



G R A P E V I N E



A quarterly newsletter of Indian Institute of Technology Kanpur for alumni and friends

Institute Milestones

IIT Kanpur Declared India's First Center of Excellence in Multi-Core: IIT Kanpur is the first University to hand over the Multi-core curriculum to Intel for free download from Intel site to other universities. IIT Kanpur presented Intel Software College with courseware for a new Multi-Core Programming Class. The ceremony took place at the Intel Asia Academic Forum in Delhi and resulted from an initiative to incorporate parallel programming in undergraduate classes and prepare the next generation of programmers for a Multi-core era. IIT Kanpur will be scaling it by training the faculty members throughout India. Dr Andrew Chien, VP Corporate Research, Intel felicitated Professor Sanjay Dhande on the achievement.



Courseware on YouTube: Google and YouTube are in the process of hosting courses created by IITK professors for a wider dissemination of knowledge. Four such courses are already available online, in the form of video lectures. These are; Finite Element Methods by Prof. C. S. Upadhyay, Intelligent Systems and Control by Prof. Laxmidher Behra, Kinematics of Mechanics by Prof. Ashok K. Mallik and Dynamics of Mechanics by Prof. Amitabh Ghosh. The project is a part of India's National Programme on Technology Enhanced Learning. The details are available at: <http://nptel.iitk.ac.in>



Support from Donors



Prof. C V Seshadri

Professor C. V. Seshadri Chair: A whole generation of students, who were taught by late Professor C. V. Seshadri have instituted a Faculty Chair in his memory in the Department of Chemical Engineering. Popularly known as CVS, Prof. Seshadri had joined IITK in 1965. He obtained his Ph. D. from Carnegie Institute of Technology (now Carnegie Mellon University). He was a Professor and later Head of the Chemical Engineering Department, and also served as Dean of Students Affairs. He is well known for his best selling textbook, *Elements of Fluid Mechanics*. CVS had also received the prestigious *Jammalal Bajaj award in 1981 for S&T for rural development*.

Vinay Kapoor Memorial Scholarship & Bhagwan Das Kapoor Memorial Scholarship: Mrs. Padma Kapoor w/o Late Shri. Bhagwan Das Kapoor and mother of Arun Kumar Kapoor (BT/ME/67), and Vimit Kapoor (BT/EE/2000) s/o Late Shri. Vinay Kapoor (BT/ME/68) have set up two scholarships through a Canada based charity organization named "AIM FOR SEWA". The scholarships named "Vinay Kapoor Memorial Scholarship" and "Bhagwan Das Kapoor Memorial Scholarship" would award Rs. 2,000 pm to B. Tech. students of any department on merit-cum-means basis with preference to students inclined towards community service.



Late. Vinay Kapoor



Amita Verma
Rohit Verma

Indra Dhanush Scholarship: Amita Verma nee Agrawal (MSc5/PHY/90) and Rohit Verma (BT/MME/90) have set up the "Indra Dhanush Award Scholarship" @ Rs. 2,000 pm to be given to a UG student of any department on the basis of academic excellence and accomplishment in extra-curricular activity at the institute level (preferably sports). Also, the student must show some evidence of financial need.

Sudarshan Kasturia Memorial Scholarship: Anjali Joshi (BT/EE/81) and Sanjay Kasturia (BT/EE/81) have set up the "Sudarshan Kasturia Memorial Scholarship" @ Rs. 2,000 pm to be given to a UG student of any department on the merit-cum-means basis. The scholarship is to be awarded to a student who in addition to academic excellence has demonstrated leadership in coordinating a team effort on a project beyond the basic curricular requirements of the Institute. Anjali Joshi and Sanjay Kasturia have worked at various companies on the east and west coast in USA and currently reside in the Bay Area. Anjali works at Google and Sanjay works at Teranetics, a company he started in 2003



Sanjay Kasturia



Devendra K. Shukla

Shri D. P. Shukla Scholarship: To honour his father, Shri D. P. Shukla, Dr. Devendra K Shukla (BT/CE/67) has established the "Shri D. P. Shukla Scholarship" @ Rs. 2,000 pm to be given to a UG student of any department on the merit cum means basis. Dr. Shukla has worked for 34 years on infrastructure, environmental and power projects worldwide and currently is the Founder-CEO of ITSI, an international infrastructure and environmental firm. He obtained his Ph. D in 1974 in Operational Research and Engineering Mechanics from University of Delaware, USA

Alumni News and Events

Distinguished Alumni Awards 2007-2008: Six alumni were felicitated with Distinguished Alumnus Awards (DAA) on the Alumni Day February 24, 2008.



Prof. Ashok Misra

Prof. Ashok Misra (BT/CHE/68): Prof. Misra has been awarded the DAA for his outstanding managerial contributions and inputs to the field of Chemical Engineering. A distinguished engineer and scientist, he has served the field of education for more than three decades. He obtained his M. S. in Chemical Engineering from Tufts University in 1969 and M.S. and Ph. D. in Polymer Science & Engineering from University of Massachusetts in 1971 and 1974 respectively.

Prof. Misra is currently Director, IIT Bombay.



Dr. Ravi Sethi

Dr. Ravi Sethi (BT/ME/68): Dr. Sethi has been awarded the DAA for his outstanding technological and managerial contributions. He has served as Assistant Professor, Computer Science, at Penn State University and as Senior Vice President, Communications Science Research at Bell Labs. He holds a Ph. D. in Electrical Engineering, with specialization in Computer Science from Princeton University. Dr. Sethi is currently the President of Avaya Labs, USA.



Mr. Harsh Manglik

Mr. Harsh Manglik (BT/ME/70): Mr. Manglik has been awarded the DAA for his outstanding managerial contributions. He has served as worldwide Vice President, Symantec Corporation and as the Global Vice President of IBM, responsible for PLM services. Mr. Manglik holds an MBA (Strategy, Technology Management Systems) from Carnegie Mellon University. Prior to this he also led the Innovation practice for IBM Consulting in North America. Mr. Manglik is presently the Chairman & Managing Director of Accenture India.



Mr. Ashok Sinha

Mr. Ashok Sinha (BT/EE/73): Mr. Sinha has been awarded the DAA for his outstanding managerial contributions. He obtained an MBA Degree from Indian Institute of Management (IIM), Bangalore in 1977, with specialization in Finance. Mr. Sinha is presently Chairman and Managing Director of BPCL, Chairman of the Board of Numaligarh Refinery Ltd., a subsidiary of BPCL and Bharat Oman Refineries Ltd., a joint venture company promoted by BPCL and Oman Oil Company for setting up a new grass root refinery at Bina in Madhya Pradesh.



Prof. Jitendra Malik

Prof. Jitendra Malik (BT/EE/80): Prof. Malik has been awarded the DAA for his outstanding contributions and academic achievements in the field of Computer Science and Engineering. He was the recipient of the gold medal for the Best Graduating Student in Electrical Engineering at IITK in 1980, a Presidential Young Investigator Award Winner in 1989 and Diane S. MCEatyre Award for excellence in Teaching in 2002. He is currently the Arthur J. Chick Professor in Electrical Engineering and Computer Science at University of California, Berkeley



Prof. Arup K Chakraborty

Dr. Arup K. Chakraborty (BT/CHE/83): Dr. Chakraborty has been awarded the DAA for his outstanding contributions to the field of Chemical Engineering. He obtained his Ph.D. in Chemical Engineering from the University of Delaware in 1988 followed by his Postdoctoral stint at the University of Minnesota. He is presently the Robert T. Haslam Professor of Chemical Engineering, Professor of Chemistry, and Professor of Biological Engineering at MIT.



Mr. Anubrotta K. Roy

Satyendra K. Dubey Memorial Award: Mr. Anubrotta Kumar Roy (BT/MT/CHE/67/69/IITB) was awarded the Satyendra Kumar Dubey Memorial Award for his outstanding work in rural development and spreading environmental awareness. The presentation ceremony of the Awards was held on the occasion of the *Annual Alumni Day of the Alumni Association, IIT Kanpur*.

The Board of Director, Alumni Association, IIT Kanpur (Year 2008-2009)

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

Vice President 1: Rahul Mehrotra (BT/EE/96)

Vice President 2: Bhanu Kapoor (BT/EE/87)

Secretary: Binayak Rath (PHD/HSS/80)

Treasurer: Sameer Khandekar (MT/ME/2000)

Member 1: Manish Thakur (BT/EE/96)

Member 2: Sanjeev Sinha (MSC5/PHY/95)

Member 3: Rahul Shukla (MSC2/MTH/98)

Member 4: Rakesh Sharma (MT/NET/78)

Immediate Past President: Pawan Kumar (BT/CE/69;MT/CHE/72)

Immediate Past Secretary: V Eswaran (BT/ME/80)

IITK Foundation nominee: Rakesh Pandey (BT/ME/78)

Patron's nominee: Sanjeev K Aggarwal (Dean, RPG)

Distinguished Alumnus Awadree Umesh Mishra (BT/EE/79)

IITK-Alumni Mumbai Chapter Annual Get Together: A large number of alumni participated in the annual get-together on February 9, 2008. The occasion was marked by the winning of the "Lead India" program by R. K. Misra (BT/CE/89), an event that the participants greatly enjoyed watching. Mr. Ashok Sinha (BT/EE/73) was in charge of providing the site arrangements. The event was a huge success with wonderful food, drinks and various other entertainment programs.

Workshops & Lectures Series

- ✎ International Strategy Workshop on Promotion of Confined Masonry Construction was held at IIT Kanpur during January 26 – 28, 2008. This technology is a much safer alternative to ordinary unreinforced masonry construction or the reinforced concrete frame buildings with masonry infill, which are very prevalent in India and other developing countries and have been shown to be deadly in recent earthquakes. The workshop was supported by EERI, USA (www.eeri.org), WSSI, Singapore (www.wssi.org), and the Poonam and Prabhu Goel Foundation at IIT Kanpur.
- ✎ Architectures and Compilers for Multithreading Workshop was held during December 13-15, 2007. The workshop focused on compiler techniques to improve multithreading capabilities and architectural/compiler techniques to improve the programmability, performance, reliability, and fault-tolerance of chip-multiprocessor based systems. Leading researchers from MIT, IBM, UIUC, Texas, Rochester, Perdue, Brown, Cornell, Stanford, Intel, Rice, Wisconsin, IITK, IITB and IISc participated in the workshop. The workshop was sponsored by Research-I Foundation.
- ✎ Tomography Confluence, CT-2008, was organized during February 15-17, 2008 at IIT Kanpur. All aspects (theory, numerics, and experiments) were covered with as many 20 keynote lectures in three days. The talks incorporated diverse CT instrumentation (e.g. gamma-ray, x-ray, laser, ultrasonic, microwave and electrical impedance) reflecting cutting edge technology and new horizons in tomography research.
- ✎ National Conference on Intellectual Property Rights was held during February 28-01 March, 2008 at IIT Kanpur. This conference aims at linking creation and protection of knowledge capital to improvement in the quality of life in the Indian context. Coordinated by Dr. A. K. Mittal, Dr. P. M. Prasad, and Dr. B. V. Phani of IIT Kanpur, the Conference was supported by funds received from MHRD, Govt. of India for IPR Chair activities.



Institute Lecture by Subir Raha: Mr. Subir Raha, Executive Vice Chairman, Hinduja Group India and Distinguished Honorary Professor, IIT Kanpur delivered a lecture titled “Energy in India Opportunities and Anxieties” on February 04, 2008. Mr. Raha was previously the Chairman of ONGC and received the recognition of Global Energy Executive from the Petroleum Economist, London.



Subir Raha



Fran Allen

Lecture series in honour of Hari Sahasrabuddhe : Starting this year, the Hari Sahasrabuddhe lecture series is intended to bring the young minds at IIT Kanpur in particular and India in general, in contact with such pioneers in the domain of computing, for interaction, understanding and inspiration. This year's speaker was Fran Allen (A CM Turing Award winner of 2007) is an IBM Fellow Emerita at the T. J. Watson Research Laboratory with a specialty in compilers and program optimization for high performance computers. The lecture series is sponsored by Mr. N. R. Narayana Murthy.

Cisco Research Delegation visit to IIT Kanpur: Dr. Douglas Comer and his team comprising of Mrs. Comer, Mr. Manoj Goel and Mr. Raghavan Kripakaran visited IIT Kanpur during January 24-26, 2008. The objective of the visit was to explore potential R&D alignment. Dr. Comer is best known for his work in the early development of the Internet. He is a distinguished professor of computer science and professor of electrical and computer engineering at Purdue University



Douglas Comer

Distinguished Lecture Series

With generous support of our alumni and well wishers, the following lectures series have been conducted during 2007-08.

- ✎ **Endowment Lecture Series in Department of Chemistry:** Prof. Animesh Chakraborty, Indian Association for the Cultivation of Science, Kolkata on “Fine-tuning of redox levels of nickel (tetravalent, trivalent and bivalent) in a amine-imine-oxime ligand environment, accompanied by protonation/deprotonation of oxime groups” and “Redox manipulation of transition metal coordinated azo functions generating stable azo anions, including their characterization by single-crystal X-ray crystallography” on November 6, 2007.
- ✎ **Prof. E. C. Subba Rao Lecture Series:** Prof. Jonathan Mark Kenoyer, University of Wisconsin, Madison, USA on “Traditions of the Indus Civilization: An overview of Technology and Artifacts” on January 01, 2008.
- ✎ **Prof. K. R. Sarma Lecture Series:** Prof. V S Ramamurthy, DAE Homi Bhabha Chair Professor, Inter-University Accelerator Centre, New Delhi on “Technology Intermediation” on February 28, 2008.
- ✎ **Prof. C. N. Rao Lecture Series:** Prof. Manindra Agrawal, IIT Kanpur, on “P <> NP problem” on February 28, 2008.
- ✎ **Prof. Ramachandra Rao Dasari Lecture Series:** Dr. Rohit Bhargava, Bioimaging Science and Technology, Beckman Institute, University of Illinois, Urbana, IL, USA on “Cancer Pathology using infrared spectroscopic imaging” on February 29, 2008.

Donation for Research Activities

Indian Institute of Technology Kanpur has been approved by the Government of India, Ministry of Finance, Department of Revenue (Central Board of Direct Taxes) for claiming exemption under section 35(1) (ii) of Income Tax Act on the donations/ grants received for research activities done by its faculty members and students. Under section 35 (1) (ii) of Income Tax Act, a deduction of the amount equal to one and one-fourth times of the donation/ grant received in IIT Kanpur for undertaking Scientific Research will be allowed for Income Tax-Exemption.

Student Achievements, Activities & News

Goldman Sachs Global Leaders Award: Sandip Gupta (BT/EE), Varun Mishra (BT/CSE), Shrey Sahay (BT/EE) and Divyanshu Jha (BT/CSE) have been chosen for the "Goldman Sachs Leaders Award" for the year of 2007-08. The program recognizes their outstanding achievements and abilities by awarding each Global Leader U.S.\$3,000.



Sandip Gupta



Varun Mishra



Shrey Sahay



Divyanshu Jha

First Prize at a Business Idea Competition-IDEAZ-2007, IIT Bombay: Tapendu Mandal (Ph. D/MME) & Prem Prakash (MT/MME) have won the first prize along with the cash prize worth Rs 15,000 under the team named Revolution Bonemat.

Techkriti'08: Techkriti, the annual international science and technology festival of IIT Kanpur was a grand success. The festival witnessed lectures by the Nobel laureates including **Dr. Peter Grunberg (Physics 2007)**, **Dr. John C Mather (Physics 2006)**, and **Dr. Robert Grubbs (Chemistry 2005)**. Unique exhibitions from Brazil, Germany, and India added to the multi-dimensional span of Techkriti. A special attraction was the Indian Open Rubix Cube Contest conducted first time in India in conjunction with the World Cube Association.



Dr. Peter Grunberg

Umang'08: Under its new name, Films and Media Council (FMC), as against what was previously known as Students Film Society (SFS), the annual film festival of IITK, Umang '08 helped to integrate print and visual media into the culture of the Institute. The special events included **Pratibimb**, a photography competition, **The Fourth Estate** or Newspaper Supplement and Layout Contest, **AnimMaz**, the animation and design contest, **A Few Minutes to Fame**, the movie making contest, and **Adict**, the ad making contest.

Marvelous Performance by Institute Athletics Team in ISM Dhanbad : IIT Kanpur Athletics team performed extremely well at the All India Technical Institutes Athletic Championship "Athletica-2K8" held at ISMDhanbad from February 16-17, 2008. Athletics Boys Team won the Team championship along with a cash prize of Rs. 20,000. Sangeeta Meena won the Best Women Athlete award which carried a cash prize of Rs.10,000. IITK Boys relay team won 4x100 and 4x400M relay.

Faculty News

New Appointments:

- Dr. Krishanu Biswas, Materials & Metallurgical Engineering (Ph. D. from Indian Institute of Science, Bangalore, 2006)
- Dr. Brijesh Eshpuniyani, Aerospace Engineering (Ph. D. from Purdue University, USA, 2003)
- Dr. Tarun Kanti Ghosh, Physics (Ph. D. from The Institute of Mathematical Sciences, Chennai, 2003)
- Dr. Anandh Subramaniam, Materials & Metallurgical Engineering (Ph. D. from Indian Institute of Science, Bangalore, 2001)

Faculty Awards and Honours:

- Dr. V. K. Singh, (Chemistry) has been awarded the Bhagyatra Award of Punjab University.
- Dr. Satyajit Banerjee, (Physics) has been awarded the Young Achiever Award by the Department of Atomic Energy (DAE).
- Dr. S. N. Singh (EE) has been appointed as one of the Editors of *International Journal of Systems Signal Control and Engineering Application*.
- Dr. Kalyanmoy Deb, (ME) has been invited to join editorial boards of the four international journals.
- Dr. Gautam Biswas, (ME) has been elected as the President of the Indian Society of Theoretical and Applied Mechanics.



V. K. Singh



Satyajit Banerjee



S. N. Singh



Kalyanmoy Deb



Gautam Biswas

Staff Achievement



Pramod K. Mishra

Pramod K. Mishra and Shiv Shankar Tewari, staff of IITK participated in the recently concluded "20th U.P. Master's Athletic Championship-2008" held during February 9-10, 2008 in Jaunpur (U.P.). Pramod won 3 Gold medals and 1 Silver medal along with the best overall athlete award and Shiv Shankar Tewari won 2 Gold, a Silver and a Bronze medal. Both have been selected for "All India Master's athletic Championship to represent U.P. Athletics Team.



Shiv Shankar Tewari

Obituary



Prof. M M Hasan

Prof. Mohammad Muzaffarul Hasan (PhD/EE/1973, EE Faculty 1961-1995), one of the founder faculty members of the Electrical Engineering department at IITK, passed away on Jan 28th, 2008 at his home in Lucknow. He was suffering from brain tumor. Born on June 7, 1935, Prof. Hasan did his BSc. Electrical Engineering from BIT Sindri (1957) and MS from University of Wisconsin, Madison in 1960. He joined IIT Kanpur in 1961. He later received another MS in Solid State Electronics from Carnegie Mellon University in 1968 and obtained his Ph. D. from IIT Kanpur in 1973. Prof. Hasan was instrumental in starting the microelectronics program and the semiconductor fabrication facility at IIT Kanpur.