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# GRAPENE

A quarterly newsletter of Indian Institute of Technology Kanpur

## Institute Milestones

### Centre of Environmental Sciences & Engineering

The foundation stone for Centre of Environmental Sciences and Engineering Building was laid on April 23, 2006. Hon'ble Member of Rajya Sabha, Shri Arun Shourie committed a sum of Rs. 11 crore from his entitlement of the MP-LAD Funds. The proposed building in addition to meeting functional needs will also be energy efficient through the incorporation of several "green" features in the design program.



## Academic Collaborations

### IIT Kanpur-Rensselaer Polytechnic Institute Cooperation Agreement

The President of Rensselaer Polytechnic Institute, Dr. Shirley Ann Jackson visited IIT Kanpur on March 24, 2006. Dr. Jackson delivered a lecture on "International Cooperation: Multiplying Strength, Sharing Benefit". A Memorandum of Understanding was signed between RPI and IITK. This would enable exchange of faculty, research personnel, students and sharing of publications, scientific resource material, and scholarly papers as well as facilitate joint publications, meetings and conferences. She was accompanied by a nine-member delegation comprising Dr. Omkaram Nalamasu, Vice President, Research, Dr. Prabhat Hajela (BT/AE/1977) Vice Provost and Dean of Undergraduate Education, Dr. David A. Gautschi, Dean, Lally School of Management & Technology, Mr. Johannes E. Goebel, Director, The Experimental Media & Performing Arts Center, Dr. Iftekhar Hasan, Cary L. Wellington Professor of Management, Dr. Robert E. Palazzo, Director, Center for Biotechnology & Interdisciplinary Studies, Ms. Dawn Chen, Director of International Advancement and Dr. Cynthia McIntyre, Chief of Staff.



### Meeting with German Technical institutes

On April 3, 2006, Directors of the seven IIT's held a meeting with a high level delegation of nine German Technological Universities (TU-9) at IIT Kanpur to discuss opportunities for collaboration between the leading academic institutes of the two countries. Discussions focused on starting programmes in Frontiers of Engineering, Distance Learning, Indo-German Joint Research Council, and student and faculty exchanges. The German delegation comprised eminent academics including Prof. Norbert Henze of University of Karlsruhe, Prof. Barbara Jurgens, Vice President, Braunschweig TU, Dr. Ulrike Gutheil, Director General, Berlin TU, Prof Rolf Rossaint, Vice Rector, Aachen RWTH, Dr. Hannemor Keidel, Vice President, Munchen TU, Prof. Sabine Kunst, Vice President, Hanover U, Mr. Ulrich Podewils, Director DAAD, New Delhi and Mrs. Rupa Israel, In-charge, International Relations, DAAD, New Delhi.



### MOU with University of Waterloo, Ontario, Canada

IITK has signed a Memorandum of Understanding with University of Waterloo, Ontario, Canada for academic cooperation in areas of mutual interest wherein members of their faculty may undertake fixed term visiting assignments. A visiting professor would teach and participate in collaborative research activities at the host institution and receive a stipend.

### IITK – GSVM Medical College MOU

On May 10, 2006, a Memorandum of Understanding (MOU) was signed between IITK and GSVM Medical College, Kanpur. This MOU will set the stage for collaboration between the two institutes on several fronts. In the field of education, the two institutions will participate in each other's undergraduate, graduate and postgraduate programmes. The two institutions will jointly organize symposia, conferences, short courses, hold meetings on specific research topics, and implement continuing education programs.



### Visit of Korean Delegation

A three member delegation lead by Prof. Wang Se Myung, Director of Centre for International Students and Scholars and Professor of Mechatronics, Gwangju Institute of Science and Technology, GIST, Republic of Korea, visited the campus on April 4 & 5 2006. The delegation discussed issues related to student exchange programs and possibilities for research collaboration.

# Support from Donors

## Deva Raj Chair



Deepak Devraj (BT/EE/1970) has set up a faculty chair at IITK named after his father. Deepak Raj is presently running Rush Brook Partners, a private investment firm after retiring from Merrill Lynch in 2003 as a Senior Vice President and member of the firm's Executive Management Committee following a career spanning 24 years. In his position as Director of Global Equity Research, Deepak managed a staff of approximately 700 equity analysts located throughout the major regions of the world. He also helped manage the entire research department including equity, fixed income and macro research as Deputy Director of Global Securities Research and Economics.

## Gireesh Jankinath Chair

Ravindra Nath Akhoury (BT/EE/1968) has set up a faculty chair in memory of his late mother. Mr. Akhoury is Chairman and Chief Executive Officer of MacKay Shields, a multi-product investment management firm with approximately \$40 billion of assets under management. He is a member of the Executive Management Committee of New York Life Insurance Company, and is on the Board of India Today along with other US and Indian Corporations. Ravi is also a Director of Thompson Press. After finishing his studies at IITK, he obtained an MS in Quantitative Methods from SUNY at Stony Brook.



## K N Saluja Endowment Fund

Mr. Hersh Saluja, the Chief Executive Officer of E2 Consulting Engineers Inc., USA, and a well-wisher of IITK has set up the K N Saluja Endowment Fund at IITK named after his father. Mr. Uday P Singh (BT/CE/1972) played a key role in initiating the project. The K N Saluja Fund will support and nurture excellence in Civil and Environmental Engineering at IITK. Activities identified for immediate implementation include eight UG scholarships in Civil Engineering at the rate of Rs 2,000 per month for ten months per year. The selection will be based purely on merit.

## PIONEER BATCH COMPLETES SECOND PROJECT

The Pioneer Batch (1965 graduates) fulfilled their commitment to contribute \$ 10,000 for the Sachchidanand Memorial Fund. The Fund has been created by family and friends of late Prof Sachchidanand to support needy students at IITK. Prof Sachchidanand held a special place in the hearts of the Pioneers due to his leadership for completing the first batch project, construction of Pioneer Batch Continuing Education Centre in the campus in 2000. The batch is now discussing with IIT Kanpur their third project to coincide with the Golden Jubilee celebrations of IITK in the year 2010.

## CSI Berkeley Extends Support to NICEE at IITK

Mr. Ashraf Habibullah, President and CEO, Mr. Syed Hasanain, Vice President of Computer and Structures Inc, Berkeley along with Mr. Rajiv Sharma (M Tech/CE/1987) and Mr. Hemant Kumar of CSI India office visited the campus on May 4, 2006. At the suggestion of National Information Center of Earthquake Engineering at IITK (NICEE), CSI had earlier donated their world-renowned earthquake engineering softwares SAP and ETABS to about 230 engineering colleges in India. During this visit, they made a donation of Rs 5 lakhs to strengthen the activities of NICEE.



## Student Research

To further promote research, the Institute has started a program to give a cash award of Rs 10,000 to any full time student of IITK who publishes a paper in a journal listed by the ISI Web of Science. In case of more than one student author, the prize money shall be shared by all the student authors. The awards are effective from 1st April 2006. IITK is looking for donors to support the initiative!

# Alumni Events

## Alumni Day and 23<sup>rd</sup> Kelkar Alumni Lecture

### Distinguished Alumnus Awards

The Alumni Association celebrated its 28<sup>th</sup> Alumni Day on March 25, 2006. The 23rd Kelkar Alumni Lecture was delivered by Mr. Arvind Kejriwal, on "Right to Information-a Tool for Holding Government Accountable". Mr. Kejriwal is an IIT Kharagpur alumnus. He started "Parivatan" [Change] to bring in transparency in the working of government and public institutions. Alumni Day Events included a ceremony to honour the recipients of the Distinguished Alumnus Awards 2006 and the First Satyendra K. Dubey Memorial Award. Mr. Abhay Bhushan (BT/EE/65), Mr. Pawan Kumar (BT/CE/69; MT/CHE/72), Mr. Pradeep Jotwani (BT/ME/75), and Prof. Umesh K. Mishra (BT/EE/79) were present along with their families to receive the awards. A special function was organized on 21st March by AA to deliver the Distinguished Alumnus Award to Prof. Vijay Mahajan (BT/CHE/70). On the occasion of this event, Prof. Mahajan delivered a lecture on his recent book 'Developing Countries: The 86% Solution.' Each of the above awards comprised a plaque and a citation. First Satyendra K. Dubey Memorial Award was given to Mr. Arvind Kejriwal.



Mr. Abhay Bhushan

Mr. Pawan Kumar

Mr. Pradeep Jotwani

Dr. Umesh K. Mishra

Prof. Vijay Mahajan

Mr. Arvind Kejriwal

## Reaching out to Alumni

Professor Sudhir K. Jain, Dean RPG, visited alumni in New York, Boston, Chicago, San Francisco, Los Angeles and London in April 2006. During his visit, Professor Jain updated the alumni on the current activities and conveyed to them the vision of the Institute.

- ❖ The event in New Jersey was organized by Ram B Misra (BT/ME/1968), Mr. Satish Srikanth Bhalerao (BT/CHE/1970) and Mr. Rakesh Sharma (BT/ME/1968) in which about twenty five alumni and their families participated. Besides Prof Jain, the other speaker on the occasion was Mr. Saroj K Jha (BT/CE/1986). Saroj is currently on leave from the IAS to work with the World Bank. He described the work being done in India on natural disaster mitigation.
- ❖ Mr. Rakesh Pandey (BT/ME/1968), Mr. Saikat Guha (BT/EE/2002) and Mr. Manu Prakash (BT/CSE/2002) organized a dinner at MIT Boston where about twenty alumni participated. Dr. Jain also delivered another talk on "History of Earthquakes in South-Asia: Road to Seismic Safety".
- ❖ The event in Chicago was organized by Ajay Gupta (BT/CSE/1984) and despite it being a working day, eleven alumni attended the dinner.
- ❖ In San Jose a large gathering of about sixty five alumni and family members got together for drinks and dinner coordinated by Mr. Ananth Shankar (BT/EE/1986), Mr. Deepak Bhagat (BT/EE/1973) and Mr. Abhay Bhushan (BT/EE/1965).
- ❖ The luncheon at Los Angeles was organized by Mr. Siddharth Dasgupta (MSC5/CHM/1980) and Mr. Ananta Mukherjee (BT/EE/1980) which was attended by twenty alumni with their family members. The other speaker on the occasion was Prof Vijay Dhir (MT/ME/1968), Dean of Henry Samueli School of Engineering and Applied Sciences at UCLA. He discussed the trends in higher engineering education in US universities and the recent breakthroughs in engineering research at ULCA.
- ❖ In London about twenty IITans from Kanpur and other IITs gathered for dinner organized by Mr. P. K. Agarwal (BT/CHE/1971). Mr. Harsh Jain, IFS, First Secretary in the Indian High Commission and an IIT Delhi alumnus hosted the group for drinks and snacks. In its entirety the Deans' visit was very well received by the alumni as seen by their enthusiasm and by the donations that were committed by them.



New Jersey



Chicago



San Jose



Los Angeles



Boston

## IIT Alumni – EU Conference at Hannover

IIT Alumni – EU under the leadership of Sharad Tripathi (B.Tech/AE/1969) organized a conference on "Technical Education in India" on April 28, 2006 during the Hannover Industrial Fair. The aim was to increase interaction between IITs and European industries and educational institutions. Prof. S. G. Dhande, Director and Prof. Sudhir K. Jain, Dean Resource Planning and Generation represented IIT Kanpur. The event initiated discussions for collaborations between IITK and European academia.



London



## Nostalgia

On April 29, 2006 the Alumni Association along with the Students' Gymkhana, organized "Nostalgia" to bid farewell to the class of 2006. The event was presided over by Mr. Anirudh Harlalka, President, Students' Gymkhana followed by an address from Prof Vinayak Eswaran. Prof Eswaran offered 5MB of personal space to each graduating student on the AA website. This was followed by the address by Prof. Prawal Sinha, Dean of Students' Affairs before Prof. Sanjay G. Dhande, Director, bade a formal adieu to the class.

## Pan-IIT: A Brand Envisioning Social Development

On March 26, 2006, the Pan-IIT UP Chapter held at IIT Kanpur its second major seminar. The theme this time was "Information and Communication Technology in India". At the seminar discussions were held on how best to pool social, political and financial resources through the IIT alumni fraternity, to steer the IIT's towards effective and meaningful social involvement both in the urban and rural sectors.

## Student Achievements

### IITK Student named among 2006 Goldman Sachs Global Leaders



Gopesh Mittal, a third year B Tech student from the Department of Electrical Engineering has been selected for the Goldman Sachs Award 2006. As a Global Leader he will receive a \$ 3,000 grant for educational expenses. Gopesh has made highly useful contributions to society by designing the web-based educative tool "Virtual Teacher" which aims at spreading scientific education among the weaker sections of society through the use of computers. Gopesh holds a green belt in tae-kwon-do and also writes articles for the students' magazine.

## Aeromodelling Club wins First Prize in Endeavour 2006

Aeromodelling Club of IIT Kanpur has won the first prize this year with its "Snitch-A Flying Saucer Project". It has been the first time that any club in Science and Technology Council has won a prize in Endeavour, the functional model presentation contest in Techkriti (Techkriti is the annual technical fest of IITK).

## Ronald V Book Best Student Paper Award

A research paper on the identity testing for depth 3 circuits, by two CSE Ph.D. Students of IITK, Neeraj Kayal (BT/CSE/2002) and Nitin Saxena (BT/CSE/2002) has been selected to receive both the Best Paper Award and the Ronald V. Book Best Student Paper Award at the upcoming Complexity Conference in Prague. It is the first research paper to win both the awards.

## Faculty News

Dr. N. Sathyamurthy & Dr. T K Chandrashekhar of Chemistry, and Dr. Ashutosh Sharma of Chemical Engineering, have been awarded the of JC Bose National Fellowships by the Department of Science and Technology, New Delhi  
Dr. Yogesh M Joshi, Department of Chemical Engineering, has been awarded the INSA Medal for Young Scientist (2006) by the Indian National Science Academy.



Dr. N. Sathyamurthy



Dr. T K Chandrashekhar



Dr. Ashutosh Sharma



Dr. Yogesh M Joshi

### Book Release

**Story of the Delhi Iron Pillar**, Foundation Books,  
Prof. R Balasubramaniam, Department of Materials & Metallurgical Engineering.

### New Heads

Professor G Neelakantan, Humanities and Social Sciences  
Professor Jitendra Kumar, Materials Science Programme

### Faculty Awards and Honours

Dr. Joydeep Dutta, Department of Mathematics and Statistics, has been invited to join the Editorial Board of the new journal International Journal of Modern Mathematics, being published by the Dixie W. Publishing, Alabama, USA

Dr. R.Balasubramaniam, Department of Materials and Metallurgical Engineering has been invited to serve in the Editorial Board of Journal of South Asian Archaeology, and in the Editorial Advisory Board of the Transactions of the Indian Institute of Metals.

Dr. Jitendra Kumar, Materials Science Programme, has been nominated as the Guest Editor of the special issue of the International Journal of Nanotechnology, published by Interscience Enterprises Ltd., Geneva, Switzerland. The special issue will be on "nanotechnology in India".

Dr. N G R Iyengar, Department of Aerospace Engineering has been invited to join the Editorial Board of International Journal of Structural Stability and Dynamics (IJSSD)

Dr. Ashutosh Sharma, Department of Chemical Engineering, has been invited to join the Editorial Board of Indian Chemical Engineer (ICE).

Dr. Ashish Dutta, Department of Mechanical Engineering, has become a member of the Editorial Consultant Board of the International Journal of Advanced Robotic Systems.

Dr. Bikramjit Basu, Department of Materials and Metallurgical Engineering, has been invited by the Korean Ceramic Study to serve as one of the Foreign Editors for its Journal.

## Upcoming Events

- ❖ Advances in Materials & Fuel Technologies for Automotive Applications, June 8-12, 2006
- ❖ Workshop on Summer Camp-2006, June 7- July 4, 2006
- ❖ Mathematical Methods in Engineering and Science, July 3-15, '06
- ❖ QIP Course on Organic Electronics, July 17-21, 2006
- ❖ A Minisymposium on Asymptotic Methods for Laminar and Turbulent Boundary Layers 2006 under the auspices of BAIL 2006 in Göttingen, Germany. July 24-28, 2006
- ❖ Law and Economics, August 14-19, 2006
- ❖ Electric Power System Operation and Control: Modern Trends & Future Challenges, August 28 – September 1, 2006
- ❖ Engg. Response to Hazards of Terrorism, September 25-26, 2006
- ❖ The 9th Asian Symposium on Information Display, October 3-6, 2006
- ❖ Recent Trends in Nano Composites, November 6-10, 2006
- ❖ International Conference on Design of Biomaterials: BIND-06 & XVII Annual Meeting of SBAOI (a IUSBSE member), December 8-11, 2006
- ❖ The 12th International Planning History Conference in New Delhi, December 10-18, 2006
- ❖ First Call for Papers, Thirteenth-National Conference in New Delhi, December 10-18, 2006
- ❖ EMBO 2006: International Workshop on Developmental Mechanisms and Disease Models, December 16-20, 2006