Publications and Outreach Activities

BOOKS AND BOOK-CHAPTERS PUBLISHED


10. Airborne Altimetric LiDAR: Principle, Data Collection, Processing and Applications in ISRO Tutor -Sensors and data processing, CSRE-IIT Bombay, Ed. Dr. Krishna Mohan, 2007, Lohani, B.

11. Video on Basic Surveying, NPTEL-MHRD, 2007, Lohani, B.


27. Imaging buoyancy-driven convective field around a KDP crystal using schlieren tomography, with Atul Srivastava and P.K. Panigrahi (pp. 133-147); Determination of the concentration field around a growing crystal using laser shadowgraphic tomography (pp. 158-175), with Sunil Verma and V.K. Wadhawan, in Computerized Tomography for Scientists and Engineers, edited by P. Munshi, Anamaya Publishers, New Delhi, 2006.


42. Interpolating Gauge, s Parameter Differentiability , WT-Identities and the Term, Current Topic in Quantum Field Theory Research, Nova Science Publisher-2007 S. D. Joglekar
JOURNAL AND CONFERENCE PAPERS

JOURNAL PAPERS


11. One Semester Course in Wind Energy for Advanced Undergraduate and Graduate Engineering Students, IGEC-2, The Second International Green


44. Recent advances in the molecular basis of Laforas progressive myoclonus epilepsy. J. Human Genetics 51, 1-8, 2006, Ganesh S, Puri R, Singh S, Mittal S, and Dubey D.


49. Supermacroporous cryogel matrix for integrated protein isolation: IMAC purification of urokinase from cell culture broth of a human kidney cell line. J.


117. Temperature based inferential control of a methyl acetate reactive distillation column, Chemical Engineering Research and Design, Accepted, March 2007, M. V. Pavan Kumar and N. Kaistha.

118. Valve positioning control for process through-put maximization, Chemical Engineering Research and Design, Accepted, March 2007, S. K. Jha and N. Kaistha.


125. Depolymerization of HDPE to wax in the presence of a catalyst formed by homonuclear macrocyclic zirconium complex chemically bonded to alumina support, Applied Catalysis A-General, 303(1), (2006), 9-17, S. Lal, K.S. Anisia, and A. Kumar.


152. Simple Model to Predict the Structural Condition of Asphalt Concrete Pavements at the Network Level, Proceedings of the 86th Annual Meeting of the Transportation Research Board, Washington D.C., USA, 2007, Partha Chakroborty, Pradeep Agarwal, and Animesh Das.


169. Tracing of tidal channels through remote sensing, Geospatial Today, 5(3), 2006, Lohani, B., and Sreenivas, B.

170. 3D visualization of LiDAR data, GIM International, 21(2), 15-17, 2007, Ghosh, S., and Lohani, B.


206. Experiences in using WiFi for Rural Internet in India, IEEE Communications Magazine, Jan 2007, Special Issue on New Directions in Networking Technologies in Emerging Economies, Bhaskaran Raman and Kameswari Chebrolu.
207. RAM Simulation of BGS Model of Abstract-state Machines, Fundamenta Informaticae, 77 (1-2), 2007, pp 175-185, Comandur Seshadhri, Anil Seth and Somenath Biswas


226. Complex valued heterogeneous Neural Network, 20th International Joint Conference on Artificial Intelligence, Jan. 6-12, Hyderabad India, 2007, B. K. Tripathi and Prem K. Kalra.


259. A decentralized nonlinear feedback controller for SVC with prescribed degree of stability for damping power system oscillations, 7th IEE International Conference on Advances in Power System Control, Operation and Management (APSCOM 2006), Hong Kong, 30 October-2 November 2006, B Kalyan Kumar, S.N. Singh, and SC Srivastava.


261. 7th IEE International Conference on Advances in Power System Control, Operation and Management (APSCOM 2006), Hong Kong, 30 October - 2 November 2006, Umakant Dhar Dwivedi and S.N. Singh.


Roorkee (India), December 27-29, 2006, GC Sethi P Tripathy, S.N. Singh and Sc Srivastava.

264. A decentralized nonlinear feedback controller with prescribed degree of stability for damping power system oscillations, Electric Power Systems research, Vol. 77, No. 3-4, March 2007, pp. 204-211, B. Kalyan Kumar, S.N. Singh and SC Srivastava.


293. Kinematic Control of a 6-DOF Robot Manipulator using Kohonen Self-Organizing Map, Accepted for publication in Dynamics of Continuous, Discrete and Impulsive Systems, Part B, Special Volume, Anjan Kumar Ray, Laxmidhar Behera and Amit Shukla.


310. Threshold Free Technique to Detect the Blotches in Old Film Sequences, in Proc. of the Thirteenth, National Conference on Communications (NCC), January 26-28, 2007, Meduri Chandra Sekhar and Dr. Sumana Gupta.


351. Wavelength Division Multiplexed Loop Buffer Memory based Optical Packet Switch, Optical and Quantum Electronics, published online 14 March 2007, Rajat Kumar Singh, Rajiv Srivastava, Y. N. Singh.


357. Experiences in using WiFi for Rural Internet in India, IEEE Communications Magazine, Special Issue on New Directions In Networking Technologies In Emerging Economies, Volume: 45, Issue 1, pp. 104-110, Jan 2007, B. Raman and K. Chebrolu.


375. Optimum supply voltage for minimization of Leakage Currents through SRAM cell in stand-by mode, Proceedings 20th International Conference on VLSI Design, Jan. 6-10, 2007, Bangalore, Lava Kumar and B. Mazhari


381. An efficient FDTD algorithm for computation of resonance frequency of an inhomogenous cylindrical structure, AsiaPasific Microwave Conference2006,


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radial stub International Microwave Symposium, USA, 2006

395. UHF RFID tag antenna – design and measurements International conference on computational fluid dynamics, acoustics, heat transfer and electromagnetics, Andhra University, Vishakhapatnam, July 2006, Rachana Pandit and A.R. Harish.


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605. Axial Interaction of the [Ru₂(CO)₄]²⁺ Core with C(sp²)-H Bond: Route to Cyclometalated Compounds Involving Metal-Metal BondedDiruthenium Unit , Organometallics, 2006, 25, 6054, Sanjib K. Patra and Jitendra K Bera


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[[(LCuCl)2(OC3H4N)5(O)], Inorg. Chem. 2006, 45, 3510-3518, V. Chandrasekhar, R. Murugesan Pandian, R. Azhakar


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652. Swift heavy ions irradiation studies on some ferrite nanoparticles, O. F. Caltun; Technovation, 26(2) 27-30 (2006), B. Parvatheeswara Rao, K. H. Rao, P. S. V. Subba Rao, A. Mahesh Kumar, Y. L. N. Murthy, K. Asokan, V. V. Siva Kumar, Ravi Kumar, N. S. Gajbhiye.


654. Structural, magnetic and electron transport studies on nanocrystalline layered manganese La$_{1.2}$Ba$_{1.8}$Mn$_2$O$_7$ system, J. Nanosci. Nanotech. 7, 1-5 (2007), N. Sudhakar, R. S. Ningthoujam, N. S. Gajbhiye, and K. P. Rajeev


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764. Propositional logics from rough set theory, Transactions of rough sets vi, LNCS 4374, 2007, 1-25, Banerjee, M & Khan, M. A


804. Modelling the spread of bacterial infectious disease with environmental effect in a logistically growing human population, Non-Linear Analysis: Real World


815. Nan-particles of La0.9Ca0.1MnO3 manganite: Size-induced change of magnetic ground state and interplay between surface and core contribution to its magnetism. E. Rozenberg, S. S. Banerjee, I. Felner, E. Sominski, A. Gedanken, Journal of Non-Crystalline Solids 353, 817 (2007)


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862. On the sol-gel synthesis and thermal, structural and magnetic studies of transition metal (Ni, Co, Mn) doped ZnO, J Physics: Condensed Matter, 18, 2006, 2473-2486, S. Thota, T. Dutta and J. Kumar


865. Structural, thermal, dielectric studies on sol-gel derived MgO from a non-alkoxide route, Materials Science and Technology, 22, 2006, 1249-1254, A. Chowdhury and J. Kumar

867. Dielectric-spectroscopic and a.c. conductivity investigations on copper doped layered Na$_{1.7}$K$_{0.3}$Ti$_3$O$_7$ ceramics, J Appl. Phys. 100, 2006, 034103 (9 pages), D. Maurya, J. Kumar and Shripal

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871. Surface roughness of fiber reinforced plastic laminates fabricated using rubber pressure molding technique, Polymer Composites, 27, 2006, 504-512, S.D. Sharma, K. K. Kar, and P. Kumar


874. Development of rubber pressure moulding technique using polybutadiene rubber to fabricate fibre reinforced plastic components based on glass fibre and epoxy resin, Current Science, 90, 2006,1492-1499, K. K. Kar, S.D. Sharma, S.K. Behera, and P. Kumar


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33. Manpower needs of Oil & Gas Industries - Role of Educational Institutions, P.C. Ray Memorial Lecture, 22nd National Seminar, Institution of Engineers (I) Delhi chapter, New Delhi, September 2006. Published in the proceedings, J.P. Gupta.

Taiwan Major Industrial Accident Prevention Association, Taiwan, October, 2006. Published in the proceedings, J.P. Gupta.


78. Multi-Agent Tracking under Complex Occlusions Pacific Rim, Conference on AI (PRICAI 2006), Guilin China, August 2006, Prithwijit Guha and Amitabha Mukerjee and K.S. Venkatesh.


103. A Knowledge and Data Based Hybrid Approach to Gene Clustering, Proceedings 5th International Conference on Bioinformatics of Genome Regulation and Structure (BGRS2006), Novosibirsk, Russia, July 16-22, 2006, Abhishek K., Harish Karnick, Pabitra Mitra.


109. Kernel-based online machine learning and support vector reduction, accepted at European Symposium on Artificial Neural Networks 2007 (ESANN07), Bruges, Belgium, April 25-27, 2007, Sumeet Agarwal, V. Vijaya Saradhi and Harish Karnick.


111. Behavioural Approximations for Restricted Linear Differential Hybrid Automata, in 9th International Workshop on Hybrid Systems: Computation


117. Fusion of Iris and Fingerprint Biometric For Recognition, Proceedings of International Conference on Signal and Image Processing (ICSIP), Karnataka, India, December 2006, Hunny Mehrotra, Ajita Rattani and Phalguni Gupta.


135. Faster Algorithms for Approximate Distance Oracles and All-Pairs Small Stretch Paths, Proceedings of 47th IEEE Symposium on Foundations of
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144. Managing Agri-Knowledge Diffusion in Rural India, 5th Conference of the Asian Federation for Information Technology in Agriculture, AOS Section, Bangalore, India, November 2006, Singh M.D., Chatterjee J., and Prabhakar, T.V.


164. Policy Approaches to Induce Corporate Social Responsibility in Public and Private Sector Firms in Developing Countries, International Corporate Responsibility 2006, Hong Kong, September 22-24, Sarkar, R.


170. Managing Agri-Knowledge Diffusion in Rural India. 5th Conference of the Asian Federation for Information Technology in Agriculture, AOS Section, Bangalore, India, November 2006, Singh, M.D., Chatterjee, J. and Prabhakar, T.V.


177. A study of two different variants of adaptive sampling procedures and some interesting applications in management science, International Conference on Operations and Quantitative Management (ICOQM-VII), Jaipur, India, 3rd – 5th August 2006, RN Sengupta.


179. Use of Artificial Immune System (AIS) in financial valuation and measurement of financial risk for credit rating, (co-author Rohit Singh), 39th Annual Convention of Operational Research Society of India (ORSI-2006


185. Strategy & Structure in the Knowledge Enterprise, Symposium on Competitiveness in the Knowledge Economy, IMI, Delhi, 3-4 November, 2006, Arun P Sinha.


216. PIV investigation of flow behind surface mounted detached square cylinder, 14th International conference on nuclear engineering (ICONE14) and 2006 ASME Joint U.S.-European Fluids Engineering Summer Meeting (FEDSM2006), Miami, Florida, July 17-20 2006, Panigrahi P. K.


241. Nano Particles Coated Carbon Fibers for Structural Applications: Preparation and Characterizations, ISAMPE National Conference on Composites INCCOM-5, Advanced Systems Laboratory, Kanchanbagh, Hyderabad,


249. Combustion Characteristics of Rice Bran Oil Derived Biodiesel in a Transportation Diesel Engine, ASME-Internal Combustion Engines Division,


260. Molecular Nonlinearities with low power femtosecond lasers, Amit Nag and Debabrata Goswami, 2nd Discussion meeting on Spectroscopy and Dynamics


276. Microwave driven plasma ion sources for focused ion beam applications, Proceedings of DAE-BRNS, Indian Particle Accelerator Conference-2006, pp.223-224, Bhabha Atomic Research Center and Tata Institute of Fundamental Research, Mumbai, India, November 1-4, 2006, Jose V. Mathew, Abhishek Chowdhury, Sudeep Bhattacharjee.
277. Effect of magnetic field gradient on power absorption in compact microwave plasma sources, Proceedings of DAE-BRNS, Indian Particle Accelerator Conference-2006, pp. 231-232, Bhabha Atomic Research Center and Tata Institute of Fundamental Research, Mumbai, India, November 1-4 206, Indranuj Dey, Md. Shamim, Sudeep Bhattacharjee.
281. Focused Ion Beam Studies using a microwave driven plasma source, International Workshop on the physics of mesoscopic and disordered


301. Dependence of image quality of state of polarization in polydisperse turbid media Photonics 2006, Prashant Shukla, Yashasvi Purwar, Asima Pradhan.


308. Negative refractive index of metamaterials at optical frequencies., Proc. MRS fall Meeting 2006, Symposium R (27th to 30th Nov. 2006, Boston) S. A. Ramakrishna, and S.Chakrabarti


313. A Laser heated pedestal growth of crystalline LiNbO3 crystal directly from the congruent mixture of Li2CO3 and Nb2O5, Sasmita Kumari Patro, Satyendra Singh Thakur, Pradeep Kumar, Bansi Lal and Joseph John, Proceedings of Sixth DAE-BRNS National Laser Symposium (NLS-6), p82-83, December 5-8, 2006 (Raja Ramanna Center for Advanced Technology, Indore, India).
314. Laser heated pedestal growth of the organic optical material 3-methoxy 4-hydroxy benzaldehyde, Shivani Singh and Bansi Lal, Proceedings of Sixth DAE-BRNS National Laser Symposium (NLS-6), p80-81, December 5-8, 2006 (Raja Ramanna Center for Advanced Technology, Indore, India).


316. Laser Heated Pedestal Growth of Organic Photonic Materials, Pradeep Kumar, Shivani Singh and Bansi Lal, Proceedings International Conference on Lasers and Nanomaterials, PL-10, November 30-December 2, 2006 (Department of Physics, University of Calcutta, Kolkata, India)

CONFERENCES ATTENDED OUTSIDE IIT KANPUR

2. 30th Indian Social Science Congress, December 26-31, 2006, Alagappa Chittier Research Center, Karaikudi, TN; Chairman: of a Session; Presented: a paper, K. Ghosh.
7. 7th World Congress on Computational Mechanics, WCCM06, Hyatt Regency Century Plaza Hotel, Los Angeles, California, July 16-22, (2006), Sanjay Mittal.
8. Indo-German Winter Academy, Digha December 10-13 (2006), Sanjay Mittal.

11. 14th International Conference on Finite Elements in Flow Problems Santa Fe, New Mexico USA March 26-28 (2007), Sanjay Mittal.


22. Engineers’ Day Symposium, Institution of Engineers (India) Qatar Chapter, Doha, Qatar, Sept. 15, 2006. Delivered an invited talk on ‘Role of Engineers in Natural Disaster Mitigation and Management’, J.P. Gupta.


27. CAMURE-6 and ISMR-5 at NCL, Pune, 14th-17th Jan, 2007, Ashok Khanna.


31. Invited to the Center of Excellence in Nanoelectronics, IIT Bombay, for exploring collaborative work, March 5, 2007, S. Panda.

32. IIT-K Reach symposium 2007, Poster presented, V. Shankar.


38. Self-organized patterning of soft solids, National Workshop on Nanomaterials and Nanotechnology, University of Lucknow (Materials Research Society of India), Lucknow, March 2007, A. Sharma.

39. Self-organized materials and interfaces, Recent Developments in Nanomaterials, Banaras Hindu University, March 2007, A. Sharma.
42. Attended 86th Annual Meeting of the Transportation Research Board, Washington D.C., USA. Presented a paper at the conference.
43. Attended 2nd National Frontiers of Engineering Symposium, New Delhi. Chaired the session on Transport, Chakraborty, P.
44. Combined Regional Workshop of WWTM and IHWTM in ARRPET, Shahid Raya Hotel, Bali, Indonesia, June 5-6, 2006, Chaired Session, S. Guha.
48. Attended 14th International Conference on Composite Engineering, Boulder, Colorado, USA, July 2-8, 2006, Kumar Ashwini. [Invited paper]
49. Attended 2nd International Congress on Computational Mechanics and Simulation, IIT Guwahati, India, 8-10 December, 2006, Kumar Ashwini. [Keynote speaker, Session chairman]
52. Attended ISPRS Commission VI symposium, 27-30 June 2007, Tokyo, Presented a research paper, Lohani B.
53. CATCON software competition, 27-30 June 2007, Tokyo, Participated in software competition with Limulator, Lohani, B.
55. 100th Anniversary 1906 San Francisco Earthquake conference at San Francisco, April 18-22, 2006, Malik, J.N.
56. Attended 100th Anniversary Earthquake Conference Commemorating the 1906 San Francisco Earthquake during 18-22, 2006 at San Francisco, USA
contributing paper entitled Implications of the 2004 Great Sumatra Earthquake and Tsunami for Risk Reduction in India, Jain S. K.

57. Attended First European Conference on Earthquake Engineering and Seismology during September 3-8, 2006 in Geneva, Switzerland, Jain S. K.

58. Attend meeting Board of Directors of International Association for Earthquake Engineering, Jain S. K.

59. Attend Editorial Board Meeting of the journal Earthquake Engineering and Structural Dynamics‘ Wiley., Jain S. K.

60. World Seismic Safety Initiative (WSSI) during 3-4 December in Singapore for attending Annual meeting of the Board of Directors, Jain S. K.

61. International Disaster Management Symposium :: Culture of Prevention, 18 January 2007, Kobe, JAPAN, Murty, C.V.R.


63. 13th World Conference on Earthquake Engineering, 1-6 August 2006, Vancouver, CANADA, Murty, C.V.R.

64. 3rd Indo-German Workshop and Theme Meeting on Seismic Safety of Structures, Risk Assessment and Disaster Mitigation, 12-13 March 2007, BARC, Bombay, Murty, C.V.R.


66. Engineers’s Day Celebration, 14 September 2006, Institution of Engineers (India), Indore Chapter, Murty, C.V.R.


68. International Conference on ‘Deltas: Depositional systems and stratigraphic development, Brunei Darussalam, January 13-18, 2006 (Invited lecture), Sinha R.


73. Formal Methods Update 2006, IIT Guwahati, July 2006, delivered two talks on Quantitative and Stochastic Games, Anil Seth.
74. ICTP-ITU-URSI School on Wireless Networking for Scientific Applications in Developing Countries, February 20-21, 2007, ICTP, Trieste, Italy, Bhaskaran Raman.
78. 25th Annual Conference on Computer Communications (IEEE INFOCOM), Barcelona, Spain, April 2006, Bhaskaran Raman.
82. NASSCOM Annual HR Summit, July 2006, Chennai, Dheeraj Sanghi.
83. 8th International Symposium on Systems and Information Security(SSI 2006), November 2006, Sao Paulo, Brazil, Dheeraj Sanghi.
84. 12th Asia Pacific Software Engineering Conference, December 2006, Bangalore, Dheeraj Sanghi.
87. 23rd International Biometric Conference, Montreal, Canada, 2006, Phalguni Gupta.
97. Conference on use of Grids in Health care, August 2006, Delhi, Sanjeev Kumar Aggarwal.
100. Intel Asia Academic Forum, November 2006, Malaysia, Sanjeev Kumar Aggarwal.
106. European Symposium on Algorithms (ESA), September 11-15, Zurich, Switzerland, paper presentation, Sumit Ganguli.
110. Sixth Working IEEE/IFIP Conference on Software Architecture, WICSA 2007, Mumbai, Jan 2007, a key note address on A Knowledge Management Perspective of Software Architecture, Prabhakar T.V.
112. 9th Asian Symposium on Information Display (ASID), New Delhi, India, 11th October 2006, Paper presentation, P. K. Kalra.
121. IEEE Power India Conference Delhi, April 10-12, 2006, S.N. Singh (Session Chairman)
122. International Conference on Energy, Efficiency and Environment, UPTU Lucknow, June 10-11, 2006, S.N. Singh (Organizing committee member, Technical Committee Chairman, Session Chairman)
123. IEEE Power Engineering Society, General Meeting, Montreal, Canada, June 18-22, 2006, S.N. Singh (Panelist, paper presenter)
124. National Seminar on Voltage Stability (SVC’06), Arulmigu Kalasalingam College of Engineering, Tamil Nadu, October 13-14, 2006, S.N. Singh. (Keynote Speaker)
125. Workshop on Laboratory Teaching in Electrical Engineering (LTEE-06), KNIT Sultanpur, India, November 24-26, 2006, S.N. Singh (Guest of Honor, Valedictory session).
126. AICTE Sponsored National Conference on Advances in Electrical Engineering, MITS Gwalior, Indian, November 29-30, 2006, S.N. Singh (Keynote Speaker, Inaugural Session)
129. IEEE Int. Symposium on Intelligent Control (ISIC), Munich, Germany, 2006, presenting contributed paper, L. Behera.
135. 2006 IEEE Information Theory Workshop held at Chengdu, China, R. K. Bansal.
140. 12th National Conference on Communications, NCC 2006 at IIT Delhi, A. Banerjee.
141. IEEE Wireless Communications and Networking Conference (WCNC), Hong Kong, March 2007, A. Banerjee.
Annual Report 2006-2007

146. WINS, Goa, April 2006. Invited participant, K. Chebrolu.
147. The 9th Asian Symposium on Information Display at New Delhi from 8th to 12th October, 2006. Was member of program committee; Chaired two tutorial sessions (by Prof. Harm Tolner and Prof. Y.N. Mohapatra); Made a poster presentation.
154. IAE International Conference, (7-10 June, 2006), Potsdam/Berlin, Germany, Anoop Singh.
156. INFRATRAIN Autumn School Trends in Infrastructure Modeling and Policy to be organized by TU Berlin’s WIP from 2 - 7 October 2006, Anoop Singh.
164. Open Knowledge Space, OPAALS, Workshop, Tampere University of Technology, Finland, October 2006, J. Chatterjee.
165. Language, Semantics and SBVR Workshop, OPAALS, University of Kassel, Germany, March 2007, J. Chatterjee.
169. Ubiquitous Middleman Syndrome; Trust is the key : National seminar on the 'Confluence of technology with handicrafts', 31st March 2007, Design Programme, IIT Kanpur, B. V. Phani.
177. Brainstorming on UK India Collaboration to identify the barriers to the transfer of low Carbon energy technologies TERI New Delhi 13 Sept 2006, Ashok K Mittal.
180. The 7th Asia Pacific Industrial Engineering and Management Systems Conference, Bangkok, 17-20 December 2006, Session Chair, Kripa Shanker.
181. Workshop on Immediate Energy Saving via Microwave Usage in Major Materials Technologies organized by National Academy of Engineering and Penn State University, University Park, USA (June 8-10, 2006) and presented an invited lecture on Microwave Sintering of W-Ni-Fe Alloys, A. Upadhyaya.


183. Effect of Powder Characteristics and Processing Parameters on the Shrinkage behaviour of Copper Compacts, Powder Metallurgy World Congress (PM2006), 24-28 September, 2006, Busan, South Korea, B. Padvamathi and A. Upadhyaya.


187. Papers from Dr. Upadhyaya’s group were presented in the 60th Annual Technical Meeting of the IIM, Jamshedpur, 15-16 November, 2006.


191. Phase Evolution and Sinter-Bonding Mechanism of Ternary Boride (Fe,Mo,Cr,B) based Cermets Sintered at Various Temperatures, 60th Annual Technical Meeting of the IIM, Jamshedpur, 15-16 November, 2006, Jain, B. Palanisamy, and A. Upadhyaya.


held in Noida between 9-11 February 2007, S. Balaji, G. Joshi, and A. Upadhyaya.


230. Spark Plasma sintering and characterisation of ZrO$_2$-ZrB$_2$ Nanoceramic composites at 8th International Conference on Nanostructured materials (NANO-06) at IISc, Bangalore, August, 2006, Bikramjit Basu.

231. Sintering, microstructure development and cell adhesion properties of bulk HAp-Ti and HAp-mullite bioceramic composites at the workshop on ‘Biomaterials and Biomedical Devices’ held at Central Glass and Ceramic Research Institute (CGCRI), Calcutta, India in December 12-13, 2006, Bikramjit Basu.

233. Spark Plasma Sintered WC-ZrO₂ Nanocomposites: Microstructure and Mechanical Properties during 31st International Cocoa Beach Conference & Exposition on Advanced Ceramics & Composites, which will be held in Daytona Beach, Florida on January 21-26, 2007, Bikramjit Basu.

234. Synthesis, Phase Stability, Microstructure, Mechanical and In-Vitro Properties of HAp-Mullite Novel Composites for Biomedical Applications during 31st International Cocoa Beach Conference & Exposition on Advanced Ceramics & Composites, which will be held in Daytona Beach, Florida on January 21-26, 2007, Bikramjit Basu.

235. Hydroxyapatite-Alumina-High Density Polyethylene Composites for Biomedical Applications: Processing and Characterization during 31st International Cocoa Beach Conference & Exposition on Advanced Ceramics & Composites, which will be held in Daytona Beach, Florida on January 21-26, 2007, Bikramjit Basu.

236. Densification and Properties of TiB₂ with MoSi₂ Binder during 31st International Cocoa Beach Conference & Exposition on Advanced Ceramics & Composites, which will be held in Daytona Beach, Florida on January 21-26, 2007, Bikramjit Basu.


244. Optical Society of America annual meeting held at Rochester New York in October 2006. K. Muralidhar.


253. Micro miniaturization – A Recent Trend, Guest lecture at Annamalai University, October 2006. J. Ramkumar.


259. Numerical Methods for Fluid Dynamics (ICFD 07), 9th International Conference, the University of Reading, U.K., 26-29th March, Contributed Paper. S. Sarkar

260. Session Chair and Organizer for SAE World Congress 2007, PFL-20: CI Engine Performance for Use with Alternative Fuels Session, to be held in Detroit, USA April 2007, A.K.Agarwal.


268. First Mid-Year Meeting of the CRSI held at IIT Madras July 12 and 13, 2006 and presented a poster on Synthesis and Characterization of NHC-Stabilized Zinc aryloxide and Zinc Hydroxyaryloxide, G. Anantharaman and K. Elango.
269. First Mid-Year Meeting of the CRSI held at IIT Madras Feb 12 and 13, 2007 and presented a poster on Synthesis and Characterization of NHC-Stabilized Zinc aryloxide and Zinc Hydroxyaryloxide, K. Elango and G. Anantharaman.

270. 37th International Conference on Coordination Chemistry (37th ICCC) at Capetown on August-2006. Oral Presentation on the topic Modulation of the Ru-Ru Single Bond by Axial Donors in Diruthenium Paddlewheel Complexes, J. K. Bera.

271. Indo-Japan Joint Workshop on New Frontiers of Molecular Spectroscopy, held in Kobe, Japan, September 24-26, 2006, A. Chandra.


281. IITK REACH Symposium, Parwanoo, Himachal Pradesh, March, V. Chandrasekhar.


290. Indian Science Congress, Annamalai University, Chidambaram, Jan. 3-7, 2007, Coordinator & Special Invited Lecture on the theme ‘Nanotechnology’, N. S. Gajbhiye.
293. 2nd Discussion meeting on Spectroscopy and Dynamics of Molecules & Clusters, The International Centre, Goa, India, Mar.30-Apr.1 (2006), D. Goswami.
299. CRSI: Delhi University, B. D. Gupta.

304. The 3rd Asian Biological Inorganic Chemistry Conference (AsBIC-III), Nanjing, China (October 31 - November 3, 2006), R. N. Mukherjee.


307. On the Aspect of Modeling Molybdenoenzymes, Chemistry Department, University of Ulm, 7th July, 2006 Germany, S. Sarkar.

308. The enzyme behind the fishy smell and more, Chemistry Department, University of Kiel, 12th July, 2006 Germany, S. Sarkar.

309. The wet side of carbon nanotube, Chemistry Department, University of Bremen, 14th July, 2006 Germany, S. Sarkar.


311. Carbon nanotube and its diverse use, Biotechnology Department, Heritage Institute of Technology, Kolkata, 9th November, 2006, S. Sarkar.


316. Modeling Molybdenoenzymes, Chemistry Department, University of Gorakhpur, 28th March, 2007, S. Sarkar.
320. IUPAC Discussion Meeting on Hydrogen Bond, Department of Inorganic and Physical Chemistry, Indian Institute of Science, Bangalore, Sep. 18, 2006, N. Sathyamurthy.
322. 7th Asian International Seminar on Atomic and Molecular Physics, Indian Institute of Technology Madras, Chennai, December 4-7, 2006, N. Sathyamurthy.
324. Indian National Science Congress, Annamalai University, Annamalainagar, Jan. 5-7, 2007, N. Sathyamurthy.
331. Delivered a lecture at MS University Baroda, in a National Seminar on Chemistry Research on October 16, 17 2006, Y.D. Vankar.
332. Delivered a lecture at Syngenta Research & Technology Centre inauguration meeting on December 1, 2006 at Santa Monica Site, Goa, Y.D. Vankar.
contributed paper: ‘Consistent estimation of regression coefficients in measurement error model under exact linear restrictions’ Shalabh.

337. Fourth International Workshop on Total Least Squares and Errors-in-Variables Modeling held at Katholieke University, Leuven, Belgium in 2006, contributed paper - On the estimation of linear ultra structural model when error variances are known, Shalabh.

338. Third Autumn Symposium of the Research Training Group “Statistical Modelling” held at University of Dortmund, Germany in November 2006, contributed paper - Parametric estimation in measurement error models, Shalabh.


340. Recent advances in optimization, theory and applications, Department of Mathematics, University of Delhi, 27-28, Sharma, P.

341. ICM 2006 at Madrid, Spain, Madan,S.


344. SIAM Conference on Analysis of Partial Differential Equations, July 10-12, 2006 at Boston, Massachusetts, Contributed paper, Ritesh, K.


346. International Conference on Bioinformatics and Computational Biology (BIOCOMP’ 06) held at LAS VEGAS, NV, USA during June 26-30, 2006, contributed paper, Prawal Sinha


348. ICAPM-2006, May28 - Jun4, Marrakech, Morrocco, contributed paper,B.V. Rathish Kumar

349. 2nd IMT-GT Regional Conference on Mathematics, Statistics and Applications,Universiti Sains Malaysia, Penang, Malaysia (June 2006), contributed paper, Bhupendra Gupta


353. International Conference organized by International Indian Statistical Association (IISA) at the Cochin University of Science and Technology, Cochin, 2007, Contributed Paper - Mitra, A., Prasad, A., Kundu, D.

354. Annual conference of Indian Mathematical Society held at Rani Durgavati University, Jabalpur, December 26-29, 2006 – Invited Talk, Santhanam, G.


356. IITK REACH Symposium held at Kalka, India during March 7-10, 2007, Poster presentation, Anurag Prasad


358. ESMRMB 23rd Scientific meeting, Warsaw, Poland, 21-23 September 2006, Contributed Paper - Purwar, A

359. 38th International Conference on Combinatorics, Graph Theory and Computing held in Florida Atlantic University, March 5 – 9, 2007, Contributed Paper - On the existence of constrained labeling for locally finite graphs, B. Bhattacharyya.

360. International Conference on Bioinformatics and Computational Biology (BIOCOMP’06) held at LAS VEGAS, NV, USA during June 26-30, 2006 contributed paper - Mucus Transport in the lung due to cough: Turbulent flow models with viscoelastic effects, Prawal Sinha


362. International Indian Statistical Association Conference, held at Cochin University of Science and Technology, Jan 02-05, 2007, invited talk : On Hybrid Censored Weibull Distribution, D. Kundu

363. Oral and Poster Presentation: Crossover in pinning regimes of the vortex solid and the peak effect at the 11th International workshop on Vortex Matter at Wroclaw, Poland, July 3rd – 8th, 2006. (Satyajit Banerjee)

364. Chaired a session: At the 11th International workshop on Vortex Matter at Wroclaw, Poland, July 3rd -8th, 2006. (Satyajit Banerjee)

365. Poster presentation: Pinning regimes in the vortex solid and the crossover between them in single crystals of 2H-NbSe₂ at the 8th International Conference
on Materials and Mechanisms of Superconductivity and High Temperature Superconductors, Dresden, July 9th-14th, 2006. (Satyajit Banerjee)


370. Contributed Papers: Indian Particle Accelerator Conference-2006, Bhabha Atomic Research Center and Tata Institute of Fundamental Research, Mumbai, November 1-4, 2006 (Sudeep Bhattacharjee)


372. Invited talk at the National Workshop “Modeling infectious Diseases: from cell to society” Institute of Mathematical Sciences, Chennai, September 4-6, 2006. (D Chowdhury)

373. Invited talk at the International workshop “Frontiers of Nanobiotechnology” Allahabad University, December 1, 2006. (D Chowdhury)

374. Statphys-Kolkata VI (International Conference on Statistical Physics), Radisson Resort, Raichak, West Bengal, India, Invited Speaker. (Amit Dutta)

375. Materials and Mechanism of superconductivity-M2S-HTSC-VIII, July 09 to July 14, 2006 Dresden, Germany (Poster presentation) (Z. Hossain)

376. 8th Prague Colloquium of F-electron systems, Prague, Czech Republic, 8-11 September, 2006 (Oral presentation). (Z. Hossain)


379. First Mexican Encounter on Space-time Microstructure, Patzcuaro, Mexico, November 06-10, 2006, Invited Talk, Regularizations of Field Theory, non-local Regularization (S. D. Joglekar)

381. Workshop on computational materials science, Bangalore, February 15-17, 2007. Gave an invited talk, chaired a session. (R. Prasad)


384. Workshop on magnetic materials, Kolkata January 08-10, 2007 Given an invited talk. (R. Prasad)


389. Multicolored Atomic Coherence, Sixth DAE- BRNS National Laser Symposium (NLS-6), December 05-08, 2006, Raja Ramanna Center for advanced Technology, Indore. (H.Wanare)

390. Conference cum Seminar on the *Emerging Trends in Physics* September 20-23, 2006 held at Khalsa College, Delhi University Talk title: Signatures of spin glass freezing in NiO nanoparticles (Dr. K.P. Rajeev)

391. Plasmonic properties of checkerboards of negative \( \varepsilon \) and \( \mu \), 9th International conference on near-field optics, nanophotonics and related techniques, Lausanne, Switzerland, 10-15 Sept. 2006 (Poster presented by Prof. O.J.F. Martin in our absence), S.A. Ramakrishna, S. Chakrabarti and S. Guenneau.


394. Understanding boundary induced phase transitions in asymmetric simple exclusion processes through boundary layer analysis -International conference “StatPhys VI”, Kolkata from 5th-9th January (2007), Sutapa Mukherjee
395. Boundary layer analysis for asymmetric simple exclusion processes - Colloquium at BHU on 19th March (2007) Sutapa Mukherjee
396. International Conference on 9th Asian Symposium on Information Display (ASID’06), October 2006, held at New Delhi on “OLED Fundamentals” (Tutorial) Y. N. Mohapatra

**SEMINAR PRESENTED**

7. Effect of blockage on Vortex induced Vibrations at Low Reynolds Numbers, in 7th World Congress on Computational Mechanics (WCCM), Hyatt Regency Century Plaza Hotel, Los Angeles, California, USA July 16-22, 2006, S. Mittal, T.K. Prasanth and S. Behara.
15. Computation of solid-fluid coexistence conditions by thermodynamic integration, Chemical Engineering Department, IIT Kanpur, April 21, 2006, P. A. Apte.
20. From molecules to materials: Surfactants as building block, contributing talk in National Chemical Laboratory, Pune, April, 2006, R. Bandyopadhyaya.
22. From clustering expression data to gene network reconstruction: array informatics using mathematical programming, CSJM University, February 2007, S Garg.
27. National Cheng Kung University, Tainan, Taiwan, J. P. Gupta.
29. Aging dynamics in soft glasses, Raman Research Institute, Bangalore, November 2006, Y.M. Joshi.

32. Self-organized meso fabrication with polymers, Central Glass and Ceramic research Institute (Kolkata); May 2006, A. Sharma.

33. University of Erlangen-Nuernberg; October 2006, A. Sharma.

34. National Institute of Standards and Technology (NIST, Maryland); July 2006, A. Sharma.

35. Presented Models of Vehicular Traffic: An Engineering Perspective; IIT Delhi, October 2006, Chakraborty, P.


40. Presented Research avenues unfolded by LiDAR technology, Map World Forum 2007 Hyderabad, 24 January 2007 (Invited presentation), Lohani, B.


42. Active fault influence on the evolution of drainage and landscape: Evidence from frontal areas along Northwestern Himalaya, India. 3rd AOGS annual meeting at Singapore, July 2006. p. 950/1202, 2006, Malik, J. N.

43. Probable occurrence of Paleo-tsunami deposit: Evidence from preliminary trench investigations around Port Blair, South Andaman, India. 3rd AOGS annual meeting at Singapore, July 2006, p. 932/1202, 2006, Malik, J. N.


45. Coseismic Land-level changes caused by 26 December, 2004 Sumatra earthquake and evidence of paleotsunami deposits (?) in Andaman and Nicobar Islands, India. 100th Anniversary 1906 San Francisco Earthquake conference at San Francisco, April, 2006, 2006, Malik, J. N., and Murty, C. V. R.
47. Keynote Speaker, International Disaster Management Symposium :: Culture of Prevention, 18 January 2007, Kobe, JAPAN
49. Luncheon Speaker, Future of World Housing Encyclopedia, Business Luncheon of the Earthquake Engineering Research Institute, USA, during the 8th US National Conference on Earthquake Engineering, 19-21 April 2006, San Francisco, USA
50. Presenter, Dependence of Ductility and Energy Dissipation on Limiting Strain States in Seismic Design of RC Columns, during the 13th World Conference on Earthquake Engineering, 1-6 August 2006, Vancouver, CANADA
51. Speaker, Seismic Design of Steel Plate Shear Walls in Steel Frames, 3rd Indo-German Workshop and Theme Meeting on Seismic Safety of Structures, Risk Assessment and Disaster Mitigation, 12-13 March 2007, BARC, Bombay
52. Invited Speaker, International Roundtable on Lessons from Natural Disasters, Policy Issues and Mitigation Strategies, 8-12 January 2007, Vellore, India
53. Invited Speaker & Chief Guest, Role of Engineers in Disaster Management, Engineers’s Day Celebration, 14 September 2006, Institution of Engineers (India), Indore Chapter
57. Atmospheric Nucleation of Aerosols, Center for Climate System Modeling, The University of Tokyo, July 28, 2006, Tripathi, S.N.
58. Atmospheric Pollution, Dept. of Chemical Engineering, Institute of Technology, Banaras Hindu University, Varanasi, November 06, 2006, Tripathi, S.N.
59. 2-day workshop on Embedded Wireless Sensors, as part of ICTP-ITU-URSI School on Wireless Networking for Scientific Applications in Developing Countries, ICTP, Trieste, Italy, February 20-21, 2007, Bhaskaran Raman.

60. Bhaskaran Raman, an Introduction to WiFi (IEEE 802.11), iSync - Communication Technology Workshop, 25 August 2006, Punjab Engineering College, India, Bhaskaran Raman.


62. Transcrypt: An Encrypting File System at more than 10 colleges in India, Dheeraj Sanghi.

63. An Introduction to IPv6, at more than 10 colleges in India, Dheeraj Sanghi.

64. Why should CSE students go for MTech/PhD, at more than 30 colleges in India, Dheeraj Sanghi.


68. Integrated Memory Controllers with Parallel Coherence Streams, Workshop on Cutting-edge Computing held in conjunction with the 13th International Conference on High-Performance Computing, December 2006, Mainak Chaudhuri.

69. Integrated Memory Controllers with Parallel Coherence Streams, Invited speaker, Indian Institute of Science, Bangalore, December 2006, Mainak Chaudhuri.


72. Primality Tests Based on Fermat's Little Theorem, Invited talk given at 7th ICDCN, Guwahati, Manindra Agrawal.

73. Finite Rings and Integer Lattices, Series of talks given at Bellairs Institute, Barbados, Manindra Agrawal.

74. A Short History of PRIMES is in P, Talk at ICALP, Venice, Manindra Agrawal.


82. Invited presentation on Conceptualization of Power exchange in India – Solutions and challenges, 22 Feb. 2007, National regional load dispatch center (NRLDC), New Delhi, India, P. K. Kalra.


88. Delivered an invited lecture DC and AC Variable Speed Drives in AICTE sponsored Staff Development Programme on Recent Trends and Applications in


94. Three-day Workshop on Rotating Machinery Insulation, BHEL, Bhopal, Jan 2007, N. Gupta.

95. On Universal Compression, Shannon’s Entropy and Individual Sequences on February 11, 2006 in TECHNEX (Students’ Technical Festival held at BHU-IT, Varanasi), R. K. Bansal.


101. All-optical packet switching: architectural and design issues, ADCAN Lab, Dept. of Computer Science, Chonbuk National University, Jeonju, South Korea, 04 December 2006, Y. N. Singh.

102. Issues in design and development of learning management system, Indian-ASEAN seminar of Elearning, 6-7 November 2006, Hyderabad, Y. N. Singh.

103. Optical communications: transmitters and receivers, Short course on Optical Communications, NIT Raipur, 14 July 2006, Y. N. Singh.
105. All Optical Packet Switching: Architectures and issues, Invited talk in TIFAC-CORE@DCE, Delhi College of Engineering, Delhi, 23 April 2006, Y. N. Singh.
109. All-optical packet switching: architectural and design issues, ADCAN Lab, Dept. of Computer Science, Chonbuk National University, Jeonju, South Korea, 04 December 2006, Y.N. Singh.
110. Issues in design and development of learning management system, Indian-ASEAN seminar of Elearning, 6-7 November 2006, Hyderabad, Y.N. Singh.
111. Optical communications: transmitters and receivers, Short course on Optical Communications, NIT Raipur, 14 July 2006, Y.N. Singh.
113. All Optical Packet Switching: Architectures and issues, Invited talk in TIFAC-CORE@DCE, Delhi College of Engineering, Delhi, 23 April 2006, Y.N. Singh.


120. Invited lecture on Software Project Management at Bharti Vidya Pheeth for their faculty, New Delhi, Dec 2006, Bansal, Veena.

121. Innovation for Strategy Creation and Implementation, invited seminar at Iran Oil Company, Iran, 10 June 2006, Arun P Sinha.


128. Two lectures each on Transport Phenomena in Porous Media and Measurements in Turbulent Flow, delivered at Department of Mechanical Engineering, Jadavpur University, Kolkata on 12th and 13th January 2007, K. Muralidhar.


130. Delivered 4 lectures on chaotic dynamics and two popular lectures in Indian Academy of Science sponsored summer school held at IIIT, Hyderabad, 2006. A.K. Mallik.


133. From natural numbers to numbers and curves in nature, lecture delivered at Mechanical Engineering Department, BESUS, February 3, 2007, A.K. Mallik.
141. PVDF based Smart sensor for sensing slips in Manipulators, IGKAR, August, 2006, Bishakh Bhattacharya.
148. Chaired a session in ICOMAST-2006 held at Melaka (Malaysia) on Unconventional Machining, V.K. Jain.
149. Chief Guest at National Seminar on Advanced manufacturing Technologies held at MNNIT Allahabad and presented a Key Note Lecture on Evolution of Advanced Machining Processes held during March, 2007, V.K. Jain.
151. Given an invited seminar titled Molecular Metal Silicates, Phosphonates and Hydroxides at Department of Chemistry, IIT Bombay on Dec. 8, 2006, Ganapathi Anantharaman.

152. Modulation of the Ru-Ru Single Bond by Axial Donors in Diruthenium Paddlewheel Complexes; 37th International Conference on Coordination Chemistry (37th ICCC) at Capetown on August-2006, J.K. Bera.


155. Ligand-Centered Reduction Steps in \([\text{M}_2(\text{pyNP})_2]^{n+}\) Units (M = Mo, Re, Ru, Rh); 3rd Singapore-India Collaborative and Cooperative Chemistry Symposium (3rd SInCCC) at IITK on December-2004, J.K. Bera.

156. Ligand-Centered Reduction Steps in \([\text{M}_2(\text{pyNP})_2]^{n+}\) Units (M = Mo, Re, Ru); at IITG on December-2004, J.K. Bera.

157. Intra and intermolecular vibrations and hydrogen bonds in aqueous systems: A quantum simulation study, Indian Association for the Cultivation of Science, November 27, 2006, A. Chandra.


160. Inorganic and Organometallic Polymers and Dendrimers. Refresher course at BHU, October 5 2006, V Chandraskehar.

161. Multiple bonds between main-group elements. Refresher course at BHU, October 5 2006, V Chandraskehar.

162. A lecture on NMR. VSSD College, Kanpur. 10th October 2006, V Chandraskehar.


170. Implementing Adiabatic Quantum Computing, Debabrata Goswami, Symposium on Quantum Information, School of Physical Sciences, JNU, Delhi, March 16-17 (2007) , D Goswami.


176. Invited lecture at Institut für Chemie, Abteilung Organische Chemie, Universität Rostock, Albert-Einstein-Str. 3a, 18059 Rostock, Germany: (June 16, 2006), F.A. Khan.

177. Invited lecture at Institute of Organic Chemistry, University of Tuebingen, Auf der Morgenstelle 18, 72076 Tuebingen, Germany: (June 20, 2006), F.A. Khan.

178. Invited lecture at Institute of Organic Chemistry, University of Hanover, Schneiderberg 1B, D-30167 Hanover, Germany: (June 27, 2006), F.A. Khan.


181. Coordination Chemistry of Pyridine Amide Ligands: Structures and Properties, Department of Chemistry, Stanford University, USA (April 18, 2006), R. N. Mukherjee.


191. Department of Chemistry, IIT Delhi, 5th April, 2006, Y.D. Vankar.

192. Department of Chemistry, Universität Konstanz, Konstanz, Germany, May 8, 2006 under INSA-DFG exchange programme. Delivered a lecture titled Synthetic endeavors towards glycosidase inhibitors and glycosamino acids, Y.D. Vankar.


199. Indian Institute of Chemical Biology, Kolkata, June 14, 2006, Y.D. Vankar.

201. School of Chemistry, University of Hyderabad, Hyderabad (October 2006), Y.D. Vankar.
205. Gyrotactic Bioconvection simulations, Engineering Mechanics Unit, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, Ghorai, S.
208. Improved estimation of parameters in linear regression models, at Deutsches Zentrum fur Luf-und Raumfahrt e.V. (DLR), Institute of Space Simulation, Koln, Germany in August 2006, Shalabh.
212. Image Processing for DTI and Tractography in CEP on Imaging Techniques In Life Sciences, February 2007, Institute of Nuclear Medicine & Allied Sciences, Delhi Rathore, R. K. S.
215. Overview of Finite Difference Methods for Partial Differential Equations (02 lectures) at University of Pune, October 2006, Kadalbajoo, M.K.
217. An overview of Finite Difference Methods for PDE’s (02 lectures) IIT Madras, December 2006, Kadalbajoo, M.K.
220. On sequence spaces in the department of mathematics, University of Addis Ababa, Ethiopia on Dec. 7, 2006, Gupta, M.
221. Banach spaces of entire sequences and their Kothe duals, Gupta, M., Pradhan, S.
223. Voxel wise exact T Estimation for Accurate Quantitation of Perfusion Indices using Fast 30-SPGR in Intracranial Mass Lesion, ISRM 14th Scientific Meeting & Exhibition Scattle, Washington, USA from 6-12, Singh, A.
224. Banach spaces and their applications in analysis at Miami University, Ohio from May 22-May 28, 2006, Acharya, L.R.
225. A DTI Analysis tool and another Newton-Raphson method for in vivo ’H MRS Data, ESMRMB 23rd Scientific meeting, Warsaw, Poland, 21-23 September 2006, Purwar, A.
226. De-scalping of the brain in echo planar DT-MRI, ISMRM 14th Scientific meeting & Exhibition, Scattle, Washington, USA, Sarma, M.K.
228. On Double Diffusive natural convention in wavy porous enclosure under the influence of soret and dufour effect, ICAPM-2006, May 28-Jun 4, Marrakech, Morrocco, B.V. Rathish Kumar et al
229. Unusually Stabilized WEBS-FEA of generalized Stokes Equations based on static condensation of quadratic Bubbles, MAFELAP 2006, June 12-16, Brunel University, London, B.V. Rathish Kumar, V.V.V.S. Kumar, P.C. Das
230. Parallel mesh division algorithm for general linear two point boundary value problems, Int. Symposium on parallel computing in electrical engineering, PARALEC’06, pp. 412-420, 2006, Rajesh Bawa, B.V. Rathish Kumar, Tanu Gupta,
231. Numerical simulation of thermal hydraulics in ADSS Model, EUA4#19-EUAXevent, 2006, IAC-CNR, ROMA, ITALY, B.V. Rathish Kumar, Arul Prakash, G. Biswas,

234. Instabilities in superconductors and mapping megagauss magnetic fields associated with laser plasma interactions. S. N. Bose National Center for Basic Sciences, Kilkata, 30th March, 2007, Satyajit Banerjee

235. Intense microwave plasmas for focused ion beams, Variable Energy Cyclotron Center, Kolkata, April 06, 2006, Sudeep Bhattachargee

236. Intense microwave plasmas for ion source application”, Institute for Plasma Research, Gandhinagar, November 08, 2006, Sudeep Bhattacharjee


239. Molecular Machines, Physics Department, Banaras Hindu University, Varanasi, February 08, 2007, D Chowdhury.


242. Effect of long-range connections on an infinite randomness fixed point, Statphys-Kolkata VI, Raichak, 5th January, 2007, Amit Dutta

243. Long-range connections, contact processes and disorder correlation, Department of Physics, Indian Institute of Technology Kanpur, 23rd February, 2007, Amit Dutta

244. Long-range connections and contact processes, S. N. Bose National Center for Basic Sciences, Kolkata, 6th March, 2007, Amit Dutta

245. Heavy fermion behaviour in YbIr$_2$Si$_2$ and Quadrupolar order in YbRu$_2$Ge$_2$, University of Koln, Germany, 11 October 2006, Z. Hossain.


249. Spin Fluctuations in the Triangular-Lattice Antiferromagnet Institute of Physics, Humboldt University, Berlin, 26 April 2006, Avinash Singh.

250. Spin Dynamics in the Diluted Ferromagnetic Kondo Lattice Model Institute of Physics, Humboldt University, Berlin, 17 May 2006, Avinash Singh.

251. Clustering Induced Suppression of Ferromagnetism in Diluted Magnets Institute of Physics, University of Regensburg, 12 Sep. 2006, Avinash Singh.


257. The time of sojourn for a wave traversing a material medium., Institut Fresnel, Universite Aix Marseille . I, France, 19 May 2006, S. A. Ramakrishna.


259. Delay times for pulses in plasmas and negative index media., The Blackett Laboratory, Imperial College London, 26 May 2006, S A Ramakrishna.

260. Colloquium on Negative refractive index and optical anti-matter., Nanophotonics and Metrology Laboratory, Ecole Polytechnique de Lausanne, Switzerland, 12 June 2006, S A Ramakrishna.

261. Delay times for pulses in plasmas and negative index media., Department of Physics, University of Geneva, Switzerland, 22 June 2006, S A Ramakrishna.

262. Seminar on Manipulating light with negative refraction. Institute of Microtechnology, University of Neuchatel, Switzerland, 12 July 2006, S A Ramakrishna.

263. Colloquium on Physics of Negative refractive index materials., Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, 21 Dec. 2006, S A Ramakrishna.

264. Negative refractive index on metamaterials at Optical frequencies., Raman Research Institute, Bangalore, 22 Dec. 2006, S A Ramakrishna.

265. Colloquium on Metamaterials and negative refractive index., Birla Institute of Technology and Science, Pilani, 06 March 2007, S A Ramakrishna.

OTHER ACTIVITIES

(A) TECHNOLOGY DEVELOPED

1. On-going developmental work on synthesis and trial of silver particle embedded granular activated carbon (GAC) filter as antibacterial agent in drinking water filtration and purification systems, in collaboration with Filtrex Technologies Pvt. Ltd., Bangalore, R. Bandyopadhyaya.
2. On-going developmental work on synthesis and tuning of superparamagnetic iron-oxide nanoparticle suspension, to be used as enhanced contrast agent for MRI diagnosis of disease, in collaboration with SGPGI, Lucknow, R. Bandyopadhyaya.
5. A Pilot Plant for the technology developed in ARRPET project is running at Vapi, Gujarat since June 2006. Funding for construction, operation and maintenance of the pilot plant has been provided by Vapi Waste & Effluent Management Co. Ltd., S. Guha.
6. Wake-on-WLAN technology for remote switch on/off (see WWW'06 publication for details), Bhaskaran Raman.
7. The BriMon system for Railway Bridge Monitoring, Bhaskaran Raman.
8. SIMRAN Technology, B.M. Shukla.
10. Track Detection, B.M. Shukla.
11. Smart Card projects: Department of CSE is involved in the specification and development of the operating systems for smart cards. A major success story is the development of SCOSTA operating system for the smart cards. This operating system has been adopted for the use in Driving Licenses, Vehicle Registration Certificates and Multi-purpose National Id card, all based on the smart cards. Lately, a standard has been developed for the smart cards to be used in the electronic passport. In addition to these, various applications have been developed around the smart cards. These include the personalization system for the driving licenses and vehicle registration system (jointly with NIC),
personalization system for the national ID card (jointly with the NIC), multi-purpose Identity card IIT Kanpur including applications such as attendance, library, club memberships etc. Department received another big project form the Ministry of Communication and Information Technology on the standardization and development of readers for the smart cards. The department will be developing hand held readers which can be deployed in the field for working with the smart cards such as those listed above, Rajat Moona.

12. The department is involved in the development of postal bag tracking along with CDAC Noida through a project funded by the Ministry of Communication and Information technology. In this project, the RFID based technologies are to be developed for automatic tracking of the speed post articles across various transit mail offices. In the pilot project, the mail that flows between Delhi and Bombay will be tracked, Rajat Moona.

13. Low power MOSFET based inverter; Status: packaging in progress, P. Sensarma.

14. IGBT gate drivers with inherent short-circuit protection scheme and isolation (2 kV) for Voltage Source Inverters; Status: beta testing in progress, P. Sensarma.

15. Removal of Scratches, Blotches and color fading in old Motion picture films, Ready for Transfer, S. Gupta.


20. Wake-on-WLAN (Remotely wakes up wireless LAN devices and hence helps save considerable power), Further development needed, K. Chebrolu.


23. A working prototype developed for the measurement of Laser Range finder based Angle of Attack and Tracking Position of Rail axles for the Indian Railways as part of the project on “Trackside Bogie Monitoring System”. Further development required before technology transfer, J. John.

24. UHF RFID tag antenna, prototypes are undergoing testing at the partnering organization, A. R. Harish.


26. Powder Metallurgical Processing of SILVAR composites for thermal management application in communication satellites developed in collaboration with Mr. A. Pathak and his team at Space Application Center (SAC), Ahmedabad. This project
was undertaken under the aegis of ISRO-IITK Space Technology Cell, A. Upadhyaya.


28. Mathematical modeling and computational analysis of large-dof robot manipulators: B. Dasgupta

29. Development of Foil Air Bearing for Air Cycle Machine. Technology transferred to HAL, Lucknow. The product is at the phase of manufacturing and testing, S. Sarkar

30. Developed an autonomous robot with a sensor probe for detecting surface features inside a closed conduit, the technology will be delivered to the Naval Armament Board, Bishakh Bhattacharya.

31. Developed a novel turn-indicator using Shape Memory Alloy with auto-shut off mechanism for General Motors, Bishakh Bhattacharya.

32. Straight Vegetable Oil (SVO) for direct use in compression ignition engines, A.K. Agarwal.

33. Fabricated solar photovoltaic cells with imidazolin-5-ones. These are biodegradable and currently being optimized, R Gurunath.

(B) SOFTWARE DEVELOPED

1. Title of the software, Ready for Transfer/further development needed, S. Guha.

2. Limulator, Available for download at http://home.iitk.ac.in/~blohani/download.htm, further being developed to make it more comprehensive, B. Lohani.

3. LAS-Converter, Available for download at http://home.iitk.ac.in/~blohani/download.htm, further will be developed on the basis of feedback on present version, B. Lohani.


8. HP iPAQ 6315 based way point logger cum way point arrival notification system.


12. Pickpacket v2: Network Monitoring Tool, More improvement one over the last year’s version (Ready to be transferred.), Dheeraj Sanghi.
15. Image compression s/w and GUI Interface, Ready for Transfer, P. K. Kalra.
19. RF breakdown power prediction in transmission lines, Kalpesh Mehta and A.R. Harish.
22. Advanced optical microscopy (3D imaging) (developed in house), Sandeep Sangal.
23. “Yantriya”, an integrated software package for analysis, design, planning and control of large-dof robot manipulators, almost ready for transfer (trial version already delivered, to IGCAR, Kalpakkam, BDasgupta.
24. Developed a software for Shape Control of Space Antenna Structure to be delivered to ISRO, Satellite Centre Ahmedabad. Bishakh Bhattacharya.
25. Developed a LES code for complex geometry, S.Sarkar.

(B) INDUSTRIES VISITED

4. Visited Indo-Gulf Fertilizers (Jagdishpur, UP) to discuss and finalize sponsored consultancy project of cost Rs. 21 Lakhs on “to develop membrane process based scheme in order to recycle urea plant process condensate after recovering Gases (Ammonia and CO2) and Urea”. Starting Date: November 2006, P.K. Bhattacharya.
5. Visited twice to Transpek-Silox, Vadodara (a multi-national company manufacturing inorganic chemicals) to discuss and finalize sponsored consultancy project of cost Rs. 10 Lakhs on “to develop a scheme for recycling of TSIL biologically treated effluent (300 m³/day) in order to recover water as well as for any discharge to municipal drainage, adhering pollution norms”, P.K. Bhattacharya.
6. Chinese Petroleum Corporation, July, 2006 to deliver a seminar and to discuss possible collaboration, J. P. Gupta.
7. Visited College of Engineering, Thiruvananthapuram (Kerala) during March 16-18, 2007 as NBA expert for accreditation of their M.Tech Structural Engineering Programme, Chakrabarti, S.K.

8. Visit to IRC as a member of the committee on Transport Planning, Traffic Engineering and Road Safety, Chakraborty, P.

9. Visit to SVNIT Surat to help them develop an M.Tech. program in Transportation, Chakraborty, P.

10. DTRL-DRDO, Invited for discussion on DTRL projects, 15 February 2007, Lohani, B.

11. Shell Technology India Private Limited, Bangalore; 30th March, 2007. To discuss mutual R&D activities in the area of earth sciences, Sinha, R.


13. IBM, Bangalore; Intel, Bangalore; IIT, Kharagpur; IISc, Bangalore; Cornell University, Ithaca, NY, USA, Mainak Chaudhuri.

14. IITG, UCSD, CalTech, UCLA, Berkeley, Stanford, CWI, University of ULM, Bellairs Institute, Manindra Agrawal.


23. BHEL, Bhopal, Sensarma P.


25. Industrial visit to study distributed control systems in the following industry: Alumina Refinery plant of HINDALCO Renukut, 1 day, R. Potluri., Captive Power plant of HINDALCO, Renusagar, 1 day, R. Potluri., NTPC Shaktinagar, 1 day, R. Potluri, October 03 - 05, 2006.

26. Crompton Greaves, Mumbai, to discuss research possibility, N. Gupta.
27. BHEL, to discuss possibility of research collaboration, N. Gupta.
28. CPRI, Bangalore, to establish collaboration, N. Gupta.
31. Visit to RDSO, Lucknow in connection with the field trials and interactions with railway engineers on the Trackside Bogie Monitoring System project under the Technology Mission on Railway Safety. One visit per month from April 2006 to March 2007, J. John.
32. Visited NTU Singapore during December 03 – 16, 2006 for exploring possible technical collaboration. Delivered two lectures on Fractal Antennas and Chaos at Microwave Frequencies, A.R. Harish.
33. Visited the Div. of Communication Engineering, School of EEE, Nanyang Technological University, Singapore as TCT Fellow during May 06-June 06, Anjan K. Ghosh.
34. Visiting the Telecomm Systems Program ,School of electrical and computer engineering,University of Oklahoma,Tulas as a visiting Professor from July 06-Aug08, Anjan K. Ghosh.
35. Mazandran University of Science & Technology, Iran, J. Chatterjee.
36. Tampere University of Technology, Finland, J. Chatterjee.
38. Curtin University of Technology, Sydney Campus, Australia, J. Chatterjee.
39. International Management Institute, New Delhi, India, J. Chatterjee.
40. Management Development Institute, Gurgaon, India, J. Chatterjee.
41. National Knowledge Commission, New Delhi, India, J. Chatterjee.
42. Indian Council of Agriculture Research, New Delhi, India, J. Chatterjee.
43. Centre for Management of Innovation and Technology, New Delhi, India, J. Chatterjee.
44. University of a Kassel, Germany, J. Chatterjee.
45. Indian Institute of Management, Kolkata, India, J. Chatterjee.
47. ICRISAT, Hyderabad, India, J. Chatterjee.
48. Innovation Management Institute, Helsinki, Finland, J. Chatterjee.
49. I I M Khozhikode, Kerala, India, B.V.Phani.
50. Invited as Visiting Faculty by Department of Psychology, Osmania University, Hyderabad to give lectures on Multivariate Statistical Methods, February 26-March 03, 2007, Narendra K. Sharma.
52. Rare-Earth Oxide Dispersed Sintered Stainless Steels (REO-Steels),(filed, 2006), Upadhyaya, R. Balasubramaniam, and J. Shankar.
56. Visited Dept. of Mechanical Science and Engineering, Nagoya University, Japan For teaching and research from 1st May 2006 to 31st March 2007, A. Dutta
57. ISRO Satellite Centre, 1-3 Jan 2007 for discussion on projects, B. Dasgupta.
58. Visited University of Verona, Italy on an Indo-Italian Joint Project on development of shear sensors for robotic manipulators in September 2006, period 2 weeks. Bishakh Bhattacharya.
59. Visited University of Illinois at Urbana Champaign and University of California at Irvine on an Indo-US project on development of micro-gripper manipulator using IPMC, period 10 Days, Bishakh Bhattacharya.
63. Visited University of Electrocommunications, Tokyo, University of Shizouka, Hamamatsu, Suzuki Motors, Iwata, Hamamatsu Photonics, Hamamatsu, October 2006, N.V. Reddy.
64. Visit to Indian Institute of Science for Research data collection in 17-23, August 2006, R. Gurunath.

(D) PATENTS

1. Profile measurement machine (filed for patent), C. Venkatesan.
3. Pressureless Room Temperature Micro- and Sub-micro Patterning of polymer Films Coated on Planar or Curved Surfaces Using Patterned Flexible Foils as

329
Stamp and Articles Formed Thereby, Indian Patent 1519/DEL/2006 filed on June 28th, 2006 (A. Sharma, Rabibrata Mukherjee, Danish Faruqui and Ganesh Patil).


10. A low complexity symbol timing estimator for MIMO Modem using two samples per symbol (Pending award of patent), A. K. Chaturvedi and Ketan Rajawat.


17. Magnetorheological abrasive flow finishing process and device therefore V.K. Jain.

18. New media for AFM machining- Indian Patent (filed), J. Ramkumar.


(E) AWARDS AND HONOURS


2. Member, International Organizing Committee of ICCM07 & Session Chairman, International Conference on Computational Methods, Hisoshima JAPAN 4-6 Apr 2007), Sanjay Mittal.


4. Fellow Indian Academic Sciences since 2007, Sanjay Mittal.


6. Member, Organizing Committee, REACH Symposium, IIT Kanpur March 7-10 Hotel Timber Trail Heights, Sanjay Mittal.


8. INAE Young Engineer Award, A. Ghatak.

10. Associate of Indian Academy of Sciences (2006-2009), Y.M. Joshi.
14. J. C. Bose National Fellowship, Department of Science & Technology (2006-2010), A. Sharma.
16. RPG Life Science Padma Vibhushan Professor M M Sharma Medal and Chemcon Distinguished Speaker Award of the Indian Institute of Chemical Engineers (2006), A. Sharma.
18. Member of Editorial Board, Indian Chemical Engineer (Journal of the Indian Institute of Chemical Engineers; 2006- ), A. Sharma.
19. INAE Young Engineer Award for the year 2006. Awarded by the Indian National Academy of Engineering for engineers below the age of 35, V. Shankar.
22. Best Poster presentation award at Map World Forum 2007 to paper 3D visualization of LiDAR data, Coauthored with Ghosh, S., Lohani B.
23. Fellow, Institution of Surveyors India, Lohani B.
25. S. S. Merh Award from Geological Society of India for contributions in Quaternary Geology, 2006, Rajiv Sinha.
27. The poster "Wake-on-WLAN" under the guidance of Kameswari Chebrolu and Bhaskaran Ramana won the best poster award amongst 24 entries from PhD and M. Tech students of IITs, IISc and other premier institutes at the Microsoft Techvista 2007, Nilesh Mishra.
28. IBM Faculty Award, 2006, Mainak Chaudhuri.
30. Fulkerson Prize for 2006, Manindra Agrawal.
32. IBM Faculty Award, 2006, Prabhakar T.V.
33. Awarded the Fulkerson Prize for the year 2006, Neeraj Kayal and Nitin Saxena.
34. Awarded the Gödel Prize for the year 2006, Neeraj Kayal and Nitin Saxena.
35. Best Presentation Award in IRISH 2007, Barna Saha.
36. The Best Poster/Demo Award at WISARD 2007, Nilesh Mishra, Raj Kumar, Phani Kumar Valiveti and Hemanth Haridas.
37. Project "Autopilot Development for Mini UAV : Hardware Software Co-Design" under the guidance of Prof. Rajat Moona won the FIRST PRIZE in the AES All-India Student Project Contest - 2006 conducted by the IEEE-India AES/Com/LEO Societies Chapter, Mohit Mangal (CSE), Mohit Mundhra (CSE), Gaurav Gupta (EE) and Shobhit Niranjan (EE).
38. Outstanding Ph.D Student award of IBM India Research Lab for the year 2006, Piyush Kurur.
39. Program Chair, APSEC 2006, Pankaj Jalote.
40. General Chair, RE07, Pankaj Jalote.
41. Member International Program Committee Machine Translation Summit 2007 Copenhagen, Denmark, R.M.K. Sinha.
42. Member national Technical Advisory Committee of Centre for Development of Advanced Computing (CDAC), R.M.K. Sinha.
43. Member Working Group on "Technology Development for Indian Languages (TDIL)", MCIT, Govt. of India, R.M.K. Sinha.
44. Member PRSG on OCR and OHR Consortia, MCIT, Govt. of India, R.M.K. Sinha.
45. Member PRSG on English to IL MT Consortia, MCIT, Govt. of India, R.M.K. Sinha.
47. Finance chair, APSEC 2006, Sanjeev Kumar Aggarwal.
48. Finance Chair, RE07, Sanjeev Kumar Aggarwal.
49. Editorial Board of International Journal of Theoretical and Applied Computer Sciences, Sanjeev Kumar Aggarwal.
50. Program Committee member for the International Conference on Computing : Theory and Application (ICCTA' 07), March 5-7 2007, Kolkata, India, Shashank K. Mehta.
51. Elected Fellow, Institute of Electrical and Electronics Engineers (IEEE) for contributions to education in power electronic applications to transmission and distribution systems, A. Ghosh.
52. The Brij Mohan Lal Memorial Prize, Institute of Engineers, Kolkata, India, P.K. Kalra.
55. Invited to join as Member of the State Advisory Committee of the U.P. Electricity Regulatory Commission, S. C. Srivastava.
56. Member, Governing Council of Central Power Research Institute, Bangalore, S. C. Srivastava.
59. Re-nominated as Member of the State Advisory Committee of the U.P. Electricity Regulatory Commission for 2007-09, S. C. Srivastava.
60. Elected Humboldt Fellow, S.N. Singh.
61. Elected Fellow of The Institution of Engineers (India) - (FIE) , S.N. Singh.
63. Member International Program Committee Machine Translation Summit 2007 Copenhagen, Denmark, R. M. K. Sinha.
64. Member national Technical Advisory Committee of Centre for Development of Advanced Computing (CDAC), R. M. K. Sinha.
65. Member Working Group on "Technology Development for Indian Languages (TDIL)", MCIT, Govt. of India, R. M. K. Sinha.
66. Member PRSG on OCR and OHR Consortia, MCIT, Govt. of India, R. M. K. Sinha.
67. Member PRSG on English to IL MT Consortia, MCIT, Govt. of India, R. M. K. Sinha.
70. Tan-Chin-Tuan Fellowship from Nanyang Technological University, Singapore, Anjan K. Ghosh.
72. The AMERICAN MEDAL OF HONOR (received medal number 9 out of 100), American Biographical Institute Inc., 5126 Bur Oak Circle, PO Box 31226, North Carolina, 27622, USA. Web: www.abiworldwide.com, Prof. RRK Sharma.
73. Nominated as 2006 Man of The Year, American Biographical Institute Inc., 5126 Bur Oak Circle, PO Box 31226, North Carolina, 27622, USA. Web: www.abiworldwide.com, Prof. RRK Sharma.
74. Biographee, Marquis, Who's Who in Asia, 890 Mountain Ave, Suite 300, New Providence, NJ 07974, United States of America, Prof. RRK Sharma.
77. Honorary Appointment to Research Council of International Biographical Centre, St. Thomas Place, Ely, Cambridgeshire, CB7 4GG ENGLAND, Prof. R.R.K. Sharma.
79. Consulting editor E-Social Sciences; Dr. Varman, Rahul.
80. Associate Editor of International Journal of Technology, Knowledge and Society, The university press, common grounds, Victoria, Australia, Dr. Veena Bansal.
81. President Operational Research Society of India, Prof. Ashok K Mittal.
82. Vice President and Director Quality Circle Forum of India Hyderabad, Prof. Ashok K Mittal.
83. Fellow, Indian National Academy of Engineering, K. Shanker.
84. Dr. B. Basu has been appointed as Foreign Member on Editorial board, Journal of Korean Ceramic Society, South Korea.
85. Dr. B. Basu has been appointed as a Member of International Advisory Panel, College of Biomedical Engineering and Applied Sciences, Kathmandu, Nepal.
86. Dr. B. Basu has been appointed as a Member of Editorial board, Trends in Biomaterials and Artificial Organ, only Indian Journal in the area of Biomaterials, Society of Biomaterials and Artificial Organs, India.
87. Dr. Ashish Garg, Ramanna Fellowship, Department of Science and Technology, Government of India (2006)
89. Fellow of the American Society of Mechanical Engineers (ASME) Dr.G.Biswas
90. Best Paper Award in a conference the details of which are given below; A.K.Saha
92. Young Scientist Award, 2006, Systems Society of India, Bishakh Bhattacharya.
93. Ramanna Fellowship, Department of Science and Technology, Government of India, 2006, A. Chandra.
94. Lalit Kapoor Chair Professor, V. Chandrasekhar.
95. Member of Advisory Board and Session Chair for the “Lecture delivered by Lov Grover” at the Indo-US Shared Vision Workshop on Soft, Quantum and Nano Computing, Dayalbagh Educational Institute, Agra, February 22 (2007), D. Goswami.
96. J.C. Bose Fellow, Department of Science and Technology, New Delhi 2006, N. Sathyamurthy
97. Ramanna Fellowship by the Department of Science and Technology, New Delhi, Y D Vankar
98. Edited a special issue on ‘Carbohydrate Chemistry,’ edited by Y. D. Vankar;

(F) CONTINUING EDUCATION ACTIVITIES

1. Acted as the resource person at SSGM College of Engineering, Shegaon, Maharashtra for AICTE sponsored First Course on CFD, 30 - 31 March, 2007. (30 participants from other engineering college and industry), Tapan K. Sengupta.
3. Organized a SERC-DST school on Rheology of complex fluids at IIT-Kanpur in December 2006, Y. M. Joshi.
5. Future of the past: Use of modern technologies in archaeology, IIIT Jabalpur sponsored, IIT Kanpur, 12 June to 7 July 2006 (Major resource person), Lohani, B.
7. Organised and/or conducted with Professors Durgesh C Rai and Sudhir K. Jain, continuing education programs for teachers of engineering colleges and polytechnics on “Seismic Design of Buried Pipelines” at IIT Kanpur in April 2006, (24 participants), on “Nonlinear Seismic Analysis of Structures” at IIT Kanpur in October 2006.
8. Organised and/or conducted with Professor Persi Engineer (Sarvajanik College of Engineering and Technology, Surat) and Ar. Amit Bose (Designers and Planners Combine, New Delhi), continuing education program for teachers of colleges of architecture, and professional architects and planners, on “Architecture for Earthquake Resistance of Buildings” at SCET, Surat in November-December 2006.
9. Five lectures delivered at the Winter School on Modeling of Planetary Atmospheres organised by Physical Research Laboratory, Ahmadabad, Tripathi, S.N.
10. Participation in High Level Industry Academia Interaction Programme during Summer: No, Tripathi, S.N.
14. Lecture module (8 hours) delivered at BHEL, Bhopal on “Power Electronic Converters”, November 9-10, 2006. 20 participants, P. Sensarma.
16. Mar 14-15, 2006. Organized "Workshop on Recent Advances in Controls & Sensors" at IITK. Speakers included faculty of IIT Kanpur and scientists from ISRO. Audience included faculty & students from NITs, IITs, and engineering colleges, and engineers and researchers from industry, R. Potluri.
18. Organizing Member of Winter School on Speech & Audio Processing (WISSAP’06 - 07), Bangalore. Self Sponsored (70 from Academia, 30 from Industry), S. Umesh.
19. Organization, Coordination, and main Instruction of Avionics Course For HAL candidates, K. S. Venkatesh.
20. Short course on “Introduction to VLSI Design” at HBTI, Kanpur from 19th to 21st Jan., 2006. Gave one hour inaugural talk on “VLSI Processing” on 19th Jan., 2006. Attendance was from academia (~40 participants), S. S. K. Iyer
22. Short course under Instruction Enhanced Programme under the Special Manpower Development Programme II of MCIT, on “Digital IC Design” from 3rd to 14th July, 2006 at IIT Kanpur. Attendance (~25) was from academia from participating institutes of MCIT. S. Qureshi, S. S. K. Iyer, B. Mazhari, A. Dutta, A. Joshi
23. QIP short course on “Organic Electronics” from 17th to 21st July, 2006 at IIT Kanpur. Helped in organization as well as presented four one-hour lectures. Attendance (27 nos.) was from academic institutions, S. S. K. Iyer, B. Mazhari
24. Tutorial on “Organic Electronics - Technology, Devices, Circuits and Applications” at the 20th International Conference on VLSI Design at Bangalore on 6th January, 2007. Helped organize the six hour tutorial and also conducted it for three hours. Number of participants was 25 from both academia and industry.
25. QIP Short Course on Advances in Materials and Fuel Technologies for Automotive Applications, 8-12th June 2006, IIT Kanpur
26. Offered a certificate course on Supply Chain Management through SIIC, IIT Kanpur. Mehta, P.
27. Accounting for Managers, Ordinance Factory Kanpur, B.V.Phani.
34. Fundamentals of IC Engines, One week sponsored course offered to RDSO engineers (15 participants), March 2007, A.K.Agarwal.

(G) PARTICIPATION IN HIGH LEVEL INDUSTRY ACADEMIA INDUSTRY INTERACTION PROGRAMME DURING SUMMER

1. Summer consultant to Chevron Refining, Richmond, CA, USA, D. Kunzru.
2. Conceptualized and organized the first meeting of Expert group on Coordinated programme on Research and Development in Airborne Altimetric LiDAR Technology at IIT Kanpur on 14 June 2006, Lohani, B.

(H) ANY OTHER IMPORTANT ACTIVITY NOT SPECIFIED IN ABOVE COLUMNS
1. Sustained activity in spreading literacy and Primary Education through an NGO called Shiksha Sopan, K. Ghosh.
4. Consultant to Delhi-Metro Railways Corporation for the proposed link between New Delhi Rail station to Airport, Tapan K. Sengupta.
5. Visited BIT-Sindri as Member - National Board of Accreditation (NBA) set-up by AICTE, P.K. Bhattacharya.
6. Attended meeting in Krishi Bhawan as Member, Advisory Board, National Sugar Institute, Kanpur (From September 2006) , P.K. Bhattacharya.
8. Member- Selection Committees, IIT-Delhi (New Delhi), IIT-Kharagpur, P.K. Bhattacharya.
12. Appointed Director General, Gujarat Energy Research and Management Institute, Gandhinagar to set up a new University in Petroleum Technology and Management , J. P. Gupta.
14. Reviewed research paper manuscripts for (a) Chemical Engineering Science (b) Journal of Chemical Thermodynamics & (c) Industrial Engineering Chemistry Research, Ashok Khanna.
15. Structural design of Modern Hangar with Annexe at Bareilly (U.P.), Chakrabarti, S.K.
16. Proof-checking of the design of POT/PTFE bearings for H.L. Bridge at Katonjha over river Bagmati in Muzaffarpur (Bihar), Chakrabarti, S.K.
17. Rectification of the defective construction of the Swimming Pool under construction at Saifai (Etawah) (U.P.) (Sponsored by : U.P. Rajkiya Nirman Nigam Ltd.; Sanctioned Amount : Rs. 1.4 lakh), Chakrabarti, S.K.
18. Developed (along with Dr. A. Das, CE, IITK) Web-based NPTEL course on Transportation Engineering, Chakraborty, P.

19. Principal Investigator of the Wastewater Treatment and Management (WWTM) project of Asian Regional Research Programme in Environmental Technology II (ARRPET II). The project consists of five National Research Institutes (NRIs) from Thailand, Vietnam and India. More information is available at http://www.arrpet.ait.ac.th/wwtm/team.html, S. Guha.

20. Center for Advanced Studies Visiting Fellow, Institute of Technology, Banaras Hindu University, Tripathi, S.N.

21. Member of Cloud Steering Committee, Department of Science and Technology CTCZ Experiment, Tripathi, S.N.

22. Member, Core Committee, Mars Orbiter, Appointed by Director, Physical Research Laboratory, Department of Space, Ahmedabad, Tripathi, S.N.

23. Member of Task Team and Steering Review Committee of the Space Borne Lidar Project, Vikram Sarabhai Space Centre, Thiruvananthapuram, Tripathi, S.N.

24. Participated in the 2nd National Frontiers of Science (NatFOS) Symposium held during 3-4 December, 2006 at INSA, New Delhi, Tripathi, S.N.

25. NPTEL Video Course on Power System Operation and Control, S.N. Singh.


27. Electronic Fabrication (ELFAB) module at 4-i Laboratory, S. Sensarma.

28. The High Voltage laboratory was enhanced with modern detection equipment: Partial discharge detector, high resolution high speed Basler camera, Pico-ammeter, photon counter, etc. N. Gupta.

29. Developed a DSP Laboratory based on Texas Instruments TMS320C6711/C6713 processors, A. Banerjee.

30. Expansion and Upgradation of VLSI / EDA Laboratory for Teaching, Research and Conducting of Courses for Participants from Colleges and Industry, WL-211, S. Qureshi.


32. Participated in Class 1000 Room Functioning, SAMTEL Centre for Display Technology, S. S. K. Iyer.


34. Created a Web-based Course on Fluid Mechanics for the sophomore students (open to all, under the auspices of NPTEL, an consortium of the Ministry of Human Resource and Development) [URL
35. Expert Member, Technical Committee for Evaluation of Vehicle Emission Factors Development, Central Pollution Control Board, New Delhi, B.P. Pundir
36. Expert Member, Standing Committee on Emission Standards for Off- Highway RIC Engines, Central Control Pollution Control Board, New Delhi, B.P. Pundir
37. Consultant on EU ‘Quantify’ Project being conducted by European Union-Central Institute of Road Transport, Pune on Emission Inventory from Transport Vehicles in India, B.P. Pundir
40. Involved with Organizational activities of Indo-Japan seminar on Advanced Manufacturing, N.V. Reddy.
41. Sponsored projects on Tele-ophthalmology, Ministry of Health and Family Welfare, Rs.10 lakhs, duration one year, Harish Karnick.
42. Project on Open Philosophies of Associative Autopoietic digital ecosystem (OPAALS) sponsored by European Commission, Prabhakar T.V.
43. Project on Voice Processing sponsored by General Motors, Prabhakar T.V.
44. Rajat Moona established a “Storage Lab” with collaboration and funding from TCS Lucknow. The lab facilities include a HP NAS Server with 500GB storage and a EMC SAN Server with 1.5TB storage. In addition to this the lab uses various new technologies related to the storage such as iSCSI initiator and iSCSI target. Several research works are also being carried out in the lab including research on the state-of-art in storage such as object oriented storage servers, security and availability of data etc.
45. The department has become the nodal centre in supporting the courses related to multi-core programming and architecture in the country. The project is funded by Intel Corporation. We have developed course ware on “Program Optimization for Multi-core Architecture”. The course ware is being distributed to other engineering colleges. We are participating in workshops being organized by Intel to propagate this technology, and for conducting teacher’s training programmes. Intel has established a laboratory having multi-core desktops and servers to support this activity. The laboratory also has all the Intel multi-core related software.
46. Reviewed Ph.D. theses each for Banaras Hindu University and Indian Institute of Science, R. Gurunath.
47. Reviewed manuscripts for journals Peptide Research and Current Science, R. Gurunath.
48. Executive member and co-editor of the Indian peptide society newsletter, R. Gurunath.
50. Organizer, International Conference on Quantum Computing: Back Action 2006 held during March 06-12, 2006. Funded through Indo-US, Max-Planck (Garshing) and MIT (USA), D Goswami.
51. Organized (with Prof. T. Chakraborty, IACS, Kolkata) the fourth International discussion meeting on Spectroscopy and Dynamics of Molecules and Clusters, held from February 23-25, 2007 at the Corbett National Park, India, K. Srijani.
Outreach activities. Associated with Austrian Mycological Society and the Herbarium. Tight associations exist with the Austrian Mycological Society and the Herbarium. Nature protection activities, mushroom intoxication counseling, press interviews. Our research group is regularly engaged in several ways into public activities, reaching from the “fungus of the year” for the nature protection organisation, via - life saving - mushroom counseling for hospitals, mushroom counseling for the public, public lectures, press, television and radio interviews, congresses, meetings.