, 2017) at the University of Aveiro, Portugal.
- Kasinath Ojha received following awards:
 - a. International travel grant for attending conference at the University of Aveiro, Portugal by SERB, Department of Science and technology, India.
 - b. GTEP -outstanding postdoctoral fellow 2017, Technion.
 - c. PBC-outstanding postdoctoral fellow 2018, Ministry of Science, Israel.
 - d. Technion excellent postdoc award 2018, Technion.
 - e. The ISE Travel Award 2018 (International Society of Electrochemistry).
- Ph.D. defence exam was also conducted successfully for Dr. Ayesha Sadaf on 28th February 2018.
- Ph.D. Comprehensive exam was successfully held for Ms. Syeda Warisul Fatima on 1st December 2017.
- Ph.D. student Ms. Jasneet Grewal presented her work "Lactic acid production by Lactobacillus brevis mediated bioprocesses utilizing lignocellulosic agro-wastes" presented in 5th International Conference on Sustainable Solid Waste Management, Athens, 21-24 June 2017.

- Best poster awarded to Dr. Rameshwar Tiwari (Post Doc) for his work "Bioprospecting of cellulase producing fungal isolates from Himalayan forest soil for efficient hydrolysis of paddy straw" at The XIV BRSI Convention and International Conference held on October 8-10, 2017 at CSIR-NEERI, Nagpur.

Civil Engineering

- Ph.D. Scholar Nikhil Ghodichore received DAAD scholarship to pursue his research in Forchungszentrum Juelich, Germany for two years from October 2017 to September 2019.
- Ph.D. Scholar Tewodros received travel grant from American Geophysical Union (AGU) to attend AGU Fall Meeting December 2017.
- Ph.D. Scholar Vinnarasi was invited to talk in the session "Young Minds on Water" in DWIH Annual Symposium: WaterScapes organised by DAAD and German House for Research and Innovation in New Delhi in October 2017.
- DAAD Award for Prof. Sumedha Chakma's student Mr. Rahul Singh (2016CEZ8144) in the Exchange Programme: 14 Months.
- Sumit Balgavhar (research scholar) and Prof. Suresh Bhalla, received best oral presentation award for paper "Green energy harvesting using piezoelectric material from bridge vibrations", 2nd IEEE International Conference on Green Energy and Applications (ICGEA 2018) held in NTU, Singapore on March 24-26, 2018.
- Ms. Komal Shukla, Research Scholar, awarded, Birmingham India Centre Fellowship for three months from May, 2018 to August 2018.

Computer Science and Engineering

- A team of 3 undergraduate students qualified for the final round of ACMICPC contest, which will be held in Beijing, China.

Electrical Engineering

- Amresh Kumar Singh & Ikhlq Hussain awarded the Gandhian Young Technology Innovation (GYTI) Appreciations 2018.
- Narayani Bhatia and Shridu Verma awarded the Gandhian Young Technology Innovation (GYTI) Appreciations 2018.
- Mr. Deep Kiran received "POSOCO Power System Award" for high quality doctoral research.

Management Studies

- Team Enigma from DMS, IIT Delhi for securing SECOND position among 907 teams, from across the world, in Ericsson Innovation Awards 2017 held at STOCKHOLM, SWEDEN by Aditya Raj, Poornima Asija, Rhea Jayant and Deepanshu Kaushik.
- Silver Team Award, Team Rekindle Tushar Dhingra APAC Rank 1, Himanshu Jain APAC Rank 6, Archana APAC Rank 6, Akshay Kumar Bali APAC Rank 2, The Fresh Connection APICS Global

Scholarships, Assistantships and Awards

- Student Challenge is a famous supply chain management competition organized by The Fresh Connect (TFC).
- Nespresso Sustainability Challenge (Global): Global Semi Finalist (One of the top 15 teams to reach the semi-finals internationally & the only one from India), Nespresso Sustainability Challenge (Global), 1. Shubham Garg, 2. Abhirup Mukherjee, 3. Eashwar Prasad, 4. Sudnya Desai.
 - Hult Prize Challenge 2017 (Global): National Finalist (One of the Top 52 teams out of approx 6000 applicants initially), 1. Shubham Garg, 2. Abhirup Mukherjee, 3. C.R. Eashwar Prasad.
 - Schnieder Go Green (Global): Global Semi Finalist (Competing Currently for being a Finalist), 1. Shubham Garg, 2. Sudnya Desai.
 - Shell Ideas 360 (Global): Stage 1- Innovator (Global Level), 1. Shubham Garg, 2. Abhirup Mukherjee, 3. C.R. Eashwar Prasad.
 - Kailash Satyarthi Nobel Laureate: Leaders and Laureates Summit, Shubham Garg.
 - GE FMP Case Challenge: Campus Winner, 1. Shubham Garg, 2. Shashank Choudhary, 3. Archana, 4. Himanshu Jain.
 - Shruti Narang, First Female Student from DMS, IIT Delhi to secure an International Internship with HITLAB, New York., She joined HITLAB as a summer intern in May 2017. In her role at HITLAB, she worked in the strategy consulting domain, supporting the identification and implementation of digital health interventions.
 - Our first-year MBA students, Ankit Agrawal & Sujoy Sengupta for finishing as runner-up at Trilogly 2018 conducted by IIM Lucknow.
 - Team Pacifiers (Naushi Khare Meghdipa Dey Nikunj Garg) for being Runners Up at National Finals of Inscribe 2017 by Bosch India.

Physics

- Best Poster Award at 2nd International Conference on Condens. Matter and Appl. Phys. (ICC-2017), November 23-24, 2017, Bikaner, Rajasthan, INDIA (Rekha Bai).
- Best Poster Award at 2nd International Conference on Condens. Matter and Appl. Phys. (ICC-2017), November 23-24, 2017, Bikaner, Rajasthan, INDIA (Sajid Husain).
- Best presentation in 3D atom probe tomography (Mujeeb Ahmad).
- Malhotra Wiekfield Award (Vishakha Kaushik).
- Best Poster in ICONSAT-2018 (Mansi Agarwal).
- Raman Charpak Fellowship (Parswajit Kalita).
- Best Poster Award in IEEE sponsored WRAP-2017 to Ms. Babita Kumari, held at Hyderabad, Dec. 17-18, 2017.
- "Jagat Ram Chopra (for Best MSc-Project) Award to "Studies on Metal Clad Leaky Waveguide Modal Interferometers for Bio-Sensing", Jaismeen Kaur and Monika (May 2017).

- Ph.D. Student Naveen Sisodia was chosen as the finalist for Best Student Presentation Award at 62nd Annual Conference on Magnetism and Magnetic Materials (MMM) held at Pittsburgh, USA in November, 2017 and was awarded one year fellowship of \$250 supported by American Physical Society Topical Group on Magnetism and its Applications (APS-GMAG).
- Best Oral presentation in the international Conference on Nanotechnology: Ideas, Innovations and Initiatives-2017 held at IIT Roorkee, Dec. 6-8 2017 to Ms. Shikha Saini.
- Ph.D. student Shashank Gahlaut awarded 1st Prize (worth \$400) in "Science as Art" competition held at MRS Fall Meeting 2018, Boston USA.
- Best Poster Award to Shashank Gahlaut in International Conference on Sculptured Thin Films (GLAD-2018) 30-31 March 2018.
- Best Poster Award to Mr. Atul Kumar Dubey, in International Conference on Advances in Optics and Photonics XLI Conference of the Optical Society of India. 23 November 2017 to 26 November 2017, Hisar, Haryana India.

Textile Technology

- Mr. Ajay Kumar Maddineni (Ph.D. Student) and Dr. Dipayan Das (PhD Supervisor) received BIRAC-SRISTI Gandian Young Technological Innovation (GYTI) Appreciation Award in 2018.
- Polyurethane/Ceria PU nanocomposite coated Textile with Improved weather resistant property, Raman Sandhoo, Bapan Adak, Mangala Joshi, Functional Textiles and Clothing FTC Conference, 9-12 Feb 2018, IIT Delhi, Poster got third prize.
- Anasuya Roy, B.S. Butola and Mangala Joshi, 1st Prize in Poster Presentation on Poster titled: "Nanoclay reinforced Antimicrobial Plastics for Healthcare Applications" under category "Affordable Healthcare", Industry Day at IIT Delhi, Sep 23, 2017.
- Yatee Gupta got the Pfizer Award (An Incubation grant of 50 lakh rupees and support of further eight lakh rupees), PI- Dr. Samrat Mukhopadhyay.
- Ms. Shikha Chawla (Ph.D. Student), Ms. Aarushi Sharma (Ph.D. Student) and Prof. Sourabh Ghosh (Ph.D. Supervisor) received BIRAC-SRISTI Gandian Young Technological Innovation (GYTI) Appreciation Award in 2018.
- Ms. Juhi Chakraborty (PhD Student) received the Best Oral Presentation on the topic entitled- "Chemically decorated decellularized cornea as full thickness stromal substitute"; at BioMET 2018, VIT, Vellore under supervision of Prof. Sourabh Ghosh.
- Winner of RuTAG Best Oral award at 1st International Conference of Rural Technology Action Group (RuTAG-2018), March 9-11, 2018, New Delhi, India by Springer India Pvt. Ltd.

Applied Research in Electronics

- Priyansha Kaurav, Best Poster Award, IEEE-IMARC 2017, Ahmedabad.

Scholarships, Assistantships and Awards

- Priyansha Kaurav, 2nd position, Open House 2017.
- Ph.D. student Ms. Payal received Best Student Paper Award in Intl. Conf. on Sonar Systems and Sensors (ICONS'18) at NPOL, DRDO, Kochi, Feb. 2018.
- Priyanka Dwivedi: Graduating student award for attending PSST 2018 held at La Grande Motte, France.
- Priyanka Dwivedi: Tata CRUCIBLE Hackathon 2017, First position.

Atmospheric Sciences

- Mr. Ishant Singhal, M.Tech. (2015AST2016), Ganga Devi and Khem Chand memorial award for securing highest grade point.
- Best paper presentation award to Ms. Yajnaseni Dash in the Int. Conf. ICICICT-2017 during 6-7th July 2017 on research paper entitled "Rainfall prediction of maritime state (Kerala), using SLFN & ELM techniques".
- Fulbright-Nehru Doctoral Research Fellowship to Mr. Sourangsu Chowdhury from 16th August, 2017 to 15th May, 2018; University of California, Berkeley, USA.
- Ms. Soumi Dutta, Ph.D. scholar, Visiting Scholar at Dept. of Atmospheric Sciences, University of Illinois at Urbana-Champaign from 16th August 2017 to 15th May 2018.
- Offered Fullbright-Kalam Climate fellowship for Doctoral Research to Mr. Sudipta Ghosh.
- Article published in Nature communication by Sourangsu Chowdhury, Sagnik Dey & Kirk R. Smith "Ambient PM_{2.5} exposure and expected premature mortality to 2100 in India under climate change scenarios"; DOI: 10.1038/s41467-017-02755-y.

Biomedical Engineering

- Neha Singh received the Reginal Winner India for the Ericsson Innovation Award 2018 January, 2018.
- Neha Singh received the poster award during Science Day, IIT Delhi, February, 2018.
- Tech Plantar award from Leave a Nest Co. UK to Ph.D. student Mr. Anoop Kant Godiyal.
- Deshpande, S. received Gordon Research Conferences' GRC Carl Storm International Diversity (CSID) Award to attend GRC- Cancer Nanotechnology at Mount Snow West Dover, Vermont, 18th June to 23rd June, 2017.
- Patil, S. was awarded a stipend of 200 USD by Cold Spring Harbor Meetings, NY, USA to attend "Stem Cell Biology Meeting of Cold Spring Harbor Laboratory" at CSH, New York, USA 25th September to 29th September, 2017.
- Patil, S. was awarded DST Travel Grant to attend "Stem Cell Biology Meeting of Cold Spring Harbor Laboratory" at CSH, New York, USA, 25th September to 29th September, 2017.
- Dhyani, V. was awarded DST Travel Grant to attend "Regenerative Biology and Applications: Cell Differentiation,

Tissue Organization and Biomedical Engineering (T3)" at University of Hong Kong, Pok Fu Lam, Hong Kong, 15th October to 19th October, 2017.

- Dhyani, V. selected for Oral presentation "Chemical strategies for the manipulation of material's biological property" at National Science Day Research Scholar Symposium, at Indian Institute of Technology Delhi, New Delhi, on 28th February, 2018.
- Best Poster Award to Neha Mehrotra entitled "Anticancer peptide delivery using polymeric biodegradable nanoparticles for cancer therapy" in International conference on advances in polymer science and technology 23rd November to 25th November 2017 at Radisson Blu Hotel Dawrka, New Delhi.
- Nehate C received "Nano Today Student Travel Award" as one of the top 25 candidates all over the world based on the merit of submitted abstracts in 5th Nano Today Conference, organized by Nano Today, Institute of Bioengineering and Nanotechnology (IBN), Materials Today at Hawaii, USA.
- Dogra Educational Endowment Medal 2016-2017 for best the scientific publication in Centre for Biomedical Engineering in year 2015-2016 to Aji Alex for "Self Assembled Dual Responsive Micelles Stabilized with Protein for Co-Delivery of Drug and siRNA in Cancer Therapy. Biomaterials 2017, 133, 94-106.
- Best Poster Award to Neha Mehrotra for a presentation entitled "Delivery of anti-Cancer peptide using biodegradable polymeric nanoparticles" in National conference on biotechnology and environment at Jamia Millia Islamia on 11th April, 2017.

Energy Studies

- PSSI Best Student Poster Award to Ms. Anshu Verma (2014ESZ8087) "Study of Magnetised Plasma Expansion", "PLASMA 2017", 32nd National Symposium on Plasma Science & Technology from 7-10 Nov 2017 held at EDI, Gandhinagar, Gujarat (Hosted By Institute for Plasma Research, Gandhinagar, Gujarat).

Instrument Design Development Centre

- Shilpi Agarwal received the Best Research Thesis award in Optical Instrumentation (for her contribution in optical metrology) for the year 2018 by the Instrument Society of India (ISOI).

Kusuma School of Biological Sciences

- DAAD Fellowship awarded to Mr. Saiguru S (MSR student) to work at KIT, Germany for six months.

Amar Nath and Shashi Khosla School of Information Technology

- Danish Contractor named one of India's Top 10 Innovators under 35 for the year 2018 by Mint and MIT Technology Review.

Scholarships, Assistantships and Awards

The students pursuing Ph.D. are also eligible for assistantships. This year 300 students were awarded assistantships. Assistantship to existing students continues provided, they show satisfactory progress. The table below gives a discipline wise break-up of assistantships awarded during the period.

Table V : Institute Assistantships Awarded to Research Scholars during the Session 2017-2018

Department/Centre/School	No. of Assistantships Renewed	No. of Assistantship Awarded (2017 entry)
Applied Mechanics (AMZ)	35	15
Biochemical Engineering & Biotechnology (BEZ)	28	7
Chemical Engineering (CHZ)	47	23
Chemistry (CYZ)	34	4
Civil Engineering (CEZ)	81	20
Computer Science & Engineering (CSZ)	21	7
Electrical Engineering (EEZ)	123	40
Humanities & Social Sciences (HUZ)	43	11
Management Studies (SMZ)	40	27
Mathematics (MAZ)	11	8
Mechanical Engineering (MEZ)	84	32
Physics (PHZ)	56	13
Textile Technology (TTZ)	17	12
Centre for Applied Research in Electronics (CRZ)	18	6
Centre for Atmospheric Sciences (ASZ)	25	11
Centre for Biomedical Engineering (BMZ)	21	8
Centre for Energy Studies (ESZ)	32	13
Industrial Tribology, Machine Dynamics & Maintenance Engineering Centre (ITZ)	11	6
Industrial Design & Development Centre (IDZ)	10	2
Centre for Polymer Science & Engineering (PTZ)	17	8
Centre for Rural Development & Technology (RDZ)	24	13
Kusuma School of Biological Sciences (BLZ)	21	3
Amar Nath and Shashi Khosla School of Information Technology (ANZ)	11	1
Bharti School of Telecommunication Technology & Management (BSZ)	15	9
Transport Res. & Injury Prevention Programme (TRZ)	4	1
Total	829	300

Infrastructure Development

(April 1, 2017 - March 31, 2018)

PHYSICAL INFRASTRUCTURE

All infrastructure related activities are managed by the Building & Works Committee. Environment Clearance obtained from MoEF for the following projects of IIT Delhi, which was the last of the mandatory approvals/ Clearance required commencement of these projects.

1. Construction of Indoor Sports Complex
2. Construction of Boys Hostel 'E'
3. Construction of New Girls Hostel
4. Construction of Nalanda Married Research Scholar Apartments
5. Construction of Golden Jubilee G.H. Keswani Research Centre
6. Construction of Faculty Housing
7. Construction of Institute Activity Centre
8. Construction of Shopping Complex in East campus.



Construction of Engineering Blocks 99 B & 99 C

CPWD has awarded the work of construction of Engineering Blocks to M/s. NCCL. The work is in full swing and about 20% of work is completed at site. These two blocks will be constructed on either side of Lecture Hall Complex. These blocks shall provide additional area for Labs, Workshops, and Faculty rooms etc. The approximate floor area of the Engineering block 99 'B' & 99 'C' is 32,000 sq m. & 26,000 sq m. respectively.

Construction of Research and Innovation Park

The main purpose of this project is to facilitate state of the art facilities for R&D activities. This building consists of 2 basements plus Ground Floor and 6 floors. The work was assigned to NBCC, who have awarded the work to M/s. Sam India Buildwell Pvt. Ltd., The work is expected to commence soon.

Setting up of STP in IIT Campus

1 MLD capacity STP near Shani Mandir, East campus, and 0.5 MLD capacity STP near Jwalamukhi Hostel to collect total

sewage of the campus is proposed. CPWD has awarded the work and about 30% work is completed as on date the work is expected to be completed by February 2019. The treated water shall be used for Horticulture and Vehicle washing purpose through pipeline network.

Construction of Faculty Flats

154 Faculty Flats shall be constructed by NBCC in west campus. NBCC has awarded the work to M/s. Sam India Buildwell Pvt. Ltd. and work is expected to commence soon.

Construction of Innovation Centre for Education (I-TEC)

IIT Delhi was allotted 50 acres of land in parts of 10 acres and 40 acres each at RGEN, Kundli, Sonapat for development of extended campus of IIT Delhi. I-TEC building is completed by NBCC and requested IIT Delhi to take possession of the Building. FITT is taking possession of the building in stages from NBCC.

Construction of Indoor Sports Complex

To meet the requirement of the students of IIT Delhi, it is proposed to construct an Indoor Sports Complex. The Indoor Sports Complex will have facilities like Badminton Court, Squash Court, Gym, and Table Tennis Hall. The work was awarded by CPWD and is expected to commence soon.

Construction of Boys Hostel 'E'

A New Boys Hostel with 836 seated capacity built on G+7 storeyed building having a 24,000 Sq. mtr. (approx.) total built up area, fully air conditioned rooms with two separate dining rooms for each wing. The work was awarded by CPWD and is expected to commence soon.

Construction of New Girls Hostel

A New Girls Hostel with 324 seated capacity fully air conditioned building built in G+7 storeyed building having a built up area of 14,000 Sq. mtr. (approx.). The proposed building will be constructed next to Himadri Hostel. The work was awarded by CPWD and is expected to commence soon.

Construction of Nalanda Married Research Scholar Accommodation

Nalanda Married Research Scholar Accommodation work was assigned to NBCC, who have awarded the work and the demolition of a portion of old Nalanda Apartment is completed. The proposed accommodation will have 96 single bed room flats. The work is expected to start soon.

MAJOR NEW EQUIPMENT INSTALLED

Chemical Engineering

- Physisorption Studies Model: Bellsorp Mini-II (Measurement)
- SOFC Test Fixture for Temperature Programmed Oxidation and Reduction

Infrastructure Development

- CISBIO HTRF Detection
- High Pressure & High Temperature Microwave Reactor System
- High Pressure Compact Laboratory Reactor
- Olympus Inverted Research Microscope Model IX73
- Cytell Cell Imaging System
- GPU Enabled Nodes, Node PY CX400 M1 Chasis for Dual CX2570 M2
- Carry Eclipse Microplate Reader Bundle
- High Pressure Skid Mounted Tank Reactor System
- Cell Culture Bioreactor
- Online NIR Analyzer Optional Series 750 Flow Thru Probe
- Modular Diffuse Reflectance for is 50 FTIR Spectrometer

Chemistry

- Cryostat for Spectrophotometer USP-203-B with Magneti
- Agilent 511OVDV ICP-OES

Civil Engineering

- Advanced Hydrology Study System in WRE Lab.
- "Large-Scale Geotechnical Dynamic Testing Facility" in Foundation Engineering Lab.
- 48 Channel Data Acquisition system in Foundation Engineering Lab.
- Prof. Shashank Bishnoi's Lab:
 - a. Helium Pycnometer
 - b. Concrete cover meter
 - c. Concrete resistivity meter

Computer Science and Engineering

- GPU Server for the VLSI lab.

Electrical Engineering

- Inkjet Materials Printer based Printer with Healed Plater, Drop Visualization.
- Upgrade of Probe System IC No. 49350/2015/1 by adding Probe POSNR, RF100TPTMAG base Left W/ARM RPP
- Upgrade of Semiconductor Device Analyzer main Frame (IC No. 49371/2015/1) by adding MP-SMU Model Itme code B1500AU-11B etc.
- ENA Series network Analyzer Recommended startup assistance Part No. E5071C
- Keysight DSO S254A DSO2.5 Ghz, 4CH, Sampling Rate 10GS/S on all channel 10 bit
- Programmable AC power Source Part No. CSW5550-3-400FC
- ACE kit consisting of DS1006 and Option QC Proc Board 2.8GHz
- Plasma Enhanced Savannah S200 (without vacumm pump)
- Supply, Installtion and Integration of Vacumm System for pulsed laser Deposition

- Complex 201 Excimer lase with Waveling TH 248 NM, pulse Energy etc.
- Dynamic Signal Analyzer 100KHz, 2 CH, FFT Type
- ACE kits Part No. ACE_MLBX_1302T Advanced Control Education Kit Microlab Box
- Itech make AC-DC Controllable Electronic Load

Applied Research in Electronics

- Quantum Efficiency Measurement Systems.
- The Underwater Tank facility for acoustic experiments at CARE has been installed with removable anechoic tiles, making it one of a kind facility amongst academic institutions.

Atmospheric Sciences

- Storage-cum-data server with JBID from MI01344 in July 2017.
- Upgradation of JBOD Storage server from PLN05/CATS in January 2018.

Biomedical Engineering

- Wireless Electroencephalogram (64 channel)
- Wireless Electromyogram (8 channel)
- Biosafety level II facility with biosafety hood, fixtures and ducting.

Energy Studies

- Pyrheliometer with sun tracker is procured. Installation and commissioning to be completed soon.
- Setting up a lab for Perovskite/hybrid solar cell fabrication.

EDUCATIONAL TECHNOLOGY SERVICES CENTRE

The Educational Technology Services Centre (ETSC) is actively engaged in providing and promoting the use of Educational Technology in the Institute and also at the national level. Some of its major activities are: Design, Development and dissemination of video and web based instructional resources; Provision and maintenance of Audio/Video equipment for classroom teaching; organization of training programmes for faculty, staff and professionals across the country and undertaking sponsored research and consultancy projects; audio/video conferencing for faculty selection interviews and meetings including Ph.D. viva voce examinations; e-learning other distance education using video conferencing facility. The Centre has a modern video studio with recording and editing facilities. A studio-classroom is also available for on-line recording of courses. Non-linear editing set up and Apple streaming server are available for post-production and video streaming respectively. In addition there are 4 classrooms of seating capacity of more than 125, where lectures can be video recorded.

ETSC has procured and installed Sony ANYCAST system in the Video Studio and in two lecture theatres for non-linear editing and recording. Video Conferencing facilities have

Infrastructure Development

been installed in two lecture theatres and in the Conference room of ETSC. The facility is being used for faculty interviews, meetings and distance education. For connectivity both ISDN and IP based network connection are used. Two lecture delivery rooms for Remote Delivery have been equipped with remote teaching facility.

Some of the new initiatives of the ETSC include projects sponsored by MHRD, Swayam, Swayam-Prabha and IIT-PAL. Under Swayam, ETSC actively encourages faculty members of the institute to develop MOOCs (massively open and online courses) to be disseminated country-wide. ETSC is responsible for recording, post-production, and uploading content into the Swayam platform, as well as, hand-holding faculty members towards developing content. Under Swayam-Prabha, ETSC manages 2 TV-channels (Electrical Engineering and Civil Engineering). In IIT-PAL, ETSC engages in working with faculty members of the institute towards content creation, recording, post-production and managing of 4 TV channels (Physics, Chemistry, Maths and Biology). These initiatives were recently inaugurated and appreciated by the Honorable President of India and by the Honorable Minister for HRD.

CENTRE FOR RURAL DEVELOPMENT & TECHNOLOGY

1. MAJOR ACTIVITIES

CRDT has a strong team of 9-Core Faculty, 4-Joint Faculty, 2-Emeritus Professors, 1-Honorary Professor, 96-Ph.D. Scholars and 11-PDFs along with many project staff at all levels. The centre is a leading entity in the national and international scenario for rural development and technology, and coordinating two mega programs of Govt. of India, relevant to holistic development of rural mass involving higher learning academic and research institutes in the country.

A. Unnat Bharat Abhiyan (UBA) – A flagship program of the Ministry of Human Resource Development which aims at connecting knowledge Institutions to villages. 102 Institutes have identified cluster of 5 villages under Unnat Bharat Abhiyan in which 76 Institutes have signed MoU with IIT Delhi for UBA activities in their Institute. Rs. 1.75 Lakhs as 1st instalment of the funds approved for the Participating Institute which is 50% of the 3.50 Lakhs transferred to 63 Institutes. UBA IIT Delhi, developed an online system called Reporting Portal for Participating Institutes. 38 Institutions started uploading data on the portal for their Base line survey. 141 village survey forms have been filled by Participating Institutions.

B. Scientific Utilization through Research Application - Products from Indigenous Cows (SUTRA-PIC) - which is again a flagship programme of National Importance of Ministry of Science & Technology, Govt. of India for promotion of Bio Economy in the country. IIT Delhi is the national coordinator of the programme and the meeting of National Steering Committee (NSC) was held on 30th August, 2017 chaired by the honourable Minister of Science & Technology, Earth Sciences, Environment and Forest. To identify the prominent applications which required

the scientific validation, a National Brainstorming-Cum-Consultative Workshop on Scientific Research on Prime products from Indigenous cows for scientific validation and research on application of Panchgavya was organized at IIT Delhi on December 18-19th, 2016; sponsored by the Ministry of Science & Technology. The key thematic areas where the application of Panchgavya products identified for further research are agriculture, food, medicine and utility articles.

C. Summer internship program – The Centre has initiated a summer internship at village clusters 'Village is Soul for Improvement of Our Nation (VISION)' for UG students of IIT Delhi in order to orient students with the social as well as technological problems of rural India.

2. ACHIEVEMENTS

- Arghya Bhattacharya: 2nd runners up prize at Industry Day organized by IIT Delhi under Environment theme (A suitable approach for simultaneous waste water treatment and green energy generation using algal systems).
- Arghya Bhattacharya: 2nd prize winner of FIRP projects demonstration organized by IIT, Delhi (2017).
- Nitin Chauhan: Awarded 1st prize in eposter presentation, XIIth Joint Annual Conf. of Indian Society for Malaria Other Communicable Diseases & Indian Association of Epidemiologists. September 2017, AFMC, Pune.
- Nitin Chauhan: Prof. Mira Madan Excellence Award 2017.
- Vivek Dalvi : Awarded 1st prize in Environment Contest organized by ReNew Power, 24 February 2018
- Farah Naaz: Awarded 1st prize in poster presentation, National Conference on Advances in Inter disciplinary Microbiology: Perspectives from Academia and Industry at Bhaskaracharya College of Applied Sciences (University of Delhi), 14 March 2018.
- Megha Pant: Prof. Mira Madan Excellence Award 2017.
- Garima Singh: Awarded with best poster presentation in International conference- Bioprocessing India 2017 at IIT Guwahati, December 2017.
- Prof. V.K. Vijay was invited in the launch of smart village by the President of India at Rastrapati Bhavan on 2 July, 2017. CM of Haryana, Minister of Rural Development, Gol, CEO NITI Aayog and other senior ministers and officers were present along with sarpanch of villages and villagers.
- Prof. V.K. Vijay was invited speaker on "Gobardhan" at consultation meet (Phase II) on Bioenergy organized by Ministry of Drinking Water and Sanitation on Tuesday, 20th February 2018.
- Prof. V.K. Vijay organized training module on biogas technologies & GOBAR-dhan scheme on 24th March, 2018, sponsored by ministry of Drinking Water and Sanitation (MDWS), Gol.
- Prof. V.K. Vijay organized National Biogas Training Programme by BDTC, IIT Delhi (22-24 March 2018).

Infrastructure Development

- Prof. V.K. Vijay organized India-UK workshop on close loop green technologies for rural communities 11-13 September 2017 at IIT Delhi.
- Prof. Kavya Dashora conducted TEQIP III course on Rural Industries: Establishment, sustainability and Challenges at IIT Delhi, Sonipat Campus.
- Prof. Kavya Dashora was invited speaker at Chicago at India Development Coalition workshop on Exploring Innovative Approaches to Mitigate Poverty and Climate Change in India.
- Prof. Kavya Dashora was invited Delegate at Development Alternatives for TAP-RISE initiative by DST.

COMPUTER SERVICES CENTRE

The main objectives of the Centre are to :

- Provide round the clock computing and networking facilities to serve a user population of more than 12,000 users consisting of UG, PG, Research Scholars, Faculty and Staff of the Institute and provide advice on all the aspects of academic computing. The centre also participates in the Academic programmes of some of the departments and centres.
- Implement and maintain System and Application software.
- Implement and Manage the Institute Network.
- Computational labs facility to students for the conduct of UG/PG Lab courses.
- Impart Introductory and advanced instructions to users.
- Work on cutting edge technology and provide Services to users based on new technology.
- Provide support to Institute Computerization efforts.
- Provide training to Institute employees.

General Computing Facilities

The Centre is equipped with 112 HP/CISCO UCS blade servers out of which 64 Blade Servers are used for Cloud computing with 200 TB of virtualized storage and 48 blade servers with 130 TB of storage for user homes and infrastructure use like email, proxy, web services etc. CSC also has around 450 Desktop computers and ten Dell workstations for Simulation connected over a switched fast Ethernet. Uninterrupted Power Supply is provided through 2x80 KVA MGE UPS system and DG set.

High Performance Computing (HPC)

The HPC facility in the Data Centre consists of the following:-

Compute Nodes: 422 (CPU nodes: 238, GPU nodes: 161 & Xeon Phi co-processors: 23)

Basic Configuration:-

GPU: 2x NVIDIA K40 (12GB, 2880 CUDA cores)

Xeon Phi: 2x Intel Xeon Phi 7120P (16GB, 1.238 GHz, 61 cores)

CPU: 2x E5-2680 v3 2.5GHz/12-Core

RAM: 64 GB

8 CPU, 8 GPU and 4 Xeon Phi nodes have 512 GB RAM each

Storage:- Home space: 500 TB and Scratch space: 1000 TB

In addition there are CUDA based GPU mini-cluster environment of 16 nodes, each with 2x8 core ES-2670 (Sandy bridge) CPU, 128 GB RAM and 2xNvidia K20 GPUs.

PC Services

There are six PC Labs in the CSC premises having about 225+ Desktop computers under Windows and Linux environment. During the year 125 old DELL systems were replaced with 125 HP systems. Besides this there are four Computing labs in the Lecture Hall Complex (LHC) having 235 desktop computers running Ubuntu and Windows 10. Projection facility is also provided for the UG/PG courses of the Institute which are held every semester. There are ten DELL workstations under windows environment for CAD/CAE/CUDA.

The PC Labs in the main building of CSC is open round-the-clock for authorized users.

Network Services

The Institute LAN is a state of the art switched network with Fiber Optics and enhanced CAT5/CAT6 UTP backbone. It consists of more than 9000 network access points spread over the campus using about 265 Cisco switches and about 75 virtual LANs. Network access is provided to every student, faculty, Doctor, Laboratory and rooms in guest houses. Internet connection has been provided through a router, redundant firewall switching modules, and 2x10 Gbps from NKN.

IIT Delhi is connected to the National Knowledge Network (NKN) with 10 Gbps dual connectivity from PowerGrid and RailTel. This connectivity provides virtual routing service, Internet Connectivity, and connectivity with other Institutes connected on the NKN backbone.

Internet and Intranet access is provided to faculty/officer homes via GPON over fiber (750+ houses) and ADSL connectivity over internal telephone lines.

The Academic, Hostel area, both Guest houses, RCA and Hospital are also connected through IITD_WIFI and Secure Wi-Fi (IITD_Secure_GUEST). There are 800+ wireless access points. Many network services including mail, web, and domain name, anti-virus are being provided over this network. IITD has upgraded the routers and switches for internet and the core and distribution network and has replaced the existing multimode fiber with single mode fiber. This has made the backbone 10 Gbps. Internet/Network connectivity including WiFi is provided on six entry gates to IIT campus.

Facilities/Services

- The email facility is provided to all students, staff and faculty with webmail interfaces Round cube and Squirrel mail using user and mailing list definitions from the IITD LDAP and Kerberos for user authentication.
- Compute facilities for Research and Projects are provided through Baadal, the Cloud Computing environment.
- The Data Center (DC) consists of Cisco UCS B200 M3: Three chassis with 24 blade servers each with 2x12 Cores Intel(R) Xeon(R) CPU E5-2695 v2 @ 2.40GHz ("Ivy

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- Bridge" Generation) and 128 GB RAM. Each blade has five virtual NICs connected to two Fiber interconnects with redundant paths.
- The Disaster Recovery Data Centre (DRDC) is situated in the SIT building. The DRDC has been built by IBM and can support a total IT load of 60 KW. It has redundant UPS power supplies and precision air conditioners in N+N and N+1 configurations respectively.
 - The CSC provides Infrastructure Services through virtualization technology.
 - The CSC has Microsoft Volume Licensing EES agreement for the Campus under which Microsoft software such as Windows OS, MS Office, Office 365 etc. are available for use.
 - The center has the following third party software packages: Matlab-17b, Mathematica, Ansys, Fluent, Labview, etc.
 - The center maintains local repositories of several popular open-source and commercial licensed software. The system is fully integrated with IITD LDAP and Kerberos.
 - The CSC has configured moodle a public domain course management software, for use by faculty and students for the courses running during the semester.
 - IIT Delhi is also a part of Eduroam, a global WIFI roaming programme across academic campuses through ERNET India.
 - Own Cloud, a file and document sharing utility similar to the popular drop box is also provided for user community. The utility supports storing and sharing of files, images, music and documents, contacts, calendars, tasks etc.
 - To facilitate downloads of data files through non-standard ports, download Server: download.iitd.ac.in can be used. and to facilitate download of huge data for Research, proxy server xen03.iitd.ac.in (Research proxy) can be used.
 - Virtual web hosting facility can be used for securely hosting all websites of the form http://xyz.iitd.ernet.in which are not maintained by CSC.
 - User web pages is available for the use of faculty and PhD. students for hoisting their web-pages on the server web.iitd.ac.in
 - To provide Internet access to the visitors, the faculty and officers have been authorized to create user account for their visiting faculty/students.
 - To facilitate limited access within IITD, CSC has a separate web server privateweb.iitd.ernet.in where users can have their personal web pages.
 - VPN facility is provided to the Faculty/Retired Faculty/ Emeritus and Part-time Ph.D. students for accessing IITD internal LAN from outside IIT Delhi. The faculty have been authorized to create cert-keys for their own use and students.
 - Network Time Protocol (NTP) servers are synchronized with standard internet time servers with time drift less than a

few milliseconds and can be used by all users.

- MRTG and RRD Health Graphs have been provided to see the Status Reports of the various System activities/ Services.
- SLA ticketing system (Complaint Registration and Monitoring System) has been provided for resolving User problems pertaining to Network connectivity and Software issues on their systems.

Activities undertaken during the year 2017-18:

- Two days workshops on HPC conducted twice a month for the benefit of new HPC users.
- Online Citation System for the generation of citation report as per new format of convocation
- Evaluation System for all the major administrative positions
- SIRE website
- SIRE: Project Proposal System
- Online Book Recommendation System for library
- QIP Proposals System
- Online Faculty Recruitment Application and Backend processing
- Online PDF Applications
- Online Staff Recruitment
- HR Module testing in new ERP to be implemented soon
- PG admission
- 7th PC implementation
- QIP Admissions
- New Guest House System
- Designing Brochure for Corporate Affairs, IRD, Alumni Day
- Content Writing for Major events and featuring of New faculty
- New Logo Design for ERP system

CENTRAL LIBRARY

The IIT Delhi Library System comprises of a Central Library and 18 departmental libraries that collectively support the teaching, research and extension programmes of the Institute. All students, faculty and employees of the Institute are entitled to make use of the Library facilities. The Alumni of the Institute are also entitled to Library services provided they are members of the Institute's Alumni Association. Similarly, industrial establishments can avail the Library services on taking corporate membership of the Library. Library consultation facilities are extended to faculty, students of outside organizations and the wards of IIT faculty and staff on their request. Retired teaching and non-teaching staff members can also avail Library facilities. The Library has over 9000 registered members.

Library Hours

The Library remains open throughout the year except on six

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days, namely; Republic Day, Independence Day, Dussehra, Diwali, Holi, Mahatma Gandhi's Birthday and any other holiday declared as a special holiday. The book stack area at 1st floor and Ground floor is open from 9:00 AM to 9:00 PM (Weekdays) and 10:00 AM to 6:30 PM (Weekends & Holidays). Reading Area at Ground floor and 2nd Floor is open 24x7 hrs.



Library Resources

a. Collection

The Central Library, IIT Delhi has a strong collection pertaining to physical sciences, engineering and technology, biotechnology, computer and information technology, social sciences and management.

As per record, the collection of the Library as on 31st March 2018 is as follows :

Books	1,77,024
Journals (Bound Volume)	1,05,765
Theses	5,494
Video Cassettes	1,800
Books in Text Book & Book Bank	23,184
Online Electronic Journals (Direct Subscribed+through Eshodh Sindhu)	20,000+
Online Databases	10

b. Video Library

The Library is equipped with video viewing facility and has a collection of more than 2,500 CDs and kept in the Computer Application Division of the Central Library for viewing.

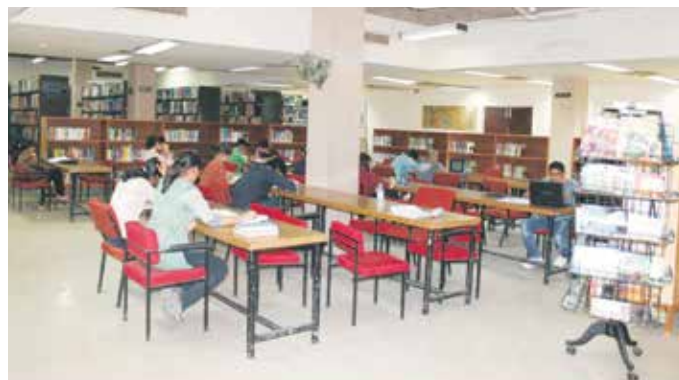
c. Reference Collection

The Library maintains a separate reference collection consisting of encyclopedias, dictionaries, handbooks, technical data, almanacs, atlases, bibliographies, etc.

d. Hindi Collection

The Central Library has built up a good collection of books in Hindi. Books in Hindi include books on various subjects

being taught and researched at the Institute as well as books on literature in Hindi. Books in Hindi are prominently kept near the reference area in the Library to promote its usage. To increase the use of Rajbhasha Hindi, Central library offers borrowing facility of one extra Hindi Book to all its members apart from their entitlement.



Electronic Journals and Online Bibliographic Databases

The Institute have access to over 25,000 full-text electronic journals and 10 bibliographic databases from a number of publishers and aggregators through the Direct subscription/ access through eShodh Sindhu consortium. A-Z list of subscribed journals are available on Central Library website. The details and links to these electronic journals are available through the Library web site as well through the Library Web OPAC. More than 1 lakh bound volumes of journals are available in print form.

a. E-Resources available through the Central Library/ eShodh Sindhu Consortium

- AAAS – Science - Online & Science Classics
- ABI / Inform Complete
- ACM Digital Library
- ACS All Web Edition Journals Package
- AIP Journals
- American Mathematical Society Journals
- American Meteorological Society Journals
- Annual Reviews
- APS Journals
- ASCE Journals
- ASCE Proceedings
- ASME Digital and Archives
- ASME Journals (+ A M R)
- ASTM Standards & Digital Library
- BIS - Standards
- Cambridge University Press - HSS and S&T Package
- Capitaline
- Crisil Research

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- EBSCO - Business Source Complete
- EBSCO – World Textiles
- EBSCO Discovery Services
- EBSCO - Textile & Technology Complete
- Economic & Political Weekly (EPW)
- Electrochemical Society - Digital Library Package
- Elsevier's Science Direct
- Emerald Full-text
- Euromonitor (GMID)
- Grammarly Software (Premium Version)
- I.C.E. Journals
- IEEE / IEE Library Online (IEL)
- Indiastat.com
- INFORMS Current Journals
- IoP Science extra and their Archival collection
- ISID database
- ISI Emerging Markets - EMIES
- Jgate+JCCC
- JOVE Biology
- JOVE Physics
- JSTOR
- Lecture Notes in Computer Science, Mathematics and Physics (Vol.1/1969-Vol. 476/1996)
- Manupatra
- MathSciNet
- Nature journals
- NOW Journals
- Online Miscellaneous Journals (8 Journals)
- Optical Society of America (OSA)
- Oxford Journals (Mathematics, Life Science, Humanities and Social Science)
- Project Euclid (30+ Journals)
- Project MUSE Journals
- ProQuest Dissertation & Theses Global (PQDT Global)
- RSC GoldOnline
- RSC Journals Archive Titles (1841 - 2004)
- Sage - IMECH Collection
- Sage - HSS & Management Journals and their Archives
- Sage – Science and Technology Package
- Scientific American
- Scopus
- SIAM Journals and their Archives
- Springer Link

- Taylor & Francis, Current Core Science & Technology Titles+ Chemistry Backfiles
- Wiley Custom Package
- World Scientific Publication Mathematics
- World Textile All Digital Magazines

b. Electronic Books

The Central Library has access to eBooks from the following publishers/aggregators which are available through wide access on IP range in the campus:

- Cambridge University Press
- Degruyter
- Elsevier
- Pearson
- Springer
- Wiley
- World Scientific Publisher
- McGraw Hill Education
- World Scientific Publisher
- E-Text Books (38 books)
- Lectures Notes in Computer Science, Mathematics and Physics (upto year 1996)

Apart from the above eBooks, following two eBook collections are also available through National Digital Library (NDL) :

- World eBook Library
- South Asian Archives

Computer and Networking Facilities

The Library has its own sub-LAN, which, in turn, is connected to the Campus LAN. It has over 90 PCs and six servers spread over three floors of the Library. The Library is a part of fibre optic-based campus-LAN. Of 90 PCs in the Library, 25 Internet-enabled PCs are exclusively devoted for the Library users. As a member of the DELNET, the users can access databases offered by the DELNET. The Library Home Page provides a link to the DELNET database.

a. Computerization of In-house Activities

All in-house activities in the Library including Acquisition, Cataloguing, Circulation and Serials Control are fully computerized using Libsys Software Package. The Online Public Access Catalogue (OPAC) of the Library is operational both on Intranet and Internet. It can be accessed online to search more than 1,75,000 bibliographic records, available in the Library database through a web-based search interface or with a window client of the Libsys on Intranet as well as on Internet. The editing and updation activities are done on regular basis. Besides, the Central Library has two in-house databases for specialized collections. These databases include: Database of Ph.D. theses submitted to the IIT Delhi and

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Database of research articles by the faculty and researchers of the Institute.

The Library uses bar-code technology for computerized circulation system. Every document in the Library (except reference sources and bound volumes of journals) bear a bar-code tag that facilitates identification of document and the borrower in the circulation process. Similarly, all categories of users have a bar-coded patron cards. The Library has developed in-house facility for bar coding of books and patron cards.



b. RFID Technology in the Library

The Library also has the Radio Frequency Identification (RFID) based system. It is the best automated library automation system used world wide and is an effective way of managing collections of the library and providing enhanced services to the users having benefits like: self check-out of books, self-check-in (book drop), to control theft, to find misplaced reading material, sorting, inventory accuracy, stock verification procedures, security control, video surveillance, people counter, Smart Card issuance, etc. It is an automatic data capture technology that uses tiny microchips and miniature antennas affixed to documents. RFID plays a vital role in redefining the library processes to make everyone's job easier right from the users to library staff.

Library Services and Facilities

a. Reader's Assistance

The Library provides assistance to its users ranging from location of a book to finding specific information required by a user. A suggestion book is maintained with Incharge, Reader's Services where the users of the Library can suggest measures for improvements in its facilities and services.

b. Circulation of Books and Library Membership

The Library members, according to their borrowing category can borrow stipulated number of books at a time against their bar-coded/RFID patron card.

c. Inter Library Loan (ILL) and Resource Sharing Facility

The Library arranges books and journals from other libraries in Delhi on Inter Library Loan (ILL). Photocopies of research articles are also arranged from other IITs under a resource sharing agreement signed by all IITs. The Library also facilitates Demand based procurement of research publications,

photocopies of research articles, etc. from other IITs and institutions in Delhi as well as from other parts of India on reciprocal basis.

d. Database of Ph.D. Theses submitted to the IIT Delhi

The Library has in-house design and developed Ph.D. theses database. Contains approximately 5,500 bibliographic records of Ph.D. theses submitted to the IIT Delhi. In the year 1966 the first Ph.D. was awarded after that number of Ph.D. research has been continuously increasing every year till dated. The Database developed and maintained in MySQL Database and programmed using PHP language to facilitate access on the Intranet and Internet.

e. Photocopying Facility

The Library provides photocopying facility within its premises through an external vendor on payment basis.

f. Book Bank Facilities

The Book Bank holds multiple copies of selected textbooks for making them available to the students for the entire period of a semester.

g. Text Books Facilities (Print and Online)

The text books are most useful collection of the library especially for course/syllabus related reading. The section has approximately 10,000 syllabus related text books. The books for this section are purchased generally on the recommendations from different faculty members through the concerned Heads of the Department. The timings for issuing the books from the Text Book Section are from 2 PM to 5 PM during Monday to Friday and the same are issued for overnight only (for one day). The books of this section may be returned back during 9 AM to 1 PM only. A maximum total of 2 of books are issued from the section at a time. The Central Library also has 35 e-textbooks for undergraduate students and the same are accessible in the campus through library website - <http://library.iitd.ac.in/index.php/e-resourc/e-textbooks>.

h. Theses Consultation Facilities

Central Library receives all the Ph.D. Theses awarded by IIT Delhi in Hard copy along with their CDs. Print copies of theses are housed in Text Book & Book Bank Section located at the ground floor of the library for consultation purpose only. The abstracts of theses are made available through library Online Public Access Catalog (OPAC) - <http://10.217.116.12:8380/opac/> and also through another interface especially designed for searching the theses at: <http://library.iitd.ac.in/thesis>.

i. Institutional Repository at IIT Delhi (<http://eprint.iitd.ac.in/>)

The Eprints @ IIT Delhi has been set-up to host full-text of research publications of faculty and researchers of the IIT Delhi using Dspace, an open source Digital Library software developed by the Massachusetts Institute of Technology. The Dspace supports the Open Archives Initiative's Protocol for Metadata Harvesting (OAI-PMH), an internationally recognized protocol and interoperability standard. The Eprints@IIT Delhi

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provides a platform for faculty and researchers to deposit, reuse and share their research publications. The repository also has the ability to capture, index, store, disseminate and preserve digital materials created in any part of the Institute. Faculty and researchers can register themselves with the digital repository and submit their pre-prints (pre-refereed version of an article), post-prints (post-refereed final version) and publisher PDFs (if allowed by the publisher). The repository has around 2,100 full-text research articles and 4662 abstract of Ph.D. Theses.

MAKERSPACE

Makerspace is a central facility for students/staff/faculty of the institute to carryout their prototyping needs. This facility is in addition to central workshop and is different in two respects. Makerspace facilitates students/staff/faculty to obtain training to use prototyping machines and equipment to build their prototypes in DIY (Do it yourself) manner. Secondly makerspace is available for use beyond office hours in the evenings. Makerspace is presently being supported by MHRD's Design Innovation Center (DIC) and 1986 batch of Alumni.

CENTRAL WORKSHOP

Central Workshop is one of the pivoting units of the institute which teaches conceptually "how" a product comes to its present form by way of imparting core manufacturing education to all the first year students of IIT Delhi. It also provides product manufacturing support to entire institute community in general and undergraduate students in particular. More than 900 undergraduate students in their first year acquire hands-on manufacturing skills in this Central Workshop. The Central workshop not only introduces art and science of manufacturing but also infuses confidence to take up product design and manufacturing activities in future. Central Workshop is also a place where B.Tech. students of Mechanical Engineering and B.Tech. students of Production & Industrial Engineering acquire training and knowledge in specialized areas of manufacturing like Metal Casting, Metal Forming, Machining, Welding & Joining, CNC programming and 3D Printing, Plastic Product manufacturing etc. M.Tech. students of Production Engg. also use central workshop facilities for their practical classes in various courses as well as for project and research work.

The Central Workshop is fully equipped with latest power tools, equipments and facilities in all areas of manufacturing technologies. It also caters to the fabrication needs of students doing product design & manufacturing courses, minor projects, B.Tech. project, Master's thesis and Doctoral research. Large number of students use this facility to build products and compete at national and international level product building competitions like Formula student car, mini Baja, Robocon etc. The facility can also be used by external agencies for their manufacturing and training needs during the vacation period.

Central Workshop has undertaken efforts to reorganize, modernize and prepare it for continuously changing global manufacturing scenario. Efforts are also on to prepare students for a broader view of manufacturing which involves planning and deploying optimum ways to transform raw material into goods by integration of people, capital, processes, systems and enterprises to deliver products of value to the society.

A new shop 'CNC Learning' is created in 2013-14 to imbibe product realization through computer generated geometries. A rapid prototype model can also be visualized by use of state of art 3D printing technology in this new shop of Central Workshop. Laser cutting facility has also been added recently.

IIT HOSPITAL

The Institute has a 14 beds hospital centrally located in the campus, which provides facilities for OPD treatment and admissions. The Hospital is managed by a team of full time 09 Allopathic Doctors, 01 Homeopathic doctor, 01 Dental doctor and 05 Allopathic Contract Doctors from Apollo Life. The Hospital is also visited by part time specialists doctors from AIIMS in the field of Orthopedics, ENT, Ophthalmology, Dermatology, Radio-diagnosis, Cardiology, Ayurvedic, Endocrinology, Counseling & Psychiatry. The doctors are assisted by efficient group of Pharmacists, Nurses, physiotherapist and other Paramedical Staff. The hospital is well equipped to take care of primary emergencies, whereas serious patients are carried to All India Institute of Medical Sciences (AIIMS) and Safdarjang Hospital (SJH) with help of hospital ambulance services is available 24 hours on all days.

IIT Delhi Hospital is the recognized centre for Pulse polio immunization and other programmes by the Government. It also provides medical aid during sports meets, Rendezvous, culture function etc. Demonstrations in first-aid, AIDS and Cardio – pulmonary Resuscitation (CPR), and other medical problem are conducted for the students and other staff of the Institute. Besides other free educative and health checkup camps.

Hospital Statistics 2017-2018	
Patients Attended in OPD	93,341
X-Ray	1,717
Ultra Sound	285
Patients Admitted	438
Physiotherapy	3,631
Surgical Dressing	3,482
Dental Treatment	2,276
Pathology Lab Test	38,651
ECG	1,368

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Hospital Facilities

a. OPD facility (Allopathy & Homeopathy)

Patients are registered at the reception and are seen on first come, first serve basis, however out of turn consultation may be provided in case of emergency and to senior citizen. Wheel chairs, trolleys and attendants are there to help very sick patients. Patients have the right to consult any doctor. In OPD, clinical consultation is provided to patients which includes history taking, clinical examination, diagnosis and providing prescription to patients besides advising laboratory test in some cases. Hospital has a large new OPD complex with excellent waiting facilities for patients where, prompt OPD services are provided by doctors. There is also a waiting hall with chairs, a TV, public utilities like drinking water and toilets.



b. Dental facility

An experienced dental surgeon carries out procedures like dental extractions, scaling/cleaning, extractions, fillings, & RCT.

c. Ward / Indoor facility

Ward facilities for observation and management of medical problem like typhoid, acute gastroenteritis, COPD, bronchial asthma, malaria, dengue, viral fever, pneumonias, etc. Facility for 24x7 physical presence of doctor has currently been added.

d. Minor OT

Provides services for minor surgical procedure like dressing of lacerated wound, suturing of minor lacerations and resuturing, excision of corns and sebaceous cysts are done under local anesthesia.

e. Physiotherapy

Range of physiotherapy services to assist the patients to recover from wide range of musculoskeletal painful disorders. Available modalities are MWD, SWD, U/S, TENS, IFC laser therapy traction unit, magnolia.

f. Laboratory Services

Trained laboratory staff are providing best services which includes painless blood withdrawal services of one NABL accredited laboratory are also available for carrying out specialized tests, they collect sample from 8 a.m. to 12 p.m. (Monday to Friday) in IIT Hospital. Sample collection time for IIT Laboratory is 8 a.m. to 10:30 a.m. while emergency

tests like Blood Sugar, Platelet Counts, HB & Blood Grouping are done in emergency cases throughout OPD hours. This facility also available on Saturday, Holidays through outsourced lab Dr. P. Bhasin Pathlab Pvt. Ltd.

g. Pharmacy

Free reliable quality medicines are available to beneficiaries on doctor prescription during OPD hours (8 a.m. to 8 p.m.). Medicines not available are provided by supply order signed by prescribing doctor and Head, Hospital Services, which can be collected from Apollo Pharmacy on campus.

h. Radiology / X-ray facility

X-Ray X-Ray pleophos-D, 300 MA Siemens available, X-rays done on all working days during OPD hours. Sonoline G-50 U/s machine Siemens ultrasound is available and ultrasounds are done once a week by visiting specialist.

i. ECG Services

24 hours ECG services, including machine report, carried out by trained staff.

j. Ambulance Services

24 hours patient transport vehicle available. Patients are transported from home (on campus) to IIT hospital and patients are referred by emergency duty doctor to empanelled hospital for specialized treatment.

k. Specialist OPD Services

Visiting specialists of various specialists like ophthalmology, ENT, psychiatry, orthopedic, cardiology, endocrinology and ultrasonology visit the IIT Delhi Hospital in the evening from 5:30 p.m. to 7:30 p.m.

HINDI CELL

During the period (1st April 2017 to 31st March 2018) the following important activities were organized by Hindi Cell:

- Training workshop on "Prashasnik karyon mein Rajbhasha Hindi ka swarup" was organized for group 'B', 'C' Staff & Hindi Nodal Officers of the Institute, 19 July, 2017.
- Training workshop on "Manak vartani evom IT-Tools" was organized for group 'B', 'C' Staff & Hindi Nodal Officers of the Institute, 22 September, 2017.
- 'Hindi Pakhwara' was organized during the 14-29 September, 2017 in which many activities were organized.
- Training workshop on "Hindi ke Pragami Prayog mein e-Tools ki Sarthakta" was organized for group 'A', 'B', 'C' Staff & Hindi Nodal Officers of the Institute, 6 December, 2017.
- Training workshop on "Timahi Report Bharne Ke liye aankado ka sanklan karne evom Report bharne se Sambandhit Karyshala" was organized for group 'B', 'C' Staff & Hindi Nodal Officers of the Institute, 8 December, 2017.
- Training workshop on "Computer par Hindi ke Prayog ke liye e-Tools evom Software" was organized for Executive Engineers, Assistant Executive Engineers, group 'B', 'C' Staff & Hindi Nodal Officers of the Institute, 23 March, 2017.

New Initiatives

(April 1, 2017 - March 31, 2018)

NEW COURSES PROPOSED/DEVELOPED/INITIATED

During the period, the following new courses have been proposed/developed/initiated :

Chemical Engineering

- CLL788 Process Data Analytics for UG & PG level (3-0-0)
- CLL787 Statistical Methods for Chemical Engineering for UG & PG level (3-0-0)

Computer Science and Engineering

- COL 761 Data Mining
- COP 820 Processor Design Lab

Management Studies

- MSV801 Selected Topics in OB & HR Management
- MSV802 Selected Topics in Finance
- MSV803 Selected Topics in IT Management
- MSV804 Selected Topics in Operations Management
- MSV805 Selected Topics in Economics
- MSV806 Selected Topics in Marketing Management
- MSV815 Case Study Teaching and Writing
- MSV816 Contemporary Issue in Management
- MSV817 Art of Scholarship in Management Research
- MSP801 Interdisciplinary Research in Management
- MSV818 Contemporary Issues in OB & HR Management
- MSV819 Contemporary Issues in Finance
- MSV820 Contemporary Issues in IT Management
- MSV821 Contemporary Issues in Operations Management
- MSV822 Contemporary Issues in Economic Policy
- MSV824 Contemporary Issues in Strategic Management

Physics

- New Departmental specialization titled "Theoretical and Computational Techniques in Physics" for UG curriculum.

Textile Technology

- Practical Statistics for Textile Engineers UG (Elective)

Energy Studies

- M.Tech. in Energy & Environment Technologies and Management.

Rural Development and Technology

- RDL770 Panchagavya for Holistic Development (2-0-2)
- RDL702 Karigar and Traditional Industries (3-0-2)
- RDL727 Conservation and Recycling Practices in Rural Areas (3-0-2)

- RDL725 Ecological Perspective of Growth and Development (3-0-0)
- RDL761 Value Chain in Agro-food Processing (2-0-2)

Amar Nath and Shashi Khosla School of Information Technology

- SIV851 Special Module on eGovernance (1 credit)
- SIL861 Special Topics in Information and Communication Technologies for Development (3 credits)
- SIL761 Introduction to Information and Communication Technologies for Development (4 credits)
- SIL763 Introduction to Blockchains, Cryptocurrencies and Smart Contracts (4 credits)

QIP/CEP COURSES

Chemical Engineering

- Center of Excellence Biopharmaceutical Technology Course Series, 6th to 8th December 2017 organized by Prof. A.S. Rathore.

Civil Engineering

- GIAN course on "Remote Sensing of Soil Moisture and its Geophysical Applications", 12-16 February 2018. Coordinator: Dhanya C.T.
- GIAN course on "Seismic Vulnerability Assessment and Retrofitting of Existing Structures", 21-25 August 2017. Coordinator: Vasant Matsagar.
- GIAN course on "Pedestrian dynamics – empirics and modelling", 8-14 November 2017. Coordinators: K. Ramachandra Rao and G. Tiwari.
- CEP course on "Recent Trends in Transportation Engineering", 5-9 March, 2018. Coordinators: A.K. Swamy and K. Ramachandra Rao.

Electrical Engineering

- Short term course under CEP titled, "Selected Topics in Security" duration of 2 days from 14.02.2018 to 15.02.2018, Prof. Ranjan Bose.
- Short term course under CEP titled, "Emerging Technologies Workshop in Security" duration of 3 days from 10.01.2018 to 12.01.2018, Prof. Ranjan Bose.
- Short term course under CEP titled, "Brain Science and Technology: Tools and Techniques to understand the Human Brain" in KMBB College of Engineering, Bhubaneswar, Odisha duration of 5 days from 16.12.2017 to 20.12.2017, Prof. Tapan K. Gandhi.
- Short term course under CEP titled, "Stability and Control

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- of Renewable Energy based Systems" duration of 2 days from 02.09.2017 to 03.09.2017, Prof. Sukumar Mishra.
- Short term cours under CEP titled, "Advances in Cyber Security" duration of 5 days from 09.10.2017 to 13.10.2017, Prof. Ranjan Bose.
- GIAN Short term course titled, "Complex Networks" duration of 5 days from 17.12.2017 to 21.12.2017, Prof. Swades De.

Management Studies

- Strategic Decision Models for Operations Finance and IT, 13/4/2017 to 15/4/2017, Prof. S.P. Singh & Prof. Smita Kashiramka.
- CEP/STC on Venture Capital Financing in India, 10/04/2017, Prof. Smita Kashiramka.
- CEP/STC on International Finance, 19/4/2017 to 26/04/2017, Prof. Smita Kashiramka & Prof. Shveta Singh.
- Certificate Course in Business Management, 03/6/17 to 05/8/2017, Prof. Harish Choudhry.
- 25th SIDBI-SIMAP "Management Skill formation Program for Entrepreneurial Venture", May 2017 to Sep 2017, Prof. S.K. Jain & Prof. Mahim Sagar.
- Certificate Course in Econometrics for Business Decisions, 1/7/2017 to 23/7/2017, Prof. Amlendu Dubey (DMS), Prof. Sourabh B. Paul & Prof. Ankush Agarwal.
- Certificate Course Business Management (Focus: Banking Operations), 04/09/2017 to 8/12/17, Prof. Harish Choudhry.
- Middle Management Training in IT Management, 5-6-12-13 Oct & 2-3 Nov, 2017, Prof. Arpan Kumar Kar.
- Middle Management Training in IT Management, 7-8-14-15 Oct & 4-5 Nov, 2017, Prof. Arpan Kumar Kar.
- Executive Management Programme in Strategic Innovations, Digital Marketing and Business Analytics, 6 January 2018 to 10 June 2018, Prof. Arpan Kumar Kar, Prof. Sanjay Dhir, Prof. P Ilavarasan.
- Executive Management Programme on Business Models, 16/12/2017 to 21/01/2018, Prof. Mahim Sagar.
- Capacity Building for Effective Workplace Communication (1st), 11/12/2017 to 15/12/2017, Prof. Shuchi Sinha.
- Capacity Building for Effective Workplace Communication (2nd), 26/02/2018 to 02/03/2018, Prof. Shuchi Sinha.
- Leadership & Strategic Thinking, 13/03/2018 to 15/03/2018, Prof. Shveta Singh.

Biomedical Engineering

- GIAN Course on "Prosthetic and motor learning" during 05-09 Dec. 2017 at IIT Delhi organized by Prof. Deepak Joshi and Prof. Sethu Vijayakumar (University of Edinburgh).

- MedImg: Workshop on Medical Imaging Techniques, Post Processing and Clinical Applications; 14th to 16th April 2017, IIT Delhi.
- Clinical Orthopaedic Biomechanics, jointly organized by CBME, IIT Delhi, ISIC New Delhi and University of Toledo, USA on 18 March, 2017.
- Clinical Spinal Biomechanics, jointly organized by CBME, IIT Delhi, ISIC New Delhi and University of Toledo, USA on 04 March, 2017.

Industrial Tribology Machine Dynamics and Maintenance Engineering

- Transportation and storage of coal ash 13-15 December. 2017.

Rural Development and Technology

- TEQIP III Programme on "Rural Industries: Establishment, Sustainability and Challenges.

Amar Nath and Shashi Khosla School of Information Technology

- COV887 under GIAN scheme taught by Prof. Ranjan Pal, University of Southern California, C.A., in September 2017.
- SIV889 under GIAN scheme taught by Prof. Dinesh Manocha, Deptt. Of CS, University of North Carolina, USA in January 2018.

MoUs SIGNED BY THE INSTITUTE

A. Memorandum of Understandings

In order to have close cooperation in the field of Teaching and Research, the Institute has signed MoUs/Agreements with Institutions/organizations in India and abroad. Currently there are 107 MoUs with foreign Institutions/Organizations and 39 MoUs with Indian Institutions/Organizations. The objectives of these MoUs include exchange of students and faculty, joint research activities and fellowships for training at doctoral and postdoctoral level etc.

B. Institutions of Chairs

The Industry and the alumni of the Institute have extended significant support to the Institute for its academic and research programmes by way of instituting chairs in various fields. As on date, 22 Chairs are functional at the Institute.

C. Scholarships/Medals/Awards/Fellowships

To encourage and to provide financial assistance to needy students of the Institute, individuals, trusts and organizations have been instituting scholarships etc. At present there are 133 awards/scholarships/medal stand instituted at Undergraduate and Postgraduate levels. In addition the Institute has a "Loan Scholarship Scheme" which makes it more affordable for the students in comparison to taking loan from the banks.

New Initiatives

During the period under report following scholarships have been instituted:

1. Alumni Scholarship
2. Swami Shivananda Scholarship

D. New Faculty Research Grant

To encourage the new faculty for developing research facilities in the area of their expertise, during the period under report the Institute allocated a sum of ₹295 lakhs.

BOOKS AND CHAPTERS PUBLISHED/EDITED

Chemical Engineering

- Alnouri, S., Linke, P., El-Halwagi, M., Shaik, M.A., Karmakar, S., and Varekar, V. Water Management, Chapter 2, in *The Water-Food-Energy Nexus: Processes, Technologies and Challenges*, I.M. Mujtaba, R. Srinivasan, N.O. Elbashir (eds.), CRC Press, USA, 2017, 69-114.
- Ayan Mukherjee and Suddhasatwa Basu Direct Hydrocarbon Low-temperature Fuel Cell (Ch 4) in *Electrocatalysts for Low Temperature Fuel Cells - Fundamentals and Recent Trends*, Ed. Viswanathan, Elsevier (2017).

Chemistry

- Varjani, S.J., Binod, P., Kumar, S., Khare, S.K. (Eds.) (2018) *Biosynthetic Technology and Environmental Challenges*, Springer, Singapore. <https://doi.org/10.1007/978-981-10-7434-9>.
- Ayesha Sadaf, Jasneet Grewal and S.K. Khare (2018). Potential of ionic liquid tolerant cellulases and hemicellulases for the generation of cost effective biofuels and chemicals: Accepted in *Waste Biorefineries*. Elsevier Science, Amsterdam, The Netherlands
- Arti Kumari, Razi Ahmad, Amrik Bhattacharya, Shivani Chaturvedi and S.K. Khare (2018) *Biofuels and their Impact Assessment: In Biofuels: Advances and Perspectives*.
- Anchal Goel, Rajeshwari Sinha and S.K. Khare (2017) Immobilisation of *A. oryzae* beta- galactosidase on silico nano particles: Development of an effective biosensor for determination of lactose in milk whey: In *Recent advances in Applied Microbiology*. Springer, Heidelberg.
- Shubhrima Ghosh, Rameshwar Tiwari, R. Hemamalini and S.K. Khare (2017) Multi-omic approaches for mapping interactions among marine microbiomes: In *Understanding Host-Microbiome Interactions - An Omics Approach*. Springer, Heidelberg.

Civil Engineering

- *Ocean Structures - Constructions, Materials, and Operations* by S Chandrasekaran and A.K. Jain.

Computer Science and Engineering

- *Soft Computing-Fundamentals, Techniques and Applications*, McGraw Hill Education, 2018 by Saroj Kaushik & Sunita Tiwari.

Electrical Engineering

- H. Kaushal, V.K. Jain, S. Kar, "Free Space Optical Communication" ISBN 1935-3839, ISSN 1935-3847 (electronic), ISBN 978-81-322-3689-4, ISBN 978-322-3691-7 (eBook), DOI 10.1007/978-81-322-3691-7, Library of CongressControlNumber2016963412Springer(India)2017.

Management Studies

- Sushil, T.P. Singh and A.J. Kulkarni (Eds.) (2018) *Flexibility in Resource Management*, Springer Nature: Singapore.
- Julia Connell, Renu Agarwal, Sushil and Sanjay Dhir (Eds.) (2018) *Global Value Chains, Flexibility and Sustainability*, Springer Nature: Singapore.
- Sanjay Dhir and Sushil (Eds.) (2018) *Flexible Strategies in VUCA Markets*, Springer Nature: Singapore.
- Kar, A.K., Ilavarasan, P.V., Gupta, M.P., Dwivedi, Y.K., Mäntymäki, M., Janssen, M, Simintiras, A.C. and Al-Sarhan, S. (2017). *Digital Nations – Smart Cities, Innovation & Sustainability*. (Eds). In *Lecture Notes in Computer Science*. Springer Nature. ISBN 978-3-319-68557-1.
- K.C. Iyer, S.G. Deshmukh, Anil Sawhney, Rajendra Sahu and Surya Prakash Singh, *Accelerating Development: Harnessing the Power of Project Management* (Edited Volume), Project Management Institute, 2017.
- Seema Sharma (2nd Eds.) (2018) *Statistics for Business and Economics*, Wiley India ISBN: 9788126570942.

Textile Technology

- Dipayan Das :
 1. Dharmaraja Selvamuthu and Dipayan Das, "Introduction to Statistical Methods, Design of Experiments and Statistical Quality Control", Published by Springer, Singapore. ISBN: 978-981-13-1735-4.
 2. Syamal Maiti, Dipayan Das and Kushal Sen, Monograph on "Flexible non-metallic electro-conductive textiles", Published by Taylor & Francis, UK ISSN: 0040-5167.
- Mangala Joshi : Book Chapter :
 1. M. Joshi and B. Adak, Nanotechnology based textiles: A Solution for Emerging Automotive Sector In: Banerjee B. (Eds.), *Rubber Nanocomposites and Nanotextiles in Automobiles*, SmithersRapra, UK (April 2018) pg 207-265.
 2. Mangala Joshi and Bapan Adak, "Advances in Nanotechnology Based Functional, Smart and Intelligent Textiles: A Review" for *Comprehensive Nanoscience and Nanotechnology*, 2nd edition, Publisher Elsevier Editor-in-Chiefs: David Andrews Thomas Nann Robert Lipson, Book ISBN: 9780128122952.

New Initiatives

Energy Studies

- S.C. Kaushik, S.K. Tyagi and P. Kumar, Finite Time Thermodynamics of Thermal Energy Conversion Systems, Springer, Germany (2017).

Industrial Tribology Machine Dynamics and Maintenance Engineering

- Tandon, N. and Nakra, B.C., Vibration and Noise Engineering, I.K. International Pvt. Ltd., April 2017.

Rural Development and Technology

- Choudhary, P., Malik, A. and Pant, K.K., 2017. Algal Biofilm Systems: An Answer to Algal Biofuel Dilemma. In Algal Biofuels (pp. 77-96). Springer International Publishing.
- Mathur, M., Bhattacharya, A. and Malik, A., 2017. Advancements in Algal Harvesting Techniques for Biofuel Production. In Algal Biofuels (pp. 227-245). Springer International Publishing.
- Monika Jangir, Ritika Pathak, Satyawati Sharma, 2017. Trichoderma and Its Potential Applications. In: Singh D., Singh H., Prabha R. (eds) Plant-Microbe Interactions in Agro-Ecological Perspectives. Springer, Singapore.
- Sonal Yadav, Satyawati Sharma, 2017. Pesticides: problems and remedial measures for the ebook entitled "Environmental Risk Factors and Natural Products: A Human Health Perspective", Bentham Science. (Submitted)
- Garima Singh, Sonal Yadav, Kanika Tokas and Satyawati Sharma, 2018. Role of microbes in plastic degradation. Springer. (Submitted)
- Algal Biofuels: Recent Advances and Future Prospects (Eds: S.K. Gupta, A. Malik and F. Bux). Springer Nature, Netherland 2017. (Book Edited)

Kusuma School of Biological Sciences

- Narain, A. Pandey, S. Gupta, J. Gomes*, R. Bhatia*, P. Vivekanandan*. Targeted next generation sequencing reveals novel and rare variants in Indian patients with Amyotrophic Lateral Sclerosis. Neurobiology of Aging (In press).
- Biswas B., Kumari P., Vivekanandan P*. Pac1 Signals of Human Herpesviruses Contain a Highly Conserved G-Quadruplex Motif. ACS Infect Dis. 2018 March 1. doi: 10.1021/acsinfecdis.7b00279.
- Sankar S., Borkakoti J., Ramamurthy M., Nandagopal B., Vivekanandan P*, Sridharan G. Identification of tell-tale patterns in the 3' non-coding region of hantaviruses that distinguish HCPS-causing hantaviruses from HFRS-causing hantaviruses. Emerging Microbes and Infection. 2018; 7 (1); 32.
- Samal J., Kandpal M., Vivekanandan P*. HBeAg-induced miR-106b promotes cell growth by targeting the

retinoblastoma gene. Scientific Reports. 2017 October 30;7(1):14371.

- Biswas B., Kandpal M., Vivekanandan P*. A G-quadruplex motif in an envelope gene promoter regulates transcription and virion secretion in HBV genotype B. Nucleic Acid Research. 2018; 45 (19), 11268-11280.
- Wasson M.K., Borkakoti J., Kumar A., Biswas B., Vivekanandan P*. The CpG dinucleotide content of the HIV-1 envelope gene may predict disease progression. Scientific Reports. 2017 August 15; 7(1):8162.
- P. Narain, J. Gomes*, R. Bhatia*, I. Singh, P. Vivekanandan*. C9orf72 hexanucleotide repeat expansions and Ataxin 2 intermediate length repeat expansions in Indian patients with amyotrophic lateral sclerosis. Neurobiol Aging. 2017 August; 56:211.e9-211.e14.
- A. Srivastava, J. Singh, S.P. Singh Yadav, P. Arya, F. Kalim, P. Rose, Ashish, Kundu B*, The Gelsolin Pathogenic D187N Mutant Exhibits Altered Conformational Stability and Forms Amyloidogenic Oligomers. Biochemistry 57 (16), 2359-2372. March 2018.
- R. Sachdev, K. Kappes-Horn, L. Paulsen, Y. Duernberger, C. Pleschka, Kundu B., Endoplasmic Reticulum Stress Induces Myostatin High Molecular Weight Aggregates and Impairs Mature Myostatin Secretion Molecular neurobiology, 1-19. March 2018.
- R. Jena, D.K. Garg, L. Choudhury, A. Saini, B. Kundu*, Heterologous expression of an engineered protein domain acts as chaperone and enhances thermo tolerance of Escherichia coli, International journal of biological macromolecules 107, 2086-2093. February 2018.
- P. Sharma, A.K. Tomar, B. Kundu*, Interplay between Ceda, rpoB and double stranded DNA: A step towards understanding Ceda mediated cell division in E. coli, International journal of biological macromolecules 107, 2026-2033. February 2018.
- N. Tiwari, A. Srivastava, B. Kundu, M. Munde, Biophysical insight into the heparin-peptide interaction and its modulation by a small molecule. Journal of Molecular Recognition 31 (1), e2674. January 2018.
- P. Sharma, A.K. Tomar, B. Kundu*, Identification of functional interactome of a key cell division regulatory protein Ceda of E. coli, International journal of biological macromolecules 106, 763-767. January 2018.
- J. Singh, M.I. Khan, S.P.S. Yadav, A. Srivastava, K.K. Sinha, P. Das, B. Kundu*, L-Asparaginase of Leishmania donovani: metabolic target and its role in Amphotericin B resistance, International Journal for Parasitology: Drugs and Drug Resistance 7 (3), 337-349. December 2017.

New Initiatives

- T Bansal, E Chatterjee, J. Singh, A. Ray, B. Kundu, V Thankamani. Arjunolic Acid, a Peroxisome Proliferator-Activated Receptor Alpha Agonist Regresses Cardiac Fibrosis by Inhibiting Non-canonical TGF- β Signaling, *Journal of Biological Chemistry*, jbc. M117. 788299. August 2017.
- D.K. Garg, B. Kundu*. Hyperthermophilic L-asparaginase bypasses monomeric intermediates during folding to retain cooperativity and avoid amyloid assembly. *Archives of biochemistry and biophysics* 622, 36-46. May 2017.
- S. Gautam, S. Karmakar, R. Batra, P. Sharma, P. Pradhan, J. Singh, B. Kundu*. Polyphenols in combination with β -cyclodextrin can inhibit and disaggregate α -synuclein amyloids under cell mimicking conditions: A promising therapeutic alternative. *Chawhdury P. Biochimica et Biophysica Acta (BBA)-Proteins and Proteomics* 1865 (5), 589-603. May 2017.
- Bhugra S., Mishra D., Anupama A., Chaudhury S., Lall B., and Chugh A. (2018). Automatic quantification of stomata for high-throughput plant phenotyping. In 24th International Conference on Pattern Recognition (ICPR). IEEE (accepted).
- Anupama A., Bhugra S., Lall B., Chaudhury S., and Chugh A.* (2018). Assessing the correlation of genotypic and phenotypic responses of indica rice varieties under drought stress. *Plant Physiology and Biochemistry* 127: 343-354.
- Budagavi D.P. and Chugh A.* (2018) Antibacterial properties of Latarcin 1 derived cell-penetrating peptides. *European Journal of Pharmaceutical Sciences* 115: 43-49.
- Budagavi D.P., Zarin S., Chugh A.* (2018) Antifungal activity of Latarcin 1 derived peptides against *Fusarium solani*. *BBA Biomembranes* 1860: 250-256.
- Bhugra S., Anupama A., Chaudhury S., Lall B., and Chugh A. (2017). "Phenotyping of xylem vessels for drought stress analysis in rice." In *Machine Vision Applications (MVA)*, 2017 Fifteenth IAPR International Conference. IEEE 428-431.
- Nisha P., Deepthi B. and Chugh A.* (2017) CyLoP-1: Membrane-active peptide with cell-penetrating and antimicrobial properties. *Biochimica et Biophysica Acta (BBA)-Biomembranes* 1859(2), 167-176.
- Neha Jaina, Timothy J. Knowles, Peter A. Lund*, Tapan K. Chaudhuri*, 2018 "Minichaperone (GroEL191-345) mediated folding of MalZ proceeds by binding and release of native and functional intermediates", *BBA - Proteins and Proteomics* 1866 (2018) 941-951.
- Ashima Sharma, and Tapan K. Chaudhuri*, 2017. "Revisiting *Escherichia coli* as microbial factory for enhanced production of human serum albumin" *Microbial Cell Factories* 16:173 (DOI 10.1186/s12934-017-0784-8). (IF 3.7)

MAJOR RESEARCH INITIATIVES/ RESEARCH PROJECTS UNDERTAKEN

Chemical Engineering

- Project titled "Scale-up Studies and Process Development for Hydrogen Production by Catalytic Decomposition of Natural Gas sanctioned by Hindustan Petroleum Corporation Limited, R&D Centre India with a project cost of Rs. 1.02 crores (Prof. K.K. Pant).
- Project titled "Extraction of Precious Metals from E-waste using Chelation Technology" sanctioned by Department of Science and Technology, Government of India with a project cost of Rs. 4.27 crores (Prof. K.K. Pant).
- Project titled "Reduction of NOx from H2 Engines using EGR and After treatment Devices" sanctioned by Ministry of New and Renewable Energy, Hydrogen Energy India with a project cost of Rs. 1.80 crores (Prof. Divesh Bhatia).
- Project titled "Development of a Low-Cost Therapy for Biological Toxins for Rural India" sanctioned by Department of Biotechnology, Ministry of Sc.& Tech India with a project cost of Rs. 71.09 lakhs (Prof. Anurag S. Rathore).
- Project titled "Gas Production from Heterogeneous Methane Hydrate Reservoirs" sanctioned by Science and Engineering Research Board, (DST) India with a project cost of Rs. 20.47 lakhs (Prof. Jyoti Phirani).
- Project titled "Development of efficient vanadium redox flow battery (VRFB) using assisted inner-sphere electron transfer and higher state-of-charge management" sanctioned by Science & Engineering Research Board, Delhi India with a project cost of Rs. 46.11 lakhs (Prof. Anil Verma).
- Project titled "Development of Solid Oxide Cell for Conversion of Carbon Dioxide to Hydrocarbons" sanctioned by GAIL (India) Limited, Noida India with a project cost of Rs. 69.53 lakhs (Prof. M.A. Haider).
- Project titled "Methanol Production from Indian Coal: Pilot Plant Demonstration, Catalysis and Scale-up Technologies" sanctioned by Department of Science & Technology India with a project cost of Rs. 38.24 Crores (Prof. Shantanu Roy).
- Project titled "Investigation of non-assisted low temperature startup of PEM fuel cell" sanctioned by MSA, VSSC, ISRO, P. O. Thiruvananthapuram, India with a project cost of Rs. 24.81 lakhs (Prof. Anil Verma).
- Project titled "Development of a point-of-care (POC) diagnostic panel for rapid detection and stratification of bacterial septicemia in critically-ill patients" sanctioned by Department of Science and Technology, Government of India with a project cost of Rs. 62.25 lakhs (Prof. Shalini Gupta).

New Initiatives

- Project titled “Development of suitable processes for the synthesis and purification of Trimethyl phosphate (TMPO) and Triethyl borate (TEB)” sanctioned by Semi-Conductor Laboratory, Department of Space, Punjab, India, with a project cost of Rs. 77.55 lakhs (Prof. K.K. Pant).

Chemistry

- Lactic acid based biorefineries for converting agro and food based biomass into PLA and high value-added products (Funded by NASF, India)- 2017-2; Rs. 2.5 Crores.
- Synthesis of novel low-cost biosorbents based on modified cellulosic agro-wastes by tetra ethylene pentamine, tri ethylene tetramine, or diethylenetriamine and adsorption study for anionic dyes removal (Indo-Tunisian Project, funded by DST India and MHESR, Tunisia-2017-19:Rs.25 lakhs).

Civil Engineering

- “Vajra Faculty Project”, External Faculty: Prof. Patrick L. Gurian, Drexel Univ. USA (2018-2020) (Funding Agency: DST, India) Rs. 10 Lakhs per year for 3 years, (Prof. Arun Kumar)
- “Sensor Project” Other PI: Prof. S. Jha, IIT Delhi; Prof. A.K. Panda, NIST Behrampur; Co-PI from 8 institutions) (Funding Agency: IUSSTF, India; Duration: 2018-2022; Total amount of Rs. 9 Crores) (Profs. A.K. Gosain, A.K. Nema, Arun Kumar and Dhanya C.T.)
- “Revisiting water guidelines” (Funding Agency: Centre for Ganga River Basin Management, IIT Kanpur, India; Duration: 2017-2018; Total amount of Rs. 9 Lakhs), (Prof. Arun Kumar)
- DST Project awarded under FITT on “Development of new approach for the enhancement of landfill capacity derived from experimental and mathematical modeling”, (Prof. Sumedha Chakma).
- “Prismoidal Bioreactor Landfill” approved for applying patent by FITT, (Prof. Sumedha Chakma).
- Limestone Calcined Clay Cement, which has been developed at IIT Delhi, was submitted for standardization to Bureau of Indian Standards, (Prof. Shashank Bishnoi)
- Funding of Rs. 4.24 crores received from MoEF&CC for Sponsored Project on “Capacity Building of Academic Institutions to Support Remediation Initiatives” for Contaminated Sites under which special environmental soil sampling equipment of additional Rs. 7 crores will be procured by MoEF&CC and located at IIT Delhi, (Prof. Manoj Datta)
- Awarded “Global Challenge Research Fund” for “A Systems Approach to Air Pollution in Delhi (ASAAP)” with University of Birmingham, U.K. (Prof. Mukesh Khare),
- Collaborative Research Award by MIT TATA Centre for Technology + Design on “Designing new policy and

technology interventions to mitigate Indian agricultural residue burning impacts considering effects on local agriculture”, (Prof. Mukesh Khare).

- Collaborative Research Award by NERC, UK and MoES, Govt. of India, with University of Birmingham, UK, University of Surrey, UK on “An Integrated Study of Air Pollutant Sources in the Delhi NCR (ASAP-Delhi)” (Prof. Mukesh Khare).
- Coordinating a Major Research Centre on Clean Air (CERCA) opened under Dean R&D, IIT Delhi, (Prof. Mukesh Khare)
- Co-coordinating collaborative research on “Source Appointment of Ambient Particulate Matter During Winter Season in Delhi City” with IIT Madras funded by Delhi Pollution Control Committee, (Prof. Mukesh Khare)

Computer Science and Engineering

- Indo-US Joint Center for “Algorithms under Uncertainty”, funded by IUSSTF (Indo-US Science and Technology forum) for 2 years.

Electrical Engineering

- We have received 7.5 crore project funded by Indo-US Science and Technology Foundation. In collaboration with DST. IIT Delhi is part of consortium that together received Rs.50 crore funding for this prestigious project, (Prof. A.R. Abhyankar).

Management Studies

- Concurrent Evaluation and Monitoring of National Food Security Act, 2013, Ministry of Food & Consumer Affairs, India, Rs. 3 lakhs, (Seema Sharma).
- Comparative study of the role of innovation strategies in different institutional contexts, Chandragupt Institute of Management Patna, India, Rs. 4.70 lakhs, (Sanjay Dhir).
- Joint Research on Global issues in Container Supply Chain, University of Connecticut, United States, Rs. 94 thousand, (Ravi Shankar).
- Strategies for Grid Strengthening: Leverage Storage for Solar Integration at Distribution Network Level, Renew Power Ventures Pvt. Ltd., India, Rs. 80 lakhs (Ravi Shankar).
- Game-based Interactive Simulator for Training Professionals in Cybersecurity Vulnerabilities (under IMPRINT Scheme), Ministry of Human Resource Development India, Rs. 97.80 lakhs, (Manmohan Prasad Gupta).
- Analyzing Big Data in Twitter for Identifying Concerns - Inputs in Digital Payments and Telecommunications, Department of Science & Technology India, Rs. 11.13 lakhs, (Arpan Kumar Kar).
- Public Engagement on Health and Development in India, Bill & Melinda Gates Foundation, United States, Rs. 9.59 Crores, (Mahim Sagar).

New Initiatives

- Learning to Innovate The Role of Exploration and Exploitation Strategies in Different Institutional Contexts, Indian Council of Social Science Research, India, Rs. 2.09 lakhs, (Sanjay Dhir).
- Advanced Analytics for Green and Resilient Supply Chain Decision Making, University Grants Commission, United Kingdom, Rs. 52.72 lakhs, (Ravi Shankar).
- Collaborative Decision Making on Container Supply Chains, University Grants Commission, United Kingdom, Rs. 53.26 lakhs, (Surya Prakash Singh).
- Do Social Media Platforms Grow the Small and Medium Enterprises: An Experimental Design Study in India, Indian Council of Social Science Research, India Rs. 6 lakhs, (P. Vigneswara Ilavarasan).
- Facilitating Research in EMF Technology and Management, Grace Cander Foundation, India, Rs. 7 lakhs, (Ravi Shankar).
- Assessing the Societal and Business Impact of Corporate Social Responsibility (CSR), Indian Council of Social Science Research, India, Rs. 7 lakhs, (Shveta Singh).
- Preparing for long Term Care Needs of Elderly in India: Design Guidelines for Old Age Home, Assessment of Manpower for Institutional/Home Based Care of Elderly and Curriculum Development, Human Settlement Management Institute, HUDCO House India, Rs. 21.98 lakhs, (Amlendu Kumar Dubey).

Mathematics

- Project of NOKIA reg. finding solution of different Networking problems is taken by Prof. Niladri Chatterjee.

Mechanical Engineering

- A Centre for Smart Manufacturing under Dept. of Heavy Industries worth Rs. 30 Crores has been sanctioned which will be coordinated by the dept. (C/o, Prof. Sunil Jha).

Physics

- KPFM based study of 2D/3D interfaces to obtain photovoltage at interface which facilitate charge transfer.
- Visit to CERN by three faculty members in June 2017, for IITD-CERN MoU.

Textile Technology

- Sponsored Project "Development of Multilayered Coated and Laminated Fabric for Aerostat Hull Material (JATC Sub project #22) from DRDO under SITEX vertical Date of Initiation: 1st December 2017, Grant : Rs. 7.96 Crores, 5 years (PI : Prof. Mangala Joshi Co PI : Dr. B.S. Butola, Dr. S. Wazed Ali, Dr. Abhijit Majumdar and Dr. Bipin Kumar).
- Sponsored Project "Design and Development of Multilayered Laminated Fabric for High altitude Airship

(JATC Sub project #19) from DRDO under SITEX vertical Date of Initiation: 1st November 2017, Grant : Rs. 6.37 Crores, 5 years (PI : Dr. B.S. Butola Co. PI:, Prof. Mangala Joshi, Dr. S. Wazed Ali, Dr. Abhijit Majumdar and Dr. Bipin Kumar).

- Self-cleaning, UV protective multi-functional fabric PI : Dr. Samrat Mukhopadhyay.

Applied Research in Electronics

- THz Electronics.
- Tunnelling Devices.
- Metal based RF switches.

Atmospheric Sciences

- Project titled "Ecosystem based services – An approach for Management of Coastal areas" sponsored by MoES, Govt. of India, Rs. 60 lakhs, (Prof. A.D. Rao).
- Project titled "All in One Platform for Health Care Domain (Under IRD Startup scheme), Rs. 90 thousand (Prof. Vimlesh Pant).
- Project titled "Transmission Loss Variability Due to Internal Tides Simulated Using an Integrated Model" sponsored by DRDO, Ministry of Defence India, Rs.24.97 lakhs, (Prof. A.D. Rao).
- Project titled "Simulating Coastal Inundation due to combined effect of storm surges Tides and wing waves along the east Coast of India" sponsored by Space Application Centre, ISRO India, Rs.15.60 lakhs (Prof. A.D. Rao)
- Project titled "SERB NPFSHIP of Dr. Thumree Sarkar under supervision of Prof. Sagnik Dey, C.A.S., sponsored by Science and Engineering Research Board, (DST) India, Rs. 19.20 lakhs (Prof. Dilip Ganguly).
- Project titled "DAPHNE: Delhi Air Pollution Health and Effects" sponsored by Department of Biotechnology, Ministry of Science & Technology.
- India, Rs. 99.36 lakhs, Prof. Deepak Joshi/Sagnik Dey (on sabbatical leave).
- Project titled "Coupled Ocean Wave Sediment Transport Model Experiments for the Assessment of Futuristic Shoreline Changes and its Impact on the Coastal Regions" sponsored by Space Application Centre, ISRO India, Rs. 13.86 lakhs (Prof. Vimlesh Pant).
- Project titled "Examining the Role of Realistic Landuse-land Cover Features on Temperature and Rainfall Predictions" sponsored by Department of Science & Technology (DST) India, Rs. 52.86 lakhs (Prof. Manju Mohan).
- Project titled "DST's Centre of Excellence in Climate Modeling" (under Climate Change Programme - (SPLICE) sponsored by Department of Science & Technology (DST) India, Rs. 7.188 Crores (Prof. Saroj Kanta Mishra).

New Initiatives

- Project titled "Observed and Simulated dependence of Bay of Bengal Rainfall on Tropospheric Temperature and Moisture" sponsored by Science and Engineering Research Board, (DST) India, Rs. 22.17 lakhs (Prof. Sandeep Sahany).
- Project titled "Identification of Upwelling Zones and Their Variability in the Indian Ocean, Using a High Resolution 3-D Ocean Circulation Model" sponsored by Ministry of Earth Sciences India, Rs. 49.91 lakhs (Prof. Vimlesh Pant).
- Project titled "Estimation of Coastal Storm Inundation Along the Indian Coastal Districts in a Probabilistic Climate risk Assessment Scenario" sponsored by Department of Science & Technology (DST) India, Rs. 69.71 lakhs (Prof. A.D. Rao).
- Project titled "Heat-stress Index for India: Projections for Near Future HIIPROF" sponsored by Department of Science & Technology (DST) India, Rs. 65.23 lakhs (Prof. Manju Mohan).
- Project titled "Dynamic Downscaling to Study Climate Change Impacts on Water Resources in India" sponsored by Ministry of water Resources India, Rs. 1.566 Crores (Prof. Krishna Mirle Achutarao).

Energy Studies

- Perovskite solar cell.

Instrument Design Development Centre

- Advanced optical fabrication of specialized optics such as freeform and aspheric optics.
- Development of confocal scanning optical microscope workstation for spectroscopic detection of low traces explosives, nanomaterials and bio-molecules.

Rural Development and Technology

- Development-evaluation of Aptamer based high sensitive-low cost kits for the detection of mycotoxins in food, PI: Prof. Hariprasad P., Funding Agency: DST, Financial Outlay: Rs. 40 Lakh, Duration: 2018-2021.
- Feasibility assessment and customization of biological dye removal process for industrial wastewater treatment (IIT Delhi-Vardhman Industries Ltd. Collaboration), PI: Prof. A. Malik, Funding Agency: DST, Financial Outlay: Rs. 100.33 Lakh, Duration: 2016-2019.
- Process development and assessment/evaluation of microalgae based biofuels and value added products (Indo-Srilanka Joint Res. Project), PI: Prof. A. Malik, Funding Agency: DST, Financial Outlay: Rs. 30.19 Lakh, Duration: 2017-2019.
- From wastewater to bioenergy: A microalgae biorefinery approach in Indian and Brazilian Scenario (DBT- India & MCTI-CNPq-Brazil Joint Res. Project) PI: Prof. A. Malik, Funding Agency: DBT, Financial Outlay: Rs. 136 Lakh, Duration: 2016-2020.
- Novel bio-harvesting approach for coupling algal wastewater treatment and biofuel production PI: Prof. A. Malik, Funding Agency: SERB-DBT, Financial Outlay: Rs. 47 Lakh, Duration: 2014-2017.
- Customising nanoemulsions for optimal algal biomass production and CO₂ sequestration PI: Prof. A. Malik, Funding Agency: FIRP IITD, Financial Outlay: Rs. 10 Lakh, Duration: 2016-2018.
- Local treatment of urban sewage for healthy reuse (Lotus-HR), Co-PI: Prof. A. Malik, Funding Agency: DBT (Indo-Dutch Project), Financial Outlay: Rs. 110 Lakh, Duration: 2017-2020.
- Development of microbial formulations for degradation of explosives in soil, PI : Prof. Satyawati Sharma, Co-PI: Prof. A. Malik, Funding Agency: DRDO, Financial Outlay: Rs. 40 Lakh, Duration: 2016-2018.
- Experimentally assisted mathematical modeling of silver nanoparticles growth by reduction from solutions, Co-PI: Prof. A. Malik, Funding Agency: DST, Financial Outlay: Rs. 19 Lakh, Duration: 2014-2017.
- Biogas development and Training Centre (BDTC), Co-PI: Prof. A. Malik, Funding Agency: MNRE, Financial Outlay: Rs. 19 Lakh, Duration: 2012-2018.
- Development of bio-pesticidal formulations employing bio-control agents integrating botanicals (oil cakes, plant parts etc.), Co-PI: Prof. Satyawati Sharma, Funding Agency: DBT, Financial Outlay: Rs. 53.1 Lakh, Duration: 2015-2018.
- Development of sustainable rural livelihood options utilizing locally available bioresources through transformative rural technologies in the Indian Himalayan Region of Himachal Pradesh and Sikkim PI: Prof. J.K. Sahu, Co-PI: Prof. S.N. Naik, Funding Agency: Ministry of EF&CC, GoI, Financial Outlay: Rs. 49.3176 Lakh, Duration: 2018-2021.
- Development of a multimode continuous drying system for on-farm processing of Indian spices PI: Prof. J.K. Sahu, Funding Agency: DST-SERB, Financial Outlay: Rs. 25.39 Lakh, Duration: 2016-2019.
- Value chain development of non-timber forest products for socio-economic development of tribal's in western Odisha PI: Prof. S.N. Naik, Co-PI: Prof. J.K. Sahu, Funding Agency: DST- SEED, Financial Outlay: Rs. 21.0961 Lakh, Duration: 2017-2020.
- Improving sustainable rural livelihood security through processing and value addition of non-timber based forest products PI: Prof. J.K. Sahu, Funding Agency: IIT Delhi, Financial Outlay: Rs. 10 Lakh, Duration: 2017-2018.

New Initiatives

Amar Nath and Shashi Khosla School of Information Technology

- Data Analytics, Data Science for Development, Computational Sustainability, Computational Neuroscience and Neuroimaging, and Blockchain Technologies.

PATENTS

Applied Mechanics

- "A Novel Device for Measuring Pressure Pulses Based on Applanation Tonometry", Invented by Dr. Sitikantha Roy.

Biochemical Engineering & Biotechnology

- "Nano Filtration Assisted Process for Ethanol Fermentation of Lignocellulosic Hydrolysate", Invented by Gopal P. Agarwal.
- "Methods for Enhanced Expression of Human Serum Albumin", Invented by Saroj Mishra.
- "Process for Shikimic Acid production", Invented by A.K. Srivastava.
- "Magnetic Enrichment of Magnetically Marked Analytes", Invented by E. Ravikrishnan.
- "Method, System and Apparatus for Multilingual and Multimodal Keyword Search in a Mixlingual CH Corpus", Invented by Arun Kumar.
- "A Recombinant Vector Comprising a Fusion DNA for Cell Surface Display, and Uses Thereof", Invented by P. Srivastava.
- "Magnetic Capturing of Rare Cells", Invented by Ravikrishnan.
- "Magnetic Capturing of Rare Cells", Invented by R. Elangovan, V. Perumal, and S. Gupta.

Chemical Engineering

- "Formation of Thin Film like Assembly by Solvent Non-Evaporative Method Using Centrifuge", Invented by Suddhasatwa Basu.
- "Center of Excellence Biopharmaceutical Technology", Invented by A.S. Rathore.
- "Infinity Helix (logo)", Invented by A.S. Rathore.
- "Ionic Liquid Based Support for Manufacture of Peptides", Invented by Sreedevi Upadhyayula.
- "A Process for Preparation of a Peptide", Invented by Sreedevi Upadhyayula.
- "Compact Coiled Flow Inverters as In-line Mixers", Invented by K.D. P. Nigam, S. Roy.
- "Process to Produce δ -decalactone by Integrated Fermentation and Catalytic Processing of Biomass", Invented by M.A. Haider.

- "Device for Oil Spill Control", Invented by A.N. Bhaswarkar.
- "Liquid Distributors for Three Phase Applications of Monolith Catalysts and Substrates", Invented by S. Roy.
- "A Formulation for Stabilizing Bio-Therapeutics", Invented by A.S. Rathore.
- "Redox Flow Battery System with Improved Energy Efficiency and Method of Operating Thereof", Invented by A. Verma.
- "Process for Conversion of Sulfur Trioxide and Hydrogen production", Invented by S. Upadhyayula.
- "Catalyst Composition for Conversion of Sulfur Trioxide and Hydrogen production", Invented by S. Upadhyayula.

Chemistry

- "A Nano-adsorbent for Removal of Lanthanide Ions from Water and Associated Methods", Invented by A. K. Ganguly.

Computer Science & Engineering

- "A System-On-Chip with In-Built Mechanism and Method for Identification of Faulty Components in the System-On-Chip", Invented by Smruti Ranjan Sarangi.
- "Anode Structure for Opto-Electronic DEVICES", Invented by Vamsi Krishna Komarala.
- "ePrasav Graph: Smart Phone Based Labor Monitoring", Invented by K. Paul, and S. Prasad.
- "A Portable and Affordable Scanning Stand for Multi-Utility Applications", Invented by M Balakrishnan.

Electrical Engineering

- "Method for Management of Two Secondary Underlay Multiuser Downlink Networks", Invented by Shankar Prakriya.
- "Hybrid Microgrid Synchronisation and Desynchronisation with Utility Grid and Diesel Generator", Invented by Bhim Singh.
- "A System for Controlling Speed of A Switched Reluctance Motor", Invented by Bhim Singh.
- "Position Estimation and Starting of a Sensorless Brushless DC Motor", Invented by Amit kumar jain.
- "Biosensing Devices", Invented by M. Jagadesh Kumar.
- "A Loop Power Flow Controller for DC Distribution Networks", Invented by S. Mishra.
- "Neural Network Classifier", Invented by Jayadeva.
- "A Single Sensor Based Maximum Power Point Tracking (MPPT) technique for battery charging", Invented by Bhim Singh.

New Initiatives

- "Fifth-Order Generalized Integrator Based Reduced Sensor Topology for Three-Phase Two-Stage Grid Integrated Solar Photovoltaic System", Invented by Bhim Singh.
- "A Single Stage Solar PV Array Fed Water Pumping System", Invented by Bhim Singh.
- "Multi-purpose Charging Station for E-Rickshaws in Rural Areas", Invented by Bhim Singh.
- "A Photo-voltaic Fed Single Input Dual Output DC/DC Converter System for Driving Load", Invented by Bhim Singh.
- "Diagnosis of Subclinical Mastitis in Dairy Animals", Invented by S. Kar.
- "Thin Capacitively-Coupled Thyristor (TCCT) for Ultra-high Sensitivity Biosensing Applications", Invented by M. J. Kumar.
- "Co-operative Movement for Photovoltaic Irrigation (CMPVI) based Irrigation System", Invented by S. Mishra.
- "Bipolar Impact Ionization MoSFET (I-MOS)", Invented by Mamidala Jagdesh kumar.
- "A Novel Green Micro-Emulsion for Controlling Fungal Wilt Diseases", Invented by S. Sharma.
- "3D Neuron Model", Invented by M Suri.
- "A Method of File Compression and Decompression Using Polar Codes", Invented by M. Bhatnagar.
- "A Three Phase Grid Synchronized Microgrid System", Invented by Bhim Singh.
- "A System and Method for Control and Ripple Reduction in SRIM based DFIG-DC Generation System", Invented by A. K. Jain.
- "Optimization of Supplementary Battery-assisted Energy Harvesting Nodes", Invented by S. Prakriya.
- "Larvae and Egg Detector", Invented by R. Bose.
- "Physical Layer Security in a Wireless Communication Channel", Invented by R. Bose.

Mechanical Engineering

- "Magnetorheological Finishing Tool with Electromagnet Cooling", Invented by Sunil Jha.
- "Smart Case", Invented by Sudipto Mukherjee.
- "System for Supplying Polishing Fluid", Invented by Sunil Jha.
- "Always-Taut Cable Driven Parallel Manipulator and a Vehicle Simulator Based Thereon", Invented by Sudipto Mukherjee.
- "Process and System for Nano-Finishing a Surface", Invented by Sunil Jha.

- "Bending of Orthopaedic Plates", Invented by S. Jha.
- "Tactile Feedback in Laparoscopes", Invented by S. Mukherjee.
- "Manta Ray Interface for Neonates", Invented by P.V. Madhusudhan rao.
- "Robotic Apparatus/Manipulator with Two Degrees of Freedom (RCM point) for Carrying out Invasive Surgery, Actuated Using Capstan Drivers", Invented by J.P. Khatait.
- "A Combination Lock With A Limited Trial and Resetting Mechanis", Invented by S. Aravindan.
- "An Air Purifier", Invented by Sujeet K. Sinha.
- "A Power Distribution System for Supply of Uninterrupted Power", Invented by S. Mishra.
- "A Process of Preparation of Ordered Cell Metal Foam", Invented by P. M. Pandey.
- "A System and Method for Ultrasonic Assisted Magnetic Abrasive Finishing with Pulsating Current", Invented by P.M. Pandey.
- "A Self-configurable Surgical Armrest", Invented by S. Mukherjee.

Physics

- "Molecularly Modified Schottky Barrier Diode", Invented by R. Singh.
- "Non-Mechanical Tracking Solar Concentrator", Invented by Dalip Singh Mehta.
- "All-optically Pumped Semiconductor Optical Amplified", Invented by M.R. Shenoy.
- "Nanocomposite Photocatalysts", Invented by N. Khare.
- "Recyclable Smart Mesh for on Demand Separation of Oily Water", Invented by J.P. Singh.

Textile Technology

- "Nasal Filter with Nanofibres and a Process Thereof", Invented by A.K. Agarwal.
- "Development of Infection Resistant Nano-Functional Polyurethane Material and A Product Thereof", Invented by Bhuvanesh Gupta.
- "Facile Method for Controlled Pore Filling", Invented by Viresh Dutta.
- "Process and Composition Imparting Multifunctional Properties to Fabrics", Invented by Samrat Mukhopadhyay.
- "Bioactive and Insect Repellent Polyethylene Films and Filaments Based on Neem Oil Encapsulated Halloysite Nanotubes (HNT)", Invented by Mangala Joshi.

New Initiatives

- "A Flame Retardant Composition and Applications Thereof", Invented by W. Ali.
- "A System for Obtaining Multi-Directional View Images", Invented by S.M. Ishtiaque and S.D. Joshi.
- "A System for Acquiring Bidirectional View Images", Invented by S.M. Ishtiaque, and SD Joshi.
- "A Process for Preparing Three Dimensional Porous Scaffold and the Three Dimensional Porous Scaffold Formed Thereof", Invented by R.K. Srivastava.
- "Alveolar Distraction Device", Invented by D. Kalyanasundaram.
- "Flexible and Stretchable Conductors and Method of Fabrication Thereof", Invented by A.K. Agrawal.
- "A Process of Manufacturing of a Thermally Bonded Core Sheath Structured Hybrid Yarn", Invented by R. Alagirusamy.
- "Fire Retardant Nanocomposite Composition", Invented by Mangla Joshi.
- "3D Printed Construct for Correcting Bone Defects and Stem Cell Delivery", Invented by S. Ghosh.
- "Apparatus and Process for Fabricating Natural Fibre Based Flexible Thermally Bonded Yarn for Thermoplastic Composite Reinforcement", Invented by R. Alagirusamy.
- "Hydrogen Fueled Multi-Cylinder Spark Ignition Engine Generator for Electrical Power Generation", Invented by K.A. Subramanian.

Industrial Tribology Machine Dynamics & Maintenance

- "Swirling device for reduction of erosive wear in pneumatic conveying belts", Invented by Vijay Kumar Agarwal.

Polymer Science & Engineering

- "Polypropylene Composites and Method for Preparation Thereof", Invented by A.K. Ghosh.
- "Synergistic Combinations of Natural Antimicrobials Encapsulated in the Porous PLGA Particles and Their Application in Food Preservation", Invented by S. Saha.

Rural Development and Technology

- Satyawati Sharma, Abhishek Sharma, Saurabh Dubey and S.N. Naik. A novel green micro-emulsion for controlling fungal wilt diseases. Indian Patent Application No.: 201711031634.
- A device and a process for conversion of biogas to a fuel gas with enhanced thermal efficiency. Indian Patent No.:284588.
- V.K. Vijay, Rimika Kapoor, P.M.V. Subbarao, "A System for Biomethane and Bio Carbon Dioxide Production from Biogas and a Method Thereof". (Indian) – Patent Application No.: 201811018965, Dated: May 21, 2018.
- V.K. Vijay, P.M.V. Subbarao, R.R. Gaur and S.S. Kapdi, "A Process for Preparing Fuel from Biogas and a Device for the Same". (Indian) Patent No.: 284588, granted on June 27, 2017.
- Patent Proposal for Indian Patent filing, micro-harvesting algae | L&S ref no.: PD015227IN-SC | your ref. FT/93/AM/CRDT/2014/.
- "A two-step Process for Extraction of Essential Oil and Curcumin from Turmeric Rhizomes", Invented by S.N. Naik.

Applied Research in Electronics

- "Molybdenum Trioxide and Nano Silicon Chips For Acetone Detection", Invented by Saakshi Dhanekar.
- "Polypeptide Sequency and Composition Thereof", Invented by G. Goel.
- "Cantilever Sensor Device Based on Suspended Metal Oxide and Silicon Nanostucture and Fabriciation Method Thereof", Invented by S. Dhanekar.

Biomedical Engineering

- "Microfluidic Chip for Neurotransmitter Detection", Invented by Sandeep Kumar Jha.
- "An Algorithm of Controlling Closed Loop Rehabilitation Devices", Invented by Amit Mehndiratta.
- "Exoskeleton Device for Upper Limb Rehabilitaiton", Invented by A. Mehndiratta.
- "Capillary Electrophoresis Microchip for Beer and Wine Quality Testing", Invented by S.K. Jha.
- "A Biocompatible Triblock Copolymer and Methods Thereof", Invented by V. Koul.

Energy Studies

- D.K. Sharma, Heena Dhawan, a process for producing super clean coal, India Patent Application No.: 201711023384. (patent filed).

Kusuma School of Biological Sciences

- "Magnetic Enrichment of Magnetically Marked Analytes", Invented by V. Perumal.
- "Agrobacterium Derived Cell Penetrating Peptides as Nanocarriers", Invented by A. Chugh.
- "Organelle - Targeting Nanocarrier", Invented by A. Chugh.
- "Process for Enhanced Production of Recombinant Human Serum Albumin in E.Coli through Chaperone Assistance", Invented by T.K. Chaudhury.
- "A Medicament for the Treatment of Diseases by Biofilm Forming Microorganisms", Invented by S.E. Hasnain.
- "Agrobacterium Derived Cell Penerating Peptides as Nanocarriers", Invented by A. Chugh.

New Initiatives

DEPARTMENT OF DESIGN

Design has enormous impact on human lives and is a vehicle for social and economic progress of any country. Keeping this in mind, IIT Delhi has started a new Department of Design which came into existence in the year 2017. Major objectives of creating this department are:

- Imparting high quality design education to produce industry-ready and socially conscious design professionals
- Create new leaders in design among both faculty and students.
- To inculcate design thinking among students and faculty across the campus.
- Advancing knowledge through high impact research in the area of design.
- To promote, nurture and advance the culture of design and innovation in the institute leading to significant contributions and breakthroughs impacting quality of human life.
- Playing major role in addressing some of the grand challenges facing our society/country by designing and delivering products/solutions through multi-disciplinary teams.

- Contribute to creation of intellectual property and entrepreneurial ecosystem in the institute and country.
- Contribute to betterment of institute campus ambience using design as a tool.
- To build flagship programmes in the area of design which can be replicated in other institutes/universities in our country.
- To promote increased interactions/collaborations with institutes/organizations worldwide working in this area design education and research.

Proposal for Joint Ph.D. Degree with University of Queensland

IIT Delhi has been in talks with university of Queensland, Australia, to set up a Joint Degree Programme along the lines of the IITB-Bonash research academy. The proposal envisages setting up of a research academy (at both IITD and QU) which will admit Ph.D. students (from India, Australia and elsewhere). IITD/QU faculty will jointly formulate projects and Students will be jointly selected against these projects. Students in this academy will spend 3 years at the parent institution and at least 1 year at the partner.



The Year in Perspective

(April 1, 2017 - March 31, 2018)

Glimpses of various activities during 2017-18

CONVOCATION



Glimpses of various activities during 2017-18



Glimpses of various activities during 2017-18

हिन्दी दिवस समारोह एवं कार्यशालाएँ



Glimpses of various activities during 2017-18

Rendezvous



Glimpses of various activities during 2017-18

Board for Hostel Management



Board for Recreational & Creative Activities



Glimpses of various activities during 2017-18



**RESEARCH
AT
THE CORE!**

Lab activities at IIT Delhi



Glimpses of various activities during 2017-18

Sports Activities



6. Research & Development

(April 1, 2017 - March 31, 2018)

- Academic & Sponsored Research 71
- Research Projects and Consultancy 72
- Foundation for Innovation and Technology Transfer (FIIT) 79

Research Thrust

Atmospheric Sciences, Embedded Systems, Environmental Science & Engineering, Rural Industrialization, Bioinformatics, Nanotechnology, Fibre Optics and Optical Communications, Biotechnology, Bio-catalysis, Smart and Industrial Textiles, Transportation, Photo-thermal energy conversion, Material Science, Photo-acoustic Microscopy, Power Technology, Signal processing, Opto-electronics, Computer Science, Computer Aided Design & Manufacturing, Smart Buildings and Infrastructure, Artificial Intelligence and Robotics

Academic & Sponsored Research

(April 1, 2017 - March 31, 2018)

ACADEMIC RESEARCH

The academic research carried out by the students for the Ph.D. degree, the final semester major project included in the four-year B.Tech. programme, the five-year integrated M.Tech. programmes, and the four-semester M.Tech./M.S.(R)/M.Des. programmes make a significant contribution to the research output.

The principal source of academic research, however, continues to be through Ph.D. research projects. With a total of 2483 students enrolled for a research degree during the year under review, the emphasis on and commitment to academic research is evident. During the two semesters of 2017-2018, 639 candidates were admitted out of which 302 were full-time Institute scholars with the remaining 337 belonging to other categories like sponsored, part-time etc. A total of 306 theses were approved for the award of Ph.D. degree.

IIT Delhi faculty remain engaged in publishing their research results in various journals, Conferences and Seminar proceedings. The number of publication along with citation and h-index for the last 5 years is stated below:

Year	No. of Publications	No. of Citations	h-index
2018	1811*	678*	7*
2017*	1626	440	5
2016	1903	3344	17
2015	1727	2611	15
2014	1740	6112	25

Source*: Scopus as on 06 September 2018.

SPONSORED RESEARCH

Along with teaching and academic research leading to doctoral degree, IIT Delhi gives high priority to research and development projects sponsored by outside national and international agencies and user organizations. The Institute has as one of its cardinal guiding principles continuous, and meaningful interaction with the world of science & technology and industry.

INDUSTRIAL RESEARCH AND DEVELOPMENT UNIT (IRD)

The Industrial Research & Development (IRD) Unit has been specifically set up in the Institute to provide specialized administrative and managerial support for the operation of Sponsored Research Projects, Consultancy Jobs and other related R&D activities. Over the years, the institute has set up many modern laboratories and is continuously supporting infrastructure through these projects.

IRD Unit plays an important role by providing a one-time grant of up to Rupees One Lakh to new faculty member who

joins the Institute. This assistance is being given to the new faculty so that they can initiate new projects, which may subsequently be submitted to various funding agencies.

Faculty Interdisciplinary Research Project (FIRP) scheme aims to enhance Interdisciplinary and collaborative research interest in the Institute. 19 projects were approved for support under Phase-II of FIRP. Selected projects are given an initial grant of ₹10 Lakh. It is expected that the joint research team will submit at least one research project to a funding agency on the completion of the 1st year. Additional funds covering the teaching assistance of a Ph.D. student for 4 years can also be provided, if required and justified based on the progress of the first year.

Equipment Matching Grant for new Faculty: IRD provides matching equipment grant to new faculty for the purchase of equipment sanctioned under a project. Faculty can avail this grant within 2 years of joining with a ceiling of ₹35 Lacs or an amount equivalent to the funds sanctioned by funding agency for the equipment under the project whichever is lower. Equipment Matching Grants to the tune of ₹114.10 Lacs have been given to 4 new faculty members during the financial year 2017-18.

1234 Discover and Learn Projects (1-2-3-4) Scheme: Objective of this scheme is to enhance research aptitude among undergraduate students and increase the component of 'learning by research'. Involvement of students at a very early stage of their stay at the institute and working jointly with senior students will expose the students to the excitement of research. In addition, continuous operation of research project on a particular objective for at least 4 years is expected to result in meaningful research output, which will add to profile of the students. Financial support of ₹1 lakh per year has been provided for each project. 14 projects were approved for financial support in the Phase-II of the scheme.

IRD support for student start up activity in the campus is given under 'Student Start-up Action Scheme'. Students are engaged in start-up actions at different stages and different forms. The objective of this scheme is support this activity by providing a support environment in terms of recognition, initial seed grant and expert advice. 8 Projects were approved for financial support in the Second Phase of this scheme. The selected teams are given a seed grant of ₹2 Lacs per year. 8 projects approved in the first phase are in progress.

Summer Undergraduate Research Award (SURA): under this scheme, the students are required to submit the project proposals in association with identified Faculty of a Department/Centre to act as an Administrative Facilitator and a Guide.

Assistantships/Fellowships are provided by IRD to the Ph.D. students during their 5th year. IRD provides support in the form of Gap Period Assistantship for both M.Tech./M.S.(R) and

Research Projects & Consultancy

(April 1, 2017 - March 31, 2018)

Ph.D. students who are drawing their fellowship/assistantship from the projects. These assistantships will be provided to the students once the projects get over and there is no other project to pay their assistantship. M.Tech./M.S.(R) students can be supported for a maximum gap period of six months and Ph.D. students would be supported for a maximum gap period of one year.

Institute has been organizing Open House to exhibit an extensive collection of innovative research and product development projects since last ten consecutive years. The 13th edition of Open House was held successfully on 22nd April, 2017. Open House targets young school kids in NCR region and the footfall is approx. 5000 visitors in a day.

HIGHLIGHTS (2017-18)

Some important highlights about research are:

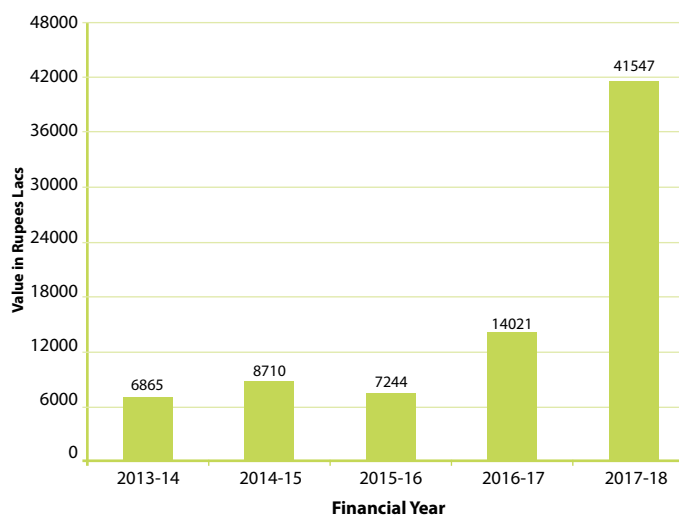
- 282 Sponsored Research Projects with a total funding of ₹415.47 crores were undertaken.
- 282 Consultancy Assignments worth ₹22.18 crores were undertaken by IRD Unit. Besides, 51 Technology Development Projects/Contract Research Projects worth ₹12.08 crores were undertaken/organized by FITT.
- 19 projects are selected for financial support in the first phase of the new scheme Faculty Interdisciplinary Research Projects (FIRP). An initial grant of ₹5 Lacs has been sanctioned for each project.
- 14 new faculty members who joined the Institute during the year received a research grant of ₹1 Lac each from IRD Unit.
- 14 projects are selected for support under the scheme Discover and Learn Projects (1-2-3-4) in the second Phase.
- 8 projects are selected for support under the scheme Student Start-up Action in the second phase. Each of the selected project will be given a seed grant of ₹1 Lakh.
- 27 UG Projects have been selected under the Summer Undergraduate Research Award (SURA) scheme.

The trend in research funding and their number for last five years is shown in Table II and in Fig.1

Table I : Statistics of Sponsored Research Project

Sponsored Research Projects		
Financial Year	Number of Projects	Value (Rupees Lacs)
2013-14	150	6,865
2014-15	164	8,710
2015-16	136	7,244
2016-17	158	14,021
2017-18	282	41,547

Fig. 1 : Trends in Sponsored Research Projects



Research Projects & Consultancy

Table II : Industrial Research and Development Board (2017-18) - As on 31.3.2018

Chairman		Ex-Officio	
Prof. B.R. Mehta		Prof. Suneet Tuli	Prof. Sandeep Sen
		Prof. Sunil Kumar Khare	
Representatives of Department / Centre / School			
<i>Department of Applied Mechanics, Prof. Sawan S. Sinha</i>		<i>Centre for Atmospheric Sciences, Prof. S.K. Mishra</i>	
<i>Department of Biochemical Engineering & Biotechnology, Prof. Saroj Mishra</i>		<i>Centre for Biomedical Engineering, Prof. (Ms.) Veena Koul</i>	
<i>Department of Chemical Engineering, Prof. K.K. Pant</i>		<i>Centre for Energy Studies, Prof. Vamsi Krishna</i>	
<i>Department of Chemistry, Prof. Sidharth Pandey</i>		<i>Centre for Polymer Science & Engineering, Prof. B.K. Satapathy</i>	
<i>Department of Civil Engineering, Prof. J.T. Shahu</i>		<i>Instrument Design Development Centre, Prof. Satish Kumar Dubey</i>	
<i>Department of Computer Science & Engineering, Prof. Prem Kalra</i>		<i>Industrial Tribology Machine Dynamics & Maintenance Engineering Centre, Prof. N. Tandon</i>	
<i>Department of Electrical Engineering, Prof. Subrat Kar</i>		<i>Centre for Rural Development & Technology, Prof. V.K. Vijay</i>	
<i>Department of Humanities & Social Sciences, Prof. Ambuj D. Sagar</i>		<i>Computer Services Centre, Mr. K. Narayanan</i>	
<i>Department Management Studies, Prof. Ravi Shankar</i>		<i>Educational Technology Services Centre, Prof. Kolin Paul</i>	
<i>Department of Mathematics, Prof. Niladri Chatterjee</i>		<i>National Resource Centre for Value Education in Engineering, Dr. Nomesh Bolia</i>	
<i>Department of Mechanical Engineering, Prof. S. Mukherjee</i>		<i>Kusuma School of Biological Sciences, Prof. C.S. Dey</i>	
<i>Department of Physics, Prof. Neeraj Khare</i>		<i>Bharti School of Telecommunication Technology & Management, Prof. Subrat Kar</i>	
<i>Department of Textile Technology, Prof. S.M. Ishtiaque</i>		<i>Amar Nath & Shashi Khosla School of Information Technology, Prof. Sanjiva Prasad</i>	
<i>Centre for Applied Research in Electronics, Prof. Arun Kumar</i>			
Outside Technical Experts From Industry			
<i>Dr. A.K. Saxena, AGM & Head - BHEL, Gurgaon, Haryana</i>		<i>Dr. Rajiv Sharma, Head, Technology Mission Division, Nano Mission, Department of Science & Technology, Technology Bhawan, New Mehrauli Road, New Delhi – 110 016</i>	
<i>Mr. Ujjwal Chaudhary, AGM – Operation, NTPC – EOC, Sector 24, Noida</i>		<i>Dr. Satendra Kumar, M/s SWAJAL, 230, Udyog Vihar, Phase-I, Gurgaon</i>	
<i>Dr. S. S. V. Ramakumar, Director (R&D), Indian Oil Corporation Ltd. (IOCL), Sector 13, Old Faridabad, Faridabad - 121 006, Haryana</i>		<i>Mr. Vineet Prakash, Geomarket Operations Manager, Software Integrated Solutions- Schlumberger, 14th Floor, Tower C, Building No. 10, DLF Cyber City, Phase II, Gurgaon - 122002, India</i>	
<i>Dr. S.D. Sherlekar, Sankhya Sutra Labs Pvt. Ltd., C/o Jawaharlal Nehru Centre for Advanced Scientific Research, Jakkur, Bangalore-560064</i>		<i>Dr. Jai Menon, Group Director, HT Media, 18-20 HT House, K.G. Marg, New Delhi – 110 001</i>	
Managing Director FITT			
Dr. Anil Wali			
Special Invitee			
Joint Registrar (Accounts)		Assistant Registrar (Stores)	Assistant Registrar (IRD Accounts)
Secretary			
Mr. V. K. Vashistha			

Research Projects & Consultancy

Some of the major projects undertaken during the period are listed below:

Table III : Financial Outlay of Some of the Major Projects during 2017-18 (with sanctioned value 100 Lacs and above)

Project Title	Sponsoring Agency	Sanctioned Funds (₹ Lacs)
Methanol Production from Indian Coal: Pilot Plant Demonstration, Catalysis and Scale-up Technologies	Department of Science & Technology, India	3,825.00
Virtual Labs (Phase III)	Ministry of Human Resource & Development, India	1,500.00
Design and Development of Light Weight Bullet Proof Jacket (BPJ) for Protection against High Threat Level of NIJ Level 3+ and NIJ Level IV	DRDO, Ministry of Defence, India	1,325.00
Local Treatment of Urban Sewage Streams for Healthy Reuse (LOTUS) (INDO-DUTCH Joint project)	Department of Biotechnology, Ministry of Sc. & Tech, Holland	1,273.00
Human Body Tissue Characterization under Blast, Impact and Penetration	DRDO, Ministry of Defence, India	1,225.00
A Technology Platform for Application of Advanced Textile Structures for the Development of Structural Composites including Green and Waste Composites	Ministry of Textile, Textile Commissioner of India, India	983.00
Public Engagement on Health and Development in India	Bill & Melinda Gates Foundation, United States	960.00
Fabrication and Integration of Chemical, GAS and Physiological Monitoring Sensors on Textiles Substrates	DRDO, Ministry of Defence, India	903.00
Integrated low cost water sensors for real- time river water monitoring and decision- making	Indo-US Science and Technology Forum (IUSSTF), United States	900.00
Design of Blast Resistant	DRDO, Ministry of Defence, India	882.00
Development of Time Resolved THz Imaging and Spectroscopy System for Studying High Energy Density Materials and Condensed Explosives under Functionalized Condition	DRDO, Ministry of Defence, India	852.00
Development of Multilayered Coated and Laminated Fabric for Aerostat Hull Material	Directorate of Extramural R&I Property Right, DRDO, Ministry of Defence, India	796.00
THz Components and Systems using Synthesized Sources and Phase-coherent Techniques	DRDO, Ministry of Defence, India	792.00
Human Body FE Model Development for Blast and Impact	DRDO, Ministry of Defence, India	767.00
UI-ASSIST: US India Collaborative for Smart Distribution System with Storage	Indo-US Science and Technology Forum (IUSSTF), United States of America	753.00
Design of Anti-Mine Boots (AMBs) using Finite Element Simulations with Human Body Model (HBM)	DRDO, Ministry of Defence, India	745.00
DST's Centre of Excellence in Climate Modeling [under Climate Change Programme - (SPLICE)]	Department of Science & Technology (DST), India	719.00
Millimeter Wave & RF MEMS Components and System for Imaging and Surveillance	DRDO, Ministry of Defence, India	683.00
Characterization of EMRG using Electromagnetic Modeling and Design of Rail Armature and Compulsator	DRDO, Ministry of Defence, India	681.00
Design and Development of Laminated Fabric for High Altitude Airship	DRDO, Ministry of Defence, India	638.00

Research Projects & Consultancy

contd.....

Spintronic based Tunable and Powerful Broadband THz Emitters	DRDO, Ministry of Defence, India	628.00
Design & Development of Extreme Cold Climate Clothing for Defence Personnel	Directorate of Extramural R&I Property Right, DRDO, Ministry of Defence, India	603.00
High Efficiency THz detectors Based on Field Effect Transistors	DRDO, Ministry of Defence, India	568.00
Development of Soft Body Armour using Shear Thickening Fluids	DRDO, Ministry of Defence, India	536.00
Development of Explosive Resistant Structures	DRDO, Ministry of Defence, India	533.00
Development of Textile Based Interconnects and Antennas	DRDO, Ministry of Defence, India	497.00
Extraction of Precious Metals from E-waste using Chelation Technology	Department of Science & Technology (DST), India	428.00
Electronically Tuned Ultra-wide Band Microwave Monolithic Devices using Magnetic Nanostructures	Ministry of Human Resource Development, India	405.00
Computational Modeling of Ballistic Impact of Bullet Proof Panels for Body Armour	DRDO, Ministry of Defence, India	401.00
Smart Integrated Landmine Detection System (SILDS) Based on Explosive Vapor-sensing Nose high Sensitive Magnetic Field sensing and Novel Microwave Radar Imaging	Ministry of Human Resource Development, India	400.00
Mechanical Behaviour of Light Weight Materials Under Different Rates of Dynamics Loading	DRDO, Ministry of Defence, India	369.00
Surface Enhanced Raman Scattering (SERS) Based Point Detection and Stand off Detection of Explosives and Chemical & Biological Warfare Agents	DRDO, Ministry of Defence, India	354.00
Development of roller carding machine for manufacturing of nonwovens	Department of Heavy Industry, India	327.00
Energy Efficient Buildings: Technology with Intelligence	Department of Science & Technology (DST), India	318.00
UK India Clean energy Research Institute (UKICERI)	International Division, Dept. of Science & Technology, United Kingdom	299.00
Nano Springs Layered Energy Dissipating and Energy Dispersing Non-ballistics Materials	DRDO, Ministry of Defence, India	285.00
Community-scale Energy Demand Reduction in India (CEDRI)	Department of Science & Technology, India	275.00
Development of Biocompatible Non-fluorinated Surfactant System for Fluoro-polymer Polymerization	Gujarat Fluorochemicals Ltd., India	275.00
Design and Development of Solar PV Integrated System with Island and Resynchronization Capabilities	Department of Science & Technology (DST), India	234.00
Reduction of NOx from H2 Engines using EGR and After treatment Devices	Ministry of New and Renewable Energy, India	181.00
3-dimensional forward-looking Imaging Sonar for Autonomous Underwater Vehicles	Ministry of Human Resource Development, India	171.00
Improvement of S&T Infrastructure in Centre for Applied Research in Electronics, IIT Delhi (Under FIST scheme of DST)	Department of Science & Technology (DST), India	158.00
CyCLOPES : Proposal for monitoring landslide movement using large arrays of cooperating cyber-physical systems	Department of Science & Technology (DST), India	150.00

Research Projects & Consultancy

contd.....

Development and Demonstration of enhanced performance of the Commercial automotive Vehicle with Alternative Transportation Fuel	Department of Science & Technology, India	143.00
Civil Society Advocacy and Inclusive Development in India	Netherlands Organisation for Scientific Research, Netherlands	134.00
Ultra-high efficiency CMOS compatible Si/Ge Single Nanowire Photodetectors in Infrared and THz Wavelengths for Defence and Security Applications	Ministry of Human Resource Development, India	132.00
Tractable Probabilistic Logic Models: A New Deep Explainable Representation	University of Texas, United States of America	129.00
Identification and Demonstration of Cost effective Technologies to Maximize habitat Energy self-sufficiency	Department of Science & Technology, India	124.00
Development of SERB based Ultra-sensitive, Rapid, Portable and Field Deployable Platform for Detection of Pathogenic Bacteria and Dengue Virus	Ministry of Human Resource Development, India	122.00
State-of-the-Art Facilities under Underwater Signal Processing at CARE, IIT Delhi	Directorate of Naval Training, Ministry of Defence, India	122.00
Development of a Suite of Indigenous Assistive Systems and Tools for the Disabled Community in India (under IMPRINT scheme)	IIT Kharagpur, India	121.00
Flexibility Assessment and Establishment for Strengthening the Grid for Large Scale Renewable Integration (RE)	Renew Power Ventures Pvt. Ltd., India	120.00
Development of Web Enabled Learning/Training Modules for Nano-Materials, Fabrication and Devices	Ministry of Human Resource Development, India	120.00
Development of protocols for the production of value added bio-degradable polymers from methane & CO ₂	GAIL (India) Limited, India	113.00
Scale-up Studies and Process Development for Hydrogen Production by Catalytic Decomposition of Natural Gas	Hindustan Petroleum Corporation Limited, India	102.00
Design and Development of a Charging Station for Electric Vehicles	Renew Power Ventures Pvt. Ltd., India	100.00

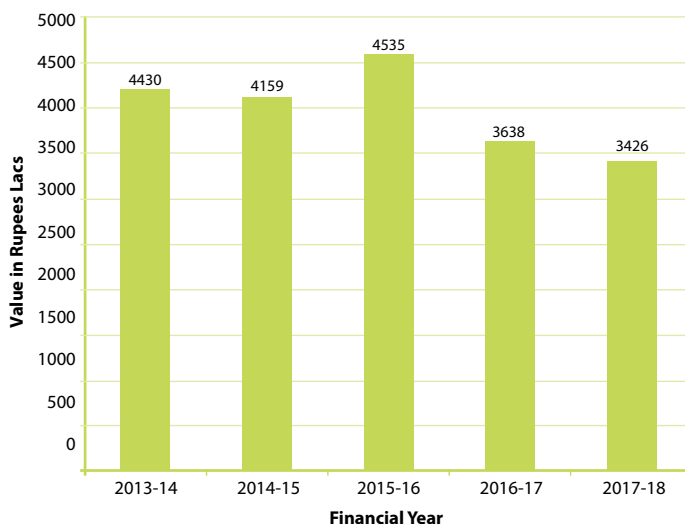
Industrial consultancy is another significant area of activity of the Institute. The nature and extent of the industrial consultancy projects undertaken by the Institute is an index of its credibility with the industry and is symbolic of

the relevance of a centre of excellence in the context of nation's socio-economic development. The consultancy jobs undertaken during last five years is shown in Table II.

Table IV : Statistics of Consultancy Jobs Undertaken

Financial Year	Consultancy Jobs (IRD)		Technology Development Projects / Contract Research (FITT)		HRD Programmes (FITT)		TOTAL
	No.	Value in ₹ Lacs	No.	Value in ₹ Lacs	No.	Value in ₹ Lacs	Value in ₹ Lacs
2013-14	430	2731	72	1411	41	288	4430
2014-15	394	2481	96	1678	-	-	4159
2015-16	365	2929	79	1606	-	-	4535
2016-17	318	2036	52	1602	-	-	3638
2017-18	282	2218	51	1208	-	-	3426

Research Projects & Consultancy



COLLABORATIVE RESEARCH

The Institute is actively involved in collaborative programmes with national and international organizations/universities to remain at the forefront of scientific and technological developments and to share knowledge. A large number of collaborative Research Projects are under operation with Institutes/Organizations of Austria, Australia, Belarus, Brazil, Canada, Denmark, Ethiopia, European Commission, France, Finland, Germany, Holland, Hungary, Ireland, Israel, Italy, Japan, Korea, Kuwait, Netherland, Nepal, Poland, Portugal, Russia, Slovenia, Sweden, Switzerland, Taiwan, UK, USA, etc. Major research activities have also been undertaken in the areas of national importance.

During the year under report, the Institute has undertaken 35 new Collaborative Sponsored Research Projects with International funding.

Table V : International Sponsored Research Projects undertaken during the year 2017-18

Project Title	Sponsoring Agency/ Collaborating Institute(s)	Sanctioned Funds (₹ Lacs)
Public Engagement on Health and Development in India	Bill & Melinda Gates Foundation, United States	960.00
Civil Society Advocacy and Inclusive Development in India	Netherlands Organization for Scientific Research, Netherlands	133.72
Tractable Probabilistic Logic Models: A New Deep Explainable Representation	University of Texas, United States of America	128.54
Local Treatment of Urban Sewage Streams for Healthy Reuse (LOTUS)(INDO-DUTCH Joint project)	Through Department of Biotechnology, India Participating Dutch Institute : TU Delft	1,272.98
UI-ASSIST: US India Collaborative for Smart Distribution System with Storage	Indo-US Science and Technology Forum (IUSSTF) United States of America Participating US Institutes : Massachusetts Institute of Technology, Cambridge, Texas A&M University, Idaho National Laboratory, Lawrence Berkley National Lab, GE Grid Solutions, SnoPUD Burns and McDonnell AVISTA ETAP	753.42
UK India Clean Energy Research Institute (UKICERI) - Project II	Through International Division, Dept. of Science & Technology, Participating UK Institutes : Loughborough University, Imperial College London, University of Mancheste, University of Birmingham, University of Southampton, University of Warwic, kCardiff University, University of Exeter, Swansea University, United Kingdom	298.50
Integrated low cost water sensors for real- time river water monitoring and decision- making	Indo-US Science and Technology Forum (IUSSTF), United States	900.00

Research Projects & Consultancy

CONSULTANCY ASSIGNMENTS WITH INTERNATIONAL ORGANISATIONS

The Institute has been undertaking Consultancy Assignments with International Organizations like: Jaiprakash Associates Ltd., Bhutan; Bulk Testing International, France; Total Marketing Services, France; Japan Automobile Research Institute, Japan; U.S. Air Force Research Laboratory (AFRL), Asian Office of Aerospace R&D, Japan; Nippon Steel & Sumitomo Metal Corp., Japan; LG Electronics Inc, Korea; Panchkanya Plast (P) Ltd., Nepal; Royal Norwegian Embassy, Nepal; G.S. Seismic Control System (P) Ltd., Nepal; Common Fund for Commodities, Netherlands; Energy Research Center of Netherlands; FCG Anzdec Limited, New Zealand; Escom Research and Innovation Department, South Africa; Uppasala University, Sweden; National Property Board, Sweden; International Institute of Non- Aligned Studies, Switzerland; McLellan and Partners Ltd, UK; Emerald Group Publishing Limited, UK; Marvel Chemicals Ltd, UK; Aquatech International Corp., USA; Fushi Copperweld Inc., USA; PPG Industries Inc., USA; United Technologies Corp./ Pratt & Whitney, USA; McAfee Inc., USA; Safe Water Network, USA; Gulf Coast Technical Service, USA; Corning Inc., USA; Biomorphic VLSI Inc., USA; Institute for the Future, USA; Yardi Systems, USA; Dezaview LLC, USA; Owens Corning Sales, LLC, USA; Ahlstrom Nonwovens LLC, USA; Chapter Apps Incorporated, USA; and Universities/Institutions abroad.

During the year under report, the Institute has undertaken 2 new Consultancy Jobs with International funding.

International Consultancy Jobs undertaken during the year 2017-18

1. "Assistance with preparation for technical paper for UNFCCC" (Rs. 5.03 Lakhs), Sponsored by Margaree Consultants Inc., Canada, Consultant Incharge/ Department - Ambuj D. Sagar (Department of Humanities & Social Sciences).
2. "Urban transport digital platforms in New Delhi, India : Aggravators or Facilitators" (Rs. 13.31 Lakhs), Sponsored by Julia Pomares, Argentina, Consultant Incharge/ Department - P. Vigneswara Ilavarasan (Department of Management Studies).

OTHER ACTIVITIES

Besides handling Direct Fellowships sponsored by various funding agencies, sponsored Chairs, PAC/Expert Committee Meetings, new faculty grants, PDF Management, DDF/ CDF Management, IRD has also undertaken the following activities during 2017-2018:

1. National Conference on Bioinformatics and Computational Biology.
2. Conference on Strategies in Volatile and Uncertain Environment for Emerging Markets.
3. 'The Present of The Day' - International HSS Conference.
4. Annual conference on 'Bio-World 2016'.
5. 2nd Indian International National Conference on Air Quality Management (IICAQM 2017).
6. Indo-German Workshop on Optimal Control, Inverse Problems and their Applications.
7. Advanced Instructional School on Ergodic Theory and Dynamical Systems.
8. Functional Textiles & Clothing Conference 2018 (FTC 2018).
9. IEEE CIS Summer School on Computational Intelligence: Tools and Techniques for Smart Grid Solutions.
10. Intel FICE Educational Program in bridging Innovation Gap in five neighboring Schools of IIT Delhi.
11. International Conference on 'Rural Technology Development and Delivery: RuTAG and its Synergy with other Initiatives'.
12. International Symposium on Hydrogen Energy Technologies.
13. Brain Storming Meeting on Bio-Medical Device & Technology Development, Advance Manufacturing Technologies and Technology Programme for Electric Mobility (TPEM).
14. SERB, DST PAC meetings & Expert Committee Meetings.
15. Chair Professorships.
16. INSPIRE Faculty Awards.
17. Sponsored Post-Doctoral Fellowships.
18. Direct Research Associateships.
19. Open House.

Foundation for Innovation and Technology Transfer (FITT)

(April 1, 2017 - March 31, 2018)

The Foundation for Innovation and Technology Transfer (FITT) is a leading technology commercialization organization from academia. Since the last 25 years, FITT has been operating with a mandate, to be an effective interface with the industry and to promote and sustain commercialization of science and technology. Its mission is to formulate innovative ways to create partnerships and linkages with business and community to enable knowledge transfer for societal good and economic development. With the active support of the academic fraternity, team FITT has enabled successful outreach and extensive S&T collaborations by/at IIT Delhi.

The varied roles of FITT can be seen in enabling innovations, business partnerships, technology development, consultancy, collaborative R&D, technology commercialization, development programs, corporate memberships etc. These roles are necessitated by the key agenda of the Foundation to showcase the Institute's "intellectual ware" to industry, and thereby unlock its knowledgebase and inculcate industrial relevance in teaching and research at IIT Delhi.

FITT's gamut of services and activities include:

- Research partnership with industry for technology development and its commercial applications
- Transfer of technology relating to proven R&D outputs
- Intellectual Property Management
- Innovative problem solving consultancy with industry clients
- Information support service to industry and R&D organizations
- Specialist development programmes
- Corporate membership of FITT
- Facilitate funding for the development of innovative ideas of commercial implications

FITT is a DSIR approved Scientific and Industrial Research Organization (SIRO) by virtue of its charter to implement, inter-alia, industrial R&D projects. During FY 2017-18, 51 technology development / transfer projects worth Rs.1207.84 lakh have been contracted at FITT.

FITT manages the Institute's IPs and IPRs. During the last financial year 106 patents were filed and 11 licensing deals were closed. To augment its outreach and technology commercialization efforts, FITT also engages with specialist outside agencies. Besides enabling regular industry academia meetings, FITT organized a number of visits by IIT Delhi faculty to industrial units in order to assess their R&D needs so as to initiate industry-relevant R&D programs at the Institute. FITT has been instrumental in organising several visits by overseas companies and delegations, enabling dialogue between the visiting delegates and academic community of the institute.



A high level delegation of 7 Spanish companies in the area of water technologies visited FITT on October 13, 2017

At the Institute, the Professional Candidate Registration (PCR) program has been adopted towards extending the academic courses at the Institute, amongst the targeted segments of industry, research and academic establishments. Through this unique program, suitably qualified professionals can undertake relevant semester-long course modules here at IIT Delhi, to augment their knowledgebase and skill set. During the academic year 2017-18, 58 candidates participated in this program.

FITT has been strengthening the techno-entrepreneurship activities on the campus. It enabled the establishment and operation of thriving incubators on the campus - Technology Business Incubation Unit (TBIU) and Bio-technology Business Incubation Facility (BBIF). The TBIU is a flagship institute program designed primarily to promote partnership with new technology entrepreneurs and start-up companies, and also serve as a medium of technology transfer. During the last fiscal there were 20 companies resident at the TBIU and 12 in the BBIF. FITT provides co-share equipment facility to bio-tech start-ups. These companies are working in the technology domains of IT, Biotechnology, Engineering design, Cleantech etc. Out of 82 companies admitted so far in the incubator since its inception in the year 2000, 29 companies have started their up-scaling /commercial operation after completing their incubation at the Institute and are reported to be growing at a steady pace.

Start-up Entries (FY 2017-18)

- Kriya Labs Pvt. Ltd.
- Araint Technologies and Research Pvt. Ltd.
- Floly Pvt. Ltd.
- Soulmachine Innovations Pvt. Ltd.
- Dr. Biswajeet Kundu
- Dr. Rupesh Chaturvedi

Foundation for Innovation and Technology Transfer (FIIT)

- Md Imteyaz Ali

Start-up Exits (FY 2017-18)

- Omnia Information Pvt. Ltd.
- Creditas Solutions Pvt. Ltd.
- Cutting Edge Medical Devices Pvt. Ltd.

FITT has been at the forefront in managing several innovation and entrepreneurship programs in the country. As a nodal agency in several Government schemes, FITT administers programs of - The Ministry of Micro, Small and Medium Enterprises (MSME) for promoting and supporting innovation amongst micro and small enterprises leveraging the knowledge resources at IIT Delhi; Department of Electronic and Information Technology (DietY) seed support in the broad area of ICT is also forthcoming under the "Technology Incubation and Development of Entrepreneurs" (TIDE) scheme; Technology Development Board (TDB)'s scheme for the specific purpose of providing early stage financial support to start-up units incubated at IIT Delhi's TBIU and a Partner of BIRAC (DBT) towards implementing their Biotechnology Ignition Grant (BIG) scheme in the country. FITT is in association with Pfizer, for implementation of the Pfizer IIT Delhi Innovation and IP Program, thereby providing support upto Rs. 50 lakhs to healthcare based innovators/ start-ups for incubation and Rs. 3 lakhs for IP protection. Under the NIDHI-Seed Support System (NIDHI-SSS) program of DST, introduced in the year 2017, FITT provides funding to incubatee start-ups upto Rs. 1 crore. So far six incubatees have been supported by seed funding to the tune of Rs. 2.80 cr. The BioNest, program of BIRAC, which is under implementation at FITT, will provide seed grant upto Rs. 30 lakhs to the biotech start-ups.

FITT has promoted the Women Entrepreneurship and Empowerment (WEE) program supported by the Department of Science and Technology (DST) at IIT Delhi. WEE classes were conducted during the weekends at IIT Delhi with the global industry experts mentoring the woman entrepreneurs. During the 2nd phase of this WEE program 10 women were shortlisted for the award.

The Deferred Placement Policy (DPP) offered by IIT Delhi is being implemented by FITT for students who opt out of placement in order to inculcate their start-up idea. A student must opt for deferred placement in the final semester of the pre-final year and is eligible to sit for placement after two years if their start-up is not successful. Selected innovative ideas are eligible for incubation at the TBIU. In the year 2017-18, six applicants have been shortlisted under DPP.

FITT along with SkyQuest Technologies Consulting Pvt. Ltd. conducted a research and prepared a report for Department of Biotechnology, Ministry of Science and Technology, Govt regarding the Status of Technology Transfer Facilities in Public/Private Sector Academic/Research and other Institutions including Industry Associations and SMEs.



Action seminar on IP Management and Technology Transfer organised by FITT at IIT Delhi on August 2, 2017

FITT in partnership with Samsung Research & Development Institute, Delhi had organised 'SMARTATHON 2017' at the IIT Delhi campus. This event was aimed at generating interest in cutting-edge technology domains such as Artificial Intelligence and Swarm Intelligence for Natural Language Processing within the student community. Students from different IITs and other top technical institutes across the country were part of the event on December 1, 2017. The winning team members were awarded with Samsung Galaxy Note 8, Samsung 43" LED Smart TV, and Samsung J7.



Winners of SMARTATHON 2017 were felicitated by Prof M. Balakrishnan, Deputy Director, IIT Delhi, and senior officials from Samsung R&D Institute India - Delhi on December 1, 2017

For promotion of entrepreneurship, FITT and N.S. Raghavan Centre for Entrepreneurial Learning (NSRCEL), IIM Bangalore has instituted a joint mentoring program for start-ups at their respective incubators. Both the parties have agreed that a team of mentors from the alumni community of both the institutes will help in mentoring start-ups in the domains of technology and management.



FITT, IIT Delhi signed MOU with NSRCEL, IIM Bangalore to provide joint mentorship to start-ups on January 19, 2018

Foundation for Innovation and Technology Transfer (FIIT)

FITT has been the implementing partner of The Ministry of Skill Development and Entrepreneurship (MoSDE) for execution of National Entrepreneurship Awards (NEAS), 2017. This award aims to recognise the efforts and achievements of exceptional entrepreneurs and those individuals and organizations who are working in the field of entrepreneurship development.

Power System Operations Corporation Ltd (POSOCO), in association with FITT has been implementing the POSOCO Power System Awards (PPSA) since 2013. PPSA is a part of the CSR initiatives of POSOCO, which aims to reward excellence in the area of power system and its related fields. During the 6th edition of this award, 15 awardees were shortlisted in Doctoral category and 15 candidates in the Master's category.



Awardees of PPSA- 2018 felicitated by Prof. Ashok Gupta, Deputy Director (O), IIT Delhi at Senate Room on March 16, 2018

FITT has corporate members representing small/medium/large scale industrial and R&D units. Corporate members receive preferential treatment in matters of collaboration with the Institute in addition to information and technical services that FITT provides.

GLIMPSES OF OUR ACTIVITIES DURING FY 2017-18



Mentorship session for Bio-tech start-ups organised by FITT at IIT Delhi on June 2, 2017



Devjani Ghosh, President NASSCOM during a mentorship program for start-ups organised by FITT at Bharti School, IIT Delhi on September 6, 2017



Dr. Malathi Lakshmikumar, during her mentorship program on Intellectual Property Rights at IIT Delhi organised by FITT on September 8, 2017



UK India roundtable discussion on innovation campuses, science parks and incubators organised by FITT at the Senate Room, IIT Delhi on November 1, 2017



Workshop on Engineering Healthcare through venture Development & Commercialization Organised by FITT in association with SamCircle on November 6, 2017

Foundation for Innovation and Technology Transfer (FIIT)



49th Governing Council Meeting of FIIT was held at IIT Delhi Technopark, Sonipat on November 24, 2017



IP Awareness lecture by Mr. Amit Shukla, Consultant SIDBI, IIT Kanpur organised by FIIT at the Senate Room, IIT Delhi on November 27, 2017



23rd AGM of FIIT, presided by Prof. V. Ramgopal Rao, Director IIT Delhi was held at the Senate Room, IITD on December 20, 2017



Mr. Ramesh Abhishek, Secretary, DIPP in an interaction with TBIU's start-ups at IIT Delhi on January 8, 2018

VISITS 2017-18



A team of Russian delegates led by Mr. Vsevolod Rozanov, Chairman Sistema- Asia visited IITD on May 22, 2017



Delegation from African Universities visited TBIU, IIT Delhi on September 11, 2017



Parliamentary delegation from Nepal visited TBIU, IIT Delhi on October 3, 2017

7. Events

(April 1, 2017 - March 31, 2018)

- Convocation 84
- Conferences/Seminars/Workshops/Lectures 86
- Interaction with Alumni 93
- Distinguished Visitors 95

Convocation

(April 1, 2017 - March 31, 2018)

DISTINGUISHED ALUMNI AWARD/DISTINGUISHED ALUMNI SERVICE AWARD

IIT Delhi lays great emphasis on a strong and vibrant relationship with its alumni. The Institute is proud of its alumni and their achievements. The success of the alumni is one of the most important yardsticks by which the Institute measure its achievements in academic / professional fields.

The Institute recognizes the outstanding contributions made by the alumni in various areas by conferring the Distinguished Alumni Award each year. This award is the highest honour conferred by the Institute on its alumni to recognize their achievements and outstanding contributions to academics, teaching & research, corporate business development, profession and / or public service. For the year under report, the prestigious award was conferred upon the following at the 48th Convocation of the Institute.



Mr. Sunil Sood

Distinguished Alumni Award

B.Tech., Textile Technology (1982),
Managing Director and CEO of Vodafone India Limited.



Prof. Soumitra Dutta

Distinguished Alumni Award

B.Tech., Electrical Engineering (1985),
Founding Dean of Cornell SC Johnson College of Business at Cornell University, New York.



Dr. Kiran Bedi

Distinguished Alumni Award

Ph.D., Humanities and Social Sciences (1993),
Lt. Governor of Puducherry.



Mr. Saurabh Mittal

Distinguished Alumni Award

B.Tech., Electrical Engineering (1995), Founder and Chairman of Mission Holdings,
his wholly owned strategic holding firm with focus on building strong operating platforms in
technology, financial services and media.

Conferences / Seminars / Workshops / Lectures

(April 1, 2017 - March 31, 2018)

The departments, centres and schools of the Institute organized many conferences, seminars, workshops, lectures and some major of them are highlighted here under:

Departments/Centres/Schools	Title of the Conference / Seminar / Workshop / Lecture
Chemical Engineering	Dr. Alessandro Lavacchi, ICCOM-CNR Italy "Electrochemical Exploitation of Biomass", 3rd April, 2017.
	Dr. Prapanch Nair, Institute for Multiscale Simulation, FAU Erlangen, "Fluid Solid interactions using a meshless numerical method", 5th April, 2017.
	Dr. Hariprasad K., University of Alberta, "A Data Driven Approach For Multimodal Process Monitoring Using Bayesian Analytics", 9th June, 2017.
	Prof David Lewis, University of Adelaide, "Chemical engineers role in Biofuels technology and applications", 11th August 2017.
	Dr. Girish Rao, Shell Technology Center Bangalore, "Innovation from the Refinery to the Road", 18th August 2018.
	Dr. Sandeep Kulkarni, Halliburton Energy Service, "Modeling Real-Time Wellbore Pressures under Transient Fluid and Operational conditions", 7th September 2017.
	Mr. Ananth Govind Rajan, Massachusetts Institute of Technology (MIT), "Understanding Interfacial Phenomena at 2D Material Interfaces using Atomistic Simulations: Chemical Vapor Deposition Growth, Wetting, and Liquid-Phase Exfoliation", 8th September, 2017.
	Mr. Akash Arora, University of Minnesota, "Computational Routes to Discover New Materials in Block Polymers", 8th January, 2018.
	Mr. Sukaran Arora, University of Minnesota, "The critical role of methanol pressure in controlling its transfer dehydrogenation and the corresponding effect on propylene-to ethylene molar ratio during methanol-to-olefins catalysis over H-ZSM-5", 10th January, 2018.
	Prof. Eric Clement, Institute of Fluid Mechanics, University of Toulouse, CNRS, "Numerical modeling of fluid particle interactions", 12th February, 2018.
	Prof. Senthilmurugan, IIT Guwahati, "Development of high recovery reverse osmosis (RO) system for Indian market and technology for removal of micro pollutants from drinking water", 17th January, 2018.
	Dr. Harshwardhan Katkar, University of Chicago, "Modeling and simulations of biopolymers and synthetic polymers", 31st January, 2018.
	Prof. Alois Jungbauer, University of Natural Resources and Life Sciences Vienna, Austria, "Fluid Dynamics Simulation, Molecular Simulation, Nano-computer Tomography, and Small Angle X-Ray Scattering to Understand Process Chromatography on a Nanoscale Level and to Predict Flow Pattern, Capacity and Resolution", 3rd February, 2018.
	Dr. Anil Koul, IMTECH, "Discovery and Development of Bedaquiline- A new drug for drug-resistant tuberculosis- Harnessing value of Innovation", 5th February, 2018.
Dr. Anushree Chatterjee, University of Colorado Boulder, "From Synthetic Biology to Nanobiotechnology: Rational Antimicrobial Engineering Approaches for Combating Multidrug-Resistant Pathogens", 12th March 2018.	
Dr. Till Bachmann, University of Edinburgh, "Rapid Diagnostics to Combat Antimicrobial Resistance", 12th March, 2018.	

Conferences / Seminars / Workshops / Lectures

contd.

	Workshop on Unit Operations organized by Undergraduate Laboratory of Chemical Engineering Department, 5th to 9th June, 2017.
	Prof. D. P. Rao (Former Faculty of the Department), "Estimation of Reaction Rates and Kinetic Parameters from Non-Isothermal Transient Temperature Data of a Batch Reactor", 9th November, 2017.
Chemistry	Prof. Jin-Ook Baeg, Korea Research Institute of Chemical Technology Jang-Dong, Yuseong, Daejeon, South Korea, 17th July, 2017.
	Prof. Jordi Benet-Buchholz, X-ray Diffraction Unit, Institute of Chemical Research of Catalonia (ICIQ), Av. Països Catalans, Tarragona, Spain, 11th August, 2017.
	Rabah Boukherroub, Université de Lille, Avenue Poincaré, France, 10th November, 2017.
	Anna Maria Venezia, ISMN-CNR, Via Ugo La Malfa 153, 90146 Palermo, Italy, 28th November, 2017.
	Dr. Aniko Borbas, Department of Pharmaceutical Chemistry, University of Debrecen, Hungary, 8th December, 2017.
	Dr. Roderick W. Bates, Division of Chemistry and Biological Chemistry, Nanyang Technological University, Singapore, 3rd January, 2018.
	Dr. Masahiro Terada, Department of Chemistry, Tohoku University, Aoba-ku Sendai 980-8578, Japan, 11th January, 2018.
	Dr. Qi-Lin Zhou, College of Chemistry, Nankai University, Tianjin 300071, China, 16th January, 2018.
	Dr. Arie Ben-Naim, Hebrew University, Jerusalem, Israel, 19th January, 2018.
	Dr. Jean-François Soulé, Institut des Sciences Chimiques de Rennes, CNRS-Université de Rennes, Rennes, France, 19th January, 2018.
	Dr. Michael Gozin, School of Chemistry, Faculty of Exact Sciences, Tel Aviv University, Tel Aviv, Israel, 12nd February, 2018.
	Dr. Prashant Nagpal, University of Colorado Boulder, Boulder, CO 80303, USA, 14th March, 2018.
	Dr. Nikolai Gaponik, Physical Chemistry, TU Dresden, 01062 Dresden, Germany, 15th March, 2018.
	Dr. R. Poli, Laboratoire de Chimie de Coordination, 205 Route de Narbonne, 31077 Toulouse, France, 23rd March, 2018.
	Dr. Matthias Epple, University of Duisburg-Essen, Germany, 26th March, 2018.
	Dr. Indrapal Singh Aiden, Department of Chemistry, Indian Institute of Technology Madras, India, 28th March, 2018.
Civil Engineering	"Application of Virtual Reality to analyze pedestrian behavior on mid-block crosswalk" by Prof. Anurag Pande, California Polytechnic State University, US on 6th February, 2018.
	"Carbon adsorbents for environment and energy: opportunities and challenges" by Prof. Pascaline Pre, IMT Atlantique, Nantes, France on 19th February, 2018.
	3-Day Short Course on Geotechnical Modeling Using GeoStudio, December 18 to 20, 2017, IIT Delhi, New Delhi. Coordinators: G.V. Ramana and R. Ayothiraman.
	"Ishan Vikas Programme 2017": Programme under MHRD from June to August, 2017. Coordinator: Sumedha Chakma.

Conferences / Seminars / Workshops / Lectures

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	Stakeholder workshop on Limestone Calcined Clay Cement on 3rd February, 2018, IIT Bombay. Coordinator: Shashank Bishnoi.
	Stakeholder workshop on Limestone Calcined Clay Cement on 6th February 2018, India Habitat Centre, New Delhi. Coordinator: Shashank Bishnoi.
	Geoenvironment 2017 - Workshop on Landfills and Waste to Resources, 19th April, 2017, Organized by Profs. Manoj Datta, G.V. Ramana and A.K. Nema.
	Seminar talk by Prof. Harrie-Jan Hendricks Franssen from Forschungszentrum Juelich, Germany on "Data assimilation for fully coupled subsurface-land surface-atmosphere models" 20th September 2017.
	Seminar talk by Prof. Balaji Rajagopalan, University of Colorado, Boulder, on "The Once and Future Variability of Colorado River Flows - Lessons for Water Resources Management" 14th November 2017.
	Seminar talk by Prof. Rao S. Govindaraju, Purdue University, on "Some Do's and Don'ts of Technical Writing" 27th November 2017.
	"Robust non-parametric approaches for stochastic data generation" Held on 12th April, 2017 by Prof John Ndiritu. Associate Professor in Civil Engineering at University of Witwatersrand (Wits), Johannesburg, S. Africa.
Computer Science and Engineering	IITD-IBM joint workshop on AI and Machine Learning, 27 March, 2018, had eight speakers.
	IITD Workshop in AI and ML, 5 January, 2018, had seven Speakers.
	Kurt Mehlhorn taught a GIAN course on "Certifying Algorithms".
	GIAN course on "Robot Motion Planning and Applications", 3-8 January.
Electrical Engineering	Lecture on "High Speed, High Efficiency, Variable Frequency Motors and Generators" on 15.03.2018 by Dr. Brij Bhargava.
	Lecture on "Electrical Drives: Application to Solar pumping and Some Practical Issue" on 15.02.2018 by Dr. Chinmay Jain.
	Lecture on "Hybrid Renewable Energy Standalone Systems" on 03.11.2017 by Prof. Ambrish Chandra.
	Lecture on "Design, Selection and Applications of AC Motors" on 28.03.2018 by Dr. Sabyasachi Roy
	IEEE ICCCNT 2017 Conference, July 3-5, 2017, IIT Delhi, Prof. S.D. Joshi
Management Studies	2017. Co-Chair. The 16th IFIP Conference on e - Business, e - Services and e – Society: Smart Nations. 22-23 Nov. IIT Delhi.
	International Conference on "Strategies in Volatile and Uncertain Environment for Emerging Markets" held on 14th & 15th July, 2017 at Lecture Hall Complex, Room 308, 310, and 316, Indian Institute of Technology Delhi.
	21st Annual Conference of Indian Political Economy Association (IPEA), December 8-9, 2017, Prof. Seema Sharma.
	Round Table on "The IoT Ecosystem (Models, Manpower & Adoption), Prof Shuchi Sinha.
	GCCS 2017, Doctoral Colloquium, November 25, 2017.
	New Age Data, 9th September 2017.
	Parivartan'18, 16-18 Feb 2018.

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	Building India Inc. 2018, 14 Feb 2018.
	Thought Leadership Series and Pre-Budget Session '18, 20 Jan 2018.
	CONFLUENCE'17, 5 Nov 2017.
	The Open Group' organized Enterprise Architecture Executive Seminar on "Future-Ready Enterprises: The Growing Role of Architecture". 9 Nov 2017.
	Annual Alumni Day on 3rd November 2017.
	Enterprise Architecture Executive Seminar at IIT Delhi, November 9, 2017.
	SAKSHAM'17 the Annual CSR Conclave on October 14, 2017.
	MANTRA'17 the Annual Media Conclave on October 14, 2017.
	Horizon'17, the Annual HR Conclave on October 8, 2017.
	Social Impact Summit, on 2nd October 2017.
	Open Forum India, jointly organized by World Economic Forum and Department of Management Studies, IIT Delhi on 4th of October 2017.
	OPERA'17, the annual Operations Conclave on September 23, 2017.
	Research for Development in a shifting Global Context, NIVAH Social Sector Initiatives, DMS, IIT Delhi, September 22, 2017.
	STRATEGIA'17, the annual Analytics and Consulting Conclave, 5th August 2017.
	Building India Inc. 2017, 15 to 16 April 2017.
	International Workshop on Decision Sciences, November 1, 2017, Prof. Ravi Shankar.
	Workshop on Qualitative Research Methodology, on 8th November 2017, Prof. Shuchi Sinha.
	Knowledge sharing session organized by Research Scholar on 24th November 2017.
	Knowledge sharing session on "Writing High Impact Journal Article" on 17th to 19th January 2018.
	Knowledge sharing session organized by Research Scholar on 12th January 2018.
	Knowledge sharing session on "New Frontiers in Business value of IT Research" on 15th January 2018.
	Knowledge sharing session organized by Prof. Vigneswara Illavarasan on 16th March 2018.
Mathematics	Workshop organised by Dr. Mani Mehra on "Optimal Control Inverse Problems and Their Applications" during 7 to 9 February 2018.
	GIAN CourseWorkshop on "Computational Solution of Hyperbolic PDEs for Scientists, Engineers, and Mathematicians" organised by Dr. Harish Kumar during the period 4 to 16 December, 2017.
	Winter School organised by Dr. Ritumoni sharma during the period 4 to 30 December, 2017.
	Workshop on "Advanced Instructional School (AIS) on Ergodic Theory and Dynamical Systsms organised by Dr. Anima Nagar during 4 to 12 December, 2017.
	Dr. Sasmita Barik (School of Basic Science, IIT Bhubaneswar) "On the Spectra of Multidigraphs", 19th March 2018.

Conferences / Seminars / Workshops / Lectures

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Prof. Andreas Brandstadt (University of Rostock, Germany) "On Dually Chordal Graphs, Strongly Chordal Graphs and Leaf Powers", 22nd February, 2018.
Prof. Taufiqar R. Khan (Department of Mathematical Sciences. Director of Global Engagement Initiatives, College of Science, Clemson University O-201 Martin Hall, 220 Parkway) "Electrical Impedance Using Sparsity Constraints and Statistical Regularization", 6th February, 2018.
Anisa Chorwadwala (IISER Pune) "An Eigenvalue Optimization Problem over a Family of Planar Punctured Disks Where the Puncture has a Dihedral Symmetry", 30th January, 2018.
Prof. Chris Rodger (Don Logan Endowed Chair in Mathematics, Auburn University, USA) "Fair Colorings of Graph Decompositions", 12th January, 2018.
Prof. Paola Tardelli (Department of Industrial and Information Engineering and Economics, University of L'Aquila Monteluco di Roio, Italy) "Hedging of a Defaultable Claim Driven by Hawkes Processes", 12th January, 2018.
Prof. Biswa Nath Datta (IEEE Fellow, Distinguished Research Professor, Northern Illinois University DeKalb, Illinois 60115 USA) "Title: Computational and Optimization Methods for Quadratic Inverse Eigen
Value Problems Arising in Mechanical Variation and Structural Dynamics: Linking Mathematics to Industry", 4th January, 2018.
Prof. Anant Shastri "Proof the Fundamental Theorem of Algebra via Linear Algebra", 5th December, 2017.
David Levin (School of Mathematical Sciences, Tel Aviv University, Israel) "Attractors of Sequences of Function Systems and Their Relation to Non-Stationary Subdivision", 1st December, 2017.
Dr. Samir Shukla (Visiting Scientist ISI Bangalore) "Neighborhood Complexes of Some Exponential Graphs", 22nd November, 2017.
Prof. S. Arumugam (Kalasa Lingam University, Tamilnadu) "Biological Networks", 11th October, 2017.
Dr. Satya Prakash (University of Haifa, Israel, Post-Doctoral Fellow) "Some Issues in the Design of Experiments with Ordered Experimental Treatments", 10th October, 2017.
Prof. Christian Klingenberg (University of Wurzburg, Germany) "Multi-species Kinetic and Fluid Models and Applications", 3rd October, 2017.
William Mcghee (Global Head of Quantitative Analytics, Royal Bank of Scotland) "Investment Banking & Quants", 20th September, 2017.
K. Takao (Wuhan University in China) "Bernoulli-Carlitz and Cauchy-Carlitz Numbers Related to Hypergeometric Functions", 18th August, 2017.
Dr. Punit Sharma (Department of Mathematics and Operational Research, University of Mons, Belgium) "Eigenvalue Backward Errors of Structured Polynomial Eigenvalue Problems", 17th August, 2017.
Prof. K. Parthasarathy (Ramanujan Inst. Adv study in Math) "Groups and Analysis", 20th April, 2017.
Dr. Divyum Sharma "Thue equations with few coefficients", 28th April, 2017.
Prof. Rajendra Bhatia (ISI Delhi & Ashoka University, Haryana) "Diagonals of Matrices", 15th January, 2018.

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	Prof. Ajay Kumar (Department of Mathematics, University of Delhi) "Uncertainty Principles on Locally Compact Groups", 24 January, 2018.
	Prof. Apala Majumdar (Reader in Applied Mathematics, University of Bath, United Kingdom) "Multistability for Liquid Crystal Systems", 31st January, 2018.
	Prof. Ved Prakash Gupta (Jawaharlal Nehru University, New Delhi) "Ideals and Lie Ideals of Certain Normed Algebras", 15th February, 2018.
	Prof. Krishnan Rajkumar (Jawaharlal Nehru University, New Delhi) "Generalized Factorials in Several Variables", 15th March, 2018.
Mechanical Engineering	RTDD 2018: All RuTAG Conference by S.K. Saha, 9 to 11 March, 2018.
	Learn & TQM workshop was conducted on Industry Day of 2017.
Physics	Nano India 2017 Conference.
	East Asia Symposium on Superconductor Electronics (EASSE2017), December, 2017.
	XIX International Workshop on Physics of Semiconductor Devices (IWPSD-2017), December 2017.
	Gian Course: Phase Ordering and Ageing in Pure and Disordered Systems. Marco Zannetti, University of Salerno, Italy. November 2017.
	UKIERI Workshop: Pattern Dynamics in Complex Systems. January 2018.
	International Conference on Sculptured Thin Films (GLAD-2018) 30-31 March 2018. a) Ayodhya Nath Tiwari, Laboratory for Thin Films and Photovoltaics, Empa – Swiss Federal Laboratories for Materials Science and Technology, Switzerland. b) Ivaturi Aruna, University of Strathclyde Glasgow, UK.
Textile Technology	"International Conference on Advances in Polymer Science & Technology" by: Prof. Bhuvanesh Gupta (Conference Chair) and Dr. Dipayan Das (Conference Secretary) on November 23 to 25, 2017.
Applied Research in Electronics	CST Simulator Workshop, 18-19 August 2017.
	ADS Simulator Workshop, 28th July, 2017.
	Prof. Srinivas Tadigadapa, Penn. State University, USA.
	Dr. Gaurav Bahl, University of Illinois at Urbana-Champaign.
	Dr. Tuhin Maity, Tyndall National Institute, Cork, Ireland.
	Dr. Harald Gossner, Intel Corporation Munich, Germany.
	"Wireless Power Transfer" Naoki Shinohara, 15th December, 2017.
	"Electromagnetic Legos", Omar Ramahi, 22nd November, 2017.
	Overview of Wireless Research at University of Westminster, UK" Djuradj Budimir.
Atmospheric Sciences	6th SERB Group monitoring workshop-cum-7th meeting of expert committee for young Scientist: Earth & Atmospheric Sciences from 14 to 16 October, 2017.
	Seminar by Professor V. Ramaswamy, Director, NOAA Geophysical Fluid Dynamics Laboratory (GFDL) and Professor, Atmospheric and Oceanic Sciences (AOS), Princeton University, Princeton, New Jersey, USA on "Aerosol-Climate Interactions: Progress and Future Directions" on 11th April, 2017.
	Seminar by Dr. Rajeev Kumar Mehajan, Sci-G & Head, (SERB), on "Research Opportunities in SERB", DST, Govt. of India on 1st December, 2017.
	Prof. Prakash Keshwan, Univ. of Connecticut, USA, on "Inequality environment and the future of global climate government" on 11th December, 2017.

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	<p>Prof. Jagdish Shukla, Univ. Prof. George Mason University, Virginia, USA, on the topic "Introduction to Weather and Climate: Learning by Socratic Questioning" on 19th February, 2018.</p>
	<p>Institute lecture by Prof. Jagdish Shukla, Univ. Professor of George Mason University, Virginia, USA, Title "Science and Politics of Climate Change: Sustainability in an unequal world" on 28th February, 2018.</p>
Biomedical Engineering	<p>Professor K. Chen (Department of Mathematical Sciences, University of Liverpool, Peach St., Liverpool L69 7ZL, UK) "Mathematical Modeling and Advanced Image Processing in Healthcare".</p> <p>Prof. Shyni Varghese (Duke University, USA) "Physicochemical Properties of Extracellular Matrix: Key to Function, Clue to Mechanism".</p>
Energy Studies	<p>Joint workshop and an exhibition at IIT Delhi on "Global Energy Transition (In special context to Germany and India)", from February 23 to 26, 2018.</p> <p>International Symposium on "Hydrogen Energy Technologies" on March 14-15, 2018 at IIT Delhi jointly organised by IIT Delhi and TU Delft, Netherlands.</p> <p>Seminar on: "Pathways to Global Renewable Energy Adoption" by Dr Deborah Sunter, postdoctoral researcher at UC Berkeley, USA, 13th October, 2017.</p> <p>Dr. Harjit Singh, Senior Lecturer, Built Environment Engineering and Energy, Brunel University London, UK delivered an expert lecture, "Reducing the Carbon Impact of Buildings through Technological Intervention", 22nd May, 2017.</p> <p>Dr. S.P. Viswanathan President, Empereal-KGDS Renewable Energy Pvt. Ltd., Saravanampatti Coimbatore delivered a talk on "Applications of Solar Thermal Energy for Large-Scale Desalination", 10th October, 2017.</p> <p>Dr. Aman Jha, from STMicroelectronics delivered an invited talk on "LED Drivers for Home and Street Lighting Systems", 6th December, 2017.</p>
Amar Nath and Shashi Khosla School of Information Technology	<p>Workshop on "Use of Digital Content for Braille & Tactile Graphics Production in Braille Presses of India, 8 to 10 June, 2017.</p> <p>Avlokan - Awareness Workshop on Assistive Technologies, Open House 2017.</p> <p>Workshop on "Design and Production of Perceivable and Affordable Tactile Diagrams", 11 to 13 May, 2017.</p> <p>Ph.D Seminar Series were organized by Research Scholars: Happy Mittal, Anup Bhattacharya, Yashoteja Prabhu, Neha Sengupta, 2017.</p> <p>Dr. Anjali Chauhan (Post-Doctoral Fellow, SIT), July 2017.</p> <p>Prof. Viktor K. Prasanna (Univ. of Southern California), August 2017.</p> <p>Dr. Manik Varma (Adjunct Faculty, SIT), August 2017.</p> <p>Dr. Kapil Dev (Senior Engg., Nvidia, Santa Clara).</p> <p>Dr. Elizabeth Bennet from iDinsight on "The state of Aadhaar report" & Dr. Usha Ramanathan, Legal researcher and activist on "Impact of Aadhaar on Identity, Privacy and Civil Liberty" for the course titled, "Special Module on eGovernance: SIV851" in October 2017.</p> <p>Prof. Jorge A. Perez, University of Groningen, The Netherlands in October 2017.</p> <p>Prof. David Kotz, Dartmouth College in November 2017.</p> <p>Prof. Torsten Braun, University of Bern, Switzerland in December 2017.</p> <p>Dr. Rajeev Shorey's talk organised by Ph.D. Scholars on "Career Options after a Ph.D. in March 2018.</p>

Interaction with Alumni

(April 1, 2017 - March 31, 2018)

INTERACTION WITH ALUMNI

- **Golden Jubilee Reunion:** 1967 pass out batch of IIT Delhi celebrated its Golden Jubilee Reunion on December 16th 2017. Over 80 Alumni had participated in the event.
- **Alumni Day:** IIT Delhi celebrated its Alumni Day on December 17th 2017. The Chief Guest of the event was Mr. Jayant Sinha, MoS, Ministry of Civil Aviation and also an Alumnus of the Institute.
- **The Silver Jubilee Reunion:** 1993 batch of IIT Delhi celebrated its Silver Jubilee Reunion on December 22nd and 23rd, 2017.
- **1967 Entry Batch:** 1967 Entry batch level visited the Institute on December 8th 2017 and celebrated their get-together.
- **Batch of 1997:** Batch of 1997 celebrated their 20th year on December 24th 2017 and about 50 alumni participated in the event.
- **Batch of 1991:** Batch of 1991 celebrated their get-together on December 25th 2017 at Karakoram Hostel, IIT Delhi.
- **1967 Batch Chemical Engineering** Celebrated their 50 Years Reunion held on February 24th 2018 at IIT Delhi.
- **Pearl Reunion** of 1980 and 1981 Batches was held on March 5th 2017. The Reunion was attended by about 60 Alumni and their spouse. During the day long programme, the Alumni interacted with the Director, other senior management and Student representatives of the Institute. A guided Campus tour for the Alumni was conducted and the Director hosted the lunch and dinner for the attending Alumni. Postal Stamps, carrying individual Alumni Photographs, were presented to the Alumni by the Director.

IITDAA EVENTS & INTERACTION WITH ALUMNI

- **IITDAA Hyderabad Chapter:** The Hyderabad Chapter organized a get-together on April 8th 2017 where Prof. V. Ramgopal Rao, Director, IIT Delhi, Prof. Sanjeev Sanghi, Dean AA&IP and Dr. Deepak Dogra, President, IITDAA, were present and interacted with Alumni.
- **Building India Inc (BII`17):** Department of Management Studies, IIT Delhi and IIT Delhi Alumni Association jointly organized Building India Inc. 2017, their annual flagship business summit on April 15th and 16th. The event, lasting two days, was graced by eminent personalities from business, academia and government offices. BSNL was the proud platinum sponsor of the event.

Building India Inc. is a podium to highlight the contribution of corporate India in the Indian economy & towards making India a developed nation. BII is known for raising topics of contemporary relevance to the country.

- **AGM`17 & Annual Get-together:** The Annual Bash & Annual General Body Meeting held on 29th April 2017 at IIT Delhi. This occasion brings an opportunity for all alums to assemble, interact and enjoy with each other and with the institute.
- **Open House 2017:** This is an annual event of IIT Delhi as well as IITD Alumni Association, in which students from across Delhi as well as from outside Delhi participates and learn the culture as well as the research environment at IIT Delhi. All Laboratories/research labs in IIT Delhi is open at that day for visitors and demos were there to understand the science behind the research work.
- **Participation of IITDAA for UG & PG students Farewell – 13th May`2017 & 15th May 2017:** The President, Office Bearers and EC members participated on 13th & 15th May 2017 for the UG as well as PG farewell functions respectively wherein initiatives by the alumni for the students were highlighted.
- **IITDAA has conferred the IIT Delhi Alumni Award for Outstanding Contribution to National Development 2017:** The awards was in the form of citation and mementos were presented to the awardees by Prof. V. Ramgopal Rao, Chairman, IITDAA and Director, IIT Delhi.
 1. Mr. Raghu Hari Dalmia, 1972, B.Tech., Mechanical Engineering
 2. Ms. Shubha Maudgal, 1979, M.S. in Chemistry
 3. Mr. Ashok kumar, 1986, B.Tech, Mechanical Engg.
 4. Mr. Somnath Bharti, 1997, M.Sc in Mathematics
 5. Mr. Shashank Kumar, 2008, B.Tech. in Textile Technology.
- **GST Workshop:** `GST Workshop` held on 9th July 2017 from 4 pm to 6 pm at Seminar Hall, IIT Delhi. Sh. Kamal Jit Chaudhry (IRS), 1980, B.Tech., ME, Sh. Prabhat Kumar, 1980, B.Tech, CE, and Sh. G.D. Lohani, Commissioner, CBEC looking after GST implementation and Sh. R.Viswanathan, Advisor were facilitators to conduct the workshop on the GST. The Seminar Hall jam packed and it was a grand success event.
- The Play on `GHALIB (Musical)` the main Stars Tom Alter as Mirza Ghalib -- the look a likes., held on 30th July 2017 at Dogra Hall, IIT Delhi. The Dogra Hall jam packed and it was a grand success event.

Interaction with Alumni

- **The Speranza 2017** held on 15-17 September 2017 organized by the Board for Student Welfare (BSW), IITD. Through the event, 'Guftagoo : A talk with Alumni' organized on 16-17 September wherein students to had a detailed discussion with IIT Delhi alumni.
- **Comedy Night:** IITDAA organized a comedy night on 17th September 2017 at Dogra Hall, IIT Delhi.
- The workshop on entitled "Strategy to crack IIT-JEE" held on 5th August at Jhajja, Haryana, and on 16th September 2017 at GMSSS, Sushant Lok, Sector-43, Gurugram and the 25th November 2017 at KLP College Rewari Auditorium. The list of books were provided to every student present in the workshop.
- **A Traditional Dandiya Night- 14th October 2017:** This cultural event was organized in collaboration with Dakshin Gujarati Mandal on 14th October 2017. The Alumni with their families enjoyed the 'Garba' and also got a chance to perform Dandiya.
- IIT Delhi Alumni Association partner with activities of Rendezvous 2017 held on 13th - 16th October 2017 at IIT Delhi. There had been a continuous demand from many alumni to be part of the Rendezvous for the sake of old memories. It made make Alumni and students both these segments to stand as one on the platform of IIT Delhi. IITDAA extended invitation to alumni on the first-cum-first basis for all the 4 pro-nights held at OAT, IITD.
- IIT Delhi's Inter Hostel Alumni Sports Meet 2017 held on 28th October 2017.
- **Felicitation of IITD Distinguished Alumni Awardees 2017:** The IIT Delhi Alumni Association felicitated on 4th November 2017 the following alumni who have attained high distinction in their respective fields, and had received the IIT Delhi Distinguished Alumni Award for the year 2017.
 1. Mr. Sunil Sood, (B.Tech., Textile, 1982) MD & CEO, Vodafone India Limited, Mumbai.
 2. Prof. Soumitra Dutta, (B.Tech., Electrical, 1985) Dean, Cornell SC Johnson College of Business, Cornell University, USA.
 3. Dr. Kiran Bedi (Ph.D., Humanities & Social Science, 1993), Lieutenant Governor of Puducherry.
 4. Mr. Saurabh Mittal, (B.Tech, Electrical, 1995), Founder & Chairman, Mission Holdings, Singapore.
- **The Leadership Conclave 2017:** this flagship annual event, where high achievers from IIT Delhi congregate to share ideas, and brainstorm to find solutions for thematic issues held on 11th November 2017 (Saturday), at Welcom Hotel Sheraton, Saket, New Delhi. The theme for the IITD Leadership Conclave 2017 was "Creating the Ecosystem for the 4th Industrial Revolution" wherein more than 200 alumni participated from the Civil Services, Industrialists, Corporate CXOs and Senior Faculty from IIT Delhi.
- **IITD Reunion Run 2018-First Edition:** It held on January 14th 2018 'IIT Delhi Reunion Run' organized by IITDAA on the theme 'Promise to the environment' on 14th January 2018 at IIT Delhi Sports Complex. The run was supported by Fitso, a fitness company co-founded by Saurabh Aggarwal, an IIT Delhi alumnus himself. The event was marked by the presence of Chief Guest Mrs. Meenakshi Lekhi, MP (Lok Sabha) and Guest of Honour Mr. Sandeep Sejwal (Bronze Medallist, Asian Games, 2014) along with Prof. V. Ramgopal Rao, Director, IIT Delhi and Mr. Prabhat Kumar, President, IITDAA who flagged of the run which was followed by a healthy breakfast and various fun activities. The event attended by alumni from 1966 to 2017 batches wherein many eminent alumni also participated e.g. Prof. Sharad Malik, Princeton University, USA, Hitesh Oberoi, MD, Naukari.com and many more.
- **The Fintech Summit 2018:** The event held on January 19th 2018 at 3rd Floor, ISME ACE, South Annex, Tower-2, One Indiabulls, Elphinstone Road, Mumbai, Maharashtra-400013. It was knowledge event of IIT Delhi Alumni Association. This was first of its kind event being held under the umbrella of IITDAA at the financial capital of India i.e. Mumbai. It created synergies among the IIT Delhi alumni and contributed in Fintech domain.
- IITD Alumni Association Society Outreach Sub-Committee Organized the Counselling Session for IIT-JEE exam at Maharaja Agarsen Public School, Khurja, Bulandshar, UP on 17th February 2018.
- IITDAA Mumbai Chapter organised a get-together on February 23rd 2018 at Radio Club, Colaba, Mumbai.
- eDC IIT Delhi organized Rendezvous with Alumni event on 25th of February during BECon IIT Delhi in association with IITDAA. IITDAA was the title sponsor for the Rendezvous with Alumni event – "BECon presents Rendezvous with Alumni in association with IIT Delhi Alumni Association". The theme for the 2018 edition was ' India 2030: Role of upcoming entrepreneurship in shaping India's future'.

Distinguished Visitors

(April 1, 2017 - March 31, 2018)

Major visits by the State Dignitaries

- His Majesty King Abdullah II ibn Al-Hussein of Jordan visited the Institute on 28.02.2018.
- H.E. Dr. Atef Naddaf, Minister of Higher Education of the Syrian Arab Republic visited the Institute on April 3rd 2018.

Many delegations from the Industry, Academia and the Government from several countries visited the Institute to explore the possibilities of mutual interaction. Some of these are highlighted below:

- A delegation from Malaysia visited the Institute on April 3rd 2017.
- A 4 member delegation from Kyungsoong University, South Korea visited the Institute on April 10th 2017.
- A 2 member delegation from University of Miami visited the Institute on April 20th 2017.
- A 2 member delegation from Hiroshima University, Japan visited the Institute on April 24th 2017 to explore some change to meet and talk in face-to-face with some of key persons at IIT Delhi.
- A delegation from University of Alberta visited the Institute on April 25th 2017 to meet and talk the potential for collaboration between IITD and University of Alberta.
- A delegation from Institut Teknologi Bandung, Indonesia visited the Institute on April 26th 2017.
- A delegation from French visited the Institute on April 27th 2017.
- A delegation from Director of International Office, Newcastle University visited the Institute on May 3rd 2017.
- A 6 member delegation from Industrial Technology Research Institute (ITRI), Taiwan visited the Institute on May 9th 2017.
- A delegation from University of Washington visited the Institute on May 11th 2017.
- Mr. Saurabh Mittal, our Alumnus visited the Institute on May 12th 2017 and decided to contribute a sum of Rs. 10 crore towards the new sports complex (to be built in the sports field near the existing stadium).
- A delegation from Russia visited the Institute on May 22nd 2017.
- A 2 member delegation from Politecnico Di Torino, Italy visited the Institute on May 24th 2017.
- A 4 member delegation led by Mr. Lucky Hezekia Masuku, Director: Ministry of Higher Education and Training from South Africa visited the Institute on May 30th 2017.
- A 4 member delegation from Consulate General of Spain visited the Institute on June 9th 2017 to explore opportunities for joint projects.
- A delegation from Washington University in St. Louis visited the Institute on June 12th 2017 to organizing a workshop.
- A 15 member delegation led by Dr. Anuradha Madhukar from Ethiopia visited the Institute on June 15th 2017 to meet and talk the potential for collaboration between IITD and Ethiopia.
- A 6 member delegation from the Military Institute of Science & Technology (MIST), Bangladesh visited the Institute on June 23rd 2017 to meet and talk for the possibilities of collaboration.
- A 2 member delegation from French Embassy visited the Institute on July 3rd 2017.
- A 5 member delegation led by Mr. Vinay Joshi, Recruiter, South Asia Cultural Support Officer-LCC from Mohawk College, Hamilton visited the Institute on July 10th 2017.
- A 2 member delegation from University of Malbourne visited the Institute on July 20th 2017.
- A 1 member delegation (Ms. Rihab Mohd Osman Khalifa) from Emirates Institute for Learning Outcomes Assessment, United Arab Emirates University, UAE visited the Institute on August 24th 2017.
- Dr. Sarah Springman, Rector, ETH Zurich visited the Institute on August 31st 2017.
- 67 entry Mechanical Engineering Batch visited the Institute on September 8th 2017.
- A 37 member delegation from different countries visited the Institute on September 15th 2017 for International Parliamentarians Conference (IAPPD).
- A 3 member delegation from the International University of Grand-Bassam, Cote d'Ivoire visited the Institute on September 25th 2017.
- A 2 member delegation from UNAM Mexico visited the Institute on September 25th 2017 to interact the possible future collaboration between IIT Delhi and Mexico.
- A 2 member delegation from University College London (UCL) visited the Institute on September 26th 2017 to explore the possibilities of research collaboration.
- A 3 member delegation let by Dr. Adam Wright, President, Dallas Baptist University, USA visited the Institute on September 29th 2017 to discuss about collaboration.
- A 6 member delegation from Taiwan visited the Institute

Distinguished Visitors

- on October 9th 2017 to exchange views and discuss future ways of strengthening cooperation between two sides in the area of academia operation.
- A delegation from Technical University, Liberac visited the Institute on October 12th 2017 for signing of MoU between IIT Delhi and University of Liberac.
- A 6 member delegation from Hiroshima University visited the Institute on October 26th 2017.
- A 3 member delegation from Postech, Korea visited the Institute on October 30th 2017.
- A delegation from Loughborough University, UK visited the Institute on November 1st 2017.
- A 2 member delegation with Evan, Director, International Initiatives visited the Institute on November 8th 2017.
- A 2 member delegation from Technical University of Munich visited the Institute on November 13th 2017.
- A member delegation from Shanghai Jiao Tong University visited the Institute on November 13th 2017.
- A delegation from Seoul National University visited the Institute on November 24th 2017.
- A delegation from University of Toronto visited the Institute on December 4th 2017.
- A 2 member delegation from University of Glasgow, U.K. visited the Institute on December 6th 2017.
- A delegation from Curtin University visited the Institute on December 7th 2017.
- A 2 member delegation from Lehigh University visited the Institute on December 14th 2017.
- A 2 member delegation from Washington University visited the Institute on December 14th 2017.
- Golden Jubilee Reunion 2017 : December 16th 2017.
- Alumni Day 2017 : 17th December 2017.
- Silver Jubilee Reunion 2017 : 22nd & 23rd December 2017.
- Batch of 1997 celebrated their 20th year on December 24th 2017 : 50 members came.
- Batch of 1991 celebrated their reunion/get-together on December 25th 2017: 75 members came.
- 1967 Batch of IIT Delhi alumni celebrated their Golden Jubilee Reunion on December 16th 2017 and about 80 alumni participated.
- IIT Delhi celebrated its Alumni Day on December 17th 2017. The celebration include Hostel Session on "Reminiscing IIT Delhi Days and pledge for support" in respective hostels preferably Nilgiri, Karakoram, Aravali, Jwalamukhi, Kumaon, Vindhyachal, Shivalik and Kailash. The alumni visited to interact with the students.
- A 3 member delegation from Ethiopian Space Science and Technology Institute visited the Institute on December 19th 2017.
- 1993 Batch of IIT Delhi celebrated its Silver Jubilee Reunion on December 22nd& 23rd 2017 and about 160 alumni participated the same.
- Batch of 1997 celebrated their 20th year on December 24th 2017 and about 50 alumni participated.
- Batch of 1991 celebrated their reunion/get-together on December 25th 2017 and about 75 alumni participated.
- A delegation from Mangolia University visited the Institute on January 15th 2017.
- A 20 member delegation from Tsinghua University, China visited the Institute on January 29th 2018 for enabling an avenue for academic as well as cultural interaction.
- A 20 member delegation from Advantage Austria visited the Institute on January 29th 2018 to understand the current status, main objectives and peculiarities regarding technology and innovation in India in general specifically in the fields of Big Data analytics, Cyber Security, Artificial intelligence etc.
- A 2 member delegation from Embassy of Brazil visited the Institute on January 31st 2018.
- A 20 member delegation from University of Taipei, Taiwan visited the Institute on February 2nd 2018.
- A 2 member delegation from Ahilia University Kingdom of Bahrain visited the Institute on February 8th 2018.
- A 4 member delegation from ITESM Mexico visited the Institute on February 12th 2018 to explore possibility of collaboration between IIT Delhi and ITESM Mexico.
- Mr. Kiran Seth from Rediscovering Classical Arts of India visited the Institute on February 13th 2018.
- Mr. Amit Khandelwal from University College London visited the Institute on February 16th 2018 to explore research collaboration between IIT Delhi and UCL.
- A 4 member delegation from Stanford University visited the Institute on February 19th 2018.
- Prof. Pascaline Pre from The Dept. of Energy and Environment, IMT Atlantique, Nantes, France visited the Institute on February 19th 2018.
- Mr. Ashok K. Singhal, Co-Founder/Chairman, CFD Research Corporation, Huntsville visited the Institute on February 20th 2018 for (i) Commercialization of the promising technologies emerging from latest research and projects & (ii) Philanthropic contributions to organizations such as IITs – e.g. to establish some scholarships for students.
- Dr. Sushanta Mitra, Executive Director, Waterloo Institute for Nanotechnology visited the Institute on February 20th 2018.

Distinguished Visitors

- A 2 member delegation from University of Victoria, Canada visited the Institute on February 21st 2018 to explore collaboration between IIT Delhi and University of Victoria.
- A 19 member of 1967 Chemical Engineering Batch visited the Institute on February 24th 2018 and celebrated their Golden Jubilee.
- A 6 member delegation from University of Essex University visited the Institute on February 27th 2018 for discussing ways in which the Institution link and collaborate.
- A 2 member delegation from Technical University of Delft (TUD) visited the Institute on February 27th 2018 to explore collaboration between IIT Delhi and Technical University of Delft.
- A delegation from Embassy of Japan visited the Institute on February 27th 2018.
- A 15 member delegation with His Majesty King Abdullah II IBN Al-Hussein of Jordan visited the Institute today on February 28th 2018 to explore possibility of collaboration between IIT Delhi and Jordan. An MoU, signed between IITD and Al Hussein Technical University, Jordan, was exchanged in the presence of His Majesty.
- A delegation from Embassy of Belarus in India visited the Institute on March 1st 2018.
- A 5 member delegation from Taiwanese Semiconductor IC design (A.K.A. Electronic Design Automation, EDA) tool company visited the Institute on March 9th 2018.
- A 2 member delegation from ILDP-Start Program in Hiroshima, Japan visited the Institute on March 9th 2018.
- A 3 member delegation from University of Paris-Saclay visited the Institute on March 12th 2018 for the French-Indian Knowledge Summit.
- A delegation from SDU, Denmark visited the Institute on March 12th 2018.
- A 2 member delegation from Madrid Complutense University visited the Institute on March 19th 2018.
- Mr. Gyula Petho, Ambassador of Hungary, New Delhi visited the Institute on March 20th 2018.
- Ambassador of Gambia visited the Institute on March 20th 2018.
- A 3 member delegation with Ambassador of Korea visited the Institute on March 22nd 2018.
- A 2 member delegation from Concordia University visited the Institute on March 26th 2018.



A 4 member delegation from Kyungshung University, South Korea visited the Institute on April 10th 2017



A 6 member delegation from Industrial Technology Research Institute (ITRI), Taiwan visited the Institute on May 9th 2017



A 4 member delegation from Consulate General of Spain visited the Institute on June 9th 2017 to explore opportunities for joint projects.



A 5 member delegation led by Mr. Vinay Joshi, Recruiter, South Asia Cultural Support Officer-LCC from Mohawk College, Hamilton visited the Institute on July 10th 2017.

Distinguished Visitors



Ms. Rihab Mohd Osman Khalifa from Emirates Institute for Learning Outcomes Assessment, United Arab Emirates University, UAE visited the Institute on August 24th 2017.



A 37 member delegation from different countries visited the Institute on September 15th 2017 for International Parliamentarians Conference (IAPPD).



Delegation from Taiwan visited the Institute on October 9th 2017 to exchange views and discuss future ways of strengthening co-operation between two sides in the area of academia operation.



UNSW Australia held a research road-show at IIT Delhi on November 20th 2017, in the areas of Social Entrepreneurship, Water and Environmental Stream, Smart City and Global Health Stream.



Delegation from University of Glasgow, U.K. visited the Institute on December 6th 2017.



Batch of 1997 celebrated their 20th year on December 24th 2017.



20 member delegation from Tsinghua University, China visited the Institute on January 29th 2018 for enabling an avenue for academic as well as cultural interaction.



20 member delegation from University of Taipei, Taiwan visited the Institute on February 2nd 2018.

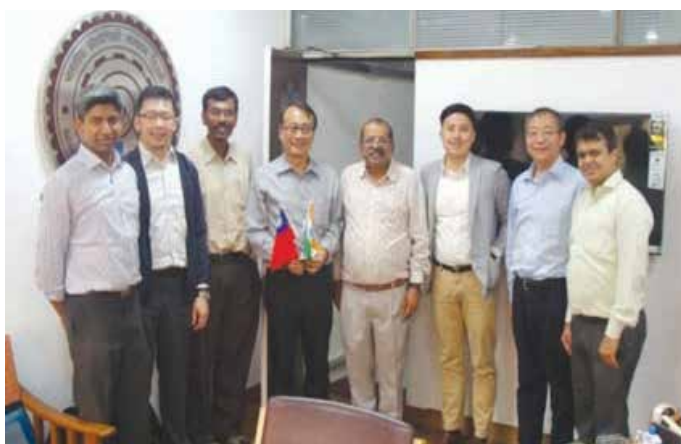
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5 member delegation from Taiwanese Semiconductor IC design (A.K.A. Electronic Design Automation, EDA) tool company visited the Institute on March 9th 2018.



3 member delegation from University of Paris-Saclay visited the Institute on March 12th 2018 for the French-Indian Knowledge Summit.



3 member delegation with Ambassador of Korea visited the Institute on March 22nd 2018.



2 member delegation from Concordia University visited the Institute on March 26th 2018.

Distinguished Visitors

DISTINGUISHED VISITORS VISITED DEPARTMENT/ CENTRE/SCHOOL

Chemical Engineering

- Prof. Srinivas Garimella, Sustainable Thermal Systems Laboratory, Georgia Tech University, "From Microscale Phase Change Phenomena to Sustainable Thermal Systems", 18th September, 2017.

Chemistry

- Dr. Arie Ben-Naim, Hebrew University, Jerusalem, Israel visited the Department in January, 2018 & stayed for 15 days. He has delivered a series of lectures for M.Sc./M.Tech./Ph.D. students.

Civil Engineering

- Prof. Harrie- Jan Hendricks Franssen from Forschungszentrum Juelich. Germany, as DAAD Visiting Faculty in September 2017.
- Prof. Karen L. Scrivener from Ecole Polytechnique Fédérale de Lausanne (EPFL) Switzerland visited the department for project meetings.

Computer Science and Engineering

- Kurt Mehlhorn, MPI Saarbrücken, Germany.
- Keshab Parhi, University of Minnesota.

Management Studies

- Ms. Kamalika Deka, Regional Head, HR, Jubilant Foodworks.
- Abhijit Roy is an alumnus of 2003 batch, Vice President-Operation, Genpact.
- Mr. Ankit Grover, Regional Head, Arc Worldwide, Publicis Groupe.
- Dr. Neha Kumar, Assistant Professor, Georgia Institute of Technology.
- Abhishek Luthra is an alumnus of 2010 batch, Supply Chain Specialist, McKinsey.
- Dr. Kaustubh Nande.
- Mr. Bohitesh Misra, VP- IT, Simpa Networks
- Prof Stan Kachnowski, Chair, HITLAB, New York.
- Mr. Vishal Srivastava, Executive Vice President, Bloomberg Quint.
- Mr. Ravi K.R., Vice-President and Head of Human Resources, Larsen & Toubro's Heavy Civil Infrastructure Company.
- A team from UC Browser (Alibaba Group) for an exciting

and informative session about UC Millionaire Quiz on the UC News platform.

- Mr. Hitesh Sood, AVP & Head - Marketing (Delhi & NCR), Idea Cellular Ltd.
- Mr. Anurag Joshi, Head- International Carriers Sales, Bharti Airtel Limited.
- Mr. Bhajneet Singh - Senior Manager- Hiring at Publicis. Sapient.
- Mr. Devarshi Deb - Executive Director & Chief Human Resource Officer at Asahi India Glass Ltd.
- Mr. Abhishek Gupta, Senior Vice President & Head of Marketing, Edelweiss Financial Services.
- Mr. G.K. Pillai, M.D. & CEO, Walchandnagar Industries Ltd.
- Mr. Sandeep Sharma, Cluster Head- Sales and Marketing at Sun Pharma.
- Mr. Hindol Roy, Vice President, Decimus Financial.
- Mr. Dinesh Kapur, Vice President, Royal Bank of Scotland.
- Vinay Pandey, Head, Economics Bureau, Economic Times.
- Sarbvir Singh, Regional Advisor, JP Morgan.
- Vijay Chandrawat, COO & Co-Founder, 22 Motors Pvt. Ltd.
- Aseem Marwaha, Director Corporate Business, eLitmus.
- Dipak K. Dash, Senior Editor, Times of India.
- Amandeep Singh Kalsi, Vice-President, Head of Operations, AbsolutData Analytics.
- Puneet Chandok, Partner, McKinsey.
- Rajesh Agarwal, Joint Secretary, Govt. of India.
- Bhuwan Singh, Head, Investment Operations, Sunlife Financial.
- Sunil Agarwal, Founder, 20:20 Media.
- Mr. Advit V. Sahdev, Head of Marketing, Infibeam.com.
- Mr. Pratyush Kumar, President, Boeing India & Vice President, Boeing International.
- Mr. Avinash Kaul, Managing Director at A+E Networks, TV18.
- Mr. Manoj Kumar Sharma, Senior VP Human Resources at Vedanta Resources.
- Ms. Kanika Mittal, Director-Brand Marketing and Communications at Reebok India.
- Mr. Lalit Chaturvedi, Senior General Manager-HR, Head Talent Management, OD and L&D at Bosch Limited.

Distinguished Visitors

- Mr. Harpreet Singh Kohli, Manager-HR at Bosch India.
- Mr. Vartul Mittal, Technology and Innovation Specialist.
- Prof. Bipin Prabhakar, Chair – Information Systems Graduate Program and Clinical Professor, Kelly School of Business, Indiana.
- Mr. Sidharth Balakrishna, Strategy-Board Director, Essel (Zee Group).
- Ms. Lakshmi Iyer, CIO - Fixed Income & Head products, Kotak Mahindra.
- Mr. Harinder Sikka, Group Director-Strategic Business, Piramal Enterprises Ltd.
- Mr. Nishant Govil – Director at Blackrock.
- Mr. Jitender Panihar – Head of Human Resources, Talent & Org Development – Healthkart.
- Mr. Rahul Dewan, CEO, Srijan Technologies.
- Mr. Sumeet Gupta, Agile Coach – Srijan Technologies.
- Mr. Rahul Sangal, Associate VP, Taparia Group.
- Mr. Akash Gupta, VP & Head-Marketing, MobiKwik.
- Mr. Nishant Govil, Director, BlackRock.
- Mr. Manish Advani, Head Marketing & Public Relations, Mahindra SSG.
- Ms. Anant Kiran - Regional Head- North.
- Mr. Pawas Sharma- Regional Manager- North, from Hafele.
- Mr. Avnish Sabharwal - Managing Director- Accenture Ventures and Open Innovation.
- Mr. James de Raeve, VP & GM, India, The Open Group
- Mr. J. Satyanarayana, Chairman, UIDAI, Gol.
- Dr. Santosh Mohanty, VP, IP & Product Engg, TCS.
- Dr. Pallab Saha, Chief Architect, The Open Group.
- Dr. Niraj Prakash, Consulting Leader, Digital Enterprises & Digital India, Oracle India.
- Mr. Neeraj Maheshwari, Senior VP & Head – Group Business & Partnership Development, DHFL Pramerica.
- Mr. P. Sriram, Executive Vice President-Operations, Pernod Ricard, India.
- Mr. Ganesh Iyer, EVP & Group Head CPD, GMR Group.
- Mr. Kishore Jayaraman, President - Rolls Royce for India
- Ms. Anuja Bhargava, Director - Finance from Fidelity International.
- Ms. Shweta Jain, Director - HR from Fidelity International.
- Mr. Rajat Katyal – Head – Sales & Service, Bath Division from Asian Paints.
- Mr. Ritesh Nagpal – Brand Manager, Retailing, Bath Division from Asian Paints.
- Mr. Prasanth Narayanan, CHRO and Director, Carnival Group.
- Ms. Deepanwita Chakraborty - Director, Corporate Responsibility & Sustainable Development, Asia Pacific in Cargill.
- Mr. Sameer Mathur - SM, Accenture Strategy.
- Mr. Sriraman P.K. - Chief Financial Officer (CFO), Helpage India.
- Mr. Aishwarya Saxena - Deputy V.P., Aviva life insurance.
- Mr. Kaizim Rizvi - Founder Director of The Dialogue.
- Ms. Jyotsna Bhatnagar- Private Sector Partnership Officer at UN World Food Programme.
- Mr. Prashant Chopra - Associate V.P., Hero Fincorp.
- Mr. Arindam Saha - Associate Director at PwC India.
- Mr. Sandeep Chatterjee, Chairman International Supply Chain Education Alliance (ISCEA) & Senior Manager at Deloitte India.
- Mr. Jean Lebel, President, International Development Research Centre (IDRC) and esteemed members from IDRC CRDI.
- Mr. Vinod Radhakrishnan, Project Manager, CTO Themes, Wipro.
- Mr. Rajat Sharma, Founder and Chairman of India TV.
- Mr. Sandeep Roy Choudhury, Head - Climate Finance/ Sustainability & Climate Change, VNV Advisory Services LLP.
- Ms. Shyamala Mani, Professor, National Institute of Urban Affairs.
- Mr. Govind Singh, Assistant Professor, Indraprastha College for Women, University of Delhi.
- Ms. Swanzal Kak Kapoor, Founder, Saka Studio.
- Ms. Manisha Mukherjee, Practice Head - Climate Change & Sustainability, Deft Advisory and Research Pvt. Ltd.

Distinguished Visitors

- Mr. Sonu Tandon, Vice President, Enhanced WAAP Systems India.
- Ms Sangeeta D, Head, Global Client Operations.
- Ms. Sophie Joseph, Senior Vice President, Data Science from Nielsen.
- Dr. Silvia Masiero, Lecturer in International Development at Loughborough University, United Kingdom.
- Dr. Pawan Agrawal - International Motivational Speaker, Author, Educationist, Business Consultant and Successful Entrepreneur || CEO, Mumbai Dabbawalas.
- Sonam Wangchuk - Engineer, innovator, and an education reformist: Inspiration for 3 Idiots movie.
- Chinmay Agarwal - Co Founder at Jugnoo || IIT Delhi Alumni.
- Prof. Balaji Rajagopalan, Univ. of Colorado at Boulder, USA from 10-14 Nov. 2017 (DST-CoE).
- Dr. Frank Selten & Dr. W.V.D. Karin, MNMI, Netherlands from 10-14 Nov. 2017 (DST-CoE).
- Professor V. Ramaswamy, Director, NOAA Geophysical Fluid Dynamics Laboratory (GFDL) and Professor, Atmospheric and Oceanic Sciences (AOS), Princeton University, Princeton, New Jersey, USA on 11.04. 2017.
- Dr. Rajeev Kumar Mehajan, Sci-G & Head, (SERB), on "Research Opportunities in SERB", DST, Govt. of India on 1.12.2017.
- Prof. Prakash Keshwan, Univ. of Connecticut, USA, on 11.12.2017.
- Prof. Jagdish Shukla, Univ. Prof. George Mason University, Virginia, USA, on 19.02.2018 & 28.2.2018 for Institute Lecture.

Mathematics

- Prof. Paola Tardelli, Italy during Jan. 3 -10, 2018.
- Prof. Chris Rodger from USA during Jan. 11 - 13, 2018.
- Prof. Andreas Brandstadt from Germany during February 18 - 24, 2018.
- Pro. Christian Klingenberg from Germany during 29/9/17 to 4/10/17.
- Prof. David Levin during 31/11/17 to 4/12/17.
- Prof. Komatsu Takao from Japan during August 12-22, 2017.
- Prof. J. Giacomoni from France during 5/11/17 to 2/12/17.
- Seminar by Cmdr M.K. Singh, Indian Navy, "Nowcasting in the marine environment" on 11.04.2018.
- C.V. Raman International fellowship award for African researcher to Mr. Sinclair Zabaze from 15 May to 14 August 2017.
- C.V. Raman International fellowship award by DST to African researcher Mr. Komkoua Mbienda Armand Joel from Cameroon to work for 3 months w.e.f. 2.5.2017.

Biomedical Engineering

- Professor K. Chen, Professor, Department of Mathematical Sciences, University of Liverpool, U.K.

Applied Research in Electronics

- Prof Naoki Shinohara, Kyoto University Japan.
- Prof Omar Ramahi, University of Waterloo, Canada.
- Prof Djuradj Budimir, University of Westminster UK.

Atmospheric Sciences

- Dr. Varun Kumar, Dr. Yandong Tong, Dr. Roberto Casotto, Dr. Deepika Bhattu, Dr. Pragati Rai for "An intensive measurement campaign to characterize the Delhi Air Pollution" from 4 Jan to 15 March 2018 for joint collaborative efforts of IIT Delhi, IIT Kanpur and Paul Scherrer Institute (PSI, Switzerland).
- Dr. C. Rodger, Dept. of Maths, Auburn Univ., Auburn, USA from 11-13 Jan 2018.

Amar Nath and Shashi Khosla School of Information Technology

- Delegation from Japan in June 16, 2017 invited by Prof. P.V.M. Rao.
- Delegation from Iran University in August 2017 invited by Prof. Sanjiva Prasad.
- Prof. Ranjan Pal, University of Southern California, USA in September 1-30, 2017 taught COV887 under GIAN Scheme proposed by Prof. Vinay Ribeiro.
- Prof. Steven Mannheimer, SOIC, IUPUI, USA in January 29 to February 9, 2018.
- Prof. Peter Marwedel, Dortmund University, Germany in February 9-22, 2018.

8. Faculty

(April 1, 2017 - March 31, 2018)

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- New Appointments 111

Faculty Awards / Recognitions

(April 1, 2017 - March 31, 2018)

The quality of an academic institution primarily depends on its faculty. Our faculty is one of the finest in the country and is recognized internationally for their quality of research, teaching and curriculum development. They also contribute greatly for the development of the nation by being associated with a large number of decision making bodies, providing crucial guidance and advice on policy matters and technical issues. Many of our faculty members serve on the editorial Boards of reputed journals, peer-review papers for publications, serve on committees for recruitment of professionals, and are on the Boards of many institutions and organizations. 23 new faculty members have joined the Institute this year, which has enhanced our competence in several emerging areas, while bringing new energy into our academic endeavors.

Recruitment of bright faculty is one of our most important missions, since therein lies the future of the Institute. Our Board of Governors (BoG) is seized of this issue, and has played a very positive and constructive role in approving policies, which empower the faculty to deliver their best in both teaching and research. We are continuously trying to reach out to the potential faculty members through a variety of means, including round-the-year search and recruitment and on-line submission and processing of applications.

During the period under report, international bibliographic databases have indexed 2070 research articles published by faculty members and researchers of the institute in international journals including 1800 articles indexed in Scopus, an international indexing service in Science & Technology and Social Sciences. The faculty members have also presented a similar number of papers in national and international conferences. Besides, they have also published many books and conducted several continuing education programs. The Institute supported participation of faculty members to international and national conferences this year. Many more participated with financial support from sponsored projects, and other funding agencies. The Institute provides seed research funding to the new faculty upon joining the Institute to the tune of ₹50 lakhs (or more when necessary).

FACULTY AWARDS/RECOGNITIONS

Our distinguished faculty colleagues continue to make a difference to the world of Science, Engineering, Humanities and Management, and continue to earn recognition and awards, which bring glory to the Institute. Many of them have been bestowed with honours/awards and elected as Fellows of several professional national/international bodies during the year 2017-2018. Some of these recognitions are

highlighted below:

Chemical Engineering

- Professor Divesh Bhatia has been selected for the prestigious IET Young Engineers Award 2017-2018.
- Professor M.A. Haider has been selected for the prestigious IET Young Engineers Award 2017-2018.
- Professor A.S. Rathore appointed Member, NITI Aayog Committee for Evaluation of NIPERs.
- Professor K.K. Pant achieved Herdilia Award 2017 by Indian Institute of Chemical Engineers for Excellence in Basic Research in Chemical Engineering.
- Professor Shalini Gupta and her student Rohini Singh's research in collaboration with Prof. Neetu Singh (CBME) and her student Smita Patil has been highlighted in Times of India and Indian Express. The research promises to boost the efficiency of Antibiotics.
- Professor S. Basu appointed as Director, CSIR-Institute of Minerals & Materials Technology (IMMT) from 9th February to present.

Chemistry

- Professor Nidhi Jain: Professor D.K. Banerjee Memorial Lecture Award 2018 by IISc Bangalore.
- Professor Ashok Kumar Ganguli has received 9th Prof. C.N.R. Rao Bangalore INDIA NANO Science Award 2017 (given by Karnataka Govt.)
- Professor S.K. Khare- Joint Secretary, Association of Microbiologists of India (2017).
- Professor S.K. Khare- General Secretary, Biotech Research Society of India (2017).
- Professor S.K. Khare- Associate Editor of "3 Biotech"; Springer.
- Professor S.K. Khare- Board of Studies (BoS)/Academic Council Member: Biotechnology and Microbiology units of Aligarh Muslim University, Central University of Haryana, Jamia Hamdard and IP University, New Delhi.

Civil Engineering

- NASI Young Scientist Platinum Jubilee Award 2017 in the field of Electronics, Computer Science and Engineering from The National Academy of Sciences India to Prof. Dhanya C.T.
- Young Researcher Award - 2017 from Ministry of Earth Sciences to Professor Dhanya C.T.

Faculty Awards / Recognitions

- “Humboldt Research Fellowship for Experienced Researchers” by the Alexander von Humboldt (AvH) Foundation to Vasant Matsagar.
- “Carl Friedrich von Siemens Research Award” conferred by the Carl Friedrich von Siemens Foundation, Munich, Germany to Vasant Matsagar.
- One month research stay at Toyohashi University of Technology and visits to base-isolated structures in Tokyo funded to Vasant Matsagar by the Japan Society of Seismic Isolation (JSSI) in March 2018.
- IGS-HEICO Biennial Prize 2017 conferred by the Indian Geotechnical Society (IGS) for the Best Paper on “Rock Mechanics” published in the Indian Geotechnical Journal (IGJ), “Response of Semi-Buried Structures Subjected to Multiple Blast Loading Considering Soil-Structures Interaction”.
- Best paper award in ILCC Indian Lean construction conference (national conference) to Professor J. Uma Maheswari in July 2017.
- Best paper award in Technocongress (international conference) to Prof. J. Uma Maheswari in December 2017.
- CIDC Vishwakarma award to Prof. J. Uma Maheswari for best academician in March 2018.
- “Silver Medal” in Table Tennis during Inter-IIT Sportsmeet held at IIT Madras in December 2017 to Professor Sumedha Chakma.
- “Most Promising Sportsperson Award” at IIT Delhi on 26th January, 2018 to Prof. Sumedha Chakma.
- INSPIRE Faculty Award by DST to Professor N.M. Anoop Krishnan for years 2017 – 2022.
- Professor Mukesh Khare: Independent Director, Board of Pure Earth, USA.
- Professor Mukesh Khare: Independent Director, Board of BONIPHUL, India.
- Professor Mukesh Khare: Independent Director, Board of Engineers India Limited, Delhi.
- Professor Mukesh Khare: Independent Director, Board of Certification Engineers International Limited.
- Professor Mukesh Khare: Member, High Level Task Force, PMO, Delhi.
- Indian Geotechnical Society (Delhi Chapter) Lifetime Achievement Award to Prof. Manoj Datta on 25/9/2017.
- Teaching Excellence Award, IIT Delhi to Prof. Manoj Datta on 29/1/2018.
- Teaching Excellence Award, IIT Delhi to Prof. S. Bishnoi on 29/1/2018.

Electrical Engineering

- Professor Ranjan K. Mallik has been awarded the prestigious J.C. Bose Fellowship award.
- Professor Bhim Singh has been received “Faculty Research Award” for the “Most Outstanding Researcher” in the field of engineering from Careers360.
- Professor Bhim Singh has been awarded the prestigious “Nari Hingorani Custom Power Award for 2017” by the IEEE Power and Energy Society.
- Professor B.K. Panigrahi has been received “Faculty Research Award” for the “Most Outstanding Researcher” in the field of engineering from Careers360.
- Professor A.R. Abhyankar has been received the Award for Excellence in Teaching for 1st semester 2017-18.
- Professor Deepak U. Patil has been received the Award for Excellence in Teaching for II semester, 2016-17 and I semester 2017-18.
- Professor Manan Suri has been honored by MIT Technology Review as one of the top 10 Innovators under 35 from India.
- Professor Manan Suri has been received “NASI-Young Scientist Platinum Jubilee Award (2017) in the field of Electronics, Computer Science and Engineering.
- Professor Subrat Kar has been awarded “IETE Prof. S.V.C. Aiyar Memorial Award-2017” for significant contributions in “Academic guidance, teaching and research contributions to the field of telecommunications”.
- Professor Debanjan Bhowmik has been received Associateship (2017-2022) from the Indian Academy of Sciences.

Management Studies

- ICCR Visiting Professor at Simon Fraser University, Canada (Sept to December 2017) Prof. Kanika T. Bhal.
- Professor Ravi Shankar received “UGC-UKIERI Thematic Partnership Award” on 7th April 2017 by British Council for his International Research Project with Loughborough University UK on “Advanced Analytics for Green and Resilient Supply Chain Decision Making.” His another project (with Dr. S. P. Singh and Professor Surendra S. Yadav) got this award for their research partnership with Newcastle University UK in the area of “Container Supply Chain”.
- Outstanding Paper Award from Emerald Group of Journals (Literati Award) for paper published in the Journal of Advances in Management Research, 2017 (Volume: 13 Issue: 2) Professor Ravi Shankar.
- Excellence in Teaching Award in 2017 by Indian Institute of Technology Delhi, Professor Arpan Kumar Kar.

Faculty Awards / Recognitions

- "IFIP I3E Best Paper Award" for the article titled "The Untold Story of USA Presidential Elections in 2016-Insights from Twitter Analytics" at "The 16th IFIP Conference on e-Business, e-Services and e-Society", held in New Delhi, India, Prof. Arpan Kumar Kar.
- Award for "PMI Young Research Scholar Award 2016" by Project Management Institute, USA, for recognizing academicians below 40 with outstanding contributions in education, training, consultancy and advocacy in project management, New Delhi, India, Prof. Arpan Kumar Kar.
- 2017 Highly Commendable Award for the paper Precise Decisions for Indian Energy Sectors by imprecise Evaluation by Emerald Publishing House., Professor S.P. Singh.
- Excellence in Teaching Award in 2017 by Indian Institute of Technology Delhi, Professor Amlednu Kumar Dubey.
- National Stock Exchange - Indira Gandhi Institute of Development Research (NSE-IGIDR) Corporate Governance Research Initiative grant (\$2000 USD), National Stock Exchange - Indira Gandhi Institute of Development Research (NSE-IGIDR), Professor Shveta Singh, 2018.

Physics

- Professor Arun Kumar has been conferred "Senior Member of OSA, USA, Designation" for professional and service accomplishments in the field of Optics and Photonics.
- Professor Dalip Singh Mehta has been conferred "Excellence in Teaching Award 2017-2018", on the Foundation Day January 2018 Indian Institute of Technology Delhi, India.

Textile Technology

- Dr. Dipayan Das received IIT Delhi Teaching Excellence Award in 2017.
- Professor Mangala Joshi:
 - a. Nominated as "Academic Expert" in DMSRDE Laboratory Research Council for two years (2017- 2019).
 - b. Expert Member of BOG of UPTTI, Kanpur.
 - c. Core Committee expert member of PAC "Materials, Mining and Metallurgy" SERB, India (2016-2018).
 - d. Coopted Expert Member of "Engineering Sciences" of SERB, India (2016-2018).

Applied Research in Electronics

- Dr. Samaresh Das, INAE Young Engineer Award 2017.

Atmospheric Sciences

- Fullbright-Nehru Academics and Professional Excellence Award for both research & teaching from 16 August, 2017- 18 June, 2018 to Professor Sagnik Dey.

- Young Faculty Incentive Fellowship (YFIF) to Dr. Ravi Kumar Kunchala w.e.f. 22 March, 2018.

Biomedical Engineering

- Dr. Amit Mehndiratta E.K. Zavoisky award at 25th Proceeding of International Society of Magnetic Resonance in Medicine (ISMRM) 2017, Honolulu, HI, USA.

Energy Studies

- Dr. Debaprasad Sahu received an award, "Early Career Research Award by Science and Engineering Research Board (SERB), India.
- Professor S.C. Kaushik received an award, "Bharat Ratna Dr. Abdul Kalam Gold Medal Award" by Global Economic Progress and Research Association (GEPRA), India.

Instrument Design Development Centre

- Professor Chandra Shakher has been conferred the "Lifetime Achievement Award" by the Instrument Society of India (ISOI) at NSI-41 in JSS Science & Technology University, Mysore on 13th July 2018.
- Professor Chandra Shakher got the new assignment of Chairperson of the Board of Governors of National Institute of Technology (NIT) Hamirpur, Himachal.
- Govt. of India has approved Prof. Chandra Shakher as the Board member of the Science & Engineering Research Board (SERB), a statutory body of DST.
- Professor Chandra Shakher has been nominated as the Chairman of the Device Development Program of DST, Govt. of India.

Amar Nath and Shashi Khosla School of Information Technology

- An unrestricted research grant of USD 10K from Microsoft Research was awarded to Sorav Bansal towards helping to build a strong Systems Research Community in the country, under the "MSR India Virtual Centre 2017" initiative. The Virtual Centre is proposed as a mechanism to foster meaningful research collaborations between MSR and academia and contribute to this larger endeavor. June 2017.
- Professor Balakrishnan along with P.V.M. Rao (Mech. Engg.) have been awarded the National Award for "Improving the Accessibility for the Differently Abled through S&T interventions" for the year 2018 for their work on developing a Refreshable Braille Display. This is the second time the team has received this award.

Faculty in Position

(April 1, 2017 - March 31, 2018)

Department of Applied Mechanics	Department of Biochemical Engineering & Biotechnology	Shalini Gupta, Ph.D.	P.P. Ingole
Professor and Head	Professor and Head	Shaik Abdul Munawar, Ph.D.	Tanmay Dutta
S.V. Veeravalli, Ph.D.	Professors	Sudip K. Pattanayek, Ph.D.	Department of Civil Engineering
Professors	Sunil Nath, Ph.D.	Jayati Sarkar, Ph.D.	Professor and Head
Puneet Mahajan, Ph.D.	Prashant Mishra, Ph.D.	Sreedevi U., Ph.D.	Manoj Datta, Ph.D.
Anupam Dewan, Ph.D.	Saroj Mishra (Ms), Ph.D.	Anil Verma, Ph.D.	Professors
Rajesh Prasad, Ph.D.	A.K. Srivastava, Ph.D.	Assistant Professors	B.J. Alappat, Ph.D.
Sanjeev Sanghi, Ph.D.	T.R. Sreekrishnan, Ph.D.	Gaurav Goel, Ph.D.	Suresh Bhalla, Ph.D.
S.N. Singh, Ph.D.	Associate Professors	Jyoti Phirani, Ph.D.	B. Bhattacharjee, Ph.D.
Santosh Kapuria, Ph.D.	Ritu Kulshreshtha, Ph.D.	M.A. Haider, Ph.D.	Bhagu Ram Chahar, Ph.D.
Associate Professors	D. Sundar, Ph.D.	M.K.C. Ramteke, Ph.D.	A.K. Jain, Ph.D.
S. Pradyumna, Ph.D.	Shilpi Sharma, Ph.D.	Divesh Bhatia, Ph.D.	N.K. Garg, Ph.D.
Badri Prasad Patel, Ph. D.	Preeti Srivastava, Ph.D.	Vikram Singh, Ph.D.	Ashok Gupta, Ph.D.
Maloy K. Singha, Ph.D.	Assistant Professors	Emeritus Fellow	V.R. Guntari, Ph.D.
Balaji Srinivasan, Ph.D.	Ravi Krishnan Elangovan, Ph.D.	K.D.P. Nigam, Ph.D.	Department of Chemistry
Sawan Suman, Ph.D.	Ashish Misra, Ph.D.	Professor and Head	R.R. Kalaga, Ph.D.
Assistant Professors	Shaikh Ziauddin Ahammad	Ravi Shankar, Ph.	Deo Raj Kaushal, Ph.D.
Ajeet Kumar, Ph.D.	Emeritus Professors	Professors	A.K. Keshari, Ph.D.
M.R. Cholevari, Ph.D.	G.P. Agarwal, Ph.D.	A.K. Singh, Ph.D.	Mukesh Khare, Ph.D.
Jayant Jain, Ph.D.	M.N. Gupta, Ph.D.	D.K. Bandyopadhyay, Ph.D.	Shashi Mathur, Ph.D.
Vikrant Tiwari, Ph.D.	Department of Chemical Engineering	Anil Jacob Elias, Ph.D.	A.K. Gosain, Ph.D.
Sitikantha Roy, Ph.D.	Professor and Head	N.D. Kurur, Ph.D.	Alok Madan, Ph.D.
Samaresh Das, Ph.D.	Rajesh Khanna, Ph.D.	S.K. Khare	A.K. Nema, Ph.D.
Arjun Sharma, Ph.D.	Professors	B. Jayaram, Ph.D.	K.S. Rao, Ph.D.
Suresh Neelakantan, Ph.D.	A.N. Bhaskarwar, Ph.D.	Siddharth Pandey, Ph.D.	Geetam Tewari, Ph.D.
Adjunct Faculty (Naval Construction Wing)	Vivek V. Buwa, Ph.D.	Nalin Pant, Ph.D.	J.T. Shahu, Ph.D.
Cdr. R. Vijaya Kumar	S.K. Gupta, Ph.D.	A. Ramanan, Ph.D.	Rakesh Khosa, Ph.D.
Lt. Cdr. Amit Ray	S. Basu, Ph.D. (on deputation)	N.G. Ramesh, Ph.D.	Associate Professors
Capt. V.K. Satyam (Officer-in-charge)	Ratan Mohan, Ph.D.	A.K. Ganguli, Ph.D.	R. Ayothiraman, Ph.D.
Dharam Singh	K.K. Pant, Ph.D.	Jai Deo Singh, Ph.D.	Shashank Bishnoi, Ph.D.
LT. Cdr. S.K. Rao	Anurag Singh Rathore, Ph.D.	Associate Professors	G.S. Benipal, Ph.D.
Emeritus Fellow	Anupam Shukla, Ph.D.	Pramit K. Chowdhury, Ph.D.	Tanusree Chokrabarty, Ph.D.
D.K. Sehgal	Shantanu Roy, Ph.D.	Shashank Deep, Ph.D.	Arun Kumar, Ph.D.
	Anil K. Saroha, Ph.D.	V. Haridas, Ph.D.	Kumar Neeraj Jha, Ph.D.
	Associate Professors	S. Nagendran, Ph.D.	Bappaditya Manna, Ph.D.
	Pareesh P. Chokshi, Ph.D.	Ravi P. Singh	Vasant Matsagar, Ph.D.
		Sameer Sapra, Ph.D.	Dipti Ranjan Sahoo, Ph.D.
		Nidhi Jain, Ph.D.	Assistant Professors
		Assistant Professors	Supratic Gupta, Ph.D.
		G.S. Lahu, Ph.D.	Gazala Habib, Ph.D.
		Hemant Kumar Kashyap	

Faculty in Position

J. Uma Maheshwari, Ph.D.	Professors	B. Bhowmik (Ms.), Ph.D.	Upasana Sharma, Ph.D.
Abhijit Ganguli, Ph.D. (on-lien)	Ranjan Bose, Ph.D.	P.R. Bijwe, Ph.D.	Varsha Singh
Dhanya C.T., Ph.D.	G. Bhuvaneswari (Ms.), Ph.D.	V. Chandra, Ph.D.	Adjunct Faculty
Arvind K. Swamy, Ph.D.	S. Chaudhury, Ph.D.	Devi Chadha, Ph.D.	Bijoy H. Boruah, Ph.D.
Sumedha Chakma	Swades K. De, Ph.D.	V.K. Jain, Ph.D.	English Language Instructor
Emeritus Fellow	Jayadeva, Ph.D.	R.K. Patney, Ph.D.	Rajiv Ranjan Mahto, Ph.D.
K.G. Sharma, Ph.D.	I.N. Kar, Ph.D.	Surendra Prasad, Ph.D.	Anuradha Vashisth, Ph.D.
Senior Programmer	Subrat Kar, Ph.D.	Department of Humanities & Social Sciences	Department of Management Studies
M. Malikharijuna Rao, M.E.	M.J. Kumar, Ph.D.	Professor and Head	Professor and Head
Department of Computer Science & Engineering	R.K. Mallik, Ph.D.	Purnima Singh, Ph.D.	M.P. Gupta, Ph.D.
Professor and Head	Sukumar Mishra, Ph.D.	Professors	Professors
Saroj Kaushik, Ph.D.	B.K. Panigrahi, Ph.D.	Ravinder Kaur (Ms), Ph.D.	Kanika T. Bhal (Ms.), Ph.D.
Professors	Shankar Prakriya, Ph.D.	R.B. Nair (Ms.), Ph.D.	Ravishankar, Ph.D.
Naveen Garg, Ph.D.	Bhim Singh, Ph.D.	V. Sanil, Ph.D.	Sushil, Ph.D.
Rahul Garg, Ph.D.	M. Veerachary, Ph.D.	Ambuj D. Sagar, Ph.D.	S.S. Yadav, Ph.D.
Amit Kumar, Ph.D.	Associate Professors	C.A. Tomy, Ph.D.	Associate Professors
Anshul Kumar, Ph.D.	Manav Bhatnagar, Ph.D.	Associate Professors	Mahim Sagar, Ph.D.
S. Arun Kumar Ph.D.	Shouribrata Chatterjee, Ph.D.	Vibha Arora, Ph.D.	S.P. Singh, Ph.D.
M. Balakrishnan, Ph.D.	Brijesh Lal, Ph.D.	Reetika Khera, Ph.D.	Seema Sharma (Ms.), Ph.D.
S. Banerjee, Ph.D.	Mashuq-un-Nabi, Ph.D.	Stuti Khanna, Ph.D.	P. Vigneswara Ilavarasan, Ph.D.
Prem Kumar Kalra, Ph.D.	Anuj Dhawan, Ph.D.	Arjun Ghosh, Ph.D.	Shveta Singh, Ph.D.
Subodh Kumar, Ph.D.	Sumantra Dutta Roy, Ph.D.	Angelie Multani, Ph.D.	Harish Choudhary, Ph.D.
Kolin Paul, Ph.D.	Nilanjan Senroy, Ph.D.	M. Wakankar, Ph.D.	Assistant Professors
Huzur Saran, Ph.D.	Madhusudan Singh	Bharati Puri, Ph.D.	Jitendra Madan, Ph.D.
Preeti Ranjan Panda, Ph.D.	Umesh Kumar, Ph.D.	J.J. Thomas, Ph.D. (on lien)	A.K. Kar, Ph.D.
Sanjiva Prasad, Ph.D.	Abhijit R. Abhyankar, Ph.D.	Kamlesh Singh, Ph.D.	Shuchi Sinha (Ms.), Ph.D.
Sandeep Sen, Ph.D.	Shubhendu Bhasin, Ph.D.	Farhan Ibrahim, Ph.D.	Smita Kashiramka
Associate Professors	Abhisek Dixit, Ph.D.	Simona Sawhney	Sanjay Dhir
Amitabh Bagchi, Ph.D.	S. Janardhanan, Ph.D.	Pritha Chandra, Ph.D.	A.K. Dube, Ph.D.
Mausam, Ph.D.	Saif Khan Mohammed, Ph.D.	Richa Kumar, Ph.D.	Emeritus Fellow
Vinay Joseph Ribeiro, Ph.D.	Mukul Sarkar, Ph.D.	Debasis Mondal, Ph.D.	P.K. Jain, Ph.D.
Smruti R Sarangi, Ph.D.	Saunak Sen, Ph.D.	Sarbeswar Sahoo, Ph.D.	Department of Mathematics
Aaditeswar Seth, Ph.D.	Assistant Professors	Assistant Professors	Professor and Head
Assistant Professors	T.P. Gandhi, Ph.D.	Ankush Agarwal, Ph.D.	K. Sreenadh, Ph.D.
Ragesh Jaiswal, Ph.D.	Abhishek Dixit, Ph.D.	Arudra Venkata Burra, Ph.D.	Professor
Sorav Bansal, Ph.D.	Jun Bae Seo, Ph.D.	Divya Dwivedi, Ph.D.	N. Chatterjee, Ph.D.
Maya Ramanath, Ph.D.	Sumeet Agarwal, Ph.D.	Saptarshi Mukherjee, Ph.D.	S. Dharmaraja, Ph.D.
Parag Singla, Ph.D.	Anand Rup Das, Ph.D.	Naveen Thayyil Kamaluddin, Ph.D.	Subiman Kundu, Ph.D.
Subodh Vishnu Sharma, Ph.D.	Amit Kumar Jain, Ph.D.	Samar Husain, Ph.D.	Aparna Mehra, Ph.D.
Department of Electrical Engineering	Bhaskar Mitra, Ph.D.	Saurabh Bikas Paul, Ph.D.	B.S. Panda, Ph.D.
Professor and Head	S. Srirangarajan, Ph.D.	Paroma Sanyal, Ph.D.	R.K. Sharma, Ph.D.
S.D. Joshi, Ph.D.	Manan Suri, Ph.D.		S.C. Sekhara Rao
	R. Maheshwari, Ph.D.		
	Emeritus Fellow		
	R.K.P. Bhatt, Ph.D.		

Faculty in Position

A. Tripathi	B. Premachandran, Ph.D.	Pranaba Kishor, Ph.D.	V.K. Kothari, Ph.D.
Associate Professors	Assistant Professors	Amartya Sengupta, Ph.D.	Centre for Applied Research in Electronics
Anima Nagar, Ph.D.	Subhra Datta, Ph.D.	Joyee Ghosh, Ph.D.	Professor and Head
Mani Mehra, Ph.D.	Naresh Varma Datla, Ph.D.	Pintu Das, Ph.D.	Ananjan Basu, Ph.D.
Assistant Professors	Jitendra P. Khatait, Ph.D.	R. Suresh Marthe, Ph.D.	Professors
Harish Kumar, Ph.D.	Supreet Singh Bahga, Ph.D.	Sujin B. Babu, Ph.D.	R. Bahl, Ph.D.
N. Shravan Kumar, Ph.D.	Devendra Kr. Dubey, Ph.D.	R.S. Dhaka, Ph.D.	Arun Kumar, Ph.D.
Amit Priyadarshi, Ph.D.	Emeritus Fellow	S. Bhattacharya, Ph.D.	S.K. Koul, Ph.D.
Sivnathan Sampath, Ph.D.	Kiran Seth, Ph.D.	Sunil Kumar, Ph.D.	Suneet Tuli, M.Tech. (Sabbatical leave)
V.V.K. Srinivas Kumar, Ph.D.	Visiting Faculty	Bhaskar Kanseri, Ph.D.	Associate Professors
P.V. Viswanathan, Ph.D.	A.D. Gupta, M.Tech.	Rohit Narula, Ph.D.	Mahesh P. Abegaonkar, Ph.D.
Department of Mechanical Engineering	Department of Physics	Brajesh Kumar Mani, Ph.D.	Monika Aggarwal (Ms), Ph.D.
Professor and Head	Professor and Head	Emeritus Fellow	Assistant Professors
S.K. Saha, Ph.D.	Anurag Sharma, Ph.D.	Arun Kumar, Ph.D.	Prabhu Babu, Ph.D.
Professors	Professors	B.D. Gupta, Ph.D.	Samaresh Das, Ph.D.
Naresh Bhatnagar, Ph.D.	Versha Banerjee (Ms.), Ph.D.	D.K. Pandya, Ph.D.	Ankur Gupta, Ph.D.
Anoop Chawla, Ph.D.	Mukesh Chander, Ph.D.	Department of Textile Technology	Pushpraj Singh, Ph.D.
Ashish K. Darpe, Ph.D.	R. Chatterjee (Ms.), Ph.D.	Professor and Head	Centre for Atmospheric Sciences
S.G. Deshmukh, Ph.D. (on-lien)	Sujeet Chaudhary, Ph.D.	B.K. Behera, Ph.D.	Professor and Head
J.K. Dutt, Ph.D.	Santanu Ghosh, Ph.D.	Professors	Manju Mohan (Ms.), Ph.D.
Sanjeev Jain, Ph.D.	Joby Joseph, Ph.D.	Ashwini K. Agrawal, Ph.D.	Professors
Sangeeta Kohli, Ph.D.	Ajit Kumar, Ph.D.	R. Alagirusamy, Ph.D.	Maithili Sharan, Ph.D.
D. Ravi Kumar, Ph.D.	H.K. Malik, Ph.D.	R. Chattopadhyay, Ph.D.	A.D. Rao, Ph.D.
Sudipto Mukherjee, Ph.D.	Neeraj Khare Ph.D.	Apurba Das, Ph.D.	Associate Professors
Sunil Pandey, Ph.D.	B.R. Mehta, Ph.D.	Bhuvanesh Gupta, Ph.D.	Sagnik Dey, Ph.D.
P. Venkateswara Rao, Ph.D.	Dalip Singh Mehta, Ph.D.	Deepti Gupta (Ms.), Ph.D.	Krishna Achuta Rao, Ph.D.
P.V. Madhusudhan Rao, Ph.D.	G.V. Prakash, Ph.D.	S.M. Ishtiaque, Ph.D.	Somnath Baidya Roy
M.R. Ravi, Ph.D.	G.B. Reddy, Ph.D.	Manjeet Jassal (Ms.), Ph.D.	Assistant Professor
Anjan Ray, Ph.D.	M.R. Shenoy, Ph.D.	Mangla Joshi (Ms.), Ph.D.	Sandeep Sahnay, Ph.D.
S.R. Kale, Ph.D.	J.P. Singh, Ph.D.	Kushal Sen, Ph.D.	Vimlesh Pant, Ph.D.
S.P. Singh, Ph.D.	Aloka Sinha (Ms.), Ph.D.	R.S. Rangasamy, Ph.D.	Saroj Kanta Mishra, Ph.D.
P.M.V. Subbarao, Ph.D.	R.K. Soni, Ph.D.	Associate Professors	Dilip Ganguly, Ph.D.
Harish Hirani, Ph.D. (on-lien)	A.K. Shukla, Ph.D.	Dipayana Das, Ph.D.	Emeritus Fellow
S. Aravindan, Ph.D.	R.K. Varshney, Ph.D.	B.S. Butola, Ph.D.	S.K. Dash, Ph.D.
S.V. Modak, Ph.D.	Pankaj Srivastava, Ph.D.	Sourabh Ghosh, Ph.D.	Centre for Biomedical Engineering
Pulak Mohan Pandey, Ph.D.	P. Senthil Kumaran, Ph.D.	S. Mukhopadhyay, Ph.D.	Professor and Head
Prabal Talukdar, Ph.D.	V. Ravishankar, Ph.D.	Abhijit Majumdar, Ph.D.	Veena Koul (Ms.), Ph.D.
R.K. Pandey, Ph.D.	Associate Professors	Bhanu Nandan, Ph.D.	Professors
Sujit Kumar Sinha, Ph.D.	Sankalpa Ghosh, Ph.D.	Amit Rawal, Ph.D.	Harpal Singh, Ph.D.
Associate Professors	Amrita Mishra (Ms.), Ph.D.	Rajiv K. Srivastava, Ph.D.	
Sudarsan Ghosh, Ph.D.	Rajendra Singh, Ph.D.	Assistant Professors	
Sunil Jha, Ph.D.	Assistant Professors	Md. S. Wazid Ali, Ph.D.	
Nomesh B. Bolia, Ph.D.	Kedar Khare, Ph.D.	Emeritus Fellow	
Amit Gupta, Ph.D.			

Faculty in Position

Assistant Professors	Associate Professors	Emeritus Fellow	Bharti School of Telecommunication Technology and Management
S.K. Jha, Ph.D.	K. Vamsi Krishna	D.T. Shahani, Ph.D.	Professor & Coordinator
Neetu Singh, Ph.D.	Ramesh Narayanan, Ph.D.	A.L. Vyas, Ph.D.	Ranjan Bose, Ph.D.
Anup Singh, Ph.D.	K.A. Subramanian, Ph.D.	Chandra Shakher, Ph.D.	Amar Nath and Shashi Khosla School of Information Technology
Amit Mehndiratta, Ph.D.	S.K. Tyagi, Ph.D.	Centre for Polymer Science & Engineering	Professor & Coordinator
S.M.K. Rahman, M.Tech.	R. Uma, Ph.D.	Professor and Head	Sanjiva Prasad, Ph.D.
Dinesh Kalyanasundaram, Ph.D.	Assistant Professors	A.K. Ghosh, Ph.D.	School of Biological Sciences
Computer Services Centre	Sandeep Kumar Pathak, Ph.D.	Professor	Professor & Co-ordinator
Professor and Head	Dibakar Rakshit, Ph.D.	Josemon Jacob, Ph.D.	Tapan Kr. Choudhari, Ph.D.
Huzur Saran, Ph.D.	Ashu Verma, Ph.D.	Associate Professor	Professors
Arun Kumar S., Ph.D. (Associate Head)	Emeritus Fellow	Bhabani Kr. Satapathy, Ph.D.	James Gomes, Ph.D.
Subhashish Banerjee, Ph.D.	L.M. Das, Ph.D.	Brijkumar Tripathi, Ph.D.	C.S. Dey, Ph.D.
Sr. System Programmers	M.G. Dastidar, Ph.D.	Assistant Professor	Seyed E. Hasnain, Ph.D.
Pravanjan Kumar Baboo, Ph.D.	A. Ganguly, Ph.D.	Sampa Saha, Ph.D.	Aditya Mittal, Ph.D.
Pradeep Kumar Gupta	S.C. Kaushik, Ph.D.	Leena Nebhani, Ph.D.	Associate Professors
Sriram Hegde	D.K. Sharma, Ph.D.	Emeritus Fellow	Bishwajit Kundu, Ph.D.
Pragya Jain (Ms.) Ph.D.	Industrial Tribology, Machine Dynamics & Maintenance Engineering Centre	Veena Choudhary, Ph.D.	Archna Chug, Ph.D.
K. Narayanan	Professor and Head	S.N. Maiti, Ph.D.	Vivekanandan Perumal, Ph.D.
Ajay Guleria	Jayashree Bijwe, Ph.D.	Centre for Rural Development & Technology	Assistant Professors
Manish Agarwal	Professors	Professor & Head	Manidipa Banerjee, Ph.D.
Gaurav Munjal	Naresh Tandon, Ph.D.	V.K. Vijay, Ph.D.	Ashok Kumar Patel, Ph.D.
Senior Programmers	V.K. Agarwal, Ph.D.	Professors	Interdisciplinary / Transportation Research and Injury Prevention Programme (TRIPP)
Rajesh Bhat, Ph.D.	Assistant Professors	V.M. Chariar, Ph.D.	Professor and Co-ordinator
R.K. Chauhan, M.C.A.	Deepak Kumar, Ph.D.	Anushree Malik (Ms.), Ph.D.	S.R. Kale, Ph.D.
Jaya, M.Tech.	Emeritus Fellow	S.N. Naik, Ph.D.	Central Workshop
Sunil Kak, M.Tech.	O.P. Gandhi, Ph.D.	Satyawati Sharma (Ms.), Ph.D.	Professor & Head
Ram Lal, M.Sc.	Instrument Design & Development Centre	Associate Professor	Naresh Bhatnagar, Ph.D.
Gopal Krishan, M.Sc.	Chief Design Engineer (SG) and Head	Vivek Kumar, Ph.D.	Interdisciplinary Opto-Electronics & Optical Communication Research Programme
Senior Manager	P.V. Madhusudan Rao, Ph.D.	Assistant Professors	Professor and Co-ordinator
Educational Technology Services Centre	Assistant Professors	Hari Prasad P., Ph.D.	M.R. Shenoy, Ph.D.
Professor & Head	Jyoti Kumar, Ph.D.	Kavya Dashona, Ph.D.	
Sanjeev Sanghi, Ph.D.	Gurfan Sayeed, Ph.D.	Emeritus Fellow	
Centre for Energy Studies	Sumer Singh, Ph.D.	Rajendra Prasad, Ph.D.	
Professor and Head	Satish Kumar Dubey, Ph.D.	National Resource Centre for Value Education in Engineering	
Viresh Dutta, Ph.D.	Chief Design Engineers (SG)	Professor & Coordinator	
Professors	S.K. Atreya, D.I.I.T.	Sangeeta Kohli, Ph.D.	
T.S. Bhatti, Ph.D.			
T.C. Kandpal, Ph.D.			

New Appointments

(April 1, 2017 - March 31, 2018)

23 new faculty members have joined the Institute this year. These new additions to our faculty have enhanced our competence in several emerging areas, while bringing new energy into our academic endeavours.

New Appointments

New Faculty Joined	
Hariprasad Kodamana, <i>Chemical Engineering</i>	Vikrant Saxena, <i>Physics</i>
Sayantan Paria, <i>Chemistry</i>	Pradipta Ghosh, <i>Physics</i>
N.M. Anoop Krishnan, <i>Civil Engineering</i>	Bipin Kumar, <i>Textile Engineering</i>
Rijurekha Sen (Ms.), <i>Computer Science and Engineering</i>	Deepak Joshi, <i>Biomedical Engineering</i>
Rahul Narain, <i>Computer Science and Engineering</i>	Jayanta Bhattacharyya, <i>Biomedical Engineering</i>
Prathosh A.P., <i>Electrical Engineering</i>	Sandeep Sukumaran, <i>Atmospheric Sciences</i>
Harshan Jagadeesh, <i>Electrical Engineering</i>	K. Ravi Kumar, <i>Energy Studies</i>
Vivek Venkataraman, <i>Electrical Engineering</i>	Satyananda Kar, <i>Energy Studies</i>
Punit Sharma, <i>Mathematics</i>	Supravat Karak, <i>Energy Studies</i>
Minati De (Ms.), <i>Mathematics</i>	Debaprasad Sahu, <i>Energy Studies</i>
K. Rama Krishna, <i>Mechanical Engineering</i>	Srinivasan Venkataraman, <i>Instrument Design Development Centre</i>
Varun Ramamohan, <i>Mechanical Engineering</i>	



9. Student Activities

(April 1, 2017 - March 31, 2018)

- Student Affairs Council (SAC) and its five Boards 113
- National Service Scheme (NSS) 118
- National Cadet Corps (NCC) 118
- Student Counselling Service (SCS) 118
- Student-teacher Interaction Committee (STIC) 119

Student Activities

(April 1, 2017 - March 31, 2018)

Considerable efforts are made to see that students lead a balanced campus life in harmony with their teachers and fellow students. To ensure that freshers settle down in their new surroundings comfortably, a Freshers' Orientation Programme was organized at the beginning of the academic session.

Counselling Service provides counselling to students on adjustment problems or for the problems arising from financial hardship, and emotional/psychological problems affecting academic pursuits.

Outside the classrooms, facilities for a variety of cocurricular activities, sports, games, student publication etc. are provided for the overall growth and development of students' potentialities and initiative with an emphasis on responsible student leadership.

The pace and mode of student life on the campus is planned and implemented by the following student bodies:

1. Student Affairs Council (SAC) and its five Boards, i.e.,
 - (a) Board for Hostel Management (BHM)
 - (b) Board for Recreational & Creative Activities (BRCA)
 - (c) Board for Sports Activities (BSA)
 - (d) Board for Student Publications (BSP)
 - (e) Board for Student Welfare (BSW)
2. National Service Scheme (NSS)
3. National Cadet Corps (NCC)
4. Student Counselling Service (SCS)
5. Student-Teacher Interaction Committee (STIC)
6. National Sports Organization (NSO)
7. Departmental Professional Societies.

1. STUDENT AFFAIRS COUNCIL (SAC)

The Students Affairs Council has been quite active. Regular meetings took place between the various representatives of SAC, to ensure that all facts of student issues were discussed. SAC representatives also interacted with student member of senate and other SAC committees to ensure wider participation of students in the affairs of the institute. Many student related issues were discussed. Maintenance problems of hostels and the institute, the no dues process for students, library and computer related issues, as well as safety and security issues were also resolved. Openness in the decision making process of various boards and improvements in the student election process were other matters that were discussed. Another important issue that was raised at SAC

was the need for improved student teacher interaction. A student Mentorship Programme to provide counselling of first year students was enhanced. The process of restructuring of Boards and constitution review of the student bodies was also started by SAC. The two standing committees of the SAC, namely the Coordination Committee and the Executive Committee contributed as usual in tackling of various issues referred to them.

a. Board for Hostel Management (BHM)

The Board for Hostel Management is an important Board in the SAC to decide the students issues directly.

There are eleven hostels for boys, six with a capacity in the range of 400-450, two with a capacity of 1000 and the others in the range 300-350 each; two hostels for girls students with a capacity of about 500 each. In addition, there is also very limited accommodation for married students. Each hostel has a House Working Committee which decides the pace and pattern of its life. The Board for Hostel Management, with the Dean of Students as the ex-officio president, coordinates the working of all hostels. The Dean of Students is the head of hostel organization. He is assisted in his administrative responsibilities by the Associate Deans of Hostel Management, Students Welfare, Events and the Assistant Registrar (Student Affairs). The BHM has representation from all the hostel and takes decisions on all problems of common interest. The warden is the administrative head of each hostel. He/she is a faculty member of the Institute. The House Working Committee of each hostel is chaired by the House Master who is a professor of the Institute. The committee consists of the Warden, the House Secretary, the Mess Secretary, the Sports Secretary, the Cultural Secretary, the Maintenance Secretary, and the representatives from all classes.

Right from the beginning of this academic year, hostel maintenance problems were undertaken. A number of meetings with the Dean of Students, wardens, hostel functionaries, Institute Engineer and engineering staff were held. For proper implementation of maintenance schedules, long-term and short-term problems were identified and engineering staff visits to each hostel for monitoring work. Special efforts were made towards the cleaning of common areas.

Security problems in each hostel were reviewed and detail discussion with the wardens, students and security personnel's was held. CCTV monitoring has been done.

Considerable efforts were made for providing accommodation to all students.

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Continuing dialogue between the mess staff, student representatives and authorities has resulted in better work environment. Regular meetings with the staff improved their punctuality.

This year was devoted to improve the food quality in hostel mess. Regular meetings with Dean of Students, Hostel Representatives and Mess Supervisors were held for the same purpose. Modifications assured for Scheme (MAO) is being implemented for BHM staff.

The Wardens / House Masters during 2017-18

Hostel	Warden
Aravali	Prof. R. Abhijit Abhyankar
Girnar	Prof. D. Sundar
Himadari	Prof. Paroma Sanyal (Ms.)
Jwalamukhi	Prof. Ravi P. Singh
Kailash	Prof. Joyee Ghosh
Karakoram	Prof. M.C. Ramteke
Kumaon	Prof. Rajendra Singh Dhaka
Nalanda	Prof. A.K. Saroha
Nilgiri	Prof. D. Kalayansundram
Satpura	Prof. S.K. Pattanayek
Shivalik	Prof. B. Sujin Babu
Udaigiri	Prof. S.R. Sarangi
Vindhyachal	Prof. Ashok Patel
Zanskar	Prof. Saif K. Mohammed

A BHM dinner was organized during the Student's Week. Each hostel immaculately arranged its counters at a central place. Faculty and students attended with enthusiasm. The cultural programme was a big attraction for the evening. The BHM trophy and BHC trophy was given for their excellent outstanding work.

BHM also arranged the stay and messing for all the delegates of Rendezvous' 2017 and TRYST' 2018 events very successfully. To simplify the recovery of dues from students, a regular monitoring system has been introduced involving simplified system of payment, by which the students sign a declaration form and the amount is automatically deducted from their bank account, avoiding any personal bank transaction on this account. Use of computers for maintenance of hostel accounts has been in existence from past six years and the staff working in the hostels was encouraged to undergo training in the use of PCs.

Each Hostel was in the forefront in initiating and hosting the

celebration on the independence Day and the Republic Day functions at the Institute level.

Hostel Mess Secretaries put in considerable efforts in controlling food wastage and thus were able to keep a check and balance of galloping mess bills. By proper coordination between the students and the wardens, the supply system was improved and new supplies were identified and added.

There were surprise checks by canteen cells for institute canteens. Monopoly of supplies has been reduced by attaching 2-3 suppliers to each hostel.

b. Board for Recreational and Creative Activities (BRCA)

BRCA continued the open system in 2017-18, with fresh initiatives from all the clubs. With the scrapping of the hostel comp culture, we saw more cross-hostel bonding amongst the participants, as well as a few combined events of different clubs. With no hostel restrictions, there was a much greater participation in internal club activities.

Vacanza – Vacanza was a new initiative launched this year to keep students connected with BRCA even throughout the summer. Each club organized an informal competition, open to all students in the vacations. As all the submissions were in the form of videos, pdf files or facebook comments, the students could stay involved with their clubs from their homes. With Amazon gift vouchers and other great prizes, Vacanza saw a thumping participation.

BRCA Orientation – The BRCA orientation was held in August with all the clubs showcased their talents and organized informal interactive events to introduce freshers to the non-academic side of IIT Delhi. This marked the beginning of the BRCA journey for all freshers (UG+PG), including interest within them.

Rendezvous 2018 – With Hardy Sandhu, Kailash Kher and the entertaining Salim-Sulaiman duo rocking the Pro-Nites, it was clear RDV 2018 was reaching new heights. While comedian Zakir Khan left the entire Open Air Theatre in hysterics on the last day, foreign artists like Galina and Alaska Snack Time rocking the Confluence stage, there was never a moment of silence in campus. With more than 30 club events and multiple informal events, the campus was packed with students from over 600 colleges. With the organizing team working day and night to ensure brilliant decoration, flawless events and delicious food fest, we ensured a footfall of over 70,000 students, and a 4-day experience no one is likely to ever forget.

Inter IIT Cultural Meet – Probably one of our biggest achievements of the year, IIT Delhi sent a contingent of 170 enthusiastic talented students to IIT Kanpur to battle it out with our fellow IITs in a fiercely contested Meet. After spending the entire Winter Vacations in campus, training for the competition, our students bagged first prize in multiple

Student Activities

events. After 4 grueling days, we won the prestigious Inter IIT Cultural Trophy!

New Initiatives – Without a comp structure, club secretaries were more flexible with their events. There were many crossover events, where clubs divided responsibilities to make events smoother and grander. There was also greater involvement of BSP to ensure greater outreach and publicity. Students participated in many DU College fests, winning laurels for IIT Delhi in the same.

All Boards Night – Held in the final week of the academic year, All Board Night felicitated all those who had taken the cultural spirit of IIT Delhi to New heights. The Debating Club was adjudged as the best club, while the best secretary was Nikhil Dadeech (Drama) followed by drummer Prakhar Singh (Music). The prestigious spirit of BRCA award was given to Saurabh Kumar.

c. Board for Sports Activities (BSA)

Sports, being the practical way of education, inculcates

and ancillary arrangements for all the games. Construction of a new multipurpose hall with facilities for badminton, table tennis and squash courts had already started. The squash courts and basketball courts are also under renovation and will be available very soon. A team comprised of Sports officer, Physical training instructors (PTI), part-time coaches and ground staff, the President (BSA) and Vice President (BSA), help the students in their regular sporting activities ensuring that all facilities are being properly maintained and utilized.

The Institute lays considerable emphasis on student's participation in various outdoor and indoor games. Such activities take place almost throughout the year. The students are encouraged to take part in the Fresher's events conducted for incoming first year students, friendly matches with the local colleges, inter-hostel events, the annual IIT Delhi Inter-Collegiate event 'Sportech' the annual Inter-IIT Sports Meet and in sporting activities organized by Institutes outside Delhi. To summarise, IIT Delhi has a very vibrant sporting atmosphere contributed to, not only by students but staff and faculty alike.



discipline and dedication in general life. In addition, it facilitates recreation and fosters social harmony. Board for Sports Activities (BSA) of IIT Delhi has been looking after this important component for the development of sports environment in the campus. Board for Sports Activities (BSA) is a constituent body of the Student Affairs Council and is responsible for the coordination of the various sports activities in the Institute. It ensures that adequate sports facilities are available to the community and provides a forum for the students and staff to discuss and formulate policy towards the betterment of sports activities in the campus.

Our facilities include, a cricket field with four turf wickets, four flood-lit cricket practice pitches, flood-lit hockey and football grounds, three flood-lit volleyball and football grounds, eight flood-lit tennis courts (four synthetic and four clay courts), tennis practice wall, two squash courts, one badminton hall, two table tennis halls with synthetic flooring, one weight-lifting hall with 400 meters athletics track, flood-lit jogging track

d. Board for Student Publications (BSP)

The year 2017-18 marked a change in the vision of BSP. The publications board began to focus more on creative expression and facilitating interaction within the IIT Delhi community. In an attempt to go beyond the team boundaries, students and faculty from outside the board were involved through various events, competitions and online series.

The Board attempted to knit the entire IITD community together through print and online media. The Journalism Wing worked with the aim of investigating issues relevant to the student community, in order to bring student concerns to the administration. The Creative Wing restructured itself to increase its outreach to the students and worked to enhance the involvement of the PG students in the Board's activities. The Design and Video Team helped in the photographic and video coverage of events on campus. It also helped in increasing outreach through trailer videos for publications.

For BSP, which is still in its nascent stages, the year 2017

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was a year of firsts. Listed below are some of the major new initiatives from last year:

- **To enhance student-faculty interaction:**

BSP worked to bridge the gap between the two sides of the podium in our classrooms by evolving initiatives like 'The First Conversation' and the online series, 'Prof Next Door'. 'The First Conversation', held with professors Ambuj Sagar and Narayanan Kurur last year, acted as a great platform for the students to get to know the professors more and interact with them on issues that are beyond the confines of lecture halls.

- **Magazine Design Competition:**

A one-of-its-kind Inter-Hostel Magazine Design Competition 'Gazettale' was conceptualized and conducted for the first time. It gained wide popularity as the participants came up with beautiful and very creative magazines. In another initiative to increase participation of the student community at large, the final publication of the board, Muse was solely composed of entries from outside the BSP team. It gave students a platform to showcase their talent, in both Hindi and English.

- **Print Publications:**

In print, the board published two newsletters and four magazines during the year.

BSP worked on improving the quality of research for the newsletter articles and sought responses from outside the team through surveys and comments from students, administration and faculty. On the creative side, BSP renamed its technical magazine--the new name is Elemental--and launched it in an all new avatar. A new diary format was implemented for the creative magazine Muse, which presented a collection of several diary entries through different eras of time.

- **To increase accountability and improve efficiency:**

To increase accountability within student bodies on campus, BSP developed a review meter, 'GSec Miles' to check whether the manifesto promises were actually being fulfilled by the respective General Secretaries or they remained just tall claims.

Collaborations with other boards led to increase in efficiency. Inter IIT Meet held in Kanpur was extensively covered for the first time; Institute Convocation was covered in collaboration with CAIC.

- **Literati 2017: Cerca Trova**

The first flagship event of the year was Literati which saw several renowned journalists, authors, and publishers come together in a span of three days. The renowned writer Amit Chaudhari, the singer Rajshekhar, veteran journalist Prabhu Chawla, and Ananth Padmanabhan, the CEO of Harper Collins, were among the invited speakers.

The IIT Delhi I-Can Conference was renamed as The Negotiation Table (NeT) and it went on to become a huge success. The Negotiation Table created a virtual world wherein the participants took on the roles of Journalists, Politicians and Corporates and held negotiations regarding the problem given to them as they would in the real world, in sessions spanning 3 days.

Other than this, enriching workshops and competitions were also organized during Literati.

- **Board for Student Welfare (BSW)**

The Board for Student Welfare, IIT Delhi is a student body set up with an intention to look after the Welfare of the Student Community. BSW has always been dedicated towards helping the Student Community in every aspect of life in IIT Delhi. The Board adheres to a principle of making itself the organisation of the Students, for the Students, and by the Students.

Orientation

Board for Student Welfare have been constantly involved in the Orientation and Registration of every new Batch. It handles 850+ UG entries and over 1000+ PG entries. Apart from the usual registration processes, the Board is involved in tour of stalls, where freshers are introduced to various co-curricular and extra-curricular clubs being operated in IIT Delhi; introduction to department, where freshers are given a brief introduction and research opportunities in their respective departments.

This year, BSW started JEE Counselling session in summers, where in JEE Advanced Qualified students were invited to clear their doubts regarding IIT Delhi and courses being taught in IIT Delhi.

Along with this Registration process, BSW also organises several Camps mainly Mattress camp, cooler camp, bicycle camp to facilitate items at discounted price for IIT Delhi students.

Mentorship

The Board handles mentorship program of IIT Delhi, where in all the first year undergraduate students are allotted mentors from third and fourth year to get them accustomed to IIT Delhi life initially. The mentors are responsible for smooth transition of freshers within initial one month and guiding them throughout the year over various academic, cultural related domains. Mentors play an integral role in life of every IIT Delhi student. Apart from allotting the mentors, board ensures constant feedback of each mentor and constantly works to provide good mentorship to each and every first year undergraduate.

The mentors help BSW in conducting the orientation in key sessions life introduction to Mentorship where freshers are

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introduced to the concept of mentors, given introduction to counselling services. Also, the mentors are responsible for conducting tour of stalls where every club and board of IIT is allotted a stall to introduce freshers to the extra-curricular activities in IIT Delhi.

Apart from regular student mentorship in 2017-18 there were several other initiatives undertaken to further help the students.

- *Academic Mentorship Program:* Few academic mentors are allotted to each hostel for the entire first year undergraduate course and regular doubt solving sessions are held in each hostel. The sessions aim to inculcate an academic atmosphere in the hostels, and provide a platform to all the students to get their course related doubts cleared on a regular basis.
- *Language Mentorship Program:* With the help of NLN teachers, students were identified that need help in English language and mentors are allotted to them to help out in learning the language. The aim is to provide sufficient knowledge to make them understand the class content and the examination papers.

- *Alumni Mentorship Program:* The flagship program of mentorship committee was started this year with the aim of using vast expertise of alumni in various careers for the benefit of current students. Interested students are registered on alma connect, an online portal to connect with the alumni network. The students can take career guidance in multiple fields from the alumni already working there.

- *Computer Classes:* The board believes in equal opportunities for all and hence, BSW started computer classes this year to help out the freshers who did not have basic skills on how to operate a computer. Computer technology has become an integral part of college studies and this program makes sure no one lags behind just because of not so fortunate backgrounds.

BSW also conducts several Welfare activities for students all-round the year to help them to gain information about IIT life, career and also Fun Activities.

- Intern k Fundae
- Fores k Fundae
- Delhi Darshan
- Talk series and various other sessions



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2. NATIONAL SERVICE SCHEME (NSS)

NSS IIT Delhi is the IIT Delhi chapter of the National Service Scheme, institutionalized under the Ministry of Youth Affairs & Sports Govt. of India. Our sole aim is to motivate students at IITD to indulge in nation building activities through various events and projects which are aimed towards the benefit of people in and around IIT Delhi. We share the belief that such activities are almost always means of great satisfaction and joy. NSS IITD has a volunteer base of around 2000 students belonging to various disciplines and degrees of IIT Delhi, 25+ ongoing projects and collaboration with 20+ student bodies and NGOs. We work on a diverse range of social issues broadly under five domains - Education, Environment, Health, Social Innovation and Society.

Milestones that we have achieved :

- With an aim to empower and secure the future of the underprivileged, IIT Delhi adopted VIDYA School and NSS would be facilitating and mentoring the children through its various projects like Science Seeds, Science Speaks, Extra Currics and Aarohan.
- Our volunteers successfully resolved the issue of water scarcity in Sindhi Basti with Delhi Jal Board and now two water tankers serve the community every week.
- We have facilitated 45 students from Munirka and Sindhi slums to fill the RTE applications, out of which 17 have been shortlisted for admission.
- 700+ donations and 2100+ lives were saved with 7 blood donation camps organised.

We have successfully organised the annual social extravaganza, Kaizen : IIT Delhi for Society attended by 30+ social organisations and 15+ other NSS bodies. It included-

- *Social Convnetion*: First ever and one of its kind platform provided by IIT Delhi for having several Corporates, NGOs and Student Bodies on board to share various problems and ideas that create social impact.
- Three workshops on Youth Leadership, Mental Hygiene and Women Safety were conducted in collaboration with ComMutiny : The Youth Collective, Chinmaya Mission and SLAP NGO attended by students from various colleges across Delhi.
- *Sangarsh*: Four keynote speakers associated with fields like Environment Conservation, Social Entrepreneurship, Women Empowerment, Rural Development and Youth Motivation graced the event. Mr. Jaya Prakash Dabral (founder, Himalayan Chipko Movement), Mr. Srijan Pal Singh (CoFounder, Dr. A.P.J. Abdul Kalam Centre), Ms. Pritika Mehta (TEDx speaker, Entrepreneur), Mr. Simarpreet Singh (Founder, TEDx Chandigarh).
- *Ideathon*: An event to brainstorm and propose a suitable

and economically viable model for tackling a real life problem statement, attended by several college bodies. The winning team was awarded by SAHAS NGO.

- 15+ Stalls put up by several NGO's and research units like Flexmotiv Technologies Pvt. Ltd., Holy Cow Foundation, Prajna Foundation, FISL and UPAY working towards social impact.
- A one of its kind platform is being created comprising of individuals, NGOs, social startups and corporates to discuss the issues collectively.
- Organised a cycle rally in collaboration with 'Greenolution' which witnessed a turnout of 75+ people, including professors, staff and students of IIT Delhi.

3. NATIONAL CADET CORPS (NCC)

The NCC unit at IIT Delhi is affiliated to 7 Delhi Battalion NCC. The NCC unit IIT Delhi organized the following activities during the preceding year:

- Regular training in foot, arms and ceremonial activities.
- Regular parade drills.
- Parade on the Republic Day, where the Director of IIT Delhi undertook the inspection of the NCC cadets.
- Award for the Best Cadet and the Most Disciplined Cadet were conferred to two of the cadets.
- A winter camp was organized on the IIT Delhi premises in December that involved weapons training, map reading activities, physical fitness and hygiene, firefighting lectures. Cadets were sent to attend annual training camps that were organized by 7 Delhi NCC Battalion, outside the IIT campus, and the cadets participated with full enthusiasm and zeal. Some cadets were given preparation guidelines for the B- and C- certification examinations which they plan to undertake in the current year.

4. STUDENT COUNSELLING SERVICES (SCS)

The aim of Student Counselling Services (SCS) of IIT-D is to support the students to enhance their efficiency and output to perform better and to cope with various distresses they experience and to address and satisfy issues of parents regarding their wards and addressing problems of any IITD faculty and staff as per their requirement.

Three components of SCS are firstly, the initial problem which is to be addressed by the counsellors which is subsequently followed by support through psychological therapies and assessment done by the counselors and the referrals by the counsellors to a psychiatrist and other medical intervention if required and thirdly, the follow up sessions with the students and staff.

Counselling in SCS involves therapies based on cognitive, behavioral, rational, emotive, supportive, existential and

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interpersonal and intrapersonal and personality domains of an individual.

Common Psychological problems brought at SCS:

The primary problems that individuals come up with and the SCS deals with, that disturb the individual's emotional, psychological, mental and physical well-being, thus leading to poor coping are stress and anxiety, academic concerns, depression, forms of eating disorders, anger and low self-esteem, adjustment problems (at personal, family, friends and social levels), relationship issues, peer pressures, time management, coping with issues, problem solving, decision making, personality orientation of self and that of others (social schemas), interpersonal and Intrapersonal communication skills, suicide ideations, addictions (smoking, alcohol, drugs, video gaming), cyber bullying, somatoform disorders, issues pertaining to body image and sexuality.

SCS Activities during the period:

- **Orientation Programme:** Programme was held for two days in the month of July, 2017.

Day 1:- SCS provided a Counselling session with parents. Sessions was aimed at sensitizing parents towards potential stressors for their wards and how they can handle effectively their wards issues while they are at IIT Delhi in the initial three months of their joining and to help their wards in adjusting to the new environment and coping with problems and potential stresses.

Day 2:- SCS provided information to students regarding their adjustment to IITD campus life and hostel environment. A brief talk was given to assist them in coping with problems like Language difficulty, change in food, system of assessment in terms of academic grading, loneliness and home sickness. This was done through a stall put up by the mentor team of students, which proved to be highly effective and where the student mentors gave a video representation showing the functioning of SCS, IIT Delhi and SCS awareness.

- **Hostel visits by counsellors in the month of August and September, 2017**

We were able to visit 7 hostels. Each hostel had approximately 50 new students who were addressed between 6 to 7.30 p.m. This included orienting new

students to the hostel environment of the institute. However, few hostels were not visited as despite repeated fixing of dates with the overall student co-coordinated or they were unable to work out a counselling session schedule for a few hostels due to some reasons as reported by the student representatives.

Lectures conducted by SCS:

A number of NEN Lectures were conducted this year from January 2018 till date. Primary focus of the NEN lectures are on ethics, moral and social responsibility, awareness on substance abuse, relationship and adjustment issues amongst many others has been going on.

Recent Developments:

- With the number of SCS counsellors having increased since last year, the Student Counselling Services has been able to deal with the increasing number of students visiting SCS for counselling.
- There has been a decrease in waiting time for the students, and about 30-40 mins, sometimes up to an hour depending upon the nature of the problem at hand.
- As requested by some students that they looking for a male counsellor, part time male counsellor, is now visiting IITD, on contract basis as requested by some students in an SCS survey. The male counsellor has been appointed for the students of IIT Delhi, for the ones who especially feel comfortable only to a male counsellor. The counsellor joined IIT Delhi in the month of March 2018. He comes once a week, every Friday, between 5-7 p.m.
- IIT Delhi, BSW in 2017 for the IIT students had taken an initiative to tie up with an online counselling portal YourDost to help students in case the need arises with 24x7 online counselling for the students, a service which has been made free for IIT Delhi students so that they can avail of the help and take the appropriate help anytime of the day. This is an add on service to SCS IIT Delhi.

5. STUDENT-TEACHER INTERACTION COMMITTEE (STIC)

STIC (Student-Teacher Interaction Committee) made available funds for Student-Teacher Interactions organised by individual faculty for their respective courses. Also many departments organised dinners involving all their students and faculty by utilizing STIC funds for various courses.



10. Social Responsibility

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Social Responsibility

(April 1, 2017 - March 31, 2018)

RELAXATIONS TO SC/ST/OBC/PD STUDENTS AND STAFF

IIT Delhi is sensitive to the need of the students belonging to the SC/ST community and to those who are having disabilities. Special care and attention are paid to them.

Relaxation in Admissions

Admission to the first year of the four-year B.Tech., dual degree programmes is made through the Joint Entrance Examination (JEE) Advanced and five year which is held in May and is common for all the IITs.

- The minimum qualifying marks for SC/ST candidates are specially prescribed at a lower level than those for the general category of students.
- The age limit is also relaxable in their case by five years.

Reservation of Seats

At IIT Delhi, the percentage of seats reserved for SC/ST/OBC/PD candidates is as follows :

	B.Tech.Dual Deg. & Int. M.Tech.	M.Sc.	M.Tech.	M.Des.	M.B.A.
SC	15	15	15	15	15
ST	7½	7½	7½	7½	7½
OBC	27	27	27	27	27
PD	5	5	5	5	5

Persons with Disabilities (PD)

For any category of disability (viz., locomotor, visual, speech and hearing), benefit is given to those candidates who have at least 40% permanent physical impairment in relation to a body part/ system/ extremity/extremities/ whole body etc. The candidates in this category are required to produce a certificate.

SCHOLARSHIPS AND FINANCIAL ASSISTANCE

All SC/ST students are given scholarships and financial assistance as detailed below:

- All SC/ST Students are exempted from payment of tuition fee.
- Free messing (basic menu) and a pocket allowance of Rs. 250 per month in lieu of the merit-cum-means scholarship for the students having annual family income upto 4.5 lacs. In addition, they are exempted from payment of Hostel seat rent.
- All eligible SC/ST students, while on training or doing courses during semester breaks or required to stay in the Institute during semester breaks or exempted from taking meals from hostels due to medical reasons etc. are given payment of 70 per month and a per diem allowance in lieu

of free messing on the basis of prevalent average rate of messing charges as applicable from time to time.

- SC/ST students who fail in the examination for the first time continue to receive the free messing subject to a maximum limit of five years.
- SC/ST students are loaned books upto a value of 500 from the book bank without payment of any loan fee. The books are, however, required to be returned at the end of each semester.

Master of Science

Merit-cum-means scholarship of 1,000 per month and free tuition are permissible to M.Sc. students to the extent of 25% of the sanctioned strength subject to a maximum of five in each department. Only those students are eligible whose parents' gross income upto Rs.4.5 lacs per annum. The terms and conditions of the award of scholarship including conditions for continuation are laid down in the Rules and Regulations and are subject to change from time to time.

PREPARATORY COURSE

A one-year preparatory course is also run for SC/ST/PD candidates. Candidates admitted to this programme are amongst those who appeared for the JEE but were unsuccessful in qualifying for admission. The number admitted to this programme varies from year to year depending upon the number of SC/ST/PD candidates who were successful in gaining regular admission with the total number of candidates admitted to the regular B.Tech.

Dual Degree Integrated M.Tech. programmes as well as the preparatory course being limited to the above indicated percentage. Preparatory course students undergo zero level courses in Physics, Chemistry, Mathematics and English.

Candidates who successfully complete the preparatory course are eligible to seek admission during the following academic year against the vacant SC/ST/PD seats of the current year. Alternately, in case they desire a discipline of their choice, they must reappear for the JEE in the subsequent year. SC/ST Preparatory course students are also eligible to receive free messing and pocket allowance on the basis of the same norms as for regular undergraduate students belonging to SC/ST category.

OTHER FACILITIES

- Reduction in the academic load in subsequent semester in case they do not maintain the required semester grade point average (SGPA).
- Tutorial type remedial courses with half the normal credits.
- Special courses during the summer vacations to make up for the credit requirements due to reduced load during the regular semesters.

Social Responsibility

- Counselling service to help such students to better adjust to campus life and environment.

CONCESSIONS ALLOWED TO STAFF

I.I.T. Delhi follows the Government of India rules governing reservation for Scheduled Castes/Scheduled Tribes, OBC and Physically Handicap persons. Appointments made in respect of these categories during the year under report are given below:

No. of Candidates Appointed					
Groups	Scheduled Castes	Scheduled Tribes	OBC	PD	Total
A	1	0	0	0	1
B	0	0	0	0	0
C	0	0	0	0	0
D	0	0	0	0	0

SUMMER RESEARCH FELLOWSHIP PROGRAMME

The main objectives of this programme are - to help inculcate research culture among the faculty members of educational institutions outside the IIT system, to provide orientation towards research through interaction with the mentors and other research students and exposure to the facilities and labs, with a view to eventually motivate them to undertake higher studies and research activities within or outside IIT Delhi. The feedback received from both the fellows and the mentors so far has been quite positive and encouraging. Under the Summer Faculty Research Fellowship Programme of the Institute organized under the CEP, 99 faculty fellows joined this year and they come from 58 different colleges/institutes representing 19 states of the country. They have been associated with a total of 50 faculty mentors. They spent about six weeks during the summer and worked with IIT faculty mentors.

COMMITMENTS IN SUSTAINABILITY AND ENVIRONMENT

The Institute has rolled out initiatives to make the campus more Sustainable and Environment friendly. The Institute has taken measures in this direction by addressing different major aspects – Biodiversity, Energy, Water Conservation and Minimizing Waste. "In regard of this, the institute has constituted a dedicated and independent "Green Office" consisting of members knowledgeable in environmental issues, green technologies and practices besides Sustainable IIT Delhi student organization. The purpose of Green Office and Sustainable IITD is to "track, monitor and steer the institute towards green practices."

An active team is dedicated towards implementing solutions and bringing about sustainable changes by translating research into action on campus. In order to maintain sustainability, Institute has been indulged with various activities throughout the year. Institute laying great emphasis on Solar Energy & Horticulture, and has been actively focusing on underground Water Pumping, Water Management, Waste management.

Some of the highlights under the period are:

- The old halogen street Lights have been replaced with LED lights with an aim of efficient energy consumption.
- Replacements of old Air conditioners with energy efficient ACs.
- Replacements of two 60 Tr. + one 80 Tr. Chiller with three 100 Tr. screw chillers.
- Solar Panels Installation at Director's Lodge.
- Solar Water heater at Students Hostels Mess.
- Recycling and waste management: The objective of the project is to create a zero waste management plan for the campus.

COMMUNITY

The Institute is indulged in nation building activities through various events and projects which are aimed towards the benefit of community. We share the belief that such activities are almost always means of great satisfaction and joy The Institute has a volunteer base of around 2000 students belonging to various disciplines and degrees of IIT Delhi. The Institute works on a diverse range of social issues broadly under five domains - Education, Environment, Health, Social Innovation and Society.

Milestones that have been achieved under the period:

- With an aim to empower and secure the future of the underprivileged, IIT Delhi adopted VIDYA School and NSS would be facilitating and mentoring the children through its various projects like Science Seeds, Science Speaks, Extra Currics and Aarohan.
- Under the new project "SWAYAM" sponsored by MHRD, IIT Delhi is encouraging faculty members of the Institute to develop MOOCs (massively open and online courses) to be disseminated country-wide, by doing this, Institute is promoting the use of Educational Technology. This initiative are recently inaugurated and appreciated by the Honorable President of India and by the Honorable Minister for HRD.
- Our volunteers successfully resolved the issue of water scarcity in Sindhi Basti with Delhi Jal Board and now two water tankers serve the community every week.
- 45 Students have been facilitated from Munirka and Sindhi slums to fill the RTE applications, out of which 17 have been shortlisted for admission.
- 700+ donations and 2100+ lives were saved with 7 blood donation camps organised.
- Social Convention: First ever and one of its kind platform provided by IIT Delhi for having several Corporates, NGOs and Student Bodies on board to share various problems and ideas that create social impact.
- Three workshops on Youth Leadership, Mental Hygiene and Women Safety were conducted in collaboration with ComMutiny: The Youth Collective, Chinmaya Mission and SLAP NGO.

11. Alumni Contribution

(April 1, 2017 - March 31, 2018)

The Alumni are a very valuable resource for the Institute, and increasingly, they have started to make a difference to the way things are done at IIT Delhi. The Alumni have directly contributed for instituting Chair Professorships, Young Faculty Incentive Fellowships and Student Awards and even for Infrastructure Development.

The Institute has garnered excellent support for its vision and mission from its Alumni during the year.

Some of the contributions from the Alumni in the previous year are listed below and are gratefully acknowledged:

Contributor	Contribution in Rs.	Contribution For
Multi-donor	21,000.00	Stay-Con 2016
Multi-donor	99,31,718.00	IITD CS&E Research Acceleration Fund
Multi-donor	2,12,300.00	Wellness Fund-Phase 1
Mr. Ramesh C. Kapur	60,00,000.00 (Pledged) 1,80,00,000.00	Ramesh C. Kapur (Scholarship)
Multi-donor	63,94,000.00	Batch of 66 Chair and High Tech Chair
Mr. Chetan Vohra	20,00,000.00	Chetan Vohra (Scholarship)
Multi-donor	76,19,562.00	Silver Jubilee Endowment by 1993 Batch
Multi-donor	9,70,000.00	Batch of 1997 Donation
Multi-donor	3,22,000.00	Golden Jubilee 1967 Batch Donation
Mr. Saurabh Mittal	10,00,00,000.00	Pledged towards upcoming Sports Complex by Mr. Saurabh Mittal
Mr. K. Ananth Krishnan	30,00,000.00	K. Ananth Krishnan (Awards)
Mr. Neeraj Arora	40,00,000.00	Veena Arora Faculty Research Award (Mr. Neeraj Arora)
Mr. Ajay Gupta	1,00,00,000.00	Ajay Gupta (Chair)
Multi-donor	23,90,551.00	IITD Giving Day



THE 1967 BATCH ORGANIZED ITS GOLDEN JUBILEE CELEBRATION HELD ON 14-16TH DECEMBER

12. Financials

(April 1, 2017 - March 31, 2018)

The Institute is financed by the Department of Higher Education, Ministry of Human Resource Development, Government of India. During 2016-2017, the Institute received a grant of ₹41,121.01 lakhs from the Ministry of Human Resource Development to meet its yearly expenses. The Institute receives funds for sponsored research projects and for consultancy assignments being undertaken by the Institute from several funding agencies and Industries. The financial year of the Institute corresponds with that of Govt. of India i.e. 1st April to 31st March. The accounts of the Institute are annually audited by the Director General of Audit & Central Revenue of India. The 115th Finance Committee of the Institute (shown in the box on the side) in its meeting held on 07-04-2018 recommended Plan (Normal) under (OH-35) Revised Estimates for ₹38,900 lakhs for the year 2017-2018 and Budget Estimates for ₹50,000 lakhs for the year 2018-2019 respectively and Plan under (OH-31 & OH-36) Revised Estimates for ₹51,250 lakhs for the year 2017-18 and Budget Estimates for ₹58,055 lakhs for the year 2018-19.

The following are the details for the financial year 2016-2017 and 2017-2018:

FINANCE COMMITTEE

(As on 31.3.2018)

Kumar Mangalam Birla, Chairman

V. Ramgopal Rao

Tripti Gurha (Ms.)

Anil Kumar

Punya S. Srivastava (Ms.)

Sanjeev Sanghi

Sandeep Chatterjee, Secretary

PLAN (Non Recurring) OH-35

Detailed Statement showing the Actual Receipt and Expenditure for 2016-17, 2017-18 along with Revised Estimates and Budget Estimates 2018-19

Head of Expenditure	Actuals 2016-2017 (₹ in Lakhs)	Budget Estimates 2017-2018 (₹ in Lakhs)	Revised Estimates 2017-2018 (₹ in Lakhs)	Actuals 2017-2018 (₹ in Lakhs)	Budget Estimates 2018-2019 (₹ in Lakhs)
A. Receipt					
Plan Grant from MHRD carryforward	(-)1,674.75	-	-	(-) 3,875.66	-
Plan Grant from MHRD (Normal)	10,307.57	50,500.00	38,900.00	16,800.00	50,000.00
Special Plan Grant from MHRD	-	-	-	10,500.00	-
Grant Receivable from MHRD	3,875.66	-	-	2,774.78	-
Total A	12,508.48	50,500.00	38,900.00	26,199.12	50,000.00
B. Expenditure					
Normal Development Activities & Increase of Students Intake (including new hostel) New Courses Modernisation & Thrust Areas					
(i) Non-Recurring	12,508.48	50,500.00	38,900.00	15,699.12	50,000.00
Commitments against L.C.'s for the year 2017-2018 Special Plan Grant	-	-	-	10,500.00	-
Total B	12,508.48	50,500.00	38,900.00	26,199.12	50,000.00

Financials

Detailed Statement showing the Actual Receipt and Expenditure for 2016-17, 2017-18 alongwith Revised Estimates and Budget Estimates 2018-19

Head of Expenditure	Actuals 2016-17 (₹ in Lakhs)	Budget Estimates 2017-18 (₹ in Lakhs)	Revised Estimates 2017-18 (₹ in Lakhs)	Actuals 2017-18 (₹ in Lakhs)	Budget Estimates 2018-19 (₹ in Lakhs)
Major Works					
On Going Schemes	6,888.19	20,000.00	10,000.00	12,131.20	20,000.00
Repair & Maintenance on Buildings	208.51	1,000.00	1,000.00	-	1,000.00
Fresh Schemes/Projects	-	20,000.00	20,000.00	-	20,000.00
Teaching Equipment/Computerization	2,347.27	6,000.00	4,000.00	2,538.80	5,000.00
Office General Equipments, Hospital Equipments/ Furniture and Fixtures & Institute Level Network	892.50	1,700.00	1,400.00	519.45	1,200.00
Motor Vehicles	38.24	-	-	-	-
Research Funds, Central Facilities & Thrust Areas	136.49	300.00	300.00	292.31	300.00
Library Books & Journals	1997.28	1,500.00	2,200.00	217.36	2,500.00
Web Based Academic Systems	-	-	-	-	-
Institute Level Network	-	-	-	-	-
Total	12,508.48	50,500.00	38,900.00	15,699.12	50,000.00

PLAN (Recurring) OH-31 & OH-36

Detailed Statement showing the Actual Receipt and Expenditure for 2016-17, 2017-18 along with Revised Estimates and Budget Estimates 2018-19

Head of Income	Actuals 2016-17 (₹ in Lakhs)	Budget Estimates 2017-18 (₹ in Lakhs)	Revised Estimates 2017-18 (₹ in Lakhs)	Actuals 2017-18 (₹ in Lakhs)	Budget Estimates 2018-19 (₹ in Lakhs)
Institute Income	9,667.64	9,633.00	9,692.00	10,812.86	9,823.00
Grant from MHRD	30,813.44	44,367.00	41,558.00	38,100.20	48,232.00
Total	40,481.08	54,000.00	51,250.00	48913.06	58,055.00

PLAN (Recurring) OH-31 & OH-36

Detailed Statement showing the Actual Receipt and Expenditure for 2016-17, 2017-18 along with Revised Estimates and Budget Estimates 2018-19

Head of Expenditure	Actuals 2016-17 (₹ in Lakhs)	Budget Estimates 2017-18 (₹ in Lakhs)	Revised Estimate 2017-18 (₹ in Lakhs)	Actuals 2017-18 (₹ in Lakhs)	Budget Estimates 2018-19 (₹ in Lakhs)
Pay & Allowances	16,159.27	24,700.00	24,950.00	24,149.25	29,200.00
Pension & Pensionary Benefits	8,507.42	11,600.00	9,350.00	6,389.98	10,105.00
Institute Scholarship	4,273.05	6,200.00	5,200.00	5,038.08	6,200.00
Academic Expenses	1,205.77	1,500.00	1,500.00	1,136.97	1,600.00
Educational Expenses	1,003.10	1,000.00	1,100.00	1,105.38	1,200.00
Estate Maintenance	7,187.79	7,200.00	6,800.00	7,190.01	7,400.00
Office Contingencies, Misc. & Commitments/ Provisions	2,137.38	1,800.00	2,350.00	2,200.65	2,350.00
Total	40,473.78	54,000.00	51,250.00	47,210.32	58,055.00

INCOME

Detail Statement showing the Actual Income for 2016-17, 2017-18 along with Revised Estimates and Budget Estimates 2018-19

Head of Income	Actuals 2016-17 (₹ in Lakhs)	Budget Estimates 2017-18 (₹ in Lakhs)	Revised Estimates 2017-18 (₹ in Lakhs)	Actuals 2017-18 (₹ in Lakhs)	Budget Estimates 2018-19 (₹ in Lakhs)
Academic Receipts	3,860.63	3,700.00	4,000.00	4,424.29	4,200.00
Receipt-Central Administration					
Interest on Investments/Savings Account	1,576.41	1,200.00	1,200.00	1,798.72	1,000.00
Charges for use of Staff Cars and Buses	16.94	6.00	17.00	17.80	20.00
Application Fee	79.81	125.00	80.00	44.41	100.00
Sponsored Project/Consultancy and CEP	37.13	400.00	50.00	43.22	50.00
Works & Building					
Licence Fee	305.84	250.00	320.00	262.43	325.00
Seat Rent	617.90	600.00	620.00	631.10	625.00
Water & Electricity	420.99	500.00	450.00	543.69	500.00
Hospital & Medical	2.34	2.00	3.00	2.52	3.00
Guest House	226.30	250.00	240.00	253.68	250.00
Joint Entrance Exam	365.00	500.00	432.00	433.74	450.00
GATE	1,902.04	1,800.00	2,000.00	2,004.18	2,000.00
Joint Admission Test for M.Sc.	135.20	100.00	150.00	147.35	150.00
Misc./Other Receipts (including sale of obsolete equipments)	121.11	200.00	130.00	205.73	150.00
Total	9,667.64	9,633.00	9,692.00	10,812.86	9,823.00

INTERNAL AUDIT

Internal Auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization's operation. Internal Audit Section is functioning independently as per Revised Audit System (w.e.f.01/12/2011) directly under the control of the Director, supported by Assistant Registrar (Audit). The section conducts the Internal Audit of the Departments/Centres/Sections etc. within the Institute Internal Control System. The Internal Audit Section also renders advise on various financial as well as administrative/service matters as per needs of the Institute. During the financial year 2017-18, 32 units have been internally audited.



Appendix I

SENATE

(As on 31.03.2018)

V. Ramgopal Rao (Director): Chairman	Sujeet Chaudhary	Mangla Joshi (Ms.)	D.S. Mehta
Ashok Gupta (Dy. Director, Operations)	Tapan Kumar Chaudhuri	S.D. Joshi	Saroj Mishra (Ms.)
M. Balakrishnan (Dy. Director, Strategy & Planning)	Anoop Chawla	R.R. Kalaga	Sukumar Mishra
Ashwini K. Agrawal	Ashish K. Darpe	S.R. Kale	Prashant Mishra
V.K. Agarwal	Apurba Das	Prem Kumar Kalra	Aditya Mittal
Babu J. Alappat	Manoj Datta	T.C. Kandpal	Subodh V. Modak
R. Alagirusamy	S. Dharmaraja	Santosh Kapuria	Ratan Mohan
S. Aravindan	S.G. Deshmukh	I.N. Kar	Manju Mohan (Ms.)
S.K. Atreya	Swades K. De	Subrat Kar	Sudipto Mukherjee
Anshul Kumar	Anupam Dewan	Ravinder Kaur (Ms.)	Atul Narang
R. Bahl	Chinmoy Sarkar Dey	Dev Raj Kaushal	K. Narayanan
D.K. Bandhopadhyay	J.K. Dutt	Saroj Kaushik (Ms.)	R.B. Nair (Ms.)
S. Banerjee	Viresh Dutta	A.K. Keshari	S.N. Naik
Varsha Banerjee (Ms.)	Anil Jacob Elias	Rajesh Khanna	Sunil Nath
Ananjan Basu	Naveen Garg	Mukesh Khare	Arvind K. Nema
S. Basu	A.K. Ganguli	S.K. Khare	Pulak Mohan Pandey
Kanika T. Bhal (Ms.)	Anup K. Ghosh	Neeraj Khare	Raj Kumar Pandey
Suresh Bhalla	Santanu Ghosh	Rakesh Khosa	B.K. Panigrahi
A.N. Bhaskarwar	N.K. Garg	Veena Koul (Ms.)	B.P. Patel
B. Bhattacharjee	Rahul Garg	Sangeeta Kohli (Ms.)	Sanjiva Prasad
T.S. Bhatti	James Gomes	Subodh Kumar	B.S. Panda
Naresh Bhatnagar	A.K. Gosain	S. Kundu	Preeti Ranjan Panda
B.K. Behera	V.R. Gunturi	Ajit Kumar	Raj Kumar Pandey
Bijoy H. Boruah	Bhuvanesh Gupta	Amit Kumar	Sunil Pandey
Vivek Vithal Buwa	Deepti Gupta (Ms.)	Arun Kumar (Phy.)	Siddharth Pandey
G. Bhuvanewari (Ms.)	M.P. Gupta	Arun Kumar (CARE)	K.K. Pant
Jayashree Bijwe (Ms.)	S.K. Gupta (Ch.E.)	S. Arun Kumar (CS&E)	Nalin Pant
V.S. Bisaria	S.E. Hasnain	S.K. Koul	G.V. Prakash
Ranjan Bose	Sriram Hegde	N.D. Kurur	Shankar Prakriya
B.R. Chahar	Harish Hirani	Brejesh Lall	Rajesh Prasad
Mukesh Chander	S.M. Ishtiaque	Alok Madan	A. Ramanan
V.M. Chariar	K.C. Iyer	Puneet Mahajan	N.G. Ramesh
N. Chatterjee	Josemon Jacob	Anushree Malik	A.D. Rao
Ratnamala Chatterjee (Ms.)	A.K. Jain	Hitendra K. Malik	K.S. Rao
R. Chattopadhyay	Sanjeev Jain	Ranjan Kumar Mallik	P.M.V. Subbarao
Santanu Chaudhury	M. Jagadesh Kumar	Shashi Mathur	P.V. Rao
	Manjeet Jassal (Ms.)	Aparna Mehra (Ms.)	P.V. Madhusudan Rao
	B. Jayaram	B.R. Mehta	S.C.S. Rao
	Jayadeva		

Senate

contd.

Anurag Singh Rathore	Huzur Saran	Aloka Sinha (Ms.)	Sushil
D. Ravi Kumar	Anil Kumar Saroha	Sujeet K. Sinha	N. Tandon
M.R. Ravi	P. Senthilkumaran	Bhim Singh	Prabal Talukdar
V. Ravishankar	Jagdish T. Sahu	A.K. Singh	Geetam Tiwari (Ms.)
Anjan Ray	Kushal Sen	Harpal Singh	Amitabha Tripathi
G.B. Reddy	Sandeep Sen	Jai Deo Singh	Suneet Tuli
R.S. Rengasamy	Ravi Shankar (Chy.)	J.P. Singh	C.A. Tomy
P.K. Roychoudhury	Ravi Shankar (DMS)	Purnima Singh (Ms.)	V. Upadhyay
Shantanu Roy	Maithili Sharan	S.N. Singh	R.K. Varshney
Subir Kumar Saha	Anurag Sharma	S.P. Singh	M. Veerachary
Dipti Ranjan Sahoo	R.K. Sharma	R.K. Soni	S.V. Veeravalli
Ambuj D. Sagar	Satyawati Sharma (Ms.)	K. Sreenadh	V.K. Vijay
Sanjeev Sanghi	M.R. Shenoy	A.K. Srivastava	S.S. Yadav
Mukul Sarkar	Anupam Shukla	Pankaj Srivastava	Sandeep Chatterjee (Registrar): Secretary
Sanil V.	A.K. Shukla	T.R. Sreekrishnan	

EXECUTIVE COMMITTEE OF THE SENATE (ECS)

(As on 31.03.2018)

V. Ramgopal Rao, (Director): Chairman	Anurag Sharma	Subrat Kar
M. Balakrishnan	B.K. Behera	T.C. Kandpal
Ashok Gupta	Ananjan Basu	Sandeep Chatterjee (Registrar): Member-Secretary
Bhim Singh	Veena Koul (Ms.)	
Sandeep Sen	Kolin Paul / Shouri Chatterjee	
B.R. Mehta	Huzur Saran	Special Invitees
Sanjeev Sanghi	Viresh Dutta	Ashwini K. Agarwal
T.R. Sreekrishnan	Jayashree Bijwe (Ms.)	Suddhastwa Basu
V.K. Agarwal	Manju Mohan (Ms.)	James Gomes
S.V. Veeravalli	A.K. Ghosh	A.K. Saroha
Atul Narang	V.K. Vijay	Sangeeta Kohli (Ms.)
Rajesh Khanna	Sangeeta Kohli (Ms.) / Rahul Garg	Joby Joseph
Ravi Shankar	P.V.M. Rao	Shantanu Roy
Manoj Datta / N.K. Garg	Brejesh Lall	B.J. Alappat / Bishwajit Kundu
S. Arun Kumar	Prem Kumar Kalra	Deepti Gupta (Ms.)
S.D. Joshi	Tapan K. Chaudhuri	Anurag Singh Rathore
Ravinder Kaur (Ms.)	Ambuj D. Sagar	Nalin Pant
M.P. Gupta	Joseman Jacob	K.C. Iyer
S. Dharamaraja / K. Sreenadh	P.V.M. Rao / D. Ravi Kumar	K.K. Pant
S.K. Saha	A. Ramanan	Anil Wali

Appendix II

ADMINISTRATIVE AND OTHER STAFF

(As on 31.03.2018)

Administration	
Sandeep Chatterjee	Registrar
M.K. Gulati	Joint Registrar (Accounts)
Kalyan Kumar Bhattacharjee	Joint Registrar (Director's Office, FAA, E-II, Manpower Training)
Vivek Raman	Joint Registrar (CDN, R&I, RTI, Hindi Cell, PIO)
Atul Vyas	Joint Registrar (Academics, Publication Cell)
N. Bhaskar	Assistant Registrar (E-1, Health Unit, Legal, Vigilance, Nodal Officer for Public Grievance/PG Portal, Gender Grievance & Related Work)
V.K. Vashistha	Assistant Registrar (IRD)
Alan V. Siante	Assistant Registrar (Store Purchase Section)
Mohd. Shamim	Assistant Registrar (R&D Accounts)
Raj Kumar Gupta	Assistant Registrar (Accounts)
Mukesh Chand	Assistant Registrar (SAS)
Ramesh Kumar Thareja	Assistant Registrar (E-II, Recruitment Cell) On contract
S.N. Tiwari	Assistant Registrar (Conference)
Debranjana Mukherjee	Assistant Registrar (Accounts)
Sanjay Pande	Assistant Registrar (Planning, Alumni)
Amitabh Mukherjee	Assistant Registrar (Audit)
S.K. Gohar	Assistant Registrar (Academics - UG)
Mukesh Khandelwal	Institute Engineer
G.K. Taneja	Executive Engineer
K.M. Vijay Kumar	Executive Engineer
Anuj Gaur	Executive Engineer
Rafat Jamal	Assistant Executive Engineer
V.K. Bharaj	Assistant Executive Engineer
Prem Kumar	Assistant Executive Engineer
Brahm Prakash	Assistant Executive Engineer
Ashok Kumar	Assistant Executive Engineer
Raju Ram Parihar	Assistant Executive Engineer
Pradip Karmarkar	Assistant Executive Engineer
Anishya Obhrai Madan (Ms.)	Industrial Liaison Officer
Deepak Negi	Sports Officer
Shachi Mathur (Ms.)	Student Counsellor
Sandeep Sharma	Security Officer (on contract)

Administrative and other Staff

contd.

Administrative Computerisation Support Service	
Huzur Saran	Head
K. Narayanan	Senior System Programmer (SG)
Pardeep Kumar Gupta	Senior System Programmer (SG)
P.K. Baboo	Senior System Programmer

Student Counselling Service	
Sangeeta Kohli (Ms.)	Head

Professors-in-Charge of Different Sections	
I.N. Kar	Professor-in-Charge (Training & Placement)
K.C. Iyer	Professor-in-Charge (Planning)
Rakesh Khosa	Professor-in-Charge (Guest Houses & Halls)
Nalin Pant	Professor-in-Charge (EHLS Unit)
S. Nagendran	Officer-in-Charge (EHLS Unit)

Hindi Cell	
S.S. Yadav	Head

Library	
K.K. Pant	Chairman (Advisory Committee for Library)
Neeraj Kumar Chaurasia	Dy. Librarian

IIT Hospital	
Brahm Prakash	Head, Hospital Services (on contract)
Lily Khosa (Ms.)	Chief Medical Officer (SAG)
Ajay Kumar Jain	Chief Medical Officer (SAG)
Renu Misuriya (Ms.)	Chief Medical Officer (SAG)
Mahesh Kumar Sagar	Chief Medical Officer (SAG)
Anila Khosla (Ms.)	Chief Medical Officer (NFSG)
P.K. Rajesh	Senior Medical Officer
Md. Ashafaque Hussain	Senior Medical Officer
Sayed Yasmeen Raunaq	Senior Medical Officer
L. Pangerlemba	Medical Officer
Rajlaxmi Borah	Medical Officer (on contract)

Appendix III

OTHER COMMITTEES

(As on 31.03.2018)

BUILDING AND WORKS COMMITTEE	
V. Ramgopal Rao, Chairman	S. Ramanujam
Jose Kurien	Mukesh Khandelwal
K.N. Rai	V.K. Agarwal
K.J. Singh	Sandeep Chatterjee, Secretary
ADVISORY COMMITTEE FOR LIBRARY	
K.K. Pant - Chairman	N. Tandon
B.P. Patel	Samaresh Das
Atul Narang	J.K. Sahu
Vivek V. Buwa	Sampa Saha
A. Ramanan	Amit Gupta
Rahul Garg	Sumer Singh
Shubhendu Bhasin	Aaditeshwar Seth
Divya Dwivedi (Ms.)	Aditya Mittal
Harish Choudhary	Seshan Srirangarajan
S. Sivananthan	Ranjan K. Mallik
S.P. Singh	Anupma
Amruta Mishra (Ms.)	Lokesh Kumar Badyal
Mangala Joshi (Ms.)	Dhruv Gupta
Krishna Achuta Rao	Aryaman
Harpal Singh	S.S. Yadav
T.S. Bhatti	Neeraj Kumar Chaurasia, Member-Secretary
COMPUTER USERS' COMMITTEE	
Huzur Saran, Chairman	Ramesh Narayanan
Arjun Sharma	Mahesh Abegaonkar
Gaurav Goel	J.K. Sahu
Hemant Kashyap	Ashok Patel
Subodh Sharma	Deepak Kumar
Sumeet Agarwal	Gopal Krishen
Sourabh Paul	Sunil Kak
Arpan Kumar Kar	Pragya Jain (Ms.)
D. Dube	Sanjay Agarwal
Sujin B. Babu	Yash Agarwal
Sourabh Ghosh	Arshdeep Singh Goindi
Dilip Ganguly	Smarthveer Sidana
Dinesh Kalyanasundaram	Sangeeta Kohli (Ms.)



Our Values

- ❖ Academic integrity and accountability.
- ❖ Respect and tolerance for the views of every individual.
- ❖ Attention to issues of national relevance as well as of global concern.
- ❖ Breadth of understanding, including knowledge of the human sciences.
- ❖ Appreciation of intellectual excellence and creativity.
- ❖ An unfettered Spirit of exploration, rationality and enterprise.



Indian Institute of Technology Delhi

Hauz Khas, New Delhi-110 016, India

Tele : (91) 011-2659 1999, (91) 011-2659 7135

Fax : (91) 011-2658 2037, (91) 011-2658 2277

E-mail : webmaster@admin.iitd.ac.in

www.iitd.ac.in

