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Director's Report

Honourable Chairman, Board of Governors of the Indian Institute of Technology Kanpur, Professor M. Anandakrishnan, Distinguished Chief Guest, Dr. E. Sreedharan, Members of the Board of Governors, Members of the Academic Senate, all graduating students and their family members, 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-fourth convocation of the Indian Institute of Technology Kanpur.

We are particularly happy to welcome Dr. E. Sreedharan, Padmavibhushan, former Managing Director of Delhi Metro, amongst us for today’s forty-fourth convocation.

The academic year closing in May 2012 has been momentous, and I consider it a privilege to review our activities pertaining to this period.

ACADEMIC ACTIVITIES

The academic year 2011-12 has had a successful run. The number of graduating students at the undergraduate levels, 633 and the postgraduate levels, 401 shows a satisfactory trend. In addition, 101 Ph.D students have graduated over the last academic year.

AWARDS AND HONOURS

This year has brought many honours to the Institute. It has been ranked No. 1 amongst engineering institutes in India by ZEE News-DNA-IPSOS survey as well as by India Today.

The Institute has also received the India Today Award for making the most innovative use of technology by offering and using it in a way that enriched life.

I am delighted to inform you that SIDBI Innovation and Incubation Center (SIIC), IIT Kanpur has been selected for the National Award for Technology Business Incubators for the year 2011 by DST’s National Science and Technology Entrepreneurship Development Board.

The many prestigious scholarships and awards received by our students have been a matter of pride and pleasure for us.

Dipendra Kumar Misra, Kartikey Asthana, Massand Sagar Sunil, Shikhar Sharma received the O P Jindal Scholarship. Ankit Kumar, and Ashish Gupta received the World Quant Scholarship. In addition, Shouvik Sachdeva, Anshul Kumar Rai, Akash Goel, have been conferred the Aditya Birla Scholarship. And this year also, all 8 Japanese TODAI scholarships were awarded to IITK students - Meenakshi Khosla, Anyesha Ghosh, Tanmay Gupta, Asish Mahapatra, Vishwas Aggarwal, Taun Kumar Baranwal, Siddharth Sharma, and Kartikey Asthana.
Our students’ research work has also received significant recognition, both nationally and internationally. Mr. Puneet Singh and G Sriram (AE) won the American Helicopter Society student design competition for the best new entry. Mr. Rajesh Vasita (BSBE) received the Bajpai Saha Award for the best oral presentation at the Fourth Indo-Australian Conference on Biomaterials, Tissue Engineering and Regenerative Medicine. Mr. Chandra Shekhar Sharma (CHE) got the Innovative Student Projects Award 2011 from INAE, India. Mr. Ankur Verma (CHE) received the Shah-Schulman Award for the best Ph.D. Thesis in the area of Colloid and Interface Sciences at the CHEMCON 2011, Bangalore. Mr. Anurag Awasthi and Ms. Avani Nandini (CSE) won the Popular Choice Award for their project, and a Gold Medal at the Intel India Embedded Challenge (IIEC), 2011. Mr. Kewal Dharamashi (ME) received thefirst prize in ASME’s Asia Pacific Competition as well as the Best Technical Paper Award. Ms. Shail Pandey (PHY) received the Buti Young Scientist Award in the 26th National Symposium on Plasma Science and Technology. The list of other awards received by the students is given at the end of this report. I congratulate all these students and their supervisors for these accomplishments.

Our faculty has played a significant role in pushing the frontiers of knowledge. And this has been duly recognized in the form of various awards and honours, including fellowships of professional societies and editorships of international journals.

Prof. Kalyanmoy Deb (ME) received the **Infosys Prize 2011** in the category of Engineering and Computer Science. It gives me immense pleasure to tell you that we now have three faculty members and five alumni as Infosys Prize winners. Dr. Binod Sreenivasan (ME) has been awarded the **Swarnajayanti Fellowship** by the Department of Science and Technology. Prof. Sanjay G. Dhande (CSE & ME), Director of the Institute, has been awarded the degree of **Doctor of Science (honoris causa)** in recognition of his contributions in the fields of technical education and engineering research and technology by Uttarakhand Technical University, Dehradun. Prof. Sandeep Verma (CHM) and Dr. Yogesh M. Joshi (CHE) have been awarded the **DAE-SRC Outstanding Investigator award**. Prof. S. Ganesh (BSBE) received the **Rajib Goyal Award** for Young Scientist by the Goyal Foundation, Kurukshetra University. Dr. Tarun Gupta, (CE) (2011) and Dr. Pratik Sen (CHM) (2012) have been awarded the prestigious **Indian National Science Academy (INSA) young scientist medal**. Dr. Priyanka Ghosh (CE) received the **IEI Young Engineers Award 2011-2012** by the Institution of Engineers (India). Dr. Shalabh (MATH) has been selected for the **Prof. C. R. Rao National Award for Young Statisticians** by the Ministry of Statistics and Programme Implementation, Government of India, for significant work in the field of statistics. Prof. Avinash Kumar Agarwal (ME) has received the **INAE Silver Jubilee Young Engineer Award**. Dr. J. Ramkumar (ME) has been selected for the **IEI Young Engineers Award 2011-2012** in Production Engineering discipline. Dr. Kantesh Balani (MSE) has been selected by Elsevier as a recipient of the **Materials Science and Engineering C: Young Researcher Award** for the year 2011. Dr. Kantesh Balani (MSE) also received the Young Leader Professional Development Award, TMS, USA. Dr. Soumik Mukhopadhay (PHY) has been honoured with the **Young Achiever Award** in the 56th DAE Solid State Symposium in Dec 2011. Prof. Satyajit Banerjee (PHY) received the NASI-Scopus Young Scientist award for Physics, 2012 by the National Academy of Sciences, Allahabad. A special invited session in the Catalysis and Reaction Engineering Division was held in honour of Prof.
Santosh K. Gupta (CHE) during the Annual Meeting of American Institute of Chemical Engineering held in Minneapolis in Oct 2011. This honour is in recognition of the outstanding work by Prof. Gupta in the area of Polymer Reaction Engineering.

The year 2011 had been declared as the International Year of Chemistry by the UN. On this occasion, an empowered committee of DST identified the Top Chemistry Departments in the country and sanctioned Rs. 250 lakh to each for augmentation of their facilities. It gives me great pride to tell you that our department of Chemistry was chosen for this grant.

RESEARCH & DEVELOPMENT OVERVIEW

The number of externally funded ongoing projects has reached 522 with a sanctioned amount of is Rs. 344 crore. During 2011-2012, the Institute got sanctions for 107 sponsored projects worth Rs. 5871 lakh and 74 consultancy projects of value Rs. 727 lakh. The major grants sanctioned by various agencies during the year are DST Rs. 3160 lakh, DBT Rs.410 lakh, MOES Rs. 342 lakh, DRDO Rs. 189 lakh, MNRE Rs. 115 lakh, and MOEF Rs. 101 lakh. Some of the major industries which have funded projects are BHEL, NABARD, Thermax, TCS, L&T, IOCL, Samsung and GE. At the international level, organizations like EATON, P&G, Chevron, and Boeing have funded our research. A list of major projects is given at the end of the report.

During the year 2011-12, 15 technologies developed at the Institute were licensed for commercialization, while we filed 13 national patents (2 design patents). In the last financial year, our earnings from intellectual property are around Rs. 62 lakh. SIIC has come up with a comprehensive booklet on Proprietary Technologies of IIT Kanpur.

15 companies are currently being incubated at SIIC while 17 have already graduated. There are 4 current Incubate companies that have achieved a turnover of more than 100 lakh. More than 300 people work at these incubate companies at SIIC.

The Institute exercised its first Exit Option from its Incubate Company Geokno India Pvt. Ltd. The reputed infrastructure corporate GMR Projects Pvt. Ltd bought 13% equity stake of the Institute at a premium of 25%.

I am happy to inform you that the following technologies developed at the Institute have been recognized and launched at the national level.

**SIMRAN**, a GPS based Real Time Train Information System jointly developed by IITK and RDSO was inaugurated by the Hon'ble Minister of Railways in October 2011.

**Jugnu** Micro Satellite was successfully launched with the PSLV C18 rocket on October 12, 2011 from Sriharikota.

**Digital Mandi for Indian Kisan** was inaugurated by Mr. Kapil Sibal, the Hon'ble Minister of Communications and Information Technology and Minister of Human Resource Development in August 2011.
Further, several Softwares have been developed during the year. They are structural dynamic analysis of helicopter rotor blades (developed and transferred to RWR&DC HAL) (AE); a code that combines CPMD and GULP to perform QM/MM calculations of periodic solids and polymers (CHM); MTA a Plug-In utility for quantum chemical ab initio Software, Molecular Cluster (CHM); Brihaspati3 (EE); Brihaspati Sync (EE); EMS (EE); Strategic Innovation Game (IME); Real-time web-based simulation game to study Entrepreneurial decision Making (IME); Virtual Production Shop Simulator (IME); Web-based production shop simulation software (IME) and indigenously developed Engine Endoscopy Technique (ME).

Several Technologies have been developed during the year. They include an arrangement for jet engine to reduce noise (AE); Low flow prototype denuder using non-selective membrane (CE); Composite reusable adhesive (CHE); Miniature lenses, systems and methods of making the same (CHE); Micropattern generation with pulsed laser diffraction (CHE); Cancer detection system (CHE); Integrated Bragg Gratings for CWDM communications (EE); first Prototype of Electronic Fuel Injection Diesel Locomotive for Indian Railways (ME); A process for improving mobility of a pentacene based thin film transistor by field assisted deposition (MSE); Formulation and inkjet printing of TiO2 nanoparticle incorporated organic dielectric ink (MSE); preparation of fine grained Cu-Al-Ni shape memory strip from pre-alloyed argon gas atomized powder or elemental powder mixture, via hot densification rolling of powder performs (MSE) and Integrated Bragg Gratings for CWDM communications (LTP).

**Major projects sanctioned during 2011-12**

I am happy to inform you that DRDO has sponsored a project on Aero-Elastic Study of Turbo-Machinery Blades under GATET Scheme. The project will involve validation and optimization of a theoretical model of turbo-machinery aero elasticity already developed at IIT Kanpur, experimental study of forced response of a cascade, and development of a laboratory cascade model to simulate cascade flutter.

MOES India and NERC UK has sponsored a project on the structure and dynamics of groundwater systems in northwestern India under past, present and future climates. India is the largest agricultural user of groundwater in the world. In fact, northwestern India is now a hotspot of groundwater depletion, with 'the largest rate of groundwater loss in any comparable-sized region on Earth'. This project is based on the premise that we must first understand the geology and geometry of the aquifer system before we can hope to estimate the way it will respond to a complex set of future stresses.

The project entitled Generation of Solar Hydrogen is a multi-institutional initiative, coordinated by IIT Kanpur and supported by the Technology Systems Development Program of DST, New Delhi. Participating Institutes include IIT Madras, DEI Agra, IIT Jodhpur, CECRI Karaikudi and BARC Mumbai. The project aims at developing workable designs of a solar hydrogen generation system using multiple technologies. The project aims at conducting research to develop and identify the best possible photo-electro-catalysts suitable for large scale applications. Apart from the photocatalytic route, an electrolyzer integrated to a PV module and a thermochemical approach will be developed for hydrogen generation.
DST has funded a project on Research and Development of Ingazno4 (IGZO) large area Electronics and its applications to Active Matrix Flat Panel Displays. In contrast to the microelectronics industry, large area electronics is still an emerging technology in which India has the capability to join the race. This project will be a step in that direction.

DST has also funded a project Thematic Unit of Excellence on Soft Nanofabrication with applications in Energy, Environment and Bioplatforms as a 2nd phase of the Unit on Nanosciences. The Unit has many state-of-the-art resources for nanofabrication and characterization (e.g., SEM, e-beam, photolithography, nanoimprinting, profilometers, micro-Raman, NSOM, SPMs, LB/BAM, XRD, SAXS, ellipsometer, PECVD, sputtering, imaging, etc.). The basic thrust of the Unit involving participation of around ten faculty groups spread over different departments is in developing soft materials, structures and devices within 100 nm size and exploit their applications in three areas: energy, environment and bio-applications/health.

In addition, DST has sponsored a project to set up five different PV technologies of mono-crystalline, multi-crystalline, amorphous thin film silicon, CIGS thin film and multi-junction high efficiency concentrators with trackers to monitor and collect data objectively, analyze their performance and to find levelized cost of Electricity (LCOE) of each of these technologies.

**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.

**Nanoscale Imaging Facility**

The Institute is in process of setting up a facility for materials and biological science at a cost of about Rs. 15 crores. The facility will house a HRTEM and a cryo-TEM along with the complete infrastructure/accessories for materials and biological sample preparation. The HRTEM will be FEI make Titan G2 60-300 model, the world’s most powerful commercially available STEM/TEM. The microscope will have the most advanced, most recent technology detectors, attachments and imaging system with state of the art capability for imaging at sub-Angstrom scale, and diffraction and X-ray spectroscopy at nanometer scale. The facility will be commissioned and available for researcher by the end of 2012.

During the year, the Institute has procured the following facilities under its CARE scheme: A Distributed Fiber-Optic Strain and Temperature Sensing System, Contact Angle Goniometer, FTIR based Emission Measurement System for Air Pollutant measurement, Plasma Cleaning System: A TEM sample preparation accessory, Autoclave for curing of Polymer Matrix Composites. It also granted funds for upgradation of the old console for 400 MHz high resolution NMR Spectrometer under CARE.
In addition, to give a boost to infrastructure for research, the Institute provided a grant of Rs. 2.5 crore to each department. This has led to widespread augmentation of equipments and facilities across the Institute.

Some laboratories established in the Institute are virtual instrumentation laboratory (AE); a Flame/Fire dynamics laboratory (AE) and a general purpose laboratory for Production Shop Simulation and Smart Systems and Operations Laboratory (IME).

INTERNATIONAL ACADEMIC COLLABORATIONS

For promoting scientific and academic co-operation, the Institute has entered into MoUs with the University of Rhode Island, USA, Brown University, USA, the Université libre de Bruxelles, the University of Melbourne, Australia, Pontifícia Universidade Católica do Rio de Janeiro, Ecole Centrale Nantes, University of Applied Science, and Politecnico Di Torino, Italia.

FINANCIAL RESOURCE MOBILIZATION

The year 2011-12 has continued the upwards growth in financial resources of the Institute. The total Grant-in-aid received during the financial year from MHRD, Govt. of India, under non-plan was Rs. 186.60 crore and under Plan Rs.187.00 crore.

The year was good for fund raising as well. The Institute received Rs. 5.83 crore from 888 donations made by 690 donors (334 donors from India and 356 donors from abroad). A total of 421 donors (164 donors from India and 257 donors from abroad) contributed Rs. 60.5 lakh under the Annual Gift Programme (AGP). Donations received under AGP have been utilized for providing travel support to the students for attending international conferences, rewarding students for publishing research papers in high quality journals, travel support to international visiting faculty, filing of patents, students scholarships and other activities supporting and encouraging excellence in the Institute. During the financial year 2011-12, the Institute provided travel support to 114 students for attending international conferences, and cash awards to 129 students for publication of their research papers in reputed ISI Web Journals.

The Class of 1986 has contributed their batch fund for establishing Tinkering Lab that will provide basic mechanical and electrical tooling facilities. Once the lab gets going, there is a possibility of substantial additional funding from DST to make it a national innovation lab.

Several individual and corporate donors have created chairs and awards to recognize excellence in the Institute. Mr. Jageet S. Bindra, donor of Mrs. & Mr. Gian Singh Bindra Faculty Research Fellowship has converted this fellowship to Mrs. & Mr. Gian Singh Bindra Memorial Chair in the Department of Chemical Engineering. Mr. Kamalesh Dwivedi (BT/EE/79) and Mrs. Rita Dwivedi have instituted Pandit Girish Ranjan & Sushama Rani Pathak Chair. Housing and Urban Development Corporation Ltd (HUDCO) has instituted HUDCO Chair.
Mr. Bogineni Chenchu Rama Naidu (MT/MSP/82) has created the Bogineni Chenchu Rama Naidu Merit Award; Mr. Khairati Lal Chaudhary has created the Lalit Kishore Chaudhary Memorial Award; Mr. Cherian Mathew (BT/CSE/08) has created the Dr. Elizabeth & Dr. Varkey Cherian Scholarship and award, and Mr. Sanjeev Narayan Khadilkar (PHD/CSE/95) has created the Gurubandhu Challenge prize.

In addition, several donors have instituted new scholarships during the financial year 2011-12. To mention only a few: AIM FOR SEVA [Mr. Arun Kapoor (BT/ME/67)] has instituted the Padma Kapoor Memorial Scholarship; Ministry of Steel has instituted 5 scholarships named Ministry of Steel Scholarship; Mr. Ashish Shukla (MSc5/MTH/97) has instituted the Giridhar Gopal Shukla Memorial Scholarship; Mr. Saibal Dutt (BT/EE/77) has instituted the Smt. Neela Dutt Scholarship; Dr. Ashok Jain (MTech/CE/1971, PHD/CE/78) has instituted the Sri Babu Ram Jain Memorial Scholarship in memory of his father.

Dr. Shashi M. Kuppa (BT/CE/85) has instituted a Distinguished lecture series in the Department of electrical engineering in the name of his father, Prof. M. Ramamoorthy.

Mrs. Asha Jadeja has donated US$ 2.01 lakh towards the Rajeev Motwani Building for CSE department.

The 1972 batch has donated towards establishing the yoga and aerobics hall in the new student’s sports complex, which has been renamed as the 1972 Batch Yoga and Aerobics hall.

The SURGE program was conducted during summer 2011 with applications invited from 122 institutes. 95 students participated in the program. 72 faculty members participated from IIT Kanpur as mentors. The selection of student participants was very competitive as 2600 applications were received from various institutions in the country, which gives a clear indication of its increasing popularity.

Using the alumni donations, the Institute has also created a Scholar in Residence program under which eminent scholars are invited to come to IIT Kanpur and interact with students and faculty. The first visitor under this was Mr. Michael Danino, an eminent historian.

Furthermore, the Institute has created Department Excellence Funds for every department to support excellence in academics and research.

The Institute is working on an ambitious plan for raising substantial resources to increase the research and development activities on campus and hopes to launch the drive in the year 2012-13.

STUDENTS’ ACTIVITIES

IIT Kanpur continues its drive to encourage an equitable balance between academics and extra-curricular activities among its students. Our vision is to create future leaders in their fields of interest 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 a firm belief in self governance, Students’ Gymkhana continues to provide a platform to all students to pursue their interest. The coming year will also witness the Golden Jubilee of Students’ Gymkhana.

A variety of activities are pursued by various clubs coming under the broad ambit of the councils of the Students’ 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. The Music club is actively working on launching a music album of its own, a first of its kind initiative by any student group in India. It has composed three patriotic songs and is working on composing Anthem for IIT Kanpur. Apart from these, Vox Populi, the campus newspaper provides news from every aspect of the campus community. Efforts to establish a full-fledged studio for photography are also being made and progress has been made in this regard. Our students’ talents and achievements in such activities have received national level recognition. The Institute’s quiz team secured third place (first among IIT’s) in Nihilanth’12 (inter-IIT-IIM quiz competition). And this year the Institute’s cultural team won the Overall Championship at Antaragni as well as IITD’s cultural festival.

Other technically oriented student groups as part of the Science And Technology Council are engaged throughout the year in pursuing special interests such as robotics, electronics, astronomy, aero-modeling, business, programming, HAM, Rubik’s cube. This time we have successfully completed many challenging projects such as Microsoft Touch Table, Hexapod (six legged robot bot), and India’s first student made in house Planetarium which is all set to enter the Limca book of records. Also, we have put up a splendid show in IITB’s Technical festival and in the Intel Embedded Challenge. We have also successfully set up the IIT Kanpur chapter of the Society of Automotive Engineers and are all set to take part in Formula SAE 2012 which is going to be held in December.

The overriding objective of large-scale events 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 logistical skills of our students.

The Institute sports teams participated in the Inter IIT Sports meet held at IIT Kharagpur this year. The Badminton men’s team and the Cricket team were successful in securing Gold medals. This year our campus saw the addition of a new Rock Climbing wall and an air-conditioned gymnasium to the Institute Facilities.
Our students also organized several on-campus inter-Hall competitions such as Galaxy, Takneek, Spectrum, and Varchasva, the inter-Hall Cultural, Science & Technology, Media and Sports championships respectively. A fresher Varchasva tournament was also organized to find some new talent within the freshers batch. The guiding principle behind organizing these events is to provide the students a much-needed platform to compete and showcase their cultural and sports talents. Furthermore, such occasions provide a reason and a motivation for students to come out of their rooms and participate in group activities.

In addition to the above, the students also organized a significant Energy Saving Competition amongst hostels called Green Opus. The results were astounding in that the students just through internal competition were able to markedly reduce the average energy consumption in the halls. Results from all the five Inter Hall Competitions were then used to identify the winner of the Overall Championship Trophy.

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

The Institute also continued successfully with the Career Counseling programme this year with almost a two-fold rise in the number of students availing this facility.

The campus placement programme saw active participation by several companies with many old recruiters registering their presence once again after the recession in 2007. Apart from an overwhelming response from the traditional Consulting, FMCG and the core engineering sectors, the e-commerce sector registered a sizeable presence with a total of 30 job offers from companies such as Myntra, Flipkart and Snapdeal.

785 students registered for placements this year, of which 714 received job offers from 185 companies. Thus the overall placement record stands at 91% as on 5th of May, 2012. The break-up is as follows: B.Tech 92%, Dual 96%, M.Tech including M.Des 84%, Integrated M.Sc 90%, M.Sc 2 yr 35%, and MBA 96%. Results from some of the companies that participated in the placement process are still awaited.

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-fourth convocation, I extend my heartiest congratulations and best wishes to the Class of 2012 passing out today. This hard-earned success is a major milestone in your career. I also take this opportunity to salute your parents who have ensured your success and glory in all you have chosen to do through their constant quiet support.
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 are successful in your endeavors. Today, you will be leaving the protected environment of the Institute to find your place in the larger order of society. Prepare yourselves to evaluate the needs of others and respond to the call for action. It is people like you who keep our flag flying high.

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 imbibes commitment, excellence, fellowship, and, importantly, service. No matter where you are, continue to dream and dream big at that! My sincere, good wishes for the productive work you aspire to do in the future.

Jai Hind.
Books published

3. Advanced Control of Aircraft, Spacecraft and Rockets, Ashish Tewari (AE), John Wiley & Sons, Chichester, U.K.
4. Automatic Control of Atmospheric and Space Flight Vehicles, A. Tewari (AE), Springer (Birkhauser), Boston, USA.
7. SI adaptation Solid Waste Engineering and Solution Manual, Worrell and Vesilind and Tarun Gupta (CE), Cengage Learning, CT, USA.
9. Economics of Nuclear Power: Modeling and Scenario Analysis for Light Water Reactors in India, Dr. Saurabh Sharma, Prof. Anoop Singh (IME) and Prof. M S Kalra (ME), LAP LAMBERT Academic Publishing, Saarbrucken.
14. Tribology of Ceramics and Composites: Materials Science Perspective, Bikramjit Basu (MSE) and Mitjan Kalin, John Wiley & Sons, USA.
15. The Science and Engineering of Materials, Donald R. Askeland et al (Book Adaptation), Kantesh Balani (MSE), Cengage Learning, USA.

Fellowships

1. Prof. C Venkatesan (AE) has been elected as associate Fellow of American Institute of Aeronautics and Astronautics (AIAA).
2. Prof. R. P. Chhabra (CHE) has been elected to the Fellowship of the Indian Academy of Sciences, Bangalore.
3. Dr. Jayant K. Singh (CHE) has received Alexander von Humboldt Research Fellowship, Alexander von Humboldt Foundation.
4. Prof. Ashutosh Sharma (CHE) received J. C. Bose National Fellowship.
5. Prof. Faiz A. Khan (CHM) has been elected as a Fellow of the National Academy of Sciences, Allahabad for his outstanding contribution to Organic Synthesis.
6. Prof. Faiz A. Khan (CHM) has been elected to the Fellowship of the Indian Academy of Sciences, Bangalore.
7. Dr. S. P. Rath (CHM) has received Alexander von Humboldt Research Fellowship, Alexander von Humboldt Foundation.
8. Prof. S. Sarkar (CHM) received Ramanna Fellowship of the Department of Science and Technology.
9. Dr. S. P. Rath (CHM) received AvH Research Fellowship for Experienced Researcher by AvH Foundation.
10. Prof. S. R. Gadre (CHM) received Prof. B. D. Tilak Visiting Fellowship by ICT, Mumbai.
11. Prof. S. N. Singh (EE) became Fellow of the Institution of Engineering and Technology, UK.
12. Dr. Prashant Bagad (HSS) has been awarded the Endeavour Research Fellowship by Australian Government.
13. Prof. P. Chandra (MATH) has been elected as President, 2012, Indian Society of Theoretical and Applied Mechanics.
14. Prof. Kalyanmoy Deb (ME) has been awarded the National J. C. Bose Fellowship by DST.
15. Prof. Kalyanmoy Deb (ME) has been elected as an IEEE Fellow for his contributions to evolutionary multi-criterion optimization techniques.
16. Dr. Binod Sreenivasan (ME) has been awarded the prestigious Swarnajayanti Fellowship for the year 2010-11 by the Department of Science and Technology.

**Awards and honours**

1. Prof. C Venkatesan (AE) became Member of National Board on Micro-Air Vehicle Program, DRDO-DST National Program.
2. Prof. S. Ganesh (BSBE) received Rajib Goyal Award for Young Scientist of Goyal Foundation, Kurukshetra University, Kurukshetra.
3. Prof. S. Ganesh (BSBE) received CDRI Award for Excellence in Drug Research for the year 2012 of Central Drug Research Institute, CSIR, Lucknow.
4. Dr. Priyanka Ghosh (CE) received the IEI Young Engineers Award 2011-2012 of the Institution of Engineers.
5. Dr. Tarun Gupta (CE) received the Indian National Science Academy (INSA) young scientist medal in their Atmospheric Sciences and Earth Sciences Division for the year 2011.
6. Dr. Rajesh Sathiyamoorthy (CE) received IGS-Prof. G.A. Leonards Prize for the Best Doctoral Dissertation in Geotechnical Engineering for 2009-2010 of Indian Geotechnical Society.
7. Dr. Yogesh Joshi (CHE) received a prestigious DAE-SRC Outstanding Investigator Award of Department of Atomic Energy.
8. A special invited session in the Catalysis and Reaction Engineering Division was held in honour of Prof. Santosh K Gupta (CHE) during the Annual Meeting of American Institute of Chemical Engineering held in Minneapolis in Oct 2011. This honour is in recognition of the outstanding work by Prof. Gupta in the area of Polymer Reaction Engineering.
9. Dr. Jayant K. Singh (CHE) selected for the membership of the National Academy of Sciences India, Allahabad.
10. Prof. Ashutosh Sharma (CHE) elected as INAE Chair Professor of INAE.
11. Prof. Sandeep Verma (CHM) received a prestigious DAE-SRC Outstanding Investigator Award of Department of Atomic Energy.
12. Dr. Pratik Sen (CHM) has been selected for the Indian National Science Academy Young Scientist Medal for the year 2012 for his contributions to ultra-fast excited state processes in molecules.
13. Prof. J. K. Bera (CHM) received the Chemical Research Society of India (CRSI) Bronze Medal in recognition of his outstanding contributions to Organ Metallic Chemistry of Transition Metals and its application to Catalysis.
14. Prof. D. Goswami (CHM) received Bharat Jyoti Award of India International Friendship Society, New Delhi.
15. Prof. R. N. Mukherjee (CHM) received Priyadaranjan Ray Memorial Award of Indian Chemical Society, Kolkata.
16. Prof. Manindra Agrawal (CSE) has been awarded the H. K. Firodia award for excellence in Science and Technology.
17. Dr. Arnab Bhattacharya (CSE) received Yahoo faculty research and engagement award.
18. Prof. S. C. Srivastava (EE) received Outstanding Engineer Award 2012 of PES/IAS Chapter, UP.
19. Dr. R. S. Anand, Principal Research Engineer (EE) has been awarded the Indira Gandhi Shiromani Award for Outstanding Individual Achievements & Distinguished services to the Nation.
20. Dr. Vimal Kumar (HSS) has been selected as one of the winners of the Founders Award honouring Peri Arnold for the Best paper given at the 2010 American Political Science Association [APSA] conference.
21. Dr. Prashant Bagad (HSS) has been awarded the Erasmus Mundus Academic Scholarship of European Commission.
22. Dr. P. M. Prasad (HSS) has been awarded the Erasmus Mundus Academic Staff Scholarship of European Commission.
23. Prof. Arvind K Sinha (HSS) and Dr. Swagato K Ray (MATH) have been awarded the Distinguished Teacher Award-2011.
24. Prof. A. K. Mittal (IME) has been conferred with the M.C. Puri Memorial award for the year 2010 of the Operational Research Society of India.
25. Prof. A. K. Mittal (IME) was honoured by IIT Kanpur as an Institute Fellow.
26. Prof. RRK Sharma (IME) has been selected as AIMS (All India Management Scholars) International Fellow at FLAME (Foundation of Liberal Arts and Management Education), Pune.
27. Prof. Anoop Singh (IME) has been invited to join the Working Group on Power for the 12th Five Year Plan (Subgroup on Legislative and Policy Issues) of the Planning Commission.
28. Prof. P. Chandra (MATH) received Distinguished Service Award of Vijnana Parishad of India, 2012.
29. Dr. Shalabh (MATH) received Prof. C.R. Rao National Award for Young Statisticians, 2011, Ministry of Planning and Programme Implementation, Government of India.
30. Prof. Kalyanmoy Deb (ME) has been selected for the Distinguished Alumnus Award 2011 of IIT Kharagpur.
31. Dr. J. Ramkumar (ME) has been selected for the IEI Young Engineers Award 2011-2012 in Production Engineering discipline.
32. Prof. Kalyanmoy Deb (ME) has been awarded Infosys Prize 2011 in Engineering and Computer Science.
33. Prof. Kalyanmoy Deb (ME) has been awarded the V. Cajastur Mamdani Prize for Soft Computing of the European Centre for Soft Computing, Spain.
34. Prof. S. G. Dhande (CSE & ME) has been awarded the Degree of Doctor of Science (Honoris Causa) in recognition of his contributions in the fields of Technical Education and Engineering Research and Technology.
35. Prof. A. K. Agarwal (ME) received the INAE Silver Jubilee Young Engineer Award of Indian National Academy of Engineers, India.
36. Prof. A. K. Agarwal (ME) received Dr. C. V. Raman Young Teachers Award: 2011 for Excellence in the field of Engineering Education, IES, Bhopal.
37. Prof. Bikramjit Basu (MSE) received the MRSI Medal for 2012 of the Materials Research Society of India.
38. Dr. Kantesh Balani (MSE) has been selected by Elsevier as a recipient of Materials Science and Engineering C: Young Researcher Award for the year 2011.
39. Dr. Kantesh Balani (MSE) received Young Leader Professional Development Award, TMS, USA.
40. Dr. Vivek Verma (MSE) received Shri Ram Arora Award.
41. Dr. Soumik Mukhopadhay (PHY) has been honoured with the Young Achiever Award in the 56th DAE Solid State Symposium in Dec 2011.
42. Prof. Satyajit Banerjee (PHY) received NASI-Scopus Young Scientist award for Physics, 2012 of National Academy of Sciences, Allahabad.

Editorships

1. Prof. C Venkatesan (AE), Member, Journal of Aerospace Sciences and Technologies published by Aeronautical Society of India.
2. Prof. Balaji Prakash (BSBE), Member, Guha Research Conference (GRC).
3. Prof. S. Ganesh (BSBE), Review Editor, Frontiers in Evolutionary and Population Genetics published by Frontiers Research Foundation, Lausanne, Switzerland.
5. Dr. Tarun Gupta (CE), Member, Editorial Board of Journal of Civil & Environmental Engineering published by OMICS Publishing Group.
6. Prof. Ashu Jain (CE), Member, Editorial Board of ISH Journal of Hydraulic Engineering published by Taylor and Francis.
7. Dr. Debajyoti Paul (CE), Member, Editorial Board of Chemical geology published by Elsevier.
10. Prof. Ashutosh Sharma (CHE), Member, Editorial Board, Chemical Engineering Science, published by Elsevier.
13. Dr. Mainak Chaudhury (CSE), Associate Editor (Computer Architecture), ACM Computing Surveys, published by Association for Computing Machinery (ACM).
15. Dr. Praveen Kulshreshtha (HSS), Member, Editorial Board, Journal of Microeconomics published by Mind Reader Publications, New Delhi.
16. Prof. M. Gupta (MATH), Member, Editorial Board, of Proceedings of the National academy of Sciences, India, (Section A - Physical Sciences) published by Springer.
17. Prof. P. Chandra (MATH), Member, Editorial Board, of Proc. National Academy of Science, India, Ser-A published by Springer.
18. Prof. P. Chandra (MATH), Member, Editorial Board of Differential Equations and Dynamical Systems published by Springer.
19. Prof. D. Kundu (MATH), Member, Editorial Board of Statistical Theory and Practice published by Taylor and Francis.
21. Prof. Ghoshdastidar (ME), Associate Editor of Heat Transfer Research published by Begell House, USA.
22. Prof. Avinash Kumar Agarwal (ME), Member, Editorial Board of International Journal of Oil, Gas and Coal Technology, published by Inderscience Publishers, Switzerland.
23. Prof. Bikramjit Basu (MSE), Member, Editorial Board of Materials Technology: Advanced Performance Materials published by the Institute of Materials, UK.
24. Dr. Krishanu Biswas (MSE), Member, Editorial Board of Journal of Materials and Metallurgical Engineering published by STM Journals.
26. Prof. Bikramjit Basu (MSE), Associate Editor of Biomaterials and Biodevices published by VBRI Press.
27. Dr. Tapobrata Sarkar (PHY), Editorial board of the ISRN High Energy Physics published by Hindawi.
28. Dr. Dipankar Chakraborti (PHY), Member, Editorial Board of ISRN High Energy Physics journal.
29. Prof. Satyajit Banerjee (PHY), Member, Editorial Board of Superconducting Science and Technology published by Institute of Physics, UK.

Students’ awards

1. Mr. Puneet Singh and G Sriram (AE) won the American Helicopter Society student design competition for best new entry.
2. Mr. Ravi Kant Pandey, Research Scholar, (BSBE) received the Best Paper presentation by young scientists (poster session) in the XXXV All India Cell Biology Conference held at NISER Bhubaneswar.
3. Mr. Rajesh Vasita (BSBE) received the Bajpai Saha Award for best oral presentation at the Fourth Indo-Australian Conference on Biomaterials, Tissue Engineering and Regenerative Medicine, Sardar Patel University, Gujarat, Feb. 2011.
4. Mr. Ravi Kumar Verma, Research Scholar, (BSBE) received International Travel Award at the 56th Annual Biophysical Society Meeting held in Feb. 2012 in San Diego, U. S. A.
5. Ms. Ujjwala (CE) received Best Poster Award in SURGE 2011.
6. Ganti Ravikumar (CE) awarded financial assistance for meritorious students to attend AGU2011 in San-Francisco, USA.
7. Mr. Ankur Verma (CHE) received Shah-Schulman Award for the Best Ph.D. Thesis in the area of Colloid and Interface Sciences, at CHEMCON 2011.
9. Mr. Chandra Shekhar Sharma (CHE) got Innovative Student Projects Award 2011 – INAE, India.
10. Mr. Shashwat Shivam (CHE) and Mr. Rohit Gupta (EE) emerged as North Zone Winner and National 2nd Runner-Ups at Mahindra AQ Quizzing event.
11. Ms. Amritha Rammohan, Mr. Sumit Barthwal (CHE) received best Poster Award for Cantilever arrays for bio-chemical sensing at ICONSAT 2010.
12. Ms. Avani Nandini, Ms. Parul Agarwal, Ms. Kritika Singh (CSE) won the 2012 Google India Anita Borg Award. They were amongst the 9 winners from among 377 applicants.
13. Mr. Anurag Awasthi, Ms. Avani Nandini (CSE) won Popular Choice Award for their project and Gold Medal at Intel India Embedded Challenge (IIEC), 2011.
18. Mr. Purushottam Kar (CSE) got honourable mention at Yahoo Key Scientific Challenges Global Competition.
19. Ms. Parul Agarwal’s (CSE) paper was accepted for Grace Hopper Celebration for Women in Computing, 2011.
20. Mr. Shubhadip Mitra, Ashish Agrawal, Rohit Gurjar (CSE) were awarded the TCS Research Scholarship.
21. Mr. Ranjith Nair (EE) received 2nd Best Student paper Award in ACDOS 2012 at IISc Bangalore.
22. Mr. Tathagata Bhowmick (EE) has received the best Poster Award at XVI IWPSD 2011 Workshop.
23. Mr. Raghvendra Kumar Chaudhary (EE) has been awarded the Best Paper Award in session at 5th Antenna Test and Measurement Society (ATMS).
24. Mr. T. Bhowmick (EE) got the Best Poster in Optoelectronics in the International Workshop on Physics of Semiconductor Devices held at IIT Kanpur.
25. Mr. Kewal Dharmashi (ME) was declared as one of the three winners of the Inaugural version of ASME ICED Undergraduate Presentation Competition.
26. Mr. Kewal Dharamashi (ME) received the First Prize in ASME's Asia Pacific Competition apart from the Best Technical Paper Award. The award is for his work
on laser ignition of natural gas air mixtures carried out in our Engine Research Laboratory.

27. A group of students (ME) won the first prize at the USID Gurukul for designing an educational board game for high school children.

28. Ms. Shail Pandey (PHY) received the Buti Young Scientist Award for her paper titled Observation of electron plasma waves inside large amplitude electromagnetic pulses in a temporally growing plasma in the 26th National Symposium on Plasma Science and Technology.

29. Mr. Samit Paul (PHY) received the PSSI Poster Award for his poster titled Physics of capillary guiding of focussed ion beams in the 26th National Symposium on Plasma Science and Technology.

30. Ms. Seema Devi (PHY) received a cash prize and a certificate of excellence in a poster presentation titled Elastic scattering normalized synchronous fluorescence spectroscopy for multicomponents extraction from human cervical tissues, in The XXXVI Optical Society of India Symposium on Frontiers in Optics and Photonics.

**Major projects sanctioned**

- Aero-Elastic Study Of Turbo-Machinery Blades (DRDO-GTRS);
- Musculoskeletal Stem Cells In Tissue Regeneration (DBT);
- Using A Unique Tool Genetic Tool To Study The Role Of Bmp Ligands In Neurogenesis And Gliogenesis In The Developing Cortex (DBT);
- Indo-Max Planck Centre For Computer Science (IMPECS) (DBT);
- Engaging Farmers, Enriching Knowledge: Agropedia Phase II (NAIP);
- Thematic Unit Of Excellence On Soft Nanofabrication With Applications In Energy, Environment And Bioplatforms (DST);
- Stand-Off Detection Of Explosives Based On Immunochemical Techniques (PSA);
- The Structure And Dynamic Of Groundwater System In Northwestern India Under Past, Present And Future Climates (MOES);
- Hydrometeorological Feedback And Changes In Water Storage And Fluxes In Northern Indian Basins (MOES);
- Cosmic Rays-Cloud-Climate Conundrum: Can Ion-Aerosol Near Cloud Mechanism Explain The Observed Correlations (MOES);
- Top Chemistry Departments In The Country (DST);
- Stability And Performance Of Photovoltaic (STAPP) (DST);
- A 1mw Re-Synchronizable Autonomous Grid: Dc-Ac Inversion & Grid Size Paralleling (DST);
- Miniaturized Polymaric Fluidic Pumps Based On Principle Of Peristalsis (ADA);
- Development Of Non-Contact Ultrasonic NDT Based On LBU And EMAT Technique For Defect Detection In Panels (ARDB);
- Experimental Investigations On Combustion Characteristics And Emission Reductions Of A Laser Fired Hydrogen Engine (MNRE);
- Fuel Spray And Combustion Visualization Using Endoscope In Biodiesel Fuelled Direct Injection Engine For Optimal Fuel Injection Strategy And Emission Reduction (DST);
- Lithographic Approach To Assemble And Manipulate Spindle And Asters: Understanding Cell Division Through Experiment And Modeling (DBT);
• Comprehensive Water Modeling Facility For Steelmaking Process Analysis And Design (MOS);
• First Principle Studies On Ferroic Oxides (DST);
• Research And Development Of Ingazno4 (IGZO) Large Area Electronics And Its Applications To Active Matrix Flat Panel Displays (DST).
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New Delhi - 110 001

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Confederation of Indian Industry
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Ministry of Human Resource Development  
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Shri R. D. Sahay  
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Ministry of Human Resource Development  
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Kanpur-208016

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Kanpur-208016

Professor A K Ghosh  
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Indian Institute of Technology, Kanpur  
Kanpur-208016

Professor Ajit K Chaturvedi  
Dean of Research & Development  
Indian Institute of Technology, Kanpur  
Kanpur-208016

Professor Manindra Agrawal  
Dean of Resource Planning & Generation  
Indian Institute of Technology, Kanpur  
Kanpur-208016
SECRETARY:

Dr. Rakesh Kumar Sachan
Acting Registrar
Indian Institute of Technology Kanpur
Kanpur-208016

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(As on 31.03.2012)

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Indian Institute of Technology Kanpur
Kanpur-208016

Shri Harsh Manglik
Former Senior Advisor & Former Chairman
& Geography Managing Director, Accenture
26, Crescent Park
2B, Rest House, Crescent Road,
Bangalore-560 001 (Karnataka)

Shri Ashok Thakur
Special Secretary
Government of India
Department of Secondary Education & Higher Education
Ministry of Human Resource Development
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New Delhi – 110 001

Shri Ajay Narayan Jha
Joint Secretary & Financial Adviser
GOI, Department of Higher Education
Ministry of Human Resource Development
Shastri Bhawan
New Delhi-110001
Prof. Neeraj Misra  
Department of Mathematics and Statistics  
Indian Institute of Technology Kanpur  
Kanpur – 208 016

SECRETARY:

Dr. Rakesh Kumar Sachan  
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Indian Institute of Technology, Kanpur  
Kanpur – 208016

LIST OF MEMBERS OF THE BUILDING & WORKS COMMITTEE  
(As on 31.03.2012)

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Director  
Indian Institute of Technology, Kanpur  
Kanpur – 208 016

MEMBERS:

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Kanpur – 208 016

Prof. S.N. Singh  
Department of Electrical Engineering  
Indian Institute of Technology, Kanpur  
Kanpur – 208 016

Prof. S Y Kulkarni  
Head, Deptt. of Planning & Architecture  
Indian Institute of Technology, Roorkee  
Roorkee – 247 667

Shri Mohan Swaroop  
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H-Block, 54-A, Sector-22  
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Shri B M Agarwal  
Retd. Engineer-in-Chief, UP Irrigation  
102, Ravinder Garden  
Sector-E, Aliganj  
Lucknow – 226 024

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

SECRETARY:

Dr. Rakesh Kumar Sachan  
Acting Registrar  
Indian Institute of Technology, Kanpur  
Kanpur – 208016

LIST OF MEMBERS OF THE BOARD STANDING COMMITTEE (GRIEVANCES)  
(As on 31.03.2012)

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Director  
Indian Institute of Technology, Kanpur  
Kanpur – 208 016

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House No. P02/01, Silver City II  
Sector – Pie – 2, Greater Noida  
Gautam Buddha Nagar- 201 310  
Uttar Pradesh

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Chairman, Mirza International Limited  
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Department of Mathematics and Statistics  
Indian Institute of Technology, Kanpur  
Kanpur – 208016
Professor S N Singh  
Department of Electrical Engineering  
Indian Institute of Technology, Kanpur  
Kanpur - 208016  

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Acting Registrar  
Indian Institute of Technology, Kanpur  
Kanpur – 208016  

SENATE  
[From 01.04.2011 to 31.03.2012]  

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Director  
Indian Institute of Technology Kanpur  
Kanpur  

Dy. Director  

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Upto 31.08.2011  

Prof. S C Srivastava  
w.e.f . 01.09.2011  

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Prof. C S Upadhyay  
Prof. D P Mishra  
Prof. Dayanand Yadav  
Dr. Brijesh Eshpuniyani  
Upto 30.09.2011
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Prof. R Sankararamakrishnan
Prof. K Subramaniam
Prof. Subramaniam Ganesh
Prof. Balaji Prakash
Dr. Amitabh Bandyopadhyya upto 30.09.2011
Prof. Ashok Kumar w.e.f. 26.03.2012
Prof. Dhirendra S Katti w.e.f. 26.03.2012

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Prof. Anil Kumar Upto 30.09.2011
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Prof. P K Bhattacharya
Prof. R P Chhabra
Prof. Ashok Khanna
Prof. Ashutosh Sharma
Prof. Goutam Deo
Prof. Nishith Verma
Prof. V Shankar w.e.f. 26.03.2012
Prof. Nitin Kaistha w.e.f. 26.03.2012

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Prof. S Sarkar
Prof. Y D Vankar
Prof. T K Chandrasekhar Upto 04.07.2011
Prof. V Chandrasekhar
Prof. R N Mukherjee
Prof. P K Bharadwaj
Prof. N S Gajbhiye
Prof. S Manogaran
Prof. Veejendra K Yadav
Prof. Vinod K Singh
Prof. Amalendu Chandra
Prof. Faiz Ahmed Khan
Prof. S S Manoharan
Prof. Sandeep Verma
Prof. J N Moorthy
Prof. S R Gadre
Prof. K Srihari
Prof. Debabrata Goswami
Prof. R Gurunath w.e.f. 26.03.2012
Prof. Manas Kumar Ghorai w.e.f. 26.03.2012
Prof. Jitendra K Bera  
w.e.f. 26.03.2012
Prof. M L N Rao  
w.e.f. 26.03.2012

CIVIL ENGINEERING (CE):
Prof. P K Basudhar  
Upto 31.01.2012
Prof. Sudhir K Jain
Prof. Sarvesh Chandra
Prof. Vinod Tare
Prof. V K Gupta
Prof. S K Chakrabarti
Prof. Mukesh Sharma
Prof. Onkar Dikshit
Prof. Partha Chakroborty
Prof. Rajiv Sinha
Prof. Sudhir Misra
Prof. Rajesh Srivastava
Prof. Purnendu Bose
Prof. Soumyen Guha
Prof. Ashu Jain
Prof. Durgesh C Rai
Prof. Animesh Das  
w.e.f. 26-03-12
Prof. Sachidanand Tripathi  
w.e.f. 26-03-12

COMPUTER SCIENCE & ENGINEERING (CSE):

Prof. Somenath Biswas
Prof. H C Karnick
Prof. T V Prabhakar
Prof. S K Aggarwal
Prof. Sanjeev Saxena
Prof. Rajat Moona
Prof. Manindra Agrawal
Prof. Amitabha Mukerjee
Prof. Ratan Kumar Ghosh
Prof. Phalguni Gupta
Prof. Ajai K Jain
Prof. Dheeraj Sanghi
Prof. Sumit Ganguly
Prof. Shashank K Mehta
Prof. Anil Seth  
w.e.f. 26-03-12

ELECTRICAL ENGINEERING (EE):

Prof. Avinash Joshi
Prof. M Sachidananda
Prof. S C Srivastava
Prof. Prem Kumar Kalra
Prof. Shafi Qureshi  
Prof. (Ms) Sumana Gupta  
Prof. Govind Sharma  
Prof. Utpal Das  
Prof. A K Dutta  
Prof. Joseph John  
Prof. Animesh Biswas  
Prof. Pradip Sircar  
Prof. Baquer Mazhari  
Prof. A K Chaturvedi  
Prof. R K Bansal  
Prof. S N Singh  
Prof. Shyama P Das  
Prof. Yatindra N Singh  
Prof. Laxmidhar Behera  
Dr. A K Jagannatham w.e.f 01.10.2011  
Prof. K S Venkatesh w.e.f 26.03.2012  
Prof. A R Harish w.e.f 26.03.2012  
Prof. S Sundar Kumar Iyer w.e.f 26.03.2012

**HUMANITIES & SOCIAL SCIENCES (HSS)**

Prof. (Ms) Lilavati Krishnan  
Prof. Binayak Rath Upto 31.01.2011  
Prof. A K Sharma  
Prof. K K Saxena  
Prof. A K Sinha  
Prof. B K Pattnaik  
Prof. G Neelakantan  
Prof. Surajit Sinha  
Prof. (Ms) Achla M Raina  
Prof. (Ms) Shikha Dixit  
Prof. Munmun Jha

**INDUSTRIAL & MANAGEMENT ENGINEERING (IME)**

Prof. A K Mittal  
Prof. N K Sharma  
Prof. Kripa Shanker  
Prof. Arun P Sinha  
Prof. R R K Sharma  
Prof. Jayanta Chatterjee  
Prof. Rahul Varman

**MATERIALS SCIENCE AND ENGINEERING (MSE):**

Prof. S P Mehrotra Upto 30.4.2012  
Prof. Brahma Deo
Prof. R C Sharma
Prof. Dipak Mazumdar
Prof. Rajiv Shekhar
Prof. Sandeep Sangal
Prof. B K Mishra Upto 04.12.2011
Prof. Deepak Gupta
Prof. (Ms) Monica Katiyar
Prof. Anish Upadhyaya
Prof. Bikramjit Basu w.e.f. 26.03.2012

MATERIALS SCIENCE PROGRAMME (MSP):
Prof. Jitendra Kumar

MATHEMATICS & STATISTICS DEPARTMENT (MTH & STATS):
Prof. R K S Rathore
Prof. (Ms) Manjul Gupta
Prof. M K Kadalbajoo
Prof. Prawal Sinha
Prof. G P Kapoor
Prof. Peeyush Chandra
Prof. V Raghavendra
Prof. I D Dhariyal
Prof. (Ms) Shobha Madan
Prof. Debasis Kundu
Prof. Pravir Kumar Dutt
Prof. Neeraj Misra
Prof. B V Rathish Kumar
Prof. D Bahuguna
Prof. P Shunmugaraj
Prof. Arbind Kumar Lal
Prof. Alok Kumar Maloo
Prof. (Ms) Mohua Banerjee w.e.f. 26.03.2012
Prof. (Mrs) Rama Rawat w.e.f. 26.03.2012
Prof. S Ghorai w.e.f. 26.03.2012
Prof. Joydeep Dutta w.e.f. 26.03.2012
Prof. Amit Mitra w.e.f. 26.03.2012
Dr. Shalabh Upto 30.11.2011

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. S K Choudhury  
Prof. N S Vyas  
Prof. Kalyanmoy Deb  
Prof. P S Ghoshdastidar  
Prof. Subrata Sarkar  
Prof. P K Panigrahi  
Prof. Bhaskar Dasgupta  
Prof. N Venkata Reddy  
Prof. Bishakh Bhattacharya  w.e.f. 26.03.2012  
Prof. Kamal K Kar  w.e.f. 26.03.2012  
Prof. Avinash Kumar Agarwal  w.e.f. 26.03.2012  
Prof. Sumit Kumar Agarwal  w.e.f. 26.03.2012  
Prof. Ashish Datta  w.e.f. 26.03.2012  
Prof. P Venkitanarayanan  w.e.f. 26.03.2012  
Dr. J Ramkumar  Upto 30.11.2012  

PHYSICS (PHY):  

Prof. R K Thareja  
Prof. Keshawa Shahi  
Prof. Rajendra Prasad  
Prof. Debashish Chowdhury  
Prof. R C Budhani  
Prof. Y N Mohapatra  
Prof. Avinash Singh  
Prof. Deshdeep Sahdev  
Prof. V Ravishankar  
Prof. Pankaj Jain  
Prof. H C Verma  
Prof. M K Harbola  
Prof. K P Rajeev  
Prof. Mahendra K Verma  
Prof. (Ms) Asima Pradhan  
Prof. (Ms) R Vijaya  
Dr. Zakir Hossain  Upto 30.09.2011  
Dr. Anjan Kumar Gupta  Upto 30.11.2011  
Prof. S Anantha Ramakrishna  w.e.f. 26.03.2012  
Prof. Amit Dutta  w.e.f. 26.03.2012  
Prof. Satyajit Banerjee  w.e.f. 26.03.2012  

Librarian  

Dr. V D Shrivastava
Secretary Senate
Shri Sanjeev S Kashalkar  Upto 08.03.2012
Registrar
Indian Institute of Technology Kanpur
Kanpur

Dr. Rakesh Kumar Sachan  w.e.f  09.03.2012
Acting Registrar
Indian Institute of Technology Kanpur
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
   Lucknow – 226 001

2. Dr. AK Verma
   General Manager
   H.A.L Lucknow,
   Lucknow

3. Prof. MP Dubey
   Dean Faculty of Arts
   University of Allahabad
   Allahabad

THREE NOMINEES OF THE CHAIRMAN, BOARD OF GOVERNORS
(FROM 01.11.2011 TO 31.10.2012)

1. Prof. Manoj K Mishra
   Vice Chancellor
   University of Lucknow
   Lucknow

2. Dr. AK Verma
   General Manager
   H.A.L Lucknow,
   Lucknow

3. Mr. Najeeb Jung
   Vice Chancellor
   Jamia Millia Islamia
   Jamia Nagar
   New Delhi
**SENATE STANDING COMMITTEES:**
[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

(b) **SENATE NOMINEES:**

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

(c) **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 (IME)
2. Dr. A R Harish (EE)
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 28.09.2010
   Dr. Mainak Das BSBE w.e.f 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.in

(4) SENATE POST-GRADUATE COMMITTEE:

(a) SENATE NOMINEE:

1. Dr. Gouthama MSE - Outgoing Chairman

2. Prof. Jayanta Chatterjee (IME)

(b) NOMINEES OF DEPARTMENTS/PROGRAMMES:

1. Dr. Debopam Das     AE
2. Dr. R Sankararamakrishnan BSBE Upto 28.09.2010
   Dr. Dhirendra S Katti BSBE w.e.f 28.09.2010
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  
17. Dr. Zakir Hossain  
18. Dr. Munmun Jha (HSS)  

(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:

(a) MEMBERS (EX-OFFICIO):
Head Institute Counselling Service
Chairman, APEC
Dean of Students’ Affairs

(b) SENATE NOMINEES:

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

(c) 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 (CE)

(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
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

SENATE STANDING COMMITTEES
[FROM 01.10.2011 TO 30.09.2012]

(1) SENATE EDUCATIONAL POLICY COMMITTEE:

(a) MEMBERS (EX-OFFICIO):

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

(b) SENATE NOMINEES:

4. Prof. K Muralidhar, ME
5. Prof. Anish Upadhayaya, MSE
6. Progf. Yogesh Joshi, ChE

(c) STUDENTS’ SENATE NOMINEES:

1. Mr. Shantanu Misra (Y7027410) shanm@iitk.ac.in
2. Mr. Rishant Singh (Y8419) rishant@iitk.ac.in

(2) SENATE ELECTIONS COMMITTEE:

SENATE NOMINEES:

1. Prof. Sudhir Mishra, CE
2. Prof. Pankaj Jain, Phy
3. Prof. K Srihari, Chem

(3) SENATE LIBRARY COMMITTEE:

(a) LIBRARY:
(b) SENATE NOMINEES:

1. Prof. R Prasad, Phy  
2. Prof. S Ganesh, BSBE  
3. Prof. Deepu Philip, IME  
4. Prof. Monica Katiyar, MSE  

(c) NOMINEES OF DEPARTMENTS/PROGRAMMES:

1. Dr. D P Mishra AE  
2. Prof. Balaji Prakash BSBE  
3. Dr. Sri Sivakumar CHE  
4. Dr. S P Rath CHM  
5. Dr. Animesh Das CE  
6. Dr. Tarun Gupta EEM  
7. Prof. Amitabha Mukerjee CSE  
8. Dr. Koumudi P Patil HSS  
9. Prof. A K Mittal IME  
10. Prof. Y N Singh(EE) LTP  
11. Dr. I Sharma ME  
12. Dr. Vivek Verma MSE  
13. Dr. Rajeev Gupta(PHY) MSP  
14. Dr. Mohua Banerjee MTH & STAT.  
15. Dr. M S Kalra (ME) NET  
16. Dr. T K Ghosh PHY  
17. Dr. Koumudi P Patil(HSS) M DES  

(d) STUDENTS' SENATE NOMINEES:

1. Mr. Puneet Singh (Y8378), punsingh@iitk.ac.in  
2. Mr. Mohammad Ashiq (Y9106064) mdashiq@iitk.ac.in  

(4) SENATE POST-GRADUATE COMMITTEE:

(a) SENATE NOMINEE:

1. Dr. Zakir Hossain PHY - Outgoing Chairman  
2. Prof. Phalguni Gupta, CSE  

(b) NOMINEES OF DEPARTMENTS/PROGRAMMES:

1. Dr. P M Mohite AE  
2. Dr. Mainak Das BSBE  
3. Dr. Jayant K Singh CHE
4. Dr. Manas K Ghorai CHM
5. Prof. Rajiv Sinha CE
6. Dr. S N Tripathi EEMP
7. Dr. Anil Seth CSE
8. Dr. Dr. P Sensarma EE
9. Dr. Sarani Saha HSS
10. Dr. R N Sengupta IME
11. Dr. P Kumar (EE) LTP
12. Dr. P Venkitanarayanan ME
13. Dr. Krishanu Biswas MSE
14. Prof. K Shahi (PHY) MSP
15. Dr. Amit Mitra MTHS & STAT.
16. Dr. P Munshi (ME) NET
17. Dr. Satyajit Banerjee PHY
18. Dr. Nachiketa Tiwari (ME) M DES

(c) STUDENTS’ SENATE NOMINEES:

1. Mr. Vinod Parmar (10114017) vinodp@iitk.ac.in
2. Mr. Ruchir Gupta (Y10104121) rgupta@iitk.ac.in
3. Mr. Karthik Balasundaram (10103066) karthikb@iitk.ac.in
4. Mr. Kanwar Deep Singh (11125025) kanwar@iitk.ac.in

(5) SENATE RULES COMMITTEE:

(a) MEMBER (EX-OFFICIO):

Parliamentarian of the Senate

(b) SENATE NOMINEES:

1. Prof. Neeraj Mishra, Maths
2. Prof. Somenath Biswas, CSE
3. Prof. P Bose, CE

(6) SENATE SCHOLARSHIPS & PRIZES COMMITTEE:

(a) MEMBERS (EX-OFFICIO):

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

(b) SENATE NOMINEES:

1. Prof. D Goswami, Chem
2. Prof. S Guha, CE
3. Prof. Sanjeev Garg, ChE
4. Prof. Sandeep Verma, Chem

(c) STUDENTS’ SENATE NOMINEES:

1. Mr. Meet Pathak (Y8291), meetp@iitk.ac.in
2. Mr. Vibhav Agarwal (Y8558), vibhav@iitk.ac.in
3. Mr. Jyoti Gupta (Y9265), gyoti@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. Rama Rawat, Maths
2. Prof. Jayant Singh, ChE
3. Prof. Mukesh Sharma, CE

(c) STUDENTS’ SENATE NOMINEES:

1. Mr. Aditya Gupta (Y8036), gaditya@iitk.ac.in
2. Mr. Sanchit Singhal (Y8442), sanset@iitk.ac.in
3. Mr. Abdullah Bin Abu Baker (Y7108061), abdullah@iitk.ac.in
4. Mr. Vivek Agarwal (Y7513), agvivek@iitk.ac.in

(8) SENATE UNDERGRADUATE COMMITTEE:

(a) SENATE NOMINEE:

1. Dr. Brijesh Eshpuniyani AE - Outgoing Chairman

2. Prof. K Subramaniam, BSBE

(b) NOMINEES OF DEPARTMENTS/PROGRAMMES:

1. Dr. A Kushari AE
2. Prof. Pradip Sinha BSBE
3. Dr. Pankaj A Apte CHE
4. Dr. Nisanth Nair CHM
5. Prof. Purnendu Bose CE
6. Prof. Sumit Ganguly CSE
7. Dr. A Jagannatham EE
8. Dr. Suchitra Mathur HSS
9. Prof. A P Sinha IME
10. Dr. Asima Pradhan (PHY) LTP
11. Dr. A K Saha ME
12. Dr. Kantesh Balani MSE
13. Prof. Jitendra Kumar MSP
14. Prof. A K Lal MATHS & STAT.
15. Dr. P Munshi (ME) NET
16. Dr. Sudeep Bhattacharjee PHY
17. Dr. Braj Bhusan (HSS) M DES

c) STUDENTS’ SENATE NOMINEES:

1. Mr. Keshav Goel (Y7196) keshavg@iit.ac.in
2. Mr. Aditya Gupta (Y8036) gaditya@iitk.ac.in
3. Mr. Apoorva Agarwal (Y9125), apoorvag@iitk.ac.in
4. Mr. Mihir Jha (10399), mihirj@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, 2012 was 348. 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, 2012. The Institute also had a number of Visiting Faculty members. 14 faculty members and 01 academic staff retired/voluntary retired/resigned (Technical); 03 visiting faculty/ academic staff have resigned/technical resigned/term over. 14 Faculty Members, 05 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 : 18

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. 4733 D.P. Mishra
10. 4785 C S Upadhyay

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

1. 4958 Abhijit Kushari
2. 4993 Debopam Das
3. *5129 Sivasambu Mahesh

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

1. 5288 P.M. Mohite

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

1. 5366 Rajesh Kitey
ASSISTANT PROFESSOR  AGP-7000 (Contract) PB-3 (15600-39100)
1. 5396 Abhishek
2. 5403 Ashoke De
3. 5431 Rakesh Kumar

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
6. 5119 Ashok Kumar
7. 5103 Dhirendra S Katti

ASSOCIATE PROFESSOR  AGP-9500 Direct Recruitment PB-4 (37400-67000)
1. 5194 Anupam Pal

ASSISTANT PROFESSOR AGP-9000 After 3 years experience PB-4 (37400-67000)
1. 5206 Amitabha Bandyopadhyay
2. 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 : 19

PROFESSOR AGP-10500 PB-4 (37400-67000)
1. 3314 Deepak Kunzru
2. 3754 P K Bhattacharya
3. 4244 R P Chhabra
4. 4045 Ashok Khanna
5. 4562 Ashutosh Sharma
6. 4750 Goutam Deo
7. 4794 Nishith Verma
8. 5011 V. Shankar
9. 5016 Nitin Kaistha
ASSOCIATE PROFESSOR AGP-9500 Direct Recruitment PB-4 (37400-67000)

1. 5196 Siddharta Panda
2. 5106 Animangsu Ghatak
3. 5114 Yogesh Moreshwar Joshi
4. 5021 Sanjeev Garg
5. 5175 Jayant K Singh

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

1. 5208 Pankaj A Apte
2. 5298 Raj Ganesh S Pala
3. 5303 Sri Sivakumar

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

1. 5337 Raghvendra Singh
2. 5362 Abhijit Chatterjee

CHEMISTRY DEPARTMENT

SANCTIONED STRENGTH: 30
EXISTING STRENGTH  : 30

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

1. 3827 N Sathyamurthy
2. 3791 S Sarkar
3. 4008 Y D Vankar
4. 4394 V Chandrasekhar
5. 4448 R N Mukherjee
6. 4462 P K Bharadwaj
7. 4047 N S Gajbhiye
8. 4460 S Manogaran
9. 4583 Veejendra K Yadav
10. 4596 Vinod K Singh
11. 4676 Amalendu Chandra
12. 4746 Faiz Ahmed Khan
13. 4759 S S Manoharan
14. 4789 Sandeep Verma
15. 4816 J N Moorthy
16. 5389 S R Gadre
17. 4760 K Srihari
18. 5071 Debabrata Goswami
19. 4876 R Gurunath
20. 5038 Jitendra K Bera
21. 5024 Manas Kumar Ghorai
22. 5056 M L N Rao
ASSOCIATE PROFESSOR  AGP-9500 Direct Recruitment PB-4 (37400-67000)
1.  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
3.  5304  Nishanth N Nair
4.  5305  Pratik Sen

ASSISTANT PROFESSOR   AGP-8000 Regular PB-3 (15600-39100)
1.  5427  Dattatraya Hanumant Dethe
2.  5369  Ramesh Ramapanicker
3.  5432  Ashis Kumar Patra

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

CIVIL ENGINEERING DEPARTMENT

SANCTIONED STRENGTH: 33
EXISTING STRENGTH : 33

PROFESSOR AGP-10500 PB-4 (37400-67000)
1.  3462  Ashwini Kumar
2.  4209  Sudhir K Jain
3.  4399  Sarvesh Chandra
4.  4295  Vinod Tare
5.  4586  V K Gupta
6.  4464  S K Chakrabarti
7.  4799  Mukesh Sharma
8.  4662  Onkar Dikshit
9.  4663  Partha Chakraborty
10.  4695  Rajiv Sinha
11.  4690  Sudhir Misra
12.  4798  Rajesh Srivastava
13.  4775  Purnendu Bose
14.  4784  Soumyen Guha
15.  4793  Ashu Jain
16.  4871  Animesh Das
17.  4995  Durgesh C Rai
18.  5057  Sachidanand Tripathi

ASSOCIATE PROFESSOR  AGP-9500 Direct Recruitment PB-4 (37400-67000)
1.  4978  Javed N Malik
2. 5026 Bharat Lohani
3. 5079 Pranab Kumar Mohapatra
4. 5037 Nihar Ranjan Patra
5. 5192 Tarun Gupta
6. 5230 Priyanka Ghosh
7. 5307 Debajyoti Paul

ASSISTANT PROFESSOR AGP-9000 After 3 years experience PB-4 (37400-67000)
1. 5152 Amit Prashant

ASSISTANT PROFESSOR AGP-8000 Regular PB-3 (15600-39100)
1. 5346 Samit Ray Chaudhuri
2. 5347 (Ms) Prishati Raychowdhury
3. 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
4. 5405 Rajesh Sathiyamoorthy

COMPUTER SCIENCE & ENGINEERING SANCTIONED STRENGTH: 18
EXISTING STRENGTH: 25

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 Phalgungi Gupta
12. 4645 Ajai K Jain
13. 4668 Dheeraj Sanghi
14. 4762 Sumit Ganguly
15. 4934 Anil Seth
16. 5010 Shashank K Mehta
ASSOCIATE PROFESSOR   AGP-9500 Direct Recruitment PB-4 (37400-67000)
1. 5112 Mainak Chaudhuri
2. 5197 Surender Baswana
3. 5222 Peeyush P Kurur

ASSISTANT PROFESSOR AGP-9000 After 3 years experience PB-4 (37400-67000)
1. 5268 Arnab Bhattacharya

ASSISTANT PROFESSOR   AGP-8000 Regular PB-3 (15600-39100)
1. 5372 (Ms) Krithika Venkataramani
2. 5383 Amey Karkare

ASSISTANT PROFESSOR      AGP-7000 Contract PB-3 (15600-39100) Ph D + 1 year experience
1. 5382 Satyadev Nandakumar
2. 5392 Subhajit Roy
3. 5429 Raghunath Tewari

ELECTRICAL ENGINEERING
SANCTIONED STRENGTH: 53
EXISTING STRENGTH : 36

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. 4652 Animesh Biswas
11. 4478 Pradip Sircar
12. 4670 Baquer Mazhari
13. 4827 A K Chaturvedi
14. 4489 R K Bansal
15. 5003 S N Singh
16. 4776 Shyama P Das
17. 4771 Yatindra N Singh
18. 4833 K S Venkatesh
19. 4988 Laxmidhar Behera
20. 5013 A R Harish
21. 5113 S Sundar Kumar Iyer

49
ASSOCIATE PROFESSOR AGP-9500 Direct Recruitment PB-4 (37400-67000)

1. 4938 K Vasudevan
2. 5012 Parthasarathi Sensarma
3. 5015 (Ms) Nandini Gupta
4. 5111 Adrish Banerjee
5. 5162 Ramprasad Potluri
6. 5293 Santanu K Mishra
7. 5295 Rajesh M Hegde

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

1. 5309 Kumar Vaibhav Srivastava
2. 5321 Naren Naik
3. 5326 Md Jaleel Akhtar
4. 5327 Nishchal Kumar Verma

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

1. 5343 Aditya K Jagannatham
2. 5344 Bahniman Ghosh
3. 5357 Pradeep Kumar K
4. 5363 Saikat Chakrabarti

HUMANITIES & SOCIAL SCIENCES

SANCTIONED STRENGTH: 31
EXISTING STRENGTH : 31

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

1. 3838 (Ms) Lilavati Krishnan
2. 3983 A K Sharma
3. 4373 K K Saxena
4. 4016 A K Sinha
5. 4791 B K Pattnaik
6. 4729 G Neelakantan
7. 4488 Surajit Sinha
8. 4700 (Ms) Achla M Raina
9. 4702 (Ms) Shikha Dixit
10. 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. 5181 Braj Bhusan
7. *4976 Satyaki Roy
8. 5231 Kumar Ravi Priya

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

1. 5270 Sarani Saha

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

1. 5237 A V Ravi Shankar Sarma
2. 5287 Anindita Chakrabarti
6. 5332 Vineet Sahu
4. 5333 Vimal Kumar
5. 5335 P B Bagad
6. 5353 Nirmalya Guha
7. 5354 (Ms) Chaithra Puttaswamy

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

1. 5367 (Ms) Sohini Sahu
2. 5409 Anirban Mukherjee
3. 5410 (Ms.) Tanika Chakraborty

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

1. *5183 (Ms) Koumudi Prakash Patil
2. 5331 (Mrs) Shatarupa Thakurta Roy

INDUSTRIAL & MANAGEMENT ENGINEERING

SANCTIONED STRENGTH: 18
EXISTING STRENGTH : 16

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)

1. 5302 Subhas Chandra Misra

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

1. 5348 Deepu Philip

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

1. 5428 Shashi Shekhar Mishra
2. 5430 Sri Vanamalla V

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. 4382 Dipak Mazumdar
5. 4565 Rajiv Shekhar
6. 4597 Sandeep Sangal
7. 4790 Deepak Gupta
8. 4796 (Ms) Monica Katiyar
9. 4919 Anish Upadhyaya

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

1. 4977 Bikramjit Basu
2. 5034 Ashish Garg
3. 5072 Gouthama
4. 5269 Kallol Mondal
5. 5273 Krishanu Biswas
6. 5289 Anandh Subramaniam

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

1. 5297 Kantesh Balani

ASSISTANT PROFESSOR AGP-8000 Regular PB-3 (15600-39100)
1. 5336 Vivek Verma
2. 5385 Tanmoy Maiti
3. 5404 Shashank Shekhar
4. 5381 Sarang Ingole
5. 5400 Shobhit Omar

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

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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
18. 4781 (Ms) Mohua Banerjee
19. 4832 (Mrs) Rama Rawat
20. 4870 S Ghorai
21. 5029 Joydeep Dutta
22. 5153 Amit Mitra

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

1. 4822 G Santhanam
2. 4537 (Ms) Aparna Dar
3. 4930 Swagato Kumar Ray
4. 5189 Parasar Mohanty
5. 5036 Shalabh
6. 5121 (Ms) Nandini Nilakantan
7. 5229 Sharmistha Mitra
8. 5235 Sudipta Dutta

ASSISTANT PROFESSOR AGP-9000 After 3 years experience PB-4 (37400-67000)
1. 5291 Malay Banerjee
2. 5314 Sameer Laxman Chavan

ASSISTANT PROFESSOR AGP-8000 Regular PB-3 (15600-39100)
1. 5361 T Muthukumar
2. 5370 Akash Anand
3. 5395 (Ms) Rekha Santhanam

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

MECHANICAL ENGINEERING

SANCTIONED STRENGTH: 42
EXISTING STRENGTH : 38

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. 4650 Kalyanmoy Deb
13. 4288 P S Ghoshdastidar
14. 4788 Subrata Sarkar
15. 4801 P K Panigrahi
16. 4779 Bhaskar Dasgupta
17. 4823 N Venkata Reddy
18. 4890 Bishakh Bhattacharya
19. *4928 Kamal K Kar
20. 4931 Avinash Kumar Agarwal
21. 5014 Sumit Basu
22. 5022 Ashish Datta
23. 5054 P Venkitanarayanan
ASSOCIATE PROFESSOR  AGP-9500 Direct Recruitment PB-4 (37400-67000)

1. 4956 Anupam Saxena
2. 5120 Sameer Khandekar
3. 5074 J Ramkumar
4. 5122 Arun Kumar Saha
5. *5129 Sivasambu Mahesh
6. 5394 Nachiketa Tewari
7. 5399 Shakti Singh Gupta
8. 5199 Ishan Sharma
9. 5234 Shantanu Bhattacharya
10. 5299 Pankaj Wahi
11. 5364 Binod Sreenivasan

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

1. 5267 Basant Lal Sharma
2. 5294 Malay Kumar Das
3. 5300 Anurag Gupta

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

1. 5358 Sovan Das

PHYSICS DEPARTMENT

SANCTIONED STRENGTH: 38
EXISTING STRENGTH: 33

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

1. 3980 R K Thareja
2. *4064 Keshawa Shahi
3. 4254 Rajendra Prasad
4. 4642 Depashish 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
16. 5407 (Ms.) R. Vijaya
17. 5040 S Anantha Ramakrishna
18. 5041 Amit Dutta
19. 5117 Satyajit Banerjee
ASSOCIATE PROFESSOR   AGP-9500 Direct Recruitment PB-4 (37400-67000)

1. 4755 V Subrahmanyam
2. 4797 Gautam Sengupta
3. 4893 Harshwardhan Wanare
4. 5028 (Ms) Sutapa Mukherji
5. 5046 Anjan Kumar Gupta
6. 5102 Zakir Hossain
7. 5115 Tapobrata Sarkar
8. 5123 Sudeep Bhattacharjee
9. *5167 Rajeev Gupta
10. 5417 Soumik Mukhopadhyay

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

1. 5284 Tarun Kanti Ghosh
2. 5290 Kaushik Bhattacharya
3. 5306 Dipankar Chakrabarti

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

1. 5355 Krishnacharya

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

MATERIALS SCIENCE PROGRAMME

SANCTIONED STRENGTH: 06
EXISTING STRENGTH    : 05

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

1. 3762 Jitendra Kumar
2. *4064 Keshawa Shahi
3. *4559 Y N Mohapatra
4. *4928 Kamal K Kar

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

1. *5167 Rajeev Gupta

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

-- -- --
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)

-- -- --

DESIGN PROGRAMME

SANCTIONED STRENGTH:
EXISTING STRENGTH: +2 HT

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

1. *4976 Satyaki Roy

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

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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 APRIL 01, 2012

<table>
<thead>
<tr>
<th>Sl No.</th>
<th>Name &amp; Designation</th>
<th>Department/ Programme</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>4983 Alok Gupta, Research Engineer Gr-I</td>
<td>AE</td>
</tr>
<tr>
<td>2.</td>
<td>4616 Sushmit Sen, Senior Research Engineer</td>
<td>Robotics</td>
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<tr>
<td>3.</td>
<td>4824 Anjali V Kulkarni, Senior Research Engineer</td>
<td>Mechatronics</td>
</tr>
<tr>
<td>4.</td>
<td>5118 Ajay Misra, Senior Research Engineer</td>
<td>AE</td>
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<tr>
<td>5.</td>
<td>4078 Chaturi Singh, Senior Research Engineer</td>
<td>NWTF</td>
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<td>6.</td>
<td>5278 Neeru Chhabra, Senior Research Engineer</td>
<td>EE</td>
</tr>
<tr>
<td>7.</td>
<td>4318 Amitabha Roy, Principal Research Engineer</td>
<td>EE</td>
</tr>
<tr>
<td>8.</td>
<td>4807 Brajesh Chandra, Principal Research Engineer</td>
<td>AE (NWTF)</td>
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<td>9</td>
<td>4056</td>
<td>V Raghuram, Principal Research Engineer</td>
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<td>Rajeev Gupta, Principal Research Engineer</td>
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<td>Aurobinda Chatterjee, Principal Research Engineer</td>
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<td>A L Bhavsar, Scientific Officer Gr.I</td>
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<td>14</td>
<td>4815</td>
<td>K K Bajpai, Senior Scientific Officer</td>
</tr>
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<td>15</td>
<td>3780</td>
<td>Sanjay Gupta, Chief Scientific Officer</td>
</tr>
<tr>
<td>16</td>
<td>5285</td>
<td>Saikat Hira, Computer Engineer Gr II</td>
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<td>Md Aftab Alam, Senior Computer Engineer</td>
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<td>Brajesh Pande, Senior Computer Engineer</td>
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<td>Gopesh Tewari, Senior Computer Engineer</td>
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<td>Soma Sengupta, Senior Computer Engineer</td>
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<td>Md K Ahmad, Senior Computer Engineer</td>
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<td>K S Singh, Principal Computer Engineer</td>
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<td>Navpreet Singh, Principal Computer Engineer</td>
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<td>B M Shukla, Principal Computer Engineer</td>
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<td>26</td>
<td>5030</td>
<td>Vipul Mathur, Senior Aircraft Maintenance Engineer</td>
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<tr>
<td>27</td>
<td>5312</td>
<td>V D Shrivastava, Librarian</td>
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<td>28</td>
<td>3969</td>
<td>Umed Singh, Assistant Librarian</td>
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<tr>
<td>29</td>
<td>3974</td>
<td>(Ms) Neelam Prasad, Assistant Librarian</td>
</tr>
<tr>
<td>30</td>
<td>5148</td>
<td>S K Vijaianand, Assistant Librarian</td>
</tr>
</tbody>
</table>
Academic Programmes

EDUCATIONAL GOALS

Engineering education should produce trained manpower for advancing the technological growth of the nation. The scope of engineering education should evolve based on its usefulness and relevance to the current and future needs of the country.

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

To prepare 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 by bringing together faculty and students from different departments into activities of mutual interest.

TEACHING PROGRAMMES

The Institute offers instruction in various disciplines of science and engineering, both at under-graduate (UG) and post-graduate (PG) levels. These programmes are approved and monitored by Senate of the Institute. Management of these programmes are carried out by the Senate Under-Graduate Committee (SUGC) and the Senate Post-Graduate Committee (SPGC), respectively.

Undergraduate Programmes

The four-year under-graduate programmes consist of two parts. The first part is the Core programme, largely common to all such programmes, 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 under-graduate programmes consists of professional courses and a project in the chosen branch of specialization. At the Bachelor’s level, we have B.Tech. programmes in Aerospace Engineering, Biological Sciences & Bio-Engineering, Chemical Engineering, Civil Engineering, Computer Science and Engineering, Electrical Engineering, Material Science and Engineering, and Mechanical Engineering. We also have four-year B.S. programmes in Physics, Chemistry, Mathematics & Scientific Computing, and Economics.


Institute offers to its under-graduate students an option to do additional courses and research, and complete the requirements of both under-graduate and corresponding post-graduate programmes on a fast pace, normally within a duration of five years.
Two-Year M.Sc. Programme

There are two-year M. Sc. programs in Physics, Chemistry, Mathematics, and Statistics, where the students with B.Sc. background are chosen through an all-India entrance examination known as JAM. These programmes have produced large number of scientists, many of whom are currently engaged in Indian research laboratories and universities.

Postgraduate Programme

Post-graduate programmes 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. The M. Tech. and Ph.D. students receive research/teaching assistantships.

M. Tech. Programme

The Institute offers M.Tech. Programmes in all the engineering disciplines mentioned above. In addition, there are M.Tech. Programmes in inter-disciplinary areas such as, Nuclear Engineering, Laser Technology, Environmental Engineering, Materials Science, and Industrial and Management Engineering. Admission to M.Tech. programmes is based on performance in the all-India examination known as GATE, in some cases followed by an internal test/interview. These are typically two year programmes.

MBA and MDES Programme

We also offer two more Master's level programs, namely, Masters of Business Administration (MBA) and Master of Design (MDes). Both are two-year programmes. Admission to MBA programme is through an all-India examination called CAT, followed by an internal test/interview process. Admission to MDes is through an all India examination called CEED, followed by an internal test/interview process.

Doctor of Philosophy (Ph.D.)

The academic programmes leading to the Degree of Doctor of Philosophy (Ph.D.) exists in all departments (both Engineering and Science) and all inter-disciplinary programmes. The focus of PhD programs is high-quality research training. As part of the program, students carry out original research on a selected problem leading to a thesis. Usually, the research work also gets published in peer-reviewed journals and conferences. In most programs, the admission to PhD program is for those who have completed a Master's level program in the relevant discipline. In exceptional cases, students graduating with a BTech degree can also be admitted to a PhD program, based on an internal test/interview. Typically, students take 4 to 6 years to complete their programs.
M.Sc.-Ph.D. (Dual Degree)

The Department of Physics offers a M.Sc.-Ph. D. dual degree program, the admission is through JAM.

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 at the beginning of every semester 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. This Committee has been working with effect from January, 2012 and its tenure is of two years.

The following is the present composition of the CDMC:

- Prof. Goutam Deo (ChE) Chairman
- Prof. C.S. Upadhyay (AE) Co Chairman
- Prof. K Srihari (CHM) Member
- Prof. B. Mazhari (EE) 
- Prof. A.K. Lal (MTH) 
- Prof. Manoj K Harbola (PHY) 
- Prof. Sumit Ganguly (CSE) 
- Prof. Suchitra Mathur (HSS) 
- Prof. Monica Katiyar (MSE) 
- Prof. Saumyen Guha (CE) 

ADMISSION

Undergraduate

Admissions for all the B.Tech. and B.S. programmes at IIT Kanpur for the academic session 2011-2012 were made by the Joint Admission Committee for all IITs and IT-BHU.
The Joint Entrance Examination (JEE) -2011 was held on April 10, 2011. The following offers of admission were made from IIT Kanpur:

<table>
<thead>
<tr>
<th>Department/Disciplines</th>
<th>Total Number of Candidates-Direct Admission</th>
<th>JEE-2011</th>
<th>Preparatory Course-2010</th>
<th>Total</th>
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<tbody>
<tr>
<td></td>
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<td>Gen SC</td>
<td>ST OB C PH SC ST PH</td>
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<tr>
<td>B.Tech.</td>
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<td>19 7 3 11 - - 3 - 43</td>
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<td></td>
</tr>
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<td>Chemical Engg.</td>
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<td>37 10 6 21 1 - - - 75</td>
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</tr>
<tr>
<td>Civil Engg.</td>
<td></td>
<td>51 15 8 28 1 - - - 103</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer Sc. &amp; Engg.</td>
<td></td>
<td>45 14 6 25 2 - - - 92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical Engg.</td>
<td></td>
<td>63 20 9 35 4 - - - 132</td>
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<td></td>
</tr>
<tr>
<td>Mechanical Engg.</td>
<td></td>
<td>47 14 7 28 2 - - 1 99</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Materials &amp; Met. Engg.</td>
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<td>45 14 7 24 - - 6 2 98</td>
<td></td>
<td></td>
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<tr>
<td>B.S. Programme (4 year)</td>
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<td>- - - - - - - - -</td>
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</tr>
<tr>
<td>Chemistry</td>
<td></td>
<td>21 4 - - - - 2 - 27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics &amp; Scientific Computing</td>
<td></td>
<td>24 6 2 13 1 - 2 1 49</td>
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<tr>
<td>Economics</td>
<td></td>
<td>26 6 1 3 - - 3 - 39</td>
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<tr>
<td>Physics</td>
<td></td>
<td>15 4 - 7 - - 1 - 27</td>
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<td>Total</td>
<td></td>
<td>417 121 53 207 12 0 17 5 832</td>
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Two-Year M.Sc. Programme

Admissions to the two-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. and M.Sc.-Ph.D. (Dual Degree) Physics programmes during 2011-2012 are as under:

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Department/Group</th>
<th>Numbers of Admission Offered</th>
<th>Actual Number of Students Joined</th>
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<tbody>
<tr>
<td>M.Sc. (2-year)</td>
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<tr>
<td>1</td>
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<td>40</td>
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<td>2</td>
<td>Mathematics</td>
<td>39</td>
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<td>3</td>
<td>Physics</td>
<td>29</td>
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<tr>
<td>4</td>
<td>Statistics</td>
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<td>23</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>139</td>
<td>128</td>
</tr>
<tr>
<td>M.Sc. - Ph. D. (Dual Degree)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Physics</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>14</td>
<td>14</td>
</tr>
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</table>
Post-Graduate

The number of students admitted to the post-graduate programmes in the first and second semesters of 2011-12 academic year is given below:

**ENGINEERING**

<table>
<thead>
<tr>
<th>Department / Group</th>
<th>First Semester</th>
<th></th>
<th>Second Semester</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerospace Engg.</td>
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<td>34</td>
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<tr>
<td>B.S.B.E.</td>
<td>12</td>
<td>10</td>
<td>22</td>
<td>-</td>
</tr>
<tr>
<td>Chemical Engg.</td>
<td>25</td>
<td>22</td>
<td>47</td>
<td>-</td>
</tr>
<tr>
<td>Civil Engg.</td>
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<td>9</td>
<td>55</td>
<td>-</td>
</tr>
<tr>
<td>Computer Sc. &amp; Engg.</td>
<td>40</td>
<td>5</td>
<td>45</td>
<td>-</td>
</tr>
<tr>
<td>Design (M.Des.)</td>
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<td>-</td>
<td>13</td>
<td>-</td>
</tr>
<tr>
<td>Electrical Engg.</td>
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<td>22</td>
<td>135</td>
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<tr>
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<td>10</td>
<td>72</td>
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</tr>
<tr>
<td>Materials Science &amp; Engg.</td>
<td>18</td>
<td>5</td>
<td>23</td>
<td>-</td>
</tr>
<tr>
<td>I.M.E.</td>
<td>16</td>
<td>4</td>
<td>20</td>
<td>-</td>
</tr>
<tr>
<td>Laser Technology</td>
<td>15</td>
<td>-</td>
<td>15</td>
<td>-</td>
</tr>
<tr>
<td>Material Science</td>
<td>09</td>
<td>05</td>
<td>14</td>
<td>-</td>
</tr>
<tr>
<td>N.E.T.</td>
<td>09</td>
<td>01</td>
<td>10</td>
<td>-</td>
</tr>
<tr>
<td>E.E.M.</td>
<td>19</td>
<td>-</td>
<td>19</td>
<td>-</td>
</tr>
<tr>
<td>M.B.A. (IME)</td>
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<td>-</td>
<td>50</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>476</strong></td>
<td><strong>98</strong></td>
<td><strong>574</strong></td>
<td><strong>01</strong></td>
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**SCIENCES**

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<th>First Semester</th>
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<th>Second Semester</th>
<th></th>
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<tr>
<td></td>
<td>Ph.D.</td>
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<td>Ph.D.</td>
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<td></td>
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<tr>
<td>Mathematics</td>
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<td>01</td>
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</tr>
<tr>
<td>Physics</td>
<td>06</td>
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<td>06</td>
<td></td>
</tr>
<tr>
<td>M.Sc.-Ph.D. in Physics</td>
<td>09</td>
<td></td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>H.S.S.</td>
<td>02</td>
<td></td>
<td>03</td>
<td></td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>44</strong></td>
<td></td>
<td><strong>29</strong></td>
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</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>618</strong></td>
<td></td>
<td><strong>87</strong></td>
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</tbody>
</table>

The total department/programme wise strength of the post-graduate students during the year is given below:
### ENGINEERING

<table>
<thead>
<tr>
<th>Department / Group</th>
<th>First Semester</th>
<th></th>
<th></th>
<th>Second Semester</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerospace Engg.</td>
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<td>33</td>
<td>89</td>
<td>53</td>
<td>33</td>
<td>86</td>
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<td>B.S.B.E.</td>
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<td>67</td>
<td>92</td>
<td>24</td>
<td>71</td>
<td>95</td>
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<tr>
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<td>80</td>
<td>133</td>
<td>53</td>
<td>80</td>
<td>133</td>
</tr>
<tr>
<td>Civil Engg.</td>
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<td>58</td>
<td>164</td>
<td>79</td>
<td>65</td>
<td>144</td>
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<tr>
<td>Computer Sc. &amp; Engg.</td>
<td>76</td>
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<td>104</td>
<td>73</td>
<td>27</td>
<td>100</td>
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<tr>
<td>Design (M.Des.)</td>
<td>27</td>
<td>-</td>
<td>27</td>
<td>25</td>
<td>-</td>
<td>25</td>
</tr>
<tr>
<td>Electrical Engg.</td>
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<td>97</td>
<td>303</td>
<td>194</td>
<td>112</td>
<td>306</td>
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<tr>
<td>Mechanical Engg.</td>
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<td>83</td>
<td>232</td>
<td>125</td>
<td>91</td>
<td>216</td>
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<td>Materials Science &amp; Engg.</td>
<td>27</td>
<td>60</td>
<td>87</td>
<td>23</td>
<td>59</td>
<td>82</td>
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<td>I.M.E.</td>
<td>29</td>
<td>20</td>
<td>49</td>
<td>28</td>
<td>19</td>
<td>47</td>
</tr>
<tr>
<td>Laser Technology</td>
<td>25</td>
<td>-</td>
<td>25</td>
<td>23</td>
<td>-</td>
<td>23</td>
</tr>
<tr>
<td>Material Science</td>
<td>16</td>
<td>20</td>
<td>36</td>
<td>13</td>
<td>20</td>
<td>33</td>
</tr>
<tr>
<td>N.E.T.</td>
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<td>7</td>
<td>21</td>
<td>13</td>
<td>8</td>
<td>21</td>
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<tr>
<td>E.E.M.</td>
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<td>-</td>
<td>39</td>
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<td>-</td>
<td>32</td>
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<tr>
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<td>553</td>
<td>1511</td>
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### SCIENCES

<table>
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<th>Department / Group</th>
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<th></th>
<th>Second Semester</th>
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</thead>
<tbody>
<tr>
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<td>Ph.D.</td>
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<td>Ph.D.</td>
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<tr>
<td>Mathematics &amp; Statistics</td>
<td>45</td>
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<tr>
<td>Physics</td>
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<td>70</td>
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<td></td>
</tr>
<tr>
<td>M.Sc.-Ph.D. in Physics</td>
<td>32</td>
<td></td>
<td>31</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>H.S.S.</td>
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<td><strong>Total</strong></td>
<td>382</td>
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<td>384</td>
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<td>1802</td>
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Strength of Undergraduate and Postgraduate Students during 2011 – 12 – I:

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<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Aerospace</td>
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<td>47</td>
<td>-</td>
<td>56</td>
<td>33</td>
<td>279</td>
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<td>-</td>
<td>-</td>
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<td>67</td>
<td>230</td>
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<tr>
<td>Chemical</td>
<td>229</td>
<td>61</td>
<td>-</td>
<td>53</td>
<td>80</td>
<td>423</td>
</tr>
</tbody>
</table>
During the year 2011-2012, 1135 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**: 340
- **M.Sc. (2 yr. & 5 yr.)**: 170 (95+75)
- **B.Tech.M.Tech. (Dual)**: 123
- **MBA**: 26
- **VLFM**: 34
- **M.Tech.**: 320
- **M.Des.**: 21
- **Ph.D.**: 101
- **Total**: 1135

**COURSES OFFERED**

The following table gives the number of courses offered during 2011-2012 at the undergraduate as well as post-graduate level:
UNDERGRADUATE LEVEL

<table>
<thead>
<tr>
<th>Core Curriculum / Department Courses</th>
<th>First Sem.</th>
<th>Second Sem.</th>
<th>Summer</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Courses run by various departments</td>
<td>27</td>
<td>31</td>
<td>6</td>
<td>64</td>
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<td>Aerospace Engineering</td>
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<td>19</td>
<td>2</td>
<td>37</td>
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<td>10</td>
<td>-</td>
<td>20</td>
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<td>2</td>
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<td>2</td>
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<td>3</td>
<td>55</td>
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<td>Economics</td>
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<td>1</td>
<td>3</td>
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<td>Chemistry</td>
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<td>20</td>
<td>-</td>
<td>39</td>
</tr>
<tr>
<td>Mathematics</td>
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<td>28</td>
<td>2</td>
<td>39</td>
</tr>
<tr>
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<td>62</td>
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<td>Humanities &amp; Social Sciences</td>
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<td>30</td>
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<td>Industrial &amp; Management Engineering</td>
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<td>-</td>
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<td>Nuclear Engineering &amp; Technology</td>
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<td>2</td>
<td>-</td>
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<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
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<tr>
<td>CPA</td>
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<td>2</td>
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POST GRADUATE LEVEL

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<th>Core Curriculum / Department Courses</th>
<th>First Sem.</th>
<th>Second Sem.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerospace Engineering</td>
<td>15</td>
<td>16</td>
<td>31</td>
</tr>
<tr>
<td>Chemical Engineering</td>
<td>17</td>
<td>15</td>
<td>32</td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>21</td>
<td>21</td>
<td>42</td>
</tr>
<tr>
<td>Computer Science &amp; Engineering</td>
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<td>16</td>
<td>31</td>
</tr>
<tr>
<td>Design (M.Des.)</td>
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<td>6</td>
<td>12</td>
</tr>
<tr>
<td>Electrical Engineering</td>
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<td>54</td>
</tr>
<tr>
<td>Environmental Engg. &amp; Management</td>
<td>4</td>
<td>8</td>
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<tr>
<td>Mechanical Engineering</td>
<td>26</td>
<td>27</td>
<td>53</td>
</tr>
<tr>
<td>Materials &amp; Metallurgical Engineering</td>
<td>12</td>
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<tr>
<td>Chemistry</td>
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<tr>
<td>Mathematics / Statistics</td>
<td>14</td>
<td>11</td>
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<tr>
<td>Physics</td>
<td>15</td>
<td>13</td>
<td>28</td>
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<tr>
<td>Humanities &amp; Social Sciences</td>
<td>19</td>
<td>17</td>
<td>36</td>
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<tr>
<td>Industrial &amp; Management Engineering</td>
<td>7</td>
<td>7</td>
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<td>Materials Science Program</td>
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<tr>
<td>Nuclear Engineering &amp; Technology</td>
<td>5</td>
<td>6</td>
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<tr>
<td>Laser Technology Program</td>
<td>3</td>
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<td>6</td>
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<tr>
<td>Biological Science &amp; Bio Engg.</td>
<td>12</td>
<td>15</td>
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<td>V.L.M. (IME)</td>
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</tr>
</tbody>
</table>

**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 2011-12 (upto July, 2012)

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Contents</th>
<th>1st Year</th>
<th>2nd Year</th>
<th>3rd Year</th>
<th>4th Year</th>
<th>5th Year</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Students strength at the beginning of the session</td>
<td>823</td>
<td>808</td>
<td>655</td>
<td>561</td>
<td>229</td>
<td>3076</td>
</tr>
<tr>
<td>2</td>
<td>Students strength at the beginning of the 2nd semester</td>
<td>821</td>
<td>805</td>
<td>653</td>
<td>554</td>
<td>223</td>
<td>3056</td>
</tr>
<tr>
<td>3</td>
<td>Students joined in 2nd semester on migration</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>Number of students withdrawn or on leave on medical ground in 1st and 2nd semesters</td>
<td>-</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td>5</td>
<td>Number of students graduated</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>280</td>
<td>181</td>
<td>461</td>
</tr>
<tr>
<td>6</td>
<td>Number of students dismissed due to poor performance in 1st and 2nd semester</td>
<td>3</td>
<td>13</td>
<td>14</td>
<td>6</td>
<td>5</td>
<td>41</td>
</tr>
</tbody>
</table>

**UNDERGRADUATE**

The following statement shows promotion and detention of M.Sc. (2-year) and M.Sc.(Dual Degree) students in the academic year 2011-2012 (upto July, 2012)

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Contents</th>
<th>1st Year</th>
<th>2nd Year</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Students strength at the beginning of the session</td>
<td>142</td>
<td>149</td>
<td>291</td>
</tr>
<tr>
<td>2</td>
<td>Students strength at the beginning of the 2nd Sem.</td>
<td>138</td>
<td>140</td>
<td>278</td>
</tr>
<tr>
<td>3</td>
<td>Number of students dismissed in 1st semester</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Number of students dismissed in 2nd semester</td>
<td>12</td>
<td>4</td>
<td>16</td>
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<tr>
<td>---</td>
<td>--------------------------------------------</td>
<td>----</td>
<td>---</td>
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</tr>
<tr>
<td>4</td>
<td>Number of students graduated in 1st semester</td>
<td>9</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of students graduated in 2nd semester</td>
<td>86</td>
<td>86</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Number of students dismissed in due to continued absence from the programme</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Following is the department-wise break-up of students who were awarded the degree at XLIV Convocation held on June 2, 2012. Dr. E Sreedharan, Principal Adviser, DMRC, India was the Chief Guest at the Convocation:

<table>
<thead>
<tr>
<th>S No</th>
<th>DEPT</th>
<th>B.Tech</th>
<th>B.Tech (Degree)</th>
<th>M.S. (5Y R)</th>
<th>M.S. (2Y R)</th>
<th>TOT AL</th>
<th>VLF M</th>
<th>MBA</th>
<th>M.D es</th>
<th>M.T ech</th>
<th>Ph. D.</th>
<th>TOT AL</th>
<th>GRAND (UG+PG)</th>
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<td>-</td>
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</tbody>
</table>

Annual Report 2011-12

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Research and Development

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

During 2011-12, 107 sponsored projects worth Rs. 5871 lakh and 74 consultancy projects of value Rs. 727 lakh were undertaken by the faculty and research engineers/scientists of the Institute, respectively.

Our faculty members have published around 627 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.

Technologies developed at the Institute have been recognized and launched at the national level.

**SIMRAN**, a GPS based Real Time Train Information System jointly developed by IITK and RDSO was inaugurated by the Hon'ble Minister of Railways in October 2011.

**Jugnu** Micro Satellite was successfully launched with the PSLV C18 rocket on October 12, 2011 from Sriharikota.

**Digital Mandi** for Indian Kisan was inaugurated by Mr. Kapil Sibal, the Hon'ble Minister of Communications and Information Technology and Minister of Human Resource Development in August 2011.

The details of some of the major projects sanctioned during the year 2011-12 are as follows:

Major sponsored projects sanctioned by various agencies during the year are DST Rs. 3160 lakh, DBT Rs. 410 lakh, MOES Rs. 342 lakh, DRDO Rs. 189 lakh, MNRE Rs. 115 lakh, and MOEF Rs. 101 lakh.

- **Aero-Elastic Study of Turbo-Machinery Blades**

DRDO has sponsored a project on Aero-Elastic Study of Turbo-Machinery Blades under GATET Scheme. The project will involve validation and optimization of a theoretical model of turbo-machinery aero elasticity already developed at IIT Kanpur, experimental study of forced response of a cascade, and development of a laboratory cascade model to simulate cascade flutter.
• **Structure And Dynamic Of Groundwater System In Northwestern India Under Past, Present And Future Climates**

MOES India and NERC UK has sponsored a project on the structure and dynamics of groundwater systems in northwestern India under past, present and future climates. India is the largest agricultural user of groundwater in the world. In fact, northwestern India is now a hotspot of groundwater depletion, with 'the largest rate of groundwater loss in any comparable-sized region on Earth'. This project is based on the premise that we must first understand the geology and geometry of the aquifer system before we can hope to estimate the way it will respond to a complex set of future stresses.

• **Generation Of Solar Hydrogen**

The project entitled Generation of Solar Hydrogen is a multi-institutional initiative, coordinated by IIT Kanpur and supported by the Technology Systems Development Program of DST, New Delhi. Participating Institutes include IIT Madras, DEI Agra, IIT Jodhpur, CECRI Karaikudi and BARC Mumbai. The project aims at developing workable designs of a solar hydrogen generation system using multiple technologies. The project aims at conducting research to develop and identify the best possible photo-electro-catalysts suitable for large scale applications. Apart from the photocatalytic route, an electrolyzer integrated to a PV module and a thermochemical approach will be developed for hydrogen generation.

• **InGaZnO4 (IGZO) Large Area Electronics and its Application to Active Matrix Flat Panel Displays**

DST has funded a project on Research and Development of InGaZnO4 (IGZO) large area Electronics and its applications to Active Matrix Flat Panel Displays. In contrast to the microelectronics industry, large area electronics is still an emerging technology in which India has the capability to join the race. This project will be a step in that direction.

• **Thematic Unit Of Excellence On Soft Nanofabrication With Applications In Energy, Environment And Bioplatforms**

DST has also funded a project Thematic Unit of Excellence on Soft Nanofabrication with applications in Energy, Environment and Bioplatforms as a 2nd phase of the Unit on Nanosciences. The Unit has many state-of-the-art resources for nanofabrication and characterization (e.g., SEM, e-beam, photolithography, nanoimprinting, profilometers, micro-Raman, NSOM, SPMs, LB/BAM, XRD, SAXS, ellipsometer, PECVD, sputtering, imaging, etc.). The basic thrust of the Unit involving participation of around ten faculty groups spread over different departments is in developing soft materials, structures and devices within 100 nm size and exploit their applications in three areas: energy, environment and bio-applications/health.
• Stability and Performance of Photovoltaic (STAPP)

In addition, DST has sponsored a project to set up five different PV technologies of mono-crystalline, multi-crystalline, amorphous thin film silicon, CIGS thin film and multi-junction high efficiency concentrators with trackers to monitor and collect data objectively, analyze their performance and to find levelized cost of Electricity (LCOE) of each of these technologies.

Patents filed by the faculty during the financial year 2011-2012:

• Power Supply System
• A System for generating crystal of desired size and number density of a biomolecule, and process thereof.
• Functional Flow Generator
• Method of fabricating Organic Thin Film and Organic thin film thereof/Method of improving microstructure and morphology of organic thin film by annealing in electric field to achieve high efficient optoelectronic devices
• Power extraction from Photovoltaic Power Sources
• A self propelled stair climbing wheel chair
• A New Self Configurable Modular Robot
• Magnesium inserted porphyrin compound, its blends and devices thereof
• Automation of rapid thermal anneal for specific Refractive Index or Absorption Coefficient of intermixing multi quantum wells
• Breast cancer detection system
• An arrangement for jet engine to reduce noise

Patents filed through Intellectual Ventures:

• Hydroxyapatite Poly (etheretherketone) nanocomposities and method of manufacturing same
• Flexible temperature sensor and sensor array
• Carbon nanofiber/carbon nanocoil coated substrate and nano composites
• Organic photonic materials (zinc based) as precursors for inorganic photonic materials in bulk, film and nanowire form
• Aluminum based n-type semiconductors as organic photonic presursors for inorganic photonic materials in bulk, film and nanowire form
• Novel Pixel addressing to extend lifetimes and improve performance of display devices
• Smart analyte responsive microspheres and nanospheres for controlled delivery of biomolecules
• Cell sheet engineering using sugar responsive hydrogels
• Phase transformable cryogel scaffold for tissue engineering
• ASIQ: Skylines with aggregate operations over multiple relations
• Miniature Lenses, Systems and Methods of Making the same
• Composite Reusable Adhesives
• Micropattern Generation with pulsed laser diffraction
• Measurement of submicron focused charged particles beams using a current flux grating spider probe
Design patent:
- Multi Drug Delivery Medical Pump
- Stair Climbing Wheel Chair

Major Facilities Added during the financial year 2011-12:

- **Nanoscale Imaging Facility**
  The Institute is in process of setting up a facility for materials and biological science at a cost of about Rs. 15 crores. The facility will house a HRTEM and a cryo-TEM along with the complete infrastructure/accessories for materials and biological sample preparation. The HRTEM will be FEI make Titan G2 60-300 model, the world’s most powerful commercially available STEM/TEM. The microscope will have the most advanced, most recent technology detectors, attachments and imaging system with state of the art capability for imaging at sub-Angstrom scale, and diffraction and X-ray spectroscopy at nanometer scale. The facility will be commissioned and available for researcher by the end of 2012.

- In addition, to give a boost to infrastructure for research, the Institute provided a grant of Rs. 2.5 crore to each department. This has led to wide spread augmentation of equipments and facilities across the Institute.

- Some laboratories established in the Institute are virtual instrumentation laboratory (AE); a Flame/Fire dynamics laboratory (AE) and a general purpose laboratory for Production Shop Simulation and Smart Systems and Operations Laboratory (IME).

- **Facilities under CARE Scheme of IITK:**
  The Institute is adding several major infrastructural facilities for carrying out multidisciplinary R&D activities. Under CARE, A Distributed Fiber-Optic Strain and Temperature Sensing System, Contact Angle Goniometer, FTIR based Emission Measurement System for Air Pollutant measurement, Plasma Cleaning System: A TEM sample preparation accessory, Autoclave for curing of Polymer Matrix Composites. It also granted funds for up gradation of the old console for 400 MHz high resolution NMR Spectrometer have been funded.

**Memorandum of Understanding**

During the year 2011-12, 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. Central Pollution Control Board, Delhi for the study of Inventorisation of industrial clusters in the country and assessment of the unmet need for common effluent treatment plants.
2. Technical University of Denmark, Denmark funded by Danish Council of Strategic Research to develop a methodology for combining multi-scale and multi-disciplinary analysis tools with optimisation techniques for product development.

3. The International Union of Railways, France to study and evaluate VSAT based Train Control Communication System for railways in the Asia Region.

4. UK Universities in Indo-UK Project for development of efficient and low cost excitonic solar cells, Human resource development, Development of know-how, bilateral collaborations and exchanges.

5. University of Rhode Island, USA, Brown University, USA for academic exchange and cooperation (with DST Nanosciences, IITK in the first phase).

6. The Université libre de Bruxelles for exchange of faculty, scientists, students, joint research activities, exchange of publications.

7. Bhabha Atomic Research Centre, Mumbai to carry out experimental evaluation of strain rate effects on nuclear grade concrete mixes.

8. Indian Institute of Science Education and Research Bhopal for Addendum to the MoU to provide all source code and database structure of the software developed by IIT Kanpur to IISER Bhopal.

9. Indian Council for Agricultural Research (ICAR), New Delhi for the project titled “Engaging farmers, enriching knowledge: Agropedia Phase II”.

10. Research Design and Standards Organisation, Lucknow for Gangmen Warning System integrated with SIMRAN.

11. University of Nottingham, UK, IIM Bangalore for the UK-India Science Bridge Program.

12. Bhabha Atomic Research Centre, Mumbai for project titled Development of a low cost PIV system.


16. Department of Telecommunications, New Delhi to provide consultancy services for implementation of IPv6 in government department.

17. Institute for Plasma Research, Gandhinagar for project titled Safety code modification, validation, and safety analysis of Indian test blanket module for Iter.

18. Defence Engineering College, Ethiopia to assist DEC in developing and implementing a two year Masters Programme for working professionals sponsored by industrial organizations under Federal Democratic Republic of Ethiopia.

During the year 2011-12, Memoranda of Understanding have also been signed with many companies such as:

1. Tata Consultancy Services, Mumbai for TCS Research Scholarship Program.

2. TauRx Therapeutics Limited, Singapore for Project entitled “Evaluation of chemical compounds in the treatment of cellular models of Lafora disease”.

3. Chevron U.S.A. Inc for Amended and Restated Research agreement to demonstrate and commercialize HIGEE 2nd Generation Technology.
4. Boeing Company, USA for Purchase Contract.
5. General Motors Technical Center India Private Limited, Bangalore for amendment of dispute resolution clause.
6. GE India Technology Center Pvt. Ltd., Bangalore for services in the field of design and simulation of DC/DC conversion.
8. Siva Ventures Limited, Chennai to provide inputs on the draft milestone verification protocol for developing CCS technology.
9. ICF Consulting India Private Limited, New Delhi Teaming agreement for contribution of renewable power towards eliminating shortages and meeting economic growth aspirations.
10. WAPCOS Limited, New Delhi to provide technical support in SCADA system in the PMC work for R-APDRP Part B schemes of SCADA towns of U.P
12. Myko Tech Private Limited, Goa to characterize the fluorescent pigments and fluorescent proteins and developing technological applications.
14. United Technologies Corporation acting through its Pratt and Whitney Division, USA Research and Development: Master Services Agreement for Liquid jet breakup in swirling air flow.
15. Boeing Inc. USA India: Master Project Agreement
17. ITI Limited, Bangalore for providing services to ITI to revamp its business model and achieve its objectives.

A list of major sponsored and consultancy projects sanctioned during the financial year 2011-2012 is provided below.

**Sponsored Projects:**

**A. National Projects:**

1. INAE CHAIR PROFESSORSHIP, Funded by INAE, Total Cost Rs. 230000
2. INAE CHAIR PROFESSORSHIP, Funded by INAE, Total Cost Rs. 460000
3. SYNTHESIS OF NOVEL CARBON/POLMERIC MATERIALS FOR BATTERY SEPARATORS, Funded by DST, Total Cost Rs. 4124900
4. ISRO-IITK-STC, Funded by STC, Total Cost Rs. 1000000
5. ENGAGING FARMERS, ENRICHING KNOWLEDGE: AGROPEDIA PHASE II, Funded by NAIP, Total Cost Rs. 12248700
6. GRBMP-PIC, Funded by MOEF, Total Cost Rs. 10140000
7. STABILITY AND PERFORMANCE OF PHOTOVOLTAIC (STAPP), Funded by DST, Total Cost Rs. 20550000
8. MULTIMEDIA EXHIBITION ON GANGA, Funded by MOC, Total Cost Rs. 150000
9. STUDY OF HIGH ENTROPY ALLOYS FOR ENHANCED DUCTILITY: PREPARATION AND CONSOLIDATION, Funded by STC, Total Cost Rs. 3042000
10. DEVELOPMENT OF ADVANCED TEXTILE AND POLYMERIC MATERIALS FOR NBC INDIVIDUAL PROTECTIVE EQUIPMENT, Funded by DMSRDE, Total Cost Rs. 4860000
11. OFDM FOR VIDEO CONTENT BASED BROADBAND MIMO WIRELESS SENSOR, Funded by DST, Total Cost Rs. 2625480
12. MULTIPLE TIP HYPRODERMINE SYRINGE NEEDLE FOR EASY INSERTION INTO SOFT TISSUES, Funded by ICMR, Total Cost Rs. 2943092
13. A 1MW RE-SYNCHRONIZABLE AUTONOMOUS GRID: DC-AC INVERSION & GRID SIZE PARALLELING, Funded by DST, Total Cost Rs. 9565000
14. STUDIES ON SHEAR THICKENING FLUIDS, Funded by DMSRDE, Total Cost Rs. 2270400
15. STUDY OF PARAMETRIC SENSITIVITY OF WATER PERMEATION IN FUEL CELL PROTON EXCHANGE MEMBRANES, Funded by ISRO, Total Cost Rs. 2008000
16. EXTRACTION OF METAL IONS USING LIGAND ASSISTED SUPERCritical CO2 AND IONIC LIQUIDS, Funded by BRNS, Total Cost Rs. 2471300
17. PREDICTION FOR VISUAL SURVEILLANCE USING STATIC CAMERA, Funded by DRDO, Total Cost Rs. 4000000
18. ENTREPRENEURIAL AND MANAGERIAL DEVELOPMENT OF SMES THROUGH INCUBATORS, Funded by MSME, Total Cost Rs. 2651200
19. DEVELOPMENT OF HIGH STRENGTH IN-SITU NANOCOMPOSITES FOR AEROSPACE AND DEFENCE APPLICATIONS, Funded by INSA, Total Cost Rs. 150000
20. STARTING FLOW CHARACTERISTICS OF S200 SOLID MOTOR IN GROUND TEST CONDITIONS: NEAR AND FAR FIELD ACOUSTICS AND NEAR FIELD VELOCITY MEASUREMENTS, Funded by STC, Total Cost Rs. 2352000
21. ELECTRONIC,OPTICAL, STRUCTURAL AND DYNAMICAL PROPERTIES OF ZNS-PMMA NANOCOMPOSITE, Funded by SAMSUNG, Total Cost Rs. 2550000
22. TO DEVELOP ORGANIC AND POLYMER SOLAR CELLS AND LIGHT EMITTING DIODES ON CORUSS STEEL SUBSTRATE, Funded by TATASTEEL, Total Cost Rs. 2000000
23. DOPED OXIDES AS ANODES FOR HYDROGEN GENERATION VIA WATER ELECTROLYSIS, Funded by STC, Total Cost Rs. 1240800
24. DEVELOPMENT OF CARBON NANOSTRUCTURE REINFORCED BIPOLAR PLATES MADE OF PHENOLIC RESIN AND CARBON FIBER FOR THE PEM FUEL CELLS: PERFORMANCE EVALUATION, Funded by STC, Total Cost Rs. 2200000
25. MINIATURIZED POLYMERIC FLUIDIC PUMPS BASED ON PRINCIPLE OF PERISTALSIS, Funded by ADA, Total Cost Rs. 5226000
26. SINGLE POINT INCREMENTAL FORMING OF TI SHEET/FOIL, Funded by DRDO, Total Cost Rs. 1460000
27. PULSED COLUMN SIMULATION FOR PUREX, Funded by DAE, Total Cost Rs. 1589600
28. MUSCULOSKELETAL STEM CELLS IN TISSUE REGENERATION, Funded by DBT, Total Cost Rs. 7788000
29. FLASH AWARE OPTIMIZATIONS FOR COLUMNAR DATABASES, Funded by NETAPP, Total Cost Rs. 1080000
30. OPTIMAL GAME THEORETIC POLICIES FOR SPECTRUM AUCTIONS AND TRADING, Funded by IITCOE, Total Cost Rs. 200000
31. DEVELOPING BIOMEDICAL TECHNOLOGIES TO COUNTER THE DELETERIOUS EFFECTS OF MICROGRAVITY ON THE ROD AND CONE PHOTO-RECEPTOR NETWORK OF THE RETINA, Funded by STC, Total Cost Rs. 1560000
32. THE KOSI RIVER ALLUVIAL DYNAMICS AND ASSOCIATED RISKS, Funded by IFCPAR, Total Cost Rs. 2717000
33. UNDERSTANDING TRANSPORT OF ENERGY AND MASS IN JAMMED SOFT MATERIALS USING LASER INTERFEROMETRY, Funded by DST, Total Cost Rs. 4500000
34. SEGREGATION IN VIBRATED GRANULAR MATERIALS, Funded by DST, Total Cost Rs. 3381600
35. DESIGN AND FABRICATION OF MICRO ECM SETUP FOR MICRO CHENNELS, Funded by ARDB, Total Cost Rs. 1930750
36. INDO-MAX PLANCK CENTRE FOR COMPUTER SCIENCE (IMPECS), Funded by DST, Total Cost Rs. 6412000
37. DEVELOPMENT OF MICRO/NANO CARBON FIBERS AS SUPPORT FOR ENZYME IMMobilIZATION AND SEPARATION OF AMINO ACIDS FROM AQUEOUS SYSTEMS, Funded by DBT, Total Cost Rs. 2407000
38. DESIGN AND DEVELOPMENT OF MAV WITH HOVERING CAPABILITY, Funded by DRDO, Total Cost Rs. 4715000
39. WEB BASED COMPUTING RESOURCE FOR AB INITIO CALCULATIONS OF LARGE MOLECULES: A CAPACITY BUILDING PROGRAM FOR TEACHERS & RESEARCHERS, Funded by IGNOU, Total Cost Rs. 1090200
40. AERO-ELASTIC STUDY OF TURBO-MACHINERY BLADES, Funded by GTRE, Total Cost Rs. 19253000
41. IMMobilIZED ENZYME MEMBRANE REACTOR FOR CONVERSION OF LACTOSE TO GALACTO OLIGOSACCHARIDES (GOS), Funded by DBT, Total Cost Rs. 4221800.
42. RESEARCH AND DEVELOPMENT OF INGAZNO4 (IGZO) LARGE AREA ELECTRONICS AND ITS APPLICATIONS TO ACTIVE MATRIX FLAT PANEL DISPLAYS, Funded by DST, Total Cost Rs. 68695000
43. ENHANCED IONIC CONDUCTIVITY OF SOFC VIA NANO-CEO2, Funded by DST, Total Cost Rs. 2947890
44. SYNTHESIS CHARACTERIZATION AND EVALUATION OF CERIUM OXIDE NANOPARTICLES TO COUNTER FREE RADICAL DAMAGE IN HIGH ALTITUDE, Funded by DIPAS, Total Cost Rs. 4500000
45. GEOCHEMICAL EVOLUTION OF THE EARTH, Funded by DST, Total Cost Rs. 1449000
46. COMPREHENSIVE WATER MODELING FACILITY FOR STEELMAKING PROCESS ANALYSIS AND DESIGN, Funded by MOS, Total Cost Rs. 6189600
47. LOW TEMPERATURE CATALYTIC OZONE DECOMPOSITION, Funded by BRNS, Total Cost Rs. 2337875
48. EXPERIMENTAL INVESTIGATION OF LOW RE NO TWO-ELEMENT AIRFOILS TE-19 & FH 300, Funded by ADE, Total Cost Rs. 3870000
49. DEVELOPMENT OF A MORPHING WING, Funded by DRDO, Total Cost Rs. 3749000
50. MODIFIED RIG AND COMPENSATOR CONTROL SYSTEM FOR DYNAMIC RIG, Funded by ARDB, Total Cost Rs. 1834000
51. DEVELOPMENT OF 3D MULTIPACTING ANALYSIS CODE FOR RF COUPLERS, Funded by BRNS, Total Cost Rs. 1201700
52. 1 MW RE-SYNCHRONIZABLE AUTONOMOUS GRID: DC-DC CONVERSION FOR SOLAR PV INCLUDING MPPT AND BATTERY CHARGE CONTROLLER, Funded by DST, Total Cost Rs. 4508000
53. TEPP OUTREACH ACTIVITY CENTER, Funded by DSIR, Total Cost Rs. 800000
54. FABRICATION OF TUNABLE WETTING SURFACES BASED ON RESPONSIVE POLYMERS, Funded by DAE, Total Cost Rs. 1700000
55. MULTICORE CURRICULUM, Funded by INTEL, Total Cost Rs. 154904
56. DEVELOPMENT OF SILK BASED ADVANCED BIOMATERIALS FOR TISSUE ENGINEERING APPLICATIONS USING CRYOGELATION TECHNOLOGY, Funded by DBT, Total Cost Rs. 3644000
57. CHARACTERIZATION OF RETIONIC ACID SIGNALING IN THE DEVELOPING CHICK OPTIC TECTUM, Funded by DST, Total Cost Rs. 4086000
58. USING A UNIQUE TOOL GENETIC TOOL TO STUDY THE ROLE OF BMP LIGANDS IN NEUROGENESIS AND GLIOGENESIS IN THE DEVELOPING CORTEX, Funded by DBT, Total Cost Rs. 5146016
59. LITHOGRAPHIC APPROACH TO ASSEMBLE AND MANIPULATE SPINDLE AND ASTERS: UNDERSTANDING CELL DIVISION THROUGH EXPERIMENT AND MODELING, Funded by DBT, Total Cost Rs. 8951000
60. INVESTIGATING THE ROLE OF BMP SIGNALING IN THE HEART AND VASCU LATURE OF ADULT MICE USING A NOVEL GENETIC TOOL, Funded by DST, Total Cost Rs. 3820800
61. LONG-TERM RESPONSE OF THE HIMALAYAN RIVER SYSTEMS TO CLIMATE CHANGE, Funded by CRPG, Total Cost Rs. 1170000
62. EXPERIMENTAL INVESTIGATIONS OF FUEL SPRAYS OF BIODIESEL, STRAIGHT VEGETABLE OILS AND THEIR BLENDS WITH MINERAL DIESEL FOR OPTIMIZING FUEL INJECTION EQUIPMENT TO LOWER ENGINE EXHAUST EMISSIONS, Funded by DST, Total Cost Rs. 2800440
63. THEMATIC UNIT OF EXCELLENCE ON SOFT NANOFABRICATION WITH APPLICATIONS IN ENERGY, ENVIRONMENT AND BIOPH A RTICOS AT THE INDIAN INSTITUTE OF TECHNOLOGY, KANPUR, Funded by DST, Total Cost Rs. 7621000
64. AERODYNAMIC CHARACTERIZATION AND PERFORMANCE ESTIMATIONS THROUGH FLIGHT TEST, Funded by DRDO, Total Cost Rs. 1035000
65. DESIGN, CONSTRUCTION AND AERODYNAMIC TESTING OF BIO-MIMICKING FLAPPING WING MICRO AIR VEHICLES AND MODELS, Funded by DRDO, Total Cost Rs. 4929500
66. STANDARD MODEL WITH LOCAL SCALE INVAR IANCE, Funded by DST, Total Cost Rs. 1593600
67. THE STRUCTURE AND DYNAMIC OF GROUNDWATER SYSTEM IN NORTHWESTERN INDIA UNDER PAST, PRESENT AND FUTURE CLIMATES, Funded by MOES, Total Cost Rs. 21627000
68. STAND-OFF DETECTION OF EXPLOSIVES BASED ON IMMUNOCHEMICAL TECHNIQUES, Funded by PSA, Total Cost Rs. 5546680
69. ATTITUDE FROM VECTOR OBSERVATIONS, Funded by RCI, Total Cost Rs. 1440000
70. EXPERIMENTAL EVALUATION OF STRAIN RATE EFFECTS ON NUCLEAR GRADE CONCRETE MIXES, Funded by BARC, Total Cost Rs. 3110000
71. FEASIBILITY STUDIES ON ENHANCING DETECTOR EFFICIENCY WITH STRUCTURED PLASMONIC FILMS, Funded by ISRO, Total Cost Rs. 1200000
72. A DROSOPHILA MODEL FOR UNREVEALING THE LINK BETWEEN CELLULAR STRESS RESPONSE, CARCINOGENESIS AND ANTI-CANCER DRUG SCREENING, Funded by DBT, Total Cost Rs. 3924400
73. NOVEL PHOTONIC CRYSTAL MICROCAVITIES FOR LASER APPLICATIONS, Funded by BRNS, Total Cost Rs. 2783750
74. FLOW CONTROL FOR SEPARATION AND TRANSITION DELAY BY PLASMA ACTUATION OVER AIRFOIL, Funded by ARDB, Total Cost Rs. 1856500
75. JC BOSE FELLOWSHIP, Funded by DST, Total Cost Rs. 6800000
76. UNDERWATER DYNAMIC MODELING OF A UNDERWATER SUPERCAVITATING VEHICLE IN MOTION, Funded by NRB, Total Cost Rs. 2460000
77. THE MECHANICAL REGULATIONS OF PARTICULAR CARTILAGE DEVELOPMENT: THE MECHANISMS UNDERYING MECHANICAL REGULATION OF GENE EXPRESSION, Funded by DST, Total Cost Rs. 3600000
78. FUEL SPRAY AND COMBUSTION VISUALIZATION USING ENDOSCOPE IN BIODIESEL FUELLED DIRECT INJECTION ENGINE FOR OPTIMAL FUEL INJECTION STRATEGY AND EMISSION REDUCTION, Funded by DST, Total Cost Rs. 5304600
79. SOUTH ASIAN PRECIPITATION: A SEAMLESS ASSESSMENT SAPRISE, Funded by IITD, Total Cost Rs. 4560000
80. COSMIC RAYS-CLOUD-CLIMATE CONUNDRUM: CAN ION-AEROSOL NEAR CLOUD MECHANSIM EXPLAIN THE OBSERVED CORRELATIONS, Funded by MOES, Total Cost Rs. 5980100
81. CRYPTOGRAPHIC ALGORITHMS, Funded by GM, Total Cost Rs. 1000000
82. DEVELOPMENT OF PROSODICALLY GUIDED PHONETIC ENGINE FOR SEARCHING SPEECH DATABASES IN INDIAN LANGUAGES, Funded by DIT, Total Cost Rs. 4025000
83. PHOTOELECTROCHEMICAL WATER SPLITTING USING PHOTOELECTRODES HAVING NON-ACTIVE NANOSTRUCTURES AND SELECTIVE TERMINATIONS, Funded by DST, Total Cost Rs. 3000000
84. STRUCTURAL AND BIOCHEMICAL STUDIES TO UNDERSTAND THE BIOLOGICAL ROLE OF A HIGHLY CONSERVED GTPASE/ATPASE YCHF, Funded by CSIR, Total Cost Rs. 2692000
85. HYDROMETEOROLOGICAL FEEDBACK AND CHANGES IN WATER STORAGE AND FLUXES IN NORTHERN INDIAN BASINS, Funded by MOES, Total Cost Rs. 6587454
86. CARBENE GENERATION ON SYNTHETICALLY MODIFIED PURINE BASES: NUCLEOBASE MODIFICATION AND NUCLEIC ACID LABELING, Funded by CSIR, Total Cost Rs. 1700000
87. DEVELOPING ACCURATE MULTI SCALE MODELS FOR STUDYING RADIATION DAMAGE IN FERRITIC ALLOYS, Funded by DAE, Total Cost Rs. 2074550
88. COMPUTATIONAL ANALYSIS OF ALGAN/GAN EPITAXIA SYSTEMS, Funded by ER&IPR, Total Cost Rs. 4236000
89. TOP CHEMISTRY DEPARTMENTS IN THE COUNTRY, Funded by DST, Total Cost Rs. 25000000
90. EXPERIMENTAL INVESTIGATIONS ON COMBUSTION CHARACTERISTICS AND EMISSION REDUCTIONS OF A LASER FIRED HYDROGEN ENGINE, Funded by MNRE, Total Cost Rs. 11544000
91. EXPERIMENTAL INVESTIGATION OF TURBULENT BUOYANT PLUME & CEILING JET BEHAVIOUR USING TIME RESOLVED PIV (TRPIV), SHADOWGRAPH AND QUANTITATIVE SCHLIEREN, Funded by DAE, Total Cost Rs. 4825000
92. INVERSE SIMULATION FOR PREDICTION OF HELICOPTER BLADE LOADS IN AN UNSTEADY MANOEUVR, Funded by ARDB, Total Cost Rs. 1350000
93. ROBUST DISTRIBUTED VIDEO SURVEILLANCE UNDER VARIABLE ENVIRONMENTAL CONDITIONS, Funded by DST, Total Cost Rs. 2933280
94. FIRST PRINCIPLE STUDIES ON FERROIC OXIDES, Funded by DST, Total Cost Rs. 5447940
95. DEVELOPMENT OF NON-CONTACT ULTRASONIC NDT BASED ON LBU AND EMAT TECHNIQUE FOR DEFECT DETECTION IN PANELS, Funded by ARDB, Total Cost Rs. 6284400
96. NUMERICAL SIMULATION AND EXPERIMENTAL STUDIES OF MOLD FILLING PROCESS IN MANUFACTURING OF FIBROUS COMPOSITES, Funded by ARDB, Total Cost Rs. 4215100
97. ANALYTICAL AND NUMERICAL STUDY OF MIXED CONVECTION PROCESS IN CORRUGATED FLUID SATURATED POROUS CONFIGURATIONS, Funded by DST, Total Cost Rs. 1982400
98. DEVELOPMENT OF MICRO-INVERTER BASED MODULAR SOLAR ENERGY GENERATOR FOR LINE POWER, Funded by DST, Total Cost Rs. 3300000
99. LITHOGRAPHY ASSISTED PATTERNING AND IN VITRO POLYMERIZATION OF MICROTUBULE ASTERS, Funded by DST, Total Cost Rs. 1567000
100. ANALYSIS OF SIZE-SEGREGATED COMPOSITION AND DISTRIBUTION OF ORGANIC COMPOUNDS ON AMBIENT AIR PARTICLES: SEASON VARIATIONS IN URBAN ENVIRONMENT IN NORTHERN INDIA, Funded by DST, Total Cost Rs. 2590000
101. PATH TRACKING CONTROL OF FOUR WHEEL DRIVE FOUR WHEEL STEER ELECTRIC VEHICLE, Funded by DST, Total Cost Rs. 1960800
102. HEAP ANALYSIS FOR GARBAGE COLLECTION, PARALLELIZATION AND OTHER APPLICATIONS, Funded by DST, Total Cost Rs. 1014000
103. DYE SENSITIZED HYBRID SOLAR CELLS WITH UP-CONVERSION NANOSTRUCTURES FOR ENHANCED EFFICIENCY, Funded by DST, Total Cost Rs. 2610000
104. SYNTHESIS, FUNCTIONALIZATION, CHARACTERIZATION AND APPLICATION OF NOVEL CARBON NANOMATERIALS FOR THE REMOVAL OF ARSENIC FROM CONTAMINATED GROUND WATER, Funded by DST, Total Cost Rs. 2430000
105. INVESTIGATION ON SEISMIC RESPONSE OF TWO CLOSELY PLACED SHALLOW GROUND ANCHORS, Funded by DST, Total Cost Rs. 1950000

106. GENERATION, STORAGE AND DISTRIBUTION OF SOLAR HYDROGEN, Bottom of Form Funded by DST, Total Cost Rs. 30508200

B. International:

107. INVESTIGATION INTO THE THERMO-OXIDATIVE AND MECHANICAL RESPONSE OF COMMERCIAL POLYIMIDE RESINS AND POLYIMIDE NANO-COMPOSITES FOR AEROSPACE APPLICATION, Funded by Boeing, Total Cost Rs. 5959800

Consultancy Projects:

A. National:

1. PRODUCTION OF POLYMER NANOFIBRES THROUGH ELECTROSPINNING, Funded by TCS, Total Cost Rs. 1517000

2. TECHNICAL EVALUATION OF RELOCATION OF TANNERIES IN JAJMAU AREA, KANPUR, Funded by UPG, Total Cost Rs. 344203

3. PERFORMANCE STUDY OF OUR EFFLUENT TREATMENT PLANT AND EVALUATION OF COMPLIANCE STATUS AT OUR SITE, Funded by LUPINM, Total Cost Rs. 992700

4. TRAIN RUNNING SIMULATION SOFTWARE, Funded by BHEL, Total Cost Rs. 4412000

5. GLIDER BASED PAYLOAD (TORPEDO) DELIVERY SYSTEM, Funded by DRDO, Total Cost Rs. 965125

6. CHECKING SEWER DESIGN: MANDHANA KANPUR NAGAR, Funded by UPSIDC, Total Cost Rs. 77210

7. SUBSOIL INVESTIGATIONS AT SMRITI APPTS. SITE, KURSI ROAD, LUCKNOW, Funded by MARGLT, Total Cost Rs. 603893

8. STABILITY ANALYSIS OF RAISING OF ASH DYKE - PHASE I, Funded by MPPOWE, Total Cost Rs. 471223

9. VETTING OF PROCESS DESIGNS OF SEWAGE TREATMENT PLANTS, ALLAHABAD, Funded by HNBEPL, Total Cost Rs. 750000

10. CONSULTANCY REGARDING LINING WORK OF MEJA JIRGO CANAL, Funded by BANSAG, Total Cost Rs. 103406

11. INTERFACING OF ECU OF EFI WITH TEST COMMANDER, Funded by RDSO, Total Cost Rs. 2950000

12. VETTING DESIGN AND DRAWING OF 3 SEWAGE TREATMENT PLANTS, Funded by HNBEPL, Total Cost Rs. 300000

13. THEORETICAL STUDY ON UNDER WATER DYNAMICS AND HYDRO-BALLISTICS FOR ANTI-SUBMARINE ROCKET, Funded by ARDE, Total Cost Rs. 997000

14. VETTING OF PROCESS DESIGNS OF 210 MLD SEWAGE TREATMENT PLANTS, BINGAWAN KANPUR, Funded by GSJ, Total Cost Rs. 1300000

15. DEVELOPMENT OF HIGH SURFACE AREA CARBON NANO MATERIALS FOR CAPACITIVE DEIONIZATION, Funded by THERMAX, Total Cost Rs. 1200000
16. THERMODYNAMIC MODELING AND BLAST FURNACE, Funded by L&TG, Total Cost Rs. 751419
17. GPR INVESTIGATIONS AT RAJAGOPURAM TEMPLE SRIRANGAM, TIRUCHIRAPALLI, Funded by RAJAGO, Total Cost Rs. 330900
18. DESIGN AND IMPLEMENTATION OF IPV6 TRAFFIC GENERATOR, IPV6 TRAFFIC ANALYZER AND IPV6-IPV4 TRANSLATOR, Funded by BITCOE, Total Cost Rs. 909975
19. REGULATION AND CONTROL OF URPM, Funded by GEGR, Total Cost Rs. 758300
20. CONSULTANCY REGARDING BANDA BYPASS ROAD, Funded by PWD, Total Cost Rs. 96513
21. DEVELOPMENT OF TANNERY INDUSTRY DOCUMENT, Funded by UPED, Total Cost Rs. 248175
22. RESTORATION OF SERVERS, NETWORKS & WEBSITES OF NBRI, Funded by NBRI, Total Cost Rs. 192000
23. CHECKING SEWER DESIGN: TRONICA CITY GAZIABAD, Funded by UPSIDC, Total Cost Rs. 99270
24. GPS INS BASED CONTROL SYSTEM INTEGRATED AND GLIDER TORPEDO KIT, Funded by NSTL, Total Cost Rs. 992700
25. ANALYTICAL MODEL FOR CONTACTLESS POWER TRANSFER, Funded by GE, Total Cost Rs. 909975
26. PREDICTIVE MODELS FOR SHEET THINNING AND SPRING BACK INCREMENTAL SHEET FORMING, Funded by BOEING, Total Cost Rs. 876277
27. RETAINERSHIP - UPPTCL STUDY CELL 2011-12, Funded by UPPTCL, Total Cost Rs. 1000000
28. CONSULTANCY PROJECT FOR FIXING OF STREET LIGHT POLES ON THE BRIDGE AT NH-2 (FROM BHAUTI TO RUMA), Funded by KDA, Total Cost Rs. 275750
29. STRUCTURAL ASSESSMENT OF YAMUNA BRIDGE AT HAMIRPUR INCLUDING CORE CUTTING, TESTING & REPORTING, Funded by PNC, Total Cost Rs. 882400
30. TOPOGRAPHIC MAPPING MATA VAISHNO DEVI SITE, Funded by SMVDSB, Total Cost Rs. 1599813
31. 3D LASER IMAGING OF STRATEGIC TARGETS, Funded by DRDO, Total Cost Rs. 990000
32. CONSULTANCY FOR THE CORE CUTTING & TESTING, Funded by UPBC, Total Cost Rs. 440120
33. INTEROPERABILITY OF FINGERPRINT SYSTEMS, Funded by NABARD, Total Cost Rs. 3300000
34. INVENTORIZATION OF INDUSTRIAL CLUSTERS, Funded by CPCB, Total Cost Rs. 827250
35. IMPACT OF ELECTRICITY REFORMS ON THE POWER SECTOR IN INDIA, Funded by WB, Total Cost Rs. 635421
36. KOZADI CHIMNEY MODEL DESIGN AND ANALYSIS, Funded by LANCO, Total Cost Rs. 397052
37. REDUCTION IN TRANSITION SLAB VOLUME FROM 17T BLOOM CASTER IN VIZAG STEEL, Funded by RINL, Total Cost Rs. 1356690
38. IMPROVING YIELD AND PERFORMANCE OF THE BLOOM CASTER TUNDISH, Funded by MUSCO, Total Cost Rs. 1586500
39. UNDERSTANDING THE NANOSCALE PROPERTIES RELATED TO DIFFUSION, SURFACE STRESS AND MODULUS OF LITHIUM ION CELL MATERIALS USING ATOMISTIC SIMULATIONS, Funded by GM, Total Cost Rs. 3161474
40. CONSULTANCY ON GEOTECH DESIGN OF BUILDING IN MUMBAI, Funded by HALKAR, Total Cost Rs. 683860
41. ADVANCED MATERIALS, Funded by PGCI, Total Cost Rs. 25000
42. CHARACTERIZATION OF FOG GENERATORS, Funded by FHPL, Total Cost Rs. 115815
43. WIND TUNNEL STUDY OF IREO GROUP HOUSING PROJECT AT NWTF IIT KANPUR, Funded by IREO, Total Cost Rs. 529440
44. TRAINING ON SEISMIC DESIGN OF STEEL STRUCTURES, Funded by UHDE, Total Cost Rs. 132360
45. AMBIENT AIR AND STACK MONITORING TECHNIQUES, Funded by CPCB, Total Cost Rs. 279980
46. DEVELOPMENT OF EXTRA LIGHT AND STRONG ANTI-WEATHERING NETS, Funded by INGEN, Total Cost Rs. 727980
47. DEVELOPMENT OF FLYASH UTILIZATION, Funded by UPED, Total Cost Rs. 248175
48. INVESTIGATION OF STAINLESS STEEL PLATES, Funded by PTC, Total Cost Rs. 68938
49. CONSULTANCY FOR FOUNDATION OF ELECTRIC POLE FOUNDATION, Funded by ABB, Total Cost Rs. 16545
50. FAILURE OF SPOT WELDED JOINTS, Funded by MARUTI, Total Cost Rs. 45000
51. LIMITED WIND TUNNEL TESTING FOR GENERATION OF LONGITUDINAL, STABILITY AND CONTROL CHARACTERISTICS, Funded by NSTL, Total Cost Rs. 965125
52. CONTRIBUTION OF RENEWABLE POWER TOWARDS ELIMINATING SHORTAGES AND MEETING ECONOMIC GROWTH ASPIRATIONS, Funded by ICF, Total Cost Rs. 1058880
53. PERFORMANCE EVALUATION OF CATALYST COATED MICRO-CHANELED PLATES IN TEST REACTOR, Funded by CFEES, Total Cost Rs. 1191240
54. DESIGN CONSULTANCY OF STEEL GATES OF RAMGANGA BARRAGE, Funded by GHANAR, Total Cost Rs. 289538
55. ANALYSIS AND VALIDATION OF RESULTS OBTAINED OUT OF MEMBRANE PILOT PLANT FOR THE PRODUCTION OF LIGNO-SULPHONATES FROM SPENT SULPHITE LIQUOR (SSL), Funded by SPML, Total Cost Rs. 300000
56. GROUND PENETRATING RADAR SURVEY AT KAMPILYA (ERSTWHILE SOUTHERN PANCHAL CAPITAL), Funded by DRAUPA, Total Cost Rs. 40000
57. EXPERT REPORT FOR ANALYSIS OF LOADS ON PCC POLES ERECTED IN SOIL WITHOUT GROUTING IN UNNAO (U.P) ABB LTD., Funded by ABB, Total Cost Rs. 441200
58. PROOF OF CONCEPT FOR RFID-QSF, Funded by DOP, Total Cost Rs. 882400
59. DESIGN AND FABRICATION OF A FLYING WING VERTICAL TAILLESS ADAPTED AURA UCAV MODEL, Funded by ADA, Total Cost Rs. 758500
60. GANGMEN WARNING SYSTEM (GWS), Funded by RDSO, Total Cost Rs. 2976600
61. CONDITION ASSESSMENT OF IOCL OFFICE BUILDING AT NOIDA (UP),
   Funded by IOC, Total Cost Rs. 496350
62. IMPROVING RHEOLOGICAL BEHAVIOUR OF AGRO-PRODUCTS, Funded by
   UPL, Total Cost Rs. 772100
63. PASSIVE AND ACTIVE CONTROL OF HOOTING, Funded by PWC, Total Cost Rs.
   1156250
64. ENVIRONMENTAL POLLUTION SOURCES AND THEIR APPORTIONMENT TO
   AMBIENT ENVIRONMENT OF SOLAN DISTRICT: A GIS BASED STUDY, Funded
   by HPSPCB, Total Cost Rs. 3033250
65. PREPARATION OF CODE AND GUIDELINES FOR USING CODE OF ANN,
   Funded by CES, Total Cost Rs. 181414
66. OPTIMAL DESIGN OF A HEAT SINK FOR AN LED LUMINAIRE, Funded by
   PHILIP, Total Cost Rs. 137875
67. VETTING OF DESIGN OF BRIDGE AT SHUKLAGANG, Funded by ENGINE,
   Total Cost Rs. 68938

B. International:

68. STUDY ON A SOUTH ASIA REGIONAL POWER EXCHANGE, Funded by ADB,
   Total Cost Rs. 67540
69. INDOOR AIR QUALITY MONITORING, Funded by P&G, Total Cost Rs. 772243
70. REWIND: KNOWLEDGE BASED ENGGINERING, Funded by DCSR, Total Cost
    Rs. 1024595
71. PARAMETER IDENTIFICATION IN AUTOMOTIVE VEHICLES, Funded by
    EATON, Total Cost Rs. 2205000
72. VSAT BASED TRAIN CONTROL COMMUNICATION, Funded by UIC, Total Cost
    Rs. 1000000
73. THE USE OF LAFORA DISEASE CELL BASED ASSAY AS POTENTIAL
    THERAPEUTIC USES OF DIAMINOPHENOTHIAZINE COMPOUND, Funded by
    TAUROX, Total Cost Rs. 8438
74. MARKET BASKET ANALYSIS, Funded by RETAIL, Total Cost Rs. 5000
Alumni Association Activities

Major Activities of the Alumni Association, IIT Kanpur

1. Reunions

Organizing Reunions is a salient activity of Alumni Association. Reunions provide a vibrant forum that promotes interaction and networking among alumni. Alumni from around the world participate in these reunions. FOUR reunions were held during 2011-12.

i. Silver Jubilee Reunions (SJR): The SJR of Class-of-87 was held from December 24 to December 27, 2011. About 95 alumni of the batch gathered in the institute, most of them with their families, former faculty, invited guest and over all about 250 guests attended the reunion.

ii. Thirty fifth Year Reunion: The Class-of-77 had their 35th Year Reunion from February 2 to 5 2012. Around 60 batch-mates gathered for their reunion

iii. Fortieth Year Reunion: The Class-of-72 celebrated their 40th Reunion from December 27 to 30, 2011. About 64 alumni attended the reunion with their family members.

iv. Golden Jubilee Reunion: The second batch which entered IIT Kanpur in the year 1961, celebrated their 50 years of association with the Institute as Golden Jubilee Reunion from November 26 to 28, 2011. 43 alumni attended the reunion with their family members, which included three families of the deceased alumni of this batch.

The reunion attendees included alumni from various professional backgrounds. Alumni Association office facilitated their local travel, accommodation, invitation to former faculty and other guests, their meeting with the faculty and staff of their time, visit their respective Departments and Labs and new facilities in the Institute, sharing their experiences and fond memories with the present faculty, staff and students. All participants after renewing their bonds with the Institute went back determined to stay connected with the Institute and amongst themselves.

2. Nostalgia

Nostalgia, an event jointly organized by Alumni Association and the Student’s Gymkhana, is held every year for bidding farewell to the students completing their degree.

The Class-of-2011 celebrated their annual farewell function Nostalgia on May 26, 2011 on the eve of Convocation in the glamorous Open Air Theatre of the New SAC. Prof. A.K. Ghosh, who was appointed as Dean of Students Affairs on the same evening, congratulated the students and their parents on completing their studies and wished them success in life. Director, Prof. S G Dhande, Prof. Manindra Agarwal, Dean of
Resource Planning and Generation addressed and wished the students for their bright careers. A lively cultural programme and DJ night followed the hi-tea.

3. Distinguished Alumni Awards (DAA)

The DAA is the highest award conferred by the Indian Institute of Technology Kanpur upon its alumni and is given in recognition of the achievements of exceptional merit under the following five categories: (i) Entrepreneurship (ii) Management (iii) Professional Excellence (iv) Academic Achievements, and (v) any other activity that benefits humanity at large. The recipients of DAA for the year 2011-12 were:

Mr. Sunil Singhal (BT/CHE/71), President, Chemical Systems Technologies (I) Pvt Ltd and Founder, Ecoware, for his outstanding contributions to developing specialized chemicals and cutting edge technology for the sugar industry worldwide as well as using innovative skills in utilizing the waste generated for “green” use.

Mr. Vasdev Chanchlani (MT/IME/76), Serial Entrepreneur and Philanthropist, Co-founder, Sigma Group, Canada and Co-founder, Sigma Software Solutions Pvt. Ltd. for providing strategic direction in business development and outstanding entrepreneurial skills, and philanthropic activities.

Prof. Rakesh Agarwal (BT/CHE/75), Winthrop E. Stone Distinguished Professor, School of Chemical Engineering, Purdue University for his outstanding contributions to research and development in Chemical Engineering.

Prof. Jayathi Y Murthy (BT/ME/79), Chair, Department of Mechanical Engineering at The University of Texas at Austin and Ernest Cockrell, Jr., Memorial Chair in Engineering, Dept of Mechanical Engineering for her outstanding contribution towards developing powerful analysis tools and techniques for the industry and having played a transformative role in redefining the design process of fluid and thermal systems.

4. Satyendra K Dubey Memorial Award

The Board of Governors of Indian Institute of Technology Kanpur, taking a note of the tragic death of Shri Satyendra K Dubey, an alumni of IITK who died fighting against corruption, had instituted the Satyendra K Dubey Memorial Award for honoring outstanding alumni of the IIT system, who have shown professional integrity and have been upholding human values. Mr Rahul Sharma (BT/EE/87/IITK) IPS Gujarat Cadre was chosen for the Satyendra K Dubey Memorial Award this year.

5. Alumni Association Chapter Activities

- The Outer Delhi Chapter: The outer Delhi chapter holds a chapter meet almost every month. The other events organized during 2011-12 were:
  i. Get-to-gather on Saturday, October 1, 2011 at Babu Banarasi Das Institute of Technology (BBDIT), Ghaziabad.
  ii. Outer Delhi Alumni Meet was held on April 10, 2011
iii. “Annual Picnic” on December 18, 2011 at Raghunath Batika, GT Road, Ghaziabad
iv. Socio-Cultural Extravaganza on January 8, 2012
v. Jaisalmer Trip March 9, 2012
vi. Many talks and seminars, were also organized under the chapter banner.

• **Mumbai Chapter.** To celebrate the first step beyond the campus, the Mumbai Chapter held a welcome function at Mumbai on August 19, 2011 for all the new alumni who graduated in the year 2011 and have started their careers from Mumbai. The aim was to welcome the new entrants into the group of Alumni Association, IIT Kanpur and to hear the latest gossip from the campus, to share out insights in relation to any queries / concerns / ambitions and have a joyful evening.

• **Lucknow Chapter** organized a chapter get-together on September 24, 2011 and on February 25, 2012 at Lucknow. There was an emphasis on family interaction and showcasing of family talent. A few interesting party games and a local jazz band was also arranged.

• **Hyderabad Chapter** organized “Monsoon Melodies” event on Saturday, July 30, 2011 at ISB Campus, Hyderabad. Many IIT Kanpur alumni attended this lively event along with their families. Prof. UB Desai, Director, IIT Hyderabad, Mr. B V Mohan Reddy, DAA and Chairman of Infotech-Entreprises, Mr. Rakesh Pandey, President, Alumni Association IIT Kanpur attended the event. There were Talent show, Music, and Dance programmes followed by Dinner.

• **West Coast Chapter, USA** celebrated the IIT Kanpur West Coast Annual Award Dinner Event 2011 on May 21, 2011 at TiE Center, Santa Clara. Dr. Ashok Singhal (1983), Dr. Rama Shukla (1974), Mr. Vinit Saxena, (1978), Mr. Jai Rawat, (1991), Dr. T. M. Ravi (1982) were the awardees of the West Coast Alumni Leadership award. The gathering was to celebrate the personal and professional achievements of fellow alumni, to Network, find mentors, make new friends, Gestate entrepreneurial ideas, and many had more events.

6. **Student Alumni Interaction Day (SAID)**

   This initiative gives an opportunity for alumni to visit the campus, to reconnect with the Institute, share their experiences, meet with students and guide them for their careers. Altogether 3 SAID programmes have been held during this year. Several alumni varied fields expertise were invited for these interaction sessions.

7. **Chapter Coordinators Meeting**

   Alumni Association Chapter Coordinators’ meeting was held on Saturday, August 6, 2011 at IIT Kanpur. It was convened and moderated by Mr. Rakesh Pandey, President, Alumni Association. The chapter coordinators from seven chapters based in India participated in the meeting and discussed various issues related to the constitution, chapter formation, database, elections, etc.
8. Social Initiatives

Alumni Association office had sent out mails to all alumni requesting for financial help for the family of Late Mr. Sanjay Kumar Thakur, ‘97 batch and for Prof Nachiketa Tripathi, who had to undergo liver transplant surgery. Alumni Association sponsored a Half Marathon race on April 10, 2011, organized by Adventure Sports Club and Students’ Gymkhana of IIT Kanpur. Ravindra Sindhu (3rd Year student) and Dr. Madhav Ranganathan coordinated in organizing this. Alumni association also sponsored Akhilesh Sapra well known for a veena recital to perform in the campus. Bus arrangements were made for Deaf and Dumb school children to visit the campus during Annual Flower Show in the month of February. Vivekananada Samiti was given a donation of Rs. 5000 for organizing various competitions during the centenary year celebrations of Swami Vivekananda in the Institute. Alumni Association has extended support to Parivartan, an NGO of Kanpur by getting composting bins installed at few places in the campus and arranging two busses for walk-a-thon on February 5, 2012 at Green Park, Kanpur. Alumni Association took the lead to represent the campus.

9. Life Membership Cards

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 the Reunions, PAN IIT Conclave in Greater Noida, chapter gatherings Lucknow and Kanpur and during convocation to recent graduates who became new members of Alumni Association. A drive has been launched, to help the alumni apply for their cards through Alumni Website. This initiative has been well received by all alumni.

10. Life Membership Drive of the Alumni Association for the Class of 2011

Alumni Association, IIT Kanpur has expanded by adding more than 800 new members into its database. The AA office had kept in touch with the graduating batch through emails and posters, informing them about the procedure and benefits of becoming its Life Members. Memorabilia such as Bags, Coffee mugs, Departmental Group photographs of students and faculty members along with Photoframe were gifted to all new members who joined the Association.

11. Alumni Newsletters

Alumni Newsletter, a Newsletter published in house by the Alumni Association office has released 10 issues of the Newsletter in the year 2011-12

12. Souvenir shop

Looking at the overwhelming response received for the souvenir shop, Alumni association has outsourced the Souvenir Shop, to provide wider range of world-class products to the alumni as well as the Institute. The shop runs at the Outreach 69 n 80 Building.
13. Database Statistics

To remain connected with its alumni, the Alumni Association maintains a database of around 26,000 alumni who have graduated from IIT Kanpur, out of which around 70% of these are connected to the Association either through email or post.

14. BOD elections

Elections for the Board of Directors, Alumni Association for the year 2012-2014 was held during January to March, 2012. Prof. Y.N Singh of Electrical Engineering department was the Election Officer. These elections were held electronically as well as though the postal/physical ballot.

The following members have been elected.

President: Ashok Kumar Gupta (BT/ME/72)  
Vice President -1: Sashi Kumar Singhania (BT/ME/67)  
Vice President -2: Salil Dave (BT/EE/86)  
Secretary: Sudhir Misra (BT/CE/81)  
Treasurer: Mukesh Sharma (MT/CE/81)  
Member-1: Ajay Kumar Shukla (BT/MME/95)  
Member 2: Saurabh Sharma (MT/NET/10)  
Member-3: Dharam Vir (MSC2/PHY/71)  
Member-4: Nikhil Padhye (BT-MT(Dual)/EE/2010)
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 received 3377 volumes of books out of which 131 volumes were received as Gratis. 12 annual reports and 28 Technical Reports were also received. The total expenditure on books was to the tune Rs. 1,60,53,879/-. 

PERIODICALS UNIT

Subscription to periodicals and binding: The periodical budget for 2011-12 was Rs. 10,52,49,305/. The library subscribed 2009 current periodicals for the period under report. Of these 148 were print versions, whereas 935 were print plus online, 910 were online, 14 were databases and 02 were CDs. The library added 3135 bound volumes of periodicals and 875 damage books were bound during the year.

The library continued its focus on the acquisition of electronic products. The archival volumes of journals 147 were procured and previously procured volumes were maintained.

NEW RESOURCES ADDED:

NEW RESOURCES PROCURED IN THE F.Y 2011-12

<table>
<thead>
<tr>
<th>SL.NO.</th>
<th>PUBLISHER / TITLE</th>
<th>NO. OF RESOURCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>American Society of Mechanical Engineers / ASME Archive</td>
<td>25</td>
</tr>
<tr>
<td>2</td>
<td>American Society of Civil Engrs./ ASCE Proceedings (Backfiles: 2000 to Current)</td>
<td>35</td>
</tr>
<tr>
<td>3</td>
<td>Annual Reviews / Annual Reviews (Back volumes: 1832 - 2007)</td>
<td>14</td>
</tr>
</tbody>
</table>
4 Cambridge Univ. Press/ Back vols.: 
2) Ergodic Theory & Dynamical Systems 
3) Anziam Journal 
5 Elsevier / 1) Advances in Organometallic Chem. (V.1 to current year) 
6 Elsevier / (New Titles for 2012) 
1) Adv. In Heat Transfer 
2) Adv. In Applied Mechanics 
7 I.S. Eurocode, (Complete set - 2010) 
8 Intellectuals Soc. For Socio-Techno Welfare/ ISST Jl. of Advances in Librarianship 
9 Institute of Physics / (New Titles for 2012) 
1) Nuclear Fusion 
2) Plasma Phy. & Controlled Fusion 
10 Multi Science / International Jl. of Spray & Combustion Dynamics (New Title for 2012) 
13 NOW Pub./ (Backfiles): 
1) Found.& Trends in Commu. & Inf. Th.(v.1-7) 
2) F & T in Signal Processing (V. 1-3) 
3) F & T in Networking (V. 1-4) 
4) F & T in Human Compu. Integration (v.1-4) 
14 Patent InfoS / India Patents Database (1971 to Current) 
15 Royal Society of Chemistry / RSC Complete Archives (1841-2007) 
16 Sage / HSS Package Archive (1999 to Current) 
17 T&F/ Language Learning and Development (New Title for 2012) 
19 Thieme Medical & Scientific Pubs./ Synthesis (Backfiles: 1969-2011) 
20 Wiley / Backfiles: 
1) Austr. & Newzealand Jl. of Statistics 
2) Biometrical Jl. 
3) Numerical Methods for Partial Diff. Equation 
4) Statistica Neerlandica 
21 Wiley / Backfiles: 
1) Jl. Of Graph Th. (1977-95) 
3) Software: Practice & Experience (1991-95)
E-resources through INDEST-AICTE:

As a core member to the INDEST-AICTE Consortium, IITK academic community continued to access more than 10000 full-text journals.

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 every Monday. These were also released on library OPAC. The unit processed 4513 books in 2011-12. The current issues of the journals are also displayed on alternate days thrice in a week.

CIRCULATION UNIT

During the year 2011-2012, 14880 publications were circulated for home study. A large number of books and journals from reference, textbooks (23488) and general collection areas were also 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 2011-12, ILL requests for 392 articles/chapters/books were received and document delivery made to outside institutions whereas IITK users’ requests for 24 articles/chapters/books were sent to other libraries. Consulting facility of the library was extended to 1134 external users including 1065 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 period several problem solving sessions were organized in consultation with the Libsys Ltd and customization on various modules suggested by us were incorporated. Now all housekeeping operations are running through LibSys. Some of the advanced customizations are in the pipeline with the LibSys.

DIGITAL LIBRARY INITIATIVES

The following digital library initiatives continued:
**Online Submission of Theses:** 988 Theses & Dissertations (ETD) were added in the repository of Electronic Theses and Dissertations (ETD).

**BOG Minute/Agenda:** About 11221 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.

**SEMINARS/CONFERENCES/ MEETINGS CHAIRED/ ATTENDED/VISITS ABROAD:**

1. Appointed Member of the National Steering Committee of National Library and Information Services for Infrastructure for Scholarly Content (N-LIST) MHRD, GOI, New Delhi, in April 2011, Dr. V. D. Shrivastava, Librarian.

2. Attended the International Meeting of Library Advisory Board of Association of Computing Machinery (ACM) on 3rd April, 2011 at North Yorkshire, UK, Dr V. D. Shrivastava, Librarian

3. Attended as an International Delegate the 34th UKSG Conference and Exhibition at Harrogate International Centre, Harrogate, North Yorkshire, UK during 4-6 April 2011, Dr V. D. Shrivastava, Librarian

4. Attended the Resource Finalization Committee Meeting of N-LIST New Delhi on 8th August 2011 at IIT Delhi, Dr. V D Shrivastava, Librarian.

5. Attended the Seminar on “Accelerate Research Excellence: Evaluate, Benchmark and Strategise” on 23 September 2011 at New Delhi, Dr. V D Shrivastava, Librarian.

6. Attended the meeting of Elsevier e-Books forum at Four Points by Sheraton, Bangkok, Thailand during 3-6 October 2011, Dr V. D. Shrivastava, Librarian.

7. Attended the Indo-Global Education Summit 2011 during November 3-6, 2011 at India Habitat Centre, New Delhi, Dr V. D. Shrivastava, Librarian.

8. Attended the IEEE Annual Advisory Council Conference as International Advisory Council Member at W Times Square in New York City, USA during 18-23 October 2011, Dr V. D. Shrivastava, Librarian.

9. Attended the 16th National Steering Committee Meeting of INDEST-AICTE Consortium on 7th December 2011 at IIT Delhi, Dr V. D. Shrivastava, Librarian.

10. Attended the ASA Conference 2012 on “Best Way to Predict the Future is to Invent It” in Duchess Mews, London, UK during 26-29 February, 2012, Dr V. D. Shrivastava, Librarian.

11. Delivered the Inaugural Lecture on 15th December 2011 as the Chief Guest to inaugurate the International Workshop on “Strengthening the Academic
Library to enhance Agriculture Education” under AIP(US-AID) and Cornell University, USA Program held during 15-16 December 2011 held at Banaras Hindu University, Varanasi, Dr V. D. Shrivastava, Librarian.

12. Attended the Library Committee Meeting of National Academy of Sciences, India, Allahabad on 16th December 2011 at NASI, Allahabad, Dr V. D. Shrivastava, Librarian.

13. Was nominated Expert Member of the Library Committee of the National Academy of Sciences, India, Allahabad for 2012 on 2nd March 2012, Dr. V D Shrivastava, Librarian.

**Member of Editorial Board of Journals:**

1. Appointed Member of the editorial Board of “Research Digest: A Multidisciplinary Journal” published by Guru Ghasidas Vishwavidyalaya, Bilaspur, Dr V. D. Shrivastava, Librarian.

2. Appointed Member of the editorial Board of “ISST Journal of Advances in Librarianship (IJLIB)” published by Intellectual Society for Socio - Techno Welfare, Dr V. D. Shrivastava, Librarian

3. Appointed Member of the editorial Board of “ISST Journal of Library and Information Science (IJLIS)” published by Intellectual Society for Socio- Techno Welfare, Dr V. D. Shrivastava, Librarian

**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. It also manages Internet and campus local network and wireless infrastructure. It provides several services like e-mail and web access. It currently supports more than 10000 users. Computer Centre has been upgrading its computing, mail, network, Internet, PC lab and overall infrastructural facilities in a major way over past few years. In 2011-12, significant upgradation took place in the areas of servers, PC labs, software, mail, network and Internet. Besides, substantial progress also took place in the area of Data Centre infrastructure.

For the High Performance Computing (HPC) facility, four new ftp servers have been put in place which is being used heavily by HPC users for the transfer of data from the HPC storage to various nodal machines on campus. Besides, five high-end workstations are also now being used, in addition to the main HPC cluster, for running some of the HPC application software. The number of users of the HPC facility has increased significantly over the past one year. On the PC lab front, new PCs have been procured for two PC labs of the Centre so replace the old ones. The new PCs have come with state-of-the-art processors and many other modern features including good graphics and this upgradation has greatly facilitated the conduct of computer lab.
classes for undergraduate and postgraduate students and also in the conduct of various computer-related courses, examinations and other academic activities in CC.

On the software side, several general purpose and HPC application software have been either renewed or procured afresh. The list of some of the key software includes: Matlab, Parallel Numerical Algorithms Group (NAG), Mathematica, SPSS, Origin, BeCN, COMSOL, Accelrys, MedeAVASP, AMBER, Tecplot, Turbomole, Gaussian, Ansys, Fluent etc.

A new mail server has been added for the benefit of e-mail users of the Centre. Currently, the Centre handles more than 10000 e-mail users of the institute. It also provided e-mail and web facilities to a large number of conferences, symposia and workshops that took place in the campus in 2011-12. A significant expansion of the campus local area network (LAN) and wireless network also took place over the past one year to cover the new buildings and residential areas. Computer Centre procured a large number of network switches in 2011-12 for this expansion of network. The backbone of the network is upgraded to 10 Gbps. The total number of network ports now stands at more than 15000. On the Internet side, Computer Centre procured two 1 Gbps links without any rate limit and a third link is also now available from National Knowledge Network (NKN).

In addition to the above upgradations in compute servers, software, PC lab, mail, web and network facilities, Computer Centre also organized a number of symposium and short workshops in the area of HPC and networking in 2011-12. The Centre is also undergoing a massive upgradation in its infrastructural facilities. A modern data centre with state-of-the-art precision air conditioning and fire safety features is being built and the work is expected to be completed in 2012-13. Once the operation of this new Data Centre is started, Computer Centre will be in a position to house substantially bigger HPC and other servers.

Centre for Development of Technical Education

Since its inception in 1971, Ministry of Human Resource Development, All India Council for Technical Education has 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 2011-2012

1. QIP Students
   (a) M.Tech Candidates admitted 03
   (b) Ph.D. Candidates admitted 05
2. **Book-Writing Projects**  
   (a) Book-writing projects continued – 40  
   (b) Book-writing projects approved – 06  
   (c) Book-writing projects completed -04

3. Short term courses conducted under QIP – 09

4. Short term self-financed courses conducted -35

5. Workshops/ Conferences/ Seminars conducted – 30

**Staff Training Unit**

As per the prevailing practice, workshop/ training/ induction programme etc. are being organized the Administration Section. Administration Section after approval of the Competent Authority had conducted the following workshop/ training programme during the year 2011-2012.

**Workshop On Pensionary Matters**

The Administration Section had organized a workshop on Pensionary Matters on 21.01.2012 in conjunction with the Department of Pension & Pensioners’ Welfare, Government of India. Shri Amitabh Dwivedi and Shri D K Solenky, Under Secretary, DoPT were the guest faculties for the workshop. 59 staff members including officials of the Institute and 07 officials from various IITs and IISER Bhopal were attended the above said workshop. The workshop was very successful and everybody attended appreciates the initiative taken by the Administration Section to organize the workshop.

Apart from the above, Institute officials and employees were nominated to attend workshops/ training programmes conducted by the ISTM, New Delhi and other training organizations, as per their area of work and responsibility.

**SC/ST and OBC Cell**

The cell consists of **Prof. B. Mazhari** (Deptt. of Electrical Engineering), Liaison Officer *(w.e.f. August 16, 2011)* and **Shri Anil P Gonade**, In-Charge, Recruitment Section, in addition to their normal duties. Prof. B. Mazhari is available in **Room No. 221** (Directorate), Faculty Building at the Institute on **Phone No. 2597950** and Shri Gonade is available in **Room No. 224**, 2nd Floor, Faculty Building at the Institute on **Phone No. 2597391**.

**Implementation of reservation orders:**

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

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

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

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

As per Modified Assured Career Progression Scheme (in operation at present).

Concessions/ Relaxations:
(a) For Regular employees of IITs who are educationally qualified and otherwise eligible, can be considered for direct recruitment across the whole IIT system 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.

(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- AC-II rail fare (Rajdhani Exp. also) / Chair car in Shatabdi Exp., for Group-B- AC-III rail fare (Rajdhani Exp. also) / Chair car in Shatabdi Exp. and for Group-C- 2nd class sleeper 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.** (internal/ external) issued through Recruitment Section is as under:

<table>
<thead>
<tr>
<th>Advt. No.</th>
<th>Name of Post(s)</th>
<th>Pay Scale</th>
<th>No. of Vacancies</th>
<th>Total</th>
<th>Publis hed in</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/2011 [Internal]</td>
<td>Principal</td>
<td>PB-2: Rs.9300-34800 with GP: Rs. 4800</td>
<td>- - -</td>
<td>01 01</td>
<td>Institute' s Notice Board</td>
</tr>
<tr>
<td>3/2011</td>
<td>Principal</td>
<td>PB-2: Rs.9300-34800 with GP: Rs. 4800</td>
<td>- - -</td>
<td>01 01</td>
<td>UP Edition of Hindustan &amp; Hindustan Times</td>
</tr>
<tr>
<td>1/2012</td>
<td>Assistant Physical Education Officer</td>
<td>PB-3:Rs.15600-39100 with GP: Rs.5400</td>
<td>- - -</td>
<td>01 01</td>
<td>All Editions of Dainik Jagran (Nai Rahein), Times of India(As cent), Universi</td>
</tr>
<tr>
<td></td>
<td>Medical Officer</td>
<td>PB-3:Rs.15600-39100 with GP: Rs.5400</td>
<td>- - 01 -</td>
<td>01 01</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Security Officer</td>
<td>PB-3:Rs.15600-39100 with GP: Rs.5400</td>
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<tr>
<td></td>
<td>Assistant Executive Engineers</td>
<td>PB-3:Rs.15600-39100 with GP: Rs.5400</td>
<td>- - 01 01</td>
<td>02 02</td>
<td></td>
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<tr>
<td></td>
<td>Assistant Security Officers</td>
<td>PB-2: Rs. 9300-34800 with GP: Rs.4200</td>
<td>- - 02 02</td>
<td>04 04</td>
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<tr>
<td></td>
<td>Physical Training Instructor</td>
<td>PB-2:Rs. 9300-34800 with GP: Rs.4200</td>
<td>- - 01 -</td>
<td>01 01</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Junior Superintendents</td>
<td>PB-2:Rs. 9300-34800 with GP: Rs.4200</td>
<td>0 0 01+0 1* -</td>
<td>03+0 1*</td>
<td></td>
</tr>
<tr>
<td>Position</td>
<td>Pay Band</td>
<td>Pay Scale</td>
<td>Selection Committee Meetings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>----------</td>
<td>-----------</td>
<td>------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Primary Teachers (Sports-1 &amp; Music-1)</td>
<td>PB-1: Rs. 5200-20200 with GP: Rs. 2400</td>
<td>-</td>
<td>-</td>
<td>02</td>
<td></td>
</tr>
<tr>
<td>Assistant Coach</td>
<td>PB-1: Rs. 5200-20200 with GP: Rs. 2000</td>
<td>0</td>
<td>2</td>
<td>02</td>
<td></td>
</tr>
<tr>
<td>Junior Assistants</td>
<td>PB-1: Rs. 5200-20200 with GP: Rs. 2000</td>
<td>0</td>
<td>3</td>
<td>03</td>
<td></td>
</tr>
<tr>
<td>Driver Grade II</td>
<td>PB-1: Rs. 5200-20200 with GP: Rs. 2000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Deputy Registrar</td>
<td>PB-3: Rs. 15600-39100 with GP: Rs. 7600</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Assistant Registrar</td>
<td>PB-3: Rs. 15600-39100 with GP: Rs. 5400</td>
<td>0</td>
<td>1</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Junior Technical Superintendents</td>
<td>PB-2: Rs. 9300-34800 with GP: Rs. 4200</td>
<td>-</td>
<td>0</td>
<td>01</td>
<td></td>
</tr>
<tr>
<td>Junior Technician</td>
<td>PB-1: Rs. 5200-20200 with GP: Rs. 2000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td>0</td>
<td>8</td>
<td>0</td>
</tr>
</tbody>
</table>

* PH Candidates

The recruitment for all academic posts of Institute is made through the press/professional journals/circulars to educational institutes etc.

**Inclusion of SC/ST 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 12 Selection Committee meetings:
07 S/C meeting, wherein SCT and OBC representatives included
02 S/C meeting, wherein OBC representative included
02 S/C meeting, wherein SC representative included
01 S/C meeting, wherein ST 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:

<table>
<thead>
<tr>
<th>Type of house</th>
<th>Houses allotted to</th>
<th>SC/ST</th>
<th>GEN</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>As per Reservation</td>
<td>As per Seniority</td>
<td></td>
</tr>
<tr>
<td>Type-IA</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Type-1B</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Type-I</td>
<td>-</td>
<td>04</td>
<td>14</td>
<td>18</td>
</tr>
<tr>
<td>Type-II</td>
<td>01</td>
<td>04</td>
<td>08</td>
<td>13</td>
</tr>
<tr>
<td>Type-III</td>
<td>-</td>
<td>01</td>
<td>20</td>
<td>21</td>
</tr>
<tr>
<td>Type-IV</td>
<td>-</td>
<td>01</td>
<td>18</td>
<td>19</td>
</tr>
<tr>
<td>Type – V</td>
<td>No reservation</td>
<td>02</td>
<td>02</td>
<td></td>
</tr>
</tbody>
</table>

2. There is no reservation in the quarters of Type –V (as these quarters are more or less allotted to faculty members and other eligible officers without any discrimination of caste and creed etc.)

Complaints/ Grievances:

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

Any Caste falsification brought to notice is also followed up by the Cell. No new case came in notice.
Apart from the above, the data, as available for showing the **representation of SCs/STs & OBCs in other areas**, is given below:

### A. Academic Staff:

<table>
<thead>
<tr>
<th>Area(s)</th>
<th>SC</th>
<th>ST</th>
<th>OBC</th>
<th>GEN</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appointments</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Retirement</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>05</td>
<td>05</td>
</tr>
<tr>
<td>Deaths</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Resignation</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>05</td>
<td>05</td>
</tr>
<tr>
<td>Resignation (Technical)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Termination</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>V/Retirement</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Compulsory Retirement</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Dismissal</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Term Over</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>24</td>
<td>24</td>
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</tbody>
</table>

### B. Non-Academic:

<table>
<thead>
<tr>
<th>Area(s)</th>
<th>SC</th>
<th>ST</th>
<th>OBC</th>
<th>GEN</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appointments</td>
<td>05</td>
<td>02</td>
<td>07</td>
<td>12</td>
<td>26</td>
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<tr>
<td>Retirement</td>
<td>11</td>
<td>-</td>
<td>03</td>
<td>23</td>
<td>37</td>
</tr>
<tr>
<td>Deaths</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>01</td>
<td>01</td>
</tr>
<tr>
<td>Resignation</td>
<td>02</td>
<td>01</td>
<td>02</td>
<td>04</td>
<td>09</td>
</tr>
<tr>
<td>V/Retirement</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>C/Retirement</td>
<td>01</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>01</td>
</tr>
<tr>
<td>SVRS</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Deputationists repatriated</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Termination</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Dismissal</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>01</td>
<td>01</td>
</tr>
<tr>
<td>End of contract</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>On Long Leave</td>
<td>-</td>
<td>-</td>
<td>01</td>
<td>01</td>
<td>02</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td>19</td>
<td>03</td>
<td>13</td>
<td>42</td>
<td>77</td>
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</table>
Financial up-gradation under MACPS during 2011-2012

<table>
<thead>
<tr>
<th>Financial Assessment</th>
<th>SC</th>
<th>ST</th>
<th>OBC</th>
<th>GEN</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>43</td>
<td>01</td>
<td>19</td>
<td>102</td>
<td>165</td>
</tr>
</tbody>
</table>

In addition to above, the data, as available for showing the representation of SCs/STs & OBCs related to existing strength of the employees at the Institute, is given below:

A. Existing Strength of Academic Staff (Teaching/Non-teaching) as on 01.04.2012:

Recruited through DOFA Office

<table>
<thead>
<tr>
<th>Academic</th>
<th>SC</th>
<th>ST</th>
<th>OBC</th>
<th>GEN</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching</td>
<td>02</td>
<td>-</td>
<td>-</td>
<td>346</td>
<td>348</td>
</tr>
<tr>
<td>Non-Teaching</td>
<td>02</td>
<td>-</td>
<td>-</td>
<td>28</td>
<td>30</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>04</td>
<td>-</td>
<td>-</td>
<td>374</td>
<td>378</td>
</tr>
</tbody>
</table>

B. Existing Strength of Non-Academic Staff as on 01.04.2012

Recruited through Recruitment Section

<table>
<thead>
<tr>
<th>Group</th>
<th>SC</th>
<th>ST</th>
<th>OBC</th>
<th>GEN</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>05</td>
<td>21.73</td>
<td>0</td>
<td>0.00</td>
<td>16.66</td>
</tr>
<tr>
<td>B</td>
<td>60</td>
<td>21.50</td>
<td>08</td>
<td>2.86</td>
<td>15</td>
</tr>
<tr>
<td>C</td>
<td>32</td>
<td>19.63</td>
<td>04</td>
<td>2.45</td>
<td>15.95</td>
</tr>
<tr>
<td>D</td>
<td>30</td>
<td>26.08</td>
<td>0</td>
<td>0.00</td>
<td>6.95</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>127+5</strong>*</td>
<td><strong>21.89</strong></td>
<td><strong>12</strong></td>
<td><strong>2.06</strong></td>
<td><strong>8.62</strong></td>
</tr>
</tbody>
</table>

* Cleaners, not counted towards reservation.

The detailed summary of existing strength of non-academic staff as on 01.04.2012 and representation of SC/ST/OBC

<table>
<thead>
<tr>
<th>Group/Stream/Mode</th>
<th>SC</th>
<th>ST</th>
<th>OBC</th>
<th>GEN</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANR</td>
<td>0</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>05</td>
</tr>
<tr>
<td>ANU</td>
<td>03</td>
<td>27.27</td>
<td>0</td>
<td>0.00</td>
<td>08</td>
</tr>
<tr>
<td>ATR</td>
<td>02</td>
<td>40.00</td>
<td>0</td>
<td>0.00</td>
<td>03</td>
</tr>
<tr>
<td>ATU</td>
<td>0</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>01</td>
</tr>
<tr>
<td>A</td>
<td>05</td>
<td>21.73</td>
<td>0</td>
<td>4.34</td>
<td>17</td>
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</tbody>
</table>

102
### C. Existing Strength of Account-II Employees as on 01.04.2012:

**Recruited Through DORD Office**

<table>
<thead>
<tr>
<th>Group</th>
<th>SC</th>
<th>ST</th>
<th>OBC</th>
<th>GEN</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>01</td>
<td>-</td>
<td>01</td>
<td>19</td>
<td>21</td>
</tr>
<tr>
<td>C</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>D</td>
<td>03</td>
<td>01</td>
<td>04</td>
<td>03</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>04</td>
<td>01</td>
<td>05</td>
<td>22</td>
<td>32</td>
</tr>
</tbody>
</table>

### D. Existing Strength of Mess Employees as on 01.04.2012:

**Recruited through COW Office**

<table>
<thead>
<tr>
<th>Group</th>
<th>SC</th>
<th>ST</th>
<th>OBC</th>
<th>GEN</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>-</td>
<td>-</td>
<td>01</td>
<td>01</td>
<td>02</td>
</tr>
<tr>
<td>C</td>
<td>-</td>
<td>-</td>
<td>01</td>
<td>02</td>
<td>03</td>
</tr>
<tr>
<td>D</td>
<td>12</td>
<td>-</td>
<td>19</td>
<td>43</td>
<td>74</td>
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<tr>
<td>Total</td>
<td>12</td>
<td>-</td>
<td>21</td>
<td>46</td>
<td>79</td>
</tr>
</tbody>
</table>

The data as available for showing the representation of SCs/ STs/ OBCs/ PH related to the new students admitted in the year 2011-12 in various programmes/ disciplines at the Institute is given below:
# Programmes Registration Data in the 2011-12 1st Semester

<table>
<thead>
<tr>
<th>Programmes</th>
<th>SC</th>
<th>ST</th>
<th>OBC</th>
<th>PH</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.Tech</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AE</td>
<td>07</td>
<td>04</td>
<td>12</td>
<td>01</td>
<td>24</td>
</tr>
<tr>
<td>BSBE</td>
<td>06</td>
<td>05</td>
<td>11</td>
<td>0</td>
<td>22</td>
</tr>
<tr>
<td>ChE</td>
<td>10</td>
<td>07</td>
<td>20</td>
<td>01</td>
<td>38</td>
</tr>
<tr>
<td>CE</td>
<td>15</td>
<td>08</td>
<td>27</td>
<td>01</td>
<td>51</td>
</tr>
<tr>
<td>CSE</td>
<td>14</td>
<td>06</td>
<td>25</td>
<td>01</td>
<td>46</td>
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<tr>
<td>EE</td>
<td>20</td>
<td>09</td>
<td>36</td>
<td>02</td>
<td>67</td>
</tr>
<tr>
<td>ME</td>
<td>14</td>
<td>07</td>
<td>27</td>
<td>03</td>
<td>51</td>
</tr>
<tr>
<td>MSE</td>
<td>14</td>
<td>13</td>
<td>24</td>
<td>02</td>
<td>53</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>100</td>
<td>59</td>
<td>182</td>
<td>11</td>
<td>352</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Programmes</th>
<th>SC</th>
<th>ST</th>
<th>OBC</th>
<th>PH</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.Sc. (5 yrs)/BS (4 Yrs)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td>04</td>
<td>02</td>
<td>-</td>
<td>0</td>
<td>06</td>
</tr>
<tr>
<td>Economics</td>
<td>06</td>
<td>04</td>
<td>03</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>Mathematics &amp; Scientific Comp</td>
<td>06</td>
<td>04</td>
<td>14</td>
<td>02</td>
<td>26</td>
</tr>
<tr>
<td>Physics</td>
<td>04</td>
<td>01</td>
<td>06</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>20</td>
<td>11</td>
<td>23</td>
<td>02</td>
<td>56</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Programmes</th>
<th>SC</th>
<th>ST</th>
<th>OBC</th>
<th>PH</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.Sc.-PhD (Dual Degree)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physics</td>
<td>02</td>
<td>01</td>
<td>04</td>
<td>0</td>
<td>07</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>02</td>
<td>01</td>
<td>04</td>
<td>0</td>
<td>07</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Programmes</th>
<th>SC</th>
<th>ST</th>
<th>OBC</th>
<th>PH</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.Sc. (2 yrs)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
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<td>01</td>
<td>11</td>
<td>0</td>
<td>19</td>
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<tr>
<td>Mathematics</td>
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<td>01</td>
<td>13</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
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<td>05</td>
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<tr>
<td>Physics</td>
<td>05</td>
<td>01</td>
<td>07</td>
<td>0</td>
<td>13</td>
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<tr>
<td><strong>Total</strong></td>
<td>18</td>
<td>03</td>
<td>36</td>
<td>0</td>
<td>57</td>
</tr>
</tbody>
</table>
**Annual Report 2011-12**

**Registration Data of M. Tech. / MBA / VLFM / M.Des. Students of 2011-12 - 1st Semester**

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**Rajbhasha Prakashtha**

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 Prakashtha 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 Superintendent (Translation) with one Project employee. The Rajbhasha Prakashtha is effortive in creating awareness of Hindi among the Institute employees. “Sansthan Rajbhasha Karyanvayan Samiti” constituted by the Director, monitors and provides guidelines to the Rajbhasha Prakashtha in its planning and performance. The Rajbhasha Prakashtha 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 Prakashtha has adopted the following policies:
1. Entire correspondence with Group D employees are 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 Department of the Institute.
4. The name plates, office stamps, sign boards, letters heads and the envelopes etc. have been made bilingual.
5. Regular classes of Prabodh, Praveen & Pragya for the Non Hindi speaking employees have already been started. Eight 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 2010-2011 and the Audit Report for the F.Y. 2010-2011 received from the Account Section/AG,UP were translated into Hindi and fair copies typed for submission to the ministry.

Quarterly news letter SAZAG and half yearly Hindi Magazine "Antas" published in Hindi. The press release and invitation cards for the Convocation – 2012 were issued bilingually. All periodical reports were sent to the Ministry and the Nagar Rajbhasha Karyanvayan Samiti timely.

In compliance with the directives of Official Language Department, New Delhi, Hindi fortnight was observed by conducting various competitions in the month of September 2011 and on 21 September 2011 Hindi Diwas samaroh was held in the Lecture Hall complex, in which winners of the various competitions were honored with books awards.

Following Competitions were held from 01.09.2011 to 20.09. 2011

a) Letter Writing Competition
b) Hindi Vocabulary Competition
c) Noting & Drafting Competition
d) Hindi Typing Competition
e) Hindi Dictation (Non Hindi Speaking)
f) General Knowledge Competition
g) Hindi New reading (For IIT K Students)
h) Hindi Extempore (For IIT K Students)
i) Poetry recitation Competition

Winner of above competitions were as under:

1. Letter writing Competition
   1. Shri Ram Kripal - First
   2. Shri Mahesh Kumar - Second
   3. Shri Rajesh Kumar Gurang – Third

2. Hindi Vocabulary Competition
   1. Sandeep Kumar- First
   2. Shri Anil Kumar Sharma – Second
   3. Shri J P Kanojia – Third

3. Noting & Drafting Competition
1. Shri Ashis Kumar Singh – First
2. Shri Sandeep Kumar - Second
3. Shri Anil Kumar Sharma – Third

4. Hindi Typing Competition
   1. Shri Kamlesh Kumar – First
   3. Shri Alok Srivastava – Third

5. Hindi Dictation (Non Hindi Speaking)
   1. Shri Deepak Ubalae - First
   2. Shri Binu S - Second
   3. Shri Namdeo Murkhe – Third

6. General Knowledge Competition
   1. Shri Anil Kumar Dubey – First
   2. Shri Alok Srivastava – First
   3. Shri Kamlesh Singh – Second
   4. Shri Ram Krishna Tiwari – Third

7. Hindi News Reading Competition (For IIT K Students)
   1. Shri Hemant – First
   2. Ms. Harsha – Second
   3. Shri Bhuwan – Third

8. Hindi Extempore Competition (For IIT K Students)
   1. Shri Bhuwan – First
   2. Shri Hamant – Second
   3. Shri Anurag – Third
   4. Shri Piyus – Third

9. Poetry recitation Competition
   1. Shri Pramod Kumar – First
   2. Shri Rajesh Kumar Srivastava – Second
   3. Shri C S Goswami – Third

10. Poetry recitation Competition (For IIT K Students)
    1. Shri Ravi kant Pandey – First
    2. Ms. Archana Shukla – Second
    3. Dr. Sandeep Kumar Shukla – Third

During the year 2010-11 about 337 letters from Directorate, 281 letters from Registrar’s office, 423 letters/circulars from Administration Section and 664 letters from others Department/Section/Unit 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 Department of Official Language, Ministry for Home Affairs & Ministry for Human Resources & Development, Govt. of India.

On the occasion of Hindi Diwas samaroh 2011, seventeen employees of the Institute were honored who are working in official language in their Department/Section.

**Media Technology Centre**

The Media Technology Centre ensures that the faculty, students and the community at large utilize the facility provided by the centre and takes an active interest in the growth of information, communication and technology. The Media Technology Center aims to provide a meaningful platform for the students of the Indian Institute of Technology Kanpur to nurture a sense of creativity in them and merge it with their gradual process of acquiring and exchanging knowledge with technology based education at the Institute.

Students of the Media Communication in the Design Program have an academic relevance to the resources of the center. Students continue to exhibit their ample creative talents by producing social ad campaigns, documentary films, radio jingles and various web and mobile applications exploiting the varied domains of media arts. The resources are also being used by the undergraduate students opting for HSS elective courses in films and videos.

One of the major going projects of the center 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 Center aims to create a digital portal as an archive of supportive materials to serve educational purposes and research references in the field of Engineering, Science and Technology, Humanities and Management studies as well as in the relevant areas of National Heritage and Culture. The relevant information / knowledge can be disseminated using this facility and utilized for classroom teaching, student references and research aid.

We have adopted a High Definition multiple-camera mode of production for shooting of 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 unit (Switcher/Mixer) that ensures mixing and switching of the multiple footage at the
original, highest-quality through the and recorded on HD 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 computer using wide range of software i.e. Adobe, FC Pro, Pinnacle etc. 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 (i) recorded back to tape or disk and delivered (ii) converted into streaming media and shared on the NPTEL website (nptel.iitm.ac.in).

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 counselling 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. Keeping this aim in mind the Community Radio and the Radio club at IIT Kanpur organized a 15 day workshop for the students and also the members of the campus. Radio Experts were invited from All India Radio and 98.7 Radio Mirchi etc. There were nearly 60 participants. They were taught about scripting, voice modulation, anchoring and many other topics.

USID Gurukul 2011

USID Foundation along with Media Technology Center, Design Program & Department of Humanities & Social Science had organized a Design workshop called USID Gurukul from 10th December to 15th December 2011. USID Gurukul is an inspiration taken from "Gurukul", a school concept from the ancient times in India. 60 Students (Shishyas) from four countries were brought together in this two weeks workshop. Resource persons from industry and academia were invited as Gurus.

The idea was to provide a platform for students from the varied fields of design, technology, management and social sciences to go through a two weeks experience of collaborative and immersive learning and explore, experience, learn and create design solution for existing social problems under the mentorship of accomplished
practitioners, researchers, academicians and professionals which would then facilitate social-economic development and better quality of life. Relevance of understanding the importance of social context in design was emphasized through the course of different project taken up during the workshop.

**IITK Website**

A team at Media Technology Centre is currently involved in developing the IIT Kanpur Website. The team is building a dynamic website aimed towards creating a single visual branding through appropriate graphic user interface and considering the user experience design aspects.

**Video Projects**

Committed manpower and resources of the Media Technology Center is round the year involved in providing its support in various academic and non-academic events. The recordings of major institute events are done through the mEdia Technology Center. The Center is also involved in creating short films and videos on various topics relating to the Campus Life. Recently the Center produced a film titled 'Giving Back' on Solid and Liquid management systems deployed by the institute. The centre is presently working on a short film project concerning the activities of counselling service on campus and a short film on the technology research initiatives of some faculty members that has substantial social impact.
Finance

The Ministry of Human Resources & Development (MHRD) has released Rs. 13478.00 lakh as Non-Plan Grant and Rs. 12700.00 lakh as Normal Plan Grant in the financial year 2011-2012.

NON-PLAN

The total receipt under Non-Plan during the financial year 2011-2012 from Ministry of Human Resources & Development, Government of India is Rs. 13478.00 lakh. The Internal Receipts of Institute is Rs. 4056.21 lakh.

The Total Non Plan expenditure during the financial year 2011-2012 comes out to Rs. 17594.21 lakh. The deficit of Rs. 60.00 lakh has been met out from Interest Earning of Endowment Fund Account.

NORMAL PLAN

A total receipts under Normal Plan during the financial year 2011-2012 is of Rs. 12700.00 lakh under Plan from the MHRD, Government of India.

With an opening balance of Rs. 1648.96 lakh, the total expenditure under Normal Plan was Rs. 14348.96 lakh. This expenditure includes Rs. 5299.82 lakh on Building & Works and Central AC Facility, Rs. 6680.87 lakh on Non-Consumable purchases including Equipment, Furniture & Fixtures etc., Rs. 93.84.00 lakh on Library Books and Periodicals & Journals and Rs. 2274.43 lakh on Recurring Expenditure includes expenditure on scholarships.

PLAN (OSC)

With an opening balance of Rs. 550.81 lakh, the total expenditure under Plan (OSC) is restricted to Rs. 550.81 lakh. This expenditure includes Rs. 164.24 lakh on Non-Consumable purchases including Equipment, Furniture & Fixtures etc, and Rs. 187.62 lakh on Library Books and Digitalization of Library. Rs. 198.95 lakh was spent on Recurring Expenditure includes expenditure on Periodical and Journals and Consumables.

INCOME AND EXPENDITURE FOR THE YEAR 2011-12 UNDER MAJOR HEADS

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</table>
Endowment Report

The year 2011-12 has continued the upwards growth in financial resource of the institute. The total Grant-in-aid received during the financial year from MHRD, Govt. of India, under non-plan was Rs. 186.60 crore and under Plan Rs. 187.00 crore.

The year was good for fund raising as well. The Institute received Rs. 5.83 crore from 888 donations made by 690 donors (334 donors from India and 356 donors from abroad). A total of 421 donors (164 donors from India and 257 donors from abroad) contributed Rs. 60.5 lakh under the Annual Gift Programme. Donations received under AGP have been utilized for providing travel support to the students for attending international conferences, cash award for publication of their research papers in reputed journals, travel support to international visiting faculty, FM Radio Station and other activities including community services supporting and encouraging excellence in the Institute.

Class of 1986 has contributed their batch fund for establishing Tinkering Lab that will provide basic mechanical and electrical tooling facilities. Once the lab gets going, there is a possibility of substantial additional funding from DST to make it a national innovation lab.

Mr. Jageet S. Bindra, donor of Mrs. & Mr. Gian Singh Bindra Faculty Research Fellowship has converted his fellowship to Mrs. & Mr. Gian Singh Bindra Memorial Chair in the Department of Chemical Engineering; Mr. Kamalesh Dwivedi (BT/EE/79) and Mrs. Rita Dwivedi have instituted Pandit Girish Ranjan & Sushama Rani Pathak Chair; Housing and Urban Development Corporation Ltd (HUDCO) has instituted HUDCO Chair.

Mr. Bogineni Chenchu Rama Naidu (MT/MSP/82) has created Bogineni Chenchu Rama Naidu Merit Award; Mr. Khairati Lal Chaudhary has created Lalit Kishore Chaudhary Memorial Award; Mr. Cherian Mathew (BT/CSE/08) has created Dr. Elizabeth & Dr. Varkey Cherian Scholarship and award and Mr. Sanjeev Narayan Khadilkar (PHD/CSE/95) has created Gurubandhu Challenge Prize.

Several donors have instituted new scholarships during the financial year 2011-12. To mention only a few: AIM FOR SEVA [Mr. Arun Kapoor (BT/ME/67)] has instituted ‘Padma Kapoor Memorial Scholarship’; Ministry of Steel has instituted 5 scholarships named “Ministry of Steel Scholarship”; Mr. Ashish Shukla (MSc5/MTH/97) has instituted ‘Giridhar Gopal Shukla Memorial Scholarship’; Mr. Saibal Dutt (BT/EE/77) has instituted ‘Smt. Neela Dutt Scholarship’; Dr. Ashok Jain (MTech/CE/1971, PHD/CE/78) has instituted Sri Babu Ram Jain Memorial Scholarship.

Mrs. Asha Jadeja has donated US$ 2.01 lacs towards the Rajeev Motwani Building for CSE department. Mrs. Jadeja has committed to donate 50% cost of the Rajeev Motwani building which is presently under construction.
The 1972 batch has donated towards establishing the yoga and aerobics hall in the new student’s sports complex, which has been renamed as the 1972 Batch Yoga and Aerobics hall.

Dr. Shashi M. Kuppa (BT/CE/85) has instituted a Distinguished lecture series in the Department of electrical engineering in the name of his father, Prof. M. Ramamoorthy.

SURGE 2011 program was conducted during summer 2011 which saw student participation of 95 members from 122 Institutes, and faculty participation of 72 members from IIT Kanpur as mentors. The selection of student participants was very competitive as 2600 applications were received from various institutions in the country, which gives a clear indication of its increasing popularity.

The Institute encourages research by providing travel support to students and rewarding students for publishing research papers in high quality journals. Institute provided travel support to 114 students for attending international conferences, and cash awards to 129 students for publication of their research papers in reputed ISI Web Journals during the financial year 2011-12.

The institute has created a “Scholar in Residence” program under which eminent scholars are invited to come to IIT Kanpur and interact with students and faculty. The first visitor under this was Mr. Michael Danino, an eminent historian. All these activities are being supported by alumni donations.

The institute has created Department Excellence Funds for every department to support excellence in academics and research.

The institute is working on an ambitious plan for raising substantial resources to increase the research and development activities on campus and hopes to launch the drive in the year 2012-13.

The following expenditure was made during 2011-12 from Endowment Fund A/c to support different activities in the Institute.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Project Title</th>
<th>Total Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Development &amp; Operational activities in this Institute</td>
<td>122.51</td>
</tr>
<tr>
<td>2</td>
<td>Awards</td>
<td>2.70</td>
</tr>
<tr>
<td>3</td>
<td>Scholarships</td>
<td>12.87</td>
</tr>
<tr>
<td>4</td>
<td>Faculty Chairs</td>
<td>36.60</td>
</tr>
<tr>
<td>5</td>
<td>Young Faculty Research Fellowship</td>
<td>6.00</td>
</tr>
<tr>
<td>6</td>
<td>N Narayana Murthy Foundation</td>
<td>135.82</td>
</tr>
<tr>
<td>7</td>
<td>Poonam &amp; Prabhu Goel Foundation</td>
<td>24.98</td>
</tr>
<tr>
<td>8</td>
<td>Joy &amp; Gill Endowment Foundation</td>
<td>3.35</td>
</tr>
<tr>
<td>9</td>
<td>Ranjit Singh Foundation</td>
<td>3.85</td>
</tr>
<tr>
<td>10</td>
<td>Distinguished Lecture Series</td>
<td>3.10</td>
</tr>
<tr>
<td></td>
<td>Description</td>
<td>Amount</td>
</tr>
<tr>
<td>---</td>
<td>--------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>11</td>
<td>Batch Funds</td>
<td>30.16</td>
</tr>
<tr>
<td>12</td>
<td>Departmental Funds</td>
<td>18.69</td>
</tr>
<tr>
<td>13</td>
<td>Student Activities Fund A/c</td>
<td>28.33</td>
</tr>
<tr>
<td>14</td>
<td>Community Services</td>
<td>3.33</td>
</tr>
<tr>
<td>15</td>
<td>NICEE Endowment Fund</td>
<td>12.26</td>
</tr>
</tbody>
</table>
Facilities to Students

1. RESIDENTIAL ACCOMMODATION FOR STUDENTS

Hall of Residence

IIT Kanpur is a residential Institute and thus requires that all students registered for a degree programme in the Institute reside in the Campus itself. Therefore, all students except (i) married students who are allotted alternative accommodation in single 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, Hall – 11 is under construction 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:

<table>
<thead>
<tr>
<th>Loan</th>
<th>Short Term</th>
<th>Long Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short Term/Long Term</td>
<td>46</td>
<td>5</td>
</tr>
</tbody>
</table>

Student's Benefit Fund (SBF) also provides scholarships of the value of Rs. 1200/- per month to the needy students. Total 59 students were provided scholarships from the SBF during the year 2011-12.

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. 4,50,000.00 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 2011-12.


<table>
<thead>
<tr>
<th>Undergraduate Scholarships</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCM @ Rs. 1000/- p.m. with Freeship</td>
<td>II</td>
</tr>
<tr>
<td></td>
<td>174</td>
</tr>
<tr>
<td>Freeship</td>
<td>21</td>
</tr>
<tr>
<td>Free Basic mess plus Pocket Allowance @ Rs.250/- p.m.</td>
<td>93</td>
</tr>
<tr>
<td>Aedunuthula Prasad Memorial</td>
<td>---</td>
</tr>
<tr>
<td>Anurag Bartaria</td>
<td>---</td>
</tr>
<tr>
<td>Arakere and Karen Vasudev</td>
<td>---</td>
</tr>
<tr>
<td>BGM Kumar Foundation</td>
<td>1</td>
</tr>
<tr>
<td>Bhuwan and Indira Joshi</td>
<td>---</td>
</tr>
<tr>
<td>Bishambar Gupta &amp; Anguri Gupta</td>
<td>---</td>
</tr>
<tr>
<td>Balasubramaniam &amp; Visalakshi</td>
<td>1</td>
</tr>
<tr>
<td>Biswanath Jha Memorial</td>
<td>1</td>
</tr>
<tr>
<td>Dr. Gurcharan Singh Kainth</td>
<td>---</td>
</tr>
<tr>
<td>Guru Ji Ghasit Ram</td>
<td>1</td>
</tr>
<tr>
<td>Scholarship</td>
<td>Year</td>
</tr>
<tr>
<td>-------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Harish and Sushila Chandra</td>
<td></td>
</tr>
<tr>
<td>Neeraj Kapoor Memorial</td>
<td></td>
</tr>
<tr>
<td>Khem Chandra Yadav</td>
<td></td>
</tr>
<tr>
<td>Kinra</td>
<td></td>
</tr>
<tr>
<td>Kunta Jha</td>
<td></td>
</tr>
<tr>
<td>Mahesh &amp; Shashi Chandra</td>
<td></td>
</tr>
<tr>
<td>N.S. Rajaraman</td>
<td></td>
</tr>
<tr>
<td>Neta Ji Balwan Singh</td>
<td></td>
</tr>
<tr>
<td>Nita Goyal and Ashish Gupta</td>
<td></td>
</tr>
<tr>
<td>P.D. Murti Memorial</td>
<td></td>
</tr>
<tr>
<td>Pt. Balajee Govind Hardikar Memorial</td>
<td></td>
</tr>
<tr>
<td>Prof. Netar Lal Kapur</td>
<td></td>
</tr>
<tr>
<td>Ram Rajendra Malhotra Education Society</td>
<td></td>
</tr>
<tr>
<td>Sarpanch Salim Ram Katiyar</td>
<td></td>
</tr>
<tr>
<td>Shiv Kumari Shukla</td>
<td></td>
</tr>
<tr>
<td>Shiv Prakash and Dayawanti Sharma</td>
<td></td>
</tr>
<tr>
<td>Shri D.P. Shukla</td>
<td></td>
</tr>
<tr>
<td>Smt. Jagat Kaur Memorial</td>
<td></td>
</tr>
<tr>
<td>Sri Jamuna Prasad and Basanti Gupta</td>
<td></td>
</tr>
<tr>
<td>Sri Hemnath @iiit</td>
<td></td>
</tr>
<tr>
<td>Tapan Kumar and Swapna Bandhyopadguy</td>
<td></td>
</tr>
<tr>
<td>Vasudeo Laxman Sahasrabuddhe Vaidya</td>
<td></td>
</tr>
<tr>
<td>Yosodha Yadav</td>
<td></td>
</tr>
<tr>
<td>Yogendra Nath and Sushma Gupta</td>
<td></td>
</tr>
<tr>
<td>Shri Shankar Lal Shrimati Prema Debi</td>
<td></td>
</tr>
<tr>
<td>Tarun Sondhi Memorial Scholarship</td>
<td></td>
</tr>
<tr>
<td>Kemchand Memorial Scholarship</td>
<td></td>
</tr>
<tr>
<td>Dr. M. Anantaswamy and Mrs. Vijayalakshmi Rau</td>
<td></td>
</tr>
<tr>
<td>Shri Bihari Lal Srivastava and Smt. Nalini Srivastava Memorial Scholarship</td>
<td></td>
</tr>
<tr>
<td>Shanti &amp; Ram Kishore Sahai Saxena Memorial Scholarship</td>
<td></td>
</tr>
<tr>
<td>Shri Kalp Nath Singh</td>
<td></td>
</tr>
<tr>
<td>Shanti Devi and Omkar Nath Maewal Memorial</td>
<td></td>
</tr>
<tr>
<td>K. N. Saluja</td>
<td></td>
</tr>
<tr>
<td>Sri Singhasan Singh</td>
<td></td>
</tr>
<tr>
<td>Romesh Chandra Memorial</td>
<td></td>
</tr>
<tr>
<td>Dharmavati Garg</td>
<td></td>
</tr>
<tr>
<td>Durga Devi Memorial</td>
<td></td>
</tr>
<tr>
<td>Dr. K.P. Gupta</td>
<td></td>
</tr>
<tr>
<td>Baljit and Nirmal Dhinsa</td>
<td></td>
</tr>
<tr>
<td>Mona and Paramjit Singh</td>
<td></td>
</tr>
<tr>
<td>Rajnath Singh Scholarship</td>
<td></td>
</tr>
<tr>
<td>Nitish Thakor</td>
<td></td>
</tr>
<tr>
<td>Pushpa Garg</td>
<td></td>
</tr>
</tbody>
</table>
Aviation Development Award   ---   ---   13   ---   ---
Dr. D.R. Bhagat Scholarship   ---   ---   2   ---   ---
Sagnik Asis Ray               ---   ---   ---   1   ---
Anil and Reshma Nigam Scholarship ---   ---   ---   1   ---
Govinda and Indira Srikantiah ---   ---   ---   1   ---
Simran Mandeep Kainth Memorial ---   1   1   1  ---
IWA Bonn                      ---   03   ---   ---   ---
Pratima Ghosh Memorial       1   ---   ---   ---   ---
Ramesh Chandra Yadav         1   1   ---   ---   ---
Jasmine and Mohiuddin        ---   1   ---   ---   ---
Seema Jain Memorial          ---   1   ---   ---   ---
ACC Fellowship               1   ---   ---   1   ---
Anita & Santosh Mehra Foundation Scholarship ---   ---   1   ---   ---
Class of 1984                1   ---   ---   ---   ---
Shanti & Ram Kishore sahai   1   ---   ---   ---   ---
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

<table>
<thead>
<tr>
<th>Scholarships</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Matric Scholarship</td>
<td>---</td>
<td>1</td>
<td>---</td>
<td>---</td>
<td>1</td>
</tr>
<tr>
<td>NTS Scholarships</td>
<td>5</td>
<td>2</td>
<td>18</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>FAEA Scholarship</td>
<td>---</td>
<td>---</td>
<td>2</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Aditya Birla</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>---</td>
</tr>
<tr>
<td>Inspire</td>
<td>55</td>
<td>49</td>
<td>37</td>
<td>25</td>
<td>30</td>
</tr>
<tr>
<td>TODAI Scholarship</td>
<td>02</td>
<td>02</td>
<td>02</td>
<td>02</td>
<td>---</td>
</tr>
<tr>
<td>O.P. Jindal Scholarship</td>
<td>01</td>
<td>01</td>
<td>01</td>
<td>01</td>
<td>---</td>
</tr>
<tr>
<td>State Scholarship</td>
<td>---</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>World Quant Scholarship</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

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

AWARDS AND PRIZES TO MERITORIOUS STUDENTS

The students at IIT Kanpur are engaged throughout their programme in various academic, co-curricular and extracurricular activities. The outstanding students are given various awards and prizes for their achievements in their activities. Table-III shows the awards and prizes given during 2011-12. In addition, top 7% students in order of merit in each year are given a Certificate of Merit and a cash prize of Rs. 400/- for UG and Rs. 600/- for PG students.
### TABLE-III: AWARDS AND PRIZES (2010-11)

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Awards and Prizes</th>
<th>B. Tech/ M. Sc. (Intg.)/Dual degree</th>
<th>M. Sc. (2-Year)/Dual degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>President Gold Medal</td>
<td>3</td>
<td>---</td>
</tr>
<tr>
<td>2</td>
<td>Directors Gold Medal</td>
<td>1</td>
<td>---</td>
</tr>
<tr>
<td>3</td>
<td>General Proficiency Medal</td>
<td>20</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>Proficiency Medal</td>
<td>25</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>Cadence Gold Medal</td>
<td>01 (M.Tech)</td>
<td>---</td>
</tr>
<tr>
<td>6</td>
<td>Cadence Silver Medal</td>
<td>1</td>
<td>---</td>
</tr>
<tr>
<td>7</td>
<td>Prof. Adidam S. R. Sai Memorial Gold Medal</td>
<td>01 (M.Tech.)</td>
<td>---</td>
</tr>
<tr>
<td>8</td>
<td>Prof. Adidam Sri Ranga Sai Memorial Medal</td>
<td>1</td>
<td>---</td>
</tr>
<tr>
<td>9</td>
<td>Ratan Swarup Memorial Prize</td>
<td>1</td>
<td>---</td>
</tr>
<tr>
<td>10</td>
<td>Banco Foundation Prize (ME)</td>
<td>1</td>
<td>---</td>
</tr>
<tr>
<td>11</td>
<td>Dr. Shanker Dayal Sharma Medal</td>
<td>01 (M.Tech.)</td>
<td>---</td>
</tr>
<tr>
<td>12</td>
<td>Prof. Vijay Mahajan Gold Medal</td>
<td>01 (MBA)</td>
<td>---</td>
</tr>
<tr>
<td>13</td>
<td>Batra Gold Medal</td>
<td>1</td>
<td>---</td>
</tr>
<tr>
<td>14</td>
<td>IEEE/Pedes’96 Award</td>
<td>01 (M.Tech.)</td>
<td>---</td>
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<tr>
<td>15</td>
<td>Bhagwani Devi Maheshwari Gold Medal</td>
<td>1</td>
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</tr>
<tr>
<td>16</td>
<td>Prof. Bal Deva Upadhyaya Memorial Gold Medal</td>
<td>01 (M.Tech.)</td>
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<tr>
<td>17</td>
<td>Mars G. Fontana Prize (MME)</td>
<td>1</td>
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</tr>
<tr>
<td>18</td>
<td>Sangeeta Pradhan Memorial Medal</td>
<td>1</td>
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</tr>
<tr>
<td>19</td>
<td>Best Software Award</td>
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</tr>
<tr>
<td>20</td>
<td>Binay Kumar Sinha Award</td>
<td>3</td>
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</tr>
<tr>
<td>21</td>
<td>TATA Consultancy Services Awards</td>
<td>2</td>
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<tr>
<td>22</td>
<td>Dr. S.D. Bokil Memorial Medal</td>
<td>01 (M.Tech.)</td>
<td>---</td>
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<tr>
<td>23</td>
<td>Mehta M.Tech. Gold Medal</td>
<td>01 (M.Tech.)</td>
<td>---</td>
</tr>
<tr>
<td>24</td>
<td>IITK Excellance Award for Leadership</td>
<td>4</td>
<td>---</td>
</tr>
<tr>
<td>25</td>
<td>IITK Excellance Award for Art &amp; Cultural</td>
<td>4</td>
<td>---</td>
</tr>
<tr>
<td>26</td>
<td>IITK Excellance Award in Community Services</td>
<td>4</td>
<td>---</td>
</tr>
<tr>
<td>27</td>
<td>Ellizabeth and Varkey Cherian Award</td>
<td>4</td>
<td>---</td>
</tr>
<tr>
<td>28</td>
<td>Trilok Chandra Goel Memorial gold Medal</td>
<td>01 (M.Tech.)</td>
<td>---</td>
</tr>
<tr>
<td>29</td>
<td>S.N. Mittal Gold Medal</td>
<td>1</td>
<td>---</td>
</tr>
<tr>
<td>30</td>
<td>VLFM</td>
<td>03 (MBA)</td>
<td>---</td>
</tr>
<tr>
<td>31</td>
<td>Gopal Das Bhandari Memorial Distinguished Teacher Award</td>
<td>01 (Faculty)</td>
<td>---</td>
</tr>
<tr>
<td>32</td>
<td>Notional Prizes (UG)</td>
<td>193</td>
<td>12</td>
</tr>
<tr>
<td>33</td>
<td>Notional Prizes (PG)</td>
<td>56</td>
<td>---</td>
</tr>
<tr>
<td>34</td>
<td>N. Balakrishnan Award</td>
<td>---</td>
<td>1</td>
</tr>
<tr>
<td>35</td>
<td>Prof. J. N. Kapur Prizes</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>36</td>
<td>Smt. P. K. Subbulakshmi Memorial Award</td>
<td>---</td>
<td>02</td>
</tr>
<tr>
<td>37</td>
<td>Gargi, Kritika &amp; Maitreyi Awards</td>
<td>3</td>
<td>---</td>
</tr>
</tbody>
</table>
POSTGRADUATE STUDENTS

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

EDUCATIONAL GRANTS TO POSTGRADUATE STUDENTS

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

Table-II: Amount of Educational Grants given to Postgraduate Students

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

4. 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.

5. 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 and other luminaries were conducted throughout the year.

The institute sports teams also participated in the Inter IIT Sports meet this year held at IIT Kharagpur. The cricket team clinched gold after a gap of many years. The Badminton men’s team was successful in defending their title and emerged as winners securing a Gold medal yet again. Almost all the teams made it to the semi finals. The girls volleyball team won silver after a nail-bitting final. The athletics and squash teams won bronze. Viewing the big picture, the performance of all the teams was appreciable.

The annual inter college sports festival, Udghosh saw immense participation from a large number of colleges through the length and breadth of the nation. Our teams
proved their metal here as well. Athletics, badminton, hockey and weightlifting teams won gold in their respective sport. Chess, cricket, squash and table tennis teams won the Silver medal in their sport. The institute basketball team visited MNIT, Jaipur to participate in the sports festival and the girls’ teams was successful in securing a Gold Medal.

The institute throughout the year was a buzz with sporting activities and events. The Institute Football League (IFL) proved to be an immense success amongst the campus community. Students and faculty alike enjoyed JOSH and it’s open natured participation. The inter-hall sports festival Varchasva General Championship was fiercely competed with the halls organizing their intra hall festivals to form teams to compete. The Gym facility was upgraded and a new air-conditioned gym totally dedicated to Cardio workout was opened in the New Indoor Sports complex. Along with that the pool room saw the addition of three new pool tables.

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.

Counselling Service

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.

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
6. Aerobics (To be Introduced this year)
7. Skating (To be Introduced this year)
All the 1st year students admitted in the B. Tech. /BS 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.

**GAMES AND SPORTS**

Under the Games and Sports stream, a student has an option to choose one of the following sports disciplines: Athletics, Basketball, Badminton, Cricket, Football, Hockey, Squash, Swimming, Tennis, Table Tennis, Volleyball and weight-lifting. The institute has excellent facilities for these disciplines. Besides the responsibility of running the PE courses, Physical Education Section is responsible to supervise and provide Games & Sports facilities to all registered students of the institute and also to organize various games and sports tournaments and meets. The PE section is also responsible for preparing institute teams to participate in various sports tournaments. The outstanding players (students) have an opportunity to represent the institute team in various sports meets/festivals, such as, Inter IIT Sports Meet and District level tournaments. To encourage the participation in the Games and Sports, meritorious players are awarded prizes and medals at the Annual function of the Student Gymkhana. The achievements of the meritorious players are also considered for some institute awards and sports scholarships are also given to the best sports persons.

**NATIONAL CADET CORPS (NCC)**

It is a matter of grate 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.

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 the thoroughly groom the NCC cadets to be tomorrow 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 students’ 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, are conducted during both the semesters as part of PE 101 & PE 102 Courses. 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. Counseling is also provided to students for solving their personal physical, mental and emotional problems through yoga.

TAE-KWON-DO

Classes of Tae-Kwon-Do to train students under the CPA activities are conducted during both the semesters as part of PE 101 & PE 102 Course.

SWIMMING POOL

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.

AEROBICS

Aerobics which is a form of rhythmic physical exercise with stretching and strength training is taught to the students by a certified instructor in one of the streams of PE courses for improving the main elements of fitness: flexibility, strength, endurance and cardio-vascular fitness. The institute has a well equipped indoor aerobics hall.

SKATING

Skating, a fascinating sport is one of the streams in the PE courses. The students are going to be taught this sport by a qualified instructor. The students would be taught the basic skills initially and later introduced to the higher levels. The students in this
stream will have an opportunity to join the Skating Hockey Team. A proper skating hockey rink with flood lights is under construction in the institute.

**GYMNASIUMS**

The institute has two gymnasiums equipped with the latest cardio and strength equipment. A professional gym trainer has been employed for motivating the users, setting goals, providing feedbacks and measuring the users strength and weakness with fitness assessments. The membership for the gym is open to all the campus residents on payment of a nominal fee. The exact rates for these facilities are fixed and notified by the Sports & Physical Education Committee (SPEC).

6. FACULTY INCHARGES STUDENTS'S 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

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief Counsellor</td>
<td>Dr. A. K. Ghosh</td>
</tr>
<tr>
<td>Cultural Counsellor</td>
<td>Dr. Satyaki Roy</td>
</tr>
<tr>
<td>Games Counsellor</td>
<td>Dr. B. V. Phani</td>
</tr>
<tr>
<td>Films Counsellor</td>
<td>Dr. Satyaki Roy</td>
</tr>
<tr>
<td>Science &amp; Technology Counsellor</td>
<td>Dr. Anurag Gupta</td>
</tr>
<tr>
<td>Treasurer</td>
<td>Dr. A. V. R. Sarma</td>
</tr>
<tr>
<td>Chairman Students Benefit Fund</td>
<td>Dr. A. R. Harish</td>
</tr>
<tr>
<td>Chairman Students’ Placement Committee</td>
<td>Dr. Vimal Kumar</td>
</tr>
<tr>
<td>Faculty Advisor, NSS</td>
<td>Dr. H. C. Verma</td>
</tr>
<tr>
<td>Chairman, Swimming Pool Management Committee</td>
<td>Dr. Prabhat Munshi</td>
</tr>
<tr>
<td>Faculty Advisor, Yoga</td>
<td>Dr. S. C. Misra</td>
</tr>
<tr>
<td>Faculty Advisor, Tae-kwon-do</td>
<td>Dr. T. Ravishankar</td>
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7. WARDENS

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Dr. Sudeep Bhattacharjee, Warden I/c</td>
</tr>
<tr>
<td>Dr. Krishnacharya, Warden</td>
</tr>
<tr>
<td>Dr. M. Jaleel Akhtar, Warden</td>
</tr>
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<tr>
<td>Dr. Somesh K Mathur, Warden I/c</td>
</tr>
<tr>
<td>Dr. Debajyoti Paul, Warden</td>
</tr>
<tr>
<td>Dr. Anurag Gupta, Warden</td>
</tr>
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</table>

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

**HALL OF RESIDENCE No. IV**
Dr. Anish Upadhyaya, Warden I/c
Dr. Deepu Philip, Warden
Dr. Kantesh Balani, Warden

**HALL OF RESIDENCE No. V**
Dr. A. V. R. Sarma, Warden I/C
Dr. Vineet Sahu, Warden
Dr. Sivakumar, Warden

**HALL OF RESIDENCE No. VII**
Dr. Kamal K Kar, Warden I/C
Dr. J. K. Bera, Warden
Dr. Saikat Chakrabarti, 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. J. Ramkumar, Warden I/C
Dr. Vaibhav Kr. Srivastava, 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
Dr. Veena Bansal, Warden

**SBRA**
Dr. A. R. Harish, Warden I/C
Mr. Jitendra Narayan Gangawar, 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. Sanchit Singhal upto (Feb. 2012) and Mr. Abhay Jain (from March 2012)

Convenor, Students Senate
Mr. Aditya Gupta (upto Feb. 2012) and Mr. Ankit Bhutani (from March 2012)

General Secretary (Cultural)
Mr Shantanu Singh (upto Feb. 2012) and Ms. Sonal Kumari (from March 2012)

General Secretary (Games)
Mr. Anurag Agarwal (upto Feb. 2012) and Mr. Yuvraj Dhillon (from March 2012)

General Secretary (Films)
Mr. Rohit Singh (upto Feb. 2012) and Mr. Yashovardhan Bhagat (from March 2012)

General Secretary (Science & Technology)
Mr. Abhinav Prateek (upto Feb. 2012) and Mr. Subhojit Ghosh (from March 2012)
Students’ Placement

The present document describes the placement season 2011-12 of Students' Placement Office as on May 15th, 2012.

INTRODUCTION

Students' Placement Office (SPO) handles all aspect of placement, right from contacting companies to managing all logistics of arranging for test, pre-placement talks and conduction final Interview.

Role of SPO is of facilitator and counsellor for placement related activities. Apart from this office held various preparation sessions, so that students are well prepared and more informed while sitting for placements.

On the much broader level Pre-Placement Talk were held in 1st semester of 2011-12 and final placement from December 2nd onwards. The PPT's started from 18th Aug 2011.

Invitation letters for participating in the Campus Recruitment Programme 2011-12 were sent to over 2500 organizations. A total of 260 companies had filled in the proforma and finally 185 took part in the campus placements. 817 students registered for placements this year of which 691 have job offers from 185 companies that took part in placement process. Thus, the overall placement record stands at 85% as on 5th May, 2012.

The highest package offered this year within India was 52 LPA CTC, whereas in terms of foreign placements Pocket Gems (Silicon Valley, US) offered the most lavish package at $150,000.

The office continued with its policy of “one job per student”, to ensure uniform opportunities to all students.

The placements in initial days were very promising but because of industrial slowdown, fog, sports meets, it gradually slowed down, though the totals of 452 students were placed in December. Many companies visited the campus for 1st time which including ANZ Bank, Bank of India, Flipkart, Paypal, Pocket Gems, Renault Nissan etc.
PLACEMENT PREPARATION ACTIVITIES

The following are the preparation activities that were carried out towards the placement season 2011-2012 of Students’ Placement Office, IIT Kanpur:

1. Resume-making:
   a. There were two sessions taken by SPO’s Career Counselor separately for the B.Tech and M.Tech students, held on the 20th and 22nd of Aug, respectively.
   b. The Career Counselor had reviewed the resumes of about 60 interested students.

2. Aptitude Tests:
   a. SPO collaborated with Career Launcher to hold a series of 6 lectures of two hours duration each, followed by 6 mock tests during September and October. About 360 students participated. The fee taken from each student was Rs. 200 and SPO additionally paid Rs. 50 for each student
   b. Aspiring Minds took the AMCAT, a practice online aptitude test, once from 13th to 15th of August and again from 27th to 30th of September, for free. Around 700 students participated.

3. Interviews:
   a. There were two sessions taken by SPO’s Career Counselor separately for the B.Tech and M.Tech students on 22nd October.
   b. SPO collaborated with Dialog Services to hold a 3-day Interview workshop from 12th to 15th of November. Around 120 students participated. The fee taken from each student was Rs. 100 and a total of Rs. 30,000 was paid to the trainer.

4. Group Discussions:
   a. There were two sessions taken by SPO’s Career Counselor separately for the B.Tech and M.Tech students during mid-September
   b. Every fortnightly, GD sessions were organized at the institute level. The moderators would be student volunteers itself.

5. Technical preparation:
   a. Coordinating with the DPCs and Professors of respective departments, question banks were compiled and core technical tests were conducted.

6. Groups:
   a. Consulting group – Weekly practice mock case sessions used to be held for students to practice case solving.
   b. Finance group – Lectures on basics of finance, puzzle solving sessions.
<table>
<thead>
<tr>
<th>Program</th>
<th>Dept.</th>
<th>Registered</th>
<th>Placed</th>
<th>Percentage</th>
</tr>
</thead>
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<tr>
<td>BTech</td>
<td>AE</td>
<td>14</td>
<td>13</td>
<td>93%</td>
</tr>
<tr>
<td></td>
<td>BSBE</td>
<td>20</td>
<td>18</td>
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</tr>
<tr>
<td></td>
<td>CE</td>
<td>47</td>
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<tr>
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<td>CHE</td>
<td>32</td>
<td>29</td>
<td>91%</td>
</tr>
<tr>
<td></td>
<td>CSE</td>
<td>33</td>
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<tr>
<td></td>
<td>EE</td>
<td>57</td>
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</tr>
<tr>
<td></td>
<td>ME</td>
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<td></td>
<td>MME</td>
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</tr>
<tr>
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<tr>
<td></td>
<td>CE</td>
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<tr>
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<td>CHE</td>
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<td>11</td>
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<tr>
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<tr>
<td></td>
<td>ME</td>
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<td>21</td>
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<tr>
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<td>66</td>
<td>97%</td>
</tr>
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</tr>
<tr>
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<td>IME</td>
<td>9</td>
<td>9</td>
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</tr>
<tr>
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<td>LTP</td>
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<tr>
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<td>ME</td>
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<tr>
<td></td>
<td>NET</td>
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<td>71%</td>
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<td>15</td>
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<td>93%</td>
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<tr>
<td></td>
<td>MSC</td>
<td>29</td>
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<td>90%</td>
</tr>
<tr>
<td></td>
<td>PHY</td>
<td>3</td>
<td>3</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
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<td>48</td>
<td>89%</td>
</tr>
<tr>
<td>Msc2</td>
<td>CHM</td>
<td>8</td>
<td>3</td>
<td>38%</td>
</tr>
<tr>
<td></td>
<td>MTH</td>
<td>23</td>
<td>13</td>
<td>57%</td>
</tr>
<tr>
<td></td>
<td>PHY</td>
<td>1</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>32</td>
<td>16</td>
<td>50%</td>
</tr>
<tr>
<td>MBA</td>
<td>IME</td>
<td>26</td>
<td>25</td>
<td>96%</td>
</tr>
<tr>
<td>Mdes</td>
<td>Mdes</td>
<td>10</td>
<td>7</td>
<td>70%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>817</td>
<td>691</td>
<td>85%</td>
</tr>
</tbody>
</table>
## SALARY DATA

### Details of jobs in India:

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average salary offered per annum (in LPA)</td>
<td>7.1</td>
</tr>
<tr>
<td>Median salary offered per annum (in LPA)</td>
<td>7.5</td>
</tr>
<tr>
<td>Maximum salary offered per annum (in LPA)</td>
<td>52</td>
</tr>
<tr>
<td>Minimum salary offered per annum (in LPA)</td>
<td>4</td>
</tr>
</tbody>
</table>

### Details of Foreign Jobs:

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of students placed abroad</td>
<td>5%</td>
</tr>
<tr>
<td>Average salary offered per annum (in thousand)</td>
<td>US$ 120,000</td>
</tr>
<tr>
<td>Median salary offered per annum (in thousand)</td>
<td>US$ 125,000</td>
</tr>
<tr>
<td>Maximum salary offered per annum (in thousand)</td>
<td>US$ 150,000</td>
</tr>
<tr>
<td>Minimum salary offered per annum (in thousand)</td>
<td>US$ 80,000</td>
</tr>
</tbody>
</table>

*Location of foreign jobs are in US, Malaysia, Taiwan and Australia. We have salary in USD*
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.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Unit</th>
<th>Responsibility</th>
<th>Unit-in-charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Civil Division-I</td>
<td>Maintenance, upgradation and development work. Water supply, furniture &amp; roads</td>
<td>Executive Engineer</td>
</tr>
<tr>
<td>2.</td>
<td>Civil Division-II</td>
<td>Maintenance development works</td>
<td>Executive Engineer</td>
</tr>
<tr>
<td>3.</td>
<td>Electrical &amp; Air-conditioning Division</td>
<td>Electrical maintenance domestic / central AC maintenance</td>
<td>Superintending Engineer</td>
</tr>
<tr>
<td>4.</td>
<td>Horticulture unit</td>
<td>Development &amp; maintenance</td>
<td>Superintending Engineer</td>
</tr>
<tr>
<td>5.</td>
<td>Sanitation unit</td>
<td>House keeping of various building</td>
<td>Superintending Engineer</td>
</tr>
</tbody>
</table>
(A) The following works completed during 2011-2012:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of work</th>
<th>Plinth Area (in sqm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Construction of Hall of Residence No. X (Phase-II)</td>
<td>6930</td>
</tr>
<tr>
<td>2.</td>
<td>Construction of 48 units SBRA</td>
<td>3878</td>
</tr>
</tbody>
</table>

(B) The following works are under execution:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of work</th>
<th>Plinth Area (in sqm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Construction of Multi-storied Residential Flats Block-A &amp; B.</td>
<td>12362</td>
</tr>
<tr>
<td>2.</td>
<td>Extension of RA hostel</td>
<td>13455</td>
</tr>
<tr>
<td>3.</td>
<td>Infrastructural work to create High Performance Computing setup at Computer Centre</td>
<td>252</td>
</tr>
<tr>
<td>5.</td>
<td>Construction of Hall of Residence No. XI for Boys.</td>
<td>15876</td>
</tr>
<tr>
<td>6.</td>
<td>Construction of Rajeev Motwani building.</td>
<td>3510</td>
</tr>
<tr>
<td>7.</td>
<td>Construction of underground water storage tank &amp; pump house to store the water from Ganga Barrage i/c modification in existing water supply network &amp; additional pipe line to water supply network.</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Providing underground power distribution system in place of existing over head distribution system.</td>
<td></td>
</tr>
</tbody>
</table>

(C) The following works under planning:

1. Construction of Hall of Residence No. XII for Boys.
2. Construction of new Lecture Halls.
3. Extension Centre NOIDA.
5. New building for Aerospace Department.

STORES & PURCHASE SECTION

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

The Import Section handles customs clearance of all foreign consignments and matters relating to Import Licenses/Custom Duty Exemption Certificate/ Excise Duty Exemption Certificate and other certificates from Government of India. The re-export of
consignments to the suppliers for repairs/ replacements is also done through this section.

During the financial year 2011-2012 the Purchase Section places 1461 orders valued Rs. 1,18,06,55,557=00 which includes import order numbering 567 costing Rs.89,81,56,040=00 and indigenous order numbering 894 Costing 28,24,99,517=00. The purchase orders and their values under various categories are as follows.

<table>
<thead>
<tr>
<th>Category</th>
<th>No. of P.O.</th>
<th>Amount (in Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Import</strong> :-</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>(A) Institute fund</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumable</td>
<td>32</td>
<td>1,49,17,408</td>
</tr>
<tr>
<td>Non consumable</td>
<td>171</td>
<td>60,38,57,945</td>
</tr>
<tr>
<td><strong>(B) Project fund</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumable</td>
<td>84</td>
<td>1,37,45,000</td>
</tr>
<tr>
<td>Non consumable</td>
<td>280</td>
<td>26,56,35,687</td>
</tr>
<tr>
<td><strong>Total Import (A&amp;B)</strong></td>
<td>567</td>
<td>89,81,56,040</td>
</tr>
<tr>
<td><strong>(C) Indigenous :-</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Institute fund</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumable</td>
<td>201</td>
<td>2,12,85,749</td>
</tr>
<tr>
<td>Non consumable</td>
<td>291</td>
<td>14,70,27,846</td>
</tr>
<tr>
<td><strong>(D) Project fund</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumable</td>
<td>117</td>
<td>68,02,553</td>
</tr>
<tr>
<td>Non consumable</td>
<td>285</td>
<td>10,73,83,369</td>
</tr>
<tr>
<td><strong>Total Indigenous (C&amp;D)</strong></td>
<td>894</td>
<td>28,24,99,517</td>
</tr>
<tr>
<td><strong>Total Value</strong></td>
<td>1461</td>
<td>1,18,06,55,557</td>
</tr>
</tbody>
</table>

Central Stores procure highly technical items as and when required by the different departments to maintain the pace with science and technology development. It stocks some items of 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 22 personnel.

The stores also maintained the records of disposal of unusable and scrap materials. 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 2011-2012 we have reconditioned different type of furniture and issued to various departments. The details of reconditioned furniture are as follows:

1. Chair 289 nos
2. Office Table 161 nos
3. Almira 9 nos
(4) Racks 42 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 Center. 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 postal, 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 shop management, eviction of unauthorized occupants, realization of license fee and electric/water charges from shopkeepers & house allottees, estate management and civic amenities.

The Institute has various types of residential accommodation, i.e. Type-1A, 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 five 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, at new SAC 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 shop like which mainly fulfills the immediate needs of students.

Further, a cable network for T.V. 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 alongwith their guests. 1968 batch donated 50% cost of the lounge (Rs 25.00 lakhs) for creating a decent lounge
facility in the campus, known as "Lounge - 68" and rest of the money was added by the Institute. The Lounge - 68 is now to be operational by M/s. Cafe Coffee Day.

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 2011-12, the office has realized about Rs.1,03,12,757.00 (One Crore Three Lakh Twelve Thousand Seven Hundred Fifty Seven Only) from the different sources (it is notable that the tendering process of unserviceable materials has already shifted to central stores from August 2009.)

The break up of the above amount is as follows:

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Amount in Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount collected through temporary houses allotment and temporary stalls at Shop C</td>
<td></td>
</tr>
<tr>
<td>Rent From Temporary House allotment</td>
<td>33000.00</td>
</tr>
<tr>
<td>Electricity Charges of Temporary House Allotment</td>
<td>14925.00</td>
</tr>
<tr>
<td>Rent From Temporary Stall</td>
<td>34600.00</td>
</tr>
<tr>
<td>Electricity Charges of Temporary Stall</td>
<td>14600.00</td>
</tr>
<tr>
<td>Lawn Booking</td>
<td>8000.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Amount in Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount collected towards rent and electricity charges for Shops, Canteen &amp; Non Institute Employee Houses</td>
<td></td>
</tr>
<tr>
<td>Charges for electricity</td>
<td>5001264.00</td>
</tr>
<tr>
<td>Rent for Shops, Canteen and House to Non-Institute employees &amp; Administrative charges for delayed payment of Licence fee</td>
<td>2548802.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tender Process</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sale of Tender forms (Rs. 22,000/-) + VAT (Rs. 530/-)</td>
<td>22530.00</td>
</tr>
<tr>
<td>Sale of Dry woods/Logs(Rs. 3,51,000/-) + VAT (Rs. 47,385/-)</td>
<td>398385.00</td>
</tr>
<tr>
<td>Sale of Amla (Rs.1,160/-) Mango (Rs. 10,485/-) &amp; Beri Fruits (Rs. 200/-)</td>
<td>11845.00</td>
</tr>
<tr>
<td>Amount from Raddi &amp; Kabad contractor (Rs. 2,70,340/-) + VAT (Rs. 2,822/-)</td>
<td>273162.00</td>
</tr>
<tr>
<td>Interest of Investment</td>
<td>2277.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Amount collected towards Penal Charges, Eviction, Retirement, Death &amp; Resignation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Licence Fee</td>
<td>1113337.00</td>
</tr>
<tr>
<td>Water Charges</td>
<td>5263.00</td>
</tr>
<tr>
<td>Electricity Charges</td>
<td>362423.00</td>
</tr>
<tr>
<td>Amount collected through issue of Mobile Passes &amp; Collection of amount at Cycle Stand, IIT/K</td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Amount collected at Cycle Stand</td>
<td>302974.00</td>
</tr>
<tr>
<td>Charges for Entry passes, Rickshaw pullers, Supplier and vendor</td>
<td>141370.00</td>
</tr>
<tr>
<td>Amount of shopkeeper passes</td>
<td>24000.00</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>1,03,12,757.00</strong></td>
</tr>
</tbody>
</table>

**CAMPUS SCHOOL**

Education aims at making children capable of becoming responsible, productive and useful members of a society. In short it should aim at developing the all-round personality of a child. It must therefore promote and nourish as wide a range of capacities and skills in our children as possible. The gamut of such skills include the performing arts including dance, drama, painting & craft and literary abilities (weaving stories, wielding language to portray different aspects of life, a flair for metaphorical and poetic expression, etc.) Also, skills as diverse as some children’s special capacity to bond with nature – with trees, birds, and animal - need to be nurtured. We at Campus School are trying to develop an understanding of learner’s educational aims and the nature of the school as a social space. Before mentioning about the recent developments I would like to throw some light on the history of the school.

**History of the School**

Campus School was started on 14 July 1964 when the founding Director Late P.K.Kelkar realized the needs of the high class faculty and staff in the field of Primary Education on the Campus. Mrs. Meera Parasnis was the first Chairperson. Dr. Kelkar arranged, through the KIAP Programme education experts from USA, to visit and advice in matters of child development and teaching methodology. This laid the foundation of the Campus School at IIT Kanpur.

Doing Science with actual laboratory experience rather than just reading and listening, regular classwise Science Exhibitions and Annual Open House were started then as a tradition are still the pivotal points of the school.

**Physical Panorama:-**

School strength –
- Students on roll – 388
- Regular Teachers - 7 and Principal
- Adhoc – 4
- Contractual Teachers and others – 13
- Supporting staff – 9
The recent years
In the last few years the school set up a Maths laboratory, which is now used for regular class room teaching. Innovative play-way method of learning got introduced in the K.G.Class. The K.G.Class is equipped with overhead projection system and educational software. The EVS and English Language Laboratories have started this year. Indradhanush, a programme of evening activities for Campus School, Kislaya Nursery School and Opportunity School has restarted with much enthusiasm. This year the Principal attended 3-day International Teachers Training Programme. A Teachers Training Programme was organized at the school. One innovator gave a demonstration of manually operated pump and a talk to Class IV and V students. Thinkizm team held a creative Wall Painting session in the school. Campus School children have regular appearance on radio FM 90.4 too.

FOR THE UPCOMING SESSION

Our plans for the forthcoming session are:

Kindergarten
Fostering learning in a playful manner where the potential of the child is identified and individual capabilities are developed for bringing out the best in them. We are in the process of:
Introducing a curriculum map to guide parents through this first important year – Setting up a separate open air play area with colourful, attractive and child safe play equipment. This will have playhouse, sandpit and lots more to develop motor skills and physical fitness:
- Bringing in a creative programme of arts with music, dance, craft, clay modeling and dramatics.
- Story narration and classroom library.
- Celebrating days like Carpenter’s day, Farmer’s day, Helper’s day etc.
- Bird watching and outing to zoo, bank, petrol pump, post office, bakery, fire brigade etc.
- Use of educational software for the vocabulary and phrase enhancement.
- Organizing Orientation and Welcome Week for the children and parents of KG.
- Nurturing through mothers involvement in the school.

Class I to IV:
Allowing children free to explore on their own and learn through experience, making and doing things, experimenting, reading, discussing, listening, thinking and reflecting will be highlighted thus enabling them to express themselves better in speech and in writing. Framing of a well balanced curriculum, continuous evaluation of identified aspects of students growth and development spread over the entire span of the academic session, diagnosis of learning gaps, use of corrective measures retesting and feedback of evidence to teachers and students for their self evaluation will be implemented.
Celebrations:
Children learn in a variety of ways—through experience, making & doing things, experimentation, reading, discussion, asking, listening, thinking and reflecting, and expressing oneself in speech, movement or writing—both individually and with others. They require opportunities of all kinds in the course of their development.

Learning takes place both within school and outside school i.e. the Society. Learning is enriched if the two arenas interact with each other. Organizing of events like OPEN HOUSE, SPORTS DAY, ANNUAL CONCERT provide children a platform to acquire talent and display it. It brings lots of confidence in them and develops leadership quality in them.

This year OPEN HOUSE was organized in the month of February. Prof. Ashish Garg from Material Science & Engg Department was the Chief Guest. It showcased the skills acquired by the children in academics and co-curricular activities throughout the session. This time emphasis was laid on cent percent participation of the children and the major attraction was the Anchoring/Compereing being done by the children. Skills acquired in English, Hindi, Maths, E.V.S, Computers, Sports, Music, Dance was displayed through skits, oration, dance and music performance, demonstrations, charts, quizzes, models (both working & non-working). A display of Adventure Sports was also conducted. In the inaugural speech the Chief Guest also emphasized the need of activity based learning. The Chairman Prof. Sangal also addressed the august gathering and assured the parents of qualitative changes in the near future. The vote of thanks was delivered by the Principal.

Sports Day was celebrated on 17 Dec.’11. Dr. Dheeraj Sanghi, Dean of Academic Affairs was the Chief Guest. The entire event was organized on the theme ‘Healthy Mind Lives in a Healthy Body’. The children presented special display with Umbrellas, Rings, Dumbbells, Tipri, Lazium, Stick Balloons. The tiny tots came up with beautiful placards spreading the message of brushing our teeth twice a day, washing our hands before eating food, doing Yoga regularly, eating plenty of leafy vegetables and avoiding junk food. Mass P.T. by the students was appreciated by one and all. Special races for the children, tug of war and passing the ball for the parents was thoroughly enjoyed. The gymnastics and pyramids made by the children were liked by all. Prizes were distributed to the children.

Besides the two mega events, Independence Day, Teacher’s Day, Republic Day were also celebrated.

Festivals like Dusshera, Diwali, Christmas, Eid were celebrated with great enthusiasm, Special assemblies were conducted. Children’s day was celebrated in the school. Children went to Outreach to watch movie. Class K.G., I, II watched one movie and Class III, IV & V watched another movie. A short cultural programme was organized and a gift of Rs. 10/= each was given to the children. The absent students received their gifts on the next day.
Competitions:

- In the Morning Assembly reading of English and Hindi News, Thought of the Day and some presentation by the children in the form of recitation, story narration was restarted.
- The children went out to Sudhanshu Jee Maharaj’s Ashram to have a picnic and know about their surroundings.

The pass-outs of Campus School have done wonders in the past and I am sure the present batches are also going to win laurels for us by adding feathers to their caps both academically and professionally.

The school should give ample opportunities to the children to analyse and evaluate their experiences, It should also try to develop the mind to understand and cultivate thinking power in a cohesive and friendly manner.

We at Campus School are trying to develop an understanding of learner’s educational aims, the nature of knowledge and the school as a Social Space because conceptual development is a continuous process of deepening & enriching connections and acquiring new layers of meaningful perceptions thus developing citizens with social values in a scientific way.

I would like to sum up by thanking our Chairman, Prof. Sandeep Sangal, Members of the SMC for their guidance and support and expecting the same in the future also.

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 01.04.2011 to 31.03.2012 are as follows:

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Particulars</th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>01.</td>
<td>Numbers of patient treated in OPD</td>
<td>67672</td>
</tr>
<tr>
<td>02.</td>
<td>Numbers of students treated</td>
<td>20671</td>
</tr>
<tr>
<td>03.</td>
<td>Numbers of patients manually registered</td>
<td>507</td>
</tr>
<tr>
<td>04.</td>
<td>Numbers of patients admitted in Indoor</td>
<td>903</td>
</tr>
<tr>
<td>05.</td>
<td>Numbers of patients treated in Homeopathy including students</td>
<td>10177</td>
</tr>
<tr>
<td>06.</td>
<td>Numbers of patients treated in Physiotherapy</td>
<td>5854</td>
</tr>
<tr>
<td>07.</td>
<td>Numbers of surgical operation(Minor)</td>
<td>Nil</td>
</tr>
<tr>
<td>08.</td>
<td>Numbers of Tubectomy</td>
<td>Nil</td>
</tr>
<tr>
<td>09.</td>
<td>Numbers of D&amp;C</td>
<td>Nil</td>
</tr>
<tr>
<td></td>
<td>Numbers of Deliveries</td>
<td>01</td>
</tr>
<tr>
<td>---</td>
<td>----------------------</td>
<td>----</td>
</tr>
<tr>
<td>11.</td>
<td>Numbers of Plastering</td>
<td>52</td>
</tr>
<tr>
<td>12.</td>
<td>Numbers of surgical dressing</td>
<td>5906</td>
</tr>
<tr>
<td>13.</td>
<td>Numbers of Injections</td>
<td>35602</td>
</tr>
<tr>
<td>14.</td>
<td>Numbers of Tetrac</td>
<td>1511</td>
</tr>
<tr>
<td>15.</td>
<td>Numbers of Babies attended in Well Baby clinic</td>
<td>536</td>
</tr>
<tr>
<td>16.</td>
<td>Numbers of X-Ray done</td>
<td>2816</td>
</tr>
<tr>
<td>17.</td>
<td>Numbers of babies attended National Pulse Polio Programme</td>
<td>77</td>
</tr>
<tr>
<td>18.</td>
<td>Numbers of Anti Radies Injection</td>
<td>198</td>
</tr>
<tr>
<td>19.</td>
<td>Numbers of E.C.G done</td>
<td>370</td>
</tr>
</tbody>
</table>

Immunization is done round the year in the Health Centre for protection against Typhoid, Cholera, Tuberculosis, Diphtheria, Peruses Tetanus, Polio and Measles. Facilities for maternity management, Family Planning Counseling and Tubectomy operations are also available.

VISITORS’ HOSTEL

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

Allied Facilities:

- Visiting Faculty Apartment at IIT Kanpur
- Service Apartment at Chittaranjan park, New Delhi
- Visitors’ Hostel 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.
144
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 Visitors’ Hostel, VH Extension, 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 Center

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

   B. Outreach 69 & 80

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

   C. Main Auditorium

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

4. Additional Facilities:

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

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

BOOKS & BOOK CHAPTERS PUBLISHED

Books

3. Advanced Control of Aircraft, Spacecraft and Rockets, Ashish Tewari (AE), John Wiley & Sons, Chichester, U.K.
4. Automatic Control of Atmospheric and Space Flight Vehicles, A. Tewari (AE), Springer (Birkhauser), Boston, USA.
7. SI adaptation Solid Waste Engineering and Solution Manual, Worrell and Vesilind and Tarun Gupta (CE), Cengage Learning, CT, USA.
9. Economics of Nuclear Power: Modeling and Scenario Analysis for Light Water Reactors in India, Dr. Saurabh Sharma, Prof. Anoop Singh (IME) and Prof. M S Kalra (ME), LAP LAMBERT Academic Publishing, Saarbrucken.
10. Services, Marketing, 7th Editor, Christopher Lovelock Jochen Wirtz, Jayanta Chatterjee (IME), Pearson Education, South Asia, 2012.
12. Tribology of Ceramics and Composites: Materials Science Perspective, Bikramjit Basu (MSE) and Mitjan Kalin, John Wiley & Sons, USA.
13. The Science and Engineering of Materials, Donald R. Askeland et al (Book Adaptation), Kantesh Balani (MSE), Cengage Learning, USA.


**Book chapters**

**Biological Sciences and Bioengineering**


**Chemical Engineering**


Chemistry


Civil Engineering


Humanities and Social Sciences


22. Binay Kumar Pattnaik and Subhasis Sahoo, Manoj K Patairiya and Maria I Nogueira, Sharing Science, India-Brazil Dialouge on Public Communication of Science, Technology, Culture and Society, National Council for Science & Technology Communication, Government of India, New Delhi and University of Sao Paulo, Brazil, 205-228, Studying science Communications in India through People's Science Movements.


**Industrial Management and Engineering**


**Mathematics and Statistics**


**Materials Science and Engineering**


**Mechanical Engineering**


**Physics**

JOURNAL PAPERS

Aerospace Engineering


Biological Science and Bio-engineering


Chemical Engineering


Chemistry


147. M. Ahmad, M. K. Sharma, R. Singh, J. Mrozinski and P. K. Bharadwaj, Unprecedented Mn(II)-phosphate 3D coordination polymer with novel pkb1
topological network showing spin-canted anti ferromagnetism, Australian Journal of Chemistry. (Special Issue), 2012.


162. V. Chandrasekhar, T. Hajra, J. K. Bera, S.M. Wahidur Rahanam, N. Satumtira, O. Elbjeirami and M. A. Omary, Ligand-Bridged Dinuclear Cyclometallated Ir$^{II}$


234. A.K. Sharma, A. De, V. Balamurugan and R. N. Mukherjee, Conformational Flexibility of 2,6-Bis(pyrazol-1-ylmethyl)pyridine (L\textsuperscript{5}) in [L\textsuperscript{5}Co\textsuperscript{II}(H\textsubscript{2}O)\textsubscript{3}]Cl\textsubscript{2} and [L\textsuperscript{5}Ni\textsuperscript{II}(H\textsubscript{2}O)\textsubscript{2}]Cl\textsubscript{2}H\textsubscript{2}O. Molecular Structures and Non-covlant Interactions, Inorg.


**Computer Science and Engineering**


**Electrical Engineering**


355. YN Trivedi and AK Chaturvedi, Performance Analysis of Multiple Input Single Output Systems Using Transmit Beam forming and Antenna Selection with Delayed Channel State Information at the Transmitter, IET Communications, 5, 6, 827-834, 2011.


371. R. Sonkar and U. Das, Quantum well intermixed waveguide grating, Optical and Quantum Electronics, 42, No.9-10, 631-643, September 2011.


Humanities and Social Sciences


Industrial Management & Engineering


**Materials Science and Engineering**


438. Brajendra Singh, Ashutosh Dubey, S. Kumar, Naresh Saha, Bikramjit Basu and Rajeev Gupta, In vitro biocompatibility and antimicrobial activity of wet chemically prepared Ca10-xAgx(PO4)6(OH)2 (0.0 ≤ x ≤ 0.5) hydroxyapatites, Mat. Sc. Engg, Vol C 31, 1320-1329, 2011.
442. Ashutosh Kumar Dubey, Geet Sitesh, Shekhar Nath and Bikramjit Basu, Spark plasma sintering to restrict sintering reactions and enhance properties of


469. Anurag Nandwana and Dipak Mazumdar, Modeling and high temperature studies of continuous casting of wider section (1500~2500mm) steel slabs, ATCOM 2011, Ranchi, 2011.


472. Gupta, G., Kumar, M., Chattopadhyay, C., Mondal K, Corrosion and oxidation behavior of Zr58Cu22Fe4Co4Al12 metallic glass, In: IIM Transactions (Online first), 2011.


Mathematics and Statistics


Mechanical Engineering

554. Rakesh Kumar Maurya, Avinash Kumar Agarwal, Statistical Analysis of the Cyclic Variation of Heat Release Parameters in HCCI Combustion of Methanol and Gasoline, Statistical Analysis of the Cyclic Variation of Heat Release Parameters in


Physics


208. D. Sahu, S. Bhattacharjee, Mainak Bandyopadhyay and Arun K. Chakraborty,, Generation of cold electrons in the downstream region of a microwave plasma


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

Aerospace Engineering


8. Jejurkar SY, Mishra DP. Second law analysis of a premixed flame based annular microcombustor. 5th European Combustion Meeting 28 June–1 July 2011, Cardiff University, Cardiff, UK.


11. Jejurkar SY, Mishra DP. Second law analysis of a premixed flame based annular microcombustor. 5th European Combustion Meeting 28 June–1 July 2011, Ranchi

12. Mahesh S. and D. P. Mishra, Characterization of Turbulent LPG Inverse Diffusion Flame in Recessed Back step and Coaxial Burners, Flucome, National Taiwan University, Taiwan, 24-27 May 2011.


Chemical Engineering


Civil Engineering


29. Khan, I., and Das, A., Mix design for cement grouted bituminous mix, 7th International Conference on Road and Airfield Pavement Technology, 1150-1158, Bangkok, August, 2011.

Computer Science and Engineering


7th International Conference on Intelligent Computing (ICIC 2011), Zhengzhou, China, August 11-14, 2011.


60. Nirmesh Malviya, Samuel Madden, Arnab Bhattacharya, "A Continuous Query System for Dynamic Route Planning", International Conference on Data Engineering (ICDE), Hannover, Germany, April 11-16, 2011.

**Electrical Engineering**


69. T Gupta, S Madhuri, M J Akhtar and K V Srivastava, Development of the virtual lab module for understanding the concepts of modes and field patterns in electromagnetics and microwave engineering, 8th International Conference on Remote Engineering and Virtual Instrumentation, REV2011, 112 – 120, Brasov, Romania, June, 2011.


71. Uma Mahesh and AK Chaturvedi, Closed Form BER Expressions for BPSK OFDM Systems with Fractional Timing Offset and Carrier Frequency Offset, 18th National Conference on Communications, IIT Kharagpur, February 2012.


85. Raghvendra Kumar Chaudhary, H. B. Baskey, K. V. Srivastava, A. Biswas, Wideband Two-layer Rectangular Dielectric Resonator Antenna with (Zr0.8Sn0.2)TiO4-Epoxy Composite System, IEEE Applied Electromagnetics conference (AEMC) and Indian Antenna Week (IAW), Kolkata, India, Dec. 18 - 22, 2011.


97. Rajeev Kumar Singh and Santanu Mishra, A Versatile Control Modulator for Optimal Bi-directional Battery Charging, IEEE Power Electronics, Machines and Drives Conference (PEMD 2012), University of Bristol, UK, 29 March 2012.


114. Prasanna Kumar Misra and S. Qureshi, Speed Enhancement of npn SiGe HBT on Thin Film SOI and Thin BOX by Using Substrate Bias in (0V-3V) Range, IEEE TENCON, 2011, 797-801, Bali, Indonesia, Nov. 21-24, 2011.


122. G. Prithwijit, A. Mukherjee and K. S. Venkatesh, Formulation, Detection and Application of Occlusion States (Oct 7) in the Context of Multiple Object Tracking, In proceedings of 8th IEEE International Conference on Advanced Video and Signal-Based Surveillance (AVSS), Klagenfurt University, Aug-Sep, 2011.


Humanities and Social Sciences


Industrial Management & Engineering


Materials Science and Engineering

137. V. Kumar, R. Balasubramaniam, R. Shekhar, Kantesh Balani, Microstructure and texture evolution during hot rolling of Mg-9Li-7Al-1Sn alloy for aerospace application, Materials Science Forum, 85-88, 2012.

Mathematics and Statistics

Mechanical Engineering


Physics


171. S. Bhattacharjee, S. Paul, A. Chowdhury and Jose V. Mathew, New frontiers in nanoscience and technology using multi element focused ion beams (MEFIB) from compact microwave driven plasmas, 14th International conference on Ion Sources (ICIS 2011), 28, Giardini Naxos, ITALY, September 12 - 16, 2011.


Biological Sciences and Bioengineering

4. Ashok Kumar, Biomedical Applications Tissue Engineering and Regenerative Medicine, JAPAN-India (JST-DST), Workshop on Biomedical Research, Waseda University, Tokyo, Japan, 28 - 29th February, 2012.
8. Priti Agarwal, R. Mainpal, K. Subramaniam, Translational control of cyclin B by PUF-8 and GLD-1 is essential for germ cell development, 18th International C. elegan Meeting, University of California, Los Angeles, California, USA, June 22-26, 2011.
9. S. Vaid, M. Ariz and K. Subramaniam, Regulation of RAS/MAPK signaling by PUF-8 and GAP-3 is essential for meiotic progression, 18th International C. elegan Meeting, University of California, Los Angeles, California, USA., June 22-26, 2011.
18. G. Deo, CO2 reforming of CH4 to produce syngas over metal-supported catalysts, 2nd Indo German Workshop on Advances in Reaction and Separation Processes, Bad Herrenalb, Germany, February, 2012.
29. S. Sengupta, CO2 reforming of CH4 to produce Synthesis Gas Over Modified and Unmodified Ni/Al2O3 catalysts, 11th International Conference on Carbon Dioxide Utilization, Dijon, France, June 2011.
34. Singh JK, Tuning surface phase transition of associating fluids, Thermodynamics, Athens, Greece, Sept, 2011.
40. R. Mukherjee, Electrochemical synthesis, immobilisation and transmission line modelling of aniline and N-Phenylglycine co-polymer for heavy metal detection in water, CHEMCON-2011, Bangalore, December 27 - 29, 2011.
50. N. Kaistha, Design and control of a reactive distillation process for naphtha hydrodesulphurization, AIChE, Minneapolis (USA), 16-21 Oct 2011.
51. N. Kaistha, Plantwide control for economically optimal operation of an ethyl benzene, AIChE, Minneapolis (USA), 16-21 Oct 2011.
52. N. Kaistha, Hybrid Duplex and Molecular Gate PSA, AIChE, Minneapolis (USA), 16-21 Oct 2011.
53. Shyam Kumar, CFD simulations to validate the gas holdup in two phase bubble columns, Technological Advancements in Chemical and environmental Engineering (TACEE-12), BITS Pilani, 23-25th March 2012.
54. R. Timung, Heavy metal ion extraction using ionic liquids, Technological Advancements in Chemical and environmental Engineering (TACEE-12), BITS Pilani, 23-25th March 2012.
55. Shyam Kumar, Effect of operating parameters in two and three phase co-current bubble columns, CHEMCON-2011, Bengaluru, 27-29th December, 2011.

Civil Engineering

63. Khan, I., Mix design for cement grouted bituminous mix, 7th International Conference on Road and Airfield Pavement Technology, Bangkok, August, 2011.
64. Dhasmana, H., Study of moisture sensitivity of some aggregates in asphalt mix, 7th International Conference on Road and Airfield Pavement Technology, Bangkok, August, 2011.


Electrical Engineering


73. S. Chakrabarti, R. Majumder, G. Bag, Performance of electronic interfaced DERs integrated with communication network, IEEE PES General Meeting, Detroit, USA, July 2011.


87. Raghvendra Kumar Chaudhary, H. B. Baskey, K. V. Srivastava, A. Biswas, Wideband Two-layer Rectangular Dielectric Resonator Antenna with (Zr0.8Sn0.2)TiO4-Epoxy Composite System, IEEE Applied Electromagnetics conference (AEMC) and Indian Antenna Week (IAW), Kolkata, India, Dec. 18 - 22, 2011.


**Humanities and Social Sciences**


111. B. Bhushan, Culturally prevailing spiritual practices and modern methods of behavioural investigations: Reflections from India, International Conference on Consciousness, Mind and Body: Eastern and Western Perspectives, Brazil, August, 2011.

112. B. Bhushan, Studying perceptual differences between designer and non-designer: A visual identity design problem, 6th International Conference on design principles and practices, University of California, Los Angeles, January, 2012.


116. Lilavati Krishnan, Humanities and Social Sciences in Institutes of Technology - Some views regarding the HSS curriculum, International Conference on the Role of Humanities and Social Sciences in Hilistic Development of Future Technocrats, Jaypee University of Information Technology, Solan, Himachal Pradesh, September, 2011.

117. Lilavati Krishnan, Role of Rationale and Ethnics in Social Science Research, Workshop on Rationale, Methodology and Ethics in Home Economics and Social Sciences, Indore, February, 2012.


121. A. K. Sharma, Socio-cultural Aspects of Palliative Care: A Study of Palliative Care Delivery in Kerala, 19th International Conference of Indian Association of Palliative Care, Kolkata, February, 2012.


126. A. Chakrabarti, Sacred Traditions, Sectarian Identity and the Question of secularism in Contemporary India, Rethinking Religion in India: European Representations and Indian Responses, University of Pardubice, Czech Republic, October, 2011.


Industrial & Management Engineering


130. Raghu Nandan Sengupta, Siddharth Sahoo, Reliability Based Portfolio Optimization for Extreme Value Asset Returns under Asymmetric Loss Functions, 9th International Conference on Computational Management Science, Imperial College London, UK, April 2011.


Materials Science and Engineering


149. Kantesh Balani, V. Kumar, R. Shekhar, Govind, Effect of hot rolling on microstructure and texture evolution of Mg-Li based alloy, Materials Science Forum, 2011.

150. Kantesh Balani, V. Kumar, R. Balasubramaniam, R. Shekhar, Microstructure and texture evolution during hot rolling of Mg-9Li-7Al-1Sn alloy for aerospace application, Materials Science Forum, 2012.


Mechanical Engineering

181. Jitendra Gangwar, Comparative Study of PM Mass and Chemical Composition from Diesel and Biodiesel Fuelled CRDI SUV Engine, SAE INDIA International Mobility Conference-2012, New Delhi, India, January 2012.
182. Praveen Chandra Shukla, Macroscopic Spray Parameters of Karanja Oil and Blends: A Comparative Study, SAE INDIA International Mobility Conference-2012, New Delhi, India, January 2012.


193. P. Venkitanarayanan, Fracture in Layered Plates having Property Mismatch across the Crack Front, SEM Annual Conference and Exposition on Experimental and Applied Mechanics, Uncasville, CT, USA, USA, JUNE, 2011.

194. C. K. Desai, Measurement of Cohesive Parameters of Crazes in Polystyrene Film, SEM Annual Conference and Exposition on Experimental and Applied Mechanics, Uncasville, CT, USA, USA, JUNE, 2011.

Physics


199. S. Bhattacharjee, New frontiers in nanoscience and technology using multi element focused ion beams (MEFIB) from compact microwave driven plasmas, 14th International conference on Ion Sources (ICIS 2011), Giardini Naxos, ITALY, September 12 - 16, 2011.

200. Debaprasad Sahu, Optimization of negative ion current and density in a compact microwave driven upper hybrid resonance multicusp plasma source, 14th International conference on Ion Sources (ICIS 2011), Giardini Naxos, ITALY, September 12 - 16, 2011.


INVITED TALKS DELIVERED

Aerospace Engineering

2. D. P. Mishra, Micro-combustion, Department of Mechanical Engineering, IIT, Gandhinagar.

Biological Science and Bioengineering

5. R. Sankararamakrishnan, Bioinformatics in Education & Research: Challenges for the next decade, Seminar on Recent Trends in Biosciences and Bioengineering to Celebrate National Education Day, CSJM University, Kanpur, Nov. 2011.
10. Amitabha Bandyopadhyay, Precise restriction of BMP signaling is essential for articular cartilage formation, Indian Society of Developmental Biology, Meeting presentation, Jaipur.
11. Amitabha Bandyopadhyay, BMP signaling in bone and articular cartilage development, TIFR, Pune, Developmental Biology Talk Series, Pune.
12. Amitabha Bandyopadhyay, Precise restriction of BMP signaling is essential for articular cartilage formation, SCIMST, Trivandrum, Trivandrum.
13. Ashok Kumar, Supermacroporous Cryogels for Biomedical and Biotechnological Applications, Biosep company & COBIK Center, Collaboration, Ljubljana, Slovenia, 21st December 2011.


17. Ashok Kumar, New Design of Biomaterials for Biomedical Applications, Jammu University, Jammu, 18th Feb., 2012.

18. Jonaki Sen, Topographic maps: connecting the retina to the brain, Indian Society of Developmental Biologists, Annual meeting, Jaipur, India.

19. Jonaki Sen, Connecting the retina to the brain, Chhatrapati Shahu Ji Maharaj University, Kanpur, Kanpur, India.

20. K. Subramaniam, Nuclear export of mRNAs: an unexpected novel function for the germ cell protein PUF-8, Annual Meeting of the Society of Biological Chemists (India), Central Institute for Aromatic and Medicinal Plants, Lucknow.

21. K. Subramaniam, Caenorhabditis elegans as a model nematode for studies on plant-parasitic nematodes, Annual Meeting of the Nematological Society of India, Thiruvananthapuram.

22. K. Subramaniam, Free-living to the rescue of parasite biology: the usefulness of Caenorhabditis elegans for studies on parasitic nematodes, Fifth Symposium on Molecular Medicine, Special Centre for Molecular Medicine, Jawaharlal Nehru University, New Delhi.


24. S. Ganesh, Cause and consequence of polyglucosan bodies in Lafora neurodegenerative disorder, Symposium on Frontiers in Neuroscience & Genetics, Indian Institute of Chemical Biology, Kolkata (December 23, 2011).


28. Balaji Prakash, Catalytic mechanisms in GlmU deciphered by structural studies, OSDD; CSIR New Delhi, New Delhi.


30. Balaji Prakash, Structural basis governing GTP hydrolysis mechanisms, Guha Research Conference, Jodhpur.


32. Balaji Prakash, A novel Magnesium mediated product release mechanism revealed by structural studies on GlmU, University of Delhi, New Delhi.

Chemical Engineering

34. Santosh K Gupta, Polymerization Reaction Engineering: a Personal Journey, University of Akron, Polymer Engineering Dept., Akron OH, USA, University of Akron, Polymer Engineering Dept., Akron OH, USA.
35. Santosh K Gupta, Multi-objective Optimization (MOO) using Biomimetic Adaptations of Genetic Algorithm (GA), University of Western Ontario, London, ON, Canada, University of Western Ontario, London, ON, Canada.
37. A. Ghatak, Adaptive adhesion via subsurface network of fluid-filled micro-channel, Gordon Research Conference on Adhesion Science, USA.
38. A. Ghatak, Two stories on fracture and adhesion with soft gels, School of Engineering and Applied Sciences, Harvard University, School of Engineering and Applied Sciences, Harvard University.
39. PK Bhattacharya, Pervaporation, Potential Membrane Technology for Typical Liquid Mixtures Separations, THERMIC, Dr. Ambedkar Institute of Technology for Handicapped U.P., Kanpur.
40. PK Bhattacharya, Pervaporation, Potential Membrane Technology for Typical Liquid Mixtures Separations, Pt. Madan Mohan Malviya at Chemical Engineering Department, BHU, Pt. Madan Mohan Malviya at Chemical Engineering Department, BHU.
42. Nishith Verma, Lattice Boltzmann modeling of liquid-vapor two phase flow, Department of Physics, University of Saarbrucken, Germany, University of Saarbrucken, Germany.
43. G. Deo, Effect of Iron on Supported and Unsupported Nickel and Cobalt Catalysts, 2nd Indo German Workshop on Advances in Reaction and Separation Processes, Bad Herrenalb, Germany.
44. Joshi Y. M., Effective time theory and prediction of long time rheological behavior in soft glassy materials, Department of Polymer Engineering, University of Akron, Akron, US.
45. Joshi Y. M., Effective time theory and prediction of long time rheological behavior in soft glassy materials, Southern Clay Products, Louiseville, US.
46. Joshi Y. M., Structure and rheology of aqueous Laponite suspension, Southern Clay Products, Louiseville, US.
49. Singh JK, Computational Nanoscience and Engineering Applications, GM India, Bangalore.
54. R. Pala, Design of photoelectrochemical systems using non-native nanostructures, BARC, Mumbai.
56. P. A. Apte, Fundamentals of thermodynamics, Department of Chemical Engineering, VNIT Nagpur, Nagpur.
57. R. Pala, Design of photoelectrochemical systems using non-native nanostructures, CECRI, Karaikudi.
58. Ashutosh Sharma, Self-organized Meso-Fabrication and Functionalities in Highly Confined Soft Materials, Tata Institute of Fundamental Research (Mumbai), Mumbai.
59. Ashutosh Sharma, Self-organized Meso-Fabrication and Functionalities in Highly Confined Soft Materials, National Physical Laboratory, New Delhi, New Delhi.
60. D. Kunzru, Monolith Reactors for Heterogeneous Reactions, Dept. of Chemical Engineering, Institute of Chemical Technology, Mumbai.

**Chemistry**

61. J. K. Bera, Zing Conference in Coordination Chemistry, Mexico.
62. J. K. Bera, 5th EuCheMS NLigands Conference, Spain.
63. J. K. Bera, XIX European Conference on Organometallic Chemistry, France.
64. J. K. Bera, CRSI Bronze medal lecture, Trivandrum.
68. A. Chandra, Vibrational spectral diffusion and molecular motion in supercritical water and aqueous solutions, La Grande Motte (University of Montepillier), France.
69. A. Chandra, Molecular simulations of liquids and interfaces: An HPC activity at IITK, IISER, Bhopal.
70. A. Chandra, Time dependent vibrational spectroscopy of supercritical water and aqueous solutions, NISER Bhubaneswar.
71. A. Chandra, Dynamical structure of water, Presidency University, Kolkata.
73. A. Chandra, Chemical dynamics in aqueous media, Jadavpur University, Kolkata.
74. A. Chandra, HPC at IIT Kanpur, IIT Kanpur.
75. A. Chandra, Time dependent vibrational spectroscopy of normal and supercritical water, University of Burdwan, West Bengal.
76. A. Chandra, 32nd International Conference on Solution Chemistry, La Grande Motte, Montpellier, France.
77. A. Chandra, Indo-European Symposium on Frontiers of Chemistry, NISER, Bhubaneswar.
78. A. Chandra, Celebration of International Year of Chemistry – 2011, Presidency University, Kolkata.
80. A. Chandra, National Seminar on Recent Advances in Chemistry, Jadavpur University, Kolkata.
81. A. Chandra, National Seminar on Recent Advances in Chemical Sciences, University of Burdwan.
83. V. Chandrasekhar, Single Molecule Magnets: Recent Advances, SRM University, Chennai.
84. V. Chandrasekhar, Phosphorus–Supported Ligands: Versatile Coordination Platforms for the Assembly of Molecular Materials, 13th CRSI National Symposium in Chemistry, Bhubaneshwar.
86. V. Chandrasekhar, Chemistry and Polymers – A Story of the Metathesis Reaction Advances in Chemical Sciences and its impact on our lives, Jadavpur University, Kolkata.
87. V. Chandrasekhar, Phosphorus–Supported Ligands: Versatile Coordination Platforms for the Assembly of Molecular Materials, JNCASR, Bangalore.
88. V. Chandrasekhar, Phosphorus–Supported Ligands: Versatile Coordination Platforms for the Assembly of Molecular Materials, Granada, Spain.
89. V. Chandrasekhar, Phosphorescent Dinuclear Cyclometalated Ir(III) Complexes, Goa.
90. V. Chandrasekhar, Phosphorescent Dinuclear Cyclometalated Ir(III) Complexes, Kolkata.
91. V. Chandrasekhar, Phosphorus–Supported Ligands: Versatile Coordination Platforms for the Assembly of Molecular Materials, Midnapore College, West Bengal.
92. V. Chandrasekhar, Molecules and Materials: Bridging the Gap, IIT, Bombay.
94. D. Goswami, Co-Chair, OSA, India.
95. J.N. Moorthy, Exploitation of Sterics in the Oxidation Chemistry with IBX and Organocatalysis with Proline, Garhwal University, Srinagar, Uttarakand.
97. J.N. Moorthy, Rational Molecular Design for Amorphous Organic Light Emitting Diodes (OLEDs) and Ordered Functional Mimics of Inorganic Zeolites, CMERI, Durgapur, West Bengal.


102. M.L.N. Rao, 12th Tetrahedron Symposium, Sitges, SPAIN.

103. S.P. Rath, Invited talk in the Department of Inorganic Chemistry, IACS, Kolkata.


105. S.P. Rath, Invited Talk in Celebration Chemistry@IITK, IIT Kanpur.


Civil Engineering


114. R. Sinha, Buried Paleo-Ghaggar Channel Belt Inferred through Resistivity Soundings around Kalibangan Harappan Site, North-Western Rajasthan, India, International Quaternary Association Congress, Bern, Switzerland.


124. A. Das, How to build good roads?, Department of Civil Engineering, NIT Durgapur, Durgapur.

125. A. Das, Concrete pavements for low volume roads, A Short Term Training Programme for Engineers of Rural Engineering Service, HBTI, Kanpur.


127. A. Das, NPTEL course on Advanced Transportation Engineering, National workshop on deployment and use of NPTEL courses, Kanpur.

128. A. Das, How to build good roads?, Fachgebiet Straßwesen, Technical University of Darmstadt, TU-Darmstadt, Germany.


**Electrical Engineering**


133. S. Chakrabarti, Mathematics for Circuit Analysis, PSG College of Technology, Coimbatore, Workshop on Mathematics for Electrical Sciences, Coimbatore, India.


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136. S. Chakrabarti, Synchronized measurement based wide area monitoring of electric power systems, NTNU, Norway, guest lecture, Trondheim, Norway.

137. AK Chaturvedi, Information Theoretic Perspective on Cognitive Radio Networks, Samsung India, IRN meeting on Advances in Communications, Bangalore.


**Industrial Management and Engineering**


146. Raghu Nandan Sengupta, Estimation for the multiple regression set up using balanced loss function, Indian School of Business, invited lecture, Hyderabad.


**Material Science and Engineering**


150. Ashish Garg, Multiferroic Materials, RMIT University, Melbourne, Australia.

151. B. Basu, 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.

152. B. Basu, 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.
153. B. Basu, 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.

154. B. Basu, 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, Lucknow.

155. B. Basu, Genotoxicity property of Hydroxyapatite-mullite eluates, at the Indo-Australian meet at IISc, Bangalore.

156. B. Basu, Bridging gap between Materials Science and Biology: An interdisciplinary approach to Design biomaterials; Department of Ceramic Engineering, Banaras Hindu University (BHU), Varanasi.

157. B. Basu, Innovative multi-stage spark plasma sintering to obtain strong and tough ultrafine grained ceramics; Department of Ceramic Engineering, Banaras Hindu University (BHU), Varanasi.

158. B. Basu, Bridging gap between Materials Science and Biology: An interdisciplinary approach to Design biomaterials, Department of Mechanical engineering, Mining and Machinery, Indian School of Mines, ISM, Dhanbad.


160. B. Basu, Bridging gap between Materials Science and Biology: An interdisciplinary approach to Design biomaterials; Department of Mechanical engineering, Indian Institute of Science, IISc, Bangalore.

161. B. Basu, Bridging gap between Materials Science and Biology: An interdisciplinary approach to Design biomaterials; Department of Biomaterials Science and Tissue Engineering, University College London, UK.


164. B. Basu, Design of Biomaterials: where Materials Science meets Biology, Award lecture at MRSI meeting held in Thapar University, Patiala.

165. N. Mahato, D. Lahiri, A. Agarwal, Kantesh Balani, Microstructure and Mechanical Properties of Multistructured Peacock Feathers, presented in 2012 TMS Annual Meeting & Exhibition, Orlando, FL, USA.

166. D. Mazumdar, De-S in torpedo ladles, Bokaro steel Plant, Bokaro.


169. S. Shekhar, Multifunctional Nanostructured Metals by High-rate Severe Plastic Deformation (HRSPD), General Motors Research Center, Bangalore.


173. Gouthama, studies on the microstructural changes during thermo-mechanical cycling of NiTi shape memory wire samples, National Seminar on ‘Design and Development of materials for advanced technologies, Banaras Hindu University.


Mathematics and Statistics


181. M. Banerjee, Deterministic chaos and stochastic fluctuation in an epidemic model, Department of Mathematics, Bengal Engineering and Science University, May, 2011, West Bengal.


186. S. Dutta, Lectures on operator algebras to graduate students, Workshop in Functional Analysis, CUSAT, (jointly organized by I. M. Sc.), December 5 - 12, 2011, Kochi.

188. M. Gupta. Lectures on advanced topics in Functional Analysis, Department of Mathematics, Kashmir University, Srinagar, May 2011, Kashmir.


190. A. K. Lal, On problems related to algebraic connectivity of Graphs Organization, Concordia April 01, 2011, University, Montreal, Canada.


196. N. Misra, Stochastic Comparisons of Poisson and Binomial Distributions with their Mixtures, Department of Mathematics, Indian Institute of Technology, June 3, 2011, Kharagpur.


200. R. Santhanam, K-theory of F_1 schemes, June 2011, University of Bergen.

201. S. K. Ray, Fourier restriction theorem on Riemannian symmetric spaces of noncompact type, School of Mathematics, TIFR, Mumbai.

202. Shalabh, Talks on Regression Modelling, Forecasting, Model Selection, Goodness of Fit and Measurement Errors, Department of Economics, University of Hyderabad, 2011, Hyderabad.

**Mechanical Engineering**

203. Anurag Gupta, Evolution of incompatibility during growth, Department Seminar, UCSD, CA, USA.

205. Shantanu Bhattacharya, Microfluidics for clinical Daignostics and detection, Indo-Japan Seminar, IIT Delhi.

206. Shantanu Bhattacharya, Bionanotechnology, Microfluidics and BioMEMS for Clinical Diagnostics and identification, Workshop on Nanoscience and Nanotechnology, Department of Applied Physics, AMU, Aligarh, AMU, Aligarh.

207. Shantanu Bhattacharya, Microfluidics and BioMEMS research at IITKanpur, University of Texas at Arlington, Nano-Bio seminar, UT Arlington, Dallas, Tx.

208. Shantanu Bhattacharya, Boeing Autonomous vehicle presentation, Presentation made at Boeing Office Delhi to Review team from USA, Gyeongsangbuk-do, South Korea.

209. Shantanu Bhattacharya, BioMEMS research at IIT Kanpur, QIP program on Microfluidics at IIT Guwahati, IIT Guwahati.


211. Shantanu Bhattacharya, BioMEMS and Microfluidics, MAMM-2012, CMERI, Durgapur.

212. Wahi P., Regenerative chatter in turning: a system with a time delay, NIT Durgapur, Durgapur.


**Physics**


216. Zakir Hossain, Interplay between superconductivity and magnetism in EuFe2As2, UGC-Sponsored National Seminar on Recent Trends in Physical Sciences at SSKM University, Dumka.


219. Sudeep Bhattacharjee, New frontiers in nanoscience and technology using multi element focused ion beams (MEFIB) from compact microwave driven plasmas, 14th International conference on Ion Sources (ICIS 2011), Giardini Naxos, ITALY (September 12 - 16, 2011).


222. R.Vijaya, Fiber lasers for Multi-wavelength, Broadband and Secure data transfer applications, Brain-storming session on Fiber lasers and related technologies (Sept. 5, 2011), RRCAT, Indore.


226. R.Vijaya, Spontaneous and stimulated emission from self-assembled photonic structures, Indo-US Bilateral workshop on Nanophotonics and Nanoplasmonics (Jan 9-12, 2012), IISc, Bangalore.

227. R.Vijaya, Photonic band gap structures and Device design, NITT SPIE-OSA Student Chapter (Feb. 17, 2012), NIT, Tiruchirappalli.

OTHER ACTIVITIES

PROFESSIONAL VISITS TO UNIVERSITIES/RESEARCH ORGANIZATIONS / INDUSTRIES

Aerospace Engineering


Biological Sciences and Bioengineering

4. Amitabha Bandyopadhyay, Odense University Hospital, Collaboration visit, Seven days.
5. D. S. Katti, Anna University Chennai, DST PAC meeting, Committee member, 27th-29th June.

Chemical Engineering

10. Santosh K. Gupta, University of Western Ontario, London, ON, Canada, Visiting Faculty, Visiting Professor of Chemical Engineering, Summer 2011.
13. Garg, S, Department of Chemical Engineering, NIT, Durgapur, To give lectures in a DST-SERC course on optimization, November 2011.

Civil Engineering


Electrical Engineering

16. K. V. Srivastava, National Chung Cheng University, Chia-Yi, Taiwan, Visiting Faculty, June 18-June 25, 2011.
Humanities and Social Sciences

18. P. M. Prasad, Ecole Centrale Nantes (ECN), France, Interaction with colleagues on joint project proposals under Faculty Mobility EMECW India-Lot 13a Fellowship, Visiting Faculty, June 18, 2011 - July 17, 2011.

Industrial Management and Engineering


Mechanical Engineering

27. Shantanu Bhattacharya, World Class University Program at Yeungnam University, Daegu, Dae-dong, South Korea, Visiting Scientist, Visiting Scientist, May-2011.

Mathematics ans Statistics

29. A. K. Lal., Concordia University, Montreal, Canada, Sep 2010 - May 2011.
30. R. Santhanam, University of Bergen, June 2011.
31. Shalabh, Institute of Statistics, Ludwig Maximillians University, Munich, Germany, 2011.
32. A. Anand, 26th Annual Conference, Ramanujan Mathematical Society, University of Allahabad, October 2-4, 2011.
34. Mohua Banerjee, Annual Workshop of the Calcutta Logic Circle (CLC), IBRAD, Kolkata, September 2011.
43. Peeyush Chandra, 15th Annual Conference of Vijnana Parishad of India, DAV College Kanpur, Nov. 4 - 6, 2012.
45. S. Dutta, Conference on Harmonic Analysis and Approximations, September 5 - 10, Armenia, Presented a talk ‘Completely bounded multipliers on L_p’.
48. M. Gupta (joint work with A. Bhar), International Workshop on Operator Theory and Its Applications, University of Seville, Seville, Spain, July 2011, delivered talk ‘On Orlicz Lorentz subspaces of bounded families and approximation type operators’.
52. D. Kundu, International Conference held at the Chinese University of Hong Kong, Dec. 27 - 31, 2011, delivered a talk ‘Bayesian Analysis of Progressively Censored Competing Risks Data’.
53. N. Misra, New Developments in theory and Applications of Statistics: An international conference in honor of Professor Moti Lal Tiku, Department of Statistics, Middle East Technical University, Ankara, Turkey, May 2 - 4, 2011, chaired a special invited session.

55. N. Misra, XXXI Annual Convention of Indian Society for Probability & Statistics (ISPS) and International Conference on Statistics, Department of Statistics, Cochin University of Science and Technology, December 19 - 22, 2011.


61. Shalabh, Conference of the Department of Statistics and Information Management, Reserve Bank of India, Chandigarh, March 2012.

Physics

62. Zakir Hossain, Max-Planck Institute CPfS, Dresden, Germany, Collaborative research work, Visiting Scientist, 18th June 2011 to 14th July 2011.
Aerospace Engineering


Biological Sciences and Bioengineering

4. Pradip Sinha, UK-India Innovation and Leadership Meeting and Grand Finale of the Bio-Business Plan Competition- 2012, As part of UK-India Science Bridge objective to promote Bio-entrepreneurial activities, a Bio-Business plan competition is being hosted by IIT Kanpur in collaboration with C-CAMP Bangalore and BioCity Nottingham, UK, Indian Institute of Management, Bangalore (IIMB), 5-6 March 2012.

Chemical Engineering


Civil Engineering


Electrical Engineering


**Industrial Management and Engineering**


**Mathematics And Statistics**

22. Mohua Banerjee, Lecture series on Modal logic and algebra, 4th Indian School on Logic and itsApplications (ISLA), Manipal University, January 2012.

**Mechanical Engineering**

27. Shantanu Bhattacharya, NPTEL Lectures on Microfluidic systems and design, Web Course through NPTEL series, IIT- Kanpur, Currently Underway.

29. Shantanu Bhattacharya, Hands on Fabrication training on design and fabrication of a microfluidic mixer, Funding from NPMASS, IIT-Kanpur, from 17~18th February, 2012.