Publication and Outreach Activities

BOOKS AND BOOK-CHAPTERS PUBLISHED

Aerospace


Biological Science and Bio-engineering


Chemical


Civil


Computer Science & Engineering


Electrical


Industrial Management & Engineering

Materials Science and Engineering


33. Special Issue of the Journal of Microwave Power and Electromagnetic Energy (JMPEE): The two issues of JMPEE contain ~16 select papers presented at the 1st Global Congress on Microwave Energy Applications (GCEMA) held at Otsu Japan (Aug 4-8), 43, 1-2, 2009. Y. Nikawa, Y. Wada, S. Horikoshi, and A. Upadhyaya (Eds.).

Book chapter:


Mechanical


Humanities and Social Sciences


Chemistry


Mathematics and Statistics


Physics

JOURNAL PAPERS

Aerospace

13. Combustion Oscillations in Bluff body stabilized Diffusion Flames with Variable Length Inlet, ASME Journal of Engineering for Gas Turbine and
19. An Experimental Study of Flame Spread over an Inclined Thin Fuel Surface, Archivum Combustionis, V 29, No. 3-4, 101-110, 2009, P. Mishra and Maheshwari M.

Biological Science and Bio-engineering


34. The Significance of ExDD and RxKD Motifs Conservation in Rel Proteins Journal of Biological Chemistry (2009), 284, 9115-9123, Mathew Sajish, Sissy Kalayil, Sunil Kumar Verma, Vinay Kumar Nandicoori and Balaji Prakash.


37. End-to-end and end-to-middle inter-helical interactions: New classes of interacting helix pairs in protein structures, Acta Crystallographica D.


44. Lafora progressive myoclonus epilepsy: A meta-analysis of reported mutations in the first decade following the discovery of EPM2A and NHLRC1 genes, Human Mutation, 2009, 30 (5), 715-723, S. Singh, and S. Ganesh.


49. Physical and cytocompatibility properties of bioactive glass-polyvinyl alcohol-sodium alginate biocomposite foams prepared via solgel processing for trabecular bone regeneration, J Mater Sci: Mater Med; Mishra, R., Basu, B., and Kumar, A.
50. Elastic and macroporous agarose-gelatin cryogels with isotropic and anisotropic porosity for tissue engineering, J Biomedical Matrerial Research. 90 A (3), 680-694, Tripathi, A., Kathuria, N. and Kumar, A.


54. Synthesis and characterization of polyacrylonitrile and interpenetrating network of polyacrylamide and chitosan supermacroporous cryogels as scaffolds for cell immobilization, J of Biomaterial Science: Polymer Ed. 20, 877-902, Jain, E., and Kumar, A.


Chemical

57. Efficient computation of free energy of crystal phases due to external potentials by error-biased Bennett acceptance ratio method, Journal Of Chemical Physics, 132(8), 2010, 084101, P. A. Apte.


68. Development length requirements for fully-developed pipe flow of yield stress fluids, J. Fluids Engineering (Transactions Of The ASME), 132(3), 2010, 034501-1 to 034501-4, R. J. Poole and R. P. Chhabra.


75. Scientific innovation and creativity: some case studies in new process and product development, Indian Chemical Engineer 51, (2009), 163, A. Sharma.


83. Influence of electric field on saturated film boiling, Physics Of Fluids, 21(3), 2009, 032107, G. Tomar, G. Biswas, A. Sharma, and S.W.J. Welch.


95. Surface tension and vapor-liquid phase coexistence of variable range hard-core attractive Yukawa fluids, Molecular Simulation, 35(10-11), 2009, 880-887, JK Singh.


118. An efficient algorithm for rigorous dynamic simulation of reactive distillation columns, Computers & Chemical Engineering, 33(8), 2009, 1336-1343, M. Rahul, M.V.P. Kumar; D. Dwivedi and N. Kaistha.


Civil


122. Optimal proportioning for hot recycled mix design under Superpave mix design consideration, Canadian Journal of Civil Engineering, Vol.36(9), 2009, pp.1470-1477, Aravind, K. and Das, A.


129. Assessment of Personal Exposure to Indoor and Outdoor Particulate Matter for Residents of an Academic Campus (IIT-Kanpur), Inhalation Toxicology, 21 (14), 1208-1222 (2009), J. Jaidevi, Gupta, Tarun, Sachchida Nand Tripathi and Kamal Ujinwal.

130. Analysis of Diurnal and Seasonal Variation of Total Outdoor Aerosol Mass and Size Distribution in a Northern Indian City and its Correlation to Black Carbon, Aerosol and Air Quality Research, 9, 458-469 (2009), Sanjay Baxla, Anirban Roy, Gupta, Tarun, Sachchida Nand Tripathi and Rajdip Bandyopadhyaya.

131. Measurement of Number and Size Distribution of Particles Emitted from a Mid-Sized Transportation Multipoint Port Fuel Injection Gasoline Engine, Gupta, Tarun, Abhishek Kothari, Dhananjay Kumar Srivastava, Avinash Kumar Agarwal.


150. A new approach for finding an appropriate combination of texture parameters for classification, Geocarto International, April 2010, Pathak, V and Dikshit, O.

Computer Science & Engineering

Electrical


Industrial Management & Engineering


207. A new node splitting measure for decision tree construction, Pattern Recognition, March 2010 , B. Chandra, Ravi Kothari, Pallath Paul


209. Modelling the supply chain of Special economic zones in India, Directions, V 10 No 2 Dec2009  P Mehta, Ashok Mittal, Kripa Shankar

210. Centre for Engineering Excellence, Directions V 10 No 2 Deepak Gupta, AK Chaturvedi, AK Mittal, S Mittal.


Materials Science and Engineering


268. Quench hardening of 0.4 % C steel by using aqueous electrolyte plasma as heat source, Surface Engineering 25 (6), 2009, 423, A. Roy, S. J. Parihar; A. Singh, R. C Sharma and R. Shekhar.


290. An analysis of the difference in behavior of top and bottom contact organic thin film transistors using device simulations, Organic Electronics, 10 (5), 2009, 775-784, Dipti Gupta, Monica Katiyar, Deepak.


Mechanical


323. Computational Investigation on Bubble Detachment from Submerged Orifice in Quiescent Liquid under Normal and Reduced Gravity, Physics of Fluids,
Vol.21, Published online on June 11, 2009, Chakraborty, B. Ray, G. Biswas, F. Durst, A. Sharma, P.S. Ghoshdastidar.


348. The equilibrium of rubble-pile satellites: The Drawin and Roche ellipsoids for gravitationallyh and granular aggregates, Icarus, Volume 200, Ishan Sharma.


Humanities and Social Sciences


380. Woman as Survivor in Oates's 'Rape: A Love Story’. Notes on Contemporary Literature, 39.4 (September 2009): 4-6 - Srirupa Chatterjee & G. Neelakantan


Chemistry


410. Multifaceted Coordination of Naphthyridine - Functionalized N-Heterocyclic Carbene: A Novel ‘Ir^{III}(C\(^^\wedge\)N)(C\(^^\wedge\)C)’ Compound and Its Evaluation as Transfer


422. Tri- Tetra- and Hexanuclear Copper (II) phosphonates Containing N-Donor Chelating Ligands: Synthesis, Structure, Magnetic Properties and Nuclease
223


432. BF₃·OEt₂-Mediated Highly Regioselective SN₂-Type Ring-Opening of N-Activated Aziridines and N-Activated Azetidines by Tetraalkylammonium Halides, J. Org. Chem., 2010, 75, 137–151, Manas K. Ghorai, Amit Kumar and Deo Prakash Tiwari.


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475. Discrete and 1D Coordination Polymeric Chloro-Bridged Copper(II) Dimers Exhibiting Ferro- and Antiferromagnetic Exchange Coupling: Magneto-


503. Local phase space control and interplay of classical and quantum effects in dissociation of a driven Morse oscillator, Phys. Rev. A 79, 033416 (2009), A.Sethi and Srihari Keshavamurthy.

504. Bending of peptide nanotubes by focused electron and ion beam, Soft Matter 2009, 5, 1789-1791, Gour, N., Verma, S.*


506. Fabrication of platinum nanopillars on peptide-based soft structures using a focused ion beam, Biofabrication 2009, 1, 025002-025007, Joshi, K.B., Singh, P., Verma, S.*


514. Intramolecular ketonitrone-olefin cycloaddition reaction: Direct and stereocontrolled synthesis of nitrogenated quaternary centered aminocyclopentitols as galactosidase inhibitors, Tetrahedron Lett. 2009, 50,


Mathematics and Statistics


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556. Bayesian Inference and Life Testing Plans for Generalized Exponential Distribution, Science in China, Series A: Mathematics (Special volume
dedicated to Professor Z.D. Bai), Vol. 52, No.6, (2009), 1373-1388, D. Kundu, B. Pradhan.


565. Relations between bilinear multipliers on \( \mathbb{R}^n, \mathbb{T}^n \) and \$\mathbb{Z}^n \$. Proc.Indian Acad Sciences, (2009), D.Bose, S. Madan, P. Mohanty, S. Srivastava.


575. A short note on semi linear elliptic equations in unbounded domains, Nonlinear Dynamics and System Theory. 10(1),(2010),93-95, V. Raghavendra, K. Rasmia.


579. Error estimates for linear PDEs solved by wavelet based tG schemes, IJWMIP, Vol.7(1),1-20,(2009), M. Mehra, B.V. Rathish Kumar.


598. Modelling the depletion of forestry resources by population and population pressure augmented industrialization. To be published in Applied Mathematical Modelling, (2009), P. Sinha, B. Dubey, J.B. Shukla, S. Sharma.

Physics

600. Tunneling evidence of two types of electronic states in La$_{0.625}$Ca$_{0.375}$MnO$_3$ manganite thin films, J. Phys.: Cond. Mat. 21, 355001 (2009), Udai Raj Singh, Saumyadip Chaudhary, R. C. Budhani, and A. K. Gupta.


603. Adiabatic dynamics in passage across quantum critical lines and gapless phases, Phys. Rev. E 81, 012101 (2010), Debanjan Chowdhury, Uma Divakaran, and Amit Dutta.


622. The measurement of atto-gram mass accumulation on nanostructures during e-beam scanning, using carbon nano-pillars in resonant mode, Nanotechnology 20, 345501 (2009), A Banerjee, T Mankad, S Dhamodaran, J Ramkumar and V N Kulkarni.


625. Switching a plasma-like metamaterial via embedded resonant atoms exhibiting electromagnetically induced transparency, Optics Letters 34, 3728-3730 (2009), S. Chakrabarti, S.A. Ramakrishna and H. Wanare.
626. Negative refractive index, perfect lenses and checkerboards: Trapping and imaging effects in folded optical spaces, Comptes Rendus Physique 10, 352378 (2009), S. Guenneau, and S.A. Ramakrishna.


632. Experimental investigation of transition from Fowler Nordhiem field emission to space-charge-limited flows in a nanogap, Applied Physics Letters 95, 061501 (2009), Sudeep Bhattacharjee and Tathagata Chowdhury.

633. Ion energy distribution near a plasma meniscus for multielement focused ion beams, Journal of Applied Physics (Communications), 105, 096101 (2009), Jose V. Mathew and Sudeep Bhattacharjee.


635. Ion energy distribution near a plasma meniscus with beam extraction for multielement focused ion beams, Journal of Applied Physics 107, 093306 (2010), Jose V. Mathew, Samit Paul, and Sudeep Bhattacharjee.


CONFERENCE PAPERS

Aerospace


10. Effect of Unsteady Aerodynamic on System Identification accepted in IEEE Aerospace Conference held at Big Sky, Montana during March 6-13, 2010, Rakesh Kumar, AK Ghosh.

11. Parametric study during stability analysis of Aerostat, accepted for publication and presentation in AIAA Flight Mechanics International
Conference to be held at Toronto during August 2-5, 2010, Rakesh Kumar, Shashank Srivastava, Ajit Kumar, Balraj Gupta and AK Ghosh.

12. Technique to improve Precision of Kinetic Energy projectiles through motion study, AIAA, FMC, Mischigan USA, Aug 2009, AK Ghosh.


22. Experimental Study of CNG-Air Premixed Flames using Chemiluminescence Sensor 7th Asia-Pacific Conference on Combustion, National Taiwan University, Taiwan, 24-27 May 2009, B.V.S. Jyoti, M. Muralidhar and D. P. Mishra.


27. Fibre breaking damage model for unidirectional fibrous composite using micromechanics, 16th NASAS at IIT Bombay, 19-20 November 2009, Jain A, Upadhyay CS and Mohite PM.

Chemical


32. CO₂ Methanation over Supported Bimetallic Ni-Fe Catalysts, CHEMFERENCE ’09, IIT Madras, ChEmf09-201, 2009, 9-10, D. Pandey and G. Deo.


Civil


42. Identification of Air Pollution Sources at Kanpur during Winter Season. Anil Mandaria, Jaiprakash and Gupta, Tarun, IASTA-2010, Darjeeling, (24th -26th Mar, 2010).

43. Measurement and Chemical Characterisation of Background Aerosol in the Delhi Region. Amrita Singhai, Anil Mandaria, Gazala Habib and Gupta, Tarun, IASTA-2010, Darjeeling, (24th -26th Mar, 2010).


Computer Science & Engineering


67. One-way Functions and the Berman-Hartmanis Conjecture, Conference on Computational Complexity, 194-202, Year: 2009, Authors: Manindra Agrawal and Osamu Watanabe

68. On Low Distortion Embeddings of Statistical Distance Measures into Low Dimensional Spaces.. International Conference on Database and Expert


Electrical

77. Effects of hardeners, catalysts and accelerators on dielectric properties of different resin systems for microwave material processing applications., Proceedings, 12th International Conference on Microwave and High Frequency Heating, Karlsruhe, Germany, September 7-10, 2009, M. J. Akhtar et al.


82. Image based visual serving of a 7 DOF robot manipulator using distributed fuzzy proportional controller, IEEE World Congress on Computational Intelligence, (Accepted) Barcelona, Spain, July 18-23, 2010, Laxmidhar Behera, Indrazno Siradjuddin, T.M. McGinnity and Sonya Coleman.


85. Update and analysis of economic current density of low-voltage copper cables, First International Conference on Sustainable Power Generation and Supply (SUPERGEN), Nanjing, China, April 6-7, 2009, Minghui Chen, Xiangzhen He, Fushuan Wen and S.N. Singh.


90. Study of hole transport interlayer in CUPC/C60 based organic solar cells
International Photovoltaic Science and Engineering Conference-18 (PVSEC-18),
Calcutta, 19-23 January, 2009, Debjit Datta, Anirban Bagui, Vibha Tripathi, S.
Sundar Kumar Iyer and Satyendra Kumar.
91. Flexible P3HT:PCBM bulk heterojunction solar cells, International
Photovoltaic Science and Engineering Conference-18 (PVSEC-18), Calcutta, 19-
92. Development of rhodamine endcapped thiophene based devices for solar cell
application, International Photovoltaic Science and Engineering Conference-18
(PVSEC-18), Calcutta, 19-23 January, 2009, Ashish Dembla, S. Sundar Kumar
Iyer and N. Somanathan.
93. Combining edge and color features for tracking partially occluded humans,
ACCV 2009: 9th Asian Conference on Computer Vision, Xi’an China, Sept 23-
94. Photodegradation of dielectric surrounding tree channels within solids, Indo-
German Conference on PDE, Scientific Computing and Optimization in
Applications, IIT Kanpur, India October 2009, Alireza A. Ganjovi, Nandini
Gupta.
95. Retention modeling of nanocrystalline flash memories: A Monte Carlo
approach, 2010 IEEE International Conference on Semiconductor Electronics
(ICSE 2010), June 28–30, Melaka, Malaysia, B. Ghosh and S. K. Banerjee.
96. An information retrieval model based on semantically adapted vector space
model, ICON 2009, December 14-17, Hyderabad, INDIA, Pawan Goyal,
Laxmidhar Behera and T. M. McGinnity.
97. Entailment of causal queries in narratives using action language. KDIR’09 (Int
Conf Knowledge Discovery and Information Retrieval), October 06-08,
Portugal, Pawan Goyal, Laxmidhar Behera and T. M. McGinnity.
98. An information retrieval model based on automatically learnt concept
hierarchies. In the proceedings of IEEE ICSC (Int Conf Semantic Computing)
M. McGinnity.
99. Sensor integration of a mobile robot for obstacle avoidance, Int Conf and
Exhibition on Aerospace Engineering, IIsc, Bangalore, May 2009, Meenakshi
Gupta and Laxmidhar Behera.
100. PIC-MCC Modeling for Dusty Plasma, 36th IEEE Conference on Plasma
101. Set theory and composition of processors, IMST 2009 - FIM XVIII: Eighteenth
International Conference of Forum for Interdisciplinary Mathematics on
Interdisciplinary Mathematical and Statistical Techniques, Aug 2-4, 2009,
JUIT, Waknaghat, India, Richa Gupta, K S Venkatesh.
102. Preservance topology and complex set theory, IMST 2009 - FIM XVIII:
Eighteenth International Conference of Forum for Interdisciplinary


114. Annealing of copper phthalocyanine thin-film in a dc electric field, International Photovoltaic Science and Engineering Conference-18 (PVSEC-


MOPSO based day-ahead optimal self-scheduling of generators under electricity price forecast uncertainty, IEEE General Meeting, July 24-28, 2009, Calgary, Canada (Panel Paper), Naran M. Pindoriya and SN Singh.

Hybrid particle swarm optimization based day-ahead self-scheduling for thermal generator in competitive electricity market, ISAP09, Brazil, November 8-12, 2009, N. M. Pindoriya, S. N. Singh and J. Østergaard.


Mechatronic temperature-dependent dielectric properties measurement at 2.45 GHz using a rectangular waveguide. Proceedings, 12th International Conference on Microwave and High Frequency Heating, Karlsruhe, Germany, September 7-10, 2009, D. Prastiyanto, M. J. Akhtar et al.,


144. Band-pass filter using symmetrical left-handed transmission line zeroth-order resonators accepted for presentation in 5th German Microwave Conference (GeMiC) 2010 Berlin, Germany in March 2010, K. V. Srivastava, G. Naga Satish, A. Biswas and D. Kettle.


Industrial Management & Engineering

150. Vertical Decomposition Approach for Two Stage Capacitated Warehouse Location Problems, Proceedings, ICOBM conference, Malaysia, 2010; paper number 77; Verma, Priyanka and Sharma, RRK.
151. New Lagrangian Relaxation Based Approach to solve Capacitated Lot-sizing Problem with Backlogging, Proceedings, ICOBM conference, Malaysia, 2010; paper number 82; Verma, Mayank and Sharma, RRK.


162. Categorization of News Articles: A Model Based on Discriminative Term Extraction Method IEEE Conference proceedings services, The Second International Conference on Advances in Databases, Knowledge, and Data Applications, DBKDA, pp. 149-154, April 11-16, 2010, Menuires, France; Abhishek Sanwaliya, Kripa Shanker and Subhas C. Misra.

Materials Science and Engineering


180. Feedback control of vortex shedding behind a square cylinder with inline oscillations, paper number AT-9 (p54), Proceedings of ExHFT-7 [7th World


188. LES of flow past two circular cylinders in staggered, tandem and side-by-side arrangements, 8th Asian Computational Fluid Dynamics Conference, Hong Kong, 10-14 January, 2010, S. Sarkar and Sudipto Sarkar.


194. LES of Flow over Circular and Elliptic cylinder in Proximity of Wall, Turbulence and Shear Flow Phenomena (TSFP-6), Seoul, South Korea, 22-24 June, 2009, S. Sarkar and Sudipto Sarkar.

204. Nano-finishing of metal matrix composites using polymer rheological abrasive medium, Processing and fabrication of advanced materials (PFAM18), Tohoku University, Sendai, Japan, December 12-14 2009, Mamilla Ravi Sankar, J.Ramkumar and V.K.Jain.


Gupta, T Naveen Kumar, Laximidhar Behera, K S Venkatesh and Ashish Dutta.


241. An evolutionary approach for bilevel multi-objective problems. Proceedings of 20th International Conference on Multiple Criteria Decision Making (MCDM-09). (Also Communications in Computer and Information Science No. 35 entitled 'Cutting-Edge Research Topics on Multiple Criteria Decision Making') Berlin: Springer, (Chengdu, China). (pp. 17--24), 2009, Deb, K. and Sinha, A.
Humanities and Social Sciences


246. Word versus Word-meaning: A la Śābdanirnaya, Proceeding of the National Seminar on Mind and Meaning, Department of Philosophy in collaboration with the Department of Neural and Cognitive Sciences, University of Hyderabad, March, 2010 (forthcoming)- Nirmalya Guha.


248. Estimation of Regression Coefficient of the Selected Population, with an Application to Portfolio Theory of Corporate Finance (Co-authors: Dr. S. Gangopadhyay and Dr. A. Kar-Gangopadhyay), in Proceedings of 18th International Conference of ‘Forum for Interdisciplinary Mathematics’ on Interdisciplinary Mathematical and Statistical Techniques, held during August 2-4, 2009, at Jaypee University of Information Technology, Waknaghat, Dist. Solan (Near Shimla), Himachal Pradesh, India. – Praveen Kulshreshtha.

Chemistry


Mathematics and Statistics


Physics

261. Origin of time dependent effects observed in phase separated systems
Physics : Conference Series 150, p 42103 (4 pages)

262. RBS/channeling studies of swift heavy ion irradiated GaN layers, AIP
Pathak, C Muntele, D Ila, S A Khan and D K Avasthi.

263. Optimization of pulse reversal electrodeposition with fine grains and low
roughness for GaAs RF MEMS structures, Proceedings of 2nd International
Workshop on Electron Devices and Semiconductor Technology (2009)
5166124, G S Saravanam, K M Bhat, S D Prasad, S Chaturvedi, R
Muralidharan, S Dhamodaran, N Sathish.

Sangeeta Chakrabarti, S. Anantha Ramakrishna, and Harshawardhan
Wanare

265. Flux penetration asymmetry and inhomogeneous pinning in
CaFe1.94Co0.06As2; Proceedings of the DAE solid state physics symposium
Kumar, S. K. Dhar, A. Thamizhavel.

266. Novel large amplitude low frequency velocity fluctuations in the elastic
phase of driven vortex matter; Proceedings of the DAE solid state
physics symposium (2009) Vol. 54, 73-76 Proceedings of the DAE solid state
physics symposium (2009) Vol. 54, 73-76, Shyam Mohan, Jaivardhan Sinha,

267. Visualization of flux penetration in a high-Tc superconductor; Proceedings of
the DAE solid state physics symposium (2009), Vol. 54, 807-808, Gorky
Shaw, Pabitra Mandal, Jaivardhan Sinha and S. S. Banerjee.

268. Magneto optical imaging of laser irradiated hard magnetic material;
Proceedings of the DAE solid state physics symposium (2009), Vol. 54, 1083-
Kumar.

269. Proceedings of 23rd National Symposium on Plasma Science & Technology
(PLASMA-2008), Mumbai 2008, Journal of Physics: Conference Series 208,

270. Anisotropic turbulence studies of liquid metal MHD flows using numerical
simulations, in the Proceedings of 23rd National Symposium on Plasma
Science & Technology (PLASMA-2008), Mumbai 2008, Journal of Physics:
Kumar.


CONFERENCES ATTENDED OUTSIDE IIT KANPUR

Aerospace

1. IISc Centenary International Conference and Exhibition on Aerospace Engineering, Bangalore 2009, Venkatesan, C.

Biological Science and Bio-engineering

6. Eminent chemists from around the country attended the conference. Invited talk was presented by Amitabha Bandyopadhyay.
8. Molecular Basis of Locus Heterogeneity in Lafora Progressive Myoclonus Epilepsy: Invited talk delivered in the International Conference on the Role of Genetics in Clinical Practice, organized by the Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow (March 6 to 8, 2010), Ganesh S.
9. Impact of alternative mRNA splicing in the etiology of Lafora progressive myoclonus epilepsy: Invited talk delivered in the International Conference on Genetic and Molecular Diagnosis in Modern Medicine and Biology, organized by the Yenepoya University, Mangalore, February 27, to March 2, 2010, Ganesh S.
12. Discovery of Novel Modulators of Neurotoxicity as Potential Therapeutic Interventions in Neurodegenerative Disorders: Invited talk delivered in the Translational Health Research: Pathways to Discovery, organized by the King George Medical University, Lucknow, April 28-29, 2009, Ganesh S.
13. Design of cryogel biomaterials for bioprocess and tissue engineering applications. Emerging Paradigms in Biochemical Engineering, 9-10th October, 2009. Banaras Hindu University, India – Key note talk and Session Chair, Kumar, A.

14. New design of biomaterials for biomedical applications. NFTDC, Hyderabad, 21st November, Invited Talk, Kumar, A.

15. An overview on cryogel polymeric scaffolds with special approach to cartilage tissue engineering. 8-10th July 2009, TCES meeting, University of Glasgow, Glasgow, Ireland, Kumar, A.


17. XXVII Annual Conference of Indian Academy of Neurosciences, Jaipur, India, 2009, presented invited lecture, Anupam Pal.

18. A genetic screen to identify partners of PUF-8, a C. elegans member of the PUF family of RNA-binding proteins. International Worm Meeting, UCLA, Los Angeles, CA, USA2009, Subramaniam K.

Chemical


20. Time – stress and time – temperature superposition in soft glassy materials, SPS March Meeting on Soft Matter Physics, School of Physical Sciences, Jawaharlal Nehru University, New Delhi, March 2010, Y M Joshi.


23. SPS March Meeting on Soft Matter Physics, School of Physical Sciences, Jawaharlal Nehru University, New Delhi, March 2010, gave an invited talk, Y M Joshi.


27. Genetic Algorithm (GA), Multi-objective Optimization (MOO) and Biomimetic Adaptations, LIT, Nagpur, February 2010, S.K. Gupta.


33. Enzymatic conversion of lactose into galacto-oligosaccharides, Indo-Australian workshop held at Jadavpur University, December 2009, P.K. Bhattacharya.

34. International Workshop on ‘Advances in Membrane Technology for Water Treatment, Environment and Clean Energy’ at Central Glass & Ceramic Research Institute (CSIR) on December 2009 as Chairman of Session on (8th December) on ‘Hollow Fibre, Capillary Membranes & CO₂ Capture’, P.K. Bhattacharya.


44. Carbon nanofibers, nanoparticles, and molecular sieves in environmental remediation and pharmaceutical applications, First Asian Carbon Society, Delhi, November 2009, N. Verma.


51. International Conference on Chemical, Biological & Environmental Engineering (CBEE 2009), Singapore Iron Doped Microporous Activated Carbon (Phenolic resin) as an Adsorbent for Arsenic Removal, October 2009, A. Sharma, N. Sankararamakrishnan, A. Sharma and N. Verma.


55. Time-Temperature superposition in soft glassy materials, 4th Asian Particle Technology Symposium (APT2009), New Delhi, September 2009, Y.M. Joshi.


58. Wetting transition and boundary tension of dimer forming associating fluids, 4th Asian Particle Symposium (APT 2009), Delhi, September 2009, S. Khan and J.K. Singh.


60. 4th Asian Particle Technology Symposium (APT2009), New Delhi, September 2009, chaired a session and gave an invited talk, YM Joshi.


63. Alkane ODH Reaction on V2O5/TiO2-Al2O3 Catalysts: In-situ DRIFT and Reactivity studies, 8th World Congress of Chemical Engineering, Montreal, Canada, August 2009, D. Shee and G. Deo.

65. Advances in Chemical Engineering and Process Technology, NCL Diamond Jubilee Symposium, Pune, June 2009, chaired a session and gave an invited talk, YM Joshi.

66. Time-Temperature superposition in soft glassy materials, Advances in Chemical Engineering and Process Technology (ACEPT), National Chemical Laboratory, Pune, June 2009, Y.M. Joshi.


68. Future directions in chemical engineering research, NCL Diamond Jubilee Symposium, Advances in Chemical Engineering and Process Technologies (ACEPT), National Chemical Laboratory, Pune, June 2009, A. Sharma.


Civil


74. Key-note address, Perpetual pavements: innovations in pavement design Civil Engineering Conference - Innovations Without Limits, September 18-19, 2009, NIT Hamirpur, Hamirpur by Das A.


77. Air Pollution and Health: Bridging the Gap between Sources and Health Effects, Golden Jubilee Lecture delivered at Department of Chemistry, DBS College, Kanpur, 9th Dec, 2009, Tarun Gupta


82. Air Pollution Climate and Health: Bridging the Gap from Sources to Effects, Presentation for Pioneer Batch Golden Jubilee Reunion at IIT Kanpur, 20th Feb, 2010, Tarun Gupta.


86. The Lifeline Earthquake Engineering in a Multi-hazard Environment (TCLEE 2009), Oakland, California., USA, June28 - July 1, 2009, Presenting contributed paper by Samit Ray Chaudhuri.


88. Titan Through Time, NASA Goddard Space Flight Center, Greenbelt, US, 6-8 April, 2010 by Tripathi, S.N.
Computer Science & Engineering

89. International Conference on Algorithmic Aspects in Information and Management (AAIM 2009), San Francisco, USA, June 15-17, 2009, Sumit Ganguly.


91. European Symposium on Algorithms (ESA 2009), Copenhagen, Denmark, September 7-9, 2009, Sumit Ganguly.


94. India Software Engineering Conference 2010 Infosys, Mysore, India, Feb 25-27, 2010 (Programme Committee Chair), Sanjeev K Aggarwal


96. Indo-French Workshop on Automata Concurrency and Timed Systems, ACTS II. Chennai Mathematical Institute, Feb. 1-3, 2010. (Type of participation: attended the workshop), Anil Seth.

Electrical


99. NCC 2010, Jan 29-31, 2010, Chaired a session and (student) presented a contributed paper, Banerjee Adrish.

100. Meenakshi Gupta and Laxmidhar Behera, Sensor Integration of a Mobile Robot for Obstacle Avoidance, Int Conf and Exhibition on Aerospace Engineering, IISc, Bangalore, May 2009, TAROS 2009, University of Ulster UK, Behera L.


102. Pawan Goyal, Laxmidhar Behera and T. M. McGinnity, An Information Retrieval Model Based On Semantically Adapted Vector Space Model, ICON 2009, December 14-17, Hyderabad, INDIA, Behera L.

103. Chaired a session at ICICS, Macau in Dec 2009, Chaturvedi AK.
104. XVth International Workshop on the Physics of Semiconductor Devices, New Delhi, 15th to 19th December, 2009, attendee, Ghosh B.
108. 25th International Workshop on the Physics of Semiconductor Devices (IWPSD’09), 15th -19th December 2009, Delhi, India, Iyer S.S.K.
109. Workshop on Control and Inverse Problems, 1-15 Dec 2009, organized by the IISc Mathematics Initiative, Dept. of Mathematics, Indian Institute of Science, Bangalore (Invited talk), Naik Naren
110. Session Chair, Digital Circuits and Systems, IEEE TENCON Conference, Singapore, Nov. 23-26, 2009, Qureshi S.
112. Two contributed papers, International Semiconductor Device Research Symposium (ISDRS), University of Maryland, USA, December 7-9, 2009 Qureshi S.
113. IEEE General Meeting, July 24-28, Calgary, Canada (Panelist), Singh S.N.
114. NWPC 2009, September 10-11, Bornholm, Denmark, Singh S.N.
115. 15th International Conference on Intelligent System Applications to Power Systems (ISAP07), 8-12 November, 2009, Curitiba, Brazil, Singh S.N.
117. ACM Int. Conf. on Convergence and Hybrid Information Technology ICHIT 2009, Daejeon, Korea, 27-29 Aug. 2009, Sircar P.
118. Asia Pacific Microwave Conference-2009, Singapore in Dec 2009. (Contributed paper), Srivastava K.V.
119. Taiwan-India Bilateral Workshop on Intelligent Chip Design at National Tsing Hua University, Hsinchu, Taiwan during Nov 1 to Nov 4, 2009. (Invited paper), Srivastava K.V.
120. IEEE Electric Ship Technology Symposium (ESTS 2009) during 20-22 April 2009 at Baltimore, MD USA. Chaired a session and presented a paper, Srivastava S.C.
122. Self Learning Systems for Surveillance Video Analysis, Electrical Engineering Department, IISc Bangalore, 17/06/2009, Venkatesh K.S.
Industrial & Management Engineering


130. Theme presentation on ‘Problem Based Learning’ at Design Innovation Education Forum, Oberoi Delhi, 16th – 17th December, 2009, J Chatterjee.

131. OPPALS Workshop on Creative Research Approaches, Salzburg University, Austria, J Chatterjee.


134. CII-NID Design Summit, New Delhi, 15th -16th December, 2009, J Chatterjee.


139. 5th National Quality Conclave, Quality Council of India New Delhi 19-20 Feb 2010; AK Mittal.

140. QCFI Bhilai Chapter Inaugural 13 Feb 2010 Bhilai Chief Guest, Invited Talk; AK Mittal.

141. National Workshop on IPR and Patenting in Health Care; March 27-28, 2010 SGPGI Lucknow Session Chair, Resource Person; AK Mittal.

142. The New ITO/ BPO Destination 10th January 2010 MCC Kanpur, Moderator Panel Discussion; AK Mittal.


144. 2nd Learning Convention VLFM 19th Feb 2010 CII New Delhi; AK Mittal.

145. Roundtable conference with USM, Industry, IITK May 5th, 2009 Penang Malaysia; IITK Representative; AK Mittal.


147. QCFI Annual Convention Dec18-20, 2009 Bangalore Inaugural speaker; AK Mittal.

148. APORS 2009, Triennial conf of Asia Pacific Societies December 6-9, 2009; Jaipur Organizing Chair, Invited Lecture; AK Mittal.

149. Workshop on Radically simple IT of Shinsehi Bank 13 April 2009, Mumbai; Resource person; AK Mittal.


151. Association of Asian Pacific Operational Research Societies (APORS), Jaipuria Institute of Management, Jaipur, December 06-09, 2009; P Mehta.

152. Workshop of Drug-discovery and development in India: challenges and opportunities, IIM Bangalore, Feb 5, 1010; P Mehta.

Materials Science and Engineering

153. Indian Science Congress Association, Awardee and speaker, Jan. 3-7th 2010, Trivandrum, Kantesh Balani.


158. Uniqueness of glassy structure on the crystallization behavior and its macroplasticity, Discussion Meeting at Coorg Feb. 21-24th 2010, K. Mondal.


164. 4th Asian Particle Technology (APT-2009), held in New Delhi during September 14-16, 2009, S.P. Mehrotra.


166. Structural, Magnetic and Electrical Properties of Zr-Doped BiFeO₃ Thin Films, Poster Presentation at MRS Fall Meeing 2009, Boston (USA), Somdutta Mukherjee, Rajeev Gupta, Ashish Garg.


Mechanical

172. Recent Advances in Nonlinear Mechanics, Kuala Lumpur, Malaysia, August 24-27, 2009, chairing session as well as presenting contributed papers, Pankaj Wahi.
178. BARC school on micromachining and sensing technologies, IIT Mumbai, 2-7th June, 2009, S. Bhattacharya.
180. CEP on Smart Polymers for Electronic and Smart Application from30th November – 4th December, 2009 at DMSRDE, G.T. Road, Kanpur – 208013, S. Bhattacharya.
182. Department of Chemical Engineering and technology, Punjab Engineering College, Punjab University, Chandigarh, 3-4th April, 2010 S. Bhattacharya.
188. Fifth International Conference on Evolutionary Multi-Criterion Optimization (EMO-09), Nantes, France, April 2009. Contributed papers, chairing sessions, K. Deb.
190. Multi-Criterion Decision Making (MCDM), Chengdu, China, July 2009, Keynote speaker, tutorial speaker, contributed papers, K. Deb.
191. CSIRO Workshop on Multi-Criterion Optimization, New Castle, Australia (September 2009), invited workshop speaker, K. Deb.

Humanities and Social Sciences

challenges, Department of Sociology, Central University of Hyderabad, 5-6 March, 2010 – Amman Madan.


18th Annual Conference of National Academy of Psychology at Bangalore University, Bengaluru, 6-9 March, 2010. - Kumar Ravi Priya.


210. Participant in the Travel and Trauma Colloquium, Institute of Irish Studies, Queen’s University, Belfast, UK, 17-18 April 2009. - Munmun Jha.


212. Attended National Seminar on Mind and Meaning, organized by the Department of Philosophy in collaboration with the Department of Neural and Cognitive Sciences, University of Hyderabad, March, 2010 – Mini Chandran.


224. Chaired the technical session entitled: Traditional Forest related knowledge and Forest Resource Conservation, and was Discussant to the technical session: Shifting Cultivation and agricultural Production Management - Binay K Pattnaik.


226. Presented a paper ‘Rasa Aesthetics and Interpretation’ in the national conference organized by the Balvant Parekh Centre for General Semantics and the Other Human Sciences, Baroda in November, 2009. – Prashant Bagad.


Chemistry

228. Indo-French Meeting on Diffusion in nanoporous materials, held at Fortune Select JP Cosmos, Bangalore, April 2-5, 2009, A. Chandra.


231. Discussion Meeting on Chemical Reactions in Unusual Media, National Chemical Laboratory, Pune, October 8-9, 2009, A. Chandra.

232. Supercomputing-09 and ATIP 1st Workshop on HPC in India 2009, held in Portland, USA, November 14-20, 2009, A. Chandra.


236. Probing the ultrafast solution dynamics of a cyanine dye in DCM solvent interfaced with water medium, Femtochemistry’09, Beijing, China, Aug.8-13, 2009, Poster presentation. T. Goswami, S.K. Karthick Kumar and Debabrata Goswami.

237. Femtosecond pulse induced nonlinearity and Thermal Relaxation Dynamics, Femtochemistry’09, Beijing, China, Aug. 8-13, 2009, Poster presentation, I. Bhattacharyya and Debabrata Goswami.


239. Simultaneous effect of polarization and chirp on the control of femtosecond molecular fragmentation, Tapas Goswami, S. Karthick Kumar, Aveek Dutta and Debabrata Goswami, 6th Asian Conference on Ultrafast Phenomena ACUP-2010, Taipie, Taiwan, Jan 10-13, 2010, Poster Presentation.


242. Spatiotemporal Control in Laser-Scanning Fluorescence Microscopy and Optical Trapping, Oral Presentation, Jan. 15, 2010 Arijit Kumar De and Debabrata Goswami.

243. Spectrally Resolved Femtosecond Photon Echo Spectroscopy of Astaxanthin, at Spectroscopy and Dynamics of Molecules and Clusters (SDMC) Discussion


248. Invited lecture at Sri Krishnammaal College for women, Coimbatore, Feb 4th 2010, on Rare Earth mangatites-Spintronics, S. Sundar Manoharan.


252. Chemical Research Society of India, Indian Institute of Chemical Technology, Hyderabad (February 5-7, 2010), R.N. Mukherjee.


255. RAMET, Kolkata, January 2010, Invited Talk, Nisanth N. Nair


259. Metal Ion Displacements and Axial Ligand Orientations in a Nonplanar Porphyrinic Environment School and Symposium on Advanced Biological Inorganic Chemistry (SaBIC-2009) held at TIFR, Mumbai from Nov. 2-7, 2009, S.P. Rath (Presenting invited talk)

260. Title: Bioinspired Design of Porphyrin and Bisporphyrin based Metal Complex


265. Invited talk, the department of chemistry, University of Jena, July 3rd Germany, 2009, S. Sarkar.

266. Invited talk, the department of chemistry, University of Paderborn, 21st July, Germany, 2009, S. Sarkar.

267. Invited talk, the department of chemistry and biochemistry, University of Duquesne, PA, USA, 8th March, 2010, S. Sarkar.

268. Invited talk in Inorganic Chemistry Colloquium at Boston, department of chemistry and chemical biology, Harvard University, USA, February 27, 2010 S. Sarkar.


272. Enantioselective Reactions Catalyzed by Chiral Pyridine 2,6-Bis(5',5'-diphenyloxazoline)-Cu(II) Complexes Invited talk in International Conference on Heterocyclic Chemistry at St. Johns, Newfoundland, Canada on 3rd August, 2009, V.K. Singh.


274. DST’s Composite delegation to workout cooperation strategy and identify few themes of mutual interest, Moscow, 14-16 September, 2009, V.K. Singh.
275. Collaborative Opportunities at Indian Institute of Science Education and Research (IISER) Bhopal, India Indo-German Workshop on Collaboration Opportunities at the Frontiers of Modern Chemistry. Cologne 21, September 2009, V.K. Singh.

276. Symposium on symmetry, IISER, Mohali, K. Srihari.

277. Spectroscopy and Dynamics of Molecules and Clusters VII, Goa, K. Srihari.

278. Second German-Indian symposium on frontiers of chemistry, Leipzig, Germany, Conference on Tunneling and scattering in complex systems – from single to many particle physics, Dresden, Germany, K. Srihari.

279. A lecture entitled new Dimensions in Chemical Sciences was delivered in a one-day symposium held at P.G. College, Osmania University on January 30, 2010, Y. D. Vankar.

Mathematics and Statistics


286. Invited talk at a mini symposium on Least squares methods at ICOSAHOM at Norwegian University of Science and Technology, Trier from 20-27 June, P. Dutt.
287. RMS annual conference Saturation by structural subspaces in Banach Spaces, S. Dutta.

288. Participated in Eighth Mississippi-UAB conference on Differential Equations & Computational Simulations, May 7-9, 2009 at Mississippi State University, USA. Presented an invited paper entitled “A high order parameter uniform scheme for solving singularly perturbed parabolic problems with small parameters” at the conference, M.K. Kadalbajoo.


293. 11th discussion meeting on Harmonic Analysis, NISER Bhubaneshwar, January 2010, P. Mohanty.


295. Delivered an invited talk on Degenerate nonlinear Elliptic Problem. Recent Advances in Mathematical Sciences and Applications (RAMSA)-An International Conference, held at GVP College of Engg. Madhurawada, Visakhapatnam, 530048, A.P. India, V. Raghavendra.


307. 11th discussion meeting in Harmonic Analysis, NISER Bhubaneswar, Speaker, S.K. Ray.

308. Attended an Instructional and International conference on Number Theory, PDE and Geometry held at Department of Mathematics, University of Calicut during August 24-29, 2009. I presented a paper on “Obata’s theorem for Kahler Manifolds, G. Santhanam.


311. 64th Dec. 2009 to 2nd Annual meeting of the stle, ORLANDO, FL, USA May 17-212009, Numerical Simulation of Thermal and Roughness effects on the Performance of Finite Tilted Pad Slider Bearing, P. Sinha, A. Getachew.


313. Gave a Plenary Talk “Estimation of Entropy and Its Applications” in Eighteenth International Conference of Forum for Interdisciplinary

Physics

315. Summer college on Non-equilibrium physics from to quantum low-dimensional systems, 6th-24th July, at Abdus Salam ICTP, Trieste, Italy, A. Dutta.
316. Invited participant, International Colloquium on Perspectives in Fundamental Research, Tata Institute of Fundamental Research, Mumbai, March 3-6, 2010, D. Chowdhury.
320. ICOP 2009 International Conference on Optics and Photonics CSIO, Chandigarh, India, 30 Oct.1 Nov. 2009 Invited Lecture entitled Controlling metamaterial properties via imbedded resonant materials, S. Anantha Ramakrishna
321. 9th International Conference on Materials and Mechanisms of Superconductivity, MFS-IX, Tokyo 2009, 7th September to 12th September, 2009 in Keio Plaza Hotel, Tokyo Japan. Presented contributed paper, S. Banerjee
323. MRS Fall Meeting, Boston, November 30-December 4, 2009 presented three contributed papers. Rajeev Gupta.
SEMINAR PRESENTED

Aerospace


Biological Science and Bio-engineering

5. Invited speaker at the Young Investigator Meeting, Cambridge, 11th-13th Sep 2009, Pradip Sinha.
6. Yin and Yang of Skeletal Development: Gene Hunting and Genetics Central Drug Research Institute, Lucknow – 3rd September, 2009, Amitabha Bandyopadhyay
9. Invited talk: Methods to predict protein structures: An overview. In the Workshop on Bioinformatics: Research & Applications organized by the Department of Biochemistry, University of Lucknow, 18/Feb/2010, R. Sankararamakrishnan.
10. Molecular Basis of Locus Heterogeneity in Lafora Progressive Myoclonus Epilepsy: Invited talk delivered in the International Conference on the Role of Genetics in Clinical Practice, organized by the Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow (March 6 to 8, 2010), Ganesh S.
11. Impact of alternative mRNA splicing in the etiology of Lafora progressive myoclonus epilepsy: Invited talk delivered in the International Conference on Genetic and Molecular Diagnosis in Modern Medicine and Biology, organized by the Yenepoya University, Mangalore (February 27, to March 2, 2010), Ganesh S.


14. Discovery of Novel Modulators of Neurotoxicity as Potential Therapeutic Interventions in Neurodegenerative Disorders: Invited talk delivered in the Translational Health Research: Pathways to Discovery, organized by the King George Medical University, Lucknow, (April 28-29, 2009), Ganesh S.

15. Invited speaker, National Science Day at IIT-Kanpur. Theme: Gender equity for prosperity with peace Title of talk: Being a woman in science,; March 30th , 2010, Jonaki Sen.


19. Biomechanics of reflux protection, Pan European Special Interest Group meeting on Dynamic Magnetic Resonance Imaging in Gastrointestinal Studies, Biomedical Research Unit, University of Nottingham, UK, February 26, 2010, Anupam Pal.

20. Development of an Image Analysis Tool for Studies of Gastrointestinal Tract in Three Dimensions from Magnetic Resonance Imaging, Division of Gastroenterology and Hepatology, University Hospital, Zurich, Switzerland, March 1, 2010, Anupam Pal.


Chemical


23. Probing interfacial adhesion on smooth and patterned layer of adhesive, Max-Planck-Institut für Polymerforschung, Mainz, March 2010, Ghatak A.
26. Fluid near surfaces, Department of Polymer Engineering, BITS Ranchi, January 2010, Singh JK.
29. Fluid near surfaces, Department of Chemical and Biomolecular engineering, Vanderbilt University, November 2009, Singh JK.
32. Efficient computation of free energy of crystal phases due to external potentials by error-biased Bennett acceptance ratio method, Department of Aerospace Engineering, I. I. T. Kanpur, September 2009, P.A. Apte.
33. Ask not what you can do for the (Density functional) theory, but what the theory can do for you: How to convert a catalytic engineer to a quantum mechanic, Indian Institute of Science, May 2009, Pala RGS.

Civil

34. Interpretation of falling weight deflectometer data, Seloflex World Conference, New Delhi, February 5, 2010 by Das A.
35. Why roads fail?, Siddhananda Memorial Lecture, Bengal Engineering and Science University, Shibpur, December 18, 2009 by Das A.
36. Design principles for design of bituminous pavement with stabilized/ cemented layer, National Workshop on Stabilization of Soil and Granular Layers for Pavements, PEC University of Technology, Chandigarh, October 24, 2009 by Das A.
37. Perpetual pavements: innovations in pavement design, (Key-note address), Civil Engineering Conference - Innovations Without Limits, September 18-19, 2009, NIT Hamirpur, Hamirpur by Das A.
38. Pavement engineering research at IIT Kanpur, NTEC, Department of Civil Engineering, University of Nottingham, July 17, 2009 by Das A.
Analysis (WAST2009), 15-16 October 2009, IIT Kanpur, Kanpur, India by Jain, A.
40. Attended seminar on Seismic Analysis of Some Geotechnical Problems – Pseudo-dynamic Approach at University of Naples, Italy, 2009, Ghosh, P.
41. Attended seminar on Seismic Response of Bridge Foundation in TRIGNO-VIII: Geotechnical Aspect at University of Molise, Italy, 2009, Ghosh, P.
42. Attended INAE Annual Convention at IGCAR, Kalpakkam, (17th Dec, 2009), Gupta Tarun.
43. Attended IASTA-2010, Darjeeling, (24th -26th Mar, 2010), Gupta Tarun.
44. Attended National Research Conference on Climate Change, IIT Delhi, (5th-6th Mar, 2010), Gupta Tarun.
47. Invited lecture on Sediment sourcing in the Gangetic alluvium, Himalayan foreland basin: competition between Himalayan and cratonic hinterland, CNRS Laboratory, Nancy, France, June 3, 2009 by Sinha, Rajiv.
49. Aerosol charging in planetary atmosphere and its implication to lightning generation, Talk in Planex Seminar, Physical Research Laboratory, Ahemdbad, 10th May, 2009 by Tripathi, S.N.
50. Optical properties of non-spherical particles, PRL Colloquium, Physical Research Laboratory, Ahemdabad, 11th May, 2009 by Tripathi, S.N.

Computer Science & Engineering

54. Two Problems of Number Theory, Invited talk at Kurukshetra University, Jan 2010, Manindra Agrawal.
57. On Earth Mover’s Distance: A Spatially Sensitive Distance Measure at the Dept. of Computer Science, Free University of Bozen-Bolzano, Italy. Dec, 2009, Arnab Bhattacharya.
59. Parity Games on Higher Order Multi-Stack Systems, A one hour talk delivered on 29 September 2009, at Laboratory of Computer Science (LaBRI), Bordeaux, France, Anil Seth.

Electrical
63. Turbo codes and its application to optical and relay channels, Dipartimento di Elettronica, Politecnico di Torino, Italy, June 2009.
64. Spectrum sensing for cognitive radio, Defense Electronics Application Laboratory, Dehradun, October 2009, Adrish Banerjee.
69. Cognitive artificial intelligence, workshop on integrating mathematics with spirituality, Dec 2009, Delhi University, Laxmidhar Behera.
70. Applications of assistive robotics in health care, Indo-French Workshop on ICT in Health Care, March 2010, Laxmidhar Behera.
71. Delivered an invited talk on, Antenna Selection and Beamforming Using Delayed CSI at ICICS, Macau in Dec 2009, Chaturvedi A. K.

72. An optimum unified power quality conditioner with minimum VA loading Netaji Subhas Institute of Technology (NSIT), New Delhi, (Organized by IEEE Delhi Section), 16\textsuperscript{th} Nov. Das S.P.

73. Nano-dielectrics for the power industry at the workshop entitled Recent trends in condition monitoring of power apparatus and systems invited lecture at Department of Electrical Engineering, IIT Madras, during 26th to 30th Oct. 2009, sponsored by DST, New Delhi, Gupta Nandini.


75. Internet based experiments: exploring a new paradigm in distance education, Institute Lecture, IIT Kanpur, Oct.21, 2009, John J.


77. Role of academia and industry: experience with the technology mission project on railway safety, Brainstorming Session on health monitoring of automotives, Invited Talk, IIT Kanpur, March 10, 2010, John J.

78. Virtual lab on optical device characterization, HBTI Kanpur, March 27, 2010, John J.

79. Organic electronics, All India Council For Technical Education, Harcourt Butler Technological Institute, Kanpur, 1\textsuperscript{st} January, 2009, Iyer S.S.K.

80. Solar energy research in India—a prospective DST-EPSRC Solar Energy Workshop (Indo-UK initiative), Deputy High Commissioner’s residence, British High Commission, New Delhi, 22nd April, 2009, Iyer S.S.K.


83. VLSI integrated circuit fabrication technology, Tutorial at the 15\textsuperscript{th} International Workshop on the Physics of Semiconductor Devices (IWPSD ’09) Jamia Millia Islamia, New Delhi, 14\textsuperscript{th} December, 2009, Iyer S.S.K.

84. Improving efficiency and lifetime of organic solar cells, Invited talk at the 15\textsuperscript{th} International Workshop on the Physics of Semiconductor Devices (IWPSD ’09) Jamia Millia Islamia, New Delhi, 14\textsuperscript{th} December, 2009, Iyer S.S.K.


89. Qureshi S., delivered a talk titled Recent developments in RFID tag chip design, at National Tsing Hua University (NTHU), Taiwan, November 2 - 3, 2009.
90. Course on MATLAB application to Electrical Engineering, 14-16 December 2009, KNIT Sultanpur (Guest Speaker), Singh S. N.
91. Compact matching circuit design for RFICs using composite right/left handed meta-material transmission line, in Taiwan-India Bilateral Workshop on Intelligent Chip Design at National Tsing Hua University, Hsinchu, Taiwan during Nov 1 to Nov 4, 2009, K. V. Srivastava
92. Enhancing electricity grid security through wide area monitoring and control invited talk in the ECE Department, Mississippi State University USA on 30th June 2009, Srivastava S.C.
93. Smart electric energy delivery systems: An introduction and systems perspective invited talk in the DST SERC workshop on Smart Energy Delivery Systems at IIT Kanpur on 15th January 2010, Srivastava S.C.
94. Srivastava S.C., Synchrophasors based wide area monitoring, protection and control of electricity grid invited seminar at University Sains Malaysia (USM) Penang Malaysia on 3rd March 2010, Srivastava S.C.
95. Self learning systems for surveillance video analysis, Electrical Engineering Department, IISc. Bangalore, 17/06/2009, Venkatesh K.S.
96. Computer vision applications for automated surveillance, metrology and human computer interaction, IRDE Dehradun, 11/01/2010, Venkatesh K.S.

Industrial Management & Engineering

104. An Ecosystem Approach to Service Co-Creation, Software Business & Engineering Institute, Helsinki University of Technology, Espoo Finland, 22nd October, 2009, J Chatterjee.
106. Doctoral Students’ Workshop Facilitation in the New Media Department on Prosumption Phenomena and Managing Customer Integration, 1st to 20th October, 2009, Technical University, Ilmenau, Germany, J Chatterjee.
107. Service Science Factory Seminar & Workshop, Maastricht University, Maastricht Netherlands, 29th October to 4th November, 2009, J Chatterjee.
110. Delivered invited talk on Two Clustering of Gene expression Data at the International Conference on Bioinformatics at SVNIT, Surat, India, during March 25-28, 2010, B. Chandra.
112. Intellectual Property rights and OR, National Seminar RML University Faizabad 28th March 2010; AK Mittal.
113. Economics of regulations with emphasis on development of Power markets 4th Nov 2009, National Power Training Institute (NPTI), Faridabad; Anoop Singh.
114. National Conference on Cases and Research in Power and Energy Sector, as session judge, Power Management Institute, Noida, 16th Dec. 2010; Anoop Singh.


120. Project Financing and PPP, Indian Railways Institute of Transport Management, 10th Dec. 2010; Anoop Singh.


Materials Science and Engineering

122. Invited talk “Processing-microstructure-property (physical and biological) relationship for Hydroxyapatite based Bioceramic composites for hard tissue replacement”; Department of Biomedical Engineering; University of Texas, San Antonio, USA, July 14, 2009, B. Basu.

123. Invited talk “Processing-microstructure-property (physical and biological) relationship for Hydroxyapatite based Bioceramic composites for hard tissue replacement”; Division of Engineering; Brown University, USA, July 16, 2009 B. Basu.

124. Invited talk “Influence of electric field on cell-material interaction”; The fourth Asian Particle Technology Symposium (APT 2009), held in New Delhi during 14-16th September, 2009, B. Basu.

125. Invited talk Hydroxyapatite based bioceramic composites for hard tissue replacement and Analytical/Experimental study on cell-electric field interaction; IIM Varanasi chapter, BHU, 11th December, 2009, B. Basu.

126. Invited talk Influence of electric and magnetic field on cell-material interaction; DAV College, Kanpur, 12th December, 2009, B. Basu.
136. Invited talk Diffusion bonded Metal-Intermetallic interface Characterisation; at workshop on Interfaces and mechanical behavior of materials, UGC Networking Resource Centre for Materials (NRC-M) at the Department of Materials Engineering, IISc, October, 2009, Gouthama.
Mechanical


143. Health Monitoring of Pipes using Conduit Crawling Robot, International Symposium on Research Collaboration, Waseda University, Fukuoka, Japan, 08.03.2010, Bishakh Bhattacharya.


146. Patterns and chaos in convection through bifurcations, at the International Conference on Turbulence with a focus on MHD, Liquid metal and Dynamo, IIT-Kanpur, India, December 21-23, 2009, Pankaj Wahi.


156. BARC school on micromachining and sensing technologies, IIT Mumbai, 2-7th June, 2009, S. Bhattacharya.
160. CEP on Smart Polymers for Electronic and Smart Application from 30th November – 4th December, 2009 at DMSRDE, Kanpur, S. Bhattacharya.
166. Invited lecture at the Department of Chemical Engineering and technology, Punjab Engineering College, Punjab University, Chandigarh, 3-4th April, 2010, S. Bhattacharya.


173. Invited Tutorial to be delivered at CEC-2009 Conference in Trondheim, Norway entitled 'Recent Challenges to Evolutionary Multi-Criterion Optimization (EMO)', May, 2009, K. Deb.

174. Invited Tutorial to be delivered at ACM SIGEVO sponsored Genetic and Evolutionary Computation (GEC-Summit) in Shanghai, China entitled 'Evolutionary Multi-Objective Optimization: Current Approaches and Future Directions', June, 2009, K. Deb.


Humanities and Social Sciences


179. Curricular Knowledge and Indian Education: Systemic Inequality and Pathways of Hope - Invited lecture at ICICI Centre for Elementary Education, Pune, 30th November 2009, Amman Madan.


189. Inaugural address -Workshop on Integration of Technology in Teacher Education, CSJM University, Kanpur – May 26, 2009 – Braj Bhushan.

190. Introduction to Human Rights. Orientation Programme, UGC Academic Staff College and Department of Political Science, Lucknow University, Lucknow, 21 January 2010. - Munmun Jha.

191. Human Rights Movement in India: An Overview. Anthropology and Ethnomusicology Research Seminar, School of History and Anthropology, Queen’s University, Belfast, 5 May 2009 - Munmun Jha.

192. Word versus Word-meaning: A la Śabdanirnaya. Paper presented at the National Seminar on Mind and Meaning, organized by the Department of Philosophy in collaboration with the Department of Neural and Cognitive Sciences, University of Hyderabad, March 2010 - Nirmalya Guha.


197. Invited talk at the Seminar on Managing Across Cultures: Cultural Issues in Global HR Management, Institute of Business Management, CSJM University, Kanpur, 17 April, 2010. - Praveen Kulshreshtha.


199. Two Invited Lectures on Non-verbal Communication and Interview Skills at the MHRD/AICTE -sponsored Summer School on Functional English for Science and Engineering Teachers, Department of Humanities and Social Sciences, Indian Institute of Technology Kharagpur, Kharagpur 14-20 July 14, 2009 - T. Ravichandran.


Chemistry


205. Metal-Ion Complexation and Protonation of Ferrocene-Naphthyridine Conjugates IRIS-XII, Goa, India, August 16-21, J.K. Bera.

206. Structural diffusion of protonic defects in water-filled narrow pores, Indo-French Centre for the Promotion of Advanced Research (held in Bangalore), April 03, 2009, A. Chandra.

207. Vibrational spectral diffusion in hydrogen bonded systems under normal and supercritical conditions, Devi Ahilya Vishwavidyalaya, July 19, 2009, A. Chandra.

208. Kinetics of proton transfer in aqueous systems of varying dimensions, University of Innsbruck, Austria, August 24, 2009, A. Chandra.


212. Hydration structure and transport kinetics of protonic defects in water-filled narrow hydrophobic pores: Role of hydrogen bond fluctuations, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, December 18, 2009, A. Chandra.


218. Pathways to Organotin Hydroxides and -Oxides: Nanodimensional Organostannoxane Assemblies, An Invited Talk in the International Conference

219. Coordination and Organometallic Chemistry, Bharathiar University, Coimbatore, March 19 and 20 2010, V. Chandrasekhar.


225. Kanpur-Cologne: A bridge not too far, a lecture given at University of Cologne, Germany, 21st September 2009, V. Chandrasekhar.


229. Unusual Main-group-containing Compounds, An Invited talk at the JNCASR sponsored conference in Tezpur University, Nov 20-22 2009, V. Chandrasekhar.


232. From Quantum Computing to Medical Imaging with Femtosecond Spectroscopy, Department of Chemistry Seminar, Stanford University, May 8, 2009, D. Goswami.


240. Invited Lecture at 2nd Indo-German symposium during September 16-19, 2009 held at University of Leipzig, Germany, F.A. Khan.
256. Metal-Ligand Chemistry: Metal-centered and Ligand-centered Redox Processes, *Department of Chemistry, Jadavpur University, Kolkata (June 11, 2009), R.N. Mukherjee.
258. Rare Events In Silico, RAMET International Conference, IACS Kolatta, January 2010, Nisanth N. Nair.
259. Simulating Rare Events In Chemistry, IISc, Bangalore, December 2009, Nisanth N. Nair.
261. Rare Events and Configurational Sampling by Computer Simulations, JNCASR, Bangalore, December 2009, Nisanth N. Nair.
263. Department of Chemistry, IIT Delhi, November 10, 2009, Madhav Ranganathan.
269. Invited talk, Department of Chemistry Jodhpur University, August, 25, 2009, S. Sarkar.
274. Invited Talk, Chemistry Department, Bengal Engineering and Science University, Shibpur, Howrah, 15th January, 2010, S. Sarkar.
279. Symmetry in molecular structure and dynamics, at the symposium on symmetry, February 2010, IISER Mohali, K. Srihari.
282. Role of dynamical tunneling in the control of driven systems at the conference on Tunneling and scattering in complex systems – from single to many particle physics, September 2009, Dresden, Germany, K. Srihari.
286. Peptide soft structures as ion beam fabrication platforms. 2nd Indo-German Frontiers of Chemistry Meeting, University of Leipzig, Germany, 2009, Sandeep Verma.


Mathematics and Statistics

292. Turing and non-Turing pattern formation in ratio-dependent predator-prey model, Department of Applied Mathematics, University of Calcutta, Malay Banerjee 25th Feb., 2010.

293. Deterministic and stochastic dynamics in mathematical ecology, Department of Mathematics, Banaras Hindu University, 24th Oct., 209, Malay Banerjee.


299. Invited talk at the DBS College, Kanpur, P. Chandra.

300. Local properties of Holomorphic functions, delivered lectures in the ATM Workshop on Several Complex Variables and Complex Dynamics held at IISc Bangalore during March 1-12, 2010, S Chavan.


304. NIT Nagpur December 21-23, 2009 (04 lectures), M. K. Kadalbajoo.
308. Invited talks on Exponential of a square matrix A and applications to dynamical systems. Organization and date: DST – Center for Interdisciplinary Mathematical Sciences (CIMS), BHU (Varanasi) is organizing a training program cum workshop on Dynamical System: Analysis and Applications under India Math Year Program from 22-31 October, 2009, V. Raghavendra.
309. Delivered 4 lectures on Introduction to Ordinary and Partial differential equations Organization and date: A Refresher course for college teachers held at Pure Mathematics Department Calcutta University starting from 17 November to 8-9th, December 2009, V. Raghavendra.
311. Measurement error Models at Indian Institute of Science Education and Research (IISER), Kolkata, India in December, 2009, Shalabh.
312. Measurement Errors Models in Bioinformatics at the Seminar –cum – Workshop on Molecular Modeling, Protein-Protein Interactions and Computer Aided-Drug Design at Center of Bioinformatics, University of Allahabad, India in March 2010, Shalabh.
313. Local Search Problems can be easy as well as hard to solve, APORS2009, 6-9th Dec. 2009, P. Sharma.

Physics


324. Invited Speaker, School of Physics, University of Hyderabad, Dec 2009. S. Dhamodaran.

325. Invited Speaker, Department of Physics, Pondicherry University, Dec 2009. S. Dhamodaran.


330. Physics Colloquium titled Low frequency, large amplitude vortex velocity fluctuations and novel dynamics of the driven vortex state at Indian Institute of Science (IISc) Bangalore, dated 4th Dec. 2009 S. Banerjee.

331. Invited talk on Large amplitude low frequency velocity fluctuations and its evolution with different phases of the driven vortex state at the 12th
International workshop on vortex matter in superconductors, Sept.12-16, 2009 at the Lake Yamanaka, Yamanashi, Japan S. Banerjee.


334. Invited talk on Controlling magnetic and superconducting properties at extreme scales in the International symposium on clusters, cluster assemblies and nanomaterials (ISCANM 2009), held at HRI, Allahabad, India from Feb. 9 - 11, 2009 S. Banerjee.

335. Invited talk on Controlling magnetic and superconducting properties at extreme scales in the Workshop on Magnetic Nanomaterials and their Application (MNTA), at S.N. Bose Center, Kolkata, from Jan. 27-28, 2009 S. Banerjee.


340. Lectures delivered at workshop held (March 21-29, 2010) at Himachal Pradesh University, Shimla on Density Functional Theory, M.K. Harbola.


342. Invited Talk, in Dr. N.L. Singh Memorial Lecture Series at BHU, Department of Physics, 26th November, 2009, Asima Pradhan.


344. Invited Talk in the Conference Discussion meeting on statistical mechanics and condensed matter physics at IIT Guwahati during 31st October-1st November, Sutapa Mukherji.

OTHER ACTIVITIES

TECHNOLOGY DEVELOPED

Aerospace


Biological Science and Bio-engineering

2. Development of neo-cartilage for osteoarthritis, Ashok Kumar.
3. Development of stem cell separation technology using supermacroporous cryogels (process and product ready for commercialization), Ashok Kumar.
5. Development of cigarette filter accessory using supermacroporous cryogel (process and product under commercial development), Ashok Kumar.
6. Development of metal chelate affinity precipitation for protein separation, Ashok Kumar.
7. Development of disposable cryogel bioreactor for the production of therapeutics, Ashok Kumar.
8. Development of the cryogel filter for the depletion of leukocytes from blood, Ashok Kumar.
10. Polymeric macroporous scaffolds for skin tissue engineering, Ashok Kumar.

Chemical

11. Organic semiconductor based flexible temperature sensor (technology transferred to Intellectual Ventures), S. Panda.

Civil

14. Developed and field tested a 15 LPM PM2.5 air sampler, Tarun Gupta.
Electrical

15. A 30 kW power electronic interface for coupling rooftop solar panels to the grid, with Maximum Power Point Tracking incorporated. This is already commissioned and functional at WBREDA office at Salt Lake, Kolkata, Sensarma P.
16. Brihaspati-2: SCORM packager and SCORM runtime, Singh Y.N.
17. Paper Touch Pad, Paper Keypad, Venkatesh K.S.

Mechanical

20. An Active Infusion Pump jointly with MDes student of Design Programme, B. Bhattacharya.
21. 2-D Solar Tracker Developed as a PTB, M.K. Das.

Chemistry

28. Low cost nano carbon based water filter for drinking water has now been under field trial, S. Sarkar.

Physics

29. A novel focused ion beam system capable of generating multielement focused ion beams (ME-FIB), Sudeep Bhattacharjee.
SOFTWARE DEVELOPED

Biological Science and Bio-engineering

1. A four dimensional reconstruction and characterization system for biomedical images, Anupam Pal.

Chemical


Mechanical

3. LES Solver for Turbomachinery Application (LES-TURBO), S. Sarkar.
4. Tool Path Planning for Multistage Single Point Incremental Forming, further work is in progress, N. V. Reddy.

Chemistry

5. Developed constraint density functional theory codes for ab initio molecular dynamics code CPMD, Nisanth N. Nair.

INDUSTRIES VISITED

Aerospace

1. Indian Airforce Station, Chakeri, took students for industrial tour, 1 day, R. Kitey.

Biological Science and Bio-engineering

2. NFTDC Hyderabad- November 21st, 2009, Ashok Kumar.

Chemical

3. Yeungnam University, South Korea on sabbatical leave, July 2009-July 2010, A. Sharma.
4. BITS Mesra, Department of polymer Engineering, to discuss collaborative research, 29th January 2010, Singh JK.
5. UIUC, Beckmann Institute, to discuss collaborative research, July 1-2, 2009, Singh JK.
6. University of California, Irvine, to attend Indo-US meeting, June 2009, Singh JK
7. Prof. Kevin Shakes Sheff, Department of Pharmacy, University of Nottingham, UK, Sri Sivakumar.
8. Prof. Rashid Bashir, University of Illinois, Urbana Champaign, USA, Sri Sivakumar.
9. Prof. Ragina Ragan, University of California, Irvine, USA, Sri Sivakumar.

Civil

10. Visited University of Molise, Italy Ghosh P.
11. Visited IIITD for research collaboration in the field of climate change and atmospheric chemistry, Gupta Tarun.
12. Visiting Professor, School of Civil, Environmental, and Mining Engineering, University of Adelaide, Australia, May 2009-Jul 2009, Jain, A.
13. NASA Goddard Space Flight Center, Greenbelt, MD, USA, Senior Research Fellow, August 2009-July 2010, Tripathi S. N.
14. Space Application Center, Ahemdabad, Megha Tropiques CAL/VAL Finalisation, 22 May, 2009, Tripathi S. N.
15. Indian Institute of Tropical Meteorology, Pune, National Steering Committee for CAIPEX Program, 13-15 May, 2009, Tripathi S. N.

Electrical

17. Politechnico di Torino under ERASMUS-MUNDUS visiting professor scholarship, May-June 2009, Banerjee Adrish.
18. Coordinator of 9 member Indian delegation that visited National Tsing Hua University, Taiwan, during November 2-3, 2009 to promote Research Collaboration between India and Taiwan in the area of VLSI Design. A Joint workshop sponsored by DST and its Taiwanese counterpart NSC was conducted in Taiwan during the visit, Qureshi S.
19. Visiting Professor in the ECE Department at Mississippi State University, USA until July 2009 (for one year) on sabbatical leave from IIT Kanpur, Srivastava S.C.
20. IRDE Dehradun, Discussions for Proposals for Collaboration. 09-13/01/2010, Venkatesh K.S.

Industrial Management & Engineering

21. Fiskars Corporation, Hameentie, Finland, J Chatterjee
22. Kone Corporation, Espoo, Finland, J Chatterjee
23. Kone Cranes, Koneenkatu, Finland, J Chatterjee
24. Metso Corporation, Finland, J Chatterjee
25. Design Factory, Aalto University, Finland, J Chatterjee
26. Helsinki School of Economics, Finland, J Chatterjee
27. Technical University, Ilmenau, Germany, J Chatterjee
28. Maastricht University, The Netherlands, J Chatterjee
29. USM Malaysia, INTEL, MOTROLA, ALTERA, Agilant, AMD all at Penang, MIT Boston USA, AK Mittal.

Materials Science and Engineering


Mechanical

31. University of Sheffield, UK September 2009 (14 days), B. Bhattacharya.
32. Waseda University, Japan, March 2010 (10 days), B. Bhattacharya.
33. NAL, HAL, S. Sarkar.
34. Pennsylvania State University, Research discussion, May 3, 2009, Sovan Das
35. Pennsylvania State University, Research discussion, October 30-31, 2009, Sovan Das
36. Cornell University, Research Discussion, November 1-2, 2009, Sovan Das
39. IGCAR, Kalpakkam Collaborative research project< March 12-14 2010, Pankaj Wahi.
40. Jadavpur University, Collaborative research project, March 6, 2010, Pankaj Wahi.
41. IIT-Kharagpur, Collaborative research project, March 3-5, 2010, Pankaj Wahi.
44. DMRL, Hyderabad, January 8 -11, 2010. To finalize the project proposal (Proposal on incremental forming of Ti sheets is submitted and review is completed), N. V. Reddy.
45. Airbus company, Nantes, France (April 2009), toured the facility, K. Deb.
46. General Motors and India Science Lab, Bangalore (July 2009), delivered a lecture and discussed possible project ideas, K. Deb.
47. Volvo Powertrain, Skovde and Goteborg, Sweden (December 2009), delivered a tutorial, addressed top label managers and toured the company, K. Deb.

Chemistry


Mathematics and Statistics

49. Invited Professor, Institute of Logic and Cognition (ILC), Sun Yat-Sen University, Guangzhou, China, May-July, 2009, Mohua Banerjee
52. Visited Institute of Statistics, Ludwig Maximilians University, Munich, Germany in 2009 for three months, Shalabh.

Physics


PATENTS

Aerospace


Biological Science and Bio-engineering

3. Antiseptic polymeric macroporous hydrogel based thin sheets containing iodine as wound dressing materials (Patent filed, 2009), Ashok Kumar and Era Jain.
4. Polymer Matrix Scaffold and Process for Preparation Thereof (Patent filed; IPA 3948; 2009), Ashok Kumar and Anuj Tripathi.

Chemical


Electrical


Materials Science and Engineering

12. Rare-Earth Oxide Dispersed Sintered Stainless Steels (REO-Steels), (1224/DEL/2006 Filing Date: 18.5.2006; Publication Date: 23.11.2007), A. Upadhyaya, R. Balasubramaniam, and J. Shankar.

Mechanical


Chemistry

15. One Indian Patent filed on Removal of Mercury, P. K. Bharadwaj

Physics

17. Filed for a Patent with Intellectual Ventures; A non-destructive damage detecting instrument which using an alternating or direct current mode of operation sensitively images damage induced changes in the path of currents flowing through the material. Satyajit S. Banerjee, Shyam Mohan, Jaivardhan Sinha.

AWARDS AND HONOURS

Aerospace


Biological Science and Bio-engineering

4. Received DBT – National Bioscience Award for the year 2009, Balaji Prakash.
5. Task Force committee member of Silk Biotechnology, DBT, India, Ashok Kumar.
6. JSPS Visiting Professor Fellowship, Ashok Kumar.
7. Invitation for Chief-Editor for Frontiers of Biotechnology and Bioengineering Journal, Ashok Kumar.
8. Young Investigator Award by Asian Neurogastroenterology and Motility Association, April 2009, Anupam Pal.

Chemical

10. L & T Chair Professor of Chemical Engineering, IIT Bombay (Dec 2009 – present), to Prof. S. K. Gupta.


13. Amar Dye Chem Award, Indian Institute of Chemical Engineers (IIChE) (2009), to Dr. Y.M. Joshi.


Student awards:

15. M H Shukla 2nd Prize, IIChE for the best Technical Paper presented at CHEMCON 09 to Mr. S. Kumar and Mr. S.S. Muduli.

16. Ambuja’s young researcher’s award for doing post graduate studies in chemical engineering after GATE presented at CHEMCON 09 to Mr. Sunil Kumar and Mr. G. Srivardhan.


18. Best Poster Award at the International Symposium of Hydrogen and Energy Storage as a part of the Energy Conclave 2010 at IITK to Mr. C.S. Sharma.


Civil

20. Recipient of Batch of 1970 Research Fellowship, IIT Kanpur, from October 01, 2009 for three years by Das A.


22. Ghosh, P. Senate Recommendation for Best Teaching by IIT Kanpur, 2009

23. INAE Young Engineer Award (2009) by Gupta, Tarun, .


27. 3rd prize for Poster, International Conference on Environmental Health and
30. NASA-Scopus Young Scientist 2009 Awarded by National Academy of Sciences India and Elsevier Pvt. Ltd. Asia-Pacific by Tripathi, S.N.
31. NASA Senior Fellowship, National Aeronautics and Space Administration, USA by Tripathi, S.N.
32. Sir M Visvesaraya Fellowship, IIT Kanpur by Tripathi, S.N.

Computer Science & Engineering

33. G B Birla Award for Scientific Research, Birla Foundation, Manindra Agrawal.
34. P C Mahanalobis Birth Centenary Award, Indian Science Congress, Manindra Agrawal.
35. Rajib Goyal Prize, Kurukshetra University, Manindra Agrawal.
36. Young Engineer Award for the year 2009 by Indian National Academy of Engineers for contribution in the field of design and analysis of algorithms, Surender Baswana.

Electrical

38. The Computer Simulation Technology AG (CST) is a Germany based company, which is the market leader in the area of 3-D electromagnetic field simulation. The CST University publication award is given each year to few selected researchers for their original work in the field of 3-D electromagnetic field simulation, where they have made skilful usage of CST software features, Akhtar Jaleel.
40. Young Engineer Award, Institute of Engineers (IEI), India in area of Electronics & Communications, 2009, Banerjee Adrish.
41. Microsoft Research India Outstanding Young Faculty Award, 2009, Banerjee Adrish
44. Has been awarded P.K. Kelkar Chair Professor position (IIT Kanpur endowed chair position) for 3 years since Oct. 2009, Srivastava S.C.
45. Has been nominated as Member of the Central Advisory Committee of the Central Electricity Regulatory Commission (CERC) for the year 2010, Srivastava S.C.
46. K. Seethalekshmi, a Ph.D. student of our department working with Prof. SC Srivastava and Prof. S.N.Singh has been selected for the 2010 Clayton Griffin Student Paper Award in the Georgia Tech Protective Relaying Conference. The conference will be held at Atlanta, USA during May 5-7, 2010. This was a global student paper contest and carries a cash award of USD 1000. The title of her paper is SVM based Scheme to Prevent Distance Relay Mal-operation under Power Swing and Voltage Instability.

Industrial Management & Engineering

47. The Best Paper Award, AGCETI 2010, N K Sharma and Manu Kanchan.
48. Judged as Outstanding Management Researcher, at AIMS-7 conference, Dec 20-22, 2009; held at IIM Bangalore, India. Award was given by Prof. MR Rao (ex director IIM Bangalore and ex Dean ISB Hyderabad), R R K Sharma.

Materials Science and Engineering

49. R.L. Thakur Memorial Award 2009, awarded by Indian Ceramics Society on Dec. 11th 2009 at Trivandrum India, Kantesh Balani.
50. Young Scientist Award in Materials Science division, awarded by Indian Science Congress Association on Jan. 5th 2010 at Trivandrum India, Kantesh Balani.

53. Lecturer Award, awarded for the Academic Year 2010/11, by AIST, the Association for Iron and Steel Technology, USA, D. G. C. Robertson, J. F. Elliott.


55. Metallurgist of the Year Award for the year 2009 from the Ministry of Steels November 2009, A. Upadhyaya.

56. Selected as P.K. Kelkar Research Fellow (Class of 1982 Batch), October 2009, A. Upadhyaya.

57. Australia India Science and Technology Research Award by Australian Academy of Technological Sciences and Engineering, 2009, A. Garg.

Student Accolades


60. B.Tech. Project Thesis by Mr. Shobit Misra on PM Processing of High Copper Dental Amalgams (supervisor: Dr. A. Upadhyaya) was adjudged for the Best Departmental B.Tech. Project, May 2009.

Mechanical

61. IEI, Young engineer’s award in Mechanical Engineering for the year 2009, S. Bhattacharya.

64. Invited to become a member of the Editorial Board of a new quarterly journal titled 'Heat Pipe Science and Technology: An International Journal' launched by Begell House, Inc. USA, S. Bhattacharya.

Humanities and Social Sciences

65. Our Common Future Fellowship (2010), Volkswagen Stiftung, Germany. - Bhushan, B.
67. Director’s commendation for excellent teaching based on SRS. The course taught was PHI 447: Ethics & Society, Semester 1 2009-10, Semester 1 2009-10. - Vineet Sahu.

Chemistry

68. Conference Chair, Third Asian Conference on Coordination Chemistry .
69. J. C. Bose National Fellow, DST, New Delhi, India, P. K. Bharadwaj.
70. Elected to the Academy of the Developing World, FTWAS, Trieste, Italy, V. Chandrasekhar.
71. Best Poster Award at the SPIE Photonics West 2010 at San Jose, CA on the poster: Spatio-temporal Control in Multiphoton Fluorescence Imaging, A.K. De, D. Roy and D. Goswami.
72. Best Poster Award for: Encoding molecular fragments with chirped femtosecond pulses for quantum information processing, 9th Asian Conference on Quantum Information Science (AQIS ’09) organized by the Nanjing University of Posts and Telecommunication (NUPT), Nanjing, China, 26-29 Aug. 2009, D. Goswami.
73. Guide for the Best M.Sc. Project (Mr. V. Tewari, Dept. of Chemistry IITK, May 2009), D. Goswami.
75. Associate Editor, Global Journal of Analytical Chemistry, Simplex Academic Publishers, 2010 onwards (3-year term), D. Goswami.
77. Elected as fellow of the Indian Academy of Sciences (FASc), Bangalore, J. N. Moorthy.
78. Awarded Bronze Medal by Chemical Research Society of India (CRSI), J. N. Moorthy.
81. CDRI Award for Excellence in Drug Research, 2009, S. Verma.
84. Elected as a Fellow, Indian National Science Academy, New Delhi, Y. D. Vankar.

Mathematics and Statistics

85. Appointed Member, Editorial Board, Transactions on Rough Sets, Journal subline of the Lecture Notes in Computer Science (LNCS), Springer, Mohua Banerjee.

Physics

87. Buti Foundation Award and the Endeavour Research Award of the Australian Government, Sudeep Bhattacharjee.

CONTINUING EDUCATION ACTIVITIES

Civil

1. Co-organized (with Dr. Avinash Agarwal, ME) a short-term Course on Diesel Particulate and NOx Emissions, from 14th -18th Feb, 2010. Sponsored by Quality Improvement Program, MHRD, Government of India. The school was attended by 54 participants with equal number from industry and academia by Gupta, Tarun.

Electrical

2. Co-organized 5 days Short Course for DoorDarshan Employees on RF and Microwaves at IIT Kanpur during Nov. 30 to Dec. 4 2009. Approximately 20 participants attended the courses from the level of Deputy Director, DoorDarshan to level of Senior Engineer, DoorDarshan, Akhtar, Jaleel and Srivastava K.V.
3. Co-organized short course (Self-financed) on Cellular Technologies: 3G and Beyond at I.I.T. Kanpur, 26th-28th December 2009 and delivered lectures on OFDM and LTE, Banerjee Adrish, Chaturvedi AK, Jaganatham Aditya
5. Organic Solar Cells at the 6-14July summer short course on Organic Electronics and Photovoltaic Systems, IIT Kanpur, 12th July, 2009. M.Tech. and PhD students as well as research scientists from industry. Course was supported by project funds, Iyer S. S. K.
7. Organized (Convenor) of DST-SERC Workshop on Smart Energy Delivery Systems at IIT Kanpur on January 15, 2010, Sensarma P.
8. Organised a Course at I. I. T. Kanpur on Cadence Tool Training during June 29 - July 4, 2009 for teachers of N.I.Ts participating in SMDP-II project sponsored by MCIT, Qureshi S.

Industrial Management & Engineering

10. Conducted a one day self financed QIP course on MRP Systems (3 OCT 2009); Venue: IIT Kanpur 208016, R R K Sharma.
14. Workshop on Record management, 2-13th August 2009 IIT Kanpur; AK Mittal.
15. Management Development Programme for DoorDarshan officer; May 23- June 07, 2009; AK Mittal.
18. 2nd Capacity Building Program for Staff of Electricity Regulatory Commissions from August 3-8, 2009; Anoop Singh.
Materials Science and Engineering


Mechanical

22. Bhaskar Dasgupta, Delivered a course on "Mathematical Methods in Engg and Science" as part of the NPTEL Phase II, awaiting review.

Humanities and Social Sciences

25. Organised a three-week CDET funded workshop on Science Fiction (SF) Writing which had 16 participants from all over the country. As part of the workshop, I invited Prof. Jayant Narlikar to IIT Kanpur as a guest lecturer for this workshop; he also gave an Institute lecture while he was here for the SF workshop, Suchitra Mathur.
27. Course Development for NPTEL (Microeconomics: Web and Net) - Vimal Kumar.


30. A workshop on Applied Bologna and Steering Committee Meeting (LUVIT) of the Erasmus Mundus External Cooperation Window (EMECW) India –Lot 13, during 30th November- 4th December, 2009 in Delhi, India - P. Murali Prasad

31. EMECW (WILLPOWER) Coordination Committee Meeting during 22- 23 September, 2009, in Delhi, India, P. Murali Prasad.


Chemistry

33. Taught CHM-101 course for IIT Rajasthan in 2009-10 1st semester as a theory tutor and laboratory instructor, M. K. Ghorai.

34. Developed a web site for the students to enable information and communication technology in teaching of web courses in physics and chemistry (sponsored by MHRD). The web site is www.ictwiki.iitk.ernet.in, R. Gurunath.

Mathematics and Statistics

33. Taught summer course on Rough Set Theory, Institute of Logic and Cognition (ILC), Sun Yat-Sen University, Guangzhou, China, May-July, 2009; 15 attendees undergraduate and graduate students, and faculty, Mohua Banerjee.

34. Delivered lectures on Modal Logic, Rough Sets and Rough Logics, at the MHRD/AICTE Winter School on Logic and Applications of Logic (LAAL 2009), IIT Kharagpur, December 7-18, 2009; 20 participants – graduate students, researchers and participants from industry, Mohua Banerjee.

35. Organized Pre-conference Workshop on Foundations of Rough Set Theory, prior to the 12th International Conference on Rough Sets, Fuzzy Sets, Data Mining & Granular Computing (RSFDGrC 2009), December 15, 2009, Delhi; 5 invited speakers, 40 participants – graduate students, researchers and participants from industry, Mohua Banerjee.

36. Coordinator, Workshop on Relational Structures in Reasoning with Incomplete Information, as part of Third Indian School on Logic & its Applications (ISLA 2010), January 19-22, 2010, University of Hyderabad; 2 invited speakers, about 40 participants – graduate students and researchers, Mohua Banerjee.
Physics

38. Lectures on solid state physics to Chattisgarh students from the e-classroom at IIT Kanpur under the CHIPS programme, M. K. Harbola.

PARTICIPATION IN HIGH LEVEL INDUSTRY ACADEMIA INDUSTRY INTERACTION PROGRAMME DURING SUMMER

Aerospace

2. Two times visited Birla Institute of Technology, Mesra (Ranchi) (August and October 2009) for holding Discussion on Modification of existing Syllabus for Associate Membership Examination in Aerospace Engineering under the auspices of Institution of Engineers, India, Kunal Ghosh.

Humanities and Social Sciences

3. Attended a meeting with Dr. Amarjit Singh, Executive Director, Jansankhya Sthirata Kosh (JSK), National Population Stabilisation Fund, New Delhi (Website:www.jsk.gov.in) and other experts on how to stabilize population growth in India, as advisor to JSK, 16 October 2009, A.K. Sharma
5. Conducted survey and submitted report for the NGO Eklavya, Madhya Pradesh on the academic achievement levels of children in government schools of a tribal belt in district Betul, Madhya Pradesh, Amman Madan.

Chemistry

7. Visited Prof. Dominik Marx, Ruhr-Universitaet Bochum, Germany, Nisanth N. Nair.
ANY OTHER IMPORTANT ACTIVITY NOT SPECIFIED IN ABOVE COLUMNS

Aerospace

1. Established a new experimental laboratory (with funding from DST) for the design, development and testing of autonomous mini helicopter, in the Department of Aerospace Engineering, IIT Kanpur. This lab is the only experimental lab on helicopters in India, Venkatesan C.
2. Member of Selection Committees for faculty at IIT’s, Venkatesan C.
3. Expert Member, Selection Committee for Common-wealth scholarship, MHRD, Venkatesan C.
4. Restructured Composite Materials course (AE681) to develop experimental skills among students. The experimental projects are included for students to have an hands-on-experience of fiber composites manufacturing and their mechanical properties characterization, R. Kitey.
5. Initiated the process to build high strain rate testing facilities in Aero Structures Lab, R. Kitey.
6. Elected as an executive member of The combustion institute (India Section) for 2010-2012, D. P. Mishra.

Biological Science and Bio-engineering

9. IIT-K develops cartilage in lab, says may help osteoarthritis, Ashok Kumar.
   http://pubs.acs.org/subscribe/journals/ancham/78/i09/html/0506materialworld.pdf
10. Nanomaterials: Possible Consequences on Human Health, Ashok Kumar.
    http://www.iitk.ac.in/infocell/iitk/newhtml/storyoftheweek.htm
11. Environmental Endocrine Disrupters and Human Health, Ashok Kumar.
    http://www.iitk.ac.in/infocell/iitk/newhtml/storyoftheweek55.htm
    http://precedings.nature.com/documents/4301/version/1
Chemical

15. Member, PAC (Chemical Engineering), DST, N.Delhi, D. Kunzru.
17. Chairman of two Advisory & Monitoring Committees of the Bioprocess and Bioproducts Programme of TIFAC, D. Kunzru.
18. Reviewer – Funding agencies (DST), Journals (Electrochemical Solid-State Letters), S. Panda.

Civil

20. Appointed examiner for Ph. D. thesis of IIT Mumbai by Tripathi, S.N.
21. AGU Publication Committee, ISPRA, EU, Milan, April 2009 by Tripathi, S.N.

Computer Science & Engineering

23. Program Committee Member, ACM International Conference on Management of Data (SIGMOD 2010). Reviewer for 10 papers, Sumit Ganguly.
24. Program Committee Member, IEEE International Conference on Data Engineering (ICDE 2010). Reviewer for 8 papers, Sumit Ganguly.
25. Program Committee Member, International Conference on Database Systems for Advanced Applications (DASFAA 2010). Reviewer for 7 papers, Sumit Ganguly.

Electrical

27. A new lab for the microwave imaging and material testing is currently being developed in the department, Akhtar Jaleel.


31. During the Fall 2009 semester, he revamped the control systems experiments of EE380 with a view to making them practically useful to the students. He designed new experiments for two of the three existing hardware setups (ball & beam and inverted pendulum), and introduced four new experiments (based on DC motor control) that my students had built in the Networked Control Systems laboratory the preceding summer. Also, his team documented all the six experiments thoroughly so that other faculty and students may be able to deploy them even in their absence. These six new experiments enable the student to actually work with the software and hardware of the control systems, Potluri Ramprasad.

32. Responsible for Design and Tape out of first application specific integrated circuit (ASIC) at I.I.T. Kanpur. The tape out is due for fabrication by Europractice in Belgium. To promote design activities at other technical institutes, the Chip also has designs from three N. I. T.s which were integrated at I. I. T. Kanpur, Qureshi S.

Industrial Management & Engineering

33. Visiting Professor, Design Factory, Helsinki University of Technology, Espoo Finland, March to November, 2009, J Chatterjee.

34. Core Faculty at Interdisciplinary Product Development, Summer School of Helsinki University of Technology, 5th - 20th August, 2009, J Chatterjee.


36. Japan Visit with VLFM second Batch 5th-18th July 2009; AK Mittal.

37. LUMS advisory Council meeting MIT Boston June 2009, AK Mittal.

38. Vice-President QCFI India; AK Mittal.

39. Centre of excellence at Penang Malaysia May 3-5, 2009; AK Mittal.


41. Member, Advisory Committee for Capacity Building of distribution Personnel under R-APDRP, Ministry of Power, Government of India; Anoop Singh.
42. Member, Research Advisory Committee, Council of Power Utilities, New Delhi; Anoop Singh.

Humanities and Social Sciences

43. Visiting Faculty in MA programme in Elementary Education, hosted jointly by the Tata Institute of Social Sciences, Digantar, Eklavya and Vidya Bhawan, Amman Madan
44. Member of advisory committee of Pragat Shikshan Sansthan, Phaltan, Amman Madan
45. Member of advisory committee, Vidya Bhawan Centre for Societal Studies, Udaipur, Amman Madan
46. Towards a meaningful school social science, Deccan Herald, Bangalore, 23rd April 2009, Amman Madan
47. Interview Create an India that is fearless in its search for truth, Deccan Herald, Bangalore, 8th April 2009, Amman Madan
48. Convener, Organizing Committee, National Workshop on Qualitative Research Methods: Potential for the Science of Well-Being and Self-Growth at IIT Kanpur,
50. 24 - 27 February, 2010, Kumar Ravi Priya
51. Completed Initiation Grant Project 2008-09(September) (DORD, IITK) entitled, Productivity Analysis of the ICT sector and Linkage in some countries of South East Asia, Australia and New Zealand, Somesh K. Mathur
54. Visiting Faculty at IIT Gandhinagar from Feb 1, 2010 to April 30, 2010. During this period, participated in the Setting up of the counseling service, Advising for development of a communications centre, Co-teaching of a Ph.D. course in Literary Theory, Conducting a communication skills workshop for IIT Gandhinagar staff, Suchitra Mathur
55. Have been Head, Department of HSS, IIT Kanpur since May 26, 2009 (continuing), Lilavati Krishnan.
56. Coordinator of the Group on Impacts, Economics and Policy, as part of the proposed Center for Earth Systems and Climate Change Research, at I.I.T. Kanpur, Praveen Kulshreshtha.
57. Member, Solar Energy Research Enclave, at I.I.T. Kanpur, Praveen Kulshreshtha.
59. Cultural and Livelihood Objectives for Maintaining Sustainable Flows (Sponsored and Consultancy projects), P. Murali Prasad.

Materials Science and Engineering

60. Re Indian Key Leader for Indo-UK project entitled Effect of cation substitution on the structure and biocompatibility of ionomer glasses and glass ceramics with University of Birmingham, University of Warwick, University of Kent and Sree Chitra Tirunal Institute for Medical Sciences and Technology [SCTIMST, India], funded by UK-India Educational Research Initiative, January, 2009- , Dr. B. Basu.
62. Material Advantage at IIT Kanpur, a technical student chapter in the Materials and Metallurgical Engineering Department, received award for Most Students Recruited with a cash prize of $500.00 by Material Advantage Charter, K. Balani.
63. Delivered the GD Birla Gold medal lecture titled The knowledge based foundation of steelmaking and application in steel melt shop, Dipak Mazumdar.
64. Co-Chairman of the Organizing Committee, 4th Asian Particle Technology (APT-2009), held in New Delhi during September 14-16, 2009, S. P. Mehrotra.
65. Established a 3 kW, controlled atmosphere, microwave sintering facility by Dr. A. Upadhayay.

Chemistry

61. Organized the fifth JNOST at IIT Kanpur under the aegis of the golden jubilee of IIT Kanpur December 2-5 2009, R. Gurunath.
62. Faculty incharge for the chatisgarh outreach lecture 2010. A set of lectures on various topics were coordinated and given in L-14, R. Gurunath.
63. Member DPGC, department of chemistry, IIT Kanpur, R. Gurunath.
64. Member, Faculty forum executive committee, IIT Kanpur, R. Gurunath.
65. Member, executive committee, Indian peptide society, R. Gurunath.
66. SURGE-2010, Summer Undergraduate Research for Excellence, Faculty-in-charge, Madhav Ranganathan.
67. DUGC – Department of Chemistry, Department Undergraduate Committee Convener, Madhav Ranganathan.
68. Organized a satellite (SABIC, TIFR) (mini) one day symposium on bio-inorganic chemistry, in the department of chemistry, IITK, November 9, 2009, S. Sarkar.
69. Participated in the brainstorming session at IISc on the KVPY (Kishor vaygyanik prothsahan yojana) program, April 2010, K. Srihari.

Mathematics and Statistics

71. Member, Programme Committee, 12th International Conference on Rough Sets, Fuzzy Sets, Data Mining & Granular Computing (RSFDGrC 2009), December 16-18, 2009, Delhi, Mohua Banerjee.
72. Member, Programme Committee, 7th International Conference on Rough Sets and Current Trends in Computing (RSCTC 2010), June 28-30, Warsaw, Poland, Mohua Banerjee.
77. Delivered two invited lectures in the DST Workshop on ‘Mathematical Models for Biofluid flows and Application’ at SV University, Tirupati, Jan. 23,24,2010, P. Chandra.

79. Editorial Board Member of the Journal of Modern Applied Statistical Methods, D. Kundu.

80. DST Sponsored Serc Project Analyzing non-stationary signals Duration 3 years, Mitra.


Physics


89. Working on the development of a remote low temperature laboratory accessible through the internet along under MHRD's Virtual Labs project. A K Gupta and K.P. Rajeev.


92. S.A. Ramakrishan visited IISER Mohali as an Adjunct Faculty and taught a course module on electromagnetic antennas for the M.Sc. Physics students there. (23rd Oct. 29th Oct. 2009).


