

2015-16 Annual Report



Indian Institute of Technology Jodhpur



Annual Report

2015-16

Indian Institute of Technology Jodhpur Old Residency Road, Ratanada Jodhpur 342011

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Preface



Into the *seventh* year of its existence, the Institute started five new academic programs, three at the *M.Sc.* level in *Chemistry, Mathematics* and *Physics*, and two at the *M.Tech.* level in *Electrical Engineering* and *Mechanical Engineering*. Also, during 2015-16, the construction of the Permanent Campus of IIT Jodhpur has moved forward with speed, even though the pace could have been faster... Construction of Phase I buildings is expected to be completed by September 2016, and the migration to the Permanent Campus is expected to happen during 9-23 October 2016.

During 2015-16, a major step taken forward by the Institute was the launching of the *Industry Immersion Program*. In the inaugural edition, 30 Students and 5 Faculty Members spent the summer in the leading technology industries of the country – *Mahindra & Mahindra Limited*, *Larsen & Toubro Limited*, *Tata Motors Limited*, *TVS Motor Company Limited*, and *Tata Power Company Limited*, as the first of the 3-summer immersion of this set of Students and Faculty Members.

Also, another special beginning made by IIT Jodhpur was the *first* successful defence of Ph.D. thesis; four students completed their requirements. The number of Ph.D. Students increased from 70 during 2013-14 to 139 during 2015-16. The research profile of the Institute has improved from 32 sponsored research projects during 2014-15 to 47 during 2015-16, and from 78 publications during 2014-15 to 110 during 2015-16. 2 Patents were filed by the Faculty Members during 2015-16. In particular, in September 2015, IIT Jodhpur joined five established IITs as Co-Investigators of the DBT-Pan IIT Center for Bioenergy.

The Institute welcomed 8 new Faculty Members and 2 new Staff Members into the IIT Jodhpur community, to build a strong career here. 4 GIAN Courses were organized by the Faculty Members in *Chemistry, Mechanical Engineering* and *Electrical Engineering*.

IIT Jodhpur Vision, Mission & Core Values

VISION

The Institute shall

- (1) Promote technology thought and action, and
- (2) Prepare needed technical human resources to meet the technology challenges of the nation.

MISSION

The Institute shall

- (1) Create a vibrant technology institute that incubates and promotes learning, research, invention and eventually innovation; and
- (2) Prepare each primary stakeholder towards their dharma, while continuing to adhere to its core values:
 - (a) Prepare competent Technology Graduates ready to meet Grand Challenges of India;
 - (b) Train active functionaries of a process driven professional institute;
 - (c) Facilitate builders of an internationally competitive academic institute; and
 - (d) Provide technology innovation as a force to as many industries as possible for economic value creation.

CORE VALUES

The Institute stands for a set of core values, wherein each member of the IIT Jodhpur community shall

- (1) Uphold highest levels of human integrity and dignity;
- (2) Not take unfair advantage of any stakeholder of the Institute;
- (3) Work towards building the most admired technology Institute furthering interests of Students, Industries and Society;
- (4) Commit to economic development of India through technological thought and action;
- (5) Be ethical, sincere and open in all transactions; and
- (6) Be continually responsible for upholding utmost confidentiality of all information and circumstances arising out of any interaction.

ORGANIZATION

Organizational Structure

Under the broad umbrella of IIT Council, IIT Jodhpur functions under the guidance of the following statutory bodies.

(1) Board of Governors;

(2) Finance Committee;

(3) Senate; and

(4) Buildings & Works Committee.



Member details of these Statutory Bodies are given in the pages to follow.

BOARD OF GOVERNORS

Chairman

- Professor Goverdhan Mehta (FNA, FRS) Department of Organic Chemistry University of Hyderabad Central University PO Hyderabad 500046
- 2. Director (Ex-officio) Professor C. V. R. Murty Director IIT Jodhpur Old Residency Road, Ratanada, Jodhpur 342011

Member-Nominees of the IIT Council

1. Professor Pankaj Chandra

Former Director Indian Institute of Management Bangalore 560076

2. Professor N. S. Vyas Chairman, Technology Mission for Indian Railways Ministry of Railways Government of India New Delhi 110001

3. Mr. Kiran Karnik Former President, NASSCOM

S-315 Panchsheel Park New Delhi 110017

4. Mr. D. R. Mehta

Founder & Chief Patron Bhagwan Mahaveer Viklang Sahayata Samiti 13A-Gurunanak Path Main Malviya Nagar Jaipur 302017

State Government Nominee

1. Principal Secretary

Higher & Technical Education Main Building Secretariat Government of Rajasthan Jaipur 302005

Chairman

1. Professor Goverdhan Mehta, FNA, FRS Department of Organic Chemistry University of Hyderabad Central University PO Hyderabad 500046

Members

 Professor C. V. R. Murty Director IIT Jodhpur Old Residency Road, Ratanada Jodhpur 342011

2. Additional Secretary (Technical Education)

Department of Higher Education Ministry of Human Resources and Development Government of India Shastri Bhawan New Delhi 110001

3. Financial Advisor

Department of Higher Education Ministry of Human Resources and Development Government of India Shastri Bhawan New Delhi 110001

4. Mr. G. S. Sood, IDAS House No. 1090 Sector 29 Faridabad 121008

5. CA S. S. Bhandari

Director, Non-Executive Director on the Board Bank of Baroda P-7, Tilak Marg, C-Scheme Jaipur 302005

6. Dr. Gaurav Harit

Assistant Professor Indian Institute of Technology Jodhpur Jodhpur 342011 C. V. R. Murty Chairman Pratap Bhanu Mehta Member (Nominee of Board of Governors) H. P. Khincha Member (Nominee of Board of Governors) Sanjeev Misra Member (Nominee of Board of Governors)

Members

Coordinator (Faculty) Coordinator (R&D) Coordinator (Academics) Coordinator (Students) Head, Department of Biology Head, Department of Chemistry Head, Department of Chemistry Head, Department of Electrical Engineering Head, Department of Electrical Engineering Head, Department of Mathematics Head, Department of Mathematics Head, Department of Mechanical Engineering Head, Department of Physics Chairman, Wardens Committee Chairman, Library Committee Laboratory In-Charge, Workshop

Chairman

 Professor C. V. R. Murty Director IIT Jodhpur Old Residency Road, Ratanada, Jodhpur 342011

Members

1. Ms. Usha Kasana

Chief Architect Public Works Department Government of Rajasthan Jacob Road, Civil Lines Jaipur 302006

2. Mr. R. K. Govil

Additional Director General Civil (Retd.), CPWD 26, Ankur Apartments 7, I.P. Extension Delhi 110092

3. Mr. V. K. Bansal

Chief Engineer Electrical (Retd.), CPWD 721 Sky Lark Apartment, Sector-6, Plot No.35, Dwarka New Delhi 110075

4. Dr. B. Ravindra

Associate Professor Indian Institute of Technology Jodhpur Jodhpur 342011



The Institute has organized its activities through various key functionaries, as depicted in the organogram below.

Details of various key functionaries of the Institute are as follow.

Director					
C. V. R. Murty					
Coordinators					
Deepakkumar M. Fulwani	Faculty				
V. Narayanan	Research & Development				
Atul Kumar	Academics				
Hari Narayanan V.	Students				
Rahul Chhibber	Laboratory In-Charge, Workshop				
Heads of the Departments					
Venkata Ramana Badarla	Computer Science & Engineering				
Anil K. Tiwari	Electrical Engineering				
B. Ravindra	Mechanical Engineering				
Sushmita Jha	Biology				
Rakesh Kumar Sharma	Chemistry				
Kirankumar R. Hiremath	Mathematics				
Subhashish Banerjee	Physics				
Vidya Sarveswaran	Humanities & Social Sciences				
Convenors of Focus Groups					
Sushmita Jha	Biologically Inspired System Science				
V. V. M. S. Chandramouli	System Science				

Professors In-Charge	
Prawal Sinha	Faculty
Navratan Mal Bhandari	Research & Development
Chairman / Chairperson	
Samanwita Pal P. Manikandan Anil Kumar Tiwari Satyajit Sahu V. V. M. Sarma Chandramouli V. V. M. Sarma Chandramouli Anand Krishnan Plappally Ankita Sharma	Wardens Committee Student Placement Committee Medical Services Committee Library Committee Logistics Committee Scholarships and Prizes Committee Alumni Relations Committee Counselling Services Committee
Officers	
Gaurav Harit Gaurav Bhatnagar Puneet Sharma Mahesh Kumar Satyajit Sahu Barun Pratiher Kshema Prakash Amardeep Sharma Sanjeeb Mukherjee Amardeep Sharma	Chief Vigilance Officer Transparency Officer Hindi Officer Green Initiative Officer Nodal Officer for OBC, PwD, and Minorities Nodal Officer for SC and ST Women Cell Officer Public Relations Officer Infrastructure Engineer Infrastructure Manager Central Public Information Officer
Academic Committee	
Coordinator (Academics) Members Head, Department of Computer Head, Department of Electrical I Head, Department of Mechanica Head, Department of Biology Head, Department of Chemistry Head, Department of Mathemat Head, Department of Physics Head, Department of Humanitie Convener (Focus Group Biologie Convener (Focus Group System Liaison Officer (SC/ST Cell)	Chairman Science & Engineering Engineering al Engineering c ics es & Social Sciences cally Inspired System Science) Science)
Secretary, ARA Society, Student	rs Gymkhana
Three Student Representatives f (one each from B.Tech., M.Tech. an	rom ARA Society, Students Gymkhana ad Ph.D. Programs)

Departments and Associated Faculty Members

The Institute has organised its academic activities to be conducted through eight Departments, and two Focus Groups. They are:

- I. Departments
 - 1. Biology,
 - 2. Chemistry,
 - 3. Computer Science & Engineering,
 - 4. Electrical Engineering,
 - 5. Humanities & Social Sciences,
 - 6. Mathematics,
 - 7. Mechanical Engineering, and
 - 8. Physics
- II. Focus Groups
 - 1. Biologically Inspired System Science, and
 - 2. System Science.

Details of Departments and associated Faculty Members are given in the pages to follow.

DEPARTMENT OF BIOLOGY

The Department of Biology is the hub of biological sciences at IIT Jodhpur. The mission of the Department is to gain excellence in education and research at the national and international levels. The Faculty Members at the Department of Biology span a wide range of biological disciplines from cellular and molecular neuroscience, biochemistry, physiology to environmental biotechnology.

The Department offers B.Tech. (Biologically Inspired System Science) and Ph.D. Program with specialisation in Biology, and in Biologically Inspired System Science. The department offers a wide range of courses from foundational biology to advanced concepts in biological sciences from B.Tech. to Ph.D. level courses. With state-of-the-art centralized laboratories and research facilities, hands-on learning is emphasized.

Faculty Members and Students at the Department of Biology believe in collaboration both within and outside the department to enhance research potential and productivity. Following are the Faculty Members associated with the department:

- •	
Name	Research Areas
Sushmita Jha Head of Department	Cellular and Molecular Neuroscience, Cell and Molecular Physiology
	Cellular and Molecular Neuroscience, Cell Cycle Regulation and Cancer
Amit Kumar Mishra	
	Protein Biophysics, Amyloids and Collagens, Rationally Engineered Biomaterials

Karunakar Kar



Biological Science & Bio-Engineering: Renewable Bioenergy Bioremediation

Meenu Chhabra

Academic Activities in the Department

A "Discussion Meeting on Technology in Life Sciences" was organized during 1-3 August 2016 at IIT Jodhpur. The Institute invited colleagues from Industry, R&D Organisations and Academia, to help shape the role of IIT Jodhpur in so far as Technology in Life Sciences is concerned. During this 3-day discussion meeting 12 guests participated from outside the Institute, as detailed below.

- 1. Dipankar Nandi, Indian Institute of Science
- 2. Biswajit Kundu, Indian Institute of Technology Delhi
- 3. S. K. Khare, Indian Institute of Technology Delhi
- 4. Shilajit Bhattacharya, All India Institute of Medical Sciences Jodhpur
- 5. Surajit Ghatak, All India Institute of Medical Sciences Jodhpur
- 6. Abhay Elhence, All India Institute of Medical Sciences Jodhpur
- 7. Pradipta Bandopadhyay, Jawaharlal Nehru University, New Delhi
- 8. Mukesh Jain, Jawaharlal Nehru University, New Delhi

9. Parthosarothi Ray, IISER, Kolkata

via Video Conferencing

- 10. Dulal Panda, Indian Institute of Technology Bombay
- 11. Debashis Dash, CSIR-Institute of Genomics & Integrative Biology
- 12. T. R. Sreekrishnan, IIT Delhi

Along with the Faculty Members from the Department of Biology, Faculty colleagues from other Departments also participated in this 3-day discussion meeting. Many points emerged during the discussions, and curriculum was suggested for the proposed M.Tech. (Biosciences and Bioengineering) Program at IIT Jodhpur. Some of the salient closing thoughts were:

- (1) National challenges and gaps in *pedagogy, infrastructure* and *curriculum* on part of the Institute, and *competence (i.e., knowledge, skills* and *attitude)* in graduating students, need to be assessed while moulding a new Department and degree programs at IIT Jodhpur.
- (2) Wider discussion on the agenda of *Technology in Life Sciences at IIT Jodhpur* is required with a larger stakeholder group, especially with those from *Industry*, to assess employability of students educated in IIT Jodhpur through the B.Tech., M.Tech. and Ph.D. Programs;



Faculty Members of the Department of Biology, IIT Jodhpur with the invited guests



Ph.D. Students of the Department of Biology, IIT Jodhpur with the invited guests

DEPARTMENT OF CHEMISTRY

Chemistry at IIT Jodhpur is where Chemistry sees Technology. At IIT Jodhpur, Chemistry embraces a distinctive locus in science and technology collaboration. The department is making technological contribution to new materials for energy solutions, catalysis and water. Fundamental understanding of chemical dynamics, biological phenomena, Nuclear Magnetic Resonance and Quantum Chemistry are growing in prominence. The vision of the Department of Chemistry is to strive to be acknowledged for excellence in teaching, research, and outreach. The following Faculty Members are associated with the department:

-	
Name	Research Areas
	Catalysis for Energy and Stereocontrol, Feedstock Chemistry, Fuel and Lubricants, Energy Storage and Water Treament Technology
Rakesh Kumar Sharma Head of Department	
	Theoretical and Computational Chemistry
Ananya Debnath	
	Quantum Information Processing
Atul Kumar	
Atur Kumar	Theoretical and Computational Chemistry, Chemical Reaction Dynamics
Manikandan Paranjothy	
	Nanomaterials & Nanodevices for Water, Energy and Healthcare
Ritu Gupta	
Samanwita Pal	Solution and solid state NMR and NQR spectroscopy

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

The Department offers B.Tech. (Computer Science & Engineering) and Ph.D. Program with specialisation in Computer Science & Engineering. It has some state-of-the-art laboratory and research facilities.

Following are the Faculty Members associated with the department:



Aritra Banik

The department also has an Adjunct Faculty Member, Professor Venkatesh Raman from Institute of Mathematical Sciences, Chennai.

DEPARTMENT OF ELECTRICAL ENGINEERING

The Department offers B.Tech. (Electrical Engineering), M.Tech. (Electrical Engineering) and Ph.D. Program with specialisation in Electrical Engineering. It has some state-of-the-art laboratory and research facilities.

The following Faculty Members are associated with the department:





Microelectronics & VLSI Technology, Microfabrication, Organic Electronics, Device Physics and Characterization, New Device Structures

Shree Prakash Tiwari



Semiconductor Device Physics, Integrated Circuit (IC) Technology, Flexible Electronics

Suresh Gundapaneni

The department also has a Scholar-in-Residence, Professor R. K. Shyama Sunder, who is a Senior Professor and J. C. Bose National Fellow at Tata Institute of Fundamental Research, Mumbai.

Kota V. Murali, Chief Technologist, Semiconductor Research and Development Center, IBM India, Bangalore is associated with the department as an Adjunct Faculty Member.

DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES

The Department of Humanities and Social Sciences operates from spaces that give us an opportunity to act as an interface between empirical and experiential knowledge systems. Playing a significant role in the academic curriculum of the young engineers, we offer both core and elective courses at the Bachelors, Masters, and Doctoral levels. The ability to provide tools and skills for specific aims notwithstanding, the essence of Humanities and Social Sciences involves the sensitizing of individuals. Acting as facilitators, thus, we engage in meaningful interactions with students and help them witness, study, and understand the interplays among technology, society, and humanity. This task assumes even more significance in an educational context where the brightest young minds of India come together.

With Faculty Members who specialize in diverse disciplines (including Philosophy, Economics, Psychology, and Literature) and with students from a spectrum of backgrounds, the Department provides an enriching platform -where technical education can be complemented with human and social understanding. Following are the faculty members associated with the department:

Name	Research Areas
	English: Literature and Environment (Ecocriticism), Film and Literature, Literatures of the Global South, Regional Literatures in Translation, American Literature
Vidya Sarveswaran Head of Department	
	Psychology: Gerontology, Clinical and Positive Psychology
Ankita Sharma	
	Philosophy: Applied Ethics, Ethics of Technology, Bioethics
K. J. George	
	Economics: Intellectual Property Rights (IPR) and Pharmaceutical Industry, Productivity and Efficiency Analysis, Growth and Regional Development, Inequality Poverty and Social mobility
Mainak Mazumdar	

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Economics: Health Economics, Health Policy, Applied Econometrics, Development Studies

Rijo M. John



Philosophy: Philosophy of Science, Aesthetics of Design, Formal Logic, Philosophy of Technology

Sreekumar Jayadevan



Philosophy: Cognitive Studies, Evolutionary Theory, Analytic Philosophy and Mindfulness

V. Hari Narayanan

DEPARTMENT OF MATHEMATICS

Mathematics, being the basis of many disciplines, is a subject that evolves with time and creates new theories and models to solve challenging problems of today. Since its inception, the department has been taking a leading role in developing new methods and models that can be used in diverse areas of computer science, engineering and basic sciences. The department has faculty with research interests in the areas of Mathematical Physics, Scientific Computation, Numerical Analysis, Differential Equations, Topological Dynamics, Low Dimensional Chaos, Dynamical Systems, Renormalization in Low-dimensional dynamics, Wavelet Analysis, Fractional Transform Theory, Image Processing, Financial Risk Analysis, and Categorical Data Analysis.

The department offers at undergraduate and postgraduate levels. It runs a four year B.Tech. Program in System Science, and a Ph.D. Program with specialization in different areas of Mathematics. Following are the Faculty Members associated with the department:

Mathematical Modeling of Engineering and Bio-systems



Research Areas

Theoretical, mathematical and computational aspects of wave-matter interactions

Kirankumar R. Hiremath Head of Department



Prawal Sinha



Wavelet Analysis, Fractional Transform Theory, Multimedia Security, Image Processing, Information Fusion

Gaurav Bhatnagar



Topological Dynamics, Low Dimensional Chaos

Puneet Sharma



V. V. M. S. Chandramouli

Smooth Dynamical Systems, Renormalization of Unimodal maps and Henon-like maps



Financial Risk Analysis, Categorical Data Analysis, Regression

Vivek Vijay

DEPARTMENT OF MECHANICAL ENGINEERING

The desire to contribute to national and global causes such as the solar mission and climate change is at the heart of the academic activities carried out within the Department of Mechanical Engineering. Several application domains of interest in Mechanical Engineering (such as solar energy, automotive technologies and health) motivate Students, Staff Members and Faculty Members.

The B.Tech. Program in Mechanical Engineering commenced in 2008, since the inception of the Institute. Since then three batches have graduated and most of the Alumni are pursuing successful careers in the industry. Some of them have chosen to pursue higher studies in India, Europe and the United States of America.

During the last six years, several collaborative projects have been initiated with a number of industries and research laboratories across India (such as Thermax, Sunborne, Areva, STEAG, BHEL, IOCL, ONGC, BARC, and NFTDC) to pursue research and development in the area of mechanical engineering.

To respond to the diverse needs of students, broad based Bachelors and Masters Programs in Mechanical Engineering are being designed, with scope to let students specialize in interdisciplinary as well as sub-domains of Mechanical Engineering. A Doctoral Program is underway in the Department. Currently, about 10 Ph.D. students are pursuing research in thermal, design and manufacturing streams of Mechanical Engineering. The main objective of the academic programs is to build capacity and capability necessary to make the nation competitive in the globalized world. Also, the students are being made aware of professional skills, such as seeking patentable innovations, taking up technology transfer tasks and active collaboration with industrial partners.



The following Faculty Members are associated with the department:



Barun Pratiher



Gaurav Ameta



Kaushalkumar A. Desai



Laltu Chandra



Prodyut R. Chakraborty



Rahul Chibber



Suril V. Shah

Dynamics of Machines and Structures, Flexible Robots, MEMS, Rotor Dynamics, Nonlinear Oscillations

Computer-Aided Design, Additive Manufacturing, Tolerancing, Sustainable Design and Manufacturing

Modeling of Manufacturing Processes, CAD/CAM, CNC Machining, Error compensation

Solar thermal sub-systems (open volumetric air receiver, thermal energy storage, air-water heat exchanger), Thermal hydraulics, Turbulence simulation (DNS/LES/HYBRID/RANS) & model development, Computational Fluid Dynamics.

Heat and mass transfer, Latent heat based storage device for high temperature applications, Alloy solidification process, Active and passive solar cooling systems, Electronic cooling

Welding and joining, Manufacturing and materials processing, Mechanical behaviour of materials

Robotics, Multibody Dynamics and Control

DEPARTMENT OF PHYSICS

A visible research in fundamental Physics along with its applications is the major theme of Physics Department at IIT Jodhpur. The Faculty members carry out research in the field of Astrophysics, Condensed Matter Physics & Material Science, Particle Physics, Experimental and Theoretical Quantum Optics, Quantum Information and Foundations of Quantum Mechanics. The research facilities available in the department include SQUID magnetometer, Physics Property Measurement Systems (PPMS), Raman Spectrometer and Scanning Tunnelling Microscope (STM). Following are the faculty members associated with the department:

nembers associated	with the department.
Name	Research Areas
Subhashish Banerjee Head of Department	Open Quantum Systems; Quantum Information; Non-Equilibrium Statistical Mechanics; Quantum Optics
	Semiconductors, multifunctional ferroics & materials for energy-fabrication
	& characterization, Photovoltaic materials & devices ab initio DFT study and device simulations
Ambesh Dixit	
	Particle Physics and Cosmology
Ashutosh Kumar Alok	
Monika Sinha	Astrophysics, Astroparticle physics
Satvajit Sahu	Information Processing in Biological Systems
	Ontics and Solar Field Design Plasmonics Laser Produced Plasmas (LPP)
	Pulsed Laser Deposition (PLD), Plasma Diagnostics (Interferometry & Optical Emission Spectroscopy (OES)), Laser Matter Interaction and Laser Cluster Interaction
/. Narayanan	
The departm	nent also has a Scholar-in-Residence, Professor K. L. Chopra.

Advisor, Thin Film Laboratory, IIT Delhi.

Academic Activities in the Department

Physics Course Curriculum Review Workshop was conducted on 11 April 2015. Professor P. C. Deshmukh (IIT Madras), Professor Rajiv V. Gavai (TIFR Mumbai), Professor P. K. Dutta (IIT Kharagpur), Professor Uma Sankar (IIT Bombay), Professor K. G. Suresh (IIT Bombay), and Professor Deshdeep Sahdev (IIT Kanpur) participated in the workshop. The agenda of the workshop was to discuss the M. Sc. Physics program along with all the courses offered by Department of Physics, IIT Jodhpur.

FOCUS GROUPS

Biologically Inspired System Science (BISS)

Biologically Inspired System Science (BISS) is a stream initiated with the broad objective to design novel, adaptive and sustainable technological solutions inspired by biological systems and processes. The Institute recognises the need for a test-oriented singular education towards a creativity-oriented quality multidisciplinary education, thereby blur existing boundaries between biology and engineering. B.Tech. Program in Biologically Inspired System Science (BISS) is run by this focus group in collaboration with the Department of Biology.

System Science (SS)

The System Science stream was initiated in 2011 to promote and implement interdisciplinary education and research by adopting a holistic systems thinking approach. Its vision is to transform students into trained graduates with the spirit of systems thinking in diverse domains of engineered systems, natural systems, and financial systems. The focus group runs an undergraduate program, B.Tech. in System Science (SS) in collaboration with the Department of Mathematics.

Staff Members

The	e following	are	the	Staff	Members	engaged	in	various	Offices	and
Departmer	its of the Inst	itute								

Administrative & Academic Staff Members						
Office of Academics						
Gaurav Nigam	Superintendent					
Abhay Kumar Awasthi	Junior Assistant					
Rashmi Dhyani	Junior Assistant					
Office of Account	s & Internal Audit					
Manish Kumar Bhomia	Assistant Registrar					
Ashish Kachhawaha	Superintendent					
Naresh Chouhan	Junior Superintendent					
Rakesh Kumar	Junior Assistant					
Biswajit Pramanik	Junior Assistant					
Goutam Sethiya	Junior Assistant					
Office of Administra	tion & Establishment					
S. Balachandra Iyer	Registrar					
Amardeep Sharma	Deputy Registrar					
Sandeep Singh Chandel	Superintendent					
Sharad Srivastava	Assistant					
Ajay Kumar Singh	Junior Assistant					
Office of Alumni Relations & Student Placement						
Gurpreet Kaur Virdi	Assistant					
Office of Director						
Darsh Kumar Khatwani	Assistant					
T. Madhavi Lata	Stenographer (on Deputation to IIT Tirupati)					
Office of Infrastru	cture Engineering					
Sanjeeb Mukherjee	Executive Engineer (Civil)					
Chandresh Pareek	Junior Engineer (Civil)					
Vinay Kumar	Junior Engineer (Electrical)					
Office of	f Library					
Kshema Prakash	Deputy Librarian					
Amit Kumar Soni	Senior Library & Information Assistant					
Chunni Chhatwani	Senior Library & Information Assistant					
Kamleshkumar J. Patel	Senior Library & Information Assistant					
Office of	Planning					
Amardeep Sharma	Deputy Registrar (Planning)					
Trilotama Singh	Junior Assistant					

Office of Recruitment						
Sandeep Pareek	Junior Superintendent					
Achinta Mondal	Junior Assistant					
Office of Students						
Dhani Ram Choudhary	Stenographer					
Swati Kushwaha	Junior Assistant					
Office of Stores & Purchase						
Sharabh Pradhan	Junior Superintendent					
Adarsh Kumar Srivastava	Junior Assistant					
Technical Stat	ff Members					
Department of Computer	Science & Engineering					
Rimpesh Katiyar	Technical Superintendent					
Dheerendra Kumar Yadav	Junior Technical Superintendent					
Rinkesh Kumar Mangal	Junior Technical Superintendent					
Poonam Chand Sankhla	Junior Technical Superintendent					
Ram Singh Ratnu	Technician					
Vivek Verma	Junior Technician					
Department of Electrical Engineering						
Gajraj Sharma	Junior Technician					
Hemraj Dhodhawat	Junior Technician					
Kailash Chander	Junior Technician					
Abhishek Sharma	Junior Technician					
Department of Mech						
	anical Engineering					
Praveen Suthar	anical Engineering Junior Technician					
Praveen Suthar Bhagya Wardhan	anical Engineering Junior Technician Junior Technician					
Praveen Suthar Bhagya Wardhan Rambeer Singh	anical Engineering Junior Technician Junior Technician Junior Technician					
Praveen Suthar Bhagya Wardhan Rambeer Singh Department	anical Engineering Junior Technician Junior Technician Junior Technician of Biology					
Praveen Suthar Bhagya Wardhan Rambeer Singh Department Bharat Pareek	anical Engineering Junior Technician Junior Technician Junior Technician of Biology Junior Technical Superintendent					
Praveen Suthar Bhagya Wardhan Rambeer Singh Department Bharat Pareek Mohan Mukesh Malviya	anical Engineering Junior Technician Junior Technician Junior Technician of Biology Junior Technical Superintendent Junior Technician					
Praveen Suthar Bhagya Wardhan Rambeer Singh Department Bharat Pareek Mohan Mukesh Malviya Department o	anical Engineering Junior Technician Junior Technician Junior Technician of Biology Junior Technical Superintendent Junior Technician f Chemistry					
Praveen Suthar Bhagya Wardhan Rambeer Singh Department Bharat Pareek Mohan Mukesh Malviya Department o Ganpat Chowdhary	anical Engineering Junior Technician Junior Technician Junior Technician of Biology Junior Technical Superintendent Junior Technician f Chemistry Junior Technician					
Praveen Suthar Bhagya Wardhan Rambeer Singh Department Bharat Pareek Mohan Mukesh Malviya Department o Ganpat Chowdhary Shubham Pandey	anical Engineering Junior Technician Junior Technician Junior Technician of Biology Junior Technical Superintendent Junior Technician f Chemistry Junior Technician Junior Technician					
Praveen Suthar Bhagya Wardhan Rambeer Singh Department Bharat Pareek Mohan Mukesh Malviya Department o Ganpat Chowdhary Shubham Pandey Department	anical Engineering Junior Technician Junior Technician Junior Technician of Biology Junior Technical Superintendent Junior Technician f Chemistry Junior Technician Junior Technician of Physics					

ACADEMICS

Academic Programs

Currently, the Institute offers the following four sets of Programs:

- 1. Bachelor of Technology Programs:
 - 1. B.Tech. (Computer Science and Engineering)
 - 2. B.Tech. (Electrical Engineering)
 - 3. B.Tech. (Mechanical Engineering)
- 2. Master of Science Programs
 - 1. M.Sc. (Chemistry)
 - 2. M.Sc. (Mathematics)
 - 3. M.Sc. (Physics)
- 3. Master of Technology Programs
 - 1. M.Tech. (Electrical Engieering)
 - 2. M.Tech. (Mechanical Engineering)
- 4. Doctor of Philosophy Programs
 - 1. Ph.D. with specialisation in Computer Science & Engineering
 - 2. Ph.D. with specialisation in Electrical Engineering
 - 3. Ph.D. with specialisation in Mechanical Engineering
 - 4. Ph.D. with specialisation in Biology
 - 5. Ph.D. with specialisation in Chemistry
 - 6. Ph.D. with specialisation in Mathematics
 - 7. Ph.D. with specialisation in Physics
 - 8. Ph.D. with specialisation in Humanities & Social Sciences

First set of Ph.D. Theses

IIT Jodhpur opens its account, with four students successfully defending their Ph.D. theses during this year. Following are the details.

S. No.	Name of the Student	Title of Thesis	tle of Thesis Supervisor		Date of Defense	
1.	Shrivishal Tripathi	Analysis and Design of Wideband Fractal Antennas for Portable UWB Applications	Akhilesh Mohan (IITKgp) Sandeep Yadav	Electrical Engineering	3 September 2015	
2.	Heena Rathore	Improving Security in Wireless Sensor Networks Through Bio-Inspired Approaches	Venkata Ramana, B.	Computer Science & Engineering	29 October 2015	
3.	Sibani Bisoyi	Bias-Stress Stability and Charge-Carrier Trapping in High Performance Organic Thin-Film Transistors	Shree Prakash Tiwari	Electrical Engineering	16 December 2015	
4.	Deepak Kumar Chhangani	Role of MGRN1 E3 Ubiquitin Ligase in Protein Quality Control Mechanism and Polyglutamine Diseases	Amit Kumar Mishra	Biology	7 January 2016	

Collaborations with Academia

The Institute has signed Memoranda of Understanding (MoUs) with six international universities, two international agencies, three national institutes and universities, and one national agency for furthering cooperation on specific fronts. These MoUs are:

1	_ `) International	Institutes and Universities
L	d,) international	institutes and Universities

1. University of Western Ontario, Canada (9 August 2010)

To explore the possibilities for cooperation in education, training, and research and also to encourage direct contact and mutual cooperation between faculty members, departments, and research centers.

2. Universitat Rovira I Virgili, Tarrgona, Spain (29 August 2010)

For the development of mutually beneficial academic program and courses; coordination of academic staff travel for the purposes of teaching, research, and training; cooperation of student mobility program for study, research, and for joint academic activities such as research publications, conferences and symposia; exchange of documentation and research materials in the field of mutual interest provided that there are no legal barriers against exchange and collaboration in international master's and doctoral programs between both the institutions.

3. University of Waterloo, Canada (25 November 2010)

For collaborative measures to foster international experience and advancement of knowledge on the basis of reciprocity, mutual benefit, interaction and exchange of students in graduate programs.

4. University of Manitoba, Canada (9 December 2010)

For the development of mutually beneficial programs for student internships and graduate study in order to provide students opportunities for advancement of knowledge and international experience.

5. University of California, Merced (26 April 2011)

For the development of mutually beneficial relationships for promoting academic exchange, scholarly cooperation, and collaborations under mutually agreeable terms and conditions: the exchange of faculty members, scientists and students and scientific material, access to library resources, pursuit of joint meetings, symposia and/or conferences and access to laboratories as may be appropriate and feasible in the two institutes.

6. Arid Forest Research Institute, Jodhpur, India (15 August 2011)

For the development of sheltering belt plantation as urban forestry model for at a selected site at IIT Jodhpur.

7. Institute of Science and Technology, Nara, Japan (28 February 2012)

To promote academic exchanges in fields where each party needs to enhance its educational and academic programs: the academic exchanges will include, implementation of collaborative research, joint symposia, lectures and education and exchange of scholars, researchers, and administrative staff; exchange of information in fields which are of interest to both parties and exchange of graduate students in fields of interest to both parties.
(b) International Agencies

1. The Commissariat a l'Energie Atomique et aux Energies Alternatives, France (22 November 2010)

To cooperate in areas of solar energy research, such as Concentrated Solar Power (CSP) and Concentrated Photovoltaic (CPV), water production by using solar energy, renewable energy storage and smart management, integration of solar energies and energy efficiency in buildings.

2. Embassy of France in India (28 March 2011)

To explore prospective domains for students and scholars to learn French language effectively.

(c) National Institutes and Universities

- All India Institute of Medical Sciences, Jodhpur To collaborate in various academic activities in the spheres of expertise.
- National Law University, Jodhpur To collaborate in various academic activities in the spheres of expertise.
- 3. Sardar Patel University of Police, Security, and Criminal Justice, Jodhpur (12 June 2013)

To promote academic exchanges in fields where each party needs to enhance its educational and academic programs.

Collaborations with Industry

IIT Jodhpur has initiated to collaborate with industry towards enhancing the learning experience of students and collaboration opportunities for Faculty Members. These include:

- 1. Vanguard Lectures; and
- 2. Industry Immersion Program.

Vanguard Lectures

The Vanguard Lecture Series is an integral part of Blended B.Tech. Program. It enables the Students to listen to inspirational talks given by experts from Industry and Academia, and to get a big-picture of the technological advances and emerging trends in different fields.

In the year 2015, two more series of Vanguard Lectures were organised since July 2015, namely:

- 1. Series 3: July September 2015, and
- 2. Series 4: January May 2016.

The following are the details of speakers and topics covered in the two series.

S. No.	Speaker & Topic	
	S	eries 3: July – September 2015
(1)	Mr. N. Jayaram Vice President, Research and Development TVS Motor Company Limited, Hosur "New Product Development (Simulation Way)" 27 July 2015	
(2)	Dr. Arunkumar M. Sampath General Manager, Product Development, Auto Division Mahindra & Mahindra Limited, Chennai "Innovation and Product Development in Automotive Secto 31 July 2015	r"
(3)	Mr. M. Paranjpe Chief, Hydro & Renewable Operations and Safety Tata Power Company Limited, Khopoli "Hydropower Plant Challenges" 3 August 2015	
(4)	Dr. Sachin P. Lodha Principal Scientist, TCS's Innovation Labs Tata Consultancy Services, Pune "Applied Algorithms" 4 August 2015	

(5)	Mr. Pranab Ghosh Head, Planning Tata Motors Limited, Jamshedpur "Automotive Manufacturing" 5 August 2015
(6)	Dr. Barun Chakrabarti General Manager, Research & Development Larsen & Toubro Hydrocarbon Engineering Limited, Mumbai "Engineering – From Class Room to Real World : The L&T Perspective" 7 August 2015
(7)	Professor S. Natarajan Professor, Indian Institute of Science, Bangalore "Permanent Color and Chemistry" 4 September 2015
	Series 4: January – May 2016
(1)	Professor Navneet Arora Professor, Indian Institute of Technology Roorkee "Excellence in Engineering and Expectations from an Engineer" 7 January 2016
(2)	Mr. Anil Bhansali MD, Microsoft India (R&D) Private Limited and General Manager, Cloud & Enterprise Microsoft India Development Center & Mr. Prashant Gupta Director, Microsoft Cloud & Enterprise Division Microsoft India Development Center "Advanced Analytics and Machine Learning on Cloud – Creating impact for Education, Healthcare and other domains" 25 January 2016
(-)	Drafagan Amitak ba Chack

- Professor Amitabha Ghosh
 Platinum Jubilee Senior Scientist, The National Academy of Sciences, India
 Former Director, Indian Institute of Technology Kharagpur
 "Conceptual Evolution of Newtonian Mechanics & The Little Known Story of F=ma"
 4 February 2016
- Professor Raghunath K. Shevgaonkar
 Professor, Indian Institute of Technology Bombay
 Former Director, Indian Institute of Technology Delhi
 "Electromagnetic Theory "
 22 February 2016

Industry Immersion Program

In July 2014, when the Institute launched the blended Technical Education model at the B.Tech. level, the intent was to inspire students to build passion for technology to solve the grand technology challenges of the Indian Industry. One of the elements of the model is to have industry captains give the first lectures of each course to lay the cornerstone by giving the big-picture of sectoral technologies, industry needs and research opportunities. The model gained momentum with *Vanguard Lecture Series*, and now this has become a distinctive feature of the blended Technical Education Model for the B.Tech. Program of the Institute. Then, this was followed by the *Grand Technology Projects* (*GTPs*) *Competition* during January-March 2015, and interested students showed special excitement. Most students are now seeing merit in converting their *B.Tech. Projects* to *GTPs*.

Currently, five industry partners have joined the Industry Immersion Program at the B.Tech. level, namely:

- (1) Mahindra & Mahindra Limited, Mumbai;
- (2) Larsen & Toubro Limited, Mumbai;
- (3) Tata Motors Limited, Mumbai;
- (4) TVS Motor Company Limited, Chennai; and
- (5) Tata Power Limited, Mumbai.

Beginning 11 May 2015, 31 Students and 5 Faculty Members *immersed* inside these leading *technology Industries* as the first of the three successive summer engagement. The key features of this *Industry Immersion Program (IIP)* include:

- (*a*) *For Students:* Learning-by-doing, Experiential and cooperative learning, Working on live assignments under the tutelage of industry professionals, and Engaging in industry-supported projects spanning over 2¹/₂ years starting IV semester.
- (b) For the Institute: Faculty Members will be able to look beyond the Institute and develop linkages with Industry; Course curricula will become more real a silent advantage; Faculty Members will have opportunities for research and consultancy projects that are current and impactful; and greater sensitivity to integrate industry needs in academia, to benchmark students and Faculty Members from Industry perspective, and to reflect and undertake needed correction in strategies of the Institute.

By choosing to join the *Industry Immersion Program*, select students have chosen a path different from others. It will put them on a pedestal of *competence* and *accomplishments* - beyond the qualification by the *B.Tech. Degree*.

RESEARCH

Highlights

IIT Jodhpur becomes one of the five IITs in DBT-Pan IIT Center for Bioenergy

The Department of Biotechnology (DBT), Ministry of Science & Technology, Government of India, and five IITs, namely, IIT Bombay, IIT Kharagpur, IIT Roorkee, IIT Guwahati, and **IIT Jodhpur**, have come together to launch a virtual Center for Bioenergy. IIT Bombay will coordinate the activities of this virtual center. The main objective of this Center is to develop advanced technologies in the area of biofuels, paving the way for a sustainable solution to the energy crisis. Also, the Center aims to develop a mutually beneficial relationship with the bio-energy industry in India.

V. Narayanan, Coordinator (Research & Development), IIT Jodhpur, represented the Institute at the signing of the Memorandum of Agreement (MoA), at IIT Bombay on 3 September 2015.



MoA Signing

Faculty Members at IIT Jodhpur working on Bio Fuels

Biomass, or bio-energy, has been acknowledged as a renewable energy source that can replace fossil fuels, with the added bonus that the biomass can absorb carbon dioxide from the atmosphere and reduce the greenhouse effect. Bio-fuel, obtained either from microbial fermentation or from the pyrolysis of biomass in an inert gas atmosphere, has a significant appeal for use in transportation fuels, both economically and technologically. Algae can produce more oil than other biofuel feed stocks. The bottle neck of this technology is to devise cultivation methods for algae which can support higher growth rates and oil productivities, efficient methods to convert algae oil to fatty acid methyl esters (biodiesel) or to develop a "Right Catalyst" that can convert biomass to fuel (bio) for the current technology.

"Catalytic Upgrading of Algae Biomass to Transport Fuel" is the project Rakesh K. Sharma, Assistant Professor is working on. This research aims to develop new and efficient heterogeneous catalytic systems for conversion of algae biomass to transport fuel via tandem hydrocracking followed by Hydrodenitrogenation and/or hydrodeoxygenation processes. These heterogeneous catalytic systems based on metals

nanoparticles supported/intercalated/layered in zeolites and clays. Successful catalysts are aimed to be green, recyclable and scalable (kilogram level). These catalysts will be sulphide free non noble metal catalysts. In next phase, the substrate applications will be extended from algal-oil to edible and non-edible oils. The reactions will be essentially carried out at two operating conditions, for mild (50-200°C, 100 bar) and deep hydrotreatment (200-350°C, 200 bar). Mechanistic studies of these catalytic processes will be focal point to design a better catalyst.

"Development of low cost Microbial carbon capture cells for power generation and algae cultivation" is the project Meenu Chhabra, Assistant Professor, Department of Biology, is working on. Bio-fuels from algae have a potential to completely replace fossil based fuels and provide energy security for the future. However, the cost of algae bio-fuels is still too high for commercial application. In this context, a process for the production of algae and electrical energy using microbial carbon capture (MCC) cells is proposed. In MCC cells, the process of algae biomass degradation complements the process of algae biomass production with concomitant power generation.

These two projects together, which are funded by Department of Biotechnology, Government of India, are likely to offer an exciting technology proposition of offering non-fossil fuels for the nation.

R & D Projects

The Faculty Members in the Institute are currently working on 47 sponsored research projects. Their details are:

S. No.	Project Title				
Depart	Department of Biology				
(1)	Identification, assessment and characterization of E3 ubiquitin ligases implicated in the neurodegenerative diseases Department of Biotechnology (DBT), Government of India PI: Amit Mishra Rs. 74.5 Lakhs				
(2)	Understanding the molecular function of MGRN1 in Chaperone Mediated Autophagy Department of Biotechnology (DBT), Government of India PI: Amit Mishra Rs. 41.19 Lakhs				
(3)	How AMFR gene regulates cell division and cancer after stress exposure? Board of Research in Nuclear Sciences (BRNS), DAE, Government of India PI: Amit Mishra Rs. 23.9 Lakhs				
(4)	Self-assembly of collagen peptides as foundational knowledge for cardiovascular disease Board of Research in Nuclear Sciences (BRNS), DAE, Government of India PI: Karunakar Kar Rs. 18.43 Lakhs				
(5)	Bioremediation of low level wastes including denitrification using microbial fuel cells Board of Research in Nuclear Sciences (BRNS), DAE, Government of India PI: Meenu Chhabra; Co-PI: Atul Kumar Rs. 23.73 Lakhs				
(6)	Development of low cost Microbial Carbon capture (MCC) cells for algae cultivation and powers generation Department of Biotechnology (DBT), Government of India PI: Meenu Chhabra Rs. 172 Lakhs				
(7)	Deposition of particulate matter in lungs Board of Research in Nuclear Sciences (BRNS), DAE, Government of India PI: Sushmita Jha Rs. 24.79 Lakhs				
(8)	Role of the inflammasome associated proteins in glioma Science and Engineering Research Board (SERB), DST, Government of India PI: Sushmita Jha Rs. 22.30 Lakhs				
Depart	ment of Chemistry				
(9)	Dual scale simulations of surfactant, co-surfactant water system Science and Engineering Research Board (SERB), DST, Government of India PI: Ananya Debnath				

Rs. 21.7 Lakhs

- (10) Chemical Dynamics Simulations of Complex Organic Reactions
 Science and Engineering Research Board (SERB), DST, Government of India
 PI: Manikandan Paranjothy
 Rs. 18.7 Lakhs
- Generation, Storage and Distribution of Solar Hydrogen
 Department of Science & Technology (DST), Government of India
 PI: Rakesh Kumar Sharma
 Rs. 39.63 Lakhs
- Asymmetric Hydrogenation on Carbon Nanotube Surface Department of Science & Technology (DST), Government of India PI: Rakesh Kumar Sharma Rs. 25.25 Lakhs
- Molecular Sensors: Synthesis and Anion Recognition Studies
 Science and Engineering Research Board (SERB), DST, Government of India
 Pl: Rakesh Kumar Sharma
 Rs. 27 Lakhs
- (14) Catalytic Upgrading of Bio-Oil to Transport Fuel Department of Biotechnology (DBT), Government of India Pl: Rakesh Kumar Sharma Rs. 94.79 Lakhs

Department of Computer Science & Engineering

(15) Energy Efficient Technologies for Smart Buildings The Indo-US Science and Technology Forum (IUSSTF), Department of Science & Technology, Government of India Pl: Venkata Ramana Badarla Rs. 1.3 Crores

Department of Electrical Engineering

(16) Enabling Technologies for Intelligent Wireless Sensor Network for Health and Environment Monitoring

Department of Science & Technology (DST), Government of India PI: Anil Kumar Tiwari Rs. 75 Lakhs

(17) Visveswaraya Ph.D. Scholarship scheme for Electronics & IT

Department of Electronics & Information Technology (DeitY), Government of India PI: Anil Kumar Tiwari Rs. 16.25 Lakhs

(18) Computationally efficient fixed complexity sphere decodes for multiuser MIMO communications

Science and Engineering Research Board, Department of Science & Technology, Government of India PI: Arun Kumar Singh Rs. 22.82 Lakhs

(19) Development of Programmable Emulator for Photovoltaic Plant to Facilitate Complex Testing Requirements

Science and Engineering Research Board (SERB), DST, Government of India PI: Deepakkumar M. Fulwani Rs. 9.48 Lakhs

- (20) Development of Metal Doped TiO₂ Low Dimension Structures by Sputtering for Gas Sensing Applications Board of Research in Nuclear Sciences, Department of Atomic Energy, Government of India Pl: Mahesh Kumar Rs. 17.46 Lakhs
- (21) Ion-Beam Synthesis and Characterization of Gallium Nitride Based Nanocrystals embedded in Si based Matrices for New-Generation Photodetector and Light-Emitter Applications Department of Science & Technology (DST), Government of India PI: Mahesh Kumar Rs. 55.72 Lakhs
- (22) Development of mems based gas sensors using RF sputtered transition metal doped ZnO Nanostructures Science and Engineering Research Board, Department of Science & Technology (DST), Government of India PI: Mahesh Kumar Rs. 24.17 Lakhs
- (23) Development of Tunable RF Filter Based on Ferroelectric Thin Film by Sputtering Indian National Science Academy Pl: Mahesh Kumar Rs. 5 Lakhs
- (24) **Reproductive Child Health** UNICEF, Jaipur Branch PI: Sandeep Kumar Yadav Rs. 38.52 Lakhs

(25) Algorithms for Blind Signal Detection and Demodulation

Defense Research & Development Organization (DRDO), Jodhpur, Government of India PI: Sandeep Kumar Yadav Rs. 55.24 Lakhs

(26) Developing Dielectric Semiconductor Combinations and Processes for Flexible Organic Electronics

Science and Engineering Research Board (SERB), DST, Government of India PI: Shree Prakash Tiwari Rs. 12.84 Lakhs

(27) Design of a sensor signal conditioning system(I) & multiprocessor Scheduling Algorithms using control theoretic Approach(II) Department of Electronics & Information Technology (DeitY), Government of India

PI: Shree Prakash Tiwari Rs. 99.72 Lakhs

(28) Encapsulation of Organic devices by atomic layer deposition(DRDO CAR Proposal) Defense Research & Development Organization (DRDO), Jodhpur, Government of India Pl: Shree Prakash Tiwari Rs. 9.96 Lakhs

Department of Humanities & Social Sciences

(29) Wisdom as cognitive and motivational-emotional heuristics in ecologically rational decision making

Department of Science & Technology, Government of India PI: Ankita Sharma Rs. 22.3 Lakhs (30) Where the Bougainvillea Blooms: Stories of Place from a Resilient Landscape

M. R. A. R. Educational Foundation PI: Vidya Sarveswaran Rs. 0.5 Lakhs

Department of Mathematics

 (31) Multimedia security based on biometrics for copyright protection and authentication Science and Engineering Research Board, DST, Government of India PI: Gaurav Bhatnagar Rs. 22 Lakhs

Department of Mechanical Engineering

- Bifurcation and Stability Assessment of a Highly Lightweight Rotor-Bearing System with Moving Platform
 Science and Engineering Research Board (SERB), DST, Government of India
 Pl: Barun Pratiher
 Rs. 21.8 Lakhs
- (33) Establishment of the Centre of Excellence in Solar Thermal Research and Education Ministry of New & Renewable Energy, Government of India Pl: Laltu Chandra Rs. 40 Crores
- (34) **IOC-BHEL-IITJ CSP Plant** Indian Oil Corporation Ltd. Pl: Laltu Chandra Rs. 60 Lakhs
- (35) Thermal Design of PCM Cool and Warm Vest
 Defense Research & Development Organization (DRDO), Jodhpur, Government of India
 PI: Prodyut Ranjan Chakraborty
 Rs. 9.96 Lakhs
- (36) Hybrid reactionless manipulation and visual serving of a satellite mounted robot for autonomous on orbit services
 Department of Science & Technology (DST), Government of India
 PI: Suril Vijaykumar Shah
 Rs. 35 Lakhs
- (37) Singularity free reactionless manipulation of a satellite mounted dual-arm robot for capture of tumbling orbiting object Department of Science & Technology (DST), Government of India PI: Suril Vijaykumar Shah Rs. 24.77 Lakhs

Department of Physics

- (38) Development of III-Nitrides thin film(s) for high frequency saw device applications
 Department of Space, Government of India
 PI: Ambesh Dixit
 Rs. 22.62 Lakhs
- (39) Development of Ferroelectric and their composite with hexaferrites for microwave absorption applications Defense Research & Development Organization (DRDO), Jodhpur, Government of India Pl: Ambesh Dixit Rs. 9.55 Lakhs

- Investigation of Magnetoelectric coupling in Cu1-xTMxO Multiferroic System Board of Research in Nuclear Sciences (BRNS), DAE, Government of India Pl: Ambesh Dixit Rs. 23.42 Lakhs
- (41) Development of plasmonic metal hybrid electrode system for II-VI quantum dot sensitized solar cells (QDSSCs) realization of carrier multiplication for better efficiency Department of Science & Technology (DST), Government of India PI: Ambesh Dixit Rs. 32.87 Lakhs
- (42) Development of high thermal conductivity PCM composites for thermal management Defense Research & Development Organization (DRDO), Jodhpur, Government of India Pl: Ambesh Dixit Rs. 9.8 Lakhs
- Design and development of high capacity and low cost Li2TMSio4(TM=transition metals) silicate materials for future rechargeable lithium ion battery
 Department of Science & Technology (DST), Government of India
 PI: Ambesh Dixit
 Rs. 23.88 Lakhs
- Probing Magnetic Structures and Spin Flop transition in bulk and nanostructured FeVo4 Multiferroic System
 UGC-DAE, Department of Science & Technology (DST), Government of India
 PI: Ambesh Dixit
- Hunting of New Physics Through b-> S Transitions
 Council of Scientific & Industrial Research (CSIR), Government of India Pl: Ashutosh K. Alok
 Co-Pl: Subhashish Banerjee
 Rs. 11.92 Lakhs
- (46) Synchrony Based Evolution of Various Biological and Artificial Systems to Understand Complex Computational Aspects Department of Science & Technology (DST), Government of India Pl: Satyajit Sahu Rs. 35 Lakhs
- (47) Graph Theoretical Aspects in Quantum Information Processing Council of Scientific and Industrial Research (CSIR), Government of India PI: Subhashish Banerjee Rs. 9.92 Lakhs

Patents & Publications

In 2015-16, our Faculty Members have filed 2 patents, published 75 research papers and articles in scholarly journals; 20 of their works have been covered as conference presentations and in conference proceedings; 10 preprints and 4 book chapters have been contributed.

Department	Patents Filed	Journal Articles	Conference Papers	Preprints	Book Chapters	Total
Biology		10				10
Chemistry	2	13	3			18
Computer Science & Engineering		3	1			4
Electrical Engineering		18	9			27
Humanities & Social Sciences		4	1			5
Mathematics		3	2	3	2	10
Mechanical Engineering		9	2		2	13
Physics		15	2	7		24
Total	2	75	20	10	4	112

Category-wise Break up of Scholarly Publications



The following is the department-wise list of patents and publications.

- 1. Chhabra, M., Mishra, S., & Sreekrishnan, T. R. (2015). *Immobilized laccase mediated dye decolorization and transformation pathway of azo dye acid red 27.* Journal of Environmental Health Science and Engineering, 13(1), 1–9.
- Chhangani, D., Endo, F., Amanullah, A., Upadhyay, A., Watanabe, S., Mishra, R., & Mishra, A. (2016). *Mahogunin ring finger 1 confers cytoprotection against mutant SOD1* aggresomes and is defective in an ALS mouse model. Neurobiology of Disease, 86, 16–28. http://doi.org/10.1016/j.nbd.2015.11.017
- Dubey, K., Anand, B. G., Badhwar, R., Bagler, G., Navya, P. N., Daima, H. K., & Kar, K. (2015). *Tyrosine- and tryptophan-coated gold nanoparticles inhibit amyloid aggregation of insulin*. Amino Acids, 1–10. http://doi.org/10.1007/s00726-015-2046-6
- Hoop, C. L., Lin, H.-K., Kar, K., Magyarfalvi, G., Lamley, J. M., Boatz, J. C., & Wel, P. C. A. van der. (2016). *Huntingtin exon 1 fibrils feature an interdigitated β-hairpinbased polyglutamine core*. Proceedings of the National Academy of Sciences, 201521933. ISSN: 1091-6490. http://doi.org/10.1073/pnas.1521933113
- Kumar, D., Pal, S., Chhabbra, M., & Harinipriya, S. (2015). Separation of Enantiomers of Alanine from Racemic Mixture by Polycrystalline Metal Surfaces - A Spectroelectrochemical Approach. ECS Transactions, 66(32), 33–43. http://doi.org/10.1149/06632.0033ecst
- Sharma, N., & Jha, S. (2015). NLR-regulated pathways in cancer: opportunities and obstacles for therapeutic interventions. Cellular and Molecular Life Sciences, 1–24. ISSN: 1420-9071. http://doi.org/10.1007/s00018-015-2123-8
- Upadhyay, A., Amanullah, A., Chhangani, D., Joshi, V., Mishra, R., & Mishra, A. (2015). *Ibuprofen Induces Mitochondrial-Mediated Apoptosis Through Proteasomal Dysfunction*. Molecular Neurobiology, 1–14. ISSN 1559-1182. http://doi.org/10.1007/s12035-015-9603-6
- 8. Upadhyay, A., Amanullah, A., Chhangani, D., Mishra, R., & Mishra, A. (2015). Selective multifaceted E3 ubiquitin ligases barricade extreme defense: Potential therapeutic targets for neurodegeneration and ageing. Ageing Research Reviews, 24, Part B, 138–159. ISSN: 1568-1637. http://doi.org/10.1016/j.arr.2015.07.009
- Upadhyay, A., Amanullah, A., Chhangani, D., Mishra, R., Prasad, A., & Mishra, A. (2015). Mahogunin Ring Finger-1 (MGRN1), a Multifaceted Ubiquitin Ligase: Recent Unraveling of Neurobiological Mechanisms. Molecular Neurobiology, 1–13. http://doi.org/10.1007/s12035-015-9379-8
- 10. Vijay, A., Vaishnava, M., & Chhabra, M. (2016). *Microbial fuel cell assisted nitrate nitrogen removal using cow manure and soil*. Environmental Science and Pollution Research, 1–13. eISSN: 1614-7499. http://doi.org/10.1007/s11356-015-5934-0

	Department of Chemistry
	Patents Filed
1.	Title "Real-time Calibration free water quality sensor (Device and System)"
	Rakesh K. Sharma (IIT Jodhpur) & Hareesh, P. V. (Panasonic Corporation, Japan) Patent Reference Number (Provisional)
	1468/CHE/2015
	23 March 2015
2.	<i>Title</i> "Metal Nanoparticles Intercalated Clay for Solvent Free Hydrogenation of Squalene into Squalane" Inventors
	Rakesh K. Sharma & Vineet K. Soni
	Patent Application Number 201611009866 Date
	21 March 2016
	Journal Articles

3. Adhikari, S., & **Kumar**, **A.** (2016). *Upper bound on singlet fraction of two-qubit mixed entangled states.* Quantum Information Processing, 1–7. eISSN: 1573-1332.

http://doi.org/10.1007/s11128-016-1295-y

4. Bondarenko, G. N., Ganina, O. G., **Sharma, R. K.**, & Beletskaya, I. P. (2015). *Catalytic activity* of Pd catalysts on different supports in hydrogenation of 1-phenylethenylphosphonic acid. Russian Chemical Bulletin, 63(8), 1856–1859.

http://doi.org/10.1007/s11172-014-0676-6

- Choudhary, G., Sharma, R. K., & Plappally, A. K. (2015). Local material composite sintered systems for fluoride removal. Desalination and Water Treatment, 55(10), 2626–2637. http://doi.org/10.1080/19443994.2014.957936
- Debnath, A., & Schäfer, L. V. (2015). Structure and Dynamics of Phospholipid Nanodiscs from All-Atom and Coarse-Grained Simulations. The Journal of Physical Chemistry B. 119(13), 6991-7002. ISSN: 1520-6106.

http://doi.org/10.1021/acs.jpcb.5b02101

7. **Debnath, A.,** Wiegand, S., Paulsen, H., Kremer, K., & Peter, C. (2015). *Derivation of coarsegrained simulation models of chlorophyll molecules in lipid bilayers for applications in light harvesting systems.* Physical Chemistry Chemical Physics.

http://doi.org/10.1039/C5CP01140J

8. Goudar, R., **Gupta, R.,** Kulkarni, G. U., & Inamdar, S. R. (2015). *Rotational Diffusion of a New Large Non Polar Dye Molecule in Alkanes. Journal of Fluorescence*, 1–9.

http://doi.org/10.1007/s10895-015-1654-6

 Gupta, R., Siddhanta, S., Mettela, G., Chakraborty, S., Narayana, C., & Kulkarni, G. U. (2015). Solution processed nanomanufacturing of SERS substrates with random Ag nanoholes exhibiting uniformly high enhancement factors. RSC Advances, 5(103), 85019–85027. http://doi.org/10.1039/C5RA17119A

- Kiruthika, S., Gupta, R., Anand, A., Kumar, A., & Kulkarni, G. U. (2015). Fabrication of Oxidation Resistant Metal Wire Network Based Transparent Electrodes by a Spray-Roll Coating Process. ACS Applied Materials & Interfaces, 7(49), 27215-27222. eISSN: 1944-8252. http://doi.org/10.1021/acsami.5b08171
- Sharma, P., & Sharma, R. K. (2015). Platinum functionalized multiwall carbon nanotube composites as recyclable catalyst for highly efficient asymmetric hydrogenation of methyl pyruvate. RSC Advances, 5(124), 102481–102487. http://doi.org/10.1039/C5RA21790C
- 12. Sharma, P., Choudhary, G., Satankar, R., **Plappally, A. K., & Sharma, R. K.** (2015). *Development of Low Cost Polycalixarene-Clay Based Water Guards. Indian Water Week,* 3(91).
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- Dani, S. G., Shah, R., & Sharma, P. (2015). Affine almost automorphic actions on compact nilmanifolds. Ergodic Theory and Dynamical Systems, 35(06), 1783–1794. ISSN: 1469-4417. http://doi.org/10.1017/etds.2014.19
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- Choudhary, B., & Pratiher, B. (2015). Numerical Studies of a Nonlinear Flexible Rotating System Under Harmonic Ground Motion. In P. Pennacchi (Ed.), Proceedings of the 9th IFToMM International Conference on Rotor Dynamics (pp. 1677–1687). Springer International Publishing. http://link.springer.com/chapter/10.1007/978-3-319-06590-8_138
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- 7. Omkar, S., **Banerjee**, S., Srikanth, R., & Alok, A. K. (2016, In Press). *The Unruh effect interpreted as a quantum noise channel*. Quantum Information and Computation. http://arxiv.org/abs/1408.1477

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- Alok, A. K., Banerjee, S., & Sankar, S. U. (2015). *Effect of decoherence on clean determination of* sin 2β and Δm_d. In Proceedings of Science. Vienna, Austria: SISSA. http://pos.sissa.it/archive/conferences/234/578/EPS-HEP2015_578.pdf
- 2. Alok, A. K., Banerjee, S., Sankar, S. U., Kumar, D., & London, D. (2015). *New-physics signals of a model with an isosinglet vector-like t' quark.* In Proceedings of Science. Vienna, Austria: SISSA. http://pos.sissa.it/archive/conferences/234/579/EPS-HEP2015_579.pdf

Department of Biology

- 1. Amit Kumar Mishra, Assistant Professor, Department of Biology, IIT Jodhpur, has been chosen by Indian National Science Academy (INSA) Council as one of the Founding Members of the Indian National Young Academy of Science (INYAS). Their term will be for a period of five years, upto 31 December 2019.
- 2. Amit Kumar Mishra, Assistant Professor, Department of Biology, IIT Jodhpur, has been selected for the "Young Researcher Award" in the category of (Cellular and Molecular Neuroscience) of the Venus International Foundation Faculty Awards (VIFFA) 2015. This award will be presented to him at the VIFFA 2015 event.
- 3. Amit Kumar Mishra, Assistant Professor, Department of Biology, IIT Jodhpur, has been conferred the *2014 Young Scientist Award* by the Biotech Research Society of India (BRSI). This honour was conferred on him during the International Conference on New Horizons in Biotechnology at CSIR-National Institute for Interdisciplinary Science and Technology, Thiruvananthapuram, held during 22-25 November 2015.
- 4. For his research contributions, the New York Academy of Sciences has launched Amit Kumar Mishra's profile on their website.

Department of Electrical Engineering

- 1. Mahesh Kumar, Assistant Professor, Department of Electrical Engineering, IIT Jodhpur, has been chosen by Indian National Science Academy (INSA) Council as one of the Founding Members of the Indian National Young Academy of Science (INYAS). Their term will be for a period of five years, upto 31 December 2019.
- 2. Mahesh Kumar, Assistant Professor, Department of Electrical Engineering, has been selected by the Materials Research Society of India (MRSI) to receive the MRSI Medal for 2016. The medal will be presented to him during the Annual General Meeting of MRSI to be held at Jorhat, Assam, during 18-20 February 18-20 2016. The MRSI is an interdisciplinary society founded in 1989 by Bharat Ratna Professor C. N. R. Rao, who is dedicated to the field of materials science and engineering in India. The Society is committed to stimulate and integrate research in the field of materials for rapid industrial progress in the country.
- 3. Shree Prakash Tiwari, Assistant Professor, Department of Electrical Engineering has been elevated as Senior Member of the Institute of Electrical and Electronics Engineers (SMIEEE) as an honour to his contribution to the profession.

Department of Physics

- 1. Satyajit Sahu's (Assistant Professor, Department of Physics) research work on finding signatures of hidden information processing network, received recognition and has appeared in Scientific Reports published by Nature Publishing Group.
- 2. Ashutosh K. Alok, Assistant Professor, and Subhashish Banerjee, Assistant Professor and Head of the Department received international recognition for their work on Probing Signatures of Quantum Gravity. They, along with S. Uma Sankar (IIT Bombay) are working on "Probing signatures of quantum gravity like background at LHCb and B-factories". This work opened the doors for probing some very fundamental aspects of nature such as quantum gravity background by measuring observables in flavor physics which are mainly used to probe new physics models beyond Standard Model. Their work "*Re-examining sin 2β and Am_d from evolution of B⁰_d mesons with decoherence*" has been published in Physics Letters B, a renowned journal in the field of particle physics. Also, the work was presented at the prestigious European Physical Society's Conference on High Energy Physics, held at the University of Vienna, Austria in July 2015.

Outreach

The following Outreach activities have been undertaken by the Faculty Members at IIT Jodhpur during the FY 2015-16.

Undergraduate Research Initiative

IIT Jodhpur started the Undergraduate Research Initiative (UGRI) Program in 2011 with the objective of promoting research and innovation among undergraduate students. This program is organised every summer; it helps participating students improve their professional knowledge and skills. Students from across the country were encouraged to participate in the UGRI Program. 18 students participated in the UGRI 2015. Students were selected on the basis of their academic achievements and the merit of the research proposal submitted by them, be it an analytical one or an experimental one. It began on 11 May 2015 and ended on 10 July 2015. Selected students were provided accommodation in Students' Hostel at IIT Jodhpur. During this period, the participating students were offered a token financial assistance to meet their basic expenses. During this 10 week program, the students worked on their projects under the mentorship of Faculty Members at IIT Jodhpur.

Ishaan Vikaas Program

A special program in the name of Ishaan Vikaas, an initiative of the Ministry of Human Resource Development, has been launched as a comprehensive plan to bring selected school girls and boys, from the North-Eastern states into close contact with the IITs and IISERs during their vacation periods with the objective of opening up the young minds and giving them a broad overview of the future paths which they would like to traverse. They should get a wider perspective on how they can take a much more proactive role in shaping their own future. At the same time, as a part of Ishaan Vikaas, an academic activity will take place to encourage internship for the engineering college students of North-Eastern states in various institutes of national importance.

From this year onwards, IIT Jodhpur has taken part in this Government's mission to give whole-hearted support for the success of this Program. The Institute has organized the Program twice this year, during summer and winter.

During this summer, about 40 school children, accompanied by 7 teachers and 5 B.Tech. Students, accompanied by one Faculty Member have visited IIT Jodhpur for two weeks (30 June - 9 July, 2015) and eight weeks, respectively. In this context, a schedule has been prepared for the school children, while each visiting B.Tech. Student has been assigned a well-defined research problem under the mentorship, guidance and supervision of the Faculty Members of respective department.

During 12-24 December 2015, the Institute has hosted about 47 school children accompanied by 6 teachers from various regions of the North-East. A well-defined schedule was maintained to meet the requirements. The schedule maintained for the program encompassed not only the domains of science and technology but also highlighting various facets of humanities and social sciences. Visits to the state-of-the-art laboratories for hands-on experience followed by the lectures. In addition, visit to the Defense Laboratory, Jodhpur and the Central Arid Zone Research Institute (CAZRI) was also included as a part of this program. The program ended with a visit to various local places of visit in Jodhpur.



Participants of Ishaan Vikas Program

Rashtriya Avishkar Abhiyan

Rashtriya Avishkar Abhiyan (RAA) is a program of the Ministry of Human Resource Development (MHRD) in pursuance of the focus on connecting school-based knowledge to life outside the school and making learning of Science and Mathematics a joyful and meaningful activity, and to bring focus on innovation and use of technology.

The Rashtriya Avishkar Abhiyan (RAA) is a convergent framework that aims at nurturing a spirit of inquiry and creativity, love for Science and Mathematics and effective use of technology amongst children and encourage those who show an inclination and talent for these subjects to be encouraged and supported to heights of academic excellence and research.

The activities of Rashtriya Avishkar Abhiyan (RAA) are organized by Ananya Debnath, Faculty Member In-charge, with the support of Heads of Departments, Faculty Members, and Staff Members.

Under Rashtriya Avishkar Abhiyan initiative, an "Open House for School Students" was organized on 21 November 2015 at IIT Jodhpur, which included public lectures and laboratory visits. The objectives of this event were to enable students in getting motivated and engaged in Science, Mathematics and Technology; and to provide an exposure to students, of national needs and current science. Total 79 students, escorted by 2 teachers each from their school, participated from 7 Schools in Jodhpur.



Ananya Debnath, Assistant Professor, Department of Chemistry and Faculty-in-Charge for Rashtriya Avishkar Abhiyan, introducing the program



Vivek Vijay, Assistant Professor, Department of Matematics addressing the enthusiasts from schools



Chiranjoy Chattopadhyay, Assistant Professor, Department of Computer Science & Engineering explaining computer technology used in movies



Ritu Gupta, Asssistant Professor, Department of Chemistry, showing structural colour of butterfly to the school students

Lecture Series

The Institute invites accomplished persons from different walks of life to expand and enrich the horizons of its Faculty Members, Staff Members and Students. These invitations are grouped under the following categories, namely:

- 1. Distinguished Lectures,
- 2. MEA IITJ Distinguished Lectures, and
- 3. Extra-Mural Lectures.

Details of the lectures organized in the Institute in this year are, as below:

Distinguished Lectures

The Distinguished Lecture series brings in a meaningful exchange of ideas from outside to the Institute with eminent scholars of Humanities, Sciences and Technology.

A distinguished lecture on "The Development of Temple Architecture in India" was delivered by Dr. Chithra Madhavan, a renowned archaeologist and historian, on 29 January 2016.



MEA - IITJ Distinguished Lectures

In collaboration with the Ministry of External Affairs (Government of India), the Institute launched the "*MEA – IIT Jodhpur Distinguished Lecture Series*", where current and former Ambassadors of India spend time at the Institute to share their experiences and understanding of India from outside India.

The Institute, continuing its tradition of MEA-IITJ Distinguished Lectures, invited Ambassador Ajai Malhotra for a lecture. Ambassador Malhotra visited the Institute on 11 September 2015 and addressed the IIT Jodhpur community on "Climate Change and India".



Extra-Mural Lectures

Professionals with standing and missionary zeal, who dedicated their lifetime in specific domains, are invited to the Institute to share their career paths - the trials and tribulations, and the way forward for the current generation seeking to tread such challenges.

During this year, on 1 February 2016, Professor Amitabha Ghosh, Platinum Jubilee Senior Scientist, The National Academy of Sciences, India, and Former Director of IIT Kharagpur, delivered a lecture on "Gravitation Inertia and the Universe: The amazing consequences of a relook into the Newton's laws".

Besides the above, the following Special Lectures were witnessed in the Institute during this period.

Special Lectures

IIT Jodhpur and Department of Management Studies, Jai Narayan Vyas University, Jodhpur came together to organize a special lecture by Professor Pankaj Chandra, Member, Board of Governors, IIT Jodhpur and Former Director, IIM Bangalore, on 23 October 2015. Professor Chandra spoke on "Pivoting Indian Manufacturing Policy Differently".

A special public lecture was delivered by Jerry M. Hultin, Chairman, Board of Directors, and Co-Founder, Global Futures Group, USA on "REBUILDING CITIES: A holistic approach" on 9 February 2016. Jerry Hultin also served as the 15th President of the Polytechnic Institute of New York University.

GIAN Program

Global Initiative for Academic Networks (GIAN) in higher education is a program of the Ministry of Human Resource Development (MHRD) to invite accomplished scientists and entrepreneurs living abroad, to give short courses at premier Institutes in India. This scheme is relevant especially for new IITs facing faculty shortage. Under this program, the Faculty Members of the Institute organized shortterm courses as below.

- Synthesis and Characterization of Materials for Energy Storage Devices Dates: 12-16 December 2015 Host Faculty: Ritu Gupta
 - Foreign Faculty: Timothy S. Fisher, Purdue University, USA
- Robot Modeling and Control, and Applications to Aerial Robots
 Dates: 22-28 December 2015
 Host Faculty: Suril Vijakumar Shah and Sudipto Mukherjee (IIT Delhi)
 Foreign Faculty: Vijay Kumar, University of Pennsylvania, USA
- Fundamentals of Applied Vehicle Dynamics and Chassis Systems Dates: 12-23 January 2016
 Host Faculty: B. Ravindra
 Foreign Faculty: Raghu Enchempati, Kettering University, USA

4. Advanced Digital VLSI Circuit Design Dates: 7-18 March 2016 Host Faculty: Suresh Gundapaneni Foreign Faculty: Manoj Sachdev, University of Waterloo, Canada





This year, the following workshops and conferences were organized in the Institute.

Workshops & Conferences

- 1. A workshop for "Discussion and Finalization of DPR for an Experimental CSP Plant at IIT Jodhpur" was organized by jointly by IIT Jodhpur, Indian Oil Corporation Limited, and Bharat Heavy Electrical Limited, during 8-9 July 2015 at IIT Jodhpur.
- 2. The 9th edition of the National Frontiers of Engineering Symposium (9NatFoE), the annual flagship event of the National Academy of Engineering (INAE), was hosted at IIT Jodhpur during 5-7 June 2015.
- 3. National Conference on Solar Thermal Energy Technologies was organized during 26-28 February 2016 at IIT Jodhpur. Technical Co-Sponsor was Ministry of New and Renewable Energy, Government of India.
- 4. National Conference on Semiconductor Materials and Devices was jointly organized by IIT Jodhpur, Defence Lab Jodhpur and Semiconductor Society of India at IIT Jodhpur during 4-6 March 2016.

INSTITUTE EVENTS

Celebration of National Festivals & Observance of Days of National Importance

First International Yoga Day

First International Day of Yoga was celebrated on 21 June 2015 at the GPRA Residential Campus of IIT Jodhpur. Faculty Members, Staff Members and Students took an active part in the event.



Participants in Yoga session



Organizers with Yoga instructors

69th Independence Day Celebration



IIT Jodhpur celebrated the 69th Independence Day on 15 August 2015 at its Permanent Campus in Karwad Village. The Director hoisted the National Flag, while the National Anthem was sung with affection and devotion to the mother land, by all present. The Director urged the gathering that sincere commitment to one's goal be ensured to serve the nation. On this occasion, the First Building at the Permanent Campus of IIT Jodhpur was inaugurated. The opportunity to do the honours was presented to the three junior most members of the IIT Jodhpur family – the youngest Faculty Member (Ritu Gupta), the youngest Staff Member (M. M. Malviya), and the youngest Student (Akash Yadav).

Activities were organized for the children of IIT Jodhpur employees. Students presented music and dance performances, and street play. Also they rendered their thoughts on the advancement of technology since Independence. The General Secretary of Students Gymkhana, IIT Jodhpur, proposed a Vote of Thanks. This was followed by tree plantation and lunch.

The National Flag was hoisted at the other three Temporary Campuses earlier in the morning: Academic Campus, and the GPRA and BSNL Residential Campuses.



Inauguration of the first building at permanent campus of IITJ

Cultural program

Teacher's Day

IIT Jodhpur organized a program on Teacher's Day to pay tribute to the contribution of Dr. Sarvepalli Radhakrishnan and to acknowledge the importance of Teachers towards nation building.

Coordinator (Academics) started the program by welcoming the Director, Faculty Members, and Students. On this occasion, the Coordinator (Students) delivered speech on the importance of Teacher's Day, to all present. Certificates of Academic Distinction were handed over by the Heads of Departments to the meritorious students registered in the Academic Year 2014-15.



The program ended with a Vote of Thanks by Coordinator (Faculty) followed by High Tea.

Vigilance Awareness Week

Vigilance Awareness Week was observed at IIT Jodhpur during 26-31 October 2015. It concluded with a program on Preventive Vigilance as a Tool of Good Governance, where all the Offices at IIT Jodhpur presented procedures followed by them in various works. As a part of their presentations, the issues, challenges and bottlenecks faced by them at different stages were discussed, and some suggestions to overcome were received from the participating members to mitigate confusions and delays in various dealings.

On this occasion, Ridhi Aggarwal, Ph.D. Student (Computer Science & Engineering) received a token of appreciation for her presentation on the topic of the program. The program was attended by the Faculty Members, Staff Members and Students. The program concluded with a pledge taken by the members present.



Ridhi Aggarwal receiving prize

Faculty and Staff members taking the vigilance pledge

First Constitution Day

The Constitution Day was celebrated at IIT Jodhpur on 26 November 2015. On this occasion, the Faculty Members and Staff Members of IIT Jodhpur came together. The program was introduced by Mr. S. Balachandra Iyer, Registrar. The Preamble of the Constitution of India was read out by Deepak Fulwani, Assistant Professor, Department of Electrical Engineering, and Kshema Prakash, Deputy Librarian, in English and Hindi, respectively.



Introduction to the Program



Reading of the Preamble of the Constitution

67th Republic Day Celebration



The 67th Republic Day was celebrated by the members of IIT Jodhpur, on 26 January 2016 at the Project Office Building on the Permanent Campus in Karwad Village. The Director hoisted the National Flag, and the National Anthem was patriotically rendered by all present.

Students presented their thoughts on the importance of Republic Day, urgent need to curb the societal ills and working towards technology-driven societal advancement in India. Then, Students presented a cultural show with a musical performance by Sangam, the music band of students, and a street play by Nukkad, the drama group of students. The General Secretary of Student Gymkhana, IIT Jodhpur, proposed a Vote of Thanks. Thereafter, music, drawing and musical chairs competitions were organized for the children of IIT Jodhpur employees, and prizes were given to the winners.

Flag Hoisting in Permanent Campus

A visit was arranged to the ongoing construction site of various buildings in the Permanent Campus of IIT Jodhpur. Students, Staff Members and Faculty Members, present for the occasion, visited the site. The program was followed by lunch.



Cultural programs by IIT Jodhpur Students on Republic Day, 26 January 2016 The National Flag was hoisted at the Academic Campus, and the GPRA and BSNL Residential Campuses, earlier in the morning.

Tree Plantation in Permanent Campus of IIT Jodhpur

Tree plantation activity was undertaken at the Permanent Campus of IIT Jodhpur in Karwad on 21 February 2016. Around 900 neem saplings were planted jointly by the members of the IIT Jodhpur community and the Jodhpur Tree Plantation and Environment Protection Committee, led by M. S. Singhvi, Senior Advocate, (High Court of Rajasthan, Jodhpur) in the presence of Honourable Justice Sandeep Mehta, (Sitting Judge, High Court of Rajasthan, Jodhpur).



Tree plantation by Smt. & Sh. M.S. Singhvi



Tree plantation by Professor N. M. Bhandari



Tree plantation by Professor & Mrs. Prawal Sinha



Tree plantation by Staff Members of IIT Jodhpur

The event was attended by Faculty Members, Staff Members, and Students of IIT Jodhpur, and 20 Advocates of High Court of Rajasthan, Jodhpur.

FACILITIES

Our Campus

Present Campuses



At present, IIT Jodhpur operates from two sets of temporary campuses, namely:

Temporary Academic Campus: It operates independently from the premises of MBM Engineering College in Jodhpur, situated on the Old Residency Road, Ratanada, at a distance of about 4 km from the Jodhpur Railway Station and 3 kms from the Jodhpur Airport.

Temporary Residential Campuses: IIT Jodhpur has two residential campuses located at (1) GPRA Residential Campus, New Pali Road Jodhpur, and (2) BSNL Residential Campus, Subhash Nagar, Jodhpur. GPRA Campus is located at New Pali Road, about 17 kms from the academic campus and provides accommodation to nearly 600 B.Tech. boy and all girl students. Also, it provides accommodation to nearly 150 other members of IIT community, including Faculty Members, Staff Members, and their family members. On the other hand, BSNL Campus is located in the heart of the city and provides accommodation to nearly 150 male M.Tech. and Ph.D. students. Limited housing is available on this campus for married students.

TEMPORARY ACADEMIC CAMPUS

Currently, the academic campus of IIT Jodhpur comprises of three blocks, namely:

- (i) Academic Block 1: It houses several laboratories, the library, a computer center and offices of some Faculty Members.
- (ii) Academic Block 2: It comprises of lecture halls, classrooms, language lab and multimedia lab.
- (iii) Administrative Block: It comprises the Directorate, administrative offices, technical laboratories and offices of some Faculty Members.

In addition, the academic campus consists of some temporary structures used for different purposes such as laboratories and office spaces. IIT Jodhpur has established good academic facilities for teaching and research. The Institute has well equipped Laboratories and a Library.

Laboratories and Research Facilities

IIT Jodhpur has established state-of-the-art teaching and research laboratories. These advanced laboratories have machinery and devices of international standard, which are actively used in research. The major laboratories include Heat Transfer, Fluid Mechanics, Electronic Circuit Laboratory, Robotics, Electro Mechanical Energy Conversion Laboratory and Solar Radiation.

Library

The Library has a collection of about 12,000 volumes of books comprising of textbooks, research and reference books, monographs etc. In addition, the Library provides access to a range of electronic resources from professional and scholarly societies and publishers, such as American Society for Mechanical Engineers, Institute for Electrical & Electronics Engineers, and Association for Computing Machinery, to name a few. Also, it subscribes to popular scientific, research and archival databases, like SciFinder, MathSciNet, JStor, Prowess, and EBSCO Academic Search.

The Library operates in a computerized environment with automated member & circulation services, and digital library services. Memberships, circulation, reference & information service, inter library loans & document lending services, current awareness service, digital library service are some of the important services that are presently offered.

TEMPORARY RESIDENTIAL CAMPUSES

GPRA Residential Campus

The major residential area is in a scenic campus located on New Pali Road, Vivek Vihar, Jodhpur, about 20 kms from the railway station. The campus is well guarded and equipped with basic amenities including Wi-Fi, recreational rooms and a computer center. Also, the residential campus provides accommodation for Faculty Members and Staff Members of the Institute. Transport facility is available between the Institute and Residential campus.

BSNL Residential Campus

The second residential campus is located in BSNL Colony on Pal Link Road in Subhash Nagar. Basic common facilities are available at BSNL colony. Transport facility is available between the Institute and BSNL Campus. All male M.Tech. and Ph.D. and some married students are given accommodation in this residential campus.

Facilities

Following are some basic facilities made available in the residential areas:

- (a) *ATM & Bank:* The residential area has a branch of SBI (State Bank of India) as well as an ATM of SBI, enabling students to make transactions with ease. There are several other banks namely UCO, HDFC and SBBJ close to the academic area.
- (b) *Canteen:* There are two sets of canteens, one at Residential Campus and the other one in Academic Campus. They provide hygienic food, fresh juices and various other snacks for the students.

- (c) *Gymnasium:* A well-equipped gymnasium is present in the Residential Campuses, and is operational during 5 am to 10 pm. Students can avail these facilities to stay healthy and to maintain their physique.
- (d) *Dining Facility:* There are two sets of Dining Facilities, one in the Residential Campuses and the other one in the Academic Campus. The mess offers good quality food, regularly monitored by the Wardens for hygiene and nutritional values, and provided at affordable cost.
- (e) *Shops:* Shops catering to the various primary needs of students are present near the Academic Campus. A small outlet is functional inside GPRA campus for urgent petty purchases.
- (f) *Transport Services:* The Institute has a bus service running between the Residential and Academic Campuses at regular intervals, exclusively for the Students of the Institute.
- (g) *Entertainment Room:* Every hostel consists of recreation facilities (like TV Rooms, where students can enjoy matches and watch movies) along with indoor games (like table tennis and carroms).

Medical Services

Both the Residential Campuses have Health Centers for providing routine health services. Due to geographical locations of the two Campuses and the type of the residents, Health Center at GPRA Campus provides services to the patients round the clock, while medical services are available at BSNL Campus for limited hours in the evening, typically from 5 pm to 10 pm. In addition to the availability of medical services at Residential Campuses, medical assistance is available at Academic Campus. This assistance is normally provided from 3 pm to 4.30 pm, when laboratory sessions are in full swing and medical assistance may be required. The Institute has its ambulance services available round-the-clock.

Besides the Health Centers, the Institute has empanelled five hospitals in the city of Jodhpur. Two of these hospitals have specializations in ophthalmology and one in orthopedic, and the remaining two hospitals are the best known general purpose hospitals in the city. For specialized medical attention doctors at our Health Centers refer patients to one of these hospitals. In addition to these five hospitals, the city has a Medical College and three hospitals run by Government of Rajasthan. Also, the city All India Institute of Medical Sciences (AIIMS), which is nearly 12 km GPRA Campus and nearly 5 km from BSNL Campus. Also, the Institute has constituted a Medical Board consisting of Senior Doctors from the Medical College and the AIIMS; advice is taken for enhancement of medical services of the Health Centers and in critical medical cases. IIT Jodhpur has empanelled two hospitals in Jaipur. These two hospitals are accredited by National Accreditation Board for Hospitals & Healthcare, and patients can be referred to these hospitals as per the need of the treatment.

Permanent Campus

In the forthcoming years, IIT Jodhpur will shift to its sprawling state-of-the-art residential permanent campus on 852 acres of land located ~24 km away from the center of the city of Jodhpur on National Highway 65 towards Nagaur, N-NE from the center of Jodhpur. The permanent campus has 3 parcels of land. The Institute is finalizing plans for adopting one of for harvesting technologies. This new campus has been planned meticulously and envisioned to stand as a symbol of academics – simple, but deep.



Master Plan of IIT Jodhpur's Permanent Campus at Karwad Village on NH65

The foundation stone for the permanent campus was laid on 16 April 2013 by the Hon. Union Minister for Human Resources Development (Government of India), Dr. M. M. Pallam Raju. The Permanent Campus of the Institute is being constructed. Work to build Phase 1 of the campus began in March 2015. When complete, it will be the first fully-planned technical institute campus in India. More importantly, it will be an international exemplar of sustainability with strategies for ensuring NET ZERO ENERGY, WATER and WASTE. The other salient features of the Permanent Campus are:

- (1) Walking campus, which is pedestrian oriented and bicycle dominant;
- (2) Learning facilitated anywhere, anytime with wireless ICT backbone (including Multi-media enabled learning spaces with flexible, shared public spaces);
- (3) Thermally comfortable smart buildings with GRIHA 4/5 star compliant buildings and GRIHA LD benchmark campus (including dense desert settlement morphology,
low height buildings (up to a maximum of 3 storeys) built with low embodied energy materials, and improved local and traditional methods);

- (4) Plantation with native species, soil stabilization, protection from dusty wind to arrest erosion, desertification, and building-up soil moisture over time;
- (5) Rain water harvesting, and water reduction and sewage recycling, together greening the site over time; and
- (6) Segregated wastes and customized recycling



Entrance structure of IIT Jodhpur permanent campus

The campus will have housing for Faculty Members and Staff Members, along with a school (up to Class XII), bank, post office and market. Also, it will have a Primary Health Center with hotline connections to reach the top hospitals of the city, like the All India Institute of Medical Sciences, Jodhpur, and a fully equipped ambulance service. A large parcel of the Permanent Campus (of about 182 acres) is set aside for the development a TECHNOLOGY PARK to strengthen institute-industry interactions.



Faculty Member housing

The first migrations into the campus are likely to take place during October 2016.

Computer Center

The Institute has a modern Computer Center, presently running on a gigabit LAN with 1Gbps internet bandwidth. It is the nucleus of all computing activities for Students, Staff Members and Faculty Members. Several terminals running on Windows and GNU/Linux operating systems across the campus, provide access to several licensed software, like MatLab, Mathematica, Cadence, Mentor Graphic, Ansys, PSCAD and Solidworks. A 802.11/b/g/n Wi-Fi service is enabled in the academic and residential areas. Also, the Computer Centre hosts a High Performance Computing cluster for scientific research.

Resources

The Institute has five key resources at the Computer Center, namely, the Linux Operating System, SVN Server, GIT Server, OwnCloud and various licensed application software that are used for academic and research purpose, have made it possible to offer the various resources and facilities.

Facilities

The Institute extends three facilities, namely, networking, computing, Internet access, and LDAP and Active Directory ID facilities through its Computer Center.



Services

The Institute offers services like FTP, LDAP, HPC, Web Hosting, Network Connectivity, VPN, EduRoam, and News Group, through its Computer Center.

Library

Library supports the teaching and research activities of the Institute by facilitating acquisition, organization and dissemination of knowledge resources, and also by providing library & information services to IIT Jodhpur community. Library is located on the ground floor of Academic Block I in the Academic Campus of IIT Jodhpur, in room nos. 1001, 1001 Extension, and 1011. Library functions with the guidance of Library Committee, which has representatives from all Departments, and Student Representatives.



Room No. 1001, AB1 – Stacks

Circulation Section

Library Collection

The Library has a rich and growing collection of 12,000 volumes of books (approx.), which include textbooks, and books of general and reference nature. A wide range of scholarly journals and databases are also subscribed from various sources for the academic and research purposes of the Institute.

Services & Facilities

The following services and facilities are being provided by the Library to its registered users.

- 1. Member & Circulation Services
- 2. Orientation & User Education
- 3. Borrowing Facility
- 4. Reference & Information Service
- 5. Course Reserves
- 6. Current Awareness Service
- 7. Inter Library Loan & Document Supply
- 8. Digital Library Facility & Services

Digital resources are accessible through the Library website, which is a comprehensive site maintained by Library. They include the Library subscribed resources, online catalogue, lists of useful resources accessible in the open domain like the open access journals, books, repositories, video lectures, open courseware. These resources are continuously updated.

Library also maintains a portal for hosting bibliographic listing of the Faculty Publications. Additionally, a course guide portal has also been developed and maintained by Library, wherein, resources i.e., books available in Library, subscribed journals, resources accessible in open domain are listed and linked, course-wise. This platform is very useful for the students in finding topical and course-wise resources. Library also provides remote access to the subscribed scholarly resources and antiplagiarism checking.







Appearing below are some vital statistics of Library for FY 2015-16:

S. No.	Description	Statistics
1.	Books added	Total 511
	a. Number of titles added	207
	b. Number of volumes added	511
2.	Number of Scholarly Resources subscribed	Total 39
	a. Fulltext resources	31
	b. Research databases	8
3.	Document Supply & Inter Library Loan service requested fulfilled	Total 149
	a. Document supply of articles & research papers	146
	b. Books arranged on Inter Library Loans	3
4.	Circulation Transactions	Total 24,962
	a. Number of book check-outs	12022
	b. Number of book check-ins	12320
	c. Number of book renewals	578
	d. Number of book recalls	42

Details of E-Resources

Library has licensed the following electronic resources in this year, for teaching, research and private study of its academic community.

A. Fulltext Resources

- 1. Association of Computing Machinery Digital Library
- 2. American Chemical Society Journals
- 3. American Institute of Physics Journals
- 4. American Physical Society Journals

- 5. American Society for Mechanical Engineers Digital Library
- 6. Bioinformatics Journal
- 7. EBSCO Academic Search Complete
- 8. Human Molecular Genetics Journal
- 9. IEL (IEEE) Online Digital Library
- 10. Interdisciplinary Studies in Literature and Environment Journal
- 11. Journal of Biological Chemistry Journal
- 12. Journal of Consciousness Studies
- 13. Journal of Immunology
- 14. JStor Archives
- 15. MIT CogNet Journals
- 16. Nature Journal
- 17. Proceedings of the National Academy of Sciences
- 18. Quantum Information and Computation Journal
- 19. Royal Society of Chemistry Journals
- 20. Science Online
- 21. Elsevier Science Journals
- 22. Society of Industrial & Applied Mathematics Journals
- 23. Springer Journals

B. Research Databases

- 1. CMIE Prowess
- 2. EPW India Times Series
- 3. IndiaStat
- 4. MathSciNet
- 5. SciFinder

The Library is also a core member of the eShodhSindhu: Consortium for Higher Education Electronic Resources, operated by INFLIBNET Center, Gandhinagar, thorugh which subscriptions to major resources is fulfilled. Also, the Library is a member of DEveloping Libraries NETwork (DELNET), New Delhi through which the Library meets its Inter Library Loan requirements.

Library also subscribes to Antiplagiarism Tool and Remote Access Tool for its users. Orientation sessions and Library Instruction sessions for Students are conducted by the Library Staff from time to time.

Along with providing regular library facilities and services, the library staff members are also engaged in rendering services in preparation of Institute's publications like the Annual Report, Institute Newsletter; and also actively contribute in maintaining the Institute's website and repositories.

Laboratories

IIT Jodhpur has established good number of teaching and research laboratories and facilities, which aid in elevating the students from minimalist academic concerns to inquisitive world of scientific arena. These teaching and research laboratories help Faculty Members and Students work for better future by supplementing and improving existing technologies and bodies of knowledge, using competence, creativity and imagination. Appearing below is a department-wise list of laboratories established in IIT Jodhpur whose details are given in the following pages.

Sl. No. Name of the Laboratory

Department of Biology

- 1. Advanced Biosciences and Neuroscience laboratory
- 2. Chemical Biology laboratory
- 3. Environmental Biotechnology Laboratory
- 4. Protein Engineering Laboratory

Department of Chemistry

1. Chemistry Laboratory

Department of Computer Science & Engineering

- 1. Multimedia Laboratory
- 2. Networking Technologies Laboratory

Department of Electrical Engineering

- 1. Control / DSP / Microprocessor Laboratory
- 2. Electronic Circuit Laboratory
- 3. Instrumentation & Communication Laboratory
- 4. Power Electronics Laboratory
- 5. Robotics Laboratory

Department of Humanities & Social Sciences

Digital Language Laboratory

- Department of Mechanical Engineering
 - 1. Advance Manufacturing Laboratory
 - 2. Central Workshop

1.

- 3. Dynamics & Vibration Laboratory
- 4. Electro Mechanical Energy Conversion Laboratory
- 5. Fluid Mechanics & Heat Transfer Laboratory
- 6. High Temperature Solar Thermal Laboratory
- 7. Materials Testing & Solid Mechanics Laboratory
- 8. Renewable Energy Laboratory
- 9. Solar Radiation Laboratory

Department of Physics

- 1. Biomolecular Information Processing Laboratory
- 2. Magnetic Property Measurement System (MPMS / SQUID) Laboratory
- 3. Materials Analysis Laboratory
- 4. Physics Laboratory

The Department of Biology has the following laboratories for teaching and research purposes.

1. Advanced Biosciences and Neuroscience laboratory

The Advanced Biosciences and Neuroscience laboratory is a part of the center of excellence in biologically inspired systems science (BISS). This laboratory provides cellular and molecular investigative tools for UG and PG teaching and research in neuroscience. Cell culture studies are utilised along with molecular biology, biochemistry and microscopy approaches to elucidate the molecular mechanisms underlying molecular and cellular interactions underlying inflammation and repair. Inflammation is a key component of many diseases including traumatic brain injury, cancer, multiple sclerosis, stroke, asthma, Parkinson's disease and Alzheimer's disease. Inflammation is characterized by accumulation and proliferation of innate immune cells. This is followed by clearance of dead cells and cellular debris along with enhanced expression of molecular mediators called cytokines and chemokines, which cause migration and proliferation of immune cells and may even lead to cell death. Understanding the mechanisms by which inflammation occurs, and the molecular mediators involved in this process, is necessary for identification of potential therapeutic targets.



2. Chemical Biology Laboratory

The Chemical Biology Laboratory deploys cellular and molecular biology approaches to explore the pathogenesis of cancer and other neurodegenerative diseases. Given the interest in neuronal death, it is no wonder that this lab team is interested in E3 ubiquitin ligases essential for quality control events in neuronal survival. Protein ubiquitylation is highly versatile, ordered, the multistep post translation modification enzymatic process that regulates numerous aspects of cell physiology. This lab team has been studying the role of such E3 ligases to find out the role of quality control E3 ubiquitin ligases in maintenance of proteostasis and hence playing a role in cellular survival and death. Such important biochemical findings may contribute to innovative therapeutic approaches for the diseases associated with misfolded proteins.

Organisms at the cellular level possess a well-established protein quality control mechanism which the lab team is trying to understand at present. The role of E3 ubiquitin ligases was reported in such mechanisms so far. Our laboratory is dedicated to

a qualitative research in the field of protein quality control mechanisms. We have recently found that a HECT domain containing E3 ubiquitin ligase E6-AP helps in Amyotrophic Lateral Sclerosis diseases suppression through its association with the misfolded protein aggregates formed by SOD1 mutants. Such findings support that an E3 ligase can have a capability to clear the misfolded protein aggregation. However, while appreciating the incredible efficiency of cellular systems, we must recognize the crucial role of chaperones which are supposed to work preferentially compared to E3 ubiquitin ligases in order to refold the misfolded proteins, and hence conserving the energy utilized during the translation of those proteins. Various examples made us think that we could explore the role of both the chaperones and E3 ubiquitin ligases in the clearance of misfolded proteins. Therefore, now we are working not only with E3 ubiquitin ligases but also with the chaperones and even in their functional association to confer an efficient quality control mechanism to the cell.

3. Environmental Biotechnology Laboratory

The Environmental Biotechnology Laboratory at IIT Jodhpur, in addition to serving various undergraduate and post-graduate courses, undertakes research in the areas of bioenergy and bioremediation. Researchers in the lab investigate on waste to energy conversion processes with an aim to develop sustainable biotechnological solutions to water pollution and energy. At present, successful bioremediation processes for nitrate and chromium(VI) contaminated wastes have been developed. Also, research is underway for the development of low cost Microbial Carbon Capture cells for power generation and algae cultivation. In addition to this, researchers in the lab have been successful in isolating novel yeasts, the potential biodiesel producing candidates.



4. Protein Engineering Laboratory

The Protein Engineering Laboratory at IIT Jodhpur is undertaking cutting edge research in developing biomaterials based on the understanding of structural and functional properties of useful proteins such as collagen. The implications of the research could also extend towards development of effective biomedical devices and implants.



The Department of Chemistry has the following laboratories for teaching and research purposes.

1. Chemistry Laboratory

The core objective of the chemistry laboratory of IIT Jodhpur is to train students in scientific methods that would solve real problems at the frontier of our understanding of the matter. This is a multi-use laboratory and provides a number of resources to assist undergraduate, graduate and Ph.D. students in planning their professional careers after completing their academic program at IIT Jodhpur.

This laboratory maintains a broad spectrum of state-of-the-art instrumentation including basic laboratory set up (for organic, inorganic, organometallic and material synthesis), Nitrogen, Oxygen and LPG gas line, Inert atmosphere boxes, vacuum line work, fume hood pH, conductivity, BOD, COD, meters, Rotary evaporator, Vacuum pumps, centrifuges, High pressure reactor system, Chiller, microbalances, Orbital Shaker, GC, HPLC and Radleys ready reactor. In the academic year 2012-2013, the lab procured equipment such as Polarimeter, Melting point Instrument, Solar Simulator, Digital Titrator, Kugalrohr, Electrochemical work stations, and Battery analysers.

A 500 MHz NMR spectrometer with solid state probe is an essential resource, whose mission is to make a state-of-the-art high field NMR and methods available to researchers, providing a place for them to pursue their projects and develop new methodologies in NMR methods.

The following are some pictures of Chemistry Laboratory.



Nuclear Magnetic Resonance Spectrometer (500 MHz)



Powder X-ray Diffractometer







Scanning Electron Microscope and Electron Dispersion Spectrometer



Solar Simulator



Gas Chromatograph



Surface Area Analyzer



Reactor Ready



Atomic Force Microscope



Glow Box



Fluorescence Spectrometer



High Pressure Reactor

Department of Computer Science & Engineering

The Department of Computer Science & Engineering has the following laboratories for teaching and research purposes.

1. Multimedia Laboratory

The Media Laboratory provides facilities to carry out work related to E-learning, image processing, and computer vision. The thrust areas of research in this lab are: Semantic analysis of video/image content, video surveillance, human motion analysis, document image analysis, content based image retrieval etc. E-learning related activities include video recording, audio-video digitization, video editing, etc. In the academic year 2011-2012, a research on Indian sign language recognition using Kinect has been initiated.

Equipment:

- 1. Scanners: Book Drive Mini, UMAX Powerlook.
- 2. Cameras: Sony 177PD, Sony Camcorder, Cannon 500D VCR: Sony DSR 45AP
- 3. Tripods: Manfrotto, iMac.

2. Networking Technologies Laboratory

Networking Technologies Laboratory has been started functioning in the Academic Year 2011-2012. It aims at enabling undergraduate and graduate students, who pursue their interest in the area of computer networks, to understand the concepts of computer networks and work with contemporary networking equipment in a realistic setting. In addition, the lab aims at providing necessary infrastructure to carry out research activities on advanced topics, such as wireless mesh networks, sensor networks, communication on power lines, from computer networks. The activities that take place in this laboratory are:

- 1. Prototyping of networking hardware (Example, Ethernet switch, IPV4 router etc.) using NetFPGA.
- 2. Developing packet processors using "Click router" modular software framework.
- 3. Establishing infrastructure for the mini-Internet, single-hop wireless networks, multi-hop wireless mesh and sensor networks, power line communication networks, home phone line networks.
- 4. Studies related to the performance analysis of various protocols over on different network configurations.
- 5. Development of novel routing algorithms, transport layer mechanisms, and services for next generation networks.
- 6. Setting up planet-lab infrastructure (which will essentially become part of the global distributed computing platform created over the Internet by connecting over 500+ sites). This allows the students and researchers not only to understand develop the traffic patterns on the Internet but also to new technologies/applications on the Internet for distributed storage, networking mapping, peer-to-peer systems, content distribution service, and cloud computing.

Department of Electrical Engineering

The Department of Electrical Engineering has the following laboratories for teaching and research purposes.

1. Control / DSP / Microprocessor Laboratory

The lab provides software and hardware infrastructure for carrying out experiments in the field of Control Systems, Microprocessor and DSP. Broadly, the lab includes the following experimental setup:

1. Control Systems

- (a) Ball & Beam System from Quanser
- (b) Magnetic Levitation System from Quanser
- (c) Inverted Pendulum System from Quanser
- (d) Software include Scilab / MatLab
- 2. DSP Lab Equipment
- 3. Microprocessor Lab



3. Electronic Circuit Laboratory

In this laboratory the students make and test their analog and digital circuits by using all kinds of circuit components like diode, transistor, op-amps, and clocks. The lab has following equipment:

- 1. Arbitrary Function Generator from Agilent
- 2. Digital Oscilloscope from Agilent
- 3. Programmable Power Supply from Scientific
- 4. 61/2 BIT DMM from Agilent



4. Instrumentation and Communication Laboratory

The mission of Instrumentation and Communication Laboratory is to provide platform for UG and PG students on research and hands-on learning in Measurement and Automation Technology. The state-of-the-art facilities at this laboratory offer innovative research opportunities in the astronomical space of communication and real time measurement technology. The experienced Lab team nurtures students' talent in research and offers an opportunity for developing sophisticated measurement, test, control systems, data analysis system and next generation communication technologies.



Students also develop theoretical and practical competence in (i) building baseband communication circuits, (ii) the application of NI LabVIEW graphical programming software, (iii) the PXI based NI RF/Wireless measurement stand, (iv) evaluating NI WSNs and LabVIEW software, adjusting a software-defined radio system, measuring the parameters of studied antennas and (v) the operation of analog modulation schemes. NI-Lab contains software and hardware subsystems which enable rapid prototyping and development of embedded systems for various applications. Currently, this lab constitutes the following setups:

- 1. NI ELVIS based Communication Systems and Theory Teaching Stand
- 2. Large MIMO Stand for Spectral, Channel Efficiency Studies and New Standard Development
- 3. Protocols Stand for WLAN, WiMAX, GPS, RFID, Zigbee, GSM, CDMA, WCDMA, Bluetooth
- 4. FPGA-enabled Software Defined Radio Stand for Custom Communication Scheme Development and Research
- 5. Basic Analog and Digital Communication Techniques Teaching Stand
- 6. Wireless Sensor Networks Stand
- 7. Signal Intelligence and Wireless Spectral Monitoring Stand
- 8. Wireless Prototype Characterization and Testing Stand
- 9. FPGA based protocol development for base-band studies and signal processing
- 10. VNA based Antenna Characterization Stand
- 11. Fiber Optic Communication Stands
- 12. Network Based Manufacturing
- 13. USRP (Universal Software Radio Peripheral) based wireless communication

system for physical layer design, record and playback, signal intelligence, algorithm validation and more.

14. Network Communication and Manufacturing Control Stand

After three years of its formation, this lab has contributed immensely to the learning and research activities at IIT Jodhpur. Communications and Networking Lab, Intelligent Instrumentation, System Analysis Techniques and Bio-Sensors courses are being offered through this lab for both graduate and undergraduate students. The lab has provided the right hardware and software tools for many industrial consultancy projects, including the development of DRM/DRM+ IP for digital radio standards, Link budget design for Marine environment, DRFM based Radar echo simulator and Blind Signal Demodulator. Other projects being done in the lab are development of affordable wireless video transmission systems, cognitive radio and Zigbee protocol development.

5. Power Electronics Laboratory

The power electronics laboratory is used for undergraduate studies and research in the area of power electronics based power conversion systems, control systems and drives. The laboratory facilitates for faculty and students to conduct research in the areas power converters and AC/DC micro-grid. The laboratory is equipped with state-of-art test and measurement instruments, converters, power supplies and programming boards. Major equipment available in this lab are:

- 1. High Precision power Analyzer -YOKOGAWA WT3000.
- 2. DSO- Tektronix 200MHz (DPO 2024) and 1GHz (DPO 4104B).
- 3. Function Generator-Tektronix AFG 3021B.
- 4. Power Supply: 0-30V, 1A; 0-32V, 3A; 0-32, 10A.
- 5. Three phase inverter drive.
- 6. Three phase inverter stacks.
- 7. DC-DC converters.
- 8. Differential currents Probes.
- 9. Current clamps.
- 10. Isolation Transformers.
- 11. FPGA training kits and programming boards.



6. Robotics Laboratory

IIT Jodhpur has an advanced robotics laboratory for PG/UG education and research. The infrastructure includes the following:

- 1. Vicon Motion Tracking System
- 2. Mobile Manipulator comprising of Barret WAM ARM mounted on a PowerBot Mobile robot platform
- 3. Pioneer P3-DX mobile robots 10 units
- 4. Turtlebot
- 5. Wheel Chair
- 6. Force Plate



- 7. Infrastructure for Mobile Robotics Navigation, Path-planning, SLAM
- 8. Dynamic and Kinematic Control problem, Redundancy Resolution, Inverse Kinematics of Manipulators and Mobile Manipulators, Visual Servoing, and
- 9. GAIT Analysis and Robot Assisted Rehabilitation

Department of Humanities & Social Sciences

The Department of Humanities and Social Sciences uses the Language Lab teaching and practice of language.

1. Digital Language Laboratory

The Digital Language Laboratory provides resources, facility, and support for foreign language instruction and learning to the entire student community of IIT Jodhpur. The lab is the multilingual computing and assessment center of the Institute. The lab team explores and implements methods through which multimedia technology renders a more authentic experience to learning a foreign language. Here, for language learning purposes one could seek recourse to technologies like the Internet and interactive video, audiovisual techniques, multi-modal iconic approach, and speech recognition. The exercises include listening and comprehension, grammar-based exercises, placement solutions, and mastery tests. The main features of this facility include Smart Class Symposium LL from Robotel and New Dynamic English Learning Program from Dyned International. All the facilities at the Digital Language Laboratory are proficiency-oriented, standard-based, and nurture the students' enthusiasm for gaining global exposure and proficiency in a foreign language.



Department of Mechanical Engineering

The Department of Mechanical Engineering has the following laboratories for teaching and research purposes.

1. Advance Manufacturing Laboratory

In the Advance Manufacturing Laboratory, CAD model of object is prepared using 3D modelling software like ProE, SolidWorks, and Catia. FE analysis is carried out using Analysis software like Ansys, Nastran/Patran and precision manufacturing is carried out using CNC programing/CNC machines and Rapid Prototyping Machine/ 3D Printer. The manufactured components are characterised for mechanical behaviour using UTM, Hardness testers, Impact testers etc. The role of CNC machines in increasing flexibility and precision of the product to be manufactured and, increasing productivity are illustrated. The Advance Manufacturing Laboratory of institute is equipped with following facilities:

- 1. CAD Section
- 2. Precision Machining Section
- 3. Rapid Prototyping Section
- 4. Mechanical Behaviour Characterisation section



2. Central Workshop



Central workshop is the central facility of Institute, consisting of various workshops such as Welding shop, Carpentry shop, Fitting shop, Sheet metal shop, Foundry and Heat treatment shop and Machine shop. Undergraduate Students get hands on experience in above sections by doing the job work and carrying out projects as part of their coursework and also students utilize the facilities for fabrication purpose of their academic projects. It also supports the R&D projects of the institute handled by various Faculty Members and Ph.D. and M.Tech. Thesis work of research scholars by providing them assistance in fabrication of their research set-ups.

The following machines and equipment are available in the Central Workshop:

- 1. Welding fume extraction down draft table
- 2. Multi process welding equipment
- 3. Portable single phase MIG/MAG
- 4. AC/DC welding equipment
- 5. MIG/MAG welding equipment
- 6. Treadle operated shearing Machine
- 7. Hand operated Folding Machine
- 8. Kaizen Muffle Furnace
- 9. Hand operated Jeeny or Burying Machine
- 10. Motorized Circle cutting Machine
- 11. Hand operated Circle cutting Machine
- 12. Hydraulic shearing Machine
- 13. Portable Heating Plant
- 14. Portable hardening plant
- 15. Forging Heating Plant
- 16. Aluminium Melting Plant



- 17. Fitting Table
- 18. Mould Making Facility
- 19. Portable Tool Grinder



3. Dynamics and Vibration Laboratory

Dynamics and Vibration Laboratory is well equipped with various mechanisms such as Motorized Gyroscope Apparatus, Static and Dynamic Balancing Apparatus, Universal Governor Apparatus, Coriolis Component of Acceleration Apparatus, Epicyclic Gear Train Apparatus, Cam Analysis Machine Apparatus, Universal Vibration Apparatus, Stroboscope and Tachometer 10 in helping the students to understand the behavior of the various mechanisms and forces acting on them.

In addition, the laboratory is also equipped with various vibration measuring instruments for computing the vibration characteristics of a machine or structures and equipment for vibrating the machine or structures in order to finds its resonance characteristics in various environmental conditions. Following equipment are available for measuring and/or testing vibration characteristics of elements to structures.



4. Electro Mechanical (EM) Energy Conversion Laboratory

In order to familiarize students to Electrical Machines properties & characteristics, IIT Jodhpur has established "Electro Mechanical Energy Conversion Laboratory" and has continually been developing the potential of its lab facility. In this lab, state-of-the-art "Electrical Engineering" facilitates the students to empower their potential by familiarizing themselves with the fundamental of electro-mechanical energy conversion process, including several practical & industrial applications of machines in true applicable environment. This lab occupies conventional as well as modern

equipment to fulfil the basic and modern technological requirements with continual developing efforts.



5. Fluid Mechanics and Heat Transfer Laboratory

At Fluid Mechanics Laboratory students learn about the following:

- 1. Analyses and evaluation of experimental data
- 2. Comparison between theoretical models and experimental data
- 3. How to design a fluid mechanical and heat transfer system e.g. a piping system considering various technical aspects, heat exchanger, thermal energy storage, receiver, wind catcher, volumetric air receiver.

In addition to the above, this laboratory aims at generating innovative ideas in students by promoting the design of experiments and small scale projects. At present in the fluid mechanics laboratory are conducted experiments on losses in pipes (smooth/rough) and fittings (e.g. valves, bends), comparison between different flow meters, particle image velocimetry technique, Hot-wire anemometer, labscale sub-sonic wind tunnel for- pressure distribution around a cylinder/air-foil, lift and drag balance, boundary layer development, weather monitoring. Furthermore the lab provides training on standard software, such as, CFAST for fire simulation.



Currently the Heat Transfer Laboratory is equipped with the demonstration of various thermometry techniques, heat exchange system, ventilation system, Natural and forced convection system, heat conduction unit for different materials, lab and industrial-scale solar water heater system, and thermal radiation unit. All these equipment are installed with respective software.

For testing, calibration and research purpose in these laboratories, various equipment such as Laser Doppler Velocimeter with Particle Analyzer, pressure and

temperature calibration, blower with variable flow, pressure transducers, differential pressure transducers, turbine test rig, turbo-machine test rig, IC engine test rig etc., have been procured.

Moreover, multi-purpose test set up is being indigenously designed and the components / sub-systems involved are being fabricated locally. This system aims at investigation and evaluation of solar thermal sub-systems such as volumetric air receiver, thermal energy storage, air-water heat exchange systems and their simultaneous operation. Devices such as earth air heat exchange system, wind catcher, and air-cooled heat exchange systems are being fabricated and tested for certain applications.

6. High Temperature Solar Thermal Laboratory

Six laboratories are being set-up under the MNRE funded project entitled as "Establishment of Center of Excellence in Solar Thermal Research and Education at IIT Jodhpur". High Temperature Solar Thermal Laboratory is one of these specialized laboratories. The aim of this laboratory is:

- 1. Fundamental aspects of fluid flow and heat transfer related problems, like, dust deposition
- 2. Design and analysis of sub-systems for concentrated solar thermal systems

Some of the sub-systems being designed and analyzed in this laboratory are:

- (a) Open Volumetric Air Receiver for process heat applications
- (b) Compact heat exchanger
- (c) Solar Convective Furnace

This laboratory includes test facility, such as, Solar Air Tower Simulator (SATS) facility, advanced research grade equipment like Laser Doppler Velocimetry. SATS facility includes,



open volumetric air receiver, thermal energy storage, air-water heat exchanger and is being extended with solar convective furnace.

7. Material Testing and Solid Mechanics Laboratory

The material testing lab of the institute provides facilities to test samples of different types of materials to find out their mechanical properties like modulus of elasticity, tensile and compressive strength, stress strain curve, bending properties, hardness etc. The lab is equipped with following test equipment:

- 1. Universal testing Machine 5-50 kN
- 2. Rockwell Tester
- 3. Brinell Tester
- 4. Vickers Tester
- 5. Poldi Hardness Tester
- 6. Portable hardness tester

8. Renewable Energy Laboratory

To resolve most daunting challenge of this world–energy needs–and also our nation's heavy reliance on fossil fuels, Renewable Energy Laboratory (REL) promotes rigorous and objective empirical research at IIT Jodhpur on issues related to energy and environment. REL focuses on designing, testing, and disseminating renewable and efficient energy system. The mission of REL is to help these technologies to realize their full potential to contribute to environmentally



sustainable development in industrial and developing countries. In the renewable energy field, expert faculty and students at this Laboratory are currently striving to create an innovative system to efficiently harness energy from sunlight and wind power. REL has computer interfaced systems and approximately 30 students can work at a time. Students are the greatest resource of REL and IIT Jodhpur has made substantial commitment to the area of renewable energy and been providing all required resources to execute a viable plan and innovative research at REL. One aspect of the evolution of REL is the development of collaborative partnership with other academic and industrial groups. In the near future, it will be a hub for training and public-private sector collaboration. Recently, the lab has started a consultancy project, with Panasonic R & D India Pvt. Ltd., on the prototyping of microbial fuel cells. In addition, the lab has started work on data collection, interpretation, and analysis of PV power plants less than 5 MW in Rajasthan and Gujarat. The Renewable Energy Laboratory uses the following equipment:

- 1. Wind power of 2KW Charge controller ~12V, Synchronous generator with permanent magnets ~12V, Lamp board ~12V, Off grid inverter *etc.*
- 2. PEM Fuel cell Fuel cell with DC converter, Electronic load, Metal hydride storage cell, Electrolyser, 200W/20V/10A.
- 3. Advanced Photovoltaics Solar module simulation model 23V/2A, Solar module with solar altitude emulator, Solar charge controller 12/24V, 6A, Solar accumulator 12V, 7Ah, Off grid inverter 230V, 275VA etc.
- 4. Combined RF/DC Sputtering Unit for Coatings Applications.

9. Solar Radiation Laboratory

The Ministry of New and Renewable Energy (MNRE) has selected the IIT Jodhpur campus site as one of their solar radiation centers. Solar radiation measurement (Global and Direct), Humidity, Ambient temperature, Rain gauge and wind speed measurement are carried out at this center and the data is transmitted via a satellite link to the MNRE nodal center C-WET in Chennai. The instruments in this laboratory are powered by a couple of solar panels. The data collected from this center enables the solar resource assessment required for the setting up of solar thermal and solar photovoltaic power plants as outlined in the Jawaharlal Nehru National Solar Mission (JNNSM).



The Department of Physics has the following laboratories for teaching and research purposes.

1. Biomolecular Information Processing laboratory

This laboratory is involved in the understanding of information processing by various kinds of biomolecules and related synthetic molecules. The process involves in using a single molecule first and then a group of molecule on a given interface. The interaction among the molecules in a given external stimuli will help us understanding the communication among them.



2. Magnetic Property Measurement System (MPMS/SQUID)

IIT Jodhpur has created an excellent facility in the field of material characterization. Recently an additional dimension has been added to it by procuring magnetic property measurement system (MPMS). MPMS (SQUID) is getting installed in coming few months. This will provide a wide temperature 2 K – 1000 K range for both DC and AC magnetic measurements in conjunction with field dependent magnetic measurements. Such measurements will help to understand magnetic properties and associated spin dynamics in magnetic materials.

3. Materials Analysis Laboratory



The research focuses on the development of novel materials for different applications including materials for energy generation and storage. The current work includes the development of solution processable CIGS compound semiconductor materials for solar cell applications and transition metal oxide based materials for lithium ion batteries and supercapacitor applications. The laboratory is equipped with synthesis of bulk and thin films techniques such as sputtering, sol-gel process assembly etc., and numerous characterization techniques such as X-ray diffraction, Scanning electron microscope, Optical spectroscopic techniques, LCR meter, ferroic measurement system for bulk samples etc.

In addition, the group is also focusing on the development of multifunctional materials for different applications such as solar selective coatings, ferroic materials for high frequency absorbing system, and magnetic particles for different applications. The laboratory is equipped with state-of-the-art facilities to carry out thermal analysis, electrochemical analysis, surface morphology studies, separation techniques for chemicals, electrical conductivity measurement devices, glove box etc.

4. Physics Laboratory

The mission of the Physics laboratory at IIT Jodhpur is to provide students with experiential knowledge in basic physics. This laboratory has state-of-the-art facilities including specific equipment and is currently offering different experiments in Mechanics, Waves, Electricity, Magnetism, and Optics. Now the lab has facilities for experimenting with Speed of Light, Zeeman Effect, and Michelson Interferometer.



Health Center

IIT Jodhpur provides round the clock health care facilities to Students, Faculty and Staff Members of the Institute, at its residential campuses. The Health Center has five doctors and five supporting staff members. Both the Residential Campuses have Health Centers for providing routine health services. Due to geographical locations of the two Campuses and the type of the residents, Health Center at GPRA Campus provides services to the patients round the clock, while medical services are available at BSNL Campus for limited hours in the evening, typically from 5 pm to 10 pm. In addition to the availability of medical services at Residential Campuses, medical assistance is available at Academic Campus. This assistance is normally provided from 3 pm to 4.30 pm, when laboratory sessions are in full swing and medical assistance may be required. The Institute has its ambulance services available round-the-clock.

Besides the Health Centers, the Institute has empanelled five hospitals in the city of Jodhpur. Two of these hospitals have specializations in ophthalmology and one in orthopedic, and the remaining two hospitals are the best known general purpose hospitals in the city. For specialized medical attention doctors at our Health Centers refer patients to one of these hospitals. In addition to these five hospitals, the city has a Medical College and three hospitals run by Government of Rajasthan. Also, the city All India Institute of Medical Sciences (AIIMS), which is nearly 12 km GPRA Campus and nearly 5 km from BSNL Campus. Also, the Institute has constituted a Medical Board consisting of Senior Doctors from the Medical College and the AIIMS; advice is taken for enhancement of medical services of the Health Centers and in critical medical cases. IIT Jodhpur has empanelled two hospitals in Jaipur. These two hospitals are accredited by National Accreditation Board for Hospitals & Healthcare, and patients can be referred to these hospitals as per the need of the treatment.

The Health Center coordinates and supervises the treatment of students, employees, and their dependents during hospitalization in other hospitals that are empaneled by the Institute, to provide in-patient care. Also, an ambulance is available in the GPRA Residential Campus for attending to any medical emergencies.

On request, the Health Center extends its health care services to Institute visitors during their stay in the residential campus. Under emergency circumstances medical services are also extended to the non-IIT Jodhpur community residents in the residential campus. Details like patient records, medicine procurement/disbursement, assets, equipment of Health Center are all computerized.

Sports Facilities

Sports and games facilities to students are provided at four places, namely, the hostel premises, academic campus, playground of Vidhyashram International School, and in the new campus area of Jai Narayan Vyas University. Conveyance is taken care of by the Office of Logistics in the Institute. Students also enjoy a gymnasium facility at the residential campus.

SC/ST Cell

An SC/ST Cell for ensuring the proper utilization and adaptation of reservation policies and guidelines issued by the Government of India, is functional at IIT Jodhpur. The Cell deals with matters related to grievances received from SC/ST and OBC employees and students in the Institute. The Cell acts as a communicator between the Institute and the Ministry of Human Research and Development in matters related to SC/ST and OBC students and employees in the Institute. IIT Jodhpur has adopted the reservation policy while selecting the students for MCM scholarship. In addition, a substantial number of SC students whose total family income is limited to Rs. 6 lakhs per annum, are deriving the benefit of Central Sector Scholarship of Top Class Education available from the Ministry of Social Justice and Empowerment.

Women Cell

The Women Cell, IIT Jodhpur, functions in accordance with the provisions contained in Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013. The following are some activities organized by the Women Cell during FY 2015-16.

Public Lecture

The Women Cell of the Institute organized a lecture on "Sexual harassment at work place and precedent law" by Advocate Dr. Nupur Bhati on 18 September 2015. Advocate Bhati, a serving lawyer in Rajasthan High Court, elucidated the provisions under the Sexual Harassment at Workplace Act, 2013 and touched upon some cases as examples. The lecture was attended by the Faculty Members, Staff Members, Students, and Members of Women Cell.

Celebration of 2016 International Women's Day

2016 International Women's Day was celebrated at the Indian Institute of Technology Jodhpur on 8 March 2016. The program was organized by Women Cell, IIT Jodhpur. Honourable Justice Jaishree Thakur, Sitting Judge of Rajasthan High Court, Jodhpur, who graced the occasion as the Chief Guest delivered the key note address.

The Women Cell, IIT Jodhpur, on the occasion of the International Women's Day, organized Logo Design and Slogan Writing Competitions for their Students and Employees, ahead of time. During this program, Prizes and Certificates of Appreciation were given away to the winners and runners up. A memento was presented to the Chief Guest.

On this day the Women Cell, IIT Jodhpur adopted an official logo and a slogan, which was released by the Chief Guest. They were the prize winning contributions from the Logo Design and Slogan Writing Competitions organized by the Women Cell, IIT Jodhpur. Thereafter, a short video on "Contribution of Women" was screened. The event concluded with a visit to the exhibition of the entries received in Logo Design and Slogan Writing competition of the Women Cell, IIT Jodhpur.



Honourable Justice Jaishree Thakur, Chief Guest, addressing the gathering

Releasing Logo and Slogan for the Women Cell



Members of the Women Cell, IIT Jodhpur

Exhibition of the Logo Design & Slogan Writing Competition

Workshop on "Gender Intelligence"

The Women Cell of the Institute organized a workshop on "Gender Intelligence" during 5-7 May 2016, for all employees of IIT Jodhpur. The workshop was conducted by Ms. Rashmi Datt and Ms. Mona Dutta from Dialog Services, Gurgaon. The first part of the workshop focused on assertive training aspect for women, which was attended by all women employees of the Institute. The second part of the workshop was for both men and women employees. The workshop was attended by the Faculty Members, Staff Members, and Members of Women Cell.



Workshop on "Gender Intelligence" Part 1 - Assertive training session for women



Workshop on "Gender Intelligence" Part 2 – Session on Prevention of Sexual Harassment (PoSH)



Participants of the Workshop on "Gender Intelligence" with Resource Persons

STUDENT ACTIVITIES

Students Gymkhana

The "Student Gymkhana", IIT Jodhpur, is divided into five "societies", and in turn each society is divided into several clubs. These societies fulfil the varied interests of the students and contribute to their holistic development. These six societies are:

- (1) Academic, Research and Management (ARM) Society,
- (2) Media, Arts and Design (MAD) Society,
- (3) Nurturing-Understanding Technology and Science (NUTS) Society,
- (4) Sports, Adventures, Games and Explorations (SAGE) Society, and
- (5) Writing, Awareness, Vocals, Entertainment, Social (WAVES) Society.



Academic, Research and Management (ARM) Society

The Academic, Research and Management (ARM) Society is a platform for all activities and initiatives related to Academics and Research. It encourages academic and research activities in Institute among students. Also, the society works towards effective involvement of students in the decision making. The Mission of the ARM Society is:

- (a) To strengthen Student-Faculty interaction and take them beyond only formal association;
- (b) To serve as a platform for students to undertake research projects under Faculty Members, and to create an environment of cognizance in the student community pertaining to the real-life problems; and
- (c) To organize various technical meets and seminars to expose students to the recent discoveries and technological advancements and the innumerable opportunities that they can pursue.

The functions and responsibilities of the ARM Society are:

- (a) To help individual students address their specific academic concerns;
- (b) To coordinate with the centralized academic facilities such as Computer Centre, Library and Reading Room;
- (c) To support the Senate of the Institute on matters such as revision of academic curriculum; and
- (d) To share concerns of the students on academic and research matters.

The society deals with all matters regarding public relations and management of the various activities of all the societies of Students' Gymkhana which take place in the Institute. It helps in enhancing one's personality, management skills, public speaking, writing and coordination with student colleagues, towards overall development of students. The following clubs operate under the society:

(a) Promotions Club

The Club writes content as well as reports for various Intra and Inter collegiate fests, special events and seminars, which are held throughout the year. Also, it coordinates for the content to be published in local media.

(b) Public Speaking and Personality Development Club

Public speaking is one very important aspect which shows the personality of an individual. The club organizes sessions to hone public speaking skills, increase confidence levels and makes students proficient in Public Speaking.

(c) Entrepreneurship Club

The club collaborates with the E-cells of other institutes and conducts various seminars and useful activities related to entrepreneurship.

(d) Resource Management Club

The main work of this club is to manage resources during various inter and intra-level activities efficiently.

(e) Finance and Case-Studies Club

Many individuals are faced with investing and financing decisions at some point in their life. Having a firm grasp over financial matters aids them in making those decisions. The club helps students undertake Case Studies which help to see how the complexities of real life situations influence decision making.

(f) Leadership Enhancement and All-round Development (LEAD) Club

This initiative aims at enhancing the overall personality and soft skills of the students, and prepares them for the professional world. Workshops organized by professionals skilled in personality grooming, resume writing, personal interview, etc. Group discussions, mock interviews and public-speaking sessions are conducted to train students for interviews and help in their personality development. Students get a real-world exposure, while getting expert guidance not only from professionals, but also from senior students.

Media, Arts, and Design (MAD) Society

Creativity is more than just being different. Anybody can plan being weird; that's easy. What's hard is to be simple. Making the simple, awesomely simple, that's creativity. The society makes people develop their imagination, their talent; teaching them the advancement in technology to enhance their knowledge in their field of interest. The society has its independent activities, workshops and competitions under the following areas of interest:

(a) Animatrons (The Animation Club)

The Club teaches students to bring the animator out of them, via workshops by professionals and its own team. With the blend of Stop Motion Animation and Software Animation, the Club moves towards paper animation, 2D and 3D graphics animation, pixilation, flash light animation.

(b) Ateliers (The Fine Arts Club)

To play with colours is the passion of this Club. Training is imparted to students via workshops and competitions in fine or decorative arts. We organize a lot of activities of interest like painting, sketching, glass etching, face and T-shirt Painting, wax carving, and graffiti workshops. This Club gives shape to various festivals of IIT Jodhpur.

(c) Designerds (The Designing Club)

The Club designs logos, posters, newsletters, T-shirts, etc. The Club has given some of the best designers, who can train with software, like Adobe Photoshop, Indesign and Illustrator. The Club members excel in graphic designing which promotes thoughts and imagination. Also, the club has won competitions in Mood Indigo – IIT Bombay.

(d) Frame-X (The Film Making and Video Editing Club)

The Club makes videos, record and edits them. The Club, constantly and actively, takes part in various Inter-College Fests presenting short films or documentaries which have gained popularity. The Club members use the most sophisticated HandyCams, GoPro cameras dealing with software, like Windows Movie Maker, Sony Vegas and Adobe After Effects.

(e) Porta Talkies (The Movie Screening Club)

The Club is responsible for screening of movies, matches and on demand talks.

(f) Shutterbugs (The Photography and Photo-Editing Club)

The Club consistently holds its workshops on Photoshop and provides hands on experience on technically sound semipro DSLR Cameras. The Club holds responsibility of all media coverage of student activities IIT Jodhpur.

Nurturing-Understanding Technology and Science (NUTS) Society

With the thought "Imagination is more important than knowledge", the Science and Technology Society (NUTS) of IIT Jodhpur provides students an opportunity to think beyond the conventional boundaries of science, to realize their dreams and develop the technology for the next generation. The following clubs operate under this society:

(a) Aeromodelling Club

The Aeromodelling Club is a group for aviation and Aeromodelling enthusiasts in the Institute. The Club provides students an opportunity to make rockets, gliders, planes, hovercrafts and fly them up in the air. The activities of the Club include lectures and workshops on various Aeromodelling and aviation topics and working on small projects.

(b) Automobile Club

The Club promotes students to design and make their own car. The Club has developed an eco-friendly manual cum electric driven vehicle. The Club is associated with an international body, Society of Automotive Engineers (SAE), and encourages and prepares students to participate in national level competitions such as Effi Cycle and Baja.

(c) Astronomy Club

The Club organizes regular lectures and discussions to help students develop a better understanding of those astronomy phenomenons in nature. The Club made a record at the Inter IIT-Tech Meet 2014 by detecting 72 objects in the overnight observatory competition "The Messier Marathon".

(d) Electronics Club

The Club makes students familiar with electronic circuits, and teaches them skills like working on mini computers (such as beagle bone, Raspberry pie). Also, the club makes students familiar with analog as well as digital electronics through various lectures and competitions organized throughout the year.

(e) Robotics Club

The Club conducts regular lectures and workshops to provide students a hand on experience on technologies, such as DTMF, image processing, and motion sensing. Today the Club is an active platform for students to display and develop their practical machine-building skills and knowledge.

(f) Programming and Web Designing Club

With regular lectures, competitions and winter coding camp, the Club provides students a chance to learn from people around them and improve their coding skills. Students get a chance to sit with a group of like-minded people and prepare for various national and international level coding competitions.

(g) Science Club

The Club provides students an opportunity to solve the Rubik's Cube, make their own angry bird station, and play with air gun, Rube Goldberg etc. The activities of this club tests students' imagination skills and help to improve it.

Sports, Adventures, Games and Explorations (SAGE) Society

Sports are known for producing the most remarkable athletes, colourful characters, influential leaders and memorable heroes. IIT Jodhpur Sports and Games Society reflects the same spirit of introducing sporting activities to the campus community. This society aims to promote sports and exercise in the true spirit of sportsmanship and motivate students to work with team spirit. The Society strives and endeavours to inculcate and introduce this essential activity as a part of the routine in every student's life. All efforts are made to bring out and encourage the sports person in each one under the guidance of professional coaches and with best sporting facility.

Individuals can be strong on their own, but they are much stronger in a team. Victory achieved alone can be sweet, but there is nothing sweeter than sharing that moment with fellow members. One of the rare times in life one learns to play with his friends and some of his enemies, and yet learns to respect each one of them for the innate respect of the sport. That is the essence of introducing sports in a student's life to instill the qualities of vigour, sacrifice

and overall sportsman spirit. The society organizes the Institute team that participates in Inter IIT Sports Meet held annually at any one of the IITs. Inter-IIT Championship title is much coveted in the whole IIT Jodhpur family. It is the place where every sports student is given the opportunity to showcase his/her talent in respective sports and to wear the jersey and run around the grounds representing the glorified history of respective IITs along with the responsibility to continue the legacy. Every Inter-IIT player has this unique urge to win the game for the pride and the honour of the Institute, for the blood, and the tears and the sweat to make a team and to earn the spot. The Institute has representation in the sports, like Aquatics, Athletics, Badminton, Basketball, Cricket, Football, Lawn Tennis, Squash, Table Tennis, Volleyball, and Weightlifting at Inter IIT Sports Meet.

The Institute has many sporting events lined up throughout the year, which act as a platform to showcase your talent and to keep the adrenaline levels racing. Every year the council organizes an Intra-Institute Sports Festival called "KRIDANSH". This sports fest is designed to attract mass participation. It sees the best sporting talents in the Institute pitted against each other to fight for the glory of their respective branches. It has games like tug of wars, Kho-Kho and Kabaddi, along with regulars.

In addition to sports, the society arranges several adventure tours and coordinates the Carrom Club, the Chess Club, the Skating Club, the Yoga Club and the Joggers Club.

Writing, Awareness, Vocals, Entertainment, and Social (WAVES) Society

WAVES is the fountainhead of all cultural activities in the institute. It provides students opportunities to pursue their passion for performing arts and in honing their aesthetic sensibilities. Under WAVES, there are five Clubs, which function throughout the year.

(a) Dance Club

The Dance Club organises activities ranging from Intra Institute to Inter-Collegiate events with a special emphasis on workshops on different dance forms. The team, with name 'dEFEATtHEbEAT', has participated in different college festivals across country, including Chaos (IIMA) and Mood Indigo (IITB) and has also been selected in Indian Hip Hop Dance Championship auditions.

(b) Music Club

The Music Club is all about passion and the platform you need to showcase them. Spanning from the students' band performances for freshers, to the live stages of college festivals, Music Club brings opportunities for all the interested students. The major highlights include Unplugged Nights and the Musical Extravaganza. Apart from these, music learning sessions are conducted for the beginners.

(c) Quiz Club

The main aim of the Club is to generate interest in quizzing as a fun activity that everyone can indulge in and at the same time gain some handful amount of knowledge. The Club organizes interesting Quiz contests/sessions throughout the year to expose students to the artistic world of Quizzing and provide a platform to contest at several national and intra-collegiate quizzes.

(d) Drama Club

The Club, also known as "DRAMEBAAZ", performs a variety of plays which are both didactic and simultaneously entertaining. Nukkad performance is the highlight of the Republic and Independence Day celebrations in the Institute, and is quite applauded by the audience, leaving them awestruck every time. Also, it performs stage plays.

(e) Literature Club

The Club works on the vision to explore a whole new world of books, belles-letters and the magic of words. The Club is not all about writing, but hosts fun events like Jam, Shout, Hurdles, and Debates. Language is no bar; we have both Hindi and English Literature Clubs.

(f) SPIC MACAY Club

The Society for the Promotion of Indian Classical Music And Culture Among Youth (SPIC MACAY) is a society that helps protect and popularize our rich Indian heritage. SPIC MACAY IIT Jodhpur Chapter was formalized in the year 2012.

Student Fests & Events

The Student Gymkhana of the Institute organizes events with dual purpose. On the one side, these events help engage students in creative work during their leisure hours and thereby build skills and interests in them. And, on the other side, these events help students to self-organise themselves and provide platforms for others to excel.

The events organized by the Student Gymkhana can be seen in two streams, namely:

- 1. Inter-Institute Festivals and Tournaments; and
- 2. Intra-Institute Festivals and Championships.

The students were successful in nurturing a culture filled with energy and initiative. They have organized events which served as a medium of communication and bonding amongst themselves. Major festivals like Ganesh Chaturthi, Diwali, Sankranti, Eid and Holi were celebrated with great enthusiasm. Sports activities were also regularly conducted to encourage sportsmanship, which were supported by the Faculty Members. The following are some of the major student activities that had taken place in the campus in the year 2014-15.

INTER-INSTITUTE FESTIVALS

VARCHAS

Varchas is the inter-collegiate sports festival of IIT Jodhpur. The festival celebrates the spirit of sportsmanship and serves as a platform to showcase countless hours of perspiration put in by college teams to achieve excellence in sports. Varchas was first conducted in the year 2011, with a vision of promoting sports among the colleges of India, and providing the athletes in India, a platform to showcase their talent. Competitions are held in the fields of football, cricket, table tennis, lawn tennis, badminton, squash, volleyball, basketball and athletics in national level stadiums of Jodhpur. Varchas promotes healthy competition and is a great opportunity for the teams to prove their mettle in their respective sports.

Moreover, belonging to the educated core of the country, the students of IIT Jodhpur try to fulfil their social obligation through "Soch -The Social Aspect of Varchas". Soch is a platform where the students take up pertinent social issues and try to find possible solutions through discussions and debates; spread awareness and conduct drives to involve people spanning across varied backgrounds. An attempt is made to create a profound social impact for the amelioration of the society.

In 2015, this sports festival was organized from 29 October to 1 November. The Chief Guest at Varchas 2015 was Padma Shri Limba Ram, an Indian archer from Rajasthan. Varchas 2015 witnessed a footfall of over 1000 participants and various competitions were conducted in events like athletics, volleyball, cricket, football, table tennis, basketball, aquatics, chess and badminton.



Opening Ceremony of Varchas 2015



Participants of Varchas 2015



Participants of Varchas 2015



"Awaz": A SOCH event

In 2015, the Soch team put their best foot forward to organize the following events as part of Soch.

- (a) *Awaaz:* A panel discussion was conducted with a great contribution from some renowned speakers and students from all over the city of Jodhpur on the theme "Improtance of Sports in Education".
- (b) *Intra and Inter School Competitions:* To understand the outlook of younger generation who are tomorrow's responsible citizens, a visit was undertaken to some schools in Jodhpur. Competitions like drawing, essay writing, were conducted to get a reflection of their thoughts and ideas regarding cleanliness.

The fest concluded with Director's Dinner hosted in the Temporary Academic Campus of IIT Jodhpur on 1 November 2016. The marathon, which is a part of Varchas 2015, was organized on 17 April 2016 at 6 am in coordination with the Jodhpur Development Authority (JDA). The theme of this year's marathon was "Smart and Swacch Jodhpur". An overwhelming response was received from the people and athletes from across the state of Rajasthan.



Participants in Mini Marathon on 17 April 2016
IGNUS

IGNUS, the techno-cultural fest of IIT Jodhpur was celebrated from 25-28 February 2016. The fest was opened by famous Sitar player Shujaat Khan on 25 February 2016 with collaboration of Spic Macay. Robosoccer, Nrityansh, Clash of Bands, Robowar, Antarang, IGNUS Open 2016 were the flagship events that were organised during this fest. Workshops on Android App Development, Bridge Designing, Augmented Reality, Vehicle Overhauling, Ethical Hacking, Embedded System, Entrepreneurship, Data Science & machine Learning, Serial & Wireless Communication, Placement Etiquettes, and Quadcopter were organized during this event. Famous singer Krishnakumar Kunnath, popularly known as KK performed during the pronite.

An Alumni Meet was also organized on 27 February 2016. Professor Prawal Sinha, Professor In-Charge (Faculty), IIT Jodhpur, Anand Krishnan Plappally, Faculty In-Charge, Alumni Relation Committee, IIT Jodhpur, and Damayanti Bhattacharya, CEO, IIT Bombay Alumni Association addressed the Alumni of IIT Jodhpur.



Technical Events during IGNUS 2016



Cultural Events during IGNUS 2016

INTRA-INSTITUTE FESTIVALS

IIT Jodhpur Student Gymkhana hosts Intra-Institute Festivals for its own student community. They are:

(a) Spandan

Spandan is the Intra-Institute cultural fest of IIT Jodhpur, usually the first fest of the session. It draws an enthusiastic crowd, eager to portray their talents in the cultural arena. Versatility in the various categories is extensive, with competitions organized in fields, like drama, dance, singing, literature, photography events, informals and fashion show. Three days of Spandan awakens the whole campus leaving the students to prepare all night. Spandan is one of the first public occasions to take place in the year, and hence it brings together students from all years to interact with each other. Participation with zeal and showcasing the hidden creativity tamed inside an individual, are the motives of the fest.

(b) Nimble

Nimble, the Intra-College technical fest provides a platform to the techno buds of the Institute to show their hidden talent. Nimble comprises of four action packed days, filled with a great variety of tech and science events ranging from intense mind boggling events (such as robotics, electronics and programming) to fun filled events (like angry bird, quizzes, and crypto)). Apart from the events, talks are organized by eminent personalities in the field of Science and Technology, to motivate students to work harder, as there is no end to discoveries and inventions.

(c) Kalakriti

Kalakriti is a mixed bag of fun-filled competitions, interesting workshops and backto-back movie screenings. "Because everything you can imagine is real!" : this line wakes up the dormant talent amongst students and the output is sudden burst of colors. With a multitude of events ranging from Fine Arts and Clay Modelling, to Photography and Video Editing, 'Kalakriti' witnesses huge participation from designers and nondesigners alike. Events like 'Scribble Day' brings together the entire final year batch of students, whom all the other students bid adieu and leave a farewell message or graffiti on a common piece of cloth given to them. A great way to bring smile on everyone's face, 'Kalakriti' succeeds in spreading joy, unity and togetherness in the small tight-knit community of ours.

(d) Kridansh

Kridansh is organized to give sports enthusiasts a chance to pursue their passion in sports. Matches are organized both outdoor and indoor, such as Gully Cricket, Street Football and Single Court Basketball, Chess, Carroms, Badminton, Table Tennis, and Swimming. Full-fledged dedication from participants and organizers makes Kridansh one of the liveliest events of the year.

OTHER EVENTS

"Framed 2016" Art Exhibition

"Framed" is the annual Art Exhibition of IIT Jodhpur conducted by the Media, Arts and Design Society, Students Gymkhana, IIT Jodhpur. The main motive of 'Framed' is to promote and showcase the artwork done by the students of IIT Jodhpur throughout the year. This year it was organised on 13 March 2016, in the Institute. It includes the Photography, Photo Editing, Posters designed by Students, and Sketches & Paintings made by the Students. For the first time, this event was opened for people outside of the Institute. There were entries from all over the country. The exhibition recorded a considerable footfall from students of other colleges and local public of Jodhpur. Mr. Ravi Dhingra, Canon Photo Mentor, who has been a judge in many national level competitions, was Chief Guest for the event.



Spectators musing the art work



Felicitating Mr. Ravi Dhingra, Canon Photo Mentor

Student Accolades

Scholarships to Students

The following III Year B.Tech. students have received academic scholarships for Summer 2016.

1. *Name of* Deutscher Akademischer Austauschdienst

Scholarship(German Academic Exchange Service) popularly known as "DAAD"Funding AgencyDAAD WISE (Working Internships in Science and Engineering)Period of3 Months (from May to July, 2016)

Scholarship

Names of Students

- 1. Abhishek Jaju (Electrical Engineering),
- 2. Arnav Jindal (Computer Science & Engineering),
- 3. Ashutosh Gupta (Electrical Engineering),
- 4. Nithin Venkatesh (Computer Science),
- 5. Hardik Jain (Mechanical Engineering),
- 6. Prakhar Srivastava (Electrical Engineering), and
- 7. Sangram Gaikwad (System Science).

2.	Name of	S. N. Bose Scholars Program
	Scholarship	
	Funding Agency	DST and the Indo-US Science and Technology Forum (IUSSTF)
	Period of	3 Months (from May to July, 2016)
	Scholarship	
	Name of the	V. Ashwin (Electrical Engineering)
	Student	

GRIDTECH 2015 Award to IIT Jodhpur Students

Aniruddh Ramrakhyani, Suryateja Voruganti, and Alvin Roy Aliath, final year B.Tech. (Electrical Engineering) students were awarded Second Prize at the Student Innovation Pavilion of 5th International Exhibition and Conference GRIDTECH 2015, for their project "Short-time Transformer-less Dynamic Voltage Restorer". They carried out the project under the guidance of Dhaval C. Patel, Assistant Professor, Department of Electrical Engineering. The prize was given away by Shri Girish Pradhan, Chairman, CERC. Supported by the Ministry of Power (Government of India), the event was organised by PGCIL from 8-10 April 2015 at Pragati Maidan, New Delhi.



IIT Jodhpur Students qualify for SAE BAJA 2016

Team VAAYU 2.0 of Automobile club at IIT Jodhpur is participating in BAJA 2016 an all-terrain vehicle design competition organised by SAE India. The virtual round of competition was held at Chitkara University, Patiala, Punjab on 10th and 11th July 2015. VAAYU 2.0 qualified for the final event with scoring of 92.64/100 in presentation component which is 13th rank out of 152 teams qualifying and about 400 teams participating in the event. After qualifying in virtual round, the team will be gearing up for developing an all-terrain vehicle to participate in the final round of competition which will be held at NATRIX, Pithampur, Madhya Pradesh, during February 2016.

Photographic Talent of IIT Jodhpur Students showcased at a photography exhibition in Denmark

Photographic talent of three students of IIT Jodhpur, was showcased at a photography exhibition "Sparks from India: A photographic journey through incredible India", in Denmark. These students are:

- 1. Himanshu Sahu, B.Tech. Class of 2015 (Mechanical Engineering),
- 2. Mohit Gupta, III Year B.Tech. (Electrical Engineering), and
- 3. Kirti Vardhan Rathore, IV Year B.Tech. (Computer Science & Engineering).

Their work has been on display at Gallerie Lorien in Denmark from 17 October to 14 November, 2015, along with the works of other professional artists from around the world.



Second Position in Techfest @ IIT Bombay

Two of the II year B.Tech. (Computer Science & Engineering) students, Abhinav Rai and Archil Kumar Srivastava secured overall 2nd position in the event *"Battle Code"*, in Techfest held at IIT Bombay from 26-28 December 2015.

Counselling Service

The prime objective of the team is to organize the Orientation Program. This is especially tailored to bring the freshers up to speed with life in Institute, while maintaining a homely feel, and gently enabling the transition into this Institute. The Counseling Service has been an integral part of the Institute since its inception. Every year, it strives hard to ensure that every student gets to know IITJ at its most intricate levels, and absorb all that the Institute has to offer. Further, the Counseling Service Team takes care of special language needs that some students might face during this time. It spares no effort in this, and work towards making this transition memorable throughout their lives.

The Counseling Service Team consists of a Faculty Advisor with 30 students (called Student Guides) bestowed to work for welfare of students. A Student Guide is the backbone of the team, with every guide taking 8-10 freshers under his/her vision and guidance. The Student Guide works towards helping the student adjusts well in the hostel and in his academic life. The Student Guide keeps in continuous touch with the student and his/her family. The team ensures that not only the student, but his/her parents too get the opportunity to interact with the Student Guide, to maintain a healthy relationship. As part of this Counseling, it is the duty of the team to promote development of the student in all three aspects, namely:

- 1. Academics
- 2. Extra-Curricular
- 3. Personal

For this purpose, voluntary, confidential and free counselling service is offered for a wide range of issues that include:

- 1. *Academic support:* Providing information about the different academic programs of the Institute, imparting efficient time management skills and study skills;
- 2. *Personal:* Overcoming homesickness, adjusting to the new environment and related difficulties;
- 3. Counselling advocacy: Psycho-education and referral services to students;
- 4. Interaction with the Institute and the existing body of students; and
- 5. Encouraging students to discover their extra-curricular interests/hobbies.

Counselling service also focuses on the concerns and difficulties of the students by providing personal guidance to deal with problems arising during their college life at the Institute. The following activities are undertaken by the Counseling Services team:

- 1. Maintaining the Institute as a ragging free campus;
- 2. Organizing "Orientation Program" every year, for the sophomore batch so as to make them acquainted with the culture of IIT Jodhpur;
- 3. Organizing workshops related to:
 - (a) Career counselling,
 - (b) Stress management,
 - (c) Time management,
 - (d) Health care and hygiene,
 - (e) Vocational training,
 - (f) Relationship problems,
 - (g) Coping with homesickness and
 - (h) Addiction and others;

- 4. Conducting motivational talks by eminent speakers;
- 5. Addressing the academic problems of the students by conducting:
 - (a) English language sessions for students from vernacular background, and
 - (b) Basic Information Technology (IT) skill building sessions etc.;
- 6. Organizing interaction building events amongst students of different batches, and with faculty members etc.; and
- 7. Individually attending to problems of students with poor academic performance.

Launched in 2014, the IIT Jodhpur Counseling Service is continuing the Campus Mentoring System. In this system, a group of students are associated with one Faculty Member and one Staff Member, who in turn act as the Mentors of the students.

Yellow Day Celebrations

"Yellow is the best colour to create enthusiasm for life and can awaken greater confidence and optimism. As we get engrossed in our mundane routines, we forget to take a break and enjoy the little things in our life. What is needed is a moment where we stop and appreciate all the awesome things around us". With this motive, IIT Jodhpur Counselling Service Team initiated a tradition this year to dedicate one day i.e., 12 February, to appreciate the good things in our life. On this day, all members of IIT Jodhpur Community were requested to wear clothes in the shades of yellow and join for a get together in the lawns of the Academic Campus. The team had put up yellow chart papers for the members to record their thoughts on "What makes you smile". The event was attended by the Students, Faculty and Staff Members of the Institute.



Faculty Members greeting each other in yellow attires



Recording thoughts on "What makes you smile?"

Student Placement Cell

The Office of Student Placements (OSP) is run and managed by the students in sync with the official authorities, thereby taking care of the placement and internship procedures. The students coordinate the job of contacting various companies, their interaction with the students, arranging pre-placement talks, tests, and interviews.

In 2015-16, companies in core engineering, information and communication technology, and banking sector, government and public sector organizations have visited IIT Jodhpur for placements.

Total 96 of our students i.e., 90 B.Tech. Students and 6 M.Tech. Students, have been placed with different companies in the year 2015-16.



Branch-wise Placement of B.Tech. Students in 2015-16

Their details of companies and placements are as below.

B.Tech. Undergraduate Students

S. No.	Company	Numb	Number of Students Selected per Branch			Total Number of Students
		CSE	EE	ME	SS	Placed
1.	Angara E-Commerce Pvt. Ltd.	2				2
2.	C42 Engineering India Pvt. Ltd.	3				3
3.	Coal India Limited		3	4		7
4.	Cognizant		5	1	3	9
5.	Cognizant Technology Solutions				1	1
6.	CRISIL				1	1
7.	D. E. Shaw India Software Pvt. Ltd	1			1	2
8.	Drishti Soft Solutions Pvt. Ltd.	3				3
9.	Futures First Info Services Pvt. Ltd.				1	1
10.	Grofers India Pvt. Ltd.	2				2

11.	HCL Technologies	1	2			3
12.	HPCL		3	2		5
13.	IgniteWorld Pvt. Ltd.	1				1
14.	Ishi Systems	1			1	2
15.	JSW Energy Ltd.		2	1		3
16.	Larsen and Toubro		3			3
17.	Mahindra & Mahindra Ltd.			6		6
18.	Maxheap Technologies Pvt .Ltd. (CommonFloor.com)	2				2
19.	Microsoft	2	1			3
20.	Morgan Stanley	2	1			3
21.	National Engineering Industries			2		2
22.	Nucleus Software Exports Limited			1		1
23.	Practo Technologies Pvt. Ltd.	1			1	2
24.	Samsung India Software Center (SISC)	4				4
25.	SteelWedge Technologies Pvt. Ltd.	2	2		1	5
26.	Tata Consultancy Services		4			4
27.	Tata Motors Ltd.		1	4		5
28.	Voylla Fashions Pvt. Ltd.	2	1	1	1	5
	Total Students Placed	29	28	22	11	90

M. Tech. Postgraduate Students

S. No. Company		Number of Selected p	Total Number of Students	
		ICT	SS	Placed
1.	Cognizant	2	2	4
2.	Tata Consultancy Services		2	2

Alumni Relations

The Office of Alumni Relations of the Institute works for the alumni of the Institute, no matter where the alumni live. The Office is a canvas of collective experiences and shared memories. We urge the Alumni to share with us your stories of both struggle and success. As brand ambassadors of the Institute and torch bearers of change, this special bond between the Alumni and the Institute, should be the catalyst for valuable exchange between the Institute and the big-wide world.

The Office of Alumni Relations is managed by the Alumni Relations Committee, consisting of two Faculty Members and four Students.

All students completing any specific degree program at IIT Jodhpur become Life Members with the Office of Alumni Relations and no fee is associated with the membership.

An Alumni Meet was organized on 27 February 2016. Professor Prawal Sinha, Professor In-Charge (Faculty), IIT Jodhpur, Anand Krishnan Plappally, Faculty In-Charge, Alumni Relation Committee, IIT Jodhpur, and Damayanti Bhattacharya, CEO, IIT Bombay Alumni Association addressed the Alumni of IIT Jodhpur.

Registered Students in IIT Jodhpur

IIT Jodhpur has, as on 31 March 2016, a total of 750 students registered in various programs offered by the Institute. The table and chart below depict the program-wise breakup of the registered students in the Institute.

Program	Year of Registration	Number
Ph.D.	2015	39
	2014	34
	2013	28
	2012	18
	2011	17
	2010	3
	Total	139
M.Tech.	2015	24
	2014	16
	Total	40
M.Sc.	2015	14
	Total	14
B.Tech.	2015	112
	2014	131
	2013	169
	2012	145
	Total	557
	Grand Total	750



Following are lists of students registered in various programs offered by the Institute, detailed according to the Centers and Branches of the various programs.

S. No.	Roll No.	Name	Center / Department
1.	PG201081501	Belal Usmani	Energy
2.	PG201081502	Dharmendra Singh Rajpurohit	Energy
3.	PG201081504	Suresh Kumar	Energy
4.	PG201181001	Deepesh Patidar	Energy
5.	PG201181003	Pura Ram	Energy
6.	PG201181004	Vikas Pratap Singh	Energy
7.	PG201181005	Vikash Chandra Janu	Energy
8.	PG201181501	Lokesh Saini	Energy
9.	PG201181502	Surendra Singh Barala	Energy
10.	PG201182001	Abhay Samant	ICT
11.	PG201182005	Puneet Kumar Jain	ICT
12.	PG201182006	Ram Niwash Mahia	ICT
13.	PG201182007	Ravi Raj Choudhary	ICT
14.	PG201182009	Sapana Ranwa	ICT
15.	PG201182010	Saurabh Maheshwari	ICT
16.	PG201182501	Amit Bhati	ICT
17.	PG201182502	Kapil Sharma	ICT
18.	PG201183001	Rohan Sharma	SS
19.	PG201183501	Parmod Kumar	SS
20.	PG201183502	Preeti Yadav	SS
21.	PG201281001	Ajay Jain	Energy
22.	PG201281002	Dharmesh Kumar	Energy
23.	PG201281003	Poonam Sharma	Energy
24.	PG201281004	Shejale Kiran Prakash	Energy
25.	PG201282002	Deepak Bharti	ICT
26.	PG201282003	Giriraj Vyas	ICT
27.	PG201282007	Rakesh Kanji	ICT
28.	PG201282009	Suresh Dahiya	ICT
29.	PG201282010	Vaibhav Saini	ICT
30.	PG201282012	Vibha Sahlot	ICT
31.	PG201282501	Shilpa Pandey	ICT
32.	PG201283001	Anoopa Joshi	SS
33.	PG201283003	Manvendra Sharma	SS
34.	PG201283005	Parvinder Singh	SS
35.	PG201283006	Pradumn Kumar Pandey	SS
36.	PG201283007	Rakesh Kumar	SS
37.	PG201283008	Ranveer Singh	SS
38.	PG201283009	Vinay Pratap Singh	SS

Ph.D. Students

39.	PG201381001	Aditya Raw Gautam	Energy
40.	PG201381002	Goutam Kumar Gupta	Energy
41.	PG201381003	Om Prakash Mahela	Energy
42.	PG201381005	Rohitash Kumar	Energy
43.	PG201382005	Vipin Joshi	ICT
44.	PG201383001	Anjali Singh	SS
45.	PG201382002	Anurag Sahu	SS
46.	PG201383002	Dipti Trivedi	SS
47.	PG201383005	Raj Kumar Satankar	SS
48.	PG201383006	Shraddha Choudhary	SS
49.	PG201383501	Deepak Kumar	SS
50.	PG201383502	Dileep Kumar	SS
51.	PG201383503	Manish Raghav	SS
52.	PG201383504	Satendra Pal Singh	SS
53.	PG201383506	Vishal Sharma	SS
54.	PG201384002	Ankisha Vijay	BISS
55.	PG201384003	Anuj Kumar Bharti	BISS
56.	PG201384004	Arun Kumar Upadhyay	BISS
57.	PG201384005	Ayeman Amanullah	BISS
58.	PG201384006	Bhubanesh Rathore	BISS
59.	PG201384007	Kriti Dubey	BISS
60.	PG201384008	Megha Singh	BISS
61.	PG201384009	Nidhi Sharma	BISS
62.	PG201384010	Rahul Badhwar	BISS
63.	PG201384011	Rakhi N. K.	BISS
64.	PG201384012	Ridhi Aggarwal	BISS
65.	PG201384013	Shalini Singh	BISS
66.	PG201384014	Vibhuti Joshi	BISS
67.	P14EE001	Ajay Kumar Mahato	EE
68.	P14EE002	Priyanka Bajaj	EE
69.	P14ME001	Gurveer Singh	ME
70.	P14ME003	Rakesh Joshi	ME
71.	P14ME004	Ram Niwas Verma	ME
72.	P14ME005	Sandeep Gupta	ME
73.	P14CS001	Hiteshi Jain	CSE
74.	P14CS002	Ravi Sharma	CSE
75.	P14PH001	Rajesh Kumar	РН
76.	P14PH002	Sanjoy Chatterjee	РН
77.	P14MT001	Supriyo Dutta	MT
78.	P14BL002	Sachin Vyas	BL
79 .	P14BS001	Alankar Agarwal	BISS
80.	P14BS002	Bibin G Anand	BISS
81.	P14BS004	Manju Kumari	BISS
82.	P14BS005	Shivanjali Saxena	BISS
83.	P14BS006	Vandana	BISS

84.	P14BS007	Ribhav Mishra	BISS
85.	P14HS003	Saina Maidullah	HSS
86.	P14SS001	Brajesh Kumar Shukla	SS
87.	P14EN001	Priya Malpani	Energy
88.	P14BL003	Amitap Khandelwal	BL
89.	P14CHM001	Erum Gul Naz	СНМ
90.	P14CHM002	Abhinav Srivastava	СНМ
91.	P14ME007	Amrita Kaurwar	ME
92.	P14ME008	Phadatare Hanmant Pandurang	ME
93.	P14PH003	Javid Ahmad Naikoo	РН
94.	P14PH004	Vijendra Singh Bhati	РН
95.	P15ME001	Devendra Singh	ME
96.	P15ME002	Lochan Sharma	ME
97.	P15ME003	Pravesh Kumar	ME
98.	P15ME004	Sumit Mahajan	ME
99.	P15CY001	Devika Laisharam	СНМ
100.	P15CY002	Hargeet Kaur	СНМ
101.	P15CY003	Jyoti Faujdar	СНМ
102.	P15CY004	Anchal Gahlaut	СНМ
103.	P15CY005	Bhawna Chaubey	СНМ
104.	P15CY006	Arpita Srivastava	СНМ
105.	P15CY007	Sumitra Godara	СНМ
106.	P15CS001	Arka Ujjal Dey	CSE
107.	P15BL001	Ishan Agrawal	BL
108.	P15PH001	Chandni Kumari	РН
109.	P15PH002	Jyoti Saini	РН
110.	P15PH003	Khushboo Dixit	РН
111.	P15MA001	Divya Gupta	MT
112.	P15MA001	Rohit Kumar	MT
113.	P15EE001	Abhishek Sahu	EE
114.	P15EE002	Arpita Jaitawat	EE
115.	P15EE003	Poonam Sahu	EE
116.	P15EE004	Shivam Chaturvedi	EE
117.	P15VSS001	Divya Srivastava	VSS
118.	P15VSS002	Divya Sharma	VSS
119.	P15VSS003	Tushar Shankar Shinde	VSS
120.	P15VSS004	Nanduri Kameswara Swarun	VSS
121.	P15VSS005	Mahmood Shaik	VSS
122.	P15VSS006	Gajendra Singh Chawda	VSS
123.	P15HS201	Abhra Paul	HSS
124.	P15HS202	Varun	HSS
125.	P15EE201	Rajesh Shukla	EE
126.	P15EE202	Yogesh Kumar	EE
127.	P15EE203	Rahul Kumar	EE
128.	P15VSS201	Aditya Raj	VSS

129.	P15VSS202	Neeraj Goel	VSS
130.	P15VSS203	Abhishek Kumar	VSS
131.	P15ME201	Aniket Dilip Monde	ME
132.	P15ME202	Vibhuti Bhushan Pandey	ME
133.	P15ME203	Ankit Agarwal	ME

Ph.D. Students registered under "Visvesvaraya Ph.D. Scheme for Electronics and IT"

S. No.	Roll No.	Name	Department
1.	P14VSS001	Adarsh Nigam	EE
2.	P14VSS002	Amrik Singh	EE
3.	P14VSS003	Ishan Varun	EE
4.	P14VSS004	Rahul Kumar	EE
5.	P14VSS005	Nupur Rathore	EE
6.	P14VSS006	Parveen	EE

Post Graduate Students

M.Tech. Students, Batch 2014

S. No.	Roll No	Name	Center
1.	M14CT003	Ankit Chouhan	ICT
2.	M14CT004	Anshul Gupta	ICT
3.	M14CT005	Charu Gupta	ICT
4.	M14CT006	Piyush Kumar Jaiswal	ICT
5.	M14CT008	Prem Raj	ICT
6.	M14CT009	Raj Singh Parihar	ICT
7.	M14CT012	Vivek Raghuwanshi	ICT
8.	M14EN002	Satish	Energy
9.	M14EN003	Swarn Kumar	Energy
10.	M14EN004	Vishwa Deepak Kumar	Energy
11.	M14SS001	Amit Kumar Gangwar	SS
12.	M14SS002	Aniruddha Singhal	SS
13.	M14SS003	Gaurav Jajoo	SS
14.	M14SS004	Shreya Goyal	SS
15.	M14SS005	V. Saji	SS
16.	M14SS006	Vipul Bijawat	SS

S. No.	Roll No	Name	Department
1.	M15ME002	Ashok Verma	ME
2.	M15ME003	Deepak Raina	ME
3.	M15ME004	Himanshu Gaur	ME
4.	M15ME006	Narayan Kumar	ME
5.	M15ME007	Naveen	ME
6.	M15ME008	Neha Arora	ME
7.	M15ME009	Sankalp Singh	ME
8.	M15ME010	Shiv Ram Suthar	ME
9.	M15ME011	Shravan Singh Rao	ME
10.	M15ME012	Shubhendu Prashant Singh	ME
11.	M15ME013	Tushar Lohora	ME
12.	M15ME014	Vivek Tripathi	ME
13.	M15EE004	Chandrashekhar Bhardwaj	EE
14.	M15EE005	Dinesh Jangid	EE
15.	M15EE007	Itisha Chauhan	EE
16.	M15EE008	Lobzang Namgail	EE
17.	M15EE009	Mohit Kachhwaha	EE
18.	M15EE010	Prakriti Arya	EE
19.	M15EE011	Priyanka Siddha	EE
20.	M15EE013	Saurabh Rawal	EE
21.	M15EE014	Vineet Kumar	EE

22.	M15EE016	Anil Kumar	EE
23.	M15EE017	Jitendra Kumar	EE
24.	M15EE018	Joshi Sonal Sunil	EE

M.Sc. Students, Batch 2015

S. No.	Roll No	Name	Department
1.	M15CY003	Pooja	СНМ
2.	M15CY004	Pranay Rajbangshi	СНМ
3.	M15CY006	Suman Dhara	СНМ
4.	M15CY008	Vikas Kumar	СНМ
5.	M15CY009	Vinay Uniyal	СНМ
6.	M15PH001	Ashish Kumar	PH
7.	M15PH002	Bernard Lalroliana	РН
8.	M15PH005	Nidhin Sathyan	РН
9.	M15PH007	Rashmi Mehla	РН
10.	M15PH008	Sanjeeda Bharati Das	РН
11.	M15PH011	Vikrant Chaudhary	РН
12.	M15MA001	Aarti Balana	MT
13.	M15MA004	Bhagya Shree Meena	MT
14.	M15MA007	Dharmendra Kumar Gurjar	MT

Undergraduate Students

S. No.	Roll No.	Name	Branch
1.	UG201210001	Abhishek Kumar	CSE
2.	UG201210002	Aditya Yadav	CSE
3.	UG201210003	Akash Mishra	CSE
4.	UG201210004	Akshit Jain	CSE
5.	UG201210005	Aseem Raj Baranwal	CSE
6.	UG201210006	Asheet Kumar	CSE
7.	UG201210007	Attanti Madhurya	CSE
8.	UG201210008	Bandela Prathyusha	CSE
9.	UG201210009	Basamgari Harika	CSE
10.	UG201210010	Bundele Manas Mahesh	CSE
11.	UG201210011	Dhake Akash Hiraman	CSE
12.	UG201210012	Dinesh Kumar Jangra	CSE
13.	UG201210013	Dinesh Kumar Saini	CSE
14.	UG201210014	Gaurav Shastri	CSE
15.	UG201210015	Gondi Dedeepya Sai	CSE
16.	UG201210016	Gorla Uhasree	CSE
17.	UG201210017	Jinank Jain	CSE
18.	UG201210018	Kalshetti Pratik Mallinath	CSE
19.	UG201210019	Kunal Dadheech	CSE
20.	UG201210020	Mala Muthyalappa	CSE
21.	UG201210021	Manish Jaiswal	CSE
22.	UG201210022	N. K. Kiran	CSE
23.	UG201210023	Pankaj Kumar	CSE
24.	UG201210024	Pawan Kumar Saini	CSE
25.	UG201210025	Rajesh Kumar Meena	CSE
26.	UG201210026	Rishabh Garg	CSE
27.	UG201210028	Ritesh Kumar	CSE
28.	UG201210029	Rohan Khanna	CSE
29.	UG201210030	Sachin Grover	CSE
30.	UG201210031	Samarth Kumar Goel	CSE
31.	UG201210032	Shah Akshat Mukeshkumar	CSE
32.	UG201210033	Shivam Kumar Garg	CSE
33.	UG201210034	Siddharth Talesra	CSE
34.	UG201210035	Sonika Agrawal	CSE
35.	UG201210036	Sunil Kumar	CSE
36.	UG201210037	Vaibhav Singh Khokhar	CSE
37.	UG201210038	Vijendra Sukariya	CSE
38.	UG201210039	Vikas Meena	CSE
39.	UG201210040	Ankit Jain	CSE

40.	UG201211001	Abhishek Thepra	EE
41.	UG201211002	Ajay Charan	EE
42.	UG201211003	Akarsh Rastogi	EE
43.	UG201211004	Akshay Arya	EE
44.	UG201211006	Anubhuti Mittal	EE
45.	UG201211007	Ashwani Kumar	EE
46.	UG201211008	Ashwani Nainawat	EE
47.	UG201211009	Deepak Verma	EE
48.	UG201211010	Devabattini Sriharsha	EE
49.	UG201211011	Dharm Raj Meena	EE
50.	UG201211012	Dheeraj P.	EE
51.	UG201211013	Dinesh Gurjar	EE
52.	UG201211014	Farazuddin Ansari	EE
53.	UG201211015	Ghanshyam	EE
54.	UG201211016	Hitesh Kumar Singhal	EE
55.	UG201211017	K. V. Vikas Reddy	EE
56.	UG201211018	Lalit Mirdha	EE
57.	UG201211019	Mamta Dhaka	EE
58.	UG201211020	Mukesh Kumar	EE
59.	UG201211021	Nisha Agrawal	EE
60.	UG201211022	Nishit Umesh Parekh	EE
61.	UG201211023	Pawan Kumar Verma	EE
62.	UG201211024	Piyush Dugar	EE
63.	UG201211025	Prakash Gehlot	EE
64.	UG201211027	Rajat	EE
65.	UG201211028	Rajat R Rahatgaonkar	EE
66.	UG201211029	Rajnesh Meena	EE
67.	UG201211030	Sanchit Gupta	EE
68.	UG201211031	Sanket Jain	EE
69.	UG201211032	Santosh Kumar Meena	EE
70.	UG201211033	Saurav Kumar	EE
71.	UG201211034	Sharath Kuntanhal	EE
72.	UG201211035	Shivam Upadhyaya	EE
73.	UG201211036	Shrish Lal Bhatnagar	EE
74.	UG201211037	Sriramadasu Ashok Kumar	EE
75.	UG201211038	Sunil Saran	EE
76.	UG201211039	Tarun Vatwani	EE
77.	UG201211040	Upendra Kumar Nagar	EE
78.	UG201211041	Vinay Shankar Saxena	EE
79.	UG201211042	Antos C. Varghese	EE
80.	UG201211043	Himanshu Takwani	EE
81.	UG201212001	Aditya Khandelwal	ME
82.	UG201212002	Ajay Kumar Jagetiya	ME

83.	UG201212003	Anjali Bansiwal	ME
84.	UG201212005	Ashish Kumar	ME
85.	UG201212006	Ashish Kumar	ME
86.	UG201212007	Atul Dubey	ME
87.	UG201212008	Ayush Bhadauria	ME
88.	UG201212009	B. V. Kishore	ME
89.	UG201212010	Balla Raghavendar Goud	ME
90.	UG201212011	Boddupalli Nibodh	ME
91.	UG201212012	Chamarthy Kameswara Shiva Dinesh	ME
92.	UG201212013	Chetan Gupta	ME
93.	UG201212014	Daman	ME
94.	UG201212015	Dilkhush Meena	ME
95.	UG201212017	Himanshu Yadav	ME
96.	UG201212018	Kamlesh Aseri	ME
97.	UG201212019	Kanak Shrivastava	ME
98.	UG201212020	Manish Soni	ME
99.	UG201212021	N. Vinaykumar Reddy	ME
100.	UG201212022	Navneet Mittal	ME
101.	UG201212023	Pavan Kumar Shakya	ME
102.	UG201212024	Sachin Yadav	ME
103.	UG201212025	Sandeep Kumar Meena	ME
104.	UG201212026	Saurabh Jain	ME
105.	UG201212027	Saurabh Pandey	ME
106.	UG201212028	Shah Jigar Deepak	ME
107.	UG201212030	Shreyas Srivastava	ME
108.	UG201212031	Shubham Gupta	ME
109.	UG201212032	Snigdhadeep Moitra	ME
110.	UG201212033	Sonu Siba Bara	ME
111.	UG201212034	Surendra Pal Singh	ME
112.	UG201212035	Tapesh Kumar Mourya	ME
113.	UG201212036	Thani Aswanth	ME
114.	UG201212037	Vaibhav Gupta	ME
115.	UG201212038	Varun Suryan	ME
116.	UG201212039	Vikash Kumar Goenka	ME
117.	UG201212040	Vishal Kumar	ME
118.	UG201212041	Anshuman Singh	ME
119.	UG201212042	Kirti Vardhan Rathore	ME
120.	UG201213002	Anmol	SS
121.	UG201213005	Divya Nagar	SS
122.	UG201213006	Gaurav Choudhary	SS
123.	UG201213007	Gourab Kumar Patro	SS
124.	UG201213008	Hari Om Meena	SS
125.	UG201213013	Kota V. Aakash	SS

126.	UG201213014	Kshitij Soni	SS
127.	UG201213016	Mahendra Kachhawa	SS
128.	UG201213018	Manish Malhotra	SS
129.	UG201213019	Narender Kumar	SS
130.	UG201213020	Paladugu Venkata Karteek	SS
131.	UG201213021	Palash Jain	SS
132.	UG201213022	Parag Rahangdale	SS
133.	UG201213023	Pise Indraneel Rajnish	SS
134.	UG201213024	Pragati Nagar	SS
135.	UG201213025	Prasoon	SS
136.	UG201213026	Priyanka Raju Masne	SS
137.	UG201213027	Purvi Tiwari	SS
138.	UG201213028	Raghunath Meena	SS
139.	UG201213029	Ravi Kumar	SS
140.	UG201213031	Rochika	SS
141.	UG201213033	Sharwan Songara	SS
142.	UG201213034	Shivam Choudhary	SS
143.	UG201213035	Shreshtha Garg	SS
144.	UG201213036	Sunil Suthar	SS
145.	UG201213037	Vibhav Sharma	SS

SI. No.	Roll No	Name	Branch
1.	UG201310001	Aakash Asija	CSE
2.	UG201310002	Aayush Sharda	CSE
3.	UG201310003	Abhay Kumar Singh	CSE
4.	UG201310004	Aman	CSE
5.	UG201310005	Amit Jain	CSE
6.	UG201310006	Anjali Malav	CSE
7.	UG201310007	Archit Agrawal	CSE
8.	UG201310008	Arnav Chopra	CSE
9.	UG201310009	Arnav Jindal	CSE
10.	UG201310010	Avan Jayendra Rathod	CSE
11.	UG201310011	Bharti	CSE
12.	UG201310012	Bharti Arya	CSE
13.	UG201310013	Dishant Goyal	CSE
14.	UG201310014	Hemant Pratap Singh	CSE
15.	UG201310015	Kartik Singh	CSE
16.	UG201310016	Komanduri Sai Raghava	CSE
17.	UG201310017	Kushagra Surana	CSE
18.	UG201310018	Mahendra Kumar Jat	CSE
19.	UG201310019	Makarand Milind Gomashe	CSE
20.	UG201310020	Muttineni Navya	CSE

21.	UG201310021	Nikhil Jeevansingh Taji	CSE
22.	UG201310022	Nithin V.	CSE
23.	UG201310023	Piyush Yadav	CSE
24.	UG201310024	Priyank Arya	CSE
25.	UG201310025	Rajkumar Meena	CSE
26.	UG201310026	Ramkesh Meena	CSE
27.	UG201310027	Ravi Prakash Gupta	CSE
28.	UG201310028	Ravindra Kumar Saini	CSE
29.	UG201310029	Riteek Srivastav	CSE
30.	UG201310030	Shiv Bhagwan	CSE
31.	UG201310031	Shiv Kumar Sen	CSE
32.	UG201310032	Shiv Mohan	CSE
33.	UG201310033	Shubham Saxena	CSE
34.	UG201310035	Sourav Khoso	CSE
35.	UG201310036	Suresh Gehlot	CSE
36.	UG201310037	Tapan Bhatnagar	CSE
37.	UG201310038	Upendra Singh Chauhan	CSE
38.	UG201310039	Vaghela Rajan Arvindkumar	CSE
39.	UG201310040	Vaibhav Paliwal	CSE
40.	UG201310041	Vivek Lata	CSE
41.	UG201311001	Abhishek Agrawal	EE
42.	UG201311002	Abhishek Jaju	EE
43.	UG201311003	Abhishek Kumar Yadav	EE
44.	UG201311004	Amit Kumar	EE
45.	UG201311005	Anirudh Singh Shaktawat	EE
46.	UG201311006	Ankit Garg	EE
47.	UG201311007	Anshul Agarwal	EE
48.	UG201311008	Anshul Yadav	EE
49.	UG201311009	Ashok Kumar	EE
50.	UG201311010	Ashutosh Gupta	EE
51.	UG201311011	Ashutosh Vaishnav	EE
52.	UG201311012	Bhabhuta Ram	EE
53.	UG201311013	Dinesh Kumar Danwa	EE
54.	UG201311014	Dipender Singh Ridmalot	EE
55.	UG201311015	Ekant Kumar	EE
56.	UG201311016	Gurpinder Singh	EE
57.	UG201311017	Hede Tejan Rohit	EE
58.	UG201311018	Hemant Meena	EE
59.	UG201311019	Kanika Mahajan	EE
60.	UG201311020	Khushbu Saxena	EE
61.	UG201311021	Kshitij Sandeep Minocha	EE
62.	UG201311022	Mohit Gupta	EE
63.	UG201311023	Niranjan Sanodia	EE
64.	UG201311024	Paduru Kandarpa Sai	EE
65.	UG201311025	Prakhar Gupta	EE

66.	UG201311026	Rahul Jain	EE
67.	UG201311027	Rajendra Kumar Yadav	EE
68.	UG201311028	Ramdev Bhichar	EE
69.	UG201311029	Rishikesh Meena	EE
70.	UG201311030	Shraddha Garg	EE
71.	UG201311031	Siddhant Jain	EE
72.	UG201311032	Sisodiya Vrushali	EE
73.	UG201311033	Sneha Gupta	EE
74.	UG201311034	Sumit Pegwal	EE
75.	UG201311035	Sushant Gautam	EE
76.	UG201311036	Syed Afshan Ali	EE
77.	UG201311037	Talloju Jawahar	EE
78.	UG201311038	Tiloka Ram	EE
79·	UG201311039	V. Ashwin	EE
80.	UG201311040	Vaibhav Sharma	EE
81.	UG201312001	Aditya Saxena	ME
82.	UG201312002	Akhil Mehta	ME
83.	UG201312003	Amit Kumar	ME
84.	UG201312004	Ankit Raipuria	ME
85.	UG201312005	Arpit Kumar Gahlot	ME
86.	UG201312006	Ayush Raina	ME
87.	UG201312007	Balveer Danga	ME
88.	UG201312008	Bhaskarjyoti Barman	ME
89.	UG201312009	Dheeraj Kumar Sisodiya	ME
90.	UG201312010	Dron Airon	ME
91.	UG201312011	Hardik Jain	ME
92.	UG201312012	Harsh Vardhan Shrivastava	ME
93.	UG201312013	Himanshu Agrawal	ME
94.	UG201312014	Himanshu Kumar Singh	ME
95.	UG201312015	Himanshu Sharma	ME
96.	UG201312016	K. Lakshmi Phalguni	ME
97.	UG201312017	Kanuganti Vamshi	ME
98.	UG201312018	Lakshaya Bhatt	ME
99.	UG201312019	Lakshman Kumar	ME
100.	UG201312020	Lokesh Swami	ME
101.	UG201312021	Manish Rajendra Jadhav	ME
102.	UG201312022	Mayank Gupta	ME
103.	UG201312023	Mohammed Firoz	ME
104.	UG201312024	Mohit Agarwal	ME
105.	UG201312025	Patel Harsh Bhupendrabhai	ME
106.	UG201312026	Pradyuman Meena	ME
107.	UG201312027	Prakhar Srivastava	ME
108.	UG201312028	Pushpendra Dhurwe	ME
109.	UG201312029	Pushpendra Mishra	ME
110.	UG201312030	Rohan Kumar	ME

111.	UG201312031	Rohit Singh	ME
112.	UG201312032	Sachin	ME
113.	UG201312033	Shubham Shaurya	ME
114.	UG201312034	Subham Teji	ME
115.	UG201312035	Vaghela Nirav Jitendrakumar	ME
116.	UG201312036	Vaibhav Jain	ME
117.	UG201312037	Vikas Kumar	ME
118.	UG201312038	Vikrant Arora	ME
119.	UG201312039	Viraat Srivastava	ME
120.	UG201313002	Aman Ajmera	SS
121.	UG201313003	Anirudh Vyas	SS
122.	UG201313004	Arvind Saini	SS
123.	UG201313005	Ayush Bhaskar	SS
124.	UG201313006	Darapaneni Chandana	SS
125.	UG201313007	Deepika Jalli	SS
126.	UG201313008	Deepshi Garg	SS
127.	UG201313010	Gaikwad Sangram Dasharath	SS
128.	UG201313011	Gourav Singh	SS
129.	UG201313013	Jayant Carpenter	SS
130.	UG201313014	Jayant V. Khapre	SS
131.	UG201313015	Joshi Achyut Sanjay	SS
132.	UG201313016	Lingala Prasantha Kumar	SS
133.	UG201313017	Mandeep	SS
134.	UG201313018	Naresh Kumar Prajapati	SS
135.	UG201313019	P Manisha	SS
136.	UG201313020	Pankaj Panwar	SS
137.	UG201313021	Pankaj Yadav	SS
138.	UG201313023	Perla Sukesh	SS
139.	UG201313024	Pinkesh Kumar	SS
140.	UG201313025	Prabhash Jain	SS
141.	UG201313026	Prakhar Mathur	SS
142.	UG201313027	Pramod Kumar	SS
143.	UG201313028	Prashant Kumar	SS
144.	UG201313029	Pulavarthy Anirudh	SS
145.	UG201313030	Rohil Surana	SS
146.	UG201313031	Rohit Kumar	SS
147.	UG201313032	Sangepu Ashrith	SS
148.	UG201313033	Saroj Prasad Chhatoi	SS
149.	UG201313034	Sheela Meena	SS
150.	UG201313035	Shipra Jain	SS
151.	UG201313036	Shubham Singh	SS
152.	UG201313037	Tarun Devireddy	SS
153.	UG201313038	Vishal Kumar	SS
154.	UG201314001	Abhishek Thombre	BISS
155.	UG201314002	Aditya Choudhary	BISS

156.	UG201314003	Ajay Kumar Kumawat	BISS
157.	UG201314004	Arnav Mishra	BISS
158.	UG201314005	Chandresh Kumar	BISS
159.	UG201314006	Dhanajit Brahma	BISS
160.	UG201314007	Himanshu Sikaria	BISS
161.	UG201314008	Jalaj Sharma	BISS
162.	UG201314010	Kaushtubh Kumar	BISS
163.	UG201314011	Kuldeep Meena	BISS
164.	UG201314012	Nisha Kumari	BISS
165.	UG201314013	Pranjal Singh	BISS
166.	UG201314014	Rakesh Yadav	BISS
167.	UG201314015	Sharath Challapalli	BISS
168.	UG201314017	Shrey Maheshwari	BISS
169.	UG201314018	Ujjwal Anand	BISS

Sl. No.	Roll No	Name	Branch
1.	B14CS001	Abhimanyu Singh Gaur	CSE
2.	B14CS002	Abhinav Rai	CSE
3.	B14CS003	Ajeet Goyal	CSE
4.	B14CS004	Ajeet Ujjwal	CSE
5.	B14CS005	Ankita Muzalda	CSE
6.	B14CS006	Annuay. J	CSE
7.	B14CS007	Anurag Sanyal	CSE
8.	B14CS008	Archil Kumar Srivastava	CSE
9.	B14CS009	Ashish Sahu	CSE
10.	B14CS010	Ayush Agrawal	CSE
11.	B14CS011	B Sree Siddharth	CSE
12.	B14CS012	Bharat Singh	CSE
13.	B14CS013	Chaudhari Akshay Gajanan	CSE
14.	B14CS014	Daval Pargal	CSE
15.	B14CS015	Dhruv Sharma	CSE
16.	B14CS016	Edula Hari Hara Reddy	CSE
17.	B14CS017	Ganesh Bhimrao Patil	CSE
18.	B14CS018	Garimella Sravan	CSE
19.	B14CS019	Gaurav Kamal	CSE
20.	B14CS020	Gutapu Raj Kumar	CSE
21.	B14CS021	Hitesh Hingorani	CSE
22.	B14CS022	Kommuru Vinay Kumar	CSE
23.	B14CS023	Mahendra Meena	CSE
24.	B14CS024	Manish Goyal	CSE
25.	B14CS025	Pranav Arora	CSE
26.	B14CS026	Pushpinder	CSE
27.	B14CS027	Rinku Kumar Meena	CSE
28.	B14CS028	Rishabh Shukla	CSE

29.	B14CS029	Robin Gaur	CSE
30.	B14CS030	Rohit Paliwal	CSE
31.	B14CS031	Sahil Dhiman	CSE
32.	B14CS032	Sandeep Charan	CSE
33.	B14CS033	Rohan Govind Saraf	CSE
34.	B14CS034	Saurav Suman	CSE
35.	B14CS035	Shubham Jain	CSE
36.	B14CS036	Snehal Azad	CSE
37.	B14CS037	Sunil Choudhary	CSE
38.	B14CS039	Varun Kumar	CSE
39.	B14CS040	Vijay Kumar Paliwal	CSE
40.	B14EE001	Abhishek Mandwale	EE
41.	B14EE002	Abhishek Meena	EE
42.	B14EE003	Akshat Shrivastava	EE
43.	B14EE004	Anand Kumar	EE
44.	B14EE005	Ankush Garg	EE
45.	B14EE006	Anusha Gupta	EE
46.	B14EE007	Archit Sharma	EE
47.	B14EE009	Dara Shanmukha Sai Sanjay Gupta	EE
48.	B14EE010	Deepanshu Bhojak	EE
49.	B14EE011	Guntuku Deepak	EE
50.	B14EE012	Himanshu Verma	EE
51.	B14EE013	Jaiswal Ronak Nilesh	EE
52.	B14EE014	Jay Bhavin Sheth	EE
53.	B14EE015	Kanika Jakhar	EE
54.	B14EE016	Kaviti Sarath Kalyan	EE
55.	B14EE017	Kumari Saumya	EE
56.	B14EE018	Mahak Jain	EE
57.	B14EE020	Mohit Mehta	EE
58.	B14EE021	Naveen Kumar Chittoriya	EE
59.	B14EE022	Parmar Sunny Mukeshkumar	EE
60.	B14EE023	Piyush Sharma	EE
61.	B14EE024	Rahul Negi	EE
62.	B14EE025	Ramesh Kumar	EE
63.	B14EE026	Ravindra Parihar	EE
64.	B14EE027	Rishabh Bhardwaj	EE
65.	B14EE028	Ritu Singh	EE
66.	B14EE029	Sachin Mandowara	EE
67.	B14EE030	Shah Neelkumar Sureshkumar	EE
68.	B14EE031	Shivani Meena	EE
69.	B14EE032	Shounak Kulkarni	EE
70.	B14EE033	Sudhir Pratap Yadav	EE
71.	B14EE034	Thara Giriraj Prasad	EE
72.	B14EE035	Tripti Meena	EE
73.	B14EE036	Vamsi Prudhvi Chintaguntala	EE

74.	B14EE037	Vanam Bhanu Sai Simha	EE
75.	B14EE038	Vidit Jain	EE
76.	B14EE039	Vivek	EE
77.	B14EE040	Yasharth Sahu	EE
78.	B14ME001	Abhishek Sharma	ME
79.	B14ME003	Akhil Bindal	ME
80.	B14ME004	Akshay Vinay Bapat	ME
81.	B14ME005	Aman	ME
82.	B14ME006	Anandhu Suresh	ME
83.	B14ME007	Bandi Sai Mukesh	ME
84.	B14ME008	Boghara Pruthvi Rameshbhai	ME
85.	B14ME010	Jerry Mathew Oommen	ME
86.	B14ME011	Kartik Venkata Ramachandruni	ME
87.	B14ME012	Katakam Harsha Sai Manohar	ME
88.	B14ME013	Kuldeep Meena	ME
89.	B14ME014	Madhvendra Tiwari	ME
90.	B14ME015	Manoj Malviya	ME
91.	B14ME016	Mohammad Sharey	ME
92.	B14ME017	Mohit Vijay	ME
93.	B14ME019	Parella Ravi Teja	ME
94.	B14ME020	Patel Pranav Nareshbhai	ME
95.	B14ME021	Pawan Kumar	ME
96.	B14ME022	Pothula Krishna Teja	ME
97.	B14ME023	Rachit	ME
98.	B14ME024	Rahul Chanania	ME
99.	B14ME025	Rajendra Manda	ME
100.	B14ME026	Rishabh Badodia	ME
101.	B14ME027	Santhoju Shiva	ME
102.	B14ME028	Santhosh M	ME
103.	B14ME030	Shinde Shubham Bhaskar	ME
104.	B14ME031	Shivam Jaiswal	ME
105.	B14ME032	Shivam Srivastava	ME
106.	B14ME034	Shubham Kaushal	ME
107.	B14ME035	Sutariya Monark	ME
108.	B14ME036	Suyog Bodhankar	ME
109.	B14ME037	Udit Singh Parihar	ME
110.	B14ME038	Uma Shankar Sharma	ME
111.	B14ME039	Vanditi Mathur	ME
112.	B14ME040	Vedant Bhuyar	ME
113.	B14SS002	Angad Singh Sabherwal	SS
114.	B14SS003	B Sai Chaitanya	SS
115.	B14SS006	Devanshu Bhavin Kathrecha	SS
116.	B14SS007	K. Tejas Reddy	SS
117.	B14SS008	Katragadda Karthik	SS
118.	B14SS009	Mansi Mittal	SS

119.	B14SS011	Pranali Pawar	SS
120.	B14SS013	Raj Prajapat	SS
121.	B14SS017	Shreyansh Chhajer	SS
122.	B14SS018	Tejas Gattani	SS
123.	B14SS019	Vaibhav Baban Ganer	SS
124.	B14SS020	Yashwant Kumar Meena	SS
125.	B14BS005	Dinesh Kumar Maurya	BISS
126.	B14BS006	Divya Naval	BISS
127.	B14BS009	Kumar Venkateshwar	BISS
128.	B14BS011	Mahesh	BISS
129.	B14BS014	Sahil Bhatia	BISS
130.	B14BS015	Shubham Talbar	BISS
131.	B14BS016	Vishal Verma	BISS

S. No.	Roll No	Name	Branch
1.	B15CS001	Abhishek Sah	CSE
2.	B15CS002	Aditya Agrawal	CSE
3.	B15CS003	Akash Gupta	CSE
4.	B15CS004	Akshay Agrawal	CSE
5.	B15CS005	Amitansh Gangwar	CSE
6.	B15CS006	Amol Thakur	CSE
7.	B15CS007	Anant Kumar Singh	CSE
8.	B15CS008	Ankit Kumar	CSE
9.	B15CS009	Anmol Chhabra	CSE
10.	B15CS010	Aryaman Singh	CSE
11.	B15CS011	Ashish Mittal	CSE
12.	B15CS012	Ashish Yadav	CSE
13.	B15CS013	Bagannagari Vinay Kumar Reddy	CSE
14.	B15CS014	Bhamare Nikhil Daryavsing	CSE
15.	B15CS015	Bhuma Ayyappa Sumanth	CSE
16.	B15CS016	Deewan Singh	CSE
17.	B15CS017	Divyansh Aggarwal	CSE
18.	B15CS018	Harsh Akshit	CSE
19.	B15CS019	Harshit Singh	CSE
20.	B15CS020	Indra Kumar Malav	CSE
21.	B15CS021	Joukani Vinit Pradeep	CSE
22.	B15CS022	Kansagara Bhargav Dineshbhai	CSE
23.	B15CS023	Kishan Sharma	CSE
24.	B15CS024	Kongi Arunsrivardhan	CSE
25.	B15CS025	Marali Jagadeesh	CSE
26.	B15CS027	Praveen Kumar T	CSE
27.	B15CS028	Rajat Babel	CSE
28.	B15CS029	Rajat Mangla	CSE
29.	B15CS030	Rajesh Meena	CSE

30.	B15CS031	Rashi Sahu	CSE
31.	B15CS032	Rashmi Sahu	CSE
32.	B15CS033	Rishabh Arun Kanabar	CSE
33.	B15CS034	Shubham Kumar	CSE
34.	B15CS035	Shukla Anugrah Harish Kumar	CSE
35.	B15CS036	Singamsetty Sandeep	CSE
36.	B15CS037	Sushil Kumar	CSE
37.	B15CS038	Swapnil Ganesh Athawale	CSE
38.	B15CS039	Vinayak Singla	CSE
39.	B15CS040	Vishesh Mistry	CSE
40.	B15EE003	Akshat Agrawal	EE
41.	B15EE004	Amitesh Kumar Jigyasu	EE
42.	B15EE005	Anurag	EE
43.	B15EE006	Ashish Gambhir	EE
44.	B15EE007	B Visveswaraiah	EE
45.	B15EE008	Bhanwar Singh Choudhary	EE
46.	B15EE009	Braj Raj Nagar	EE
47.	B15EE010	Chirayu Parashar	EE
48.	B15EE011	Dheeraj Dhariwal	EE
49.	B15EE012	Divyanshu Agarwal	EE
50.	B15EE013	Gadde Harshavardhan	EE
51.	B15EE014	Gyandeep Singh	EE
52.	B15EE015	Inderpreet Singh Chhabra	EE
53.	B15EE016	Jeet Shah	EE
54.	B15EE017	Karanveer Singh Thakur	EE
55.	B15EE018	Krunal Sanjay Chirmade	EE
56.	B15EE019	Kuldeep Verma	EE
57.	B15EE020	Lalit Kumar Bamanawat	EE
58.	B15EE021	Milind Singhal	EE
59.	B15EE022	Nikhil Negi	EE
60.	B15EE023	Nilesh Kumar Tiwari	EE
61.	B15EE024	Pradeep Choudhary	EE
62.	B15EE025	Pranab Kumar	EE
63.	B15EE026	Rahul Meena	EE
64.	B15EE028	Ramnarayan Choudhary	EE
65.	B15EE029	Riya Chaudhary	EE
66.	B15EE030	Sameer Jalutharia	EE
67.	B15EE031	Sarthak Desai	EE
68.	B15EE032	Saurabh Jangir	EE
69.	B15EE034	Shitendra Kumar Tyagi	EE
70.	B15EE035	Shreyas Malakarjun Patil	EE
71.	B15EE036	Shubham Bhargava	EE
72.	B15EE037	Somender Singh	EE
73.	B15EE038	Sonu Kumar	EE
74.	B15EE039	Vadde Keerthi Aishwarya	EE

75.	B15EE040	Vaibhav Sharma	EE
76.	B15ME001	Aarush Gupta	ME
77.	B15ME002	Abhinay Kumar	ME
78.	B15ME003	Abhishek Meena	ME
79.	B15ME004	Aditya Raj Malviya	ME
80.	B15ME006	Alukapally Gnanadeep	ME
81.	B15ME007	Aniket Janrao	ME
82.	B15ME008	Ankit Jangir	ME
83.	B15ME009	Ankit Mangal	ME
84.	B15ME010	Ashutosh Pathak	ME
85.	B15ME012	Ayush Upadhyay	ME
86.	B15ME013	Chandrapratap Singh Raghuvanshi	ME
87.	B15ME014	Dhagash Desai	ME
88.	B15ME015	Divyanshu Goyal	ME
89.	B15ME016	Gandi Rajesh	ME
90.	B15ME017	Gaurav Meena	ME
91.	B15ME018	Gourav Jeengar	ME
92.	B15ME019	Karthik Mohan	ME
93.	B15ME021	Keshetty Sai Surya	ME
94.	B15ME023	Krishna Goyal	ME
95.	B15ME024	Meka Lalit Sai Chandra Reddy	ME
96.	B15ME025	Mukul Bansal	ME
97.	B15ME026	Nakka Sanket Gangadhar	ME
98.	B15ME027	Neelansh Kamboj	ME
99.	B15ME028	Nitish Kumar	ME
100.	B15ME030	Perisetla Srinivasa Deepak	ME
101.	B15ME031	Quadri Syed Mujtaba Syed Maqsood	ME
102.	B15ME032	Ramesh Kumar	ME
103.	B15ME033	Ritwik Kulkarni	ME
104.	B15ME034	Saurabh Yadav	ME
105.	B15ME035	Sharan Saarsar	ME
106.	B15ME036	Somesh Sharma	ME
107.	B15ME037	Sunil Kumar Sakhnia	ME
108.	B15ME038	Vartha Divyesh Yashvant	ME
109.	B15ME039	Vineet Singh Chauhan	ME
110.	B15ME040	Vivek Kumar Singh	ME
111.	B15BS001	Ankur Kamboj	ME
112.	B15ME005	Akash Gupta	ME

FINANCIAL POSITION

The MHRD has released a sum of Rs. 14625.00 Lakhs as Grant-in-Aid under Normal Plan Head and Rs. 946.68 Lakh as opening balance as on 01-04-2015. The internal income of the Institute was Rs. 828.05 Lakh. The total Plan expenditure during the year was Rs. 13633.61 Lakh (Recurring Rs. 2852.76 Lakh and Non-Recurring Rs. 10780.85 Lakh).

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