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 Universities Press, Hyderabad, 2008 and CRC Press, Boca Raton (2009); M.K. Verma.

JOURNAL PAPERS

Aerospace


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.


Chemical

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 Bishh; M Kulkarni; TK Maiti; TK Bhattacharyya; JR Subramaniam; a Sharma; BY Park; M Madou.
89. Characterization and Reactivity of TiO_2/SiO_2 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


250. On the Mechanism of Corrosion of Terfenol-D (Tb$_{0.3}$Dy$_{0.7}$Fe$_{1.92}$), Journal of the Electrochemical Society 155 (2008) C315, Deepika Sachdeva and R. Balasubramaniam.


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 (2008) 261, Deepika Sachdeva and R. Balasubramaniam.


268. Development of High Temperature Tib2-Based Ceramics, Key Engineering


Mechanical


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-Triisopropylphenylphosphonic 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 Copperi Complex and Dioxygen forms a \( \{\text{Cu}^{III}_{2}\mu_{2}\text{O}_{2}^{2+}\} \) Core: Exogenous Substrate Reactivity, Chemistry & Biodiversity, 2008, 5, 1594-1608, S. Mandal, A. De, and R. N. Mukherjee.


Mathematics & Statistics


562. Representation theorems for Operators of Type \( \mathcal{W}_{\mathcal{L}} \) and \( \mathcal{W}_{\mathcal{M}} \), Glasnik Matematicki, 43 63 2008, 423 – 437, M. Gupta, L. R. Acharya.


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


Physics


Satish D. Joglekar.

621. Study of Asymptotic Decay of Electronic Density for Excited-States including

622. Study of $2s^22p^3s$ and $1s^22p^3d$ Excited-States of B-isoelectronic Series in
Time-independent Excited-State Density-Functional theory, J. Phys. B 42,


624. Two Photon Exchange Contributions To Elastic E-Polarized + P ---> E + P-

625. CMB Anisotropy Power Spectrum using Linear Combinations of WMAP
Souradeep.

626. Direct Determination of Astronomical Distances and Proper Motions by
interferometric Parallax, Astronomy & Astrophysics, 484, 887 2008, P. Jain
and J. P. Ralston.

627. Mapping Giant Magnetic Fields Around Dense Solid Plasmas by High
Resolution Magnetooptical Microscopy, Phys. Rev. E 77, 046118 2008,
Jaivardhan Sinha, Shyam Mohan, S. S. Banerjee, Subhendu Kahaly and G.
Ravindra Kumar.

628. High Resolution Magneto Optical Microscopy of Megagauss Axial Magnetic

629. Ion Beam Studies on Reactive DC Sputtered Manganese Doped indium Tin
Oxide Thin Films, J. Nucl. inst. and Meth in Physics Research, B. 266, 1421,
Kasiviswanathan.

630. Surface Superconductivity, Positive Field Cooled Magnetization and Peak
Effect Phenomenon Observed in a Spherical Single Crystal of Niobium, Phys.

631. Interacting RNA Polymerase Motors on a DNA Track: Effects of Traffic
Congestion and intrinsic Noise on RNA Synthesis, Physical Review E APS,


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.


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.


Electrical


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 Photovoltaics 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.


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, PGCI, 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 Johannesburg, 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), Ljubliana, 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.
155. Indo-Russian workshop on Tropical Problems in Solid Mechanics, BITS Pilani, Goa Campus, Zuainagar, Goa, P. Wahi.

Humanities and Social Sciences

157. Fifth All India Conference 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.
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, Pittsburg, 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 multcticritical 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.

260
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 Ellitic equations-an over view, 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.


SEMINAR PRESENTED

Aerospace

6. Flight dynamic modeling and analysis of a mini helicopter for trim and stability Invited Talk in INDUS MAV Workshop, NAL, Bangalore, Venkatesan. C.

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.
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, Dipartmento 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-Universitaet Marburg, Germany, F.A. Khan.

205. Invited lecture at Organisch-Chemisches Institut, Ruprecht-Karls-Universitaet Heidelberg, 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: Contemporary Themes and Futuristic Developments Orange County, Coorg, Karnataka, R.N. Mukherjee.
213. Rational approaches to engineering organic nanoporous materials and organic amorphous functional materials, Humboldt-Keelg on Structural characterization and spectroscopy of materials relevant to nanotechnology, biomedical and geobiology, BHU, Varanasi, J.N. Moorthy.


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.

224. Unique Property of Nano-thick Interface Revealed by Novel Nonlinear Electronic Spectroscopy, Department of Nanoscience, Chiba University, Chiba, Japan, 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.
245. Glimpses of Mathematical Modeling and Simulations pertaining to Cardio-
Vascular Flows under Pathological conditions, ICRTMA-09, 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.
249. Convex Functions and Inequalities. Christ Church College, Kanpur, Neeraj
Misra.
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

253. Signatures of Coherent Polarons in STM/S study of CMR Manganites, Invited
talk in Symposium on Physical Sciences, JNU, New Delhi, A.K. Gupta.
255. Electronic and transport properties of graphene in presence of
inhomogeneous magnetic fields, IIT-Kanpur, T.K. Ghosh.
256. Low-energy properties of fermionic superfluid along the BEC-BCS crossover,
IISER-Kolkata, T.K. Ghosh.
257. Causality violation and its detection, BHU, Varanasi, S.D. Joglekar
258. Lee-Wick Quantum field theories, IIT Kanpur, S.D. Joglekar
259. Time-independent excited-state density-functional theory, Centre for
Theoretical studies, IIT Kharagpur, M.K. Harbola.
260. Can we construct excited-state energy functionals by splitting k-space?
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


274. *Invited Talk*, Biomedical Optics: Polarization Based Spectroscopy and Imaging, Condensed Matter Workshop, Conference on Laser Applications in Basic and in Applied Sciences, Santiniketan, A. Pradhan

275. *Invited Talk*, Biomedical Optics: Polarization Based Spectroscopy and Imaging, Condensed Matter Workshop, IIT Kanpur, A. Pradhan

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. Subrahmanyam.

286. *Invited talk*, How entangled is a quantum state? at Quantum Annealing and Quantum Correlations Workshop, SINP, Kolkata, V. Subrahmanyam.

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

283
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

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, Abhishek Jain, 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 Starlimger 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, Mattiasson, 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.


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. Balasubramian.

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 Programme 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.