Contents

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. Profs. 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. Profs. V. Chandrasekhar and R. N. Mukherjee (CHM) have been chosen to receive the Chemical Research Society of India Silver Medal for the year 2011. Profs. 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. Suarhaa 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 is 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

1. Numerical Methods for Engineering and Science. S. Guha and R. Srivastava (CE). Oxford University Press, New Delhi.
2. Dynamical Tunneling: Theory and Experiment. Srihari Keshavamurthy (CHM) and Peter Schlagheck, (Eds). CRC Press, Boca Raton USA, 2011.
3. Basic Electrical Engineering. S. N. Singh (EE). PHI Learning Pvt. Ltd, India.
4. Vivade Vishade Pramade Prasave (a collection of short stories in Marathi). Prashant Bagad (HSS). Shabda publication, Mumbai, 2010.
5. Population and society. A. K. Sharma (HSS). Concept publishers, New Delhi, 2010.

6. Liberalizing research in Science and Technology: Studies in science policy. B. K. Pattnaik (HSS), Nadia Asheulova & Eduard Kolchinsky (Eds.). Russian Academy of Sciences, Saint Petersburg Politechnika, Russia 2010.
7. Services Marketing – People, Technology, Strategy – Sixth Edition. Christopher, L., Wirtz, J. and Chatetrjee, J (IME). Pearson, New Delhi.
8. Inter-fuel Substitution, Industrial Energy Demand and Carbon Emissions. Anoop Singh (IME), Kirit Parikh and Jyoti Parikh. VDM Verlag Publishers, Saarbrücken, 2010.
9. Powder Metallurgy: Science, Technology, and Materials. A. Upadhyaya and G. S. Upadhyaya (MSE). Universities Press Pvt. Ltd., CRC Press, 2011.
10. Carbon Nanotubes: Synthesis, Characterization and Applications. Kamal K. Kar (MSP). Research Publishing, Singapore.
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).
12. IC Engines: Combustion and Emissions. B. P. Pundir (ME). Narosa Publishing House, New Delhi.
13. Stochastic Transport in Complex System. Debashish Chowdhury (PHY) coauthored with A Schadschneider (University of Koln, 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.

10. Prof. Kalyanmoy Deb (ME) elected Fellow of the Indian National Science Academy.
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.
14. Prof. Debashish Chowdhury (PHY) elected Fellow of the Indian National Science Academy.

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.
14. Prof. P. K. Bhattacharya (CHE) selected for the Hiyoshi Think of Ecology Award of Hiyoshi Corporation, Japan.

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.
4. Dr. Debabrata Goswami (CHM), Editor-in-chief of Spectroscopy and Dynamics, by Simplex Academic Publishers.
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 sub-systems (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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GOI, Ministry of Human Resource Development
Department of Secondary & Higher Education
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Prof. Rajendra Govind Harshe
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Prof. D. V. Singh
Former Vice Chancellor, Roorkee University &
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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

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New Delhi – 110 001

Shri S. K. Ray
Additional Secretary and Financial Advisor
GOI, Ministry of Human Resource Development
Department of Secondary & Higher Education
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Ghaziabad, UP

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

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Kanpur – 208016

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Kanpur – 208 016

MEMBERS:

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Dy. Director
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Kanpur – 208 016

Prof. Rajiv Shekhar
Department of Materials Science and Engineering
Indian Institute of Technology, Kanpur
Kanpur – 208 016

Shri S. Y. Kulkarni
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Indian Institute of Technology, Roorkee
Roorkee – 247 667

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Retd. Engineer-in-Chief, UP PWD
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9/29, Rana Pratap Marg
Lucknow – 226 001

Shri R. K. Govil
Chief Engineer (Northern Zone-II), CPWD
3rd Floor, Kendriya Bhawan
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Kanpur – 208016

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Professor R. S. Nirjar
Former Vice Chancellor, Gautam Buddha University
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Professor I. D. Dhariyal
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Kanpur - 208016

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

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Indian Institute of Technology, Kanpur
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[From 01.04.2010 to 31.03.2011]

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Director
Indian Institute of Technology Kanpur
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Deputy Director:

Prof. R. K. Thareja

Members of the Senate:

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Prof. Dayanand Yadav	Upto 31.08.2010
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Prof. C. Venkatesan	
Prof. T.K. Sengupta	
Prof. Sudhir Kamle	
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Prof. Sanjay Mittal	
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Prof. C. S. Upadhyay	From 01.10.2010
Dr. Brijesh Eshpuniyani	

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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

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Prof. Anil Kumar	
Prof. Deepak Kunzru	
Prof. JP Gupta	Upto 31.05.2010
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Prof. RP Chhabra	
Prof. Ashok Khanna	

Prof. Ashutosh Sharma
Prof. Goutam Deo
Prof. Nishith Verma

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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
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Prof. Veejendra K Yadav	
Prof. Vinod K Singh	
Prof. Amalendu Chandra	
Prof. Faiz Ahmed Khan	
Prof. S S Manoharan	
Prof. J N Moorthy	
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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	
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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 (Chairman, SLC-2010-11 Promoted to Prof. w.e.f. 29.11.2010)	From 01.10.2010 to 28.11.2010

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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	

Prof. K P Rajeev	From 29.11.2010
Prof. Mahendra K Verma	From 29.11.2010
Prof. Asima Pradhan	From 29.11.2010
Dr. Sudeep Bhattacharjee	Upto 30.11.2010
Dr. Zakir Hossain	From 01.10.2010
Dr. Anjan Kumar Gupta	From 01.12.2010

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	AE
2. Dr. S Ganesh	BSBE
3. Dr. Animangsu Ghatak	CHE
4. Dr. S P Rath	CHM
5. Dr. Javed N Malik	CE
6. Dr. Tarun Gupta	EEMP
7. Dr. T V Prabhakar	CSE
8. Dr. A R Harish	EE
9. Dr. T Ravichandran	HSS
10. Dr. Peeyush Mehta	IME
11. Dr. P K Panigrahi	LTP
12. Dr. P K Panigrahi	ME
13. Dr. Gouthama	MME
14. Dr. K Shahi	MSP
15. Dr. Rama Rawat	MTHS & STAT.
16. Dr. P Munshi	NET
17. Dr. Zakir Hossain	PHY
18. Dr. Munmum Jha	Design Prog.

(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 Mittal	IME
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.i

(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. Munmun Jha (HSS)	M DES

(c) STUDENTS' SENATE NOMINEES:

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

SANCTIONED STRENGTH : 20
EXISTING STRENGTH : 16 +1

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 Phalguni 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)

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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 Debasis 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 Subrahmanyam
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)

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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

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

23.	3868	K S Singh, Principal Computer Engineer	C C
24.	4817	Navpreet Singh, Principal Computer Engineer	C C
25.	4541	B M Shukla, Principal Computer Engineer	C C
26.	5030	Vipul Mathur, Aircraft Maintenance Engineer	A E
27.	5312	V D Shrivastava, Librarian	Kelkar Lib
28.	3969	Umed Singh, Assistant Librarian	Kelkar Lib
29.	3974	(Ms) Neelam Prasad, Assistant Librarian	Kelkar Lib
30.	5148	S K Vijaianand, Assistant Librarian	Kelkar Lib

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

IIT Kanpur has demonstrated its excellence in research in many areas. To cite a few areas: Finite Element Methods Using Domain Decomposition, Flow Induced Vibrations, Wind Tunnel Testing of Large Scale Prototypes, Computational Chemistry, Nano-materials and Nano-technology, Geometric Optimization of Large Organic Systems, Genomics and Bio-Informatics, Electronic Structure Calculations, Aggregation and Etching, Molecular Dynamics, Thin Film Dynamics, Optical / EM Field Calculations, Computational Fluid Dynamics and Heat Transfer, Computer Aided Design and Rapid Prototyping, Tomography, Robotics, Multi-Body Dynamics, Geo-seismic Prospecting, Stress Analysis and Composite Materials, Vibration and Control, Semiconductor Physics, Photonics, Neural Networks and Genetic Algorithms, Earthquake Engineering, Impurities in Anti-Ferro Magnet, Raman Scattering, Particle Physics, Spin Fluctuation in Quantum Magnets, Quantum Computation and so on.

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 (PDPMIIITDM), 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:

Department/Disciplines	**Total Number of Candidates-Direct Admission**								
Programmes	**JEE-2010**					**Preparatory Course-2009**			**Tota l**
	Gen	**SC**	**ST**	**OB C**	**PH**	**SC**	**ST**	**PH**	
B.Tech.									
Aerospace Engg.	18	06	03	10	01	-	-	-	38
BSBE	20	04	-	11	-	02	01	01	39
Chemical Engg.	30	09	05	15	02	-	03	01	65
Civil Engg.	41	11	06	21	02	-	-	01	82
Computer Sc. & Engg.	25	08	04	14	01	-	-	-	52
Electrical Engg.	49	14	07	26	02	-	-	-	98
Mechanical Engg.	36	11	04	20	01	-	-	-	72
Materials & Met. Engg.	45	13	01	24	-	-	06	01	90
M.Sc. Integrated						-	-	-	

Chemistry	18	02	-	-	-	02	-	-	22
Mathematics & Scientific Computing	28	07	-	08	-	-	-	01	44
Economics	26	05	-	02	-	04	02	01	40
Physics	15	04	-	06	01	-	01	-	27
Total	**351**	**94**	**30**	**157**	**10**	**08**	**13**	**06**	**669**
B. Tech.-M. Tech. (Dual Degree)									
Aerospace Engg.	05	01	-	03	-	-	-	-	09
Chemical Engg.	07	02	01	04	01	-	01	-	16
Civil Engg.	11	04	02	06	01	-	-	01	25
Computer Sc. & Engg.	19	06	03	11	01	-	-	01	41
Electrical Engg.	16	05	02	08	-	-	-	-	31
Mechanical Engg.	12	04	02	07	01	-	-	01	27
Total	**70**	**22**	**10**	**39**	**04**	**-**	**01**	**03**	**149**

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:

S. No.	Department/Group	Numbers of Admission Offered	Actual Number of Students Joined
M.Sc. (2-year)			
1	Chemistry	40	40
2	Mathematics	40	35
3	Physics	30	30
4	Statistics	35	32
Total		**145**	**137**
M.Sc. – Ph. D. (Dual Degree)			
1	Physics	13	12
Total		**13**	**12**

Post Graduate

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

ENGINEERING

Department / Group	First Semester			Second Semester		
	M.Tech.	Ph.D.	Total	M.Tech.	Ph.D.	Total
Aerospace Engg.	30	06	36	-	-	-
B.S.B.E.	16	11	27	-	03	03
Chemical Engg.	34	14	48	-	05	05
Civil Engg.	50	15	65	-	08	08
Computer Sc. & Engg.	33	04	37	-	02	02
Design (M.Des.)	14	-	14	-	-	-
Electrical Engg.	98	17	115	-	11	11
Mechanical Engg.	103	19	122	-	06	06
Materials Science & Engg.	15	14	29	-	02	02
I.M.E.	14	01	15	-	01	01
Laser Technology	10	-	10	-	-	-
Material Science	06	01	07	-	03	03
N.E.T.	07	-	07	-	03	03
E.E.M.	15	-	15	-	-	-
M.B.A. (IME)	29	-	29	-	-	-
Total	**474**	**102**	**576**	**0**	**44**	**44**

SCIENCES

Department / Group	First Semester	Second Semester
	Ph.D.	Ph.D.
Chemistry	28	19
Mathematics	04	01
Physics	10	06
M.Sc.-Ph.D. Dual Degree in Physics	06	-
H.S.S.	03	05
Total	**51**	**31**
Grand Total	**627**	**75**

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

ENGINEERING

Department / Group	First Semester			Second Semester		
	M.Tech.	Ph.D.	Total	M.Tech.	Ph.D.	Total
Aerospace Engg.	57	36	93	55	30	85
B.S.B.E.	28	70	98	25	64	89
Chemical Engg.	57	63	120	52	64	116
Civil Engg.	111	49	160	0	52	152
Computer Sc. & Engg.	74	26	100	70	28	98
Design (M.Des.)	35	-	35	34	-	34
Electrical Engg.	158	74	232	138	80	218
Mechanical Engg.	176	79	255	148	78	226
Materials Science & Engg.	38	54	92	37	55	92
I.M.E.	30	17	47	29	19	48
Laser Technology	18	-	18	17	-	17
Material Science	16	14	30	14	16	30
N.E.T.	15	04	19	13	06	19
E.E.M.	33	-	33	29	-	29
M.B.A. (IME)	71	-	71	68	-	68
Total	**917**	**486**	**1403**	**729**	**492**	**1221**

SCIENCES

Department / Group	First Semester	Second Semester
	Ph.D.	Ph.D.
Chemistry	191	193
Mathematics & Statistics	51	45
Physics	63	66
M.Sc.-Ph.D. Dual Degree in Physics	36	34
H.S.S.	43	39
Total	**384**	**377**
Grand Total	**1787**	**1598**

Strength of Undergraduate and Postgraduate Students during 2010 – 2011 – I:

Department /Group	UG (B.Tech./ M.Sc. -5 Yr.)	B.Tech.-M.Tech (Dual Degree)	M.Sc. 2-Yr.	M.Sc. Ph.D. Dual Degree	M.Tech./ MBA/ DES/ VLFM	Ph.D	M.Sc-Ph.D Dual Degree	Total (UG+PG
Aerospace	131	46			57	36		270
B.S.B.E.	124	-			28	70		222
Chemical	200	64	-		57	63		384
Chemistry	71	-	74		-	191		336
Civil	272	94			111	49		526
C.S.E.	180	162			74	26		442
Economics	117	-			-	-		117
Design (M.Des.)	-	-			35	-		035
E.E.	328	131			158	74		691
H.S.S.	-	-			-	43		043
Math	170	-	67		-	51		288
Stat	-	-	56		-	02		058
M.E.	236	110	-		176	79		601
M.S.E.	291	-	-		38	54		383
Physics	99	-	55	24	-	63	36	277
I.M.E.	-	-	-		30	17		047
Laser Tech.	-	-	-		18	-		018
M.S.P.	-	-	-		16	14		030
N.E.T.	-	-	-		15	04		019
E.E.M.	-	-	-		33	-		033
M.B.A. (I.M.E.)	-	-	-		71	-		071
Total	**2219**	**607**	**252**	**24**	**917**	**836**	**36**	**4891**

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 wall as postgraduate level:

UNDERGRADUATE LEVEL

Core Curriculum / Department Courses	First Sem.	Second Sem.	Summer	Total
Core Courses run by various departments				
Aerospace Engineering	19	21	04	**44**
B. S. B. E.	12	13	-	**25**
Chemical Engineering	23	25	01	**49**
Civil Engineering	27	33	03	**63**
Computer Science & Engineering	23	28	04	**55**
Economics	13	12	02	**27**
Design	01	02	-	**03**
Electrical Engineering	31	32	02	**65**
Mechanical Engineering	32	33	02	**67**
Materials & Metallurgical Engineering	18	12	01	**31**
Chemistry	23	26	01	**50**
Mathematics	33	35	02	**70**
Physics	34	35	01	**70**
Humanities & Social Sciences	25	25	-	**50**
Industrial & Management Engineering	10	16	-	**26**
Nuclear Engineering & Technology	-	-	-	**-**
Materials Science Programme	01	01	-	**02**
Laser Technology Programme	01	01	-	**02**
CPA	01	01	01	**03**

POST GRADUATE LEVEL

Core Curriculum / Department Courses	First Sem.	Second Sem.	Total
Aerospace Engineering	16	15	**31**
Chemical Engineering	19	16	**35**
Civil Engineering	21	20	**41**
Computer Science & Engineering	15	14	**29**
Design (M.Des.)	07	05	**12**
Electrical Engineering	26	25	**51**
Environmental Engg. & Management	03	05	**08**
Mechanical Engineering	22	27	**49**
Materials & Metallurgical Engineering	19	19	**38**
Chemistry	14	12	**26**
Mathematics / Statistics	08	10	**18**
Physics	10	14	**24**
Humanities & Social Sciences	19	14	**33**
Industrial & Management Engineering	08	0	**08**
Materials Science Programme	07	8	**15**
Nuclear Engineering & Technology	04	06	**10**
Laser Technology Programme	03	03	**06**
Biological Science & Bio Engg.	14	14	**28**
M.B.A.(IME)	19	18	**37**

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)

Sl. No.	Contents	1st Year	2nd Year	3rd Year	4th Year	5th Year	Total
1	Students strength at the beginning of the session	818	662	563	495	288	**2826**
2	Students strength at the beginning of the 2nd	818	654	562	494	263	**2791**

	semester						
3	Students joined in 2nd semester on migration	-	-	-	-	-	**-**
4	Number of students withdrawn or on leave on medical ground in 1st and 2nd semesters	04	05	01	04	01	**15**
5	Number of students graduated	-	-	-	243	134	**377**
6	Number of students dismissed due to poor performance in 1st and 2nd semester	10	08	02	01	03	**24**

UNDERGRADUATE

The following statement shows promotion and detention of M.Sc. (2-year) and M.Sc. (Dual Degree) students in the academic year 201-02011 (upto July, 2011)

S. No.	Contents	1st Year	2nd Year	Total
1	Students strength at the beginning of the session	149	127	276
2	Students strength at the beginning of the 2nd Sem.	145	123	268
3	Number of students dismissed in 1st semester	-	01	01
	Number of students dismissed in 2nd semester	04	01	05
4	Number of students graduated in 1st semester	-	03	03
	Number of students graduated in 2nd semester	-	103	103
5	Number of students dismissed in due to continued absence from the programme	01	01	02

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:

S. No.	DEPT	B.Tech	B.Tech -M. Tech (Dual Degree)	M.Sc. (5YR)	M.Sc. (2YR)	**TOTAL**	VLFM	MBA	M.Des	M.Tech	Ph. D.	**TOTAL**	**GRAND (UG+PG)**
1	AE	20	15	-	-	**35**	-	-	-	19	03	**22**	**57**
2	BSBE	25	-	-	-	**25**	-	-	-	09	12	**21**	**46**
3	CHE	33	12	-	-	**45**	-	-	-	20	05	**25**	**70**
4	CHM	-	-	13	33	**46**	-	-	-	-	23	**23**	**69**
5	CE	46	16	-	-	**62**	-	-	-	38	06	**44**	**106**
6	CSE	38	27	-	-	**65**	-	-	-	25	01	**26**	**91**
7	DES	-	-	-	-		-	-	08	-	-	**08**	**08**
8	ECO	-	-	16	-	**16**	-	-	-	-	-		**16**
9	EE	57	15	-	-	**72**	-	-	-	25	11	**36**	**108**
10	EEM	-	-	-	-	**-**	-	-	-	10	-	**10**	**10**
11	HSS.	-	-	-	-	**-**	-	-	-	-	05	**05**	**05**
12	IME	-	-	-	-	**-**	59	43	-	04	01	**107**	**107**
13	LTP	-	-	-	-	**-**	-	-	-	05	-	**05**	**05**
14	MSE	56	-	-	-	**56**	-	-	-	15	-	**15**	**71**
15	MSP	-	-	-	-	**-**	-	-	-	12	02	**14**	**14**
16	MTH	-	-	-	25	**25**	-	-	-	-	13	**13**	**38**
17	MTH & SCOMP.	-	-	21	-	**21**	-	-	-	-	-		**21**
18	ME	38	15	-	-	**53**	-	-	-	52	08	**60**	**113**
19	NET	-	-	-	-	**-**	-	-	-	08	01	**09**	**09**
20	PHY	-	-	17	23	**40**	-	-	-	-	12	**12**	**52**

21	STAT	-	-	-	22	**22**	-	-	-	-	-		**22**
	TOTAL	313	100	67	103	**583**	59	43	08	242	103	**455**	**1038**

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 SImplorer, 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.
3. Master selection among many masters.
4. Carbon Nanocomposite preparation and uses thereof.

5. Process for prepartion of Chiral ã Lactams.
6. Process for the synthesis of highly functionalized racemic and non-racemic piperidines.
7. Nanotextured Dielectric in electrolyte insulator semiconductor devices for enhanced sensitivity.
8. Design of a novel multi-tip hypodermal needlequot.
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.
12. Finger Gesture Recognition in Dynamic Projecting upon Arbitrary Background Using Reflectance Modeling.
13. A Finishing Device.
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.
17. Nanocrystalline titanium carbide and process of preparation.
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 charaterization system.
3. Flexible temperature sensor and sensor array.
4. Organic photonic materials (zinc based) as precursors for inorganic photonic materials in bulk, film and nanowire form/ (New Title)- Zinc Chalcogenides, Doped Zinc Chalcogenides and Methods of Making.
5. Aluminum based n-type semiconductors as organic photonic presursors for inorganic photonic materials in bulk, film and nanowire form.
6. Convergent Matrix Factorization Based Entire Frame.
7. Hydroxyapatite Poly (etheretherketone) nanocomposities and method of manufacturing same.
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 ridding.

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).
3. Research Design & Standards Organisation, Lucknow for improvement in bottom discharge system of BOBRN Wagon.
4. Ministry of Environment and Forests, GOI for the preparation of the Ganga River Basin Management Plan.
5. International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), Patanacheru for project titled, Innovations in Technology Medicated Learning: an institutional capacity building in using Re-usable learning objects in Agro-horticulture.
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.
13. Bhabha Atomic Research Centre, Mumbai for development of Technology for Nanofinishing of curved and sculptured surfaces.
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, 2021for 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.
21. Asian Development Bank, Philippines for study on a South Asia regional power exchange.
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.
4. Innovo Biologicals Pvt. Ltd., Hyderabad, Bioworld Research Technologies, Hyderabad for improvement of Jatropha curcus as a sustainable energy crop using genetic engineering.
5. Unilever Industries Private Limited, Bangalore for extension of the Research Project Agreement upto 31st December 2010.
6. Hindustan Aeronautics Limited, Bangalore for development of a computational aeroelasticity code for helicopter rotor loads and dynamic response analysis.
7. Aramco Overseas Company B.V. for extension of Contract upto 13th December 2010.
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.
13. National Thermal Power Company Limited, New Delhi for The work related to study of use of fly ash in canal lining works.
14. Curadev Pharma Pvt. Ltd., New Delhi for consulting advisory services in the area of medicinal chemistry.
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.
36. Eaton Corporation, USA for Master sponsor Research Agreement with research project specifications: Parameter identification in automotive vehicles.
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.
39. Boeing, USA for Boeing-IIT Kanpur Externship Programme 2010.
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 SILYMETHYL-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 VECHICLES, 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. RAMANNA 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 CROOS-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. ELECTROHYDRODYNAMIC 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 VECHICLES 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. SYSNTHESIS AND FUNCTIONALIZATION OF MULTIWALLED CNT, funded by OPCW, Total Cost Rs. 831052.
112. EXTENDING THE SCOPE OF HOMO-NZAROV CYCLIZATION TO 2-SILYLMETHYLCYCLOPROPYL 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 HUNTIGTON'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 STRQATEGY 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 Engineeers, 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. 5574000.
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. CONSULATNCY 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. CONSULATNCY 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. RETAINERSHIP 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 GHATAMPUR 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. 3000000.
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 ARTIFICAL NEURAL, funded by ADRDE, Lucknow, Total Cost Rs. 990000.
93. DESIGN AND FABRAICATION 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 Stastics:

Database Statistics, as on March 05, 2011

Degree	Total Alumni	Registered members	Unregistered members	Email Addresses available	Postal Addresses available
Graduate degrees	11638	7906	3732	10052	9727
MT (Dual)	272	272	0	262	256
M Tech	8993	3325	5668	5122	4792
MSC2	1710	712	998	996	1019
MBA	277	244	33	256	245
MDES	75	73	2	72	71
PHD	2225	762	1463	1366	1353

Others	72	2	70	19	38
Grand Total	**25262**	**13296**	**11966**	**18145**	**17501**

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 Hyderbad 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-to-gether 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 Assocition 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 upto 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 updradations 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 detainls of training programmes are as follows:

1. Induction Programme (for the newly joined Institute employees) – February 17-18, 2011
   Total attendance: 25
2. Training programme on procurement of Material/Equipment – February 22-23, 2011
   Total attendance: 60
3. Training programme on Safety Management – March 21, 2011
   Total attendance: 17
4. Training programme on Effective Office Management – June 14, 2011
   Total attendance: 45
5. Training programme on Workplace Management - June 24, 2011
   Total attendance: 30
6. Industrial visit – Parle Biscuits, Kanpur – June 25, 2011
   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 **SC**s and **ST**s in the direct recruitment is **5th September 1974** in this Institute and the implementation of reservation for **OBC**s 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 relax able 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 Advts.** (External) issued through Recruitment Section is as under:

Advt. No.	Name of Post(s)	Pay Scale	No. of Vacancies					Total	Published in
			SC	ST	OBC	PH	UR		

1/2010	Deputy Registrars	PB-3:Rs.15600-39100 with GP: Rs.7600	1	0	0	0	1	02	All Editions of Dainik Jagran (Nai Rahein), Times of India, The Hindu and Employment News
	Assistant Registrars	PB-3:Rs.15600-39100 with GP: Rs.5400	0	2	1	0	2	05	
	Assistant Executive Engineer	PB-3:Rs.15600-39100 with GP: Rs.5400	0	0	1	0	0	01	
	Medical Officer	PB-3:Rs.15600-39100 with GP: Rs.5400	0	0	1	0	0	01	
	Junior Technical Superintendent	PB-2:Rs.9300-34800 with GP: Rs.4200	0	3	1	2	1	07	
	Junior Engineer	PB-2:Rs.9300-34800 with GP: Rs.4200	0	1	0	0	0	01	
	Junior Technician	PB-1:Rs.5200-20200 with GP: Rs.2000	1	0	1	1	2	05	
	Junior Assistant	PB-1:Rs.5200-20200 with GP: Rs.2000	0	0	1	1	2	04	

1/2011	Principal Medical Officer	PB-4:Rs.37400-67000 with GP: Rs.8900 + NPA	0	0	0	0	1	01	
	Assistant Security Officer	PB-2:Rs.9300-34800 with GP: Rs.4200	0	1	2	0	2	05	
	Junior Technical Superintendent	PB-2:Rs.9300-34800 with GP: Rs.4200	0	4	4	1	5	14	
	Junior Technician	PB-1:Rs.5200-20200 with GP: Rs.2000	3	0	3	2	7	15	
	Junior Assistant	PB-1:Rs.5200-20200 with GP: Rs.2000	2	0	4	0	3	09	
TOTAL			**7**	**11**	**19**	**7**	**26**	**70**	

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:

For Selection	Total **05** Selection Committee meetings: **03** S/C meeting, wherein SCT/OBC representatives included **01** S/C meeting, wherein OBC representative included

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:

Type of house	**Houses allotted to**			
	SC/ST		**GEN**	**Total**
	As per Reservation	**As per Seniority**		
Type-IA	-	-	02	**02**
Type-1B	**-**	-	16	**16**
Type-I	**-**	02	20	**22**
Type-II	-	07	11	**18**
Type-III	-	-	20	**20**
Type-IV	-	-	11	**11**
Type – V	**No reservation**		07	**07**

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. <u>Academic Staff:</u>

Area(s)	SC	ST	OBC	GEN	TOTAL
Appointments					
Teaching	-	-	-	16	16
Non-Teaching	-	-	-	-	-
Visiting Faculty	-	-	-	05	05
Total A	**-**	**-**	**-**	**21**	**21**
Retirement	-	-	-	09	09
Deaths	-	-	-	02	02
Resignation				03	03
Resignation (Technical)	-	-	-	01	01
Termination	-	-	-	01	01
V/Retirement	-	-	-	02	02
Compulsory Retirement	-	-	-	-	-
Dismissal	-	-	-	-	-

Term Over	-	-	-	05	05
Total B	**-**	**-**	**-**	**23**	**23**

B: <u>Non-Academic</u>:

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

Financial up-gradation under MACPS during 2010-2011

Pay-Band	Pay-scale		SC	ST	OBC	GEN	TOTAL
	From	To					
PB-1 Rs. 5200-	1800	1900	-	-	-	02	02
	1900	2000	03	-	02	06	11
	2000	2400	04	-	02	07	13

20200	2400	2800	03	-	-	15	18
	2800	4200	01	-	-	-	01
PB-2	4200	4600	04	-	02	25	31
Rs.	4600	4800	01	-	-	06	07
9300-34800	4800	5400	-	-	-	01	01

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:

Recruited through DOFA Office

Academic	SC	ST	OBC	GEN	Total
Teaching	02	-	-	344	346
Non-Teaching	01	-	-	36	37
Total	**03**	**-**	**-**	**380**	**383**

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

Recruited through Recruitment Section

Group	SC		ST		OBC		GEN	Total
A	**04**	**17.39**	**0**	**0.00**	**01**	**4.34**	**18**	**23**
B	**59**	**20.92**	**07**	**2.48**	**24**	**8.51**	**192**	**282**
C	**32**	**19.27**	**04**	**2.40**	**30**	**18.07**	**100**	**166**
D	**36**	**27.27**	**0**	**0.00**	**09**	**6.81**	**87**	**132**
TOTAL	**131+8***	**21.72**	**11**	**1.82**	**64**	**10.61**	**397**	**603+8***

*** 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	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

Group	SC	ST	OBC	GEN	Total
B	-	-	1	10	11
C	1	-	-	9	10
D	3	1	4	3	11
Total	**4**	**1**	**5**	**22**	**32**

D. Existing Strength of Mess Employees as on 01.04.2011:

Recruited through COW Office

Group	SC	ST	OBC	GEN	Total
B	-	-	1	3	4
C	-	-	1	2	3
D	12	-	23	48	83
Total	**12**	**-**	**25**	**53**	**90**

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:

Programmes	**Registration Data in the 2010-11**				
B.Tech	**SC**	**ST**	**OBC**	**GEN**	**Total**
AE	06	03	10	19	**38**
BSBE	06	01	10	22	**39**
ChE	09	08	16	32	**65**
CE	11	06	22	43	**82**
CSE	08	04	14	26	**52**
EE	14	07	26	51	**98**
ME	11	04	19	38	**72**
MSE	13	07	24	46	**90**
TOTAL	**78**	**40**	**141**	**277**	**536**

Programmes	**Registration Data in the 2010-11**				
M.Sc. (5 yrs)	**SC**	**ST**	**OBC**	**GEN**	**Total**
Chemistry	04	-	-	18	**22**

Economics	09	02	03	26	**40**
Mathematics	07	-	07	30	**44**
Physics	04	01	06	16	**27**
Total	**24**	**03**	**16**	**90**	**133**

Programmes	**Registration Data in the 2010-11**				
BT-MT	**SC**	**ST**	**OBC**	**GEN**	**Total**
AE	01	-	03	05	**09**
ChE	02	02	04	08	**16**
CE	04	02	07	12	**25**
CS&E	06	03	12	20	**41**
EE	05	02	08	16	**31**
ME	04	02	07	14	**27**
Total	**22**	**11**	**41**	**75**	**149**

Programmes	**Registration Data in the 2010-11**				
M.Sc.-PhD	**SC**	**ST**	**OBC**	**GEN**	**Total**
Physics	02	-	05	05	12
Total	**02**	**-**	**05**	**05**	**12**

Programmes	**Registration Data in the 2010-11**				
M.Sc. (2 yrs)	**SC**	**ST**	**OBC**	**GEN**	**Total**
Chemistry	06	01	14	19	40
Mathematics	05	03	15	12	35
Statistics	04	-	08	20	32
Physics	05	02	08	15	30
Total	**20**	**06**	**45**	**66**	**137**

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

Dept.	**SC**	**ST**	**OBC**	**GEN**	**Total**
AE	09	-	09	12	**30**
CHE	01	03	13	17	**34**
CE	02	-	12	36	**50**
EE	06	01	18	73	**98**
ME	09	04	34	56	**103**
MSE	01	-	09	05	**15**

CSE	-	-	04	29	**33**
MSP	-	-	01	05	**06**
IME	03	-	04	07	**14**
MBA	06	03	04	16	**29**
NET	01	01	01	04	**7**
LT	-	-	02	08	**10**
EEM	03	-	04	08	**15**
BSBE	-	01	03	12	**16**
DES	03	-	04	07	**14**
TOTAL	**44**	**13**	**122**	**295**	**474**

Registration Data of Ph D students of 2010-11

Dept.	SC	ST	OBC	GEN	Total
AE	03	-	-	02	**05**
CHE	02	-	04	13	**19**
CE	02	-	06	14	**22**
EE	-	-	05	21	**26**
ME	01	01	06	16	**24**
MSE	03	-	-	13	**16**
CHM	02	01	14	27	**44**
MATH	01	-	-	03	**04**
PHY	01	01	05	07	**14**
M Sc-PhD (Dual)	-	-	01	05	**06**
HSS	-	-	03	04	**07**
CSE	-	-	-	06	**06**
MSP	-	-	01	03	**04**
IME	-	-	-	02	**02**
NET	-	-	01	02	**03**
BSBE	01	-	01	09	**11**
TOTAL	**16**	**03**	**47**	**147**	**213**

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 Prakoshtha is dedicated to the upliftment of Hindi in the Institute. Prakoshtha 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 NationalHeritage 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

Sl. No.	Particulars	Income (Rs. In lakh)	Expenditure (Rs. In lakh)
1	Non- Plan	15928.49	15928.49
2	Normal Plan (Opening Balance – Rs. 575.38 lakh)	5178.00	4104.42
3	Plan (OSC) (Opening Balance – Rs. 1687.29 lakh)	5000.00	6136.48
4	JEE	783.64	1096.06 (Non Plan)* 3.86 (Plan)
5	GATE	421.35	519.30 (Non Plan)* 0.92 (Plan)
6	GATE (JMET)	27.31	7.08 (Non Plan)*
7	Research & Development	1413.16	717.68 (Non Plan) 7.62 (Plan)
8	Deans Capital Fund	72.46	11.53 (Non Plan)* 20.48 (Plan)
9	Hall Management	898.56	925.49 (Non Plan)*
10	Fund Hall Management	111.07	143.93 (Non Plan)*
11	Pension Hall Management	127.34	139.13 (Non Plan)*
12	Student Gymkhana	35.19	31.04 (Non Plan)*
13	Visitors Hostel	112.63	101.51 (Non Plan)*
14	Endowment Fund	1518.48	806.71 (Non Plan)
15	GATE (JAM)	25.46	23.82 (Non Plan)*

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 (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. Suarhaa 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.

S. No.	Project Title	Total Amount (Rs. in lakh)
1	Development & Operational activities in this Institute	414.24
2	Awards	2.09
3	Scholarships	14.26
4	Faculty Chairs	23.02

5	Young Faculty Research Fellowship	3.10
6	N Narayana Murthy Foundation	126.45
7	Poonam & Prabhu Goel Foundation	51.36
8	Joy & Gill Endowment Foundation	2.00
9	Ranjit Singh Foundation	4.20
10	Distinguished Lecture Series	4.68
11	Batch Funds	19.98
12	Departmental Funds	16.40
13	Student Activities Fund A/c	5.30
14	Community Services	2.32
15	NICEE Endowment Fund	15.01
16	Miscellaneous	60.61
17	DRPG Activities	63.25

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 bed room 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 Ist 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:

Loan	Short Term	Long Term
Short Term/Long Term	35	3

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

Undergraduate Scholarships	Year				
	I	II	III	IV	V
MCM @ Rs. 1000/- p.m. with Freeship	191	142	104	82	9
Freeship	---	24	11	13	2
Free Basic mess plus Pocket Allowance @ Rs.250/- p.m.	79	44	30	26	21
Anurag Bartaria	1	---	---	---	---
Arakere and Karen Vasudev	---	---	1	---	---
BGM Kumar Foundation	1	---	---	---	---
Bhuwan and Indira Joshi	1	---	---	---	---
Balasubramaniam & Visalakshi	1	---	---	---	---
Biswanath Jha Memorial	---	1	---	---	---
Dr. Gurcharan Singh Kainth	---	1	1	1	---
Dr. Hari Mohan and Pushpa Srivastava	---	---	1	---	---
Guru Ji Ghasit Ram	1	---	---	---	1
Harish and Sushila Chandra	1	---	---	---	---
Indra Dhanush Awards	---	---	1	---	---
Khem Chandra Yadav	---	1	1	---	---
Kinra	---	---	1	---	---
Kunta Jha	---	1	---	---	---
Mahesh & Shashi Chandra	---	1	---	---	---
Mathur Brothers	1	---	---	---	---
N.S. Rajaraman	1	---	---	---	---
Neta Ji Balwan Singh	2	---	---	---	---
Nita Goyal and Ashish Gupta	1	1	---	---	---
P.D.Murti Memorial	---	---	1	1	---
Pt. Balajee Govind Hardikar Memorial	1	---	---	---	---

Prof. C.N.R. Rao Science Talent	---	---	---	---	1
Prof. Netarlal Kapur	---	---	1	---	---
Ram Rajendra Malhotra Education Society	3	---	---	---	---
Sarpanch Salik Ram Katiyar	2	---	---	---	---
Shiv Kumari Shukla	1	---	---	---	---
Shiv Prakash and Dayawanti Sharma	1	---	---	---	---
Shri D.P. Shukla	1	---	---	---	---
Smt. Jagat Kaur Memorial	---	---	1	---	---
Sri Jamuna Prasad and Basanti Gupta	---	1	---	---	---
Sri Temasek@iitk	1	---	---	---	---
Tapan Kumar and Swapna Bandhyopadgyay	---	---	1	---	---
Vasudeo Laxman Sahasrabuddhe Vaidya	---	---	1	---	---
Yasodha Yadav	---	1	---	---	1
Yogendra Nath and Sushma Gupta	---	1	---	---	---
Shrikant Mishra Scholarship	1	---	---	---	---
Sudarshan Kasturia Memorial Scholarship	1	---	---	---	---
Shri Shankar Lal Shrimati Prema Debi	1	---	---	---	---
Tarun Sondhi Memorial Scholarship	1	---	---	---	---
Kemchnd Memorial Scholarship	1	---	---	---	---
Dr. M. Anantaswamy and Mrs. Vijayalakshmi Rau	1	---	---	---	---
S. C. Mehrotra's Scholarship	---	1	---	---	---
Shri Kalp Nath Singh	---	---	1	---	---
Shanti Devi and Omkar Nath Maewal Memorial	---	---	1	---	---
K. N. Saluja	2	2	3	3	---
Sri Singhasan Singh	---	---	1	---	---
Romesh Chandra Memorial	---	---	---	1	---
Dharmavati Garg	---	---	---	1	---
Durga Devi Memorial	---	1	---	---	---
Dr. K.P. Gupta	---	---	1	---	---
Baljit and Nirmal Dhinsa	1	1	---	---	---
Mona and Paramjit Singh	---	---	1	1	---
Rajnath Singh Scholarship	---	---	---	1	---
Nitish Thakor	1	---	----	---	---
Pushpa Garg	1	---	---	---	---
Aviation Development Award	---	---	9	---	---
Dr. D.R. Bhagat Scholarship	---	---	1	---	---
Sagnik Asis Ray	---	---	---	1	---
Vinay Kapoor Memorial Scholarship	1	---	---	---	---
Bhawan Das Kapoor Memorial Scholarship	---	---	1	---	---

Anil and Reshma Nigam Scholarship	---	---	1	---	---
Govinda and Indira Srikantiah	---	---	1	---	---
Simran Mandeep Kainth Memorial	---	---	1	1	---
IWA Bonn	---	01	02	---	---
Pratima Ghosh Memorial	---	1	---	---	---
Ramesh Chandra Yadav	1	1	---	---	---
Jasmine and Mohiuddin	---	1	---	---	---
Seema Jain Memorial	---	1	---	---	---
ACC Fellowship	1	---	---	---	---
Anita & Santosh Mehra Foundation Scholarship	---	---	3	---	---
Class of 1984	1	---	---	---	---
Dilip Kohli Memorial Scholarship	1	---	---	---	---
Shanti & Ram Kishore sahai	1	---	---	---	---
Smt Saraswati Singh Scholarship	---	---	---	2	---
Smt. Padmavathy & Prof. R. Sankar	---	1	---	---	---
Suman Gupta Scholarship	---	1	---	---	---

Scholarships from outside agencies

TABLE-I (B): 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

Undergraduate Scholarships	**Year**				
	I	**II**	**III**	**IV**	**V**
Post Matric Scholarship		5	5	2	1
NTS Scholarships	---	27	17	9	4
FAEA Scholarship			2	1	
Aditya Birla	2	1	2	1	---
Inspire	81	45	27	27	---
TODAI Scholarship	02	02	02	02	---
O.P. Jindal Scholarship	01	01	01	01	---
State Scholarship	---	1	1	---	---
NBHM Scholarship	---	2	3	---	---

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-Ill: AWARDS AND PRIZES (2010-11)

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

24	IITK Excellance Award for Leadership	4	---
25	IITK Excellance Award for Art & Cultural	3	---
26	IITK Excellance Award in Community Services	2+1 (M.Tech.)	---
27	Ellizabeth and Varkey Cherian Award	1	---
28	Suman Gupta Gold Medal	1	---
29	S.N. Mittal Gold Medal	1 (M.Tech.)	---
30	Notional Prizes (UG)	145	13
31	Notional Prizes (PG)	55	
32	N. Balakrishnan Award	---	3
33	Prof. J. N. Kapur Prizes	1	1
34	Smt. P. K. Subbulakshmi Memorial Award	01 (M.Tech.)	01
35	Gargi, Kritika & Maitreyi Awards	3	---
36	Sridhar Memorial Prize (EE)	3	---
37	Ajai Agarwal Memorial Prize	1	---
38	Dr. Sangeeta Goel Memorial Award	1	---
39	O. P. Bajaj Memorial Award	1	---
40	Amit Saxena Memorial Award	1	---
41	Dr. R.C. Srivastava Memorial Scholarship	1	---
42	Jayesh Memorial Award	4	---
43	Dr. V.Rajaraman Scholarship	2	---

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

S. No.	Items of Expenditure	Ph. D.	M. Tech.
1.	Thesis Preparation Aid	3,000.00	750.00

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 is 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 is 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 MBA98%. 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 the 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

Dean, Students Affairs	Dr. A. K. Ghosh
Head, Counseling Service	Dr. A. R. Harish
Chairman, Council of Wardens	Dr. S. N. Singh
Vice-Chairman, Council of Wardens	Dr. J. Ramkumar

Counsellors, Students' Gymkhana

Chief Counsellor	Dr. A. K. Ghosh
Cultural Counsellor	Dr. Satyaki Roy
Games Counsellor	Dr. S. K. Mathur
Films Counsellor	Dr. Satyaki Roy
Science & Technology Counsellor	Dr. Anurag Gupta
Treasurer	Dr. A. V. R. Sarma
Chairman Students Benefit Fund	Dr. A. R. Harish
Chairman Students' Placement Committee	Dr. J. Ramkumar

Faculty Advisor, NSS	Dr. H. C. Verma
Chairman, Swimming Pool Management Committee	Dr. P. Shunmugaraj
Faculty Advisor, Yoga	Dr. A.K. Sharma
Faculty Advisor, Tae-kwon-do	Dr. T. Ravichandran

7. WARDENS

HALL OF RESIDENCE No. I
Dr. Rajesh Srivastava, Warden I/c
Dr. Krishnacharya, Warden
Dr. Sudeep Bhattacharjee, Warden
HALL OF RESIDENCE No. II
Dr. Somesh K. Mathur, Warden I/c
Dr. Debajyoti Paul, Warden
Dr. Anurag Gupta, Warden
HALL OF RESIDENCE No. III
Dr. Anjan K. Gupta, Warden I/c
Dr. Vimal Kumar, Warden
Dr. Tarun Gupta, Warden
HALL OF RESIDENCE No. IV
Dr. Anish Upadhyaya, Warden I/c
Dr. Deepu Philip, Warden
Dr. V. Shankar, Warden
HALL OF RESIDENCE No. V
Dr. A. V. R. Sarma, Warden I/C
Dr. Vineet Sahu, Warden
Dr. Siddharth Panda, Warden
HALL OF RESIDENCE No. VII
Dr. D. Goswami, Warden I/C
Dr. J. K. Bera, Warden
Dr. Yogesh M. Joshi, Warden
HALL OF RESIDENCE No. VIII
Dr. D. Bahuguna, Warden I/C
Dr. Priyanka Ghosh, Warden
Dr. Sumit Basu, Warden
HALL OF RESIDENCE No. IX
Dr. M. K. Ghorai, Warden I/C
Dr. Malay K. Das, Warden
Dr. Amit Dutta, Warden

HALL OF RESIDENCE No. X
Dr. Sandeep Sangal, Warden I/C
Dr. Rajeev Gupta, Warden
Dr. Ashwani K. Thakur, Warden
HALL OF RESIDENCE for Girls (GH-1)
Dr. Jonaki Sen, Warden I/C
Ms. Koumudi Patil, Warden
Dr. Chaithra Puttaswamy, Warden
HALL OF RESIDENCE for Girls (GH-2)
Dr. Nishchal Verma, Warden I/C
Dr. Sohini Sahu, Warden
SBRA
Dr. A. R. Harish, Warden I/C
Mr. Anurag Singh, Convener

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).

Students' Placement

Students' Placement Office

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

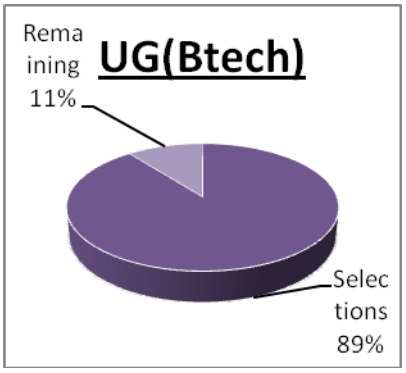
inactive for the last 3-4 years like Airbus, Ashok Leyland, EXL Services, Texas Instrument, etc.

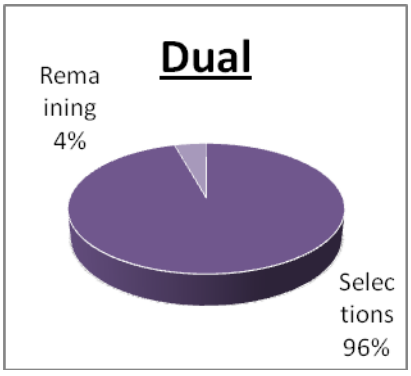
The office also undertook many efforts to inform students of various career options and help them prepare for their placements. As many as 16 different preparation sessions were conducted and a placement preparation portal was set up where students can get access to the relevant material needed for the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

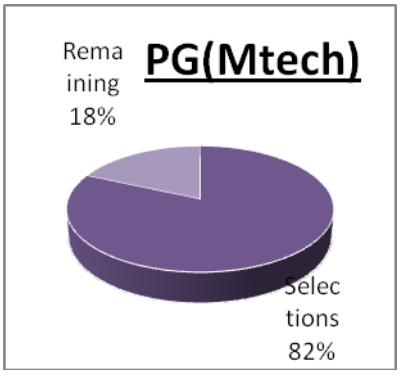
The relationship with the alumni was further strengthened as Mr. Anurag Singh extended his kind help in providing SPO with a state of the art portal to be used for the placement process. Career awareness sessions were being taken on IAS and MS/PhD as a career option by Rajeev Chawla and Dr Sameer Khandekar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

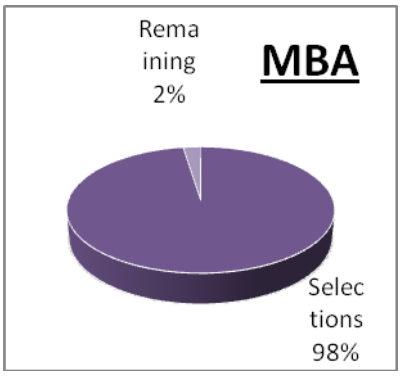
We successfully continued the career counseling program with the number of students being counseled rising significantly during the last year.

Placement Statistics 2010-11

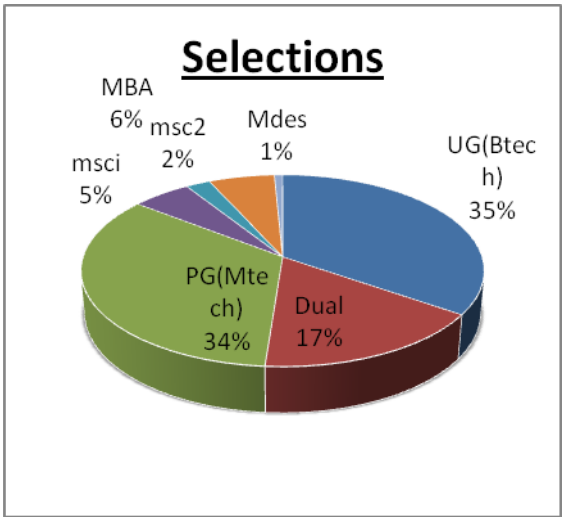


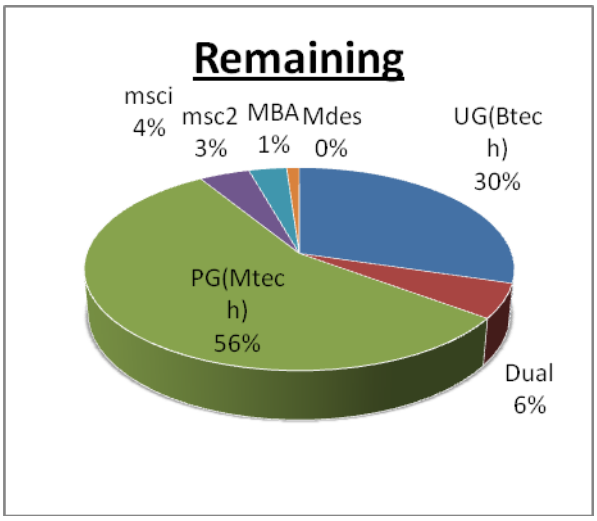




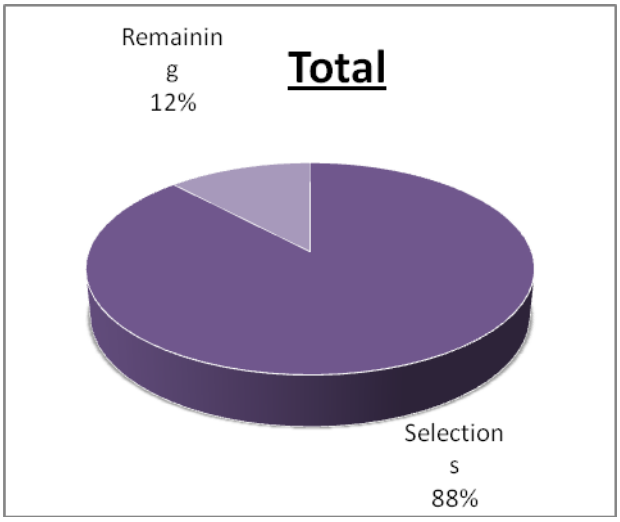


Total Selections and Remaining of each program





Overall Placement Data: 2010-11



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 constriction activity, under the control of the Superintending Engineer.

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

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

Sl. No.	Name of work	Plinth Area (in sqm)
1.	Construction of building for department of IME	5400
2.	Construction of Pseudo Dynamic Test Facility & Mezzanine floor at Structural Engineer Lab	550
3.	Conversion of Type –I houses (80 nos.) into double seated hostel accommodation	--
4.	Construction & installation of new sub station (SS#VIII) near	--

	hall of residence No. X	
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:

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

(C) The following works under planning:

1. Construction of Hall of Residence for Girls (Phase-I).
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.
8. Construction of new Lecture Halls.
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.

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

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 maintaines 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 un-authoriesed 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:

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

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, Esteeemed 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 featrues 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 Comptitions:

During the Hindi week and Wild Life week celebrations, our children participated in several interschool comptition 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 1 st, 2nd & 3rd prizes.

Mega Events:

Achievements Report for Physical Education:

Many physical competitions hod been done in the campus school IITK.

- 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 201 0. 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.
3. Recreation trip jungle water paper 27 Oct 2010. 110 no. of student's participation.
4. Reunion activity 19th Nov. 2010.
5. Open House 20th Nov. 2010.
6. Inter school Kho -Kho Tournernent Dec 13 to 15 2010. Campus School 1st place 8 school participation.
7. Traffic day/ Bicycle race Dec. 21, 2010.
8. Sport's day Dec. 22, 2010.

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:

Sl.No.	Particulars	Numbers
01.	Numbers of patient treated in OPD	54282
02.	Numbers of students treated	15759
03.	Numbers of patients manually registered	1093
04.	Numbers of patients admitted in Indoor	1056
05.	Numbers of patients treated in Homeopathy including students	12103
06.	Numbers of patients treated in Physiotherapy	4629
07.	Numbers of surgical operation(Minor)	Nil
08.	Numbers of Tubectomy	Nil
09.	Numbers of D&C	06
10.	Numbers of Deliveries	03
11.	Numbers of Plastering	84
12.	Numbers of surgical dressing	4846
13.	Numbers of Injections	39966
14.	Numbers of Tetvac	1606
15.	Numbers of Babies attended in Well Baby clinic	560
16.	Numbers of X-Ray done	2685

17.	Numbers of babies attended National Pulse Polio Programme	140
18.	Numbers of Anti Radies Injection	252
19.	Numbers of E.C.G done	319

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 Centere

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

1. Outreach 69 & 80

S. No.	Name of Facility	Max. Capacity
7	Auditorium	210
8	Seminar Room -1	40
9	Video-Conferencing Room	30

2. Main Auditorium

S. No.	Name of Facility	Max. Capacity
10	Main Auditorium	1250

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

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Humanities and Social Sciences

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PAPERS PRESENTED IN SEMINARS/CONFERENCE/WORKSHOPS/SYMPOSIA

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66. Hydropower Survey using terrestrial laser scanning, 2nd Innovative LiDAR Solutions Conference, Toronto, 31May – 3 June 2011, Lohani, B., Palani, S., Muniya, and Balaji, N.
67. LASViewer-A LiDAR visualisation software, 2nd Innovative LiDAR Solutions Conference, Toronto, 31May – 3 June, Lohani, B., Manchawari, L.
68. NICEE's Role in Promoting Confined Masonry as an Appropriate Technology for Building Construction in India, 9th US National and 10th Canadian Conference on Earthquake Engineering, Toronto, Canada, 25-29 July 2010, Paper no. 1689, July 2010, D. C. Rai, and S. K. Jain.
69. Critical Appraisal of Plume and Alternate Hypotheses into the Origin of Melting Anomalies: Perspectives and Prospects of Research in India, Centre of Advanced Study in Geology, University of Lucknow, Lucknow on March 15-16, March 2011, D. Paul.
70. Probabilistic Drought Classification using Hidden Markov Models, International Conference on Sustainable Water Resources Management and Climate Change Adaptation, 2011, G. Mallya, S. Tripathi, R. S. Govindaraju, Durgapur, India, S. Tripathi.
71. High-altitude charged aerosols in the atmosphere of Titan, S.N. Tripathi, M. Michael, P. Arya, European Geophysical Union, Vienna, May 2-7, 2010.
72. Microphysical modelling of nitrile ice clouds in Titan's atmosphere, S. N. Tripathi, Paul N. Romani, and Carrie M. Anderson, European Geophysical Union, Vienna, May 2-7, 2010.
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.
74. First direct evidence of strong absorption associated with coarse mode particles over CTCZ region from Aircraft experiment 2009, J. Jaidevi, Priya Choudhry, Marykutty Michael, S.N. Tripathi, Tarun Gupta, American Geophysical Union, San Francisco, December 13-17, 2010.
75. Evaluating the Effectiveness of Signal-based Countermeasures on Pedestrian Safety, Accepted for Proceedings of the Transportation Research Board 90th Annual Meeting, January 2011, Washington DC, USA, V. Vasudeavn, S. Pulugurtha, S. Nambisan, M. Dangeti.
76. Analysis of Effects of CAFE Standards, Hybrid and Alternative Fuel Vehicles on Fuel Tax Revenues, Proceedings of the Transportation Research Board 90th Annual Meeting, January 2011, Washington DC, USA, V. Vasudeavn, S. Nambisan.
77. Developing a Methodology for Night Time Seat Belt Usage Data Collection, Proceedings of the Transportation Research Board 90th Annual Meeting, January 2011, Washington DC, USA, V. Vasudeavn, N. Bandaru, P. Kachroo.
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).
79. Basics of Health Effects Originating from Air Pollution, Tarun Gupta, delivered invited lecture at Summer camp in Civil Engineering, IIT-Kanpur, Kanpur, (17th June, 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.
83. Coordination Polymers for Catalysis and Gas Adsorption, CGD-India Summit, IISc. Bangalore, December, 2010: Prof. P. K. Bharadwaj.
84. Metal Organic Frameworks: Synthesis and Applications, Frontiers in Chemistry, Indian Association for the Cultivation of Science, Kolkata, December 2010: Prof. P. K. Bharadwaj.
85. Functional Porous Metal-Organic Framework Built Using Rigid Carboxylate Based Linkers, 13th CRSI Conference, Bhuvaneswar, February, 2011: 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.
91. Proton transfer pathways in aqueous systems of varying dimensions, National University Singapore, November 16, 2010, Prof. A. Chandra.
92. Molecular simulations of liquids and interfaces: An HPC activity at IITK, Indian Institute of Technology Kanpur, February 28, 2011 (CNR Rao Lecture) : 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.
96. Phosphorus-Supported Ligands: Versatile Coordination Platforms for the Assembly of Molecular Materials: Invited Lecture at the 1st International collaborative, 1st ICCS, NUS, Singapore, Nov 15-16, 2010: Prof. V. Chandrasekhar.
97. Single-Molecule Magnets: Synthetic Strategies: An Invited Talk in the International workshop on Advances in Magnetic phenomenon and materials, Manali, June 3-5, 2010: Prof. V. Chandrasekhar.
98. Single-Molecule Magnets: Synthetic Strategies: Frontiers in Chemistry, IACS, Kolkata, December 11-13 2010: Prof. V. Chandrasekhar.
99. Single-Molecule Magnets: Recent Advances: Distinguished Lecture, NISER Bhubaneshwar, September 17, 2010: Prof. V. Chandrasekhar.
100. Single-Molecule Magnets: Sri Sathya Sai University, Prasanthi Nilayam, Puttaparthi, July 6 2010: Prof. V. Chandrasekhar.
101. Science: Some Inspiring Stories: DST-Inspire program for School Children, Lucknow, May 21 2010: Prof. V. Chandrasekhar.
102. Single-Molecule Magnets: Problems and Progress, TIFR Wednesday Colloquium, September 22, 2010, TIFR Bombay: 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.
104. Spatio-temporal control in multiphoton fluorescence laser-scanning microscopy, Progress in Biomedical Optics and Imaging, Multiphoton Microscopy in Biomedical Sciences X under BIOS Symposium, Photonics West 2010, San Jose, USA, A. K. De, D. Roy, and D. Goswami.
105. Femtosecond spatiotemporal control with multiple knobs, Lasers and Electro-Optics/Quantum Electronics and Laser Science Conference: 2010 Laser Science to Photonic Applications, CLEO/QELS 2010, San Jose, USA, May 18-20, 2010, (Invited Speaker: Joint CLEO/QELS Symposium on Quantum Control II), Debabrata Goswami.
106. Towards Stable trapping of single macromolecules in solution, SPIE NanoScience + Engineering—Optical Trapping and Optical Micromanipulation (OTOM '10), San Diego, CA, USA, Aug. 1-5, 2010, A. K. De, D. Roy, and D. Goswami.
107. Quantum Computing, Tutorial Lecture at the international conference on Simulated Evolution And Learning (SEAL-2010), IIT Kanpur, Dec. 1-4, 2010, Debabrata Goswami.
108. Quantum Computing Approaches via Femtosecond Spatiotemporal Control, International School on Quantum and Nano Computing Systems and Applications (QUANSAS-2010), Dec. 2-5, 2010, Debabrata Goswami.
109. Probing intra and intermolecular interactions through Femtosecond Laser Spectroscopy, Frontiers in Inorganic Chemistry (FIC-2010), IACS, Kolkata, Dec. 11-13, 2010, Debabrata Goswami.
110. Control of femtosecond laser driven retro-Diels-Alder reaction of dicyclopentadiene, Photonics-2010, IIT Guwahati, Dec. 12-15, 2010, D.K. Das, T. Goswami, and D. Goswami.

111. Two-Photon absorption study of Copper ion sensor based on conjugated pyrene and coumarin Schiff base, Photonics-2010, Dec. 12-15, 2010, IIT Guwahati, S. K. Maurya, M. D. Pandey, V. Chandrasekhar and D. Goswami.
112. Spectrally resolved femtosecond photon echo spectroscopy of Astaxanthin, Photonics-2010, Dec. 12-15, 2010, IIT Guwahati, Ajitesh Kumar, S.K. Karthick Kumar, A. Gupta and D. Goswami.
113. Spatiotemporal Control of Molecular Motions in Femtosecond Microscopy, Photonics-2010, Dec. 12-15, 2010, IIT Guwahati, Debabrata Goswami.
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.
115. Challenging the intra and intermolecular interacting forces: Towards spatiotemporal control of molecules, International Symposium on Facets of Weak Interactions in Chemistry, Saha Institute of Nuclear Physics Auditorium, Salt Lake, Kolkata, Jan. 13-15, 2011, Debabrata Goswami.
116. Nanoparticles in pulsed optical trap, Spectroscopy and Dynamics of Molecules and Clusters (SDMC), The Corbett Hideaway, Corbett National Park, Uttarakhand, Feb. 18-20, 2011, D. Roy and D. Goswami.
117. Ultrafast solution dynamics of IR144 in an organic solvent interfaced with water, Spectroscopy and Dynamics of Molecules and Clusters (SDMC), The Corbett Hideaway, Corbett National Park, Uttarakhand, Feb. 18-20, 2011, D.K. Das, T. Goswami and D. Goswami.
118. Intermolecular interaction in thermal lens spectroscopy, Spectroscopy and Dynamics of Molecules and Clusters (SDMC), The Corbett Hideaway, Corbett National Park, Uttarakhand, Feb. 18-20, 2011, P. Kumar and D. Goswami.
119. Control of femtosecond laser-driven chemical reactions transforming dicyclopentadiene into cyclopentadiene in supersonic molecular beams, Spectroscopy and Dynamics of Molecules and Clusters (SDMC), The Corbett Hideaway, Corbett National Park, Uttarakhand, Feb. 18-20, 2011, Debabrata Goswami.
120. Towards Using Molecules as Qubits: Mapping Coherence Flow within a Molecule, International Conference on Quantum Optics and Quantum Computing (ICQOQC-11), Mar. 24-26, 2011, JIIT, Noida, 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.
122. Design of DOPA crown peptide helices, Garima Tripathi and G. Ramanathan, 3rd Indian peptide symposium at Pune, Feb 2011: Dr. R. Gurunath.
123. Chemistry of Non-innocent Ligands. Molecular and electronic structure and properties, International Symposium on Frontiers in Inorganic Chemistry (FIC-2010), Indian Association for the Cultivation of Science, Kolkata (December 11-13, 2010), Suman Kumar Barman, Anuj K. Sharma and R. N. Mukherjee.
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.

125. Models for the Photosynthetic Reaction Center: Structure, Reactivity and Photophysical Properties of Porphyrin Dimers and Rationalization of Supramolecular Chirality, 13th CRSI National Symposium in Chemistry & 5th CRSI-RSC Symposium in Chemistry held at NISER, Bhubaneswar from Feb 04 - 06, 2011. S. Brahma, A. Chaudhary, A. Ikbal, and S. P. Rath.
126. Models for the Photosynthestic Reaction Centre: Structure, Reactivity and Photophysical Prpoerties of Porphyrin Dimers and Rationalition of Supramolecular Chirality, International Symposium on Frontiers in Inorganic Chemistry (FIC-2010) held at IACS, Kolkata from December 11-13, 2010. A. Ikbal, S. Brahma, A. Chaudhary and S. P. Rath.
127. A Novel Series of Oxo and Hydroxo Bridged Fe(III) Bisporphyrins: Synthesis, Structure and Properties. International Symposium on Frontiers in Inorganic Chemistry (FIC-2010) held at IACS, Kolkata from December 11-13, 2010. S. Bhowmik, S. K. Ghosh, D. Sil and S. P. Rath.
128. A Novel Series of Oxo and Hydroxo Bridged Fe(III) Bisporphyrins: Synthesis, Structure and Properties. Golden Jubilee Chemistry Conference Molecules, Supramolecules and Materials (MSM) held at IIT Kanpur from October 1-3, 2010. S. Bhowmik, S. K. Ghosh, D. Sil and S. P. Rath.
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.
132. National Symposium on Radiation and Photochemistry, Jodhpur, March 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.
136. Story of an Efficient Primality Test, Adobe Developer Summit, Noida, June 2010, Manindra Agarwal.
137. Automorphisms of Finite Rings and Their Role in Computer Science, Google India, Bangalore, June 2010, Manindra Agarwal.
138. On the Arithmetic Complexity of Euler Function, ICM Satellite Workshop, Bangalore, September 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.

141. On the Arithmetic Complexity of Euler Function, IBM Day, IIT Kanpur, November 2010, Manindra Agarwal.
142. The P ≠ NP Hypothesis, Talk at IISER Pune, November 2010, Manindra Agarwal.
143. PRIMES is in P, Invited Talk at SEAL conference, IIT Kanpur, December 2010, Manindra Agarwal.
144. On the Arithmetic Complexity of Euler Function, Invited Talk at KAUST Workshop, Jeddah, Saudi Arabia, February 2011, Manindra Agarwal.
145. Talash: Friend Finding in Federated Social Networks, Workshop on Linked Data on the Web (colocated with WWW 2011), Hyderabad, March 29th, 2011, Ruturaj Dhekane and Brion Vibber.

Humanities and Social Sciences

146. Movement, Institutionalization and Sectarianism: Exploring the Question of Succession in Religious Movements— 36th Annual Conference, Indian Sociological Society. 27-29 December 2010, A. Chakrabarti.
147. Hindi Film Meets Bollywood: A Comparative Critique of Cultural Commodification, presented at the Annual IACLALS international conference held in Trivandrum, India, Jan. 27-29, 2011, Suchitra Mathur.
148. Ghostly Sirens, Haunting Serenades: 'Uncanny' Songs in Classic Hindi Cinema, Fables of Fear, CPRACSIS, Thrissur, Kerala, August 7-8, 2010, Suchitra Mathur.
149. Textual Inoculations, Generic Mutations: Adventures of the 'English' Detective in Native L/Hands, 15th Triennial ACLALS Conference, University of Cyprus, June 6-11, 2010, Suchitra Mathur.
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.
152. Trade of CSG by ESCAP Members: A Gravity Analysis (Revised with theoretical justification), The Indian Econometric Society 47th Annual Conference, Indore, Jan 6-8, 2011. Somesh K.Mathur.
153. Contemporary Tribal resistance Movements in Orissa: Debate on Development and Displacement. XVII World Congress of Sociology (International Sociological Association), Gothenburg, Sweden, July 11-17, 2010, B.K. Pattnaik.
154. Science and Technology in India Contributing to Class Formation? Symposium, International Seminar entitled Science Technology and the Nation Central University of Hyderabad (funded by European Commission) under the auspices of Centre for Knowledge, Culture and Innovation Studies - March 24-26, 2011, B.K. Pattnaik.
155. Nature Versus Nurture: An Ecocritical Reading of R. K. Narayan's The English Teacher National Seminar on Revisiting the Classics: Text and Context and (Re)Interpretation, Department of Mathematics and Humanities, Institute of Technology, Nirma University 25 - 26 March 2011, T. Ravichandran.

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.
157. Political Violence, Internal Displacement and Children: Insights into Trauma Reactions, Suffering and Healing in Gujarat, India, International Conference on Intercultural aspects of mental disorders, University of Heidelberg, Germany. November, 2010, Kumar Ravi Priya.
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.
159. Perceived deprivation and perceived injustice under merit and need violation: The role of locus and norms. Paper presented at the Symposium on 'Justice', 20th Annual Conference of NAOP (National Academy of Psychology, India), JNU, New Delhi, December, 2010, L. Krishnan.

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.
161. An Interdisciplinary Approach to Teaching Service Innovation, The Art & Science of Service VI Conference, Madrid, Spain, June 2-4, 2010, Chatterjee, J. and Lemmink, J.
162. Market Characteristics and Regulatory Best Practices for Renewable Energy Certificates: An International Perspective, Renewable Energy 2010, 27 June – 2 July 2010, Yokohama, Japan, Anoop Singh.
163. Implementing Renewable Energy Certificates in India: Economic Analysis for a Proposed Regulatory Approach, International Conference on Infrastructure Finance, IIT Kharagpur, June 3-5, 2010, Anoop Singh.

Mechanical Engineering

164. Adhesion of two component vesicle, SIAM Conference on Life Sciences, 12-15 July, 2010, Y. Zhao, S. Das, Q. Du, Pittsburgh-USA.
165. Analytical study of Hopf bifurcations in frictional chatter models, Summer school and Conference on Advanced Problems in Mechanics (APM2010), July 1-4, 2010, Saint Petersburg, Russia. P. Wahi.
166. Nonlinear response of a flexible member supported non-ideally at one end, Summer school and Conference on Advanced Problems in Mechanics (APM2010), July 1-4, 2010, Saint Petersburg, Russia. S. Kumar, I. Sharma, and P. Wahi.
167. Design, fabrication and performance evaluation of a nonlinear quasi-zero stiffness vertical vibration isolator, Proc. IUTAM Symposium on Nonlinear Dynamics for Advanced Technologies and Engineering Design, July 27-30, 2010, Aberdeen, Scotland, UK. P. Wahi, R.H. Lokhande, R. Maurya, and A.K. Mallik.
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

Madras in December 2010, paper number 76 (FMFP10-HT-12), Trushar Gohil, Arun K. Saha, and K. Muralidhar.

169. Behavior of Thin Walled Cylinders Under Pulse Loading, International Symposuim on Impact anPlasticity IMPLAST 2010, October 12-14, Providence, Rhode Islans\d, USA A. Malladi, B. Aswin, P. Venkitanarayanan.
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.
171. Dipole generation and subcritical behaviour in the geodynamo, UK MHD Meeting, University of Leeds, 20--21 May 2010, B. Sreenivasan & C.A. Jones.
172. Method of Characteristics for RELAP5 Simulations, Trans. American Nuclear Society, 102(2010), pp 601-602 G. Shrishrimal, P. Munshi.
173. Numerical Simulation of exiting coolant flow of a pool type research reactor, Trans. American Nuclear Society, 102, (2010) pp 629-630, S. Soni, V. Eswaran, P. Munshi, S. Sengupta, P. K. Guchhait.
174. Large Break LOCA Analysis of a Natural Circulation Reactor, Trans. American Nuclear Society, 102 (2010), pp 631-632, J.P. Tyagi, M. Kumar, H.G. Lele, P. Munshi.
175. Unsteady State Heat Transfer Analysis in a Magnesio-Thermic-Reduction Reactor for Uranium Production, Trans. American Nuclear Society, 102(2010), pp 681-682, S. Soni, V. Eswaran, P. Munshi, S. Manna, S.B. Roy.
176. Station Blackout Analysis of a Natural Circulation Reactor, Proc. ICAPP2010, American Nuclear Society (2010), paper 10025 J.P. Tyagi, P. Munshi, Mithilesh Kumar, H.G. Lele.
177. Segregation in granular mixtures, Gordon Conference on granular and granular-fluid flow, B. R, Guru, A. Bhateja, I. Sharma, J. K. Singh.
178. Detection of Shear and Pressure Waves in Metals by Dynamic Wavelet Fingerprinting in Laser Based Ultrasonics, QNDE2010, Sandiego, July 18-23, 2010, N. N. Kishore, Aparna Gajendragadkar, Pankaj Gupta, and V. Raghuram.
179. Finite Element Modeling of Ultrasonic EMAT Technique for Crack Detection in Ferro-Magnetic Specimens, National Seminar on Non-Destructive Evaluation, Dec 9-11, 2010, Organized by ISNT, N. N. Kishore and T.H. Adithya.
180. On the Deformation and Fracture of Solid Dielectrics Immersed in an Electric Field, XVth Asian Conference on Electrical diacharges, Xian China, 2010, S N Khaderi and Sumit Basu.

Material Science Program

181. On the Sol-gel Synthesis and Characterization of Oxygen Permeable Strontium ferrite membrane, International Conference on Inorganic Membrane (ICIM-2010), Washington D.C., USA, 17-22 July 2010, S. V. Jaiswal, V.K. Kashyap, J. Kumar.
182. Carbon Nanomaterial Coated Glass Fiber Reinforced Epoxy Composites, International Conference on Carbon Nanotechnology: Potential and Challenges, IIT Kanpur, India, December 15-17, 2010, A. Rahaman, R. Sharma, K.K. Kar.
183. Exfoliated Graphite for Heavy Oil Sorption, International Conference on Carbon Nanotechnology: Potential and Challenges, IIT Kanpur, India, December 15-17, 2010, N. Sykam, K. K. Kar.

184. Synthesis of Carbon Nanotube Coated Alumina for Alumina Matrix Composites, International Conference on Carbon Nanotechnology: Potential and Challenges, IIT Kanpur, India, December 15-17, 2010, N. P. Reddy, R. Sharma, K.K. Kar.
185. Effect of CNT Growth Time on the Properties of CNT-Coated Carbon Fiber/Polyester Composites, International Conference on Carbon Nanotechnology: Potential and Challenges, IIT Kanpur, India, December 15-17, 2010, P. Agnihotri, S. Basu, K.K. Kar.
186. Carbon Nanotubes and Kirchoff's Elastica, International Conference on Carbon Nanotechnology: Potential and Challenges, IIT Kanpur, India, December 15-17, 2010, P. Agnihotri, S. Basu, K.K. Kar.
187. Synthesis of Carbon Nanocoils /Microcoils Coated Carbon Fiber: Effect of Growth Parameters, International Conference on Carbon Nanotechnology: Potential and Challenges, IIT Kanpur, India, December 15-17, 2010, R. Sharma, K.K. Kar.
188. Field Emission Study of Carbon Tubes Coated Kanthal wire, International Conference on Carbon Nanotechnology: Potential and Challenges, IIT Kanpur, India, December 15-17, 2010, S.R. Punugupati, K.K. Kar.
189. Carbon Nanotube Coated Tungsten Filament: Incandescence and Field Emission Properties, International Conference on Carbon Nanotechnology: Potential and Challenges, IIT Kanpur, India, December 15-17, 2010, R. Sharma, S.R. Punugupati, K.K. Kar.
190. Development of High Strength Functional-PEEK/HA/CNF Bionanocomposite, International Conference on Carbon Nanotechnology: Potential and Challenges, IIT Kanpur, India, December 15-17, 2010, S. Pramanik, K.K. Kar.
191. Synthesis of Various Carbon Nanomaterials: Effects of CVD Parameters, International Conference on Carbon Nanotechnology: Potential and Challenges, IIT Kanpur, India, December 15-17, 2010, A. Rahaman, R. Sharma, K.K. Kar.

Physics

192. Electronic Structure of Transition Metal Oxides, in Discussion Meeting on Electronic Structure at University Of Hyderabad, Jan 14-17 2011. R. Prasad.
193. Born Effective Charges, Spontaneous Polarization and Optical Properties of Bismuth Titanate from First-principles in International Conference on Quantum Effects in Solids of Today (I-ConQuEST) Dec 20-23, 2010 at NPL Delhi. R. Prasad.
194. Born Effective Charges, Spontaneous Polarization and Optical Properties of Ferroelectric Bismuth Titanate in Current Trends in Condensed Matter Physics, Dec 15-19, 2010, NISER, Bhubaneswar. R. Prasad.
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.
197. Changes in the Potential Fluctuations of GST Chalcogenides upon Switching, 17th International Symposium on Non Oxide Glasses, Nongbo, China, 2010, Ch. Bapanayya, Rajeev Gupta, and S. C. Agarwal, presented by, Ch. Bapanayya.

198. Investigation of stability of continuous wave broadband output from a fiber laser, PHOTONICS 2010: 10th International Conference on Fiber Optics & Photonics, paper no.454, Dec. 2010, A. Ghosh, D. Venkitesh and R.Vijaya, Guwahati, R.Vijaya.
199. Continuous wave broadband generation using specialty fibers in fiber laser cavity, PHOTONICS 2010: 10th International Conference on Fiber Optics & Photonics, paper no. 444, Dec. 2010, A. Ghosh, D. Venkitesh and R.Vijaya, Guwahati, R.Vijaya.
200. Experimental study of the dynamics of fiber ring laser under cavity-loss modulation, PHOTONICS 2010: 10th International Conference on Fiber Optics & Photonics, paper no. 332, Dec. 2010, A. Ghosh and R.Vijaya, Guwahati, R.Vijaya.
201. Density functional study of frequency-dependent polarizability of gold clusters, PHOTONICS 2010: 10th International Conference on Fiber Optics & Photonics, paper no. 406, Dec. 2010, D. Makwani and R.Vijaya, Guwahati, R.Vijaya.
202. Fabrication and optical characterization of SU-8 waveguides and distributed Bragg structures, PHOTONICS 2010: 10th International Conference on Fiber Optics & Photonics, paper no. 381, Dec. 2010, D. Makwani, R.Vijaya, A.Mallik and A. Bhatnagar, Guwahati, R.Vijaya.
203. Fabrication, characterization and band structure of 2-dimensional photonic crystal, PHOTONICS 2010: 10th International Conference on Fiber Optics & Photonics, paper no. 108, Dec. 2010, D. Makwani, M.S. Reddy, J. James and R.Vijaya, Guwahati, R.Vijaya.
204. Waveguide patterning on self-assembled photonic crystals, PHOTONICS 2010: 10th International Conference on Fiber Optics & Photonics, Guwahati, paper no. 298, Dec. 2010, D. Makwani, S. Kedia, J. James and R.Vijaya.
205. Emission studies in novel photonic crystal microcavities, PHOTONICS 2010: 10th International Conference on Fiber Optics & Photonics, paper no. 37, Dec. 2010, S. Kedia, R.Vijaya, A.K.Ray and S. Sinha, Guwahati, R.Vijaya.
206. Design, fabrication and characterization of Photonic crystals, Annual Symposium of the IITB – Monash Research Academy, Feb. 2011, M.S. Reddy, R.Vijaya and M.Premaratne, Mumbai, R.Vijaya.
207. A novel multi element focused ion beam system using microwave plasmas, Proceedings 25th National Symposium on Plasma Science and Technology (PLASMA 2010), IASST, Guwahati, pp. 71, December 8-11, 2010, Jose V. Mathew and S. Bhattacharjee.
208. Investigation on effect of excitation frequency on electron energy distribution functions in low pressure radio frequency bounded plasmas, Proceedings 25th National Symposium on Plasma Science and Technology (PLASMA 2010), IASST, Guwahati, pp. 52, December 8-11, 2010, S. Bhattacharjee, T. Lafleur, C. Charles and R. Boswell.
209. Experimental investigation of plasma oscillation due to interaction of high-power short-pulse microwaves with temporally growing self produced plasma, Proceedings 25th National Symposium on Plasma Science and Technology (PLASMA 2010), IASST, Guwahati, pp. 50, December 8-11, 2010, S. Pandey, I. Dey, D. Sahu and S. Bhattacharjee.
210. Experimental investigation of electron trapping and frequency sideband generation in nonlinear interaction of electromagnetic standing waves with an

overdende plasma column, Proceedings 25th National Symposium on Plasma Science and Technology (PLASMA 2010), IASST, Guwahati, pp. 38, December 8-11, 2010, I. Dey, K. Roychowdhury and S. Bhattacharjee.

211. A compact microwave multicusp plasma source with magnetic filter and wave cutoff disc for generation of negative ions, Proceedings 25th National Symposium on Plasma Science and Technology (PLASMA 2010), IASST, Guwahati, pp. 35, December 8-11, 2010, D. Sahu and S. Bhattacharjee.
212. Submicron guiding using capillary tube and diagnostics of multi-element focused ion beams, Proceedings 25th National Symposium on Plasma Science and Technology (PLASMA 2010), IASST, Guwahati, pp. 30, December 8-11, 2010, S. Paul, A. Chowdhury, and S. Bhattacharjee.
213. Interaction of low energy micron focused ion beamlets with matter, Proceedings 25th National Symposium on Plasma Science and Technology (PLASMA 2010), IASST, Guwahati, pp. 27, December 8-11, 2010, A. Chowdhury, S. Paul, and S. Bhattacharjee.
214. Diagnostics of submicron multi-element focused ion beams from an intense microwave plasma, Proceedings of the 37th IEEE International Conference on Plasma Science (ICOPS-2010), June 20-24, 2010, Norfolk, VA, United States of America, Jose V. Mathew and S. Bhattacharjee.
215. Observation of birefringence of waves in a bounded nonhomogeneous plasma confined in a magnetostatic well, Proceedings of the 37th IEEE International Conference on Plasma Science (ICOPS-2010), June 20-24, 2010, Norfolk, VA, United States of America, I. Dey and S. Bhattacharjee.

INVITED TALKS DELIVERED

Aerospace Engineering

1. Flight dynamics of Artillery rockets/shells, ARDE Pune, Oct-Nov 2010, A. K. Ghosh.
2. Experimental Techniques in Fracture, DMSRDE (Defense materials and stores research and development), Kanpur, Dec 07, 2010, R. Kitey.
3. Micromechanics based damage modeling for unidirectional composites: some recent developments, ICC-CFT2011 conference, IISc Bangalore, 2010, Murari V, C.S. Upadhyay.

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.
6. Cell culture engineering using new design of biomaterials- an Indian perspective. JAACT 2010 Program 23rd annual international meeting of the Japanese association for animal cell technology. Sep 1st -4th, 2010, JAPAN, Ashok Kumar.
7. Society of Biological Chemists Meeting, Bangalore, 2010, Dr. Balaji Prakash.
8. Connexios Biotech, Bangalore, 2010 Dr. Balaji Prakash.
9. Dept of Pharmacy, BITs-pilani, Hyderabad Campus, 2011 Dr. Balaji Prakash.
10. Surface modification of electrospun microfibers of PLGA for improved protein interactions. Invited talk at XXI National Conference of the Society for Biomaterials and Artificial Organ, India (SBAOI), at Sardar Patel University, Ahmadabad, February 10-12, 2011. Dhirendra S. Katti.
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.
12. Germline Stem Cells: RNA-binding proteins take multiple avatars to maintain the fountain of youth. International Symposium on Alternate Animal Models in Biological Research: Present and Future Perspective in Toxicology, Indian Institute of Toxicological Research, Lucknow, 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.
14. From sequence analysis to simulations: Applications of HPC in modern biology. REACH Symposium, IIT-Kanpur, Oct. 2010, R. Sankararamakrishnan.
15. From microbial to mammalian aqauporins: Sequence analysis to simulations. Indo-Swiss Bioinformatics Symposium at IIT-Delhi, Oct. 2010, R. Sankararamakrishnan.
16. Structure of biomolecules: An overview. Workshop on Understanding Molecular Simulations: Theory and Applications. UMS 2010, IIT-Kanpur, Nov. 2010. R. Sankararamakrishnan.

17. Using molecular dynamics to understand the specificity of protein-ligand interactions. Joint Indo-Russian Workshop on Predictive Biology using Systems and Integrative Analysis and Methods, Institute of Microbial Technology, Chandigarh, Nov. 2010. R. Sankararamakrishnan.
18. Membrane protein modeling and simulations. MathBio Workshop on Protein Structure, Function and Folding, Indian Institute of Science, Bangalore, Dec. 2010. R. Sankararamakrishnan.
19. Flexibility in the drugs and their targets: Challenges in drug design investigated using molecular simulation approach. 3rd CDRI – NIPER Symposium on Medicinal Chemistry & Pharmaceutical Sciences, Lucknow, Mar. 2011. R. Sankararamakrishnan.
20. GPCR-binding flexible peptide hormones: Influence of membranes in the recognition of cognate receptors. Conference on Biomolecular Simulations: Algorithm and Applications. JNU, New Delhi, Mar. 2011. R. Sankararamakrishnan.
21. Novel non-covalent interactions in protein structures. 5th Indo-French Bioinformatics Meeting, Centre for DNA Finger-Printing & Diagnostics, Hyderabad, Mar. 2011. 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.
23. Defects in proteolytic process underlie neuropathology in Lafora disease: Invited talk delivered in the 79th Annual Meeting of the Society of Biological Chemists (India), Indian Institute of Science, Bangalore, December 13-15, 2010, S.Ganesh.
24. Molecular pathology of Lafora disease: the tale of two proteins: Invited talk delivered in the International Conference on Functional Genomics, Banaras Hindu University, Varanasi, October 2-4, 2010, S.Ganesh.
25. Laforin-malin act as suppressors of misfolded protein accumulation: Invited talk delivered in the International Symposium on Progressive Myoclonus Epilepsies in the New Millennium, Mariani Foundation, Venice, Italy, April 28, to May 2, 2010, 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.
27. Principles of asphalt pavement design - a discussion, (October 20, 2010), Conference on Infrastructure, Sustainable Transportation & Urban Planning, CiSTUP, IISc Bangalore, October 18-20, 2010, Das, A.
28. How to build good roads? (October 5, 2010), IGS Local Chapter, SGSITS, Indore, Das, A.
29. In quest of an optimal pavement design, (July 31, 2010), Indo-US Workshop on Highway and Airport Pavement Engineering: Challenges and Opportunities, IIT Kharagpur, July 30-31, 2010, 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.
32. Laser Scanning Technology", NSTL-DRDO, Vishakhapattnam, Bharat 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.
38. Proposal for Space Borne Measurements of Dust Properties and Clouds (CO_2 and H_2O) in Mars, Brain Storming Session on Mars, Physical Research Laboratory, Ahmedabad, March 2011, S.N. Tripathi.
39. Brain Storming Session on Technology Vision 2035, IT-BHU, Varanasi, May 2011, S.N. Tripathi.
40. Aerosol absorption, mixing state and radiative effects, Health, Safety, and Environment Group, Bhabha Atomic Research Center, Mumbai, June 09, 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

42. Organic Molecules, in A Short Course on Organic Electronics, 2010, IIT Kanpur, July 5, 2010, S.Panda.
43. Organic Chemical Sensors, in A Short Course on Organic Electronics, 2010, IIT Kanpur, July 10, 2010, S.Panda.
44. Plasma Etch – Silicon Deep Trench Applications, VLFM IIT Kanpur, Sept 9, 2010, S.Panda.
45. Plasma Etch – Silicon Deep Trench Applications, in Continuing Education Programme on Advanced Manufacturing Processes, DMSRDE, Kanpur, Sept. 21, 2010, S.Panda.
46. Electrolyte Insulator Semiconductor based Microfluidic Biosensor for Early Disease Detection, Invited Seminar at IMMT, Bhubaneswar, Dec. 16, 2010, S. Panda.

47. Organic Semiconductor Based Chemical Sensors, in UGC-NCRM Winter School on Polymers: Synthesis, Characterization and Applications, IISc Bangalore, Dec 12, 2010, S.Panda.
48. Chemical Sensors – Nature to Laboratory, CSIR Programme on Youth Leadership in Science, IMMT Bhubaneswar, Dec 23, 2010, S.Panda.
49. Plasma Etch – Silicon Deep Trench Applications, in Short Term Course on Micro Scale Engineering, IIT Kanpur, Jan 6, 2011, S.Panda.
50. Electrolyte Insulator Semiconductor based Microfluidic Biosensor for Early Disease Detection, Invited talk, 16th National Seminar on the Physics and Technology of Sensors (NSPTS), Lucknow University, Lucknow, Feb 12, 2011, S.Panda.
51. Electrolyte Insulator Semiconductor based Microfluidic Biosensor for Early Disease Detection, in 2nd Symposium on Indo-Swiss Collaboration in Biotechnology(ISCB), New Delhi, Mar 11, 2011, S.Panda.
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.
53. Adaptive Adhesion via Sub-surface Network of Fluid Filled microchannels, National Physical Laboratory, India, 2010, A. Ghatak.
54. Membrane Processes for Effluent Treatment, National course Environmental Health and Safety Management in Process Industries at Chemical Engineering Dept., I.I.T Roorkee from January 25-29, 2011. P K Bhattacharya.
55. Chemical Engineering: Directions and Opportunities, MANIT – Bhopal, October 23, 2010. PK Bhattacharya.
56. Plenary Lecture on Typical Liquid Mixtures Separations through Pervaporation: An Emerging Membrane Based Technology at S-CHEMCON 2010, 6th Annual Session, Students Chemical Engineering Congress 2010, Process Industries & Sustainable Development, 24-25 September, 2010 at RVR & JC College of Engineering, Guntur, Andhra Pradesh. PK Bhattacharya.
57. Multi-objective Optimization: Bio-mimetic Adaptations of Genetic Algorithm, IIChE's Deepak Group's Padma Bhushan Prof. L. K. Doraiswamy CHEMCON Distinguished Speaker Lecture, CHEMCON Annual Meeting, Annamalai University, S.K. Gupta.
58. Population Balance-Based Model of Bubble Entrapment and Growth during Bulk Polymerization of Methyl Methacrylate (Invited Lecture), Symposium on Recent and Emerging Advances in Chemical Engineering (REACH 2010), IIT Madras, S.K. Gupta.
59. Step Growth Polymerization: a Personal Journey (Plenary Lecture), International Conference on Modeling, Optimization and Computing (ICMOC-2010), NIT Durgapur, S.K. Gupta.
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, Hydrabad, 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.
65. Irreversible aging in aqueous Laponite suspension, Institute for Condensed Matter and Complex Systems, University of Edinburgh, Scotland, Yogesh M Josh.
66. Unveiling thermodynamics at nanoscale. Amar Dye Chem Award Lecture, CHEMCON Annual Meeting, Annamalai University, Jayant K. Singh.

Chemistry

67. Organometallic and Organic Synthesis Highlights and New Perspectives, NEHU, Shillong Trinuclear Cu-NHC Complex: Synthesis, Structural Characterization, Reactivity and a Potential Transmetallating Agent, Ganapathi Anantharaman,* Renganathan Srirambalaji, Biswajit Santra, and Indranil Roy.
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.
72. ICOMC, July 19 – 23, 2010, Singapore: Dr. J. K. Bera.
73. Goldschmidt-2010", held at Knoxville, Tennessee, USA, June 15-19, 2010: Prof. A. Chandra.
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.
76. 1st International Collaborative and Cooperative Symposium, Singapore, November 15-16, 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.
80. Chemistry through Electrostatic Viewglasses, CLRI, Chennai: 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.
82. Molecular Tailoring : an Art of the Possible for Ab Initio Treatment of Large molecules and Molecular Cluster, TCS 2010, I.I.T. Kanpur: 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 Unversity (BESU)-2011, Shibpur, Department of Chemistry, Manas K. Ghorai.
85. Lewis acid-mediated S_N2-type ring-opening of aziridines and azetidines: synthetic and mechanistic perspectives: NOST symposium-2010, Goa: Dr. M. K. Ghorai.
86. Ring-opening chemistry of small ring aza-heterocycles: mechanistic investigation and controlled stereoselection: Humboldt Kolleg 2011, IIAP Bengalore, 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.
90. University of Madras Golden Jubilee Alumni Endowment Award Lecture on February 23, 2011 at Department of Organic Chemistry, University of Madras, Guindy Campus, Chennai: Prof. F. A. Khan.
91. National Symposium on Organic Synthesis held during February 18-19, 2011 at IIS University Jaipur: Prof. F. A. Khan.
92. National Conference on Recent Trends in Organic Synthesis–2011 (RTOS-2011) held during February 24-26, 2011 at School of Chemistry, Bharathidasan University, Tiruchirappalli, Prof. F. A. Khan.
93. Organic Oxidations with IBX and Organocatalysis with Proline Current Trends in Organic Synthesis, Bangalore University, Bangalore, 9-10 April, 2010: Prof. J. N. Moorthy.
94. Rational Design of Organocatalysts for Enantioselective Transformations, Interface between Chemsitry and Biology: A Perspective, September, IICT, Hyderabad, t 21-24 September, 2010: Prof. J. N. Moorthy.
95. Molecular Design for Manipulation of Organic Material Properties, Annual Meeting of the Indian Academy of Sciences, Goa, 12-15 November, 2010: Prof. J. N. Moorthy.
96. Importance of Weaker Interactions in Molecular Self-Assembly and Lattice Inclusion Compounds.
97. International conference on Facets of Weak Interactions, Calcutta University, Kolkota, 13-15 January, 2011: Prof. J. N. Moorthy.
98. Organic Oxidations with IBX and Organocatalysis with Proline Green Chemistry for Sustainable Future, 23-25 March 2011, Garhwal University, Srinagar, Uttarkhand, Prof. J. N. Moorthy.
99. Photoinduced Enolization, Isomerization and Cyclization Reactions in the Solid State Invited Speaker in the FIRST Gordon Conference on Crystal Engineering, Waterville Valley, New Hampshire, USA, June 6-11, 2010: Prof. J. N. Moorthy.
100. Influence of Sterics on the Photochemsitry of Aromatic Aldehydes, Ketones and Chromenes Invited speaker in the biennial 'XXIII IUPAC Symposium on Photochemistry' Ferrara, Italy, July 11-16, Prof. J. N. Moorthy.

101. Exploitation of Sterics in the Oxidation Chemistry with IBX and Organocatalysis with Proline Indo-French Conference on Organic Synthesis (IFCOS), Villard de Lans, France, September 13-17, 2010: Prof. J. N. Moorthy.
102. Modern Trends in Inorganic Chemistry Research: A Tribute to Acharya Prafulla Chandra Ray, National Seminar (International Year of Chemistry: Chemistry in our lives) under the thrust area "Design, Synthesis, Interaction, Chemical and Biochemical Activities of Different Functional Molecules" on the occasion of the 150th Birth Anniversary of Acharya Prafulla Chandra Ray, Department of Chemistry, The University of Burdwan (March 15-17, 2011) (March 15, 2011): Prof. R. N. Mukherjee.
103. Metal-Coordinated Radicals. Bioinorganic and Inorganic Perspectives, Celebration of the 150th Birth Anniversary of Acharya Prafulla Chandra Ray and the International Year of Chemistry, "Frontiers in Synthetic and Bioorganic Chemistry 2011, Indian Institute of Science Education and Research (IISER) Kolkata, Mohanpur Campus March 13, 2011): Prof. R. N. Mukherjee.
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.
105. Metal-Coordinated Radicals. Inorganic and Bioinorganic Perspectives, Department of Chemistry, Indian Institute of Technology Kharagpur, Kharagpur (December 15, 2010): Prof. R. N. Mukherjee.
106. Metal-Coordinated Radicals. Inorganic and Bioinorganic Perspectives, "Emerging Trends in Chemical Sciences (ECTS-2011)" Department of Chemistry, Faculty of Science, Banaras Hindu University (February 19, 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.
108. Chemical Reactions In Silico, IIT Kharagpur, Kharagpur, Dr. Nisanth N. Nair.
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.
114. Triarylbismuthanes as atom-efficient multi-coupling organometallic nucleophiles for carbon-carbon bond formations in organic synthesis 11th Eurasia Conference on Chemical Sciences The Dead Sea, JORDAN, October 6-10, 2010: Dr. M. L. N. Rao.
115. New Generation Organometallic Reagents and Coupling Reactions: Triarylbismuths as Atom-economic Multi-coupling Organometallic GREEN reagents in Organic Synthesis, XIV NOST-Organic Chemistry Conference Cidade De Goa, GOA; Dec 5-8, 2010: Dr. M. L. N. Rao.

116. New Generation Organometallic Reagents for Coupling Reactions: Triarylbismuths as Atom-economic Multi-coupling Organometallic GREEN Reagents in Organic Synthesis: Dr. M. L. N. Rao.
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.
118. New Generation Organometallic Reagents and Coupling Reactions: Triarylbismuths as Atom-economic Multi-coupling Organometallic GREEN Reagents in Organic Synthesis: Dr. M. L. N. Rao.
119. National symposium on Organometallic Chemistry and Organic Synthesis: Highlights and Perspectives (OMCOS-2011), Department of Chemistry, North Eastern Hill University (NEHU), SHILLONG MARCH 28-29, 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.
122. Effects of Axial Ligand and their Orientations in a Nonplanar Porphyrinic Environment, International Conference on 60th Anniversary Conference on Coordination Chemistry in Osaka, JAPAN during September 27-30, 2010 organized by Chemical Society of Japan: Dr. S. P. Rath.
123. Modulation of Iron Displacements and Axial Ligand Orientations in a Nonplanar Porphyrinic Environment, International Conference on Porphyrin and Phthalocyanines held on New Maxico, USA during July 3-10, 2010: Dr. S. P. Rath.
124. A Novel Series of Oxo and Hydroxo Bridged Fe(III) Bisporphyrins: Synthesis, Structure and Properties, Department of Chemistry, University of California, Davis, USA on 12th July, 2010, Dr. S. P. Rath.
125. A Novel Series of Oxo and Hydroxo Bridged Fe(III) Bisporphyrins: Synthesis, Structure and Properties, DST Group Monitoring Workshop at Department of Chemistry, IITK on April 05, 2010: Dr. S. P. Rath.
126. Viscosity Inside A Nano-Cavity: A Femtosecond Fluorescence Up-Conversion Study Of Malachite Green Iupan Conference on Photochemistry 2010, Ferrara, Italy 14 July 2010: Dr. P. Sen.
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.
128. Frontiers of Chemistry: Molecules, Materials, and Drugs. Council Meeting ISCA 7th May 2010: Prof. Vinod K. Singh.
129. Role of Chemistry in Quality of Life. Council Meeting ISCA 7th May 2010: Prof. Vinod K. Singh.
130. Asymmetric Synthesis: Past, Present, and Future Perspectives. XIV Ischia Advanced School of Organic Chemistry (IASOC) conference, September 25-20, 2010, Italy: Prof. Vinod K. Singh.
131. Recent Progress in Enantioselective Organocatalytic Aldol Reaction, INDIGO meeting, October 3rd - 6th 2010 in Regensburg, Germany: Prof. Vinod K. Singh.

132. Organocatalytic syn- and anti-Aldol Reactions in Aqueous Medium, Annual meeting Indo-French Center for Organic Synthesis (IFCOS) VI meeting. September 14th-17th 2010, Université de Renne, Rennes Cedex, France Enantioselective: Prof. Vinod K. Singh.
133. Organic Synthesis: From Creativity to Sustainability and Human Well-being". "Dr. G.P.Chatterjee Memorial Lecture" for the year 2010-2011, Indian Science Congress, Jan 3-7, 2011, SRM University, Kattankulathur: Prof. Vinod K. Singh.
134. Enantioselective reactions catalyzed by chiral pybox-diph-metal complexes. 98th Indian Science Congress, Jan 3-7, 2011, SRM University, Kattankulathur: Prof. Vinod K. Singh
135. Enantioselective Organocatalytic Aldol Reaction, IISER Mohali 20-21st Feb. 2011: Prof. Vinod K. Singh.
136. Enantioselective Friedel-Crafts Alkylation Reactions Catalyzed by PYBOX-DIPH-Metal Complexes, National Symposia on Organic Synthesis, ICG, Jaipur, 18-19 Feb, 2011: Prof. Vinod K. Singh.
137. Creativity in Organic Synthesis and its Implications on Human wellbeing, University of Jammu, February 28, 2011: Prof. Vinod K. Singh.
138. Scalable Size and Complexities in Silver-Adenine Frameworks. First China-India-Singapore Symposium on Crystal Engineering, National University of Singapore, Singapore, 2010: Prof. S. Verma.
139. Development of New Methodologies in Carbohydrate Chemistry: Application in the Synthesis of Some Biologically Important Molecules, Department of Chemistry, IIT Guwahati, Guwahati (January 03, 2011): Prof. Y. D. Vankar.
140. Invited speaker and Session Presided at CLEO-2010 in San Jose, CA during May 18-20, 2010, Prof. D. Goswami.

Electrical Engineering

141. Ultra Wideband Microwave Imaging and Testing, One Day Workshop on Ultra Wideband Systems (UWBS-2011), Aligarh Muslim University, Aligarh, Department of Electronics Engineering, Aligarh, U.P., India, March 24, 2011, M.J. Akhtar.
142. Material and Process Development in Fabrication of Polymer Solar Cells, International Conference on Photochemical Conversion of Solar Energy, held Amirtha V. V. University Coimbatore, Invited Talk by Dr. RS Anand.
143. Organic Semiconductor Devices and Modules – Processing and Characterization, UGC-NRC-Material Winter School on Polymer Synthesis, Characterization and Application, 20 -24 Dec 2010 held at Department of Materials Engineering, IISc, Bangalore, Invited Talk by Dr. RS Anand.
144. Recent Advances in Solar Cell Technologies, National Conference on Innovations in Power Electronics, Controls and Systems, M.A.M Engineering College, Tirchy, Tamil Nadu, 18 Mar 2011. Invited Talk by Dr. RS Anand.
145. Automatic and Robust Detection of Facial Features in Frontal Face Images, 2011 UKSim 13th International Conference on Modelling and Simulation, Cambridge, UK March 2011, Anima Mazumdar, Laxmidhar Behera and KS Venkatesh.
146. A Novel Approach of Human Motion Tracking with the Mobile Robotic Platform, 2011 UKSim 13th International Conference on Modelling and Simulation,

Cambridge, UK March 2011. Meenakshi Gupta, Laxmidhar Behera and KS Venkatesh.

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.
148. A System of Systems Approach to Face Feature Tracking in Real-Time Applications, IEEE Conf on System of Systems Engineering, 2010, (22-24, June) Loughbrough, UK, Himansu Singh, Vipul Arora, Laxmidhar Behera and Ashish Dutta.
149. Face Feature Tracking with Automatic Initialization and Failure Recovery, 2010 IEEE International Conferences on Cybernetics & Intelligent Systems (CIS 2010) and Robotics, Automation and Mechatronics (RAM 2010), Singapore, 28-30 June, 2010, Himansu Singh, Vipul Arora, Laxmidhar Behera and Ashish Dutta.
150. Optimal design and control of a hand exoskeleton, 2010 IEEE International Conferences on Cybernetics & Intelligent Systems (CIS 2010) and Robotics, Automation and Mechatronics (RAM 2010), Singapore, 28-30 June, 2010, Felix Orlando, Ashish Dutta, Anupam Saxena and Laxmidhar Behera.
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 plenerrary 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.
155. Criteria for choice of material for building organic solar cells DAE-SSPS-2010, Manipal University, 26th to 30th December, 2010. S. Sundar Kumar Iyer.
156. Recent Developments in Solar Power Generation at the QIP sponsored short-term course on ‘Intelligent System Applications to the Smart Electric Grid Solutions held at IIT Kanpur, 18th November, 2011. S. Sundar Kumar Iyer.
157. Organic Electronics in Future of Electronics session at the 2nd The Indo-German Frontiers of Engineering Symposium, co-organized by the Department of Science and Technology (DST), Government of India and the Alexander von Humboldt Foundation at Potsdam, Germany, June 24 - 27, 2010. S. Sundar Kumar Iyer.
158. Organic Solar Cells tutorial at the International Symposium on Photovoltaic Science and Technology at IIT Kanpur on 12th January, 2010. S. Sundar Kumar Iyer.
159. Wind-Solar Hybrid Power Plant: Universal Renewable Power Module at GE Global Research Center Bangalore on Jan 27, 2011, Mishra S. K.
160. DC-DC converter for microgrid application’ at IEEE lecture at MNNIT Allahabad on Feb. 09, 2011, Mishra S. K.

161. A Hessian based numerical convergence analysis of a dual-grid Tikho-nov regularized Gauss-Newton reconstruction approach to electromagnetic tomography, Oral presentation at PIERS 2011, Marrakesh, Morocco, Mar 20-23, 2011. (PIERS: Progress in Electromagnetics Research). Naren Naik and Jerry Eriksson.
162. Robust PI controller for multi-purpose voltage controlled VSI, Proceedings of Emobility - Electrical Power Train, 2010, Leipzig, Germany, 10.1109/EMOBILITY.2010.5668043, November 2010. S. Shah and P. Sensarma, P. Chaudhary.
163. Stability analysis of input-series output-parallel connected buck rectifiers, Proceedings of Emobility - Electrical Power Train, 2010, Leipzig, Germany, 10.1109 / EMOBILITY. 2010.5668072, November 2010. P. Chaudhary, A. Agarwal and P. Sensarma, P. Chaudhary.
164. Power Converters, Crompton Greaves Global R&D Ltd., Electronics Division, Mumbai, P. Sensarma.
165. Basics of Transmission Lines, Impedance Transformer, Matching Circuits, 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.
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.
169. RF and Microwave Measurement 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.
170. Composite Right/left Handed (CRLH) Meta-Material Transmission Line in IEEE Seminar on 'Meta-materials-A Paradigm in Electromagnetics' on Dec. 23 – Dec 24, 2010 organized by IEEE AP/MTT Joint Chapter, Gujarat Section. K.V.Srivastava.
171. Microwave Filter Design for RF Application," in 3-days short course on RFIC Design Penang, Malaysia Dec. 13 - Dec 15, 2010. Kumar Vaibhav Srivastava.
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.
174. Smart Grid: Few Concepts and System Perspective' in a QIP Course on Intelligent System Applications to the Smart Electric Grid Solutions at IIT Kanpur, November 15, 2010. Srivastava S.C.

175. Wide Area Monitoring and Control' during 16th National Power Systems Conference, Hyderabad, on December 15, 2010, Srivastava S.C, Dr. Saikat Chakrabarty.
176. Invited plenary lecture on 'Smart Management of Electricity Grid using Synchrophasor Technology' in National Seminar on Recent Advances in Electrical Power and Energy System Management (RAEPESM-2011), March 25-26, 2011, MMMEC Gorakhpur, Srivastava S.C.
177. International Conference on the European Energy Markets (EEM10), June 23-25, 2010, Madrid, Spain. Singh S.N.
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.
181. National Conference on Emerging Trends in Engineering and Technology, Shree L R Tiwari College of Engineering, Mumbai, March 11,2 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.
183. Contemporary Resistant Movements in Orissa and Social Impacts of IT Revolution in India - UGC Lecture Series, Department of Sociology, University of Pondicherry (a Central University) October 25- 27, 2010. B.K. Pattnaik.
184. Science and Technology under Globalisation, Social and Economic aspects of Industrial Technology transfer from Developing countries to Developed countries. Lecture Series, Department of Humanities and Social Sciences IIT Guwahati, Dec. 14-18, 2010, B.K. Pattnaik.
185. Contemporary Tribal Resistance Movements in Orissa: Studies on Collective Mobilization by the Development Induced Displaced. - UGC Special Lecture series, Dept. of Sociology, North Eastern Hill University (NEHU), Shillong, March 3-5, 2011, B.K. Pattnaik.
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.
187. Disaster and Lifestyle: Cultural Considerations- Seminar on "*Prevention is Better than Cure: Ways to keep Lifestyle Diseases at Bay*". Hindu College, University of Delhi, September 8-10, 2011, Kumar Ravi Priya.
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.

190. Science Fiction and/as Science Communication, Indo-USSTF Science and Technology Forum workshop on Science Communication, Centre for Contemporary Studies, IISc, Bangalore, Dec. 13-15, 2010, Suchitra Mathur.
191. Human Rights in the Era of Globalization. Keynote Address: National Seminar on *Globalization and Marginalized Groups,* Department of Sociology, Halim Muslim PG College, Kanpur, January 12, 2011 - Munmun Jha.
192. Subjective well-being and Happiness: Regret, Felt Justice/ Injustice, and Parental attitudes as possible correlates. Invited talk at *PsyCon,* M.L.B. College, Bhopal, January 6-8, 2011. – L. Krishnan.
193. Distributive justice in India – A comment on the state-of-the-art. State-of- the-Art Lecture (invited). 20th Annual Conference of NAOP (National Academy of Psychology, India), JNU, New Delhi – December, 2010. L. Krishnan.

Industrial Management and Engineering

194. Power Procurement, Bidding & Trading Strategy (Demand Forecasting)" Training Programme on Power Market and Power Trading for APTRANSCO, Hyderabad, 14-16 Dec. 2010 Organized by Indian Energy Exchange (IEX), Anoop Singh.
195. Indian Power Market: Road Ahead for Buyers, Sellers and Regulators", NPTI-PXIL Course on Power Markets, 14th – 16th July 2010, NPTI Faridabad, Anoop Singh.
196. Renewable Energy: Policy Options and Research Issues", Short term course on "Energy & Environment Management, 10-14 May 2010, NIT Hamirpur, Anoop Singh.
197. Energy & Environment Policy: Current Status and Research Issues", Short term course on "Energy & Environment Management, 10-14 May 2010, NIT Hamirpur, Anoop Singh.
198. Implementing Renewable Energy Certificates in India: Economic Analysis for a Proposed Regulatory Approach", Indo–European Workshop on Solar Energy, 20-22, April 2010, IIT Rajasthan, Anoop Singh.
199. Effective Regulation for Renewable Energy: An Analysis of Renewable Energy Certificates", India Energy Security Summit: Energy Security for a sustainable future, 03-04 March 2011, New Delhi, IPPAI, Anoop Singh.

Mathematics

200. Mathematical Modeling & Epidemiology at a referesher course in the Department of Mathematics, Delhi University, Dec. 22 and 23, 2010, Peeyush Chandra.
201. Resource person for the summer workshop on Mathematical Modeling, held at Kalasalingam University, Krishnankoil (TN), June 2010, Peeyush Chandra.
202. Resource person in the DST Workshop on 'Stability & Bifurcation Analysis and Pattern Formation in Mathematical Ecology and Epidemiology' at IIT Kanpur, Feb. 25-March 2, 2011, Peeyush Chandra.
203. Presented 02 lectures in the Centre of Advanced Study, Punjab University during December 22-25, 2010, M. K.Kadalbajoo.

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

206. Transport Processes at Micro Scales, National Workshop on Recent Advances in Micro-Electro_mechanical System, Institute of Technology, BHU, March 07-09, 2011, P. K. Panigrahi.
207. Optical Characterization of MEMS, National Workshop on Recent Advances in Micro-Electro_Mechanical System, Institute of Technology, BHU, March 07-09, 2011, P. K. Panigrahi.
208. Pulsating Heat Pipe Heat Exchangers, 21st International Symposium on Transport Phenomena, Kaohsiung City, Taiwan ROC, November 2010, S. Khandekar.
209. Biofuels Research: Challenges and Opportunities, Keynote Speech in 5th International Conference on Innovations in Food and Bio-process Technology, December 2010, AIT, Bangkok, Thailand, A.K. Agrawal.
210. Bifurcations in higher-dimensional nonlinear systems, Indo-UK workshop on Advanced Instability Methods, 10-12 January, 2011 Chennai, India, P. Wahi.
211. Dynamical systems approach to fluid convection, International seminar series on Applied Mechanics, Center for Applied Dynamics Research, University of Aberdeen, Aberdeen, Scotland, UK, July 16, 2010, P. Wahi.
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
214. Microscale Heat Conduction, presented during the QIP sponsored course on Microscale Transport Phenomena at IIT Kanpur, January 2011, K. Muralidhar.
215. Dropwise condensation on textured surfaces, presented during the QIP sponsored course on Phase Change Phenomena at IIT Kanpur, January 2011, K. Muralidhar.
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.
217. Recent developments in computational fluid flow and heat transfer, presented at Vellore Institute of Technology, Vellore, 4th February 2011, K. Muralidhar.
218. Mathematical modeling of fluid flow and transport phenomena in biological systems, presented during the QIP sponsored course on Biofluid Mechanics at IIT Kanpur, March 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.
220. Lager-Eddy Simulation: A Preview, Workshop on Computational Fluid Dynamics, Centre for Modeling, Simulation and Design, University of Hyderabad, 21-25 September, 2010, S. Sarkar.

221. Liouvile-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.
224. Equilibrium shapes of rubble-pile binaries, IIT Hyderabad, ME, Hyderabad, Ishan Sharma.
225. Stability of rubble-pile asteroids, IIT Kanpur, AE, Kanpur, Ishan Sharma.
226. Applications of Ultrasonic Tomography to find defects in Composite Materials, Preconference tutorial on Signal Analysis, Simulation and Modeling; National Seminar on Non-Destructive Evaluation, Dec 7-8, 2010, Organized by ISNT, N. N. Kishore.
227. Micromanufacturing: An Overview, 4th Int. and 24th AIMTDR conference held at Visakhapatnam (A.P.) during Dec. 13- Dec. 15, 2010, V. K. Jain.
228. Micromachining:An Overview, Pre-conference workshop held at Andhra University, Visakhapatnam (A.P.) during Dec. 10- Dec. 12, 2010, V.K. Jain.
229. Nanofinishing Techniques: An Overview, Indo-Austria workshop held at NFTDR at Hyderabad, Dec. 8-, 2010, V.K. Jain.
230. Flexible Manufacturing Processes, BCT Kumaon Engineering College, Department of Mechanical Engineering, Dwarahat, N V Reddy.
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

232. Present Understanding and Future prospects of Phase and Microstructure Evolution in Severe Plastic Deformation Processes, Coorg, Karnataka, 20-23rd February, 2011, Kallol Mondal.
233. Amorphous alloy and Its Composite for Futuristic Engineering Applications, at Institute of Engineers, Kanpur Chapter, 26th December 2010, Kallol Mondal.
234. Hydroxyapatite based bioceramic composites for hard tissue replacement and Analytical/Experimental study on cell-electric field interaction; SCTIMST, Trivandrum, 4th March, 2010, B. Basu.
235. Development of borides for armour applications; DMRL, Hyderabad, 5th March, 2010, B. Basu.
236. Processing-Microstructure-Biocompatibility relationship of HAp based composites and experimental results on influence of electric and magnetic field on cell-material interaction; Advanced Ceramics department, Universität Bremen, Germany, 5th July, 2010, B. Basu.
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.

239. Multi-Stage Spark Plasma Sintering to Develop ZrB2-18wt%SiC-xwt%TiSi2 Composites With Better Properties; 3rd International Ceramic Congress, ICC-3, held at Osaka, Japan during November 14-18, 2010, Basu.
240. Influence of moderate intensity Static Magnetic Field exposure on Bacterial cell adhesion and viability on biomaterial surface; 3rd International Ceramic Congress, ICC-3, held at Osaka, Japan during November 14-18, 2010, B. Basu.
241. Electrically Stimulated Enhancement of Cell Proliferation on Ferroelectric-Hydroxyapatite Composites; 3rd International Ceramic Congress, ICC-3, held at Osaka, Japan during November 14-18, 2010, B. Basu.
242. Bridging gap between Materials Science and Biology: An interdisciplinary approach to Design biomaterials; MRS-J Conference in Yokohama, Japan, 21st December, 2010, B. Basu.
243. Spark Plasma Sintering of HA-Ti composite: in Vitro biomineralization and cell culture; at the 35th International Conference & Exposition on Advanced Ceramics & Composites (ICACC), held in Daytona Beach, Florida, January 23-28, 2011, 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.
246. Cytotoxicity and genotoxicity property of Hydroxyapatite-mullite eluates, at the International Symposium on the Safe use of Nanomaterials and Workshop on Nanomaterial Safety: Status, Procedures, Policy and Ethical Concerns (SUN 2011), held at Lucknow, India, February 1-3, 2011, B. Basu.
247. Genotoxicity property of Hydroxyapatite-mullite eluates, at the Indo-Australian meet at IISc, Bangalore, sponsored by DBT, Government of India, February 7, 2011, B. Basu.
248. Bridging gap between Materials Science and Biology: An interdisciplinary approach to Design biomaterials; Department of Ceramic Engineering, Banaras Hindu University (BHU), Varanasi, India, 28th March, 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.
250. Hydrogen in steel, Mahindra Ugine Steel Industries, Khopoli, Maharastra , 2011 January, D. Mazumdar.

Physics

251. MBI Workshop on Transport in a Cell, Mathematical Biosciences Institute, Columbus, Ohio, USA (2010), D. Chowdhury.
252. Adv. School on Living Mechanics: Cells, Tissues and Organisms, ICTS prog., National Centre for Biological Sciences, Bangalore (2010). D. Chowdhury.
253. TWIM: Tata Institute of Fundamental Research, India, and Weizmann Institute of Science, Israel, Interaction Meeting, Mumbai (2010). D. Chowdhury.

254. 4th India-Singapore Joint Physics Symposium, Singapore, (2011). D. Chowdhury.
255. Mobility, Diffusivity and Relaxation in Organic Semiconductors: Measurements that Challenge Models Invited Lecture delivered at Institute of Materials Research, Singapore in Symposium on Organic & Polymer Electronics: IMRE, December 9-10, 2010 Singapore.
256. Transport and Injection of Carriers in organic Semicondcutors in SCDT Organic Electronics Course Indian Institute of Technology, Kanpur July 05, 2010.
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.
259. Challenges of turbulence simulations on petascale supercomputers, In Next Generation Application Challenges on PARAM Yuva, CDAC Pune, Feb. 2011 (Plenary talk). M.K. Verma
260. Field Reversals in Convection and Dynamo, in National Conference on Nonlinear Systems and Dynamics (NCNSD) 2011, Trichy, Jan. 2011. M.K. Verma.
261. Accurate Fluid Simulations Using Pseudo-spectral & Spectral-element Method, in Indo-Russian Workshop on High Performance Computing in Science and Technologies, CDAC Pune, Nov 2010. M.K. Verma.
262. Dynamo transition, in UAH Huntsville Workshop 2010 on Partially Ionized Plasmas throughout the Cosmos, Nashville USA, October 2010 (work with R. Yadav, M. Chandra, S. Paul, and P. Wahi). M.K. Verma.
263. Bifurcation and chaos in Rayleigh-Benard convection, in Perspectives in Nonlinear Dynamics (PNLD), IISc Bangalore, July 2010 (work with P. Wahi, P. Pal. S. Paul, and P. K. Mishra). M.K. Verma.
264. Varieties of organization in the flowing driven state of vortex matter, at International conference on Vortex Matter in Superconductors, Chicago, Organizers, Argonne National Laboratory, USA. July 31st – 5th Aug, 2011, Satyajit Banerjee.
265. Driving through traffic jams in superconductors, Institute Colloquium, Tata Institute of Fundamental Research, Mumbai, April 2011, Satyajit Banerjee.
266. Promise of Nanotehnology (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.
268. Photonic crystals – I, II and III", SERC School on Nano-Optics, Physics, Hamirpur, 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.
274. Entanglement and decoherence in quantum dots.; Indo Brazil Workshop on cold atoms, mesoscopic systems and QI processes, Hyderabad, Oct 16-18 2010, V. Ravishankar.
275. Control, tomography and entanglement in photon emission from atomic systems; International Conference on quantum optics and quantum computation, JI 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 partcipation 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.
9. World Seismic Safety Initiative (WSSI), National Technological University, Singapore, Board of Directors Meeting, 27-28 Feb. 2011, D. C. Rai.
10. Visited HS&E Group, BARC, Mumbai during June 5-12, 2011, S.N. Tripathi.

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.Bhattacharya.
13. University of Edinburgh, INSA visiting scientist, May - July 2010, Yogesh M Joshi.

Chemistry

14. Visiting Professor for a month during June-July, 2010, Univ. of Strasbourg, Strasbourg, France: Prof. J. N. Moorthy.

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.
19. National Institute of Science and Technology, NARA, Japan, 15 March – 27 March 2011, Behera L.
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.
26. Visited Power Grid Corporation of India Ltd., Gurgaon and Crompton Greaves Ltd., Mumbai, 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.
31. Was examiner for the PhD thesis of Mr Hari Varma, Dept of Instrumentation, I.I.Sc, Bangalore in July 2010, Naren Naik.

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.
36. Guest Professor- Academic and administrative advisory activities -March 2011, IIT Gandhinagar, Suchitra Mathur.

Industrial Management and Engineering

37. IE Business School, Madrid, Spain; National Instituite of Science, Technology & Development Studiers, New Delhi; T.A.Pai Namagement Institute, Manipal; Maastricht University, School of Business, Netherlands, J.Chatterjee.

Mechanical Engineering

38. Northwestern University, Evanston, Collaborative Research work, May – June 2011, N.V. Reddy.
39. IIT Hyderabad, To interact with students and faculty, Nov 2010, N.V. Reddy.
40. IITChennai, Discussion on collaborative Research, Visitor, June 26, 2011, Prof. Sunil Kumar, dept. of Physics, IIT Chennai, S. Das.
41. University of Aberdeen, Aberdeen, Scotland, UK, P. Wahi.
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.
44. Universitaet Kassel, Alexander von Humboldt Fellowship, June 01-30, 2010, Prof. Dr. A. Luke, P.Munshi.
45. Ulsan National Institute of Science and Technology, Korea, Collaborative Research, Visitor, May 2010, Ishan Sharma.
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.
50. Visited Maruti Udyog Limited for collaborative project on detection of reliability failures for automation in WELD shop 3, 23rd March, 2011, S. 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.
55. Chicago University, USA, Oct. 2010, National Center for Atmospheric Research, Boulder, USA, Oct. 2010, TIFR, India, June 2011 M.K. Verma.
56. Workshop at University Libre de Bruxelles, Belgium, Aug. 2011, CDAC Pune, June 2011. M.K. Verma.
57. Collaboration ENS, Paris, Aug. 2011. M.K. Verma.
58. Tata Institute of Fundamental Research, Mumbai, Research, Visiting Scientist, May – June, 2011, Satyajit Banerjee.
59. NIT Hamirpur, SERC school on Nano-optics, Invited speaker, 21-22 Sept, 2010, R.Vijaya.
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.
6. ISPRS Workshop on Digital Preservation of Archaeological Heritage, IIT Kanpur, 18-19 October 2010, Government and Industry participants, Bharat Lohani with Onkar Dikshit.
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

8. Delivered a lecture in ICTS School on "Understanding Molecular Simulations: Theory and Applications" UMS (2010) held at IIT Kanpur during November 4-13, 2010, Dr. P. A. Apte.
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.
10. Recent Trends in Fuels & Lubricant (continuing education programme), DMSRDE, Kanpur, Scientists of DRDO laboratories, 21 to 25 February 2011, Yogesh M Joshi.
11. Delivered a lecture in ICTS School on "Understanding Molecular Simulations: Theory and Applications" UMS (2010) held at IIT Kanpur during November 4-13, 2010, Dr. Jayant K. Singh.

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.
16. Convener of "School on Understanding Molecular Simulations: Theory and Applications", sponsored by ICTS, TIFR Mumbai, held at Indian Institute of Technology Kanpur, November 3-13, 2010. (Co-Conveners: Drs. M. Ranganathan, N. Nair (from IITK), S. Sengupta (IACS Kolkata) and S. Sastry JNCASR Bangalore): Prof. A. Chandra.

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.
18. A short course on "OFDM based next generation wireless standards", May 17-19, 2010 (co-organized with Aditya Jagannatham), Banerjee Adrish.
19. A short course on "Cognitive radio: The Next Frontier in Wireless Communications", November 23-25, 2010, Banerjee Adrish.
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.
22. Organized a National Workshop on 'Deployment and Use of NPTEL Courses' during 12-13 July 2010, 2010 at IIT Kanpur, Srivastava S.C.
23. Organized a National Workshop on 'Deployment and Use of NPTEL Courses' during 30-31 October 2010, 2010 at JSS NOIDA, Srivastava S.C.
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

25. Two Lectures: "Communication Across Cultures" and "Netiquette": Workshop on Soft Skills, Department of English, Babu Banarasi Das National Institute of Technology and Management, Lucknow. September 18, 2010, T. Ravichandran.
26. Two Lectures: "Cross-Cultural Communication" and "Non-Verbal Communication" - QIP Short Term Course on Culture and Communication- QIP Centre, Indian Institute of Technology Roorkee, Roorkee - June 21- 25, 2010, T. Ravichandran.
27. Two lectures: "Introduction to Human Rights" and "Naxalite Violence and Response", QIP Short-term course on Macro Human Culture and Social Environment. QIP Centre, IIT Roorkee, June 7 2010, Munmun Jha.

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

31. Transport Phenomena in Phase-Change and Reacting Systems, Short-term Course, Duration: 5days, Place IIT Kanpur, Date: January 10-15, 2011, Jointly organized M.K. Das and S. Khandekar.
32. Micro Scale Engineering, Short Term Course on January 3rd to January 8th (2011), Engg. College Teachers and Research Labs, P. K. Panigrahi.
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.
35. A one-week short course sponsored by Quality Improvement Program for engineering college teachers and industry entitled "Diesel Particulate and NOx Emissions: Formation and Control", September 10-14, 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.
37. Bio-Fluid Mechanics, Conducted QIP sponsored short term course March 04-09, 2011, A.K. Saha.
38. Conducted an AICTE sponsored course on "Micromanufacturing". V.K. Jain.

39. QIP Course on Mechanics of Fracture: A Modern perspective, 19-24 March, 2010.

Materials Science Program

40. Emerging Trends in Carbon Nanotechnology, Quality Improvement Programme, IIT-Kanpur, 14-18th December, 2010, Academic Institutions, K. K. Kar.
41. Carbon Nanotechnology: Potential and Challenges, International Conference, IIT-Kanpur, 15-17th December, 2010, Academic Institutions, National Laboratories, Private Industries, K. K. Kar.

ANY OTHER IMPORTANT ACTIVITY

Aerospace Engineering

1. International Conference on Intelligent Unmanned Systems, Bali, Indonesia, Nov. 2010, C. Venkatesh.
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.
4. Session Chairman: International Conference on Intelligent Unmanned Systems, Bali, Indonesia, Nov. 2010, C Venkatesan.
5. Establishing high strain rate and optical testing facilities in Aerospace Structures Laboratory, R. Kitey
6. Session Chair, Materials Conclave (Frontiers in nanostructured materials for next- generation nanotechnology), IIT Kanpur, Dec 21, 2010, R. Kitey.
7. 37th Solid Mechanics Conference, Warsaw, Poland from 6-10 September 2010, P.M. Mohite.
8. ICC-CFT2011, held at IISc Bangalore, January 2011, C.S. Upadhyay.
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.
11. PhD student has submitted thesis titled "Micromechanics based continuum damage model for ply failure in unidirectional composites". Student: V. Murari, 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.
14. Seminar Presented, Hydrogen Energy Production Methods, TERI, University, New Delhi, 2011, D.P. Mishra.
15. Editor, 8th Asia-Pacific Conference on Combustion, 2010, D.P. Mishra.
16. Member, National Organizing Committee, CHEMCON-2011, D.P. Mishra
17. Editorial board member, Journal of the Chinese Institute of Engineers, Published by Taylor & Francis, 2011, D.P. Mishra
18. Editorial board member, International Journal for Turbines and Energy, 2011, D.P. Mishra
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
22. National Mission Project on Pedagogic Development : Introduction to Combustion, D.P. Mishra
23. Virtual Combustion and Atomization Lab, D.P. Mishra
24. Design and development of pedal powered car, 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

26. Member of the Governing Council, Motility & Functional Disease Association, established 2011, A. Pal.
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.
30. International Travel Award received by Vivek Modi from the Biophysical Society, U. S. A. in the 55th Annual Biophysical Society Meeting held in Baltimore, U.S.A. in March 2011 for his work "Differential binding affinities of anti-apoptotic MC1-1 and A1 proteins for the pro-apoptotic BH3 peptides: Understanding the molecular basis using MD simulations."
31. Associate Editor, Annals of Neurosciences (official journal of the Indian Academy of Neuroscience), S. Ganesh.

Civil Engineering

32. Co-chair, Technical Session-I, Indo-US Workshop on Highway and Airport Pavement Engineering: Challenges and Opportunities, July 30-31, 2010, IIT Kharagpur, Das, A.
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.
39. Editorial board GIM International, Netherlands, 2009-2011, 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.
46. Member, Working Group for preparation of Science Plan on Aerosol and Greenhouse Gases Monitoring Research by Indian Meteorological Department, December 2010 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.
50. Rviewer of TRB's Taxation and Finance Committee, Washington, DC, USA, V. Vasudevan.
51. Reviewer of Elsevier's Research in Transportation Economics, 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.
55. Infosys Prize in Engineering and Computer Science, Infosys Science Foundation (2010). (http://www.infosys-science-foundation.com/laureates.html), Ashutosh Sharma.
56. Kapitsa Gold Medal, Russian Academy of Natural Sciences, RANS (2010), Ashutosh Sharma.
57. R. C. Mehrotra Memorial Lifetime Achievement Award, The Indian science Congress Association (2010), Ashutosh Sharma.
58. J. C. Bose National Fellowship, Department of Science & Technology (2006-2011), Ashutosh Sharma (http://dst.gov.in/whats_new/press_releases05/two-prestigious.html).
59. Elected Fellow, TWAS--The Academy of Sciences for the Developing World (2010). http://www.twas.org/, Ashutosh Sharma.
60. INAE Visvesvarya Chair Professorship, Indian National Academy of

Engineering, New Delhi (2011-2013), Ashutosh Sharma.

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.
65. Research Advisory Council, Hari Shankar Singhania Elastomer and Tyre Research Institute, Kankroli, 2009-2011, Ashutosh Sharma.
66. Council Member (Materials), Indo-French Centre for the Promotion of Advanced Research (IFCPAR), New Delhi, 2008-2011, Ashutosh Sharma.
67. Member, Governing Body, Translational Health Science & Technology Institute (THSTI; DBT-MIT-Harvard partnership institute), Faridabad, 2008, 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.
74. Ashutosh Sharma, Member, The Nano Applications and Technology Advisory Group (NATAG), Department of Science & Technology, New Delhi (2008-2012).
75. Coordinator, Indo-US Workshop on Fabrionics: Science of Advanced Fabrication, Aurangabad, December 17-21, 2010, Ashutosh Sharma.
76. Coordinator, Indo- French Workshop/Seminar on Soft Interfaces: Self-organization, Functionalities and Applications, ESPCI, Paris, July 07-09, 2010, 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.
   a. Members of Scientific Committee of "International Scientific Conference on Pervaporation and Vapour Permeation [PERMEA-2010 - Membrane Science and Technology Conference of VISEGRAD Countries]", April 18-21, 2010, Torun (Poland).
   b. Member, External Advisory Committee, S-CHEMCON 2010, 6th Annual Session, Students Chemical Engineering Congress 2010, Process Industries & Sustainable Development, 24-25 September, 2010 at RVR & JC College of Engineering, Guntur, Andhra Pradesh.
   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,

IIT Bombay S.K. Gupta.

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.
91. REVIEWER/EVALUATOR: PROJECTS/PROPOSALS/PATENTS, 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

93. Convener of "Golden Jubilee Conference on Moleculues, Supramolecules and Materials", held at IIT Kanpur, October 1-3, 2010 (Co-Conveners: Drs. J. Bera and S. Verma): Prof. A. Chandra.
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.
97. Co-organizer with K. Srihari and P. Sen: Spectroscopy Dynamics of Molecules and Clusters (SDMC-2011), Feb. 16-18, 2011: Prof. D. Goswami.
98. Chair: Indo-US Discussion Meeting with Lockhead-Martin Team & Indian Researchers on Quantum Computing, Fulbright House, New Delhi: Jan. 17, 2011: Prof. D. Goswami.
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.
101. Kinetic Monte Carlo simulations of Silicon Germanium thin films, Poster, Theoretical Chemistry Symposium (TCS 2010), December 8-12, 2010, IIT Kanpur, Pinku Nath and Madhav 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.
104. Member, Editorial Board of Inorganica Chimica Acta (Elsevier) (2011 – 2013): Prof. R. N. Mukherjee.
105. Editor-in-Chief, Journal of Spectroscopy and Dynamics, Simplex Academic Publishers: Prof. D. Goswami.
106. International Council Member, Optical Society of America, USA: Prof. D. Goswami.
107. Special Issue Dedicated to Professor Animesh Chakravorty on the occasion of his 75th birthday, Inorg. Chim. Acta 2010, 363, 2693-3138. Acted as Guest Editor

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.
109. Vice President, Chemical Research Society of India (2011-2014): 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 Enginnering

113. Election to the Technical Expert Committee of the Election Commission of INDIA: Rajat Moona.
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.
131. Editorial Board Editor, International Journal of Renewable Energy Technology, 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.
136. Real-Time Digital Simulation Facility for Advance Research in Power and Control, S.C. Srivastava, S.N. Singh, S. Chakrabarti, Parthasarthy Sensarma.
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.
140. Chaired Sessions entitled Collective Mobilization by the Development Induced Displaced and Liberalizing research in science and technology; Institutional aspects at ISA XVII World Congress of Sociology (International Sociological Association), University of Gothenburg, Sweden. July 12 and 13, 2010, B.K. Pattnaik.
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.
142. Resource person in the Brainstorming Session on "M.Sc. (Integrated) Economics Programme" Doon University, Dehradun, February 7, 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 modelof 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
149. Team- building. Institute of Chartered Accountants of India, Kanpur (for CA Trainees): July 2010 and February 2011 - 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).
155. Paper presented at the Asia- Pacific Business Research Conference organized by the World Business Institute, Australia, Feb 22, 2011, Paper authored by Dr. Dr. S.K. Mathur & Ms. Archana Srivastava.
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

158. International Conference on Technology and Business Management (ICTBM-11), SZABIST, Dubai, March 28-30, 2011, Peeyush Mehta, R K Amit.
159. 14th Annual conference of Society of Operations Management, NITIE. Mumbai, December 2010. Lokendra Devangan, R K Amit, Peeyush Mehta, Kripa Shanker, Sanjeev Swami.
160. 14th Annual conference of Society of Operations Management, NITIE. Mumbai, December 2010. Peeyush Mehta R K Amit.
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.
166. Reviewer: American J of Operations Research; Computers and Mathematics; International J of Manufacturing Technology and Management, RRK Sharma.
167. Reviewer: International Journal of Case Studies in Management, World Development, Philosophy of Management, Decision, Rahul Varma.
168. Appointment as Editor: American J of Operations Research from Mar 20, 2011 for a period of one year, Dr. RRK Sharma.
169. Appointed to Research Advisory Board of National Institute of Science Technology & Development Studies, CSIR, New Delhi, India. Jayanta Chatterjee.
170. Appointed to Academic Advisory Board of T.A.Pai Management Institiute, 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.
174. Study Group for System Loading Charges, UP Electricity Regulatory Commission, Anoop Singh.
175. Advisory Committee for Capacity Building of distribution Personnel under R-APDRP, Ministry of Power, Government of India, Anoop Singh.
176. Research Advisory Committee, Council of Power Utilities, New Delhi, Anoop Singh.
177. Proposed Modification in the Methodology for Calculating Escalation Indices for Use in Tariff Based Competitive Bidding, Central Electricity Regulatory Commission, Nov. 2010, 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.
181. Biography Dr.S. Misra, IME, appeared in Marquis Who's Who in Science and Engg , USA, 2010, Dr.S. Misra.
182. Experimental Design for Managers, Dr. Deepu Philip.

Mechanical Enginnering

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.
186. Member of VLFM Thailand mission, March 22 – 25, 2011 (visited various universities, research laboratories and Industry) N. V. Reddy.
187. Member, Scientific Committee, The 6th International Conference on Micro Manufacturing, March 7-10, 2011, Tokyo, Japan, N. V. Reddy.
188. Co-organized the minisymposium on "Mechanics and Biophysics of Lipid Bilayer Membranes" at the SIAM Conference on Life Sciences (LS10), 2010, 12-15 July, 2010, Pittsburgh, USA, S. Das.
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, Sesion 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.
207. International Editorial Board, Indian Institute of Metals-University Press Series Member, B. Basu.
208. Associate Editor, Bioceramics Development and Applications; Ashdin Publishing, Belgium, B. Basu.
209. Editorial board member, "Journal of Materials Engineering Innovation-IJMatEI", published by INDERSCIENCE PUBLISHERS, UK (http://www.inderscience.com/ijmatei), B. Basu.
210. Editorial board member, "International Journal of Biomaterials", published by Hindawi Publishing Corporation, USA (http://www.hindawi.com/journals/ijbm), 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

215. Editor-in-Chief, International Journal of Mechanical Engineering and Materials Sciences, ISSN: 0974-584X, K.K. Kar.
216. International-Editorial-Board, Journal of Clinical Rehabilitative Tissue Engineering Research, ISSN 1673-8225, CN 21-1539/R, WK3862, Wanfang, K.K.

Kar.

217. Editorial Board, International Journal of Plastics Technology, ISSN 0972-656X (Print)/0975-072X (electronic), K.K. Kar.
218. Editorial Advisory Board, Journal of Recent Patents on Electrical Engineering, Bentham Science, ISSN: 1874-4761, K.K. Kar.
219. Editorial Advisory Board, Journal of Recent Patents on Engineering, Bentham Science, ISSN: 1872-2121, K.K. Kar.
220. Editorial Advisory Board, Journal of Recent Patents on Nanotechnology, Bentham Science, ISSN: 1872-2105, K.K. Kar.
221. Editorial Advisory Board, Journal of Recent Patents on Mechanical Engineering, Bentham Science, ISSN: 1874-477X, K.K. Kar.

Physics

222. Development of an Indigeneous Scannining 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 Rajastan, 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.
224. Active participation in department/institute administration: Convenor DPGC, Chairman SPGC, M.Sc. Physics lab in-charge, Optics Shop in-charge. Z. Hossain.
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.