

NATIONAL WORKSHOP ON LIS EDUCATION IN DIGITAL ERA

Central Library, in collaboration with IATLIS (Indian Association of Teachers of Library and Information Science), organized a 3-day "National Workshop on LIS Education in Digital Era" from 13th-15th June 2007 at IIT Bombay. Thirty eight participants, including Library and Information Science teachers, librarians and research scholars from all over the country, attended the workshop. The main objectives of the workshop were :

- To provide a forum to the LIS teachers, research scholars, librarians and academic administrators to discuss or present their views on the developments in ICT and its applications in LIS Teaching and Library Services.
- To create awareness and understanding about the importance of introducing and executing information technology in LIS teaching to achieve academic excellence.
- To provide an opportunity to the participants to see the world class Information Technology Infrastructure and other facilities available at IIT Bombay.
- To provide an opportunity to the participants to observe state-of-the-art ICT applications in the Central Library, IIT Bombay, and have firsthand experience of the web-based library and information services, smart card-based



(bar-coded) circulation system, electronic resource management, on-line submission of theses and dissertations, open archives, etc.

The workshop was inaugurated by Prof. Ashok Misra, Director, IIT Bombay, who appreciated the efforts of IATLIS for organizing such programmes for their members. He highlighted that the Library and Information Science Education is an essential component of Library and Information Services in the country and it is only appropriate that the national workshop on "LIS Education in Digital Era" is being organized to help LIS teachers and librarians to enhance their knowledge and skills. Prof. C.R. Karisiddappa, President, IATLIS, thanked IIT Bombay for providing all the resources and facilities for organization of the

workshop. He mentioned that LIS professionals working in remote areas and inadequately funded institutions do not get opportunities for their professional development. Institutions like IIT Bombay which have best of facilities and services should organize such progra-

mmes regularly so that more and more professionals can benefit from it. Shri D. Jotwani, Librarian, IIT Bombay, welcomed the participants. Prof. A.K. Pani, Convener, Library Committee, also spoke on the occasion.

Resource Persons invited from different parts of the country gave lectures on a number of important topics including ICT Applications in Libraries and LIS Education, IPR, Knowledge Management, Digital Libraries and Web-based Information Services, etc. The workshop concluded on 15th June 2007 with distribution of certificates to participants by Prof. J. M. Vasi, Deputy Director, IIT Bombay.

IIT Bombay Celebrates "Vanamahotsav 2007"



IIT Bombay celebrated "Vanamahotsav 2007" on its campus on June 16, 2007. On this occasion, a tree plantation drive was organised in association with "Haryali", a Thane-based NGO. IIT Bombay provides land and keeps the pits required for planting the trees ready and "Haryali" motivates and organises volunteers from a cross-section of the society. Apart from the usual participation from students, this year the volunteers were mainly drawn from industry and service sector. In fact, many companies in the service sector came forward and offered their service voluntarily.

Over 2000 trees of assorted species were planted across the hills within the campus. About 300 volunteers participated in the tree plantation drive.

Prof. Ashok Misra, Director, IIT Bombay, inaugurated the tree plantation session. He said, "IIT has been very conscious and particular about maintaining greenery within its campus. However, the increasing need of expansion of civil works compels us to clear the land within the campus for new buildings, lecture halls, etc. The loss of trees occurring in this process is made good by planting trees in the hilly region in much large numbers. IIT is indeed grateful to "Haryali" for taking up

the cause of plantation and helping IIT Bombay in organising volunteers and making plants available for this purpose."



The Estate Office has plans to plant 3000 more saplings at the site after receiving a good shower.

Among those who participated in the tree plantation drive were: Prof. R.K. Malik, Dean (Planning), and Mr. V.B. Mamdapur, Superintending Engineer, from IIT Bombay; Mr. Punam Singavi, President of "Haryali", besides a host of activists.

Real Time Forecasts of Ocean Waves Using Artificial Intelligence Computing

Real time forecasting of ocean waves over a period of a few hours and days at a specified location in the sea is required for operational planning of any activity including commercial shipping or naval operations, port and harbour works, fishing as well as recreational expeditions. Indian Institute of Technology Bombay (IIT Bombay), in association with National Institute of Ocean Technology (NIOT) of India, is currently implementing a scheme in which such wave forecasts are provided in a web-based manner to the NIOT's clientele that includes Indian navy as well as numerous port trusts and shipping companies. The specialty of this task is that the forecasts are based on the

artificial intelligence (AI) computing technique of neural networks. Unlike traditional hard approaches like numerical models, the neural networks do not start with an equation to solve a given problem or do not assume any fixed mathematical model a priori for this purpose. They mine available information in such a way that the data themselves come up with a solution. While doing so they follow the cognition process of human brain.

India has an ambitious programme of collecting wave and other oceanographic data through a network of floating wave rider buoys deployed along its 7000 km coastline. The present work will be a useful value addition to dissemination of such collected information. Fig. 1 shows some of the locations where the floating buoys are deployed by NIOT. Station-specific neural networks have been developed and integrated through a web-based scheme. The user has to go to the link where the map showing the buoy locations appears (like Fig. 1). He has to then click on the exact location after which he will be directed to an interactive screen (Fig. 2) in order to get the wave forecasts in tabular and graphical manner.

The above forecasts involve time series modelling in which a sequence of previous wave observations is used every time in order to recognize a hidden pattern in them and predict the future value accordingly. The observed time series may contain gaps due to a variety of reasons ranging from unusually severe weather to hardware/software failures and such gaps can deteriorate performance of the forecasting model. Another set of models based on the AI techniques of neural networks and genetic programming is therefore developed to fill up the missing values in buoy observations on on-line basis. These are based on temporal (uni-variate) as well as spatial (multi-variate) correlations

with neighboring data buoys. Such networks are being integrated with the above forecasting networks.



Fig. 1. Indian coastline showing some of the floating data collection buoys (<http://www.niot.res.in/ndbp/by-lo.html>)

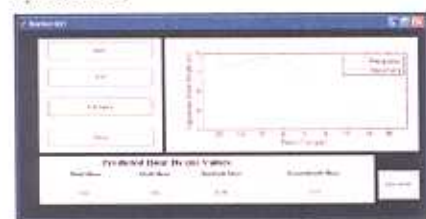


Fig. 2. Web-based wave forecasts through an interactive screen (This article was contributed by Prof. M. C. Deo, of Civil Engineering Dept.)

Awards and Distinctions

Prof. Vijay G. Ukadgaonker, Mechanical Engineering Department, has been selected for "The Best Citizens of India Award 2006".

Prof.(Ms.) Karuna Jain, SJMSOM, has been awarded "Emerald Literati Network 2007 Awards for Excellence" for her joint paper "A New Framework to Understand the Technological Innovation Process" published in the Journal of Intellectual Capital, Vol.7, No.2, 2007. The paper is jointly written with Rajiv Narvekar, her doctoral student.

Faculty News

Prof. Preeti Aghalayam, Department of Chemical Engineering (with Dinesh Mantri & M. Venkata Ramesh), participated and presented a paper on "Catalytic Reduction on NOx: Experiments and Micro-kinetic Modeling" at the Workshop on Past and Present in DeNOx Catalysis, Danube Delta Romania, 17-20 June 2007.

Dr Sudha Shastri, Associate Professor, HSS Department, presented a paper entitled "Circularity, Inversion, and 'Catch-22': Establishing Value within an Iterative Narrative Mode" at the International Seminar on The Literature of War, hosted by the DSC (Durrell School of Corfu) in Corfu, Greece, 20-25 May 2007.

Prof. Milind Malshe, HSS Department, presented a paper on "Answerability and Responsibility: Self/Other Dynamics in Bakhtin and Levinas" (Co-author Amith Kumar, P. V.) in the International Interdisciplinary Conference on "Mikhail Bakhtin" held at the University of Crete, Greece (25-27 May, 2007). His trip was funded by IIT-Bombay (MHRD funds).

Prof. Karunamay Subuddhi, H&SS department, participated in the International Conference of the Greening of Industry Network on a theme entitled: 'Sustainable Ecosystem and Social Stewardship', June 15-17, 2007, in Wilfrid Laurier University, School of Business and Economic, Waterloo, Ontario, Canada. Prof. Subuddhi presented a paper on 'Communicative Practices and Green Activism: Strategies for Green Solidarity and Transnationalization in the post-Cold Era'.

Prof. B. K. Chakravarthy, Industrial Design Centre, was invited to deliver a lecture during "Design Meet 2007", organized by Crompton Greaves

Limited at Renaissance Hotel & Convention Centre, Powai, on 21st May 2007. The title of his lecture/presentation was "Innovation Case Studies".

Prof. M. C. Deo, Civil Engineering Department, delivered an invited speech in the International Workshop on Advances in Hydroinformatics, held during June 4-7, 2007, at Niagra Falls, Canada. The topic of his speech was: "Applications of Genetic Programming to Coastal and Ocean Problems". He also chaired a technical session during the workshop.

Publications

Prof. Milind Malshe, HSS Department, a book on Modern Literary Theory in Marathi (Aadhunik Sameekshaa Sidhdhanta) (Co-author: Prof. Ashok Joshi) was recently published by the Mauj Prakashan and University of Mumbai.

The research work of Prof. Mahesh Tirumkudulu and Mr Karnail Singh (Research Scholar), both from the Department of Chemical Engineering, appeared in a popular physics journal "Physics World" published by the Institute of Physics, UK.

Seminars

Department of Chemical Engineering

P. Aghalayam, Institute of Chemical Engineering and High Temperature Processes, Patras, Greece, delivered a seminar on "Detailed modelling of reactive processes" on 13th June 2007.

Department of Chemistry

Prof. Paresh C. Ray, Department of Chemistry, Jackson State University, Jackson, MS, USA, delivered a seminar on "Nanomaterial-based FRET for Environmental Protection" on 5th June 2007.

Dr. Sameer Sapra, TU, Dresden, delivered a seminar on "Semiconductor Nanocrystals: Electronic Structure, Optical Properties and Applications" on 12th June 2007.

Dr Pradeep Kumar K.K., Hewlett Packard, San Diego CA, USA, delivered a seminar talk on "Development of Single Photon Sources from Single Molecules of Conjugated Polymers for Quantum Information Processing" on 13th June 2007.

Prof. P. Natarajan, FNA, FASc., DST Ramanna Fellow, National Centre for Ultrafast Processes, University of Madras, delivered a seminar talk on "Photosensitization of Titaniumdioxide Nanoparticles by the Excited States of Dyes Loaded on the Micro and Mesoporous Silicate Host Materials" on 22nd June 2007.

Dr. Srivatsan G. Seergazh, University of California, delivered a seminar on "Fluorescent Ribonucleoside Probe: Synthesis and Application" on 25th June 2007.

Department of Computer Science & Engineering

Dinesh Kulkarni, Senior Programme Manager, Visual Studio Microsoft Corporation, delivered a seminar talk on "The NET Language Integrated Query (LINQ)Framework" on 15th June 2007.

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 talk on "Consensus Genetic Maps: A Graph Theoretic Approach" on 28th June, 2007.

Departments of Computer Science & Engineering and Electrical Engineering

Prof. Rangachar Kasturi, IEEE CS President-elect and D W Hood Professor and Chair of Dept of CS & Engg, Univ. of South Florida, Tampa and Member, Strategic Board of IEEE, delivered a seminar on "An Overview of IEEE Computer Society and Research in Computer Vision at the University of South Florida" on 26th June 2007.

Department of Mathematics

Phoolan Prasad, IISc., Bangalore, delivered a colloquium talk on "An Evolution Operator (in Integral Form) for the Solution of a Cauchy Problem for the Wave Equation" on 29th May 2007.

Prof. S. Kesavan, I.M.Sc., Chennai, delivered a colloquium talk on "The Method of Moving Planes" on 30th May 2007.

M. Vanninathan, TIFR, Bangalore, delivered a colloquium talk on "Factorization Principle in Homogenization" on 1st June 2007.

Prof. A.K. Nandakumaran, IISc, Bangalore, delivered a colloquium on "Homogenization of Low Cost Control Problems in Perforated Domain" on 4th June 2007.

Prof. A.S. Vasudeva Murthy, TIFR Centre, Bangalore, delivered a colloquium on "Far Field Boundary Conditions and Its Numerical Approximation" on 7th June 2007.

Prof. Amiya Kumar Pani, IIT Bombay, delivered a talk on "Navier-Stokes Equations: A Million Dollar Open Problem" on 8th June 2007.

Prof. D.V. Pai, Department of Mathematics, IIT Bombay, delivered a

colloquium talk on "Wellposedness and Regularization in Variational Analysis" on 11th June 2007.

Prof. Amiya Kumar Pani, Department of Mathematics, IIT Bombay, delivered a talk on "How to Compute a Fair Price for an Option Derivatives : A Case Study" on 12th June 2007.

Prof. V. D. Sharma, IIT Bombay, delivered a colloquium talk on "Quasilinear Hyperbolic Equations and Systems" on 15th June 2007.

Prof. Gopal K. Srinivasan, IIT Bombay, delivered a colloquium on "Nonlinear Fuchsian Equations" on 19th June 2007.

Prof. Uma Iyer, Bronx Community College (CUNY), USA, delivered a seminar on "On Volichenko Algebras" on 25th June 2007.

Department of Metallurgical Engineering & Materials Science

Dr. R. Sundaresan, Associate Director, International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI), Hyderabad, delivered a seminar on "Nanocrystalline Magnesium-based Materials for Hydrogen Storage" on 8th June 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.

Workshops

Department of Management Studies (DMS), IIT Delhi, and SIMSOM, IIT Bombay, had jointly organized a one-day workshop on "Competitiveness in Emerging Industries" on 1st June 2007 along with the Department of Scientific and Industrial Research (DSIR).

Gymkhana News

IIT-Bombay Swimming Club

The 3rd Annual Matunga Gymkhana swimming competition was held from June 2 to 3, 2007, at Matunga Gymkhana swimming pool.

Apurva Phale won two silver medals in 50M Butterfly and 100M Individual



Medley and bronze medal in 50M Breaststroke girls under 11 age-group. She secured 4th place in Freestyle and Backstroke. Overall she won the Individual Runner-up championship trophy girls under 11 age-group of Matunga Gymkhana.

Sidharth Rao-Deb secured bronze medal in 50M Breaststroke boys under 11 age-group and secured 4th place in 50M Backstroke, 5th place in 50M Freestyle and 100M Individual Medley and 6th place in 50M Butterfly.

Sidhant Reddy secured 6th place in 50M Backstroke boys under 13 age-group.

Yashi Singh secured 6th place in 25M Butterflystroke girls under 7 age-group.

Other participants from IIT swimming club were Sneha Raut, Akshata Raut and Rahul Biswas.

RSF Valedictory and Awards Function

The Research Scholars' Forum, a premier body of and by research scholars of IIT Bombay organized its annual valedictory and awards function at the IRCC Auditorium on the evening of 29th May 2007. The function, which

commenced at 5.30 pm in the evening, continued for about an hour and half and concluded at 7.00 pm. An array of dignitaries graced the occasion. The Honorable Deputy Director Prof. J.M. Vasi was the chief guest on the occasion. The other distinguished guests for the evening were Prof. Dipan Kumar Ghosh, Prof. A. K. Singh (Dean, Academic Programme), Prof. V. M. Gadre (Convener, PG-APEC), Prof. K. Kurien Issac (Associate Dean, R&D), and Prof. C. Amarnath (Chairman SINE & Advisor, RSF). In his talk to the research community, Prof. Vasi stimulated the research scholars to develop a spirit of research and earn for IIT the recognition of a leading research institute not only in India but also in the world. Prof. Ghosh in his encouraging words praised RSF in its efforts to develop an all-round capability in research scholars during their research tenure. Prof. Singh also inspired the congregation with his talk to the scholars. Prof. Kurian and Prof. Gadre also emphasized on research activities and inspired the research scholars to come up with better research output. The major attraction of the evening was, however, the prestigious RSF Awards for research and other co-curricular activities at the institute level and the RSF office bearer awards for organizational activities within RSF. This time the categories of the research awards were as follows. Awards for the Best Research Paper, Outstanding Research in Engineering and Non-Engineering fields and Best Research Scholar for excellence in academic and extra curricular activities. The Best Research Paper Award went to Mr. S. Kuppusamy of Department of Chemistry, who published two papers in Angewandte Chemie International Edition during the year 2006. Kuppusamy works in the field of synthetic main group chemistry. The Outstanding Research Award in Non-Engineering went to Dr. P. Chandrasekaran of the Department of Chemistry. Dr. Chandrasekaran has

published four journal papers that got seven citations. His work mainly focuses on "Inorganic and Organo-Metallic Synthesis and Catalysis with Main attention on Phosphorus Element". The Outstanding Research Award in Engineering stream was given to two research scholars, Mr. Ashish Tendulkar of the Department of Computer Science and Engineering and Dr. T. C. Manjunath of Systems and Control Engineering Inter-Disciplinary Programme. Ashish has worked on "Analysis of Protein Structure using Geometric and Machine Learning Techniques", published four journal papers that got 38 citations and one conference paper. Dr. Manjunath, the other recipient, has worked on "Modelling, Control and Implementation of Smart Flexible Structures" and its applications to Aerospace Engineering, Vibration Control and Robotics. He has published 16 journal papers, 62 conference papers and has co-authored a research monograph, which has been published by Springer-Verlag. The Best Research Scholar Award for excellence in academics and extra-curricular activities went to Mr. Debashis Panda of the Department of Chemistry. Debashis has worked on "Photo-physical Investigation of Biologically Relevant Fluorescent Probes". He has published seven journal papers. Debashis served as General Secretary of Hostel 1 for the year 2006-2007 and received the Best Office Bearer Award. He also received the Best Defensive Player Award in the inter-departmental volleyball tournament in PG Sports 2007 along with many other sports awards. He was instrumental in organizing innumerable socio-cultural activities including Vanamahotsav.

The organizational awards within team RSF went to Mr. Praveen Agarwal for the Best Office Bearer, Mrs. Rupashree Baral for the Best Event Organizer and Mr. Kirti Patel for the Most Enthusiastic Fresher of the year 2006-07. The evening came to an end with refreshments and applause for the awardees.

Appointments

Dr. M. Radhakrishna has been appointed as Associate Professor in the Earth Science Department from 13th June 2007.

Shri Sumant Rao has been appointed as Associate Professor (Contract) in the Industrial Design Centre from 1st June 2007 for a period of two years.

Dr. Bharat G. Adsul has been appointed as Assistant Professor in the Computer Science & Engineering from 1st June 2007.

Dr. Pankaj K. Porwal has been appointed as Assistant Professor in the Civil Engineering Department from 1st June 2007.

Dr. Rajib Maity has been appointed as Assistant Professor in the Civil Engineering Department from 7th June 2007.

Dr. Prasanna S. Chaporkar has been appointed as Assistant Professor in the Electrical Engineering Department from 15th June 2007.

Dr. Anurag Garg has been appointed as Assistant Professor (Contract) in the Centre for Environmental Science Engineering from 15th June 2007.

Dr. Suryendu Dutta has been appointed as Assistant Professor (Contract) in the Earth Sciences & Department from 29th June 2007.

Dr. Azizuddin Khan has been appointed as Lecturer in the senior scale

Events

CEP Courses

No.	Course Title	Coordinator / Department	Date
1.	Advances in Distillation Systems: Principles and Practices	Prof. S. Mahajani Chemical Engg.	July 02 - 06
2.	Monsoon Course on Human Computer Interaction	Prof. A. Joshi IDC	July 03 - 13
3.	Introduction to Mechatronics and Robotics	Prof. C. Amarnath Mechanical Engg.	July 09 - 13
4.	Scientific Computing with Python	Prof. Prabhu Ramechandran Aerospace Engg.	July 16 - 19
5.	4th Batch of Certificate Programme in Management for Working Professionals (with Dual Specialization in Marketing and People Management)	Prof. S.G. Bhargava SJMSoM	July 28 (for 40 days)
6.	Certificate Programme in Management (for Tata Motors Ltd)	Prof. S. Narayan Rao SJMSoM	July 27 August 01

(Contract) in the Humanities and Social Sciences Department from 14th June 2007 for a period of three years.

Shri Ramu M. Sandesh has been appointed as Lecturer in the senior scale (Contract) in the Industrial Design Centre.

Retirements

As on 31.7.2007

Shri Guthunu Gunna
Vehicle Section

Shri D.K. Ghosh
Mechanical Engineering

Shri H.K. Bhawar
Systems & Control Engineering

Campus Diary is edited and published by Public Relations Officer, IIT - Bombay, Powai, Mumbai- 400 076. Printed at IIT Printing Press
For Private Circulation only.

Material for publication in Campus Diary should reach PPR section by the 25th of each month or by email to: pro@iitb.ac.in

