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Director’s Report

Honorable Chairman, Board of Governors of the Indian Institute of Technology Kanpur, Professor M. Anandakrishnan, Distinguished Chief Guest, Prof. P. Balaram, Members of the Board of Governors, Members of the Academic Senate, all graduating students and their family members, all members of faculty, staff and students, invited dignitaries, guests, and members of the media: I heartily welcome you all on this occasion of the forty-third convocation of the Indian Institute of Technology Kanpur.

We are particularly happy to welcome Prof. P. Balaram, Director, Indian Institute of Science, Bangalore, amongst us for today’s forty-third convocation.

The academic year closing in May 2011 has been momentous, and I consider it a privilege to review our activities pertaining to this period.

Academic Activities

The academic year 2010-11 has had a successful run. The number of graduating students both at the undergraduate: B Tech - 313, M Sc (5 year Integrated) - 67, B Tech – M Tech Dual Degree (5 year) - 100, M Sc (2 year) - 103 and the postgraduate: M Tech - 242, M Des - 8, MBA - 43, VLFM - 59, PhD - 103 levels shows a satisfactory trend. The enrollment in the Doctoral programme as well as the publication record of the faculty and students for the academic year has considerably increased. Faculty and students published a large number of research papers in journals and conference proceedings. Books published by the faculty are listed at the end of this report.

Awards and Honours

The Institute has played a significant role in pushing the frontiers of knowledge. Our faculty, students and staff have created a niche for the Institute in the world of science and technology. This has been duly recognized in the form of various awards and honors to the faculty including fellowships of professional societies, editorships of international journals, and best paper awards to the students. Awards and honors to our faculty are listed at the end of the report.

Our students Vishal Gupta, Abhijit Sharang have been conferred the prestigious Aditya Birla Scholarship. Umang Khandelwal, Priya Gautam, Kartikey Asthana, Ankit Jain received the O P Jindal Engineering & Management Scholars Scholarship. Mainak Chowdhury, Raghav Khanna, Bhuwan Dhingra, Puneet
Singh, Palak Bhushan, Vishwas Aggarwal, Asish Mahapatra, Akshay Agrawal received the Japanese TODAI Scholarship. It is my pleasure to inform you that this year all the 8 TODAI scholarships have been awarded to IITK students.

Mr. G. C. Patil, Research Scholar (EE), bagged the Best Paper Award for his presentation in the 4th International Student Workshop on Electrical Engineering at Kyushu University, Fukuoka, Japan. Mr. Raghvendra K Chaudhary, Research Scholar (EE), won the Best Student Paper Bronze Award in IEEE, APACE 2010, Port Dickson, Malaysia. Ms. Archana Srivastava, Research Scholar (HSS), bagged the Best Paper Award and Fellowship of the World Business Institute, Australia for her presentation at the Pacific Business Research Conference. K. Shravan Kumar (MSE) received the Best Paper Presentation award at the Annual Technical Meeting of IIM Bangalore. Saurabh Hadas’s (MSE) M.Tech thesis titled “Effect of Initial Porosity and Tempering on the Microstructural Evolution and Mechanical Properties of Sinter-Hardened Steels” was awarded Professor B. D. Upadhyaya Memorial Gold Medal for the best thesis in the materials processing and physical metallurgy area in the department.

Prof. Sandeep Verma (CHM) has been conferred the prestigious Shanti Swarup Bhatnagar Prize in Chemical Sciences. Prof. Sanjay G. Dhande (CSE) & (ME), Director of the Institute, has been awarded the Dewang Mehta Business School Award for his outstanding contribution to higher education in India. Prof. Ashutosh Sharma (CHE) received the first Infosys Prize in Engineering and Computer Science and also was elected fellow of the Third World Academy of Sciences. Prof. R. P. Chhabra (CHE) has been elected a Fellow of the National Academy of Sciences. Prof. Manindra Agrawal (CSE) received the Humboldt Research Award and the TWAS prize in Mathematics. Profss. Debashish Chowdhury (PHY), Kalyanmoy Deb (ME), Sanjay Mittal (AE) and V. K. Singh (CHM) have been elected Fellow(s) of the Indian National Science Academy. Profss. V. Chandrasekhar and R. N. Mukherjee (CHM) have been chosen to receive the Chemical Research Society of India Silver Medal for the year 2011. Profss. Y. D. Vankar (CHM) and G. Biswas (ME) currently Director, CMERI, Durgapur, have been awarded the J. C. Bose Fellowship. Prof. Dipak Mazumdar (MSE) has been selected for the Indian National Academy of Engineering Chair Professorship.

Prof. Suchitra Mathur (HSS) has been chosen for the Gopal Das Bhandari Memorial Distinguished Teacher Award given by the Institute. Late Prof. R. Balasubramaniam (MSE), late Prof. S. D. Joglekar (PHY), late Prof. V. N. Kulkarni (PHY), Dr. Amit Mitra (MATH) and Dr. S. S. K. Iyer (EE) have been awarded the Distinguished Teacher Award for the year 2010.
Dr. S. Ganesh (BSBE) has been chosen for the DAE-SRC Outstanding Research Investigator award. Dr. Priyanka Ghosh (CE) has been conferred the Outstanding Young Investigator Award by the International Association for Computer Methods and Advances in Geomechanics. Dr. Jayant Kumar Singh (CHE) has won the Amar Dye-Chem Award (2010). Prof. T. K. Chandrashekar (CHM), currently Director of NISER Bhubaneswar, has been conferred the D. S. Kothari Gold Medal at the Indian Science Congress. Dr. Anindita Chakrabarti (HSS) has received the prestigious Prof. M. N. Srinivas Memorial Prize 2010 awarded by the Indian Sociological Society. Dr. S. Mahesh (ME) has been selected for the INAE Young Engineer Award 2010. Dr. Kantesh Balani (MSE) has received the INAE Young Engineer Award 2010 as also the 2010 Young Metallurgist of the Year. Dr. Krishanu Biswas (MSE) has been selected for the BOYSCAST fellowship of the DST. Dr. Bikramjit Basu (MSE) has been selected for the Ministry of Steel funded Best metallurgist of the year award.

Research & Development Scenario

During 2010-2011, 127 sponsored projects worth Rs. 10652 lakh and 97 consultancy projects of value Rs. 898 lakh were sanctioned. Major grants sanctioned by various agencies during the year are DST Rs. 2988 lakh, MHRD ` 2070 lakh, MOEF ` 1648 lakh, MNRE Rs. 687 lakh, ADA Rs. 566 lakh, and DBT Rs. 564 lakh. Some of the major research organizations or industries which have funded projects at IITK are HAL, Intel, NTPC, RDSO, L&T, TCS, Microsoft Research India, GE India Technology Center, ICRISAT, IGCAR, NTPC, CDAC, ISRO and BARC. A list of major projects is given at the end of the report. At the international level, organizations like Chevron, NASA, IHI, Boeing, P&G, Honda have funded our research.

I am extremely happy to share with you the wonderful news that a paper titled Melting of the Earth’s Inner Core co-authored by Dr. Binod Sreenivasan (ME) has been published in the prestigious journal Nature. The Institute has filed over 28 patents during the last year. Also, 11 inventions have been accepted by Intellectual Ventures for patenting and commercialization. In the last financial year, our earnings from intellectual property is close to $ one lakh.

A consortium of 7 IITs led by IIT Kanpur, involving more than 100 faculty members from various institutions and organizations has been formed for working on the Ganga River Basin Management Plan. The project is being funded by MOEF at a cost of Rs. 16 crore. Interdisciplinary thematic groups covering a broad range of issues such as environmental quality and pollution, water resources management, fluvial geomorphology, ecology and biodiversity, socio-
cultural and socio-economic factors, policy, law and governance, geo-spatial data and communication have been formed to execute the project.

I am pleased to inform you that Boeing Company, USA in appreciation of our research output in the area of RFID and Condition Based Monitoring (CBM) has decided to continue its support for the fifth consecutive year. In the area of RFID, we have been working on the design of innovative reader antennas for portable RFID reader. The primary objective here is to make the antenna as sleek and compact as possible. CBM for air compressors and motors allows the maintenance activity to be scheduled efficiently.

Our Samtel Centre for Display Technologies is exploring possibilities of commercial applications of Organic Solar Cells (OSC) with its industrial partners Tata Steels and OSC sub-modules with MoserBaer. In the area of solid state lighting with organic light emitting diodes, the center has developed new technologies for better extraction of light from the device which is a key issue in this technology. In the area of printable electronics, the centre has developed a method of printing micron size width of nano gold ink.

IIT Kanpur has embraced a multidisciplinary approach to strengthen ongoing research on new and challenging areas of solar energy development. Towards this end, the Institute has set up a Solar Energy Research Enclave (SERE) with the objective of developing a solar photovoltaic technology demonstrator with various modular components and associated laboratories. SERE is receiving widespread external funding and has brought together faculty members from several departments of the institute.

I am happy to inform you that while presenting the Railway budget of 2011-12, the Minister for Railways announced that “success of the pilot project of SIMRAN, jointly developed by IIT Kanpur and RDSO, a Real Time Train Information System (RTIS) will provide reliable information on train running.” SIMRAN is expected to contribute directly to the modernization of Indian Railways by benefiting passengers and improving the efficiency of the system.

The next green revolution is sure to be driven by knowledge, especially with the challenge of climate change looming ahead. IIT Kanpur has been working on ICT in agriculture with special emphasis on agriculture knowledge management. Some of the major innovations that have come up include: use of semantic web and social networking technologies in agriculture knowledge creation and
dissemination, automatic tagging for meta-data population, re-usable learning objects management in agriculture and extension content delivery. These efforts are supported by National Agricultural Innovation Projects funded by ICAR.

A software developed during the past year is LAS Viewer. This is a LiDAR data display and analysis software aimed at providing multiple kinds of views including immersive view, measurement, points of interest and areas of interest sharing at a fast speed. A LiDAR simulator called Limulator which can generate data similar to actual LiDAR sensors for artificially created terrain and other features has also been developed. In the same area, capability for capturing, storing, displaying and analyzing 3D laser images has been developed using a secure proprietary .dli data format for DRDO.

The Ministry of New and Renewable Energy has sanctioned a grant of Rs. 6.6 crore for the Design and Development of Organic Solar Cells Sub-modules. The project proposes to build sub-modules with polymer based organic solar cells that will be useful for practical applications. The three-year project targets building a base-line process to manufacture small area organic solar cells of at least 5% power conversion efficiency (PCE) with a six months lifetime, followed by a 10 cm by 10 cm sized sub-module which will have a PCE of 4% and an estimated lifetime of 3 years.

IIT Kanpur is leading an NMEICT, MHRD funded Enterprise Resource Planning consortium mode project having a funding of Rs. 19.36 crore. The other consortium members are AMU Aligarh, AVV Kochi, DEI Agra, IGNOU Delhi, IIT Roorkee, JMI Delhi, NIT Hamirpur, and SMVDU Jammu. The project envisages designing, developing, implementing and maintaining software services to make them available for all the educational institutes of the country.

Research Infrastructure Development

The Institute strives to provide state-of-the-art equipment to its faculty, students and staff to facilitate cutting edge research in the frontier areas of science and technology.

Under the FIST scheme of DST and with additional support from the institute, the Department of Chemistry is procuring a time resolved resonance Raman spectrometer. This facility is available only at a few selected centers across the world. The upcoming facility promises to be unique in addressing the requisite laser wavelength tunability (215 nm – 1064 nm), anaerobic and cryostatic sample chamber, ultra-sensitive detectability and ultrashort time resolution (5 ns). The
facility is likely to interest several other departments across the Institute for e.g., MSE, CHE, Physics and BSBE.

The Department of Electrical Engineering has received a grant of Rs. 490 lakh from the DST under its FIST scheme for procuring a Real-Time Simulator, Millimeter Wave Network Analyzer, Light wave measurement system, Optic-wave photonic EDF amplifier, Laser Driver and Fusion Splicer, Wireless Network Simulator and Research Platform, Shadow Hand and a Biomorphic Robotic Arm, Control Research Platforms and a Four Wheel Drive and Four Wheel Steer.

A new State-of-the-Art 372-node High Performance Computing cluster has been recently inaugurated at the Computer Centre. It has been sponsored by the Department of Science and Technology and is based on Intel Xeon Quadcore processors with a total of 2944 cores and high-speed Infiniband network with a peak performance of 34.5 TF. It has greatly facilitated high-end computational research in the Institute covering several areas of science and engineering. On the infrastructural side, a modern data centre with state-of-the-art precision air conditioning and fire safety features is being built in the central area of the Computer Centre.

The Department of Aerospace Engineering has established a new DST supported experimental laboratory for the design, development and testing of an autonomous mini helicopter.

To carry out advanced research on practical power and control system problems, the Department of Electrical Engineering is setting up a 6-rack Real Time Digital Simulation (RTDS) facility which is the biggest in Asian academic institutions. For setting up this facility, DST has sanctioned a funding of about Rs. 7.6 crore under its IRHPA scheme. The facility can simulate the transient behavior of practical systems using a time step of upto two microseconds. Two major research activities planned are Synchrophasor Applications in Power Systems and Grid Integration of Wind Farm/Solar Photovoltaics using AC as well as DC microgrids.

During 2010-11, under its CARE scheme the Institute has procured the following facilities: X-Ray Fluorescence (XRF) spectrometer, laser-induced incandescence, dynamic high-resolution polarized inverted laser confocal fluorescence microscopy, Scanning Electron Microscope, a probe station for temperature and magnetic field dependent electrical measurements on thin films, devices and materials.
International Academic Collaborations

The Institute has entered into MoUs with the University of Missouri -Columbia, USA, Yale University, USA, University of Waterloo, Canada and ParisTech – Paris Institute of Science and Technology, Paris, France.

Financial Resource Mobilization

The Institute has had a satisfactory financial year during 2010-11. The total Grant-in-aid received during the financial year from MHRD, Govt. of India, under non-plan was Rs. 112.30 crore, under Normal Plan Rs. 51.78 crore and Rs. 50.00 crore under plan (OSC), respectively.

The financial year 2010-11 has been reasonably good for fund raising at IIT Kanpur. The Institute received Rs. 4.08 crore from 872 donations made by 772 donors (501 donors from India and 271 donors from abroad). The Institute proposes to introduce initiatives to draw the corporate world and well-placed alumni to donate to IIT Kanpur and also to increase the number of donors.

A total of 461 donors (297 donors from India and 164 donors from abroad) contributed Rs. 33.12 lakh under the Annual Gift Programme. Donations received under AGP have been utilized for providing travel support to the students and faculty for attending international conferences, cash award to students for publication of their research papers in reputed journals, travel support to international visiting faculty, filing of patents, students scholarships and other activities supporting and encouraging excellence in the Institute.

State Bank of India has given a donation of Rs. 50.00 lakh for establishing the State Bank Chair in the area of Environment and Energy at the Institute.

Mr Sudhir M. Mittal (BT/CHE/70) has made a donation for establishing Dr. Jag Mohan Garg Chair at IIT Kanpur. Ministry of Earth Sciences (MoES) has donated Rs. 1.5 crore to establish D. N. Wadia Chair in the Institute. Ministry of Steel has committed to institute Ministry of Steel Chair in the area of ‘Ferrous Metallurgy’ and five scholarships to undergraduate students. Dr. D. S. Hur, CEO of GS Caltex has created two young faculty Research Fellowships to honor Mr. Jeet S Bindra (Ex-President Chevron Global and BT/ChE/1968), a distinguished alumnus of IIT Kanpur and another to honor Prof. Arakare Vasudev, former faculty member of IIT Kanpur and teacher of Mr. Jeet S. Bindra. Microsoft Research Lab India Pvt. Ltd. has donated Rs. 3.60 lakh for MSR India outstanding Young Faculty Award.
Mr. Sanjay Pradhan (BT/ChE/1986) and Mr Pramath Sinha (BT/MME/1986) have announced creation of two chairs during the recently held Silver Jubilee Reunion of their batch.

The Institute has received a promise of donation for US$ 1.5 million from Rajiv Motwani Foundation for construction of the new CSE Building.

Several donors have instituted new scholarships during the financial year 2010-11. To mention only a few: Mr. Manoj K. Singh (BT/ME/84) has instituted ‘Saraswati Singh Scholarship’; Mr. Santosh Mehra (BT/EE/66) has instituted ‘Anita and Santosh Mehra Scholarship’; Mr. Ravi S Bhagavatula (MScI/Phy/89) has instituted ‘Bhagavatula Project Award’; Mr. Chandra M. Srivastava (BT/ChE/65) has instituted ‘Behari lal and Nalini Srivastava Memorial Scholarship’; Prof. Sanjay Mittal (BT/AE/88) has instituted ‘Dr. R. K. Singhal Memorial Scholarship’; Prof. Ashok Saxena (BT/ME/70) has instituted ‘Shanti and Ram Kishore Sahai Saxena Memorial Scholarship’; Ms. Saurhaa Monika Banerjee (non-alum) has instituted ‘Vimal Madaan Memorial Scholarship’; Prof. Brahma Deo (faculty, IITK) has instituted ‘Steel Scholarship’; Mrs. Vidula S Jakatdar, mother of Priyadarshan Jakatdar, (BT/EE/79) has instituted ‘S. Y. Jakatdar Memorial Scholarship’; Mr. R. Balasubramanian ((BT/ME/89) has instituted ‘Balasubramanian & Visalakshi Scholarship.

World Quant Foundation, USA has instituted two Scholarships of USD 1000 each for IITK students. The Foundation stands committed to offer these two scholarships every year. IIT London Chapter has instituted one IIT London Chapter Scholarship which will be given every year. Dr. Gopal Shankar Upadhyaya (Retired professor of IITK) has donated Rs. 2.00 Lakh for instituting ‘Samsonov Memorial International Lecture Series’ in the Department of Material Science & Engineering.

SURGE 2010 programme was conducted during summer 2010 which saw student participation of 122 members from 115 Institutes, and faculty participation of 80 members from IIT Kanpur as mentors. These figures for 2010 are nearly twice as that of the previous year. The selection of student participants was very competitive as 1500 applications were received from various institutions in the country.

The Institute encourages research by providing travel support to students and faculty members, rewarding students for publishing research papers in high quality journals. Institute has provided travel support to 148 students for attending international conferences, and cash awards to 128 students for...
publication of their research papers in reputed ISI Web Journals during the financial year 2010-11.

The Institute recognizes outstanding faculty by providing chairs and fellowships, supporting registration of patents, awarding summer internships and supporting schools on campus. These activities are being supported by alumni donations.

The IIT Kanpur Golden Jubilee celebrations started in August 2009 have just been concluded. A number of events, conferences, student/faculty/staff activities were organized during the Golden Jubilee year.

There exists an enormous potential for actively engaging our alumni. The challenge ahead of us is to sensitize all the segments of the institute about alumni engagement and fund raising. Without a supportive environment at the grassroots level within the Institute, it may be difficult at times for our alumni and well-wishers to reach out to us. The Institute needs to create a substantial demand for donor funds, for the alumni to respond enthusiastically.

Students’ Activities

IIT Kanpur continually strives to encourage an equitable balance between academics and extra-curricular activities among its students. Our vision is to create future leaders in their chosen fields and not just technically accomplished individuals. The Institute strongly believes that an abiding social and humane engagement is the hallmark of its student body. To translate such a belief into reality, the Institute nurtures social, cultural and sporting activities pursued by the students’ gymkhana and other student groups.

With contributions from more than 200 students over a period of three years, Jugnu nanosatellite is now in its final integration stage for its launch by ISRO’s PSLV C-18 rocket, currently scheduled for July-August 2011. Weighing less than 3 Kg (10 cm x 10 cm x 32 cm in size) with most functionalities of microsatellite (~100 Kg) on a small platform, the payload of the satellite includes an indigenously designed camera for near IR remote sensing, a GPS receiver and MEMS based Inertial Measurement Unit. Jugnu will be launched from Satish Dhawan Space Centre (SHAR), Sriharikota.

This satellite mission was a unique learning experience and also a trend setter in the country. Many universities in the country have now started working on such nano satellite missions. This mission is also expected to help ISRO in their
programmes by providing them a standard proven platform for testing newer technologies and thus helping in reducing cost, development and testing time.

A variety of activities are pursued by various clubs coming under the broad ambit of the councils of the Gymkhana. They range from clubs like Prayas, where students teach children coming from socially disadvantaged and economically deprived backgrounds to the Dramatics club which stages thematically inspired and socially relevant plays. Other technically oriented student groups are engaged throughout the year in pursuing special interests like robotics, electronic aids, animation, aero-modeling, dance, fine arts, and astronomy to name only a few activities.

The overriding objective of the large-scale events of the Institute such as Antaragni (the cultural festival), Techkriti (the technical and entrepreneurship festival) and Udghosh (the sports festival) is to infuse a sense of richness and purpose in the lives of students. All these social, cultural and sporting activities play a crucial role in the transformation of a student into a complete human being. These festivals have seen vastly improved participation levels, both from within the Institute and also from students from other national and international institutions. The revenues generated for conducting these festivals saw an impressive growth last year, which is a tribute to the managerial and logistic skills of our students. During the year, several talks with eminent personalities like Retd. Ambassador Arundhati Ghose and other such luminaries were organized.

The Institute sports teams also participated in the Inter IIT Sports meet this year held at IIT Delhi. The Badminton men’s team was successful in securing a Gold. The Institute team visited IIT Roorkee to participate in the sports festival; our tennis & hockey teams won silver medals. The TT Team was successful in securing a Gold Medal at MNIT’s Sports meet.

The Institute witnessed stiff inter- Hall competition in the form of Galaxy, Takneek, Spectrum and Varchasva, inter- Hall Cultural, Science & Technology, Films & Media and Sports championships respectively. Fresher Varchasva tournament also was organized to find some new talent from the incoming batch. The sole guiding principle behind organizing these championships is to provide the students of this campus, a much needed platform to compete and showcase their cultural and sports talents and to give them a reason and a motivation, strong enough, to come out of their rooms and participate in group activities.

Significantly, the students also engaged in an Energy Saving Competition amongst hostels through an Inter-Hall Competition called Green Opus. The results were
astounding in that the students just by internal competition were able to markedly reduce the average energy consumption. Results from all the five Inter Hall Competitions were then used to identify the winner of the Overall Championship Trophy.

The Counselling Service is an active wing of our students. The activities include organizing the orientation programme for UG as well as PG students; providing specific attention to students having academic, financial or personal problems; monitoring the progress of students who need special attention. It enjoys wide appreciation from both faculty and students alike.

After a two-year low, the economy bounced back and the Placement Office received a good response from the industry. This year we saw the presence on campus of many past recruiters who went low on recruitment for the last couple of years. There was also an overwhelming response from the Consultancy, FMCG and Core sectors and many new companies have been added to our list.

753 students registered for placements this year, of which 660 have job offers from 160 companies that took part in the placement process. Thus our overall placement record stands at 88%. The break-up is as follows: B.Tech 89%, Dual 96%, M.Tech including M.Des 81%, M.ScI 90%, M.Sc 2yr 83%, and MBA 98%. We are still awaiting the outcome for some of the candidates who participated in the campus placement drive.

The relationship with alumni was further strengthened with Mr. Anurag Singh of 1986 batch presenting the SPO with a State-of-the-Art Portal to be used for the placement process. Ms. Madhu Chadda from the 1979 batch along with her team conducted a 3-day workshop on personality and soft skills development.

The Career Counseling Program continued successfully with a significant rise in the number of students who availed this facility.

The Institute has put in place the entire infrastructure necessary to meet the requirements of the enhanced student strength. As of now, there are eleven halls of residence, nine for boys and two for girls. The total capacity in these halls is over five thousand.

Closing Remarks

Dear graduates, on this occasion of the forty-third convocation, I congratulate each of you on your achievements. I extend my best wishes to Class of 2011 passing out
today. I also take this opportunity to salute your parents for being with you and encouraging you to continually strive for excellence.

As individuals you will choose the profession that excites you, that generates intellectual passion within yourself, engages your mind in the best possible way. I fervently hope that you would be successful in your endeavors. Today, you will be leaving the protected environment of this Institute to find your place in the larger order of the society. Prepare yourself to evaluate the needs of others and respond to the call for action.

Graduates, you have the responsibility of changing this world into a better place to live in. You are supremely qualified to bring about this transformation given your training, passion, knowledge, and determination. Innovate, create and forge ahead. As leaders, you should continually strive to usher in a revolution of quality in both professional and social domains. Always look for ways and means to help your countrymen. Discover your own mantra to create wealth for the benefit of the human society. With your personal standards of excellence, you are ready to evolve just policies that would leave no community or race behind. Simply put, if you cannot break the chain of poverty nobody else will be able to!

Dear Graduates of 2011, I admire you for your fine accomplishments during your stay at IIT Kanpur. Given your intellectual attainments and breadth of understanding, you are destined to bring cheer, hope, joy and luck in all the lives you touch. Each of you in your own way has internalized the spirit of IIT Kanpur that privileges commitment, excellence, fellowship, and, importantly, service. No matter where you are and what your vicissitudes, continue to dream and dream big at that! Never forget that “in [your] dreams begin responsibilities.” Therefore, be a practical dreamer and see that in your lifetime you change this world a little bit. My sincere, good wishes for the productive work you aspire to do in the future.

Books

11. Logic and Its Applications, 4th Indian Conference, ICLA 2011, Delhi, India, January 2011, Proceedings; Co-edited with A. Seth (CSE); Lecture Notes in Artificial Intelligence, Volume 6521, Springer-Verlag, Berlin, Mohua Banerjee (MATH).
13. Stochastic Transport in Complex System. Debashish Chowdhury (PHY) coauthored with A Schadschneider (University of KölN, Germany) and K Nishinari (Univ. of Tokyo, Japan). ELSEVIER (Amsterdam, The Netherlands).

Fellowships

1. Prof. Sanjay Mittal (AE) elected Fellow of the Indian National Science Academy.
2. Prof. Sandeep Verma (CHM) elected Fellow of the Indian Academy of Sciences, Bangalore.
3. Prof. A. Chandra (CHM) received the Ramanna Fellowship.
4. Prof. J. N. Moorthy (CHM) elected Fellow of Andhra Pradesh Academy of Sciences, Hyderabad.
5. Prof. Y. D. Vankar (CHM) received the J. C. Bose National fellowship.
6. Prof. V. K. Singh (CHM) elected Fellow of the Indian National Science Academy.
7. Prof. Ashutosh Sharma (CHE) elected Fellow of the Third World Academy of Sciences.
8. Prof. D. Kunzru (CHE) elected for G. M. Abhyankar Memorial Distinguished Fellowship in Chemical Engineering, by the Institute of Chemical Technology, Mumbai.
9. Prof. R. P. Chhabra (CHE) elected Fellow of the National Academy of Sciences, India.
11. Prof. G. Biswas (ME) currently Director, CMERI, Durgapur, received the J. C. Bose Fellowship.
12. Dr. A. Garg (MSE) received the Endeavour Research Fellowship Award (Australian Government), 2010-11.
13. Dr. Krishanu Biswas (MSE) selected for the BOYSCAST fellowship of the DST.

Awards

1. Dr. D. P. Mishra (AE) received the Samanta Chandra Sekhar award instituted by Orissa Bigyan Academy.
2. Dr. D. P. Mishra (AE) received the Vikas Prerak Award from Bharat Vikash Sangam.
3. Dr S. Ganesh (BSBE) received DAE-SRC Outstanding Research Investigator Award.
4. Prof. Sandeep Verma (CHM) received the Shanti Swarup Bhatnagar award for Chemical Sciences.
5. Prof. T. K. Chandrashekar (CHM), currently Director of NISER Bhubaneswar, was conferred the D. S. Kothari Gold Medal at the Indian Science Congress.
6. Prof. V. Chandrasekhar (CHM) selected for the Chemical Research Society of India Silver Medal in recognition of his extensive and outstanding contributions to research in Chemistry.
7. Prof. R. N. Mukherjee (CHM) selected for the Chemical Research Society of India Silver Medal in recognition of his extensive and outstanding contributions to research in Chemistry.
8. Prof. Ashutosh Sharma (CHE) received the Infosys Prize under Engineering and Computer Science category instituted by Infosys Science Foundation.
9. Prof. Ashutosh Sharma (CHE) received the MRSI Distinguished Lectureship Award instituted by the Materials Research Society of India.
10. Prof. Ashutosh Sharma (CHE) received the Kapitsa Gold Medal, Russian Academy of Natural Sciences, RANS.
11. Prof. Ashutosh Sharma (CHE) received the R. C. Mehrotra Memorial Life Time Achievement Award of the Indian Science Congress Association.
12. Prof. Ashutosh Sharma (CHE) received The Syed Husain Zaheer Medal of the Indian National Science Academy (INSA).
13. Dr. Jayant Kumar Singh (CHE) received the Amar Dye-Chem Award.
15. Prof. Manindra Agrawal (CSE) awarded the Humboldt Research Award.
16. Prof. Manindra Agrawal (CSE) awarded the Third World Academy of Sciences Prize in Mathematics.
17. A company Geokno India Pvt. Ltd. incubated through SIIC, IIT Kanpur by Dr. Bharat Lohani (CE) was awarded the ISBA start up of the year in ICT category.
18. Dr. Priyanka Ghosh (CE) conferred the Outstanding Young Investigator Award by the International Association for Computer Methods and Advances in Geomechanics (IACMAG).
19. Prof. G. Neelakantan (HSS) was felicitated in recognition of his significant research contributions to Contemporary American Literature at the International Seminar on Humanistic Language and Literature Teaching.
20. Prof. Suchitra Mathur (HSS) selected for the Gopal Das Bhandari Memorial Distinguished Teacher Award of IITK.
21. Late Prof. R. Balasubramaniam (MSE), late Prof. S. D. Joglekar (PHY), late Prof. V. N. Kulkarni (PHY), Dr. Amit Mitra (MATH) and Dr. S. S. K. Iyer (EE) were awarded the Distinguished Teacher Award (2010) of IITK.
22. Dr. Anindita Chakrabarti (HSS) received the Dr. M. N. Srinivas Memorial Prize awarded by the Indian Sociological Society.
23. Prof. N. K. Sharma and Manu Kanchan (IME) won the Best Paper Award, AGCETI 2010.
24. Prof. R. R. K. Sharma (IME), judged Outstanding Management Researcher at AIMS-7 conference held at IIM Bangalore.
25. Prof. Sanjay G. Dhande (ME & CSE) awarded the Dewang Mehta Business School Award for his outstanding contributions to higher education in India.
26. Dr. S. Mahesh (ME) received the INAE Young Engineer Award.
27. Dr. Kantesh Balani (MSE) received the INAE Young Engineer Award.
28. Dr. Kantesh Balani (MSE) received the NASI Young Scientist Platinum Jubilee Award.
29. Dr. Kantesh Balani (MSE) received the Young Metallurgist of the Year award by Ministry of Steel, Government of India.
30. Dr. Bikramjit Basu (MSE) awarded the NASI-Scopus Young Scientist Award.
31. Dr. Bikramjit Basu (MSE) received the Best Metallurgist of the Year Award instituted by Ministry of Steel, Government of India.
32. Prof. Dipak Mazumdar (MSE) received the INAE Visvesvarya Chair Professorship, 2011.
33. Dr. K. Biswas (MSE) received the IEI Young Engineers Award of IE (India).
34. Dr. Vivek Verma (MSE) received the Shri Ram Arora Award.
35. Dr. Shalabh (MATH) selected for the Mahalanobis Memorial Medal.
Editorships

1. Dr. D. P. Mishra (AE), Member of the Editorial board of the Chinese Institute of Engineers, Published by Taylor & Francis.
2. Prof. R. N. Mukherjee (CHM), Member, Editorial Board of Inorganica Chimica Acta by Elsevier.
3. Prof. J. N. Moorthy (CHM), Member of the Editorial Board of New Journal of Chemistry.
5. Dr. Debabrata Goswami (CHM), Member of the Editorial Board of Review of Scientific Instruments, by American Institute of Physics.
6. Prof. Mukesh Sharma (CE), Member of the Board of Associate Editors of Environmental Engineering Science by Mary Ann Liebert Inc., New Rochelle, NY.
7. Prof. Mukesh Sharma (CE), Member of the Editorial Board of the International Journal of Environmental Science and Engineering, David Publishing Company, Libertyville, Illinois, U.S.A.
8. Dr. Y. N. Singh (EE), Member of the Editorial Board of ISRN Communications, Hindawi Publishing Corporation.
9. Prof. S. Qureshi (EE), Editor of STM Journal VLSI Design Tools and Technology.
10. Prof. G. Neelakantan (HSS), Member of the Editorial Board of Philip Roth studies published by Purdue University Press, USA.
11. Ms. Shatarupa Roy (HSS), Associate Editor of the current volume of Design Principles and Practices: An International Journal, University of Illinois Research Park, USA.
12. Prof. B. K. Pattnaik (HSS), Member of the Editorial Board of Bangladesh Sociological Studies: an International Bi-Annual journal.
13. Prof. D. Kundu (MATH), Member of the Editorial Board of Modern Applied Statistical Methods.
14. Prof. D. Kundu (MATH), Member of the Editorial Board of Statistics and Its Application.
15. Prof. D. Kundu (MATH), Member of the Editorial Board of Communications in Statistics – Theory and Methods.
16. Prof. D. Kundu (MATH), Member of the Editorial Board of Journal Communications in Statistics – Simulation and Computation.
17. Dr. Shalabh (MATH), Member of the Editorial Advisory Board of Proceedings of Indian Society of Mathematics and Mathematical Sciences.
18. Dr. Mohua Banerjee (MATH), Editorial Board of the journal Fuzzysetsand Systems.
19. Dr. Kantesh Balani (MSE), Editorial Board of Recent Patents on Materials Science (Bentham).
20. Dr. Kantesh Balani (MSE), Editorial Board of Recent Patents on Nanotechnology (Bentham).
21. Dr. Kantesh Balani (MSE), Associate Editor of Nanomaterials and Energy (ICE Publishing).
22. Dr. B. Basu (MSE), Associate editor, Biomaterials and Biodevices.
23. Dr. B. Basu (MSE), Member of the Editorial Board Materials Science and Engineering: C - Materials for Biological Applications (Elsevier Journal).
24. Dr. B. Basu (MSE), Member of the International Editorial Board of Indian Institute of Metals-University Press Series.
25. Dr. B. Basu (MSE), Associate Editor, Bioceramics Development and Applications; Ashdin Publishing, Belgium.
26. Dr. B. Basu (MSE), Member of the Editorial Board of Journal of Materials Engineering Innovation - IJMatEI, published by Inderscience Publishers, UK.
27. Dr. B. Basu (MSE), Member of the Editorial Board of International Journal of Biomaterials, published by Hindawi Publishing Corporation, USA.
28. Dr. Anish Upadhyaya (MSE), Member of the Editorial Board of Powder Metallurgy.
29. Dr. P. Venkitanarayanan (ME), Associate Editor of Experimental Mechanics (the official journal of the Society for Experimental Mechanics), published by Springer.
30. Dr. Avinash K Agarwal (ME), Associate Editor of International Journal of Vehicle Systems Modelling and Testing (IJVSMT) ISSN.
31. Dr. Shantanu Bhattacharya (ME), Associate Editor of the Nanotechnology and Nanoscience.
32. Dr. Gautam Biswas (ME), Member of the Editorial Board of the Indian Journal of Engineering & Materials Sciences (IJEMS).
33. Dr. V K Jain (ME), Associate Editor of the International Journal of Machining Science and Technology, published by Taylor and Francis.

**Major projects sanctioned**

- Applications of biofuel for aviation (DST);
- Experimental investigation of flow separation in proposed aura intake duct and its control (ADA);
- Development of computational aeroelasticity code for helicopter rotor loads and dynamic response analysis (HAL);
- Design and optimization of a bioartificial liver support using cryogel based bioreactor for treatment of acute liver failure (DBT);
• Structural and biochemical studies to understand the role of a unique GTPASE ENGA in ribosome biogenesis (DBT);
• Gastro-esophageal transport and reflux: a comprehensive analysis using an interdisciplinary approach (DBT);
• Discovery of novel modulators of neurotoxicity as potential therapeutic interventions (DAE);
• Unraveling the role of human non-coding satellite-III transcripts in cellular stress response (DBT);
• Measurement of aerosol and droplet microphysical models (BRNS);
• Preparation of GRBMP (MOEF);
• Paleoseismic & GPS studies for active fault mapping and slip rate estimation in NW-central Himalaya, India (JICA);
• Fabrication of arrays of nano-sized metal particles/1d nanostructured materials (DMSRDE);
• Targeted multifunctional polymer capsules: a versatile drug carrier and bioimaging agent (DBT);
• Coordination polymers of transition and lanthanide metals for heterogeneous catalysis, luminescence and magnetic studies (DST);
• Inorganic hybrid helicate and encapsulation assembly mimicking cell and DNA structure (DST);
• Speech based access for agriculture commodity prices in six Indian languages (MCIT);
• ERP-mission (MHRD);
• Synchronous live lecture delivery system-Brihaspatisync (MHRD);
• Setting up real time digital simulation facility for advance research in power and control (DST);
• Development of carbon nanotube coated backing structure/ bipolar plate for the PEM fuel cells: performance evaluation (STC);
• MEMS based health management system for automotive brake & steering subsystems (ADA);
• Study of flow structures and associated acoustics in a weapon bay cavity using les (ADA);
• A study of the effects of wake passing on turbine blade film cooling (MOD);
• Advancing the efficiency and production potential of excitonic solar cells (APEX) (DST);
• Syndicate bank entrepreneurship research & education centre (Syndicate bank);
• Technology business incubator (DST);
• Passive matrix full color organic light emitting diode (OLED) display with commercial specifications (DST).
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New Delhi - 110 001

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New Delhi - 110 001

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128, ‘C’ wing, Shastri Bhawan,
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Confederation of Indian Industry  
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Guwahati – 781 039

Prof. S.C. Saxena  
Director, IIT Roorkee  
Roorkee – 247 667
Annual Report 2010-2011

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Camp Office, Deptt. of Computer Science & Engineering
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Andhra Pradesh, India

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Samanatapuri (Rearside of Hotel Swosti Plaza)
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PWD Rest House 2nd Floor
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Mandi – 175001, Himachal Pradesh
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M Block, Institute of Engineering & Technology  
Devi Ahilya Vishwavidyalaya Campus  
Khandwa Road, Indore – 452 017  
Madhya Pradesh, India

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Chennai Mathematical Institute Chennai  
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Tata Institute of Fundamental Research (TIFR)  
Homi Bhabha Road  
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Special Secretary (TE)  
GOI, Department of Secondary & Higher Education,  
Ministry of Human Resource Development  
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New Delhi – 110 115

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Secretary, Department of Information Technology  
New Delhi
Smt. Pratima Dikshit  
Director (TE)  
GOI, Ministry of Human Resource Development  
Department of Secondary & Higher Education  
Shastri Bhawan  
New Delhi – 110 001

Shri Yatendra Kumar  
Under Secretary  
GOI, Ministry of Human Resource Development  
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Technical Section- 1, Shastri Bhawan  
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Smt. Prisca Mathew  
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Department of Secondary & Higher Education  
Technical Section – 1, Shastri Bhawan  
New Delhi – 110 001

Shri Kamal Ranjan Saha  
Section Officer  
GOI, Ministry of Human Resource Development  
Department of Secondary & Higher Education  
Technical Section-1, Shastri Bhawan  
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GOI, Ministry of Human Resource Development  
Department of Secondary & Higher Education  
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Shri Parveen Jargar  
Section Officer  
GOI, Ministry of Human Resource Development  
Department of Secondary & Higher Education  
Technical Section-1, Shastri Bhawan  
New Delhi – 110 001
 Secretary

Shri Ashok Thakur, IAS
Special Secretary (TE)
GOI, Ministry of Human Resource Development
Department of Secondary & Higher Education
Shastri Bhawan,
New Delhi – 110 001

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Director
Indian Institute of Technology, Kanpur
Kanpur-208016

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Shri N K Sinha, IAS
Joint Secretary
GOI, Ministry of Human Resource Development
Department of Secondary & Higher Education
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Prof. Rajendra Govind Harshe
8301, La Paloma Apartment
House No. 8-2-693
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Hyderabad – 500 034

Prof. D. V. Singh
Former Vice Chancellor, Roorkee University &
former Director, CRRI
Sunbreez Apartments
1002, Tower-B, Vaishali, Sector-V
Ghaziabad, UP

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Uttar Pradesh Government:

Professor R. S. Nirjar
Former Vice Chancellor, Gautam Buddha University
House No. P02/01, Silver City II
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Gautam Buddha Nagar- 201 310 (U.P.)

Senate Nominees (Members):

Professor I. D. Dhariyal
Department of Mathematics and Statistics
Indian Institute of Technology, Kanpur
Kanpur - 208016

Professor Rajiv Shekhar
Department of Materials Science and Engineering
Indian Institute of Technology, Kanpur
Kanpur – 208016
SECRETARY:
Shri Sanjeev S Kashalkar
Registrar & Secretary, Board of Governors
Indian Institute of Technology, Kanpur
Kanpur – 208016

LIST OF MEMBERS OF THE FINANCE COMMITTEE
(As on 31.03.2011)

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Prof. M. Anandakrishnan
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‘Madan Apartments’
8/15, 5th Main Road
Kasturibai Nagar, Adyar
Chennai – 600 020, Tamil Nadu

MEMBERS:
Professor Sanjay G. Dhande
Director
Indian Institute of Technology, Kanpur
Kanpur-208016

Shri Ashok Thakur, IAS
Additional Secretary (TE)
GOI, Ministry of Human Resource Development
Department of Secondary & Higher Education
Technical Section -1, Shastri Bhawan
New Delhi – 110 001

Shri S. K. Ray
Additional Secretary and Financial Advisor
GOI, Ministry of Human Resource Development
Department of Secondary & Higher Education
Technical Section -1, Shastri Bhawan
New Delhi – 110 001
Prof. D. V. Singh
Former Vice Chancellor, Roorkee University &
Former Director, CRRI
Sun Breeze Apartment
1002, Tower-B, Vaishali
Ghaziabad, UP

Prof. I. D. Dhariyal
Department of Mathematics and Statistics
Indian Institute of Technology Kanpur
Kanpur – 208 016

SECRETARY:

Shri Sanjeev S. Kashalkar
Registrar & Secretary, Finance Committee
Indian Institute of Technology, Kanpur
Kanpur – 208016

LIST OF MEMBERS OF THE BUILDING & WORKS COMMITTEE
(As on 31.03.2011)

CHAIRMAN:

Prof. Sanjay G. Dhande
Director
Indian Institute of Technology, Kanpur
Kanpur – 208 016

MEMBERS:

Prof. R. K. Thareja
Dy. Director
Indian Institute of Technology, Kanpur
Kanpur – 208 016

Prof. Rajiv Shekhar
Department of Materials Science and Engineering
Indian Institute of Technology, Kanpur
Kanpur – 208 016
Shri S. Y. Kulkarni
Head, Deptt. of Planning & Architecture
Indian Institute of Technology, Roorkee
Roorkee – 247 667

Shri D. N. Agarwal
Retd. Chief Engineer (Electrical) CPWD
M-21, Greater Kailash – II
New Delhi – 110 048

Shri M. D. Seth
Retd. Engineer-in-Chief, UP PWD
Consultant
9/29, Rana Pratap Marg
Lucknow – 226 001

Shri R. K. Govil
Chief Engineer (Northern Zone-II), CPWD
3rd Floor, Kendriya Bhawan
Sector-H, Aliganj
Lucknow – 226 024

SECRETARY:

Shri Sanjeev S. Kashalkar
Registrar & Secretary, B&WC
Indian Institute of Technology, Kanpur,
Kanpur – 208016

LIST OF MEMBERS OF
THE BOARD STANDING COMMITTEE (GRIEVANCES)
(As on 31.03.2011)

CHAIRMAN:

Prof. Sanjay G. Dhande
Director
Indian Institute of Technology, Kanpur
Kanpur – 208 016
MEMBERS:

Prof. D. V. Singh
Former Vice Chancellor, Roorkee University &
Former Director, CRRI
Sun Breeze Apartment
1002, Tower-B, Vaishali
Ghaziabad, UP

Professor R. S. Nirjar
Former Vice Chancellor, Gautam Buddha University
House No. P02/01, Silver City II
Sector – Pie – 2, Greater Noida
Gautam Buddha Nagar- 201 310
Uttar Pradesh

Professor I. D. Dhariyal
Department of Mathematics and Statistics
Indian Institute of Technology, Kanpur
Kanpur - 208016

Professor Rajiv Shekhar
Department of Materials Science and Engineering
Indian Institute of Technology, Kanpur
Kanpur – 208016

SECRETARY:

Shri Sanjeev S. Kashalkar
Registrar & Secretary, Grievance Committee
Indian Institute of Technology, Kanpur
Kanpur – 208016

SENATE
[From 01.04.2010 to 31.03.2011]

Director & Chairman Senate:

Prof. Sanjay G. Dhande
Director
Indian Institute of Technology Kanpur
Kanpur
Deputy Director:

Prof. R. K. Thareja

Members of the Senate:

AEROSPACE ENGINEERING (AE):

- Prof. Kunal Ghosh, Upto 31.10.2010
- Prof. RK Sullerey, Upto 31.10.2010
- Prof. Dayanand Yadav, Upto 31.08.2010
- Prof. E. Rathakrishnan
- Prof. C. Venkatesan
- Prof. T.K. Sengupta
- Prof. Sudhir Kamle
- Prof. Kamal Poddar
- Prof. Sanjay Mittal
- Prof. Ashish Tewari
- Prof. A.K. Ghosh, From 29.11.2010
- Prof. C. S. Upadhyay, From 01.10.2010
- Dr. Brijesh Eshpuniyani

BIOLOGICAL SCIENCES & BIO-ENGINEERING (BSBE):

- Prof. Pradip Sinha
- Prof. R Sankararamakrishnan, From 29.11.2010
- Prof. K Subramaniam, From 29.11.2010
- Prof. Subramaniam Ganesh, From 29.11.2010
- Prof. Balaji Prakash, From 29.11.2010
- Dr. Amitabh Bandopadhyay, From 01.10.2010

CHEMICAL ENGINEERING (CHE)

- Prof. S. K. Gupta
- Prof. Anil Kumar
- Prof. Deepak Kunzru
- Prof. JP Gupta, Upto 31.05.2010
- Prof. PK Bhattacharya
- Prof. RP Chhabra
- Prof. Ashok Khanna
Prof. Ashutosh Sharma
Prof. Goutam Deo
Prof. Nishith Verma

CHEMISTRY (CHM):

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Prof. S Sarkar
Prof. BD Gupta Upto 31.03.2010
Prof. YD Vankar
Prof. TK Chandrashekar
Prof. V Chandrasekhar
Prof. RN Mukherjee
Prof. Parimal K Bhardwaj
Prof. N.S. Gajbhiye
Prof. P. Gupta Bhaya Upto 31.05.2010
Prof. S. Manogaran
Prof. Veejendra K Yadav
Prof. Vinod K Singh
Prof. Amalendu Chandra
Prof. Faiz Ahmed Khan
Prof. S S Manoharan
Prof. J N Moorthy
Prof. Sandeep Verma
Prof. S R Gadre From 21.07.2010
Prof. K Srihari From 29.11.2010
Prof. Debabrata Goswami From 29.11.2010

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Prof. PK Basudhar
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Prof. Sarvesh Chandra
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Prof. Vinod Tare
Prof. Vinay Kumar Gupta
Prof. S.K. Chakrabarti
Prof. CVR Murty Upto 13.05.2010
Prof. Mukesh Sharma
Prof. Onkar Dikshit
Annual Report 2010-2011

Prof. Partha Chakroborty
Prof. Rajiv Sinha
Prof. Sudhir Misra
Prof. Rajesh Srivastava
Prof. Purnendu Bose
Prof. Soumyen Guha From 29.11.2010
Prof. Ashu Jain From 29.11.2010
Prof. Durgesh C Rai From 29.11.2010
Dr. Soumyen Guha From 01.10.2010 to 28.11.2010
(Chairman, SLC-2010-11
Promoted to Prof. w.e.f. 29.11.2010)

COMPUTER SCIENCE & ENGINEERING (CSE):

Prof. RMK Sinha Upto 31.10.2010
Prof. Somenath Biswas
Prof. HC Karnick
Prof. TV Prabhakar
Prof. Sanjeev Kumar Aggarwal
Prof. Sanjeev Saxena
Prof. Rajat Moona
Prof. Manindra Agrawal
Prof. Amitabha Mukerjee
Prof. Dheeraj Sanghi
Prof. Phalguni Gupta
Prof. Ratan Kumar Ghosh
Prof. Ajai K Jain
Prof. Shashank K Mehta
Prof. Sumit Ganguly
Dr. Amit Prashant Upto 30.09.2010

ELECTRICAL ENGINEERING (EE):

Prof. Avinash Joshi
Prof. M Sachidananda
Prof. SC Srivastava
Prof. Prem Kumar Kalra
Prof. Shafi Qureshi
Prof. Sumana Gupta
Prof. Govind Sharma
Prof. Utpal Das
Prof. AK Dutta
Prof. Joseph John
Prof. Animesh Biswas
Prof. Pradip Sircar
Prof. Baquer Mazhari
Prof. A K Chaturvedi
Prof. R.K. Bansal
Prof. S Umesh
Prof. S.N. Singh
Prof. Shyama P Das
Prof. Yatindra N Singh From 29.11.2010
Prof. Laxmidhar Behera From 29.11.2010
Dr. Ramprasad Potluri Upto 30.11.2010

HUMANITIES & SOCIAL SCIENCES (HSS):

Prof. Lilavati Krishnan
Prof. Binayak Rath
Prof. AK Sharma
Prof. KK Saxena
Prof. AK Sinha
Prof. BH Boruah Upto 01.12.2010
Prof. Binay Kumar Pattanaik
Prof. G Neelakantan
Prof. Surajit Sinha
Prof. Achla Misri Raina
Prof. (Ms) Shikha Dixit
Prof. Munmun Jha From 29.11.2010
Dr. Mini Chandran Upto 30.11.2010

INDUSTRIAL & MANAGEMENT ENGINEERING (IME):

Prof. AK Mittal
Prof. Kripa Shanker
Prof. NK Sharma
Prof. Arun P Sinha
Prof. R R K Sharma
Prof. Jayanta Chatterjee
Prof. Rahul Varman
Dr. Anoop Singh Upto 30.11.2010

MATERIALS SCIENCE & ENGINEERING (MSE):

Prof. SP Mehrotra
Prof. RC Sharma
Prof. RK Dube
Prof. Brahma Deo Upto 31.3.2011
Prof. SC Koria
Prof. Dipak Mazumdar
Prof. Rajiv Shekhar
Prof. Sandeep Sangal
Prof. Barada K Mishra
Prof. Deepak Gupta
Prof. Monica Katiyar
Prof. Anish Upadhyaya From 29.11.2010
Dr. Gouthama Upto 30.09.2010

MATERIALS SCIENCE PROGRAMME (MSP):

Prof. Jitendra Kumar

MATHEMATICS AND STATISTICS (MTH & STATS):

Prof. RKS Rathore
Prof. (Ms) Manjul Gupta
Prof. MK Kadalbajoo
Prof. Prawal Sinha
Prof. GP Kapoor
Prof. Peeyush Chandra
Prof. V Raghavendra
Prof. ID Dhariyal
Prof. Shobha Madan
Prof. Debashis Kundu
Prof. Pravir Kumar Dutt
Prof. Neeraj Misra
Prof. B V Rathish Kumar
Prof. Dhirendra Bahuguna
Prof. P Shunmugaraj
Prof. Arbind Kumar Lal
Prof. Alok Kumar Maloo  From 29.11.2010
Dr. Shalabh  From 01.12.2010

MECHANICAL ENGINEERING (ME):

Prof. M. S. Kalra
Prof. V. K. Jain
Prof. N. N. Kishore
Prof. Himanshu Hatwal
Prof. P. M. Dixit
Prof. K. Muralidhar
Prof. Gautam Biswas
Prof. Prabhat Munshi
Prof. BP Pundir  Upto 30.6.2010
Prof. S.K. Chaudhury
Prof. N.S. Vyas
Prof. Vinayak Eswaran
Prof. Kalyanmoy Deb
Prof. P.S. Ghoshdastidar
Prof. Subrata Sarkar
Prof. P K Panigrahi
Prof. Bhaskar Dasgupta  From 29.11.2010
Prof. N Venkata Reddy  From 29.11.2010

PHYSICS (PHY):

Prof. SD Joglekar  Upto 10.07.2010
Prof. Keshawa Shahi
Prof. Rajendra Prasad
Prof. Debashish Chowdhury
Prof. RC Budhani
Prof. Y.N. Mohapatra
Prof. Avinash Singh
Prof. V.N. Kulkarni  Upto 24.07.2010
Prof. Deshdeep Sahdev
Prof. V Ravishankar
Prof. Satyendra Kumar
Prof. Pankaj Jain
Prof. HC Verma
Prof. Manoj K Harbola
LIBRARIAN

Dr. V. D. Shrivastava

SECRETARY, SENATE

Shri Sanjeev S Kashalkar  
Registrar  
Indian Institute of Technology Kanpur  
Kanpur

THREE NOMINEES OF THE CHAIRMAN, BOARD OF GOVERNORS  
(From 01.11.2009 to 31.10.2010):

1. Prof. H K Sehgal, Vice-Chancellor  
C S J M Kanpur University  
Kanpur – 208024

2. Prof. S K Awasthi  
Director, H.B.T.I.  
Nawabganj,  
Kanpur-208002

3. Prof. Prithvi Yadav, Director  
Guar Hari Singhania Institute of Management  
Kanpur

THREE NOMINEES OF THE CHAIRMAN, BOARD OF GOVERNORS  
(From 01.11.2010 to 31.10.2011):

1. Dr. Tushar Kanti Chakraborty, Director  
Central Drug Research Institute  
Chattar Manzil Palace  
Mahatma Gandhi Marg  
Lucknow – 226 001
2. Dr. A K Varma  
General Manager  
Hindustan Aeronautics Limited  
Lucknow-226 016

3. Prof. M P Dube  
Dean Faculty of Arts  
University of Allahabad  
Allahabad-211002

SENATE STANDING COMMITTEE  
[FROM 01.10.2009 TO 30.09.2010]

(1) SENATE EDUCATIONAL POLICY COMMITTEE:

(a) MEMBERS (EX-OFFICIO):

1. Chairman, Senate : Chairman
2. Chairman, SPGC
3. Chairman, SUGC

(b) SENATE NOMINEES:

1. Dr. Harish C Verma, PHY
2. Dr. Harish Karnick, CSE
3. Dr. T K Sengupta, AE

(c) STUDENTS’ SENATE NOMINEES:

1. Mr. Ashish Agrawal (Y6113), ashagr@iitk.ac.in
2. Mr. K S Rao (Y5209864), ksrao@iitk.ac.in

(2) SENATE ELECTIONS COMMITTEE:

SENATE NOMINEES:

1. Dr. Ashok K Mittal, IME
2. Dr. F A Khan, CHM
3. Dr. Shankar Ramakrishnan, BSBE
(3)  SENATE LIBRARY COMMITTEE:

(a)  LIBRARY:

Librarian    : Dr. V D Shrivastva

(b)  SENATE NOMINEES:

1. Dr. Pranab K Mohapatra, CE
2. Dr. M L N Rao, CHM
3. Dr. B K Pattanaik, HSS
4. Dr. D P Mishra, AE

(c)  NOMINEES OF DEPARTMENTS/PROGRAMMES:

1. Dr. E Rathakrishnan  AE
2. Dr. Dhirendra S Katti  BSBE
3. Dr. S Sivakumar  CHE
4. Dr. J K Behra  CHM
5. Dr. Saumyen Guha  CE
6. Dr. Saumyen Guha  EEMP
6. Dr. Harish Karnick  CSE
7. Dr. Pradip Sircar  EE
8. Dr. Braj Bhushan  HSS
9. Dr. Ashok K Mittal  IME
10. Dr. H Wanare  LTP
11. Dr. Ishan Sharma  ME
12. Dr. Anish Upadhyaya  MME
13. Dr. Jitendra Kumar  MSP
14. Dr. Parasar Mohanty  MTH & STAT.
15. Dr. I Sharma  NET
16. Dr. Tapobrata Sarkar  PHY
17. Ms. Koumudi Patil, HSS  Design Prog.

(d)  STUDENTS’ SENATE NOMINEES:

1. Mr. C Rahul (Y6142), crahul@iitk.ac.in
2. Mr. Puneet Singh (Y8378), punsingh@iitk.ac.in
(4) SENATE POST-GRADUATE COMMITTEE:

(a) MEMBER (EX-OFFICIO):

1. Dr. Vinay K Gupta, CE : Outgoing Chairman

(b) SENATE NOMINEE:

1. Dr. Peeyush Chandra, MTH & STATS

(c) NOMINEES OF DEPARTMENTS/PROGRAMMES:

1. Dr. D Das
2. Dr. S Ganesh
3. Dr. Animangsu Ghatak
4. Dr. S P Rath
5. Dr. Javed N Malik
6. Dr. Tarun Gupta
7. Dr. T V Prabhakar
8. Dr. A R Harish
9. Dr. T Ravichandran
10. Dr. Peeyush Mehta
11. Dr. P K Panigrahi
12. Dr. P K Panigrahi
13. Dr. Gouthama
14. Dr. K Shahi
15. Dr. Rama Rawat
16. Dr. P Munshi
17. Dr. Zakir Hossain
18. Dr. Munnum Jha

(d) STUDENTS’ SENATE NOMINEES:

1. Ms. V Sangeetha (Y8116006), sangiv@iitk.ac.in
2. Mr. Nitin Jagga (Y8125031), njagga@iitk.ac.in
3. Mr. Mohammad Atiflam (Y4118062), atif@iitk.ac.in
4. Mr. Md. Ayaz (Y9103068), ayazmd@iitk.ac.in
(5) SENATE RULES COMMITTEE:

(a) MEMBER (EX-OFFICIO):

(b) Parliamentarian of the Senate:
Dr. Rajiv Shekhar, MME : Upto 30.09.2009

(b) SENATE NOMINEES:

1. Dr. Jitendra Kumar, MSP
2. Dr. V N Kulkarni, PHY
3. Dr. Pradip Sircar,

(6) SENATE SCHOLARSHIPS & PRIZES COMMITTEE:

MEMBERS (EX-OFFICIO):

Head Institute Counselling Service : Dr. A K Ghosh, AE
Chairman, APEC : Dr. N N Kishore, ME
Dean of Students’ Affairs : Dr. Partha Chakraborty, CE

SENATE NOMINEES:

1. Dr. S Sangal, MME
2. Dr. Animesh Biswas, EE
3. Dr. Purnendu Bose, CE
4. Dr. Animanshu Ghatak, CHE

STUDENTS’ SENATE NOMINEES:

1. Mr. Yash Sidana (Y7519), yashsid@iitk.ac.in
2. Mr. Sanjay Chaudhary (Y7388), sanjayc@iitk.ac.in
3. Mr. C Rahul (Y6142), crahul@iitk.ac.in

(7) SENATE STUDENTS’ AFFAIRS COMMITTEE:

(a) MEMBERS (EX-OFFICIO):

Head Institute Counselling Service : Dr. A K Ghosh, AE
Chairman, APEC: Dr. N N Kishore, ME
Representative of COW: Dr. Siddharta Panda, CHE
Dean of Students’ Affairs: Chairman, Ex-Officio

(b) SENATE NOMINEES:

1. Dr. Monika Katiyar, MME
2. Dr. J K Bera, CHM
3. Dr. S Qureshi, EE

(c) STUDENTS’ SENATE NOMINEES:

1. Mr. M K Jolly (Y6265), mkjolly@iitk.ac.in
2. Mr. Ashish Agrawal (Y6113), ashagr@iitk.ac.in
3. Mr. K S Rao (Y5209864), ksrao@iitk.ac.in
4. Mr. Abdullah Bin Abubaker (Y7108061), abdullah@iitk.ac.in

(8) SENATE UNDERGRADUATE COMMITTEE:

(a) MEMBER (EX-OFFICIO):

Dr. Sudhir Misra, CE: Outgoing Chairman

(b) SENATE NOMINEE:

1. Dr. P M Dixit, ME

(c) NOMINEES OF DEPARTMENTS/PROGRAMMES:

1. Dr. Brijesh Eshpuniyani: AE
2. Dr. Balaji Prakash: BSBE
3. Dr. Siddharth Panda: CHE
4. Dr. Madhav Ranganathan: CHM
5. Dr. Amit Prashant: CE
6. Dr. A Mukerjee: CSE
7. Dr. J Akhtar: EE
8. Dr. Achla M Raina: HSS
9. Dr. Arun P Sinha: IME
10. Dr. D P Mishra: LTP
11. Dr. Ishan Sharma: ME
12. Dr. Sandeep Sangal      MME
13. Dr. Kamal K Kar    MSP
14. Dr. S K Ray      MATHS & STAT.
15. Dr. P Munshi      NET
16. Dr. Sudeep Bhattacharjee  PHY
17. Dr. Bishakh Bhattacharya  Design Prog.

(d) STUDENTS’ SENATE NOMINEES:

1. Mr. Anurag Sujania (Y5827107), sujania@iitk.ac.in
2. Mr. Abhishek S Khetan (Y6019), askhetan@iitk.ac.in
3. Mr. Navesh Priyankar (Y7249), navesh@iitk.ac.in
4. Mr. Pranay Dighe (Y8347), pranayd@iitk.ac.in

SENATE STANDING COMMITTEE
[FROM 01.10.2010 TO 30.09.2011]

(1) SENATE EDUCATIONAL POLICY COMMITTEE:

(a) MEMBERS (EX-OFFICIO):

1. Chairman, Senate  : Chairman
2. Chairman, SPGC
3. Chairman, SUGC

(c) SENATE NOMINEES:

1. Prof. Somnath Biswas (CSE)
2. Prof. Debasish Kundu (MATHS)
3. Prof. P K Bharadwaj (CHM)

(d) STUDENTS’ SENATE NOMINEES:

1. Mr. C Rahul (Y6142), crahul@iitk.ac.in
2. Mr. Vivek Agarwal (Y7513) agvivek@iitk.ac.in

(2) SENATE ELECTIONS COMMITTEE:

SENATE NOMINEES:

1. Prof. G P Kapoor (MATHS)
2. Prof. V K Jain (M E)
3. Prof. A K Ghosh (A E)

(3) SENATE LIBRARY COMMITTEE:

(a) LIBRARY:

Librarian : Dr. V D Shrivastva

(b) SENATE NOMINEES:

1. Dr. Peeyush Mehta (I M E)
2. Dr. A R Harish (E E)
3. Dr. Aneesh Upadhyay (MME)
4. Dr. P M Prasad (HSS)

(c) NOMINEES OF DEPARTMENTS/PROGRAMMES:

1. Dr. P M Mohite AE
2. Dr. Ashwani Kumar Thakur BSBE (UPTO 28.9.2010)
   Dr. Mainak Das BSBE (From 28.9.2010)
3. Dr. S Sivakumar CHE
4. Dr. J K Bera CHM
5. Dr. Saumyen Guha CE
6. Dr. Harish Karnick CSE
7. Dr. L Behera EE
8. Dr. Prashant Bagad HSS
9. Dr. Ashok K MittalIME
10. Dr. Y N Singh (EE) LTP
11. Dr. I Sharma ME
12. Dr. Ashish Garg MSE
13. Dr. Rajeev Gupta MSP
14. Dr. Parasar Mohanty MTH & STAT.
15. Dr. P Munshi NET
16. Dr. Amit Dutta PHY
17. Dr. Jayanta Chatterjee (IME) M DES

(d) STUDENTS’ SENATE NOMINEES:

1. Mr. Puneet Singh (Y8378), punsingh@iitk.ac.in
2. Mr. Sanchit (Y8442), sanset@iitk.ac.in
(4) SENATE POST-GRADUATE COMMITTEE:

(a) SENATE NOMINEE:

1. Dr. Gouthama MSE - Outgoing Chairman  
2. Prof. Jayanta Chatterjee (I M E)

(b) NOMINEES OF DEPARTMENTS/PROGRAMMES:

1. Dr. Debopam Das AE  
2. Dr. R Sankararamakrishnan BSBE (Upto 28.9.2010)  
Dr. Dhirendra S Katti BSBE (From 28.9.2010)  
3. Dr. J K Singh CHE  
4. Dr. S P Rath CHM  
5. Dr. Priyanka Ghosh CE  
6. Dr. Purnendu Bose EEMP  
7. Dr. Anil Seth CSE  
8. Dr. Nandini Gupta EE  
9. Dr. Vineet Sahu HSS  
10. Dr. Peeyush Mehta IME  
11. Dr. P Kumar (EE) LTP  
12. Dr. N V Reddy ME  
13. Dr. Aneesh Upadhyaya MSE  
14. Dr. Kamal K Kar MSP  
15. Dr. Joydeep Dutta MTHS & STAT.  
16. Dr. P Munshi NET  
17. Dr. Zakir Hossain PHY  
18. Dr. Munmum Jha (HSS) M DES

(c) STUDENTS’ SENATE NOMINEES:

1. Mr. A Y Santosh (Y9101001), aysan@iitk.ac.in  
2. Mr. Biswajeet Mandal (Y9114007), bmandal@iitk.ac.in  
3. Mr. Mohammad Ashiq (Y9106064), mdashiq@iitk.ac.in  
4. Mr. Abdullah Bin Abubaker (Y7108061), Abdulllah@iitk.ac.in

(5) SENATE RULES COMMITTEE:

(a) MEMBER (EX-OFFICIO):

Parliamentarian of the Senate
(b) SENATE NOMINEES:

1. Prof. Sarvesh Chandra (C E)
2. Prof. Utpal Das (E E)
3. Prof. Deeraj Sanghi (CSE)

(6) SENATE SCHOLARSHIPS & PRIZES COMMITTEE:

MEMBERS (EX-OFFICIO):

Head Institute Counselling Service
Chairman, APEC
Dean of Students’ Affairs

SENATE NOMINEES:

1. Prof. P S Ghoshdastidar (M E)
2. Dr. Siddharth Panda (CHE)
3. Dr. Kantesh Balani (MME)
4. Dr. Amitabh Bandyopadhyay (BSBE)

STUDENTS’ SENATE NOMINEES:

1. Mr. Meet Pathak (Y8291), meetp@iitk.ac.in
2. Mr. Yash Sidana (Y7519), yashsid@iitk.ac.in
3. Mr. Ashutosh Sharma (Y7097), ashushar@iitk.ac.in

(7) SENATE STUDENTS’ AFFAIRS COMMITTEE:

(a) MEMBERS (EX-OFFICIO):

Head Institute Counselling Service
One member of the APEC nominated by Chairman, APEC
One Warden of students; Hall of Residence nominated Chairman, COW
Dean of Students’ Affairs : Chairman, Ex-Officio

(b) SENATE NOMINEES:

1. Prof. Rajat Moona (CSE)
2. Prof. Shikha Dixit (HSS)
3. Dr. Bharat Lohani (C E)
(c) STUDENTS’ SENATE NOMINEES:

1. Mr. Deepanshu Arora (Y6927157), deepansh@iitk.ac.in
2. Mr. K S Rao (Y5209864), ksrao@iitk.ac.in
3. Mr. Abdullah Bin Abubaker (Y7108061), abdullah@iitk.ac.in
4. Mr. C Rahul (Y6142), crahul@iitk.ac.in

(8) SENATE UNDERGRADUATE COMMITTEE:

(a) SENATE NOMINEE:

1. Dr. Amit Prashant CE - Outgoing Chairman
2. Prof. Peeyush Chandra (MATHS)

(b) NOMINEES OF DEPARTMENTS/PROGRAMMES:

1. Dr. Brijesh Eshpuniyani AE
2. Dr. Ashok Kumar BSBE
3. Dr. Pankaj A Apte CHE
4. Dr. Madhav Ranganathan CHM
5. Dr. Pranab K Mohapatra CE (Upto 21.07.2011)
   Prof. P Bose CE (From 21.07.2011)
6. Dr. Sumit Ganguly CSE
7. Dr. J Akhtar EE
8. Dr. Praveen Kulshreshtha HSS
9. Dr. Arun P Sinha IME
10. Dr. Asima Pradhan (PHY) LTP
11. Dr. B Dasgupta ME
12. Dr. R C Sharma MSE
13. Dr. K Shahi (PHY) MSP
14. Dr. Shalabh MATHS & STAT.
15. Dr. P Munshi NET
16. Dr. Sudeep Bhattacharjee PHY
17. Dr. Braj Bhusan (HSS) M DES

(d) STUDENTS’ SENATE NOMINEES:

1. Mr. C Rahul (Y6142) crahul@iit.ac.in
2. Mr. Vivek Agarwal (Y7513), agvivek@iitk.ac.in
3. Mr. Suraj Gupta (Y8517), surajg@iitk.ac.in
4. Mr. Pratik Moona (Y9433), pratikm@iitk.ac.in
The Faculty

There are thirteen departments and five interdisciplinary programs offering degrees at various levels in the Institute.

The faculty strength of the Institute as on March 31, 2011 was 344. Out of these 20 are shared by two departments on a half time basis. There were also 30 Academic staff comprising of Research Engineers/Scientific Officers/Design Engineers and Library staff, who are treated at par with faculty, on March 31, 2011. The Institute also had a number of Visiting Faculty members. 11 faculty members and 02 academic staff retired/voluntary retired/resigned (Technical); 06 visiting faculty/ academic staff have resigned/technical resigned/term over; 01 faculty member were terminated and 04 faculty members passed away during the period. 17 Faculty Members, 02 Visiting Faculty joined during the year. The Visiting/Distinguished/ Adjunct Faculty contribute significantly and they also get an opportunity to know the Institute.

AEROSPACE ENGINEERING DEPARTMENT

<table>
<thead>
<tr>
<th>SANCTIONED STRENGTH</th>
<th>EXISTING STRENGTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>16 +1</td>
</tr>
</tbody>
</table>

PROFESSOR AGP-10500 PB-4 (37400-67000)

1. 4458 E Rathakrishnan
2. 4694 C Venkatesan
3. 4581 T K Sengupta
4. 4285 Sudhir Kamle
5. 4664 Kamal Poddar
6. 4696 Sanjay Mittal
7. 4660 Ashish Tewari
8. 4709 A K Ghosh
9. 4785 C S Upadhyay

ASSOCIATE PROFESSOR AGP-9500 Direct Recruitment PB-4 (37400-67000)

1. 4733 D P Mishra
2. 4958 Abhijit Kushari
3. 4993 Debopam Das
4. *5129 Sivasambu Mahesh
ASSISTANT PROFESSOR AGP-9000 after 3 years experience PB-4 (37400-67000)

1. 5280 Brijesh Eshpuniyani

ASSISTANT PROFESSOR AGP-8000 Regular PB-3 (15600-39100)

1. 5288 P M Mohite
2. 5366 Rajesh Kitey

ASSISTANT PROFESSOR AGP-6000 (Contract) PB-3 (15600-39100)

1. 5396 Abhishek

BIOLOGICAL SCIENCE & BIO-ENGINEERING

SANCTIONED STRENGTH : 15
EXISTING STRENGTH : 12

PROFESSOR AGP-10500 PB-4 (37400-67000)

1. 4959 Pradip Sinha
2. 5005 R Sankararamakrishnan
3. 5009 K Subramaniam
4. 5020 Subramaniam Ganesh
5. 5023 Balaji Prakash

ASSOCIATE PROFESSOR AGP-9500 Direct Recruitment PB-4 (37400-67000)

1. 5119 Ashok Kumar
2. 5103 Dhirendra S Katti

ASSISTANT PROFESSOR AGP-9000 after 3 years experience PB-4 (37400-67000)

1. 5194 Anupam Pal
2. 5206 Amitabha Bandyopadhyay
3. 5207 (Ms) Jonaki Sen

ASSISTANT PROFESSOR AGP-8000 Regular PB-3 (15600-39100)

1. 5376 Mainak Das
2. 5378 Ashwani Kumar Thakur
CHEMICAL ENGINEERING DEPARTMENT

SANCTIONED STRENGTH : 32
EXISTING STRENGTH : 21

PROFESSOR AGP-10500 PB-4 (37400-67000)

1. 2432 Anil Kumar
2. 3314 Deepak Kunzru
3. 3064 J P Gupta
4. 3754 P K Bhattacharya
5. 4244 R P Chhabra
6. 4045 Ashok Khanna
7. 4562 Ashutosh Sharma
8. 4750 Goutam Deo
9. 4794 Nishith Verma

ASSOCIATE PROFESSOR AGP-9500 Direct Recruitment PB-4 (37400-67000)

1. 5011 V Shankar
2. 5016 Nitin Kaistha
3. 5196 Siddharta Panda
4. 5106 Animangsu Ghatak
5. 5114 Yogesh Moreshwar Joshi
6. 5021 Sanjeev Garg
7. 5175 Jayant K Singh

ASSISTANT PROFESSOR AGP-9000 after 3 years experience PB-4 (37400-67000)

1. 5208 Pankaj A Apte

ASSISTANT PROFESSOR AGP-8000 Regular PB-3 (15600-39100)

2. 5298 Raj Ganesh S Pala
3. 5303 Sri Sivakumar
4. 5337 Raghvendra Singh
5. 5362 Abhijit Chatterjee
CHEMISTRY DEPARTMENT

SANCTIONED STRENGTH : 30
EXISTING STRENGTH : 29

PROFESSOR AGP-10500 PB-4 (37400-67000)

1. 3827 N Sathyamurthy
2. 3791 S Sarkar
3. 4008 Y D Vankar
4. 4325 T K Chandrashekar
5. 4394 V Chandrasekhar
6. 4448 R N Mukherjee
7. 4462 P K Bharadwaj
8. 4047 N S Gajbhiye
9. 4460 S Manogaran
10. 4583 Veejendra K Yadav
11. 4596 Vinod K Singh
12. 4676 Amalendu Chandra
13. 4746 Faiz Ahmed Khan
14. 4759 S S Manoharan
15. 4789 Sandeep Verma
16. 4816 J N Moorthy
17. 5389 S R Gadre
18. 4760 K Srihari
19. 5071 Debabrata Goswami

ASSOCIATE PROFESSOR AGP-9500 Direct Recruitment PB-4 (37400-67000)

1. 4876 R Gurunath
2. 5038 Jitendra K Bera
3. 5024 Manas Kumar Ghorai
4. 5056 M L N Rao
5. 5127 Sankar Prasad Rath

ASSISTANT PROFESSOR AGP-9000 After 3 years experience PB-4 (37400-67000)

1. 5236 Madhav V Ranganathan
2. 5091 Anantharaman Ganapathi
ASSISTANT PROFESSOR   AGP-8000 Regular PB-3 (15600-39100)

3.  5304  Nishanth N Nair
4.  5305  Pratik Sen

ASSISTANT PROFESSOR   AGP-7000 Contract PB-3 (15600-39100) Ph D + 1 year experience

1.  5369  Ramesh Ramapanicker

CIVIL ENGINEERING DEPARTMENT

SANCTIONED STRENGTH : 33
EXISTING STRENGTH     : 33

PROFESSOR AGP-10500 PB-4 (37400-67000)

1.  3462  Ashwini Kumar
2.  4068  P K Basudhar
3.  4209  Sudhir K Jain
4.  4399  Sarvesh Chandra
5.  4295  Vinod Tare
6.  4586  V K Gupta
7.  4464  S K Chakrabarti
8.  4799  Mukesh Sharma
9.  4662  Onkar Dikshit
10. 4663  Partha Chakroborty
11. 4695  Rajiv Sinha
12. 4690  Sudhir Misra
13. 4798  Rajesh Srivastava
14. 4775  Purnendu Bose
15. 4784  Soumyen Guha
16. 4793  Ashu Jain
17. 4995  Durgesh C Rai

ASSOCIATE PROFESSOR   AGP-9500 Direct Recruitment PB-4 (37400-67000)

1.  4871  Animesh Das
2.  4978  Javed N Malik
3.  5026  Bharat Lohani
4.  5057  Sachidanand Tripathi
5.  5079  Pranab Kumar Mohapatra
6.  5037  Nihar Ranjan Patra
7.  5192  Tarun Gupta
ASSISTANT PROFESSOR AGP-9000 after 3 years experience PB-4 (37400-67000)

1. 5152 Amit Prashant
2. 5230 Priyanka Ghosh

ASSISTANT PROFESSOR AGP-8000 Regular PB-3 (15600-39100)

3. 5307 Debajyoti Paul
4. 5346 Samit Ray Chaudhuri
5. 5347 (Ms) Prishati Raychowdhury
6. 5386 (Ms) Anubha Goel

ASSISTANT PROFESSOR AGP-7000 Contract PB-3 (15600-39100) Ph D + 1 year experience

1. 5387 Vinod Vasudevan
2. 5388 Shivam Tripathi
3. 5393 Sudib K Mishra

COMPUTER SCIENCE & ENGINEERING

SANCTIONED STRENGTH : 18
EXISTING STRENGTH : 23 + 1 HT

PROFESSOR AGP-10500 PB-4 (37400-67000)

1. *3858 S G Dhande
2. 3972 Somenath Biswas
3. 4297 H C Karnick
4. 4370 T V Prabhakar
5. 4563 S K Aggarwal
6. 4490 Sanjeev Saxena
7. 4628 Rajat Moona
8. 4754 Manindra Agrawal
9. 4627 Amitabha Mukerjee
10. 4300 Ratan Kumar Ghosh
11. 4385 Phalguna Gupta
12. 4645 Ajai K Jain
13. 4668 Dheeraj Sanghi
14. 4762 Sumit Ganguly
15. 5010 Shashank K Mehta
ASSOCIATE PROFESSOR   AGP-9500 Direct Recruitment PB-4 (37400-67000)

1. 4934 Anil Seth
2. 5112 Mainak Chaudhuri
3. 5197 Surender Baswana

ASSISTANT PROFESSOR AGP-9000 after 3 years experience PB-4 (37400-67000)

1. 5222 Peeyush P Kurur
2. 5268 Arnab Bhattacharya

ASSISTANT PROFESSOR AGP-8000 Regular PB-3 (15600-39100)

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ASSISTANT PROFESSOR AGP-7000 Contract PB-3 (15600-39100) Ph D + 1 year experience

1. 5372 (Ms) Krithika Venkataramani
2. 5382 Satyadev Nandakumar
3. 5383 Amey Karkare
4. 5392 Subhajit Roy

ELECTRICAL ENGINEERING

SANCTIONED STRENGTH : 53
EXISTING STRENGTH     : 36 + 1 HT

PROFESSOR AGP-10500 PB-4 (37400-67000)

1. 3927 Avinash Joshi
2. 4326 M Sachidananda
3. 4495 S C Srivastava
4. 4486 Prem Kumar Kalra
5. 4691 Shafi Qureshi
6. 3873 (Ms) Sumana Gupta
7. 4372 Govind Sharma
8. *4687 Utpal Das
9. 4566 A K Dutta
10. 3999 Joseph John
11. 4652 Animesh Biswas
12. 4478 Pradip Sircar  
13. 4670 Baquer Mazhari  
14. 4827 A K Chaturvedi  
15. 4489 R K Bansal  
16. 5003 S N Singh  
17. 4776 Shyama P Das  
18. 4771 Yatindra N Singh  
19. 4988 Laxmidhar Behera  

ASSOCIATE PROFESSOR AGP-9500 Direct Recruitment PB-4 (37400-67000)  
1. 4833 K S Venkatesh  
2. 4938 K Vasudevan  
3. 5013 A R Harish  
4. 5113 S Sundar Kumar Iyer  
5. 5012 Parthasarathi Sensarma  
6. 5015 (Ms) Nandini Gupta  
7. 5111 Adrish Banerjee  
8. 5162 Ramprasad Potluri  

ASSISTANT PROFESSOR AGP-9000 after 3 years experience PB-4 (37400-67000)  

ASSISTANT PROFESSOR AGP-8000 Regular PB-3 (15600-39100)  
1. 5293 Santanu K Mishra  
2. 5295 Rajesh M Hegde  
3. 5309 Kumar Vaibhav Srivastava  
4. 5321 Naren Naik  
5. 5326 Md Jaleel Akhtar  
6. 5327 Nishchal Kumar Verma  
7. 5343 Aditya K Jagannatham  
8. 5344 Bahniman Ghosh  
9. 5357 Pradeep Kumar K  
10. 5363 Saikat Chakrabarti
HUMANITIES & SOCIAL SCIENCES

SANCTIONED STRENGTH : 31
EXISTING STRENGTH : 30 + 2

PROFESSOR AGP-10500 PB-4 (37400-67000)

1. 3838 (Ms) Lilavati Krishnan
2. 3989 Binayak Rath
3. 3983 A K Sharma
4. 4373 K K Saxena
5. 4016 A K Sinha
6. 4791 B K Pattnaik
7. 4729 G Neelakantan
8. 4488 Surajit Sinha
9. 4700 (Ms) Achla M Raina
10. 4702 (Ms) Shikha Dixit
11. 4773 Munmun Jha

ASSOCIATE PROFESSOR AGP-9500 Direct Recruitment PB-4 (37400-67000)

1. 4957 (Ms) Suchitra Mathur
2. 5076 T Ravichandran
3. 5310 Praveen Kulshrestha
4. 4927 (Ms) Mini Chandran
5. 5075 P M Prasad
6. 5077 Amman Madan
7. 5181 Braj Bhusan

ASSISTANT PROFESSOR AGP-9000 after 3 years experience PB-4 (37400-67000)

1. *4976 Satyaki Roy
2. 5231 Kumar Ravi Priya
3. 5270 Sarani Saha

ASSISTANT PROFESSOR AGP-8000 Regular PB-3 (15600-39100)

4. 5296 Somesh Kumar Mathur
5. 5237 A V Ravi Shankar Sarma
6. 5287 Anindita Chakrabarti
7. 5332 Vineet Sahu
8. 5333 Vimal Kumar
9. 5335 P B Bagad
10. 5353 Nirmalya Guha
11. 5354 (Ms) Chaithra Puttaswamy

ASSISTANT PROFESSOR
AGP-7000 Contract PB-3 (15600-39100) Ph D + 1 year experience

1. 5367 (Ms) Sohini Sahu

ASSISTANT PROFESSOR AGP-6000 (Contract) PB-3 (15600-39100)

2. *5183 (Ms) Koumudi Prakash Patil
3. 5331 (Mrs) Shatarupa Thakurta Roy

INDUSTRIAL & MANAGEMENT ENGINEERING

SANCTIONED STRENGTH : 18
EXISTING STRENGTH : 14

PROFESSOR AGP-10500 PB-4 (37400-67000)

1. 3432 A K Mittal
2. 3977 N K Sharma
3. 3792 Kripa Shanker
4. 4042 Arun P Sinha
5. 4525 R R K Sharma
6. 4961 Jayanta Chatterjee
7. 4701 Rahul Varman

ASSOCIATE PROFESSOR AGP-9500 Direct Recruitment PB-4 (37400-67000)

1. 4865 (Ms) Veena Bansal
2. 4968 Anoop Singh
3. 5073 Raghu Nandan Sengupta
4. 5147 B V Phani
5. 5142 Peeyush Mehta

ASSISTANT PROFESSOR AGP-9000 after 3 years experience PB-4 (37400-67000)

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ASSISTANT PROFESSOR AGP-8000 Regular PB-3 (15600-39100)

1. 5348 Deepu Philip
2. 5302 Subhas Chandra Misra

MATERIALS & METALLURGICAL ENGINEERING

SANCTIONED STRENGTH : 32
EXISTING STRENGTH : 21

PROFESSOR AGP-10500 PB-4 (37400-67000)

1. 1932 S P Mehrotra
2. 3845 R C Sharma
3. 3763 R K Dube
4. 4245 S C Koria
5. 4382 Dipak Mazumdar
6. 4565 Rajiv Shekhar
7. 4597 Sandeep Sangal
8. 4665 Barada K Mishra
9. 4790 Deepak Gupta
10. 4796 (Ms) Monica Katiyar
11. 4919 Anish Upadhyaya

ASSOCIATE PROFESSOR AGP-9500 Direct Recruitment PB-4 (37400-67000)

1. 4977 Bikramjit Basu
2. 5034 Ashish Garg
3. 5072 Gouthama

ASSISTANT PROFESSOR AGP-9000 after 3 years experience PB-4 (37400-67000)

1. 5269 Kallol Mondal
2. 5273 Krishanu Biswas
3. 5289 Anandh Subramaniam

ASSISTANT PROFESSOR AGP-8000 Regular PB-3 (15600-39100)

4. 5297 Kantesh Balani
5. 5336 Vivek Verma
6. 5385 Tanmoy Maiti
ASSISTANT PROFESSOR AGP-7000 Contract PB-3 (15600-39100) Ph D + 1 year experience

1. 5381 Sarang Ingole

MATHEMATICS & STATISTICS DEPARTMENT

SANCTIONED STRENGTH : 36
EXISTING STRENGTH : 35

PROFESSOR AGP-10500 PB-4 (37400-67000)

1. 3407 R K S Rathore
2. 3772 (Ms) Manjul Gupta
3. 3739 M K Kadalbajoo
4. 3773 Prawal Sinha
5. 3776 G P Kapoor
6. 4058 Peeyush Chandra
7. 4074 V Raghavendra
8. 3824 I D Dhariyal
9. 4290 (Ms) Shobha Madan
10. 4584 Debasish Kundu
11. 4449 Pravir Kumar Dutt
12. 4726 Neeraj Misra
13. 4707 B V Rathish Kumar
14. 4782 D Bahuguna
15. 4656 P Shunmugaraj
16. 4734 Arbind Kumar Lal
17. 4803 Alok Kumar Maloo

ASSOCIATE PROFESSOR AGP-9500 Direct Recruitment PB-4 (37400-67000)

1. 4781 (Ms) Mohua Banerjee
2. 4822 G Santhanam
3. 4832 (Mrs) Rama Rawat
4. 4870 S Ghorai
5. 5029 Joydeep Dutta
6. 5153 Amit Mitra
7. 4537 (Ms) Aparna Dar
8. 4930 Swagato Kumar Ray
9. 5189 Parasar Mohanty
10. 5036 Shalabh
ASSISTANT PROFESSOR AGP-9000 after 3 years experience PB-4 (37400-67000)

1. 5121 (Ms) Nandini Nilakantan
2. 5229 Sharmistha Mitra
3. 5235 Sudipta Dutta

ASSISTANT PROFESSOR AGP-8000 Regular PB-3 (15600-39100)

4. 5291 Malay Banerjee
5. 5314 Sameer Laxman Chavan
6. 5361 T Muthukumar
7. 5370 Akash Anand

ASSISTANT PROFESSOR AGP-7000 Contract PB-3 (15600-39100) Ph D + 1 year experience

1. 5395 (Ms) Rekha Santhanam

MECHANICAL ENGINEERING

SANCTIONED STRENGTH : 42
EXISTING STRENGTH : 36 + 3 HT

PROFESSOR AGP-10500 PB-4 (37400-67000)

1. *3858 S G Dhande
2. 3862 M S Kalra
3. 4093 V K Jain
4. 4224 N N Kishore
5. 4286 Himanshu Hatwal
6. 4210 P M Dixit
7. 4398 K Muralidhar
8. 4560 Gautam Biswas
9. 4061 Prabhat Munshi
10. 4452 S K Choudhury
11. 4459 N S Vyas
12. 4482 Vinayak Eswaran
13. 4650 Kalyanmoy Deb
14. 4288 P S Ghoshdastidar
15. 4788 Subrata Sarkar
16. 4801 P K Panigrahi
17. 4779 Bhaskar Dasgupta
18. 4823 N Venkata Reddy

ASSOCIATE PROFESSOR AGP-9500 Direct Recruitment PB-4 (37400-67000)

1. 4890 Bishakh Bhattacharya
2. 4931 Avinash Kumar Agarwal
3. 5014 Sumit Basu
4. *4928 Kamal K Kar
5. 5022 Ashish Datta
6. 5054 P Venkitanarayanan
7. 4956 Anupam Saxena
8. 5120 Sameer Khandekar
9. 5074 J Ramkumar
10. 5122 Arun Kumar Saha
11. *5129 Sivasambu Mahesh
12. 5394 Nachiketa Tewari
13. 5399 Shakti Singh Gupta

ASSISTANT PROFESSOR AGP-9000 after 3 years experience PB-4 (37400-67000)

1. 5199 Ishan Sharma
2. 5234 Shantanu Bhattacharya
3. 5267 Basant Lal Sharma

ASSISTANT PROFESSOR AGP-8000 Regular PB-3 (15600-39100)

4. 5294 Malay Kumar Das
5. 5299 Panjaj Wahi
6. 5300 Anurag Gupta
7. 5358 Sovan Das
8. 5364 Binod Sreenivasan

PHYSICS DEPARTMENT

SANCTIONED STRENGTH : 38
EXISTING STRENGTH : 27 + 4 HT

PROFESSOR AGP-10500 PB-4 (37400-67000)

1 3980 R K Thareja
2. *4064 Keshawa Shahi
3. 4254 Rajendra Prasad
4. 4642 Debashish Chowdhury
5. 4688 R C Budhani
6. *4559 Y N Mohapatra
7. 4651 Avinash Singh
8. 4527 Deshdeep Sahdev
9. 4504 V Ravishankar
10. 4708 Pankaj Jain
11. 4723 H C Verma
12. 4881 M K Harbola
13. 4653 K P Rajeev
14. 4692 Mahendra K Verma
15. *4679 (Ms) Asima Pradhan

ASSOCIATE PROFESSOR AGP-9500 Direct Recruitment PB-4 (37400-67000)

1. 4755 V Subrahmanym
2. 4797 Gautam Sengupta
3. 5040 S Anantha Ramakrishna
4. 5041 Amit Dutta
5. 5117 Satyajit Banerjee
6. 4893 Harshwardhan Wanare
7. 5028 (Ms) Sutapa Mukherji
8. 5046 Anjan Kumar Gupta
9. 5102 Zakir Hossain
10. 5115 Tapobrata Sarkar
11. 5123 Sudeep Bhattacharjee
12. *5167 Rajeev Gupta

ASSISTANT PROFESSOR AGP-9000 After 3 years experience PB-4 (37400-67000)

ASSISTANT PROFESSOR  AGP-8000 Regular PB-3 (15600-39100)

1. 5284 Tarun Kanti Ghosh
2. 5290 Kaushik Bhattacharya
3. 5306 Dipankar Chakrabarti
ASSISTANT PROFESSOR      AGP-7000 Contract PB-3 (15600-39100) Ph D + 1 year experience

1.  5355 Krishnacharya

MATERIALS SCIENCE PROGRAMME

SANCTIONED STRENGTH : 06
EXISTING STRENGTH      : 01 + 4 HT

PROFESSOR AGP-10500 PB-4 (37400-67000)
1.  3762 Jitendra Kumar
2.  *4064 Keshawa Shahi
3.  *4559 Y N Mohapatra

ASSOCIATE PROFESSOR AGP-9500 Direct Recruitment PB-4 (37400-67000)
1.  *4928 Kamal K Kar
2.  *5167 Rajeev Gupta

ASSISTANT PROFESSOR AGP-9000 after 3 years experience PB-4 (37400-67000)

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LASER TECHNOLOGY PROGRAMME

SANCTIONED STRENGTH : 
EXISTING STRENGTH      : + 02 HT

PROFESSOR AGP-10500 PB-4 (37400-67000)
1.  *4687 Utpal Das
2.  *4679 (Ms) Asima Pradhan

ASSOCIATE PROFESSOR AGP-9500 Direct Recruitment PB-4 (37400-67000)

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DESIGN PROGRAMME

SANCTIONED STRENGTH : 
EXISTING STRENGTH      : +2 HT
ASSISTANT PROFESSOR AGP-8000 Regular PB-3 (15600-39100)

1. *4976 Satyaki Roy

ASSISTANT PROFESSOR AGP-6000 (Contract) PB-3 (15600-39100)

1. *5183 (Ms) Koumudi Prakash Patil

While Nuclear Engineering & Technology and Environmental Engineering Management interdisciplinary programmes offer separate postgraduate degrees for administrative purpose these are under the administrative control of Mechanical Engineering and Civil Engineering Departments respectively.

* Half Time

LIST OF ACADEMIC STAFF AS ON MARCH 31, 2010

<table>
<thead>
<tr>
<th>Sl No.</th>
<th>Name &amp; Designation</th>
<th>Department/ Programme</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>4983 Alok Gupta, Research Engineer Gr-I</td>
<td>A E</td>
</tr>
<tr>
<td>2.</td>
<td>4616 Sushmit Sen, Senior Research Engineer</td>
<td>Robotics</td>
</tr>
<tr>
<td>3.</td>
<td>4824 Anjali V Kulkarni, Senior Research Engineer</td>
<td>Mechatronics</td>
</tr>
<tr>
<td>4.</td>
<td>5118 Ajay Misra, Senior Research Engineer</td>
<td>A E</td>
</tr>
<tr>
<td>5.</td>
<td>4078 Chaturi Singh, Senior Research Engineer</td>
<td>NWTF</td>
</tr>
<tr>
<td>6.</td>
<td>5278 Neeru Chhabra, Senior Research Engineer</td>
<td>E E</td>
</tr>
<tr>
<td>7.</td>
<td>4318 Amitabha Roy, Principal Research Engineer</td>
<td>E E</td>
</tr>
<tr>
<td>8.</td>
<td>4807 Brajesh Chandra, Principal Research Engineer</td>
<td>A E (NWTF)</td>
</tr>
<tr>
<td>9.</td>
<td>4056 V Raghuram, Principal Research Engineer</td>
<td>M E</td>
</tr>
<tr>
<td>10.</td>
<td>4777 Rajeev Gupta, Principal Research Engineer</td>
<td>A E (NWTF)</td>
</tr>
<tr>
<td>11.</td>
<td>4955 Raghuvir Singh Anand, Principal Research Engineer</td>
<td>E E</td>
</tr>
<tr>
<td>12.</td>
<td>4921 Aurobinda Chatterjee, Principal Research Engineer</td>
<td>M E</td>
</tr>
<tr>
<td>13.</td>
<td>4015 A L Bhavsar, Scientific Officer Gr.I</td>
<td>CHEM</td>
</tr>
<tr>
<td>14.</td>
<td>4815 K K Bajpai, Senior Scientific Officer</td>
<td>C E</td>
</tr>
<tr>
<td>15.</td>
<td>3780 Sanjay Gupta, Chief Scientific Officer</td>
<td>ACMS</td>
</tr>
<tr>
<td>16.</td>
<td>5285 Saikat Kira, Computer Engineer Gr II</td>
<td>C C</td>
</tr>
<tr>
<td>17.</td>
<td>4578 Md Aftab Alam, Senior Computer Engineer</td>
<td>C C</td>
</tr>
<tr>
<td>18.</td>
<td>4821 Brajesh Pande, Senior Computer Engineer</td>
<td>C C</td>
</tr>
<tr>
<td>19.</td>
<td>4820 Gopesh Tewari, Senior Computer Engineer</td>
<td>C C</td>
</tr>
<tr>
<td>20.</td>
<td>5019 Soma Sengupta, Senior Computer Engineer</td>
<td>C C</td>
</tr>
<tr>
<td>21.</td>
<td>4721 Md K Ahmad, Senior Computer Engineer</td>
<td>C C</td>
</tr>
<tr>
<td>22.</td>
<td>4920 Anju Tewari, Senior Computer Engineer</td>
<td>C C</td>
</tr>
</tbody>
</table>
Academic Programmes

EDUCATIONAL GOALS

Education in the Engineering stream should produce trained manpower for maintaining and advancing technological growth. The scope of engineering education should evolve based on the evaluation of technological growth for their usefulness and relevance to the prosperity of the country. The educational strategy in this context should help to develop a knowledge industry and the systems involved in this endeavour should strive for furtherance of knowledge.

The academic goals of the Indian Institute of Technology Kanpur from the viewpoint of its teaching programme are as the following:

To prepare the students for the highest level of excellence in science and technology and produce competent, creative and imaginative scientists and engineers.

To promote a spirit of free and objective inquiry in different fields amongst the students and motivate them for higher studies and research.

To foster inter-disciplinary approach. To promote the concept of virtual research departments by bringing together faculty and students into activities of mutual interest.

TEACHING PROGRAMMES

The Institute offers instruction in various disciplines of science and engineering, both at the undergraduate (UG) and the postgraduate (PG) levels. These programmes are planned and implemented by the Academic Senate of the Institute Micro-management and these programmes are carried out by the Senate
Undergraduate Committee (SUGC) and the Senate Post-graduate Committee (SPGC), respectively.

**Undergraduate Programme**

The four-year undergraduate programme consists of two parts having duration of four semesters each. The first part is the Core programme common to all students, and is carefully planned to give the students a strong base of basic education in Mathematics, Physics, Chemistry, Engineering Sciences, Technical Arts, Humanities and Social Sciences. The second part of the undergraduate programme consists of the Professional courses and a project in the chosen branch of specialization. At the Bachelor’s level, the Institute offers B.Tech. programs in Aerospace, Biological Sciences and Bio-Engineering, Chemical, Civil, Computer Science, Electrical, Metallurgy and Mechanical Engineering. These are also integrated M.Sc. programs in Physics, Chemistry, Mathematics, Statistics and Economics.

**Two-Year M.Sc. Programme**

There are programs for M. Sc. (2 years) in Physics, Chemistry, Mathematics and Statistics, where the students with B.Sc. (Hons.) background are chosen through an all-India entrance examination known as JAM. These programmes have been largely responsible for the scientific manpower in Indian research institutes and universities.

**Postgraduate Programme**

The postgraduate programme is intended to prepare students to enter their professions with a perspective and breadth of knowledge related to the principal divisions of their respective fields of specialization through courses and specialized research experience. A postgraduate student is typically enrolled for three or four courses each semester until the student advances to a point where the principal requirements of the programme left to be fulfilled are research and thesis.

**M. Tech. Programme**

The Institute offers **M. Tech. Programmes** in all the Engineering Branches, as mentioned above. In addition, there are M. Tech. Programmes in the interdisciplinary areas, such as, Nuclear Engineering, Biological Sciences and Bioengineering, Laser Technology, Environmental Engineering, Materials Science,
and Industrial and Management Engineering. The M. Tech. students are chosen through an all-India examination known as GATE.

**B. Tech.-M. Tech**

The Institute has also adopted a dual degree (B. Tech.-M. Tech.) programme. In this programme, the students admitted through JEE, are expected to complete the M. Tech. Programme in five years. At the end of five years, the student is awarded both B. Tech. and M. Tech. Degrees.

**MBA and MDES Programme**

The Institute has introduced two interdisciplinary programs, namely, MBA and Master of Design. For these courses as well, the students are selected through the all-India examinations known as JMET and CEED respectively.

**Doctor of Philosophy (Ph.D.)**

The academic programmes leading to the Degree of Doctor of Philosophy (Ph.D.) exists in all the engineering departments and two interdisciplinary programmes, namely, Materials Science and Nuclear Engineering and Technology. The Ph.D. programmes also exist in Chemistry, Mathematics, Physics, Statistics, Economics, English, Philosophy, Psychology and Sociology.

**Ph.D. (Dual Degree)**

The Ph.D. programme culminates in research on a selected topic leading to a thesis submitted in partial fulfillment of the requirements for the degree.

The Department of Physics offers an M.Sc.-Ph. D. dual degree programme, the admission is through JAM. It also allows their M.Sc. students to continue for a Ph.D. degree.

The M. Tech. and Ph.D. students receive research/ teaching assistantships.

**D.I.I.T. Programme**

The Institute started a D.IIT programme in Video Communications Systems with effect from first semester 1992-93. The duration of the Course is one year. The DIIT Programme is based on existing PG Course for M. Tech. Programme. This programme is monitored by the Department of Electrical Engineering.
Research Environment in IIT Kanpur


The most recent initiative of IIT Kanpur has been the Formation of a Strong Research Group in the areas of Nanoscience and Nanotechnology.

Curriculum Development and Monitoring Committee (CDMC)

The Curriculum Development and Monitoring Committee (CDMC) has been formed in order to monitor the curriculum continually. The Committee will solicit a report annually from all Core Course Subcommittees regarding their respective core courses. These reports include all relevant information pertaining to the teaching of the courses, tutorials, laboratories and other aspects. The Committee will work over the period with effect from 01/12/2009 to 31/12/2011 for a tenure of two years.

The following is the composition of the CDMC:

Prof. R K Dube (MSE) Chairman
Prof. Amit Prashant (CE) Co-Chairman
Prof. Mainak Choudhary (CSE) Member
Prof. L Krishnan (HSS) ,,
Prof. Aloke Datta (EE) ,,
Prof. D Kundu (MTH) ,,
Prof. V Shankar (CHE) ,,
Prof. C S Upadhyay (AE) ,,
Prof. Ravi Shankar (PHY) ,,
New Initiatives

(a) M.Sc. in Economics

IIT Kanpur has introduced an M Sc (5 year integrated) programme in Economics from July 2005. This programme is providing a strong ground in basic sciences, engineering as well as in various emerging areas of Economics.

The knowledge of Economics and use of Technology for creation of wealth are necessary preconditions for breaking the chain of poverty and low standard of living in the developing countries. Economics and Technology have always migrated together from one country to another, from Europe to the United States, from the United States to Japan and from Japan to Asian Tigers. Today India is in the midst of this tremendous migration of global know-how. The American and the European companies are increasingly carrying out their design and manufacturing work in India.

India has a great tradition in Economics Education and Research. Prof. Amartya Sen, Prof. Jagdish N. Bhagwati are among the finest and best known Economists in the World, and the Hon’ble Prime Minister of India is himself an eminent economist.

Today India needs trained mind with perfect blend of Technology and Economics. The Integrated MSc programme in Economics is a step in that direction. Twenty-five students will be admitted through the Joint Entrance Examination and there will be no prerequisite of Economics as a subject at the higher secondary level. The four streams of Economics are focused. They are Econometrics and quantitative techniques; Industrial economics and business policy; Development infrastructure and public policy and Environment and resource economics. The credit requirement for the graduation is 199 Credit Points. The first four semesters would be common with the other branches of BTech and MSc Integrated programmes.

(b) Environmental Science and Environmental Engineering

The Scope of Environmental Science and Environmental Engineering is inherently interdisciplinary and expanding rapidly. Recognizing the challenges for environmentally sustainable development, IIT Kanpur initiated an interdisciplinary M.Tech. Programme in Environmental Engineering and Management in 1997. This experience has convinced the Institute that there is a pressing need to integrate environmental engineering and science across various
disciplines to solve problems that have important societal impact.

A National Advisory Committee (NAC) was constituted by IIT Kanpur to identify the strategies related to the education in Environmental Sciences and Environmental Engineering. The NAC further recommended that in order to ensure full and unrestricted growth of environmental science and engineering disciplines, a separate initiative be started.

The sustainability of any academic programme and its viability would depend on better and comprehensive integration of the interdisciplinary aspects of such a programme. It is also essential that research should focus on new emerging areas, which can respond to the varying societal environmental concerns. Faculty members drawn from the current EEM program, and Departments such as Chemistry, Chemical Engineering, Civil Engineering, Physics, Biological Sciences and Bio-Engineering, Mechanical Engineering, etc. can provide the best combination to initiate a world class teaching and research academic program in Environmental Science and Environmental Engineering, once proper facilities are created.

It is proposed to initiate a new multidisciplinary facility for Environmental Science and Environmental Engineering at IIT Kanpur, with a focus on the following areas:

- Green Technologies
- Assessment, monitoring and modeling of environmental quality
- Pollution control and remediation
- Health risk assessments due to modern technologies and products
- Ecological modeling
- Atmospheric Sciences – monsoon dynamics, global warning, ozone depletion
- Land reclamation
- Water Resources – groundwater as well as surface water
- Environmental Geosciences – Earth systems
- Environmental Chemistry

To attain these objectives, a comprehensive infrastructure facility including state-of-the-art laboratory will be required. The equipment proposed to be purchased will also be utilized for the on-going research activities in other Departments of the Institute.
National Programme on Earthquake Engineering Education

IIT Kanpur earnestly believes that every Institute of National Importance has an obligation to render necessary service to the country in a crisis. Our country is prone to strong earthquakes, and we need to contain the risks this involves. A trained manpower development programme for earthquake risk mitigation, known as NPEEE (National Programme on Earthquake Engineering Education), has been instituted by the Government of India. IIT Kanpur is the nodal agency for the entire gamut of NPEEE activities. The enthusiastic faculty members of the Institute have made enormous contribution in the Earthquake Engineering Education in the country. Their work in the Andaman Islands during the Tsunami calamity deserves deep appreciation.

Outreach and National Program on Technology Enhanced Learning

Meaningful growth of an Institution depends on the kind of commitment it has made to the society at large. Benefits of academic excellence cannot remain restricted to the boundaries of the academic wall. In an electronic age that has seen walls razed cross states and countries, an institute like IIT Kanpur has a supreme role in providing leadership that addresses societal concerns. As part of its social responsibility, the Institute wants to share its expertise with fellow academic institutions across the country and abroad. Towards this goal, it has initiated an Outreach Education Program. Under this scheme, using the VSAT transmission technology, our faculty members provide lecture courses in the area of engineering and biological sciences to the college and university students in the State of Chhattisgarh. IIT Kanpur is promise bound to transmit some advanced courses to the students of newly founded Pandit Dwarka Prasad Mishra Indian Institute of Information Technology, Design and Management (PDPMIITDM), Jabalpur. IIT Kanpur is also participating in a new project, known as Indo-French Cyber University. This will foster international collaboration in the areas of emerging technologies. The program will include transmission of courses between IIT-Kanpur and the Université Pierre et Marie Curie (Paris). The courses will be taught in English to the advanced Master’s students in both countries by the French and Indian professors.

IIT Kanpur is actively participating in the National Program on Technology Enhanced Learning (NPTEL) sponsored by the Ministry of Human Resource Development. Knowledge grows faster when shared. The NPTEL (National Program on Technology Enhanced Learning) is an initiative of the MHRD to promulgate quality education among the Engineering Colleges of the country.
through the Video and Web-based learning materials in some of the popular disciplines. In particular, MHRD wants to monitor the standard of Engineering Education in many colleges where well-trained faculty members are not available in many subjects. The task is double-sided in nature. On one hand, the standards of the colleges are to be uplifted, while on the other hand, the courses have to be acceptable to the end users. Seven IITs and IISc Bangalore are the major players in this endeavour. The courses prepared at IIT Kanpur, are being transmitted through the educational TV Channel, Eklavya on regular basis. These courses have earned appreciation form a wide range of learners.

ADMISSION

Undergraduate

Admissions for all the B. Tech. M.Sc. (5-year integrated) and B. Tech.-M. Tech. (Dual Degree) programmes at IIT Kanpur for the academic session 2010-2011 were made by the Joint Admission Committee for all IITs and IT-BHU.

The Joint Entrance Examination (JEE) -2010 was held on April 11, 2010. The following offers of admission were made from IIT Kanpur:

<table>
<thead>
<tr>
<th>Department/Disciplines</th>
<th>Total Number of Candidates-Direct Admission</th>
<th>Preparatory Course-2009</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>JEE-2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gen  SC  ST  OB  PH</td>
<td>SC  ST  PH</td>
<td></td>
</tr>
<tr>
<td>B.Tech.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aerospace Engg.</td>
<td>18   06   03   10   01</td>
<td>-   -   -</td>
<td>38</td>
</tr>
<tr>
<td>BSBE</td>
<td>20   04   -    11   -</td>
<td>02  01  01</td>
<td>39</td>
</tr>
<tr>
<td>Chemical Engg.</td>
<td>30   09   05   15   02</td>
<td>-   03  01</td>
<td>65</td>
</tr>
<tr>
<td>Civil Engg.</td>
<td>41   11   06   21   02</td>
<td>-   -   01</td>
<td>82</td>
</tr>
<tr>
<td>Computer Sc. &amp; Engg.</td>
<td>25   08   04   14   01</td>
<td>-   -   -</td>
<td>52</td>
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<tr>
<td>Electrical Engg.</td>
<td>49   14   07   26   02</td>
<td>-   -   -</td>
<td>98</td>
</tr>
<tr>
<td>Mechanical Engg.</td>
<td>36   11   04   20   01</td>
<td>-   -   -</td>
<td>72</td>
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<tr>
<td>Materials &amp; Met. Engg.</td>
<td>45   13   01   24   -</td>
<td>-   06  01</td>
<td>90</td>
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<tr>
<td>M.Sc. Integrated</td>
<td>-   -   -</td>
<td></td>
<td></td>
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</tbody>
</table>
Annual Report 2010-2011

<table>
<thead>
<tr>
<th>Department/Group</th>
<th>Numbers of Admission Offered</th>
<th>Actual Number of Students Joined</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chemistry</strong></td>
<td>18</td>
<td>02</td>
</tr>
<tr>
<td><strong>Mathematics &amp; Scientific Computing</strong></td>
<td>28</td>
<td>07</td>
</tr>
<tr>
<td><strong>Economics</strong></td>
<td>26</td>
<td>05</td>
</tr>
<tr>
<td><strong>Physics</strong></td>
<td>15</td>
<td>04</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>351</td>
<td>94</td>
</tr>
<tr>
<td><strong>B. Tech.-M. Tech. (Dual Degree)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aerospace Engg.</td>
<td>05</td>
<td>01</td>
</tr>
<tr>
<td>Chemical Engg.</td>
<td>07</td>
<td>02</td>
</tr>
<tr>
<td>Civil Engg.</td>
<td>11</td>
<td>04</td>
</tr>
<tr>
<td>Computer Sc. &amp; Engg.</td>
<td>19</td>
<td>06</td>
</tr>
<tr>
<td>Electrical Engg.</td>
<td>16</td>
<td>05</td>
</tr>
<tr>
<td>Mechanical Engg.</td>
<td>12</td>
<td>04</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>70</td>
<td>22</td>
</tr>
</tbody>
</table>

Two-Year M.Sc. Programme
Admissions to the 2-year M.Sc. and M.Sc.-Ph.D. (Dual Degree) programmes were made on the basis of JAM performance. Admission statistics for the M.Sc. (2 year) and M.Sc.-Ph.D. (Dual Degree) Physics programmes during 2010-2011 are as under:

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Department/Group</th>
<th>Numbers of Admission Offered</th>
<th>Actual Number of Students Joined</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>M.Sc. (2-year)</strong></td>
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<td>1</td>
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<td>40</td>
</tr>
<tr>
<td>2</td>
<td>Mathematics</td>
<td>40</td>
<td>35</td>
</tr>
<tr>
<td>3</td>
<td>Physics</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>4</td>
<td>Statistics</td>
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<td>32</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>145</td>
<td>137</td>
</tr>
<tr>
<td><strong>M.Sc. - Ph. D. (Dual Degree)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Physics</td>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>13</td>
<td>12</td>
</tr>
</tbody>
</table>

Post Graduate
The number of students admitted to the Postgraduate Programme in the First and the Second Semesters 2010-2011 is given below:
### ENGINEERING

<table>
<thead>
<tr>
<th>Department / Group</th>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerospace Engg.</td>
<td>30</td>
<td>06</td>
</tr>
<tr>
<td>B.S.B.E.</td>
<td>16</td>
<td>11</td>
</tr>
<tr>
<td>Chemical Engg.</td>
<td>34</td>
<td>14</td>
</tr>
<tr>
<td>Civil Engg.</td>
<td>50</td>
<td>15</td>
</tr>
<tr>
<td>Computer Sc. &amp; Engg.</td>
<td>33</td>
<td>04</td>
</tr>
<tr>
<td>Design (M.Des.)</td>
<td>14</td>
<td>-</td>
</tr>
<tr>
<td>Electrical Engg.</td>
<td>98</td>
<td>17</td>
</tr>
<tr>
<td>Mechanical Engg.</td>
<td>103</td>
<td>19</td>
</tr>
<tr>
<td>Materials Science &amp; Engg.</td>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td>I.M.E.</td>
<td>14</td>
<td>01</td>
</tr>
<tr>
<td>Laser Technology</td>
<td>10</td>
<td>-</td>
</tr>
<tr>
<td>Material Science</td>
<td>06</td>
<td>01</td>
</tr>
<tr>
<td>N.E.T.</td>
<td>07</td>
<td>-</td>
</tr>
<tr>
<td>E.E.M.</td>
<td>15</td>
<td>-</td>
</tr>
<tr>
<td>M.B.A. (IME)</td>
<td>29</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>474</strong></td>
<td><strong>102</strong></td>
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</tbody>
</table>

### SCIENCES

<table>
<thead>
<tr>
<th>Department / Group</th>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ph.D.</td>
<td>Ph.D.</td>
</tr>
<tr>
<td>Chemistry</td>
<td>28</td>
<td>19</td>
</tr>
<tr>
<td>Mathematics</td>
<td>04</td>
<td>01</td>
</tr>
<tr>
<td>Physics</td>
<td>10</td>
<td>06</td>
</tr>
<tr>
<td>M.Sc.-Ph.D. Dual Degree in Physics</td>
<td>06</td>
<td>-</td>
</tr>
<tr>
<td>H.S.S.</td>
<td>03</td>
<td>05</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>51</strong></td>
<td><strong>31</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>627</strong></td>
<td><strong>75</strong></td>
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</tbody>
</table>

The total department/programme wise strength of the Post Graduate students during the year 2010-2011 is given below:
## ENGINEERING

<table>
<thead>
<tr>
<th>Department / Group</th>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerospace Engg.</td>
<td>57</td>
<td>36</td>
</tr>
<tr>
<td>B.S.B.E.</td>
<td>28</td>
<td>70</td>
</tr>
<tr>
<td>Chemical Engg.</td>
<td>57</td>
<td>63</td>
</tr>
<tr>
<td>Civil Engg.</td>
<td>111</td>
<td>49</td>
</tr>
<tr>
<td>Computer Sc. &amp; Engg.</td>
<td>74</td>
<td>26</td>
</tr>
<tr>
<td>Design (M.Des.)</td>
<td>35</td>
<td>-</td>
</tr>
<tr>
<td>Electrical Engg.</td>
<td>158</td>
<td>74</td>
</tr>
<tr>
<td>Mechanical Engg.</td>
<td>176</td>
<td>79</td>
</tr>
<tr>
<td>Materials Science &amp; Engg.</td>
<td>38</td>
<td>54</td>
</tr>
<tr>
<td>I.M.E.</td>
<td>30</td>
<td>17</td>
</tr>
<tr>
<td>Laser Technology</td>
<td>18</td>
<td>-</td>
</tr>
<tr>
<td>Material Science</td>
<td>16</td>
<td>14</td>
</tr>
<tr>
<td>N.E.T.</td>
<td>15</td>
<td>04</td>
</tr>
<tr>
<td>E.E.M.</td>
<td>33</td>
<td>-</td>
</tr>
<tr>
<td>M.B.A. (IME)</td>
<td>71</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td>917</td>
<td>486</td>
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## SCIENCES

<table>
<thead>
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<th>Department / Group</th>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
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<td>Ph.D.</td>
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<tr>
<td>Mathematics &amp; Statistics</td>
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</tr>
<tr>
<td>Physics</td>
<td>63</td>
<td></td>
</tr>
<tr>
<td>M.Sc.-Ph.D. Dual Degree in Physics</td>
<td>36</td>
<td></td>
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<tr>
<td>H.S.S.</td>
<td>43</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
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<tr>
<td><strong>Grand Total</strong></td>
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Strength of Undergraduate and Postgraduate Students during 2010 – 2011 – I:

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</thead>
<tbody>
<tr>
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<td>270</td>
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<td>B.S.B.E.</td>
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<td></td>
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<tr>
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<td>200</td>
<td>64</td>
<td>-</td>
<td>57</td>
<td>63</td>
<td></td>
<td></td>
<td>384</td>
</tr>
<tr>
<td>Chemistry</td>
<td>71</td>
<td>-</td>
<td>74</td>
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<td>191</td>
<td></td>
<td></td>
<td>336</td>
</tr>
<tr>
<td>Civil</td>
<td>272</td>
<td>94</td>
<td></td>
<td>111</td>
<td>49</td>
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<td>526</td>
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<td>C.S.E.</td>
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<td>162</td>
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<tr>
<td>Economics</td>
<td>117</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>117</td>
</tr>
<tr>
<td>Design (M.Des.)</td>
<td>-</td>
<td>-</td>
<td></td>
<td>35</td>
<td>-</td>
<td></td>
<td></td>
<td>035</td>
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<tr>
<td>E.E.</td>
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<td>131</td>
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<td>158</td>
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<td></td>
<td>691</td>
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<td>H.S.S.</td>
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<td>-</td>
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<td>Math</td>
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<td>67</td>
<td>-</td>
<td>51</td>
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<td>288</td>
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<td>Stat</td>
<td>-</td>
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<td>M.E.</td>
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<td>176</td>
<td>79</td>
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<td>-</td>
<td>38</td>
<td>54</td>
<td></td>
<td></td>
<td>383</td>
</tr>
<tr>
<td>Physics</td>
<td>99</td>
<td>-</td>
<td>55</td>
<td>24</td>
<td>-</td>
<td>63</td>
<td>36</td>
<td>277</td>
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<td>I.M.E.</td>
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<td>-</td>
<td>-</td>
<td></td>
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<td>047</td>
</tr>
<tr>
<td>Laser Tech.</td>
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<td>-</td>
<td>-</td>
<td>18</td>
<td>-</td>
<td></td>
<td></td>
<td>018</td>
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<td>M.S.P.</td>
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<td>-</td>
<td>-</td>
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<td>-</td>
<td>-</td>
<td>15</td>
<td>04</td>
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<td></td>
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<td>E.E.M.</td>
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<td>-</td>
<td>-</td>
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<td>033</td>
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<tr>
<td>M.B.A. (I.M.E.)</td>
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<td>-</td>
<td>71</td>
<td>-</td>
<td></td>
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<td>071</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2219</strong></td>
<td><strong>607</strong></td>
<td><strong>252</strong></td>
<td><strong>917</strong></td>
<td><strong>836</strong></td>
<td><strong>36</strong></td>
<td></td>
<td><strong>4891</strong></td>
</tr>
</tbody>
</table>

**GRADUATION**

During the year 2010-2011, 1038 students completed the requirements for the award of B.Tech., M.Sc., DIIT, MBA, M.Tech., and Ph.D. degrees as detailed below:

- B.Tech. 313
- M.Sc. (2 yr. & 5 yr.) 170 (103+67)
- B.Tech.M.Tech. (Dual) 100
MBA 43
VLFM 59
M.Tech. 242
M.Des. 08
Ph.D. 103
Total: 1038

COURSES OFFERED

The following Table gives a picture of the courses offered during 2010-2011 at the undergraduate as well as postgraduate level:

UNDERGRADUATE LEVEL

<table>
<thead>
<tr>
<th>Core Curriculum / Department Courses</th>
<th>First Semester</th>
<th>Second Semester</th>
<th>Summer</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Courses run by various departments</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aerospace Engineering</td>
<td>19</td>
<td>21</td>
<td>04</td>
<td>44</td>
</tr>
<tr>
<td>B. S. B. E.</td>
<td>12</td>
<td>13</td>
<td>-</td>
<td>25</td>
</tr>
<tr>
<td>Chemical Engineering</td>
<td>23</td>
<td>25</td>
<td>01</td>
<td>49</td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>27</td>
<td>33</td>
<td>03</td>
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<td>01</td>
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POST GRADUATE LEVEL

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<td>Nuclear Engineering &amp; Technology</td>
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<td>Laser Technology Programme</td>
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<tr>
<td>Biological Science &amp; Bio Engg.</td>
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UNDERGRADUATE

The following statement shows promotion and detention of B. Tech., M.Sc. (Integrated) and B.Tech.-M.Tech. (Dual Degree), students in the academic year 2010-2011 (upto July, 2011)

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Contents</th>
<th>1st Year</th>
<th>2nd Year</th>
<th>3rd Year</th>
<th>4th Year</th>
<th>5th Year</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Students strength at the beginning of the session</td>
<td>818</td>
<td>662</td>
<td>563</td>
<td>495</td>
<td>288</td>
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<td>2</td>
<td>Students strength at the beginning of the 2nd</td>
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<td>562</td>
<td>494</td>
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## UNDERGRADUATE

The following statement shows promotion and detention of M.Sc. (2-year) and M.Sc. (Dual Degree) students in the academic year 2010-2011 (upto July, 2011)

<table>
<thead>
<tr>
<th>S. No.</th>
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<th>1st Year</th>
<th>2nd Year</th>
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<tr>
<td>1</td>
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<td>Students strength at the beginning of the 2nd Sem.</td>
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<td>3</td>
<td>Number of students dismissed in 1st semester</td>
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<td>01</td>
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<tr>
<td></td>
<td>Number of students dismissed in 2nd semester</td>
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<td>4</td>
<td>Number of students graduated in 1st semester</td>
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<td>Number of students graduated in 2nd semester</td>
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<td>5</td>
<td>Number of students dismissed in due to continued absence from the programme</td>
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</table>

Following is the department-wise break-up of students who were awarded the degree at XLIII Convocation held on 28-05-2011. Dr. Padmanabhan Balram, Director, IISC Bangalore, India was the Chief Guest at the Convocation:
<table>
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<tr>
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Research and Development

The Institute has been striving to develop itself into an institution of excellence in education and research in consonance with the contemporary and future needs of India. The Institute’s R&D activity aims at innovation and technological development through research collaborations with universities, governments through sponsored projects. The research work is published through journal papers in reputed national and international journals. Besides this, the research done, and the technology developed have commercial value.

During 2010-11, 127 sponsored projects worth Rs. 10652 lakh and 97 consultancy projects of value Rs. 898 lakh were undertaken by the faculty and research engineers/scientists of the Institute, respectively.

Our faculty members have published around 696 research papers in reputed national and international journals. The Institute has signed several Memoranda of Understanding with Indian as well as international academic/research institutions and industries to strengthen its collaborative research efforts.

The details of some of the major projects sanctioned during the year 2010-11 are as follows:

National Projects

Major sponsored projects sanctioned by various agencies during the year are DST Rs. 2988 lakh, MHRD Rs. 2070 lakh, MOEF Rs. 1648 lakh, MNRE Rs. 687 lakh, ADA Rs. 566 lakh, and DBT Rs. 564 lakh.

- The Ganga River Basin Management Plan:

A consortium of 7 IITs led by IIT Kanpur, involving more than 100 faculty members from various institutions and organizations has been formed for working on the Ganga River Basin Management Plan. The project is being funded by MOEF at a cost of Rs. 16 crore. Interdisciplinary thematic groups covering a broad range of issues such as environmental quality and pollution, water resources management, fluvial geomorphology, ecology and
biodiversity, socio-cultural and socio-economic factors, policy, law and governance, geo-spatial data and communication have been formed to execute the project.

- **ICT for agriculture:**

The next green revolution is sure to be driven by knowledge, especially with the challenge of climate change looming ahead. IIT Kanpur has been working on ICT in agriculture with special emphasis on agriculture knowledge management. Some of the major innovations that have come up include: use of semantic web and social networking technologies in agriculture knowledge creation and dissemination, automatic tagging for meta-data population, re-usable learning objects management in agriculture and extension content delivery. These efforts are supported by National Agricultural Innovation Projects funded by ICAR.

- **Design and Development of Organic Solar Cells Sub-modules:**

The Ministry of New and Renewable Energy has sanctioned a grant of Rs. 6.6 crore for the Design and Development of Organic Solar Cells Sub-modules. The project proposes to build sub-modules with polymer based organic solar cells that will be useful for practical applications. The three-year project targets building a base-line process to manufacture small area organic solar cells of at least 5% power conversion efficiency (PCE) with a six months lifetime, followed by a 10 cm by 10 cm sized sub-module which will have a PCE of 4% and an estimated lifetime of 3 years.

- **ERP for Academic Institutions:**

IIT Kanpur is leading an NMEICT, MHRD funded Enterprise Resource Planning consortium mode project having a funding of Rs. 19.36 crore. The other consortium members are AMU Aligarh, AVV Kochi, DEI Agra, IGNOU Delhi, IIT Roorkee, JMI Delhi, NIT Hamirpur, and SMVDU Jammu. The project envisages designing, developing, implementing and maintaining software services to make them available for all the educational institutes of the country.

**International projects**

- **DISANET - Information Network for Natural Disaster Mitigation and Recovery:**
A project has been granted by the Japan International Cooperation Agency (JICA), Japan. It deals with risk mitigation in the context of earthquakes. Based on the available information on active tectonics in the Himalayan region, the project will undertake detailed mapping, paleo-seismic investigation and GPS measurements in three transacts across the fault zone between NW and Central Himalayas. It is proposed to develop an Optically Stimulated Luminescence (OSL) dating facility at IIT Kanpur to define the timings of earthquakes, and rates of crustal deformation for seismic and tectonic history of the Himalayan front.

- **RFID and Condition Based Monitoring (CBM):**

Boeing Company, USA, in appreciation of our research output in the area of RFID and Condition Based Monitoring (CBM), has decided to continue its support for the fifth consecutive year. In the area of RFID, we have been working on the design of innovative reader antennas for portable RFID reader. The primary objective here is to make the antenna as sleek and compact as possible. CBM for air compressors and motors allows the maintenance activity to be scheduled efficiently.

- **An Outer Rotor Surface Permanent Magnet Synchronous motor:**

IHI is one of Japan’s largest manufacturers of comprehensive heavy machinery. The collaborative project was directed towards design of new electrical machines using electromagnetic analysis of rotating machines coupled with their appropriate drive systems. The methodology devised was first tested in the design of a high efficiency induction motor. The methodology devised involved the initial design of machines using RMXprt (from Ansoft) and co-simulation using Maxwell and Simploter, in order to achieve the accuracy of a finite element analysis for system level simulation. Ultimately the devised methodology was used in the development of an Outer Rotor Surface Permanent Magnet Synchronous motor for electrical vehicles.

**Patents filed by the faculty during the financial year 2010-2011:**

1. Device for power control and storm security for savonius wind turbine.
2. Torque augmentation of horizontal axis wind turbine by utilizing core region flow/ A horizontal axis wind turbine for augmenting torque.
4. Carbon Nanocomposite preparation and uses thereof.
7. Nanotextured Dielectric in electrolyte insulator semiconductor devices for enhanced sensitivity.
9. A generic approach to prepare nanoparticles-loaded polymer capsules for biomedical applications.
10. Toilet waste treatment system and device.
11. A Technique for soundscaping over internet based map/image server.
14. A System for providing the users a secured service relating to deposit, withdrawal and transfer of one of inputted and processed data including financial instrument.
15. Modular transporter for material handling and personalized ridding.
16. A product and process for increasing mail transmission process of postal industry/ A System & method for transmitting mails from a first location to a second location.
18. Advanced Sintering System.
19. Powder coating system and method.

**Patents filed through Intellectual Ventures:**

1. Image Based Structural Characterization Of Fibrous Materials.
2. Four dimensional reconstruction and characterization system.
3. Flexible temperature sensor and sensor array.
5. Aluminum based n-type semiconductors as organic photonic precursors for inorganic photonic materials in bulk, film and nanowire form.
6. Convergent Matrix Factorization Based Entire Frame.
8. Incandescent Lamp.
9. Carbon nanofiber/carbon nanocoil coated substrate and nano composites.
10. Systems and methods for imaging characteristics of a sample and for identifying regions of damage in the sample.
Design patent:

1. A green harvesting device for low power electronic equipment.
2. Modular transporter for material handling and personalized riding.

Major Facilities Added during the financial year 2010-11:

1. Under the FIST scheme of DST and with additional support from the institute, the Department of Chemistry is procuring a time resolved resonance Raman spectrometer. This facility is available only at a few selected centres across the world. The upcoming facility promises to be unique in addressing the requisite laser wavelength tunability (215 nm – 1064 nm), anaerobic and cryostatic sample chamber, ultra-sensitive detectability and ultrashort time resolution (5 ns). The facility is likely to interest several other departments across the Institute for e.g., MSE, CHE, Physics and BSBE.

2. The Department of Electrical Engineering has received a grant of 490 lakh from the DST under its FIST scheme for procuring a Real-Time Simulator, Millimeter Wave Network Analyzer, Light wave measurement system, Optic-wave photonic EDF amplifier, Laser Driver and Fusion Splicer, Wireless Network Simulator and Research Platform, Shadow Hand and a Biomorphic Robotic Arm, Control Research Platforms and a Four Wheel Drive and Four Wheel Steer.

3. A new State-of-the-Art 372-node High Performance Computing cluster has been recently inaugurated at the Computer Centre. It has been sponsored by the Department of Science and Technology and is based on Intel Xeon Quadcore processors with a total of 2944 cores and high-speed Infiniband network with a peak performance of 34.5 TF. It has greatly facilitated high-end computational research in the Institute covering several areas of science and engineering. On the infrastructural side, a modern data centre with state-of-the-art precision air conditioning and fire safety features is being built in the central area of the Computer Centre.

4. Real Time Digital Simulation (RTDS):

To carry out advanced research on practical power and control system problems, the Department of Electrical Engineering is setting up a 6-rack Real Time Digital Simulation (RTDS) facility which is the biggest in Asian academic institutions. For setting up this facility, DST has sanctioned a funding of about
Rs. 7.6 crore under its IRHPA scheme. The facility can simulate the transient behavior of practical systems using a time step of upto two microseconds. Two major research activities planned are Synchrophasor Applications in Power Systems and Grid Integration of Wind Farm/Solar Photovoltaics using AC as well as DC microgrids.

5. Facilities under CARE Scheme of IITK:

The Institute is adding several major infrastructural facilities for carrying out multidisciplinary R&D activities. Under CARE, X-Ray Fluorescence (XRF) spectrometer, laser-induced incandescence, dynamic high-resolution polarized inverted laser confocal fluorescence microscopy, Scanning Electron Microscope, a probe station for temperature and magnetic field dependent electrical measurements on thin films, devices and materials have been funded.

Memorandum of Understanding

During the year 2010-11, IIT Kanpur strengthened its relations with many national and international institutes and organizations through research collaborations and signed several Memoranda of Understanding. During the year, the following institutes/universities/organizations have joined hands with IIT Kanpur for the purpose of research work in the diverse fields of science and technology. Some of such organizations are:

1. Ministry of Defence, Government of India, New Delhi for design and development of symmetric key encryption algorithm to Indian Air Force.
2. National Informatics Centre (NIC), New Delhi, National Informatics Centre Services Incorporated (NICSI), New Delhi for addendum to the MoU for creation of virtual classrooms at IITs over National Knowledge Network (NKN).
6. British Telecommunications is the funding agency. It’s a consortium agreement where IITs, research institutes and universities around the World are
participating for Indian-UK Advanced Technology Center of Excellence in next generation networks systems and services project.

7. Central Glass & Ceramic Research Institute, Kolkata for study on the compressive strength evaluation of ceramics and composites at high strain rate.

8. Indira Gandhi Centre for Atomic Research, Kalpakkam for project titled, metrology of fuel sub-assembly wrappers and evaluation of fuel pellets.

9. Ministry of Communications and IT, DOP, GOI, Chennai for improving speedpost and registered mail processing using RFID technology.

10. Ordinance Factory Board (OFB), Medak to cooperate for development of Futuristic Infantry Combat Vehicle (FICV).

11. Homi Bhabha National Institute (HBNI), Mumbai to create a long term institutional partnership in education and research.

12. Centre for Development of Advanced Computing, Vellayambalam, Thiruvananthapuram to transfer the technology of Grid Connected Solar PV Power Plant to identified eligible industries, on non-exclusive basis for commercial exploitation.


14. Research Design and Standards Organisation, Lucknow for interfacing of Electronic Control unit of Electronic Fuel Injection System (EFI) with test commander (AVL PUMA 5.6) of Test bed of engine development directorate and with microprocessor traction control system of ALCO locomotive.

15. The World Bank, New Delhi for short term Consultant appointment

16. Syndicate Bank, Bangalore for Creation of a Research Centre namely ‘Syndicate Bank Entrepreneurship Research and Training Centre’ (SBERTC-IITK) at IITK.

17. Department of Scientific & Industrial Research, New Delhi for Technopreneur Promotion Programme Programme (TePP).

18. National Bank for Agriculture and Rural Development (NABARD), Mumbai for interoperability of Fingerprint Systems

19. National Aeronautics and Space Administration (NASA), USA for extension of agreement up to April 30, 2021 for a detailed understanding of global atmospheric change.

20. Asian Office Aerospace Research and Development, USA for control of resonances and optical properties of plasmonic-patch metamaterials.


22. Politecnico Di Torino, Italia for Exchange of faculty, academic material and publications, collaboration in teaching, research and development, undertaking joint research, co-supervising post-graduate students.
During the year 2010-11, Memoranda of Understanding have also been signed with many companies such as:

1. Medhaj Techno Concept Pvt. Ltd., Lucknow for the activities, modalities and conditions regarding collaboration focusing on the areas of power system development, power system education and training.
2. SAMTEL Color Limited, Ghaziabad for Joint Programmes and activities of the SAMTEL Centre for Display Technologies (SCDT) at IIT Kanpur.
3. SAMTEL Color Limited, Ghaziabad for IPR policy governing the Samtel sponsored projects at SCDT.
6. Hindustan Aeronautics Limited, Bangalore for development of a computational aeroelasticity code for helicopter rotor loads and dynamic response analysis.
8. GE India Technology Centre Private Limited for providing services in the field of design and simulation of DC/DC conversion.
9. IHI Corporation, Japan for optimization of efficiency of outer-rotor surface permanent magnet synchronous motor (SPMSM) over a given speed range.
10. BioOrganics & Applied Materials Pvt. Ltd., Bangalore for extension of the original MoU till 30th June 2013. (To initiate and guide the collaborative research projects.)
11. UP Rajya Vidyut Utpadan Nigam Ltd., Lucknow for monitoring of the Techno IT Project under Project Pragati.
12. BSES Rajdhani Power Limited, New Delhi for joint collaboration in the areas of system studies and network planning; evaluation of technical losses; reactive power optimization; harmonic estimation and control; adaptive of new technologies, training and development activities for BSES engineers.
15. Embsol Technologies Private Limited, Bangalore to develop smart card solutions, operating system and associated applications to meet SCOSTA-CL and various standards and seek their viability for commercial purposes.
16. ITI Limited, Bangalore Commercialize technologies developed by the companies incubated at SIIC.
17. Pricol Limited, Coimbatore to employ software architecture and knowledge modeling techniques in automotive software development.
18. Cromoz Inc., North Carolina, USA for extension of the original MoA till 30th June 2012. (For the development of drug delivery process.)
19. Honda R&D Co. Ltd., Japan for Social optimization algorithms will be developed.
20. Chevron U.S.A. Inc., USA to generate a computer code that automates the design equations to size the HIGEE 2nd generation technology for absorption of acid gas.
21. Eaton Corporation, USA to jointly work on activities like summer as well as project based internships for students at Eaton, lectures and courses for Eaton engineers, visits of Eaton engineers and managers to IITK, projects of mutual interests.
22. Invention Development Management Company, LLC (Licensee), an affiliate of Intellectual Ventures Management, LLC, USA pursuant to this license agreement, IIT Kanpur may submit proposed solutions to licensee and licensee may license those proposed solutions and related rights under open invention program, topic invention and/or other programs created from time to time.
23. Microsoft Research India, Bangalore for Microsoft Research India PhD fellowship program.
24. The Curators of the University of Missouri, on behalf of the University of Missouri-Columbia, College of Engineering, USA to promote interaction and exchanges between faculty, staff and students; to explore joint research programs, educational exchange programs, continuing and distance education; to enhance the technological, social and cultural relations.
25. University of Waterloo, Canada for addendum to the MoU in January 2007 for exchange of students in their BTech and BASc programs.
26. Yale University, USA And India Institute of Management, Kozhikode, India for exchange of scientific, academic and technical information, identification of opportunities for exchanges, joint workshops, seminars, courses and conferences, establishment of two Centers of Excellence of Academic Leadership (CEEAL) in India.
27. ParisTech – Paris Institute of Science and Technology, Paris, France to promote exchanges of faculty, staff, students, organize symposia, conferences, short courses and meetings, carry out joint research, exchange information pertaining to developments in teaching, student development and research at each institution.
28. Tata Consultancy Services, Mumbai for production of polymer nanofibers through Electrospinning.
29. Larson & Toubro Ltd, Mumbai for thermodynamic modeling of the Blast Furnace as a counter-current reactor using optimization.
30. Intel Technology Limited, Bangalore to perform research on advanced Cache Architectures for emerging applications and systems.
31. GE India Technology Centre Pvt. Ltd. for fixed term hiring.
32. GE India Technology Centre Pvt. Ltd. for providing services in the field of design and simulation of DC/DC conversion.
33. Samsung India Software Operations Pvt Ltd. for Commissioned research and development contract.
34. Thermax Limited, Pune for development of high surface area Carbon nanomaterials for capacitive deionization.
35. Chevron USA and Hindustan Petroleum Corporation Limited, Mumbai for Industry sponsored Joint Research and Exchange Program Agreement.
37. The Procter & Gamble Company, Cincinnati, USA for understanding adhesion and contact mechanics of microparticles with substrates.
38. The Procter & Gamble Company, Cincinnati, USA for Services related to air quality testing.
40. Tata Steel Nederland Technology BV, The Netherlands for extension upto 30th April 2012 and amendment agreement.
41. Technische Universiteit Eindhoven, The Netherlands for Software License Agreement.

A list of major sponsored and consultancy projects sanctioned during the financial year 2010-2011 is provided below.

**Sponsored Projects:**

**A. National Projects:**

1. QUANTUM PHASE TRANSITIONS & NON-EQUILIBRIUM DYNAMICS OF CLASSICAL & QUANTUM SYSTEMS, funded by CSIR, Total Cost Rs. 1016000.
2. WETTING BEHAVIOUR OF AQUEOUS ORGANIC FLUIDS ON FUNCTIONAL SURFACES, funded by CST, Total Cost Rs. 636000.
3. ALTERNATIVE COMPLIMENTARY ROUTE OF DIRECT STEEL MAKING WITH REFERENCE TO INDIAN RAW MATERIALS, funded by MOS, Total Cost Rs. 4800000.
4. IMPROVEMENT IN SINTER PRODUCTIVITY THROUGH DEEP BENEFICIATION AND AGGLOMERATION TECHNOLOGIES FOR RATIONAL UTILISATION OF LOW GRADE IRON ORES AND FINES, funded by MOS, Total Cost Rs. 4680000.

5. MEASUREMENT OF AEROSOL AND DROplet MICROPHYsICAL MODELS, funded by BRNS, Total Cost Rs. 5258000.

6. DESIGN AND DEVELOPMENT OF HYDROGEN GAS BURNER FOR INDUSTRIAL APPLICATION, funded by MNRE, Total Cost Rs. 2390400.

7. DEVELOPMENT OF CARBON NANOtUBE COATED BACKING STRUCTURE/ BIPOLAR PLATE FOR THE PEM FUEL CELLS: PERFORMANCE EVALUATION, funded by STC, Total Cost Rs. 5436000.

8. COMPRessive STRENGTH EVALUATION OF CERAMICS AND COMPOSITES AT HIGH STRAIN RATE, funded by CSIR, Total Cost Rs. 1257312.

9. FLIGHT LAB TRAINING PROGRAM, funded by MIS, Total Cost Rs. 1138153.

10. E-BOOK ON MATERIAL SCIENCE AND ENGINEERING, funded by MHRD, Total Cost Rs. 3221000.

11. SPEECH BASED ACCESS FOR AGRICULTURE COMMODITY PRICES IN SIX INDIAN LANGUAGES, funded by MCIT, Total Cost Rs. 5543000.

12. WIDE AREA MEASUREMENT AND CONTROL FOR IMPROVING OBSERVABILITY AND STABILITY OF POWER SYSTEMS, funded by CPRI, Total Cost Rs. 2500000.

13. NONPLANAR METALLO-PORPHYRINS AND IMPLICATIONS FOR THE HEMOPROTEINS, funded by CSIR, Total Cost Rs. 1205167.

14. APPLICATION OF SLYMETHYL-SUBSTITUTED SMALL RING COMPOUNDS IN ASYMMETRIC CATALYSIS & ORGANIC SYNTHESIS, funded by CSIR, Total Cost Rs. 1986000.

15. BIOCOMPATIBLE SYNTHETIC CAPSULES AT REACTION VESSELS AND DELIVERY VEHICLES, funded by DST, Total Cost Rs. 3182000.

16. DESIGNING AND OPTIMIZATION OF A BIOARTIFICIAL LIVER SUPPORT USING CRYOGEL BASED BIOREACTOR FOR TREATMENT OF ACUTE LIVER FAILURE, funded by DBT, Total Cost Rs. 15895500.

17. SETTING OF A SHPB FACILITY AT TBRL FOR HIGH STRAIN RATE CHARACTERIZATION OF LOW IMPEDANCE MATERIALS, funded by DRDO, Total Cost Rs. 1444800.

18. PHOTONIC PROPERTIES OF PERIODICALLY PATTERNED NANOSCULPTURED THIN FILMS, funded by CSIR, Total Cost Rs. 2000000.

19. BI-DIRECTION BATTERY CHARGING SYSTEM, funded by DST, Total Cost Rs. 2290800.
20. PREPARATION OF DETAILED TECHNICAL & FINANCIAL PROPOSAL ON PREPARING GANGA RIVER BASIN MANAGEMENT PALN (GRBMP), funded by MOEF, Total Cost Rs. 3685000.
21. MOLECULAR WIRES AND ULTRASENSITIVE MOLECULAR SENSORS BASED ON METAL NUCLEOBASE SYSTEMS, funded by DST, Total Cost Rs. 1373900.
22. ENGINEERING SUPERCONDUCTING NANOSTRUCTURES IN DICHALCHOGENIDES AND INVESTIGATING THEIR PROPERTIES, funded by DST, Total Cost Rs. 3558500.
23. ERP-MISSION, funded by MHRD, Total Cost Rs. 193600000.
24. SYNCHRONOUS LIVE LECTURE DELIVERY SYSTEM-BRIHASPATISYNC, funded by MHRD, Total Cost Rs. 10200000.
25. PREPARATION OF GRBMP, funded by MOEF, Total Cost Rs. 160002000.
26. DAMAGE ASSESSMENT FOR TEJAS DUE TO ARRESTOR BARRIER ENGAGEMENT, funded by ADA, Total Cost Rs. 696000.
27. DESIGN, DEVELOPMENT & TESTING OF AEROFOIL HOUSING, funded by HAL, Total Cost Rs. 2475000.
28. ASSISTIVE ROBOTICS USING MULTISENSOR NETWORK, funded by DST, Total Cost Rs. 3628240.
29. DECIPHERING THE ROLE OF UNIQUE GTPASE, HFIX IN RIBOSOME ASSEMBLY, funded by DST, Total Cost Rs. 3180000.
30. DEVELOPMENT OF A BIOARTIFICIAL LEVER SUPPORT SYSTEM, funded by DST, Total Cost Rs. 352000.
31. A STRUCTURAL BASIS FOR THE VARIATIONS IN CATALYTIC MECHANISMS EXHIBITED BY GTPASES, funded by DBT, Total Cost Rs. 900000.
32. PARALLEL PROCESSING SOFTWARE DEVELOPMENT IN QUANTUM CHEMISTRY, funded by CDAC, Total Cost Rs. 1467120.
33. SPECIAL HONORARIUM TO SSB AWARDEES, funded by CSIR, Total Cost Rs. 155323.
34. STRUCTURAL AND BIOCHEMICAL STUDIES TO UNDERSTAND THE ROLE OF A UNIQUE GTPASE ENGA IN RIBOSOME BIOGENESIS, funded by DBT, Total Cost Rs. 6391000.
35. INNOVATIVE NATURAL DYEING, funded by EDI, Total Cost Rs. 200000.
36. THERMAL STRIPING STUDY IN A FBR: EDDIES TRANSPORT USING COMBINED PIV/ LIF AND SCHLIEREN TECHNIQUES, funded by IGCAR, Total Cost Rs. 2340000.
37. RAMANANNA FELLOWSHIP, funded by DST, Total Cost Rs. 3480000.
38. COORDINATION POLYMERS OF TRANSITION AND LANTHANIDE METALS FOR HETEROGENOUS CATALYSIS, LUMINESCENCE AND MAGNETIC STUDIES, funded by DST, Total Cost Rs. 9190000.
39. MASS TRANSFER STUDIES REMOVAL OF DISSOLVED GASES FROM AQUEOUS SOLUTION APPLYING MEMBRANCE CONTRACTOR AS DEGASSER, funded by CSIR, Total Cost Rs. 975000.

40. STUDY OF INTERNAL FLOW DYNAMICS IN A 2D CURVED NOZZLE AND DEVELOPMENT OF FLUIDIC THRUST VECTORED NOZZLE, funded by ARDB, Total Cost Rs. 1841200.

41. STUDY OF METAMATERIAL BASED PHOTONIC CRYSTALS AND ITS APPLICATIONS, funded by DST, Total Cost Rs. 1164000.

42. APPLICATIONS OF BIOFUEL FOR AVIATION, funded by DST, Total Cost Rs. 8316000.

43. PERMITTIVITY AND PERMEABILITY MEASUREMENTS OF THIN SAMPLES IN X AND KU FREQUENCY BANDS, funded by DRDO, Total Cost Rs. 1000000.

44. COMMUNITY LINK UP FOR NATURAL DYEING WITH RICH DYE YIELDING PLANTS OF ARUNACHAL PRADESH, funded by DST, Total Cost Rs. 635200.

45. LARGE-EDDY SIMULATION OF TRANSITIONAL FLOW OVER A LOW PRESSURE TURBINE BLADE, funded by MOD, Total Cost Rs. 4224000.

46. A STUDY OF THE EFFECTS OF WAKE PASSING ON TURBINE BLADE FILM COOLING, funded by MOD, Total Cost Rs. 5486900.

47. NUMERICAL SIMULATIONS OF FLOW AND HEAT TRANSFER AROUND FILM-COOLED GAS TURBINE BLADES WITH DIFFERENT TURBULENCE MODELS, funded by MOD, Total Cost Rs. 4224000.

48. DEVELOPMENT AND PERFORMANCE EVALUATION OF CARBON NANO COIL STRUCTURE FOR THE CATALYST SUPPORT IN PEM FUEL CELLS, funded by DST, Total Cost Rs. 4952800.

49. ONE-PHOTON FLUORESCENCE, TWO-PHOTON FLUORESCENCE AND TWO-PHOTON ABSORPTION CROSS-SECTION FOR SELECTIVE SENSING OF CATIONS, funded by DST, Total Cost Rs. 1674000.

50. COMPARATIVE EVALUATION OF HUMAN BRAIN IN VITAMIN B-12 DEFICIENCY USING EPI BASED AND STEAM BASED DTI TECHNIQUES, funded by DBT, Total Cost Rs. 1314000.

51. FLOW INSTABILITIES IN SUPERSONIC MIXED COMPRESSION AIR INTAKES, funded by ARDB, Total Cost Rs. 1135000.

52. SINTERING STUDIES ON NUCLEAR MATERIALS, funded by IGCAR, Total Cost Rs. 4700000.

53. EXPERIMENTAL AND NUMERICAL INVESTIGATION ON THE MECHANICAL BEHAVIOUR OF MICRO-SIZED STRUCTURAL ELEMENTS, funded by DST, Total Cost Rs. 2303935.

54. DEVELOPMENT OF GAS SENSOR PLATFORM FOR AUTOMOTIVE APPLICATIONS, funded by ADA, Total Cost Rs. 4370000.
55. JC BOSE FELLOWSHIP, funded by DST, Total Cost Rs. 1570000.
56. DERANDOMIZING POLYNOMIAL IDENTITY TESTING AND THE
    ISOLATION LEMMA, funded by DST, Total Cost Rs. 889600.
57. UNRAVELLING THE ROLE OF HUMAN NON-CODING SATELLITE-III
    TRANSCRIPTS IN CELLULAR STRESS RESPONSE, funded by DBT, Total
    Cost Rs. 5779000.
58. REAL TIME DETERMINATION OF THE ELECTRONIC AND STRUCTURAL
    DYNAMICS IN MOLECULES BY ULTRAFAST SPECTROSCOPY, funded by
    BRNS, Total Cost Rs. 3065000.
59. WHITE ORGANIC LIGHT EMITTING DIODE FOR LIGHTING AND
    DISPLAYS, funded by DST, Total Cost Rs. 3692600.
60. EXPERIMENTAL STUDIES ON SPRAY CHARACTERIZATION, funded by
    DRDL, Total Cost Rs. 995000.
61. EXPERIMENTAL STUDIES OF TRAPPED VORTEX COMBUSTOR, funded by
    DST, Total Cost Rs. 2610000.
62. INORGANIC HYBRID HELICATE AND ENCAPSULATION ASSEMBLY
    MIMICKING CELL AND DNA STRUCTURE, funded by DST, Total Cost Rs.
    5156000.
63. TARGETED MULTIFUNCTIONAL POLYMER CAPSULES: A VERSATILE
    DRUG CARRIER AND BIOIMAGING AGENT, funded by DBT, Total Cost Rs.
    7258000.
64. MICROWAVE PROCESSING, CHARACTERIZATION AND MODELING OF
    METAL POWDER COMPACTS, funded by DST, Total Cost Rs. 2231680.
65. COMBINING BIMETALLIC SCAFFOLDS AND METAL-COORDINATED
    PHENOXYL RADICALS FOR MULTI ELECTRON TRANSFORMATIONS: A
    STEP BEYOND NATURE COMBINING BIMETALLIC SCAFFOLDS AND
    METAL - A STEP BEYOND NATURE, funded by DST, Total Cost Rs. 1439600.
66. WATER REACTION AT THE TRANSITION METAL CENTER AND ITS
    APPLICATION IN CATALYTIC ORGANOMETTALIC PROCESS, funded by
    CSIR, Total Cost Rs. 1400000.
67. JC BOSE FELLOWSHIP, funded by DST, Total Cost Rs. 6800000.
68. VIDEO COMPRESSION AND DECOMPRESSION FOR E-LEARNING, funded
    by CDAC, Total Cost Rs. 1000000.
69. TECHNOLOGY BUSINESS INCUBATOR, funded by DST, Total Cost Rs.
    20000000.
70. ACTIVE TECTONIC INFLUENCE ON LANDSCAPE EVOLUTION AROUND
    NORTHERN FRINGE OF JANAURI ANTICLINE ALONG HIMALAYAN
    FRONTAL ZONE,NW HIMALAYA, funded by DST, Total Cost Rs. 1979000.
71. MODELING OF ELECTRODYNAMIC SHAKERS, funded by STC, Total Cost
    Rs. 1444320.
72. SYNCHRONIZED MEASUREMENT TECHNOLOGY FOR VOLTAGE STABILITY MONITORING AND STATE ESTIMATION OF POWER SYSTEMS, funded by STC, Total Cost Rs. 1652000.

73. A COMPUTATIONAL STUDY OF CRYSTALLINE WETTING BEHAVIOUR ON SMOOTH AND PATTERNED SUB-STRATES, funded by DST, Total Cost Rs. 1830000.

74. PASSIVE MATRIX FULL COLOR ORGANIC LIGHT EMITTING DIODE (OLED) DISPLAY WITH COMMERCIAL SPECIFICATIONS, funded by DST, Total Cost Rs. 25000000.

75. AN INVESTIGATION INTO THE BIOMECHANICS OF DIABETIC GASTROPARESIS, funded by CSIR, Total Cost Rs. 1370000.

76. DESIGN & DEVELOPMENT OF A NON INVASIVE OCULAR DRUG DELIVERY SYSTEM FOR THE TREATMENT OF RETINAL DISEASES, funded by ICMR, Total Cost Rs. 2770852.

77. SETTING UP REAL TIME DIGITAL SIMULATION FACILITY FOR ADVANCE RESEARCH IN POWER AND CONTROL, funded by DST, Total Cost Rs. 76076520.

78. FIBRE-OPTIC ENTANGLED PHOTON PAIR GENERATION FOR QUANTUM KEY DISTRIBUTION AND QUANTUM OPTICS, funded by DST, Total Cost Rs. 1548000.

79. SMART HYBRID STRUCTURE FOR FLAPPING WING STUDIES AND ITS APPLICATION TO MICRO AIR VEHICLES, funded by DRDO, Total Cost Rs. 4757000.

80. THEORETICAL AND COMPUTATIONAL STUDIES OF MICAV, funded by DRDO, Total Cost Rs. 4174500.

81. DEVELOPMENT OF DIELECTRIC RESONATORS FOR APPLICATIONS TO MICROWAVE SYSTEMS, funded by SAC, Total Cost Rs. 3327000.

82. NOVEL MULTIFUNCTIONAL NANOCOMPOSITES MADE OF EPOXY REINFORCED WITH CARBON NANOCOIL COATED CARBON FIBER FOR STRUCTURAL APPLICATIONS, funded by DST, Total Cost Rs. 4807115.

83. DEVELOPMENT OF BILAYERED MACROPOROUS CRYOGEL SCAFFOLD FOR SKIN TISSUE ENGINEERING APPLICATIONS, funded by LSRB, Total Cost Rs. 3898000.

84. DEVELOPMENT OF FUZZY RULE BASED GAUSSIAN REGRESSION MODEL FOR GENERATING FUTURE IMAGES, funded by DST, Total Cost Rs. 2580000.

85. SYNTHESIS OF SHAPE AND SIZE CONTROLLED METALLIC AND OXIDE AQUASOLS WITH EXTRAORDINARY BACTERICIDAL EFFECTS, funded by DST, Total Cost Rs. 2580000.
86. RESPONSE MODIFICATION OF NONSTRUCTURAL COMPONENTS DUE TO NONLINEAR BEHAVIOUR OF SUPPORTING STRUCTURES, funded by DST, Total Cost Rs. 1488000.
87. LOOP MODELING IN NUCLEIC ACID STRUCTURES, funded by DBT, Total Cost Rs. 1934400.
88. ANALYSIS OF WIDEBAND PRINTED DIPOLE ANTENNAS, funded by CRESIS, Total Cost Rs. 446080.
89. SYNDICATE BANK ENTREPRENURSHIP RESEARCH & EDUCATION CENTRE, funded by SYNDICATE BANK, Total Cost Rs. 20000000.
90. SBEREC (RUNNING, CURRENT), funded by SYNDICATE BANK, Total Cost Rs. 3400000.
91. FEASIBILITY STUDIES ON LASER-MACHINING OF INFRA-RED METAMATERIALS, funded by IRDE, Total Cost Rs. 975000.
92. ELECTROHYDRO_DYNAMIC ATOMIZATIN FOR MICRO/NANO CAPSULE FORMATION IN TARGETED DRUG DELIVERY, funded by DST, Total Cost Rs. 2400000.
93. MULTI-OBJECTIVE MULTIDISCIPLINARY OPTIMIZATION SYSTEM, funded by DST, Total Cost Rs. 482020.
94. DESIGN, CONSTRUCTION AND AERODYNAMIC TESTING OF BIO-MIMICKING FLAPPING WING MICRO AIR VEHICLES AND MODELS, funded by DRDO, Total Cost Rs. 4929500.
95. DEVELOPMENT OF THE VIDEO CDS FOR THE MIDDLE SCHOOL STUDENTS ON SCIENCE AND MATHEMATICS, funded by DST, Total Cost Rs. 1200000.
96. DISCOVERY OF NOVEL MODULATORS OF NEUROTOXICITY AS POTENTIAL THERAPEUTIC INTERVENTIONS, funded by DAE, Total Cost Rs. 10000000.
97. AERODYNAMIC CHARACTERIZATION AND PERFORMANCE ESTIMATIONS THROUGH FLIGHT TEST, funded by DRDO, Total Cost Rs. 1035000.
98. INVESTIGATION OF SPACE CHARGE PHENOMENA IN POLYMERIC DIELECTRIC MATERIALS, funded by DST, Total Cost Rs. 4435405.
99. FABRICATION OF ARRAYS OF NANO-SIZED METAL PARTICLES/1D NANOSTRUCTURED MATERIALS, funded by DMSRDE, Total Cost Rs. 22844000.

100. ADVANCED MANUFACTURING, funded by DST, Total Cost Rs. 679000.
101. SYNTHESIS AND CHARACTERIZATION OF PHENYL-C61-BUTYRIC ACID METHYL ESTER (PCBM), funded by DMSRDE, Total Cost Rs. 897000.
102. CSIR SSB AWARD, funded by CSIR, Total Cost Rs. 45000.
103. GASTRO-ESOPHAGEAL TRANSPORT AND REFLUX: A COMPREHENSIVE ANALYSIS USING AN INTERDISCIPLINARY APPROACH, funded by DBT, Total Cost Rs. 8280000.
104. ADVANCING THE EFFICIENCY AND PRODUCTION POTENTIAL OF EXCITONIC SOLAR CELLS (APEX), funded by DST, Total Cost Rs. 18400000.
105. DEVELOPMENT OF VIABLE TECHNOLOGY FOR MERCURY REMEDIATION FROM INDUSTRIAL AND DENTAL HOSPITAL WASTE WATERS USING POLYMER NANOCOMPOSITES, funded by MOEF, Total Cost Rs. 1206775.
106. DEVELOPMENT OF TECHNOLOGY FOR NANOFINISHING OF CURVED AND SCULPTURED SURFACES, funded by BARC, Total Cost Rs. 4140000.
107. DESIGN OF HEAT TRANSFER MODULE USING HEAT PIPES, funded by IRDE, Total Cost Rs. 400000.
108. DESIGN AND FABRICATION OF MICRON SIZE NON-HYSTERETIC SUPERCONDUCTING QUANTUM INTERFERENCE DEVICES (U-SQUID), funded by CSIR, Total Cost Rs. 830000.
109. AN INTERDISCIPLINARY APPROACH FOR ANALYZING BOLUS TRANSPORT THROUGH THE ESOPHAGO GASTRIC DUODENAL SEGMENT, funded by DST, Total Cost Rs. 3900000.
110. MECHANISTIC INSIGHTS TO WACKER PROCESS HOMOGENOUS TO HETEROGENOUS CATALYTIC SYSTEMS, funded by CSIR, Total Cost Rs. 1690000.
111. SYNTHESIS AND FUNCTIONALIZATION OF MULTIWALLED CNT, funded by OPCW, Total Cost Rs. 831052.
112. EXTENDING THE SCOPE OF HOMO-NZAROV CYCLIZATION TO 2-SILYL METHYL CYCLOPROPYL VINYL KETONES, EXPLORING SPIROINDENE FORMATION TO GENERATE CYCLOHEPTENES, funded by DST, Total Cost Rs. 3879000.
113. UG LAB FOR STUDENTS OF RGIPT, funded by DST, Total Cost Rs. 1012440.
114. EXPERIMENTAL INVESTIGATION OF LOW RE NO. AIRFOILS-B-19 AND M-300, funded by ADE, Total Cost Rs. 2319600.
115. MECHANISM BASED PEPTIDE INHIBITORS OF HUNTINGTIN FRAGMENT AGGREGATION IN HUNTINGTON’S DISEASE (HD), funded by DBT, Total Cost Rs. 4146000.
116. MICRO LENS ARRAY IN CHALCOGENIDE GLASSES FOR IR OPTICS, funded by DRDO, Total Cost Rs. 1380000.
117. TARGETED NANOPARTICULATE ORAL VACCINE AGAINST SHIGELLOSIS: MIMICKING SHIGELLA’S STRATEGIES OF INFECTION, funded by DBT, Total Cost Rs. 4514000.
118. ASSESSMENT OF METAL CONTAMINATION IN NORAIYAKHEDA AND TO CONDUCT BASIC BINDING STUDIES WITH AN EFFICIENT
BIOSORBENT FROM TRAPA NATANS, funded by DST, Total Cost Rs. 1284000.

119. DESIGN AND DEVELOPMENT OF ORGANIC SOLAR CELL SUB-MODULES, funded by DST, Total Cost Rs. 66352000.

120. ‘HIGH VOLTAGE SYSTEM’, ‘MICROWAVE, PHOTONICS AND COMMUNICATION’, ROBOTICS, ‘CONTROL AND VISION’, funded by DST, Total Cost Rs. 49000000.

B. International:

1. PALEOSEISMIC & GPS STUDIES FOR ACTIVE FAULT MAPPING AND SLIP RATE ESTIMATION IN NW-CENTRAL HIMALAYA, INDIA, funded by JICA, Total Cost Rs. 37500000.

2. THERMO-HYDRODYNAMICS OF PHASE-CHANGE INDUCED OSCILLATING TAYLOR BUBBLE FLOWS, funded by IFCPAR, Total Cost Rs. 2185600.

3. COMMUNICATION, LOCALIZATION & NAVIGATION USING SOLELY AD HOC NETWORK PROVIDING ROBUST SOLUTIONS, funded by EADS, Total Cost Rs. 256392.

Consultancy Projects:

1. FLIGHT LAB TRAINING PROGRAM FOR PRIVATE ENGGINEERING COLLEGE, Total Cost Rs. 5517000.

2. 3D LASER IMAGING OF A SHIP, funded by DRDO, Total Cost Rs. 1721000.

3. CONSULTANCY REGARDING PLATE LOAD TEST AT ARJUN FEEDER, funded by M.D.C.D.I., Mahoba, Total Cost Rs. 165450.

4. IDENTIFICATION OF SUITABLE BUSINESS OPPORTUNITIES, funded by Shree Cement Ltd., Total Cost Rs. 634752.

5. RE-DESIGNING THE FARMER EXTENSION-AGRICULTURAL RESEARCH/EDUCATION CONTINUUM IN INDIA WITH ICT-MEDIATAED KNOWLEDGE MANAGEMENT, funded by NAIP, Total Cost Rs. 4017340.

6. DEVELOPMENT OF AN ECM MACHINE, funded by Electronica Machine Tools Ltd., Total Cost Rs. 500000.

7. CFD SIMULATION OF CRUCIBLE FOR MOLTEN LASER GLASS, funded by CSIR, Total Cost Rs. 696765.

8. EVALUATION OF CORE SAMPLES FROM SEISMIC SHEAR WALLS, funded by P&G, Total Cost Rs. 209570.

9. HYDRO-DYNAMIC STUDY FOR WIDENING OF GOMTI BRIDGE, funded by Vam Consulting Engineers, Total Cost Rs. 50000.
10. UNMANNED LEVEL CROSSING GATE WARNING SYSTEM, funded by RDSO, Total Cost Rs. 2982368.
11. BOUNDARY SURVEY FOR DETERMINATION OF AREA, funded by UPSID, Total Cost Rs. 68285.
12. DATABASE FOR ELECTRIC UTILITIES & PROJECT MONITORING, funded by Planning Commission, Total Cost Rs. 1323600.
13. SEISMIC STUDIES ON BHAGYAM FIELD, funded by L&T, Total Cost Rs. 827250.
14. WIND TURBINE MODEL TESTING AT NWTF, funded by Tocen Technology Pvt Ltd., Total Cost Rs. 216000.
15. DESIGN & DEVELOPMENT OF SYMMETRIC ENCRYPTION ALGORITHM, funded by IAF, Total Cost Rs. 1567000.
16. DATA STORAGE & BACKUP SOLUTIONS, funded by BITCOE, Total Cost Rs. 1303500.
17. HIGEE FOR GAS DEHYDRATION, funded by Saudi Aramco, Total Cost Rs. 2734875.
18. WIND TUNNEL STUDY OF CHIMNEY & NDCT MODEL, funded by BGR Energy System Limited, Total Cost Rs. 108810.
19. IMPROVEMENT IN BOTTOM DISCHARGE SYSTEM OF BOBRN WAGON, funded by RDSO, Total Cost Rs. 2475000.
20. CHECKING OF DPR FOR STORM WATER DRAINAGE OF LUCKNOW, funded by Municipal Corporation Lucknow, Total Cost Rs. 1250000.
21. TOPOGRAPHIC SURVEY WORK AT NTPC UNCHAHAR, funded by NTPC, Total Cost Rs. 959550.
22. REDUCTION IN TAP TO TAP TIME, funded by Mukund Ltd., Total Cost Rs. 1654500.
23. DESIGN CHECKING OF THE MPS & STP OF KURSI ROAD BARABANKI, funded by UPSIDC, Total Cost Rs. 55150.
24. WIND SOLAR HYBRID POWER PLANT, funded by GE, Total Cost Rs. 413625.
25. ENABLING WI-FI IN HOSTEL & OFFICE PREMISES OF BIRD, funded by Bankers Institute of Rural Development, Total Cost Rs. 220600.
26. WIND TUNNEL STUDY OF CHIMNEY OF NORTH CHENNAI PROJECT, funded by BHEL, Total Cost Rs. 360900.
27. WIND TUNNEL STUDY OF 70M HIGH CHIMNEY, funded by Thermax Ltd., Total Cost Rs. 189000.
28. DEUTERIUM LABELING OF MOLECULES FOR DRUG DISCOVERY AND CLINICAL RESEARCH, funded by BAMPL, Total Cost Rs. 900000.
29. EXISTING ROAD STRENGTHENING, funded by PWD, Total Cost Rs. 83900.
30. CHECKING OF DESIGN & RATES, funded by UPSIDC, Total Cost Rs. 55150.
31. VETTING OF PIPELINE (KANPUR), funded by RAMKY Infrastructure Ltd., Total Cost Rs. 41343.
32. DEVELOPMENT OF COMPUTATIONAL AEROELASTICITY CODE FOR HELICOPTER ROTOR LOADS AND DYNAMIC RESPONSE ANALYSIS, funded by HAL, Total Cost Rs. 557400.
33. GPR SURVEY AT IIT DELHI, funded by Transerve Technologies Pvt Ltd., Total Cost Rs. 190000.
34. PRAGATI, funded by UPRVUN, Total Cost Rs. 4963500.
35. RLO PLATFORM, funded by ICRISAT, Total Cost Rs. 4500000.
36. HYDRAULIC STUDY OF RAIT RIVER, funded by UPSIDC, Total Cost Rs. 68938.
37. CONSULTANCY REGARDING SOIL/PILE TESTING FOR ALINAGAR SUNHARA SCHEME AT LUCKNOW, funded by LDA Lucknow, Total Cost Rs. 60681.
38. CHECKING OF DESIGN OF 400KL TANK ON 21M STAGING AT GOKUL GRAM YOJNA-2, funded by LDA Lucknow, Total Cost Rs. 27340.
39. CONSULTANCY FOR PLATE LOAD TESTS, funded by IRRIGA, Total Cost Rs. 275750.
40. DESIGN OF PARACHUTE ASSISTED UNMANNED AERIAL VEHICLE, funded by ADRDE, Agra, Total Cost Rs. 992700.
41. CONSULTANCY REGARDING LINING WORK OF MEJA JIRGO LINK CANAL, funded by BSCC Lucknow, Total Cost Rs. 368126.
42. LANCE DESIGN FOR OPTIMAL PERFORMANCE OF BOF-VSP IN TERMS OF SLAG-METAL REACTION, HEAT TRANSFER TO LANCE & LANCE SKULLING, funded by RINL, Visakhapatnam, Total Cost Rs. 1277640.
43. LIDAR MAPPING AT VISHNUGAD PIPALKOTI HE PROJECT AND SLOPE STUDY ETC., funded by THDC, Total Cost Rs. 1585563.
44. DEVELOPMENT OF ARTIFICIAL NEURAL NETWORK BASED CONTROL LOW FOR PARACHUTE ASSISTED UAV, funded by ADRDE, Agra, Total Cost Rs. 965000.
45. WIND TUNNEL STUDY OF CHIMNEY FOR KORBA, funded by BHEL, Total Cost Rs. 330900.
46. MIX DESIGN WMM/BM/SDBC, funded by PWD, Total Cost Rs. 124000.
47. DISCHARGE MEASUREMENT, funded by UP Irrigation, Total Cost Rs. 52697.
48. SEISMIC STUDIES ON SEISMIC ACTIVITIES FOR SALAYA BHOGAT PIPELINE AT BHOGAT, GUJARAT, funded by L&T, Total Cost Rs. 1213300.
49. CONSULTANCY REGARDING FOUNDATION OF ESP AT PARICHHA THERMAL POWER PLANT, funded by Ex. Engineer Electricity Civil Maintenance Div. I, Total Cost Rs. 406731.
50. HEALTH AND SOCIAL DEVELOPMENT, funded by ADRDE, Agra, Total Cost Rs. 200000.
51. VETTING OF WATER SUPPLY SYSTEM, MADHUBAN BAPUDHAM, 
GAZIBAD, funded by Sertech Consultants, Total Cost Rs. 41363.
52. EMBEDDED SYSTEMS COURSEWARE, funded by ADRDE, Agra, Total Cost 
Rs. 1200000.
53. VETTING OF DESIGN OF 2000 KL OVERHEAD TANK ON 25 STAGING, 
funded by M/S Bhagvati Pasad Sharma, Total Cost Rs. 45200.
54. OPTIMIZATION OF EFFICIENCY OF OUTER ROTOR SURFACE 
PERMANENT MAGNET SYNCHRONOUS MOTOR, funded by IHI, Total 
Cost Rs. 958395.
55. RESEARCH WORK ON STRATOSPHERIC AIRSHIP, funded by ADRDE, 
Total Cost Rs. 703100.
56. STUDY ON USE OF FLY ASH IN CANAL LINING WORKS, funded by NTPC, 
Total Cost Rs. 476496.
57. SLAB CASTING WITH HIGHER SECTION SIZE AT JSPL, RAIGARH, funded 
by Jindal, Total Cost Rs. 1896000.
58. RETAI NERSHIP FEE: MOU BETWEEN RAJDHANI POWER LIMITED AND 
IITK FOR TECHNICAL HELP, funded by BSES, Total Cost Rs. 1000000.
59. VETTING OF TECHNICAL AND FINANCIAL PROPOSAL STPS AT 
GREATER NOIDA, UP, funded by Greater Noida Industrial Development 
Authority, Total Cost Rs. 772100.
60. THIRD PARTY QUALITY CHECKING, funded by DSMRU, Total Cost Rs. 
66180.
61. ARCHITECTURE KNOWLEDGE MANAGEMENT, funded by Pricol Limited, 
Total Cost Rs. 1000000.
62. DEVELOPING NR STRATEGY FOR AIRCRAFT TESTING FACILITY AT 
CHAKERI, funded by MES, Total Cost Rs. 295053.
63. TRAINING TO RDSO ON FINITE ELEMENT ANALYSIS, funded by RDSO, 
Total Cost Rs. 206813.
64. OPERATION & MAINTENANCE OF AIR QUALITY STATIONS, funded by 
UPCB, Total Cost Rs. 865579.
65. VETTING OF TECHNICAL AND FINANCIAL PROPOSAL ON RAW AND 
CLEAR WATER CONVEYANCE MAIN TO 85 CUSEC GANGA WATER 
PROJECT IN GREATER NOIDA, UP, funded by GNIDA, Total Cost Rs. 
110300.
66. VETTING OF DESIGN AND DRAWINGS (STRUCTURAL PART ONLY), 
funded by M/S Techno Care, Total Cost Rs. 330900.
67. VETTING OF DESIGN: KURSI ROAD, funded by UPSIDC, Total Cost Rs. 
77210.
68. IPV6 IMPLEMENTATION IN TTSL NETWORK, funded by Tata Teleservices 
Ltd, Total Cost Rs. 198540.
69. VETTING OF HYDRAULIC DESIGN OF AQUEDUCTS, funded by Techno Care Lucknow, Total Cost Rs. 482839.
70. ALKYLATION OF ISOBUTANE WITH BUTENE FOR THE PRODUCTION OF GASOLINE, funded by Chevron, Total Cost Rs. 2545482.
71. TOPOGRAPHICAL AND CONTOUR SURVEY IN GHAHAMPUR THESIL, KANPUR, UP, funded by Neyveli Lignite Corporation Limited, Total Cost Rs. 2922260.
72. CO-OPERATIVE SPECTRUM SENSING FOR MILITARY RADIO APPLICATION, funded by DEAL, Lucknow, Total Cost Rs. 980000.
73. SYSTEM AUDIT OF UP STOCK EXCHANGE LTD., funded by UP Stock Exchange, Total Cost Rs. 39708.
74. CO2 CAPTURE ON SUPPORTED ZEOLITES, funded by Chevron, Total Cost Rs. 300000.
75. OS FOR SMART CARD, funded by Bartronics India Pvt. Ltd., Total Cost Rs. 469878.
76. TECHNICAL IMPROVEMENT & PERFORMANCE EVALUATION OF AAS 271, funded by Ecotech Instruments, Total Cost Rs. 255069.
77. DEVELOPMENT OF TECHNOLOGY FOR NANOFINISHING OF CURVED AND SCULPTURED SURFACES, funded by BARC, Total Cost Rs. 827000.
78. HIGEE DESIGN TOOL, funded by Chevron, Total Cost Rs. 316460.
79. CONSULTANCY REGARDING GROUND IMPROVEMENT FOR RE WALL FOUNDATION, funded by Techpro Engineers Pvt Ltd, Total Cost Rs. 110300.
80. NANOCATALYSTS FOR HYDRODESULFURIZATION, funded by Chevron, Total Cost Rs. 3805400.
81. PERFORMANCE ANALYSIS OF REACTOR INTERNALS USING CFD SIMULATION, funded by Chevron, Total Cost Rs. 2112000.
82. VETTING OF WATER DISTRIBUTION PIPELINES (FEEDER MAIN, KANPUR CITY), funded by UP Jal Nigam, Total Cost Rs. 41363.
83. DURABILITY STUDY OF CONCRETE USING COPPER SLAG, funded by Sterlite Industries, Total Cost Rs. 1025790.
84. DESIGN OF WATER SUPPLY GRID, TEJAB MILL RAILWAY COLONY, KANPUR, funded by Indian Railways, Total Cost Rs. 413625.
85. TRACKING SOLUTION FOR SEALDAH DIVISION, funded by Electronic Equipment Co. Pvt. Ltd., Total Cost Rs. 200000.
86. MALAYALAM ANGLAMT, funded by CDAC, Total Cost Rs. 550000.
87. NEPALI, PUNJABI, URDU, ANGLAMT, funded by CDAC, Total Cost Rs. 550000.
88. TELUGU ANGLAMT, funded by CDAC, Total Cost Rs. 550000.
89. ASSAMESE, BENGALI ANGLAMT, funded by CDAC, Total Cost Rs. 550000.
90. EVALUATION OF KSM-66 ASHWAGANDHAA (ROOT EXTRACT) FOR LIFESPAN EXTENSION OF CAENORHABDITIS ELEGANS, funded by Shri Kartik Pharma, Total Cost Rs. 100000.
91. ADVANCED CACHE ARCHITECTURES FOR EMERGING APPLICATIONS AND SYSTEMS, funded by Intel, Total Cost Rs. 919627.
92. DESIGN AND DEVELOPMENT OF CONTROL ALGORITHM USING ARTIFICIAL NEURAL, funded by ADRDE, Lucknow, Total Cost Rs. 990000.
93. DESIGN AND FABRICATION OF A REFLEX AEROFOIL BY USING COMPOSITES, funded by ADRDE, Lucknow, Total Cost Rs. 990000.
94. AERODYNAMIC CHARACTERIZATION OF A UAV THROUGH FIGHT TEST, funded by ADRDE, Lucknow, Total Cost Rs. 990000.
95. FEASIBILITY ANALYSIS FOR ANC SYSTEM FOR SCI-TECH, funded by Sci-Tech, Total Cost Rs. 181250.
96. WIND-SOLAR HYBRID PLANT, funded by GE, Total Cost Rs. 304965.

Alumni Association Activities

Major Activities of the Alumni Association IIT Kanpur for the year 2010-2011

Nostalgia

‘Nostalgia’, an event jointly organized by AA and the Students Gymkhana, is held every year for bidding farewell to the students completing their academic programmes. The Class-of-2010 had their event on 6th May 2010. On this occasion the President of Student’s Gymkhana Mr. Vivek Agarwal delivered farewell speech to the class.

Prof S G Dhande, Director IIT Kanpur, Prof. Sanjeev Agrawal, former DRPG, and Prof Kripa Shanker, Secretary, Alumni Association, addressed the students explaining the role of the DRPG and Alumni Association as a link between the alumni and the Institute and requested the graduating students to leave their contact details with the institute. They bid a formal adieu to the graduating students and wished them all the best for their future. The evening concluded with a hi-tea party.

Reunions

Alumni Association organizes reunions of the graduated batches to create a platform for IIT K Alumni of the whole batch to get together and cherish old relations with plentiful of pleasant memories. Alumni from around the world
participate in these reunions. Two reunions were scheduled to be held during the year 2010-2011.

**Silver Jubilee Reunion of the Class-of-86:** The Silver Jubilee Reunion of the class-of -1986 after 25 years of their graduation was held during December 24 to 27, 2010. The attendees included DAA, entrepreneurs, professors, bureaucrats and a whole bunch of techies. More than 110 alumni, most of them with their families, in all 270 guests including children attended the reunion.

**Thirty Fifth Year Reunion of the class-of-76:** The 35th Year reunion of the class-of -1976 was held with Alumni day from 12th March to 14th March, 2011. Nearly 60 alumni registered for this programme and many of them visited their alma mater with their families.

**Distinguished Alumni Awards**

The Distinguished Alumnus Award (DAA) of the Indian Institute of Technology Kanpur (IITK) is the highest award given by the Institute to its alumni in recognition of their achievements of exceptional merit. The recipients of DAA for the year 2010-11 are:

i. Satya Pal Singh Chauhan (BT/CHE/68), Senior Program Director, Battelle Memorial Institute for his outstanding contributions to the field of Research and Development.
ii. B V R Mohan Reddy (MT/ME/74), Founder, INFOTECH ENTERPRISES LIMITED for his outstanding entrepreneurial and managerial skills
iii. Mahesh Gupta (BT/ME/75), CMD, Kent RO Systems Ltd for his outstanding entrepreneurial and managerial skills
iv. Yogendra Kumar Joshi (BT/ME/79), Professor and John M. McKenney and Warren D. Shiver Distinguished Chair at the G.W. Woodruff School of Mechanical Engineering, Georgia Institute of Technology for his outstanding contributions and academic achievements.
v. Sandip P Trivedi (MSC5/PHY/85), Indian theoretical physicist working at Tata Institute for Fundamental Research (TIFR) for his outstanding contributions and academic achievements.
vi. Gaurav Gupta (BT/EE/87), IAS, Managing Director, Karnataka State Road Transport Corporation, Bangalore for his outstanding managerial skills.
Satyendra K. Dubey Memorial Award

The Board of Governors of the Indian Institute of Technology Kanpur, taking a note of the tragic death of Shri Satyendra K Dubey, an alumnus of IITK who died fighting against corruption, had instituted the Satyendra K Dubey Memorial Award for honoring outstanding alumni of the IIT system, all existing Indian Institutes of Technology, who have shown professional integrity and have been upholding human values. The Satyendra K Dubey Memorial Award has been conferred upon Sanjeeb Kumar Patjoshi (MT/EE/88) who has distinguished himself by displaying the highest professional integrity in upholding human values.

The Distinguished Alumnus Awards and Satyendra K Dubey Memorial Awards are given away during the award presentation ceremony on Alumni Day which happens to be today 12th March 2011. Alumni Association takes full care of all the requirements of the awardees in order to come for this event and receive the precious award in person.

Database Statistics:

Database Statistics, as on March 05, 2011

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<th>Degree</th>
<th>Total Alumni</th>
<th>Registered members</th>
<th>Unregistered members</th>
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<td>1366</td>
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</tr>
</tbody>
</table>
According to the database statistics, we have around 18,145 email addresses and 17,501 postal addresses available out of the total of 25,262 alumni. Around 900 alumni who graduated in 2010 have been registered while 114 graduating students who will be obtaining their degrees in the next convocation but completed their graduating requirements at different points in time during the year are also registered in Alumni Association based on their provisional degree certificates.

Alumni Newsletters:

Alumni Newsletter, a Newsletter published in-house by the Alumni Association office has released 5 issues of the Newsletter in the year 2010-2011 and a sum of Rs 1.5 lakhs has been obtained through sponsorship.

Souvenir Shop:

Looking at the overwhelming response received for the souvenir shop, the Alumni Association has signed a formal memorandum of understanding with Kansas Manufacturing Private Limited who has been running the shop in the premises of Outreach Building for the past one year.

New Initiatives taken by Alumni Association

Student Alumni Interaction Day (SAID):

This initiative gives an opportunity for alumni to visit IIT to meet with students, share their experiences and reconnect with the campus. The first interaction programme was held on Saturday, Jan 8, 2011. Several alumni came together to participate in the programme. The second SAID is scheduled for 13th March 2011-9 AM onwards.

Life Membership Cards:

The Alumni Association office has obtained a new plastic card color printer to print Life Membership Cards and deliver them effectively for all the members of Alumni Association. The information printed on the card includes name, roll
number, degree and branch with a background of the institute. These cards were given during Silver Jubilee Reunion, PAN IIT Conclave in Greater Noida, Chapter gatherings at Lucknow and Kanpur and during the Convocation to recent graduates who became new members of Alumni Association. A drive has been launched for getting the cards through Alumni Website. This has been well received by all alumni.

Off-campus reunions / Chapter get-togethers and Conventions held during 2010-11

Golden Jubilee Alumni Conventions

On IIT Kanpur turning a golden 50 years, the Alumni Association celebrated this momentous occasion by arranging four major alumni conventions/conferences across the world, two in India and two in the United States, one last year and three this year.

i. Golden Jubilee Alumni Convention at IIT Kanpur campus, during January 2-4, 2010 with focus on R&D.

ii. Bangalore, June 19-20, 2010: The Bangalore convention was the first major convention off-campus. The theme was “Innovation Convention”. It focused on “Igniting Innovation” at IITK and in the country, and Building Bridges between the alumni and their alma mater. Nearly 600 delegates from across the world, including IITK alumni, faculty, ex-faculty, families and distinguished guests from corporate, academia and government institutions attended. The convention focused on five key areas: 1. Spurring Innovation in IIT education, Next 50 Innovation Challenge, Discussion on Vision 2020, Celebration of the achievements of ‘unsung alumni heroes’ and Loads of nostalgia

iii. Washington, DC convention July 9 – 10, 2010: The theme of the Washington, DC convention was “US-India Collaboration: KIAP and Beyond.” Keeping with the spirit of the theme, the alumni convention showcased and celebrated IIT Kanpur’s 50 years of contributions to the academic, industry and entrepreneurship ecosystems in India and the USA. On this occasion, IITK honored and thanked the collaborations and contributions of the US government and other institutions toward its creation and success. Looking into the future, the convention explored emerging opportunities to extend this symbiotic relationship between US and India on globalization of Education, Energy & Environment and Entrepreneurship. An event is as good as its participants make it. We had a very enthusiastic and energetic group of participants, from the
earliest of the KIAP participants and KIAP-era Indian faculty members, to current IITK faculty members and leaders of IITK administration.

iv. **Santa Clara, July 16-18, 2010:** The theme of the Santa Clara event was Reconnect! Rejuvenate! Rejoice! The evening’s highlight was the announcement of Rajeev Motwani awards. The Vision 2020 panel discussion was an eye opener. A healthy discussion and presentation was followed by a Question and Answer session which informed the alumni about the future plans and about the need for their continued support and participation in shaping the future of IIT Kanpur.

v. **Golden Jubilee Alumni Conventions at Hyderabad on December 17, 2010:** IIT Kanpur Alumni Association Hyderabad Chapter, which has been in existence for the last 25 years, celebrated the Golden Jubilee of the institute in a grand way on 17th December, 2010. More than 250 IIT Kanpur alumni who reside currently in Hyderabad, and dozens of the retired faculty of alumni and this family members were seen proudly networking, re-living those nostalgic memories, and celebrating the 50th anniversary of their Alma Mater at the Infotech Campus, Gachibowli, Hyderabad. 'IITians should be job creators and not job seekers' was the theme of the Hyderabad convention.

**IITK Alumni Association Chapter activities during 2010-11**

The year 2010-11 witnessed a drastic rise in the activities of IIT K Alumni Association Chapters owing to the Golden Jubilee Celebrations of IIT Kanpur. There were three conventions and many chapter gatherings, led by Alumni Association of local chapters. All the conventions were immensely successful given the participation levels and action items arising from them. The Alumni, including The Director Prof. Dhande, and many IIT K faculty members attended these events in large number held in Lucknow, Kanpur Bangalore, Mumbai, Outer Delhi, Greater Noida, Hydrabad, etc.

**New Chapter Launched**

**Alumni Association, IIT Kanpur, Lucknow Chapter:** An entertainment filled grand function was organized on 10 July 2010 to celebrate the launch of Lucknow Chapter. The event was well attended with over 100 alumni and their family members. The outstanding feature of the evening was the cross-section of alumni from Classes ranging from the pioneer batch of 1965 to that of 2008, B Techs, M Techs, MScs and PhDs. Prof. Kripa Shankar, Secretary, IIT-K Alumni Association and Vice Chancellor of the UP Technical University presided over the function.
• **The Outer Delhi Chapter of the Alumni Association** elected its new Executive Committee through the Elections held on April 19, 2010 for the 2-year Period, April 2010 to March 2012.

• **Silver Jubilee Picnic of the East Coast Chapter, USA:** On August 14, 2010, the second Saturday of August – the IITK picnic of the East Coast USA area was held at the Morris Lewis Park in Morristown, NJ. While IITK was celebrating its Golden Jubilee, the East Coast Chapter was celebrating its Silver Jubilee picnic.

• **IIT Diwali Dhamaka 2010:** The cultural festival Diwali Dhamaka of all the IITians was held on October 2nd, 2010, at Campbell Heritage Theater in the San Francisco Bay. The IIT Kanpur show was the most entertaining. The audience just loved it and opponents admired it in awe. Acting, Dancing, Costumes, Props, A/V, and singing all came together to put up a great show. IIT Kanpur won the award for the Best Acting and secured overall the third position!

• **IIT Kanpur Lucknow Chapter:** A grand function was organised by on Saturday, 18 December at Genesis Club, Lucknow, to celebrate IIT-K Golden Jubilee. All IITK alumni residing in Lucknow were invited and many alumni with their families attended the function. Apart from Mehfil-e- Khaas (a networking session), the invitees enjoyed Mehfile-e- Mausiki (Cultural Evening) a musical performance by the well known sufi singer Kavita Seth of the 'Gunja sa ek tara' fame (Movie-Wake up Sid) and her troupe. Prof Sanjay Dhande, Director, IIT Kanpur graced the occasion as the Chief Guest.

• **IITKAA-Kanpur Chapter:** As a part of Golden Jubilee Celebrations of IIT Kanpur a Get-together of the Kanpur Chapter of the Alumni Association, IIT Kanpur was arranged on Sunday the 9th January, 2011 at 2A/244 Azad Nagar, Kanpur. Many alumni along with their families from the campus enjoyed the lunch party. More than 100 people from Kanpur city and the IIT campus attended. Prof. S G Dhande, The Director of IIT Kanpur, Mr. Rakesh Pandey, The President of Alumni Association and others spoke on the occasion. The Alumni Association of IITK office gave Life Membership ID Cards to all the alumni present in the event.

• **IITKAA Mumbai Chapter** had annual get-together Deja-Vu on 26th February 2010, Saturday evening at MIG Club, Bandra (E) at 6:30 PM.
PANIIT Conclave

The 2010 PANIIT Global Conference was organized in Greater Noida (Delhi NCR) at the India Expo Centre from October 29 to 31, 2010. PanIIT is an umbrella organization covering alumni of all Indian Institutes of Technology with the goals of nation building, branding, alumni services, and advocacy for the alma mater. At the Pavilion, IIT Kanpur was present in full force to exhibit its competence, facilities, in-depth technological expertise along with mechanisms for networking with the alumni, to continue an endearing relationship with their alma mater. Since a very large number of IITK alumni were anticipated to attend the conclave, Alumni Association office had made arrangements for showcasing the services offered to its alumni. The issuing of Life Membership Cards instantly to members of Alumni Association was a cynosure at the exhibition area. Many IITK souvenir items were also made available for sale at the stall. The venue was vibrant with activities, be in for interacting with its alumni by the DRPG staff and students volunteers and alumni association, gifting them with lots of goodies and souvenirs or the display of Jugnu, the nano satellite on the plazma monitor or the incubation centre’s fresh IITK alumni showcasing their novel technological idea.

IIT Alumni Sessions was scheduled at 18:00 hrs on Saturday October 30, 2010. Prof S G Dhande, the Director, addressed the IITK alumni gathering. Prof. Dhande, Prof Anandkrishnan, Chairman, BOG, IIT Kanpur, along with other panelists, interacted with alumni and answered their questions during this session.

Central Facilities

P. K. Kelkar Library

The P. K. Kelkar Library provides essential support by offering current information services which are integrated with and central to the IITK’s teaching, learning and research activities. The Library facilitates excellence in teaching, creates an appropriate learning and research environment, anticipates and responds to student learning and research needs, and provides the information infrastructure essential in today’s changed environment.

P. K. Kelkar Library is housed with all modern amenities, and is situated in a magnificent three-storied building covering an area of 5730 square meters. The Library remains open, for 358 days of the year, from 8 a.m. to 12 midnight on all working days; 9 a.m. to 12 midnight on Saturdays; 9 a.m. to 5.30 p.m. on Sundays and Gazetted holidays and for 24 hours during the three examinations each semester.
ACQUISITION UNIT

Books: During the period under report the P. K. Kelkar Library acquired 3207 volumes of books out of which 189 volumes were received as Gratis. The budget of Rs. 1.25 crores was fully utilized for procurement of books.

PERIODICALS UNIT

Subscription to periodicals and binding: The periodical budget for 2010-11 was Rs. 8.25 crores. The Library subscribed to 1938 current periodicals for the period under report. Of these 613 are print versions, whereas 466 are print plus online, 847 are online only and 12 are databases and CDs. The Library added 3250 bound volumes of periodicals and 500 damage books were bound during the year.

The Library continued its focus on the acquisition of electronic products. The archival volumes of journals procured in the previous year were maintained. Significant new electronic products acquired in 2010-11 included:

- E-journals package from Sage for HSS (304) journals available up to 1998
- National Technical Reports Library (NTRL) from 1998 to current
- Decision Analysis
- Information System Research
- Journal of Computing
- Transactions on Education
- Pro Quest Dissertation and Theses A & B Full Text
- ASTM Standard & Digital Library
- Cell Metabolism
- Experimental Physiology Translation and Integration
- American Journal of Physiology (Package of 7 journals)
- Physiology
- Physiological Reviews
- Journal of Physiology
- Journal of Applied Physiology
- Foundation and Trends in Computer Science (Package of 7 journals)
- Behavioral and Brain Sciences
- Artificial Intelligence for Engineering Design and Manufacturing
- Journal of High Energy Physics
E-resources through INDEST-AICTE:

As a core member to the INDEST-AICTE Consortium, IITK academic community is entitled to access more than 10000 full-text journals and 06 bibliographic databases.

TECHNICAL SERVICES UNIT

Current Awareness Service (Weekly List of Additions):

The books added to the Library collection were disseminated to academic community through 52 weekly lists of new additions on the first working day of each week. These were also released on Library OPAC. The current issues of the journals are also displayed on alternate days thrice in a week. In all, the unit processed 4675 books for display.

CIRCULATION UNIT

During the year 2010-11, 34580 publications were lent for home study. Well nigh 58317 textbooks were issued for consultation. Besides, a large number of books and journals from reference, and general collection areas were consulted by users within the Library.

COMPUTER AIDED REFERENCE SERVICE UNIT

Document Delivery Services and Consultation Facility to External Users: The Inter-Library Loan (ILL) services are extended free to sister IITs, IISc, TIFR, BARC, INDEST-AICTE members and other technical institutions & universities. During 2010-11, ILL requests for 922 articles/chapters/books were received and document delivery made to outside Institutions whereas IITK users’ requests for 14 articles/chapters/books were sent to other libraries.

Consulting facility of the library was extended to 1491 external users including 1000 Programme participants of various courses/ programmes organized by the Institute.

LIBRARY AUTOMATION:

Library has already installed and implemented LibSys LSPremia, a web centric integrated library management software package. During the year under report several problem solving sessions were organized in consultation with the Libsys
Corporation and the customization on various modules suggested by us were incorporated. Now all housekeeping operations are running through LibSys. Some of the advanced customization are in the pipeline with the LibSys.

DIGITAL LIBRARY INITIATIVES:

The following digital library initiatives continue/added afresh:

1. **Online Submission of Theses**: 501 theses were added in the repository of Electronic Theses and Dissertations (ETD). The total number of theses and dissertations in the Institutional Repository has reached 11497 during the period under report.

2. **BOG Minutes/Agenda**: 47 volumes consisting of more than 26100 pages of BOG Minutes/Agenda were scanned along with complete OCRing and quality checking of Agenda and Minutes as per request from Institute Archival Project/Registrar Office.

**Computer Center**

Computer Centre at IIT Kanpur is a central facility that caters to the computing needs of the faculty, staff and students for their research, development and teaching activities. It also manages Internet and campus LAN and wireless infrastructure. It provides several services like e-mail and web access. It currently supports more than 9000 users.

Computer Centre has significantly upgraded its computing, mail, network and PC lab facilities during the past one year. For the high performance computing (HPC), the Centre has acquired, with support from the Department of Science and Technology, a 372-node HPC cluster based on Xeon Quadcore processors with a total of about 3000 cores, 100 TB storage and 40 Gbps Infiniband network. This new cluster has a peak performance of 34.5 TF and it has been greatly facilitating high performance computational research in the Institute covering many areas of science and engineering. In addition to this main HPC cluster, four GPU servers have also been procured to introduce the facility of GPU-based computing at the Centre.

On the software side, several general purpose and HPC application software have been procured. The list of some of key software includes: Matlab, Parallel Numerical Algorithms Group (NAG), Mathematica, SPSS, Origin, Accelrys, MedeAVASP, AMBER, Tecplot, Turbomole, Gaussian, Ansys, Fluent etc. In addition, various compilers and job management software for HPC such as Intel
suite of compilers, PGI Cluster kit and PBS Portal have also been acquired and installed in the HPC cluster.

A new state-of-the-art Mail Storage System (NetApp) has also been procured. This storage system has a capacity of 25 TB with back-up features at various levels. It provides seamless connectivity to both Linux Postfix and Microsoft Exchange servers. The storage also allows both reading and writing of mails at a significantly high speed. It currently handles mails of more than 9000 users of the Institute. A significant expansion of the campus LAN and wireless network also took place over the past one year to cover the new buildings and areas. The total number of network ports now stands at more than 15000.

The Centre also developed three PC Labs in the New Core Building with a total of 220 PCs. These labs have greatly facilitated the conduct of computer lab classes for undergraduate and postgraduate students and also in the conduct of various other courses and examinations of the Institute that require computer environment.

In addition to the above upgradations in computing, mail, network and PC lab facilities, Computer Centre is also undergoing a massive improvement in its infrastructural facilities. A large online UPS System (4x300 KVA) has been procured and new electrical panels have been set up. A modern data centre with state-of-the-art precision air conditioning and fire safety features is also in the process of being built. Once this data centre is in operation, it will be possible to house substantially bigger HPC and other computing facilities at the Centre.
Centre for Development of Technical Education

Since its inception in 1971, The Ministry of Human Resource Development, and the All India Council for Technical Education have always strived for the development of technical education in the country. The main objective of the Centre for Development of Technical Education (CDTE) is dissemination of knowledge resources of IITK. In a way CDTE is a coordinating facility for the various activities connected with development of curricula, preparation of resource material, administering the continuing education programme and providing in-service training to the teachers of engineering colleges. This is carried out through activities under Curriculum Development Cell (CDC), Quality Improvement Programme (QIP) and Continuing Education Cell (CEC).

Summary of various activities during the year 2010-2011:

1. **QIP STUDENTS:**
   - (a) M.tech Candidates admitted - 02
   - (b) Ph.D. Candidates admitted - 05

2. **BOOK-WRITING PROJECTS:**
   - (a) Book-writing projects continued - 48
   - (b) Book-writing projects approved - 05
   - (c) Book-writing projects completed – 03

3. Short-term courses conducted under QIP - 09
4. Short-term self-financed courses conducted - 14
5. Workshops/Conferences/Seminars conducted - 22

Centre for Creative Writing and Publication (CCWP)

CCWP, of the Department of HSS, IIT Kanpur, organized the following activities in the year April 2010 to March 2011.

A. Two talks by Dr. Raja Burte (Retired Physicist, formerly at BARC, Mumbai) on Philosophy:

   Talk 1 – “We” - September 30, 2010
   Talk 2 – “Phenomenology and Sankhya- Method”- October 1, 2010
B. ‘CCWP Day’: A two-day programme held on February 26 and 27, 2011. This programme was co-ordinated by Dr. Chaithra Puttaswamy (Department of HSS). The programme was inaugurated by Prof. S.G. Dhande, Director, IIT Kanpur, and included the following events, spread out over two days:

- Creative writers’ panel – members of the campus community (including faculty members, faculty spouses, students, and staff) presented their creative works, namely, short stories and poems.
- BRiCS Workshop (3-hours) conducted by Prof. Amitabha Mukherjee (Department of CSE, IIT Kanpur) for campus children.
- Creative music through the violin: A violin recital combined with lecture on the Carnatic style by Prof. P. Venkitanarayanan (Department of Mechanical Engineering) and Hindustani style by Shri Devanand Pathak (Campus School, IIT Kanpur).
- Script Writing Workshop for students – a one-day workshop conducted by Shri Atul Tiwari, Script writer, FTII, Pune and NSD, New Delhi.

**Staff Training Unit**

The Staff Training Unit of the Institute has conducted various training programmes including one induction programme for the newly joined Institute employees.

The details of training programmes are as follows:

1. Induction Programme (for the newly joined Institute employees) – February 17-18, 2011
   Total attendance: 25
   Total attendance: 60
3. Training programme on Safety Management – March 21, 2011
   Total attendance: 17
   Total attendance: 45
5. Training programme on Workplace Management - June 24, 2011
   Total attendance: 30
   Total attendance: 15
SC/ST and OBC Cell

The cell consists of Prof. M. S. Kalra (Dept. of Mechanical Engineering), Liaison Officer (w.e.f. April 26, 2010) and Shri Anil P Gonade, Superintendent and In-charge, Recruitment Section, in addition to their normal duties. Prof. M. S. Kalra is available in Room No. 221 (Directorate), Faculty Building at the Institute on Phone No. 2597950 and Shri Gonade is available in Room No. 224, 2nd Floor, Faculty Building at the Institute on Phone No. 2597391.

Implementation of reservation orders:

The effective date of implementation of reservation for SCs and STs in the direct recruitment is 5th September 1974 in this Institute and the implementation of reservation for OBCs is w.e.f. the year 1995.

Maintenance of rosters/ Percentage of reservation:

The Board of Governors had approved, in its meeting held on July 27, 1995, maintenance of 120 points vacancy-based roster [for Group A other than exempted posts (Points reserved in favour of OBCs-31, SCs-20, STs-9)] & B posts; and 100 points roster for Group C & D posts (Points reserved in favour of OBCs-27, SCs-21, STs-1) for direct recruitment at the Institute.

On the basis of Judgment passed by the Constitution bench of Supreme Court, the Government of India, Deptt. Of Per. & Trg., issued O.M. 36012/2/96-Estt.(Res.) dated July 02,1997 vide which the above vacancy-based rosters have been revised into post-based rosters for the different category of employees in direct recruitment. The Board after due consideration accorded its approval, in its 1997/5th meeting held on December 05, 1997 for maintenance of post-based rosters.

Further, the Board of Governors of the Institute (in its meeting held in May 2004, vide item no. 2004.2.13) has considered and approved the proposal for grouping of staff for the purpose of reservation and separate grouping of technical and non-technical posts. The proposal was as follows – the posts under Group-A, B, C & D would be grouped separately for technical and non-technical posts. However, there would be a single group under Group-D. Under this dispensation, there would be seven groups in all and as for as possible efforts would be made to provide adequate representation of SCs, STs and OBCs to each post under the group. The proposal was approved in the context that grouping of posts would
provide greater leverage for purpose of securing adequate representation for SCs, STs and OBCs in the Institute

**Concessions/ Relaxations:**

(a) The upper age bar in the Institute is as follows: Group C Post – 18 to 27 years; Group B Post – 18 to 32 years. Relaxation in age is admissible as per Central Govt. Rules. Regular employees of IITs who are educationally qualified and otherwise eligible can be considered for direct recruitment up to a maximum of 50 years of age. The due relaxation in upper age is made available for SC/ST, OBC, PH and Ex-servicemen candidates as per Central Govt. Rules. There is no upper age limit for Group-A Officers at the Institute.

(b) SC/ST and PH candidates are fully exempted from payment of application and registration fees.

(c) To and fro TA is being paid to the candidates of all categories out of Kanpur to attend the interview [For Group-A: 1st class/AC-III and for Group B and C: 2nd class rail fare].

(d) Experience requirement is relaxable at the discretion of competent authority.

**Employment notification etc.:**

Advertisement/ Notification is released in the Employment News with details of concessions/ relaxations to SC/ST & OBC candidates and the number of posts reserved available for them. The copies of Employment Notices/ Notifications are sent to recognize SC/ST Welfare Associations for publicity among their members.

During the period of report, the **detail of Advs.** (External) issued through Recruitment Section is as under:

<table>
<thead>
<tr>
<th>Advt. No.</th>
<th>Name of Post(s)</th>
<th>Pay Scale</th>
<th>No. of Vacancies</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>SC</td>
<td>ST</td>
</tr>
</tbody>
</table>

-119-
<table>
<thead>
<tr>
<th>1/2010</th>
<th>Deputy Registrars</th>
<th>PB-3:Rs.1560 0-39100 with GP: Rs.7600</th>
<th>1</th>
<th>0</th>
<th>0</th>
<th>0</th>
<th>1</th>
<th>02</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Assistant Registrars</td>
<td>PB-3:Rs.1560 0-39100 with GP: Rs.5400</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>05</td>
</tr>
<tr>
<td></td>
<td>Assistant Executive Engineer</td>
<td>PB-3:Rs.1560 0-39100 with GP: Rs.5400</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>01</td>
</tr>
<tr>
<td></td>
<td>Medical Officer</td>
<td>PB-3:Rs.1560 0-39100 with GP: Rs.5400</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>01</td>
</tr>
<tr>
<td></td>
<td>Junior Technical Superintendent</td>
<td>PB-2:Rs.9300 -34800 with GP: Rs.4200</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>07</td>
</tr>
<tr>
<td></td>
<td>Junior Engineer</td>
<td>PB-2:Rs.9300 -34800 with GP: Rs.4200</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>01</td>
</tr>
<tr>
<td></td>
<td>Junior Technician</td>
<td>PB-1:Rs.5200 -20200 with GP: Rs.2000</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>05</td>
</tr>
<tr>
<td></td>
<td>Junior Assistant</td>
<td>PB-1:Rs.5200 -20200 with GP: Rs.2000</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>04</td>
</tr>
</tbody>
</table>

All Editions of Dainik Jagran (Nai Rahein), Times of India, The Hindu and Employment News
The recruitment for all academic posts of Institute is made through the press/professional journals/circulars to educational institutes, etc.

**Inclusion of SC/ST and OBC Member:**

One SCT and/or OBC member of comparable status is included in the Selection Committee as a full member. For the period of report, the detail of Selection Committee meetings held through Recruitment Section is given below:

<table>
<thead>
<tr>
<th>For Selection</th>
<th>Total</th>
<th>05 Selection Committee meetings: 03 S/C meeting, wherein SCT/OBC representatives included 01 S/C meeting, wherein OBC representative included</th>
</tr>
</thead>
</table>

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Call letters for Interviews/ Appointment letters:

1. To ensure that the interview/ appointment letters are received by the candidates (including reserved category candidates) well in time – the interview/ appointment letters are being sent through UPC & registered/speed post or courier to ensure delivery.

2. Normally for interviews a minimum of three weeks’ time and for appointments a minimum of one month's period of interval is being provided.

Reservation of Quarters:

1. The Institute has been allotting 1st in every ten qrs. to SC/ST employees, out of Type-1A, Type-1B Type-1 and Type-II Qrs. & 1st in every twenty qrs. in Type-III, and Type-IV Qrs. (only from the pool reserved for allotment to Officers other than faculty).

The available data related to house allotment is given below for the period under reference:

<table>
<thead>
<tr>
<th>Type of house</th>
<th>Houses allotted to SC/ST</th>
<th>GEN</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>As per Reservatio n As per Seniority</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type-IA</td>
<td>-</td>
<td>02</td>
<td>02</td>
</tr>
<tr>
<td>Type-1B</td>
<td>-</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Type-I</td>
<td>-</td>
<td>02</td>
<td>22</td>
</tr>
<tr>
<td>Type-II</td>
<td>-</td>
<td>07</td>
<td>18</td>
</tr>
<tr>
<td>Type-III</td>
<td>-</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Type-IV</td>
<td>-</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Type – V</td>
<td>No reservation</td>
<td>07</td>
<td>07</td>
</tr>
</tbody>
</table>
2. There is no reservation in the quarters of Type-V (as these quarters are more or less allotted to faculty members and other eligible officers without any discrimination of caste and creed etc.)

Complaints/ Grievances:

No letter received for redressal of grievance of a SC/ST/OBC employee under the period of report.

Any **Caste falsification** brought to notice is also followed up by the Cell. No new case came in notice.

Apart from the above, the data, as available for showing the **representation of SCs/STs & OBCs in other areas**, is given below:

**A. Academic Staff:**

<table>
<thead>
<tr>
<th>Area(s)</th>
<th>SC</th>
<th>ST</th>
<th>OBC</th>
<th>GEN</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appointments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Teaching</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Teaching</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Visiting Faculty</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>05</td>
<td>05</td>
</tr>
<tr>
<td>Total A</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>Retirement</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>09</td>
<td>09</td>
</tr>
<tr>
<td>Deaths</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>02</td>
<td>02</td>
</tr>
<tr>
<td>Resignation</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td>03</td>
</tr>
<tr>
<td>Resignation (Technical)</td>
<td>-</td>
<td></td>
<td>-</td>
<td>01</td>
<td>01</td>
</tr>
<tr>
<td>Termination</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>01</td>
<td>01</td>
</tr>
<tr>
<td>V/Retirement</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>02</td>
<td>02</td>
</tr>
<tr>
<td>Compulsory Retirement</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Dismissal</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Term Over  -  -  -  05  05
Total B  -  -  -  23  23

B: Non-Academic:

<table>
<thead>
<tr>
<th>Area(s)</th>
<th>SC</th>
<th>ST</th>
<th>OBC</th>
<th>GEN</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appointments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On permanent basis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Through open Recruitment)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On compassionate grounds</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On deputation basis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On contract for 5 yrs</td>
<td>01</td>
<td>-</td>
<td>01</td>
<td>08</td>
<td>10</td>
</tr>
<tr>
<td>Total A</td>
<td>01</td>
<td>-</td>
<td>01</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Retirement</td>
<td>05</td>
<td>-</td>
<td>02</td>
<td>26</td>
<td>33</td>
</tr>
<tr>
<td>Deaths</td>
<td>02</td>
<td>-</td>
<td>01</td>
<td>-</td>
<td>03</td>
</tr>
<tr>
<td>Resignation</td>
<td>02</td>
<td>-</td>
<td>02</td>
<td>07</td>
<td>11</td>
</tr>
<tr>
<td>V/Retirement</td>
<td></td>
<td></td>
<td>01</td>
<td>-</td>
<td>01</td>
</tr>
<tr>
<td>C/Retirement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SVRS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deputationists repatriated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Termination</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dismissal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>End of contract</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total B</td>
<td>09</td>
<td>-</td>
<td>06</td>
<td>33</td>
<td>48</td>
</tr>
</tbody>
</table>

Financial up-gradation under MACPS during 2010-2011

<table>
<thead>
<tr>
<th>Pay-Band</th>
<th>Pay-scale From</th>
<th>Pay-scale To</th>
<th>SC</th>
<th>ST</th>
<th>OBC</th>
<th>GEN</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PB-1 Rs.</td>
<td>1800</td>
<td>1900</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>02</td>
<td>02</td>
</tr>
<tr>
<td>5200-</td>
<td>1900</td>
<td>2000</td>
<td>03</td>
<td>-</td>
<td>02</td>
<td>06</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>2000</td>
<td>2400</td>
<td>04</td>
<td>-</td>
<td>02</td>
<td>07</td>
<td>13</td>
</tr>
</tbody>
</table>
In addition to above, the data, as available for showing the representation of SCs/STs & OBCs related to existing strength of the employees at the Institute, is given below:

A. Existing Strength of Academic Staff (Teaching/Non-teaching) as on 01.04.2011:

<table>
<thead>
<tr>
<th>Academic</th>
<th>SC</th>
<th>ST</th>
<th>OBC</th>
<th>GEN</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching</td>
<td>02</td>
<td>-</td>
<td>-</td>
<td>344</td>
<td>346</td>
</tr>
<tr>
<td>Non-Teaching</td>
<td>01</td>
<td>-</td>
<td>-</td>
<td>36</td>
<td>37</td>
</tr>
<tr>
<td>Total</td>
<td>03</td>
<td>-</td>
<td>-</td>
<td>380</td>
<td>383</td>
</tr>
</tbody>
</table>

B. Existing Strength of Non-Academic Staff as on 01.04.2011:

<table>
<thead>
<tr>
<th>Group</th>
<th>SC</th>
<th>ST</th>
<th>OBC</th>
<th>GEN</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>04</td>
<td>17.39</td>
<td>0.00</td>
<td>01</td>
<td>4.34</td>
</tr>
<tr>
<td>B</td>
<td>59</td>
<td>20.92</td>
<td>2.48</td>
<td>24</td>
<td>8.51</td>
</tr>
<tr>
<td>C</td>
<td>32</td>
<td>19.27</td>
<td>2.40</td>
<td>30</td>
<td>18.07</td>
</tr>
<tr>
<td>D</td>
<td>36</td>
<td>27.27</td>
<td>0.00</td>
<td>09</td>
<td>6.81</td>
</tr>
<tr>
<td>TOTAL</td>
<td>131+8*</td>
<td>21.72</td>
<td>1.82</td>
<td>64</td>
<td>10.61</td>
</tr>
</tbody>
</table>

* Cleaners, not counted towards reservation.
The detailed summary of existing strength of non-academic staff as on 01.04.2011 and representation of SC/ST/OBC Group/
Stream/Mode | SC | ST | OBC | GEN | TOTAL
---|---|---|---|---|---
ANR | 0 | 0.00 | 0 | 0.00 | 01 | 14.28 | 06 | 07
ANU | 03 | 27.27 | 0 | 0.00 | 0 | 0.00 | 08 | 11
ATR | 01 | 25.00 | 0 | 0.00 | 0 | 0.00 | 03 | 04
ATU | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 01 | 01
A | 04 | 17.39 | 0 | 0.00 | 01 | 4.34 | 18 | 23

BNR | 03 | 11.53 | 02 | 7.69 | 05 | 19.23 | 16 | 26
BNU | 22 | 25.58 | 01 | 1.16 | 0 | 0.00 | 63 | 86
BTR | 14 | 18.18 | 03 | 3.89 | 19 | 24.67 | 41 | 77
BTU | 20 | 21.50 | 01 | 1.07 | 0 | 0.00 | 72 | 93
B | 59 | 20.92 | 07 | 2.48 | 24 | 8.51 | 192 | 282

CNR | 11 | 20.37 | 0 | 0.00 | 12 | 22.22 | 31 | 54
CNU | 03 | 15.78 | 01 | 5.26 | 0 | 0.00 | 15 | 19
CTR | 09 | 14.06 | 01 | 1.56 | 18 | 28.12 | 36 | 64
CTU | 09 | 31.03 | 02 | 6.89 | 0 | 0.00 | 18 | 29
C | 32 | 19.27 | 04 | 2.40 | 30 | 18.07 | 100 | 166

DR | 06 | 24.00 | 0 | 0.00 | 09 | 36.00 | 10 | 25
DU | 30 | 28.03 | 0 | 0.00 | 0 | 0.00 | 77 | 107
D | 36 | 27.27 | 0 | 0.00 | 09 | 6.81 | 87 | 132

CLEANERS | 8* | 0 | 0 | 0 | 0 | 8*

TOTAL | 131+8* | 21.72 | 11 | 1.82 | 64 | 10.61 | 397 | 603+8*

**Abbreviations:** SC-Scheduled Caste, ST-Scheduled Tribes, OBC-Other Backward Class, GEN-General, A, B, C & D-Groups, N-Non-technical, T-Technical, R-Recruited, U-Upgraded, * Not counted towards reservation
C. Existing Strength of Account-II Employees as on 01.04.2011:

**Recruited Through DORD Office**

<table>
<thead>
<tr>
<th>Group</th>
<th>SC</th>
<th>ST</th>
<th>OBC</th>
<th>GEN</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>-</td>
<td></td>
<td>1</td>
<td>10</td>
<td>11</td>
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<tr>
<td>C</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>D</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>4</td>
<td>1</td>
<td>5</td>
<td>22</td>
<td>32</td>
</tr>
</tbody>
</table>

D. Existing Strength of Mess Employees as on 01.04.2011:

**Recruited through COW Office**

<table>
<thead>
<tr>
<th>Group</th>
<th>SC</th>
<th>ST</th>
<th>OBC</th>
<th>GEN</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>-</td>
<td></td>
<td>1</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
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<tr>
<td>D</td>
<td>12</td>
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<td>Total</td>
<td>12</td>
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<td>25</td>
<td>53</td>
<td>90</td>
</tr>
</tbody>
</table>

The data as available for showing the representation of SCs/ STs/ OBCs related to the new students admitted in the year 2010-11 in various programmes/ disciplines at the Institute is given below:

<table>
<thead>
<tr>
<th>Programmes</th>
<th>Registration Data in the 2010-11</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.Tech</td>
<td></td>
</tr>
<tr>
<td>AE</td>
<td>SC    06</td>
</tr>
<tr>
<td>BSBE</td>
<td>SC    06</td>
</tr>
<tr>
<td>ChE</td>
<td>SC    09</td>
</tr>
<tr>
<td>CE</td>
<td>SC    11</td>
</tr>
<tr>
<td>CSE</td>
<td>SC    08</td>
</tr>
<tr>
<td>EE</td>
<td>SC    14</td>
</tr>
<tr>
<td>ME</td>
<td>SC    11</td>
</tr>
<tr>
<td>MSE</td>
<td>SC    13</td>
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<tr>
<td>TOTAL</td>
<td>SC    78</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Programmes</th>
<th>Registration Data in the 2010-11</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.Sc. (5 yrs)</td>
<td>SC</td>
</tr>
<tr>
<td>Chemistry</td>
<td>SC    04</td>
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</table>
### Programmes Registration Data in the 2010-11

<table>
<thead>
<tr>
<th>Programmes</th>
<th>Registration Data in the 2010-11</th>
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</thead>
<tbody>
<tr>
<td>Economics</td>
<td>09 02 03 26 40</td>
</tr>
<tr>
<td>Mathematics</td>
<td>07 - 07 30 44</td>
</tr>
<tr>
<td>Physics</td>
<td>04 01 06 16 27</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>24 03 16 90 133</td>
</tr>
</tbody>
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### BT-MT Registration Data in the 2010-11

<table>
<thead>
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<th>Programmes</th>
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</thead>
<tbody>
<tr>
<td>AE</td>
<td>01 - 03 05 09</td>
</tr>
<tr>
<td>ChE</td>
<td>02 02 04 08 16</td>
</tr>
<tr>
<td>CE</td>
<td>04 02 07 12 25</td>
</tr>
<tr>
<td>CS&amp;E</td>
<td>06 03 12 20 41</td>
</tr>
<tr>
<td>EE</td>
<td>05 02 08 16 31</td>
</tr>
<tr>
<td>ME</td>
<td>04 02 07 14 27</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>22 11 41 75 149</td>
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</table>

### M.Sc.-Ph.D Registration Data in the 2010-11

<table>
<thead>
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</thead>
<tbody>
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<td>Physics</td>
<td>02 - 05 05 12</td>
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<tr>
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### M.Sc. (2 yrs) Registration Data in the 2010-11

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<tr>
<td>Mathematics</td>
<td>05 03 15 12 35</td>
</tr>
<tr>
<td>Statistics</td>
<td>04 - 08 20 32</td>
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<tr>
<td>Physics</td>
<td>05 02 08 15 30</td>
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<tr>
<td><strong>Total</strong></td>
<td>20 06 45 66 137</td>
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</table>

### Registration Data of M. Tech./ MBA/ M.Des. Students of 2010-11

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<th>OBC</th>
<th>GEN</th>
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<td>15</td>
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</table>
Registration Data of Ph D students of 2010-11

<table>
<thead>
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<tbody>
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<tr>
<td>PHY</td>
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<td>05</td>
<td>07</td>
<td>14</td>
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<tr>
<td>M Sc-PhD (Dual)</td>
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<td>05</td>
<td>06</td>
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<td>-</td>
<td>-</td>
<td>01</td>
<td>02</td>
<td>03</td>
</tr>
<tr>
<td>BSBE</td>
<td>01</td>
<td>-</td>
<td>01</td>
<td>09</td>
<td>11</td>
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<tr>
<td>TOTAL</td>
<td>16</td>
<td>03</td>
<td>47</td>
<td>147</td>
<td>213</td>
</tr>
</tbody>
</table>
Rajbhasha Prakoshtha

IIT Kanpur is an Institute of national importance where students from all over the country and abroad are admitted for higher education in Science, Engineering, Technology and Humanities disciplines. Therefore, the English language has been adopted as the medium of instruction/syllabus, research and academic activities.

Rajbhasha Prakoshtha was established in the Institute in September 1986. It has got its own office which is equipped with the three bilingual computers for smooth and efficient working. It is managed by a liaison Officer (Hindi), Assistant Registrar, and two Junior Technical Superintendents (Translation) and one Project employee. The Rajbhasha Prakoshtha takes efforts in creating awareness of Hindi among the Institute employees. “Sansthan Rajbhasha Karyanvayan Samiti”, constituted by the Director, monitors and provides guidelines to the Rajbhasha Prakoshtha in its planning and performance. The Rajbhasha Prakoshtha performs various activities like organization of Hindi Diwas, Hindi fortnight, Hindi workshops, and holds meetings for promoting the atmosphere of Rajbhasha in the Institute round the year.

The Rajbhasha Prakostha has adopted the following policies:
1. Entire correspondence with Group D employees is done in Hindi.
2. All Hindi letters are replied to in Hindi.
3. All routine forms and the heading of Registers have been printed bilingually in most of the departments of the Institute.
4. The name plates, office stamps, sign boards, letters heads and the envelopes etc., have been made bilingual.
5. Regular class of Prabodh, Praveen & Pragya for the Non-Hindi speaking employees have already been started. Twelve Non-Hindi speaking employees have been trained in Prabodh, Praveen and Pragya.

The act and the Statutes of the Institute have been made bilingual. The Annual Report of the Institute for 2009-2010 and the Audit Report for the F.Y. 2009-2010 received from the Account Section/AG, UP were translated into Hindi and fair copies here typed in Hindi for submission to the ministry.

The Quarterly news letter SAZAG was published in Hindi. The press release and invitation cards for the Convocation were issued bilingually. All periodical reports were sent to the Ministry and the Nagar Rajbhasha Karyanvayan Samiti in time.

In compliance with the directives of Official Language Department, New Delhi, Hindi fortnight was observed by conducting various competitions from Sept. 01,
2010 and on 14 Sept. 2010 Hindi Diwas samaroh was held in the Lecture Hall complex, in which winners of the various competitions were honored with suitable books awards.

**Following Competitions were held from 01.09.2010 to 14.09.2010**

a) Letter writing Competition  
b) Précis writing Competition  
c) Hindi Slogan Competition  
d) Hindi Typing Competition  
e) Noting & Drafting Competition  
f) General Knowledge Competition  
g) Poetry recitation Competition

Winner of above competitions were as under:

1. **Letter writing Competition**

1. Shri Ram Kripal (First)  
2. Shri Rajesh Kumr Gurang (Second)  
3. Shri Arvind Kumar Panday (Second)  
4. Shri Md. Naeem (Third)

2. **Précis writing Competition**

1. Shri Ram Krishan Tewari (First)  
2. Shri Anil Kumar Sharma (Second)  
3. Shri Sanjeev Kumar Gupta (Third)

3. **Hindi Slogan Competition**

1. Shri Md. Yavar Hussain (First)  
2. Shri Somnath Danayak (Second)  
3. Shri Shiv Shankar Shukla (Third)

4. **Hindi Typing Competition**

1. Ms. Arti Gupta (First)  
2. Ms.Priyanka Katiyar (Second)  
3. Mr. Sandeep Kumar (Third)
5. Noting & Drafting Competition

1. Mr. Anil Kumar Sharma (First)
2. Mr. Sandeep Kumar (First)
3. Mr. Anil Kumar (Second)
4. Mr. Ashish Kumar (Third)

6. General Knowledge Competition

1. Mr. Kamlesh Kumar (First)
2. Mr. Ramkrishan Tewari (Second)
3. Mr. Kundan Pandey (Third)
4. Mr. Sanjeev Kumar Gupta (Third)
5. Mr. Chander Shekhar Sharma (Third)

7. Poetry recitation Competition

1. Mr. C S Goswami (First)
2. Mr. Somnath Danayak (Second)
3. Mr. Ravi Pandey (Third)

During the year 2009-10 about 222 letters from The Directorate, 235 letters from The Registrar’s office, 397 letters/circulars from The Administration Section and 467 letters from others Section were issued in Hindi.

Rajbhasha Prakashtha is dedicated to the upliftment of Hindi in the Institute. Prakashtha is always ready to co-ordinate with each and every Department/Section of the Institute in implementing the orders and directives received time to time from the Ministry of Human Resources & Development, Govt. of India.

On the occasion of Hindi Diwas samaroh, 13 employees of the Institute were honored who are working in official language.
Media Technology Centre

The Media Technology Centre attempts to encourage and cultivate a sense of appreciation and explores the skills involved in the new media for creative expressions. The Centre aims to provide a meaningful platform for the students of the Indian Institute of Technology Kanpur to foster their creative potentials and merge it with their gradual process of acquiring and exchanging knowledge with technology based education at the Institute.

The Students of the Communication Design in the Design Program have an academic relevance to the resources of the centre. The students continue to exhibit their ample creative talents by producing social ad campaigns, documentary films, radio jingles, and various web applications exploiting the varied domains of media arts. The resources are also being used by the undergraduate students opting for elective courses such as Topics in Motion Pictures and Video Production Theory and Practice. In July 2011, the students of the Design Programme and Computer Science participated in the project competition sponsored by Nokia Research Centre, Bangalore and received the Developers Choice award.

One of the major ongoing projects of the centre involves faculty across the Institute in production of quality video based courseware to generate resources and aids for supporting the engineering, sciences and technology based education that can reach out to the larger Education system through various communication media. The Ministry of Human Resource and Development is supporting the initiative under the auspicious of National Program on Technology Enhanced Learning (NPTEL). In the long term, Media Technology Centre aims to create a digital portal as an archive of supportive materials to serve educational purposes and research references in the field of Engineering, Science and Technology, Humanities and Management studies as well as in the relevant areas of National Heritage and Culture. The relevant information / knowledge can be disseminated using this facility and utilized for classroom teaching, student references and research aid.

90.4 FM Community Radio Station

It has been a sincere effort of IIT K Community Radio, since its inception in September 2010, to unite the community within the campus, with the communities outside. This is an initiative by IIT Kanpur to focus on social and educational issues for the development of rural and semi urban areas. As a non-profit, non-commercial setup, the focus of IIT community radio is to engage the campus
community along with the students, to educate the rural areas by generating interest through programmes on agriculture, health and hygiene, education and counseling and providing information on courses run in the neighbouring areas, women related issues, moral values through story narration and giving a platform to local people for personality development.

As far as possible the Media Centre engages the campus community, students and faculty in programme production and reaches out to them through mails, regular radio announcements and through field visits. The discussions are held over ideas/themes, and once the concept is finalized, the team and volunteers work together. Also, people from neighbouring villages have come forward and effectively used this medium of communication. Regular feedback is also received on our e-mail, and some through field surveys. Our aim is to involve every section of society and produce good and meaningful programmes.

**Revamping of the Production Studios and Editing facilities**

We have adopted a multiple-camera mode of production for shooting our programs. It is typically a three camera set up employed on the set that simultaneously record a scene. Generally, the two outer cameras shoot close shots on the set at any given time, while the central camera shoots a wider master shot to capture the overall action. In this way, multiple shots are obtained in a single take without having to start and stop the action. The live audio and video feed from the cameras of the production floor are send to the production control room that ensures mixing and switching of the multiple footage at the original, highest-quality through the Video Switchers and Audio Mixers and recorded on DV Recorders. The digitized video and audio data is then imported to hard disks from the digital tapes through these recorders. Once on disk they are edited on a computer using wide range of software. Compared to the linear method of tape-to-tape editing, the non-linear editing offers a flexibility of film editing, with random access on the source material and easy project organization. The non-linear editing platforms provide numerous options and effect for assembling video clips, audio tracks, graphics and other source material into a presentable package. Once this process is over the edit footage is recorded back to tape or disk and delivered to the clients. The recordings of video lectures created under the auspicious of NPTEL are now being converted into a streaming format for the benefit of students of the institute and the process of conversion shall be over in the next three months.
Committed manpower and resources of the Media Technology Centre is round the year, involved in providing its support in various academic and non-academic events.

**Finance**

The Ministry of Human Resources & Development (MHRD) has released Rs. 12230.00 lakh as Non-Plan Grant, Rs. 5178.00 lakh as Normal Plan Grant and Rs. 5000.00 lakh as Plan (OSC) in the financial year 2010-2011.

**NON-PLAN**

The total receipt under Non-Plan during the financial year 2010-2011 from Ministry of Human Resources & Development, Government of India is Rs. 12230.00 lakh. The Internal Receipts of Institute is Rs. 3498.49 lakh.

The Total Non Plan expenditure during the financial year 2010-2011 comes out to Rs. 15928.49 lakh. The deficit of Rs. 200.00 lakh has been met out from Interest Earning of Endowment Fund Account.

**NORMAL PLAN**

A total receipts under Normal Plan during the financial year 2010-2011 is of Rs. 5178.00 lakh under Plan from the MHRD, Government of India.

With an opening balance of Rs. 575.38 lakh, the total expenditure under Normal Plan is restricted to Rs. 4104.42 lakh. This expenditure includes Rs. 1755.52 lakh on Building & Works and Central AC Facility, Rs. 1223.90 lakh on Non-Consumable purchases including Equipment, Furniture & Fixtures etc., Rs. 475.00 lakh on Periodicals & Journals and Rs. 650.00 lakh on Recurring Expenditure includes expenditure on scholarships for new entrants. Balance of Rs. 1648.96 lakh has been carried over as unspent balance for the financial year 2011-12.

**PLAN (OSC)**

A total receipts under Plan (OSC) during the financial year 2010-2011 is of Rs. 5000.00 lakh under Plan from the MHRD, Government of India.

With an opening balance of Rs. 1687.29 lakh, the total expenditure under Plan (OSC) is restricted to Rs. 6136.48 lakh. This expenditure includes Rs. 3212.03 lakh on Building & Works and Central AC Facility, Rs. 1395.57 lakh on Non-
Consumable purchases including Equipment, Furniture & Fixtures etc, and Rs. 491.84 lakh on Library Books, Digitalization of Library, Periodicals & Journals. Rs. 1037.04 lakh was spent on Recurring Expenditure includes expenditure on scholarships for new entrants and House Keeping / Maintenance of new buildings. Balance of Rs. 550.81 lakh has been carried over as unspent balance for the financial year 2011-12.

INCOME AND EXPENDITURE FOR THE YEAR 2010-11 UNDER MAJOR HEADS

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Particulars</th>
<th>Income (Rs. In lakh)</th>
<th>Expenditure (Rs. In lakh)</th>
</tr>
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<tr>
<td>1</td>
<td>Non- Plan</td>
<td>15928.49</td>
<td>15928.49</td>
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<td>2</td>
<td>Normal Plan (Opening Balance – Rs. 575.38 lakh)</td>
<td>5178.00</td>
<td>4104.42</td>
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<tr>
<td>3</td>
<td>Plan (OSC) (Opening Balance – Rs. 1687.29 lakh)</td>
<td>5000.00</td>
<td>6136.48</td>
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<td>4</td>
<td>JEE</td>
<td>783.64</td>
<td>1096.06 (Non Plan)*</td>
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<td>GATE</td>
<td>421.35</td>
<td>519.30 (Non Plan)*</td>
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<td></td>
<td></td>
<td>0.92 (Plan)</td>
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<td>6</td>
<td>GATE (JMET)</td>
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<td>7.08 (Non Plan)*</td>
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<td>7</td>
<td>Research &amp; Development</td>
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<td>717.68 (Non Plan)</td>
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<td>7.62 (Plan)</td>
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<td>11.53 (Non Plan)*</td>
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<td>143.93 (Non Plan)*</td>
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<td>139.13 (Non Plan)*</td>
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<td>Student Gymkhana</td>
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<td>31.04 (Non Plan)*</td>
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<td>Visitors Hostel</td>
<td>112.63</td>
<td>101.51 (Non Plan)*</td>
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<tr>
<td>14</td>
<td>Endowment Fund</td>
<td>1518.48</td>
<td>806.71 (Non Plan)</td>
</tr>
<tr>
<td>15</td>
<td>GATE (JAM)</td>
<td>25.46</td>
<td>23.82 (Non Plan)*</td>
</tr>
</tbody>
</table>
Endowment Report

During the financial year 2010-11, the Institute has received donations of Rs. 4.08 crore from 872 donations made by 772 donors (501 donors from India donated Rs. 2.00 crore and 271 donors from abroad donated Rs. 2.08 crore)

The donations amounting to Rs. 38.24 lakhs (170 donations by 115 donors) received in IIT Kanpur Foundation; USA during October to December 2010 was received in the Institute in April 2011 hence not included in the total donations of Rs.4.08 core.

A total number of 461 donors (297 donors from India and 164 donors from abroad) contributed Rs.33.12 lakh in the Annual Gift Program during the financial year 2010-11.

State Bank of India has given a donation of Rs. 50.00 lakh for establishing State Bank Chair in the Institute. Mr Sudhir M. Mittal (BT/CHE/70) has donated to establish “Dr Jag Mohan Garg Chair” Ministry of Earth Sciences (MoES) has committed a grant of Rs. 1.5 crore to establish ‘D.N. Wadia Chair’ in the Institute. D.N. Wadia was a very distinguished geologist and awarded Padma Bhushan in 1958. He was also elected Fellow of the Royal Society in 1957. Ministry of Steel has committed to establish “Ministry of Steel Chair” in the area of ‘Ferrous Metallurgy’ and five scholarships to undergraduate students. Mr Sanjay Pradhan (BT/ChE/1986) and Mr Pramath Sinha (BT/MME/1986) announced creation of two faculty chairs during the Silver Jubilee Reunion of their batch. Microsoft Research Lab India Pvt. Ltd. has donated for MSR India outstanding Young Faculty Award.

The institute has received commitment for US$ 1.5 million from Rajiv Motwani Foundation for construction of Rajiv Motwani Building for Computer Science & Engineering department in the Institute.

Class of 1986 has donated considerable amount for creating Tinkering Lab. in IIT Kanpur. Class of 1972 has consented to utilize their batch fund for Aerobic & Yoga Hall in new Sports Complex in the Institute.

Several new scholarships have been instituted during the financial year 2010-11. Mr Manoj K Singh (BT/ME/84) has instituted ‘Saraswati Singh Scholarship, Mr Santosh Mehra (BT/EE/66) has instituted ‘Anita and Santosh Mehra Scholarship, Mr Ravi S Bhagavatula (MScl/Phy/89) has instituted ‘Bhagavatula Project Award, Mr Chandra M Srivastava (BT/ChE/65) has instituted ‘Behari Lal and Nalini
Srivastava Memorial Scholarship, Prof. Sanjay Mittal (BT/AE/88) has instituted ‘Dr. R K Singhal Memorial Scholarship, Prof. Ashok Saxena (BT/ME/70) has instituted ‘Shanti and Ram kishore Sahai Saxena Memorial Scholarship, Ms. Suarhhaa Monika Banerjee (non-alum) has instituted ‘Vimal Madaan Memorial Scholarship, Prof.Brahma Deo (faculty, IITK) has instituted ‘Steel Scholarship, Mrs. Vidula S Jakatdar mother of Priyadarshan Jakatdar (BT/EE/79) has instituted ‘S Y Jakatdar Memorial Scholarship, Mr. R Balasubramanian ((BT/ME/89) has instituted ‘Balasubramanian & Visalakshi Scholarship.

World Quant Foundation, USA has donated two Scholarships of USD 1000. The Foundation has committed to donate two scholarships every year of USD 1000 each every year. IIT London Chapter has donated one ‘IIT London Chapter Scholarship’ and committed to donate every year.

Dr. Gopal Shankar Upadhyaya (Former IITK Faculty) has donated Rs. 2.00 Lakh for ‘Samsonov Memorial International Lecture Series’ in the Department of Material Science & Engineering (MSE), IIT Kanpur.

The Institute provided travel support to 148 students for attending international conferences, and Cash Awards to 128 students for publication of their research papers in reputed ISI Web Journals during the financial year 2010-11. Partial travel support to seven new faculty members was provided for attending international conferences abroad.

SURGE program was conducted during the summer of 2010. A total of 122 students participated in the Program. About 80 Faculty members mentored these students. This level is nearly the double compared to SURGE 2009. The selection of student participants was very rigorous as 1500 applications were received from Institutions across the country.

The following expenditure was made during 2010-11 from Endowment Fund A/c to support different activities in the Institute.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Project Title</th>
<th>Total Amount (Rs. in lakh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Development &amp; Operational activities in this Institute</td>
<td>414.24</td>
</tr>
<tr>
<td>2</td>
<td>Awards</td>
<td>2.09</td>
</tr>
<tr>
<td>3</td>
<td>Scholarships</td>
<td>14.26</td>
</tr>
<tr>
<td>4</td>
<td>Faculty Chairs</td>
<td>23.02</td>
</tr>
</tbody>
</table>
Facilities to Students

1. RESIDENTIAL ACCOMMODATION FOR STUDENTS

Hall of Residence

IIT Kanpur is a residential Institute and thus requires that all students registered for a degree programme in the Institute reside in the Campus itself. Therefore, all students except (i) married students who are allotted alternative accommodation in single bedroom apartments (SBRA) and (ii) students, who are wards of campus residents, as a special case, are permitted to stay with their parents on the campus.

The Institute has nine Halls of Residence for boys, namely Hall-1 to Hall-5 & Hall-7 Hall-10, and two for girls (GH) with total capacities of 3800 and 484 for boys and girls respectively. In addition, there is accommodation for 72 students in single bedroom apartments (SBRA).

The Halls have single and double-seated rooms. Presently, most of the senior undergraduate and all post graduate students are given single-seated rooms, while most of first and second year and some third year B. Tech. and M. Sc., (Integrated) students and 1st year M. Sc. (2-Yrs.) are living in double seated rooms. Each Hall has a mess of which every hall resident is a member. The Halls of Residence also have a well subscribed reading room, TV room, TT rooms, PC room, badminton and volley ball courts, canteen, library (with the books on general topics) and several hobby clubs. The affairs of these amenities in each Hall are managed by (i) the respective committee of students for the amenities and (ii) a central Hall Executive Committee (HEC) under the overall guidance and
supervision of three wardens (two for Hall-VI). The overall management of the Halls of residence is through the central Hall Management Council (HMC). The Council of Wardens (COW) looks after the affairs of mess workers.

In addition to students, staffs working in various research projects of the Institute are also provided accommodation in the halls depending upon the availability of the rooms. The boarding and lodging arrangements for the participants of conferences and short-term courses are also made in the Halls of Residence.

**Single Bed Room Apartments (SBRA’s)**

Depending on the availability, the accommodation in single bedroom apartments (SBRA) is provided to married students. In exceptional cases bachelors, on specific medical grounds, may also be provided SBRA accommodation. A Married Students Welfare Committee (MSWC) manages the affairs of SBRA’s under the supervision of the Warden-in-Charge.

### 2. FINANCIAL ASSISTANCE TO STUDENTS

All possible efforts are made by the Institute to render financial assistance (i) in the form of scholarships and (ii) short-term loans to needy and deserving students during their stay at the Institute. Short-term loans are given to some students, depending on the requirement of the case, out of the Students' Benefit Fund (SBF) so that their minor financial emergencies are overcome. The details of the financial assistance offered to the students at the Institute are given below:

<table>
<thead>
<tr>
<th>Loan</th>
<th>Short Term</th>
<th>Long Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short Term/Long Term</td>
<td>35</td>
<td>3</td>
</tr>
</tbody>
</table>

Student's Benefit Fund (SBF) also provides scholarships of the value of Rs. 1200/- per month to the needy students. Total 75 students were provided scholarships from the SBF during the year 2010-11.

### 3. SCHOLARSHIPS FOR UNDERGRADUATE STUDENTS

Merit-cum-Means scholarships of the value of Rs. 1000/- per month with tuition fee waiver are awarded per semester to students up to 25% of the total strength enrolled in each of the batches of the B. Tech., M. Sc. (Integrated), B. Tech-M. Tech. Dual degree and M. Sc. (2-year) programmes provided that the incomes of their parents do not exceed Rs. 4,50,000 per annum. SC/ST students, not in receipt of
scholarships from any other source including the State Governments or Directorate of Harijan and Social Welfare, are eligible for the Free Basic Mess (scholarships).

In addition, several students of the B. Tech. /M. Sc. (Integrated) and M. Sc. (2-year) programmes are in receipt of the financial assistance through scholarships, stipends and grants from Central and State Governments, Directorate of Education and other organizations. Table-I shows various scholarships awarded to undergraduate students during 2010-11.

**TABLE-I (A): Scholarships for B. Tech./ B. Tech.-M. Tech. (Dual degree)/ M. Sc. (Integrated) M. Sc. (02Year) & M.Sc.-Ph.D. (Dual Degree) for the year 2010-11**

<table>
<thead>
<tr>
<th>Undergraduate Scholarships</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I</td>
</tr>
<tr>
<td>MCM @ Rs. 1000/- p.m. with Freeship</td>
<td>191</td>
</tr>
<tr>
<td>Freeship</td>
<td>---</td>
</tr>
<tr>
<td>Free Basic mess plus Pocket Allowance @ Rs.250/- p.m.</td>
<td>79</td>
</tr>
<tr>
<td>Anurag Bartaria</td>
<td>1</td>
</tr>
<tr>
<td>Arakere and Karen Vasudev</td>
<td>---</td>
</tr>
<tr>
<td>BGM Kumar Foundation</td>
<td>1</td>
</tr>
<tr>
<td>Bhuwan and Indira Joshi</td>
<td>1</td>
</tr>
<tr>
<td>Balasubramaniam &amp; Visalakshi</td>
<td>1</td>
</tr>
<tr>
<td>Biswanath Jha Memorial</td>
<td>---</td>
</tr>
<tr>
<td>Dr. Gurcharan Singh Kainth</td>
<td>---</td>
</tr>
<tr>
<td>Dr. Hari Mohan and Pushpa Srivastava</td>
<td>---</td>
</tr>
<tr>
<td>Guru Ji Ghasit Ram</td>
<td>1</td>
</tr>
<tr>
<td>Harish and Sushila Chandra</td>
<td>1</td>
</tr>
<tr>
<td>Indra Dhanush Awards</td>
<td>---</td>
</tr>
<tr>
<td>Khem Chandra Yadav</td>
<td>---</td>
</tr>
<tr>
<td>Kinra</td>
<td>---</td>
</tr>
<tr>
<td>Kunta Jha</td>
<td>---</td>
</tr>
<tr>
<td>Mahesh &amp; Shashi Chandra</td>
<td>---</td>
</tr>
<tr>
<td>Mathur Brothers</td>
<td>1</td>
</tr>
<tr>
<td>N.S. Rajaraman</td>
<td>1</td>
</tr>
<tr>
<td>Neta Ji Balwan Singh</td>
<td>2</td>
</tr>
<tr>
<td>Nita Goyal and Ashish Gupta</td>
<td>1</td>
</tr>
<tr>
<td>P.D.Murti Memorial</td>
<td>---</td>
</tr>
<tr>
<td>Pt. Balajee Govind Hardikar Memorial</td>
<td>1</td>
</tr>
<tr>
<td>Scholarship Name</td>
<td>Amount</td>
</tr>
<tr>
<td>------------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>Prof. C.N.R. Rao Science Talent</td>
<td>---</td>
</tr>
<tr>
<td>Prof. Netarlal Kapur</td>
<td>---</td>
</tr>
<tr>
<td>Ram Rajendra Malhotra Education Society</td>
<td>3</td>
</tr>
<tr>
<td>Sarpanch Salik Ram Katiyar</td>
<td>2</td>
</tr>
<tr>
<td>Shiv Kumari Shukla</td>
<td>1</td>
</tr>
<tr>
<td>Shiv Prakash and Dayawanti Sharma</td>
<td>1</td>
</tr>
<tr>
<td>Shri D.P. Shukla</td>
<td>1</td>
</tr>
<tr>
<td>Smt. Jagat Kaur Memorial</td>
<td>---</td>
</tr>
<tr>
<td>Sri Jamuna Prasad and Basanti Gupta</td>
<td>---</td>
</tr>
<tr>
<td>Sri Temasek@iitk</td>
<td>1</td>
</tr>
<tr>
<td>Tapan Kumar and Swapna Bandhyopadgyay</td>
<td>---</td>
</tr>
<tr>
<td>Vasudeo Laxman Sahasrabuddhe Vaidya</td>
<td>---</td>
</tr>
<tr>
<td>Yasodha Yadav</td>
<td>---</td>
</tr>
<tr>
<td>Yogendra Nath and Sushma Gupta</td>
<td>---</td>
</tr>
<tr>
<td>Shrikant Mishra Scholarship</td>
<td>1</td>
</tr>
<tr>
<td>Sudarshan Kasturia Memorial Scholarship</td>
<td>1</td>
</tr>
<tr>
<td>Shri Shankar Lal Shrimati Prema Debi</td>
<td>1</td>
</tr>
<tr>
<td>Tarun Sondhi Memorial Scholarship</td>
<td>1</td>
</tr>
<tr>
<td>Kemchnd Memorial Scholarship</td>
<td>1</td>
</tr>
<tr>
<td>Dr. M. Anantaswamy and Mrs. Vijayalakshmi Rau</td>
<td>1</td>
</tr>
<tr>
<td>S. C. Mehrotra’s Scholarship</td>
<td>---</td>
</tr>
<tr>
<td>Shri Kalp Nath Singh</td>
<td>---</td>
</tr>
<tr>
<td>Shanti Devi and Omkar Nath Maewal Memorial</td>
<td>---</td>
</tr>
<tr>
<td>K. N. Saluja</td>
<td>2</td>
</tr>
<tr>
<td>Sri Singhasan Singh</td>
<td>---</td>
</tr>
<tr>
<td>Romesh Chandra Memorial</td>
<td>---</td>
</tr>
<tr>
<td>Dharmavati Garg</td>
<td>---</td>
</tr>
<tr>
<td>Durga Devi Memorial</td>
<td>---</td>
</tr>
<tr>
<td>Dr. K.P. Gupta</td>
<td>---</td>
</tr>
<tr>
<td>Baljit and Nirmal Dhinsa</td>
<td>1</td>
</tr>
<tr>
<td>Mona and Paramjit Singh</td>
<td>---</td>
</tr>
<tr>
<td>Rajnath Singh Scholarship</td>
<td>---</td>
</tr>
<tr>
<td>Nitish Thakor</td>
<td>1</td>
</tr>
<tr>
<td>Pushpa Garg</td>
<td>1</td>
</tr>
<tr>
<td>Aviation Development Award</td>
<td>---</td>
</tr>
<tr>
<td>Dr. D.R. Bhagat Scholarship</td>
<td>---</td>
</tr>
<tr>
<td>Sagnik Asis Ray</td>
<td>---</td>
</tr>
<tr>
<td>Vinay Kapoor Memorial Scholarship</td>
<td>1</td>
</tr>
<tr>
<td>Bhawan Das Kapoor Memorial Scholarship</td>
<td>---</td>
</tr>
</tbody>
</table>
### Scholarships from outside agencies

TABLE I (B): Scholarships for B. Tech. / B. Tech.-M. Tech. (Dual degree)/ M. Sc. (Integrated) M. Sc. (02 Year) & M.Sc.-Ph.D. (Dual Degree) for the year 2010-11

<table>
<thead>
<tr>
<th>Undergraduate Scholarships</th>
<th>Year</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Matric Scholarship</td>
<td></td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>NTS Scholarships</td>
<td></td>
<td></td>
<td>27</td>
<td>17</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>FAEA Scholarship</td>
<td></td>
<td></td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aditya Birla</td>
<td></td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Inspire</td>
<td></td>
<td>81</td>
<td>45</td>
<td>27</td>
<td>27</td>
<td>1</td>
</tr>
<tr>
<td>TODAI Scholarship</td>
<td></td>
<td>02</td>
<td>02</td>
<td>02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O.P. Jindal Scholarship</td>
<td></td>
<td>01</td>
<td>01</td>
<td>01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>State Scholarship</td>
<td></td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NBHM Scholarship</td>
<td></td>
<td>2</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All the SC/ST category students get tuition fee waiver irrespective of their parents’ income. Concession of free messing (basic menu only) plus pocket allowance of Rs. 250/- per month is provided to SC/ST category students whose parents’ income do not exceed Rs. 4,50,000/- per annum, in the previous financial year.
AWARDS AND PRIZES TO MERITORIOUS STUDENTS

The students at IIT Kanpur are engaged throughout their programme in various academic, co-curricular and extracurricular activities. The outstanding students are given various awards and prizes for their achievements in their activities. Table-III shows the awards and prizes given during 2010-11. In addition, top 7% students in order of merit in each year are given a Certificate of Merit and a cash prize of Rs. 400/- for UG and Rs. 600/- for PG students.

TABLE-III: AWARDS AND PRIZES (2010-11)

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Awards and Prizes</th>
<th>B. Tech./ M. Sc. (Intg.)/Dual degree</th>
<th>M. Sc. (2-Yr.)/Dual degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>President Gold Medal</td>
<td>1</td>
<td>---</td>
</tr>
<tr>
<td>2</td>
<td>Director’s Gold Medal</td>
<td>1</td>
<td>---</td>
</tr>
<tr>
<td>3</td>
<td>General Proficiency Medal</td>
<td>18</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>Proficiency Medal</td>
<td>20</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Cadence Gold Medal</td>
<td>01 (M.Tech)</td>
<td>---</td>
</tr>
<tr>
<td>6</td>
<td>Cadence Silver Medal</td>
<td>1</td>
<td>---</td>
</tr>
<tr>
<td>7</td>
<td>Prof. Adidam S. R. Sai Memorial Gold Medal</td>
<td>02 (M.Tech.)</td>
<td>---</td>
</tr>
<tr>
<td>8</td>
<td>Prof. Adidam Sri Ranga Sai Memorial Medal</td>
<td>1</td>
<td>---</td>
</tr>
<tr>
<td>9</td>
<td>Ratan Swarup Memorial Prize</td>
<td>1</td>
<td>---</td>
</tr>
<tr>
<td>10</td>
<td>Banco Foundation Prize (ME)</td>
<td>2</td>
<td>---</td>
</tr>
<tr>
<td>11</td>
<td>Dr. Shanker Dayal Sharma Medal</td>
<td>01 (M.Tech.)</td>
<td>---</td>
</tr>
<tr>
<td>12</td>
<td>Prof. Vijay Mahajan Gold Medal</td>
<td>01 (M.Tech.)</td>
<td>---</td>
</tr>
<tr>
<td>13</td>
<td>Batra Gold Medal</td>
<td>1</td>
<td>---</td>
</tr>
<tr>
<td>14</td>
<td>IEEE/Pedes’96 Award</td>
<td>01 (M.Tech.)</td>
<td>---</td>
</tr>
<tr>
<td>15</td>
<td>Bhagwani Devi Maheshwari Gold Medal</td>
<td>1</td>
<td>---</td>
</tr>
<tr>
<td>16</td>
<td>Prof. Bal Deva Upadhayaya Memorial Gold Medal</td>
<td>01 (M.Tech.)</td>
<td>---</td>
</tr>
<tr>
<td>17</td>
<td>Mars G. Fontana Prize (MME)</td>
<td>1</td>
<td>---</td>
</tr>
<tr>
<td>18</td>
<td>Sangeeta Pradhan Memorial Medal</td>
<td>1</td>
<td>---</td>
</tr>
<tr>
<td>19</td>
<td>Best Software Award</td>
<td>2</td>
<td>---</td>
</tr>
<tr>
<td>20</td>
<td>Binay Kumar Sinha Award</td>
<td>2</td>
<td>---</td>
</tr>
<tr>
<td>21</td>
<td>TATA Consultancy Services Awards</td>
<td>2</td>
<td>---</td>
</tr>
<tr>
<td>22</td>
<td>Dr. S.D. Bokil Memorial Medal</td>
<td>02 (M.Tech.)</td>
<td>---</td>
</tr>
<tr>
<td>23</td>
<td>Mehta M.Tech. Gold Medal</td>
<td>01 (M.Tech.)</td>
<td>---</td>
</tr>
</tbody>
</table>
POST GRADUATE STUDENTS

The amount of teaching/research assistantship or fellowship for M. Tech. students is Rs. 8000/- per month while that for Ph. D. students in engineering disciplines is (a) Rs. 18000/- for first two years and (b) Rs. 20,000/- for subsequent years. The amount of assistantship or fellowship for Ph. D. students in Sciences and Humanities & Social Science is (a) Rs. 16000/- per month for the first two years of their programmes and (b) Rs. 18000/-per month for subsequent years.

EDUCATIONAL GRANTS TO POSTGRADUATE STUDENTS

The Institute gives financial assistance to the M. Tech. / Ph. D. students who are in receipt of Institute scholarship in the form of grant for (a) the preparation of thesis, (b) purchase of books and stationary items and (c) charges for photocopying. The amounts of grants given under these heads are summarized in Table-II.
Table-II: Amount of Educational Grants given to Postgraduate Students

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Items of Expenditure</th>
<th>Ph. D.</th>
<th>M. Tech.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Thesis Preparation Aid</td>
<td>3,000.00</td>
<td>750.00</td>
</tr>
</tbody>
</table>

3. SPECIAL ASSISTANCE TO SC/ST& OBC STUDENTS

Rules for admission to undergraduate programme through JEE are relaxed for the SC/ST categories of students. 15% of seats are reserved for the Scheduled Caste (SC), 7.5% for the Scheduled Tribes (ST) students & 18% seats are reserve for OBC (for non-creamy layer). A separate merit list is drawn for those OBC &SC/ST students, who appear for the Joint Entrance Examination. Cut-off point for calling them for the Counseling and thereafter for the offer of admission is based on the relaxed criteria.

In addition, SC/ST students are also selected from among the list of students who do not qualify for the admission for a one-year preparatory course scheme. All the SC/ST category students get tuition fee waiver irrespective of their parent's income. Concession of free messing (basic menu only) plus pocket allowance of Rs. 250/- per month and room rent exemption are admissible to these SC/ST category students whose parents income does not exceed Rs. 4,50,000/- per annum, in the previous financial year. While granting any financial assistance other than the teaching/research assistantship or fellowship available to all the students, including SC/ST students, the SC/ST students are given special consideration.

4. ACTIVITIES OF STUDENTS’ GYMKHANA

As mentioned above, academic activities are only one facet of student's life at IIT Kanpur. Our students actively participate in various extra and co-curricular activities focussed towards the holistic development of their mind and body. The year 2010-2011 also saw a very active calendar in the form of various games and cultural events.

IIT Kanpur continually strives to encourage an equitable balance between academics and extra-curricular activities among its students. Our vision is to create future leaders in their chosen fields and not just technically accomplished individuals. The Institute strongly believes that an abiding social and humane engagement is the hallmark of its student body. To translate such a belief into reality, the Institute nurtures social, cultural and sporting activities pursued by the students’ gymkhana and other student groups.
A variety of activities are pursued by various clubs coming under the broad ambit of the councils of the Gymkhana. They range from clubs like Prayas, where students teach children coming from socially disadvantaged and economically deprived backgrounds to the Dramatics club which stages thematically inspired and socially relevant plays. Other technically oriented student groups are engaged throughout the year in pursuing special interests like robotics, electronic aids, animation, aero-modeling, dance, fine arts, and astronomy to name but a few.

The overriding objective of the large-scale events of the Institute such as Antaragni (the cultural festival), Techkriti (the technical and entrepreneurship festival) and Udghosh (the sports festival) is to infuse a sense of richness and purpose in the lives of students. All these social, cultural and sporting activities play a crucial role in the transformation of a student into a complete human being. These festivals have seen vastly improved participation levels, both from within the Institute and also from students from other national and international institutions. The revenues generated for conducting these festivals saw an impressive growth last year, which is a tribute to the managerial and logistic skills of our students. During the year, several talks with eminent personalities like Retd. Ambassador Arundhati Ghose and other such luminaries were conducted throughout the year.

The Institute sports teams also participated in the Inter IIT Sports meet this year held at IIT Delhi. The Badminton men’s team was successful in securing a Gold. The Institute team visited IIT Roorkee to participate in the sports festival; our tennis & hockey teams won silver medals. The TT Team was successful in securing a Gold Medal at MNITs Sports meet.

The Institute witnessed stiff inter- hall competition in the form of Galaxy, Takneek, Spectrum and Varchasva, inter- hall Cultural, Science & Technology, Films & Media and Sports championships respectively. Fresher Varchasva tournament also had been organized to find some new talent from the incoming batch. The sole guiding principle to organize these championships is to provide the students of this campus, a much needed platform to compete and showcase their cultural and sports talents and to give them a reason and a motivation, strong enough, to come out of their rooms and participate in group activities.

**Overall Championship Trophy**

The Student Counselling Service is an active wing of our students. The activities include organizing the orientation programme for UG and as well as PG students; providing specific attention to students having academic, financial or personal
problems; monitoring the progress of students who need special attention. It enjoys wide appreciation from both faculty and students alike.

After a 2 year low, the economy bounced back and the Placement Office received a good response from the industry. This year we saw the presence on campus of many past recruiters who were inactive for the last couple of years. There was also an overwhelming response from the Consultancy, FMCG and Core sectors and many new companies added to our list. 753 students registered for placements this year of which 660 have job offers from 160 companies that took part in the placement process, thus making it an overall of 88% placements. B.Tech is 89%, Dual 96%, M.Tech including M.Des 81%, M.ScI 90%, M.Sc 2 year 83%, and MBA 98%. We are still awaiting a few more results.

The relationship with alumni was further strengthened with Mr. Anurag Singh of 1986 batch presenting SPO with a State of the Art Portal to be used for the placement process. Ms. Madhu Chadda from 1979 batch along with her team took a 3 day workshop on personality and soft skills development.

The Career Counseling Program continued successfully with a significant rise in the number of students who availed this facility.

**PHYSICAL EDUCATION ACTIVITIES**

With the objective of a sound physical health and an all round development of personality of students, several co-curricular and extracurricular physical activities have been integrated as Compulsory Physical Activities (CPA) with the regular curriculum at IIT Kanpur. The streams of activities are:

1. Games and Sports
2. National Cadet Corps (NCC)
3. National Service Scheme (NSS)
4. Yoga
5. Tae-Kwando

All the 1st year students admitted in the B. Tech. /M. Sc. (Integrated) programme are required to exercise their option for one of the above activities at the time of registration under the course PE. The two courses PE 101 and PE 102 constitute Compulsory Physical Activities (CPA) at IIT Kanpur.
NATIONAL CADET CORPS (NCC)

1. It is a matter of great pride that the National Cadet Corps (NCC) has been spearheading the youth movement in the country. It has played an important role in propagating the ideals of secularism, national integration and selfless service, which are ever so essential in the present day context. During the past 56 years, the NCC has come a long way. It has grown into a vibrant youth organization and has made substantial contribution for creation of disciplined, and well- motivated citizens, ready for service of the nation. Its credentials as the largest youth organization engaged in grooming the youth and endowing them with qualities of character, comradeship and leadership are unquestionable.

2. The NCC is authorized and administered by the Govt. of India as an integral part of its National Plan. For the successful implementation of the NCC Programme, the scheme has been inter-woven with the National Education Programme. In order to thoroughly groom the NCC cadets to be tomorrows leaders, they are exposed to every facet of the multi-dimensional training programme in as realistic a manner as possible. Due emphasis is given to constantly update and refine training method and ensure its proper implementation. The NCC training strives to inculcate in cadet the qualities of leadership, discipline, courage and corporate living, which stand them in good stead in whatever vocation they choose. The various activities undertaken by the NCC cadets, such as mountain craft, rock climbing, skiing/jumping, camping, gliding and flying and sea faring provide students an immense opportunity to be nature friendly and helps in self discovery.

NATIONAL SERVICE SCHEME (NSS)

The Scheme provides the most diversified opportunities to the students to upgrade their personality through social add community service of different variety, suiting different aptitudes and needs. Special emphasis is laid on tutorial assistance to the weaker sections of the campus. The student volunteers participated in teaching at the opportunity school. Some volunteers visited non-formal schools. NSS volunteers visited nearby villages for distributing books and demonstrating science experiments.

YOGA

Classes to train students in Yoga, as one of the stream of PE courses, were conducted during both the semesters of 2010-2011 successfully by a yoga teacher. These classes included Joints and Glands exercises, Asanas (Postures) in standing,
sitting and lying positions, Mudras (Gestures), Bandhas (Locks), body cleansing Kriyas (techniques); Pranayama (Breathing exercises) and Meditation. Counselling is also provided to students for solving their personal physical, mental and emotional problems through yoga.

**TAE-KWON-DO**

The new scheme of Tae-Kwon-Do as approved by the Senate was introduced from the year 1998-1999. It was found to be extremely popular.

**5. SWIMMING POOL**

The Institute has a full size (50x20 meters) Swimming Pool for its students, faculty and staff and also for their family members. The membership is open to all on payment of a nominal fee. Arrangements have been made to coach beginners in swimming. To ensure maximum safety of the members, life-guards are engaged. The exact rates for these sessions are fixed and notified by the Swimming Pool Management Committee, for regular memberships as well as guest charges. The Pool has been operating for 7 months in a year, i.e., from April to October on monthly basis. Pool is operating in the morning as well as evening hours i.e. 5:30 am to 8:15 am and 3:30 pm to 8:00 pm divided into 45 minutes slots with 15 minutes free time in between Swimmers and non-swimmers are separated.

**6. FACULTY INCHARGES STUDENTS’ AFFAIRS**

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dean, Students Affairs</td>
<td>Dr. A. K. Ghosh</td>
</tr>
<tr>
<td>Head, Counseling Service</td>
<td>Dr. A. R. Harish</td>
</tr>
<tr>
<td>Chairman, Council of Wardens</td>
<td>Dr. S. N. Singh</td>
</tr>
<tr>
<td>Vice-Chairman, Council of Wardens</td>
<td>Dr. J. Ramkumar</td>
</tr>
</tbody>
</table>

**Counsellors, Students’ Gymkhana**

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief Counsellor</td>
<td>Dr. A. K. Ghosh</td>
</tr>
<tr>
<td>Cultural Counsellor</td>
<td>Dr. Satyaki Roy</td>
</tr>
<tr>
<td>Games Counsellor</td>
<td>Dr. S. K. Mathur</td>
</tr>
<tr>
<td>Films Counsellor</td>
<td>Dr. Satyaki Roy</td>
</tr>
<tr>
<td>Science &amp; Technology Counsellor</td>
<td>Dr. Anurag Gupta</td>
</tr>
<tr>
<td>Treasurer</td>
<td>Dr. A. V. R. Sarma</td>
</tr>
<tr>
<td>Chairman Students Benefit Fund</td>
<td>Dr. A. R. Harish</td>
</tr>
<tr>
<td>Chairman Students’ Placement Committee</td>
<td>Dr. J. Ramkumar</td>
</tr>
<tr>
<td>Faculty Advisor, NSS</td>
<td>Dr. H. C. Verma</td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>Chairman, Swimming Pool Management Committee</td>
<td>Dr. P. Shunmugaraj</td>
</tr>
<tr>
<td>Faculty Advisor, Yoga</td>
<td>Dr. A.K. Sharma</td>
</tr>
<tr>
<td>Faculty Advisor, Tae-kwon-do</td>
<td>Dr. T. Ravichandran</td>
</tr>
</tbody>
</table>

7. WARDENS

<table>
<thead>
<tr>
<th>HALL OF RESIDENCE No. I</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Rajesh Srivastava, Warden I/c</td>
<td>Dr. Krishnacharya, Warden</td>
</tr>
<tr>
<td>Dr. Sudeep Bhattacharjee, Warden</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>HALL OF RESIDENCE No. II</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Somesh K. Mathur, Warden I/c</td>
<td>Dr. Debajyoti Paul, Warden</td>
</tr>
<tr>
<td>Dr. Anurag Gupta, Warden</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HALL OF RESIDENCE No. III</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Anjan K. Gupta, Warden I/c</td>
<td>Dr. Vimal Kumar, Warden</td>
</tr>
<tr>
<td>Dr. Tarun Gupta, Warden</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HALL OF RESIDENCE No. IV</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Anish Upadhyaya, Warden I/c</td>
<td>Dr. Deepu Philip, Warden</td>
</tr>
<tr>
<td>Dr. V. Shankar, Warden</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HALL OF RESIDENCE No. V</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. A. V. R. Sarma, Warden I/C</td>
<td>Dr. Vineet Sahu, Warden</td>
</tr>
<tr>
<td>Dr. Siddharth Panda, Warden</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HALL OF RESIDENCE No. VII</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. D. Goswami, Warden I/C</td>
<td>Dr. J. K. Bera, Warden</td>
</tr>
<tr>
<td>Dr. Yogesh M. Joshi, Warden</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HALL OF RESIDENCE No. VIII</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. D. Bahuguna, Warden I/C</td>
<td>Dr. Priyanka Ghosh, Warden</td>
</tr>
<tr>
<td>Dr. Sumit Basu, Warden</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HALL OF RESIDENCE No. IX</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. M. K. Ghorai, Warden I/C</td>
<td>Dr. Malay K. Das, Warden</td>
</tr>
<tr>
<td>Dr. Amit Dutta, Warden</td>
<td></td>
</tr>
</tbody>
</table>
8. STUDENTS’ GYMKHANA EXECUTIVE

The philosophy followed at this Institute is to involve students at various decision-making levels. The President, Students' Gymkhana, and the Convener, Students' Senate are special invitees to the Senate. Students' Senate also sends its nominees for various standing committees of the senate namely EPC, SPGC, SUGC, SSAC, SLC, SSPC and various other users committees. The following list gives the names of students holding various posts of the executive wing of students' Gymkhana.

President
Mr. Vivek Agarwal (upto Feb. 2011) and Mr. Sanchit Singhal (from March 2011)

Convenor, Students Senate
Mr. C. Rahul (upto Feb. 2011) and Mr. Aditya Gupta (from March 2011)

General Secretary (Cultural)
Mr. Rishi Raj Singh (upto Feb. 2011) and Mr. Shantanu Singh (from March 2011)

General Secretary (Games)
Mr. Tarun (upto Feb. 2011) and Mr. Anurag Agarwal (from March 2011)

General Secretary (Films)
Mr. Hemant Gupta (upto Feb. 2011) and Mr. Rohit Singh (from March 2011)

General Secretary (Science & Technology)
Mr. Pulkit Agarwal (upto Feb. 2011) and Mr. Abhinav Prateek (from March 2011).
The present document describes the placement season 2010-11 of the Students’ Placement Office as on May 6, 2011.

Introduction

Student Placement Office (SPO) is responsible for providing a platform to facilitate interaction between students and companies, so that both can find the best match as their aspirations and requirements. The office also undertakes many efforts to inform students of various career options and help them prepare for their placements.

Pre-Placement Talks were held during the 7th semester and the final placements were scheduled after the end semester exams. The PPT’s started from 14th August, 2010 and 50 companies gave their presentations. The final Placements began from 2nd December and now we have almost closed the placements at IIT Kanpur campus, although we are keeping students informed about the opportunities that we receive from the companies.

Invitation letters for participating in the Campus Recruitment Programme 2010-11 were sent to over 2500 Organizations. A total of 260 companies had filled in the proforma and finally 165 took part in the campus placements and recruited 662 students out of the 753 students who had registered with the SPO. The placement statistics for our B.Tech students is 89% this year while for the M.Tech. students, it is 82% till date. The MBA program has had 98% and Dual Degree Programme has had 96% placement. The overall placement for 2010-11 has been 88%.

With the objective of providing uniform opportunity to all students registered for placement, the policy of “one job per student” still continues. The average salary this year for the overall batch is Rs.7.24 lakhs per annum.

After the economic downturn faced for the last two years, the Placement Office received a pretty good response from the companies. We saw a great progress especially in the consultancy and FMCG sector with almost double number of companies visiting the campus. Amongst the new organizations, the major ones that recruited this year are Boston Consulting Group, Diamond Consultant, Opera Solutions, i3 consulting, Procter and Gamble and Reckitt Benckiser. Also many other organizations like Facebook, VMWare, InMobi, NLC Nalco, Brocade, Cummins, TVS Motors, Novartis etc visited IIT Kanpur for the first time. We also saw a revival of many past recruiters which were
inactive for the last 3-4 years like Airbus, Ashok Leyland, EXL Services, Texas Instrument, etc.

The office also undertook many efforts to inform students of various career options and help them prepare for their placements. As many as 16 different preparation sessions were conducted and a placement preparation portal was set up where students can get access to the relevant material needed for the preparations.

The relationship with the alumni was further strengthened as Mr. Anurag Singh extended his kind help in providing SPO with a state of the art portal to be used for the placement process. Career awareness sessions were being taken on IAS and MS/PhD as a career option by Rajeev Chawla and Dr Sameer Khandekar respectively.

We successfully continued the career counseling program with the number of students being counseled rising significantly during the last year.

**Placement Statistics 2010-11**
Total Selections and Remaining of each program

**Selections**
- MBA: 6%
- msc2: 2%
- msci: 5%
- PG(Mtech): 34%
- Mdes: 1%
- Dual: 17%
- UG(Btech): 35%

**Remaining**
- msci: 4%
- msc2: 3%
- MBA: 1%
- Mdes: 0%
- UG(Btech): 30%
- PG(Mtech): 56%
- Dual: 6%

Overall Placement Data: 2010-11

**Total**
- Selections: 88%
- Remaining: 12%
Services / Amenities

INSTITUTE WORKS DEPARTMENT

Institute Works Department (IWD) is primarily responsible for the maintenance of capital assets for providing the following utility services to the resident community:

Civil, Electrical, Air-conditioning maintenance services
Water supply and sewage disposal unit
Power distribution
Estate Management
Sanitation and upkeep
Horticulture development & maintenance
Furniture repairs
Roads

In addition to the above, IWD also executes development projects from concept to commissioning. It comprises of the following units for facilitating operation & maintenance of services and construction activity, under the control of the Superintending Engineer.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Unit</th>
<th>Responsibility</th>
<th>Unit-in-charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Civil Division-I</td>
<td>Maintenance, upgradation and development work.</td>
<td>Executive Engineer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Water supply, furniture &amp; roads</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Civil Division-II</td>
<td>Maintenance development works</td>
<td>Executive Engineer</td>
</tr>
<tr>
<td>3.</td>
<td>Electrical &amp; Air-conditioning</td>
<td>Electrical maintenance domestic / central AC maintenance</td>
<td>Superintending Engineer</td>
</tr>
<tr>
<td></td>
<td>Division</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Horticulture unit</td>
<td>Development &amp; maintenance</td>
<td>Superintending Engineer</td>
</tr>
<tr>
<td>5.</td>
<td>Sanitation unit</td>
<td>House keeping of various building</td>
<td>Superintending Engineer</td>
</tr>
</tbody>
</table>

(A) The following works completed during 2010-2011.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of work</th>
<th>Plinth Area (in sqm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Construction of building for department of IME</td>
<td>5400</td>
</tr>
<tr>
<td>2.</td>
<td>Construction of Pseudo Dynamic Test Facility &amp; Mezzanine floor at Structural Engineer Lab</td>
<td>550</td>
</tr>
<tr>
<td>3.</td>
<td>Conversion of Type –I houses (80 nos.) into double seated hostel accommodation</td>
<td>--</td>
</tr>
<tr>
<td>4.</td>
<td>Construction &amp; installation of new sub station (SS#VIII) near</td>
<td>--</td>
</tr>
</tbody>
</table>
5. Providing DG set power supply in Visitors hostel, health centre outreach building and 33 kv sub station --
6. Additional air conditioning work for installation of 3x400 TR screw chiller at ACMS building --

(B) The following works are under execution:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of work</th>
<th>Plinth Area (in sqm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Construction of Hall of Residence No. X (Phase-II)</td>
<td>6930</td>
</tr>
<tr>
<td>2.</td>
<td>Construction of Multi-storied Residential Flats Block-A &amp; B.</td>
<td>12362</td>
</tr>
<tr>
<td>3.</td>
<td>Extension of RA hostel</td>
<td>13455</td>
</tr>
<tr>
<td>4.</td>
<td>Construction of 48 units SBRA</td>
<td>3878</td>
</tr>
<tr>
<td>5.</td>
<td>Infrastructural work to create High Performance Computing set up at Computer Centre</td>
<td>252</td>
</tr>
</tbody>
</table>

(C) The following works under planning:

2. Construction of Hall of Residence No. XI for Boys.
3. Construction of Rajiv Motwani building.
4. Fire study Lab.
5. Construction of rooms at second floor of community centre near Type-II
6. Construction of office space over the existing IWD office.
7. Construction of under ground water storage tank & pump house to store the water from Ganga Barrage i/c modification in existing water supply network & additional pipe line to water supply network.
9. Extension Centre of NOIDA.
10. Providing under ground power distribution system in place of existing over head distribution system.

STORES & PURCHASE SECTION

The Stores and Purchase Section is an important service unit to cater to the needs of departments/units for purpose of various equipments, chemicals, glassware, hardware, consumables, stationery and all medicines/pharmaceutical products, industrial gases, etc., for research and general purpose. The procurements are from both indigenous and foreign sources.

The Import Section handles customs clearance of all foreign consignments and matters relating to Import Licenses, Custom Duty Exemption Certificate. The institute is partially exempt for paying the custom duty under the Govt. Notification No 51/96, dated 23.07.1996. The re-export of consignments to the suppliers for repairs/replacements is also done through this section.
For indigenous purchase, the Institute is issued Excise Duty Exemption Certificate under Govt. Notification No 10/97, dated 01.03.1997 and road permit for transportation of the materials.

During the financial year 2010-2011, the Purchase Section placed 1162 orders valued Rs. 64,23,21,022=98 which include import order numbering 289 costing Rs.40,32,07,185=50 and indigenous order numbering 873 costing 23,91,13,837=48. The purchase orders and their values under various categories are as follows.

<table>
<thead>
<tr>
<th>Category</th>
<th>No. of P.O.</th>
<th>Amount (in Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Import :-</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(A) Institute fund</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumable</td>
<td>24</td>
<td>16,28,793=23</td>
</tr>
<tr>
<td>Non consumable</td>
<td>51</td>
<td>12,39,97,415=03</td>
</tr>
<tr>
<td>(B) Project fund</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumable</td>
<td>72</td>
<td>1,05,41,140=04</td>
</tr>
<tr>
<td>Non consumable</td>
<td>142</td>
<td>26,70,39,837=20</td>
</tr>
<tr>
<td><strong>Total Import (A&amp;B)</strong></td>
<td>289</td>
<td>40,32,07,185=50</td>
</tr>
<tr>
<td>(C) Indigenous</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institute fund</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumable</td>
<td>193</td>
<td>1,22,65,411=78</td>
</tr>
<tr>
<td>Non consumable</td>
<td>257</td>
<td>10,17,85,895=47</td>
</tr>
<tr>
<td>(D) Project fund</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumable</td>
<td>143</td>
<td>1,72,56,079=23</td>
</tr>
<tr>
<td>Non consumable</td>
<td>280</td>
<td>10,78,06,451=00</td>
</tr>
<tr>
<td><strong>Total Indigenous (C&amp;D)</strong></td>
<td>873</td>
<td>23,91,13,837=48</td>
</tr>
<tr>
<td><strong>Total Value</strong></td>
<td>1162</td>
<td>64,23,21,022=98</td>
</tr>
</tbody>
</table>

The Central Store procures highly technical items as and when required by the different departments to maintain the pace with science and technology development. It stocks some items which are consumable in nature like stationary, hardware, and liveries, etc. The Central Store has four units, namely Purchase Unit, Import Unit, Bill Unit and Receipt/Issue Unit. This section is headed by a professionally competent person and he is also assisted by a professionally competent team of 19 personnel.

The stores also maintains the records of disposal of unusable and scrap materials. The total revenue collected from the unserviceable materials for this year is Rs.55,09,075/-.

Clearance of parcels and dispatch of rejected materials to both local and foreign firms for repair/replacement is also done by this section. It assists the department in areas like transportation, procurements of furniture, etc.

This Section also started reconditioning of wooden & steel furniture. During The Financial year 2010-2011 we have reconditioned different types of furniture and issued them to various departments. The details of reconditioned furniture are as follows. (1) Chair 117 nos. (2) Office Table 63 nos. (3) Almira 17 nos. (5) Wooden Racks 08 nos. In this way we have saved lot of money of the institute.
We have been successful in computerizing the transactions both in Stores, Purchase & Import Section. We are processing all Indents through the software developed by Automation Division and each & every function of Store & Purchase has been automated. We can generate reports as our requirements as and when needed. We have full connectivity in Central Store through LAN/WAN for complete automation. Maximum correspondence is done by e-mail where it is available keeping in view the speedy action for the procurement. Stores and Purchase is now connected with main frame computer of Computer Centre. Full communication with every net user is now possible in campus from Store and Purchase Section. We are also planning to provide the web based portal, so that department can send electronic indent directly to Central Store and check the status of this indent/sanction sheet on the monitor.

**ESTATE OFFICE**

The Institute has a sprawling area of 960 acres having total population around fifteen thousand. Being a residential campus with 1241 houses (including 213 SBRA and ACES quarters) in various categories far away from the heart of the city, the Institute had to create its own infrastructure and civic amenities such as sanitation, water supply, sewage disposal, shopping complexes and similar other facilities, which are required for day-to-day living.

The estate office is entrusted with various kinds of activities including house allotment, commercial shops management, eviction of unauthorized occupants, realization of license fee and electric/ water charges from shopkeepers and house allotees, estate management and civic amenities.

The Institute has various types of residential accommodation, i.e. Type-IA, IB, I, II, III, IV & V for Faculty members, Scientists, Research Engineers, Group-A Officers and other staff members of this Institute. We have mainly four shopping complexes at various locations, one of which is in the heart of campus called as main shopping complex, the others are at Type-II complex, at security crossing and at Type-I area consisting of various kinds of shops, which fulfill the basic needs of the residents.

Besides the above shopping complexes, we have 11 hostels for students’ accommodation out of which nine are for boys and two are for girls. Every hostel has shops which mainly fulfills the immediate needs of students.

Further a cable T.V. Network is also being operated round the clock by the Institute to provide entertainment to the entire campus community.

There was no decent canteen/ lounge facility available in the campus for faculty and officers and their guests. They were to go at staff canteen along with their guests. 1968 batch donated 50% cost of the lounge (Rupees 25.00 lacs) for creating a decent lounge facility in the campus, known as “Faculty Lounge” and rest of the money was added by the Institute. The Faculty Lounge is now operational.
During 2010-11, on 13.08.2010, a house no. 258 of Type-II has been free from unauthorised occupancy which was held due to stay order dated 24.11.1999 from Hon’ble High Court, Allahabad, on a civil misc. Writ Petition No.48947/1999.

Besides, the estate office is also managing different types of activities related to the estate successfully and cautiously by way of taking precautions to solve various types of problems. During the financial year 2010-11, the office has realized about Rs.1,10,33,774.00 (23.35% more than the FY 2009-10) from the different sources (it is notable that the tendering process of unserviceable materials has already shifted to central stores from August 2009).

The break up of the above amount is as follows:

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Particulars</th>
<th>Amount in Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Amount collected through temporary houses allotment and temporary stalls at Shop C</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>Rent From Temporary House allotment</td>
<td>27300</td>
</tr>
<tr>
<td>B</td>
<td>Electricity Charges of Temporary House Allotment</td>
<td>11175</td>
</tr>
<tr>
<td>C</td>
<td>Rent From Temporary Stall</td>
<td>45300</td>
</tr>
<tr>
<td>D</td>
<td>Electricity Charges of Temporary Stall</td>
<td>18300</td>
</tr>
<tr>
<td>2.</td>
<td>Amount collected towards rent and electricity charges for Shops, Canteen &amp; Non Instt. Employee Houses</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>Charges for electricity</td>
<td>4425372</td>
</tr>
<tr>
<td>B</td>
<td>Rent For Shops, canteen, and House to non-Institute employees</td>
<td>2783379</td>
</tr>
<tr>
<td>3.</td>
<td>Tender Process</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>Sale of Tender forms</td>
<td>14200</td>
</tr>
<tr>
<td>B</td>
<td>Sale of Dry woods / Logs</td>
<td>702700</td>
</tr>
<tr>
<td>C</td>
<td>Sale of Amla, Mango &amp; Beri Fruits</td>
<td>25366</td>
</tr>
<tr>
<td>D</td>
<td>Amount from Raddi &amp; Kabar contracter</td>
<td>427801</td>
</tr>
<tr>
<td>3.</td>
<td>Amount collected towards Panel Charges, Eviction, Retirement, Death &amp; Resignation</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>Licence Fee</td>
<td>1603226</td>
</tr>
<tr>
<td>B</td>
<td>Water Charges</td>
<td>3770</td>
</tr>
<tr>
<td>C</td>
<td>Electricity Charges</td>
<td>464848</td>
</tr>
<tr>
<td>4.</td>
<td>Amount collected through issue of Mobile Passes &amp; collection of amount at Cycle Stand, IIT/K</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>Amount collected at cycle stand</td>
<td>265857</td>
</tr>
<tr>
<td>B</td>
<td>Charges for Entry passes, Rickshaw pullers, Supplier and vender</td>
<td>184280</td>
</tr>
<tr>
<td>C</td>
<td>Amount of shopkeeper passes</td>
<td>29700</td>
</tr>
<tr>
<td>Grand Total</td>
<td></td>
<td>1,10,33,774.00</td>
</tr>
</tbody>
</table>
CAMPUS SCHOOL

Hon'ble chief guest Prof. S. G. Dhande, Director I.I.T.Kanpur, Deputy Director, Prof Sandeep Sangal, Chairman SMC, Ex-Principal-Mrs Rupa Dhar, Esteemed Alumni, distinguished Guest, Ladies & Gentleman.

It's indeed a very happy occasion of reunion of campus school teachers and alumni when they all got together for the-first time & celebrating golden jubitee of IITK. It's a great honour as well as a real pleasure for me to extend a heartly welcome to all of you on this occasion of Open House cum Reunion-2010.

Physical Panorma:

1. School Strength:
   - Students on roll 415
   - Teachers regular 12, adhoc 4 and Principal
   - Teachers contractual and other 13
   - Supporting staff 11

History of the school:

School establised in July 1964 & started functioning in a small house of type iv. It grew up very fast with a good strength of students reached to the strength of about 1500 students about go to teacher. It was started by the Director Prof P .K. Kelkar. He wanted the school to be set up infront of this bunglow. It was started with Indo American tie up. Its founder member was Mrs Meera Parasnis who was the chairperson of the school.

Purpose of establishment:

The aim behind its establishment was to cater quality education to the wards of IIT employees. Its detailed history had been displayed in the lobby during the Open House cum Reunion Programme.

Present scenario:

In present scenario it has 415 students & 26 teacher including special activity teachers and tool developers. Its infrastructure has been renovated to a great extent but still needs a lot more to be done.

- The school is still carrying on a lot of value based education for the children.
- Every festival being celebration in the school to give wide exposure and carry on with our rich cultrual Heritage.
- Each and every child is important for the school and made to participate in some school events organized throughout the year.
- To make the mathematical concepts and operations interesting a Maths Lab is
set up in Sept. 2008 which is a unique feature of the school.

**Activities:**

To nurture the budding talents of the children various clubs have been introduced to carry out different activities like - Art and Craft, Maths, Science, Music, Dance, Language, Theatre, sport etc. The students are given a wide range of exposure for the all round development of personality.

**Morning Assembly:**

Story telling, Quiz, newsreading, book-reading & poetry recitation are regular features of morning assembly.

**Festivals:**

Cultural programmes on different festivals-functions such as Janmasthami, Raksha Bandhan, Gandhi Jayanti, Dussehra, Deepawali, Eid, Bal Diwas, Christmas etc are organized in the morning assembly to acquaint the kids with the socio-cultural heritage of our country.

**Competitions:**

Fancy Dress, Poetry Recitation, Book reading, Mental Maths, Mono Acting, Elocution, Debate, Singing, Art Quiz, Handwriting competitions etc. are organised in the school during the session.

**Inter-School Competitions:**

During the Hindi week and Wild Life week celebrations, our children participated in several interschool competition in sub junior (1 to 4) and junior (5 to 8) groups. Our class Vth students competed with class VIIIth students' of the city school in Races. Group discussion, essay writing, Elocution, Quiz, Art, Group Song, Group dance, Casio Playing, Mono action etc and brought many laurels to the school. The performance of the campus school students was appreciated and applauded by all including the Director of the Zoo and the local daily newspapers.

**Art Competitions:**

Many students won prize at Regional level in All India. Camel colour contest & many other students won 1st, 2nd & 3rd prizes.

**Mega Events:**

**Achievements Report for Physical Education:**

Many physical competitions had been done in the campus school IITK.
Annual Report 2010-2011

- Inter school foot-ball tournament from 7th sept to 10th Sep 2011, 10 schools participated in this tournament.
- INDRADHANUSH sports activities CAMP 9th to 16th Oct 2010.
- Recreation trip to jungle water park-27th Oct 2010, 110 no of students participated.
- INTER SCHOOL Kho-Kho tournament Dec 13 to 15th Dec 2010. Campus won 1st place in 8 schools participation.
- Traffic day/Bicycle race as 21 Dec 2010.
- Sports day Dec 22, 2010.
- Indradhanush sports activity CAMP from 6th May to 17th May 2010. 48 no children participated.

Placements:

Today students of campus school are spread allover the world & placed at high positions. But I would say why to go for we have many alumni at our IITK itself like Dr Suchitra Mathur, Dr Neeraj Mishra, Dr. Anish Upadhyay of IIT Faculty. Mr & Mrs Rajeev Garg, Mr Nav preet singh & many others who are today staff of IIT.

I am going to show you a picture (display picture). Please see if you can recoznise the "Father of the nation" ok if not, we'll call this child to come up on the dias & say a few words after a while. You will know "Who he is"?

In one way I also find myself as an alumnus because I have my own teacher Mrs Sheela Baveja who taught me in class 5th one incident one day when I was scolding one of my students Shubho Banerjee who was very intellegent but never wanted to write, for not bringing his maths note-book. In the mean time she came to my class for some work & asked me. What happened? I told her the reason. She said do u remember that are day I scolded u for the same reason. Thank You Baveja Maam.

Thanks: I would like to avail this opportunity to thanks the instt adminstretion, its various deptt. Our alumni, teachers & staff worked day & night like a team is organizing the show Mrs Reeta Singh who extended her unmatched support is managing the whole show with minute details. I am grateful to them & all those who have been instrument is making the day a very special one for all of us.

I shall wind up here with a request to visit open house and hope that you all will enjoy the two days show and heartily welcome is all once again.

There is a video dipping from one of the alumni: video display of Phani Adidam.
ACHIEVEMENT REPORT FOR PHYSICAL EDUCATION 2010

1. Inter school Foot-Ball tournament Sept. 7th to 10th 2010, Campus School 3rd Place.
2. Indradhanus 10th School's participation sport's activity camp 9th to 16th Oct. 2010. 50 no. of student's participation.

Indradhanus sports activity cam 06th to 17th May, 2010. 48 nos. of student's participation.

HEALTH CENTRE

Health centre has been established with the objective of addressing health needs of the Institute community. Health centre provides service round the clock to meet out the objective. Health centre is manned by 10 Medical Officers and a Medical Advisor of the Institute.

The details of the Health Centre services provided for the period with effect from 01.04.2010 to 31.03.2011 are as follows:

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Particulars</th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>01.</td>
<td>Numbers of patient treated in OPD</td>
<td>54282</td>
</tr>
<tr>
<td>02.</td>
<td>Numbers of students treated</td>
<td>15759</td>
</tr>
<tr>
<td>03.</td>
<td>Numbers of patients manually registered</td>
<td>1093</td>
</tr>
<tr>
<td>04.</td>
<td>Numbers of patients admitted in Indoor</td>
<td>1056</td>
</tr>
<tr>
<td>05.</td>
<td>Numbers of patients treated in Homeopathy including students</td>
<td>12103</td>
</tr>
<tr>
<td>06.</td>
<td>Numbers of patients treated in Physiotherapy</td>
<td>4629</td>
</tr>
<tr>
<td>07.</td>
<td>Numbers of surgical operation(Minor)</td>
<td>Nil</td>
</tr>
<tr>
<td>08.</td>
<td>Numbers of Tubectom</td>
<td>Nil</td>
</tr>
<tr>
<td>09.</td>
<td>Numbers of D&amp;C</td>
<td>06</td>
</tr>
<tr>
<td>10.</td>
<td>Numbers of Deliveries</td>
<td>03</td>
</tr>
<tr>
<td>11.</td>
<td>Numbers of Plastering</td>
<td>84</td>
</tr>
<tr>
<td>12.</td>
<td>Numbers of surgical dressing</td>
<td>4846</td>
</tr>
<tr>
<td>13.</td>
<td>Numbers of Injections</td>
<td>39966</td>
</tr>
<tr>
<td>14.</td>
<td>Numbers of Tetvac</td>
<td>1606</td>
</tr>
<tr>
<td>15.</td>
<td>Numbers of Babies attended in Well Baby clinic</td>
<td>560</td>
</tr>
<tr>
<td>16.</td>
<td>Numbers of X-Ray done</td>
<td>2685</td>
</tr>
</tbody>
</table>
Immunization is done round the year in the Health Centre for protection against Typhoid, Cholera, Tuberculosis, Diphtheria, Peruses Tetanus, Polio and Measles. Facilities for maternity management, Family Planning Counseling and Tubectomy operations are also available.

**VISITORS’ HOSTEL**

Housed in an imposing double storeyed building and located at a central place, Visitors’ Hostel provides boarding and lodging facilities for the Institute’s guests, newly appointed faculty and staff members, delegates and participants attending various conferences, seminars, symposia and workshops. The Visitors’ Hostel has some allied facilities on the campus and in Chittaranjan Park Colony, New Delhi, also for the benefit of the Institute’s Visitors.

**Allied Facilities:**
- Visiting Faculty Apartment at IIT Kanpur
- Service Apartment at Chittaranjan park, New Delhi
- VH Extension
- Outreach 69 & 80 building, IIT Kanpur
- Main Auditorium

The Visitors’ Hostel and allied facilities are operated as a non-profit activity to mainly support the academic and research activity on the campus with a homely atmosphere and ambience, traditionally acclaimed for its environs of hygiene and food of homely relish and richness. The following are the various activities undertaken by the team managing the affairs of the Visitors’ Hostel and allied facilities.

1. **Accommodation:** Visitors’ Hostel has been equipped with fully furnished 70 Standard rooms, of which 55 are AC and 15 are Non-AC. Further, there are 15 Deluxe AC rooms. It can accommodate a maximum of 170 guests at a time on twin sharing basis. All the rooms have attached bathrooms with modern amenities.

   Visitors’ Hostel Extension has 44 Non-AC guest rooms, which can accommodate 88 guests on twin sharing basis.

2. **Dining Facility:** Visitors’ Hostel provides dining facilities to in-house guests of VH and Visiting Faculty Apartment and for important Institute activities. The Visitors’ Hostel has 2 air-conditioned dining halls with capacity of 30 and 70 guests respectively. One of the dining halls has a well furnished sitting room attached with it.
3. Conferencing Facilities:

A. Pioneer Batch Continuing Education Centre

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of Facility</th>
<th>Max. Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>VH Lounge (round table)</td>
<td>16</td>
</tr>
<tr>
<td>2</td>
<td>PBCEC Lawns</td>
<td>250</td>
</tr>
<tr>
<td>3</td>
<td>PBCEC Conference Room (U shaped)</td>
<td>18</td>
</tr>
<tr>
<td>4</td>
<td>PBCEC Small Class Room</td>
<td>36</td>
</tr>
<tr>
<td>5</td>
<td>PBCEC Big Class Room</td>
<td>65</td>
</tr>
<tr>
<td>6</td>
<td>PBCEC Committee Room</td>
<td>11</td>
</tr>
</tbody>
</table>

1. Outreach 69 & 80

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of Facility</th>
<th>Max. Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Auditorium</td>
<td>210</td>
</tr>
<tr>
<td>8</td>
<td>Seminar Room -1</td>
<td>40</td>
</tr>
<tr>
<td>9</td>
<td>Video-Conferencing Room</td>
<td>30</td>
</tr>
</tbody>
</table>

2. Main Auditorium

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of Facility</th>
<th>Max. Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Main Auditorium</td>
<td>1250</td>
</tr>
</tbody>
</table>

4. Additional Facilities:

- Centralised booking system for all facilities at VH and Allied Services through a common requisition form. All the forms are made available in departmental offices as well as downloadable from the website of VH at http://www.iitk.ac.in/vh.
- All the Deluxe AC rooms have a PC.
- All the rooms, Meeting Lounge, PBCEC and Dining Hall have Wi-fi connectivity.
- DHCP: All the guest rooms have DHCP (Dynamic Host Control Protocol) for direct Internet Connection, i.e. No IP Address, no User ID or password is required for accessing the Wi-Fi enabled internet services through their laptop.
- All the rooms have cable connections with Color Television Set.
- All the deluxe rooms have a small pantry and a small refrigerator.
- Intimation of confirmation of bookings through e-mail.
- For detailed information, website of Visitors’ hostel can be accessed at http://www.iitk.ac.in/vh.

Management of day-to-day hospitality service has been outsourced to a private agency. An increase in facilities, services and a more professional approach has led to more transparency in day-to-day functioning of the system and increased occupancy rate, thus achieving more financial viability in terms of operational expenditure.
Publication and Outreach Activities

BOOKS & BOOK CHAPTERS PUBLISHED

Aerospace Engineering


Chemistry


Chemical Engineering


Civil Engineering


**Computer Science & Engineering**


**Electrical Engineering**


**Humanities and Social Sciences**


**Industrial Management & Engineering**


**Mechanical Engineering**


Materials Science and Engineering


Materials Science Program


51. Carbon Nanotube Coated Carbon Fiber: Structural and Electrochemical Applications, Carbon Nanotube based Nanocomposites: Recent Development,


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131. Two-dimensional laminar flow of a power-law fluid across a confined square cylinder, Journal Of Non-Newtonian Fluid Mechanics, Vol 165, No.0, 752-763, 2010, Sahu, AK; Chhabra, RP; Eswaran, V.
133. Direct determination of fluid-solid coexistence of square-well fluids confined in narrow cylindrical hard pores, Journal Of Chemical Physics, Vol 132, No.22, -, 2010, Huang, HC; Chen, WW; Singh, JK; Kwak, SK.
139. Is free surface free in micro-scale electrokinetic flows?, Journal Of Colloid And Interface Science, Vol 347, No.1, 153-155, 2010, Choi, W; Sharma, A; Qian, S; Lim, G; Joo, SW.
140. Accurate acceleration of kinetic Monte Carlo simulations through the modification of rate constants, Journal Of Chemical Physics, Vol 132, No.19, -, 2010, Chatterjee, A; Voter, AF.
141. Spray pyrolytically deposited nanoporous Ti4+ doped hematite thin films for efficient photoelectrochemical splitting of water, International Journal Of Hydrogen Energy, Vol 35, No.9, 3985-3990, 2010, Kumari, S; Singh, AP; Sonal; Deva, D; Shrivastav, R; Dass, S; Satsangi, VR.

143. The Promotion of Vanadia-Alumina and Vanadia-Titania Catalysts by Surface Molybdenum Oxide for the Propane ODH Reaction, Catalysis Letters, Vol 136, No.40606, 271-278, 2010, Nayak, SC; Shee, D; Deo, G.

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150. Changes in Structural and Optical Properties of Polycarbonate Induced by Ag+ Ion Implantation, Journal Of Macromolecular Science Part B-Physics, Vol 49, No.2, 259-268, 2010, Bahniwal, S; Sharma, A; Aggarwal, S; Deshpande, SK; Sharma, SK; Nair, KGM.


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Civil Engineering


Tripathi, J.S. Reid, D.M. Giles, O. Dubovik, N.T. O'Neill, A. Smirnov, P. Wang and X. Xia.

Chemistry


220. Effect of Bulkiness on Reversible Substitution Reactions at Mn(II) Center with Cocomitant Movement of the Lattice DMF: Observation Through Single-Crystal
Annual Report 2010-2011


249. Synthesis, structure, and two-photon absorption studies of a phosphorus-based tris hydrazone ligand (S)P[N(Me)N=CH-C6H3-2-OH-4-N(CH2CH3)2]3 and its


264. Bidentate Coordination of a Potentially Tridentate Ligand. A Mononuclear Four-Coordinate Ni(II) Complex Supported by Two o-Iminobenzo-semiquinonate Units,


311. Enantioselective Reactions Catalyzed by Chiral Pyridine 2,6-bis(5',5'-diphenyloxazoline) -Metal Complexes, Pure and Appl. Chem. 82, (2010) 1845, P.K. Singh and V.K. Singh.


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**Computer Science and Engineering**


**Electrical Engineering**


Humanities and Social Sciences


373. Indian Cognitivism and the Phenomenology of Conceptualization. Phenomenology and the Cognitive Sciences, Online First™, 30 June, 2010 -R Kasturirangan, N. Guha, & C. Ram-Prasad.


377. Indian Cognitivism and the Phenomenology of Conceptualization’. Phenomenology and the Cognitive Sciences, Online First™, 30 June, 2010 - Rajesh Kasturirangan, Nirmalya Guha and Chakravarthi Ram-Prasad.


Industrial Management & Engineering


381. Vertical Decomposition Approach for Two Stage Capacitated Warehouse Location Problems, Global Business and Management Research; ISSN: 1947-5667; Universal-Publishers, Boca Raton, USA; V 2(2&3); 2010; pp. 275-284; Priyanka Verma and RRK Sharma.


394. Innovating Telecom Service Design for Customer Satisfaction at the Bottom of the Revenue Pyramid, Directions, June2010, pp 44-49, Dhawan, P, and Chatterjee, J.


Materials Science and Engineering


439. Structure and mechanical properties of Al–Ni–Ti amorphous powder consolidated by pressure-less, pressure-assisted and spark plasma sintering,


**Mechanical Engineering**


P. Arora and A.K. Saha.


526. Investigations into the applicability of rubber elastic analogy to hardening in glassy polymers, Modelling and Simulation in Materials Science and Engineering, v18, n2, 2010, Mahajan Dhiraj K.; Basu, Sumit.


**Material Science Programme**


**Mathematics and Statistics**


Bayesian inference and prediction of the inverse Weibull distribution for Type-II censored data, Computational Statistics and Data Analysis, Vol. 54, 1547-1558, 2010, D. Kundu, H. Howlader.


Inference on Weibull parameters with conventional Type-I censoring, Computational Statistics and Data Analysis, Vol. 55, 1-11, 2011, A. Joarder, H. Krishna, D. Kundu.


635. Effect of shear flow factor on thermal elastohydrodynamic lubrication of infinite line contact rough surfaces, Proceedings of the National Academy of Sciences, India (Section-A), 2010, Vol.80 Part IV, 327-346, H. Khan, P. Sinha.

Physics


648. Mobility with negative coefficient in Poole-Frenkel field dependence in conjugated polymers: Role of injected hot electrons Organic Electronics, Volume


654. Spin Waves in the (0,pi) and (0,pi,pi) Ordered SDW States of the t-t' Hubbard Model: Application to Doped Iron Pnictides J. Phys.: Condens. Matter 22 (2010) 422202 (FAST TRACK COMMUNICATION) Selected for inclusion in IOP Select, Nimisha Raghuvanshi and Avinash Singh.


656. Role of Hund's coupling in stabilization of the (0, pi) ordered SDW state within the minimal two-band model for iron pnictides Phys.: Condens. Matter 23 (2011) 312201 (Fast Track Communication) Nimisha Raghuvanshi and Avinash Singh J.


Possible potentials responsible for stable circular relativistic orbits; European Journal of Physics, 32, 895-903, (2011), Prashant Kumar, Kaushik Bhattacharya.


Driven weak to strong pinning crossover in partially nanopatterned 2H-NbSe2 single crystal, Superconducting Science and Technology 23, 075002 (2010), Gorky Shaw, Jaivardhan Sinha, Shyam Mohan and S. S. Banerjee


690. Penetration and screening of perpendicularly launched electromagnetic waves through bounded supercritical plasma confined in multicusp magnetic field, Physics of Plasmas, 18, 022101 (2011), I. Dey and S. Bhattacharjee.


693. Ion energy distribution near a plasma meniscus with beam extraction for multielement focused ion beams, Journal of Applied Physics, 107, 093306 (2010), Jose V. Mathew, S. Paul, and S. Bhattacharjee.


695. Tomography, Control and Characterization of Entanglement in Three level Atomic System; Physical Review A 82, 062301 (2010); S. N. Sandhya, V. Ravishankar.

RESEARCH PAPERS PUBLISHED IN CONFERENCE PROCEEDINGS
(AS A FULL PAPER)

Aerospace Engineering

6. A generalized adaptive finite element analysis of laminated composite plates, 37th Solid Mechanics Conference, Warsaw, Poland from 6-10 September 2010, Mohite PM, Upadhyay CS.


29. Sources of and temporal trends in occurrence of Legacy Pesticides in atmosphere of eastern United States, Poster presentation (by Goel A.) at SETAC Europe 21st Annual Meeting, Milan Italy, May 2011, Goel, A.; McConnell, L.L.; Torrents, A.; and Hapeman, C.J.

30. Occurrence and behavior of Particulate Matter in the Atmosphere of North India: Corelation of PM properties with health Issues, Initied Poster Presentation at 3rd Annual Indo-German Frontiers of Engineering Symposium, Khandala India, June 2011, Goel, A.


33. Thick absorbing aerosol layer observed in the monsoon season over India, Tripathi, S.N., Sagnik Dey, J. Jaidevi, B. N. Singh, Marykutty Michael and Tarun Gupta, AGU Fall meeting, San Francisco, (13-17 Dec., 2010).


Chemistry


**Computer Science & Engineering**


65. Application architecture considerations for cloud platforms, 3rd International Conference on Communication Systems and Networks (COMSNETS 2011), Bangalore, January 4-8, 2011, Balwinder Sodhi and T.V. Prabhakar.


71. Learning grounded semantics of Hindi nouns from video surveillance and user commentary, 8th International Conference on Natural Language Processing (ICON 2010), Kharagpur, December 8-11, 2010, S V P Gopi Srinath, Nikhil Joshi, Prabhat Mudgal, and Amitabha Mukerjee.


76. Dependence Analysis for Parallelization of Sequential Programs, 8th Asian Symposium on Programming Languages and Systems (APLAS 2010), Shanghai, China, Nov 28 - Dec 1, 2010, Sandeep Dasgupta, Barnali Basak and Amey Karkare.

77. A Novel Representation of Palm-print for Recognition, Asian Conference on Computer Vision (ACCV-2010), Queen Town, Newzealand, November, 2010 Badrinath G. S. and Phalguni Gupta.


80. Estimating the first frequency moment of data streams in nearly optimal space and time, 12th Italian Conference on Theoretical Computer Science (ICTCS 2010), September 15-17, 2010, Sumit Ganguly and Purushottam Kar.


83. Discovering the concept of anaphora from grounded verb models, 9th International Conference on Development and Learning (ICDL 2010), Ann Arbor, Michigan, August 18-21, 2010, Kruti Neema and Amitabha Mukerjee.

84. Two Characterizations of Success of the Metropolis Algorithm for Optimization, Genetic and Evolutionary Computing Conference (GECCO 2010), Portland, USA, July 7-11, 2010, Swagato Sanyal, Raja S and Somenath Biswas.

85. Finding top-k similar pairs of objects annotated with terms from an ontology, 22nd International Conference on Scientific and Statistical Database Management (SSDBM 2010), Heidelberg, Germany, June 30 - July 2, 2010, Arnab Bhattacharya, Abhishek Bhowmick and Ambuj Singh.

86. Most Significant Substring Mining Based On $\chi^2$ Measure, 1st Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD 2010), Hyderabad, India, June 21-24, 2010, Sourav Dutta and Arnab Bhattacharya.

87. Macro-Scheduling of Base Stations for Video-on-Demand Flows in WiMAX Networks, IEEE International Workshop on Quality of Services, Tsinghua University, Beijing, China, June 16-18, 2010, Shubhadip Mitra, Uma Maheswari Devi, Parul Gupta, Malolan Chetlur and Shivkumar Kalyanaraman.

(AICT 2010), Barcelona, Spain, May 9-15, 2010, Ashish Gupta, Mohit Sharma, Michel Marot and Monique Becker.

89. Broadcasting on Large Scale Heterogeneous Platforms under the Bounded Multi-Port Model, 24th IEEE International Parallel and Distributed Processing Symposium (IPDPS 2010), Atlanta, USA, April 19-23, 2010, Olivier Beaumont, Lionel Eyraud-Dubois and Shailesh Kumar Agrawal.


Electrical Engineering


114. PSO based modeling of Takagi-Sugeno fuzzy motion controller for dynamic object tracking with mobile platform, 5th International Symposium Advances in Artificial Intelligence and Applications, Wisla, Poland, October 2010, Meenakshi Gupta, Laxmidhar Behera and KS Venkatesh.


144. SVM based Scheme to Prevent Distance Relay Mal-operation under Power Swing and Voltage Instability, Georgia Tech Protective relaying conference, May 5-7, 2010, Atlanta, Georgia, USA (2010 Clayton Griffin Student Award), Seethalekshmi K., SN Singh and SC Srivastava.


153. What does Business have to say about Maoism? An attempt at finding out the missing voice of big business on Maoism, 34th Indian Social Science Congress, Guwahati 27th to 31st Dec, 2010, Varman, Rahul & Chakrabarti, Manali.

154. Solving multi-item multi-period capacitated lot sizing problem with considerations of backorders and setups, accepted for presentation at the 2nd International Conference on Computer and Automation Engineering (ICCAE 2010) at SINGAPORE; V 4; Eds. Dr V. Mahadevan and Dr Zhou Jianhong; pp. 18-22; ISBN: 978-1-4244-5585-0; IEEE Catalog Number: CFP1096F-PRT; Verma, Mayank and Sharma, RRK.


156. Transformational e-Governance Service Quality Assessment – An Indian Case Study, 1st International Conference on Services in emerging Markets, Indian School of Business, Hyderabad, Sept.23-24, 2010; Mukhopadhyay, S.N. and Chatterjee, J.


191. Experimental study and Empirical Modeling of Magnetic Abrasive Finishing on Ferromagnetic and Non-Ferromagnetic Materials, 3rd International and 24th All


Mathematics and Statistics


207. Hybrid finite difference methods for solving modified burgers and Burgers-Huxley Equations at the Fourth International Conference on Neural, Parallel & Scientific Computions held during August 11-14, 2010 at Atlanta, USA. M.K. Kadalbajoo.


211. \( L^p \) Wiener Tauberian theorems for \( M(2) \), given in ICM satellite conference in Harmonic Analysis, (SATEHA), Aug. 29-Sept.2, 2010, in National Institute of Science Education and Research (NISER), Bhubaneswar, R. Rawat.

212. Characterising Problems in class PLS for which Local Search is Polynomial Time, at the ORST 2010 Annual Convection, held in Madurai from 15th to 17th Dec. 2010, P. Sharma.


216. Thermal and roughness effects on the performance of a finite slider bearing considering heat conduction through the pad, 65th Annual meeting of the STLE, Las Vegas, NV, USA, May 16-20, 2010, P. Sinha, Getachew Adamu.

217. Thermal elastohydrodynamic lubrication of infinite line contact rough surface Considering shear flow factor, 65th Annual meeting of the STLE, Las Vegas, NV, USA, May 16-20, P. Sinha, H. Khan.
Materials Science and Engineering


Material Science Program


PAPERS PRESENTED IN
SEMINARS/CONFERENCE/WORKSHOPS/SYMPOSIA

Aerospace Engineering

1. Analytical modeling trajectory simulation and control of guided projectiles, Control, Automation and robotics (CAR) Conference-2011 which was held in Hostel fort canning, Singapore during 28th Fed- 1st March 2011, Subramanian saderla, Sunil Sharma, AK Ghosh.

Biological Sciences and Bioengineering


7. Structural studies on N-acetylglucosamine-1-phosphate uridyltransferase (GlmU) from Mycobacterium tuberculosis, 42nd Course - Structure and Function from Macromolecular Crystallography, Erice, Italy 2010, Balaji Prakash, Vinay Nandicoori, Sunil Kumar Verma.

8. Surface hydrophilization of electrospun poly(lactide-co-glycolide) nanofibers for tissue engineering applications. Podium presentation at XXI National Conference of the Society for Biomaterials and Artificial Organ, India (SBAOI), at Sardar Patel University, Ahmadabad, February 10-12, 2011. Rajesh Vasita, Dhirendra S. Katti (Bajpai-Saha Award for the best student paper presentation)


10. Preparation and characterization of nanoclay reinforced pullulan gels for biomedical applications. Poster presentation at XXI National Conference of the Society for Biomaterials and Artificial Organ, India (SBAOI), at Sardar Patel


15. Germline Stem Cells: RNA-binding proteins take multiple avatars to maintain the fountain of youth. 79th Annual Meeting of the Society of Biological Chemists (India), Indian Institute of Science, Bangalore 2010, M. Ariz, R. Mainpal, K. Pushpa and K. Subramaniam.


17. RNA-binding proteins PUF-8 and GLD-1 coordinate to control the translation of cyclin B in C. elegans germ cells. 79th Annual Meeting of the Society of Biological Chemists (India), Indian Institute of Science, Bangalore, 2010, P. Agarwal, M. Rana and K. Subramaniam.


25. Importance of mRNA dysregulation in neurodegenerative disorders, All India Cell Biology Conference and symposium on Quantitative Biology: from molecule to cell, Bose Institute, Kolkata, December 4-6, 2010, S. Singh and S. Ganesh.


Chemical Engineering

28. Fabrication and functionalities of polymeric and carbon structures imaged on small scales, 1st International Symposium on Bionics and Molecular Imaging, April 01, 2010, Daegu, South Korea, A. Sharma.


32. Nanostructures and Interfaces of Carbon and Polymer-metal Nanoparticles, JSPS-DST Asian Academic Seminar 2010; Recent advances in the study of clusters, nanomaterials and surfaces with new properties and functions, Saha Institute of Nuclear Physics, Kolkata, November 28-30, 2010, A. Sharma.


40. Irreversible Aging Dynamics of Aqueous Laponite suspensions, 82nd Annual Meeting Society of Rheology, A. Shahin and Y. M. Joshi, Santa Fe, New Mexico, A. Shahin.

41. Anomalous Creep Flow Behavior of Aging PBD-Clay Nanocomposite, 82nd Annual Meeting Society of Rheology, A. Shahin and Y. M. Joshi, Santa Fe, New Mexico, A. Shahin.

42. Hyper-aging dynamics of aqueous Laponite-PEO suspensions, 82nd Annual Meeting Society of Rheology, A. Shahin and Y. M. Joshi, Santa Fe, New Mexico, A. Shahin.

43. Time-aging time-stress superposition in soft glass under tensile deformation field, 82nd Annual Meeting Society of Rheology, 2010, A. Shaukat, A. Sharma, Y. M. Joshi, Santa Fe, New Mexico, Asima Shaukat.

44. Shear flow mediated elongational flow in soft glassy materials, 82nd Annual Meeting Society of Rheology, 2010, A. Shaukat, A. Sharma, Y. M. Joshi, Santa Fe, New Mexico, Asima Shaukat.

45. Self similar electrorheological behavior,82nd Annual Meeting Society of Rheology, M. Kaushal, A. Patel, Y. M. Joshi,Santa Fe, New Mexico, Y. M. Joshi.


47. In-situ DRIFT and simultaneous reactivity measurements over Co/Al2O3 catalysts: The CO2 hydrogenation reaction, Spectrocat2010, 19th-23rd July 2010, LCS, Caen, France, T. Das and G. Deo.


Civil Engineering


67. LASViewer-A LiDAR visualisation software, 2nd Innovative LiDAR Solutions Conference, Toronto, 31 May – 3 June, Lohani, B., Manchawari, L.


73. Thick absorbing aerosol layer observed in the monsoon season over India, S. N. Tripathi, S. Dey, J. Jaidevi, B. N. Singh, M. Michael, T. Gupta, American Geophysical Union, San Francisco, December 13-17, 2010.


78. Seasonal Variation in Chemical Composition of Background Aerosol in the Delhi Region, Amrita Singhai, Saood Manzer, Anil Mandaria, Gazala Habib, Tarun Gupta, Poster presented in Workshop Cum Seventeenth National Symposium on Environment (NSE-17), CESE, IIT Kanpur (13th-15th May, 2010).

80. Development of PM$_1$ and PM$_{2.5}$ sampler for ambient measurement, Tarun Gupta, poster presentation at the 3rd Indo-German Frontiers of Engineering Symposium, Khandala, (17-19th June, 2011).

Chemistry

81. Mr. Biswajit Santra has presented a poster Titled Synthesis of Mono- and Bi-Nuclear Pd-NHC Complexes via Transmetallation from Trinuclear Cu-NHC complex, B. Santra, R. Srirambalaji, I. Roy and G. Anantharaman, at CRSI-13 meeting held at KIIT Bhubaneswar and obtained best poster award: Dr. G. Anantharaman.

82. Laterally Non-symmetric Cryptands for Fluorescence and Other Studies, 60th Conference on Coordination Chemistry of the Japanese Chemical Society, Osaka, Japan, October 2010: Prof. P. K. Bharadwaj.


86. Proton transport kinetics in aqueous systems: Role of hydrogen bond fluctuations, Indian Institute of Science, Bangalore, July 02, 2010: Prof. A. Chandra.

87. Vibrational spectral diffusion and chemical dynamics in aqueous solutions, Knoxville, USA, June 18, 2010: Prof. A. Chandra.

88. First principles studies of vibrational spectral diffusion in aqueous and nonaqueous solutions, Kobe, Japan, September 28, 2010, Prof. A. Chandra.

89. Molecular Simulations and HPC@IITK, Indian Institute of Technology Kanpur, October 10, 2010 (talk delivered at REACH Symposium), Prof. A. Chandra.

90. Introduction to ab initio molecular dynamics simulations, Indian Institute of Technology Kanpur, November 10, 2010 (talk delivered at the School on Understanding Molecular Simulations: Theory and Applications (UMS10), Prof. A. Chandra.


93. Macromolecule-Metal Nanoparticle Hybrids as Efficient Recyclable Catalysts: Key-Note Address at the National Conference RECENT ADVANCES IN INORGANIC AND NANOCHEmISTRY, March 29-30, 2010, Madurai Kamaraj University, Madurai: Prof. V. Chandrasekhar.

94. 3d-4f Heterometallic compounds: A new family of single-molecule magnets: An Invited Talk at the National Conference RECENT ADVANCES IN INORGANIC AND NANOCHEmISTRY, March 29-30, 2010, Madurai Kamaraj University, Madurai: Prof. V. Chandrasekhar.
95. Inspiration in Science: An Invited Talk given In IISER Bhopal, May 17, 2010: Prof. V. Chandrasekhar.


103. SSK @ 70: Celebration of Excellence: National Symposium on Frontiers of Main-group and Organometallic Chemistry, Indian Institute of Science, Bangalore, November 20, 2010: Prof. V. Chandrasekhar.


114. Towards Using Molecules States as Qubits, 75 Years of Quantum Entanglement: Foundations and Information Theoretic Applications, CII – Suresh Neotia Centre of Excellence for Leadership, City Centre, Salt Lake, Kolkata, Jan. 6-10, 2011, Debabrata Goswami.


121. A change in the 310- to alpha helical transition point in the heptapeptides containing sulfur and selenium’, Anju Duley, M. Nethaji and G. Ramanathan, 3rd Indian peptide symposium at Pune Feb 2011. This presentation received the best poster prize: Dr. R. Gurunath.


124. Chemistry with multidentate pyridine amide ligands: Structures and properties, International Symposium on Frontiers in Inorganic Chemistry (FIC-2010), Indian
Association for the Cultivation of Science, Kolkata (December 11-13, 2010), Partha Pratim Das, Sharmila Pandey, Akhilesh K. Singh and R. N. Mukherjee.


129. Trombay Symposium on Radiation and Photochemistry, Lonavala, India, September 2010: Dr. P. Sen.

130. Chemical Research Society of India, National Symposium in Chemistry, Bhubaneswar, India, February 2010, Dr. P. Sen.

131. Spectroscopy and Dynamics of Molecules and Clusters, Corbett, India, February 2011: Dr. P. Sen.


**Computer Science and Engineering**

133. The Isomorphism Conjecture, IMPECS Workshop, IIT Delhi, April 2010, Manindra Agarwal.

134. The P≠ NP Hypothesis, Talk at Kurukshetra University, April 2010, Manindra Agarwal.

135. Fermat’s Last Theorem: From Integers to Elliptic Curves, INSPIRE Workshop, Lucknow, May 2010, Manindra Agarwal.


137. Automorphisms of Finite Rings and Their Role in Computer Science, Google India, Bangalore, June 2010, Manindra Agarwal.


139. Deolalikar’s Paper on P ≠ NP, Mysore Park Workshop, Mysore, October 2010, Manindra Agarwal.

140. PRIMES is in P, CSE Department Day, IIT Kanpur, November 2010, Manindra Agarwal.
142. The P ≠ NP Hypothesis, Talk at IISER Pune, November 2010, Manindra Agarwal.

Humanities and Social Sciences

150. Some Reflections on Human Rights Education in the Context of Democracy, National seminar on Mass Literacy and Basic Life Skills: The Unfinished Modernist Project in India, Group of Adult Education, School of Social Sciences, Jawaharlal Nehru University, New Delhi, 3-4 March 2011, Munmun Jha.
151. Reading as Resistance: The Spiritual and Political Power of Reading, Annual national conference of Indian Association for Commonwealth Language and Literature Studies, January 2011, Trivandrum, Mini Chandran.
156. Income Inequality, Club Formation and the Quality of Public Good: A Developing Country Perspective, 6th Annual Conference on Growth and Development at ISI Delhi, December, 2010, S. Bhattacharya, Sarani Saha and S. Banerjee.


158. Psychiatric profiling of the Indian geriatric population: Implication for possible interventions. Coping, Resilience and Hope Building: Asia Pacific International Conference, Brisbane Institute of Strength Based Practice & Griffith University, Brisbane, Australia, July 9-11 (2010), Braj Bhushan.


**Industrial & Management Engineering**

160. What does Business have to say about Maoism? An attempt at finding out the missing voice of big business on Maoism, 34th Indian Social Science Congress, Guwahati 27th to 31st Dec, 2010, Varman, Rahul & Chakrabarti, Manali.


**Mechanical Engineering**


168. Modal analysis of free and forced circular jets at low and high Reynolds numbers, Proceedings of the 37th Fluid Mechanics and Fluid Power Conference, held at IIT
Annual Report 2010-2011


170. Dipole generation and subcritical behaviour in rapidly rotating dynamos, 12th SEDI Symposium, Santa Barbara, USA, 18-23 July 2010, C.A. Jones & B. Sreenivasan.


Material Science Program


**Physics**


195. Primordial Features and Non-Gaussianities (PFNG), Harish Chandra Research Institute (HRI) from December 14 th-18th, 2010, Lee-Wick particle spectrum in the early universe, Kaushik Bhattacharya, Suratna Das.

196. Driven weak to strong pinning crossover in a partially nanopatterned superconductor, International conference on Ion-Beam Induced Nanopatterning of Materials (IINM-2011), 06-10 February 2011, Institute of Physics, Bhubaneswar, Orissa, Gorky Shaw; Satyajit Banerjee.


210. Experimental investigation of electron trapping and frequency sideband generation in nonlinear interaction of electromagnetic standing waves with an


INVITED TALKS DELIVERED

Aerospace Engineering

2. Experimental Techniques in Fracture, DMSRDE (Defense materials and stores research and development), Kanpur, Dec 07, 2010, R. Kitey.

Biological Science and Bioengineering

4. Role of BMP signaling in vertebrates: Exceeding the brief?, Central Drug Research Institute, Lucknow, Diamond Jubilee Lecture, BSBE, Amitabha Bandyopadhyay
5. Stopping heart burn, ChEmference, Department of Chemical Engineering, IIT Kanpur, A. Pal.
7. Society of Biological Chemists Meeting, Bangalore, 2010, Dr. Balaji Prakash.
11. Germline Stem Cells: RNA-binding proteins take multiple avatars to maintain the fountain of youth, 79th Annual Meeting of the Society of Biological Chemists (India), Indian Institute of Science, Bangalore, K. Subramaniam.
13. (i) Membrane Structure & Dynamics and (ii) Protein – Membrane interactions. Workshop on Biological Simulations and Applications in Biology, School of Computational and Integrative Sciences, Jawaharlal Nehru University, New Delhi, Aug 2010, R. Sankararamakrishnan.
15. From microbial to mammalian aqaurinps: Sequence analysis to simulations. Indo-Swiss Bioinformatics Symposium at IIT-Delhi, Oct. 2010, R. Sankararamakrishnan.


22. Polyglucosan body in neurodegenerative disorders and in aged brain: friend or foe?: Invited talk delivered in the Indo-US Bilateral Symposium on Aging and Age-Related Diseases, National Institute of Immunology, Delhi, March 3, 4, 2011, S. Ganesh.


Civil Engineering

26. Structural design of pavements with stabilized layers, Seminar on New Materials in Road Construction for Stabilized Pavements, Department of Civil Engineering, IIT Madras, March 01, 2011, Das, A.


28. How to build good roads? (October 5, 2010), IGS Local Chapter, SGSITS, Indore, Das, A.

30. Pavement design using recycled asphalt, Sustainable asphalt construction and maintenance technologies: a road to a green future, New Delhi, June 24, 2010, Das, A.
31. LiDAR Simulator, CEF-University of Montreal, Canada, Bhart Lohani.
33. Dynamics of Mantle melting and volcanism in Mauritius Island, Indian Ocean. Department of Geology, Lucknow University, D. Paul.
34. Towards Seismic Safety in India : Progress and Hurdles, Workshop on earthquake response- When the shaking stops: the role of secondary hazards in earthquake-prone regions, Institute of Hazard, Risk and Resilience, Durham University, 10 September 2010, D. C. Rai
35. Understanding the heterogeneity in aerosol characteristics over the Indo-Gangetic Basin-an observational Portrayal, Geophysical Fluid Dynamical Laboratory, Princeton University, USA, June 2010, S.N. Tripathi.
36. Understanding the heterogeneity in aerosol characteristics over the Indo-Gangetic Basin-an observational Portrayal, National Atmospheric Research Laboratory, Department of Space, Gadanki, February, 2011, S.N. Tripathi.
37. Understanding the heterogeneity in aerosol characteristics over the Indo-Gangetic Basin-an observational Portrayal, National Physical Laboratory, New Delhi, March 2011, S.N. Tripathi.
41. Systematic Approach to Address Road Safety, First International Conference on Road Safety Vision 2020, May 2011, Co-hosted by All India Federation of Motor Vehicle Department Technical Executive Officer's Association, Udaipur, India, V. Vasudevan.

Chemical Engineering


52. Electrolyte Insulator Semiconductor based Microfluidic Biosensor for Early Disease Detection, UGC sponsored Workshop on Nanoscience and Nanotechnology, Aligarh Muslim University, Aligarh, Mar 26, 2011, S.Panda.


55. Chemical Engineering: Directions and Opportunities, MANIT – Bhopal, October 23, 2010. PK Bhattacharya.


60. Delivered an invited talk at the Indo-European meeting on hydrodynamic stability held during January 17-19 2011, at JNCASR Bangalore, V. Shankar.

61. Delivered an invited departmental seminar at the Department of Mathematics, IIT Madras, Chennai on February 18, 2011, V. Shankar.

62. Superpositions in time domain and prediction of long time behavior in soft glassy materials, Indian Institute of Technology Hydrabad, Hyderabad, Yogesh M Joshi.
63. Aging and rheology of pasty materials, Unilever Research and Development Center, Connecticut, Yogesh M Joshi.
64. Superpositions in time domain and prediction of long time behavior in soft glassy materials, KAUST center, Cornell University, Ithaca, Yogesh M Joshi.

Chemistry

68. 98th Indian Science Congress, January 3-7, 2010, Chennai: Dr. J. K. Bera.
69. CRSI-RSC Meeting, February 4 - 6, 2011, Bhubaneswar: Dr. J. K. Bera.
70. FIC-2010, December 11-13, 2010, IACS, Kolkata: Dr. J. K. Bera.
71. NSFMOC, November 20, 2010, Bangalore: Dr. J. K. Bera.
74. 1st Joint Meeting of the Associated International Laboratory held at Solid State and Structural Chemistry Unit, Indian Institute of Science, Bangalore, India, July 2-5, 2010: Prof. A. Chandra.
75. Indo-Japan Joint Workshop on Frontiers in Molecular spectroscopy: From gas phase to proteins, held at Kobe, Japan, September 26-29, 2010: Prof. A. Chandra.
77. Treating Large Molecules and Clusters by ab initio Methods: An Art of the Possible, Tohoku University, Sendai, Japan: Prof. S. R. Gadre.
78. Treating Large Molecules and Clusters by ab initio Methods: An Art of the Possible, National institute of advanced industrial science and technology (AIST) Japan, and Nagoya University, Nagoya, Japan: Prof. S. R. Gadre.
79. Treating Large Molecules and Clusters by ab initio Methods: An Art of the Possible, Institute for molecular science, Department of Theoretical Molecular Science, Okazaki, Japan: Prof. S. R. Gadre.
81. Molecular Electrostatics: Basic Concepts and Applications in Chemistry and Biology, Mathematics in Drug Discovery at Yashada, Pune: Prof. S. R. Gadre.
83. Molecular Tailoring : an Art of the Possible for Ab Initio Treatment of Large molecules and Molecular Cluster, Next Generation Application Challenges on PARAM Yuva Workshop at C-DAC: Prof. S. R. Gadre.
84. New Chemistry of Small Ring N-Heterocycles: Synthetic and Mechanistic Perspectives: National seminar, Bengal Engineering and Science University (BESU)-2011, Shibpur, Department of Chemistry, Manas K. Ghorai.
87. Towards Using Molecules as Qubits, C. V. Raman Hall, Indian Association for the Cultivation of Science, Kolkata, Nov. 26, 2010, Debabrata Goswami.
88. Interface between chemistry and biology a perspective, International Conference and Humboldt Kolleg on held during September 21-24, 2010 at IICT Hyderabad: Prof. F. A. Khan.
89. Prof. N. S. Narasimhan Endowment Lecture on February 4, 2011 held at Department of Chemistry, University of Pune, Pune, Prof. F. A. Khan.
96. Importance of Weaker Interactions in Molecular Self-Assembly and Lattice Inclusion Compounds.


104. Metal-Coordinated Radicals. Bioinorganic and Inorganic Perspectives, One-Day Seminar, Department of Chemistry, University of Delhi, Delhi (March 05, 2011): Prof. R. N. Mukherjee.


107. Metal-coordinated radicals and their reactivity. Bioinorganic and Inorganic Perspectives, 13th CRSI National Symposium in Chemistry and 5th CRSI-RSC Symposium in Chemistry, National Institute of Science Education and Research (NISER), Bhubaneswar (February 4-6, 2011): Prof. R. N. Mukherjee.


109. Applications of Ab Initio Molecular Dynamics in Biology, JNU, New Delhi, Prof. Indira Ghosh, Dr. Nisanth N. Nair.

110. Chemical Reactions In Silico, NUS, Singapore, Dr. Nisanth N. Nair.

111. Catalysis by Number Crunching, University of Ghorakpur, Ghorakpur, Dr. Nisanth N. Nair.

112. Molecular Beam Epitaxy group, Solid State Physics Laboratory, New Delhi: Dr. M. Ranganathan.

113. Aerospace Engineering Department, IIT Kanpur: Dr. M. Ranganathan.


117. International Conference on Chemistry: Frontiers and Challenges, Department of Chemistry Centenary Celebrations, Aligarh Muslim University, ALIGARH, March 5-6, 2011: Dr. M. L. N. Rao.


120. Control of Spins by Ring Deformations: A Novel Series of Oxo and Hydroxo Bridged Fe(III) Bisporphyrins, 13th CRSI and 5th RSC Symposium held on NISER-Bhubaneswar, during February 03-06, 2011: Dr. S. P. Rath.

121. Control of Spins by Ring Deformations: A Novel Series of Oxo and Hydroxo Bridged Fe(III) Bisporphyrins, FICS-2010 Symposium held on IITG, during December 03-04, 2010: Dr. S. P. Rath.


127. Seeing The Unseen Of Nanothick Interface By Laser Spectroscopy, Department of Chemistry, Visva-Bharati University, Santiniketan, WB, India 20 March 2011: Dr. P. Sen.


140. Invited speaker and Session Presided at CLEO-2010 in San Jose, CA during May 18-20, 2010, Prof. D. Goswami.

**Electrical Engineering**


146. A Novel Approach of Human Motion Tracking with the Mobile Robotic Platform, 2011 UKSim 13th International Conference on Modelling and Simulation,
147. PSO based modeling of Takagi-Sugeno fuzzy motion controller for dynamic object tracking with mobile platform, 5th International Symposium Advances in Artificial Intelligence and Applications, Wisla, Poland, October 2010. Meenakshi Gupta, Laxmidhar Behera and KS Venkatesh.


151. Delivered part of the tutorial on "Wide area Monitoring and Control", in 16th National Power Systems Conference, Hyderabad, India, in December 2010, Chakraborty S.

152. Delivered a plenary talk on "Solid State Lasers" at “PhotoSMART”, A summer school organized by Institute of Radio Physics and Electronics, University of Calcutta, 1-18th June 2010. Das U.

153. Plenary talk at IITM 2010 Workshop on "Innovations in Information Communication Technologies (ICT) for Defence Applications" Dec 27, 2010, IIIT Allahabad. Title: Distant speech recognition : sub space and group delay based methods, Hegde, RM.

154. Plenary talk at National conference on SIGNAL PROCESSING and REAL TIME OPERATING SYSTEM (SPRTOS), Mar. 27 2011, Hands Free speech communication, Hegde, RM.


160. DC-DC converter for microgrid application’ at IEEE lecture at MNNIT Allahabad on Feb. 09, 2011, Mishra S. K.


164. Power Converters, Crompton Greaves Global R&D Ltd., Electronics Division, Mumbai, P. Sensarma.


166. Microwave Measurements I: Basic Principle of Major Components and Instruments used in the RF and Microwave Frequency Range, in Short Course on Recent Trends in the Design and Measurement of RF and Microwave Circuits (DMRMC) at IIT Kanpur in July 2010. K. V. Srivastava.

167. Microwave Measurements II: Modern Measuring Equipments used at Microwave Frequencies and their Applications”, in Short Course on Recent Trends in the Design and Measurement of RF and Microwave Circuits (DMRMC) at IIT Kanpur in July 2010. K. V. Srivastava.

168. Metamaterials and their applications for the RF circuit design, in Short Course on Recent Trends in the Design and Measurement of RF and Microwave Circuits (DMRMC) at IIT Kanpur in July 2010. K. V. Srivastava and M. Jaleel Akhtar.


172. A Scheme to Prevent Distance Relay Mal-operation under Power Swing and Voltage Instability using Synchrophasor Measurements’ in the ECE Department, Mississippi State University USA on 20th July 2010. Srivastava S.C.

173. Synchrophasors based Wide Area Monitoring, Protection and Control at Crompton Greaves Limited, R&D Division, Mumbai on 1st October 2010. Srivastava S.C.


178. IEEE General Meeting, July25-29, Minneapolis, USA, Singh S.N.

179. 4rth IASTED Power and Energy Conference, Phuket, Thailand, Nov. 24-26. Singh S.N.

180. Two-day Indo-Canadian Workshop on Urban Electric System Integration with PHEV Charging stations and solar farms, Anna University, Chennai, Jan 6-7, 2011. Singh S.N.


**Humanities and Social Sciences**

182. A Research Note on Religion and Politics — Seminar on *Interdisciplinary Dialogue on Religion and Politics* at the Centre for Political Studies, Jawaharlal Nehru University, 19 November 2010, A. Chakrabarti.


186. Key-Note address: International Conference entitled: Science, Technology and Society (supported by the M P council of Science and Technology). Indore Christian College, Devi Ahilya University, Indore (M.P.), March 12, 2011- B.K. Pattnaik.


188. Suffering and Healing: Indigenous Perspective, Refresher Course on *Indian Psychology: Emerging Perspectives*, University of Delhi, November 22 - December 11, 2010 - Kumar Ravi Priya.

189. The centrality of reflexivity in qualitative research and The Healing Potential of the Qualitative Research Relationship, National Workshop on Qualitative Research
Methods in Psychology, Department of Psychology, University of Calcutta, December 3-10, 2010, Kumar Ravi Priya.


**Industrial Management and Engineering**


**Mathematics**


201. Resource person for the summer workshop on Mathematical Modeling, held at Kalasalingam University, Krishnankoil (TN), June 2010, Peeyush Chandra.


204. Presented 03 lectures in the Workshop on PDEs held during March 3-5, 2010 at IIT Patna, M. K. Kadalbajoo.

205. Second PDE at a four days Workshop in PDE for students and teachers of Patna and surrounding academic institutions during 1-4 March 2011. The venue was IIT Patna. This workshop is being partially funded by Indian Academy of Science, V. Raghavendra.

Mechanical Engineering


212. Dynamical systems approach to instability problems, Lehrstuhl fuer Thermodynamik, University of Munich, Munich, Germany, June 10, 2010, P. Wahi.

213. Computational Fluid Dynamics Organization: Kongu Engineering College, Perundurai, Erode, Tamil Nadu Date: 18.2.2011, P. S. Ghoshdastidar


216. Modeling phase change in a crystal growth process, presented during the QIP sponsored course on Phase Change Phenomena at IIT Kanpur, January 2011, K. Muralidhar.


219. Optical measurement using refractive index and scattering techniques and (ii) Recent developments and applications of computational fluid dynamics, presented at National Institute of Technology Agartala, 8-9 March 2011, K. Muralidhar.

221. Liouville-Arnold Theorem Analysis seminar Department of Mathematics and Statistics, IIT Kanpur, B. L. Sharma.
222. Modelling the Earth's magnetic field, IISc Bangalore, Department of Mechanical Engineering, 3 September 2010, B Sreenivasan.
223. Probing the Earth's deep interior with geodynamo models. IISc Bangalore, Centre for Earth and Atmospheric Sciences, 6 January 2011, B Sreenivasan.
231. Molecular Dynamics simulations of plasticity in amorphous, glassy polymers, January 3-8, 2011 Puerto Vallarta, Mexico Dhiraj K Mahajan and Sumit Basu.

Material Science and Engineering

237. Processing-Microstructure-Biocompatibility relationship of HAp based composites and experimental results on influence of electric and magnetic field on cell-material interaction; Institute of Biomaterials, Department of Materials Science and Engineering, University of Erlangen-Nuremberg, Germany, 9th July, 2010, B. Basu.
238. Bridging gap between Materials Science and Biology: An interdisciplinary approach to Design biomaterials; Materials Research Center, IISc, Bangalore, INDIA, October, 2010, B. Basu.
244. Electrically Stimulated Enhancement of Cell Proliferation on Ferroelectric-Hydroxyapatite Composites; at the 35th International Conference & Exposition on Advanced Ceramics & Composites (ICACC), held in Daytona Beach, Florida, January 23-28, 2011, B. Basu.
245. Innovative multi-stage spark plasma sintering to obtain strong and tough ultrafine grained ceramics; at the 35th International Conference & Exposition on Advanced Ceramics & Composites (ICACC), held in Daytona Beach, Florida, January 23-28, 2011, B. Basu.
249. Innovative multi-stage spark plasma sintering to obtain strong and tough ultrafine grained ceramics; Department of Ceramic Engineering, Banaras Hindu University (BHU), Varanasi, India, 28th March, 2011, B. Basu.

Physics

251. MBI Workshop on Transport in a Cell, Mathematical Biosciences Institute, Columbus, Ohio, USA (2010), D. Chowdhury.
257. The Scaling of fidelity Susceptibility close to a quantum (multi-)critical point; Conf.: ICTS conference on Condensed Matter (ICMP10), Mysore, India, 22nd Dec, 2010 Name: Amit Dutta.
258. The Scaling of fidelity Susceptibility close to a quantum multicritical point: Statphys-Kolkata VII, organized SINP and S. N. Bose Center for Basic Sciences, Kolkata, 26-30 Nov., 2010 Name: Amit Dutta.
265. Driving through traffic jams in superconductors, Institute Colloquium, Tata Institute of Fundamental Research, Mumbai, April 2011, Satyajit Banerjee.
266. Promise of Nanotechnology (Invited), National Conference on Nanomaterials and Nanotechnology, Amity School of Engineering & Technology and Department of Physics, University of Lucknow, Lucknow, 21-23 Dec, 2010, S.C. Agarwal.
267. Invited Plenary Lecture, The fascinating world of Lasers, 5th Laser Optics for Young Scientists (LOYS 2010) as part of 14th International Conference “Laser Optics”, Physics, St.Petersburg, Russia, R.Vijaya.
269. Fiber Optics and its present relevance in Communication, SPIE Visiting Lecture, Physics, B.P.Poddar Institute of management and Technology, Kolkata, R.Vijaya.
270. Laser emission from self-assembled photonic crystals, PHOTONICS 2010, Physics, Guwahati, R.Vijaya.
271. An Introduction to Lasers and Fiber Lasers, DST-SERC School on Guided-wave optics and Devices, Physics, CGCRI Kolkata, R.Vijaya.
272. Laser emission from self-assembled photonic crystals, Annual Symposium of the IITB – Monash Research Academy, Physics, Mumbai, R.Vijaya.

273. Multi-element focused ion beams: Concepts to Genesis of a Novel Device”, Australian National University, Research School of Physics and Engineering, Canberra, October 20, 2010 (Invited). S. Bhattacharjee.


275. Control, tomography and entanglement in photon emission from atomic systems; International Conference on quantum optics and quantum computation, IIT Institute of Technology, March 2011; V. Ravishankar.
OTHER ACTIVITIES

PROFESSIONAL VISITS TO UNIVERSITIES/RESEARCH ORGANIZATIONS / INDUSTRIES

Aerospace Engineering

1. Indian Airforce Station, Chakeri, Exploring research opportunities in the field of fracture in laminated composites, R. Kitey.
2. Defense materials and stores research and development, Kanpur, Exploring research opportunities in the field of interfacial fracture in thin films, R. Kitey.
3. R&D center for Iron & Steel of SAIL, Rourkela, To discuss about problems faced by them in existing burners from 15th to 17th Feb 2011, D.P. Mishra.

Biological Sciences and Bioengineering

4. Institute of Genomics and Integrative, Biology, New Delhi on Dec 17, 2010, Dr Santosh Pasha, Scientist, for collaboration, Dr. Ashwani Kumar Thakur.
5. University of Nottingham, UK, Bimolecular Sciences Department, for collaboration Dr. Ashwani Kumar Thakur.

Civil Engineering

6. CEF-University of Montreal, Canada, For discussion on collaboration on the use of our software “Limulator”, 7 July 2011, Bharat Lohani.
7. Attended the Southern African Institute of Steel Construction Award 2010 as mentor of the top final year Civil Engineering students of the University of KwaZulu-Natal, South Africa for their participation in the award ceremony held in Gauteng, South Africa, 2010, Chakrabarti, S.K.
8. Institute of Hazard, Risk and Resilience, Durham University, Collaborative research program, 10 September 2010, D. C. Rai.

Chemical Engineering

11. Sabbatical Leave; Yeungnam University, South Korea, Visiting Professor, April 2010-July 2010, Ashutosh Sharma.
12. Chief Guest at the inauguration of ‘Chemical Engineering Students Association (ChESA) & release of first Newsletter of ChESA’ at MANIT – Bhopal, October 23, 2010, P.K.Bhattacharyya.

Chemistry

15. Invited by Taiwan Academy of Sciences to give lectures for a week (October 10-17, 2010): Prof. J. N. Moorthy.

16. Visit to Solid State Physics Laboratory, New Delhi for 1 day for scientific discussions: Dr. M. Ranganathan.

**Electrical Engineering**

17. To deliver a technical lecture on Microwave Imaging, Sensing and Nondestructive Testing, January 28, 2011 at Aligarh Muslim University, Aligarh, Akhtar M. J.

18. Visit to C-DOT Bangalore to conduct a short course on Introduction to LTE. (Co-organized with Aditya Jagannatham), Banerjee Adrish.


20. Intelligent Systems Research Centre, University of Ulster, 20 Nov 2010 – 18 Dec 2010, Behera L.

21. Chemnitz University of Technology, Chemnitz, Germany, See the printing facilities and interact with researchers working in printable electronics, 29th June, 2010, S. Sundar Kumar Iyer.

22. Dresden University of Technology, Dresden, Germany, See the printing facilities and interact with researchers working in printable electronics, 29th June, 2010, S. Sundar Kumar Iyer.

23. Faculty of Combat, College of Military Engineering, Pune in Dec 2010 to understand the various IED and landmine type threats faced by us, Naren Naik.

24. Department of Orthopaedics, Chatrapati Shahu Maharaj Medical University (formerly the KGMC), Lucknow in line with an ongoing collaboration to explore impedance based methods to monitor fracture healing, Naren Naik.

25. ECE Department, Mississippi State University USA during July 2010, Srivastava S.C.


27. Asian Institute of Technology Thailand, During Nov 23-28, 2010, Singh S.N.

28. Asian Institute of Technology Thailand, During March 28- April 2, 2011, Singh S.N.

29. BSES Rajdhani Power, New Delhi, Singh S.N.

30. Visit to C-DOT Bangalore to conduct a short course on Introduction to LTE, Banerjee Adrish.


**Humanities and Social Sciences**

32. Lund University, Sweden – Participating in Erasmus Mundus Europe Asia (EMEA), Lot 11- Consortium Meeting, September 23-24, 2010 - P.M. Prasad.

33. Visiting Faculty - Interaction with students, mentoring of English faculty, participation in various administrative matters related to the setting up of a new Institute (also conducted two workshops) Feb.- May 2010, IIT Gandhinagar, Suchitra Mathur.
34. Visiting Faculty - Conducting a short course entitled “The Pleasures of Reading” for students and faculty (course designed to introduce participants to the study of literature at the college level). Oct. 2010, IIT Gandhinagar Suchitra Mathur.
35. Guest Professor (equivalent to Adjunct Faculty) - Organizing and participating in workshops/ seminars/ lectures in Humanities and Social Sciences, including English and Communication Skills, and for other academic and advisory activities -for a period of two years- beginning Nov. 2010, IIT Gandhinagar, Suchitra Mathur.

**Industrial Management and Engineering**

37. IE Business School, Madrid, Spain; National Institute of Science, Technology & Development Studies, New Delhi; T.A.Pai Management Institute, Manipal; Maastricht University, School of Business, Netherlands, J.Chatterjee.

**Mechanical Engineering**

40. IITChennai, Discussion on collaborative Research, Visitor, June 26, 2011, Prof. Sunil Kumar, dept. of Physics, IIT Chennai, S. Das.
42. IISc Bangalore and JNC, Bangalore (September 2010 & January 2011), B. Sreenivasan.
43. University of Coventry (UK), University of Leeds (UK) (December 2010), B. Sreenivasan.
46. Ulsan National Institute of Science and Technology, Korea, Collaborative Research, Visitor, Oct 1. - 21, Ishan Sharma.
47. Cornell University, USA, Collaborative Research, Visitor, June 2010, Ishan Sharma.
48. Continuing Education Activities Conducted an AICTE sponsored course on Micromanufacturing S. Bhattacharya.
49. Organized a 10 days hands on training program on Microelectromechanical systems under the National Program on Micro and smart systems with a team of 14 faculty members and students from BITS Ranchi, ISM Dhanbad, IT-BHU and MNNIT Allahabad for “Fabrication of a poly-silicon peizo-resistive pressure sensors” at CEERI-PILANI. July 14-23, 2010. Bhattacharya.
Mathematics

51. Visit to the University of Western Cape during December 4, 2010 to December 25, 2010, D. Bahuguna.
52. Research visit to the Institute of Mathematics, University of Warsaw, Poland, June-July 2010, Mohua Banerjee.

Physics

53. Visited the Mechano-Biology Institute, National University of Singapore, Singapore, (2011) to deliver a seminar. D. Chowdhury.
54. Visited HRI, Allahabad to deliver Physics Colloquium. D. Chowdhury.
60. B.P.Poddar Institute of management and Technology, Kolkata, SPIE Lecture, SPIE Visiting Lecturer, Oct. 29, 2010, R.Vijaya.
61. CGCRI Kolkata, DST-SERC School on Guided-wave optics and Devices, Invited Speaker, 16 Feb, 2011, R.Vijaya.
62. Australian national University, Canberra, Australia; Research collaboration; May 30, 2010- October 30, 2010; S. Bhattacharjee.
63. Institute for Plasma Research, Bhat, Gandhinagar, India; Research presentation and discussions on ongoing research collaboration; August 10 –11, 2010; S. Bhattacharjee
64. The Abdus Salam International Center for Theoretical Physics, Trieste, Italy; June 01, 2010 – June 30, 2010; Tarun Kanti Ghosh.
CONTINUING EDUCATION ACTIVITIES

Aerospace Engineering

1. Experimental Techniques in Fracture (QIP), DMSRDE, Kanpur, Dec 07, 2010, Number of people attended from academics/industry – 50, R. Kitey.
2. Lectures on Finite Element Method in “A course in advanced computing in engineering and sciences”, held at IIT Kanpur, 5-9 November 2010, C.S. Upadhyay
3. Delivered two lectures on combustion is short term course conducted by ME department, IITK, D.P. Mishra.

Biological Sciences and Bioengineering

4. Bio-fluid mechanics (QIP), IIT Kanpur, March 5-9, 2011, Participants: M.Tech and Ph.holders in Mechanical Engineering and allied areas working at academia and industry, A. Pal.

Civil Engineering

5. Organized a short-term Course on “Engine Emission Formation and Control”, from 28th June-3rd July, 2011. Sponsored by Quality Improvement Program, MHRD, Government of India. The school was attended by 38 participants with 14 members from industry and 24 from academia by Tarun Gupta.
7. Design of Steel Structures to IS800 and EC3, Industry, Mumbai, 24-25 September 2010, Tecnimont ICB Pvt. Ltd., ~30 engineers from mid- to senior level, D. C. Rai.

Chemical Engineering

9. Aspects of Polymer Rheology and its Significance (continuing education programme), DMSRDE, Kanpur, Scientists of DRDO laboratories, 7 to 12 February 2011, Yogesh M Joshi.
Chemistry

12. Delivered lectures at DST-INSPIRE program (August 04-07, 2010), Dharwad, Karnataka: Prof. J. N. Moorthy.
13. Chemistry - A Fascinating Science: Biological Processes of Metal Ions, DST INSPIRE lecture, Pandit Ravishankar Shukla University, Raipur (December 4, 2010), Prof. R. N. Mukherjee.
14. Co-convener: Theoretical Chemistry Symposium, December 8-12, 2010. This was a 4 day conference with invited talks and poster sessions. It is part of a biennial national level meeting and was attended by over 250 participants from India and abroad: Dr. M. Ranganathan.
15. Co-convener: ICTS School on Understanding Molecular Simulations, November 3-13, 2010. IIT Kanpur: Dr. M. Ranganathan. This was a 10 day school on molecular simulations. It included lectures and hands-on training sessions from experts in the field and was attended by 75 student participants from different parts of India.

Electrical Engineering

17. A short course on “Recent Trends in the Design and Measurement of RF and Microwave Circuits (DMRMC), July 12-16, 2010 Akhtar M. J.
20. Organic Electronic 2010” Summer Course supported by Samtel Centre for Display Technologies from 5th to 10th July, 2010, IIT Kanpur, Participants were PhD students, young faculty members from other universities and a few industrial representatives from partner industries of Samtel Centre, Iyer S. S. K.
21. Baquer Mazhari, S. Sundar Kumar Iyer, Y. N. Mohapatra (Physics), Siddhartha Panda (Chemical Engineering), Deepak Gupta, Monica Katiyar and Ashish Garg (all for Material Science and Engineering), Iyer S. S. K.
24. Coordinator of Quality Improvement Program Course on Intelligent System Applications to the Smart Electric Grid Solutions at IIT Kanpur, November 15-19, 2010, Singh S.N.
Humanities and Social Sciences


Industrial Management and Engineering

28. Coordinated under IITK CEP :USID Gurukul, Collaborative & Immersive Design Camp for Social Innovation, involving 16 facilitators (Gurus) and 48 students (Shisyas) from 15 top Design Institutes, August 28-Spetember 4, 2010, J. Chatterjee.

29. 6-day 3rd Capacity Building Program for staff of Electricity Regulatory Commissions (for Forum of Regulators) from August 23-28, 2010, Anoop Singh.

30. Conducted a one day self financed QIP course on “Cost Minimization in Supply Chains” (12 APR 2010); Venue: IIT Kanpur 208016, RRK Sharma.

Mechanical Engineering


33. Plasticity and Sheet Metal Forming, TATA STEEL, TATA NAGAR, February 14 – 18, 2011; Researchers from TATA STEEL R&D division, PM Dixit and N V Reddy.

34. A one-week short course sponsored by Quality Improvement Program for engineering college teachers and industry entitled “Diesel Particulate and NOx Emissions” February 14 - 18, 2010, Coordinator: Dr. Avinash Kumar Agarwal, Dr. Tarun Gupta.


36. Taught a course on rapid Manufacturing to IIT Hyderabad students in Distance mode, N. V. Reddy.


38. Conducted an AICTE sponsored course on “Micromanufacturing”. V.K. Jain.

**Materials Science Program**


**ANY OTHER IMPORTANT ACTIVITY**

**Aerospace Engineering**

2. Member of Program Management Board, Micro Air Vehicle Program, DRDO, C Venkatesan.
3. Advanced Composites-Phase 3 (As coordinator of ARDB) submitted the proposal to DRDO and it has been approved by RM, C Venkatesan.
5. Establishing high strain rate and optical testing facilities in Aerospace Structures Laboratory, R. Kitey.
7. 37th Solid Mechanics Conference, Warsaw, Poland from 6-10 September 2010, P.M. Mohite.
9. SOLMECH 2010, held at Warsaw (Poland), 6-10th September 2010, C.S. Upadhyay.
10. Arrester Barrier Analysis tool for LCA (sponsored by ADA), C.S. Upadhyay.
12. Member of ARC committee of IIT Kanpur, for review of UG and PG curriculum, C.S. Upadhyay.
13. Special invitee to ARDB structures panel, C.S. Upadhyay.
19. Member, National Technical Committee, National conference on “Energy,
Economy and Environment”, from 28th to 30th December, 2011, D.P. Mishra

20. Working as an executive member of The combustion institute (India Section) for 2010-2012, D.P. Mishra

21. NPTEL Course Development : (i) Fundamentals of Combustion (ii) Introduction to Propulsion, D.P. Mishra


23. Virtual Combustion and Atomization Lab, D.P. Mishra


25. Control, Automation and robotics (CAR) Conference-2011 which was held in Hostel fort canning, Singapore during 28th Fed- 1st March 2011, Dr. A.K. Ghosh.

Biological Science and Bio-engineering


27. Life member of Indian Peptide Society, Dr. Ashwani Kumar Thakur.

28. Life member of Indian Biophysical society, Dr. Ashwani Kumar Thakur.

29. The paper named “PUF-8 and GAP-3 negatively regulate RAS/MAPK signaling in C. elegans germ cells”, was selected as one of the 8 selected from among 795 papers to be presented as an oral presentation by a PhD student at the 79th Annual Meeting of the Society of Biological Chemists Indian Institute of Science, Bangalore, (India), 2010, S. Vaid, M. Ariz and K. Subramaniam.


31. Associate Editor, Annals of Neurosciences (official journal of the Indian Academy of Neuroscience), S. Ganesh.

Civil Engineering


33. Co-chair, session-II, Seminar on New Materials in Road Construction for Stabilized Pavements, Department of Civil Engineering, IIT Madras, March 01, 2011, Das, A.

34. SURGE 2011: Ashwin Kumar (NIT Tiruchirappalli). Recipient of Best Poster Presentation Award for Surge 2011 students (8 out of total 81 students were awarded) Report Title: Assessment of the air quality in Kanpur city 2011: impact of traffic and construction activities near major intersections, A. Goel.

35. Editor, ISET Journal of Earthquake Technology for the 13th consecutive year, V.K. Gupta.

36. Associate Editor, ASCE Journal of Structural Engineering for the 8th consecutive year, V.K. Gupta.
37. Co-Chair, ISPRS WGV/2 for period 2008-2012, Bharat Lohani.
38. Member, MHRD National Task Force on Geospatial Education, 2011, Bharat Lohani.
40. Incorporated Geokno India Pvt. Ltd. at SIIC, IIT Kanpur won the ISBA award for the best start up in ICT category in 2011, Bharat Lohani.
41. Developed “LASViewer” working with Geokno, Bharat Lohani.
42. Fellow of Geological Society of India, D. Paul.
43. Editorial board member, Chemical Geology, D. Paul.
44. Associate Editor, Journal of Earth System Sciences published by Indian Academy of Sciences, Bangalore by S.Tripathi.
45. Lead speaker, Third Indo-German Frontiers of Engineering held in Khandala, June 2011 by S.N. Tripathi.
47. Examiner for Ph.D. thesis Physical Research Laboratory, Ahmadabad and Vikram Sarabhai Space Center, Trivandrum by S.N. Tripathi.
48. Serving as the Chair of paper review committee of Transportation Research Board's (TRB) Occupant Protection Committee, Washington, DC, USA, V. Vasudevan.
49. Reviewer of TRB's Pedestrian Safety committee, Washington, DC, USA, V. Vasudevan.
52. Member of a scientific committee of Urban Mobility India (UMI), V. Vasudevan.
53. Member of AICTE's committee on syllabus for new transportation engineering related courses, V. Vasudevan.

Chemical Engineering

54. MRSI Distinguished Lecturership Award, Materials Research Society of India (2011-12), Ashutosh Sharma.
57. R. C. Mehrotra Memorial Lifetime Achievement Award, The Indian science Congress Association (2010), Ashutosh Sharma.
60. INAE Visvesvarya Chair Professorship, Indian National Academy of

61. Member, Advisory Board, Elsevier (India), 2008-2012, Ashutosh Sharma.

62. Member, Program Committee of the International Centre for Theoretical Sciences (ICTS) of Tata Institute of Fundamental Research, Mumbai (2010-2012), Ashutosh Sharma.

63. Member, Research Council, National Physical Laboratory (NPL), New Delhi (2010-2013), Ashutosh Sharma.

64. Member, Research Council, Central Electrochemical Research Institute (CECRI), Karaikudi (2010-2013), Ashutosh Sharma.


66. Member, Advisory Board, Elsevier (India), 2008-2012, Ashutosh Sharma.


68. Ashutosh Sharma, Member, Board of Governors & Research Advisory Committee, Indian Institute of Science Education and Research (IISER), Mohali (2007-2011).

69. Member, Research Council, National Institute for Interdisciplinary Science and Technology (NIST-CSIR), Trivendrum (2007-10), Ashutosh Sharma.

70. Member, Search-cum-Selection Committee, Post-Doctoral Fellowships in Nano Science and Technology, Department of Science & Technology, Govt. of India (2008-2012), Ashutosh Sharma.

71. Ashutosh Sharma, Member, Steering Committee, Sophisticated Instruments Facility Program, Department of Science and Technology, New Delhi (2010-2012).

72. Member, Program Advisory Committee for International Division’s Program on Materials, Mining and Mineral Engineering, (PAC-MAT), Department of Science and Technology, New Delhi (2009-2011), Ashutosh Sharma.

73. Member, Program Advisory Committee for Chemical Engineering Program (PAC-ChE), Department of Science and Technology, New Delhi (2007-2011), Ashutosh Sharma.


77. PAC( Chemical Engineering), DST, N.Delhi, D. Kunzru, Member

78. Member, Board of Governors, Rajiv Gandhi Institute of Petroleum Technology, Rai Bareli U.P., D. Kunzru.

79. Member, Research Advisory Council for Indian Oil Corporation, R&D in Refining Technology, D. Kunzru.

80. Member, Editorial Board of International Journal of Chemical Engineering, D. Kunzru.
81. MEMBER: SELECTION COMMITTEE - FACULTY/ SCIENTIST, P.K. Bhattacharya
   a. I. I. T. – Roorkee
   b. I.T.-BHU

82. MEMBER: EDUCATION & RESEARCH COMMITTEE. P.K. Bhattacharya
   a. Member (2010-2011), Research Degree Committee (RDC) of Applied Chemistry/Chemical Technology/Chemical Engineering, GB Technical University, Lucknow
   b. Member, Board of Chemical Engineering Studies – MA N.I.T. Bhopal.

83. REVIEWER/EVALUATOR: PROJECTS/PROPOSALS/PATENTS, P.K. Bhattacharya
   a. Indo-US Science & Technology Forum
   b. Indo-French Centre for the Promotion of Advanced Research (IFCPAR)
   c. DBT (Department of Biotechnology, GOI)
   d. DST (Department of Science & Technology, GOI)
   e. CSIR (Council of Scientific & Industrial Research – GOI)
   f. Dr. D. S. Kothari Postdoctoral Fellowship Scheme in Sciences under UGC

84. Ph. D. THESIS EXAMINER, P.K. Bhattacharya
   a. I. I. T. Kharagpur
   b. I.I.T. – Roorkee
   c. Anna University, Coimbatore
   d. Jadavpur University, Kolkata, West Bengal
   e. Jawaharlal Nehru Technological University, Anantapur (A.P.)
   f. Vidyasagar University, Midnapore 721 102, West Bengal

85. SERVICE FOR NATIONAL BOARD OF ACCREDITATION (NBA). P.K. Bhattacharya
   a. Gandhi Institute of Technology, Gunupur (Orissa)

86. CONFERENCE/SYMPOSIUM – ORGANIZING COMMITTEE, P.K. Bhattacharya.
   c. Member of the Advisory Committee, National Conference on “Biotechnology and the Environment”, organized by Department of Biotechnology, National Institute of Technology, Durgapur, 4 & 5th October 2010.

87. L&T Chair Professor, Dec 2009-June 2010, Department of Chemical Engineering,
88. Life membership of National Academy of Sciences India (NASI), Y.M. Joshi.
89. Amer-Dye Chem Award, IICHE 2010, Jayant K. Singh.
90. Member of high level committee HPC facilities of ministry of earth sciences, Jayant K. Singh.
   a. Indo-US Science & Technology Forum
   b. DST (Department of Science & Technology, GOI)
92. Ph. D. THESIS EXAMINER, Jayant K. Singh
   a. IISc Bangalore

Chemistry

94. Convener of “Theoretical Chemistry Symposium (TCS10)”, held at IIT Kanpur, December 8-12, 2010 (Co-conveners: Drs. K. Srihari, M. Ranganathan and N. Nair): Prof. A. Chandra
95. National Coordinator for Dr. D. S. Kothari Postdoctoral Fellowship Program of the UGC, New Delhi: Prof. S. R. Gadre.
96. Academic Editor of AIP Advances, American Institute of Physics: Prof. S. R. Gadre.
99. Program Committee Member, 3rd International Workshop on Optical Super-Computing in Bertinoro, Italy (OSC10), Nov 17-19, 2010: Prof. D. Goswami.
100. Faculty-in-charge, Summer Undergraduate Research for Excellence (SURGE), IIT Kanpur: Dr. M. Ranganathan.
102. Editorial Board Member, Review of Scientific Instruments, American Institute of Physics: Prof. D. Goswami.
103. Invited as an editorial board member of ‘New Journal of Chemistry’, published by RSC and CNRS jointly, for the period from 2011-2014: Prof. J. N. Moorthy.
106. International Council Member, Optical Society of America, USA: Prof. D. Goswami.
along with Prof. Akhil R. Chakravarty, Department of Inorganic & Physical Chemistry, Indian Institute of Science, Bangalore: Prof. R. N. Mukherjee.

108. Special Issue on Bioinorganic Chemistry, Indian J. Chem. 2011, 50A, 339-548, Acted as Guest Editor along with Prof. C. P. Rao, Department of Chemistry, Indian Institute of Technology Bombay, Powai and Prof. S. Mazumdar, Department of Chemical Sciences, Tata Institute of Fundamental Research, Mumbai: Prof. R. N. Mukherjee.


110. Expert Committee Member, Intensification of Research in High Priority Areas (IRHPA), Department of Science and Technology (DST), Govt. of India: Prof. D. Goswami.

111. Member Executive committee Indian Peptide Society (2008-2011): Dr. R. Gurunath.

112. Joint Secretary, Indian Peptide Society (since Feb 2011): Dr. R. Gurunath.

**Computer Science and Engineering**


114. Appointment as the Director General of CDAC, INDIA: Rajat Moona.

**Electrical Engineering**

115. Secretary, IEEE UP Section, Akhtar M.J.

116. Establishment of the Microwave Imaging and Testing Lab in the Department of Electrical Engineering, Akhtar M.J.

117. Senior member of the Institute of Electrical and Electronic Engineers (IEEE) (S'05, M'06, SM'11), Chakraborty S.

118. Elected Chairman of the IEEE Power & Energy Society (IEEE PES) and Industry Applications Society (IEEE IAS), Uttar Pradesh section, India, for the period beginning in 2010, Chakraborty S.

119. Writing a web based course for NPTEL-II called “Optical Communication Components and Devices”, Das U.

120. Expert Member, International advisory Committee of Power Grid Corporation of India Limited, Gurgaon on ‘Smart Grid Technology’ (October 2010 till date), Srivastava S.C.

121. Member, Central Advisory Committee, Central Electricity Regulatory Commission, New Delhi. (Since 2010), Srivastava S.C.

122. Member, SERC-Project Advisory Committee (PAC) on ‘Electrical Electronics and Computer Eng.’ Of DST New Delhi (since 2006), Srivastava S.C.

123. Member, Smart Grid Task Force on ‘Identification of Pilot Projects’ coordinated by CPRI Bangalore (since 2011), Srivastava S.C.

124. Chairman, Institution of Engineers (India), Kanpur Local Center (2010-2012), Singh S.N.

125. Vice-Chairman, IEEE UP Section, IITK Kanpur (2010-to date), Singh S.N.

126. Administrator, IEEE Online Communities (January 2006 to date), Singh S.N.

127. Moderator, IEEE Online Communities (April 2003 to date), Singh S.N.
128. Editorial Board member, International Journal of Electrical and Power Engineering, Singh S.N.
129. Associate Editor, International Journal of Electrical Energy Systems, Singh S.N.
130. Editor, International Journal of Systems Signal Control and Engineering Application, Singh S.N.
132. Honorary Editorial Board Member, Int. Journal of Bio-Sciences and Technology, Singh S.N.
133. Associate Editor (Electrical), Int. Journal of Engineering, Sciences and Technology, Singh S.N.
134. Student Best Paper Award to G. C. Patil, Ph.D student for paper presentation titled “Impact of Dopant Segregation Length on Scalability and RF Performance of Nanoscale Dopant-Segregated Schottky Barrier SOI MOSFET”, G. C. Patil and S. Qureshi, 4th International Student Workshop on Electrical Engineering, Nov. 21, 2010, Kyushu University, Fukuoka, Japan, Qureshi S.
135. S. Qureshi was elected Editor of STM Journal of VLSI Design Tools and Technology, Qureshi S.
137. Department of Electrical Engineering is setting up a 6-rack Real Time Digital Simulation (RTDS) facility, funded under IRHPA scheme of DST New Delhi, to carry out advance research on practical power and control system problems.

Humanities and Social Sciences

138. Attended a workshop on Religion and Civil Society in South Asia, organized by the University of California, Santa Barbara. The workshop was held at the India International Centre, New Delhi. 18 September 2010- A. Chakrabarti.
139. Participated a seminar on “International Day”, University of Applied Sciences, Darmstadt, Germany, June 29, 2011. - P.M. Prasad.
141. Chaired sessions in the Second International Conference on Globalisation and Consumer Protection (ICGCP’11), Kalasalingam University, Krishnankoil, Tamil Nadu, January, 2011, P.M. Prasad.
143. Invited as a panelist by the Sociological Association of West Bengal at their 4th Annual Conference organized on the theme: Is Natural Science the only model of research in Sociology? December 6, 2010, A. Chakrabarti.
144. Group Discussion and Interview Skills- Institute of Technology of Nirma University, March 24, 2011. T. Ravichandran
145. Creating Comics: The Power of Visual Communication. –Short workshop for students and faculty at IIT Gandhinagar. The workshop was designed to
introduce participants to the language of comics and the step-by-step process of creating a graphic narrative. - T. Ravichandran.

146. 2-Week Communication Skills Workshop (Speaking and Writing) for UG students. -T. Ravichandran.

147. 2-Week Communication Skills Workshop for Administrative Staff - T. Ravichandran.

148. Creativity and You. MNNIT Allahabad, March 16, 2011 (for MBA students), L. Krishnan


150. Effective Communication -Staff Workshop, Institute of Chartered Accountants of India, Kanpur (for staff of ICA): November 2010 - L. Krishnan.

151. Memorial Prize 2010 for her paper titled "Judicious Succession and Judicial Religion: Internal Conflict and Legal Dispute in Religious Reform Movement in India". Indian Sociological Society, Dr. Anindita Chakrabarti, Dr. M.N.Srinivas.

152. Felicitated in recognition of his significant research contributions to Contemporary American Literature at the International Seminar on Humanistic Language and Literature Teaching held at Anna University, Chennai, February, 2011, Prof. Gurumurthy Neelakantan.

153. Invited to serve on the Editorial Board of Philip Roth Studies published by Purdue University Press, USA, Prof. Gurumurthy Neelakantan.

154. Best Paper Award, Fellowship of the World Business Institute, Australia February 2011 Ms. Archana Srivastava (Research Scholar, HSS Economics).


156. Nominated as the Editorial Board Member of international journal entitled: Bangladesh Sociological Studies, An International Biannual journal, BSIR, Dhaka. Bangladesh. ISSN: 1815-2163, Prof. B.K. Pattnaik.

157. Invited as a distinguished member of the International Editorial Board of Reformare, Journal of Educational Research- an international peer-reviewed academic journal published by Department of Public Education, Mexico, Dr. Nirmalya Guha.

Industrial Management and Engineering


161. PV Based Replicable Business Models for Informal Markets for Electricity received the Best Business Model Award at the Asia Clean Energy Forum 2010 organised at the Asian Development Bank (ADB), Manila in June 2010, Anoop Singh.

162. Dr.S. Misra’s biography appeared in Marquis Who’s Who in Science and Engg.
USA, 2010.
163. Two NPTEL courses developed, Computer Adided Decision Support Systems & Applied
164. Appointment as Editor, Bharatiya Samajik Chintan, Rahul Varman.
165. Appointed as Member, Executive Council for the year 2010-2011, INDIAN ACADEMY OF SOCIAL SCIENCES, Rahul Varman.
168. Appointment as Editor: American J of Operations Research from Mar 20, 2011 for a period of one year, Dr. RRK Sharma.
170. Appointed to Academic Advisory Board of T.A.Pai Management Institute, Manipal, India, Jayanta Chatterjee.
171. Invited as a “Guru” on USID Foundation Design Innovation Panel, Jayanta Chatterjee.
172. Appointed as General Secretary, Executive Committee, Society of Operations Management for the period 2011-13, Peeyush Mehta.
173. Member, State Advisory Committee, UP Electricity Regulatory Commission, Anoop Singh.
178. Setting a Floor and Forbearance Price for Renewable energy Certificates (RECs), Central Electricity Regulatory Commission, April 2010, Anoop Singh.
179. Laboratory for Production Shops (40 Lakhs), Sponsored Research Project, Deepu Philip.
180. PV Based Replicable Business Models for Informal Markets for Electricity received the Best Business Model Award at the Asia Clean Energy Forum 2010 organised at the Asian Development Bank (ADB), Manila in June 2010, Anoop Singh.
182. Experimental Design for Managers, Dr. Deepu Philip.

Mechanical Engineering

183. Invited to become a member of the editorial board of Frontiers in Heat Pipes - An International Journal, published by Global Digital Center, USA.
S. Khandekar.

184. Invited to become a member of the academic senate of Government Engineering College, Amravati (MS), S. Khandekar.

185. Member of the Curriculum Review Committee of the Indian Institute of Information Technology, Design and Manufacturing, Jabalpur (MP), S. Khandekar.


189. Gas Turbine Enabling Technology (GATET) initiative is one of the major initiatives of AR&DB, and the aim is to design the Gas turbine Engine of the future, for both civilian and military applications. Another initiative launched is by ADA, to define and develop advanced technologies for aircraft programme. I have been coordinating between the board and the faculty members of the institute, which initiated projects of around 3.0 corers and we are expecting other projects to be sanctioned in the near future as well S. Sarkar.

190. All 40 lecture notes on ME726 (Hamiltonian mechanics and Symplectic Algorithms) are available (upon request) in pdf format. This course was introduced as ME PG elective last year, B.L. Sharma.

191. All 40 lecture notes on ME681 (Mathematics for engineers) are available (upon request) in pdf format. This is a compulsory course for PG students in ME., B. L. Sharma.

192. Elected Honorary Research Fellow, Coventry University, UK for 4 years (2010-2014), Binod Srinivasan.

193. Associate Editor of The Nanotechnology and Nanoscience, S Bhattacharya.

194. Honorary fellow of the Australian Institute of High Energetic Materials, Melbourne, Australia, S Bhattacharya.

Mathematics

195. 7th International Conference on Rough Sets and Current Trends in Computing (RSCTC 2010), Warsaw, Poland, June 2010, Mohua Banerjee, Session Chair.

196. 4th Indian Conference on Logic and Its Applications (ICLA 2011), Delhi, January 2011, Session Chair, Mohua Banerjee.

197. Editorial Board Member of the Journal of Modern Applied Statistical Methods, D.Kundu.

198. Editorial Board Member of the Journal Statistics and Its Applications, D. Kundu.

199. Editorial Board Member of the Journal Communications in Statistics – Theory and Methods, D. Kundu.

200. Editorial Board Member of the Journal Communications in Statistics – Simulation and Computation, D. Kundu.

201. Stability & Bifurcation Analysis and Pattern Formation in Mathematical Ecology and Epidemiology held during 25th February to 2nd March, 2011 at Indian
Institute of Technology, Kanpur. This workshop is a part of year-long activity of the Centre for Mathematical Biology and the Mathematics Initiative of the Indian Institute of Science (IISc), Bangalore (A DST centre for Mathematical Biology). I delivered four invited talks on Stability of Linear Systems, V. Raghavendra

202. Member of Editorial Advisory Board of Proceedings of Indian Society of Mathematics and Mathematical Sciences, Shalabh.

**Materials Science and Engineering**

203. Editorial board of Recent Patents on Materials Science (Bentham), and Recent Patents on Nanotechnology (Bentham), 2010 onwards, Kantesh Balani.

204. Associate Editor of Nanomaterials and Energy (ICE Publishing), Mar. 2011 onwards, Kantesh Balani.

205. Associate editor, Biomaterials and Biodevices (website: www.amlett.com), B. Basu.

206. Editorial board member, Materials Science and Engineering; C - Materials for Biological Applications (Elsevier Journal), B. Basu.


208. Associate Editor, Bioceramics Development and Applications; Ashdin Publishing, Belgium, B. Basu.


211. One of the organisers of SYMPOSIUM: “Nanolaminated Ternary Carbides and Nitrides (MAX Phases)”, held during 34th International Conference and Exposition on Advanced Ceramics and Composites (ICACC), January 24-29, 2010 in Daytona Beach, Florida, USA, B. Basu.

212. One of the organisers of SYMPOSIUM 5: “Hybrid and Nano-Structured Materials” to be held during the 3rd International Congress on Ceramics (ICC3), November 14-18, 2010, Osaka Japan, B. Basu.

213. Member of the Panel of Judges for the Prime Minister’s Trophy for the Best Performing Steel Plant, S. P. Mehrotra.

214. Member of the Technical Committee of the Powder Metallurgy World Congress & Exhibition PM2010 to be held in Florence, Italy between October 10-14, 2010, A. Upadhyaya.

**Material Science Program**


222. Development of an Indigenous Scanning Tunneling Microscope. The development of a Course on Nanoscience based on the STM with an admixture of theory and experiment. The promotion of Scanning Probe Microscopy in the country through talks on the subject at Delhi University, Punjab University, Chandigarh, IISER Mohali, Himachal Pradesh University, Simla, IIT Roorkee and University of Rajasthan, Jaipur, D. Sahdev.

223. Serving member on the editorial Board of the journal:Superconducting Science and Technology, a Journal from Institute of Physics (IOP), London, UK. Impact factor = 2.402. S. Banerjee.


225. The paper titled “Penetration and screening of perpendicularly launched electromagnetic waves through bounded supercritical plasma confined in multicusp magnetic field”, published in Physics of Plasmas, 18, 022101 (2011) by I. Dey and S. Bhattacharjee was selected for cover page of volume 18 Number 2 of the journal. S. Bhattacharjee.