MoU for Research and Development Project of HWB with IIT-B

The Heavy Water Board (HWB) signed an MoU with IIT-Bombay on Wednesday, August 1, 2007 at IRCC in IITB for providing technical support to HWB for installation of solar energy devices for generating steam for drying of sodium sulphate. The Chairman and Chief Executive of HWB, Dr. A L N Rao, was present on the occasion. Prof. Kurien Isaac, Associate Dean (R&D), IIT-Bombay, signed the MoU on behalf of IIT-Bombay. Prof. Rangan Banerjee, Convener, Energy Systems Engineering, IIT-Bombay, was also present on the occasion along with Shri B. K. Das, Associate Director (Projects), and Shri B. K. Jain, SOG of HWB, Mumbai.

IIT Bombay Signs MoU with KAUST, Saudi Arabia

The King Abdullah University of Science and Technology (KAUST), Saudi Arabia, and Indian Institute of Technology Bombay (IITB) signed an MoU on July 2, 2007. Areas identified for complementary interests are such as Resources, Energy, and Environment; Bioscience and Bioengineering; Materials Science; Applied Mathematics and Computational Science. The present MoU is to serve as the basis for further definitive agreements between IITB and KAUST for mutual benefits and to establish a general framework to develop academic, research, and professional cooperation between the two institutions.

ICU Signs MoU with IIT Bombay

The Information Communications University (ICU), Korea — which is the only IT-specialized university in Korea, jointly founded by the Korean Ministry of Information and Communications, Electronics and Telecommunications Research Institute (ETRI), Korea's largest national IT research institute, and IT industrial bodies — signed an MoU with IIT Bombay at ICU on June 27, 2007, during Professor Ashok Misra's visit to Korea. The MoU is for collaboration in research and education between the two institutions.

MoU for collaboration between Crompton Greaves Ltd., and IIT Bombay

An MoU for collaboration between Crompton Greaves Ltd. and IIT Bombay in research projects in the areas of Electrical Engineering, Industrial Design, Mechanical Engineering and Metallurgical Engineering & Materials Science has been signed on July 18, 2007. This scheme is called the 'CG Research Fellowship'.

The CG Research Fellowship would be given through the normal selection and admission procedure of IIT Bombay. Under this scheme Research fellowships would be offered in the above-mentioned areas.

University Paris-Sud 11, France, and Indian Institute of Technology Bombay Sign MoU

The University Paris-Sud 11, France, and Indian Institute of Technology Bombay signed an MoU on June 14, 2007, at IIT Bombay, to facilitate and further develop the exchange programme existing between the two in higher education teaching and research and to finalize a student exchange programme between the two institutions.
**Awards and Distinctions**

Prof. Pushpak Bhattacharyya, Computer Sc. & Engg. Department, has been selected for the Award from Microsoft Research, India under the “Managed Research Program”.

Prof. Ramgopal Rao, Electrical Engineering Department, has been selected for the 2007 IBM Faculty Award.

**Faculty News**

Dr. Pushpak Bhattacharyya, CSE Department, spent the period May 10-July 9, 2007 as “Professeur Invité” at Group d’Etude pour La Traduction Automatique (GETA, i.e., Laboratory for Automatic Translation) at University Joseph Fourier (UJF), Grenoble, France. During his visit Prof. Bhattacharyya delivered to the faculty and PhD students a series of lectures on “Empirical Methods in Natural Language Processing”. He also conducted research on Domain Specific Machine Translation using the Universal Networking Language (UNL) framework - an international effort in which IITB has been actively involved for last 10 years.

During 29th May-5th June Prof. Bhattacharyya visited University of Glasgow, Edinburgh University and Oxford University, and delivered seminars on Computational Semantics and also held discussions on possible collaborations and exchanges. There has been widespread interest in Hindi Wordnet, recently released in the public domain by the Natural Language Processing Group of IIT Bombay.

Prof. Bhattacharyya gave an invited talk “Language Technologies for Indian Language Processing” in the Workshop on Lexical Resources held on 21st June at UJF, Grenoble.

Prof. Bhattacharyya gave two talks in the meeting held during 5-6 July of UNL Society called U++ Consortium at Grenoble, titled “Wordnet Based Universal Word Dictionary” and “UNL Based Machine Translation at IIT Bombay”.

Prof. Sambhu N Datta, Department of Chemistry, gave an invited lecture titled “Theoretical and Computational Aspects of Magnetic Molecules” on March 30, 2007 in the Department of Chemistry, University of Virginia.

**Publications**


Prof. Siddhartha Ghosh, Deptt of Civil Engineering, presented a paper titled “Estimation of hysteretic energy demand using concepts of modal pushover analysis” in the ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering (COMPDYN 2007) held during June 13-16, 2007, in Rethymno, Crete, Greece. The paper is co-authored with former M.Tech. (Civil Engg.) student Thelen Prasanth.


**Seminars**

Department of Chemical Engineering


Department of Chemistry


Dr. Anindya Ghosh, 2406, Country Club, Duncan, OK 73533 USA, delivered a seminar on “Green Oxidation Chemistry Using Fe-TAML” on 17th July 2007.

Professor Peter E. Kundig, Department of Organic Chemistry, University of Geneva, Switzerland, delivered a seminar on “Advances in Transition Metal Lewis Acid Mediated and - Catalyzed Reactions” on 11th July 2007.


Department of Electrical Engineering

Chandra Mouli, Senior Fellow & Manager R&D Devices Group, Micron Technology Inc., USA, delivered a seminar on “Overview of R&D in Micron - Is there really that much room at the bottom?” on July 9, 2007.

Dr. Yasmin Srivastava, Department of Mechanical Engineering, MIT, Cambridge, MA, delivered a seminar on “Electro-spinning of polymeric nanofibres using microfluidic manifolds” on July 12, 2007.

Debajit Chakraborty, University of Florida, delivered a seminar on “Need

Department of Mathematics
The Industrial Mathematics Group in the Department of Mathematics organised a four-week long instructional School on Modern Partial Differential Equations (PDEs) during May 27th to June 23rd, 2007 under the Year Long Programme on "New Trends in PDEs: Theory and Computation". This event is also a part of the Golden Jubilee initiatives of the Department of Mathematics.

Around 42 people, out of whom 26 were from outside Mumbai, participated in the programme. Experts were invited from IMS, Chennai; TIFR, Bangalore; IISc, Bangalore; and from our Departments to give a series of lectures on different topics pertaining to the theme.

Centre for Environmental Science and Engineering
Prof. Suparna Mukherji and Ms Sagarika Mohanty (Research scholar in CESE) visited Department of Civil Engineering and Applied Mechanics, McGill University, Montreal, Canada, in May 2007, for participating in a collaborative research project funded under the McGill India Research Initiative (MISRI Scheme). Prof. Mukherji also visited the TOXEN Research Centre and the Department of Biological Sciences at University of Quebec a Montreal (UQAM), Montreal, Canada, and Clarkson University, Potsdam, NY, USA. The following "invited talks" were presented during this visit:

"Bioluminescence Inhibition of Chemical Mixtures Containing Naphthalene: Interpretation of Interaction Effects", presented at TOXEN Research Centre & Department of Biological Sciences, University du Quebec a Montreal (UQAM), Montreal, Canada May 17, 2007.

"Treatment of Petroleum Hydrocarbon-rich Wastewater Using Algal-Bacterial Biofilm Reactor" presented at Department of Civil and Environmental Engineering, Clarkson University, Potsdam, NY, USA, May 21, 2007.

"Treatment of Oily Wastewater in Rotating Biological Contactor" presented at Department of Civil Engineering and Applied Mechanics, McGill University, Montreal, Canada, May 24, 2007.

School of Biosciences & Bioengineering
Prof. Ravi Ranjan, Assistant Professor, Dept. of Pharmacology and Physiology, Barshop Institute for Longevity and Aging Studies, The University of Texas Health Science Center, San Antonio, delivered a seminar on "Secret of Long Lived Methuselah Found!" on 27th June 2007.

Prof. D.N.Rao, Dept. of Biochemistry, Indian Institute of Science, Bangalore, delivered a seminar on "The Mg2+-sufficient methyltransferase" on 10th July 2007.

KReSIT
Prof. Srinivas Aluru, Currently Visiting Professor at Dept. of CSE, IITB - Stanley Chair in Interdisciplinary Engineering Professor, Dept. of Electrical and Computer Engineering Chair, Bioinformatics and Computational Biology Iowa State University delivered a seminar on "Consensus Genetic Maps: A Graph Theoretic Approach" on 28th June 2007.

In order to expose the participants to some frontline areas, there were seven colloquium talks and two general talks given in the school. The standard format each day of the school was three lectures (each of one hour twenty minutes duration), problem solving session, either Lab session or Colloquium or General talk. This activity was funded by NBHM and it was organised by S. Baskar, Amiya Kumar Pani, Neela Nataraj, N. Sahu and Sivaji Ganesh from the Department of Mathematics.

Industrial Engineering and Operations Research
Prof. Sunderesh Heragu, University of Louisville, delivered a seminar talk on "Solutions of Semi-open Queueing Networks with Applications in Manufacturing and Distribution" on 9th July 2007.

Dr. Santanu Dey, Purdue University, delivered a seminar talk on "Cutting Planes For Unstructured Mixed Integer Programs Using Multiple Constraints" on 24th July, 2007.

Student News
IIT Bombay Research Scholars Visit China
Mr. Ashutosh Gore, Research Scholar, Department of Electrical Engineering, and Ms. Anand Chavan, Research Scholar, Centre for Environmental Science and Engineering, visited China from 6 to 17 June 2007 as a part of the "Indian Youth Delegation to China" jointly organized by the Governments of India and China. The purpose of this visit was to build the bonhomie between the two countries, undoubtedly the two fastest growing economies in the world. The 100-member delegation comprised youth in age group 15-35 from various professions such as scholars.

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**Events**

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<td>Production Management for Excellence</td>
<td>Prof. A.S. Babu CARE</td>
<td>August 03-07</td>
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<td>2.</td>
<td>Low Cost Hi-Tech Automation with Applications</td>
<td>Prof. N. Ramakrishnan Mechanical Engg.</td>
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<td>3.</td>
<td>Food Processing Industry: Technology and Management (for KVIC, Mumbai)</td>
<td>Dr. N. Shah CTARA</td>
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**Alumni News**

**Prof. Shankar Sastry, Distinguished Alumnus of IITB** has been appointed as the Dean of Engineering at the University of California, Berkeley. He has contributed very significantly to the academic and research programmes of UC, Berkeley.

The IIT Bombay family is extremely proud of his achievements as a Distinguished Alumnus of IITB and of his current appointment as Dean of Engineering.

**Appointments**

**Prof. K. Gopalrao** has been appointed as an Emeritus Fellow in the Department of Civil Engineering from July 23, 2007.

**Retirements**

as on August 31, 2007

1. Shri P. G. Kunjukunju, Humanities & Social Sciences Department.

2. Shri N. R. Bhat, Accounts Section