**Publication and Outreach Activities**

**BOOKS & BOOK CHAPTERS PUBLISHED**

**Aerospace Engineering**


**Chemistry**


**Chemical Engineering**


**Civil Engineering**


**Computer Science & Engineering**


**Electrical Engineering**


**Humanities and Social Sciences**


**Industrial Management & Engineering**


**Mechanical Engineering**


Materials Science and Engineering


Materials Science Program


51. Carbon Nanotube Coated Carbon Fiber: Structural and Electrochemical Applications, Carbon Nanotube based Nanocomposites: Recent Development,


Maths


55. Text Book On Ordinary Differential Equations, 2/E, TMH, New Delhi, March, 2011 has been reprinted for the 17th time, S.G. Deo, V. Lakshmikantham, V. Raghavendra.

Physics

56. Stochastic Transport in Complex System. Debashish Chowdhury (PHY) coauthored with A Schadschneider (University of Koln, Germany) and K Nishinari (Univ. of Tokyo, Japan). ELSEVIER (Amsterdam, The Netherlands).


JOURNAL PAPERS

Aerospace Engineering


16. A study of the polarization-electric field effect on the response of smart composite plates, Smart Mater. Struct, 19, 075012, Sateesh VL, Upadhyay CS and Venkatesan C.


Biological Science and Bio-engineering


47. Photoresist derived electrospun carbon nanofiber with tunable morphology and surface properties. Industrial & Engineering Chemistry Research, 49 (6), 2731-2739 (2010) # C.S.Sharma, # R.Vasita, D. Upadhyay, A. Sharma, D.S. Katti, R. Venkataraghavan. (*These authors contributed to this work equally).


Chemical Engineering


63. Densities and orientations of antibodies on nano-textured silicon surfaces, Materials Science & Engineering C-Materials For Biological Applications, Vol 31, No.2, 370-376, 2011, Kumar, S; Ch, R; Rath, D; Panda, S.

67. Instability and dewetting of ultrathin solid viscoelastic films on homogeneous and heterogeneous substrates, Journal Of Chemical Physics, Vol 134, No.6, 2011, Patra, A; Bandyopadhyay, D; Tomar, G; Sharma, A; Biswas, G.
75. Laminar Natural Convection from a Horizontal Cylinder in Power-Law Fluids, Industrial & Engineering Chemistry Research, Vol 50, No.4, 2424-2440, 2011, Prhashanna, A; Chhabra, RP.
76. Dehydration of aqueous acetonitrile solution by pervaporation using PVA-iron oxide nanocomposite membrane, Colloids And Surfaces A-Physicochemical And Engineering Aspects, Vol 373, No. 40546, 11-21, 2011, Mandal, MK; Sant, SB; Bhattacharya, PK.
80. Thermally stimulated currents in a-Se99.5Bi0.5 thin films, Vacuum, Vol 85, No. 7, 730-733, 2011, Yadav, S; Pal, RK; Sharma, SK; Dwivedi, PK; Kumar, A.
83. Bilayer staggered herringbone micro-mixers with symmetric and asymmetric geometries, Microfluidics And Nanofluidics, Vol 10, No. 2, 271-286, 2011, Choudhary, R; Bhakat, T; Singh, RK; Ghubade, A; Mandal, S; Ghosh, A; Rammohan, A; Sharma, A; Bhattacharya, S.
86. Development of a software tool and criteria evaluation for efficient design of small interfering RNA, Biochemical And Biophysical Research Communications, Vol 404, No. 1, 313-320, 2011, Chaudhary, A; Srivastava, S; Garg, S.
87. Distributed hydrogen production from ethanol in a microfuel processor: Issues and challenges, Renewable & Sustainable Energy Reviews, Vol 15, No. 1, 524-533, 2011, Moharana, MK; Peela, NR; Khandekar, S; Kunzru, D.
90. Manipulating particles in microfluidics by floating electrodes, Electrophoresis, Vol 31, No. 22, 3711-3718, 2010, Yalcin, SE; Sharma, A; Qian, SZ; Joo, SW; Baysal, O.
93. Hydrodynamic study on radially cross-flow fluidized bed multi-staged ion-exchange column, Chemical Engineering And Processing, Vol 49, No. 11, 1199-1204, 2010, Verma, R; Kumar, R; Pandey, DM; Verma, N.
94. Time-aging time-stress superposition in soft glass under tensile deformation field, Rheologica Acta, Vol 49, No. 40859, 1093-1101, 2010, Shaukat, A; Sharma, A; Joshi, YM.
97. Comparisons of TGA and DSC approaches to evaluate nitrocellulose thermal degradation energy and stabilizer efficiencies, Process Safety And Environmental Protection, Vol 88, No. 6, 413-419, 2010, Lin, CP; Chang, YM; Gupta, JP; Shu, CM.

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110. Cellular network formation of hydrophobic alkanethiol capped gold nanoparticles on mica surface mediated by water islands, Journal Of Chemical Physics, Vol 133, No. 9, 2010, John, NS; Raina, G; Sharma, A; Kulkarni, GU.


113. The Effect of Axial Concentration Gradient on Electrophoretic Motion of a Charged Spherical Particle in a Nanopore, Microgravity Science And Technology, Vol 22, No.3, 329-338, 2010, Lee, SY; Yalcin, SE; Joo, SW; Sharma, A; Baysal, O; Qian, SZ.


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Civil Engineering


Chemistry


220. Effect of Bulkiness on Reversible Substitution Reactions at Mn(II) Center with Cocomitant Movement of the Lattice DMF: Observation Through Single-Crystal


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264. Bidentate Coordination of a Potentially Tridentate Ligand. A Mononuclear Four-Coordinate Ni(II) Complex Supported by Two o-Iminobenzosemiquinonato Units,


311. Enantioselective Reactions Catalyzed by Chiral Pyridine 2,6-bis(5',5'-diphenyloxazoline) -Metal Complexes, Pure and Appl. Chem. 82, (2010) 1845, P.K. Singh and V.K. Singh.


321. Synthesis of 1, 4-dideoxy-1, 4-imino-heptitol and 1,5-dideoxy-1,5-imino-octitols from D-Xylose, Carbohydrate Res. 345, (2010) 1142-1148, Amit Kumar, Mohammed Abrar Alam, Shikha Rani and Yashwant D. Vankar.


**Computer Science and Engineering**


**Electrical Engineering**


Humanities and Social Sciences

373. Indian Cognitivism and the Phenomenology of Conceptualization. Phenomenology and the Cognitive Sciences, Online First™, 30 June, 2010 - R Kasturirangan, N. Guha, & C. Ram-Prasad.
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Industrial Management & Engineering


381. Vertical Decomposition Approach for Two Stage Capacitated Warehouse Location Problems, Global Business and Management Research; ISSN: 1947-5667; Universal-Publishers, Boca Raton, USA; V 2(2&3); 2010; pp. 275-284; Priyanka Verma and RRK Sharma.


394. Innovating Telecom Service Design for Customer Satisfaction at the Bottom of the Revenue Pyramid, Directions, June2010, pp 44-49, Dhawan, P, and Chatterjee, J.


Materials Science and Engineering


439. Structure and mechanical properties of Al–Ni–Ti amorphous powder consolidated by pressure-less, pressure-assisted and spark plasma sintering.


**Mechanical Engineering**


P. Arora and A.K. Saha.


526. Investigations into the applicability of rubber elastic analogy to hardening in glassy polymers, Modelling and Simulation in Materials Science and Engineering, v18, n2, 2010, Mahajan Dhiraj K.; Basu, Sumit.


Material Science Programme


Mathematics and Statistics


Effect of shear flow factor on thermal elastohydrodynamic lubrication of infinite line contact rough surfaces, Proceedings of the National Academy of Sciences, India (Section-A), 2010, Vol.80 Part IV, 327-346, H. Khan, P. Sinha.

Physics


Mobility with negative coefficient in Poole-Frenkel field dependence in conjugated polymers: Role of injected hot electrons Organic Electronics, Volume


654. Spin Waves in the (0,pi) and (0,pi,pi) Ordered SDW States of the t-t' Hubbard Model: Application to Doped Iron Pnictides J. Phys.: Condens. Matter 22 (2010) 422202 (FAST TRACK COMMUNICATION) Selected for inclusion in IOP Select, Nimisha Raghuvanshi and Avinash Singh.


656. Role of Hund's coupling in stabilization of the (0, pi) ordered SDW state within the minimal two-band model for iron pnictides Phys.: Condens. Matter 23 (2011) 312201 (Fast Track Communication) Nimisha Raghuvanshi and Avinash Singh J.


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Driven weak to strong pinning crossover in partially nanopatterned 2H-NbSe2 single crystal, Superconducting Science and Technology 23, 075002 (2010), Gorky Shaw, Jaivardhan Sinha, Shyam Mohan and S. S. Banerjee.


690. Penetration and screening of perpendicularly launched electromagnetic waves through bounded supercritical plasma confined in multicusp magnetic field, Physics of Plasmas, 18, 022101 (2011), I. Dey and S. Bhattacharjee.


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695. Tomography, Control and Characterization of Entanglement in Three level Atomic System; Physical Review A 82, 062301 (2010); S. N. Sandhya, V. Ravishankar.

RESEARCH PAPERS PUBLISHED IN CONFERENCE PROCEEDINGS
(AS A FULL PAPER)

Aerospace Engineering

6. A generalized adaptive finite element analysis of laminated composite plates, 37th Solid Mechanics Conference, Warsaw, Poland from 6-10 September 2010, Mohite PM, Upadhyay CS.
Biological Engineering and Biosciences


Chemical Engineering


Civil Engineering


25. 2-D FEM Analysis of Earth and Rockfill Dams under Seismic Condition, Geotechnical Earthquake Engineering Conference- 2009, San Diego, California, (2010), Basudhar, P.K., Rao, N.S.V.K., Bhookya, M. and Dey, A.
29. Sources of and temporal trends in occurrence of Legacy Pesticides in atmosphere of eastern United States, Poster presentation (by Goel A.) at SETAC Europe 21st Annual Meeting, Milan Italy, May 2011, Goel, A.; McConnell, L.L.; Torrents, A.; and Hapeman, C.J.
30. Occurrence and behavior of Particulate Matter in the Atmosphere of North India: Corelation of PM properties with health Issues, Initied Poster Presentation at 3rd Annual Indo-German Frontiers of Engineering Symposium, Khandala India, June 2011, Goel, A.
33. Thick absorbing aerosol layer observed in the monsoon season over India, Tripathi, S.N, Sagnik Dey, J. Jaidevi, B. N. Singh, Marykutty Michael and Tarun Gupta, AGU Fall meeting, San Francisco, (13-17 Dec., 2010).


Chemistry


65. Application architecture considerations for cloud platforms, 3rd International Conference on Communication Systems and Networks (COMSNETS 2011), Bangalore, January 4-8, 2011, Balwinder Sodhi and T.V. Prabhakar.


71. Learning grounded semantics of Hindi nouns from video surveillance and user commentary, 8th International Conference on Natural Language Processing (ICON 2010), Kharagpur, December 8-11, 2010, S V P Gopi Srinath, Nikhil Joshi, Prabhat Mudgal, and Amitabha Mukerjee.


76. Dependence Analysis for Parallelization of Sequential Programs, 8th Asian Symposium on Programming Languages and Systems (APLAS 2010), Shanghai, China, Nov 28 - Dec 1, 2010, Sandeep Dasgupta, Barnali Basak and Amey Karkare.

77. A Novel Representation of Palm-print for Recognition, Asian Conference on Computer Vision (ACCV-2010), Queen Town, Newzealand, November, 2010 Badrinath G. S. and Phalguni Gupta.


80. Estimating the first frequency moment of data streams in nearly optimal space and time, 12th Italian Conference on Theoretical Computer Science (ICTCS 2010), September 15-17, 2010, Sumit Ganguly and Purushottam Kar.


83. Discovering the concept of anaphora from grounded verb models, 9th International Conference on Development and Learning (ICDL 2010), Ann Arbor, Michigan, August 18-21, 2010, Kruti Neema and Amitabha Mukerjee.

84. Two Characterizations of Success of the Metropolis Algorithm for Optimization, Genetic and Evolutionary Computing Conference (GECCO 2010), Portland, USA, July 7-11, 2010, Swagato Sanyal, Raja S and Somenath Biswas.

85. Finding top-k similar pairs of objects annotated with terms from an ontology, 22nd International Conference on Scientific and Statistical Database Management (SSDBM 2010), Heidelberg, Germany, June 30 - July 2, 2010, Arnab Bhattacharya, Abhishek Bhowmick and Ambuj Singh.

86. Most Significant Substring Mining Based On $\chi^2$ Measure, 14th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD 2010), Hyderabad, India, June 21-24, 2010, Sourav Dutta and Arnab Bhattacharya.

87. Macro-Scheduling of Base Stations for Video-on-Demand Flows in WiMAX Networks, IEEE International Workshop on Quality of Services, Tsinghua University, Beijing, China, June 16-18, 2010, Shubhadeep Mitra, UmaMaheswari Devi, Parul Gupta, Malolan Chetlur and Shivkumar Kalyanaraman.

89. Broadcasting on Large Scale Heterogeneous Platforms under the Bounded Multi-Port Model, 24th IEEE International Parallel and Distributed Processing Symposium (IPDPS 2010), Atlanta, USA, April 19-23, 2010, Olivier Beaumont, Lionel Eyraud-Dubois and Shailesh Kumar Agrawal.


**Electrical Engineering**


114. PSO based modeling of Takagi-Sugeno fuzzy motion controller for dynamic object tracking with mobile platform, 5th International Symposium Advances in Artificial Intelligence and Applications, Wisla, Poland, October 2010, Meenakshi Gupta, Laxmidhar Behera and KS Venkatesh.


144. SVM based Scheme to Prevent Distance Relay Mal-operation under Power Swing and Voltage Instability, Georgia Tech Protective relaying conference, May 5-7, 2010, Atlanta, Georgia, USA (2010 Clayton Griffin Student Award), Seethalekshmi K., SN Singh and SC Srivastava.


Industrial Management & Engineering

153. What does Business have to say about Maoism? An attempt at finding out the missing voice of big business on Maoism, 34th Indian Social Science Congress, Guwahati 27th to 31st Dec, 2010, Varman, Rahul & Chakrabarti, Manali.

154. Solving multi-item multi-period capacitated lot sizing problem with considerations of backorders and setups, accepted for presentation at the 2nd International Conference on Computer and Automation Engineering (ICCAE 2010) at SINGAPORE; V 4; Eds. Dr V. Mahadevan and Dr Zhou Jianhong; pp. 18-22; ISBN: 978-1-4244-5585-0; IEEE Catalog Number: CFP1096F-PRT; Verma, Mayank and Sharma, RRK.


156. Transformational e-Governance Service Quality Assessment – An Indian Case Study, 1st International Conference on Services in emerging Markets, Indian School of Business, Hyderabad, Sept.23-24, 2010; Mukhopadhyay, S.N. and Chatterjee, J.


Mechanical Engineering


191. Experimental study and Empirical Modeling of Magnetic Abrasive Finishing on Ferromagnetic and Non-Ferromagnetic Materials, 3rd International and 24th All


Mathematics and Statistics


207. Hybrid finite difference methods for solving modified burgers and Burgers-Huxley Equations at the Fourth International Conference on Neural, Parallel & Scientific Computions held during August 11-14, 2010 at Atlanta, USA. M.K. Kadalbajoo.


211. $L^p$ Wiener Tauberian theorems for $M(2)$, given in ICM satellite conference in Harmonic Analysis, (SATEHA), Aug. 29-Sept.2, 2010, in National Institute of Science Education and Research (NISER), Bhubaneswar, R. Rawat.

212. Characterising Problems in class PLS for which Local Search is Polynomial Time, at the ORST 2010 Annual Convection, held in Madurai from 15th to 17th Dec. 2010, P. Sharma.


216. Thermal and roughness effects on the performance of a finite slider bearing considering heat conduction through the pad, 65th Annual meeting of the STLE, Las Vegas, NV, USA, May 16-20, 2010, P.Sinha, Getachew Adamu.

217. Thermal elastohydrodynamic lubrication of infinite line contact rough surface Considering shear flow factor, 65th Annual meeting of the STLE, Las Vegas, NV, USA, May 16-20, P. Sinha, H. Khan.
Materials Science and Engineering


Material Science Program


Physics


Annual Report 2010-2011

PAPERS PRESENTED IN
SEMINARS/CONFERENCE/WORKSHOPS/SYMPOSIA

Aerospace Engineering

1. Analytical modeling trajectory simulation and control of guided projectiles, Control, Automation and robotics (CAR) Conference-2011 which was held in Hostel fort canning, Singapore during 28th Fed- 1st March 2011, Subramanian saderla, Sunil Sharma, AK Ghosh.

Biological Sciences and Bioengineering


7. Structural studies on N-acetylglucosamine-1-phosphate uridylyltransferase (GlmU) from Mycobacterium tuberculosis, 42nd Course - Structure and Function from Macromolecular Crystallography, Erice, Italy 2010, Balaji Prakash, Vinay Nandicoori, Sunil Kumar Verma.

8. Surface hydrophilization of electrospun poly(lactide-co-glycolide) nanofibers for tissue engineering applications. Podium presentation at XXI National Conference of the Society for Biomaterials and Artificial Organ, India (SBAOI), at Sardar Patel University, Ahmadabad, February 10-12, 2011. Rajesh Vasita, Dhirendra S. Katti (Bajpai-Saha Award for the best student paper presentation)


10. Preperation and characterization of nanoclay reinforced pullulan gels for biomedical applications. Poster presentation at XXI National Conference of the Society for Biomaterials and Artificial Organ, India (SBAOI), at Sardar Patel


15. Germline Stem Cells: RNA-binding proteins take multiple avatars to maintain the fountain of youth. 79th Annual Meeting of the Society of Biological Chemists (India), Indian Institute of Science, Bangalore 2010, M. Ariz, R. Mainpal, K. Pushpa and K. Subramaniam.


17. RNA-binding proteins PUF-8 and GLD-1 coordinate to control the translation of cyclin B in C. elegans germ cells. 79th Annual Meeting of the Society of Biological Chemists (India), Indian Institute of Science, Bangalore, 2010, P. Agarwal, M. Rana and K. Subramaniam.


25. Importance of mRNA dysregulation in neurodegenerative disorders, All India Cell Biology Conference and symposium on Quantitative Biology: from molecule to cell, Bose Institute, Kolkata, December 4-6, 2010, S. Singh and S. Ganesh.


Chemical Engineering

28. Fabrication and functionalities of polymeric and carbon structures imaged on small scales, 1st International Symposium on Bionics and Molecular Imaging, April 01, 2010, Daegu, South Korea, A. Sharma.


32. Nanostructures and Interfaces of Carbon and Polymer-metal Nanoparticles, JSPS-DST Asian Academic Seminar 2010; Recent advances in the study of clusters, nanomaterials and surfaces with new properties and functions, Saha Institute of Nuclear Physics, Kolkata, November 28-30, 2010, A. Sharma.

40. Irreversible Aging Dynamics of Aqueous Laponite suspensions, 82nd Annual Meeting Society of Rheology, A. Shahin and Y. M. Joshi, Santa Fe, New Mexico, A. Shahin.
41. Anomalous Creep Flow Behavior of Aging PBD-Clay Nanocomposite, 82nd Annual Meeting Society of Rheology, A. Shahin and Y. M. Joshi, Santa Fe, New Mexico, A. Shahin.
42. Hyper-aging dynamics of aqueous Laponite-PEO suspensions, 82nd Annual Meeting Society of Rheology, A. Shahin and Y. M. Joshi, Santa Fe, New Mexico, A. Shahin.
43. Time-aging time-stress superposition in soft glass under tensile deformation field, 82nd Annual Meeting Society of Rheology, 2010, A. Shaukat, A. Sharma, Y. M. Joshi, Santa Fe, New Mexico, Asima Shaukat.
44. Shear flow mediated elongational flow in soft glassy materials, 82nd Annual Meeting Society of Rheology, 2010, A. Shaukat, A. Sharma, Y. M. Joshi, Santa Fe, New Mexico, Asima Shaukat.
45. Self similar electrorheological behavior,82nd Annual Meeting Society of Rheology, M. Kaushal, A. Patel, Y. M. Joshi,Santa Fe, New Mexico, Y. M. Joshi.
47. In-situ DRIFT and simultaneous reactivity measurements over Co/Al2O3 catalysts: The CO2 hydrogenation reaction, Spectrocat2010, 19th-23rd July 2010, LCS, Caen, France, T. Das and G. Deo.


Civil Engineering


67. LASViewer-A LiDAR visualisation software, 2nd Innovative LiDAR Solutions Conference, Toronto, 31 May – 3 June, Lohani, B., Manchawari, L.


73. Thick absorbing aerosol layer observed in the monsoon season over India, S. N. Tripathi, S. Dey, J. Jaidevi, B. N. Singh, M. Michael, T. Gupta, American Geophysical Union, San Francisco, December 13-17, 2010.


78. Seasonal Variation in Chemical Composition of Background Aerosol in the Delhi Region, Amrita Singhai, Saood Manzer, Anil Mandaria, Gazala Habib, Tarun Gupta, Poster presented in Workshop Cum Seventeenth National Symposium on Environment (NSE-17), CESE, IIT Kanpur (13th-15th May, 2010).

80. Development of PM$_1$ and PM$_{2.5}$ sampler for ambient measurement, Tarun Gupta, poster presentation at the 3rd Indo-German Frontiers of Engineering Symposium, Khandala, (17-19th June, 2011).

**Chemistry**

81. Mr. Biswajit Santra has presented a poster Titled Synthesis of Mono- and Bi-Nuclear Pd-NHC Complexes via Transmetallation from Trinuclear Cu-NHC complex, B. Santra, R. Srirambalaji, I. Roy and G. Anantharaman, at CRSI-13 meeting held at KIIT Bhubaneswar and obtained best poster award: Dr. G. Anantharaman.

82. Laterally Non-symmetric Cryptands for Fluorescence and Other Studies, 60th Conference on Coordination Chemistry of the Japanese Chemical Society, Osaka, Japan, October 2010: Prof. P. K. Bharadwaj.


86. Proton transport kinetics in aqueous systems: Role of hydrogen bond fluctuations, Indian Institute of Science, Bangalore, July 02, 2010: Prof. A. Chandra.

87. Vibrational spectral diffusion and chemical dynamics in aqueous solutions, Knoxville, USA, June 18, 2010: Prof. A. Chandra.

88. First principles studies of vibrational spectral diffusion in aqueous and nonaqueous solutions, Kobe, Japan, September 28, 2010, Prof. A. Chandra.

89. Molecular Simulations and HPC@IITK, Indian Institute of Technology Kanpur, October 10, 2010 (talk delivered at REACH Symposium), Prof. A. Chandra.

90. Introduction to ab initio molecular dynamics simulations, Indian Institute of Technology Kanpur, November 10, 2010 (talk delivered at the School on Understanding Molecular Simulations: Theory and Applications (UMS10), Prof. A. Chandra.


93. Macromolecule-Metal Nanoparticle Hybrids as Efficient Recyclable Catalysts: Key-Note Address at the National Conference RECENT ADVANCES IN INORGANIC AND NANOCHEmISTRY, March 29-30, 2010, Madurai Kamaraj University, Madurai: Prof. V. Chandrasekhar.

94. 3d-4f Heterometallic compounds: A new family of single-molecule magnets: An Invited Talk at the National Conference RECENT ADVANCES IN INORGANIC AND NANOCHEmISTRY, March 29-30, 2010, Madurai Kamaraj University, Madurai: Prof. V. Chandrasekhar.
95. Inspiration in Science: An Invited Talk given In IISER Bhopal, May 17, 2010: Prof. V. Chandrasekhar.


103. SSK @ 70: Celebration of Excellence: National Symposium on Frontiers of Main-group and Organometallic Chemistry, Indian Institute of Science, Bangalore, November 20, 2010: Prof. V. Chandrasekhar.


114. Towards Using Molecules States as Qubits, 75 Years of Quantum Entanglement: Foundations and Information Theoretic Applications, CII – Suresh Neotia Centre of Excellence for Leadership, City Centre, Salt Lake, Kolkata, Jan. 6-10, 2011, Debabrata Goswami.


121. A change in the 310- to alpha helical transition point in the heptapeptides containing sulfur and selenium’, Anju Duley, M. Nethaji and G. Ramanathan, 3rd Indian peptide symposium at Pune Feb 2011. This presentation received the best poster prize: Dr. R. Gurunath.


124. Chemistry with multidentate pyridine amide ligands: Structures and properties, International Symposium on Frontiers in Inorganic Chemistry (FIC-2010), Indian
Association for the Cultivation of Science, Kolkata (December 11-13, 2010), Partha Pratim Das, Sharmila Pandey, Akhilesh K. Singh and R. N. Mukherjee.


129. Trombay Symposium on Radiation and Photochemistry, Lonavala, India, September 2010: Dr. P. Sen.

130. Chemical Research Society of India, National Symposium in Chemistry, Bhubaneswar, India, February 2010, Dr. P. Sen.

131. Spectroscopy and Dynamics of Molecules and Clusters, Corbett, India, February 2011: Dr. P. Sen.


**Computer Science and Engineering**

133. The Isomorphism Conjecture, IMPECS Workshop, IIT Delhi, April 2010, Manindra Agarwal.

134. The $P \neq NP$ Hypothesis, Talk at Kurukshetra University, April 2010, Manindra Agarwal.

135. Fermat’s Last Theorem: From Integers to Elliptic Curves, INSPIRE Workshop, Lucknow, May 2010, Manindra Agarwal.


137. Automorphisms of Finite Rings and Their Role in Computer Science, Google India, Bangalore, June 2010, Manindra Agarwal.


139. Deolalikar’s Paper on $P \neq NP$, Mysore Park Workshop, Mysore, October 2010, Manindra Agarwal.

140. PRIMES is in P, CSE Department Day, IIT Kanpur, November 2010, Manindra Agarwal.
142. The P ≠ NP Hypothesis, Talk at IISER Pune, November 2010, Manindra Agarwal.

**Humanities and Social Sciences**

150. Some Reflections on Human Rights Education in the Context of Democracy, National seminar on Mass Literacy and Basic Life Skills: The Unfinished Modernist Project in India, Group of Adult Education, School of Social Sciences, Jawaharlal Nehru University, New Delhi, 3-4 March 2011, Munmun Jha.
151. Reading as Resistance: The Spiritual and Political Power of Reading, Annual national conference of Indian Association for Commonwealth Language and Literature Studies, January 2011, Trivandrum, Mini Chandran.
156. Income Inequality, Club Formation and the Quality of Public Good: A Developing Country Perspective, 6th Annual Conference on Growth and Development at ISI Delhi, December, 2010, S. Bhattacharya, Sarani Saha and S. Banerjee.


158. Psychiatric profiling of the Indian geriatric population: Implication for possible interventions. Coping, Resilience and Hope Building: Asia Pacific International Conference, Brisbane Institute of Strength Based Practice & Griffith University, Brisbane, Australia, July 9-11 (2010), Braj Bhushan.


**Industrial & Management Engineering**

160. What does Business have to say about Maoism? An attempt at finding out the missing voice of big business on Maoism, 34th Indian Social Science Congress, Guwahati 27th to 31st Dec, 2010, Varman, Rahul & Chakrabarti, Manali.


**Mechanical Engineering**


168. Modal analysis of free and forced circular jets at low and high Reynolds numbers, Proceedings of the 37th Fluid Mechanics and Fluid Power Conference, held at IIT


170. Dipole generation and subcritical behaviour in rapidly rotating dynamos, 12th SEDI Symposium, Santa Barbara, USA, 18-23 July 2010, C.A. Jones & B. Sreenivasan.


Material Science Program


Physics

195. Primordial Features and Non-Gaussianities (PFNG), Harish Chandra Research Institute (HRI) from December 14 th-18th, 2010, Lee-Wick particle spectrum in the early universe, Kaushik Bhattacharya, Suratna Das.
196. Driven weak to strong pinning crossover in a partially nanopatterned superconductor, International conference on Ion-Beam Induced Nanopatterning of Materials (IINM-2011), 06-10 February 2011, Institute of Physics, Bhubaneswar, Orissa, Gorky Shaw; Satyajit Banerjee.


210. Experimental investigation of electron trapping and frequency sideband generation in nonlinear interaction of electromagnetic standing waves with an


INVITED TALKS DELIVERED

Aerospace Engineering

2. Experimental Techniques in Fracture, DMSRDE (Defense materials and stores research and development), Kanpur, Dec 07, 2010, R. Kitey.

Biological Science and Bioengineering

4. Role of BMP signaling in vertebrates: Exceeding the brief?, Central Drug Research Institute, Lucknow, Diamond Jubilee Lecture, BSBE, Amitabha Bandyopadhyay
5. Stopping heart burn, ChEmference, Department of Chemical Engineering, IIT Kanpur, A. Pal.
7. Society of Biological Chemists Meeting, Bangalore, 2010, Dr. Balaji Prakash.
11. Germline Stem Cells: RNA-binding proteins take multiple avatars to maintain the fountain of youth, 79th Annual Meeting of the Society of Biological Chemists (India), Indian Institute of Science, Bangalore, K. Subramaniam.
13. (i) Membrane Structure & Dynamics and (ii) Protein – Membrane interactions. Workshop on Biological Simulations and Applications in Biology, School of Computational and Integrative Sciences, Jawaharlal Nehru University, New Delhi, Aug 2010, R. Sankararamakrishnan.
15. From microbial to mammalian aquaporins: Sequence analysis to simulations. Indo-Swiss Bioinformatics Symposium at IIT-Delhi, Oct. 2010, R. Sankararamakrishnan.


22. Polyglucosan body in neurodegenerative disorders and in aged brain: friend or foe?: Invited talk delivered in the Indo-US Bilateral Symposium on Aging and Age-Related Diseases, National Institute of Immunology, Delhi, March 3, 4, 2011, S. Ganesh.


Civil Engineering

26. Structural design of pavements with stabilized layers, Seminar on New Materials in Road Construction for Stabilized Pavements, Department of Civil Engineering, IIT Madras, March 01, 2011, Das, A.


28. How to build good roads? (October 5, 2010), IGS Local Chapter, SGSITS, Indore, Das, A.

30. Pavement design using recycled asphalt, Sustainable asphalt construction and maintenance technologies: a road to a green future, New Delhi, June 24, 2010, Das, A.

31. LiDAR Simulator, CEF-University of Montreal, Canada, Bhart Lohani.


33. Dynamics of Mantle melting and volcanism in Mauritius Island, Indian Ocean. Department of Geology, Lucknow University, D. Paul.

34. Towards Seismic Safety in India : Progress and Hurdles, Workshop on earthquake response- When the shaking stops: the role of secondary hazards in earthquake-prone regions, Institute of Hazard, Risk and Resilience, Durham University, 10 September 2010, D. C. Rai

35. Understanding the heterogeneity in aerosol characteristics over the Indo-Gangetic Basin-an observational Portrayal, Geophysical Fluid Dynamical Laboratory, Princeton University, USA, June 2010, S.N. Tripathi.

36. Understanding the heterogeneity in aerosol characteristics over the Indo-Gangetic Basin-an observational Portrayal, National Atmospheric Research Laboratory, Department of Space, Gadanki, February, 2011, S.N. Tripathi.

37. Understanding the heterogeneity in aerosol characteristics over the Indo-Gangetic Basin-an observational Portrayal, National Physical Laboratory, New Delhi, March 2011, S.N. Tripathi.


41. Systematic Approach to Address Road Safety, First International Conference on Road Safety Vision 2020, May 2011, Co-hosted by All India Federation of Motor Vehicle Department Technical Executive Officer’s Association, Udaipur, India, V. Vasudevan.

**Chemical Engineering**


52. Electrolyte Insulator Semiconductor based Microfluidic Biosensor for Early Disease Detection, UGC sponsored Workshop on Nanoscience and Nanotechnology, Aligarh Muslim University, Aligarh, Mar 26, 2011, S.Panda.
55. Chemical Engineering: Directions and Opportunities, MANIT – Bhopal, October 23, 2010. PK Bhattacharya.
60. Delivered an invited talk at the Indo-European meeting on hydrodynamic stability held during January 17-19 2011, at JNCASR Bangalore, V. Shankar.
61. Delivered an invited departmental seminar at the Department of Mathematics, IIT Madras, Chennai on February 18, 2011, V. Shankar.
62. Superpositions in time domain and prediction of long time behavior in soft glassy materials, Indian Institute of Technology Hydrabad, Hydrabad, Yogesh M Joshi.
63. Aging and rheology of pasty materials, Unilever Research and Development Center, Connecticut, Yogesh M Joshi.

64. Superpositions in time domain and prediction of long time behavior in soft glassy materials, KAUST center, Cornell University, Ithaca, Yogesh M Joshi.


Chemistry


68. 98th Indian Science Congress, January 3-7, 2010, Chennai: Dr. J. K. Bera.

69. CRSI-RSC Meeting, February 4 – 6, 2011, Bhubaneswar: Dr. J. K. Bera.

70. FIC-2010, December 11-13, 2010, IACS, Kolkata: Dr. J. K. Bera.

71. NSFMOC, November 20, 2010, Bangalore: Dr. J. K. Bera.


74. 1st Joint Meeting of the Associated International Laboratory held at Solid State and Structural Chemistry Unit, Indian Institute of Science, Bangalore, India, July 2-5, 2010: Prof. A. Chandra.

75. Indo-Japan Joint Workshop on Frontiers in Molecular spectroscopy: From gas phase to proteins, held at Kobe, Japan, September 26-29, 2010: Prof. A. Chandra.


77. Treating Large Molecules and Clusters by ab initio Methods: An Art of the Possible, Tohoku University, Sendai, Japan: Prof. S. R. Gadre.

78. Treating Large Molecules and Clusters by ab initio Methods: An Art of the Possible, National institute of advanced industrial science and technology (AIST) Japan, and Nagoya University, Nagoya, Japan: Prof. S. R. Gadre.

79. Treating Large Molecules and Clusters by ab initio Methods: An Art of the Possible, Institute for molecular science, Department of Theoretical Molecular Science, Okazaki, Japan: Prof. S. R. Gadre.


81. Molecular Electrostatics: Basic Concepts and Applications in Chemistry and Biology, Mathematics in Drug Discovery at Yashada, Pune: Prof. S. R. Gadre.


83. Molecular Tailoring : an Art of the Possible for Ab Initio Treatment of Large molecules and Molecular Cluster, Next Generation Application Challenges on PARAM Yuva Workshop at C-DAC: Prof. S. R. Gadre.
84. New Chemistry of Small Ring N-Heterocycles: Synthetic and Mechanistic Perspectives: National seminar, Bengal Engineering and Science University (BESU)-2011, Shibpur, Department of Chemistry, Manas K. Ghorai.


87. Towards Using Molecules as Qubits, C. V. Raman Hall, Indian Association for the Cultivation of Science, Kolkata, Nov. 26, 2010, Debabrata Goswami.

88. Interface between chemistry and biology a perspective, International Conference and Humboldt Kolleg on held during September 21-24, 2010 at IICT Hyderabad: Prof. F. A. Khan.

89. Prof. N. S. Narasimhan Endowment Lecture on February 4, 2011 held at Department of Chemistry, University of Pune, Pune, Prof. F. A. Khan.


96. Importance of Weaker Interactions in Molecular Self-Assembly and Lattice Inclusion Compounds.


104. Metal-Coordinated Radicals. Bioinorganic and Inorganic Perspectives, One-Day Seminar, Department of Chemistry, University of Delhi, Delhi (March 05, 2011): Prof. R. N. Mukherjee.


107. Metal-coordinated radicals and their reactivity. Bioinorganic and Inorganic Perspectives, 13th CRSI National Symposium in Chemistry and 5th CRSI-RSC Symposium in Chemistry, National Institute of Science Education and Research (NISER), Bhubaneswar (February 4-6, 2011): Prof. R. N. Mukherjee.


109. Applications of Ab Initio Molecular Dynamics in Biology, JNU, New Delhi, Prof. Indira Ghosh, Dr. Nisanth N. Nair.

110. Chemical Reactions In Silico, NUS, Singapore, Dr. Nisanth N. Nair.

111. Catalysis by Number Crunching, University of Ghorakpur, Ghorakpur, Dr. Nisanth N. Nair.

112. Molecular Beam Epitaxy group, Solid State Physics Laboratory, New Delhi: Dr. M. Ranganathan.

113. Aerospace Engineering Department, IIT Kanpur: Dr. M. Ranganathan.


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117. International Conference on Chemistry: Frontiers and Challenges, Department of Chemistry Centenary Celebrations, Aligarh Muslim University, ALIGARH, March 5-6, 2011: Dr. M. L. N. Rao.


120. Control of Spins by Ring Deformations: A Novel Series of Oxo and Hydroxo Bridged Fe(III) Bisporphyrins, 13th CRSI and 5th RSC Symposium held on NISER-Bhubaneswar, during February 03-06, 2011: Dr. S. P. Rath.

121. Control of Spins by Ring Deformations: A Novel Series of Oxo and Hydroxo Bridged Fe(III) Bisporphyrins, FICS-2010 Symposium held on IITG, during December 03-04, 2010: Dr. S. P. Rath.


127. Seeing The Unseen Of Nanothick Interface By Laser Spectroscopy, Department of Chemistry, Visva-Bharati University, Santiniketan, WB, India 20 March 2011: Dr. P. Sen.


140. Invited speaker and Session Presided at CLEO-2010 in San Jose, CA during May 18-20, 2010, Prof. D. Goswami.

**Electrical Engineering**


146. A Novel Approach of Human Motion Tracking with the Mobile Robotic Platform, 2011 UKSim 13th International Conference on Modelling and Simulation,

147. PSO based modeling of Takagi-Sugeno fuzzy motion controller for dynamic object tracking with mobile platform, 5th International Symposium Advances in Artificial Intelligence and Applications, Wisla, Poland, October 2010. Meenakshi Gupta, Laxmidhar Behera and KS Venkatesh.


151. Delivered part of the tutorial on "Wide area Monitoring and Control", in 16th National Power Systems Conference, Hyderabad, India, in December 2010, Chakraborty S.

152. Delivered a plenerrary talk on "Solid State Lasers" at “PhotoSMART”, A summer school organized by Institute of Radio Physics and Electronics, University of Calcutta, 1-18th June 2010. Das U.

153. Plenary talk at IITM 2010 Workshop on "Innovations in Information Communication Technologies (ICT) for Defence Applications" Dec 27, 2010, IIIT Allahabad. Title: Distant speech recognition : sub space and group delay based methods, Hegde, RM

154. Plenary talk at National conference on SIGNAL PROCESSING and REAL TIME OPERATING SYSTEM (SPRTOS), Mar. 27 2011, Hands Free speech communication, Hegde, RM.


160. DC-DC converter for microgrid application’ at IEEE lecture at MNNIT Allahabad on Feb. 09, 2011, Mishra S. K.


164. Power Converters, Crompton Greaves Global R&D Ltd., Electronics Division, Mumbai, P. Sensarma.


166. Microwave Measurements I: Basic Principle of Major Components and Instruments used in the RF and Microwave Frequency Range, in Short Course on Recent Trends in the Design and Measurement of RF and Microwave Circuits (DMRMC) at IIT Kanpur in July 2010. K. V. Srivastava.

167. Microwave Measurements II: Modern Measuring Equipments used at Microwave Frequencies and their Applications", in Short Course on Recent Trends in the Design and Measurement of RF and Microwave Circuits (DMRMC) at IIT Kanpur in July 2010. K. V. Srivastava.

168. Metamaterials and their applications for the RF circuit design, in Short Course on Recent Trends in the Design and Measurement of RF and Microwave Circuits (DMRMC) at IIT Kanpur in July 2010. K. V. Srivastava and M. Jaleel Akhtar.


172. A Scheme to Prevent Distance Relay Mal-operation under Power Swing and Voltage Instability using Synchronphasor Measurements’ in the ECE Department, Mississippi State University USA on 20th July 2010. Srivastava S.C.

173. Synchronphasors based Wide Area Monitoring, Protection and Control at Crompton Greaves Limited, R&D Division, Mumbai on 1st October 2010. Srivastava S.C.


178. IEEE General Meeting, July25-29, Minneapolis, USA, Singh S.N.

179. 4rth IASTED Power and Energy Conference, Phuket, Thailand, Nov. 24-26. Singh S.N.

180. Two-day Indo-Canadian Workshop on Urban Electric System Integration with PHEV Charging stations and solar farms, Anna University, Chennai, Jan 6-7, 2011. Singh S.N.


**Humanities and Social Sciences**

182. A Research Note on Religion and Politics — Seminar on Interdisciplinary Dialogue on Religion and Politics at the Centre for Political Studies, Jawaharlal Nehru University, 19 November 2010, A. Chakrabarti.


186. Key-Note address: International Conference entitled: Science, Technology and Society (supported by the M P council of Science and Technology). Indore Christian College, Devi Ahilya University, Indore (M.P.), March 12, 2011- B.K. Pattnaik.


188. Suffering and Healing: Indigenous Perspective, Refresher Course on Indian Psychology: Emerging Perspectives, University of Delhi, November 22 - December 11, 2010 - Kumar Ravi Priya.

189. The centrality of reflexivity in qualitative research and The Healing Potential of the Qualitative Research Relationship, National Workshop on Qualitative Research
Methods in Psychology, Department of Psychology, University of Calcutta, December 3-10, 2010, Kumar Ravi Priya.


Industrial Management and Engineering


Mathematics


201. Resource person for the summer workshop on Mathematical Modeling, held at Kalasalingam University, Krishnankoil (TN), June 2010, Peeyush Chandra.


204. Presented 03 lectures in the Workshop on PDEs held during March 3-5, 2010 at IIT Patna, M. K. Kadalbajoo.

205. Second PDE at a four days Workshop in PDE for students and teachers of Patna and surrounding academic institutions during 1-4 March 2011. The venue was IIT Patna. This workshop is being partially funded by Indian Academy of Science, V. Raghavendra.

**Mechanical Engineering**


212. Dynamical systems approach to instability problems, Lehrstuhl fuer Thermodynamik, University of Munich, Munich, Germany, June 10, 2010, P. Wahi.

213. Computational Fluid Dynamics Organization: Kongu Engineering College, Perundurai, Erode, Tamil Nadu Date: 18.2.2011, P. S. Ghoshdastidar


216. Modeling phase change in a crystal growth process, presented during the QIP sponsored course on Phase Change Phenomena at IIT Kanpur, January 2011, K. Muralidhar.


219. Optical measurement using refractive index and scattering techniques and (ii) Recent developments and applications of computational fluid dynamics, presented at National Institute of Technology Agartala, 8-9 March 2011, K. Muralidhar.

221. Liouville-Arnold Theorem Analysis seminar Department of Mathematics and Statistics, IIT Kanpur, B. L. Sharma.

222. Modelling the Earth's magnetic field, IISc Bangalore, Department of Mechanical Engineering, 3 September 2010, B Sreenivasan.

223. Probing the Earth's deep interior with geodynamo models. IISc Bangalore, Centre for Earth and Atmospheric Sciences, 6 January 2011, B Sreenivasan.


231. Molecular Dynamics simulations of plasticity in amorphous, glassy polymers, January 3-8, 2011 Puerto Vallarta, Mexico, Dhiraj K Mahajan and Sumit Basu.

**Material Science and Engineering**


237. Processing-Microstructure-Biocompatibility relationship of HAp based composites and experimental results on influence of electric and magnetic field on cell-material interaction; Institute of Biomaterials, Department of Materials Science and Engineering, University of Erlangen-Nuremberg, Germany, 9th July, 2010, B. Basu.

238. Bridging gap between Materials Science and Biology: An interdisciplinary approach to Design biomaterials; Materials Research Center, IISc, Bangalore, INDIA, October, 2010, B. Basu.


244. Electrically Stimulated Enhancement of Cell Proliferation on Ferroelectric-Hydroxyapatite Composites; at the 35th International Conference & Exposition on Advanced Ceramics & Composites (ICACC), held in Daytona Beach, Florida, January 23-28, 2011, B. Basu.

245. Innovative multi-stage spark plasma sintering to obtain strong and tough ultrafine grained ceramics; at the 35th International Conference & Exposition on Advanced Ceramics & Composites (ICACC), held in Daytona Beach, Florida, January 23-28, 2011, B. Basu.


249. Innovative multi-stage spark plasma sintering to obtain strong and tough ultrafine grained ceramics; Department of Ceramic Engineering, Banaras Hindu University (BHU), Varanasi, India, 28th March, 2011, B. Basu.


Physics

251. MBI Workshop on Transport in a Cell, Mathematical Biosciences Institute, Columbus, Ohio, USA (2010), D. Chowdhury.


257. The Scaling of fidelity Susceptibility close to a quantum (multi-)critical point; Conf.: ICTS conference on Condensed Matter (ICMP10), Mysore, India, 22nd Dec, 2010 Name: Amit Dutta.
258. The Scaling of fidelity Susceptibility close to a quantum multicritical point: Statphys-Kolkata VII, organized SINP and S. N. Bose Center for Basic Sciences, Kolkata, 26-30 Nov., 2010 Name: Amit Dutta.
265. Driving through traffic jams in superconductors, Institute Colloquium, Tata Institute of Fundamental Research, Mumbai, April 2011, Satyajit Banerjee.
266. Promise of Nanotechnology (Invited), National Conference on Nanomaterials and Nanotechnology, Amity School of Engineering & Technology and Department of Physics, University of Lucknow, Lucknow, 21-23 Dec, 2010, S.C. Agarwal.
267. Invited Plenary Lecture, The fascinating world of Lasers, 5th Laser Optics for Young Scientists (LOYS 2010) as part of 14th International Conference “Laser Optics”, Physics, St.Petersburg, Russia, R.Vijaya.
269. Fiber Optics and its present relevance in Communication, SPIE Visiting Lecture, Physics, B.P.Poddar Institute of management and Technology, Kolkata, R.Vijaya.
270. Laser emission from self-assembled photonic crystals, PHOTONICS 2010, Physics, Guwahati, R.Vijaya.
271. An Introduction to Lasers and Fiber Lasers, DST-SERC School on Guided-wave optics and Devices, Physics, CGCRI Kolkata, R.Vijaya.
272. Laser emission from self-assembled photonic crystals, Annual Symposium of the IITB – Monash Research Academy, Physics, Mumbai, R. Vijaya.

273. Multi-element focused ion beams: Concepts to Genesis of a Novel Device”, Australian National University, Research School of Physics and Engineering, Canberra, October 20, 2010 (Invited). S. Bhattacharjee.


275. Control, tomography and entanglement in photon emission from atomic systems; International Conference on quantum optics and quantum computation, JI Institute of Technology, March 2011; V. Ravishankar.
OTHER ACTIVITIES

PROFESSIONAL VISITS TO UNIVERSITIES/RESEARCH ORGANIZATIONS / INDUSTRIES

Aerospace Engineering

1. Indian Airforce Station, Chakeri, Exploring research opportunities in the field of fracture in laminated composites, R. Kitey.
2. Defense materials and stores research and development, Kanpur, Exploring research opportunities in the field of interfacial fracture in thin films, R. Kitey.
3. R&D center for Iron & Steel of SAIL, Rourkela, To discuss about problems faced by them in existing burners from 15th to 17th Feb 2011, D.P. Mishra.

Biological Sciences and Bioengineering

4. Institute of Genomics and Integrative, Biology, New Delhi on Dec 17, 2010, Dr Santosh Pasha, Scientist, for collaboration, Dr. Ashwani Kumar Thakur.
5. University of Nottingham, UK, Bimolecular Sciences Department, for collaboration Dr. Ashwani Kumar Thakur.

Civil Engineering

6. CEF-University of Montreal, Canada, For discussion on collaboration on the use of our software “Limulator”, 7 July 2011, Bharat Lohani.
7. Attended the Southern African Institute of Steel Construction Award 2010 as mentor of the top final year Civil Engineering students of the University of KwaZulu-Natal, South Africa for their participation in the award ceremony held in Gauteng, South Africa, 2010, Chakrabarti, S.K.
8. Institute of Hazard, Risk and Resilience, Durham University, Collaborative research program, 10 September 2010, D. C. Rai.

Chemical Engineering

11. Sabbatical Leave; Yeungnam University, South Korea, Visiting Professor, April 2010-July 2010, Ashutosh Sharma.
12. Chief Guest at the inauguration of ‘Chemical Engineering Students Association (ChESA) & release of first Newsletter of ChESA’ at MANIT – Bhopal, October 23, 2010, P.K.Bhattacharya.

Chemistry

15. Invited by Taiwan Academy of Sciences to give lectures for a week (October 10-17, 2010): Prof. J. N. Moorthy.
16. Visit to Solid State Physics Laboratory, New Delhi for 1 day for scientific discussions: Dr. M. Ranganathan.

**Electrical Engineering**

17. To deliver a technical lecture on Microwave Imaging, Sensing and Nondestructive Testing, January 28, 2011 at Aligarh Muslim University, Aligarh, Akhtar M. J.
18. Visit to C-DOT Bangalore to conduct a short course on Introduction to LTE. (Co-organized with Aditya Jagannatham), Banerjee Adrish.
20. Intelligent Systems Research Centre, University of Ulster, 20 Nov 2010 – 18 Dec 2010, Behera L.
21. Chemnitz University of Technology, Chemnitz, Germany, See the printing facilities and interact with researchers working in printable electronics, 29th June, 2010, S. Sundar Kumar Iyer.
22. Dresden University of Technology, Dresden, Germany, See the printing facilities and interact with researchers working in printable electronics, 29th June, 2010, S. Sundar Kumar Iyer.
23. Faculty of Combat, College of Military Engineering, Pune in Dec 2010 to understand the various IED and landmine type threats faced by us, Naren Naik.
24. Department of Orthopaedics, Chatrapati Shahu Maharaj Medical University (formerly the KGMC), Lucknow in line with an ongoing collaboration to explore impedance based methods to monitor fracture healing, Naren Naik.
25. ECE Department, Mississippi State University USA during July 2010, Srivastava S.C.
27. Asian Institute of Technology Thailand, During Nov 23-28, 2010, Singh S.N.
28. Asian Institute of Technology Thailand, During March 28- April 2, 2011, Singh S.N.
29. BSES Rajdhani Power, New Delhi, Singh S.N.
30. Visit to C-DOT Bangalore to conduct a short course on Introduction to LTE, Banerjee Adrish.

**Humanities and Social Sciences**

32. Lund University, Sweden – Participating in Erasmus Mundus Europe Asia (EMEA), Lot 11- Consortium Meeting, September 23-24, 2010 - P.M. Prasad.
33. Visiting Faculty - Interaction with students, mentoring of English faculty, participation in various administrative matters related to the setting up of a new Institute (also conducted two workshops) Feb.- May 2010, IIT Gandhinagar, Suchitra Mathur.
34. Visiting Faculty - Conducting a short course entitled “The Pleasures of Reading” for students and faculty (course designed to introduce participants to the study of literature at the college level). Oct. 2010, IIT Gandhinagar Suchitra Mathur.

35. Guest Professor (equivalent to Adjunct Faculty) - Organizing and participating in workshops/ seminars/ lectures in Humanities and Social Sciences, including English and Communication Skills, and for other academic and advisory activities –for a period of two years- beginning Nov. 2010, IIT Gandhinagar, Suchitra Mathur.


**Industrial Management and Engineering**

37. IE Business School, Madrid, Spain; National Institute of Science, Technology & Development Studies, New Delhi; T.A.Pai Namagement Institute, Manipal; Maastricht University, School of Business, Netherlands, J.Chatterjee.

**Mechanical Engineering**


40. IITChennai, Discussion on collaborative Research, Visitor, June 26, 2011, Prof. Sunil Kumar, dept. of Physics, IIT Chennai, S. Das.


42. IISc Bangalore and JNC, Bangalore (September 2010 & January 2011), B. Sreenivasan.

43. University of Coventry (UK), University of Leeds (UK) (December 2010), B. Sreenivasan.


46. Ulsan National Institute of Science and Technology, Korea, Collaborative Research, Visitor, Oct 1. - 21, Ishan Sharma.

47. Cornell University, USA, Collaborative Research, Visitor, June 2010, Ishan Sharma.

48. Continuing Education Activities Conducted an AICTE sponsored course on Micromanufacturing S. Bhattacharya.

49. Organized a 10 days hands on training program on Microelectromechanical systems under the National Program on Micro and smart systems with a team of 14 faculty members and students from BITS Ranchi, ISM Dhanbad, IT-BHU and MNNIT Allahabad for “Fabrication of a poly-silicon peizo-resistive pressure sensors” at CEERI-PILANI. July 14-23, 2010. Bhattacharya.

Mathematics

51. Visit to the University of Western Cape during December 4, 2010 to December 25, 2010, D. Bahuguna.
52. Research visit to the Institute of Mathematics, University of Warsaw, Poland, June-July 2010, Mohua Banerjee.

Physics

53. Visited the Mechano-Biology Institute, National University of Singapore, Singapore, (2011) to deliver a seminar. D. Chowdhury.
54. Visited HRI, Allahabad to deliver Physics Colloquium. D. Chowdhury.
60. B.P.Poddar Institute of management and Technology, Kolkata, SPIE Lecture, SPIE Visiting Lecturer, Oct. 29, 2010, R.Vijaya.
61. CGCRI Kolkata, DST-SERC School on Guided-wave optics and Devices, Invited Speaker, 16 Feb, 2011, R.Vijaya.
62. Australian national University, Canberra, Australia; Research collaboration; May 30, 2010- October 30, 2010; S. Bhattacharjee.
63. Institute for Plasma Research, Bhat, Gandhinagar, India; Research presentation and discussions on ongoing research collaboration; August 10 -11, 2010; S. Bhattacharjee
64. The Abdus Salam International Center for Theoretical Physics, Trieste, Italy; June 01, 2010 – June 30, 2010; Tarun Kanti Ghosh.
CONTINUING EDUCATION ACTIVITIES

Aerospace Engineering

1. Experimental Techniques in Fracture (QIP), DMSRDE, Kanpur, Dec 07, 2010, Number of people attended from academics/industry – 50, R. Kitey.
2. Lectures on Finite Element Method in “A course in advanced computing in engineering and sciences”, held at IIT Kanpur, 5-9 November 2010, C.S. Upadhyay
3. Delivered two lectures on combustion is short term course conducted by ME department, IITK, D.P. Mishra.

Biological Sciences and Bioengineering

4. Bio-fluid mechanics (QIP), IIT Kanpur, March 5-9, 2011, Participants: M.Tech and Ph.holders in Mechanical Engineering and allied areas working at academia and industry, A. Pal.

Civil Engineering

5. Organized a short-term Course on “Engine Emission Formation and Control”, from 28th June-3rd July, 2011. Sponsored by Quality Improvement Program, MHRD, Government of India. The school was attended by 38 participants with 14 members from industry and 24 from academia by Tarun Gupta.
7. Design of Steel Structures to IS800 and EC3, Industry, Mumbai, 24-25 September 2010, Tecnimont ICB Pvt. Ltd., ~30 engineers from mid- to senior level, D. C. Rai.

Chemical Engineering

9. Aspects of Polymer Rheology and its Significance (continuing education programme), DMSRDE, Kanpur, Scientists of DRDO laboratories, 7 to 12 February 2011, Yogesh M Joshi.
Chemistry

12. Delivered lectures at DST-INSPIRE program (August 04-07, 2010), Dharwad, Karnataka: Prof. J. N. Moorthy.

13. Chemistry – A Fascinating Science: Biological Processes of Metal Ions, DST INSPIRE lecture, Pandit Ravishankar Shukla University, Raipur (December 4, 2010), Prof. R. N. Mukherjee.

14. Co-convener: Theoretical Chemistry Symposium, December 8-12, 2010. This was a 4 day conference with invited talks and poster sessions. It is part of a biennial national level meeting and was attended by over 250 participants from India and abroad: Dr. M. Ranganathan.

15. Co-convener: ICTS School on Understanding Molecular Simulations, November 3-13, 2010. IIT Kanpur: Dr. M. Ranganathan. This was a 10 day school on molecular simulations. It included lectures and hands-on training sessions from experts in the field and was attended by 75 student participants from different parts of India.


Electrical Engineering

17. A short course on “Recent Trends in the Design and Measurement of RF and Microwave Circuits (DMRMC), July 12-16, 2010 Akhtar M. J.


20. Organic Electronic 2010” Summer Course supported by Samtel Centre for Display Technologies from 5th to 10th July, 2010, IIT Kanpur, Participants were PhD students, young faculty members from other universities and a few industrial representatives from partner industries of Samtel Centre, Iyer S. S. K.

21. Baquer Mazhari, S. Sundar Kumar Iyer, Y. N. Mohapatra (Physics), Siddhartha Panda (Chemical Engineering), Deepak Gupta, Monica Katiyar and Ashish Garg (all for Material Science and Engineering), Iyer S. S. K.


24. Coordinator of Quality Improvement Program Course on Intelligent System Applications to the Smart Electric Grid Solutions at IIT Kanpur, November 15-19, 2010, Singh S.N.
Humanities and Social Sciences


Industrial Management and Engineering

28. Coordinated under IITK CEP :USID Gurukul, Collaborative & Immersive Design Camp for Social Innovation, involving 16 facilitators (Gurus) and 48 students (Shisyas) from 15 top Design Institutes, August 28-Spetember 4, 2010, J. Chatterjee.
29. 6-day 3rd Capacity Building Program for staff of Electricity Regulatory Commissions (for Forum of Regulators) from August 23-28, 2010, Anoop Singh.
30. Conducted a one day self financed QIP course on “Cost Minimization in Supply Chains” (12 APR 2010); Venue: IIT Kanpur 208016, RRK Sharma.

Mechanical Engineering

33. Plasticity and Sheet Metal Forming, TATA STEEL, TATA NAGAR, February 14 – 18, 2011; Researchers from TATA STEEL R&D division, PM Dixit and N V Reddy.
34. A one-week short course sponsored by Quality Improvement Program for engineering college teachers and industry entitled “Diesel Particulate and NOx Emissions” February 14 - 18, 2010, Coordinator: Dr. Avinash Kumar Agarwal, Dr. Tarun Gupta.
36. Taught a course on rapid Manufacturing to IIT Hyderabad students in Distance mode, N. V. Reddy.
38. Conducted an AICTE sponsored course on “Micromanufacturing”. V.K. Jain.

Materials Science Program


ANY OTHER IMPORTANT ACTIVITY

Aerospace Engineering

2. Member of Program Management Board, Micro Air Vehicle Program, DRDO, C Venkatesan.
3. Advanced Composites-Phase 3 (As coordinator of ARDB) submitted the proposal to DRDO and it has been approved by RM, C Venkatesan.
5. Establishing high strain rate and optical testing facilities in Aerospace Structures Laboratory, R. Kitey
7. 37th Solid Mechanics Conference, Warsaw, Poland from 6-10 September 2010, P.M. Mohite.
9. SOLMECH 2010, held at Warsaw (Poland), 6-10th September 2010, C.S. Upadhyay.
10. Arrester Barrier Analysis tool for LCA (sponsored by ADA), C.S. Upadhyay.
12. Member of ARC committee of IIT Kanpur, for review of UG and PG curriculum, C.S. Upadhyay.
13. Special invitee to ARDB structures panel, C.S. Upadhyay.
16. Member, National Organizing Committee, CHEMCON-2011, D.P. Mishra
17. Editorial board member, Journal of the Chinese Institute of Engineers, Published by Taylor & Francis, 2011, D.P. Mishra
19. Member, National Technical Committee, National conference on “Energy,
Economy and Environment”, from 28th to 30th December, 2011, D.P. Mishra
20. Working as an executive member of The combustion institute (India Section) for 2010-2012, D.P. Mishra
21. NPTEL Course Development : (i) Fundamentals of Combustion (ii) Introduction to Propulsion, D.P. Mishra
23. Virtual Combustion and Atomization Lab, D.P. Mishra
25. Control, Automation and robotics (CAR) Conference-2011 which was held in Hostel fort canning, Singapore during 28th Fed- 1st March 2011, Dr. A.K. Ghosh.

Biological Science and Bio-engineering

27. Life member of Indian Peptide Society, Dr. Ashwani Kumar Thakur.
28. Life member of Indian Biophysical society, Dr. Ashwani Kumar Thakur.
29. The paper named “PUF-8 and GAP-3 negatively regulate RAS/MAPK signaling in C. elegans germ cells”, was selected as one of the 8 selected from among 795 papers to be presented as an oral presentation by a PhD student at the 79th Annual Meeting of the Society of Biological Chemists Indian Institute of Science, Bangalore, (India), 2010, S. Vaid, M. Ariz and K. Subramaniam.
31. Associate Editor, Annals of Neurosciences (official journal of the Indian Academy of Neuroscience), S. Ganesh.

Civil Engineering

33. Co-chair, session-II, Seminar on New Materials in Road Construction for Stabilized Pavements, Department of Civil Engineering, IIT Madras, March 01, 2011, Das, A.
34. SURGE 2011: Ashwin Kumar (NIT Tiruchirappalli). Recipient of Best Poster Presentation Award for Surge 2011 students (8 out of total 81 students were awarded) Report Title: Assessment of the air quality in Kanpur city 2011: impact of traffic and construction activities near major intersections, A. Goel.
35. Editor, ISET Journal of Earthquake Technology for the 13th consecutive year, V.K. Gupta.
36. Associate Editor, ASCE Journal of Structural Engineering for the 8th consecutive year, V.K. Gupta.
37. Co-Chair, ISPRS WGV/2 for period 2008-2012, Bharat Lohani.
38. Member, MHRD National Task Force on Geospatial Education, 2011, Bharat Lohani.
40. Incorporated Geokno India Pvt. Ltd. at SIIC, IIT Kanpur won the ISBA award for the best start up in ICT category in 2011, Bharat Lohani.
41. Developed “LASViewer” working with Geokno, Bharat Lohani.
42. Fellow of Geological Society of India, D. Paul.
43. Editorial board member, Chemical Geology, D. Paul.
44. Associate Editor, Journal of Earth System Sciences published by Indian Academy of Sciences, Bangalore by S.Tripathi.
45. Lead speaker, Third Indo-German Frontiers of Engineering held in Khandala, June 2011 by S.N. Tripathi.
47. Examiner for Ph.D. thesis Physical Research Laboratory, Ahmadabad and Vikram Sarabhai Space Center, Trivandrum by S.N. Tripathi.
48. Serving as the Chair of paper review committee of Transportation Research Board's (TRB) Occupant Protection Committee, Washington, DC, USA, V. Vasudevan.
49. Reviewer of TRB's Pedestrian Safety committee, Washington, DC, USA, V. Vasudevan.
52. Member of a scientific committee of Urban Mobility India (UMI), V. Vasudevan.
53. Member of AICTE's committee on syllabus for new transportation engineering related courses, V. Vasudevan.

Chemical Engineering

54. MRSI Distinguished Lecturership Award, Materials Research Society of India (2011-12), Ashutosh Sharma.
57. R. C. Mehrotra Memorial Lifetime Achievement Award, The Indian science Congress Association (2010), Ashutosh Sharma.
60. INAE Visvesvarya Chair Professorship, Indian National Academy of

61. Member, Advisory Board, Elsevier (India), 2008-2012, Ashutosh Sharma.

62. Member, Program Committee of the International Centre for Theoretical Sciences (ICTS) of Tata Institute of Fundamental Research, Mumbai (2010-2012), Ashutosh Sharma.

63. Member, Research Council, National Physical Laboratory (NPL), New Delhi (2010-2013), Ashutosh Sharma.

64. Member, Research Council, Central Electrochemical Research Institute (CECRI), Karaikudi (2010-2013), Ashutosh Sharma.


66. Member, Program Committee of the International Centre for Theoretical Sciences (ICTS) of Tata Institute of Fundamental Research, Mumbai (2010-2012), Ashutosh Sharma.


68. Ashutosh Sharma, Member, Board of Governors & Research Advisory Committee, Indian Institute of Science Education and Research (IISER), Mohali (2007-2011).

69. Member, Research Council, National Institute for Interdisciplinary Science and Technology (NIST-CSIR), Trivendrum (2007-10), Ashutosh Sharma.

70. Member, Search-cum-Selection Committee, Post-Doctoral Fellowships in Nano Science and Technology, Department of Science & Technology, Govt. of India (2008-2012), Ashutosh Sharma.

71. Ashutosh Sharma, Member, Steering Committee, Sophisticated Instruments Facility Program, Department of Science and Technology, New Delhi (2010-2012).

72. Member, Program Advisory Committee for International Division’s Program on Materials, Mining and Mineral Engineering, (PAC-MAT), Department of Science and Technology, New Delhi (2009-2011), Ashutosh Sharma.

73. Member, Program Advisory Committee for Chemical Engineering Program (PAC-ChE), Department of Science and Technology, New Delhi (2007-2011), Ashutosh Sharma.


77. PAC( Chemical Engineering), DST, N.Delhi, D. Kunzru, Member

78. Member, Board of Governors, Rajiv Gandhi Institute of Petroleum Technology, Rai Bareli U.P., D. Kunzru.

79. Member, Research Advisory Council for Indian Oil Corporation, R&D in Refining Technology, D. Kunzru.

80. Member, Editorial Board of International Journal of Chemical Engineering, D. Kunzru.
81. MEMBER: SELECTION COMMITTEE - FACULTY/SCIENTIST, P.K. Bhattacharya
   a. I. I. T. – Roorkee
   b. I.T.-BHU

82. MEMBER: EDUCATION & RESEARCH COMMITTEE. P.K. Bhattacharya
   a. Member (2010-2011), Research Degree Committee (RDC) of Applied Chemistry/Chemical Technology/Chemical Engineering, GB Technical University, Lucknow
   b. Member, Board of Chemical Engineering Studies – MA N.I.T. Bhopal.

83. REVIEWER/EVALUATOR: PROJECTS/PROPOSALS/PATENTS, P.K. Bhattacharya
   a. Indo-US Science & Technology Forum
   b. Indo-French Centre for the Promotion of Advanced Research (IFCPAR)
   c. DBT (Department of Biotechnology, GOI)
   d. DST (Department of Science & Technology, GOI)
   e. CSIR (Council of Scientific & Industrial Research – GOI)
   f. Dr. D. S. Kothari Postdoctoral Fellowship Scheme in Sciences under UGC

84. Ph. D. THESIS EXAMINER, P.K. Bhattacharya
   a. I. I. T. Kharagpur
   b. I.I.T. – Roorkee
   c. Anna University, Coimbatore
   d. Jadavpur University, Kolkata, West Bengal
   e. Jawaharlal Nehru Technological University, Anantapur (A.P.)
   f. Vidyasagar University, Midnapore 721 102, West Bengal

85. SERVICE FOR NATIONAL BOARD OF ACCREDITATION (NBA). P.K. Bhattacharya
   a. Gandhi Institute of Technology, Gunupur (Orissa)

86. CONFERENCE/SYMPOSIUM – ORGANIZING COMMITTEE, P.K. Bhattacharya.
   c. Member of the Advisory Committee, National Conference on “Biotechnology and the Environment”, organized by Department of Biotechnology, National Institute of Technology, Durgapur, 4 & 5th October 2010.

87. L&T Chair Professor, Dec 2009-June 2010, Department of Chemical Engineering,
88. Life membership of National Academy of Sciences India (NASI), Y.M. Joshi.
89. Amer-Dye Chem Award, IIChE 2010, Jayant K. Singh.
90. Member of high level committee HPC facilities of ministry of earth sciences, Jayant K. Singh.
   a. Indo-US Science & Technology Forum
   b. DST (Department of Science & Technology, GOI)
92. Ph. D. THESIS EXAMINER, Jayant K. Singh
   a. IISc Bangalore

Chemistry
94. Convenor of “Theoretical Chemistry Symposium (TCS10)”, held at IIT Kanpur, December 8-12, 2010 (Co-conveners: Drs. K. Srihari, M. Ranganathan and N. Nair): Prof. A. Chandra
95. National Coordinator for Dr. D. S. Kothari Postdoctoral Fellowship Program of the UGC, New Delhi: Prof. S. R. Gadre.
96. Academic Editor of AIP Advances, American Institute of Physics: Prof. S. R. Gadre.
99. Program Committee Member, 3rd International Workshop on Optical Super-Computing in Bertinoro, Italy (OSC10), Nov 17-19, 2010: Prof. D. Goswami.
100. Faculty-in-charge, Summer Undergraduate Research for Excellence (SURGE), IIT Kanpur: Dr. M. Ranganathan.
102. Editorial Board Member, Review of Scientific Instruments, American Institute of Physics: Prof. D. Goswami.
103. Invited as an editorial board member of ‘New Journal of Chemistry’, published by RSC and CNRS jointly, for the period from 2011-2014: Prof. J. N. Moorthy.
106. International Council Member, Optical Society of America, USA: Prof. D. Goswami.
along with Prof. Akhil R. Chakravarty, Department of Inorganic & Physical Chemistry, Indian Institute of Science, Bangalore: Prof. R. N. Mukherjee.

108. Special Issue on Bioinorganic Chemistry, Indian J. Chem. 2011, 50A, 339-548, Acted as Guest Editor along with Prof. C. P. Rao, Department of Chemistry, Indian Institute of Technology Bombay, Powai and Prof. S. Mazumdar, Department of Chemical Sciences, Tata Institute of Fundamental Research, Mumbai: Prof. R. N. Mukherjee.


110. Expert Committee Member, Intensification of Research in High Priority Areas (IRHPA), Department of Science and Technology (DST), Govt. of India: Prof. D. Goswami.

111. Member Executive committee Indian Peptide Society (2008-2011): Dr. R. Gurunath.

112. Joint Secretary, Indian Peptide Society (since Feb 2011): Dr. R. Gurunath.

**Computer Science and Engineering**


114. Appointment as the Director General of CDAC, INDIA: Rajat Moona.

**Electrical Engineering**

115. Secretary, IEEE UP Section, Akhtar M.J.

116. Establishment of the Microwave Imaging and Testing Lab in the Department of Electrical Engineering, Akhtar M.J.

117. Senior member of the Institute of Electrical and Electronic Engineers (IEEE) (S'05, M'06, SM'11), Chakraborty S.

118. Elected Chairman of the IEEE Power & Energy Society (IEEE PES) and Industry Applications Society (IEEE IAS), Uttar Pradesh section, India, for the period beginning in 2010, Chakraborty S.

119. Writing a web based course for NPTEL-II called “Optical Communication Components and Devices”, Das U.

120. Expert Member, International advisory Committee of Power Grid Corporation of India Limited, Gurgaon on ‘Smart Grid Technology’ (October 2010 till date), Srivastava S.C.

121. Member, Central Advisory Committee, Central Electricity Regulatory Commission, New Delhi. (Since 2010), Srivastava S.C.

122. Member, SERC-Project Advisory Committee (PAC) on ‘Electrical Electronics and Computer Eng.’ Of DST New Delhi (since 2006), Srivastava S.C.

123. Member, Smart Grid Task Force on ‘Identification of Pilot Projects’ coordinated by CPRI Bangalore (since 2011), Srivastava S.C.

124. Chairman, Institution of Engineers (India), Kanpur Local Center (2010-2012), Singh S.N.

125. Vice-Chairman, IEEE UP Section, IITK Kanpur (2010-to date), Singh S.N.

126. Administrator, IEEE Online Communities (January 2006 to date), Singh S.N.

127. Moderator, IEEE Online Communities (April 2003 to date), Singh S.N.
128. Editorial Board member, International Journal of Electrical and Power Engineering, Singh S.N.
129. Associate Editor, International Journal of Electrical Energy Systems, Singh S.N.
130. Editor, International Journal of Systems Signal Control and Engineering Application, Singh S.N.
132. Honorary Editorial Board Member, Int. Journal of Bio-Sciences and Technology, Singh S.N.
133. Associate Editor (Electrical), Int. Journal of Engineering, Sciences and Technology, Singh S.N.
134. Student Best Paper Award to G. C. Patil, Ph.D student for paper presentation titled “Impact of Dopant Segregation Length on Scalability and RF Performance of Nanoscale Dopant-Segregated Schottky Barrier SOI MOSFET”, G. C. Patil and S. Qureshi, 4th International Student Workshop on Electrical Engineering, Nov. 21, 2010, Kyushu University, Fukuoka, Japan, Qureshi S.
135. S. Qureshi was elected Editor of STM Journal of VLSI Design Tools and Technology, Qureshi S.
137. Department of Electrical Engineering is setting up a 6-rack Real Time Digital Simulation (RTDS) facility, funded under IRHPA scheme of DST New Delhi, to carry out advance research on practical power and control system problems.

Humanities and Social Sciences

138. Attended a workshop on Religion and Civil Society in South Asia, organized by the University of California, Santa Barbara. The workshop was held at the India International Centre, New Delhi. 18 September 2010- A. Chakrabarti.
139. Participated a seminar on “International Day”, University of Applied Sciences, Darmstadt, Germany, June 29, 2011. - P.M. Prasad.
141. Chaired sessions in the Second International Conference on Globalisation and Consumer Protection (ICGCP’11), Kalasalingam University, Krishnankoil, Tamil Nadu, January, 2011, P.M. Prasad.
143. Invited as a panelist by the Sociological Association of West Bengal at their 4th Annual Conference organized on the theme: Is Natural Science the only model of research in Sociology? December 6, 2010, A. Chakrabarti.
144. Group Discussion and Interview Skills- Institute of Technology of Nirma University, March 24, 2011. T. Ravichandran
145. Creating Comics: The Power of Visual Communication. –Short workshop for students and faculty at IIT Gandhinagar. The workshop was designed to
introduce participants to the language of comics and the step-by-step process of creating a graphic narrative. - T. Ravichandran.

146. 2-Week Communication Skills Workshop (Speaking and Writing) for UG students. -T. Ravichandran.

147. 2-Week Communication Skills Workshop for Administrative Staff – T. Ravichandran.

148. Creativity and You. MNNIT Allahabad, March 16, 2011 (for MBA students), L. Krishnan


150. Effective Communication -Staff Workshop, Institute of Chartered Accountants of India, Kanpur (for staff of ICA): November 2010 - L. Krishnan.

151. Memorial Prize 2010 for her paper titled "Judicious Succession and Judicial Religion: Internal Conflict and Legal Dispute in Religious Reform Movement in India". Indian Sociological Society, Dr. Anindita Chakrabarti, Dr. M.N.Srinivas.

152. Felicitated in recognition of his significant research contributions to Contemporary American Literature at the International Seminar on Humanistic Language and Literature Teaching held at Anna University, Chennai, February, 2011, Prof. Gurumurthy Neelakantan.

153. Invited to serve on the Editorial Board of Philip Roth Studies published by Purdue University Press, USA, Prof. Gurumurthy Neelakantan.

154. Best Paper Award, Fellowship of the World Business Institute, Australia February 2011 Ms. Archana Srivastava (Research Scholar, HSS Economics).


156. Nominated as the Editorial Board Member of international journal entitled: Bangladesh Sociological Studies, An International Biannual journal, BSIR, Dhaka. Bangladesh. ISSN: 1815-2163, Prof. B.K. Pattnaik.

157. Invited as a distinguished member of the International Editorial Board of Reformare, Journal of Educational Research- an international peer-reviewed academic journal published by Department of Public Education, Mexico, Dr. Nirmalya Guha.

**Industrial Management and Engineering**


161. PV Based Replicable Business Models for Informal Markets for Electricity received the Best Business Model Award at the Asia Clean Energy Forum 2010 organised at the Asian Development Bank (ADB), Manila in June 2010, Anoop Singh.

162. Dr.S. Misra’s biography appeared in Marquis Who’s Who in Science and Engg,
USA, 2010.

163. Two NPTEL courses developed, Computer Adided Decision Support Systems & Applied

164. Appointment as Editor, Bharatiya Samajik Chintan, Rahul Varman.

165. Appointed as Member, Executive Council for the year 2010-2011, INDIAN ACADEMY OF SOCIAL SCIENCES, Rahul Varman.


168. Appointment as Editor: American J of Operations Research from Mar 20, 2011 for a period of one year, Dr. RRK Sharma.


170. Appointed to Academic Advisory Board of T.A.Pai Management Institute, Manipal, India, Jayanta Chatterjee.

171. Invited as a “Guru” on USID Foundation Design Innovation Panel, Jayanta Chatterjee.

172. Appointed as General Secretary, Executive Committee, Society of Operations Management for the period 2011-13, Peeyush Mehta.

173. Member, State Advisory Committee, UP Electricity Regulatory Commission, Anoop Singh.


178. Setting a Floor and Forbearance Price for Renewable energy Certificates (RECs), Central Electricity Regulatory Commission, April 2010, Anoop Singh.

179. Laboratory for Production Shops (40 Lakhs), Sponsored Research Project, Deepu Philip.

180. PV Based Replicable Business Models for Informal Markets for Electricity received the Best Business Model Award at the Asia Clean Energy Forum 2010 organised at the Asian Development Bank (ADB), Manila in June 2010, Anoop Singh.


182. Experimental Design for Managers, Dr. Deepu Philip.

Mechanical Engineering

183. Invited to become a member of the editorial board of Frontiers in Heat Pipes – An International Journal, published by Global Digital Center, USA.
S. Khandekar.

184. Invited to become a member of the academic senate of Government Engineering College, Amravati (MS), S. Khandekar.

185. Member of the Curriculum Review Committee of the Indian Institute of Information Technology, Design and Manufacturing, Jabalpur (MP), S. Khandekar.


189. Gas Turbine Enabling Technology (GATET) initiative is one of the major initiatives of AR&DB, and the aim is to design the Gas turbine Engine of the future, for both civilian and military applications. Another initiative launched is by ADA, to define and develop advanced technologies for aircraft programme. I have been coordinating between the board and the faculty members of the institute, which initiated projects of around 3.0 crores and we are expecting other projects to be sanctioned in the near future as well S. Sarkar.

190. All 40 lecture notes on ME726 (Hamiltonian mechanics and Symplectic Algorithms) are available (upon request) in pdf format. This course was introduced as ME PG elective last year, B.L. Sharma.

191. All 40 lecture notes on ME681 (Mathematics for engineers) are available (upon request) in pdf format. This is a compulsory course for PG students in ME., B. L. Sharma.

192. Elected Honorary Research Fellow, Coventry University, UK for 4 years (2010-2014), Binod Srinivasan.

193. Associate Editor of The Nanotechnology and Nanoscience, S Bhattacharya.

194. Honorary fellow of the Australian Institute of High Energetic Materials, Melbourne, Australia, S Bhattacharya.

Mathematics

195. 7th International Conference on Rough Sets and Current Trends in Computing (RSCTC 2010), Warsaw, Poland, June 2010, Mohua Banerjee, Session Chair.

196. 4th Indian Conference on Logic and Its Applications (ICLA 2011), Delhi, January 2011, Session Chair, Mohua Banerjee.

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

198. Editorial Board Member of the Journal Statistics and Its Applications, D. Kundu.

199. Editorial Board Member of the Journal Communications in Statistics – Theory and Methods, D. Kundu.

200. Editorial Board Member of the Journal Communications in Statistics – Simulation and Computation, D. Kundu.

201. Stability & Bifurcation Analysis and Pattern Formation in Mathematical Ecology and Epidemiology held during 25th February to 2nd March, 2011 at Indian
Institute of Technology, Kanpur. This workshop is a part of year-long activity of the Centre for Mathematical Biology and the Mathematics Initiative of the Indian Institute of Science (IISc), Bangalore (A DST centre for Mathematical Biology). I delivered four invited talks on Stability of Linear Systems, V. Raghavendra

202. Member of Editorial Advisory Board of Proceedings of Indian Society of Mathematics and Mathematical Sciences, Shalabh.

Materials Science and Engineering

203. Editorial board of Recent Patents on Materials Science (Bentham), and Recent Patents on Nanotechnology (Bentham), 2010 onwards, Kantesh Balani.
204. Associate Editor of Nanomaterials and Energy (ICE Publishing), Mar. 2011 onwards, Kantesh Balani.
205. Associate editor, Biomaterials and Biodevices (website: www.amlett.com), B. Basu.
208. Associate Editor, Bioceramics Development and Applications; Ashdin Publishing, Belgium, B. Basu.
211. One of the organisers of SYMPOSIUM: “Nanolaminated Ternary Carbides and Nitrides (MAX Phases)”, held during 34th International Conference and Exposition on Advanced Ceramics and Composites (ICACC), January 24-29, 2010 in Daytona Beach, Florida, USA, B. Basu
212. One of the organisers of SYMPOSIUM 5: “Hybrid and Nano-Structured Materials” to be held during the 3rd International Congress on Ceramics (ICC3), November 14-18, 2010, Osaka Japan, B. Basu.
213. Member of the Panel of Judges for the Prime Minister’s Trophy for the Best Performing Steel Plant, S. P. Mehrotra.
214. Member of the Technical Committee of the Powder Metallurgy World Congress & Exhibition PM2010 to be held in Florence, Italy between October 10-14, 2010, A. Upadhyaya.

Material Science Program


**Physics**

222. Development of an Indigenous Scanning Tunneling Microscope. The development of a Course on Nanoscience based on the STM with an admixture of theory and experiment. The promotion of Scanning Probe Microscopy in the country through talks on the subject at Delhi University, Punjab University, Chandigarh, IISER Mohali, Himachal Pradesh University, Simla, IIT Roorkee and University of Rajasthan, Jaipur, D. Sahdev.

223. Serving member on the editorial Board of the journal: Superconducting Science and Technology, a Journal from Institute of Physics (IOP), London, UK. Impact factor = 2.402. S. Banerjee.


225. The paper titled “Penetration and screening of perpendicularly launched electromagnetic waves through bounded supercritical plasma confined in multicusp magnetic field”, published in Physics of Plasmas, 18, 022101 (2011) by I. Dey and S. Bhattacharjee was selected for cover page of volume 18 Number 2 of the journal. S. Bhattacharjee.