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Director’s Report

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

We are particularly happy to welcome our distinguished alumnus, Mr. Jeet S. Bindra, President, Chevron Global Manufacturing, USA, amongst us for our Convocation today.

The academic year closing in May 2009 has been momentous and I consider it a privilege to review our activities during this period.

Academic Activities

The academic year 2008-09 has had a successful run. The number of graduating students both at the undergraduate (B Tech - 299, M Sc (5 year Integrated) - 39, B Tech – M Tech Dual Degree (5 year) - 52, M Sc (2 year) - 68, Total = 458) and the postgraduate (M Tech - 322, M Des - 12, MBA - 45, PhD - 96, Total = 475) levels show a satisfactory trend. The enrollment in the Doctoral program as well as the publication record of the faculty and students for the academic year has considerably increased. Faculty members and students published a large number of research papers in journals and conference proceedings. Books published by the faculty are listed in the appendix of this report.

Awards and Honors

IIT Kanpur has played a significant role in expanding the frontiers of knowledge. Its faculty, students and staff have created a niche for the Institute in the world of science and technology. This has been duly recognized in the form of various awards and honors to the faculty including fellowships of professional societies, editorship of international journals, and best paper awards to the students. A representative list of awards and honors to our faculty members is included as an addendum to the report.

Our postgraduate students Satyaki Bhattacharjee, Abhishek Kumar Gupta and Anurag Sujania have been conferred the GE Foundation Scholarship. Pulkit Agrawal, Mohit Mittal, Alok Kumar Rai and Nitish Srivastava received the Goldman Sachs Global Leaders Award. Varun Jain, Pravesh Kothari, Aditya Sood, Shantanu Saraswat received the O. P. Jindal Engineering & Management Scholarship. Shitikanth and Ish Dhand have been conferred the prestigious Aditya Birla Scholarship.

Mr. Sagnik Day (Ph.D. student in CE) has received the INSA Young Scientist Award for 2008. Mr. Sajid A. Loan (Ph.D. student in EE) has been awarded the Merit Student Paper Award at the 2008 IEEE International Conference on Semiconductor Electronics. Paper titled Towards generating diverse topologies of path tracing compliant mechanisms using a local search based multi-objective genetic algorithm procedure, authored by Mr.
Deepak Sharma, a Ph.D. student of the Department of Mechanical Engineering, Professors Kalyanmoy Deb and N. N. Kishore in the Department of Mechanical Engineering, has been adjudged the Best Student Paper by the Evolutionary Programming Society at the 2008 IEEE Congress on Evolutionary Computation (CEC) conference in Hong Kong.

IIT Kanpur is proud of Professor J. N. Moorthy (Chemistry) who was conferred the prestigious Shanti Swarup Bhatnagar Award 2008 in Chemical Sciences. Dr. J. K. Bera (Chemistry) received the Swarnajayanti Fellowship. Professors V. K. Singh and R. N. Mukherjee (Chemistry) received Sir J C Bose Fellowship by DST. Prof. T. K. Chandrashekar (Chemistry) has been awarded the fellowship of the Third World Academy of Sciences, Trieste, Italy. Professors P. K. Bharadwaj (Chemistry) and R. C. Budhani (Physics) have been elected Fellows of the Indian National Science Academy, New Delhi. Prof. Manindra Agrawal (CSE) was awarded the first Infosys Prize in Mathematics. Dr. Ashu Jain (CE) received the Endeavour Executive Award 2009. Dr. Bharat Lohani (CE) won the silver medal for developing Limulator2 at XXI ISPRS Congress, Beijing. Prof. Ashutosh Sharma (CHE) has been awarded the TWAS Prize in Engineering Sciences (2008). He is the first Indian to receive this award in Engineering Sciences. Dr. Jayant K. Singh (CHE) has been selected for the BOYSCAST Fellowship for 2008-2009. Dr. Yogesh M. Joshi (CHE) received the Young Engineer Award 2008 of the Indian National Academy of Engineering and also the Young Scientist Platinum Jubilee Award in Physical Sciences for 2008 of the National Academy of Sciences, Allahabad.

Prof. A. K. Chaturvedi (EE) received the Tan Chin Tuan Fellowship of Nanyang Technological University, Singapore. Drs. R. Sankaramakrishnan and S. Ganesh (BSBE) have been awarded the National Bioscience Award for Career Development for 2008 by DBT. Dr. S. Ganesh also received the Scopus Young Scientist Award by DBT in Biological Sciences. Dr. Munmun Jha (HSS) received the Charles Wallace Fellowship in Social Anthropology given by the Charles Wallace Trust, UK. Dr. S. R. Patel (Mathematics) was chosen for the Commonwealth Academic Staff Fellowship administered by the Commonwealth Scholarship and Fellowship Commission in the United Kingdom. Dr. K. Biswas (MME) received the Young Metallurgist of the Year for 2008 given by the Ministry of Steel, GOI. Dr. A. Garg (MME) has been awarded the INSA Young Scientist Award (2008). Professor N. K. Sharma (IME) has received the IAAP-PPA BEST PSYCHOLOGIST AWARD 2008 instituted by the Governing Council of the Pondicherry Psychology Association. Professors C V R Murthy (Civil Engineering) and S. K. Gupta (Mathematics and Statistics) have been honored with the Distinguished Teacher award on the occasion of the Teacher’s Day on 5th September 2008.

Research & Development

The Institute works tirelessly to provide state-of-the-art equipment to its faculty that would facilitate cutting-edge research in frontiers of science and technology. The research and teaching profile of the Institute is continually growing every year. As a result, the Institute is well-recognized as one of the centers of academic excellence. During 2008-2009, about 140 sponsored projects and 122 consultancy projects were
undertaken by the faculty and research engineers/scientists of the Institute with a sanctioned amount of Rs. 6608 lakh and 933 lakh, respectively.

Faculty filed 17 patents in India and overseas. 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. Some of the organizations include: Bhabha Atomic Research Center, Chevron, Indian Space Research Organisation, Indira Gandhi Centre for Atomic Research, European Aeronautic Defence and Space Company, Institute for Plasma Research, Gas Authority of India Limited, and United Nations Development Program.

The Institute has signed a Memorandum of Understanding with Indian Space Research Organization (ISRO) to support the design, development and launch of an indigenous nano satellite called Jugnu. The satellite is planned to be built around a standard cuboid configuration as designed and is expected to weigh less than 5 kg. In this joint program, the satellite will be launched in the polar orbit by the ISRO. The satellite shall carry payloads for earth observation, for establishing communication links, for studying atmospheric phenomena, for testing scientific instruments and for novel applications. The mission life shall be for a minimum period of 6 months.

The Institute has signed a Memorandum of Understanding with Indira Gandhi Centre for Atomic Research (IGCAR) to carry out research in the science and technology related to design and development of Fast Breeder Reactors. An IGCAR-IITK R & D cell will be set up in the premises of IITK to conduct R&D in the areas of mechanics and materials, thermal hydraulics, multiscale modeling, instrumentation, mechanisms, and machine vision.
The Institute has signed a Memorandum of Understanding with Indian Space Research Organization (ISRO) for development, validation and testing of kinematic control algorithm for rover motion on an uneven terrain. The landing module will carry a rover that will egress out of the lander onto the lunar surface. The rover shall move on the lunar surface and perform scientific experiments.

Another Memorandum of Understanding has been signed with Vikram Sarabhai Space Centre (VSSC) for development, and testing algorithms for computer vision based autonomous navigation system for the lunar rover mission.

Board of Research in Nuclear Sciences, Mumbai has recently approved the creation of a National Fire Facility for fire propagation and associated thermal hydraulic aspects in multiple compartments at IIT Kanpur with a total cost of Rs 5 crore. The objective of the project is to understand the fire thermal hydraulics in multiple compartments configuration with ceiling opening and large vertical opening as found in various compartments within the containment of a nuclear power plant.

The DST Unit of Nanosciences has been established as a joint venture with Indo-US Science and Technology Forum with Prof. Ashutosh Sharma (CHE) as the coordinator. The unit costing Rs. 15 crore has several fabrication and characterization facilities such as e-beam patterning, spin coating, nano-imprint, lithography, maskless lithography, laser ablation, small and wide angle X-ray.

The Institute has undertaken a major initiative in particle acceleration with the inauguration of the Tandetron Ion Beam facility under the supervision of Prof. V. N. Kulkarni (Physics). The accelerator operates energies at 1.7 MeV and will facilitate research in the areas of microfabrication, micromachining (MEMS/NEMS), ion beam synthesis of nano phases and surface engineering, surface and interface studies by RBS/ERDA/PIXE/ channeling, defect and damage studies in materials, bio-materials, 3D mapping and process optimization and system automation.

IIT Kanpur has been awarded a highly competitive and major international collaborative research project jointly funded by Research Council UK (RCUK) and the
Department of Science and Technology, (DST) India under the auspices of a newly launched UK-India Science Bridge Program entitled BioPharm 2020: Entrepreneurial Opportunities for Indian and UK scientists in the Pharmaceutical and Biotechnology Industries. The grant provides funding for research and training to the tune of 1 million pounds (UK) towards extensive bilateral research and training in biomedical engineering and bio-pharma between IITK and Nottingham University, besides collaboration with IIM Bangalore in the area of supply chain management.

Indian Railways has recently placed a commercial order for buying 10,000 tons of the rail steel from SAIL. This rail steel composition considered unique was developed at IIT Kanpur as one of the projects under TMRS (PI: R Balasubramaniam). The total cost of this order is just over Rs. 50 crore. Therefore, the TMRS rail corrosion prevention project not only has an industrial partner, but tangible deliverables have resulted from it. This work also has been recognized by way of scholarly peer-reviewed publications.

Under BSNL IITK Telecom Center of Excellence (BITCOE), the Institute has received a grant of 14.5 crore. BITCOE is expected to provide a platform for research, development in India specific applications, and manpower generation in the field of telecommunications. It will have a significant impact on telecom related research at IITK.

As part of the second phase of the collaboration, the INDO-US Science and Technology Forum has sanctioned a grant of Rs. 5 crore for starting the INDO-US Center for Research Excellence in Fabrionics. The Center is a consortium of Indian researchers from IITK, IITKgp, BESU and CMRI collaborating with UIUC, UCI and Northwestern in the science, technology and selected applications of advanced fabrication. Some examples include materials and fabrication for energy storage devices, biomedical devices, micro/nano fabrication and microfluidics. The collaborative research in the Center is driven by a two-way exchange of Ph.D. students and faculty, as well as Annual Research Workshops.

Center for Development of Metal-Ceramic Composites through microwave processing has been established under the Indo-US Public-Private Networked Joint Center Program funded by the Indo-US Science and Technology Forum (IUSSTF). One of the major research thrusts at the center involves gaining a fundamental understanding of the microwave-metal interaction and consolidation of a range of ferrous and non-ferrous particulate materials using microwaves.

Biomaterials as well as their applications in artificial organs are widely recognized as an emerging area. Recent developments in the field testify to a significant progress in our attempts to develop new biomaterials. In this regard, we have received a grant for establishment of Indo-US joint center on Biomaterials for health care. The overall objective of the proposed center is to combine the cutting edge technologies of fabrication and testing of materials science with the knowledge of biological sciences and evolve strategies to develop shaped implant materials in some of the emerging material systems for the improvement of public health. Thus, it will be a true demonstration of synergistic flow and utilization of scientific concepts, and technological expertise in an international team of recognized scientists.
The project on spark plasma sintering of ceramic nanocomposites proposes to develop Hydroxyapatite (HAp or HA) based bioceramic composites using Spark Plasma Sintering (SPS) route. The basic aim of the proposed project is to improve the mechanical properties (hardness, fracture toughness) of hydroxyapatite without considerably affecting the biocompatibility and the density. For this purpose, varying amount of ceramic (mullite) particulates or whiskers, (upto 30 wt. %) will be incorporated in the HAp matrix. As an alternative to the conventional sintering route, this project will investigate the capability of the SPS route.

The Institute has received a grant of Rs. 4 crore from TCS for establishing a Foundation for Research in Algorithms on campus. The aim of the Foundation is to support both pure and applied research in algorithms. Towards this end, the Foundation will organize several workshops in different areas of algorithms and also support research visits to IITK as well as other institutions.

The Institute had proved its capability for successfully implementing CAD technology for Saddle Industry. As a result, it is getting repeated requests from the Ministry of Commerce GOI for actively participating in Modernization of Saddle Industry. During the 10th Five year plan, the Institute was awarded grants to deliver the following long term objectives:

- Establishment of Institute of International standards for saddlery.
- Development of technology for different type of saddle trees and their accessories.
- Development of various kinds of machinery used in saddlery manufacture.
- Development of database of horse anatomies and saddletree geometries.

The Institute has established two new business incubators, Technology Business Incubator (TBI) & Technology Incubation and Development of Entrepreneurs (Tide) Center. TBI is a program supported by National Science & Technology Entrepreneurship Board (NSTEDB), DST, Govt. of India, for incubation of start-ups in the areas of Science & Technology. TIDE Centre is a program supported by the Ministry of Communication & Information Technology, Govt. of India, for incubation in the areas of IT & Electronics.

The TBI and TIDE centers are currently functioning under the umbrella of SIDBI Innovation & Incubation Centre (SIIC), which is the nodal centre for Entrepreneurship Development, Business Incubation and IPR. The technologies incubated at SIIC are high-end in multidisciplinary areas such as Ultra High Frequency RFID, Voice Recognition, Embedded Systems, High-end data acquisition sensors, Nano Materials & Geospatial technologies.

New RA hostel construction

Extension of new RA hostel is underway. Construction of additional 100 units is to be taken up on a priority basis to meet the immediate shortfall in accommodation of research staff. The IRDC recommended that plans be drawn to provide an additional 200 rooms over the next three years to cater to single-seater accommodation for newly graduated project associates, studio-style accommodation for married project
associates, and accommodation suitable for a small family in case of senior scientists and post-doctoral fellows working on projects.

Photograph showing proposed extension of RA hostel is given below.

Highlights from Departments

Major facilities created in the Department of Aerospace Engineering include autonomous flight vehicles, 3D PIV and 3-Component PDPA. The Flight lab has been strengthened by acquiring 2 Sinus motor gliders.

Department of Biological Sciences and Bioengineering has received a research grant from the UK India Education and Research Initiative (UKIERI) for providing efficient treatment approach for osteoarthrites using tissue engineering.

Department of Civil engineering has indigenously developed a 10LPM all aluminum body air sampler (PM1.0 inertial impactor) which is the first of its kind in India. The Department received a grant of Rs. 89 lakh for study of toxicity of secondary particles emitted from diesel vehicles.

Department of Electrical engineering has developed technologies for review of electrical clearance in air for 25 kV, 50 Hz ac overhead electric traction system of Indian Railways; a multi modal data acquisition test bed for simultaneous recording of 4 channel video and 8 channel audio data; fully automated trackside bogie monitoring system for measuring i) angle-of-attack using laser range finder based system, and ii) lateral and vertical rail forces. It is a fully operational system installed at Ajgain Railway Station on the Kanpur – Lucknow main track. Silhouette and structured light based low cost 3D scanner laser based pointing device for large screens has been developed. The Department has also developed software for digital mandi for the Indian farmers, Web interface for accessing current mandi prices online developed as part of BSNL IITK Telecom Center of Excellence and software for calculating inductance of large non-linear shunt reactors.

Apart from carrying out internationally competitive research in the frontier areas and running excellent teaching programmes for students, the Department of Physics has
recently undertaken as part of its outreach activity, efforts to improve physics education in schools and colleges. For a better appreciation of principles of science, over 250 experiments at levels starting from primary school to college have been developed with commonly available materials. During 2008-09, eight workshops were arranged in different locations in India and 328 teachers from 13 states participated enthusiastically in this mission of using classroom experiments to motivate science learning.

Some of the major sponsored projects undertaken by the Institute include those funded by CSIR, DST, DRDO, ARDB, DBT, MCIT, and BSNL. Other projects include:

i. Potential of RNAI in insect pest management (NAIP);
ii. Mobile IED pre-initiator system (AIP);
iii. Airfoil models, instrumentations and wind tunnel testing of low Reynolds number airfoil at NWTF (ADA);
iv. Development of metal-ceramic composites through microwave processing and biomaterials for health care (INDO-US networked center);
v. Plasmonic properties of checkboard metallic structures and films (IFCPAR);
vi. Design and development of an autonomous vehicle (Boeing);
vii. An experimental study of supersonic flow over two and three dimensional slender bodies with moving surface protuberances; design and evaluation different control strategies (ARMREB);
viii. Aerodynamic characteristics of butterfly flight through measurement of three dimensional unsteady velocity field using TR-PIV system (AOARD).

A few major consultancy projects received last year include:

i. Design of river training works: river Ganga [three locations between Allahabad to Varanasi] (IWAI);
ii. EHV/UHV transmission system planning for UPTTCL-study cell (UPPTCL);
iii. One-stop educational portal (CHIPS);
iv. GIS based land record management (GNIDA);
v. Studies on catalyst composition (Chevron);

**Research Infrastructure Development**

The Institute is adding several major infrastructural facilities for carrying out multidisciplinary R&D activities. For development of a Micro-fabrication laboratory, partial funding has been obtained under the CARE scheme. Oxidation furnace, Dicing saw, Wire bonder, Spin coaters, Fume hood, PECVD (Plasma enhanced chemical vapor deposition), Sputtering system, Mask aligner, Chiller, and Optical table have been procured.

_A fiber coupled Raman microscope with multichannel detection system_ was acquired in 2008 under the CARE scheme. This instrument allows non-destructive characterization of materials using inelastic light scattering methods. Microprobe allows data collection
from very small sample sizes (as small as ~ 100 microns). The spectrum provides a method to obtain information about the local structure at the nanoscale by recording the lattice vibrational spectrum. Comparison with known standards allows quantification of information obtained such as ratio of crystalline to amorphous phases and determination of the diameter of single walled carbon nanotubes. The instrument is currently installed in the laboratory for Materials at Extreme Conditions located in ACMS.

Under the CARE scheme, the Department of Chemistry has procured microanalytical facility which can analyze liquid and solid samples for their C, H, N, S and O content. This facility is already functional and is available to all the Institute researchers.

XP-100 Surface Profilometer System with 3D Metrology Option has been purchased. For microelectronics and large area electronics, surface profiler can be used to extract – surface roughness, precision step height, surface form, thin film stress, thin film structure, and high resolution surface imaging. At SCDT, an interdisciplinary team of research scholars and faculty are using this equipment for fabricating organic solar cells, thin film transistor for RFID, as well as organic light emitting diodes for the Prototype Development Unit (PDU).

Laser Doppler Velocimetry (LDV) for the unsteady velocity measurements in a water tunnel test facility for flow control has been procured under the CARE scheme this year. LDV is an instrument which measures all the three components of fluid flow velocity along with the turbulence quantities. Unlike most turbulence measuring equipment, LDV allows non-intrusive high frequency measurements, thus providing highly accurate data.

A dedicated dynamic laser light scattering setup has been purchased through the CARE scheme. It is one of the best configuration systems available in the field. This set up can measure particle size distribution as well as molecular weight distribution of the polymeric samples. It is an ideal system suited for studying relaxation dynamics in soft transparent materials.

The Department of Science and Technology (DST) has a Fund for improvement of Science & Technology (FIST) scheme to build infrastructure facilities in universities and higher educational institutions. The grant under this scheme is provided for strengthening infrastructure of the identified department in teaching and research and is to be spent exclusively for the said purpose. During 2008-2009, the Institute has received FIST grants to add special infrastructure facilities for research purposes. While the Department of Chemical engineering has received the FIST II grant of Rs. 6.07 crore, the Department of Chemistry has been given a total amount of Rs. 8 crore for the purchase of the following equipment: Time-resolved fluorescence, high performance computational facility, Thermal analysis equipment, Atomic Force Microscopy, Resonance Raman and Mass spectroscopic facilities. It is expected that the Department will receive additional grants this year for the purchase of a new high field Nuclear Magnetic Resonance spectrometer and a single-crystal X-ray diffractometer.

The Department of Mechanical Engineering has procured an Ultra High Speed Camera through the FIST. This is the fastest camera in the world and also the first of its kind to
be available in our country. The system is currently housed in the High Speed Experimental Mechanics Laboratory (HSEML). The camera can capture 16 monochrome images at rates as high as 200 million images per second, i.e., time difference between any two images can be as low as 5 nanoseconds. Exposure time as small as 5 nanoseconds allows capturing images of ultra fast dynamic events, without smearing, seemingly freezing the events in time. The digital images have 12 bit depth and an active resolution of 1360 x 1024 pixels even at the highest framing rate.

The Institute has procured 2 motor gilders which can fly up to an altitude of 10000 feet without any oxygen cylinder and further up to a maximum altitude of 29000 feet with external oxygen cylinders and can maintain a speed of 122 knots/hr. It has two fuel tanks with a capacity of 50 liters each and can remain in the air for about six hours at a stretch.

**International Collaborations**

The Institute has entered into MoUs with the University of Ulster in relation with UKIERI, UK, Ghent University, Belgium and VLIR, Belgium, ETH Zurich, Switzerland, Chevron Energy Technology, USA, AdvanIDE Pte. Singapore, University of Kansas USA, the University of Applied Sciences Darmstadt, Germany, the Groupe Des Ecoles Des Mines (GEM), the Ecole Centrale Paris, the University of Castilla-La Mancha (UCLM) Spain, and University of Molise, Italy. The objectives of these MoUs are promoting, strengthening, maintaining scientific and academic co-operation, exchange of faculty, students, staff, technology transfer, sharing of intellectual property for the purposes of engineering research, and educational programs, sharing scientific instruments of common interest.

The Institute has signed a Memorandum of Understanding with National University of Singapore, Singapore for promotion of joint research and development activities of mutual interest. The understanding shall go a long way in the creation of vibrant academic research platforms.

**Financial Resource Mobilization**

The Institute has had a satisfactory financial year during 2008-09. The total Grant-in-aid received during the financial year from MHRD, Govt. of India, under non-plan was Rs 113.48 crore, under plan Rs 68.17 crore and another Rs. 72.56 crore under plan (OSC).

The financial year 2008-09 was successful for fund raising at IIT Kanpur. As economy slowed down globally, fewer individuals and organizations were willing to donate to the institute. The Institute received a total of Rs 5.13 crore from 923 donors (496 Indian donors and 427 overseas donors).

A total of 487 donors contributed Rs 38.75 lakh in the Annual Gift Programme (AGP). Donations received under AGP have been utilized for providing travel support to the students and faculty for attending international conferences, cash award to students for publication of their research papers in reputed journals, travel support to international visiting faculty, filing of patents and other similar activities supporting and encouraging excellence in the Institute.
The Ministry of Water Resources, Government of India, established an endowed Chair and a Faculty Research Fellowship in the institute to support research on the impact of water quality in the Ganges basin. Some of their research staff members will also join the postgraduate programs at IIT Kanpur. An endowment of Rs 100 lakh is available to support these activities.

Several new students’ scholarships, awards and research fellowships for young faculty members in the Institute have been instituted during the year. An IITK alumnus, who prefers not to disclose his identity, has donated the Dr. P.K. Kelkar Chair at IIT Kanpur.

The IITK Alumni Association and the Class of 1974 have established the Sidh Agrawal Memorial Fund in honor of the revered memory of Mr. Sidh Agrawal (BT/EE/1974). This fund will be used for providing UG scholarships, an award for entrepreneurship, and to organize programs for promoting entrepreneurship at IITK.

Partial travel support to 114 students to attend international conferences was provided with generous support from Mr. Sudhir Mittal (BT/CHE/70) and Mr. N R Narayana Murthy (MT/EE/69). The support ranged from Rs. 20,000 to Rs. 40,000 per student.

Cash awards were given to 155 students for publishing papers in reputed journals. This scheme was introduced through the donations received under the Annual Gift Programme and from NR Narayana Murthy Fund.

The donations from alumni and friends of IITK have also enabled us to start a scheme to provide partial travel support to new faculty members during the first three years of their tenure at IITK. During 2008-09, eleven faculty members availed of this support for participation in conferences overseas. Travel support is also being provided to visiting faculty members for visits of duration exceeding one month. During the year, support was provided to two visiting faculty members of the Department of Materials and Metallurgical Engineering and the Department of Physics.

The Institute will be celebrating its Golden Jubilee from August 2009 to December 2010. A number of events in project mode have been planned for the Golden Jubilee year.

**Students’ Activities**

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

**Promotion of Work-Experience and Research (POWER)**

POWER is the first initiative of its kind in India to promote coordinated Research and Work-Experience through student-industry interaction. It gives students the freedom and opportunities to work in diverse areas of business, science and technology that
have a bearing on the existing industrial and national problems. It also provides students an opportunity to work upon their own ideas.

POWER focuses on building research and technical aptitude among students, while allowing for due participation of faculty, research scholars, industries and external agencies.

It offers a database of experts, accessibility to institute resources, funds, and basic skill-building projects (including lecture series, workshops, visiting trips). Thus, it provides a platform for converting dreams and ideas into reality by throwing up opportunities to participate in solving real-life challenges through industrial research and projects.

**Notes on Engineering Research and Development (NERD)**

NERD is an exciting, student-led publication in magazine format. The magazine focuses on original research being carried out by students at IIT Kanpur. It includes experiences based on summer projects, internships, conferences; biographical profile of a woman scientist to encourage female students to take up research; new pedagogical techniques adopted; policy and perspective articles for some initiatives in their embryonic stages; and various general interest articles.

The magazine helps to publicize student research and opportunities available as well as to disseminate information in the area of research and development.

Under the Boeing-IIT Kanpur Campus engagement plan, a student project and a scholarship program have been initiated. Proposals to design and build an autonomous vehicle were invited from the student community. The review committee selected 8 students to work on a focused project. Financial support is available for realizing the prototype autonomous vehicle. The team will get an opportunity to gain guidance from and interact with experts from the Boeing. The prototype developed by the team will also get extensive visibility at both national and international levels.

Dr. Veena Sahasrabuddhe, a leading Indian vocalist and composer of Hindustani classical music visited the Institute as the first Artist in Residence in the month of March 09. Her singing style has its roots in Gwalior gharana, but it also borrows from Jaipur.
and **Kirana** gharanas. The campus residents were electrified by her inspiring presence and literally perfect compositions.

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 and astronomy to name but a few.

The overriding objective of the large-scale events of the Institute such as Antaragni, Techkriti, Udghosh and Megabucks is to infuse a sense of richness and purpose in the lives of students. Antaragni is the cultural festival. Techkriti is the science and technology festival. Udghosh is the sports festival. Megabuck is a festival to promote the spirit of innovation and incubation. All these social, cultural and sporting activities play a crucial role in the transformation of a student into a complete person. 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.

IIT Kanpur came up with a creditable show in the inter IIT sports meet held at IIT Madras. While the girls stood third in overall championship, the boys stood fifth and both had a number of podium performances as a team and in individual events.

The Institute witnessed stiff inter- hall competition in the form of Galaxy and Varchasva, inter- hall cultural and sports championships respectively. 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 sport talents and to give them a reason and a motivation, strong enough, to come out of their rooms and participate in group activities.

Introduction of the Entrepreneurship Cell (E-Cell) of IIT Kanpur which was launched during the opening ceremony of Megabucks’09 lays down the philosophy underlying the need to groom the entrepreneurial skills in the students. The vision is to foster the entrepreneurial spirit in the students of the Institute with an aptitude for innovation. Given its faith that an emerging economy like India needs the drive of young entrepreneurs to initiate and nurture firms and enterprises, the E-Cell aims to guide the
enthusiasts in the right direction and thus equip them for the stress and strife of the marketplace.

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

Owing to the economic downturn, the placement scenario this year was not as encouraging as the previous years but was certainly good when compared with some of the other IITs and other professional engineering colleges. Out of the 1200 public and private organizations invited for recruitment, 130 companies have finally conducted their interviews and the overall placement figure for the year stands at 74%. Despite the market crash, an extended effort that included a slew of new initiatives in terms of association with alumni and spreading career awareness led to 41 new companies reporting for placement this year. The relationships formed with the alumni and other prominent people in the industry, besides the different channels explored this year for recruitment, will definitely help the placement scenario of the campus in the years to come.

The Institute has put in place the entire infrastructure necessary to meet the requirements of the enhanced student strength. As of now, there are ten halls of residence, eight for boys and two for girls. The total capacity in these halls is close to four thousand. Two new blocks with a capacity of twenty four units for SBRA has been constructed. The entire rejuvenation programme has been initiated with a generous donation from Mr. N. R. Narayana Murthy, a distinguished alumnus of the Institute.
Organisation

Indian Institute of Technology Kanpur is an autonomous organization incorporated under an Act of Parliament in the year 1961, and is wholly financed by the Government of India, under the administrative control of the Ministry of Human Resource Development. The authorities constituted under the Act and Statutes, which govern and guide the functioning of the Institute in the areas of administration and academic programmes are; the Council of IITs, the Board of Governors assisted by two statutory bodies namely the Finance Committee in the financial matters and the Building and Works Committee in the matters related to construction and repairing of buildings and other major works. The Senate is assisted by its various standing committees. The compositions of these constituent bodies are as follows:

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Minister of Human Resource Development
New Delhi – 110 001

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Chairman, Board of Governors
IIT Guwahati

Shri Sanjeev Goenka
Chairman, Board of Governors
IIT Kharagpur

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Chairman, Board of Governors
IIT Bombay

Prof. A.E. Muthunayagam
Chairman, Board of Governors
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Prof. M Anandakrishnan
Chairman, Board of Governors
IIT Kanpur

Prof. V S Ramamurthy
Chairman, Board of Governors
IIT Delhi

Shri Ashok Bhatnagar
Chairman, Board of Governors
IIT Roorkee
Directors of Institute (Ex-Officio)
Prof. Damodar Acharaya IIT Kharagpur
Prof. M S Ananth IIT Madras
Prof. Devang V. Khakhar IIT Bombay
Prof. S G Dhande IIT Kanpur
Prof. Surendra Prasad IIT Delhi
Prof. Gautam Barua IIT Guwahati
Prof. S C Saxena IIT Roorkee

Other Members (Ex-Officio)
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University Grants Commission New Delhi

Dr. R A Mashelkar Director General Council of Scientific & Industrial Research Anusandhan Bhawan, Rafi Marg New Delhi

Dr. K Kasturirangan Chairman Council of IISc. Bangalore National Institute of Advanced Studies Indian Institute of Science Campus Bangalore

Prof. P Balram Director Indian Institute of Science Bangalore

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Shri D Swarup Secretary Ministry of Finance Department of Expenditure North Block New Delhi
Shri Brajesh Kumar  
Secretary  
Ministry of Information Technology  
Electronic Niketan  
6, CGO Complex, New Delhi

Prof. R.A. Yadav  
Acting Chairman, AICTE  
IP Estate  
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New Delhi

Nominees of the Visitor
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Eminent Scientist  
& Chairman, Scientific Advisory Council to the Prime Minister  
Linus Pauling Research Professor & Honorary President  
CSIR Centre of Excellence in Chemistry,  
Chemistry & Physics of Materials Unit  
Jawaharlal Nehru Centre for Advanced Scientific Research  
PO – Jakkur, Bangalore

Prof. C S Seshadri  
Director  
Chennai Mathematical Institute, Chennai  
Plot H1, SIPCOT IT Park  
Padur PO, Siruseri  
Prof. Sabyasachi Bhattacharya  
Director  
Tata Institute of Fundamental Research  
Homi Bhabha Road,  
New Delhi

Dr. Kota Harinarayan  
Chairman  
Research Council of Central Scientific Instrument Organization  
Raja Ramanna Fellow  
National Aero Space Laboratories  
PO Box 1779,  
Bangalore

Shri Tarun Das  
Chief Mentor  
Confederation of Indian Industry
Plot No. 249-F, Sector 18, 
Udyog Vihar Phase IV 
Gurgaon (Haryana)

Three Members of Parliament (Two from Lok Sabha and one from Rajya Sabha) 
Shri Milind Deora 
Member of Parliament (Lok Sabha) 
65, Lodhi Estate 
New Delhi

Shri Ananta Nayak 
Member of Parliament (Lok Sabha) 
180, South Avenue 
New Delhi

Shri B J Panda 
Member of Parliament (Rajya Sabha) 
2, Mahadev Road, 
New Delhi

Secretary to the Council 
Shri N K Sinha 
Joint Secretary (DL) 
Government of India 
Department of Secondary Education & Higher Education 
Ministry of Human Resource Development 
Shastri Bhawan 
New Delhi - 110 001

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Chairman, Indian Institute of Technology Kanpur 
‘Madan Apartment’ 
8/15, 5th Main Road 
Kasturibai Nagar 
Adyar, Chennai-600080

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Allahabad University 
Allahabad (from 13.04.2007)

Prof. D V Singh
Former Vice Chancellor, Roorkee University &  
Former Director, CRRI,  
Sunbreeze Apartments, 1002  
Towr-'B', Vaishali  
Ghaziabad – 201 010  
(from 13.04.2007)

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Chanakyapuri  
New Delhi – 110 021  
(from 13.04.2007)  
(upto 22.08.2008)

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Joint Secretary (Technical)  
Government of India  
Department of Secondary Education & Higher Education  
Ministry of Human Resource Development  
Shastri Bhawan  
New Delhi - 110 001  
(upto May 2008)

Shri Ashok Thakur  
Additional Secretary  
Government of India  
Department of Secondary Education & Higher Education  
Ministry of Human Resource Development  
Shastri Bhawan  
New Delhi - 110 001  
(from May 2008)

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Government of Madhya Pradesh  
Dept. of Technical Education and Science & Technology  
Mantralay, Vallabh Bhawan  
Bhopal - 462 004  
[From 05.10.2006]  
(Upto 30.08.2007)

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Dept. of Technical Education and Science & Technology  
Mantralay, Vallabh Bhawan  
Bhopal - 462 004  
(From 31.08.2007)

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Gautam Buddha Nagar
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Joint Secretary, Information Technology & Chief Executive Officer, CHIPS
Government of Chhattisgarh
Department of Commerce & Industry (Information Technology)
Das Bhawan
Mantralaya, Raipur, Chhatisgarh

**Director (Ex-Officio)**
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Director
Indian Institute of Technology Kanpur
Kanpur 208016

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Dept. of Computer Science & Engineering
Indian Institute of Technology Kanpur
Kanpur – 208 016

Professor Manoj K Harbola
Department of Physics
Indian Institute of Technology Kanur
Kanpur – 208 016

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‘Madan Apartment’
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Shastri Bhawan, New Delhi - 110 001

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Additional Secretary  
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Department of Secondary Education & Higher Education 
Ministry of Human Resource Development 
Shastri Bhawan  
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Shri D V Singh  
Former Vice Chancellor 
Roorkee University & 
Former Director, CRRI, 
Sunbreeze Apartment, 1002, 
Tower ‘B’, Vaishali, 
Ghaziabad-201010

Shri S K Ray  
Financial Adviser  
Government of India 
Department of Education 
Ministry of Human Resource Development 
Shastri Bhawan  
New Delhi - 110 001

Professor Manoj K Harbola  
Department of Physics 
Indian Institute of Technology Kanpur 
Kanpur - 208 016

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Professor Sanjay G. Dhande  
Director 
Indian Institute of Technology Kanpur 
Kanpur 208016

**Secretary**  
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Indian Insitute of Technology Kanpur 
Kanpur - 208 016

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Kanpur 208016  

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Indian Institute of Technology Kanpur  
Kanpur 208016  
(Upto 02.09.2008)  

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Indian Institute of Technology Kanpur  
Kanpur 208016  
(From 08.09.2008)  

Professor Jitendra Kumar  
Department of Materials Science Programme  
Indian Institute of Technology Kanpur  
Kanpur - 208 016  
(From 01.01.2008)  

Professor Ajai Kumar Jain  
Department of Computer Science & Engineering  
Indian Institute of Technology Kanpur  
Kanpur – 208016  
(From 01.01.2008)  

Shri B D Gupta  
Chief Engineer (Northern Zone) CPWD  
3 rd Floor Kendriya Bhawan  
Sector H, Aliganj  
Lucknow -226 024  

Shri D N Agarwal  
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M-21, Greater Kailash-II  
New Delhi 110048  

Shri M D Seth  
Retd. Engineer-in-Chief, UPRNN  
Consultant  
Lucknow -226 001  

Shri S Y Kulkarni  
Professor & Head  
Department of Planning & Architecture  
Indian Institute of Technology, Roorkee  
roorkee-247667
Ms. Seema Raj  
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Ministry of Human Resource Development  
Shastri Bhawan  
New Delhi 110 001  

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Indian Insitute of Technology Kanpur  
Kanpur - 208 016  

[From 01.04.2008 to 31.03.2009]  

SENATE  

Director & Chairman Senate:  

Prof. Sanjay Govind Dhande  
Director  
Indian Institute of Technology Kanpur  
Kanpur  

Deputy Director:  

Prof. Kripa Shankar  
Upto 03.09.2008  

Prof. RK Thareja  
w.e.f. 03.09.2008  

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Dr. Amitabhs Bandopadhyay, AP From 01.12.2008

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Prof. Prem Kumar Kalra
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Prof. G Neelakantan
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Prof. Achla Misri Raina
Prof. (Ms) Shikha Dixit
Prof. Amit Ray Emeritus Fellow Upto 31.05.2009

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Prof. Kripa Shanker
Prof. NK Sharma
Prof. Arun P Sinha
Prof. R R K Sharma
Prof. Jayanta Chatterjee
Prof. Rahul Varman
Dr. Runa Sarkar, AP From 01.12.2008

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Prof. RC Sharma
Prof. RK Dube
Prof. Brahma Deo
Prof. SC Koria
Prof. Sanjeev Bhargava Upto 23.01.2009
Prof. Dipak Mazumdar  
Prof. Rajiv Shekhar  
Prof. Sandeep Sangal  
Prof. R. Balalsubramaniam  
Prof. Barada K Mishra  
Prof. Deepak Gupta  
Prof. Monica Katiyar  
Prof. Shant P Gupta  
Dr. Anish Upadhyay, ASP  
Emeritus Fellow Upto 31.07.2008  
From 01.12.2008

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Prof. Jitendra Kumar.

MATHEMATICS AND STATISTICS (MTH & STATS) :

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Prof. (Ms) Manjul Gupta  
Prof. MK Kadlabjoo  
Prof. Prawal Sinha  
Prof. GP Kapoor  
Prof. Peeyush Chandra  
Prof. V Raghavendra  
Prof. ID Dhariyal  
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Prof. B V Rathish Kumar  
Prof. Dhirendra Bahuguna  
Prof. P Shunmugaraj  
Prof. Arbind Kumar Lal  
Prof. U B Tewari  
Emeritus Professor Upto 30.06.2009  
Dr. Amit Mitra, ASP  
Upto 30.11.2008

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Prof. B N Banerjee  
Prof. MS Kalra  
Prof. VK Jain  
Prof. NN Kishore  
Prof. Himanshu Hatwal  
Prof. PM Dixit  
Prof. K Muralidhar  
Prof. Gautam Biswas  
Upto 30.06.2009  
Upto 30.06.2009
Prof. Prabhat Munshi
Prof. BP Pundir
Prof. S.K. Chaudhury
Prof. N.S. Vyas
Prof. Vinayak Eswaran
Prof. Kalyanmoy Deb
Prof. P.S. Ghoshdastidar
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Prof. Ashok Sengupta
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From 01.12.2008

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Prof. RC Budhani
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Prof. Deshdeep Sahdev
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Prof. Satyendra Kumar
Prof. Pankaj Jain
Prof. HC Verma
Prof. Manoj K Harbola
Prof. S C Agarwal
Dr. Satyajit Banerjee, AP
Emeritus Fellow Upto 31.08.09
01.12.2008 to 30.11.2009

LIBRARIAN

Dr. V D Shrivastava
w.e.f. 03.02.2009

Secretary, Senate: Shri Sanjeev S Kashalkar
Registrar
Indian Institute of Technology Kanpur
Kanpur

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   Allahabad University,
   Allahabad
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Vice-Chancellor  
C S Azad University of Agri.& Tech.  
Nawabganj  
Kanpur - 208002

3. Prof. R P Singh  
Department of Oil and Paint  
Harcourt Butler Technological Institute (HBTI)  
Nawabganj  
Kanpur - 208002

THREE NOMINEES OF THE CHAIRMAN, BOARD OF GOVERNORS  
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Kanpur – 208024

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

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

SENATE STANDING COMMITTEES:  
[From 01.10.2007 To 30.09.2008]

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(a) MEMBERS (EX-OFFICIO):

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

(b) SENATE NOMINEES:

1. Dr. Dayanand Yadav  
   AE
2. Dr. Ashok Khanna  
   CHE
3. Dr. Vinod K Singh  
   CHM

(c) STUDENTS’ SENATE NOMINEES:

1. Cherian V Methew  
   (Y4129)
2. Manu Bansal (Y3167175)

(2) SENATE ELECTIONS COMMITTEE [SEC]:

SENATE NOMINEES:

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2. Dr. Dipak Mazumdar  MME
3. Dr. Pankaj Jain  PHY

(3) SENATE LIBRARY COMMITTEE [SLC]:

(a) LIBRARY:

Librarian: Shri Rajeshwar Mishra

(b) SENATE NOMINEES:

1. Dr. Debashish Chowdhury  PHY
2. Dr. K Srihari  CHM
3. Dr. Rajiv Sinha  CE
4. Dr. R Sankararamakrishnan  BSBE

(c) NOMINEES OF DEPARTMENTS/PROGRAMMES:

1. Dr. K Ghosh  AE
2. Dr. K Subramaniam  BSBE
3. Dr. Sanjeev Garg  CHE
4. Dr. Jitendra K Bera  CHM
5. Dr. S K Chakrabarti  CE
6. Dr. Purnendru Bose  EEMP
7. Dr. T V Prabhakar  CSE
8. Dr. P Sircar  EE
9. Dr. Satyaki Roy  HSS
10. Dr. A K Mittal  IME
11. Dr. Y N Singh  LTP
12. Dr. P K Panigrahi  ME
13. Dr. Anish Upadhyaya  MME
14. Dr. Jitendra Kumar  MSP
15. Dr. Shobha Madan  MTH & STAT
16. Dr. P K Panigrahi  NET
17. Dr. Sreerup Raychaudhuri  PHY
18. Ms. Koumudi Prakash Patil (HSS)  M DES
(d) STUDENTS' SENATE NOMINEES:

1. C Saipriyadarshan  (Y5149)
2. Ashish Agarwal  (Y6113)

(4) SENATE POST-GRADUATE COMMITTEE [SPGC]:

MEMBER (EX-OFFICIO):

Dr. I D Dhariyal  MTH & STATS :Outgoing Chairman

SENATE NOMINEE:

1. Dr. V K Gupta  CE

(c) NOMINEES OF DEPARTMENTS/PROGRAMMES:

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2. Dr. Dhirendra S Katti  BSBE
3. Dr. Nishith Verma  CHE
4. Dr. M L N Rao  CHM
5. Dr. Pranab K Mohapatra  CE
6. Dr. Avinash Agarwal  EEMP
7. Dr. Shashank K Mehta  CSE
8. Dr. S Umesh  EE
9. Dr. A M Raina  HSS
10. Dr. A noop Singh  IME
11. Dr. Debabrata Gowami  LTP
12. Dr. V Eswaran  ME
13. Dr. D Mazumdar  MME
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16. Dr. P Munshi  NET
17. Dr. Avinash Singh  PHY
18. Dr. Satyaki Roy  M DES

(d) STUDENTS' SENATE NOMINEES:

1. Ankur Verma  (Y5102063)
2. G Naresh Kumar  (Y6114004)
3. Priyanka Dash  (Y6106008)
4. K Sudheendra Rao  (Y5209864)

(5) SENATE RULES COMMITTEE [SRC]:

(a) MEMBER (EX-OFFICIO):
Parliamentarian of the Senate:

Dr. N K Sharma, IME : Upto 30.09.2007

(b) SENATE NOMINEES:

1. Dr. M K Kadalbajoo MTH & STATS
2. Dr. Shafi Qureshi EE
3. Dr. B K Pattnaik HSS

(6) SENATE SCHOLARSHIPS & PRIZES COMMITTEE [SSPC]:

(a) MEMBERS (EX-OFFICIO):

  Head Institute Counselling Service : Dr. Goutam Deo, CHE
  Chairman, APEC                : Dr. Purnendu Bose, CE
  Dean of Students’ Affairs      : Dr. Prawal Sinha, MTH & STAT

(b) SENATE NOMINEES:

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2. Dr. Anish Upadhyay MME
3. Dr. S K Agarwal CSE
4. Dr. A Mitra MTH & STATS

(c) STUDENTS’ SENATE NOMINEES:

1. Adarsh Behra (Y6030)
2. Piyush Agrawal (Y3167218)
3. Chirag Mittal (Y3167100)

(7) SENATE STUDENTS’ AFFAIRS COMMITTEE [S-SAC]:

(a) MEMBERS (EX-OFFICIO):

  Head Institute Counselling Service : Dr. Goutam Deo, CHE
  Chairman, APEC                : Dr. Purnendu Bose, CE
  Representative of COW          : Dr. A K Chaturvedi, EE
  Dean of Students’ Affairs      : Chairman, Ex-Officio

(b) SENATE NOMINEES:

1. Dr. P S Ghoshdastidar ME
2. Dr. Asima Pradhan PHY
3. Dr. Rajat Moona CSE

(c) STUDENTS’ SENATE NOMINEES:
1. Arvind Kothari (Y4096)
2. Ankur Verma (Y5102063)
3. Chirag Mittal (Y3167100)
4. Ramnik Arora (Y5365)

(8) SENATE UNDERGRADUATE COMMITTEE [SUGC]:

(a) MEMBER (EX-OFFICIO) :

   Dr. Dheeraj Sanghi, CSE : Outgoing Chairman

(b) SENATE NOMINEE :

   1. Dr. A K Chaturvedi EE

(c) NOMINEES OF DEPARTMENTS/PROGRAMMES :

   1. Dr. D Das AE
   2. Dr. Anupam Pal BSBE
   3. Dr. Yogesh M Joshi CHE
   4. Dr. M K Ghorai CHM
   5. Dr. Rajesh Srivastava CE
   6. Dr. Purnendu Bose EEMP
   7. Dr. Dheeraj Sanghi CSE
   8. Dr. Animesh Biswas EE
   9. Dr. Suchitra Mathur HSS
  10. Dr. Runa Sarkar IME
  11. Dr. H Wanare LTP
  12. Dr. P S Ghoshdastidar ME
  13. Dr. B Deo MME
  14. Dr. Kamal K Kar MSP
  15. Dr. A K Lal MTH & STAT
  16. Dr. P Munshi NET
  17. Dr. Anjan Kumar Gupta PHY
  18. Dr. Bishakh Bhattacharya M DES

(d) STUDENTS’ SENATE NOMINEES :

   1. Ashish Agarwal (Y6113)
   2. Chirag Mittal (Y3167100)
   3. B Shubham Gupta (Y4424)
   4. C Saipriyadarshan (Y5149)

SENATE STANDING COMMITTEES :
[From 01.10.2008 To 30.09.2009

(1) SENATE EDUCATIONAL POLICY COMMITTEE:

(a) MEMBERS (EX-OFFICIO):

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

(b) SENATE NOMINEES:

1. Dr. Vinayak Eswaran ME
2. Dr. M K Harbola PHY
3. Dr. Deepak Gupta MME

(c) STUDENTS’ SENATE NOMINEES:

1. Ankur Verma (Y5102063) ankurv@iitk.ac.in E1-209, H-4
2. C Saipriyadarshan (Y5149) darshan@iitk.ac.in D-302, H-9

(2) SENATE ELECTIONS COMMITTEE [SEC]:

SENATE NOMINEES:

1. Dr. Achla M Raina HSS
2. Dr. Ashish Dutta ME
3. Dr. Pradip Sinha BSBE

(3) SENATE LIBRARY COMMITTEE [SLC]:

(a) LIBRARY:

Librarian:

(b) SENATE NOMINEES:

1. Dr. Arbind Kumar Lal MTH & STATS
2. Dr. Ashok Kumar BSBE
3. Dr. Surajit Sinha HSS
4. Dr. Siddharta Panda CHE

(c) NOMINEES OF DEPARTMENTS/PROGRAMMES:

1. Dr. C S Upadhyay AE
2. Dr. Dhirendra S Katti BSBE
3. Dr. S Garg CHE
4. Dr. J K Bera      CHM
5. Dr. Soumyen Guha  CE
6. Dr. Soumyen Guha  EEMP
7. Dr. Harish Karnick CSE
8. Dr. Pradip Sircar  EE
9. Dr. Anindita Chakrabarti HSS
10. Dr. A K Mittal  IME
11. Dr. H Wanare  LTP
12. Dr. P K Panigrahi ME
13. Dr. A Upadhyay  MME
14. Dr. Jitendra Kumar MSP
15. Dr. Pravir Dutt MTH & STAT
16. Dr. M S Kalra  NET
17. Dr. Tapobrata Sarkar PHY
18. Dr. Munmun Jha  M DES

(d) STUDENTS’ SENATE NOMINEES:

1. Abhishek Sharma (Y5025)  abhishar@iitk.ac.in B-112, H-1
2. Keshav Goel  (Y7196)  keshavg@iitk.ac.in 314, H-2

(4) SENATE POST-GRADUATE COMMITTEE [SPGC]:

(a) MEMBER (EX-OFFICIO):

Dr. Vinay K Gupta  CE : Outgoing Chairman

(b) SENATE NOMINEE:

Dr. Govind Sharma  EE

(c) NOMINEES OF DEPARTMENTS/PROGRAMMES:

1. Dr. D Yadav  AE
2. Dr. Amitabha Bandyopadhyay  BSBE
3. Dr. Animangsu Ghatak  CHE
4. Dr. M L N Rao  CHM
5. Dr. Ashu Jain  CE
6. Dr. Tarun Gupta  EEMP
7. Dr. T V Prabhakar  CSE
8. Dr. S Umesh  EE
9. Dr. Mini Chandran  HSS
10. Dr. Rahul Varman  IME
11. Dr. Debabrata Gowami  LTP
12. Dr. P M Dixit  ME
13. Dr. R K Dube  MME
14. Dr. K Shahi  MSP
15. Dr. Rama Rawat  MTH & STAT
16. Dr. M S Kalra  
17. Dr. Avinash Singh  
18. Dr. Satyaki Roy  

(d) STUDENTS’ SENATE NOMINEES:

1. Mohd. Ashraf Bhat (Y4200063)ashraf@iitk.ac.in E-213, H-8  
2. K Sudheendra Rao (Y5209864)ksrao@iitk.ac.in F-212, H-8  
3. Abhishek Kumar Agrawal (Y7104003)abhia@iitk.ac.in E-209, H-9  
4. Satendra Kumar Yadav (Y7111036) satendra@iitk.ac.in 2068, ACES

(5) SENATE RULES COMMITTEE [SRC]:

(a) MEMBER (EX-OFFICIO):

Parliamentarian of the Senate:

Dr. R K Dube  

(b) SENATE NOMINEES:

1. Dr. Kunal Ghosh  
2. Dr. Ajai K Jain  
3. Dr. Keshawa Shahi  

(6) SENATE SCHOLARSHIPS & PRIZES COMMITTEE [SSPC]:

(a) MEMBERS (EX-OFFICIO):

Head, Institute Counselling Service: Dr. A K Ghosh, AE  
Member, APEC  : Dr. Purnendu Bose, CE  
Dean of Students’ Affairs  : Dr. Partha Chakroborty, CE

(b) SENATE NOMINEES:

1. Dr. Sandeep Verma  
2. Dr. Suchitra Mathur  
3. Dr. Rajesh Srivastava  
4. Dr. Nandini Nilakantan

(c) STUDENTS’ SENATE NOMINEES:

1. Indranuj Dey (Y5209863) indranuj@iitk.ac.in C-202, H-8  
2. Mohit Kumar Jolly (Y6265) mkjolly@iitk.ac.in 317, H-2  
3. Keshav Goel (Y7196) keshavg@iitk.ac.in 314, H-2
(7) SENATE STUDENTS’ AFFAIRS COMMITTEE [S-SAC]:

(a) **MEMBERS (EX-OFFICIO)** :

Head Institute Counselling Service : Dr. A K Ghosh, AE
Member, APEC                  : Dr. Purnendu Bose, CE
Representative of COW               : Dr. Sudhir Misra, CE
Dean of Students’ Affairs            : Chairman, Ex-Officio

(b) **SENATE NOMINEES:**

1. Dr. Ashu Jain   CE
2. Dr. Anish Upadhyaya MME
3. Dr. Shikha Dixit HSS

(c) **STUDENTS’ SENATE NOMINEES** :

1. Arvind Kothari (Y4096) arvikot@iitk.ac.in B-204, H-1
2. Ankur Verma (Y5102063) ankurv@iitk.ac.in E1-209, H-4
3. K Sudheendra Rao(Y5209864) ksrao@iitk.ac.in F-212, H-8
4. Ramnik Arora  (Y5365) ramnik@iitk.ac.in D-202, H-1

(8) **SENATE UNDERGRADUATE COMMITTEE [SUGC]:**

(a) **MEMBER (EX-OFFICIO)** :

Dr. P S Ghoshdastidar, ME       : Outgoing Chairman

(b) **SENATE NOMINEE** :

1. Dr. H C Verma PHY

(c) **NOMINEES OF DEPARTMENTS/PROGRAMMES** :

1. Dr. A Kushari AE
2. Dr. Ashok Kumar BSBE
3. Dr. Siddhartha Panda CHE
4. Dr. M K Ghorai CHM
5. Dr. Sudhir Misra CE
6. Dr. S N Tripathi EEMP
7. Dr. Amitabha Mukherjee CSE
8. Dr. Y N Singh EE
9. Dr. T Ravichandran HSS
10. Dr. A P Sinha IME
11. Dr. D P Mishra LTP/AE
12. Dr. N N Kishore ME
13. Dr. B Basu MME
14. Dr. Rajeev Gupta MSP
15. Dr. Mahua Banerjee MTH & STAT
16. Dr. M S Kalra NET
17. Dr. Anjan K Gupta PHY
18. Dr. Bishakh Bhattacharya M DES

(d) STUDENTS’ SENATE NOMINEES :

1. Manu Kapoor (Y4177218) manuk@iitk.ac.in D-210, H-8
2. Anurag Sujania (Y5107) sujania@iitk.ac.in C-215, H-1
3. Pulkit Agarwal (Y7322) pulkit@iitk.ac.in F-301, H-5
4. Abhishek Khetan (Y6019) askhetan@iitk.ac.in 247, H-2
The Faculty

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

The faculty strength of the Institute as on March 31, 2009 was 326. Out of these 22 are shared by two departments on a half time basis. There were also 36 Academic staff comprising of Research Engineers/Scientific Officers/Design Engineers and Library staff, who are treated at par with faculty, on March 31, 2009. 07 faculty members and 04 academic staff retired/voluntary retired/resigned and one faculty member passed away during the period. The Institute also had a number of Visiting Faculty members: 09 Visiting Faculty and 02 Distinguished Honorary Professor joined during the year. The Visiting/Distinguished/Adjunct Faculty contribute significantly and they also get an opportunity to know the Institute.

**AEROSPACE ENGINEERING DEPARTMENT SANCTIONED STRENGTH : 20
EXISTING STRENGTH : 16+1**

**PROFESSOR (Rs.18400-500-22400)**

1. 3159 K Ghosh
2. 1798 R K Sullerey
3. 4041 Dayanand Yadav
4. 4458 E Rathakrishnan
5. 4694 C Venkatesan
6. 4581 T K Sengupta
7. 4285 Sudhir Kamle
8. 4664 Kamal Poddar
9. 4696 Sanjay Mittal
10. 4660 Ashish Tewari
11. 4709 A K Ghosh

**ASSOCIATE PROFESSOR (Rs.16400-450-20000)**

1. 4785 C S Upadhayay
2. 4733 D P Mishra

**ASSISTANT PROFESSOR (Rs.12000-420-18300)**

1. 4958 Abhijit Kushari
2. 4993 Debopam Das
3. 5129* Sivasambu Mahesh
4. 5280 Brijesh Eshpuniyani
BIOLOGICAL SCIENCE & BIO-ENGINEERING  
SANTIONED STRENGTH : 15 
EXISTING STRENGTH   : 10

PROFESSOR (Rs.18400-500-22400)

1.  4959  Pradip Sinha

ASSOCIATE PROFESSOR (Rs.16400-450-20000)

1.  5119  Ashok Kumar
2.  5005  R Sankararamakrishnan
3.  5009  K Subramaniam
4.  5020  Subramaniam Ganesh
5.  5023  Balaji Prakash
6.  5103  Dhirendra S Katti

ASSISTANT PROFESSOR    (Rs.12000-420-18300)

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

CHEMICAL ENGINEERING DEPARTMENT  
SANTIONED STRENGTH : 32 
EXISTING STRENGTH   : 20

PROFESSOR (Rs.18400-500-22400)

1.  3113  S K Gupta
2.  2432  Anil Kumar
3.  3314  Deepak Kunzru
4.  3064  J P Gupta
5.  3754  P K Battacharya
6.  4244  R P Chhabra
7.  4045  Ashok Khanna
8.  4562  Ashutosh Sharma
9.  4750  Goutam Deo
10. 4794  Nishith Verma

ASSOCIATE PROFESSOR    (Rs.16400-450-20000)

1.  5011  V Shankar
2.  5016  Nitin Kaistha
3.  5196  Siddharta Panda

ASSISTANT PROFESSOR    (Rs.12000-420-18300)
1. 5021 Sanjeev Garg  
2. 5106 Animangsu Ghatak  
3. 5114 Yogesh Moreshwar Joshi  
4. 5175 Jayant K Singh  
5. 5208 Pankaj A Apte  
6. 5298 Raj Ganesh S Pala  
7. 5303 Sri Sivakumar  

<table>
<thead>
<tr>
<th>Professor (Rs.18400-500-22400)</th>
</tr>
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<tbody>
<tr>
<td>1. 3827 N Sathyamurthy</td>
</tr>
<tr>
<td>2. 3791 S Sarkar</td>
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<tr>
<td>3. 3990 B D Gupta</td>
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<tr>
<td>4. 4008 Y D Vankar</td>
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<td>5. 4325 T K Chandrashekar</td>
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<td>6. 4394 V Chandrasekhar</td>
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<td>7. 4448 R N Mukherjee</td>
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<td>8. 4462 P K Bharadwaj</td>
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<td>9. 4047 N S Gajbhiye</td>
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<td>10. 3112 P Gupta Bhaya</td>
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<td>11. 4460 S Manogaran</td>
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<td>12. 4583 Veejendra K Yadav</td>
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<td>13. 4596 Vinod K Singh</td>
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<td>14. 4676 Amalendu Chandra</td>
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<td>15. 4746 Faiz Ahmed Khan</td>
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<td>16. 4759 S S Manoharan</td>
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<td>17. 4789 Sandeep Verma</td>
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<td>18. 4816 J N Moorthy</td>
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<th>Associate Professor (Rs.16400-450-20000)</th>
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<tbody>
<tr>
<td>1. 4760 K Srihari</td>
</tr>
<tr>
<td>2. 5071 Debabrata Goswami</td>
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<td>3. 4876 R Gurunath</td>
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<td>4. 5024 Manas Kumar Ghorai</td>
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<td>5. 5038 Jitendra K Bera</td>
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<td>6. 5056 M L N Rao</td>
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<th>Assistant Professor (Rs.12000-420-18300)</th>
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<tr>
<td>1. 5127 Sankar Prasad Rath</td>
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<tr>
<td>2. 5091 Anantharaman Ganapathi</td>
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<tr>
<td>3. 5236 Madhav V Ranganathan</td>
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<td>4. 5304 Nishanth N Nair</td>
</tr>
</tbody>
</table>
5. 5305 Pratik Sen

CIVIL ENGINEERING DEPARTMENT  SANCED STRENGTH :  33
EXISTING STRENGTH :  29

PROFESSOR (Rs.18400-500-22400)
1. 3462 Ashwini Kumar
2. 4068 P K Basudhar
3. 4209 Sudhir K Jain
4. 4399 Sarvesh Chandra
5. 4546 Bithin Datta
6. 4295 Vinod Tare
7. 4586 V K Gupta
8. 4464 S K Chakrabarti
9. 4799 Mukesh Sharma
10. 4657 C V R Murty
11. 4662 Onkar Dikshit
12. 463 Partha Chakroborty
13. 4695 Rajiv Sinha
14. 4690 Sudhir Misra
15. 4798 Rajesh Srivastava
16. 4775 Purnendu Bose

ASSOCIATE PROFESSOR (Rs.16400-450-20000)
1. 4784 Soumyen Guha
2. 4793 Ashu Jain
3. 4995 Durgesh C Rai
4. 4871 Animesh Das
5. 4978 Javed N Malik
6. 5026 Bharat Lohani
7. 5057 Sachidanand Tripathi
8. 5079 Pranab Kumar Mohapatra

ASSISTANT PROFESSOR  (Rs.12000-420-18300)
1. 5152 Amit Prashant
2. 5037 Nihar Ranjan Patra
3. 5192 Tarun Gupta
4. 5230 Priyanka Ghosh
5. 5307 Debajyoti Paul

COMPUTER SCIENCE & ENGINEERING  SANCED STRENGTH :  18
EXISTING STRENGTH :  19 + 2 HT
PROFESSOR (Rs.18400-500-22400)

1.  *3858 S G Dhande
2.   *3541 R M K Sinha
3.  3972 Somenath Biswas
4.  4297 H C Karnick
5.  4370 T V Prabhakar
6.  4563 S K Aggarwal
7.  4490 Sanjeev Saxena
8.  4628 Rajat Moona
9.  4754 Manindra Agrawal
10. 4627 Amitabha Mukerjee
11. 4300 Ratan Kumar Ghosh
12. 4385 Phalguni Gupta
13. 4645 Aji K Jain
14. 4668 Dheeraj Sanghi
15. 4762 Sumit Ganguly
16. 5010 Shashank K Mehta

ASSOCIATE PROFESSOR (Rs.16400-450-20000)

1 4934 Anil Seth

ASSISTANT PROFESSOR (Rs.12000-420-18300)

1.  5112 Mainak Chaudhuri
2.  5197 Surender Baswana
3.  5222 Peeyush P Kurur
4.  5268 Arnab Bhattacharya

ELECTRICAL ENGINEERING

SANCTIONED STRENGTH : 53
EXISTING STRENGTH : 34 + 2 HT

PROFESSOR (Rs.18400-500-22400)

1.  *3541 R M K Sinha
2.  3927 Avinash Joshi
3.  4326 M Sachidananda
4.  4495 S C Srivastava
5.  4667 Anjan Kumar Ghosh
6.  4486 Prem Kumar Kalra
7.  4691 Shafi Qureshi
8.  3873 (Ms) Sumana Gupta
9.  4372 Govind Sharma
10.  *4687 Utpal Das
11.  4566 A K Dutta
12.  3999 Joseph John
13.  4652 Animesh Biswas
<table>
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<td>Pradip Sircar</td>
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<tr>
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<td>4670</td>
<td>Baquer Mazhari</td>
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<td>16</td>
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<td>S Umesh</td>
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<td>S N Singh</td>
</tr>
<tr>
<td>20</td>
<td>4776</td>
<td>Shyama P Das</td>
</tr>
</tbody>
</table>

ASSOCIATE PROFESSOR (Rs.16400-450-20000)

<table>
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<td>Yatindra N Singh</td>
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<td>K Vasudevan</td>
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<td>5</td>
<td>5013</td>
<td>A R Harish</td>
</tr>
<tr>
<td>6</td>
<td>5113</td>
<td>S Sunder Kumar Iyer</td>
</tr>
</tbody>
</table>

ASSISTANT PROFESSOR (Rs.12000-420-18300)

<table>
<thead>
<tr>
<th>No.</th>
<th>Code</th>
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<tr>
<td>1</td>
<td>5012</td>
<td>Parthasarathi Sensarma</td>
</tr>
<tr>
<td>2</td>
<td>5015</td>
<td>(Ms) Nandini Gupta</td>
</tr>
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<td>3</td>
<td>5111</td>
<td>Adrish Banerjee</td>
</tr>
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<td>4</td>
<td>5162</td>
<td>Ramprasad Potluri</td>
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<td>Santanu K Mishra</td>
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<td>Kumar Vaibhav Srivastava</td>
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<td>Md Jaleel Akhtar</td>
</tr>
<tr>
<td>10</td>
<td>5327</td>
<td>Nishchal Kumar Verma</td>
</tr>
</tbody>
</table>

HUMANITIES & SOCIAL SCIENCES

SANTIONED STRENGTH : 31
EXISTING STRENGTH : 25+2

PROFESSOR (Rs.18400-500-22400)

<table>
<thead>
<tr>
<th>No.</th>
<th>Code</th>
<th>Name</th>
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<tbody>
<tr>
<td>1</td>
<td>3838</td>
<td>(Ms) Lilavati Krishnan</td>
</tr>
<tr>
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<td>3989</td>
<td>Binayak Rath</td>
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<td>A K Sharma</td>
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<td>K K Saxena</td>
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<td>(Ms) Achla M Raina</td>
</tr>
<tr>
<td>11</td>
<td>4702</td>
<td>(Ms) Shikha Dixit</td>
</tr>
</tbody>
</table>
ASSOCIATE PROFESSOR  (Rs.16400-450-20000)

1. 4773 Munmun Jha
2. 4957 (Ms) Suchitra Mathur
3. 5076 T Ravichandran
4. 5310 Praveen Kulshrestha

ASSISTANT PROFESSOR  (Rs.12000-420-18300)

1. 4927 (Ms) Mini Chandran
2. 5075 P M Prasad
3. 5078 Sanjay Kumar Singh
4. 5077 Amman Madan
5. 5181 Braj Bhusan
6. *4976 Satyaki Roy
7. 5231 Kumar Ravi Priya
8. 5270 Sarani Saha
9. 5296 Somesh Kumar Mathur

LECTURER  (Rs.10000-325-15200)

1. *5183 (Ms) Koumudi Prakash Patil
2. 5237 A V Ravi Shankar Sarma
3. 5287 Anindita Chakrabarti

INDUSTRIAL & MANAGEMENT ENGINEERING  SANCTIONED STRENGTH :  18
EXISTING STRENGTH :  13

PROFESSOR  (Rs.18400-500-22400)

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  (Rs.16400-450-20000)

1. 4865 (Ms) Veena Bansal
ASSISTANT PROFESSOR   (Rs.12000-420-18300)

1. 4968 Anoop Singh
2. 5073 Raghu Nandan Sengupta
3. 5142 Peeyush Mehta
4. 5147 B V Phani
5. 5182 (Ms) Runa Sarkar

MATERIALS & METALLURGICAL ENGINEERING

SANTIONED STRENGTH : 32
EXISTING STRENGTH : 20

PROFESSOR   (Rs.18400-500-22400)

1. 1932 S P Mehrotra
2. 3845 R C Sharma
3. 3763 R K Dube
4. 4182 Brahma Deo
5. 4245 S C Koria
6. 4382 Dipak Mazumdar
7. 4565 Rajiv Shekhar
8. 4597 Sandeep Sangal
9. 4571 R Balasubramaniam
10. 4665 Barada K Mishra
11. 4790 Deepak Gupta
12. 4796 (Ms) Monica Katiyar

ASSOCIATE PROFESSOR    (Rs.16400-450-20000)

1. 4919 Anish Upadhyaya
2. 4977 Bikaramjit Basu

ASSISTANT PROFESSOR    (Rs.12000-420-18300)

1. 5034 Ashish Garg
2. 5072 Gauthama
3. 5269 Kallol Mondal.
4. 5273 Krishanu Biswas
5. 5289 Anandh Subramaniam
6. 5297 Kantesh Balani

MATHEMATICS & STATISTICS DEPARTMENT

SANTIONED STRENGTH : 36
EXISTING STRENGTH : 33

PROFESSOR   (Rs.18400-500-22400)

1. 3407 R K S Rathore
2. 3772 (Ms) Manjul Gupta

47
3.  3739  M K Kadlabajoo  
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  

ASSOCIATE PROFESSOR  (Rs.16400-450-20000)  
1.  4803  Alok Kumar Maloo  
2.  4781  (Ms) Mohua Banerjee  
3.  4822  G Santhanam  
4.  4832  (Mrs) Rama Rawat  
5.  4870  S Ghorai  
6.  5029  Joydeep Dutta  
7.  5153  Amit Mitra  

ASSISTANT PROFESSOR  (Rs.12000-420-18300)  
1.  4537  (Ms) Aparna Dar  
2.  4930  Swagato Kumar Ray  
3.  5036  Shalabh  
4.  5121  (Ms) Nandini Nilakantan  
5.  5189  Parasar Mohanty  
6.  5229  Sharmishta Mitra  
7.  5235  Sudipta Dutta  
8.  5291  Malay Banerjee  
9.  5314  Sameer Laxman Chavan  

LECTURER  (Rs.10000-325-15200)  
1.  5128  Shital Rajeshbhai Patel  

MECHANICAL ENGINEERING  
SANCTIONED STRENGTH : 42  
EXISTING STRENGTH : 35 + 3 HT  

PROFESSOR  (Rs.18400-500-22400)  
1.  2265  A K Mallik  
2.  *3858  S G Dhande
3. 3759 B N Banerjee
4. 3862 M S Kalra
5. 4093 V K Jain
6. 4224 N N Kishore
7. 4286 Himanshu Hatwal
8. 4210 P M Dixit
9. 4398 K Muralishar
10. 4560 Gautam Biswas
11. 4061 Prabhat Munshi
12. 4810 B P Pundir
13. 4452 S K Choudhury
14. 4459 N S Vyas
15. 4482 Vinayak Eswaran
16. 4650 Kalyanmoy Deb
17. 4288 P S Ghoshdastidar
18. 4788 Subrata Sarkar
19. 4801 P K Panigrahi

ASSOCIATE PROFESSOR (Rs.16400-450-20000)

1. 4779 Bhaskar Dasgupta
2. 4823 V Venkata Reddy
3. 4890 Bishakh Bhattacharya
4. 4931 Avinash Kumar Agarwal
5. 5014 Sumit Basu
6. *4928 Kamal K Kar
7. 5022 Ashish Datta
8. 5054 P Venkitanarayanan

ASSISTANT PROFESSOR (Rs.12000-420-18300)

1. 4956 Anupam Saxena
2. 5074 J Ramkumar
3. 5120 Sameer Khandekar
4. 5122 Arun Kumar Saha
5. *5129 Sivasambu Mahesh
6. 5199 Ishan Sharma
7. 5234 Shantanu Bhattacharya
8. 5267 Basant Lal Sharma
9. 5294 Malay Kumar Das
10. 5299 Pankaj Wahi
11. 5300 Anurag Gupta

PHYSICS

SANCTIONED STRENGTH : 38
EXISTING STRENGTH : 31 + 4 HT

PROFESSOR (Rs.18400-500-22400)
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<td>M K Harbola</td>
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**ASSOCIATE PROFESSOR (Rs.16400-450-20000)**

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<td>3</td>
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<td>V Subrahmanyam</td>
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**ASSISTANT PROFESSOR (Rs.12000-420-18300)**

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<td>(Ms) Sutapa Mukherjee</td>
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<td>Dipankar Chakrabarti</td>
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**LECTURER (Rs.10000-325-15200)**

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**MATERIALS SCIENCE PROGRAMME**

**SANTIONED STRENGTH : 06**

**EXISTING STRENGTH : 01 + 4 HT**
PROFESSOR (Rs.18400-500-22400)
1. 3762 Jitendra Kumar
2. *4064 Keshawa Shahi
3. *4559 Y N Mohapatra

ASSOCIATE PROFESSOR (Rs.16400-450-20000)
1. *4928 Kamal K Kar

ASSISTANT PROFESSOR (Rs.12000-420-18300)
1. *5167 Rajeev Gupta

LASER TECHNOLOGY PROGRAMME
SANTIONED STRENGTH:
EXISTING STRENGTH: + 02 HT

PROFESSOR (Rs.18400-500-22400)
1. *4687 Utpal Das

ASSOCIATE PROFESSOR (Rs.16400-450-20000)
1. *4679 (Ms) Asima Pradhan

NUCLEAR ENGG & TECHNOLOGY PROGRAMME
SANTIONED STRENGTH:
EXISTING STRENGTH: --

PROFESSOR (Rs.18400-500-22400)
--

DESIGN PROGRAMME
SANTIONED STRENGTH
EXISTING STRENGTH: +2 HT

ASSISTANT PROFESSOR (Rs.12000-420-18300)
1. *4976 Satyaki Roy

LECTURER (Rs.10000-325-15200)
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
<table>
<thead>
<tr>
<th>Sl No.</th>
<th>Name &amp; Designation</th>
<th>Department/Programme</th>
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<tbody>
<tr>
<td>1.</td>
<td>4983 Alok Gupta, Research Engineer Gr-I</td>
<td>A E</td>
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<tr>
<td>2.</td>
<td>4616 Sushmit Sen, Senior Research Engineer</td>
<td>Robotics</td>
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<td>3.</td>
<td>4824 Anjali V Kulkarni, Senior Research Engineer</td>
<td>Mechatronics</td>
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<td>4.</td>
<td>5118 Ajay Misra, Senior Research Engineer</td>
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<td>4078 Chaturi Singh, Senior Research Engineer</td>
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<td>5278 Neeru Chhabra, Senior Research Engineer</td>
<td>E E</td>
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<td>4318 Amitabha Roy, Principal Research Engineer</td>
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<td>3238 Vishal Saxena, Principal Research Engineer</td>
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<td>4807 Brajesh Chandra, Principal Research Engineer</td>
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<td>4056 V Raghuram, Principal Research Engineer</td>
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<td>4955 Raghuvir Singh Anand, Principal Research Engineer</td>
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<td>4921 Aurobinda Chatterjee, Principal Research Engineer</td>
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<td>4015 A L Bhavsar, Scientific Officer Gr.I</td>
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<td>4815 K K Bajpai, Senior Scientific Officer</td>
<td>C E</td>
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<td>16.</td>
<td>3780 Sanjay Gupta, Chief Scientific Officer</td>
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<td>17.</td>
<td>4090 Prem Chand, Chief Scientific Officer</td>
<td>EPR/PHY</td>
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<td>2028 H P S Parihar, Computer Engineer Gr.II</td>
<td>C C</td>
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<td>5285 Saikat Kira, Computer Engineer Gr II</td>
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<td>4578 Md Aftab Alam, Senior Computer Engineer</td>
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<td>4820 Gopesh Tewari, Senior Computer Engineer</td>
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<td>5019 Soma Sengupta, Senior Computer Engineer</td>
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<td>4721 Md K Ahmad, Senior Computer Engineer</td>
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<td>4920 Anju Tewari, Senior Computer Engineer</td>
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<td>2035 N P Roberts, Principal Computer Engineer</td>
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<td>4817 Navpreet Singh, Principal Computer Engineer</td>
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<td>4541 B M Shukla, Principal Computer Engineer</td>
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<td>31.</td>
<td>5030 Vipul Mathur, Aircraft Maintenance Engineer</td>
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<td>5312 V D Shrivastava, Librarian</td>
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<td>3969 Umed Singh, Assistant Librarian</td>
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<td>3974 (Ms) Neelam Prasad, Assistant Librarian</td>
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<td>5148 S K Vijaianand, Assistant Librarian</td>
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<td>36.</td>
<td>5157 (Ms) Maitrayee Mondal Ghosh, Assistant Librarian</td>
<td>Kelkar Lib</td>
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</table>
Academic Programme

EDUCATIONAL GOALS

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

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

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

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

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

TEACHING PROGRAMMES

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

Undergraduate Programme
The four-year undergraduate programme consists of two parts having duration of four semesters each. The first part is the Core programme common to all students, and is carefully planned to give the students a strong base of basic education in mathematics, physics, chemistry, engineering sciences, technical arts, humanities and social sciences. The second part of the undergraduate programme consists of the Professional courses and a project in the chosen branch of specialization. At the Bachelor’s level, we have B.Tech. programs in Aerospace, Biological Sciences & Bio Engg., Chemical, Civil, Computer Science, Electrical, Metallurgy and Mechanical Engineering. We also have integrated M.Sc. programs in Physics, Chemistry, Mathematics and Statistics. From July 2005, we have started an integrated M.Sc. program in Economics. The students for these programs are selected through JEE and usually they are of very high quality.

Two-Year M.Sc. Programme
There are programs for M. Sc. (2 years) in Physics, Chemistry, Mathematics and Statistics, where the students with B.Sc. (Hons.) background are chosen through an all-India entrance examination known as JAM. These programmes have been largely responsible for the scientific manpower in Indian research instituted and universities.
Postgraduate Programme
The postgraduate programme is intended to prepare students to enter their professions with a perspective and breadth of knowledge related to the principal divisions of their respective fields of specialization through courses and specialized research experience. A postgraduate student is typically enrolled for three or four courses each semester until the student advances to a point where the principal requirements of the programme left to be fulfilled are research and thesis.

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

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

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

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

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

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

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

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

Research Environment in IIT Kanpur
IIT Kanpur has demonstrated its excellence in research in many areas. To cite a few areas: Finite Element Methods Using Domain Decomposition, Flow Induced Vibrations, Wind Tunnel Testing of Large Scale Prototypes, Computational Chemistry, Nano-materials and Nano-technology, Geometric Optimization of Large Organic Systems, Genomics and Bio-Informatics, Electronic Structure Calculations, Aggregation and Etching, Molecular Dynamics, Thin Film Dynamics, Optical / EM Field Calculations, Computational Fluid Dynamics and Heat Transfer,
The most recent initiative of IIT Kanpur has been the Formation of a Strong Research Group in the areas of Nanoscience and Nanotechnology.

Curriculum Development and Monitoring Committee (CDMC)

The Curriculum Development and Monitoring Committee (CDMC) has been formed in order to monitor the curriculum continually. The Committee will solicit a report annually from all Core Course Subcommittees regarding their respective core courses. These reports include all relevant information pertaining to the teaching of the courses, tutorials, laboratories and other aspects. The Committee will work over the period with effect from 01/04/2007 for a tenure of 2 years.

The following is the composition of the CDMC:

- Prof. R K Dube (MME) Chairman
- Prof. S Roychoudhuri (Physics) Co Chairman
- Prof. Sumit Ganguli (CSE) Member
- Prof. A K Mallik (ME) 
- Prof. L Krishnan (HSS) 
- Prof. Santosh Kr. Gupta (ChE) 
- Prof. Alok Datta (EE) 
- Prof. Sanjay Mittal (AE) 
- Prof. D Kundu (Maths & Stat.) 

New Initiatives

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

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

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

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

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

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

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

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

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

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

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

Outreach and National Program on Technology Enhanced Learning

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

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

ADMISSION

Undergraduate

Admissions for all the B.Tech. M.Sc. (5-year integrated) and B.Tech.-M.Tech. (Dual Degree) programmes at IIT Kanpur for the academic session 2008-2009 were made by the Joint Admission Committee for all IITs and IT-BHU.

The Joint Entrance Examination (JEE) -2008 was held on April 12, 2008. 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>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Programmes</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>B.Tech.</td>
<td>Aerospace Engg.</td>
</tr>
</tbody>
</table>

57
Two-Year M.Sc. Programme
Admissions to the 2-year M.Sc. and M.Sc.-Ph.D. (Dual Degree) programmes were made on the basis of JAM performance. Admission statistics for the M.Sc. (2 year) and M.Sc.-Ph.D. (Dual Degree) Physics programmes during 2008-2009 are as under:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Department/Group</th>
<th>Numbers of Admission Offered</th>
<th>Actual Number of Students Joined</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.Sc. (2-year)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Chemistry</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>2</td>
<td>Mathematics</td>
<td>27</td>
<td>24</td>
</tr>
<tr>
<td>3</td>
<td>Physics</td>
<td>21</td>
<td>20</td>
</tr>
<tr>
<td>4</td>
<td>Statistics</td>
<td>23</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>102</td>
<td>95</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>10</td>
<td>08</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>10</td>
<td>08</td>
</tr>
</tbody>
</table>

Post Graduate
The number of students admitted to the Postgraduate Programme in the First and Second Semesters 2008-2009 is given below:

ENGINEERING

<table>
<thead>
<tr>
<th>Department / Group</th>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerospace Engg.</td>
<td>23</td>
<td>02</td>
</tr>
<tr>
<td>B.S.B.E.</td>
<td>10</td>
<td>07</td>
</tr>
<tr>
<td>Department / Group</td>
<td>First Semester</td>
<td>Second Semester</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>----------------</td>
<td>-----------------</td>
</tr>
<tr>
<td></td>
<td>Ph.D.</td>
<td>Ph.D.</td>
</tr>
<tr>
<td>Chemistry</td>
<td>33</td>
<td>18</td>
</tr>
<tr>
<td>Mathematics</td>
<td>12</td>
<td>03</td>
</tr>
<tr>
<td>Physics</td>
<td>08</td>
<td>05</td>
</tr>
<tr>
<td>M.Sc.-Ph.D. Dual Degree in Physics</td>
<td>-</td>
<td>05</td>
</tr>
<tr>
<td>H.S.S.</td>
<td>03</td>
<td>03</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>56</strong></td>
<td><strong>34</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>484</strong></td>
<td><strong>48</strong></td>
</tr>
</tbody>
</table>

The total department/programme wise strength of the Post Graduate students during the year 2008-2009 is given below:

**ENGINEERING**

<table>
<thead>
<tr>
<th>Department / Group</th>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerospace Engg.</td>
<td>45</td>
<td>33</td>
</tr>
<tr>
<td>B.S.B.E.</td>
<td>25</td>
<td>62</td>
</tr>
<tr>
<td>Chemical Engg.</td>
<td>74</td>
<td>47</td>
</tr>
<tr>
<td>Civil Engg.</td>
<td>88</td>
<td>34</td>
</tr>
<tr>
<td>Computer Sc. &amp; Engg.</td>
<td>80</td>
<td>15</td>
</tr>
<tr>
<td>Design (M.Des.)</td>
<td>31</td>
<td>-</td>
</tr>
<tr>
<td>Electrical Engg.</td>
<td>145</td>
<td>58</td>
</tr>
<tr>
<td>Mechanical Engg.</td>
<td>99</td>
<td>70</td>
</tr>
<tr>
<td>Materials &amp; Met. Engg.</td>
<td>42</td>
<td>30</td>
</tr>
<tr>
<td>I.M.E.</td>
<td>24</td>
<td>22</td>
</tr>
<tr>
<td>Laser Technology</td>
<td>09</td>
<td>-</td>
</tr>
<tr>
<td>Material Science</td>
<td>27</td>
<td>11</td>
</tr>
<tr>
<td>N.E.T.</td>
<td>19</td>
<td>02</td>
</tr>
<tr>
<td>E.E.M.</td>
<td>31</td>
<td>-</td>
</tr>
<tr>
<td>M.B.A. (IME)</td>
<td>98</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>837</strong></td>
<td><strong>384</strong></td>
</tr>
</tbody>
</table>
SCIENTES

<table>
<thead>
<tr>
<th>Department / Group</th>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ph.D.</td>
<td>Ph.D.</td>
</tr>
<tr>
<td>Chemistry</td>
<td>175</td>
<td>179</td>
</tr>
<tr>
<td>Mathematics</td>
<td>68</td>
<td>64</td>
</tr>
<tr>
<td>Physics</td>
<td>49</td>
<td>54</td>
</tr>
<tr>
<td>M.Sc.-Ph.D. Dual Degree in Physics</td>
<td>34</td>
<td>36</td>
</tr>
<tr>
<td>H.S.S.</td>
<td>49</td>
<td>48</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>375</strong></td>
<td><strong>381</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>1596</strong></td>
<td><strong>1516</strong></td>
</tr>
</tbody>
</table>

Strength of Undergraduate and Postgraduate Students during 2008 – 2009 – I:

<table>
<thead>
<tr>
<th>Department / Group</th>
<th>UG (B.Tech M.Sc.-5 Yr.)</th>
<th>B.Tech.-M.Tech (Dual Degree)</th>
<th>M.Sc.- 2-Yr.</th>
<th>M.Sc.-Ph.D. Dual Degree</th>
<th>M.Tech</th>
<th>Ph.D</th>
<th>M.Sc.-Ph.D Dual Degree</th>
<th>Total (UG+PG)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerospace</td>
<td>99</td>
<td>45</td>
<td>-</td>
<td>-</td>
<td>45</td>
<td>33</td>
<td>-</td>
<td>222</td>
</tr>
<tr>
<td>B.S.B.E.</td>
<td>102</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>25</td>
<td>62</td>
<td>-</td>
<td>189</td>
</tr>
<tr>
<td>Chemical</td>
<td>164</td>
<td>56</td>
<td>-</td>
<td>-</td>
<td>74</td>
<td>47</td>
<td>-</td>
<td>341</td>
</tr>
<tr>
<td>Chemistry</td>
<td>59</td>
<td>-</td>
<td>54</td>
<td>-</td>
<td>175</td>
<td>-</td>
<td>-</td>
<td>288</td>
</tr>
<tr>
<td>Civil</td>
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<td>-</td>
<td>88</td>
<td>34</td>
<td>-</td>
<td>406</td>
</tr>
<tr>
<td>C.S.E.</td>
<td>149</td>
<td>139</td>
<td>-</td>
<td>-</td>
<td>80</td>
<td>15</td>
<td>-</td>
<td>383</td>
</tr>
<tr>
<td>Economics</td>
<td>75</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>75</td>
</tr>
<tr>
<td>Design (M.Des.)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>31</td>
<td>-</td>
<td>-</td>
<td>31</td>
</tr>
<tr>
<td>E.E.</td>
<td>274</td>
<td>113</td>
<td>-</td>
<td>-</td>
<td>145</td>
<td>58</td>
<td>-</td>
<td>590</td>
</tr>
<tr>
<td>H.S.S.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>49</td>
<td>-</td>
<td>-</td>
<td>49</td>
</tr>
<tr>
<td>Math.</td>
<td>137</td>
<td>-</td>
<td>50</td>
<td>-</td>
<td>-</td>
<td>63</td>
<td>-</td>
<td>250</td>
</tr>
<tr>
<td>Stat.</td>
<td>-</td>
<td>-</td>
<td>36</td>
<td>-</td>
<td>-</td>
<td>05</td>
<td>-</td>
<td>41</td>
</tr>
<tr>
<td>M.E.</td>
<td>205</td>
<td>96</td>
<td>-</td>
<td>-</td>
<td>99</td>
<td>70</td>
<td>-</td>
<td>470</td>
</tr>
<tr>
<td>M.M.E.</td>
<td>236</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>42</td>
<td>30</td>
<td>-</td>
<td>308</td>
</tr>
<tr>
<td>Physics</td>
<td>79</td>
<td>-</td>
<td>38</td>
<td>16</td>
<td>49</td>
<td>34</td>
<td>-</td>
<td>216</td>
</tr>
<tr>
<td>I.M.E.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>24</td>
<td>22</td>
<td>-</td>
<td>46</td>
</tr>
<tr>
<td>Laser Tech.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>09</td>
<td>-</td>
<td>-</td>
<td>09</td>
</tr>
<tr>
<td>M.S.P.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>27</td>
<td>11</td>
<td>-</td>
<td>38</td>
</tr>
<tr>
<td>N.E.T.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>19</td>
<td>02</td>
<td>-</td>
<td>21</td>
</tr>
<tr>
<td>E.E.M.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>31</td>
<td>-</td>
<td>-</td>
<td>31</td>
</tr>
<tr>
<td>DIIT (EE)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>M.B.A. (I.M.E.)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>98</td>
<td>-</td>
<td>-</td>
<td>98</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1799</strong></td>
<td><strong>513</strong></td>
<td><strong>178</strong></td>
<td><strong>16</strong></td>
<td><strong>837</strong></td>
<td><strong>725</strong></td>
<td><strong>34</strong></td>
<td><strong>4102</strong></td>
</tr>
</tbody>
</table>

GRADUATION

During the year 2008-2009, 933 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. 299
### M.Sc. (2 yr. & 5 yr.)  68 & 39
### B.Tech.-M.Tech. (Dual)  52
### MBA  45
### M.Tech.  322
### M.Des.  12
### Ph.D.  96
**Total:**  933

### COURSES OFFERED

The following Table gives a picture of the courses offered during 2008-2009 at the undergraduate as well as postgraduate 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>22</td>
<td>29</td>
<td>05</td>
<td>56</td>
</tr>
<tr>
<td>Aerospace Engineering</td>
<td>16</td>
<td>21</td>
<td>06</td>
<td>43</td>
</tr>
<tr>
<td>B. S. B. E.</td>
<td>12</td>
<td>13</td>
<td>-</td>
<td>25</td>
</tr>
<tr>
<td>Chemical Engineering</td>
<td>20</td>
<td>20</td>
<td>02</td>
<td>42</td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>26</td>
<td>24</td>
<td>01</td>
<td>51</td>
</tr>
<tr>
<td>Computer Science &amp; Engineering</td>
<td>18</td>
<td>24</td>
<td>03</td>
<td>45</td>
</tr>
<tr>
<td>Economics</td>
<td>07</td>
<td>10</td>
<td>-</td>
<td>17</td>
</tr>
<tr>
<td>Design</td>
<td>02</td>
<td>03</td>
<td>-</td>
<td>05</td>
</tr>
<tr>
<td>Electrical Engineering</td>
<td>29</td>
<td>30</td>
<td>05</td>
<td>64</td>
</tr>
<tr>
<td>Mechanical Engineering</td>
<td>29</td>
<td>34</td>
<td>05</td>
<td>68</td>
</tr>
<tr>
<td>Materials &amp; Metallurgical Engineering</td>
<td>13</td>
<td>18</td>
<td>02</td>
<td>33</td>
</tr>
<tr>
<td>Chemistry</td>
<td>22</td>
<td>26</td>
<td>-</td>
<td>48</td>
</tr>
<tr>
<td>Mathematics</td>
<td>30</td>
<td>28</td>
<td>-</td>
<td>58</td>
</tr>
<tr>
<td>Physics</td>
<td>24</td>
<td>31</td>
<td>04</td>
<td>59</td>
</tr>
<tr>
<td>Humanities &amp; Social Sciences</td>
<td>21</td>
<td>14</td>
<td>02</td>
<td>37</td>
</tr>
<tr>
<td>Industrial &amp; Management Engineering</td>
<td>09</td>
<td>11</td>
<td>-</td>
<td>20</td>
</tr>
<tr>
<td>Nuclear Engineering &amp; Technology</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Materials Science Program</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Laser Technology Program</td>
<td>01</td>
<td>-</td>
<td>-</td>
<td>01</td>
</tr>
<tr>
<td>CPA</td>
<td>02</td>
<td>02</td>
<td>-</td>
<td>04</td>
</tr>
</tbody>
</table>

**POST GRADUATE LEVEL**

<table>
<thead>
<tr>
<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>17</td>
<td>15</td>
<td>32</td>
</tr>
<tr>
<td>Chemical Engineering</td>
<td>15</td>
<td>13</td>
<td>28</td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>18</td>
<td>21</td>
<td>39</td>
</tr>
<tr>
<td>Computer Science &amp; Engineering</td>
<td>11</td>
<td>15</td>
<td>26</td>
</tr>
<tr>
<td>Design (M.Des.)</td>
<td>06</td>
<td>05</td>
<td>11</td>
</tr>
<tr>
<td>Electrical Engineering</td>
<td>22</td>
<td>20</td>
<td>42</td>
</tr>
<tr>
<td>Environmental Engg. &amp; Management</td>
<td>04</td>
<td>03</td>
<td>07</td>
</tr>
</tbody>
</table>
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 2008-2009 (upto May, 2009)

<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>581</td>
<td>505</td>
<td>528</td>
<td>496</td>
<td>202</td>
<td>2312</td>
</tr>
<tr>
<td>2</td>
<td>Students strength at the beginning of the 2nd semester</td>
<td>576</td>
<td>500</td>
<td>526</td>
<td>493</td>
<td>175</td>
<td>2270</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>08</td>
<td>06</td>
<td>02</td>
<td>01</td>
<td>-</td>
<td>17</td>
</tr>
<tr>
<td>5</td>
<td>Number of students graduated</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>299</td>
<td>91</td>
<td>390</td>
</tr>
<tr>
<td>6</td>
<td>Number of students dismissed due to poor performance in 1st and 2nd semester</td>
<td>02</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>02</td>
</tr>
</tbody>
</table>

The following statement shows promotion and detention of M.Sc.(2-year) and M.Sc.(Dual Degree) students in the academic year 2008-2009 (upto May, 2009)

<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>102</td>
<td>92</td>
<td>194</td>
</tr>
<tr>
<td>2</td>
<td>Students strength at the beginning of the 2nd Sem.</td>
<td>97</td>
<td>82</td>
<td>179</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>-</td>
<td>01</td>
<td>01</td>
</tr>
<tr>
<td>4</td>
<td>Number of students graduated in 1st semester</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Number of students graduated in 2nd semester</td>
<td>-</td>
<td>68</td>
<td>63</td>
</tr>
</tbody>
</table>
Following is the department-wise break-up of students who were awarded the degree at XLI Convocation held on 30-05-2009. Mr. Jeet S Bindra, President Chevron global Manufacturing is the Chief Guest at the Convocation:

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>AERO ENGG.</td>
<td>14</td>
<td>07</td>
<td>-</td>
<td>21</td>
<td>-</td>
<td>-</td>
<td>16</td>
<td>08</td>
<td>24</td>
<td>45</td>
</tr>
<tr>
<td>2.</td>
<td>BSBE</td>
<td>23</td>
<td>-</td>
<td>-</td>
<td>23</td>
<td>-</td>
<td>-</td>
<td>17</td>
<td>02</td>
<td>19</td>
<td>42</td>
</tr>
<tr>
<td>3.</td>
<td>CHEM. ENGG.</td>
<td>34</td>
<td>10</td>
<td>-</td>
<td>44</td>
<td>-</td>
<td>-</td>
<td>25</td>
<td>04</td>
<td>29</td>
<td>73</td>
</tr>
<tr>
<td>4.</td>
<td>CHEMISTRY</td>
<td>-</td>
<td>-</td>
<td>11</td>
<td>23</td>
<td>34</td>
<td>-</td>
<td>-</td>
<td>26</td>
<td>26</td>
<td>60</td>
</tr>
<tr>
<td>5.</td>
<td>CIVIL ENGG.</td>
<td>48</td>
<td>02</td>
<td>-</td>
<td>50</td>
<td>-</td>
<td>-</td>
<td>37</td>
<td>05</td>
<td>42</td>
<td>92</td>
</tr>
<tr>
<td>6.</td>
<td>COMP.Sc.&amp; ENGG.</td>
<td>33</td>
<td>12</td>
<td>-</td>
<td>45</td>
<td>-</td>
<td>-</td>
<td>44</td>
<td>01</td>
<td>45</td>
<td>90</td>
</tr>
<tr>
<td>7.</td>
<td>DESIGN PROG.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>12</td>
<td>-</td>
<td>-</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>8.</td>
<td>ELECT. ENGG.</td>
<td>51</td>
<td>14</td>
<td>-</td>
<td>65</td>
<td>-</td>
<td>-</td>
<td>73</td>
<td>08</td>
<td>81</td>
<td>146</td>
</tr>
<tr>
<td>9.</td>
<td>ENV. ENGG.&amp; MGMT</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>08</td>
<td>-</td>
<td>08</td>
<td>08</td>
</tr>
<tr>
<td>10.</td>
<td>HUMANITIES &amp; SOC. SCs.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>05</td>
<td>05</td>
<td>05</td>
</tr>
<tr>
<td>11.</td>
<td>INDUSTRIAL &amp; MGMT. ENGG.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>45</td>
<td>-</td>
<td>11</td>
<td>-</td>
<td>56</td>
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<tr>
<td>12.</td>
<td>LASER TECH.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>04</td>
<td>-</td>
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<td>04</td>
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<tr>
<td>13.</td>
<td>MATERIALS &amp; MET. ENGG.</td>
<td>47</td>
<td>-</td>
<td>-</td>
<td>47</td>
<td>-</td>
<td>-</td>
<td>21</td>
<td>06</td>
<td>27</td>
<td>74</td>
</tr>
<tr>
<td>14.</td>
<td>MATERIALS Sc.</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>09</td>
<td>03</td>
<td>12</td>
<td>12</td>
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<tr>
<td>15.</td>
<td>MATHEMATI</td>
<td>-</td>
<td>-</td>
<td>23</td>
<td>23</td>
<td>-</td>
<td>-</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>34</td>
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</tr>
<tr>
<td>16</td>
<td>MATHS &amp; SC COMPUTING</td>
<td>-</td>
<td>-</td>
<td>19</td>
<td>19</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>19</td>
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<tr>
<td>17</td>
<td>MECHANICAL ENGG.</td>
<td>49</td>
<td>07</td>
<td>-</td>
<td>-</td>
<td>56</td>
<td>-</td>
<td>-</td>
<td>48</td>
<td>06</td>
<td>54</td>
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<tr>
<td>18</td>
<td>NUCLEAR ENGG. &amp; TECHNOLOGY</td>
<td>-</td>
<td>-</td>
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<td>01</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>299</td>
<td>52</td>
<td>39</td>
<td>68</td>
<td>458</td>
<td>45</td>
<td>12</td>
<td>322</td>
<td>96</td>
<td>475</td>
</tr>
</tbody>
</table>
Research and Development

The Institute works tirelessly to provide state-of-the-art equipment to its faculty that would facilitate cutting-edge research in frontiers of science and technology. The research and teaching profile of the Institute is continually growing every year. As a result, the Institute is well-recognized as one of the centers of academic excellence. During 2008-2009, about 140 sponsored projects and 122 consultancy projects were undertaken by the faculty and research engineers/scientists of the Institute with a sanctioned amount of Rs. 6608 lakhs and 933 lakhs, respectively.

Our faculty members have published around 686 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.

Details of some of the major projects sanctioned during the year 2008-09 are as follows:

National Projects:

Some of the major sponsored projects undertaken by the Institute include those funded by CSIR, DST, DRDO, ARDB, DBT, MCIT, and BSNL.

- **Establishment of a Technology Business Incubator (TBI) at Indian Institute of Technology Kanpur**

  The Institute has established two new business incubators, Technology Business Incubator (TBI) & Technology Incubation and Development of Entrepreneurs (TIDE) Center. TBI is a program supported by National Science & Technology Entrepreneurship Board (NSTEDB), DST, Govt. of India, for incubation of start-ups in the areas of Science & Technology. TIDE Centre is a program supported by the Ministry of Communication & Information Technology, Govt. of India, for incubation in the areas of IT & Electronics.

  The TBI and TIDE centers are currently functioning under the umbrella of SIDBI Innovation & Incubation Centre (SIIC), which is the nodal centre for Entrepreneurship Development, Business Incubation and IPR. The technologies incubated at SIIC are high-end in multidisciplinary areas such as Ultra High Frequency RFID, Voice Recognition, Embedded Systems, High-end data acquisition sensors, Nano Materials & Geospatial technologies.

- **BSNL Telecom Centre Of Excellence:**

  Under BSNL IITK Telecom Center of Excellence (BITCOE), the Institute has received a grant of 14.5 crore. BITCOE is expected to provide a platform for research, development in India specific applications, and manpower generation in the field of telecommunications. It will have a significant impact on telecom related research at IITK.

- **Saddlery Development for Leather Sector:**

  The Institute had proved its capability for successfully implementing CAD technology for Saddle Industry. As a result, it is getting repeated requests from the Ministry of Commerce
GOI for actively participating in Modernization of Saddle Industry. During the 10th Five year plan, the Institute was awarded grants to deliver the following long term objectives:

- Establishment of Institute of International standards for saddlery.
- Development of technology for different type of saddle trees and their accessories.
- Development of various kinds of machinery used in saddlery manufacture.
- Development of database of horse anatomies and saddletree geometries.

**TCS Foundation for Research in Algorithms:**

The Institute has received a grant of Rs. 4 crores from TCS for establishing a Foundation for Research in Algorithms on campus. The aim of the Foundation is to support both pure and applied research in algorithms. Towards this end, the Foundation will organize several workshops in different areas of algorithms and also support research visits to IITK as well as other institutions.

**National Fire Facility:**

Board of Research in Nuclear Sciences, Mumbai has recently approved the creation of this facility for fire propagation and associated thermal hydraulic aspects in multiple compartments at IIT Kanpur with a total cost of Rs 5 crores. The objective of the project is to understand the fire thermal hydraulics in multiple compartments configuration with ceiling opening and large vertical opening as found in various compartments within the containment of a nuclear power plant.

**International projects:**

- **Spark Plasma Sintering of Ceramic Nanocomposites:**

  The project proposes to develop Hydroxyapatite (HAp or HA) based bioceramic composites using Spark Plasma Sintering (SPS) route. The basic aim of the proposed project is to improve the mechanical properties (hardness, fracture toughness) of hydroxyapatite without considerably affecting the biocompatibility and the density. For this purpose, varying amount of ceramic (mullite) particulates or whiskers, (upto 30 wt. %) will be incorporated in the HAp matrix. As an alternative to the conventional sintering route, this project will investigate the capability of the SPS route.

- **INDO-US Centre for Research Excellence on Fabrionics:**

  As part of the second phase of the collaboration, the INDO-US Science and Technology Forum has sanctioned a grant of Rs. 5 crores for starting the Center. The Center is a consortium of Indian researchers from IITK, IITKgp, BESU and CMRI collaborating with UIUC, UCI and Northwestern in the science, technology and selected applications of advanced fabrication. Some examples include materials and fabrication for energy storage devices, biomedical devices, micro/nano fabrication and microfluidics. The collaborative research in the Center is driven by a two-way exchange of Ph.D. students and faculty, as well as Annual Research Workshops.

- **Center for Development of Metal-Ceramic Composites:**

  The Center for microwave processing has been established under the Indo-US Public-Private Networked Joint Center Program funded by the Indo-US Science and Technology Forum (IUSSTF). One of the major research thrusts at the Center involves gaining a
fundamental understanding of the microwave-metal interaction and consolidation of a range of ferrous and non-ferrous particulate materials using microwaves.

- **INDO-US joint Center on Biomaterials for health care:**

  Biomaterials as well as their applications in artificial organs are widely recognized as an emerging area. Recent developments in the field testify to a significant progress in our attempts to develop new biomaterials. In this regard, we have received a grant for establishment of the Center. The overall objective of the proposed center is to combine the cutting edge technologies of fabrication and testing of materials science with the knowledge of biological sciences and evolve strategies to develop shaped implant materials in some of the emerging material systems for the improvement of public health. Thus, it will be a true demonstration of synergistic flow and utilization of scientific concepts, and technological expertise in an international team of recognized scientists.

- **UK-India Science Bridge Program:**

  The Institute has been awarded a highly competitive and major international collaborative research project jointly funded by Research Council UK (RCUK) and the Department of Science and Technology, (DST) India under the auspices of a newly launched this Program entitled BioPharm 2020: Entrepreneurial Opportunities for Indian and UK scientists in the Pharmaceutical and Biotechnology Industries. The grant provides funding for research and training to the tune of 1 million pounds (UK) towards extensive bilateral research and training in biomedical engineering and bio-pharma between IITK and Nottingham University, besides collaboration with IIM Bangalore in the area of supply chain management.

**Patents filed by the faculty during the financial year 2008-2009:**

National

1. A method for preparing auto capped nano particles such as CdS in continuous flow columns.
2. A method for creation of 2 and 3-dimensional micro channels of varied dimensions using replication and molding around a wire.
3. An improved lateral bipolar junction transistor (BJT) on selective buried oxide (selbox) and a method for manufacturing the same.
4. Fabrication of Jute fiber sandwich composites.
5. Controlled growth of carbon nanocones on carbon fiber(s)/fabric and method of synthesis thereof.
7. A composition and mechanism to extend life span of an organism and protection against neurodegenartive diseases.
9. Modular Unit Attachment for Performing Dry and Near-dry Electric Discharge Machining (EDM).
10. A blue organic light emitting diode and method of fabrication thereof.
11. Method of polymerization and the polymers formed thereby.
12. A device for magnetic abrasive finishing of a work piece and magnetic abrasive finishing process.
13. Polymer matrix scaffold and process for preparation thereof.
15. Rotatory abrasive flow finishing process for finishing and texturing of internal and external surfaces of hard and composite materials and an apparatus therefore.
16. A nano polymer coating and a process for coating the same on stent system.
17. Process for synthesis of sonicated hierarchal web of carbon micro-nano-fiber and applications thereof.
18. A novel 2/3-Dimensional Soft-lithography technique to formulate micro-channels and evaluation of various associated mechanical and biological phenomena.
19. A tundish adapted for reduction in residual metal losses and a method there of.
20. Optical enhancement of two-photon absorption process.
21. Antiseptic polymeric macroporous hydrogel based thin sheets containing iodine as wound dressing materials.
22. Methods and apparatus to synthesize nano-metals impregnated hierarchal web of micro/nano carbon fibers for the adsorptive and catalytic remediation in air and liquid systems.

International

1. Pathogen Resistant Transgenic Plants, Associated Nucleic Acid Molecules and Techniques involving the same.
2. Electrospinning apparatus for producing nanofibers and process thereof.
3. Process for adsorption-based separation of bioparticles from an aqueous suspension.
4. Enhancing blood flow images using computational fluid dynamics.

Major Multi-disciplinary Facilities Added during the financial year 2008-2009:

1. Facilities under the FIST Scheme of DST:

The Department of Science and Technology (DST) has a Fund for improvement of Science & Technology (FIST) scheme to build infrastructure facilities in universities and higher educational institutions. The grant under this scheme is provided for strengthening infrastructure of the identified department in teaching and research and is to be spent exclusively for the said purpose.

During 2008-2009, the Institute has received FIST grants to add special infrastructure facilities for research purposes. While the Department of Chemical engineering has received the FIST II grant of Rs. 6.07 crores, the Department of Chemistry has been given a total amount of Rs. 8 crores for the purchase of the following equipments: Time-resolved fluorescence, high performance computational facility, Thermal analysis equipment, Atomic Force Microscopy, Resonance Raman and Mass spectroscopic facilities. It is expected that the Department will receive additional grants this year for the purchase of a new high field Nuclear Magnetic Resonance spectrometer and a single-crystal X-ray diffractometer.

The Department of Mechanical Engineering has procured an Ultra High Speed Camera through the FIST. This is the fastest camera in the world and also the first of its kind to be available in our country. The system is currently housed in the High Speed Experimental Mechanics Laboratory (HSEML). The camera can capture 16 monochrome images at rates as high as 200 million images per second, i.e., time difference between any two images can be as low as 5 nanoseconds. Exposure time as small as 5 nanoseconds allows capturing images of ultra fast dynamic events, without smearing, seemingly freezing the events in time. The digital images have 12 bit depth and an active resolution of 1360 x 1024 pixels even at the highest framing rate.
2. Facilities under CARE Scheme of IITK:

The Institute is adding several major infrastructural facilities for carrying out multidisciplinary R&D activities. For development of a Micro-fabrication laboratory, partial funding has been obtained under the CARE scheme. Oxidation furnace, Dicing saw, Wire bonder, Spin coaters, Fume hood, PECVD (Plasma enhanced chemical vapor deposition), Sputtering system, Mask aligner, Chiller, and Optical table have been procured.

A fiber coupled Raman microscope with multichannel detection system was acquired in 2008 under the CARE scheme. This instrument allows non-destructive characterization of materials using inelastic light scattering methods. Microprobe allows data collection from very small sample sizes (as small as ~ 100 microns). The spectrum provides a method to obtain information about the local structure at the nanoscale by recording the lattice vibrational spectrum. Comparison with known standards allows quantification of information obtained such as ratio of crystalline to amorphous phases and determination of the diameter of single walled carbon nanotubes. The instrument is currently installed in the laboratory for Materials at Extreme Conditions located in ACMS.

Under the CARE scheme, the Department of Chemistry has procured microanalytical facility which can analyze liquid and solid samples for their C, H, N, S and O content. This facility is already functional and is available to all the Institute researchers.

XP-100 Surface Profilometer System with 3D Metrology Option has been purchased. For microelectronics and larger area electronics, surface profiler can be used to extract - surface roughness, precision step height, surface form, thin film stress, thin film structure, and high resolution surface imaging. At SCDT, an interdisciplinary team of research scholars and faculty are using this equipment for fabricating organic solar cells, thin film transistor for RFID, as well as organic light emitting diodes for the Prototype Development Unit (PDU).

Laser Doppler Velocimetry (LDV) for the unsteady velocity measurements in a water tunnel test facility for flow control has been procured under the CARE scheme this year. LDV is an instrument which measures all the three components of fluid flow velocity along with the turbulence quantities. Unlike most turbulence measuring equipment, LDV allows non-intrusive high frequency measurements, thus providing highly accurate data.

A dedicated dynamic laser light scattering setup has been purchased through the CARE scheme. It is one of the best configuration systems available in the field. This set up can measure particle size distribution as well as molecular weight distribution of the polymeric samples. It is an ideal system suited for studying relaxation dynamics in soft transparent materials.

3. The Institute has procured 2 motor gilders which can fly up to an altitude of 10000 feet without any oxygen cylinder and further up to a maximum altitude of 29000 feet with external oxygen cylinders and can maintain a speed of 122 knots/hr. It has two fuel tanks with a capacity of 50 liters each and can remain in the air for about six hours at a stretch.

4. The Institute has undertaken a major initiative in particle acceleration with the inauguration of the Tandetron Ion Beam facility. The accelerator operates energies at 1.7 MeV and will facilitate research in the areas of microfabrication, micromachining (MEMS/NEMS), ion beam synthesis of nano phases and surface engineering, surface and interface studies by RBS/ERDA/PXe/ channeling, defect and damage studies in materials, bio-materials, 3D mapping and process optimization and system automation.
Memorandum of Understanding

During the year 2008-09, 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. Indian Space Research Organization (ISRO) to support the design, development and launch of an indigenous nano satellite called Jugnu. The satellite is planned to be built around a standard cuboid configuration as designed and is expected to weigh less than 5 kg. In this joint program, the satellite will be launched in the polar orbit by the ISRO. The satellite shall carry payloads for earth observation, for establishing communication links, for studying atmospheric phenomena, for testing scientific instruments and for novel applications. The mission life shall be for a minimum period of 6 months.

2. Indira Gandhi Centre for Atomic Research (IGCAR) to carry out research in the science and technology related to design and development of Fast Breeder Reactors. An IGCAR-IITK R & D cell will be set up in the premises of IITK to conduct R&D in the areas of mechanics and materials, thermal hydraulics, multiscale modeling, instrumentation, mechanisms, and machine vision.

3. Indian Space Research Organization (ISRO) for development, validation and testing of kinematic control algorithm for rover motion on an uneven terrain. The landing module will carry a rover that will egress out of the lander onto the lunar surface. The rover shall move on the lunar surface and perform scientific experiments.

4. Vikram Sarabhai Space Centre (VSSC) for development, and testing algorithms for computer vision based autonomous navigation system for the lunar rover mission.

5. National University of Singapore for promotion of joint research and development activities of mutual interest.

6. DBT, New Delhi to work in the area of Vertebra development biology.

7. Central Pollution Control Board, Delhi for estimation of national level emission inventory for entire country and regions mentioned.

8. VSSC, Thiruvanathapuram for development of experimental technology for studying gravitational effects during liquid phase sintering of powder metallurgy products under microgravity conditions abroad recoverable space capsule.

9. AOARD, USA to study of Chalcogenide glasses for application in memory devices.

10. AOARD, USA, for aerodynamics characteristics of butterfly flight through measurement of three dimensional unsteady velocity field using TR-PIV system.

11. The University of Applied Sciences Darmstadt, Germany for exchange of information and know-how as also advanced training and further education through exchange of scientist and student.
12. The University of Ulster in relation with UKIERI, UK to investigate intelligent systems that facilitates development of a low cost assistive robotic device for people with severe movement disability.

13. The University of Kansas, USA to cooperate in terms of development of educational programs, industry based training programs, development of research projects, exchange of academic and scientific information, exchange of faculty, researcher and student, explore the potential of product and business development.

14. DBT, New Delhi to work in the area of developmental Neurobiology.

15. Institute of Plasma research for powder metallurgical processing of tungsten-based alloys for iter-like diverter components.

16. BARC for development of test facility for fire propagation and associated thermal hydraulic aspects studies in multiple compartments.

17. BARC for development of Pulsating heat pipe passive heat exchanges.

18. BARC for Monte Carlo modeling of energy response of silicon diodes detector in a radiotherapy photon beam.

19. Indian Institute of Science Education and Research, Bhopal for automation of campus solution.

20. Asian Office Aerospace Research and Development, USA, for tunable composite metamaterials with imbedded coherently controllable atomic or molecular materials.

21. INDO-SWISS Academic Alliance –ISAA for Extension of term of earlier MoU.

During the year 2008-09, Memoranda of Understanding have also been signed with many companies such as:

1. Integra Micro Systems, Bangalore for improving current platform (iMFAST) of Integra and building/exploring new cost effective and secured solutions in transaction based on smart card technology and biometrics.

2. STJ Electronics Pvt. Ltd., New Delhi to build smart card readers, including features such as biometrics and seek their viability for commercial purposes.

3. PXIL, Mumbai to carry validation of the overall algorithm already worked out and its applicability to Indian markets, validate whether the algorithm enables market price discovery in disjoint markets to include ‘n’ (multiple) markets including enabling block bidding, check whether any critical elements are missing in the present algorithm, to provide a superior solution (if feasible) which can be further developed by PXIL.

4. ETH Zurich, Switzerland for regulating the rights and duties of the parties regarding administration and commercial exploitation of the technology.

5. Chevron Energy Technology, USA for service Agreement in the field of catalyst and composition.

6. AdvanDe Pte., Singapore to license SCOSTA CL Operating System.
7. Chevron U.S.A. Inc to demonstrate HIGEE in a specific application directed to treating gas streams to remove acid gas components such as hydrogen sulfide and carbon dioxide.

8. European Aeronautic Defence and Space Company for research services in the fields of wireless sensor networks and protocols, mobile and pervasive computing, parallel and distributed systems and performance modeling.

9. European Aeronautic Defence and Space Company for research program on reconfigurable computing – high level specification, modeling and synthesis of run time reconfigurable systems.

10. World Wide Fund India for fluvial geomorphology and hydraulic modeling of the upper Ganga for maintaining sustainable flows.

11. World Wide Fund India for cultural and livelihood objectives for maintaining sustainable flows.

12. Moser Baer India Limited for Moser Baer Photovoltaic Initiative.

13. Intellectual Ventures Asia Pte. Ltd for exclusive license agreement.

A list of major sponsored and consultancy projects sanctioned during the financial year 2008-2009 is provided below.

**Sponsored Projects:**

**A. National Projects:**

1. **STRUCTURE ELECTRONIC AND MAGNETIC CORRELATIONS IN MANGANITES PROBED USING RAMAN SPECTROSCOPY**, funded by CSIR, total cost Rs. 14,26,000.

2. **PROMOTIONAL EFFECT OF MOLYBDENUM AND CHROMIUM OXIDE ON SUPPORTED VANADIA CATALYSTS FOR THE PROPANE ODH REACTION**, funded by CSIR, total cost Rs. 12,24,000.

3. **NEWER ASPECTS OF ORGANOCOBALOXIMES ARYL COBALOXIMES AND SECONDARY/ TERTIARY ALKYL COBALOXIMES SYNTHESIS CHARACTERIZATION AND CO-C BOND REACTIVITY**, funded by CSIR, total cost Rs. 14,16,000.

4. **ENHANCEMENT OF HEAT TRANSFER USING VERTEX GENERATORS IN COMMON FLOW UP CONFIGURATION**, funded by CSIR, total cost Rs. 5,02,000.

5. **SYNTHESIS OF MARINE ORGANOHALOGEN NATURAL PRODUCTS CONVOLUTAMINEH AMATHAMIDE C-G AND THEIR ANALOGUES**, funded by CSIR, total cost Rs. 16,26,000.

6. **BIOCOMPATIBILITY EVALUATION OF HYDROXYAPATITE-MULLITE NANOBIOCERAMIC COMPOSITES**, funded by CSIR, total cost Rs. 8,84,000.

7. **FIRST PRINCIPLES THEORETICAL STUDIES OF SUPERCRITICAL AQUEOUS SOLUTIONS: CHANGES IN STRUCTURE & DYNAMICS FROM THOSE UNDER AMBIENT CONDITIONS**, funded by CSIR, total cost Rs. 20,67,000.

8. **COORDINATION POLYMERS BASED ON IMIDAZOLES / BENZIMIDAZOLES**, funded by CSIR, total cost Rs. 15,90,000.

9. **MOLECULAR IMPRINTING OF ENDOCRINE DISRUPTERS IN SOL-GEL FOR ENVIRONMENTAL SENSOR APPLICATIONS**, funded by CSIR, total cost Rs. 12,25,000.

10. **SSB FELLOWSHIP**, funded by CSIR, total cost Rs. 37,80,000.
11. INVESTIGATION ON THE CRYSTALLINE FIBERS OF LINBO3 GROWN BY LASER HEATED PEDESTAL GROWTH TECHNIQUE, funded by CSIR, total cost Rs.3,30,000.
12. ALUMINIUM SHEAR-LINKS FOR PASSIVE CONTROL OF SEISMIC RESPONSE OF TRUSS MOMENTS FRAMES, funded by CSIR, total cost Rs.20,52,000.
13. BOYSCAST, funded by DST, total cost Rs.7,57,000.
14. NOVEL BIOMIMETIC, funded by DST, total cost Rs.4,11,000.
15. EVALUATION OF LIQUEFACTION POTENTIAL OF FLY ASH DYKE, funded by DST, total cost Rs.27,91,500.
16. INVESTIGATION OF DYNAMIC INTERFERENCE EFFECT OF TWO NEARBY SHALLOW FOUNDATIONS, funded by DST, total cost Rs.13,38,000.
17. DIMETAL COMPOUNDS INVOLVING N-HETEROCYCLIC CARBENES: SYNTHESIS CHARACTERIZATION AND CATALYSIS, funded by DST, total cost Rs.39,90,000.
18. SIMULATION OF THE GROWTH OF THE GROWTH OF HETEROEPITAXIAL SEMICONDUCTOR THIN FILMS USING FINITE ELEMENT METHOD, funded by DST, total cost Rs.19,61,581.
19. NOVEL METHODS TO PERFORM PERSONAL HEALTH & EXPOSURE MEASUREMENT USING LIMITED RESOURCES, funded by DST, total cost Rs.16,14,000.
20. ANALYZING NON-STATIONARY, funded by DST, total cost Rs.9,53,280.
21. LABORATORY BASED STUDIES ON EVALUATION OF COST EFFECTIVE ADSORBENTS FOR ARSENIC FILTER UNIT, funded by DST, total cost Rs.13,24,560.
22. SPARK PLASMA SINTERING OF CERAMIC NANOCOMPOSITES, funded by DST, total cost Rs.1,11,22,822.
23. NATIONAL MEET OF RESEARCH SCHOLARS IN MATHS & STATISTICS, funded by DST, total cost Rs.4,80,000.
24. TUNABLE & HIERARCHICAL SELF-ORGANIZED MESO-STRUCTURING USING ELECTRIC FIELDS, funded by DST, total cost Rs.7,36,311.
25. PALEOSEISMOLOGICAL INVESTIGATIONS IN ANDMAN ISLANDS, funded by DST, total cost Rs.7,82,000.
26. DISTRIBUTED SOFTWARE ENGINEERING, funded by DST, total cost Rs.7,00,000.
27. RECONSTRUCTION OF MONSOONAL RAINFALL FROM LATE QUATERNARY GANGL AND YAMUNA ALLUVIAL PLAIN BY STABLE ISOTOPE TRACES: IMPLICATION TO CLIMATE FORCING ON VEGETATION AND RESPONSE, funded by DST, total cost Rs.2,00,000.
28. A STATISTICAL MECHANICS APPROACH TO STUDY AND PHASE TRANSITION OF DRIVEN DIFFUSIVE SYSTEMS RELEVANT TO PHYSICS, funded by DST, total cost Rs.13,21,200.
29. TRACK ETCHED POLYMERIC MEMBRANES FOR ENERGY AND BIOLOGICAL APPLICATIONS, funded by DST, total cost Rs.20,04,000.
30. INVESTIGATION OF LIQUID MIXING IN MULTI-HELICAL MICROCHANNEL SYSTEM, funded by DST, total cost Rs.37,40,685.
31. JC BOSE FELLOWSHIP, funded by DST, total cost Rs.40,00,000.
32. GENETIC STUDIES ON AZO-DYE DEGRADING IMMOBILIZED BACTERIAL CONSORTIA TJ-1 AND TJ-2, funded by DST, total cost Rs.31,97,298.
33. CHEMISTRY IN THE COORDINATION SPACE OF METAL ORGANIC FRAMEWORK: HETEROGENEOUS CATALYSIS AND SELECTIVE SORPTION OF GASES, funded by DST, total cost Rs.20,94,000.
34. CRYSTALLIZATION OF MACROMOLECULES IN MICRO FLUIDIC CHANNELS, funded by DST, total cost Rs.20,00,000.
35. COMPARATIVE CHEMICAL CHARACTERIZATION AND EVALUATION OF TOXIC POTENTIAL OF METALS AND PAHS PRESENT IN BOTH PRIMARY AND SECONDARY PARTICULATES EMITTED FROM COMBUSTION IN DIESEL VS BIODIESEL ENGINES, funded by DST, total cost Rs.89,81,600.
36. NUTRIENT STRESS TOLERANCE IN PLANTS: A ROOT ARCHITECTURE APPROACH IN CICER ARIETINUM L, funded by DST, total cost Rs.19,55,000.
37. DEVELOPMENT OF CATALYST FOR CONVERSION OF GLYCEROL TO ETHYLENE GLYCOL, funded by DST, total cost Rs.44,20,000.
38. A HYBRID SCHEME FOR ENHANCING SEISMIC PERFORMANCE OF A OPEN - GROUND STORY RC BUILDINGS, funded by DST, total cost Rs. 24,95,260.
39. LINKING/ASSEMBLY AND ENCAPSULATION TYPE CHEMISTRY BASED ON KEPLERATES FORMED BY CHEMICAL DRAWINISM, funded by DST, total cost Rs.9,11,400.
40. KISSING-LOOP INTERACTIONS AS STRUTS FOR HIGHER ORDER DNA NANO ARCHITECTURES, funded by DST, total cost Rs. 2,35,200.
41. BULK METALLIC GLASS COATING, funded by DST, total cost Rs.30,41,855.
42. DEVELOPMENT OF A RELIABLE COMPUTATIONAL TOOL FOR MODELING OF LAMINATED COMPOSITE PLATES, funded by DST, total cost Rs.2,22,000.
43. FUNDAMENTAL INVESTIGATIONS ON LASER IGNITION OF COMBUSTIBLE GAS-AIR MIXTURES IN A CONSTANT VOLUME COMBUSTION CHAMBER FOR ENGINE APPLICATIONS, funded by DST, total cost Rs. 32,68,732.
44. STUDY OF LIQUEFACTION POTENTIAL OF ALLUVIAL SOIL ALONG INDO-GANGETIC PLAINS, funded by DST, total cost Rs. 28,37,000.
45. ROTATIONAL- MAGNETO RHEOLOGICAL FLOW FINISHING, funded by DST, total cost Rs.30,00,000.
46. J C BOSE FELLOWSHIP, funded by DST, total cost Rs.40,00,000.
47. SIMMORTEL SEED FUNDS, funded by DST, total cost Rs. 22,93,000.
48. INDIA-JAPAN S&T COOPERATION PROGRAMME, funded by DST, total cost Rs. 3,98,000.
49. MEASUREMENTS AND MODELING OF MELT TEMPERATURE IN STEELMAKING, funded by DST, total cost Rs. 27,74,000.
50. EPITHELIAL MORPHOGENESIS AND WOUND HEALING DURING ANIMAL DEVELOPMENT ROLE OF FAT CADHERIN IN FRUIT FLY, DROSOPHILA, funded by DST, total cost Rs. 29,12,000.
51. BOYSCAST FELLOWSHIP, funded by DST, total cost Rs.10,61,000.
52. ESTABLISHMENT OF A TECHNOLOGY BUSINESS INCUBATOR (TBI) AT INDIAN INSTITUTE OF TECHNOLOGY, KANPUR, funded by DST, total cost Rs. 280,00,000.
53. CRYPTOANALYSIS USING MACHINE LEARNING ALGORITHMS, funded by DRDO, total cost Rs. 9,89,000.
54. NEURAL NETWORK BASED VISUAL MOTOR COORDINATION OF A 7 DOF REDUNDANT MANIPULATOR AND FPGA IMPLEMENTATION OF NEURAL CONTROL ALGORITHMS, funded by DRDO, total cost Rs. 48,94,000.
55. EXPERIMENTAL STUDIES OF COKE FORMATION IN LIQUID FUEL SCRAMJET APPLICATION, funded by DRDO, total cost Rs. 9,90,000.
56. SPARK PLASMA SINTERING OF TIB2 BASED CERAMIC NANO COMPOSITE FOR ARMOR APPLICATIONS, funded by DRDO, total cost Rs. 48,58,000.
57. AERO DYNAMIC SHAPE OPTIMIZATION, funded by DRDO, total cost Rs. 6,25,000.
58. EXPERIMENTAL STUDIES OF FLOW AND HEAT TRANSFER IN A ROTATING U-DUCT WITH DETACHED RIBS, funded by DRDO, total cost Rs. 24,47,000.
59. DEVELOPMENT OF COMPUTATIONAL DAMAGE MESO-MODELS FOR UNIDIRECTIONAL FIBROUS COMPOSITE LAMINATES, funded by DRDO, total cost Rs. 7,10,000.
60. FINANCIAL ASSISTANCE TO FIGHT LABORATORY, IIT KANPUR-UP GRADE, funded by DRDO, total cost Rs. 10,00,000.
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<tr>
<th>Project Description</th>
<th>Funding Agency</th>
<th>Total Cost</th>
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<td>DEVELOPMENT METABOLIC AND ORGANOCENESIS: AN EXPRESSION SCREENING APPROACH, funded by DBT, total cost Rs.79,85,000.</td>
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<td>INTEGRATED DIELECTROPHORESIS BASED CONCERATION AND REAL TIME PCR BASED IDENTIFICATION OF FOOD PATHOGENS IN A SINGLE MICROCHIP, funded by DBT, total cost Rs. 38,70,400.</td>
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<td>UNDERSTANDING THE FUNCTIONAL IMPACT OF ALTERNATIVE MRNA SPLICING IN EPILEPSY, funded by DBT, total cost Rs. 25,32,000.</td>
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<td>IDENTIFICATION AND CHARACTERIZATION OF TOPOGRAPHIC GUIDANCE MOLECULES IN THE VISUAL PATHWAY, funded by DBT, total cost Rs. 86,00,000.</td>
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<td>BIODEGRADATION OF PETROLEUM SLUDGE, funded by DBT, total cost Rs. 4,84,000.</td>
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<td>DEVELOPMENT &amp; FIELD APPLICATION OF A MULTIPURPOSE SAMPLER FOR INDOOR AIR POLLUTION MEASUREMENT, funded by CST, total cost Rs. 5,10,000.</td>
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<td>EVALUATION OF THE EFFICACY OF POLARIZED FLUORESCENCE SPECTROSCOPY FOR EARLY DIAGNOSIS OF CANCEROUS AND PRECANCEROUS CERVICAL LESIONS, funded by MCIT, total cost Rs. 59,08,000.</td>
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<td>DESIGN OF A PARALLEL PROCESSOR FOR NLP APPLICATION, funded by MCIT, total cost Rs. 48,78,000.</td>
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<td>TECHNOLOGY INCUBATION &amp; DEVELOPMENT OF ENREPRENEURSHIP (TIDE), funded by MCIT, total cost Rs. 155,00,000.</td>
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<td>BSNL TELECOM CENTRE OF EXCELLENCE, funded by BSNL, total cost Rs. 1450,00,000.</td>
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<td>VARIABLE PHASE INPUT POWER PLANT DESIGN FOR TELECOM APPLICATION, funded by BSNL, total cost Rs. 6,00,000.</td>
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<td>SUITABILITY OF CALIFORNIA BEARING RATIO (CBR) VALUE IN RAILWAY TRACK DESIGN, funded by RDSO, total cost Rs. 2,00,000.</td>
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<td>REINFORCED EARTH DESIGN OF EMBANKMENT CUTS IN RAILWAYS, funded by RDSO, total cost Rs. 3,00,000.</td>
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<td>DESIGN BANK, funded by Ministry of Textiles, total cost Rs. 26,95,000.</td>
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<td>TRAINING THROUGH ESTABLISHED INSTITUTIONS, funded by Ministry of Textiles, total cost Rs. 17,22,000.</td>
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<td>DEVELOPMENT AND TRAINNING OF TEACHERS FOR EXPERIMENT BASED TEACHING, funded by Vigyan Prasar, total cost Rs. 15,31,200.</td>
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<td>PULSATATING HEAT PIPE BASED HEAT EXCHANGER, funded by BARC, total cost Rs. 80,00,000.</td>
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<td>CARBON-CARBON COMPOSITES FOR STRUCTURAL APPLICATIONS, funded by VSSC, total cost Rs. 25,00,000.</td>
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<td>IIT Rajasthan, funded by Ministry of Human Resource Development, total cost Rs. 1,00,000.</td>
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<td>NATIONAL MISSION ON EDUCATION THROUGH ICT, funded by Ministry of Human Resource Development, total cost Rs. 25,00,000.</td>
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<td>IMPROVING OPERATIONS OF VP FIRE SERVICE, funded by UPFS, total cost Rs. 11,000.</td>
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<td>PERFORMANCE EVALUATION OF AIRCRAFT PROPELLERS UNDER RTA-70 INITIATIVES, funded by National Aerospace Laboratories, total cost Rs. 1,80,000.</td>
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<td>SADDLERY DEVELOPMENT FOR LEATHER SECTOR, funded by MOCI, total cost Rs. 1000,000.</td>
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<td>TCS FOUNDATION FOR RESEARCH IN ALGORITHMS, funded by Tata consultancy Services, total cost Rs. 290,00,000.</td>
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<td>EMPOWERING THE TEACHER, funded by All India Council for Technical Education, total cost Rs. 40,000.</td>
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<td>NATURAL PRODUCTS BIO PESTICIDES, funded by SPREDA, total cost Rs. 4,80,000.</td>
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89. SALINITY AND TRACE ELEMENTS ASSOCIATED WITH WATER REUSE IN IRRIGATED SYSTEM: PROCESSES, SAMPLING PROTOCOLS REMEDIATIONS TECHNOLOGY AND SITE SPECIFIC MANAGEMENT-----INDUSTRIAL AREA OF KANPUR AND UNNAO, funded by Department of Drinking Water Supply, total cost Rs. 13,02,000.
90. DEVELOPMENT OF NODAL PLATFORM FOR QUANTITATIVE METHODS FOR MRI SPECTROSCOPY FOR THE STUDY OF HUMAN BRAIN, funded by Life Sciences Research Board, total cost Rs. 35,00,000.
91. MODELING INTER SPEAKER VARIABILITY IN AUTOMATIC SP. RECOG, funded by BSNL IITK Telecom Centre of Excellence, total cost Rs.19,41,000.
92. PROTECTION DEVICES FOR RURAL AND URBAN EXCHANGES, funded by BSNL IITK Telecom Centre of Excellence, total cost Rs.10,44,000.
93. SPEECH ENABLED VALUE ADDED SERVICES, funded by BSNL IITK Telecom Centre of Excellence, total cost Rs.37,17,000.
94. FEASIBILITY STUDY OF AUTOMATIC SELECTION OF IMSI IN INTER NATIONAL ROAMING, funded by BSNL IITK Telecom Centre of Excellence, total cost Rs. 6,18,750.
95. SERVICE BASED MULTIMEDIA CONTENT SUMMARIZATION AND DELIVERY IN INDIA CONTEXT, funded by BSNL IITK Telecom Centre of Excellence, total cost Rs.25,87,000.
96. SPEECH- ENABLED TRAIN-NAME RECOGNITION SYSTEM, funded by BSNL IITK Telecom Centre of Excellence, total cost Rs. 24,09,000.
97. CELLULAR NETWORK OPTIMIZATION: PHASE-I, funded by BSNL IITK Telecom Centre of Excellence, total cost Rs. 3,21,000.
98. SOME RESEARCH ISSUES IN COGNITIVE RADIO, funded by BSNL IITK Telecom Centre of Excellence, total cost Rs.18,37,500.
99. STUDY OF SPRAY COMBUSTION IN A SWIRL STABILIZED DUMP COMBUSTOR, funded by ISRO, total cost Rs. 19,25,000.
100. IDENTIFICATION AND CONTROL OF COMBUSTION INSTABILITIES IN BLUFF BODY STABILIZED FLAMES, funded by ISRO, total cost Rs. 18,45,000.
101. DEVELOPMENT OF DR BASED 3D CT SYSTEM, funded by ISRO, total cost Rs. 9,72,000.
102. DYNAMICS, SENSORS, CONTROL NEW INITIATIVE- MICRO SATELLITE, funded by ISRO, total cost Rs. 2,00,000.
103. NEW INITIATIVE LUNAR ROVER, funded by ISRO, total cost Rs. 2,00,000.
104. MEASUREMENT OF 3-D UNSTEADY VELOCITY FIELD OF IMPINGING TRANSIENT SUPersonic JETS USING TIME RESOLVED PIV TO IDENTIFY NOISE PRODUCING LARGE STRUCTURES AND DEVELOPING A STRATEGY TO CONTROL THOSE USING MICRO-JETS AND WATER INJECTION, funded by ISRO, total cost Rs. 17,04,000.
105. CAR CELL, funded by IGCAR, total cost Rs. 1,65,09,000.
106. WETTING OF LIQUID SODIUM ON METAL AND ALLOY SURFACES, funded by IGCAR, total cost Rs. 15,86,400.
107. DEVELOPMENT OF CONTINUUM DAMAGE MECHANICS MODEL FOR CYCLIC THERMAL STRESSES, funded by IGCAR, total cost Rs. 18,93,600.
108. CHARACTERIZATION OF CONSTRAINT EFFECT IN EVALUATING DYNAMIC FRACTURE TOUGHNESS BASED DBTT USING FEM/Numerical Modeling FOR PLAIN 9CR-1 MO STEEL, funded by IGCAR, total cost Rs. 14,64,000.
109. STUDY OF SHEAR BANDING IN ALLOY D9, funded by IGCAR, total cost Rs. 19,80,000.
110. MODELING CREEP DEFORMATION & DAMAGE IN TWO AUSTENITIC STAINLESS STEELS USING THE HIERARCHICAL MODEL, funded by IGCAR, total cost Rs. 19,20,000.
111. DYNAMICS OF A SINGLE FUEL SUBASSEMBLY- EFFECT OF THE NONLINEARITY INTRODUCED DUE TO CLEARANCE, funded by IGCAR, total cost Rs. 20,88,000.
112. INVESTIGATION OF INSTABILITIES IN NATURAL CONVECTION IN PFBR, funded by IGCAR, total cost Rs.18,60,000.
113. UNDERSTANDING THE PARAMETRIC INSTABILITY IN FLUID FLUID FILLED THIN- WALLED VESSELS, funded by IGCAR, total cost Rs. 18,33,600.
114. SCOPE AND LIMITATIONS OF UTILISATION OF NON EDIBLE, funded by DST, total cost Rs. 50,000.
115. CERTIFICATE COURSE ON MANUFACTURING MANAGEMENT FOR 10FS OFFICERS, funded by NADP, total cost Rs. 15,00,000.
116. PILOTHING ZERO DISCHARGE SYSTEM IN HOUSE BOAT DAL, funded by GIMLS, total cost Rs. 6,76,500.
117. RESEARCH AND DEVELOPMENT OF TOOLS IN HANDICRAFT SECTOR, funded by AIP, total cost Rs. 9,90,000.
118. POTENTIAL OF RNAI IN INSECT PEST MANAGEMENT, funded by National Agricultural Innovation Project, total cost Rs. 28,96,300.
119. MOBILE IED PREINITIATOR SYSTEM, funded by ACE, total cost Rs. 6,00,000.
120. AIRFOIL MODELS AND INSTRUMENTATIONS AND WIND TUNNEL TESTING OF LOW REYNOLDS NO. AIRFOIL TESTING AT NWTF, IIT KANPUR, funded by Aeronautical Development Agency, total cost Rs. 22,00,000.
121. MEMS DESIGN CENTER, IIT KANPUR, funded by Aeronautical Development Agency, total cost Rs. 38,73,900.

B. International Projects:

1. INDO-US CENTRE FOR RESEARCH EXCELLENCE ON FABRIONICS, funded by INDOUS, total cost Rs. 413,00,200.
2. INDO-US NETWORKED CENTER ON DEVELOPMENT OF METAL-CERAMIC COMPOSITES THROUGH MICROWAVE PROCESSING, funded by INDOUS, total cost Rs. 30,82,400.
3. BIOMATERIALS FOR HEALTH CARE, funded by INDOUS, total cost Rs. 75,97,600.
4. FIELD EFFECT TRANSISTOR OF FPREUVIKITE OXIDES FOR SPINTRONICS, funded by INDO French Centre for the Promotion of Advanced Research, total cost Rs. 13,52,800.
5. PLASMONIC PROPERTIES OF CHECK BOARD METALLIC STRUCTURES AND FILMS, funded by INDO French Centre for the Promotion of Advanced Research, total cost Rs. 25,62,800.
6. DESIGN AND DEVELOPMENT OF AN AUTONOMOUS VEHICLE, funded by Boeing, total cost Rs. 20,25,000.
7. AIRFOIL MODELS AND INSTRUMENTATIONS AND WIND TUNNEL TESTING OF LOW REYNOLDS NO. AIRFOIL TESTING AT NWTF, IIT KANPUR, funded by ADE, total cost Rs. 38,40,000.
8. AN EXPERIMENTAL STUDY OF SUPersonic FLOW OVER TWO AND THREE DIMENSIONAL SLENDER BODIES WITH MOVING SURFACE PROTURBANCES, funded by ARMAMENT RESEARCH BOARD, total cost Rs. 14,70,800.
9. DESIGN AND EVALUATION DIFFERENT CONTROL STRATEGIES FOR UPGRADING EXISTING AIRCRAFT BOMB TO GUIDED BOMBS, funded by ARMAMENT RESEARCH BOARD, total cost Rs. 18,20,000.
10. NOVEL METAL CLUSTERS IN PROTEIN CLEFTS NOVEL METAL CLUTERS IN PROTEIN CLEFTS, funded by European Commission, total cost Rs. 57,81,841.
11. STUDY OF CHALCOGENIDE GLASSES FOR APPLICATION IN MEMORY DEVICES, funded by Asian Office Of Aerospace Research and Development, total cost Rs. 11,04,000.
12. AERODYNAMIC CHARACTERISTICS OF BUTTERFLY FLIGHT THROUGH MEASUREMENT OF THREE DIMENSIONAL UNSTEADY VELOCITY FIELD USING TR-
13. SEED GUM POLYSAXHARIDES FOR THE DECOLORISATION OF TEXTILE DYE SOLUTION, funded by Third World Academy of Science, total cost Rs. 1,80,000.

14. MODELING THE SUPPLY CHAINS OF SEZS IN INDIA, funded by Third World Academy of Science, total cost Rs. 25,31,504.

15. BUILDING A NEW IDENTITY CHAARAS, funded by ANA Singapore, total cost Rs. 1,42,292.

16. LATE QUATER NARY ENVIRONMENTAL, funded by University of Cambridge, total cost Rs. 2,82,000.

17. SUM SURFACE STRATIGRAPHY OF THE CHAGGAR PLAINSLINKAGE OF LANDSCAPE EVOLUTION AND CULTURAL HERITAGE, funded by Imperial College, total cost Rs. 4,74,000.

18. NOVEL BOSYNTHESIS OF CDS NANOPARTICLES BY IMMOBILISED FUNGUS, funded by International Foundation for Science, total cost Rs. 4,77,243.

Consultancy projects:

1. ANALYSIS AND PROCESS MODIFICATION OF EXISTING CETP AT ETL ANKLESHWAR, funded by ENVIRO, Total cost Rs. 25,00,000.

2. DESIGN OF RIVER TRAINING WORKS: RIVER GANGA (THREE LOCATION BETWEEN ALLAHABAD TO VARANASI), funded by IWAI, Total cost Rs. 54,06,000.

3. CONSULTANCY & UPGRADEATON OF PDP-II/73 BASED DATA ACQUISITION & CONTROL SYSTEM ON SCHENCK TRACK PANEL FATIGUE TESTING MACHINE, funded by RDSO, Total cost Rs. 33,38,350.

4. CHIMNEY AND NDOD DATA ANALYSIS FOR LANCO, funded by LANCO INFRA TECH LTD, Total cost Rs. 1,42,758.

5. IN SITU SULFIDING OF NIMO/A12O3 HYDROTREATING CATALYSTS, funded by CHEVRON, Total cost Rs. 32,34,310.

6. TO DEVELOP A STRAIN PATH INDEPENDENT FORMING LIMIT DIAGRAM, funded by Tata Steel, Total cost Rs. 23,81,250.

7. MODELLING OF THE ELECTRONIC CELL IN THE PYRO PROCESSING DEMONSTRAATION FACILITIES, funded by IGCAR, Total cost Rs. 15,00,000.

8. ELECTRO MAGNETIC SIMULATION OF 3-PHASE INDUCTION MOTOR FED FROM A VOLTAGE SOURCE INVERTER, funded by IHICOR, Total cost Rs. 29,31,006.

9. CHARGE CALCULATION MODEL FOR LARGER THROUGH PUT OF OPERATION AT HOSPET STEEL WORKS, funded by HOSPET, Total cost Rs. 8,16,000.

10. CONCRETE MIX DESIGN OF GRADE M20 AND M25 WITH CHEMICAL ADMIXTURE, funded by SKY LINE ENGG. CONTRACTS PVT LTD, Total cost Rs. 56,180.

11. PEER REVIEW OF STRUCTURAL DESIGN OF 32 STOREY TOWARDS IN NOIDA, funded by Assotech Ltd, Total cost Rs. 9,26,970.

12. UNDERSTANDING ADHENSION & CONTACT MECHANICS OF MICRO PARTICLES WITH SUBSTRATES, funded by P&G, Total cost Rs. 31,10,358.

13. STUDY OF PAVEMENT DISTRESS ON LUCKNOW-KANPUR SECTION, funded by National Highway Autho of India, Total cost Rs. 1,50,000.

14. HYDROLOGICAL AND HYDRAULIC STUDIES OF BHUTANI BALAN AND KAML BALAN RIVER IN THE VICINITY OF THE PROPOSED BRIDGE LOCATION IN RESPECT OF UNPRECEDENTED FLOOD IN THE REGION IN THE SECTION OF MUZAFFARPUR TO PURNEA SECTION ON NH-57, A PART OF EAST-WEST CORRIDOR UNDER NHDP PHASE-II, funded by NHAI, Total cost Rs. 17,30,810.

15. CONSULTANCY REGARDING EXCAVATION AT THE SITE OF, funded by MAYTAS INFRA LTD, Total cost Rs. 60,304.
<table>
<thead>
<tr>
<th>No.</th>
<th>Project Description</th>
<th>Funded By</th>
<th>Total Cost</th>
</tr>
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<tbody>
<tr>
<td>16.</td>
<td>CONCRETE MIX DESIGN OF GRADE M25 AND M30, funded by N.E. RAILWAY LUCKNOW</td>
<td>Total cost Rs.33,708.</td>
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<tr>
<td>17.</td>
<td>SEISMIC ANALYSIS OF CAIRN BSPL PIPELINE PROJECT, funded by L&amp;T GULF</td>
<td>Total cost Rs.16,85,400.</td>
<td></td>
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<tr>
<td>18.</td>
<td>ASSESSMENT OF FEASIBILITY OF HAND PUMP INSTALLATION IN PANKI INDUSTRIAL AREA</td>
<td>Total cost Rs. 9,438.</td>
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<tr>
<td>19.</td>
<td>EHV/ UHV TRANSMISSION SYSTEM PLANNING FOR UPTTCL-STUDY CELL AT IITK, funded by UPPTCL</td>
<td>Total cost Rs. 50,00,000.</td>
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<td>20.</td>
<td>ONE STOP EDUCATIONAL PORTAL, funded by CHIPS</td>
<td>Total cost Rs. 67,41,000.</td>
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<tr>
<td>21.</td>
<td>UNDRAINED SHEAR ........MIROZONATION, funded by AT&amp;ES, NEW DELHI</td>
<td>Total cost Rs. 28,188.</td>
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</tr>
<tr>
<td>22.</td>
<td>SMME RESEARCH SURVEY, funded by SAP</td>
<td>Total cost Rs.1,66,200.</td>
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<td>23.</td>
<td>CONCRETE MIX DESIGN OF GRADE M20, funded by NORTH CENTRAL RAILWAY, TUNDALA</td>
<td>Total cost Rs.22,472.</td>
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<td>24.</td>
<td>CONCRETE MIX DESIGN OF GRADE M35, funded by NORTH CENTRAL RAILWAY, TUNDALA</td>
<td>Total cost Rs. 30,900.</td>
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<tr>
<td>25.</td>
<td>FAILURE ANALYSIS OF DAMAGED HANGER SUPPORT</td>
<td>Total cost Rs. 20,000.</td>
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<td>26.</td>
<td>CONSULTANCY ON DESIGN AND DEVELOPMENT OF MOTOR CYCLE ENGINE, funded by TVS MOTOR CO LTD</td>
<td>Total cost Rs. 10,000.</td>
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<td>27.</td>
<td>CONSULTANCY FOR EVALUATION OF THE EXISTING CONDITIONS OF THE MAIN BUILDING &amp;REVENUE IN ETAH DISTT. COLLECTORATE, funded by EXECUT</td>
<td>Total cost Rs. 95,428.</td>
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<td>28.</td>
<td>REVIEW OF SOIL REPORT FOR MULTIPLY AT 47/48 VIBHUTI KHAND GOMTI NAGER LKO, funded by SRS DEVELOPERS</td>
<td>Total cost Rs. 21,573.</td>
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<td>29.</td>
<td>STRUCTURAL DESIGN OF UNIVERSAL MILLING MACHINE, funded by OKFNP</td>
<td>Total cost Rs. 1,34,832.</td>
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<td>30.</td>
<td>DEVELOPMENT OF MANUAL ON USE OF CEMENTED MATERIAL FOR BITUMINOUS PAYMENT, funded by MOSRTH</td>
<td>Total cost Rs. 2,50,000.</td>
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<td>31.</td>
<td>STRUCTURAL DESIGN OF MACHINE FONDATION FOR AUTOFFRETAGE PLANT OFC</td>
<td>Total cost Rs. 1,34,832.</td>
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<tr>
<td>32.</td>
<td>CONCRETE MIX DESIGN OF GRADE M25 WITH AND WITHOUT CHEMICAL ADMIXTURE,</td>
<td>Total cost Rs. 42,135.</td>
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<tr>
<td>33.</td>
<td>EVALUATION OF MASONRY AT P&amp;G FACILITIES IN BADDI, funded by P&amp;G</td>
<td>Total cost Rs. 5,33,433.</td>
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<td>34.</td>
<td>IITK-BMTPC EARTHQUAKE TIPS (PHASE 2), funded by BMTPC</td>
<td>Total cost Rs. 13,48,320.</td>
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<td>35.</td>
<td>STATIC TEST ON PMM PROTOTYPE, funded by HAL</td>
<td>Total cost Rs.30,000.</td>
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<td>36.</td>
<td>TECHNICAL REPORT OF MDI AND LOW POWER FACTOR OF M/S GAUTAM CEMENT, HAMIRPUR, funded by DVVN BANDA</td>
<td>Total cost Rs. 28,060.</td>
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<td>37.</td>
<td>CREATING OF MICRO NANO PARTICLES, funded by Unilever Ltd</td>
<td>Total cost Rs. 15,74,160.</td>
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<td>38.</td>
<td>CONCRETE MIX DESIGN OF GOODS M25 WITH AND WITHOUT CHEMICAL ADMIXTURE,</td>
<td>Total cost Rs. 42,135.</td>
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<tr>
<td>39.</td>
<td>VIBRATION ANALYSIS &amp; DESIGN OF ISOLATION SYSTEM FOR BUILDING, funded by CEM, ENGINEERS</td>
<td>Total cost Rs. 4,10,000.</td>
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<td>40.</td>
<td>ROOT CAUSE OF FAILURE ANALYSIS OF BROKEN SHUFFLE BODY, funded by LSL,</td>
<td>Total cost Rs. 34,832.</td>
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<tr>
<td>41.</td>
<td>STUDY OF DEMAND &amp; ENERGY CHARGES AGAINST IMPORT OF POWER DURING PEAK HOURS WITHOUT DRAWL OF ACTIVE POWER, funded by TCS</td>
<td>Total cost Rs. 2,10,675.</td>
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<td>42.</td>
<td>AUTOMOTIVE SPEED SENSOR &amp; DISTANCE LOGGING, funded by TCS</td>
<td>Total cost Rs. 1,92,000.</td>
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<td>43.</td>
<td>REVIEW OF GEOLOGICAL AND GEOTECHNICAL REPORTS FOR BSPL PIPELINE,</td>
<td>Total cost Rs. 3,37,080.</td>
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</tbody>
</table>
44. CONCRETE MIX DESIGN OF GRADE M 35 AND M 40, funded by UPRNN LTD., LUCKNOW, Total cost Rs.1,68,540.
45. CONSULTANCY REGARDING EVALUATION OF PARAMETERS AT ARJIM SAHAYAK PARAYOJONA, funded by EX ENG. MDCI, MAHOBA, Total cost Rs.5,54,215.
46. REGIONAL GEOLOGICAL INVESTIGATIONS OF KAMRAI, DAM SITE, Total cost Rs.2,03,371.
47. GROUND PENETRATING RADAR (GPR) SURVEY TO IDENTIFY ARCHAEOLOGICAL REMNANTS AROUND SUNDERWALA MAHAL AND SUNDERWALA BURJ SUNDER NURSERY, NEW DELHI, Total cost Rs.11,63,870.
48. QUALITY ASSURANCE OF PROGRAMS, funded by SIEMEN, Total cost Rs.3,00,000.
49. DESIGN OF CLOSED CONDUIT/DIRECT SLUICE FOR THE EXISTING G.H. CANAL D/S OF GOMTI BARRAGE IN LUCKNOW (PRELIMINARY PHASE), Total cost Rs.46,349.
50. DEFLECTION & VIBRATION COMPENSATION OF GASPIPE LINE AT RAMGANGA, funded by GAIL, Total cost Rs.14,045.
51. DESIGN CONSULTANCY FOR ASHDYKE AT BONGAIGAON TPP, ASSAM, funded by NTPC, Total cost Rs.4,94,385.
52. EVALUATION OF MOBILE MAPPING TECHNOLOGY, funded by GICL, Total cost Rs.2,42,698.
53. STANDARDS FOR BIOMETRICS IN E-GOVERNANCE, funded by NIC, Total cost Rs.10,00,000.
54. HYDRAULIC MODEL STUDY OF BRIDGE ON GANGA NEAR FRK, funded by UPSBC, Total cost Rs.23,84,758.
55. STATUS OF WASTE MANAGEMENT IN UP, funded by UPCB, Total cost Rs.11,00,000.
56. CBR & MODULUS SUBGRADE REACTION FOR TAXIWAY SURFACING, Total cost Rs.1,61,800.
57. VALIDATION OF POWER EXCHANGE ALGORITHM, funded by PXIL, Total cost Rs.5,39,328.
58. ANALYSIS OF WAGON DESIGNS, funded by BESCD, Total cost Rs.47,452.
59. REPORT ON FUEL EFFICIENCY OF PASSENGER CARS, funded by GPI, Total cost Rs.1,25,000.
60. TESTING OF CONCRETE GIRDER OF FLY OVER @ 8+500 OF LUCKNOW-AYODHYA SECTION OF NH-28, funded by NHAI, Total cost Rs.44,944.
61. GIS BASED LAND RECORD MANAGEMENT FOR GNIDA, funded by GNIDA, Total cost Rs.49,09,000.
62. CHIMNEY DESIGN AND ANALYSIS FOR LANCO, Total cost Rs.5,40,000.
63. YIELD IMPROVEMENT FROM 4 STRANDBLOOM CASTER TUNDISH, Total cost Rs.9,66,000.
64. DESIGN OF DRAINAGE SYSTEM FOR RAIT RIVER IN 'UPSIDC' SITE NEAR KURST, funded by UPSIDC, Total cost Rs.73,539.
65. FEASIBILITY STUDY REPORT FOR DEVELOPMENT OF DIGITAL BORE MEASURING INSTRUMENT, funded by NAIK(N), Total cost Rs.1,85,000.
66. SLOP-CUT ELIMINATION IN PIPELINE FUEL TRANSFER, funded by HPCL, Total cost Rs.7,00,000.
67. CONSULTANCY REPORT ON SPONGE IRON FOR THE METAL, Total cost Rs.10,000.
68. CHANNELIZATION OF GH CANAL LUCKNOW, Total cost Rs.73,539.
69. SITE VISIT IN CONNECTION WITH CONSULTANCY FOR POND AT GONDA, Total cost Rs.26,225.
70. CONSULTANCY FOR STRUCTURAL DESIGN OF CLOSED CONDUIT FOR EXISTING G. H. CANAL IN LUCKNOW, funded by EEL, Total cost Rs.2,69,664.
71. STUDIES ON CATALYST COMPOSITION, funded by CHEVRON, Total cost Rs.91,29,250.
72. SITE VISIT IN CONNECTION WITH CONSULTANCY FOR WALL, funded by AAI, Total cost Rs.17,665.
73. ACTIVE FAULT SURVEY IN RAJASTHAN GUJRAT REGION: PIPELINE PROJECT, funded by L&T-GU, Total cost Rs.3,93,260.
74. GEOTECHNICAL DESIGN GH CANAL CHANNELIZATION, funded by UPIRRRI, Total cost Rs.47,192.
75. REVIEW OF SUBSOIL INVESTIGATION REPORT FOR SHOPPING MALL IN MAYA TALKIES GORAKHPUR, Total cost Rs. 13,483.
76. VETTING DESIGN OF MEDICAL COLLEGE AT FAIZABAD, funded by R&KAL, Total cost Rs. 2,50,000.
77. ELECTRICAL MODELING OF USB 3.0 MEDIA, funded by MS, Total cost Rs.1,25,000.
78. CONCRETE MIX DESIGN OF GRADE M 30 WITH CHEMICAL ADMIXTURE, Total cost Rs. 39,326.
79. CONCRETE MIX DESIGN OF GRADE M 15, M 20 AND M 40 WITH CHEMICAL ADMIXTURE, Total cost Rs.1,01,124.
80. IMPLEMENTATION OF IPVG AND MULTICAST IN BSNL NIB NETWORK, funded by BITCOE, Total cost Rs.13,22,478.
81. CONCRETE MIX DESIGN OF GRADE M 25 WITH CHEMICAL ADMIXTURE, Total cost Rs.28,090.
82. 3DFE ANALYSIS OF ALH MAIN ROTOR BLADE COLLAR, funded by HAL, Total cost Rs. 7,72,475.
83. WIND TUNNEL TESTING OF HIGH REACH PANTOGRAPH AT NWTF IIT KANPUR, Total cost Rs.1,30,000.
84. FEASIBILITY STUDY AND SIMULATION OF ELECTRIC BREAK FOR TEJAS AIRCRAFT, funded by HAL, Total cost Rs.1,68,540.
85. NON- KIDWAINAGAR STAFF QUARTERS-PHASE-I, funded by RBI, Total cost Rs. 2,10,000.
86. CONCRETE MIX DESIGN OF GRADE M 35 WITH CHEMICAL ADMIXTURE, Total cost Rs.78,652.
87. DEVELOPMENT OF TRANSMISSION PRICING SCHEMES FOR ORISSA, Total cost Rs.9,83,150.
88. VETTING OF STRUCTURAL AND HYDRAULIC DESIGN OF PROPOSED 200 MLD WATER TREATMENT PLANT BARRAGE SITE, Total cost Rs. 70,112.
89. ACTIVE FAULT SURVEY ALONG ISLAND BELT FAULT AND NAGAR PARLEAR FAULT: BSPL PIPELINE PROJECT, funded by L&T, Total cost Rs. 6,74,160.
90. ENERGY EFFICIENCY IN FURNACES ROLLING, Total cost Rs. 1,57,304.
91. P & G STRUCTURAL STANDARDS RE- EVALUATION, funded by P&G, Total cost Rs. 4,82,200.
92. DISCHARGE MEASUREMENT AT GANGA BARRAGE, funded by GBK, Total cost Rs. 52,697.
93. CONCRETE MIX DESIGN OF GRADE M25, funded by SIPJ, Total cost Rs.28,165.
94. SEISMOTECTONIC INVESTIGATIONS, funded by ISR, Total cost Rs.2,02,248.
95. 3D MODELLING AND AVI GENERATION AT MUMBAI, funded by GICL, Total cost Rs.1,48,315.
96. CONCRETE MIX DESIGN OF GRADE M20, funded by BCPL, Total cost Rs.14,045.
97. JOB MIX FORMULA, funded by PWD, Total cost Rs. 61,500.
98. JOB MIX AND DESIGN, funded by PWD, Total cost Rs.78,800.
99. HYDRAULIC MODEL STUDY OF BRIDGE (CHILLAGHAT), funded by PWD, Total cost Rs.17,41,493.
100. MIX DESIGN BC WITH CRMB & PMB, funded by TWBIPL, Total cost Rs. 87,000.
101. REVIEW OF RETROFITTING AT BADDI, funded by P&G, Total cost Rs.8,08,992.
102. CFD EVALUATION OF AERODYNAMICS AND INTERNAL COOLING PERFORMANCE OF A GAS TURBINE BLADE, funded by NTPC, Total cost Rs. 17,52,500.
103. SCOUR DEPTH FOR BRIDGE-BALUA, funded by UPBC, Total cost Rs.9,438.
104. DESIGN OF DUMPABLE CONCRETE MIX OF GRADE M 25, funded by CMR&CH, Total cost Rs. 28,090.
105. DESIGN OF PUMPABLE CONCRETE MIX OF GRADE M 25, funded by ASE&M, Total cost Rs. 28,100.
106. DESIGN OF PUMPABLE CONCRETE MIX OF GRADE M 25, funded by CMR&CH, Total cost Rs. 28,090.
107. CONCRETE MIX DESIGN OF GRADE M 25, funded by MGM&CP, Total cost Rs. 28,090.
108. MONTE CARLO MODELING OF ENERGY RESPONSE OF SILICON DIODE DETECTOR IN RADIOTHERAPY PHOTON BEAM, funded by DAE, Total cost Rs.14,88,770.
109. GPR SURVEY AT AHICHHATRA, funded by ASI, Total cost Rs. 16,58,434.
110. SOUTH- NORTH COOPERATION ON IMPLEMENTATION OF DOMESTIC POLICIES, funded by CSCUK, Total cost Rs.3,16,900.
111. DYNAMICS STABILITY ANALYSIS OF AEROSTAT 2000 CUM SIZE, funded by ADRDE, Total cost Rs.99,27,000.
112. TRAJECTORY AND STABILITY ANALYSIS OF CONVENTIONAL PARACHUTE PAYLOAD COMBINATION FOR FAE, funded by ADRDE, Total cost Rs.9,72,846.
113. SCOSTA-CL IMPLEMENTATION, funded by AdvanlDe, Total cost Rs. 2,48,003.
114. FEASIBILITY STUDY FOR REMOTE DATA ACQUISITION FROM EVCS, funded by GAIL, Total cost Rs.2,60,000.
115. AERODYNAMIC STUDIES AND CHARACTERISATION OF 120MM...BOMB(RAB), funded by ARDE, Total cost Rs.11,86,500.
116. CONCRETE MIX DESIGN OF GRADE M 25, funded by ASE&M, Total cost Rs. 28,090.
117. TESTING OF SOIL SAMPLES, Total cost Rs.18,202.
118. STATUS OF INDUSTRIAL POLLUTION CONTROL (LARGE, MEDIUM, SSI), funded by CPCB, Total cost Rs.5,00,000.
119. STATUS OF BIOMEDICAL WASTE MANAGEMENT, funded by CPCB, Total cost Rs.3,00,000.
120. PREDICTION OF STEERING SYSTEM PERFORMANCE VARIATION DUE TO MANUFACTURING ERRORS, Total cost Rs.9,72,000.
121. WORKSHOP ON SEISMIC ANALYSIS, funded by SIEMENS, Total cost Rs.1,91,077.
122. DESIGN OF DUMPABLE CONCRETE AND PUMPABLE RMC OF GRADE M 30 AND M 35, funded by GEEE, Total cost Rs.1,37,641.
Alumni Association Activities

In February 2008, a Board of Directors (BOD) of IITKAA was elected under the new constitution of the AA, by a global electorate of alumni. The elections for the Board of Directors by electronic voting were conducted using election software developed in-house. The following are the members of the board for the year 2008-2010:

Patron:
Prof. Sanjay G. Dhande (PhD/ME/75)
Director, IIT Kanpur

President:
Abhay Kumar Bhushan (BT/EE/65)

Vice Presidents:
Rahul Mehrotra (BT/EE/96)
Bhanu Kapoor (BT/EE/87)

Secretary:
Kripa Shanker (MT/ME/72)

Treasurer:
Sameer Khandekar(MT/ME/00)

Members:
Manish Thakur (BT/EE/96)
Sanjeev Sinha (MSC5/PHY/95)
Rahul Shukla (MSC2/MTH/98)
Rakesh Sharma (MT/NET/78)

Ex-Officio Members:
Mr Pawan Kumar (BT/CE/69;MT/CHE/72)
Prof V Eswaran (BT/ME/80)
Mr Rakesh Pandey (BT/ME/78)
Prof Sanjeev K Agarwal (MT/NET/81/PHD/CSE/87)
Prof Umesh Mishra (BT/EE/79)

Reunions

IITK alumni from around the globe participated in the reunion events. The attendees included alumnus entrepreneurs, bureaucrats and professionals from all walks of life. Three Reunions were held in the campus by Alumni Association. They were inaugurated by the Director, Deputy Director, Deans and Faculty in the new Outreach building. The activities included Lunch at the Director’s residence, Reunion Group Photograph, Campus tour, Lunch at Students’ Hall, Open Session, campus cycle tour, Grand Reunion Dinner and Felicitation of the alumni by Director.
Silver Jubilee Reunion – Class-of-84
The Silver Jubilee Reunion (SJR) of the Class – of – 84 was held on the campus during 26th – 28th December 2008 with 72 alumni attending the event with their families. A craft mela was put up in SAC grounds where craftsmen right from cottage industries to exuberant gem stone industries had put up their stalls to display their craftsmanship, Indian Folkdance was a delight to the audience to see folk group performers from all over the country, Talash band from Lucknow was a good attraction. The whole campus was invited to enjoy many of the SJR events.

20th Year Reunion – Class-of-88
The 20th year reunion was held by the class of 1988 from 2nd – 3rd January 2009 with 38 alumni attending the reunion.

35th Year Reunion Class-of-74
The 35-year Reunion of the Class – of – 1974 was held on the campus during 3rd – 5th January 2009 with 22 alumni from around the globe, participating in the event with their families. A TV crew under the guidance of Shanbagh interviewed many attendees to get information about of history of IITK for creating a commemorative documentary for the 50th anniversary of IITK.

Distinguished Alumnus Awards:
The Distinguished Alumnus Award (DAA) of the Indian Institute of Technology Kanpur (IITK) is the highest award given by the Institute to its alumni in recognition of their achievements of exceptional merit. The DAA Evaluation Committee recommended the following names for the year 2008-2009:

1. Dr. Devendra Shukla, (BT/CE/67), Founder President and CEO, Innovative Technical Solutions, for his outstanding entrepreneurial and managerial skills.
2. Dr Udai P Singh (BT/CE/72), President-Elect of the Environmental and Water Resources Institute (EWRI) of the American Society of Civil Engineers (ASCE) for his outstanding and all round contributions to the field of Environment and Water Resources.
3. Dr D. Subbarao (MSc2/PHY/73), Governor, Reserve Bank of India, for his outstanding managerial contributions.
4. Mr. Manoj Pratap Singh (BT/EE/74), Global Managing Partner, Operations Deloitte Touché Tohmatsu for his outstanding managerial contributions.
5. Prof Arun P Shukla (BT/ME/76) Simon Ostrach Professor and Chairman, Department of Mechanical Engineering & Applied Mechanics, University of Rhode Island for his outstanding contributions and academic achievements.
6. Mr Shantanu Srivastava (BT/ME/77) Managing Director & CEO, Ishan International Pvt. Ltd., Managing Director, Norvis Holdings (Singapore) Pvt. Ltd., Chairman, Ishan Foundation for his outstanding entrepreneurial and managerial skills.
7. Dr Shreesh Jadhav (BT/PhD/CSE/89/95) Sanyasi, Rama Krishna Mission, in recognition of is dedicated service to humanity at large.
Satyendra K Dubey Memorial (SKDM) Award
The Satyendra K Dubey Memorial Award Evaluation Committee recommended following names for the year 2008-2009:

1. Late Mr. Lalit Kishore Chaudhary (BT/ME/86/IITK) awarded posthumously for his courage and upright behavior.
2. Mr Vijay Saluja (BT/CE/68/IITD) Ex-Chief Engineer (Civil), New Delhi Municipal Council, New Delhi in recognition of his honesty, integrity and for his efforts in fighting corruption.

Financial Assistance from IITKAA to Mr. A. K. Pandey
An appeal was sent to the entire IIT Kanpur alumni requesting financial support for the treatment of Mr. Anand K. Pandey, a Ph. D. student in the Department of Mathematics. He was critically ill and diagnosed with Acute Myloid Leukemia (AML, also known as Blood Cancer) in late April 2008. We wish to express our heartfelt gratitude to our alumni to have shown generosity in contributing over Rs.15 lakhs and without which Anand's treatment could have been impossible.

Newsletters
Alumni Newsletter, a bimonthly Newsletter, was published in the months of April, June, August, and October, January and March. These were funded by sponsorships provided by alumni of IITK amounting to Rs 1.40 lakhs.

Alumni Database
Alumni Association has made significant progress in enhancing the coverage of Alumni Database. By the end of the year AA had email addresses of 68.7% alumni and postal addresses 65.4 % alumni out of around 23,700 alumni.

IITK Alumni Chapters
- Northern California Chapter celebrated its Annual Gala Dinner and Alumni Leadership Awards on Sunday, May 4th, 2008.
- 40th Reunion of 1968 Batch was held in Atlantic City, USA on May 24-26, 2008.
- Alumni Association IIT Kanpur Outer Delhi Chapter had a National Seminar on Managing Innovation for Competitive Edge In association with Indian Business Academy, Greater Noida on Saturday, February 7, 2009.
- First ever PANIIT get together of South Korea Meet was held on 26th January 2009, on the backdrop of Republic day celebration. The attendees included the Indian Ambassador to South Korea Mr. S. R. Tayal (An IITK Alumnus of ’71 batch), IITK alumni and other IITians.
- The Mumbai Chapter of IIT Kanpur Alumni held its annual get together on 28th February 2009, Saturday at MIG Cricket Club, Bandra East, Mumbai. The event had crossed 175 registrations.
- The Pune chapter get-together was held on February 26, 2009 attended by many distinguished guests and a large number of alumni and their family members.

Alumni Awards and Honours:
IITK alumni have been conferred with many prestigious awards and honours during the year. To name a few;
Dr. D. Subbarao (MSc2/PhY/73) became the first ever IIT alumni to become the Governor of the Reserve Bank of India.

Prof. Manindra Agarwal (BT/CSE/86; DAA 2003) was announced as the first ever winner of the newly set up Infosys Mathematics Prize.

Mr. Jeet Bindra [Jagjeet Singh] (BT/CHE/69), President of Chevron Global Manufacturing, was honoured for his career achievements by being named a 2008 recipient of the University of Washington (UW) College of Engineering's prestigious Diamond Award.

Dr. Pradeep Sindhu (BT/EE/74; DAA 2001) has been awarded 2008 Alumni Achievement Award from the Carnegie Mellon University Alumni Association.
Central Facilities

P. K. KELKAR LIBRARY

The P. K. Kelkar Library is a creative partner and essential force in the IITK learning community. Since its inception, it has been rendering essential support to the Institute’s teaching, research and development programme. The Library plans, develops and implements programs to provide latest information, learning resources and information competencies to students, faculty, and staff. Using appropriate technology, the Library delivers resources to satisfy information needs, promote lifelong learning and create productive environments for the scholarly community.

P. K. Kelkar Library is housed with all modern amenities, 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 Saturday; 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:
The Acquisition Unit plays vital role to the development, management and evaluation of library collection in all formats. It successfully accomplished its responsibility to fully utilize the Rs. 1.25 Crore budget for Book purchase. During 2008-09, 3845 books were added to the collection in which 134 were received as Gratis.

e-books:
The library initiated and procured 14040 e-books purchased during 2008-2009 as under:

- Springer : 11890 titles
- Taylor & Francis : 2150 titles

PERIODICALS

Subscription to periodicals and binding: The periodical budget for 2008-09 was Rs 6.25 crores. A grant of Rs. 23.91 lacs was made available by NBHM which was fully utilized. The Library subscribed to 1214 current periodicals for the year 2009. Of these 772 are print versions, whereas 404 are print plus online, 22 are online only and 02 are on CD only. The Library added 3517 bound volumes of periodicals and 3751 Books were bound during the year.

The Library continued its focus on the acquisition of backfiles of online journals. Significant new backfiles acquired in 2008-09 through capacity expansion programme budget included:

- EBSCO Business Source Complete
- Foundation & Trends in Theoretical Computer Science
• Oxford English Dictionary
• MIT Cognet

E-resources through INDEST-AICTE:
As a core member to the INDEST-AICTE Consortium, IITK academic community is entitled to access more than 6500 full-text journals and 06 bibliographic databases. The following new services were started during the year 2008-09 through INDEST:
• Journal of Optical Society of America: A& B
• Applied Optics

LIBRARY SERVICES
Current Awareness Service (Weekly List of Additions): The books added to the Library collection were disseminated to academic community through 52 weekly lists of new additions on the first working day of each week. These were also released on Library OPAC. The current issues of the journals are also displayed on alternate days thrice in a week.

CIRCULATION
During the year 2008-2009, 39338 publications were circulated for home study. A large number of books and journals from reference, textbooks (55283), and general collection were also consulted by users within the Library.

DOCUMENT DELIVERY SERVICES & 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 2008-09, ILL requests for 540 articles/chapters/books were received and document delivery made to outside Institutions whereas IITK users’ requests for 71 articles/chapters/books were sent to other libraries.

Consulting facility of the library was extended to 1967 external users including 1478 participants of various courses/programmes organized by the Institute.

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

DIGITAL LIBRARY INITIATIVES
The following digital library initiatives continued/added afresh:
1. **Online Submission of Theses**: 627 theses were added in the repository of Electronic Theses and Dissertations (ETD)

2. **Faculty/Academic Staff Publications:**

   ‘Faculty/Academic Staff Publications’ consisting of 1447 bibliographic records and 1180 full text papers published in conference/journals, lecture notes, books, delivered lectures/speeches, technical/project reports were added in the repository.

**RESEARCH PAPER PUBLISHED:**


   [http://dx.doi.org/10.1016/j.iilr.2008.08.002](http://dx.doi.org/10.1016/j.iilr.2008.08.002)


CONFERENCES/WORKSHOPS/TRAINING PROGRAMMES ATTENDED:

1. IPR workshop on January 23, 2009 at IIT Kanpur, Participants: Anjana Bhatnagar, V. K. Mishra and Anil Mishra

2. International Conference on Integration of Video Conferencing in Distance Education: Pros and Cons Asian Special Libraries (ICOASL 2008) held on Nov. 26-28, 2008 at New Delhi, Participant: Anjana Bhatnagar.

3. 23rd National Seminar of IASLIC at Kolkata, Participant: V.K.Mishra


7. Indest Meeting at IIT Bombay, Participant: Mr. Umed Singh and Brij Mohan Singh.

8. Workshop on Open Access to Science Publications: Policy, Perspectives, Opportunities and Challenges on 24th March at New Delhi, Participants: D. P. Tripathi and Sunil K. Rana.


COMPUTER CENTER

Data Missing

CENTER 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 2008-2009.

1. QIP Students
   (a) M.Tech Candidates admitted 03
   (b) Ph.D. Candidates admitted 05

2. Book-Writing Projects
   (a) Book-writing projects continued – 34
   (b) Book-writing projects approved – 09
   (c) Book-writing projects completed -03

3. Short term courses conducted under QIP – 05
4. Short term self-financed courses conducted -27
5. Workshops/Conferences/Seminars conducted - 18

CENTER FOR CREATIVE WRITING AND PUBLICATION


4. Artist in Residence Initiative (March-April 2009). Mrs. Veena Sahasrabudde, the noted Hindustani Classical exponent, conducted lecture-cum-demonstrations and gave concert performances.

5. Weekly Book Discussions by Dr. Suchitra Mathur.

STAFF DEVELOPMENT COORDINATION CENTER

The staff training unit has been imparting training programs for the institute’s staff members and for the staff members of other institutes as well. During this financial year, the staff training unit has been instructed to conduct the induction training programs for the new entrants and refresher training programs for the group B, C & D employees of the institute only.
Accordingly, the staff training unit conducted the following training programs during the financial year 2008-09:

A-INDUCTION TRAINING:

<table>
<thead>
<tr>
<th>SN</th>
<th>CADRE</th>
<th>DURATION</th>
<th>PARTICIPANTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ministerial-B&amp;C-Group,</td>
<td>07/07 to 10/07/2008</td>
<td>-17-</td>
</tr>
<tr>
<td>2</td>
<td>Technical-B&amp;C-Group,</td>
<td>21/07 to 24/07/2008</td>
<td>-11-</td>
</tr>
<tr>
<td>3</td>
<td>Integrated-B&amp;C-Group,</td>
<td>25/08 to 28/08/2008</td>
<td>-08-</td>
</tr>
</tbody>
</table>

B-REFRESHER TRAINING:

<table>
<thead>
<tr>
<th>SN</th>
<th>Cadre</th>
<th>Duration</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Junior Assistants</td>
<td>11/08 to 14/08/2008</td>
<td>-15-</td>
</tr>
<tr>
<td>2</td>
<td>Senior Assistants</td>
<td>08/09 to 11/09/2008</td>
<td>-21-</td>
</tr>
<tr>
<td>3</td>
<td>Junior Superintendents</td>
<td>13/10 to 16/10/2008</td>
<td>-17-</td>
</tr>
</tbody>
</table>

Due to non approval of further training programs by the institute’s authorities, the staff training unit has been rendered non functional since then.

SC/ST and OBC CELL

The cell consists of Prof. Arvind K Sinha (Deptt. of Humanities & Social Sciences), Liaison Officer (w.e.f. October 20, 2006) and Shri Anil P Gonade, Superintendent & In-charge, Recruitment Section, in addition to their normal duties. Prof. Arvind K Sinha 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 far 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 Recruitment & Career Progression Scheme (in operation at present) which is personal promotion scheme (non-vacancy linked promotion scheme), there is no promotion - based on vacancies, hence reservation in career advancement is not applicable.

Concessions/ Relaxations:

(a) The upper age bar in the Institute (as per RCPS) is as follows: Group C&D Posts – 18 to 27 years; Group B Posts – 32 years. Relaxation in age is admissible as per Central Govt. Rules. For employees of IITs who are educationally qualified 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. There is no upper age limit for Group-A Officers at the Institute.

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

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

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

Employment notification etc.:

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

During the period of report, the detail of Advs. (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>Published in</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2008</td>
<td>Librarian</td>
<td>Rs.16400-22400</td>
<td>-</td>
<td>All Editions of Dainik Jagran, Dainik Bhaskar, Amar Ujala</td>
</tr>
<tr>
<td>1/2008</td>
<td>Executive Engineer (Elect.)</td>
<td>Rs.10000-15200</td>
<td>-</td>
<td>Times of India, University News &amp; Employment News</td>
</tr>
<tr>
<td>1/2008</td>
<td>Sr Lib. Information Asst.</td>
<td>Rs.5500-9000</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1/2008</td>
<td>Junior Engineer (Elect.)</td>
<td>Rs.5500-9000</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1/2008</td>
<td>Jr Technical Supt.</td>
<td>Rs.5500-9000</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1/2008</td>
<td>Jr. Technical Supdt.</td>
<td>Rs.5500-9000</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1/2008</td>
<td>Jr. Technical Supdt.</td>
<td>Rs.5500-9000</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1/2008</td>
<td>Jr. Technical Supdt.</td>
<td>Rs.5500-9000</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1/2008</td>
<td>Junior Technician</td>
<td>Rs.3200-4900</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1/2008</td>
<td>Junior Technician</td>
<td>Rs.3200-4900</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1/2008</td>
<td>Junior Assistant (Lib)</td>
<td>Rs.3200-4900</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2/008</td>
<td>Principal Medical Officer</td>
<td>Rs.16400-20000</td>
<td>1</td>
<td>Circulated vide No. RA/Advt.1/2008-IITK/2023 dated July 22, 2008</td>
</tr>
<tr>
<td>Date</td>
<td>Position</td>
<td>Salary Range</td>
<td>Selections</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>----------</td>
<td>--------------</td>
<td>------------</td>
<td>---</td>
</tr>
<tr>
<td>4/2008</td>
<td>Superintending Engineer</td>
<td>Rs.14300-18300</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5/2008</td>
<td>Ex. Engineer (Electrical)</td>
<td>Rs.10000-15200</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Asstt Ex. Engineer (Civil)</td>
<td>Rs.8000-13500</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Asstt Phy. Edu. Officer</td>
<td>Rs.8000-13500</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Physical Training Instructor</td>
<td>Rs.5500-9000</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Junior Engineer (Civil)</td>
<td>Rs.5500-9000</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Jr. Technical Supdt.</td>
<td>Rs.5500-9000</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Jr. Technical Supdt.</td>
<td>Rs.5500-9000</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Junior Assistant</td>
<td>Rs.3200-4900</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Junior Technician</td>
<td>Rs.3200-4900</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Junior Technician</td>
<td>Rs.3200-4900</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Junior Technician</td>
<td>Rs.3200-4900</td>
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<td>-</td>
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<tr>
<td></td>
<td>Junior Technician</td>
<td>Rs.3200-4900</td>
<td>-</td>
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<tr>
<td></td>
<td>Junior Technician</td>
<td>Rs.3200-4900</td>
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<td>-</td>
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<tr>
<td></td>
<td>Junior Technician</td>
<td>Rs.3200-4900</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Junior Technician</td>
<td>Rs.3200-4900</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Junior Technician</td>
<td>Rs.3200-4900</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Junior Technician</td>
<td>Rs.3200-4900</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Junior Technician</td>
<td>Rs.3200-4900</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Junior Technician</td>
<td>Rs.3200-4900</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>7</td>
<td>4</td>
</tr>
</tbody>
</table>

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/Assessment Committee meetings held through Recruitment Section is given below:

<table>
<thead>
<tr>
<th>For Selection</th>
<th>Total 19 Selection Committee meetings:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12 S/C meeting, wherein SCT/OBC representatives included</td>
</tr>
<tr>
<td></td>
<td>05 S/C meeting, wherein OBC representative included</td>
</tr>
</tbody>
</table>
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-IA, 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>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SC/ST</td>
</tr>
<tr>
<td></td>
<td>As per Reservation</td>
</tr>
<tr>
<td></td>
<td>As per Seniority</td>
</tr>
<tr>
<td></td>
<td>GEN</td>
</tr>
<tr>
<td></td>
<td>Total</td>
</tr>
<tr>
<td>Type-IA</td>
<td>-</td>
</tr>
<tr>
<td>Type-1B</td>
<td>-</td>
</tr>
<tr>
<td>Type-I</td>
<td>-</td>
</tr>
<tr>
<td>Type-II</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Type-III</td>
<td>-</td>
</tr>
<tr>
<td>Type-IV</td>
<td>-</td>
</tr>
<tr>
<td>Type – V &amp; VI</td>
<td>No reservation</td>
</tr>
</tbody>
</table>

2. There is no reservation in the quarters of Type – V & VI (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>31</td>
<td>31</td>
</tr>
<tr>
<td>Retirement</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Deaths</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Resignation</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>V/Retirement</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>C/Retirement</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>SVRS</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Deputationists repatriated</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Termination</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Dismissal</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>39</td>
<td>39</td>
</tr>
</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 a) On permanent basis (Through open Recruitment)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>b) On compassionate grounds</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>c) On deputation basis</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>d) On contract for 5 yrs</td>
<td>4</td>
<td>-</td>
<td>3+1#</td>
<td>9</td>
<td>16+1#</td>
</tr>
<tr>
<td>Total (a-d)</td>
<td>4</td>
<td>-</td>
<td>3+1#</td>
<td>10</td>
<td>17+1#</td>
</tr>
<tr>
<td>Retirement</td>
<td>6+4*</td>
<td>-</td>
<td>-</td>
<td>38</td>
<td>44+4*</td>
</tr>
<tr>
<td>Deaths</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Resignation</td>
<td>1</td>
<td>-</td>
<td>3</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>V/Retirement</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>C/Retirement</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>SVRS</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Deputationists repatriated</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
</tbody>
</table>
Assessment of Group ‘A’ Officers (Non-Vacancy linked personal promotion)

<table>
<thead>
<tr>
<th>Pay-scale</th>
<th>SC</th>
<th>ST</th>
<th>OBC</th>
<th>GEN</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>From</td>
<td>To</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Assessment under RCPS

Detail of Employees Assessed / designation changed etc. under RCPS during 2008-2009.

<table>
<thead>
<tr>
<th>SL No.</th>
<th>Pay Scale</th>
<th>SC</th>
<th>ST</th>
<th>OBC</th>
<th>UR</th>
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Change of Designation

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<td>16</td>
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</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 01.04.2009:
Recruited through DOFA Office

<table>
<thead>
<tr>
<th>Academic</th>
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B. Existing Strength of Non-Academic Staff as on 01.04.2009:

Recruited through Recruitment Section

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<tr>
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</tr>
<tr>
<td>C</td>
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- Cleaners, not counted towards reservation.

The detailed summary of existing strength of non-academic staff as on 01.04.2009 and representation of SC/ST/OBC

<table>
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<tr>
<th>Group/Stream/MODE</th>
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<th>OBC</th>
<th>GEN</th>
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<td>4</td>
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<tr>
<td>B</td>
<td>66</td>
<td>21.00</td>
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</table>
CNU  2  12.50  1  6.25  0  0.00  13  16  
CTR  16  21.92  1  1.37  19  26.02  37  73  
CTU  7  30.43  2  8.69  0  0.00  14  23  
C  37  21.39  4  2.31  34  19.65  98  173  

DR  6  21.42  0  0.00  10  35.71  12  28  
DU  34  24.28  0  0.00  0  0.00  106  140  
D  40  23.80  0  0.00  10  5.95  118  168  

CLEANERS  10*  0  0  0  0  10*  

TOTAL  148+10*  21.57  11  1.60  77  11.2  450  686+10*  

Abbreviations: SC-Scheduled Caste, ST-Scheduled Tribes, OBC-Other Backward Class, GEN-General, A, B, C & D - Groups, N - Non-technical, T-Technical, R- Recruited, U- Upgraded, * Not counted towards reservation

C. Existing Strength of Account-II Employees as on 01.04.2009:  

<table>
<thead>
<tr>
<th>Group</th>
<th>SC</th>
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<th>OBC</th>
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<tbody>
<tr>
<td>B</td>
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<td>11</td>
</tr>
<tr>
<td>C</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>09</td>
<td>10</td>
</tr>
<tr>
<td>D</td>
<td>3</td>
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<td>5</td>
<td>3</td>
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<tr>
<td>Total</td>
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<td>22</td>
<td>33</td>
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D. Existing Strength of Mess Employees as on 01.04.2009:  

<table>
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<tr>
<th>Group</th>
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<td>C</td>
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<td>D</td>
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The data as available for showing the representation of SCs/STs/OBCs related to the students admitted in the 1st Semester 2008-09 in various programmes/disciplines at the Institute is given below:

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<th>Programmes</th>
<th>Registration Data in the 2008-2009 I Semester</th>
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</tr>
<tr>
<td>CE</td>
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101
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Registration Data of M. Tech. / MBA/ M.Des. Students of 2008-09-I Semester

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Registration Data of Ph D students of 2008-09-I Semester

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</tbody>
</table>
RAJBHASHA PRAKOSHTHA

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

Rajbhasha Prakoshtha was established in the Institute in September 1986. It has got its own office which is equipped with the two bilingual personal computers for smooth and efficient working. It is managed by a liaison Officer, Assistant Registrar, a Superintendent and two technical assistants (Translation) The Rajbhasha Prakoshtha is effective in creating awareness of Hindi among the Institute employees. “Sansthan Rajbhasha Karyanvayan Samiti” constituted by the Director, monitors and provides guidelines to the Rajbhasha Prakoshtha in its planning and performance. The Rajbhasha Prakoshtha performs various activities like organization of Hindi Diwas, Hindi workshop and holds meeting for promoting the atmosphere of Rajbhasha in the Institute round the year.

The Rajbhasha Prakostha has adopted the following policies:

1. Entire correspondence with Group D employees are done in Hindi.
2. All Hindi letters are replied to in Hindi.
3. All routine forms and the heading of Registrars have been printed bilingual 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. Three Assistants have been trained in Hindi Stenography under the scheme.
5. Regular class of Prabodh, Praveen & Pragya for the Non Hindi speaking employees have already been started. Sixteen Non Hindi speaking employees have been trained in Prabodh and Praveen and Pragya.

The act and the Statutes of the Institute have been made bilingual.

The Annual Report of the Institute for 2007-2008 and the Audit Report 2007-2008 received from the Account Section/AG,UP were translated into Hindi and fair copies typed for submission to the ministry.

The press release and invitation cards for the Convocation were issued bilingual. All periodical reports were sent to the Ministry and the Nagar Rajbhasha Karyanvayan Samiti in time.
In compliance with the directives of Official Language Department, New Delhi, Hindi week was observed by conducting various competitions and on 15 Sept. 2008 Hindi Diwas samaroh was held in the Lecture Hall complex, in which winners of the various competitions were honoured with suitable books awards.

Following Competitions were held from 09.09.08 to 15.09.2008.

a) Dictation competition (Fourth class employees)
b) Hindi essay competition
c) Dictation competition (Non Hindi Speaking employees)
d) Noting Drafting competition
e) Poetry recitation competition

Winner of above competitions were as under:

A) Dictation competition (Fourth class employees)
   1. Smt. Pramod Tripathi (First)
   2. Shri Shiv Shanker Tiwari (Second)
   3. Shri O.P.Yadav (Second)
   4. Shri P.S. Negi (Third)

B) Hindi essay competition
   1. Shri Rajesh K. Srivastava (First)
   2. Shri Yawar Husain (Second)
   3. Shri Ram Lakhan (Third)

C) Dictation competition (Non Hindi Speaking employees)
   1. Shri Binu S. (First)
   2. Shri Goutam Karmakar (First)
   3. Shri Namdeo Murkhey (First)
   4. Shri Pradeep Sahoo (Second)
   5. Shri Shiv Nath Pal (Third)
   6. Shri Lokesh Malguy (Third)

D) Noting Drafting competition
   1. Moh. Nizam Khan (First)
   2. Shri Tej Prakash Sharma (Second)
   3. Shri Saneep Kumar (Third)

E) Poetry recitation competition
   1. Shri Ram Lakhan (First)
   2. Shri Rajesh K. Srivastava (Second)
   3. Shri Somnath Danayak (Second)
   4. Shri Hari Singh (Third)
In Hindi Diwas samaroh 16 Institute employees were honoured whose working in official language.

During the year 2007-08 about 193 letters from Directorate, 237 letters from Registrar’s office, 379 letters/circulars from Administration Section and 467 letters from others were issued in Hindi.

Rajbhasha Prokoshtha is dedicated to the upliftment of Hindi at the Institute. It is always prepared to co-ordinate with each and every department of the Institute in the implementation of the orders and directives received time to time from the Ministry of Human Resources & Development, Govt. of India.

MEDIA TECHNOLOGY CENTER

Data Missing
The Ministry of Human Resources & Development (MHRD) has released Rs. 11348.00 lakh as Non-Plan Grant, Rs. 6817.00 lakh as Normal Plan Grant and Rs. 7256.75 lakh as Plan (OSC) in the financial year 2008-2009.

**NON-PLAN**

The total receipt under Non-Plan during the financial year 2008-2009 from Ministry of Human Resources & Development, Government of India is Rs. 11348.00 lakh including Rs.2518.00 lakh towards 40% arrear and revised pay and allowances as per 6th CPC to both faculty and non-faculty w.e.f 01.09.2008. The Internal Receipts of Institute is Rs. 2241.13 lakh.

The Total Non Plan expenditure during the financial year 2008-2009 comes out to Rs. 13311.71 lakh.

**NORMAL PLAN**

A total receipts under Normal Plan during the financial year 2008-2009 is of  Rs. 6817.00 lakh under Plan from the MHRD, Government of India.

The total expenditure under Normal Plan is restricted to Rs. 6096.20 lakh. This expenditure includes Rs. 3127.16 lakh on Building & Works and Central AC Facility, Rs. 2256.16 lakh on Non-Consumable purchases including Equipment, Furniture & Fixtures etc., Rs. 635.83 Lakh on Library Books, Digitalization of Library and Periodicals & Journals and Rs. 77.05 Lakh on Recurring Expenditure such as Pay & Allowances and Initiation Grant of New Recruitees.

**PLAN (OSC)**

A total receipts under Plan (OSC) during the financial year 2008-2009 is of  Rs. 7256.75 lakh under Plan from the MHRD, Government of India.

The total expenditure under Normal Plan is restricted to Rs. 6208.59 lakh. This expenditure includes Rs. 2729.50 lakh on Building & Works and Central AC Facility, Rs. 2521.12 lakh on Non-Consumable purchases including Equipment, Furniture & Fixtures etc., Rs. 601.77 Lakh on Library Books, Digitalization of Library and Periodicals & Journals.
### INCOME AND EXPENDITURE UNDER MAJOR HEADS

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Particulars</th>
<th>Income (Rs. In Lakh)</th>
<th>Expenditure (Rs. In Lakh)</th>
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<tr>
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<td>Non-Plan</td>
<td>13589.13</td>
<td>13311.71</td>
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<td>2</td>
<td>Normal Plan</td>
<td>6817.00</td>
<td>6096.20</td>
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<td>3</td>
<td>Plan (OSC)</td>
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<td>6208.59</td>
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<td>3</td>
<td>GPF/CPF</td>
<td>1460.49</td>
<td>760.06 (Non Plan)*</td>
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<td>282.37 (Non Plan)*</td>
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<td>247.74 (Non Plan) 101.33 (Plan)</td>
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<td>17.57 (Non Plan)* 14.17 (Plan)</td>
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<td>9</td>
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<td>523.08 (Non Plan)*</td>
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<td>10</td>
<td>Fund Hall Management</td>
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<td>43.86 (Non Plan)*</td>
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<td>11</td>
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<td>66.75 (Non Plan)*</td>
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<td>12</td>
<td>Student Gymkhana</td>
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<td>28.47 (Non Plan)*</td>
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<td>13</td>
<td>Visitors Hostel</td>
<td>86.04</td>
<td>78.60 (Non Plan)*</td>
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<td>14</td>
<td>Endowment Fund</td>
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<td>415.60 (Non Plan)</td>
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<td>15</td>
<td>GATE (JAM)</td>
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<td>161.40 (Non Plan)*</td>
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<td>16</td>
<td>New Pension Scheme</td>
<td>6.09</td>
<td>0.01 (Non Plan)*</td>
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</table>

### Endowment Report

The total amount of donation received during 2008-09 was Rs. 5.12 crore contributed by 974 donors as compared to Rs. 5.96 crore contributed by about 1017 donor in 2006-07.

Many new chairs, students scholarships and awards have been instituted during the financial year.

Partial travel support from the donations enabled 95 students for participation in international conferences during 2008-09. The support ranges from Rs. 20,000 to Rs. 40,000 per student.

Partial travel support from the donations enabled 11 new faculty members for participation in international conferences during 2008-09.

In the year 2008-2009 cash award for publishing journal papers in journal was given to 155 students of IITK.
The following expenditure were made during 2008-09 for various DRPG activities.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Project Title</th>
<th>Total Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-</td>
<td>Opportunity College Project</td>
<td>2,46,642.00</td>
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<tr>
<td>2-</td>
<td>Development of Campus School</td>
<td>941684.00</td>
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<td>3-</td>
<td>SURGE Program</td>
<td>7,07,034.00</td>
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<td>4-</td>
<td>Cash Award to Students</td>
<td>12,50,000.00</td>
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<td>5-</td>
<td>Travel Support to New Faculty</td>
<td>4,98,036.00</td>
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<tr>
<td>6-</td>
<td>Travel Support to Students</td>
<td>33,92,644.00</td>
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<td>7-</td>
<td>General Corpus Fund</td>
<td>91,72,020.00</td>
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<td>8-</td>
<td>Patent Filing</td>
<td>9,36,311.00</td>
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<td>9-</td>
<td>Contract Workers Welfare Relief fund</td>
<td>50,000.00</td>
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<td>10-</td>
<td>Prabhu Goel Research Centre for Computer Security</td>
<td>16,63,520.00</td>
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<td>11-</td>
<td>N. Rama Rao Chair</td>
<td>13,52,864.00</td>
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<td>12-</td>
<td>New CSE Building Maintenance Project</td>
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<td>15-</td>
<td>Research I-Foundation</td>
<td>74,11,129.00</td>
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<td>16-</td>
<td>Research and Outreach Activities in earthquake engineering</td>
<td>18,00,208.00</td>
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<td>17-</td>
<td>Research and Outreach Activities in Solar Energy</td>
<td>4,34,910.00</td>
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<td>18-</td>
<td>Student Gymkhana Activities</td>
<td>1,00,000.00</td>
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<tr>
<td>20-</td>
<td>Shiksha Sopan</td>
<td>97,275.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>3,01,61,610.00</strong></td>
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</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, are provided room accommodation in the Halls of Residences with mess and other facilities. 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 I to Hall X, and two for girls (GH) with total capacities of 3800 and 450 for boys and girls respectively. In addition, there is accommodation for 72 students in single bedroom apartments (SBRA).

The Halls have single and double seated rooms. Presently, most of the senior undergraduate and all post graduate students are given single-seated rooms, while most of first and second year and some third year B. Tech. and M.Sc., (Integrated) students and 1st year M. Sc.(2 Yr.) 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 volleyball 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 (SBRAs)

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 SBRAs 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>
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</thead>
<tbody>
<tr>
<td>Short Term/Long Term</td>
<td>25</td>
<td>3</td>
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</table>

Student's Benefit Fund (SBF) also provides scholarships of the value of Rs. 1200/- per month to the needy students. 59 scholarships from the SBF were provided during the year 2008-09.

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 income of their parents does not exceed Rs. 2,00,000.00 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 2008-09.


<table>
<thead>
<tr>
<th>Undergraduate Scholarships</th>
<th>Year</th>
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<tr>
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<td>I</td>
<td>II</td>
<td>III</td>
<td>IV</td>
<td>V</td>
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<tr>
<td>MCM @ Rs. 1000/- p.m. with Freeship</td>
<td>117</td>
<td>89</td>
<td>95</td>
<td>95</td>
<td>07</td>
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<tr>
<td>Freeship</td>
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<td>13</td>
<td>19</td>
<td>09</td>
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<tr>
<td>Free Basic mess plus Pocket Allowance @ Rs.250/- p.m.</td>
<td>45</td>
<td>48</td>
<td>55</td>
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<td>Anurag Bartaria</td>
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<tr>
<td>Baljit and Nirmal Dhinsa</td>
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<td>Bhuwan and Indira Joshi</td>
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<tr>
<td>Name of the Person/Institution</td>
<td>Number of Permissible Cases</td>
<td>Number of Additional Cases</td>
<td>Number of Immediate Members of the Institution</td>
<td>Number of Children</td>
<td>Number of Grandchildren</td>
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<td>Simran Mandeep Kainth Memorial</td>
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<td>Tapan Kumar and Swapna Bandhyopadgyay</td>
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<td>Vasudeo Laxman Sahasrabuddhe Vaidya</td>
<td>--</td>
<td>--</td>
<td>2</td>
<td>--</td>
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</tr>
<tr>
<td>Scholarship Name</td>
<td>I-year</td>
<td>II-year</td>
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<td>----------------------------------------------</td>
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<tr>
<td>Yasodha Yadav</td>
<td>2</td>
<td></td>
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</tr>
<tr>
<td>Yogendra Nath and Sushma Gupta</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pushpa Garg</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rajnath Singh Scholarship</td>
<td></td>
<td></td>
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<tr>
<td>Aedunuthula Prasad Memorial</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Anil and Reshma Nigam</td>
<td></td>
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<tr>
<td>Swaminathan and Garg</td>
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<td></td>
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<tr>
<td>I.W.A. Bonn</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Dilip Kohli Memorial</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Nitish Thakor</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sagnik Asis Ray</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vinay Kapoor Memorial Scholarship</td>
<td></td>
<td>1</td>
<td></td>
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<td></td>
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<tr>
<td>Shrikant Mishra Scholarship</td>
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<td></td>
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<tr>
<td>Bhawan Das Kapoor Memorial Scholarship</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Sudarshan Kasturia Memorial Scholarship</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sport Scholarship</td>
<td>2</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dr. V. Rajaraman Scholarships</td>
<td>--</td>
<td>-- 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NTS Scholarships</td>
<td>29</td>
<td>13 17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State Merit Scholarships (AP)</td>
<td>1</td>
<td>1</td>
<td></td>
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</tr>
<tr>
<td>Post Metric Scholarship Gwalior</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Post Metric Scholarship, AP</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Post Metric Scholarship, Kadapa</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Senior Secondary Board, Rajasthan, Ajmer</td>
<td></td>
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<tr>
<td>FAEA Scholarship</td>
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<tr>
<td>SAIL Scholarship</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>SC/ST Walfare Deptt, Tekamgargh</td>
<td>1</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board of Secondary Education, Rajesthan</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TABLE-I (B): Scholarships for M. Sc. (2-year)/ M. Sc. - Ph. D. Dual degree 2008-09**

<table>
<thead>
<tr>
<th>Scholarship Name</th>
<th>I-year</th>
<th>II-year</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCM @ Rs. 1000/- p.m. with Freeship</td>
<td>44</td>
<td>29</td>
</tr>
<tr>
<td>Freeship</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Free Basic Mess Plus Pocket Allowance @ Rs.250/- p.m.</td>
<td>10</td>
<td>07</td>
</tr>
<tr>
<td>FBM Plus Pocket Allowance @ Rs.250/- p.m. for Prep.</td>
<td>18</td>
<td>---</td>
</tr>
<tr>
<td>ACC Scholarships</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Smt. Durga Devi Memorial Scholarship</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Jasmine and Mohiuddin Scholarship</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Ramesh Chandra Yadav Scholarship</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Seema Jain Memorial</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

**POSTGRADUATE STUDENTS**

112
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. 14000/- for first two years and (b) Rs. 15,000/- for subsequent years. The amount of assistantship or fellowship for Ph. D. students in Sciences and Humanities & Social Science is (a) Rs. 12000/- per month for the first two years of their programmes and (b) Rs. 14000/-per month for subsequent years & Rs.15000(in 5th year), with stipulation that these students are expected to devote up to eight hours per week towards job(s) assigned to him/her.

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>
<tr>
<td>2.</td>
<td>Purchase of Stationary Items and payment of photocopying charges or purchase of books</td>
<td>5,000.00</td>
<td>1000.00</td>
</tr>
</tbody>
</table>

3. SPECIAL ASSISTANCE TO SC/ST & OBC STUDENTS

Rules for admission to undergraduate programme through JEE are relaxed for the SC/ST categories of students. 15% of seats are reserved for the Scheduled Caste (SC), 7.5% for the Scheduled Tribes (ST) students & 18% seats are reserve for OBC (for non-creamy layer). A separate merit list is drawn for those OBC &SC/ST students, who appear for the Joint Entrance Examination. Cut-off point for calling them for the Counselling 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. 2,00,000/- per annum, in the previous financial year.
While granting any financial assistance other than the teaching/research assistantship or fellowship available to all the students, including SC/ST students, the SC/ST students are given special consideration.

4. 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 2008-09. In addition, 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 (2008-09)

<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>1</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>22</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>Proficiency Medal</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Cadence Gold Medal</td>
<td>1 (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>1 (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>1 (M.Tech)</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Prof. Vijay Mahajan Gold Medal</td>
<td>1 (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>2 (M.Tech.)</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Bhagwani Devi Maheshwari Gold Medal</td>
<td>1</td>
<td>--</td>
</tr>
<tr>
<td>16</td>
<td>Prof. Bal Deva Upadhyaya Memorial Gold Medal</td>
<td>1 (M.Tech.)</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Mars G. Fontana Prize (MME)</td>
<td>1</td>
<td>--</td>
</tr>
<tr>
<td>18</td>
<td>N. Balakrishnan Award</td>
<td>--</td>
<td>1</td>
</tr>
<tr>
<td>19</td>
<td>Prof. J. N. Kapur Prizes</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>20</td>
<td>Smt. P. K. Subbulakshmi Memorial Award</td>
<td>01 (M.Tech.)</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Gargi, Kritika &amp; Maitreyi Awards</td>
<td>3</td>
<td>--</td>
</tr>
<tr>
<td>22</td>
<td>Jayesh Memorial Award</td>
<td>4</td>
<td>--</td>
</tr>
<tr>
<td>23</td>
<td>Dr. Sangeeta Goel Memorial Award</td>
<td>1</td>
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</tr>
<tr>
<td>24</td>
<td>Notional Prizes (UG)</td>
<td>138</td>
<td>8</td>
</tr>
<tr>
<td>25</td>
<td>Notional Prizes (PG)</td>
<td>56 (M. Tech.)</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>O. P. Bajaj Memorial Award</td>
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<td>27</td>
<td>Aditya Birla group of Industries Scholarships</td>
<td>6</td>
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</tr>
<tr>
<td>No.</td>
<td>Scholarship/Award</td>
<td>Quantity</td>
<td>Category</td>
</tr>
<tr>
<td>-----</td>
<td>-------------------------------------------------------</td>
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<tr>
<td>28</td>
<td>OPJEMS Scholarship</td>
<td>4</td>
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<tr>
<td>29</td>
<td>GE Fund Scholarships</td>
<td>2</td>
<td>1 (M.Tech.)</td>
</tr>
<tr>
<td>30</td>
<td>Aviation Development Award</td>
<td>14</td>
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<tr>
<td>31</td>
<td>Goldman Sachs Global Leaders Program</td>
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<tr>
<td>32</td>
<td>Mehta M.Tech. Gold Medal Award</td>
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<td>(M.Tech.)</td>
</tr>
<tr>
<td>33</td>
<td>Best Software Award</td>
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<td>(M.Tech.)</td>
</tr>
<tr>
<td>34</td>
<td>Binay Kumar Sinha Award</td>
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<td></td>
</tr>
<tr>
<td>35</td>
<td>IITK Excellence Award for Leadership in Students’ Affairs</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>IITK Excellence Award in Art &amp; Cultural Activities</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>IITK Excellence Award in Community Service</td>
<td>1</td>
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</tr>
<tr>
<td>38</td>
<td>Sports Prize</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>GDB Memorial Distinguished Teacher Award</td>
<td>1</td>
<td>(Prof. B.N. Banerjee, ME)</td>
</tr>
</tbody>
</table>

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 2008-2009 also saw a very active calendar in the form of various games and cultural events.

GAMES AND SPORTS ACTIVITIES

In the arena of sports IIT Kanpur came up with a creditable show in the inter IIT sports meet held at IIT Bombay. The team finished fourth in the General championship and had a number of podium performances both in the team and individual events. To strengthen the sports culture, an inter-hall games event called JOSH was also organized which witnessed mass participation from the students.

The Tae-kwon-do Club is growing slowly but steadily. The Club has now more than two hundred members who come regularly. The Club is also taking out students to take part in the District Championships where the students performed credibly.

Udghosh’

Udghosh, the annual sports festival of IIT Kanpur was held this year from Septr 18th to 21st. The festival saw colleges from Tamil Nadu, Madhya Pradesh, Rajasthan, Delhi, West Bengal and Sikkim, spanning the length and breadth of the country. Udghosh’08 witnessed a higher competition level than last year with the home team winning in 5 out of the 12 team event. A novel addition to the festival was the Mini Marathon which attracted participation from various sections of the campus community including the staff. The Kanpur was honored to have Mr. Abhinn Shyam Gupta, the only Indian to have won the French Open in badminton, as a guest in the festival. This Arjuna awardees also played an exhibition match with the institute team.
Udghosh’08 witnessed around 800 participants from all over the country. Total of 14 colleges participated in Udghosh. The number of IITK contingent was around 200.

All the colleges played the games in full spirit and enthusiasm. The cooperation shown by the teams was commendable as they had to play in a packed schedule due to untimely rains at the time of Udghosh ’08.

The participants were quite satisfied with the Hospitality of IIT Kanpur and the keenness of the organizing team to sort out their problems at the earliest. The dedicated team of volunteers of the Security team along with the HECs of different halls and the S.I.S. ensured smooth conduction of the festival. No untoward incident took place and all of the participants and particularly the IITK students cooperated well to maintain the discipline during the festival.

This year we had brought in International Sports brands to sponsor in Udghosh. Apart from sports related companies we had IMS and SBI as sponsors.

The opening ceremony was held on 18th September, 2008. Prof. S G Dhande, The Director, IIT Kanpur was the chief guest with Prof. R K Thareja and Prof Partha Chakraborty being the other dignitaries at the ceremony. A march past of all the college contingents was escorted by the Band of Opportunity School, IIT Kanpur. The March past was followed by the oath taking ceremony by all the contingent leaders. After this the chief guest and other dignitaries addressed all the participants. The fire cracker show in the end of the ceremony opened Udghosh’08.

All the events except lawn tennis were held this year. This year new events were added to Udghosh such as Skating, Weightlifting and Taekwondo. Chess was conducted as a formal event this time with extremely competitive teams invited to play chess from all over the country. Huge participation was seen from the institute crowd in the informal events conducted in SAC.

The competition level of Udghosh touched unprecedented heights this year. The institute team won in 5 of 12 team events. We were able to call some of the best teams from all around the country. League format was used in most of the games so that all the teams get an ample change to compete.

The closing ceremony was held in Lecture Hall 7 on 21st Sept. 2008. Arjuna Awardee Mr. AbhinShyam Gupta graced the event. The ceremony commenced with the motivational address by the Chief Guest. Following the address, winners of various events were awarded certificates, medals, mementoes and shields. Dr. Anupam Saxena, Festival Chairman, Udghosh’08 delivered the Vote of Thanks.

Antaragni’08
Antaragni’08 was successfully organized from October 23rd to 26th, 2008. The festival witnessed participation from 1824 outstation participants from nearly 100 colleges all across the country. The festival was officially inaugurated on October
23rd in the Main Auditorium with the address by the Deputy Director of IIT Kanpur, Dr. R K Thareja, who welcomed the participants to the festival and urged everyone to uphold the spirit of participation. The ceremony also saw the unveiling of the trophies for the General Championship and the 8 group championships. These championships were instituted for the first time with aim of uplifting the level of competitions at Antaragni and making the festival synonymous with competitive excellence.

Competitions at Antaragni’08 were grouped in 8 sub categories namely, Dance, Dramatics, English Literary, Films Photography & Media, Fine Arts, Hindi Literary, Music and Quiz.

After four days of high quality competitions, IIT Kanpur emerged with the maximum cumulative points, followed by Kirori Mal College from Delhi University in second place. IIT. Kanpur also topped 5 out of the 8 categories of the competitions.

Numerous respected artists and experts as the judges for the finals of the competitions graced the festival. This was done on the basis of the suggestions and complaints from the participating teams about the level of judging in the previous years. The high level of expertise involved in judging the competitions this year was highly appreciated by the participating teams.

The competitions this year also saw the introduction of the new category of Films, Photography & Media consisting of a mix of competitions related to film making, photography, journalism and design. Special stress was put by the team in ensuring participation in these new competitions. A special movie hub was also created in the Media Center Lawns where critically acclaimed movies were screened for most part of the day. The dimension of a film and media festival was successfully added to Antaragni this year with the road ahead full of promises and improvements in strengthening this component of culture in the festival.

In addition to the above competitions, Antaragni’08 will also saw the Rock Competition Synchronicity, getting bigger and better than ever before. Appreciated for the spectacular rise in the level of the competition, Synchronicity saw 30 top bands shortlisted from among 200 bands from all corners of the country’s rock fraternity, perform in the prelims. The finalists got a chance to open for the headlining act, Glyder at the Rock Nite. ‘Dark Horizon’ emerged as the winning band, pocketing a prize money of 1 Lac INR.

The Professional Shows this year showcased cultural and popular performances for the entertainment of the audience.

The Opening Show saw a special dance and drama performance by the cultural troupe from the Russian Academy of Theatre Arts. This performance was organized as part of the ‘Year of Russia in India’ celebrations. This was followed by a musical performance by Pt. Habib Khan, the world renowned exponent of Indian classical music. The Rock Nite was headlined by the Irish Rock sensation, Glyder who put together a scintillating performance for the rock loving audience.

The highpoint of the festival was however Blitzkrieg – the Professional Nite. The audience in the newly extended Auditorium Grounds were mesmerized by a musical performance by Shankar Ehsaan Loy and their troupe. The Nite also had a surprise for the audience in the form the
hugely popular Director Actor Singer Farhaan Akhtar, who performed along with Shankar Ehsaan Loy for the overjoyed crowd.

India Inspired: The topic of India Inspired was Youth & Politics: the perpetual blame game, where we debated on the imminent antipathy of the country’s youth towards all matters relating to politics and governance. The panel discussion was graced by Mr. Rajeev Pratap Rudy (MP Lok Sabha), Mr. J M Lyngdoh (Former Chief Election Commissioner of India) and Mr. Vinay Rai (Founder, Rai Foundation) where they discussed why politics is not a popular career choice when compared to Medicine, Engineering or Commerce. The discussion by moderated by Mr. Abhigyan Prakash (Journalist, NDTV). The campaign also included a Manifesto Writing Competition and Essay Writing Competition. A Vote India Campaign was also run in an effort to motivate the youth of the country to come out and vote. As part of this a signature campaign and a survey was conducted in the run up to the festival in the hostel messes all over the campus.

Youth Summit: The Youth Summit saw representatives from colleges and schools converge in Antaragni’08 to work under the guidance of experienced mentors and formulate an action plan for the adoption of environment friendly measures in campuses all over the country. The Youth Summit had participation from over 25 representatives from the IIT’s and other colleges and received support from the Delta Climate organization.

Kaleidoscope: The brand new addition to the festival, Kaleidoscope was aimed at exposing the audience to a wide range of workshops, exhibitions, talks and giving the audience a teasing taste of activities and opinions from all walks of life.

Workshop on Pottery by Ms. Mudita Bhandari (a renowned contemporary artis)
Workshop on Hypnotism and Dream Interpretation by Dr. Nita Yuvraj (a well known psychiatrist)
Workshop on Mocktail Making by representatives from Tulleeho.com
Talk on Movie Appreciation by Mr. Kunal Kohli (famous Bollywood movie director and film critic)
Talk on Shootout at Lokhandwala by Mr. Aftab Ahmad Khan (former DIG Police of Maharashtra and the character played by Sanjay Dutt in Shootout at Lokhandwala)
Talk on ‘Cooking for a Dinner Date’ by Ms. Ritu Dalmia (world renowned chef)

Antaragni ’08 was incident free with the security team performing exceptionally well.

MEGABUCKS 09

Megabucks 09 were conducted from 8th-11th January 2009. This year we conducted twelve competitions and six events. Two conferences were held, on Young Guns & Pioneers and Social Entrepreneurship, along with lectures and workshops by renowned dignitaries and firms. The events conducted are:

1. Opening Night
   Andrew Horne (Vice President, South Asia, XEROX)
   Jaya Jha, CEO and Founder, Pothi.com
   Naveen Tewari, CEO and Founder, mKhoj.com
"Brainwave" – First of its kind Idea contest on the occasion of the launch of the awaited Entrepreneurship Cell. Top 25 ideas were appreciated with a sum of Rs. 2,000 each as prize money.

2. Young Guns & Pioneers:
   Naveen Tewari (Founder & CEO of mkhoj.com)
   Amit Kumar (Country Head, Grail Research)
   Jaya Jha, CEO and Founder, Pothi.com

3. Social Entrepreneurship:
   Arbind Singh (Social Entrepreneur of the Year)
   Prema Gopalan (Founder of Swayam Shiksha Prayog (SSP))
   S. Rajagopalam (Founder TIDE)

4. Workshops:
   Workshop by NSE on the basics of trading and an insight on the share market
   Workshop by Microsoft on Business Plan Essentials

COMPETITIONS

1. iDeas, the Business Plan Competition -
   Prize Money: INR 2,00,000

2. Battlefield, the Case Study Competition
   The biggest case study competition with three Corporate cases from Xerox, Technopak and IBM. We received 263 entries in total, from IIMs, IITs and other management and technical colleges.

3. Admad, the Advertisement Design Contest
   The competition was conducted in 4 categories:
   Video Ad, 26 Entries, Print Ad by Xerox Corp., 34 Entries, Photo Ad, 47 Entries
   Strategy Ad by Jet Airways, 13 Entries

4. HeadOn, the Debates
   Dr. Sachin Phaniskar, VP, Business Standard

5. Mayhem, the Over-The-Counter Floor Trading Game
   Workshop by National Stock Exchange (NSE)

6. Bulls & Bears, the Stock Market Simulator

7. Acumen, the Street Entrepreneurship Game

8. MarkStrat, the Marketing Strategy Contest
   The game named “CXO” was conducted by Dr. Vinod Dumblekar. The event saw overwhelming participation from various colleges and we had to finally restrict the entries to 30 teams.
9. Cliffhanger, the Corporate Quiz  
   Quiz Master – Avinash Mudaliar

10. Kingpin, the Board Game Contest

11. Megaworld, the Virtual Microeconomy
   The biggest and the most successful competition of Megabucks 09 with 1126 participants and total goodies worth 2 lakhs were auctioned.

This year, Megabucks received national coverage in its print media partners, Business Standard and Business & Economy which ran a series of articles and advertisements as a run up to Megabucks.

TECHKRITI

Techkriti’09 was successfully organized from February 12th – 15th, 2009.

The festival was officially inaugurated on February 12th in the Main Auditorium with the address by the Following personalities:

Director of IIT Kanpur, Dr. Dhande, Dean, Students Affairs, Dr. Partho Chakroboroty, Festival Chairman, Dr. Mukesh Sharma, Guest of Honor, Dr. David Morrisson, NASA

Techkriti 09 saw a successful conduction of the following competitions:

Rube Goldberg Challenge - organized in Tutorial block and was judged by DOSA & DOAA. (2) Crypto Contest - online results (3) National spaghetti Bridge Design Channel - finals was open stage in SAC (4) Junkyard Wars - Final showdown was conducted live from SAC gate to main stadium gates. (5) Bio Business Plan (6) Turbulence (7) Cosmos (8) Eureka (9) Gearloose (10) Radio-Active (SDR Workshop: Foxhunt: Electo-buzz) (11) Online events:

Indian Open Rubik’s Cube
   1. Endeavour
   2. School Bag:
      (Science Exhibition, Mathematical Model Exhibition, Programming Contest, Audio Visual Quiz, Essay and Debate Competition, Robotics Workshop, Electronics Workshop, Astronomy Session, Interaction Session with faculty Members from IIT Kanpur)
   3. Robogames:
      1. Robo-Ex: Build autonomous robots that can solve amaze and extinguish a fire.
      2. RoboWars: Manually controlled robots built for the fighting arena.
      3. Shoot on Sight: Manually controlled robots that can shoot wherever they want.
      4. Park ur Porsche: Solve the parking problem using autonomous bots.

4. International Online Hacking Contest:

5. Olymbiz:
Conduction of Lectures and Panel Discussion

GCOSE- Lecture Series:
- Dr. Lee Hartwell – Noble Prize in Physiology
- Dr. Ron Eglash, Fractals Study.
- Dr. G Madhvan Nair – Chairman, Indian Space Research Organization (ISRO)
- Dr. David Morrison – Senior Scientist, Ames Research Center, NASA
- Dr. Stephen Wolfram – CEO, Wolfram Research
- Dr. Hanson – CEO of Hanson Robotics
- Deepak Munganahalli - Senior Vice President, Asia and Pacific Unit, Transocean Ltd
- Dr. Shahid habib, NASA
- Kanwal Rekhi – Venture Capitalist, IITB Alumnus

“Techkriti Conclave: Energy” – Panel Discussion
- Exhibitions from GTZ, TERI, TATA BP Solar on renewable and non-renewable sources of energy.
- Panelists :
  1. Dr. R B Grover, Director, Strategic Planning Group, Department of Atomic Energy, Government of India
  2. Shailja Sharma, Head, Shell Energy Scenarios
  3. Steve Myers, President, Transocean India
  4. Anil Patni, Head, Communication and External Affairs, TATA BP Solar

Tech-Planet:
The dome shaped arena covering the entire Convocation grounds was the landmark of Techkriti’09. It housed the following events:
- Endeavour
- Exhibitions
- Research at IIT Kanpur

Conduction of Exhibitions shows a workshop
3D Movie workshop and shows – US

Various 3D movie shows were conducted each comprising of 600 students at a time. As per the overly enthusiastic response, we had to conduct repeated movie shows.
Interactive Screens – GestureTek, UK
They were placed in the Outreach auditorium and tech-Planet
Hanson Robotics - US
Zeno, the humanoid was on display for 4 days in Tech-Planet.
Conduction of Workshops
CUDA, NVIDIA

- Beagle Board Workshop, Texas Instruments, IBM, Innov8 - a BPM Simulator, Robotics workshop, Brics, Voice Apps, Simmortel, SDR workshop, Telescope making workshop
- Conduction of Professional Night

We organized a laser cum pyrotechnic show of duration 1 hour on the closing night of Techkriti’09. This show was conducted by Thriller SFX Fireworks, Mumbai, India.

6. COMPULSORY PHYSICAL ACTIVITIES (CPA)

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

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

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

NATIONAL CADET CORPS (NCC)

1. It is a matter of 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.

2. The NCC is authorized and administered by the Govt. of India as an integral part of its National Plan. For the successful implementation of the NCC Programme, the scheme has been inter-woven with the National Education Programme. In order 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, suit 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 nonformal schools. NSS volunteers visited nearby villages for distributing books and demonstrating science experiments.

YOGA

Classes to train students in Yoga, as one of the stream of PE courses, were conducted during both the semesters of 2008-2009 successfully by a yoga teacher. These classes included Joints and Glands exercises, Asanas (Postures) in standing, sitting and lying positions, Mudras (Gestures), Bandhas (Locks), body cleansing Kriyas (techniques); Pranayama (Breathing exercises) and Meditation. Counselling is also provided to students for solving their personal physical, mental and emotional problems through yoga.

TAE-KWON-DO

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

7. 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.
8. COUNSELLING SERVICE

Counselling Service has remained committed to serving the student community from the year of its inception in 1964. Over all these years, its domain of activities has extended as much as its team of volunteers (students and faculty members) and professionals (counsellors and psychiatrists). Thus, for the session 2008-2009, it functioned under the able guidance of Prof. A. K. Ghosh with a team of 110 UG student members, 50 PG student members, 90 faculty members, one professional counsellor and two psychiatrists.

Student Guide Workshop and Orientation Programme:
Like every year, the activities of the Counselling Service started with a two day workshop for all the student guides selected to assist the new students. They were sensitized to various issues that the new students may face, through sessions with faculty members, psychologists, and senior students. This was followed by the ‘Orientation Programme’ for the new UG and PG students that spanned over a period of 3 days.

During this period the student guides not only helped the new students to settle down comfortably in the new environment, but also assisted them in completing various official procedures like opening up new bank accounts, making identity cards, getting health-center booklet, computer centre logins as well as completing the academic registration process. Apart from that, the student guides developed a friendly relation with their counsellees and helped them tackle the academic and non-academic issues they faced throughout the year.

Academic Help:
With the commencement of the session, students on Warning and Academic Probation because of under performance in the previous semester, were met in a few group Counselling sessions. Through individual sessions the counsellor also helped them in effective target setting, developing better time management skills, or in resolving any other conflict that may be affecting them.

A team of link students was also selected to tutor the students who required academic help. Slow Paced Programme was recommended for certain students, on the basis of their performance up to the first mid semester examination. Meetings were held with these students to suggest semester wise course plan according to their department.
Progress Report of Students on AP During 2008-09 I

Total No. of Students in AP: 75

- Cleared: 42%
- Warning: 8%
- AP: 4%
- Termination: 11%
- Leave: 0%

Progress Report of Students on WR During 2008-09 I

Total No. of Students in WR: 87

- Cleared: 57%
- Warning: 32%
- AP: 11%
- Termination: 0%
English Conversation Classes:
English Conversation Classes were also conducted by the Counselling Service at nominal rates in both the semesters of the session 2008-2009, to help students having problems in English conversation and comprehension.
**Psychological Support:**
Apart from academic problems, students who required emotional support and guidance met the Counsellor as well. The Counsellor on assessing the requirement of the individual advised either individual counselling sessions or psychiatric intervention along with the counselling sessions.

Psychiatrists visited the campus on a regular schedule to meet the students who were advised to consult them. Regular follow up sessions with these students were also conducted by the Counsellor.

**Financial Support:**
On the financial front, students were provided assistance through SBF scholarships. Around 70 students could avail this facility. Loans were provided to students facing acute financial problems.

**Workshops and Publications:**
In the session 2008-2009, awareness building amongst the residents of our campus about the growing psycho socio economic changes in the student population was emphasized.

‘Aspirations, Career and You’, a career awareness workshop was conducted on September 6, 2008 for the students by Dr. Manas Mandal (Director, Defense Institute of Psychological Research).

A sensitization session for the faculty members was organized by the Counselling Service on March 01, 2009 titled ‘Changing Times, Changing Minds’. It was addressed by the Institute Psychiatrists Dr. Alok Bajpai and Dr. Sanjay Mahendru; Director, DIPR, Dr. Manas Mandal and Counsellor Mrs. S. Chakroborty. An information booklet titled ‘Together we strive to make a difference’ was also published on this occasion to enable the faculty members to identify students in distress and to understand their role in this context.

A pamphlet ‘Partners in Building a Happier Campus’ was also printed to generate awareness amongst students about various mental health issues.

**Survey of Parents:**
To understand the expectations and awareness of parents about the Institute, a survey was conducted during the JEE counselling 2008. The results of this survey were discussed with the parents during the Orientation Programme in a special session with the Counselling Service, which was found very useful in clearing some of the misconceptions among the parents.

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**8. FACULTY INCHARGES STUDENTS’ AFFAIRS**

Dean, Students Affairs  
Dr. Partha Chakroborty  
From June 2008

Head, Counselling Service  
Dr. A.K. Ghosh  
From 01.05.2008

Chairman, Council of Wardens  
Dr. Sudhir Mishra  
From 10.07.2008
Vice-Chairman, Council of Wardens
Dr. Animesh Biswas From 15.07.2008

Counsellors, Students' Gymkhana

<table>
<thead>
<tr>
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<tr>
<td>Chief Counsellor</td>
<td>Dr. Partha Chakroborty</td>
</tr>
<tr>
<td>Cultural Counsellor</td>
<td>Dr. (Ms) Suchitra Mathur</td>
</tr>
<tr>
<td>Games Counsellor</td>
<td>Dr. C.S. Upadhyay</td>
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<tr>
<td>Films Counsellor</td>
<td>Dr. Satyaki Roy</td>
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<tr>
<td>Science &amp; Technology Counsellor</td>
<td>Dr. Rajat Moona</td>
</tr>
<tr>
<td>Treasurer</td>
<td>Dr. D Bhaguna</td>
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<td>Chairman Students Benefit Fund</td>
<td>Dr. A.K. Ghosh</td>
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<td>Chairman Students' Placement Committee</td>
<td>Dr. Bharat Lohani</td>
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<tr>
<td>Faculty Advisor, NSS</td>
<td>Dr. H.C. Verma</td>
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<tr>
<td>Chairman, Swimming Pool Management Committee</td>
<td>Dr. P Shunmugaraj</td>
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<tr>
<td>Faculty Advisor, Yoga</td>
<td>Dr. A.K. Sharma</td>
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<tr>
<td>Faculty Advisor, Taekwon-do</td>
<td>Dr. B.V. Phani</td>
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10. WARDENS

**HALL OF RESIDENCE No. I**

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<td>Dr. Arun P. Sinha I/C</td>
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<td>Dr. Amit Prashant</td>
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<td>Dr. Anjan Kumar Gupta</td>
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<td>Dr. Y. N. Singh I/C</td>
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<tr>
<td>Dr. Nandini Gupta, Warden</td>
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</table>
10. 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. Anurag Sujania (upto Feb. 2009) Mr.Mohit Kumar Jolly (From March 2009.)
Convenor, Students Senate
Mr. K Sudheendra Rao (Upto Feb. 2009) Mr.Ashish Agarwal (From March 2009)

General Secretary (Cultural)
Mr. Anuj Gupta (Upto Feb. 2009) Mr. Apoorva K Srivastava (From March 2009)

General Secretary (Games)
Mr. Abhishek Tiwari (Upto Feb. 2007) Mr. Shilendra S Rajput (From March 2009.)

General Secretary (Films)
Mr. Ramik Sadana (Upto Feb. 2007) Mr. Naved Siddiqui (From March 2007)

General Secretary (Science & Technology)
Mr. Abhineet Gupta (Upto Feb. 2007) Mr. Puneet Singh Rathor (From March 2009)
Introduction

The Students’ Placement Office plays an important role in assisting the students in their career planning and helping them in their placement. This year the Students’ Placement Office was confronted with a big challenge of conducting recruitment in the most difficult times for the economy. Hence forth more companies were contacted and sessions were held for students to take an informed decision.

Pre-Placement Talks were held during the 7th semester and the final placements were scheduled after the end semester exams. Multiple companies were called in a day. The PPT’s started from 24th August and 58 companies gave their presentations. The final Placements began from 1st December and is still continuing for the students who have not yet secured a job.

Invitation letters for participating in the Campus Recruitment Programme 2007-08 were sent to over 1124 Organizations. A total of 126 companies visited the campus and recruited 546 students out of the 766 students who had registered with the SPO (see Table 1). The placement statistics for our B.Tech students is 76% this year while for the M.Tech. students it is 63.56% till date. The MBA program has had 93% and Dual Degree Programme has had 89% placement. The overall placement for 2008-09 has been 71.3%. With the objective of providing uniform opportunity to all students registered for placement, the policy of “one job per student” still continues. The average salary this year for the overall batch is Rs.6.00 lakhs per annum. The core sectors attracted maximum number of students. Amongst the new
organizations, the major ones that recruited this year are Chevron, DAR Group, SAIL, ISPAT India, JP Morgan and AMCC.

This year workshops were also conducted in a big way and in all 34 workshops were organized. This also included Career Awareness Workshops for the first time.

Placement Statistics

Legend
AE=Aerospace Engineering
BSBE=Biological Sciences & Bioengineering
CE=Civil Engineering
CHE=Chemical Engineering
CSE=Computer Science & Engineering
EE=Electrical Engineering
LT=Laser Technology
ME=Mechanical Engineering
MME=Materials & Metallurgical Engineering
NT=Nuclear Technology

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MTech

No Of Students

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MBA

No of Students

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Annual Report 2008-09

MDes

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ROADBLOCKS

Owing to economic slump many companies did not recruit this year. A total of 1200 companies were contacted out of which 240 companies filled in the proforma. However, around 110 companies backed out before the final placements and 130 companies finally conducted the recruitment process. Even companies that finally conducted the recruitment process did not take in large number of students. Many bulk recruiters of the previous year like G.E, JLLM, Infosys did not visit this year.

There were many occasions when companies couldn’t come for recruitment as accommodation was not available in the Institute for some reason. Some companies had to stay in Lucknow as no accommodation was available then in Kanpur and hence found it inconvenient to conduct the recruitment process without compromising on time for interviews.
INITIATIVES TAKEN

This year a number of initiatives were taken to counter the economic slump prevalent in the market. Different strategies were adopted both in contacting companies and preparing students.

Networking
This was the first year that alumni input was taken in a big way. The Board of Directors Alumni Association was approached for help in contacting more companies. Student representatives had gone for the PAN IIT meet held in IIT Chennai this year. Alumni Reunions was targeted for placements as well. Different Alumni chapters helped a lot in getting more companies for campus recruitment. Alumni from different batches were contacted directly for help in contacting companies. Sahara Next, Finmechanics, Tholons are a few examples of companies that came through alumni support.

Crossroads: An Alumni Student Interaction Interface
It was the started with a vision to inculcate the culture of preparation amongst the students by helping them learn directly from the alumni in the company. As per our past experience and the feedback given by the companies and alumni, students at IIT Kanpur did not deliberate much before taking decision about their career and did not get a platform to interact with alumni of different sectors. To cater with these problems, we started a student-alumni interaction portal named Crossroads. On this portal student post their queries and alumni answer to the same after being informed by Students’ Placement Office about the query. Currently there around 3000 student members and 1200 alumni registered on the portal.

Career Awareness Workshop
Conducted in the second semester, the workshop was aimed at giving pre-final year students a comprehensive idea of different job opportunities that one has after passing out of IIT Kanpur. Talks were given by alumni from non-core sectors namely: Finance, Consultancy, FMCG, IT and Analytics. To give students an idea of core companies departmental session for Mechanical, Material and Metallurgical and Electrical were also conducted in April. To help students better prepare for companies, workshops for Resume making, case
study and mock placements were also conducted in the months of March and April.

**Strategy**
- Since many companies were not looking at large number of students and preferred taking students from IITs that were in the same region, students were sent to Delhi and Bangalore for final interviews. Video Conferencing and telephonic interviews was more common this year.
- Though start ups and educational institutes did come earlier for recruitment this year they were pursued in a big way because of the comparatively larger number of opportunities in this sector.
Services / Amenities

INSTITUTE WORKS DEPARTMENT

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

- Civil, Electrical and Air-conditioning maintenance services
- Water Supply and Sewage Disposal
- Power Distribution
- Estimate Management
- Sanitation and upkeep
- Horticulture Development and Maintenance
- Furniture repairs
- Roads

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

<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 works / new construction works / water supply, furniture, roads</td>
<td>Officer-In-Charge, IWD</td>
</tr>
<tr>
<td>2</td>
<td>Civil Division-II</td>
<td>Maintenance &amp; development works</td>
<td>Officer-In-Charge, IWD</td>
</tr>
<tr>
<td>3</td>
<td>Electrical &amp; Air-Conditioning Division</td>
<td>Electrical maintenance domestic / central AC maintenance</td>
<td>Officer-In-Charge, IWD</td>
</tr>
<tr>
<td>4</td>
<td>Horticulture</td>
<td>Development &amp; maintenance</td>
<td>Officer-In-Charge, IWD</td>
</tr>
</tbody>
</table>
STORES & PURCHASE SECTION

The Store 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 2008-2009 the Purchase Section places 1887 orders valued Rs.93,32,55,443=09 which includes import order numbering 482 costing Rs.65,77,67,378=73 and indigenous order numbering 1405 Costing 27,54,88,064=36. 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>Import :-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(A) Institute fund</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumable</td>
<td>34</td>
<td>31,40,247=47</td>
</tr>
<tr>
<td>Non consumable</td>
<td>138</td>
<td>23,30,06,168=82</td>
</tr>
<tr>
<td>(B) Project fund</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumable</td>
<td>118</td>
<td>1,50,84,550=42</td>
</tr>
<tr>
<td>Non consumable</td>
<td>192</td>
<td>40,65,36,412=02</td>
</tr>
<tr>
<td>Total Import (A&amp;B)</td>
<td>482</td>
<td>65,77,67,378=73</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 20 personnel.

The store 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.

Stores Accounts maintain the expenditure details under working expenses and stationery grants sanctioned to Department/Section etc.

This Section also started reconditioning of wooden & steel furniture. During The Financial year 2008-2009 we have reconditioned different type of furniture and issued to various departments. The details of reconditioned furniture are as follows. (1) Chair 182 nos (2) Office Table 82 nos (3) Almira 17 nos (5) Wooden Racks 4 nos (6) Filling Cabinet 4 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 &

<table>
<thead>
<tr>
<th>(C) Indigenous :-</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Institute fund</strong></td>
<td></td>
</tr>
<tr>
<td>Consumable</td>
<td>252</td>
</tr>
<tr>
<td>Non consumable</td>
<td>448</td>
</tr>
<tr>
<td><strong>(D) Project fund</strong></td>
<td></td>
</tr>
<tr>
<td>Consumable</td>
<td>190</td>
</tr>
<tr>
<td>Non consumable</td>
<td>515</td>
</tr>
<tr>
<td><strong>Total Indigenous (C&amp;D)</strong></td>
<td>1405</td>
</tr>
<tr>
<td><strong>Total Value</strong></td>
<td>1887</td>
</tr>
</tbody>
</table>
Purchase has been automated in this financial year. 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 ten thousand. Being a residential campus with 1034 houses 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 and shopping complexes and such facilities, which are required for day-to-day living.

The estate office is entrusted with various kinds of activities including house allotment, commercial shops management, tendering process of unserviceable materials, eviction of unauthorized occupants, realization of license fee/electric charges from shopkeepers & house allotee’s, estate management and civic amenities.

The Institute has various types of residential accommodation, i.e. Type-IA, IB, I, II, III, IV & V out of which Type-III & above are allotted to Faculty members, Scientists, Research Engineers, Group-A Officers and rest are allotted to other staff. We have mainly four shopping complexes at various locations i.e. one in the heart of campus called as main shopping complex and other at Type-II complex, third one at security crossing & fourth one at Type-I area consisting of various kinds of 98 shops, which fulfill the basic needs of the residents.

Besides the above shopping complexes, we have 10 hostels for students’ accommodation out of which seven are for boys and two are for girls, one
more hostel is under construction for boys. Every hostel has a barbershop, washer man shop, tailoring shop which mainly fulfills the immediate needs of students. As per demand, we have already started the operation of the PCOs in most of the hostels.

The construction of twelve residences for visiting faculty completed and is used for providing accommodation.

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

Besides, the estate office is managing all types of activities related to the estate successfully and cautiously by way of taking all the precautions to solve all types of problems. During the financial year 2008-09, the office has realized about **Rs. 87,88,267/-** (43.16% more than the last year, i.e. 2007-08) from the different sources.

### CAMPUS SCHOOL

Honorable Chief Guest Prof. S. G. Dhande, Director of the Institute, Prof Joseph John, Chairman S. M. C., distinguished guests-ladies & gentlemen.

It is my profound privilege to extend a warm welcome to all of you on the occasion of Open House of Campus School. I am personally grateful to Prof. Dhande, who, in spite of his extremely tight schedule conceded to our request, and is present on occasion to inaugurate the function. Sir, your presence is a source of encouragement to all of us. Thank you very much. Now I take this opportunity to present the annual report of the school.

Physical Panorama:

1) School Strength:
   - (A) Students on roll: 374
   - (B) Teachers – regular: 15 and the Principal
   - (C) Teachers – contractual and others: 12
   - (D) Supporting staff: 11
2) Infrastructure:

The school is equipped with the following:-

Open shelf library, computer room, dance & music room, art room, science room, P.T. room for indoor games, a big playground for Basket ball, Kho-Kho, Cricket, Football, Volley ball, and a play area with swings, slides, seesaw and other play equipment.

1. The infrastructure of the school is quite old and requires considerable repair, renovation and modernisation. Some steps have already been taken to improve the infrastructure of various sections of the school. These are as follows:-

2. The K.G. section has been renovated to a great extent with the addition of new toys, puzzles, games & activities. It is also equipped with a computer, internet connection & a projector to create a stimulating environment for the children.

3. The Art room has been renovated with the latest furniture, storage cabinet and large display panels on the walls.

4. The Library is in the process of being computerized. A large number of books and many magazines have been added to the collection. The furniture & shelves have been renovated.

5. A Maths Lab has been set up, which has become a unique feature of Campus School. Tools to make the understanding of the mathematical concepts & operations easy & interesting are being developed and deployed in this Lab.

6. The Staffroom for teachers has been newly furnished and equipped with a computer with internet connection and electrical appliances for the tea club. This room is now used by the teachers to relax during the break, to prepare test papers, and for all staff meetings.

7. The Dance & Music rooms have also been modified to meet the needs of the students.

8. The office records of the school till date are being computerized & smartcard system of e-attendance has been introduced.

9. Some sections of the school that still need attention & modifications are the Science room, Computer lab and the Games room.
3) P. T. A. Meetings

P.T.A. meetings are scheduled on every third Saturday of the month.

Open P.T.A. meetings are held twice a year. The first meeting for this year was held on 26th April, 2008. Two parents, Dr. Sandeep Sangal & Mr. Sheetla Prasad Tripathi were unanimously elected in the meeting as members of the school management committee. The second Open P.T.A. meeting is scheduled to be held towards the end of the academic year.

Since Campus School is a community school, suggestions of parents and well wishers are always welcome. All comments are given due consideration, and all feasible suggestions that are for the betterment of the school are implemented. Parental care of the students, democratic set up, self discipline and transparency in functioning and activities make Campus School different from other educational institutions.

4) Activities

a) Students are given a wide range of exposure necessary for the all round development of personality.

b) Story telling, quiz, news reading & poetry recitation are regular features of morning assembly.

c) Different festivals & functions such as Janamashtami, Gandhi Jayanti, Dussehra, Deepawali, Eid, Christmas, etc are organized in the morning assembly to acquaint the kids with the socio-cultural heritage of our country.

I. School Competitions

Fancy Dress, Poetry Recitation, Book Reading, Mental Maths, Mono Acting, Elocution, Debate, Singing, Art, Quiz, Handwriting competitions, etc. are organized.

II. Inter-school Competitions:

During the Hindi Week & Wild Life Week celebrations our children participated in several interschool competitions in sub-junior (I to IVth) &
junior (Vth to VIIIth) groups and brought many laurels to the school. Hindi Dictation: won 17 prizes, out of 22 & Kavya Paath: won 6 prizes out of 7.

Our class Vth students competed with class VIIIth students of the city schools in the group song, group dance, Casio playing, mono acting & quiz and stood first in each of the competitions. The performance of the Campus School students was appreciated and applauded by all including the Director of the Zoo & the local daily Newspapers.

III. Art competitions

Five students won Rs. 1300 as cash awards at the State Level in the All India Camel Colour Contest & five students got prizes in the Navneet Colour Contest.

Most of the students of class IVth & Vth visited the Water Park under the guidance & supervision of Mr. V. Victor, PTI, Mr. D. Pathak, and Dr. N. Agnihotri & Mrs. U. Mahajan. All children from class K.G. to Vth visited either the Children’s Park cum Japanese Garden or the Zoological Garden, after many years.

5) Mega Events Celebration

- Independence Day: Chief Guest Prof. J. John, Chairman S.M.C. A patriotic cultural programme at the IIT Kanpur auditorium.

- Teacher’s Day: Chief Guest Prof. Kripa Shankar. Thanks to the Institute administration for remembering and recognizing the services of the teachers.

- Children’s Day: Chief Guest Dr. (Mrs.) Medha Dhande. Children presented a short cultural programme. An art competition & puppet show was organized & small gifts were distributed to all children. The chief guest encouraged the children by giving away awards & prizes.
Annual Sports Day: 20th Dec’08. Chief Guest Dr. N. S. Vyas. Children showed their skill, dexterity and discipline in their Displays, Drills and Gymnastics. Parents and guests participated in the games organised specially for them.


Annual Open House: 21st Feb’09. Chief Guest Prof. S. G. Dhande, Director of the Institute. Open House will include activities based on Language, Art & Craft, Dance & Music, Theatre, and Maths & Science. All children of the school are participating in it.

6) Special Events

The number of evening co-curricular activities has increased under the project INDRADHANUSH. The response is quite encouraging one. The energy & vitality of the children are being channelised in a proper & positive direction under the supervision of qualified teachers through art & craft, music, language & theatre activities, science, dance, and games & sports. Mr. D. Pathak, Mr. V. K. Trivedi and Mr. V. Victor and Ms. S. Iyengar from campus school are giving their best contribution in these activities. More than 200 children are being benefited through these activities.

Mr. M. A. Siddiqui – Principal, Mrs. S. Yadav -Teacher Gd.1 & Mr. Ram Lakhan – Teacher Gd. 1 have retired from their services by virtue of superannuation. Their sincere, valuable & exemplary services rendered to the school are highly appreciated. We wish them a very happy, prosperous & peaceful long life.

Mrs. Sushma Hora took over the charge as officiating principal from July 1st 2008 & later appointed as Principal w.e.f. Sept. 23rd 2008.
One of our colleagues Mrs. Malini Sinha was honoured by the Director for her long & satisfactory services to the Institute on the occasion of Republic Day. Congrats!

The principal & two teachers Mr. Mewa Lal & Mr. U. Mahajan went for training at Sidh Training Centre, Mussoorie.

I would like to thank the Institute Administration for facilitating the functioning of the school by providing new teachers through DRPG Project. We heartily welcome these teachers in the fold of school family with the hope that their professional experience, dedication & devotion will help in upholding the school’s educational environment.

7) Training Programmes

The following professionals were invited to conduct teachers’ training workshops.

a. Prof. P. P. Sah for Interactive English.

b. Prof. Amitabh Mukherjee from Delhi for a Maths Workshop.

c. Dr. Alok Bajpai for an Interactive Session on “How to Deal with Special Kids”.

d. Dr. Shashi Umesh for awareness of dental health & care.

e. Mrs. Mani for demonstration of paper crafts.

f. Prof H.C. Verma & his team of students for Science Workshop of 100 experiments.

I extend my sincere thanks to them for sharing their precious time. I also thank to the parents, teachers & supporting staff for making all the events a great success.

As mentioned earlier, Campus School is a community driven school. Members of the IIT Kanpur campus have been of invaluable help in the Upgradation and Restructuring process that has recently begun in the School. We are very grateful to them for spending their time, energy and expertise to help the school grow to new heights. I would specially like to mention Dr. Guhapriya Gurunath, and her Indradhanush team for their help. Others who are
continuing to contribute actively to the school are Professor Bisakh Bhattacharya, Mr. Vijay Anand, Ms. Satrupa Ray, and Dr. Koumudi Patil. I would also like to specially thank Ms. Rita Singh, who is always ready to offer her unmatched support for any of the school’s needs.

A special Thanks must also be given to Professor Joseph John, Chairman of the School Management Committee. Dr. John is one of the pivotal factors that have enabled the recent changes and progress in Campus School. He has worked proactively for the betterment of the school. The school will always be grateful for this generous and progressive minded chairman.

HEALTH CENTRE

Health Centre had been established with the objective of addressing health needs of the Institute Community. Health Centre provides services round the clock to meet out the objective. Health Centre is manned by 8 Medical Officers and a Medical Advisor of the Institute.

The details of the Health Centre services provided for the period with effect from 01.04.2008 to 31.3.2009, are as follows:

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Particulars</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>01.</td>
<td>Number of patients treated in OPD</td>
<td>50211</td>
</tr>
<tr>
<td>02.</td>
<td>Number of students treated</td>
<td>12220</td>
</tr>
<tr>
<td>03.</td>
<td>Number of patients manually registered</td>
<td>419</td>
</tr>
<tr>
<td>04.</td>
<td>Number of patients treated in Indoor</td>
<td>971</td>
</tr>
<tr>
<td>05.</td>
<td>Number of patients treated in Homeopathy including students</td>
<td>7721</td>
</tr>
<tr>
<td>06.</td>
<td>Number of patients treated in Physiotherapy</td>
<td>4049</td>
</tr>
<tr>
<td>07.</td>
<td>Number of Surgical Operations (Minor)</td>
<td>NIL</td>
</tr>
<tr>
<td></td>
<td>Number of Tubectomy</td>
<td>NIL</td>
</tr>
<tr>
<td></td>
<td>Number of D&amp;C</td>
<td>10</td>
</tr>
<tr>
<td>08.</td>
<td>Number of Deliveries</td>
<td>01</td>
</tr>
<tr>
<td>09.</td>
<td>Number of Plastering</td>
<td>75</td>
</tr>
<tr>
<td>10.</td>
<td>Number of Surgical Dressing</td>
<td>4368</td>
</tr>
<tr>
<td>11.</td>
<td>Number of Injections</td>
<td>90000</td>
</tr>
<tr>
<td></td>
<td>Number of Tetvac</td>
<td>840</td>
</tr>
</tbody>
</table>
12. Number of babies attended in Well Baby Clinic 656
13. Number of X-Ray done 2 446
14. Number of babies attended-National Pulse Polio Programme 253
15. Number of Anti Rabies Injections 154

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 storied 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 for the benefit of the Institute’s Visitors.

Allied Facilities:
• Visiting Faculty Apartment at IIT Kanpur
• Outreach 69 & 80 building, IIT Kanpur
• Community Hall (Main Auditorium), IIT Kanpur
• Transit Accommodation, Chittaranjan park, New Delhi

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.

Accommodation (Visitors’ Hostel):
Visitors’ Hostel has been equipped with 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.

**Dining Facility (Visitors’ Hostel):**
VH provides dining facilities to in-house guests staying in VH and Visiting Faculty Apartment and for 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.

**Accommodation (Transit Accommodation, New Delhi):**
Transit accommodation is a rented property situated at Chittranjan Park, New Delhi. It is equipped with 5 Deluxe air-conditioned rooms. It can accommodate a maximum of 10 guests at a time on twin sharing basis. All the rooms have attached bathrooms with modern amenities.

**Dining Facility (Transit Accommodation, New Delhi):**
The dining facility is provided to the in-house guests staying in the Transit accommodation. The accommodation has one air-conditioned dining area.

**Conferencing Facilities:**
A. Pioneer Batch Continuing Education Center (PBCEC)

<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>
</tbody>
</table>
6 | PBCEC Committee Room | 11

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>1</td>
<td>Auditorium</td>
<td>210</td>
</tr>
<tr>
<td>2</td>
<td>Seminar Room-1</td>
<td>40</td>
</tr>
<tr>
<td>3</td>
<td>Video-Conferencing Room</td>
<td>30</td>
</tr>
<tr>
<td>4</td>
<td>Outreach Lawns</td>
<td>250</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

C. Community Center (Main Auditorium)

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of Facility</th>
<th>Max. Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Auditorium</td>
<td>1300</td>
</tr>
<tr>
<td>2</td>
<td>Auditorium Lawns</td>
<td>2500</td>
</tr>
<tr>
<td>3</td>
<td>Foyer</td>
<td>250</td>
</tr>
<tr>
<td>4</td>
<td>Prayer Hall</td>
<td>50</td>
</tr>
</tbody>
</table>

Additional Facilities:
- Centralized reservation system for all facilities at VH and Allied Services through prescribed formats. 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.
- Intimation of confirmation of bookings through e-mail.
- Wi-fi connectivity is enabled in the entire premises of Visitors’ Hostel and all its allied services.
- 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/ or LAN enabled internet services through their laptop or PC.
• All the rooms have Television sets equipped with cable connections.
• All the Deluxe rooms have a PC.
• All the deluxe rooms have a small pantry and a small refrigerator.
• Acceptance of payment through Cash or Local Cheque/ Demand Drafts.
• For detailed information, website of Visitors’ hostel can be accessed at http://www.iitk.ac.in/vh.

Renovation Work:
• Renovation and expansion of Front Office has been completed.
• 15 Non-AC rooms have been converted into Standard AC rooms.

On the Anvil:
• Refurbishing of standard and deluxe rooms.
• Maintaining an online Wait-list for allotment of facilities at VH & Allied Services.

Management of day-to-day hospitality service has been outsourced to a private agency. An increase in facilities and 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.
BOOKS AND BOOK-CHAPTERS PUBLISHED

Aerospace


Biological Science and Bio-engineering


Chemical


Civil


Computer Science


Electrical


Industrial & Management

18. Relaxations and equivalence of two formulations of the capacitated lot sizing problem with back-orders and setup times, Proceedings of the
Global Conference on Business and Finance, V4(1), 2009, ISSN: 1931-0285 (CD); ISSN: 1941-9589 (ONLINE); pp. 42-53; M. Verma and RRK Sharma.


Mechanical


38. Advanced Machining Processes, in Machining by (Editor), published by Springer Verlag, 2008, V.K.Jain and J.Paulo Davim.
Humanities and Social Sciences


42. Teaching social science in schools: NCERTs new textbook initiative. Sage, New Delhi, 2009, Alex M. George and Amman Madan.


Chemistry


Mathematics and Statistics


Physics
58. Exchange-correlation potential of Kohn-Sham theory; a physical perspective in Chemical Reactivity Theory, A Density Functional View; CRC Press [Editor: Pratim Kumar Chattaraj]; M.K. Harbola.


60. Introduction to Turbulence, Published by Universitites Press, Hyderabad, 2008 and CRC Press, Boca Raton (2009); M.K. Verma.

JOURNAL PAPERS

Aerospace


Engineering, Vol. 223, No G1, February 2009, pp. 31-38, Ashish Vashishtha and Rathakrishnan E.


Biological Science and Bio-Engineering

23. Satellite III Non-Coding Rnas Show Distinct and Stress-Specific Patterns of induction, Biochemical and Biophysical Research Communications 382 1 102-107, 2009, Sengupta S, Parihar R, and Ganesh S.


29. Identification of Unique Molecular Subdomains in the Perichondrium and Periosteum and their Role in Regulating Gene Expression in the Underlying


47. Macroporous interpenetrating Cryogel Network of Polyacrylonitrile and Gelatin for Biomedical Applications, J. Material Science: Mat. in Medicine 2008, Jain, E., Srivastava, A. and Kumar, A.


49. Exogenous Endocrine-Disrupting Compounds, Clinical Lab International 8, 19-21, 2008, Gupta, R. and Kumar, A.


51. Studies on the Application of Different Anns in Prediction of Permeate Flux in Rotating Disk Membrane Module: a Case Study with Matlab, Desalination and Water Treatment, 2, 2009, 170-184, C Bhattacharjee; D Sen; P Sarkar; S Datta; PK Bhattacharya.
52. influence of Electric Field on Saturated Film Boiling, Physics of Fluids, 21, 2009, G Tomar; G Biswas; a Sharma; SWJ Welch.
64. Refractive index of Ageing Dispersions of Laponite, Applied Clay Science, 42, 2008, 326-330, NVNR Kumar; K Muralidhar; YM Joshi.
65. Interface Mixing Behaviour of Lennard-Jones FCC 100 Thin Film, Molecular Physics, 106, 2008, 2417-2423, P Gazali; SK Kwak; JK Singh.
75. Preparation and Characterization of Polymer Nanocomposite Containing PMMA, Styrene and Nanoalumina, Journal of Nanoscience and Nanotechnology, 8, 2008, 4056-4067, D Singh; T Jayasimha; KN Rai; A Kumar.
76. Control of Morphology in Pattern Directed Dewetting of Thin Polymer Films, Soft Matter, 4, 2008, 2086-2097, R Mukherjee; D Bandyopadhyay; A Sharma.
77. Multimode Analysis of Bubble Growth in Saturated Film Boiling, Physics of Fluids, 20, 2008, 092101, G Tomar; G Biswas; A Sharma; SWJ Welch.
82. Simulation of Temperature Fields in a Narrow Tubular Adsorber by thermal Lattice Boltzmann Methods, Chemical Engineering Science, 63, 2008, 4269-4279, N Verma; D Mewes.
85. Carbon Microelectromechanical Systems As a Substratum for Cell Growth, Biomedical Materials, 3, 2008, 034116, GT Teixidor; RA Gorkin; PP Tripathi; GS Bish; M Kulkarni; TK Maiti; TK Battacharyya; JR Subramaniam; a Sharma; BY Park; M Madou.
89. Characterization and Reactivity of TiO₂/SiO₂ Supported Vanadium Oxide Catalysts, Catalysis Letters, 124, 2008, 340-351, D Shee; G Deo.
93. Two Coexisting Modes in Field-Assisted AFM Nanopatterning of Thin Polymer Films, Macromolecular Chemistry and Physics, 209, 2008, 1358-1366,
XN Xie; HJ Chung; D Bandyopadhyay; a Sharma; CH Sow; AA Bettiol; ATS Wee.
115. Steady-State Multiplicity and Its Implications on the Control of an Ideal Reactive Distillation Column, industrial & Engineering Chemistry Research, 47, 2008, 2778-2787, MVP Kumar; N Kaistha.
Civil


Computer Science


Electrical


Industrial and Management


Materials and Metallurgical


254. Analysis of Terracotta Scale of Harappan Civilization from Kalibangan
255. Corrosion of Novel Rail Steels in 3.5% NaCl Solution Transactions of the
Indian institute of Metals 61 (2008) 177, B. Panda, R. Balasubramaniam,
Gopal Dwivedi and Sujata Mahapatra.
256. An Approach To the Development of Corrosion Resistant Coatings for
Terfenol-D (Tb0.3Dy0.7Fe1.92) Transactions of the Indian institute of Metals 61
257. Comparison of thermal Expansion Behavior of Phosphoric Irons with
Conventional Concrete Reinforcement Steel Journal of ASTM International,
258. On the Mathematical Significance of the Dimensions of the Delhi Iron Pillar,
259. Corrosion Behaviour of Mg-Cu and Mg-Mo Composites in 3.5% NaCl,
Gupta.
260. New insights on Metrology during Mughal Period Indian Journal of History
261. Effect of Surface Morphology on Atmospheric Corrosion Behavior of Fe-
Based Metallic Glass Fe67Co18Si14B1, Bulletin of Materials Science 31 (2008)
693, B. Vishwanadh, R. Balasubramaniam, D. Srivastava and G.K. Dey.
262. On History of Damage Caused to Quwwat-Ul-islam Mosque by Cannon Fire
Employed to Break the Delhi Iron Pillar, IFCAI Journal of History and
263. On the Nature of Rusts on Phosphoric Irons, Journal of Corrosion Science
and Engineering 10 (2008) 1, Gadadhar Sahoo, R. Balasubramaniam and A.
C. Vajpei.
264. Recrystallization Annealing of Cold Rolled 9Cr 1Mo Ferritic Steel Containing
Silicon Defects and Diffusion forum 282 (2008) 9, M. N. Mungole, M.
Surender, R. Balasubramaniam and S. Bhargava.
265. Electron Backscattering Diffraction Analysis of an Ancient Wootz Steel Blade
from Central India, Materials Characterization 60 (2009) 252, M.R. Barnett, A.
Sullivan and R. Balasubramaniam.
266. Cobblestone Mesotexture in a Nanocrystalline Ni–20Fe Electrodeposit,
and R. Balasubramaniam.
267. On the Confirmation of the Traditional Unit of Length Measure in the
Estimates of Circumference of the Earth, Current Science 96 (2009) 547, R.
Balasubramaniam.
268. Development of High Temperature Tib2-Based Ceramics, Key Engineering


305. Structural, Dielectric and Ferroelectric Study of Ba$_{0.9}$Sr$_{0.1}$Zr$_x$Ti$_{1-x}$O$_3$ Ceramics Prepared by the Sol Gel Method, Physica B 403 (2008) 1819, M. Kumar, A. Garg, R. Kumar and M.C. Bhatnagar.


392. Advanced Manufacturing Techniques and Information Technology Adoption in India, L.S.Thakur, V.K. Jain.


413. Improvement in Surface Degradation Properties of Polymer Composites Due to Pre-Processed Nanometric Alumina Fillers, IEEE Transactions on Dielectrics and Electrical insulation, V15, pp 63-72, 2008, Parimal Maity, P. Venkitnarayanan, Sumit Basu, Nandini Gupta.


Humanities and Social Sciences


428. Ethnography for Socially Relevant Psychology: An Illustrative Overview the Social Engineer, 112, 54-66, Kumar Ravi Priya.


Chemistry


453. A First Principle theoretical Study of Vibrational Spectral Diffusion and Hydrogen Bond Dynamics in Aqueous Ionic Solution: D2O in Hydration


463. Assembly of Tetra, Di and Mononuclear Molecular Cadmium Phosphonates using 2, 4, 6-Triisopropylphenylphosponic Acid and


467. First Example of a Molecular Ceiii Phosphonate: Synthesis, Structural Characterization and Catalytic Activity of [Ce2{Ph3CPO2OEt4}NO32H2O4], Structural Diversity of Ph3CPO3H2, Dalton Trans. 2008, 6475-6480, V. Chandrasekhar, P. Sasikumar, R. Boomishankar.


472. Mechanistic Studies on Bleomycin-Mediated DNA Damage: Multiple Binding Modes can result in Double-Stranded DNA Cleavage Jingyang Chen, Nucleic Acid Research 2008, 36, 3781, Manas K. Ghorai, Kenney Grace and Joanne Stubbe.


497. Reaction Between a Mononuclear Copper(I) Complex and Dioxygen forms a \( \text{[Cu}^{\text{II}}\mu_{-}\text{O}_2^{2+}] \) Core: Exogenous Substrate Reactivity, Chemistry & Biodiversity, 2008, 5, 1594-1608, S. Mandal, A. De, and R. N. Mukherjee.


Mathematics & Statistics


Representation theorems for Operators of Type $\mathcal{S}_{\omega}^{\omega}$ and $\mathcal{S}_{\omega}^{\omega}$, Glasnik Maematicki, 43 63 2008, 423 – 437, M. Gupta, L. R. Acharya.


On Certain Type of Modular Sequence Spaces, Turkish J Math, 32 2008, 293 – 303, M. Gupta, Shesadev Pradhan.


Physics


655. High-Temperature Superconductivity in EU$_{0.5}$K$_{0.5}$Fe$_2$As$_2$, Physical Review B, V 78, 2008, 092406, H. S. Jeevan, Z. Hossain, D. Kasinathan, H. Rosner, C. Geibel, and P. Gegenwart.


681. Diverging Giant Magnetoresistance in the Superconducting State of LA$_{2/3}$SR$_{1/3}$MNO$_3$-Y1-xPr$_x$BA$_2$Cu$_3$O$_7$-LA$_{2/3}$SR$_{1/3}$MNO$_3$ Ferromagnet Supercond-uctor Ferromagnet Trilayers, Phys. Rev. B 78, 0945022008, Soumen Mandal, R. C. Budhani, J. He and Y. Zhu.


CONFERENCE PAPERS

Aerospace


Biological Science and Bio-engineering


Chemical


30. Preparation and characterization of positively charged nano-filtration membranes, World Filtration Congress WFC10 to be held on APRIL 14-18, 2008 in Leipzig, Germany, PK Bhattacharya and M Rajagopalan.


Civil


Computer Science


64. An Efficient Dual Stage Approach for IRIS Feature Extraction using Interest Point Pairing, Accepted in CIB 2009, Nashville, TN, USA, April 2009, Hunny Mehrotra, Badrinath Srinivas, Banshidhar Majhi and Phalguni Gupta.


85. Dynamic approach for energy efficiency improvement and emission reduction in Indian power sector, World Renewable Energy Congress (WREC), Asia, to be held during 18-23 May 2009, Bangkok, Thailand, Mukesh Bhesaniya, Prem K. Kalra and Rajiv Shekhar.


96. Translation divergence English-Hindi-Sanskrit language pairs, Third International Sanskrit Computational Linguistics Symposium, Jan 15-17, 2009, Hyderabad; Lecture Notes in Computer Science / Lecture Notes in Artificial


101. DC bus voltage build up and control in stand-alone wind energy conversion system using direct vector control of SCIM, IEEE-IECON 08, Orlando, Florida, USA, 2008, pp 2143-2148, Samir Hazra, Partha Sarathi Sensarma.


114. Implementation of a neural network based visual motor control algorithm for a 7 DOF redundant manipulator, Proceedings IEEE World Congress on Computational Intelligence, Hong Kong, June 2008, Swagat Kumar and Laxmidhar Behera.
116. A frequency-duration time (FD) and Monte Carlo based hybrid approach for the evaluation of nodal price and nodal reliability indices, DRPT 2008 IEEE International Conference, April 06-09 2008 in Nanjing, Jiangsu, China, Guozhong Liu, Fushuan Wen, S. N. Singh.


129. Evolutionary Multi-objective Optimization Based Control Strategies for an Inverted Pendulum on a Cart, in Proceedings IEEE World Congress on Computational Intelligence, Hong Kong, June 2008, Awhan Patnaik and Laxmidhar Behera.


141. Improving the performance of VTLN under mismatched speaker conditions and making it approach that of matched speaker conditions, ICASSP 2009, Taipei, Taiwan, April 19-24, 2009, D. R. Sanand, S. P. Rath and S. Umesh.


Industrial & Management


Materials and Metallurgical


186. 18th International Photovolatics Science and Engineering Conference and Exhibition (PVSEC 18), 19-23 Jan 2009, Science City Conventional Center, Kolkata, Ankur Solanki, S. Sundar Kumar Iyer, Aashish Gupta and Ashish Garg.


192. Microstructural and morphological studies of 75%Ni-Fe powder prepared by mechanical alloying International conference on Recent Advances in Materials Processing and Technology (RAMPT-0),Chennai 2008, T Ashokkumar, A.Rajadurai , Gouthama, S.Sampath.


203. TEM Observations on Swaged $\alpha$-$\beta$ Brass, EMSINC-2009, Bundelkhand Univ., Jhansi, India, Gouthama, P. Sivagananapalani and G.P. Bajpa.
205. A Sample Preparation Technique to make TEM Observations on Thick (>100$\mu$m) Mechanically Milled Particles, EMSINC-2009, Bundelkhand Univ., Jhansi, India, Gouthama and J Bhagyaraj.

Mechanical

212. Experimental Investigation of cycle-by-cycle variations in CAI/HCCI combustion of Gasoline and Methanol by varying different engine operating conditions, SAE World Congress 2009, 2009-01-1345, Rakesh Kumar Maurya, Avinash Kumar Agarwal.
218. Simulation of Transport Phenomena and Interfacial Dynamics during Czochralski Growth of Oxide Crystals, to be presented at the 6th International


228. Schlieren-interferometric study of the wake of a heated in-line oscillating square cylinder, 19th International and 8th ISHMT-ASME Heat and Mass


245. State of the art Magnetic Abrasive Finishing, 14th International Conference on Frontiers in Design and Manufacturing Engineering (ICDM - 08), Sandeep Nair and J.Ramkumar.


256. Estimation of diameter during machining of Tungsten electrode by micro Block EDG process, Design and Manufacturing Issues Relevant to Automotive and Allied Industries, IPRoMM-2009, Chennai, India, G. Karthikeyan, J. Ramkumar, Shalabh.


263. A domain-specific crossover and a helper objective for generating minimum weight compliant mechanisms. Proceedings of Genetic and Evolutionary Computation conference (GECCO- 2008), Atlanta, USA, 1723-1724, 2008, Sharma, D., Deb, K., and Kishore, N. N.


Humanities and Social Sciences


Chemistry


Mathematics and Statistics


Physics


306. Potential of Principal Component Analysis (PCA) for discriminating normal against dysplastic state in cervical tissues, National Laser Symposium (NLS08), New Delhi, India, 2009, Prashant Shukla, Binay Bhushan and Asima Pradhan.


CONFERENCES ATTENDED OUTSIDE IIT KANPUR

Aerospace

2. 5-Degree of Freedom Dynamic Rig for Wind Tunnel Tests of Aerospace Vehicles, National Conference on Advances in Armament Technology, ARDE, Pashan, Pune, India, Sen, A., Peyada, N. K., Subrahmanyam, S., Wahi, P. and Ghosh, A. K.
8. International Conference on Aerospace Science and Technology (INCAST), NAL, Bangalore, Venkatesan C.
9. 34-th European Rotorcraft Forum, Liverpool, UK, Venkatesan C.
10. International Conference and Exhibition on Total Engineering, Analysis & Manufacturing Technologies, Bangalore, Venkatesan C.
11. INDUS MAV Workshop, NAL, Bangalore, Venkatesan C.

Biological Science and Bio-engineering

12. HUGO 13th Human Genome Meeting, held at International Convention Centre, Hyderabad, Ganesh S.
14. Young Investigators' Meeting Estuary Island, Kerala, Amitabha Bandyopadhyay.
15. Young Investigators' Meeting Estuary Island, Kerala, Jonaki Sen.
16. Papers presented, Joint International Meeting of Neurogastroenterology and Motility, Lucerne, Switzerland, Anupam Pal.
18. Papers presented, Joint International Meeting of Neurogastroenterology and Motility, Lucerne, Switzerland, Anupam Pal.
23. Understanding root-knot nematode development using RNAi, Fifth International Congress of Nematology, Brisbane, Australia, B.C. Yadav, Y.S. Bibin and K. Subramaniam.

Chemical

28. INTERFACE-08 held at HBTI-Kanpur, PK Bhattgacharya.
34. Wetting transitions on functional surfaces, Nanomem, FORTH-ICT, Greece, JK Singh.
35. Contributed oral presentation at the International Congress on Rheology at Monterey, California, USA, V Shankar.
37. 25th Annual meeting of Polymer Processing Society, Goa, YM Joshi.
39. 78th Annual Session of the National Academy of Sciences, Chandigarh, YM Joshi.
40. The XVth International Congress on rheology, monterey (California), de Gennes days symposium, Paris, YM Joshi.

Civil

42. Brainstorming Workshop on Application of Advanced Soft Computing Techniques in Geospatial Data Analysis, IIT Bombay, Mumbai, Jain, A.
43. Water Industry Alliance Awards Ceremony, Adelaide Convention Center, Adelaide, Australia, Jain, A.
44. Living Laboratories Technological Innovation in Wetland Management, The Vines Room, National Wine Centre, University of Adelaide, Adelaide, Australia, Jain, A.
45. REACH2008 Symposium, Khajuraho, M.P, Organized by IIT Kanpur, Jain, A.
46. Track Chair for Infrastructure Session in the National Frontiers of Engineering Symposium-3, IIT Madras, Das, A.
47. Earthquake Research Institute, University of Tokyo, as Visiting Scientists under a fellowship awarded by ERI to work with Prof. Satake, J. N. Malik.
48. ESC (European Seismological Commission) - at Crete, Greece, J. N. Malik.
49. Earthquake Research Institute, University of Tokyo, Japan under the joint INDO-JAPAN project on Paleoseismology of Andaman Island with Prof. Satake, sponsored by DST New Delhi and JSPS, J. N. Malik.
51. ESC (European Seismological Commission) - at Crete, Greece, Dikshit, O.
52. National Conference on Communications, I.I.T. Guwahati; Chaired a session, presented a contributed paper, Adrish Banerjee.
54. IFAC World Congress, Seoul, Laxmidhar Behera.
55. World Congress on Computational Intelligence (WCCI), in Hongkong, Laxmidhar Behera.
59. Presented peer reviewed paper at the National Conference on Communications (NCC 2009), IIT Guwahati, India, Rajesh M. Hegde.
60. Presented two contributed papers at IEEE-IECON 08, Orlando, Florida, US, Parthasarathi Sensarma, Rajesh M. Hegde.
64. 15th National Power System Conference, IIT Bombay (Mumbai), S. N. Singh.
65. GRIDTECH 2009 Conference and Exhibition, PGCIL, New Delhi, S. N. Singh.

Computer Science

69. Formal Methods Update Meeting, held at TRDDC, Pune, Foundations of Software Technology and Theoretical, Anil Seth.
70. Computer Science, held at Indian Institute of Science, Bangalore, India, Anil Seth.
71. International Conference on Scientific and Statistical Database Management (SSDBM) at Hong Kong, China, Arnab Bhattacharya.
72. 15th IEEE International Symposium on High-Performance Computer Architecture, Raleigh, NC, USA, Mainak Chaudhuri.
73. 10th Asia Pacific High-Performance Computing Conference, Kaohsiung, Taiwan, Mainak Chaudhuri.
75. Indian Algorithms Seminar, Khandala, Manindra Agrawal.
76. Foundations of Software Technology and Theoretical Computer Science, Bangalore, Manindra Agrawal.
77. ICDCIT, New Delhi, R.K. Ghosh.
78. Intl Conf of Parallel Processing, Portland, Oregon, Sanjeev K. Aggarwal.
81. Intl Conf on Distributed Systems and Internet Technologies, Delhi, India, Program Chair, Sanjeev K. Aggarwal.
82. India Software Engg Conference, Pune India, Session Chair, Sanjeev K. Aggarwal.
83. 20th Canadian Conference on Computational Geometry (CCCG'08), McGill University, Montreal, Canada, Shashank K Mehta.
84. Dagstuhl Seminar 08341 on Sublinear Algorithms, Dagstuhl, Germany, Sumit Ganguly.
85. Computer Science Conference of Russia (CSR), Moscow, Russia, Sumit Ganguly.
86. Frontiers of Algorithmics, Changsha, China, Sumit Ganguly.
87. International Conference on Scientific and Statistical Database Management, Hong Kong, contributed paper, Sumit Ganguly.
88. Indian Algorithms Seminar, Khandala, Sumit Ganguly.

Electrical

91. National Conference on Communications, I.I.T. Guwahati; Chaired a session, presented a contributed paper, Adrish Banerjee.
93. IFAC World Congress, Seoul, Laxmidhar Behera.
94. World Congress on Computational Intelligence (WCCI), in Hongkong, Laxmidhar Behera.
98. Presented peer reviewed paper at the National Conference on Communications (NCC 2009), IIT Guwahati, India, Rajesh M. Hegde.
104. GRIDTECH 2009 Conference and Exhibition, PGCIL, New Delhi, S. N. Singh.

Industrial & Management


109. 32nd Indian Social Science Congress, Jamia Millia Islamia New Delhi, Chairman Multidisciplinary Thematic Research Committee: Labour In Organized And Unorganized Sectors, Rahul Varman

110. 32nd Indian Social Science Congress, Jamia Millia Islamia New Delhi, Varman, Rahul & Chakrabarti, Manali.

111. International Conference on Social Network Analysis, Mumbai: Tata Institute of Social Sciences, D. Pattanaik and J. Chatterjee.

112. A session on Data Mining at the IEEE International conference on Systems, Mann and Cybernetics at Singapore, B. Chandra.


114. IFORS conference held at Johannisberg, B. Chandra.

Materials and Metallurgical

115. Processing and Fabrication of Advanced Materials, Delhi, K. Balani.


120. International Conference on Frontiers of Metallurgy and Materials Technology Hyderabad, R. Balasubhramaniam.


123. DST’s Pan-IIT Solar-research Initiative Workshop at IIT Bombay, M. Katiyar.

Mechanical

125. SAE World Congress, Detroit, USA, A.K. Agarwal.
131. IACMAG, Goa, I. Sharma.
133. Discussion on Contribution of Women in Science and Strategies and Methods to Promote women towards Science Education, Anjali K.
134. National Women’s Science Congress, at Karnataka State Women University, Bijapur, Anjali K.
135. 2nd Intl. and 23rd AIMTDR Conf., IIT Madras, Anjali K.
136. Interquadrennial Conference of the International Congress on Fracture, IISc Bangalore, P. Venkitanarayanan
137. Indo-Russian Workshop on Topical Problems in Solid Mechanics, BITS, Goa, P. Venkitanarayanan.
142. World Congress on Computational Intelligence (WCCI-2008), Hong Kong, K. Deb.
143. Genetic and Evolutionary Conference (GECCO-2008), Atlanta, USA, K. Deb.
144. Parallel Problem Solving from Nature (PPSN-2008), Dortmund, Germany, K. Deb.
145. Biologically Inspired Memetic Optimization (BIOMA-2008), Ljubljana, Slovenia
146. Simulated Evolution and Artificial Learning (SEAL-2008), Melbourne, Australia, K. Deb.
147. Dagstuhl Seminar, Saarbrucken, Germany, K. Deb.
149. 1st Int. Conference on Abrasive based Processes held at Churchill College, Cambridge (UK), V. K. Jain.
150. 23rd AIMTDR conference held at IIT Madras, Chennai, V.K. Jain.
152. Inter Quadrennial International Conference on Fracture at Bangalore India, August 2008, Basu S.
153. XXII international Conference on Theoretical and Applied Mechanics at Adelaide, Australia, Basu S.
154. IISc Centenary - International Conference on Advances in Mechanical Engineering, Bangalore, P. Wahi.

Humanities and Social Sciences

157. Fifth All IndiaConference of Indian Association for Social Sciences and Health, Xavier Institute of Management, Bhubaneswar, A.K. Sharma and Rita Singh.
162. Sixth Annual Conference of Indian Association for Social Sciences and Health (IASSH), School of Social Sciences & International Studies, Pondicherry University, Pondicherry, Ashish Kumar Mishra and A. K. Sharma.

163. Workshop on Productivity Measurements jointly organized by Swiss Re and CDE (Centre for Development Economics), DSE (Delhi School of Economics) at the DSE, S.K. Mathur.


166. International Conference on Translation and Postcolonialities, organized by IACLALS (Indian Association for Commonwealth Literature and Language Studies) and Department of English, Karnataka University, Dharwad, Mini Chandran.

167. 18th Annual Conference of National Academy of Psychology,- India, IIT Guwahati, Braj Bhushan.

168. World Intellectual Property Organization (WIPO) in cooperation with the Department of Industrial Policy and Promotion (DIPP), Government of India and the Federation of Indian Chambers of Commerce and Industry (FICCI), New Delhi, P.M. Prasad.


170. Water logging, Land Development & Drainage in Agriculture, State Water Resources Agency (SWaRA), PACT and Irrigation Department UP, Lucknow, P.M. Prasad.

171. Participated in Indo-German Symposium on Education and Research in Sustainability, IIT Madras, Chennai, P. M. Prasad.

172. The challenge of renewing the social sciences and humanities in India, National Seminar, Higher Education: Policies and Perspectives, Department of Political Science, Osmania University, Amman Madan.

173. Questioning dominant discourses in higher education: the struggle to rethink the global university, National Seminar, Sociology – Meeting the Challenges of Globalization, University of Kashmir, Srinagar, Amman Madan.


177. 18th Annual Conference of NAOP, IIT Guwahati, L. Krishnan and P. Varma.


180. Sixth conference of Indian Association for Social Sciences on Health, Equity and Human Rights, organized by School of Social Sciences and International Studies, Pondicherry University, Puducherry, S. Dixit.


Chemistry

182. 4th EuCheMS Conference on Nitrogen Ligands’ at Garmisch-Partenkirchen, Germany, J.K. Bera

183. 38th International Conference on Coordination Chemistry (37th ICCC)’ at Jerusalem, Israel, J. K. Bera. Symposium on Chemical Dynamics in Complex Systems, held in IISc, Bangalore, A. Chandra.

184. Eighth Triennial Congress of the World Association of Theoretical and Computational Chemists, held in Sydney, Australia, A. Chandra.

185. The International Conference on Theory and Applications of Computational Chemistry, held in Shanghai, China, A. Chandra.

186. Seminar on Frontiers of Spectroscopy, held at Lucknow University, A. Chandra.

187. Meeting on Future Directions of Ultrafast Spectroscopy: A Guideline, held at S.N. Bose Centre for Basic Sciences, Kolkata, A. Chandra.

188. Theoretical Chemistry Symposium (TCS 2009), held at IISc and JNCASR, Bangalore, A. Chandra.
189. Sixth Discussion Meeting on Spectroscopy and Dynamics of Molecules and Clusters (SDMC 09), held at Mandarmoni, West Bengal, India, A. Chandra.

190. India-Japan Workshop on Frontiers in Molecular Spectroscopy and Theory, held at IACS, Kolkata, A. Chandra.

191. National Seminar on Current Trends in Chemistry - III, held at University of Kalyani, West Bengal, A. Chandra.

192. Molecules and Materials: New Directions at JNCASR, Bangalore, V. Chandrasekhar.

193. 4th EuCheMS Conference on N-Ligands, Garmisch–Partenkirchen, Germany, V. Chandrasekhar.

194. UGC/State symposium at Goa University, Goa, M. K. Ghorai.


196. 4th International Conference on Coherent Multidimensional Spectroscopy (CMDS 2008), Fukui Institute for Fundamental Chemistry, Kyoto University, Kyoto, Japan, S.K. Karthick Kumar, T. Goswami, A. Kumar, A. Nag and D. Goswami.

197. Control of laser induced molecular fragmentation benzene using chirped femtosecond laser pulses, AISAMP8, Perth, Australia, Tapas Goswami, S. Karthick Kumar, Aveek Dutta and Debabrata Goswami.


199. Nonlinear optical response of carbon nanotubes functionalized with a water soluble ink, Jyotsana Gupta, C. Vijayan, Sandeep Kumar Maurya and D. Goswami.


201. Investigation of the effect of slit-width on the retrieved group delay from XSTRUT pulses, A. Dutta, I. Bhattacharya and D. Goswami.

202. Spectroscopy and Dynamics of Molecules and Clusters (SDMC) Discussion Meeting 09, Mandarmoni, Kolkata, Chirp enhanced molecular photo-fragmentation, D. Goswami.


204. Towards polarization dependent control using collinear pump-probe z-scan technique, Sandeep Kumar Maurya and D. Goswami.
208. JNOST, Madurai, R Gurunath.
212. Discussion Meeting on Crystal Engineering and Noncovalent Interactions: Contemporary Themes and Futuristic Developments, Orange County, Coorg, J.N. Moorthy.
213. The 4th Asian Biological Inorganic Chemistry Conference (AsBIC-IV), Jeju, Korea, R.N. Mukherjee.
214. International Conference on Coordination Chemistry (ICCC38), Jerusalem, Israel, R.N. Mukherjee.
215. 11th National Symposium in Chemistry (NSC-11), National Chemical Laboratory, Pune, Book of Abstracts (P-49), R.N. Mukherjee.
216. Discussion Meeting on Theoretical Chemistry, IISc Bangalore, Nisanth Nair.
219. 1st FOIC held at Jadavpur University, S. P. Rath.
220. Nanosteps Summer Workshop, Cargese, Madhav Ranganathan.
221. National Conference on Thermodynamics of Chemical and Biological Systems, Nagpur, Madhav Ranganathan.
223. Molecular Science Conference, Fukuoka, Japan, Pratik Sen.
224. FACSS Conference, Reno, USA, Pratik Sen.
225. 11th NSC CRSI 2009, Pune, Pratik Sen.
227. BIFUR08, Madrid, Spain, K. Srihari.
228. Theoretical Chemistry Conference, Bangalore, K. Srihari.
Annual Report 2008-09

229. Spectroscopy and Dynamics of Molecules and Clusters VI, Sana Beach Resort, Kolkata, K. Srihari.
230. American Physical Society Focus meeting on Transition States in Chemistry, Physics, and Astrophysics, Pittsburgh, USA, K. Srihari.

Physics

235. International conference on computational material science and engineering (ICCMSE) 2008, held at Crete, Greece, M.K. Harbola
236. Controlling magnetic and superconducting properties at extreme scales in the International symposium on clusters, cluster assemblies and nanomaterials (ISCANM 2009), held at HRI, Allahabad, S.S. Banerjee
237. Controlling magnetic and superconducting properties at extreme scales in the Workshop on Magnetic Nanomaterials and their Application (MNTA), at S.N. Bose Center, Kolkata, S. S. Banerjee.
239. 4th Indo-Israeli conference in Condensed Matter Physics, Zfat, Israel. S.S. Banerjee.
240. Talk in the Condensed Matter Seminar at Weizmann institute of Science, Israel, on Instabilities and nonlinearities in bulk and nanopatterned superconductors. S.S. Banerjee.
241. Quantum Phase Transition and Dynamics: Quenching, Annealing and Quantum Computation, Saha Institute of Nuclear Physics, Kolkata, Beyond the Kibble-Zurek Scaling: Quenching through a multicutrcritical point and a gapless line. A. Dutta
242. Recent trends in condensed matter II, Saha Institute of Nuclear Physics, Kolkata, Adiabatic dynamics of quantum spin chains across quantum critical points: A. Dutta
243. Unconventional Phases and Phase Transitions in Strongly Correlated Electron Systems, MPIPKS, Dresden, Germany, Quenching Dynamics and Defect Generation in a transverse XY Chain. A. Dutta
244. Conference on Laser Applications in Basic and in Applied Sciences, Allahabad University, A. Pradhan
245. Meghnad Saha Memorial Symposium, Santiniketan, A. Pradhan.
246. 23rd National Symposium on Plasma Science and Technology (PLASMA 2008), BARC, Mumbai, Sudeep Bhattacharjee.
247. International workshop titled "CMB anisotropy and polarization measurements held in Inter University center for Astronomy and Astrophysics (IUCAA) Pune, Kaushik Bhattacharyya.
249. Recent trends in Condensed matter physics, LNMIIT, Jaipur, R. Prasad.
250. Member, National Organizing Committee and Session Chair in the Indian Strings Meeting 2008 (ISM 08), Pondichery, G. Sengupta.
254. Krishnan Conference at Matscience, Chennai, V. Subrahmanyan.
255. QAQC International Workshop, at SINP, Kolkata, V. Subrahmanyan.

Mathematics

258. 4th Asia-Pacific Computing and Philosophy (APCAP) Conference, NIAS, IISc Bangalore, Mohua Banerjee.
259. Logics from Rough Sets, National Seminar on Mathematics with special emphasis on Discrete Mathematics (NSMDM 2009), Univ. of Calcutta, Mohua Banerjee.
261. Third Indian Conference on Logic and its Applications (ICLA 2009), IMSc, Chennai, Mohua Banerjee.
262. Subnormal Algebraic Operator Tuples, HRI International Conference in Mathematics held at Harish-Chandra Research Institute, Allahabad, S. Chavan.
263. Interdisciplinary Science Conference - 2008 on Mathematics in Biology, Jamia Milia Islamia, New Delhi, P. Chandra.
264. 76th Annual session of Indian Mathematical Society, Allahabad University, Allahabad, P. Chandra.
268. Great Plains Operator Theory Symposium, University of Cincinnati, Cincinnati, USA, M. Gupta.
269. International workshop on Operator Theory, College of Williams and Mary, Williamsburg, Virginia, USA, M. Gupta.
270. International conference on Analysis and its Applications, Aligarh Muslim University, Aligarh, India, M. Gupta.
272. International conference on Differential Equations and Dynamical Systems and at Baltimore, Maryland, USA, M. K. Kadalbajoo.
275. Nonlinear Elliptic equations-an overview, National conf. on Analysis and applications, Department of Mathematics, Sardar Patel university, V.V. Nagar, Gujarat. Also chaired a session, V. Raghavendra.
278. Twisted spherical means in annular regions in \( \mathbb{C}^n \), HRI International Conference in Mathematics, Harish-Chandra Research Institute, Allahabad, R. Rawat.
279. Obata's theorem and its generalizations, HRI International Conference in Mathematics, HRI Allahabad, G. Santhanam.
280. Thermal and roughness effects in a slider bearing with special reference to load generation in parallel sliders, presented at the 63rd Annual Meeting of the Stle, Cleveland, OH, USA, Prawal Sinha & Getachew Adamu.


Aerospace


Biological Science and Bio-engineering

8. *Invited talk* in the BSI Invited Seminars & Forums, organized by the RIKEN Brain Science Institute, Wako-shi, Japan, Ganesh S.
9. *Invited talk* in the HUGO 13th Human Genome Meeting, held at International Convention Centre, Hyderabad, Ganesh S.
11. *Invited talk* - Yin and Yang of skeletal development: Gene hunting and Genetics, CDRI, Lucknow, Amitabha Bandyopadhyay.
12. From sequence analysis to structural simulations: How can basic and applied biology benefit from bioinformatics applications, *plenary lecture* in the National Seminar on Bioinformatics Applications in Medical Sciences organized by SRM University, Chennai, R. Sankar.


15. Comparative molecular dynamics simulations reveal specificity of a member of Bcl-2 cancer proteins, *Invited talk* in the International Conference on Emerging Trends in Biological Sciences at KIIT University, Bhubaneswar, R. Sankar.


17. New generation of polymeric biomaterials for biotechnological and bioengineering applications. 13th International Biotechnology Symposium and Exhibition, Dalian-China, Kumar, A.

18. Designing New Supermacroporous Cryogels Biomaterials for Bioengineering applications. Tissue and Cell Engineering Society, Annual conference, University of Nottingham, UK, Kumar, A.

Chemical


20. 3-dimensionally Oriented Multihelical Channels for Microfluidic Mixing, Indo-German Workshop on Micro-reaction Technology, Pune, A Ghatak.


22. Pressure driven membrane processes: Effluent Treatment, INTERFACE-08 held at HBTI-Kanpur, PK Bhattacharya.


30. Fluid Dynamics Colloquium, JNCASR, Bangalore, V Shankar.
32. Time-Temperature superposition in soft glassy materials, Annual Physics convention, Department of Physics, Indian Institute of Technology-Kanpur, Y.M. Joshi.
33. Ageing under deformation field: Time-Stress superposition, Tata Research Development and Design Center, Pune, Y.M. Joshi.
34. Ageing under deformation field: Time-Stress superposition, National Chemical Laboratory-Pune, Y.M. Joshi.
36. Ageing under deformation field: Time-Stress superposition, 78th Annual Session of the National Academy of Sciences, India, Chandigarh, YM Joshi.
37. Ageing under deformation field in soft glassy materials, Polymères, Colloïdes, Interfaces, Université du Maine, Le Mans, YM Joshi.
38. Ageing under deformation field in soft glassy materials, Laboratoire de Physique des Solides, Université Paris Sud Bât, Orsay, YM Joshi.
40. Ageing under deformation field in soft glassy materials, Dipartimento di Fisica Universita di Roma La Sapienza, Rome, YM Joshi.

Civil

42. Invited Guest Lecture entitled Integrated Hydrologic Modeling and Knowledge Extraction from Trained ANN Hydrologic Models in Prof. Holger Maiers class: C&ENVENG 4087 (Final Year) and C&ENVENG 7029 (Masters) Environmental Modelling, Management and Design 08, School of Civil
Environmental, and Mining Engineering, University of Adelaide, Adelaide, Australia, Jain, A.

43. School Seminar entitled Development of Integrated Hydrologic Models, School of Civil Environmental, and Mining Engineering, University of Adelaide, Adelaide, Australia, Jain, A.

44. ICE WaRM Public Seminar entitled Water Problems and Solutions: An Indian Perspective, Water SA, 77 Grenfell Street, Adelaide, Australia, Jain, A.

45. School Seminar entitled Integrated Hydrologic Modelling and Hidden Neuron Specialisation in Neural Network Hydrologic Models, School of Civil and Environmental Engineering, University of New South Wales, Sydney, Australia, Jain, A.

46. ICE WaRM Public Seminar entitled Water Problems and Solutions: An Indian Perspective, Radisson Hotel, Liverpool Street, Sydney, Australia, Jain, A.

47. Centre for Water Management and Reuse Seminar entitled Modelling of Water Resources Variables using Soft Computing Approaches, School of Natural and Built Environments, University of South Australia, Adelaide, Australia, Jain, A.

48. Hydrology Discussion Forum Seminar entitled The Development of Hybrid Hydrologic Models using Process Based and Artificial Neural Network Methods, School of Chemistry, Physics and Earth Sciences, Flinders University, Adelaide, Australia, Jain, A.

49. Disaster management and mitigation related issues related to road infrastructure, Workshop on disaster management and mitigation, HBTI, Kanpur, Das, A.

50. Do we know how to build roads? National Seminar in Geotechnical Engineering for applications in pavement, embankment and retaining wall constructions, IT-BHU, Varanasi, Das, A.

51. Aggregate shape characterization for bituminous mixes, National Seminar in Geotechnical Engineering for applications in pavement, embankment and retaining wall constructions, IT-BHU, Varanasi, Das, A.


54. Paleo-Earthquake Evidence from Archaeological Site in Mesoseismal Zone of 1819 Allah Bund Event, Great Rann of Kachchh, Gujarat, Western India, Malik J N, Gadhavi M S, Ansari K, Dikshit O.
55. Lead Speaker, Third Indo-US Frontier of Science held in Agra, S.N. Tripathi.
56. Invited Lecture at Aryabhatta Research Institute of Observational Sciences (ARIES), Nainital, S.N. Tripathi.
57. Chairpersons talk delivered titled, Brief overview of Atmospheric Haze/Aerosol research in India with Special Reference to Ground Based Measurement and Chemical Characterization of Submicron Aerosol Particles at National frontiers of Science, DST sponsored symposium, New Delhi, Tarun Gupta,
58. Presentation on Measurement and chemical characterization of submicron aerosol collected at IITK made at Indo-US Frontiers of Science, Agra, Tarun Gupta,

**Computer Science**

59. Talk, Title: Parity Games on Multi-Stack Pushdown Systems Delivered as part of the Indo-French Workshop on Automata Concurrency and Timed Systems (ACTS), held at Chennai Mathematical Institute, Anil Seth.
60. Distributed Indexing and Querying in Sensor Networks using Statistical Models at Universite Libre de Bruxelles, Brussels, Belgium, Arnab Bhattacharya.
61. Arithmetic Circuits: A Chasm at Depth Four, Tokyo Institute of Technology, Tokyo, Japan, Manindra Agrawal.
62. Arithmetic Circuits: A Chasm at Depth Four, Kyoto University, Japan, Manindra Agrawal.
63. A Possible Pseudorandom Generator Against Arithmetic Circuits, Indian Algorithms Seminar, Khandala, Manindra Agrawal.
64. Fermats Last Theorem: From Integers to Elliptic Curves, BHU, Manindra Agrawal.
66. The P versus NP Question and Pseudorandom Generators, INSA Diamond Jubilee lecture, Delhi, Manindra Agrawal.
67. The P versus NP Problem, Infosys Award lecture, Bangalore, Manindra Agrawal.
68. Cooperative Black and Gray Hole attacks on Mobile Ad hoc Networks, University of Louisville, Kentucky, R.K. Ghosh.
69. Security attacks on MANET, University of Texas at Arlington, R.K. Ghosh.
70. Multi-core program at IIT Kanpur, Intel Asia Academic Forum, Taipei, Taiwan, Sanjeev K. Aggarwal.
73. Lower bound for estimating frequencies of data streams, University of Frankfurt, Sumit Ganguly.

Electrical

74. Smart House, 40th World Telecommunication and Information Society Day, IIT Kanpur organized by IETE Kanpur Chapter, Adrish Banerjee.
75. Turbo Code Design For Half-Duplex Relay Channels, Department of Electronic Engineering, Far East University of Science and Technology, Taiwan, Adrish Banerjee.
76. Quantum Computational Intelligence, Invited Talk in Indo-US workshop held in DEI, Agra, Laxmidhar Behera.
77. Decision-Directed Channel Estimation and Data Detection over Time Varying Flat Fading Channels, School of EEE, NTU, Singapore, K. Chaturvedi.
78. Low Complexity Frequency Offset Estimation for Flat Fading MIMO Channels, School of EEE, NTU, Singapore, A.K. Chaturvedi.
80. Partial Discharges, NERIST (AICTE course), Itanagar, Nandini Gupta.
81. Nano-dielectrics, NERIST (AICTE course), Itanagar, Nandini Gupta.
83. RFID and Applications, IETE Kanpur Chapter, R. Harish.
84. RFID and Location Sensing, Institution of Engineers, Kanpur, R. Harish.
85. RF Research at IIT Kanpur, International crossroads at TELECOM and Management, SudParis, R. Harish.
86. Antenna Design for CReSIS Radars, University of Kansas, USA, R. Harish.
87. Active and Passive RFID and Location Technology Research at IIT Kanpur, Boeing Company, St Louis, USA, R. Harish.
88. Speaker Recognition: Part I: Speech Production, Broad Overview of Vector Quantization, and Gaussian Mixture Models, National Institute of Technical Teachers Training and Research (NITTTR), Chandigarh, Rajesh M. Hegde.
89. Speaker Recognition: Part II: Theoretical and Implementation Aspects of VQ and GMM for Speaker Recognition, National Institute of Technical Teachers Training and Research (NITTTR), Chandigarh, Rajesh M. Hegde.
95. Key Note speaker at AICTE-ISTE course on Recent Trends in Power Systems at NERIST, Nirjuli, Itanagar, S. N. Singh.
96. Key Note speaker at All India Seminar on Energy Management in Indian Perspective; Efficiency Improvement and Energy Conservation in Power & Utilities & Emerging Technologies in the Alternative Energy for Power Generation, IE (I), Lucknow, S. N. Singh.
97. Key Note speaker and Panelist at National Seminar on Non-Conventional Energy Resources & Its Application (NCERU09), KNIT Sultanpur, S. N. Singh.
98. FACTS Course at POWERGRID Substation, Lucknow, S. N. Singh.
100. Optical Networks, Ambedkar Institute of Technology, Geeta Colony, Delhi, Y. N. Singh.
105. Short Course in Image Processing, BMS Engineering College, Bangalore, K. S. Venkatesh.
106. Surveillance Video Analysis Systems: Components, Developments and Challenges, Univ. of Ulster, Magee, Derry, N. Ireland, K. S. Venkatesh.

Industrial & Management

108. Use of Asymmetric Loss Functions in Sequential Estimation Problem for the Multiple Linear Regression, Department of Industrial and Operations Engineering, University of Michigan, Ann Arbor, USA, R. N. Sengupta.
109. Impact of information sharing and lead time on bullwhip effect and on-hand inventory, Department of Information, Operations & Management Sciences, STERN School of Business, New York University, USA, R. N. Sengupta.
110. Use of Asymmetric Loss Functions in Sequential Estimation Problem for the Multiple Linear Regression, Department of Computer Science, The University of Memphis, USA, R. N. Sengupta.
111. Bankruptcy Prediction Using Artificial Immune Systems, Lally School of Management & Technology, Rensselaer Polytechnic Institute, USA, R. N. Sengupta.
112. A study of two different variants of adaptive sampling procedures and some interesting applications in management science, Fordham University, USA, R. N. Sengupta.
113. Study of Asymmetric Loss function and its use in Sequential Analysis Estimation, Department of ORFE, Princeton University, USA, R. N. Sengupta.
115. Role of Incubation for successful Entrepreneurship: TiE-UP, B.V.Phani
117. Entrepreneurial Eco System, IITs Role in Nation Building, Pan IIT-Global Conference, B.V.Phani


121. A case study on knowledge networking - DEAL as an innovation ecosystem, IMI-CSIR HRD Workshop on Knowledge Management, New Delhi, D. Pattanaik and J. Chatterjee.

122. Gene Expression Data Analysis at the Workshop on Bio Informatics organized by Mahila University Tirupathi, B. Chandra.

123. Two Way Clustering at Virginia Tech, USA, B. Chandra.

124. Data Mining for Manufacturing at Nanyang Technological University, Singapore, B. Chandra.

**Mechanical**


126. Optical imaging of convection during growth of KDP and protein crystals, the second joint symposium between NTU Singapore and IIT Kanpur (at IIT Kanpur), K. Muralidhar.


129. Banding in single crystals. IIT Kanpur, ME Department seminar series, S. Mahesh.


132. Thermal ratcheting in pipes, IGCAR, I. Sharma.

133. *Invited talk* at MNIT Allahabad for workshop on faculty development entitled Optical Techniques in Mechanical Engineering, P.K. Panigrahi.

134. *Invited talk* at IET Lucknow for workshop on Research Methodologies entitled Design and analysis of experiments, P.K. Panigrahi.

135. Prediction of Bubble Growth in Film Boiling using a Variant of Volume-of-Fluid Method, University of Western Ontario, Research Seminar of the Faculty of Engineering, G. Biswas.


141. Mechatronics: The Highway to the National Development Invited talk presented at National Womens Science Congress, Karnataka State Women University, Bijapur, 2008, Anjali K.

142. 22nd National convention of Metallurgical and materials Engineers, Hyderabad, N.V. Reddy.


144. Third National Frontiers of Engineering (NatFOE) (organized by INAE), N.V. Reddy.

145. The Puzzling Primes, the open house of Mathematics Department at IIT Kanpur, A.K. Mallik.


147. The science and art of planar linkage design – Invited lecture delivered at AMM Workshop held at IIT Madras, A. K. Mallik.


150. Significance of Nonlinearity in Vibration Control – Keynote address in ICOVP at IIT Kharagpur, A K Mallik.


154. Tutorial delivered at GECCO-2008 in Renaissance Atlanta Hotel, USA, entitled `Evolutionary Multi-Criterion Optimization, K. Deb.

155. Tutorial to be delivered at SEAL-2008 Conference in Melbourne, Australia entitled `Evolutionary Multi-Objective Optimization (EMO), K. Deb.

156. Evolutionary Practical Optimization at the Ship Laboratory, Helsinki University of Technology, Espoo, Finland, K. Deb.

157. Masters Course on Evolutionary Computation delivered at University of Pavia, Italy, K. Deb.


159. Principles of Vibration Control, given jointly with Prof A. K. Mallik organized by i2k at Delhi, B. Bhattacharya.

160. Smart Materials and Design of Intelligent Systems, organized by Cats Inc. at Delhi, B. Bhattacharya.

161. Describing Mechanical Properties of Amorphous Polymers through Simulations at Multiple Scales, invited talk at National Chemical Labs Pune, CFPE Seminar series, S. Basu.

162. Control of Friction-Driven Oscillations by Time-delayed Feedback, Aerospace Engineering Department, Indian Institute of Technology Kanpur, P. Wahi.


Humanities and Social Sciences

164. Productivity Analysis of the ICT Sector Across Countries with Special Reference to India: Directions for New Science Policy. International Conference on Liberalizing Research in Science and Technology, organized by Department of HSS, IIT Kanpur and Institute of History of Science and Technology, St Petersburg, Russia, S.K. Mathur.


169. Invited talk on Science and Technology in India for Class formation or Class annihilation-Department of Humanities and Social Sciences, IIT Kharagpur, B.K. Pattnaik.
170. Cognitive Emotional Processing in the Aftermath of Trauma: Reflections from Questionnaire Based Assessment, Universities of Wurzburg and Bamberg, Germany (Graduiertenkolleg: Cognition and Emotion- Forced Choice between Siamese Twins?), Braj Bhushan.
173. *Invited talk* - Dynamic Post Disaster Socio-economic and Cultural Contexts and the Challenges of Psycho-social Rehabilitation and Disaster Management. Workshop on Disaster Management and Mitigation, Department of Civil Engineering, HBTI Kanpur, Kumar Ravi Priya.
175. Future Trends: Cybercriticism - lecture for the Short Term Course on Literary Theory: Theories of Reading and Writing, organised by the Department of Humanities and Social Sciences, IIT Kharagpur, T. Ravichandran.
176. Future Trends: Ecocriticism - lecture for the Short Term Course on Literary Theory: Theories of Reading and Writing organised by the Department of Humanities and Social Sciences, IIT Kharagpur, T. Ravichandran.

Chemistry
178. *Invited talk* is given by my student K. Elango, at Recent Advances in Metalloorganic Chemistry (RAMC), held at Periyar University, Salem, Synthesis and Hydrolysis of NHC-Stabilized Zinc Aryloxides, Kandasamy Elango and Ganapathi Anantharaman and obtained best oral presentation award, G. Anantharaman.

179. *Invited talk* on Recent trends in Organometallic Compounds and their Industrial Applications (OMCA) held at KIIT, Bhubaneshwar, Synthesis and Hydrolysis of NHC-Stabilized Zinc Aryloxides, G. Anantharaman.

180. Frontiers of Science at Indian Science Congress on in Shillong, J.K. Bera.


182. Vibrational spectral diffusion in aqueous solutions, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, A. Chandra.

183. Theoretical studies of water dynamics under normal and supercritical conditions from first principles, Solid State & Structural Chemistry Unit, Indian Institute of Science, Bangalore, A. Chandra.

184. Hydrogen bond fluctuations and vibrational spectral diffusion in normal and supercritical water, Shanghai Jiao Tong University, China, A. Chandra.

185. Vibrational spectral diffusion in water under normal and supercritical conditions, Lucknow University, A. Chandra.

186. Dynamics of water and aqueous solutions from ab initio molecular dynamics, Department of Chemistry, IIT Delhi, A. Chandra.

187. Charge defects in hydrogen bonded clusters, monolayers and chains: Hydration characteristics, dynamics and vibrational spectroscopy, S.N. Bose Centre for Basic Sciences, Kolkata, A. Chandra.

188. Ab initio molecular dynamics studies of aqueous systems: Hydration dynamics and vibrational spectroscopy, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, A. Chandra.

189. Proton transfer Kinetics in water clusters, monolayers and chains, Indian Association for the Cultivation of Science, Jadavpur (talk held at Sana Resort, Mandarmoni), A. Chandra.

190. Kinetics of proton transfer in aqueous systems of different dimensions, Indian Association for the Cultivation of Science, Jadavpur, Kolkata, A. Chandra.

191. Proton transfer in water-filled narrow pores, Department of Chemistry, University of Kalyani, A. Chandra.


193. 3d-4f Heterometallic Trinuclear Compounds. A New Family of Single-Molecule Magnets, Invited Talk in the conference: Molecules and Materials:
New Directions at JNCASR, Bangalore, V. Chandrasekhar.


198. Modelling the luminophore of the green fluorescent protein; Seminar presented at the Du pont knowledge center Hyderabad, R. Gurunath.


201. Invited lecture at Institut für Organische Chemie, Universitaet Stuttgart, Germany, F.A. Khan.

202. Invited lecture at Institut für Organische Chemie, Johannes Gutenberg University Mainz, Germany, F.A. Khan.

203. Invited lecture at Institute of Chemistry, University of Potsdam, Germany, F.A. Khan.

204. Invited lecture at Fachbereich Chemie, Philipps-Universität Marburg, Germany, F.A. Khan.

205. Invited lecture at Organisch-Chemisches Institut, Ruprecht-Karls-Universität Heidelberg, Germany, F.A. Khan.

206. Invited Lecture at Technische Universität Dresden, Germany, F.A. Khan.


208. Invited Lecture at LABORATOIRE DE CHIMIE ORGANIQUE, ESPCI, 10 rue Vauquelin, 75231 Paris Cedex 05, France, F.A. Khan.


211. Invited lecture at Indo-Korean symposium (KOSEF), NCL Pune, F.A. Khan.

212. Discussion Meeting on Crystal Engineering and Noncovalent interactions: ContemporaryThemes and Futuristic Developments Orange County, Coorg, Karnataka, R.N. Mukherjee.


217. Motion of Spiral Steps on Pb Crystallites, at Nanosteps Summer Workshop, Cargese, France, Madhav Ranganathan.

218. Impurity Effects in Crystal Growth from Solutions, National Conference on Thermodynamics of Chemical and Biological Systems, Nagpur, Madhav Ranganathan.

219. Impurity Effects in Crystal Growth from Solutions, Department of Physics, IIT Kanpur, Madhav Ranganathan.


221. Title: Bioinspired Design of Porphyrin and Bisporphyrin based Metal Complex, ChemFest, IIT Kanpur, S. P. Rath.


223. Study of Interfacial Molecules using Novel Nonlinear Electronic Spectroscopy, Chemistry Department, University of California at Berkeley, Pratik Sen.


226. Classical-Quantum correspondence in isomerization dynamics: quantum eigenstates and classical Arnold web, at the APS Focus meeting on Transition States in Chemistry, Physics, and Astrophysics, Pittsburg, USA, K. Srihari.


228. Local phase space barriers and quantum control: interplay of classical and quantum mechanisms, at the Theoretical Chemistry Conference, Bangalore, K. Srihari.
230. Postmodern Chemical Dynamics, IACS Kolkata, K. Srihari.
231. Intramolecular vibrational energy flow, quantum eigenstates and the dynamical Arnold web, at BIFUR08, Madrid, Spain, K. Srihari.
232. Triarylbumuthanes as atom-efficient sub-stoichiometric organometallic reagents for carbon- carbon bonds formations in organic synthesis (invited), Recent trends in Organometallic Compounds & their Industrial Application, OMCA-2009, KIIT-University, Patia, Bhubaneswar, M.L.N. Rao.
233. Delivered a lecture entitled Design and Synthesis of Mono and Bicyclic Glycosidase Inhibitors at Chemistry Department IIT Bombay, Y.D. Vankar.

Mathematics and Statistics

234. Dynamical Analysis in Mathematical Ecology, IIT Kanpur, Malay Banerjee.
235. Nonlinear Dynamical Modelling in Mathematical Ecology, Department of Mathematics, IIT Guwahati, Malay Banerjee.
236. Logics for Information Systems, invited talk at the Workshop on Logic and Cognition, Jadavpur University, Kolkata, Mohua Banerjee.
237. Mathematical Modeling - Invited theme Lecture in a workshop on Advanced mathematics, Department of Mathematics, BHU, Varanasi, P. Chandra.
238. Hyperexpansivity version of the Berger-Shaw Theorem, delivered a presentation in the conference International Workshop on Operator Theory and its Applications held at the College of William and Mary, Virginia, S. Chavan.
239. On hereditary semi-embeddings and $G_δ$-embeddings of Banach spaces, presented at ISI Bangalore while visiting there under young scientist visiting program of ISI, S. Dutta.
242. A Look at Cardiac-Electric-Activity & Domain Decomposition Methods, ICCPDE-08, IIT Mumbai, B.V. Rathish Kumar.
243. A Look at the Arlequin Approach for Multiscale / Multimodel Problems (53rd Congress of ISTAM (An International Meet) University College of Engineering, Osmania University, Hyderabad, B.V. Rathish Kumar.
244. Mathematics at the frontiers of Science & Technology, DBS College Kanpur, B. V. Rathish Kumar.

246. Bivariate Generalized Exponential Distribution, Presented at Indian Statistical Institute, New Delhi, D. Kundu.

247. Reliability Sampling Plan, Presented at Indian Statistical Institute, New Delhi, D. Kundu.

248. Generalized Exponential Distribution: A Review, Presented at the University of Cochi, Trivandam, D. Kundu.


250. Extensions of Multipliers, University of Hawaii, P. Mohanty.

251. On Maps which are one-one iff they are onto (an invited talk), IIT Madras, V. Raghavendra.

252. On Elliptic equations and jumping nonlinearities (an invited talk), IIT Madras, V. Raghavendra.

Physics


256. Low-energy properties of fermionic superfluid along the BEC-BCS crossover, IISER-Kolkata, T.K. Ghosh.


261. Invited talk on Magneto-optical imaging technique: from superconductors to plasmas at the Condensed Matter Physics Workshop held at IIT Kanpur, India, S.S. Banerjee.

262. Invited lectures, 33rd Mahabaleshwar Seminar on Modern Biology, Mahabaleshwar, D. Chowdhury.

263. Invited talk, Nonequilibrium Phenomena in Condensed Matter, Indian National Science Academy, New Delhi, D. Chowdhury.
264. *Invited lectures*, CCMT advanced Graduate School in Statistical and Condensed Matter Physics, Indian Institute of Science, Bangalore, D. Chowdhury.


266. *Invited talk*, Indo-Israeli Conference in Condensed Matter Physics, Zfat, Israel, D. Chowdhury.


268. Invited talk, DISCOMB09: Disordered Systems, Complexity and Biology, Banaras Hindu University, Varanasi, D. Chowdhury.


270. Spin Dynamics in Diluted Magnets, Correlation Effects in Metallic Ferromagnets, Two invited talks of 1.5 hrs duration each presented at the Homi Bhabha Centenary DAE-BRNS National Conference & HRI School on Spintronic and Magnetoelectronic Materials and Devices (NCSMMD), jointly organized by BARC, Mumbai; HRI, Allahabad; IACS, Kolkata; IoP, Bhubaneswar at Toshali Sands, Puri, A. Singh.

271. Correlated Motion of Electrons and Quantum Magnetism *Invited talk* at a Symposium on Recent Trends in Condensed Matter Physics organized by the JNU - School for Physics Sciences, A. Singh.

272. *Invited Talk* at TIFR-ANSO Collaboration Initiative Meeting, Mumbai, Interplay between superconductivity and magnetism: from borides to iron arsenides; Z. Hossain.


276. *Invited Talk*, Biomedical Optics: Polarization Based Spectroscopy and Imaging, Condensed Matter Workshop, Meghnad Saha Memorial Symposium, Allahabad University, A. Pradhan.

278. *Invited talk*, One day workshop and inauguration of Ion Beam Facility for Micro and Nano Scale Science and Engineering at IIT Kanpur, Department of Physics, IIT Kanpur, Sudeep Bhattacharjee.


281. The Legacy of Nambu, Kobyashi and Maskawa given in IIT Kanpur Kaushik Bhattacharyya.

282. *Invited talk*, Nanofabrication by ion beams; Indo-French conference on Nanostructuring by ion beams under Indo French Centre for Promotion of Advanced Research (IFCPAR), Bhubaneswar, V.N. Kulkarni.

283. Introduction to Turbulence (6 lectures) at SERC school in Gauhati, M. K. Verma.

284. Workshop on Turbulence (3 lectures) at SN Bose Institute, Kolkata, M. K. Verma.

285. *Invited talk*, Entanglement in Many-electron systems at Workshop on Entanglement in Condensed Matter Physics, Matscience, Chennai V. Subrahmanyanam.

286. *Invited talk*, How entangled is a quantum state? at Qunantum Annealing and Quantum Correlations Workshop, SINP, Kolkata, V. Subrahmanyanam.

OTHER ACTIVITIES

(A) TECHNOLOGY DEVELOPED

Biological Science and Bio-engineering

1. Joint chemical and plasma sterilizer for Indian hospitals, Anupam Pal.

Civil

2. 10LPM all aluminum body air sampler (PM1.0 inertial impactor) as part of the M.Tech. thesis of Mr. Kamal K. Ujinwal, Tarun Gupta.
3. Developed Terrestrial Laser Scanning (ILRIS3D) and data processing facility at GI laboratory, Lohani B.

Electrical

4. Review of electrical clearance in air for 25 kV, 50 Hz ac overhead electric traction system of Indian Railways, sponsored by RDSO Lucknow, Ravindra Arora.
5. A Multi modal Data Acquisition Test Bed for simultaneous recording of 4 channel video and 8 channel Audio Data, Rajesh M. Hegde.
7. Fully operational system installed at Ajgain Railway Station (Unnao Dist.) on the Kanpur – Lucknow main track, Graphical LCD-based Human-machine interface for a digital automatic voltage regulator for captive power plants, R. Potluri and P. Sensarma.

Mechanical

10. Electrochemical spark based micromachining (ECSMM) technology developed for varied materials, Prof. V.K. Jain (IIT) and Prof. K.A. Misra (HBTI), Anjali. K.
12. Development and analysis of foil air bearing (air cooling application), S. Sarkar.

Physics

13. A compact ion energy analyzer for the measurement of ion energy distribution, Sudeep Bhattacharjee.
14. A compact B dot and antenna probe has been developed for the measurement of electromagnetic wave fields (E and B) inside a plasma, Sudeep Bhattacharjee.
16. A triplet Einzel lens for the extraction and focusing of ion beams, Sudeep Bhattacharjee.
17. A compact multiple beamlet extraction electrode system for extracting micron to nanosize ion beamlets from the plasma, Sudeep Bhattacharjee.

(B) SOFTWARE DEVELOPED

Biological Science and Bio-engineering

18. MRI3D – An MRI to 3D reconstruction software for gastrointestinal diagnosis, Anupam Pal.

Civil

20. SBCM: Segmentation Based Classification Module for Indian Space Research Organization (ISRO), Dikshit O.
21. RISHI: Resource Information System for Heritage of India, a Cultural Resource Management (CRM) system for documentation of Antiquities, Dikshit O.
22. DHAROHAR: Documentation for Historical and Archaeological Research on Heritage and Remains, Cultural Resource Management (CRM) system for documentation of Monuments, Dikshit O.

Electrical
23. Location sensing simulator for indoor environments, A.R. Harish.
25. Digital Mandi for the Indian Kisan: Web interface for accessing current mandi prices on line, Rajesh M. Hegde.
27. Software for calculating inductance of large non-linear shunt reactors, Parthasarathi Sensarma.

Mechanical

28. Analysis of IPMC based Flexible Smart Manipulator, B. Bhattacharyya.
29. LES Solver for Turbomachinery Application (LES_TURBO), S. Sarkar.

IME

30. A combination of Wiki and Blog platform for knowledge sharing, Jayanta Chatterjee, Gaurav Vinod, Nai Dishayeen.
31. Krishi Katha (Mobile and voice protocol services through internet for knowledge sharing, AbhishekJain, Jayanta Chatterjee.

Physics


(C) INDUSTRIES VISITED

Aerospace

33. ARDE Pune, ADRDE Agra, Ghosh A.K.
34. IGCAR, Kalpakkam, P.M. Mohite.

Chemical

35. TISCO; February, 2009, A. Ghatak.
36. Institut fur Mikrotechnik, Mainz, Germany; May 2008, D. Kunzru.
37. Thermax (Pune); August 2008, S. Panda.
38. Moser Baer (Noida); October 2008, S. Panda.
39. Université du Maine France; Visiting Professor; May-June 2008, YM Joshi.
Civil

40. Indian Institute of Tropical Meteorology, Pune, Tripathi, S. N.
41. Aryabhatta Research Institute of Observational Sciences (ARIES), Nainital, Tripathi, S. N.

Computer Science

44. Department of CSE, University of Louisville, for collaborative research in mobile agents, November 6-9, 2008, R.K. Ghosh.

Electrical

45. Department of Electrical Engineering, National Yunlin University of Science and Technology, Douliou City, Taiwan, July-August 2008, Adrish Banerjee.
46. Department of Electrical and Electronics Engineering, Chung-Ang University, Seoul, South Korea, Sept-December 2008, Adrish Banerjee
48. School of EEE at NTU, Singapore from 15 May to 15 July, 2008 as a Tan Chin Tuan Fellow, K. Chaturvedi.
49. GE India Technology Centre Private Limited, Bangalore for Consultancy from July 2-17, 2008, S.P. Das.
50. Boeing, Seattle, USA for discussion on project proposal entitled Prognosis and Diagnosis in HVAC Systems and Rotating Machinery, P. K. Kalra.
51. TVS Motors, Hosur, Bangalore for final Installation of hardware and software for project entitled Condition Monitoring of Internal Combustion Engine, P. K. Kalra.
52. Lohia Starlinger Ltd., Chaubepur, Kanpur for technical interactions; August 2008, Joseph John.
53. BSNL Field Trip: Kalyanpur and Lakhanpur to study power plant systems used within BSNL, Santanu K. Mishra.
55. POWERGRID SVC station Bhauti to show the SVC station to Course participants, S. N. Singh.
56. UPSIDC Ghaziabad for Third party checking of 33kV substation at Bagpat, S. N. Singh.
57. Electrical and Computer Engineering Department at Mississippi State University USA, for one year from 1st August 2008, S. C. Srivastava.

Mechanical

60. ISRO, Trivandrum: Meeting on Lunar rover power module, December 2008, Malay K Das.
61. DST, Delhi: Meeting on Pan-IIT solar research initiative, November 2008, Malay K Das.
63. HAL, Lucknow: Meeting on starter-generator simulation project, 18th April, 2009, Malay K Das.
70. HAL, NAL, S. Sarkar.

Materials and Metallurgical


IME

73. Dr. Eric Hoffman of Centre for Genetic Medicine, Washington D.C. at his invitation in the area of Bio Informatics using Data mining techniques, B. Chandra
HSS


Chemistry


Mathematics

76. Department of Mathematics, University of Limoges, France, 26 May to 1 June 2008, J. Dutta.
77. Department of Mathematics, University of Perpignan, France, June 2-30, 2008, J. Dutta.

Physics

82. NISER, Bhubaneswar; Purpose: Meeting of Academic Council; March 27-28, 2009, S.D. Joglekar
83. National Centre for Education and Research and Training, New Delhi; Purpose: To develop a book Exemplar Problems in Physics for class XII; June 4-9, 2008, S.D. Joglekar
85. Bright Engineering Works, Mumbai, to monitor progress of fabrication of the multielement focused ion beam system, April 7 – 10, 2009, by Ph.D student: Jose V. Mathew, Sudeep Bhattacharjee.
86. Computational Research Laboratory, Pune- December 2008; M.K. Verma.
(D) PATENTS

Biological Science and Bio-engineering

87. Process for adsorption-based separation of bioparticles from an aqueous suspension. PCT/SE 2006/000556, Mattisson, Bo; Galaev, Igor Yu; Kumar, Ashok; Dainiak, Maria.
88. Antiseptic polymeric macroporous hydrogel based thin sheets containing iodine as wound dressing materials (Patent filed, 2009), Ashok Kumar and Era Jain.
89. Polymer Matrix Scaffold and Process for Preparation Thereof (Patent filed; IPA 3948; 2009), Ashok Kumar and Anuj Tripathi.

Chemical

90. Methods and apparatus to synthesize nano-metals impregnated hierarchal web of micro/nano carbon fibers for the adsorptive and catalytic remediation in air and liquid systems, IPA_4395, January 2009; Inventors: Nishith Verma and Ashutosh Sharma.

Electrical


Mechanical


Materials and Metallurgical

95. Two patents currently filed and under processing, R. Balasubhramaniam.
96. A novel 2/3-Dimensional Soft-lithography technique to formulate micro-channels and evaluation of various associated mechanical and biological phenomena, under the process for filing Indian Patent, R K Singh, S. Bhattacharya and B. Basu.

97. A tundish adapted for reduction in residual metal losses and a method there of, Application No 1397/MUM/2008, Date of Application 03.07.08, D Satish Kumar, Dipak Mazumdar, B.Reddi Prasad, Sujay Pandit Patil, Abijit Sarkar, P.C.Mahapatra and Madhu Ranjan.

Chemistry


(E) AWARDS AND HONOURS

Aerospace

99. Guided a team of students from Mariampur Senior Secondary School, Kanpur, to help them secure the first position in a national competition concerning deployment of satellites solar arrays, Hari B Hablani.

Biological Science and Bio-engineering

100. Major international collaborative research project jointly funded by Research Council UK (RCUK) and Department of Science and Technology, (DST) India under the auspices of a newly launched UK-India Science Bridge Program. A combined funding to the tune of 1 million pounds (UK) Dr. P. Sinha.

101. UKIERI Award for research project on cartilage tissue engineering-2009, Ashok Kumar.

102. National Bioscience Award for Career Development for the year 2008 DBT, Ganesh S.

103. Scopus Young Scientist Award in Biological Sciences for the year 2008 (by Elsevier South Asia), Ganesh S.

104. Biotechnology Overseas Associateship, DBT, Ganesh S.
105. Invited to join the editorial board of the journal, Annals of Neurosciences (published by the Indian Academy of Neuroscience), Ganesh S.

106. IBRAO-Sfn travel fellowship award for attending the Sfn 2008 meeting in Washington, Deepti Dubey (PhD student).


108. Young Investigator Award by Joint International Society of Neurogastroenterology and Motility, Anupam Pal.

109. Young Investigator Award by Asian Neurogastroenterology and Motility Association, Anupam Pal.

110. National Bioscience Award for Career Development, 2008 by DBT, R. Sankar.

Chemical


113. Young Engineer Award, Indian National Academy of Engineering, 2008, YM Joshi.

114. Young Scientist Platinum Jubilee Award, National Academy of Sciences (NASI) 2008, YM Joshi.

Civil

115. Co-convenor of the Composite Pavement Committee appointed by Indian Roads Congress from July, 2008 to December, 2011, Das, A.

116. Won Sliver Medal for developing Limulator2 at XXI ISPRS Congress, Beijing, Lohani, Bharat.

117. Organization: Earthquake Research Institute, University of Tokyo, Japan Malik, J. N.

118. Mr. Sagnik Dey, for doctoral work at IITK received INSA Young Scientist Award in 2008, Tripathi, S. N (Guide).

119. Young Engineer Award in Environmental Engg. Division from Institution of Engineers, India (2008-2009), Tarun Gupta.

120. Best Poster Award, International Conference of Environmental Research, Dec, 2008, Tarun Gupta.


122. Young Scientist Fast Track grant from DST, 2008, Tarun Gupta.
Computer

123. Awarded the first Infosys Mathematics Prize, Manindra Agrawal.

Electrical

125. Received the Tan Chin Tuan Fellowship of Nanyang Technological University, Singapore, A.K. Chaturvedi.
126. Welliver Faculty Fellowship, Boeing, USA, P. K. Kalra.

Mechanical

128. BOYSCAST Fellowship – Sponsored by Department of Science and Technology, India, J. Ramkumar.
129. MCDM Edge worth-Pareto Award by International Society on Multiple Criteria, Decision Making (MCDM), 2008, K. Deb.
130. Best paper award at the ISSS 2008 for the paper Control of Instabilities of Pipes Conveying Pulsating Fluid using SMA based actuation, B. Bhattacharya.
131. DAE Young Scientist Award, 2008, J. Ramkumar.
133. Chair the Automobile Technology Park under the Board for Smart Materials Research & Technology (B_SMART) of the National Program on Smart Materials, N. S. Vyas.
134. Chair a session entitled 'Digital Empowerment-Outcome of Desktop, A. Chatterjee.
136. Fellow of the National Academy of Sciences, India. He has also been elected as the Indian Representative to the apex body for promotion of research in Mechanics, International Union of Theoretical and Applied Mechanics (IUTAM) for four years w.e.f January 2008, Gautam Biswas.
HSS

137. Awarded the CDN Prize for Best Research Paper presented at the Annual IACLALS conference held at Karnataka University, Dharwad, Feb. 18-20, 2009, Suchitra Mathur.


139. Abstract Award, International Association for Suicide Prevention (at the 3rd Asia Pacific Regional Conference of IASP, Hong Kong), Braj Bhushan.

Chemistry

140. Swarnajayanti Fellowship, DST India, J.K. Bera.

141. Elected to the Editorial board of Organometallics an American Chemical Society Journal, V. Chandrasekhar.

142. Shanti Swarup Bhatnagar Prize in Chemical Sciences, 2008, Awarded by CSIR, J.N. Moorthy

143. Best Poster Award at the SPIE Photonics West 2009 at San Jose, CA on the poster: Coherent Control in Multiphoton Fluorescence Imaging, A.K. De and D. Goswami.

144. Best Poster Award at the 8th National Laser Symposium to Control of laser induced molecular fragmentation using chirped ultrafast laser pulses, T. Goswami, S.K.K. Karthick and D. Goswami.


IME

146. 2008 Man of The Year, American Biographical Institute Inc., 5126 Bur Oak Circle, PO Box 31226, North Carolina, 27622, USA, RRK Sharma.


149. RESEARCH EXCELLENCE AWARD 2008, awarded by WorldComp, USA, for research excellence in Software Engineering and Software Management, Subhas C. Misra.

Referee in 2008-09

151. Competitive Paper Reviewer for ACR-2008 (Association for Consumer Research, USA); Reviewed two papers for the 8th International Marketing Trends Congress, Paris, January 16-17; Referee for Decision Support Systems; Reviewer for the following journals: Decision (Journal published by IIM Calcutta); IIMB Review, N. K. Sharma.


Honor(s)


Materials and Metallurgical

161. Distinguished Overseas Guest Lecturer, TUBITAK, National Science Foundation, Tukey, July 2008, invited lectures at several Universities in Turkey), B. Basu.
162. Young Metallurgist of the Year, 2008 by Ministry of Steel, GOI, K.Biswas.
163. INSA (Indian National Science Academy) Young Scientist Award (2008), A. Garg.
164. Micrographs Contest: Zeiss prize for Best TEM micrograph in Materials Science Category, EMSI 2009, Gouthama.
165. Elected Vice-President of Electron Microscope Society of India in its 30th AGM at Jhansi, 2009, Gouthama.

Mathematics

166. Elected Secretary, Association for Logic in India, Mohua Banerjee.
167. Commonwealth Academic Staff Fellowship; awarded by the Commonwealth Scholarship and Fellowship Commission in the United Kingdom, S. R. Patel.

Physics

171. Invited on advisory board for Superconductor Science and Technology for an initial period of two years from January 2009 to December 2010. S.S. Banerjee.

(F) CONTINUING EDUCATION ACTIVITIES

Aerospace

175. Spacecraft Guidance, Navigation, and Control, Hari B Hablani, plan to present them next year.

Chemical
176. DST-SERC school on Newer Optimization Techniques for Chemical Engineering Applications, IIT Kanpur, June 2008 for teachers from academic institutes and a few participants from industries, S Garg and SK Gupta.

Civil


Computer Science

178. Invited talk on Indexing and Searching Techniques in Databases at Dr. Ambedkar Institute of Technology for Handicapped (AITH), UP as part of the Faculty Development Program, Arnab Bhattacharya.

179. Summer Course on Program Optimization for Multi-core architectures, Sanjeev K Aggarwal.

Chemistry

180. Organised the E-learning classroom for Chattisgarh colleges in Biochemistry, Botany, Zoology and Microbiology, R. Gurunath.

Electrical

181. Short Course (Doordarshan Sponsored) on Design and Analysis of Microcontroller-based System with Embedded Technology during Aug. 11-15, 2008 at IIT Kanpur. Participants were engineers from Doordarshan and Industry, S.P. Das.


Industrial & Management

188. A Short Course on Globalisation: A Critique and Possibilities beyond the Present Order, 1st -7th June 2008 Anasakti Ashram, Kausani, Almora, Rahul Varman.

Materials and Metallurgical

189. Material Advantage at IIT Kanpur chapter for students comprising (i) American Society of Metals (ASM), (ii) The minerals metals and materials society (TMS), (iii)American Ceramics Society (ACerS), and (iv) Association of Iron and Steel Technology (AIST), K. Balani.
190. Archaeomaterials in collaboration with Archaeological Survey of India, New Delhi, R. Balasubhramaniam.
191. VLFM 2009, IIM activities, K. Biswas.
192. Taught Materials part in the HAL trainees course, A. Garg.
194. HAL materials lectures, K. Mondal.

Mechanical

199. Coordinated the Second Joint IITK – NTU Singapore Workshop In Mechanical, Aerospace, And Industrial Engineering during 5-6 April 2008 at IIT Kanpur (India), K. Muralidhar.
200. QIP course proposed for December 2009: Transport phenomena in Phase change and reacting systems, Malay K., Dr. S. Khandekar.
201. Micromachining was held at IITK and sponsored by AICTE New Delhi and BARC Mumbai, V.K. Jain.

Humanities and Social Sciences

203. Faculty Advisor for English Writing and Speaking, Opportunity College – the adult education programme run under the auspices of DRPG, Suchitra Mathur.
204. Social stratification and education for State Council of Educational Research and Training, Raipur, Chattisgarh, 19-20 December 2008. Participants were from the Department of Education, Chhattisgarh, Amman Madan.
205. Induction Training Workshop at Eklavya, Hoshangabad, September 2-6, 2008. Participants were the staff of Eklavya, Amman Madan.

Mathematics and Statistics

210. Advanced Training Programme (Supported by DST, New Delhi) Pondicherry University, June 16- 20, 2008 - Resource Person, P. Chandra.
211. Basic Training Programme in Mathematics for UG students (Supported by DST, New Delhi), BNSD College, Kanpur, Nov. 17 - 30, 2008 - Resource Person, P. Chandra.
212. Basic Training Programme in Mathematics for UG students (Supported by DST, New Delhi), BNSD College, Kanpur, Nov. 17 - 30, 2008 - Resource Person, A. K. Lal.


216. Resident Faculty at MTTS Programme held at RIE, Mysore, May 19-June 14, 2008, G. Santhanam.

Physics

217. Lectures to Chattisgatrh from the e-classroom at IIT Kanpur under the CHIPS programme and also gave lecture on Quantum-Mechanics, M.K. Harbola.

(G) PARTICIPATION IN HIGH LEVEL INDUSTRY ACADEMIA INDUSTRY INTERACTION PROGRAMME DURING SUMMER

Aerospace

218. Member of TIFAC CORE, DST and Member of academic committee, HCE Chennai, Ghosh A.K.

Biological Science and Bio-engineering


220. Executive Member for Asian Federation of Biotechnology (AFOB), Ashok Kumar.

Chemical

221. Elected Member, The Asia-Pacific Academy of Materials (APAM), (2008) [elected membership of APAM is from India, Russia, Japan, China, Uzbekistan, Korea, Taiwan and Australia], A Sharma.
Civil

223. Two masters level French student from Ecole des Mines, d’Ales, France are carrying out their summer research for 10 weeks under my guidance at IITK, Tarun Gupta.

Industrial & Management Engineering

225. Nominated as member of the Editorial Board of the following Journals: Journal of Marketing Trends, Paris; Decision, IIM Calcutta, N. K. Sharma.
227. Member, evaluation committee for professors, Weldon School of BioMedical Engineering, (2008) Purdue University, MJIS Building, 206 S Martin Jischke Drive, West Lafayette, IN 47907-2032 USA; 001-765-494-2998, RRK Sharma.

Materials and Metallurgical

230. Appointed member of National Commission for History of Science and Research Council for History of Science, Indian National Science Academy, New Delhi, India for a period of three years, R. Balasubramaniam.

Mechanical

235. Member of the Editorial Board of Computational Thermal Sciences (Begell House, USA), G. Biswas.

Chemistry

236. Invited member of Editorial Board of the Journal of Molecular Liquids (published by Elsevier), A. Chandra.

Physics

237. On the selection committee for faculty recruitment at Dept of Physics, NISER, Bhubaneswar, S.D. Joglekar
238. On the committee to prepare the entire syllabus for the M.Sc. integrated program in Physics at NISER, Bhubaneswar, S.D. Joglekar.
239. On the National Organizing Committee and Convener of Local Organizing committee of a national workshop on Non-commutative Quantum Field Theory planned at Indian Institute of Technology, Kanpur during July—August 2009, S. D. Joglekar.

(H) ANY OTHER IMPORTANT ACTIVITY NOT SPECIFIED IN ABOVE COLUMNS

Aerospace

244. Attitude control using magnetic torquers, Jugnu Nanosatellite, Hari B. Hablani.
245. Attitude determination using magnetometers, Jugnu Nanosatellite, Hari B. Hablani.
246. GPS navigation, Hari B. Hablani.
247. GAGAN (Geostationary Augmented GPS Air Navigation) – an ISRO / Airports Authority of India Program, Hari B. Hablani.
248. IRNSS (Indian Regional Navigation Satellites System) – an ISRO / Airports Authority of India Program, Hari B. Hablani.
249. Chandrayan II trajectory design using ISRO’s GSLV / PSLV, Hari B. Hablani.
250. Design of remote sensing satellites, Hari B. Hablani.
251. Design of ISRO’s ASTROSAT – a satellite to study astrophysics of celestial sphere, Hari B. Hablani.
253. Design of a surveillance satellite to monitor border and coast, Hari B. Hablani.
256. GAGAN, Hari B. Hablani.
257. IRNSS, Hari B. Hablani.
258. Punjab Engineering College, Chandigarh: Introduced one student, Ankita, to many facets of satellites dynamics and control; guiding her with her project related with Satellite Attitude Determination, Hari B. Hablani.
259. Contributed to a proposal for setting up a Center for Aviation and Outer Space Exploration at IITK, Hari B. Hablani.
260. Member, International Steering Committee, IUTAM-MMSS 2008, Venkatesan C.
261. Plenary Session Chairman: International Seminar Organised by NAL, Venkatesan C.

Chemical

263. Member, PAC (Chemical Engineering), DST, N Delhi, D Kunzru.
264. Member, Board of Governors, Rajiv Gandhi Institute of Petroleum Technology, Rai Bareli, UP, D Kunzru.
265. Member, Editorial Board, International Journal of Chemical Engineering, D Kunzru.
266. Member, Advisory Committee, Advances in Chemical Engineering (AChemE 2009), Feb 27-28, 2009, Patiala, D Kunzru.

267. Member, Advisory Board, Elsevier (India), 2008- present, A Sharma.


269. Council Member (Materials), Indo-French Centre for the Promotion of Advanced Research (IFCPAR), New Delhi, 2008-2010, A Sharma.


271. Member, Program Advisory Committee for International Division’s Program on Materials, Mining and Mineral Engineering, (PAC-MAT), Department of Science and Technology, New Delhi (2009-1011), A Sharma.


274. Expert Panel Member, TATA NEN Hottest Startup Awards, National Entrepreneurship Network (2008), A. Sharma.

275. Member, PAC (Chemical Engineering), DST, N. Delhi, A. Sharma.

Civil

276. Member, Steering Committee, National Guidelines on Urban Flooding, National Disaster Management Authority (NDMA), Government of India, Jain, A.

277. Organised International School on LiDAR Technology conducted 31 March to 4 April 2008, Lohani B.

278. Serving as member of Editorial Board for Chemical Geology, Paul, D.

279. Member, Publications Committee, American Geophysical Union, Tripathi, S. N.

280. Expert Member, DST Fast Track Scientist Committee on Earth and Atmospheric Sciences, Tripathi, S. N.

281. Member, National Steering Committee, Cloud, Aerosol and Precipitation Enhancement Experiment (CAIPEX), Largest Project Ever Taken by Ministry of Earth Sciences, Tripathi, S. N.

282. Member, Geophysical Research Letter Editor Search Committee, Tripathi, S. N.
283. Lifting the Veil from Jupiter Cloud, Biplab Das, nature India, Tripathi, S. N.
284. Biting Dust in Mars, Biplab Das, nature India, Tripathi, S. N.
285. Our work was extensively referred in the article Aerosol: The Earth’s Sun Shield, N. Gopal Raj, The Hindu Survey of Environment, 2008, Tripathi, S. N.
286. Strengths 2009 (student magazine), faculty advisor, Tarun Gupta.
287. Installed ICP-OES (iCAP6300 model, Thermo Inc.), CARE grant, Tarun Gupta.
290. *Invited talk* on River dynamics (avulsion), hydrological variability and climate change: insights from the Gangetic rivers, IISc Bangalore Centenary workshop on Earth and Climate Sciences, 14th Dec., 2008.

**Electrical**

293. Chaired three sessions in IFAC World Congress, Seoul, July 2008, Laxmidhar Behera.

**Industrial & Management**


**Materials and Metallurgical**

297. The Department invited Dr. Paul Craddock of the British Museum, England
as visiting faculty between December 2008 and March 2009. During his stay in the Department, Dr. Paul Craddock taught the course on History Of Science and Technology of Metallurgy with R. Balasubramaniam. In addition, he took part in various academic activities in the institute during his stay as Visiting Faculty in the MME Department.

Mechanical

298. Visiting Professor at the University of Western Ontario, Canada, May 08-June 08, G. Biswas.
299. Visiting Professor at the ENSAM, Angers, France, November 25 - December 09, G. Biswas.
300. Involved in the Solar Energy Research Enclave initiative, IIT Kanpur, Malay K Das.
301. Manager, Jugnu Nano satellite project, IIT Kanpur, Anjali K.
302. Acting Head, Centre for Mechatronics, for 4 terms of duration of 1-2 weeks, Anjali K.
303. Personal interview for TV media for Programmable Educational, Anjali K.
306. Personal interview for print media for Programmable Educational, Anjali K.
309. Telegraph, Kolkata (on Robotics Opportunities), interviewed on 31.1.2008, Anjali K.
310. Hindi article on ‘Badhe Hai Shodh Ke Avasar’ (On Augmented Research Opportunities), in Hindustan Times, 28.5.2008, Anjali K.
311. Visited 18th World Book Fair held in New Delhi during 7-8 Feb, 2008, Anjali K.
312. Counselor Committee member, IIT Kanpur, Anjali K.

Humanities and Social Sciences

313. Initiation Grant Project (DORD, IITK) entitled Productivity Analysis of the ICT Sector and Linkages in Some Countries of South Asia East Asia, Australia and New Zealand, A DEA and Malmquist Analysis- S.K. Mathur.
314. Faculty Advisor for the Students’ Gymkhana Cultural Council (2008-09), Suchitra Mathur.
315. Member of the Advisory Board for NERD, the Students’ Science Magazine, Suchitra Mathur.
318. Organized Workshop on Patent Drafting at IIT Kanpur - Sponsored by the Ministry of Human Resource Development under IPR Chair, November 7-9, 2008, P.M. Prasad
319. Coordinated DIES Partnership Project under German Academic Exchange Service (DAAD) subject-specific funding (Euros 48000) to promote academic interaction between University of Applied Sciences, Darmstadt, Germany and Indian Institute of Technology, Kanpur, India - P.M. Prasad.
320. Member, Institute DRP&G Committee, since 2008 - P.M. Prasad.
321. Visiting Faculty at Department of Sociology and Social Work, University of Kashmir - Amman Madan.
322. Visiting Faculty in MA programme in Elementary Education at the Tata Institute of Social Sciences - Amman Madan.
323. Member of advisory committee of Pragat Shikshan Sansthan, Phaltan, Amman Madan.
324. Member of advisory committee of Early Literacy Project, New Delhi, Amman Madan.
325. Member of advisory committee, Vidya Bhawan Centre for Societal Studies, Udaipur, Amman Madan.

Physics

328. A 1.7 MV accelerator has been installed and inaugurated in October 2008 with the help of funding of about 15 Crores from DST. The objective is
to provide a common platform for researchers in the field of Physics, Materials Science, Electrical Engineering, Mechanical Engineering, Bioscience, etc. to work on the following themes: To build an infrastructure for Research and Development of ion beam based cutting edge technologies with an emphasis on applications of focused ion beams in micro and nanofabrication and diagnosis of materials; To enhance the understanding of ion-nano/micro matter interaction and harness it for developing ion beam based modern and futuristic technologies; To develop focused ion beam based technologies suitable for prototype fabrication of MEMS and NEMS devices for engineering, biological and biomedical applications, V.N. Kulkarni

Chemistry

329. Guided summer research fellow of IASc, Bangalore, F. A. Khan.
330. Invited lectures on Chemical reaction dynamics: from transition state to RRKM and beyond at the Indian Association for Cultivation of Science, Kolkata, December 2008, K. Srihari.
331. Invited to Chair the opening session of the APS Focus meeting on Transition States in Chemistry, Physics, and Astrophysics, March 2009, Pittsburg, USA, K. Srihari.

Mathematics and Statistics

333. Programme Committee Member, Third Indian Conference on Logic and its Applications (ICLA 2009), January 7-11, 2009, IMSc, Chennai, Mohua Banerjee.
334. Editorial Board Member of the Journal of Modern Applied Statistical Methods, D. Kundu.
335. Editorial Board Member of the Journal: Statistics and Its Applications, D. Kundu.
336. D. Kundu, Editorial Board Member of the Journal: Communications in Statistics - Theory and Methods, D. Kundu.
337. Editorial Board Member of the Journal: Communications in Statistics - Simulation and Computation, D. Kundu.
338. Awarded DST SERC Project titled 'Analyzing Non-Stationary Signals' from the Department of Science & Technology, Government of India, Amit Mitra and Debasis Kundu.


340. A DRDO project titled Development of nodal platform for quantitative methods for MRI and MR Spectroscopy for the study of human brain with a grant of Rs. 35,00,000/- (Rupees Thirty Five Lakhs Only), R. K. S. Rathore.