

Publication and Outreach Activities

BOOKS & BOOK CHAPTERS PUBLISHED

Aerospace Engineering

1. Revised edition of Fundamentals of Combustion, D.P. Mishra PHI, New Delhi, 2010.

Chemistry

2. Dynamical Tunneling: Theory and Experiment, CRC Press, Boca Raton USA, 2011, Srihari Keshavamurthy (CHM) and Peter Schlagheck, (Eds).
3. A Density Functional Investigation on the Structures, Energetics, and Properties of Sodium Clusters through Electrostatic Guidelines and Molecular Tailoring, edited by P. Chattaraj, Aromaticity and Metal Clusters, Taylor & Francis / CRC Press, K. V. Jovan Jose, S. S. Khire, S. R. Gadre.
4. Molecular Tailoring: An Art of the Possible for Ab Initio Treatment of Large Molecules and Molecular Clusters, edited by. R. Zalensny, M. G. Papadopolous, P.G. Mezey, J. Leszczynski, Linear-Scaling Techniques in Computational Chemistry and Physics, Springer, New York, A. P. Rahalkar, S. D. Yeole, V. Ganesh, S. R. Gadre.
5. Hot Chemistry with Cold Molecules in Laser Pulse Phenomena and Applications, edited by F. J. Duarte, InTech Publishers, Vienna, pp.371-388, T. Goswami and D. Goswami.
6. Dynamical tunneling and control, Chapter 10, pages 225-255, refereed contribution in Dynamical Tunneling: Theory and Experiment, Editors Srihari Keshavamurthy and Peter Schlagheck, CRC Press, Boca Raton USA, 2011, Srihari Keshavamurthy.
7. Symmetry in Molecular Structure and Dynamics, (Invited Book Chapter), to be published by Hindustan Book Agency, 2011.

Chemical Engineering

8. Surface instability and pattern formation in thin polymer films, In Generating Micro- and Nanopatterns on Polymeric Materials, Eds. Eduard Arzt and Aranzazu del Campo, Wiley-VCH Verlag (2011), pp. 217-265, ISBN: 978-3-527-32508-5, R. Mukherjee, A. Sharma and U. Steiner.

Civil Engineering

9. Numerical Methods for Engineering and Science, Oxford University Press, New Delhi, S. Guha and R. Srivastava (CE).
10. SI adaptation for Indian Readers of "Solid Waste Engineering" and Solution Manual by Worrell and Vesilind, Cengage Learning, May, 2011, Tarun Gupta.
11. Exposure Science: Monitoring Environmental Contaminants, Chapter in Encyclopedia of Environmental Health, Edited by J.O. Nriagu, Elsevier (Feb, 2011), Tarun Gupta.

12. Proceedings of Eighth International Conference on Simulated Evolution and Learning, (eds.) (2010), Kanpur, India, (Lecture Notes in Computer Science 6457), Heidenberg: Springer, Deb, K., Bhattacharya, A., Chakraborti, N., Chakraborty, P., Das, S., Dutta, J., Gupta, S.K., Jain, A., Aggarwal, V., Branke, J., Louis, S. J., and Tan, K. C.

Computer Science & Engineering

13. Logic and its Applications, 4th Indian Conference, ICLA 2011, Delhi, India, January 2011, Proceedings; Lecture Notes in Artificial Intelligence, Volume 6521, Springer-Verlag, Berlin, Co-edited with A. Seth (CSE), Mohua Banerjee.
14. The Isomorphism Conjecture for NP, in Computability in Context: Computation and Logic in Real World Publisher: World Scientific Year: 2011, Manindra Agrawal.

Electrical Engineering

15. Basic Electrical Engineering, PHI Learning Pvt Ltd, India, S N Singh (EE).
16. Intelligent Control of Power Electronic Systems for Wind Turbine, in Wind Power Systems: Applications of Computational Intelligence (Eds: L. Wang, C. Singh, and A. Kusiak), Springer Book Series on Green Energy and Technology, Springer-Verlag, pp. 255-295, Singh, S.N. Singh and E. Kyriakides.

Humanities and Social Sciences

17. Vivade Vishade Pramade Prasave (a collection of short stories in Marathi), Shabda publication, Mumbai, 2010, Prashant Bagad (HSS).
18. Population and society, Concept publishers, New Delhi, 2010, A. K. Sharma (HSS).
19. Liberalizing research in Science and Technology: Studies in science policy, Nadia Asheulova & Eduard Kolchinsky (Eds.). Russian Academy of Sciences, Saint Petersburg Politechnika, Russia 2010, B. K. Pattnaik.
20. Review of Carbon Markets: With lessons from CCX & EU-ETS - Pratik Agrawal (MSc. Economics student) - Lambert Academic Publishing, Germany, 2011.
21. Beyond the New Critical Bias: Approximating the Partition Pain in Asif Currimbhoy's Refugee, Partition and Indian Literature: Voices of the Wounded Psyche: Vol. 1, Neena Arora & R. K. Dhawan (Eds). Delhi: Prestige Books, 2010, pp. 382-391, T. Ravichandran.
22. Ethnographic inquiry in psychology. In G. Misra (Ed.), Handbook of psychology in India (pp. 99-110). New Delhi: Oxford University Press (2011, Kumar Ravi Priya & G. Misra.
23. Broadening of consciousness: A healing process among the survivors of Kachchh earthquake In M. Cornelissen, G. Misra, & S. Varma. (Eds.), Foundations of Indian Psychology (Vol. 2, pp. 209-224). New Delhi: MD Publications (2010), Kumar Ravi Priya.
24. From Capes to Snakes: The Indianisation of the American Superhero in Comics as a Nexus of Cultures, Mark Berninger, Jochen Ecke, & Gideon Haberkorn (Eds.) pp. 175-186. London: McFarland and Company, Inc., 2010, Suchitra Mathur.

25. Culture and distributive justice: General comments and some insights from the Indian context, Handbook of Psychology edited by Girishwar Misra, Oxford university Press: New Delhi, 2011. pp. 205-225, Lilavati Krishnan.

Industrial Management & Engineering

26. Services Marketing – People, Technology, Strategy – Sixth Edition, Pearson, New Delhi, Christopher, L., Wirtz, J. and Chatetrjee, J.
27. Inter-fuel Substitution, Industrial Energy Demand and Carbon Emissions, Kirit Parikh and Jyoti Parikh, VDM Verlag Publishers, Saarbrücken, 2010, Dr. Anoop Singh.
28. Service Science Learning : Exploring the Challenge of Cross-Disciplinary and Academia-Company Collaboration, The Science of Service Systems, (Eds) Demirkan H et al, Springer Science & Business Media, ISBN-13:978-1441982698; 2011, Lemmink, J and Chatterjee, J.
29. Policy Environment and Regulatory Reforms for Private and Foreign Investment in Developing Countries: A Case of the Indian Power Sector, Amani International Publishers, Kiel, Germany, 2010, ISBN 978-3-938054-01-7, Anoop Singh.
30. Changing Ideas in Strategy, edited, Narosa Publishing, New Delhi, 2010, 217pgs.
31. Northern India Call Centre Ltd., in Changing Ideas in Strategy, ed. Arun P Sinha, Narosa Publishing, New Delhi, 2010, pp. 17-30, Arun P Sinha and Himanshi Vij.
32. Changing Ideas in Strategy – A Prologue, in Changing Ideas in Strategy, Narosa Publishing, New Delhi, 2010, pp. 1-4, ed. Arun P Sinha.
33. Epilogue, in Changing Ideas in Strategy, Narosa Publishing, New Delhi, 2010, pp. 215-17, ed. Arun P Sinha.
34. Supply Chain Departments of Defenders, Prospectors and Analyzers: A Literature Review and Few Propositions, Changing Ideas in Strategy, Ed. Prof. AP Sinha, Narosa Publishing, New Delhi; ISBN: 978-81-8487-100-5; 2010; pp.74-88; Sharma, RRK, Rahul Sharma and Himangshu Hazarika.
35. Aarthik vraddhi ka rahasya, In Vaikalpik Aarthik Varshiki, Bharat, KN Kabra, V Upadyay & Dhruv Narayan (eds.), Daanish books, Delhi, pp23-30, Varman, Rahul & Chakrabarti, Manali.
36. Economics, Regulation and Implementation Strategy for Renewable Energy Certificates in India in India Infrastructure Report 2010, Oxford Univ. Press, Anoop Singh.

Mechanical Engineering

37. IC Engines: Combustion and Emissions. Prof. B P Pundir (ME). Narosa Publishing House, New Delhi. Stochastic Transport in Complex System.
38. Mechanism and localization of wall failure during abdominal aortic aneurysm formation, in Biomedical Simulation, edited by F. Bello and P.J. Edwards, Lecture Notes in Computer Science – 5104, Springer, New York, pp. 119-126, D. Szczerba, R. McGreggor, K. Muralidhar and G. Szekely.
39. Handbook of Combustion, 5 Volumes, 3168 pages, Hardcover, April 2010, Published by Wiley VCH, (Eds.) (ISBN: 978-3-527-32449-1), Maximilian Lackner, Franz Winter, Avinash K. Agarwal.

40. Toxicology of Combustion Products, published in Handbook of Combustion, Vol. 1, Wiley-VCH Verlag, 2010, Tarun Gupta, Avinash Kumar Agarwal.
41. Vertex search algorithm of convex polyhedron representing upper limb manipulation ability. Search Algorithms, INTECH Publications, Austria, EU, 2011, Makoto Sasaki, Takehiro Iwami, Kazuto Miyawaki, Ikuro Sato, Goro Obinata and Ashish Dutta.
42. Higher dimensional spatial estimation of upper limb manipulation ability based on human joint torque characteristics. Advances in Robot Manipulators, In-Tech Publications, Austria, EU, 2010, Makoto Sasaki, Goro Obinata, Takehiro Iwami, Kazuto Miyawaki, Ikuro Sato, Ashish Dutta.
43. Optical interferometers: Principles and Applications in Transport Phenomena, to appear in Interferometry - Principles and Applications, Edited by Mark E. Russo, Nova Publishers, USA, [60 pages] ISBN: 978-1-61209-347-5 , 2011, S. Verma, Y.M. Joshi, K. Muralidhar.
44. Metal Encapsulated Carbon Nanotubes, Carbon Nanotube based Nanocomposites: Recent Development, Editors: Kamal K Kar and Alma Hodzic, Research Publishing Services, Singapore, Page # 175-196, Raghunandan Sharma, Malay K. Das and Kamal K. Kar.
45. Carbon Nanotube Coated Carbon Fiber: Structural and Electrochemical Applications, Carbon Nanotube based Nanocomposites: Recent Development Editors: Kamal K Kar and Alma Hodzic, Research Publishing Services, Singapore, Page # 197-218, Raghunandan Sharma, Malay K. Das and Kamal K. Kar.

Materials Science and Engineering

46. Powder Metallurgy: Science, Technology, and Materials. A. Upadhyaya and G. S. Upadhyaya (MSE). Universities Press Pvt. Ltd., CRC Press, 2011.
47. Process innovation using mechanical activation of minerals and wastes in the book Experimental and Theoretical Approaches to Modern Mechanochemistry, Eds. Mulas Gabricle and Delogue Francesco, Publ: Transworld Research Network, 2010, 255-272, Rakesh Kumar, Sanjay Kumar, T.C. Alex, S. Srikanth and S. P. Mehrotra.

Materials Science Program

48. Carbon Nanotubes: Synthesis, Characterization and Applications. Kamal K. Kar (MSP). Research Publishing, Singapore.
49. Futuristic Materials: Carbon-based Nanostructures, Carbon Nanotube based Nanocomposites: Recent Development, K.K Kar and A. Hodzic, Research Publishing Services, Singapore, ISBN:978-981-08-3712-9, 1-132, A. Rahman, R. Sharma, B.Y. Sarda, K. K. Kar.
50. Metal Encapsulated Carbon Nanotubes, Carbon Nanotube based Nanocomposites: Recent Development, K.K Kar and A. Hodzic, Research Publishing Services, Singapore, ISBN:978-981-08-3712-9, 175-196, R. Sharma, M.K. Das, K. K. Kar.
51. Carbon Nanotube Coated Carbon Fiber: Structural and Electrochemical Applications, Carbon Nanotube based Nanocomposites: Recent Development,

- K.K Kar and A. Hodzic, Research Publishing Services, Singapore, ISBN:978-981-08-3712-9, 197-218, R. Sharma, M.K. Das, K. K. Kar.
52. Molecular Dynamic Simulation of Deformation Behavior of Carbon Nanotubes Under Generic Modes of Loading, Carbon Nanotube based Nanocomposites: Recent Development, K.K Kar and A. Hodzic, Research Publishing Services, Singapore, ISBN:978-981-08-3712-9, 261-296, P. Agnihotri, K. K. Kar.
 53. Carbon Nanotubes: Synthesis, Characterization and Applications, Carbon Nanotubes: Synthesis, Characterization and Applications, K.K Kar, Research Publishing Services, Singapore, ISBN: 978-981-08-6397-5, 1-122, R. Sharma, K. K. Kar.

Maths

54. Logic and Its Applications, 4th Indian Conference, ICLA 2011, Delhi, India, January 2011, Proceedings; Co-edited with A. Seth; Lecture Notes in Artificial Intelligence, Volume 6521, Springer-Verlag, Berlin, Mohua Banerjee.
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).
56. Stochastic Transport In Complex Systems: from molecules to vehicles, (582 pages) Pub. by ELSEVIER, Amsterdam, The Netherlands (2010), A. Schadschneider, D. Chowdhury and K. Nishinari.
57. CA modeling of ant-traffic on trails, in: Simulating Complex Systems by Cellular Automata, eds. A. G. Hoekstra, J. Kroc and P.M.A. Sloot, 275-300 (Springer, Heidelberg, 2010), D. Chowdhury, K. Nishinari and A. Schadschneider.
58. Nonlinear response of the static and dynamic phases of the vortex matter, in Superconductivity - Theory and Applications, edited by Assoc. Adir Moysés Luiz, Intech Open Access Publishers, Rijeka, Croatia, pp. 55 - 84, S. S. Banerjee, Shyam Mohan, Jaivardhan Sinha, Yuri Myasoedov, S. Ramakrishnan and A. K. Grover.

JOURNAL PAPERS

Aerospace Engineering

1. A study of polarisation-electric field nonlinear effect on the response of smart composite plates, Smart Materials and Structures, Vol. 19, No. 7, July 2010, Sateesh, V.L., Upadhyay, C.S. and Venkatesan, C.
2. Nonlinear analysis of smart composite plates including hysteresis effects, AIAA Journal, Vol. 48, No. 9, Sept. 2010, Sateesh, V.L., Upadhyay, C.S. and Venkatesan, C.

3. A Heuristic Model Of Twin Fluid Internally Mixed Atomization Using Distributed Weber Number Criterion, Particle & Particle Systems Characterization, Vol. 27, 2010, Pp. 32-41, Kushari.
4. Computational Investigation Of Cold Flow In A Dump Combustor With Tapered Exit, Asme Journal Of Thermal Science And Engineering Applications, Vol. 2, 2010, Pp. 011009-1-011009-7, R. Sailaja, N P. Yadav, A. Kushari.
5. Effect Of Pressure Level On The Performance Of An Auto-Initiated Pulsed Plasma Thruster, Plasma Science And Technology, Vol. 12, No. 4, 2010, Pp. 466-472, Kelvin Loh And Abhijit Kushari.
6. Effect Of Injector Geometry On The Performance Of An Internally Mixed Liquid Atomizer, Fuel Processing Technology, Vol. 91, Issue 11, 2010, Pp. 1650 - 1954, A. Kushari.
7. Experimental Study Of An Air Assisted Mist Generator, Experimental Thermal And Fluid Science, Vol. 34, 2010, Pp. 1029-1035, Suresh Lal, A. Kushari, M. Gupta, J. C. Kapoor And S. Maji.
8. Effect Of Swirl On The Turbulent Behavior Of A Dump Combustor Flow, Proceedings Of The Institution Of Mechanical Engineers, Part G, Journal Of Aerospace Engineering, Vol. 224, No. 6, 2010, Pp. 705 -717, N. P. Yadav And A. Kushari.
9. Operation of An Auto-Initiated Pulsed Plasma Thruster, Aircraft Engineering And Aerospace Technology, Vol. 82, Issue 2, 2010, Pp. 83-90, Abhijit Kushari And Kelvin Loh.
10. Slotted Orifice Plate Flow Meter, Recent Patents On Mechanical Engineering, Vol. 3, 2010, Pp. 149-153, Ramraj H. Sundararaj And Abhijit Kushari.
11. Modeling Of Externally Mixed Air-Blast Atomizer, International Journal Of Dynamics Of Fluids, Vol. 6, No. 1, 2010, Pp. 25-40, Suresh Lal, A. Kushari, J. C. Kapoor, S. Maji.
12. Nonlinear longitudinal Aerodynamics modeling using Quasi-steady stall model and Neural Gauss-Newton method, Journal of Aircraft AIAA, USA, Rakesh Kumar and Dr. A.K.Ghosh.
13. Estimation of load on control lines of ram Air parachute Designed for precise Delivery using 9-DOF Model, Journal of aerospace science and technologies India, Balraj Gupta, S C Upadhyaya, Vipin Kumar, Ravi Krishna & A K Ghosh.
14. Mathematical modeling, Simulation and estimation of aircraft parameters using 5 DOF Dynamic test Rig, Journal of Aerospace engineering, Naba Kumar Peyada, Ajoy kanti Ghosh, Tiauw H.
15. A hybrid experimental/numerical approach to characterize interfacial adhesion in multilayer thin low-k film specimens, Thin Solid Films, Year, Page number - 519, 2010, 337-344, R. Kitey, P.H. Geubelle, N. R. Sottos.
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.
17. Nonlinear analysis of smart composite plates including hysteresis effects, AIAA Journal, Vol. 48, No. 9, Sept. 2010, Sateesh VL, Upadhyay C.S. and Venkatesan, C.
18. Numerical Investigation of Direct Fuel Injection from the Cavity Walls in 2D Supersonic Combustion, International Journal of Turbo & Jet Engines, 26, 155-168, 2010, D P Mishra and K. V. Sridhar.

19. Flame structure of LPG-air Inverse Diffusion Flame in a Backstep burner, *Fuel*, 89, 8, 2145-2148, 2010, S Mahesh and D. P. Mishra.
20. Effects of N₂ Gas on Preheated Laminar LPG Jet Diffusion Flame, *Energy Conversion and Management*, 51, P. 2144-2149, 2010, D P Mishra and P Kumar.
21. Numerical Studies of Bluff-Body Stabilized Lean Premixed Flame Based Combustor, *Archivum Combustionis*, 30, 1-2, P. 63-84, 2010, D P Mishra and Singh H J.
22. Cold Flow Studies on the Effect of Injector Locations in a Directly Injected Cavity Based Combustor, *International Journal of Turbo & Jet Engines*, vol 27, No 1, 51-62, 2010, D P Mishra and K. V. Sridhar.
23. Numerical Characterization of A Premixed Flame Based Annular Microcombustor, *International Journal of Hydrogen*, 35, 18, P.9755-9766, 2010, Jejurkar S J and D. P. Mishra.
24. Experimental Study of Silica Nano-Powder Synthesis using a Diffusion Flame Reactor, *International Journal of Chemical Reactor Engineering*, Vol. 8: A149, 2010, D P Mishra, Anish Upadhaya, and S S Panda.
25. Thermal Performance Characteristics of a Microcombustor for Heating and Propulsion, *Applied Thermal Engineering*, 2010, Swarup J and D. P. Mishra.

Biological Science and Bio-engineering

26. Structure and function of the gastro-esophageal junction assessed by magnetic resonance imaging, *Radiology*, 257(1), 115-24, Oct 2010, J. Curcic, M. Fox, E. Kaufman, G. S. Hebbard, S. Roy, A. Pal, W. Schwizer, M. Fried, R. Treier, P. Boesiger.
27. Detailed quantitative analysis of architectural traits of basal roots of young seedlings of *Phaseolus vulgaris* L. in response to auxin and ethylene, *Plant Physiology*: Published online February 10, 2011; P. Basu, K. M. Brown, A. Pal.
28. Spatio-temporal Analysis of Development of Basal Roots of Common Bean (*Phaseolus vulgaris* L.), *Plant Signaling and Behavior*: Published online March 2011, P. Basu, A. Pal.
29. The performance of laminin-containing cryogel scaffolds in neural tissue regeneration. *Biomaterials*, 2011, M. Jurga., M. B. Dainiak, A. Sarnowska, A. Jablonska, A. Tripathi, F.M. Plieva, I. N. Savina, L. Strojek, H. Jungvid, H., A. Kumar, B. Lukomska, K. Domanska-Janik, N. Forraz and N. C. P. McGuckin.
30. Multi-featured Macroporous Agarose-Alginate Cryogel: Synthesis and Characterization for Bioengineering Applications. *Macromolecular Bioscience* 11, 22-35, 2011, A. Tripathi, A. and A. Kumar.
31. Supermacroporous chitosan-agarose-gelatin cryogels: In vitro characterization and in vivo assessment for cartilage tissue engineering. *J Royal Society Interface* 8 (57), 540-554, 2011, S. Bhat, A. Tripathi, and A. Kumar.
32. Supermacroporous Polymer Based Cryogel Bioreactor for Monoclonal Antibody Production in Continuous Culture using Hybridoma Cells. *Biotechnology Progress* 27(1), 170-180, 2011, E. Jain, A. A. Karande and A. Kumar.
33. Cell separation using cryogel based affinity chromatography. *Nature protocols* 5 (11), 1737-1747, 2010, (Highlighted as a cover page article and as webpage picture), A. Kumar and A. Srivastava.

34. Synthesis and characterization of molecular imprinted polymeric materials for cholesterol recognition. *J Sol-gel Sci. Technol*, 2010, R.Gupta and A. Kumar.
35. CRYOGELS: Freezing Unveiled by Thawing. *Materials Today* 13(11), 42-44. 2010, A. Kumar, R. Mishra, Y. Reinwald and S. Bhat.
36. Inorganic-organic biocomposite cryogels for regeneration of bony tissues. *Journal of Biomaterial Science: Polymer Edition*, 2010, R. Mishra and A. Kumar.
37. Stability of responsive polymer-protein bioconjugates. *Progress in polymer science* 35(4), 459-486, 2010, A. K. Shakya, H. Sami, A. Srivastava and A. Kumar.
38. Proliferation of C2C12 Myoblast Skeletal Cells on Super-macroporous Cryogel. *International Journal of Biological Sciences* 6(4), 371-381, 2010, D.Singh, V. Nayak and A. Kumar.
39. Synthesis and Characterization of Thermo-responsive poly (N-isopropylacrylamide)-bovine Catalyse Biononjugate. *Enzyme and Microbial Technology* 47 (6), 277-282, 2010, A. K. Shakya, P. Sharma and A. Kumar.
40. Biodegradable poly (N-vinylcaprolactam) cryogels: Synthesis and its biophysical evaluation for tissue engineering applications. *J Material Science: Material in Medicine* 21, 2937-2945, 2010, A. Srivastava and A. Kumar.
41. Proliferation of chondrocytes on three-dimensional modelled elastic and macroporous hydroxyethyl methacrylate (HEMA)-gelatin cryogel. *J of Biomaterial Science: Polymer edition*, 2010, D. Singh, A. Tripathi, V. Nayak and A. Kumar.
42. Improved Bio-catalytic Conversion for Increased Solvent Production using Immobilized Cryogel Beads. *Enzyme and Microbial Technology* 47, 44-51, 2010, A. Tripathi, H. Sami, S.R. Jain, M. E. Vilorio-Cols, N. Zhuravleva, G. Nilsson, H. Jungvid and A. Kumar.
43. Evaluation of boronate-containing polymer brushes and gels as substrates for carbohydrate-mediated adhesion and cultivation of animal cells. *Colloids and Surfaces B: Biointerfaces* 75, 510-519, 2010, A. E. Ivanov, A. Kumar, S. Nilsong, M-R, Aguilar, I. Lyubov, L. I. Mikhalovska, I. N. Savina, I. N. Marina, M. V. Kuzimenkova, I. Yu. Galaev and B. Mattiasson.
44. Assays for studying nucleated aggregation of polyglutamine proteins, *Methods*, V 53, 246-254, 2011, M Jayaraman, AK Thakur, K Kar, R Kodali, R Wetzel.
45. Structural biology of Mycobacterium tuberculosis proteins: The Indian efforts. *Tuberculosis*, (2011), Ashish Arora , Nagasuma R. Chandra , Amit Das , Balasubramanian Gopal , Shekhar C. Mande, Balaji Prakash , Ravishankar Ramachandran , Rajan Sankaranarayanan , K. Sekar, Kaza Suguna, Anil K. Tyagi , Mamannamana Vijayan.
46. Deciphering the Catalytic Machinery in 30S Ribosome Assembly GTPase YqeH. *PloS ONE* 5(4): e9944, (2010), Baskaran Anand, Parag Surana and Balaji Prakash.
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).
48. Degradation behavior of electrospun microfibers of blends of Poly(lactide-co-glycolide) and Pluronic® F-108. *Polymer Degradation and Stability*, 95 (9), 1605-1613 (2010). R. Vasita, S. Kirubanandan, D.S. Katti.

49. Surface hydrophilization of electrospun PLGA micro-/nano-fibers by blending with Pluronic® F-108. *Polymer*, 51 (16), 3706-3714 (2010). R. Vasita, G. Mani, C.M. Agrawal, D.S. Katti.
50. Juvenile myoclonic epilepsy: EFHC1 at the cross-roads? *Annals of Neurosciences* 17 (2), 57-59, 2010, S. Ganesh.
51. Protein quality control mechanisms and neurodegenerative disorders: checks, balances and deadlocks. *Neuroscience Research*, 68 (3), 159-166, 2010, S. Mittal, and S. Ganesh.
52. Laforin in autophagy: a possible link between carbohydrate and protein in Lafora disease? *Autophagy* 6 (8), 1229-1231, 2010, R. Puri and S. Ganesh.
53. Association of ADAM33 gene polymorphisms with asthma in Indian children. *Journal of Human Genetics*, 56 (3), 188-95, 2011, S. Awasthi, P. Tripathi, S. Ganesh, and N. Husain.

Chemical Engineering

54. Contact Instability of a Soft Elastic Film Bonded to a Patterned Substrate, *Journal Of Adhesion*, Vol 87, No. 3, 214-234, 2011, Sarkar, J; Annepu, H; Sharma, A.
55. Design and Control of a Vapor-Phase Conventional Process and Reactive Distillation Process for Cumene Production, *Industrial & Engineering Chemistry Research*, Vol 50, No.6, 3312-3326, 2011, Pathak, AS; Agarwal, S; Gera, V; Kaistha, N.
56. Modified Duplex PSA. 1. Sharp Separation and Process Intensification for CO₂-N₂-13X Zeolite System, *Industrial & Engineering Chemistry Research*, Vol 50, No.6, 3426-3436, 2011, Sivakumar, S.V.; Rao, DP.
57. Modified Duplex PSA. 2. Sharp Separation and Process Intensification for N₂-O₂-5A Zeolite System, *Industrial & Engineering Chemistry Research*, Vol 50, No.6, 3437-3445, 2011, Sivakumar, SV; Rao, DP.
58. The Effect of Prewetting on the Loading of gamma-Alumina Washcoated Cordierite Monolith, *International Journal Of Applied Ceramic Technology*, Vol 8, No.2, 430-436, 2011, Mogalicherla, AK; Kunzru, D.
59. Magnesium Aluminate Catalysed Pyrolysis of n-Heptane, *Int.J.Chem. Sci.* 8(2), 751-762, 2010, H.K.Mohanta and D.Kunzru.
60. Steam Reforming of Ethanol Over Rh/CeO₂/Al₂O₃ Catalysts in a Microchannel Reactor, *Chem. Eng. J.*, 167, 578-587 2011, N.R. Peela, A.Mubayi and D.Kunzru.
61. Oxidative Steam Reforming of Ethanol over Rhodium- based Catalysts in a Microchannel Reactor, *Int. J .Hydrogen Energy*, 36, 3384-3396, 2011 N.R.Peela and D.Kunzru.
62. Selective functionalization of n-hexane with molecular O₂ catalyzed by immobilized Cu/Co, Cu/Fe and Co/V complexes on modified Al₂O₃, *Reaction Kinetics Mechanisms And Catalysis*, Vol 102, No. 1, 165-181, 2011, Mishra, GS; Kumar, A.
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.
64. Adhesives with patterned sub-surface microstructures, *Journal Of Materials Science*, Vol 46, No.3, 832-838, 2011, Arul, EP; Ghatak, A.

65. Puncturing of soft gels with multi-tip needles, *Journal Of Materials Science*, Vol 46, No. 9, 2895-2904, 2011, Das, S; Ghatak, A.
66. Ultrafast large area micropattern generation in non-absorbing polymer thin-films by pulsed laser diffraction, *Small* 7, 758-765, 2011, A. Verma, A. Sharma and G. U. Kulkarni.
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.
68. Fabrication and conductivity measurement of suspended carbon nanofiber arrays, *Carbon* 49, 1727-1732, 2011, C. S. Sharma, H. Katepalli, A. Sharma and M. Madou.
69. Parametric study on instabilities in a two-layer electromagnetohydrodynamic channel flow confined between two parallel electrodes, *Phys. Rev. E* 83, 036313, 2011, P. D. S. Reddy, D. Bandyopadhyay, S. W. Joo, A. Sharma and S. Qian.
70. One-step grayscale technique for the fabrication of 3-dimensional structures, *Sensors and Actuators B* 153, 125-134, 2011, A. Rammohan, P. K. Dwivedi, R. Martinez-Duarte, H. Katepalli, M. J. Madou and A. Sharma.
71. On-demand particle enrichment in a microfluidic channel by a locally controlled floating electrode, *Sensors and Actuators B* 153, 277-283, 2011, S. E. Yalcin, A. Sharma, S. Qian, S.W. Joo and O. Baysal.
72. Electric-field and contact-force induced tunable patterns in slipping soft elastic films, *Europhys. Lett.* 89, 36002, 2010, D. Bandyopadhyay, A. Sharma and V. Shankar.
73. 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.
74. A bioinspired wet/dry microfluidic adhesive for aqueous environments, *Langmuir*, 26, 521-525, 2010, A. Majumder, A. Sharma and A. Ghatak.
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.
77. Application of a novel bacterial consortium for mineralization of sulphonated aromatic amines, *Bioresource Technology*, Vol 102, No.2, 765-771, 2011, Barsing, P; Tiwari, A; Joshi, T; Garg, S.
78. Multiscale Pattern Generation in Viscoelastic Polymer Films by Spatiotemporal Modulation of Electric Field and Control of Rheology, *Advanced Functional Materials*, Vol 21, No.2, 324-335, 2011, Pattader, PSG; Banerjee, I; Sharma, A; Bandyopadhyay, D.
79. Process intensification in PSA processes for upgrading synthetic landfill and lean natural gases, *Adsorption-Journal Of The International Adsorption Society*, Vol 17, No.1, 121-133, 2011, Spoorthi, G; Thakur, RS; Kaistha, N; Rao, DP.
80. Thermally stimulated currents in a-Se_{99.5}Bi_{0.5} thin films, *Vacuum*, Vol 85, No. 7, 730-733, 2011, Yadav, S; Pal, RK; Sharma, SK; Dwivedi, PK; Kumar, A.

81. Prediction of Long and Short Time Rheological Behavior in Soft Glassy Materials, *Physical Review Letters*, Vol 106, No.3, 2011, Shahin, A; Joshi, YM.
82. Laminar Forced Convection Heat Transfer from a Rotating Cylinder to Power-Law Fluids, *Numerical Heat Transfer Part A-Applications*, Vol 59, No.4, 297-319, 2011, Panda, SK; Chhabra, RP.
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.
84. Limiting Gas Liquid Flows and Mass Transfer in a Novel Rotating Packed Bed (HiGee), *Industrial & Engineering Chemistry Research*, Vol 50, No.2, 986-997, 2011, Rajan, S; Kumar, M; Ansari, MJ; Rao, DP; Kaistha, N.
85. Effect of pore morphology on vapor-liquid phase transition and crossover behavior of critical properties from 3D to 2D, *Fluid Phase Equilibria*, Vol 300, No.40545, 182-187, 2011, Singh, SK; Singh, JK.
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.
88. Efficacy of Polyvalent Bacteriophage P-27/HP to Control Multidrug Resistant *Staphylococcus aureus* Associated with Human Infections, *Current Microbiology*, Vol. 62, No.1, 255-260, 2011, Gupta, R; Prasad, Y.
89. Enhanced Self-Organized Dewetting of Ultrathin Polymer Films Under Water-Organic Solutions: Fabrication of Sub-micrometer Spherical Lens Arrays, *Advanced Materials*, Vol 22, No.46, 5306-5309, 2010, Verma, A; Sharma, A.
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.
91. Flow over and forced convection heat transfer in Newtonian fluids from a semi-circular cylinder, *International Journal Of Heat And Mass Transfer*, Vol 54, No. 40546, 225-241, 2011, Chandra, A; Chhabra, RP.
92. Momentum and heat transfer from a square cylinder in power-law fluids, *International Journal Of Heat And Mass Transfer*, Vol 54, No. 40546, 390-403, 2011, Rao, PK; Sahu, AK; Chhabra, RP.
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, Shaikat, A; Sharma, A; Joshi, YM.
95. Self-Organized Ordered Arrays of Core-Shell Columns in Viscous Bilayers Formed by Spatially Varying Electric Fields, *Journal Of Physical Chemistry C*, Vol 114, No.49, 21020-21028, 2010, Reddy, PDS; Bandyopadhyay, D; Sharma, A.
96. New methodologies for security risk assessment of oil and gas industry, *Process Safety And Environmental Protection*, Vol 88, No. 6, 407-412, 2010, Srivastava, A; Gupta, JP.

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.
98. Enrichment of benzene from benzene-water mixture by adsorption in silylated mesoporous silica, *Microporous And Mesoporous Materials*, Vol 137, No.40546, 49-55, 2011, Patel, DB; Singh, S; Bandyopadhyaya, R.
99. Simulation studies of ammonia removal from water in a membrane contactor under liquid-liquid extraction mode, *Journal Of Environmental Management*, Vol 92, No.1, 121-130, 2011, Mandowara, A; Bhattacharya, PK.
100. Nanostructured Zn-Fe₂O₃ thin film modified by Fe-TiO₂ for photoelectrochemical generation of hydrogen, *International Journal Of Hydrogen Energy*, Vol 35, No. 20, 10883-10889, 2010, Sharma, P; Kumar, P; Deva, D; Shrivastav, R; Dass, S; Satsangi, VR.
101. Microchannel Induced Surface Bulging of a Soft Elastomeric Layer, *Journal Of Adhesion Science And Technology*, Vol 24, No.0, 2681-2692, 2010, Majumder, A; Tiwari, AK; Korada, K; Ghatak, A.
102. Laminar flow of power-law fluids past a rotating cylinder, *Journal Of Non-Newtonian Fluid Mechanics*, Vol 165, No.0, 1442-1461, 2010, Panda, SK; Chhabra, RP.
103. Free convection in power-law fluids from a heated sphere, *Chemical Engineering Science*, Vol 65, No. 23, 6190-6205, 2010, Prhashanna, A; Chhabra, RP.
104. Role of wall deformability on interfacial instabilities in gravity-driven two-layer flow with a free surface, *Physics Of Fluids*, Vol 22, No.9, 2010, Gaurav; Shankar, V.
105. Spinodal phase separation in liquid films with quenched disorder, *Physical Chemistry Chemical Physics*, Vol 12, No. 40, 12964-12968, 2010, Vashishtha, M; Jaiswal, PK; Khanna, R; Puri, S; Sharma, A.
106. Process Intensification in HiGee Absorption and Distillation: Design Procedure and Applications, *Industrial & Engineering Chemistry Research*, Vol. 49, No.20, 10046-10058, 2010, Agarwal, L; Pavani, V; Rao, DP; Kaistha, N.
107. Enhancement of hydrogen gas permeability in electrically aligned MWCNT-PMMA composite membranes, *Micron*, Vol 41, No. 7, 909-914, 2010, Kumar, S; Sharma, A; Tripathi, B; Srivastava, S; Agrawal, S; Singh, M; Awasthi, K; Vijay, YK.
108. Substrate Heterogeneity Induced Instability and Slip in Polymer Thin Films: Dewetting on Silanized Surfaces with Variable Grafting Density, *Macromolecules*, Vol 43, No.18, 7759-7762, 2010, Xu, L; Sharma, A; Joo, SW.
109. Stability of pressure-driven flow in a deformable neo-Hookean channel, *Journal Of Fluid Mechanics*, Vol 659, No., 318-350, 2010, Gaurav; Shankar, V.
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.
111. Effect of temperature-dependent viscosity on forced convection heat transfer from a cylinder in crossflow of power-law fluids, *International Journal Of Heat And Mass Transfer*, Vol 53, No. 0, 4728-4740, 2010, Soares, AA; Ferreira, JM; Caramelo, L; Anacleto, J; Chhabra, RP.
112. Self-Organized Micropatterning of Thin Viscous Bilayers Under Microgravity, *Microgravity Science And Technology*, Vol 22, No.3, 273-282, 2010, Bandyopadhyay, D; Sharma, A; Joo, SW; Qian, SZ.

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.
114. Performance of monolithic reactors in film flow, *Chemical Engineering Research & Design*, Vol 88, No. 0, 1057-1066, 2010, Mogalicherla, AK; Kunzru, D.
115. Novel alkoxysilane pentacoordinate O=V(IV) complexes as supported catalysts for cyclohexane oxidation with dioxygen, *Applied Catalysis A-General*, Vol 384, No.40545, 136-146, August 2010, Mishra, GS; Kumar, A; Mukhopadhyay, S; Tavares, PB.
116. Microfabrication of Carbon Structures by Pattern Miniaturization in Resorcinol-Formaldehyde Gel, *Acs Applied Materials & Interfaces*, Vol 2, No.8, 2193-2197, August 2010, Sharma, CS; Verma, A; Kulkarni, MM; Upadhyay, DK; Sharma, A.
117. Generation of secondary droplets in coalescence of a drop at a liquid-liquid interface, *Journal Of Fluid Mechanics*, Vol 655, No., 72-104, 2010, Ray, B; Biswas, G; Sharma, A.
118. Characterization and reactivity of sol-gel synthesized TiO₂-Al₂O₃ supported vanadium oxide catalysts, *Journal Of Catalysis*, Vol 273, No. 2, 221-228, 2010, Shee, D; Deo, G; Hirt, AM.
119. Sol-gel processed (Mg-Zn-Ti) oxide nanocomposite film deposited on prism base as an opto-electronic humidity sensor, *Sensors And Actuators B-Chemical*, Vol 148, No.2, 413-419, 2010, Yadav, BC; Yadav, RC; Dwivedi, PK.
120. Two-dimensional unsteady forced convection heat transfer in power-law fluids from a cylinder, *International Journal Of Heat And Mass Transfer*, Vol 53, No.0, 4152-4167, 2010, Patnana, VK; Bharti, RP; Chhabra, RP.
121. Flow of Newtonian and power-law fluids past an elliptic cylinder: A numerical study, *Industrial and Engineering Chemistry Research*, 49, 6649-6661, 2010, P. Koteswara Rao, A. K. Sahu and R. P. Chhabra.
122. Effect of blockage on forced convection heat transfer from a heated square to power-law fluids, *Numerical Heat Transfer: Part A*, 58, 641-659, 2010, A. K. Sahu, R. P. Chhabra and V. Eswaran.
123. Laminar forced convection heat transfer from a rotating cylinder to power-law fluids, *Numerical Heat Transfer: Part A*, 59, 297-319, 2011, S. K. Panda and R. P. Chhabra.
124. Fe-Grown Carbon Nanofibers for Removal of Arsenic(V) in Wastewater, *Industrial & Engineering Chemistry Research*, Vol 49, No.15, 7074-7084, 2010, Gupta, AK; Deva, D; Sharma, A; Verma, N.
125. Stability and Dewetting of Metal Nanoparticle Filled Thin Polymer Films: Control of Instability Length Scale and Dynamics, *Acs Nano*, Vol 4, No.7, 3709-3724, 2010, Mukherjee, R; Das, S; Das, A; Sharma, SK; Raychaudhuri, AK; Sharma, A.
126. Flow of Newtonian and Power-Law Fluids Past an Elliptical Cylinder: A Numerical Study, *Industrial & Engineering Chemistry Research*, Vol 49, No.14, 6649-6661, July 2010, Rao, PK; Sahu, AK; Chhabra, RP.
127. Phase transition and crossover behavior of colloidal fluids under confinement, *Chemical Physics Letters*, Vol 494, No. 40639, 182-187, 2010, Singh, SK; Singh, JK; Kwak, SK; Deo, G.

128. Optical, chemical and structural modification of oxygen irradiated PET, *Radiation Measurements*, Vol 45, No. 7, 850-855, 2010, Awasthi, K; Kulshrestha, V; Avasthi, DK; Vijay, YK.
129. Kinetics of spinodal phase separation in unstable thin liquid films, *Physical Review E*, Vol 82, No.1, -, 2010, Khanna, R; Agnihotri, NK; Vashishtha, M; Sharma, A; Jaiswal, PK; Puri, S.
130. Embedded Microstructures by Electric-Field-Induced Pattern Formation in Interacting Thin Layers, *Langmuir*, Vol 26, No. 13, 10943-10952, 2010, Srivastava, S; Bandyopadhyay, D; Sharma, A.
131. Two-dimensional laminar flow of a power-law fluid across a confined square cylinder, *Journal Of Non-Newtonian Fluid Mechanics*, Vol 165, No.0, 752-763, 2010, Sahu, AK; Chhabra, RP; Eswaran, V.
132. PVT correlations for Indian crude using artificial neural networks, *Journal Of Petroleum Science And Engineering*, Vol 72, No. 40545, 93-109, 2010, Dutta, S; Gupta, JP.
133. Direct determination of fluid-solid coexistence of square-well fluids confined in narrow cylindrical hard pores, *Journal Of Chemical Physics*, Vol 132, No.22, -, 2010, Huang, HC; Chen, WW; Singh, JK; Kwak, SK.
134. Lattice Boltzmann study of velocity, temperature, and concentration in micro-reactors, *International Journal Of Heat And Mass Transfer*, Vol 53, No.0, 3175-3185, 2010, Verma, N; Mewes, D; Luke, A.
135. Iron doped phenolic resin based activated carbon micro and nanoparticles by milling: Synthesis, characterization and application in arsenic removal, *Chemical Engineering Science*, Vol 65, No.11, 3591-3601, 2010, Sharma, A; Verma, N; Sharma, A; Deva, D; Sankararamakrishnan, N.
136. Effect of Method of Preparation on Activity of Pd/Al₂O₃ Monolith Catalysts, *Canadian Journal Of Chemical Engineering*, Vol 88, No.3, 367-375, 2010, Mogalicherla, AK; Kunzru, D.
137. An experimental study of non-Newtonian fluid flow in rectangular flumes in laminar, transition and turbulent flow regimes, *Journal Of The South African Institution Of Civil Engineering*, Vol 52, No.1, 11-19, 2010, Haldenwang, R; Slatter, PT; Chhabra, RP.
138. A Unified Theory of Instabilities in Viscoelastic Thin Films: From Wetting to Confined Films, From Viscous to Elastic Films, and From Short to Long Waves, *Langmuir*, Vol 26, No.11, 8464-8473, June 2010, Sarkar, J; Sharma, A.
139. Is free surface free in micro-scale electrokinetic flows?, *Journal Of Colloid And Interface Science*, Vol 347, No.1, 153-155, 2010, Choi, W; Sharma, A; Qian, S; Lim, G; Joo, SW.
140. Accurate acceleration of kinetic Monte Carlo simulations through the modification of rate constants, *Journal Of Chemical Physics*, Vol 132, No.19, -, 2010, Chatterjee, A; Voter, AF.
141. Spray pyrolytically deposited nanoporous Ti⁴⁺ doped hematite thin films for efficient photoelectrochemical splitting of water, *International Journal Of Hydrogen Energy*, Vol 35, No.9, 3985-3990, 2010, Kumari, S; Singh, AP; Sonal; Deva, D; Shrivastav, R; Dass, S; Satsangi, VR.

142. A multigrain catalyst model for unifunctional multicomponent catalysts, *Chemical Engineering Research & Design*, Vol 88, No. 0, 455-464, 2010, Varshney, P; Kunzru, D; Gupta, SK.
143. The Promotion of Vanadia-Alumina and Vanadia-Titania Catalysts by Surface Molybdenum Oxide for the Propane ODH Reaction, *Catalysis Letters*, Vol 136, No.40606, 271-278, 2010, Nayak, SC; Shee, D; Deo, G.
144. Electric field induced microstructures in thin films on physicochemically heterogeneous and patterned substrates, *Journal Of Chemical Physics*, Vol 132, No. 17, -, 2010, Srivastava, S; Reddy, PDS; Wang, C; Bandyopadhyay, D; Sharma, A.
145. Formation of Nanoparticles of Water-Soluble Molecules: Experiments and Mechanism, *Journal Of Physical Chemistry C*, Vol 114, No.19, 8806-8813, 2010, Ravikumar, C; Singh, SK; Bandyopadhyaya, R.
146. Prewetting transitions of one site associating fluids, *Journal Of Chemical Physics*, Vol 132, No.14, April 2010, Khan, S; Singh, JK.
147. Microstructure change in poly(ethersulfone) films by swift heavy ions, *Micron*, Vol 41, No.4, 390-394, June 2010, Kulshrestha, V; Agarwal, G; Awasthi, K; Tripathi, B; Acharya, NK; Vyas, D; Saraswat, VK; Vijay, YK; Jain, IP.
148. Effect of Blockage on Heat Transfer from a Sphere in Power-Law Fluids, *Industrial & Engineering Chemistry Research*, Vol 49, No.8, 3849-3861, April 2010, Song, DY; Gupta, RK; Chhabra, RP.
149. Hydrogenolysis Of Glycerol With Feco Macrocyclic Complex Bonded To Raney Nickel Support Under Mild Reaction Conditions, *Canadian Journal Of Chemical Engineering*, Vol 88, No. 2, 208-216, April 2010, Anand, KA; Anisia, KS; Agarwal, AK; Kumar, A.
150. Changes in Structural and Optical Properties of Polycarbonate Induced by Ag⁺ Ion Implantation, *Journal Of Macromolecular Science Part B-Physics*, Vol 49, No.2, 259-268, 2010, Bahniwal, S; Sharma, A; Aggarwal, S; Deshpande, SK; Sharma, SK; Nair, KGM.
151. Stress relaxation in aging soft colloidal glasses, *Soft Matter*, Vol 6, No.7, 1462-1466, 2010, Bandyopadhyay, R; Mohan, PH; Joshi, YM.
152. Molecular Simulation Study of Vapor-Liquid Critical Properties of a Simple Fluid in Attractive Slit Pores: Crossover from 3D to 2D, *Journal Of Physical Chemistry B*, Vol 114, No.12, 4283-4292, April 2010, Singh, SK; Saha, AK; Singh, JK.
153. Phase Transitions in Nanoconfined Fluids: The Evidence from Simulation and Theory, *Aiche Journal*, Vol 56, No.4, 842-848, 2010, Cummings, PT; Docherty, H; Iacovella, CR; Singh, JK.
154. Templated one step electrodeposition of high aspect ratio n-type ZnO nanowire arrays, *Journal Of Colloid And Interface Science*, Vol 344, No.1, 1-9, 2010, Sharma, SK; Rammohan, A; Sharma, A.
155. Preparation of Activated Carbon Fibers from Cost Effective Commercial Textile Grade Acrylic Fibers, *Carbon Letters*, 12 (1), 44-47, 2011, Mekala B., N. Verma, R. K. Singh, H. C. Joshi, A. Srivastava.

Civil Engineering

156. Flexural Response of Surface Strip Footing resting on Reinforced Viscoelastic Foundation Beds. *International Journal of Geotechnical Engineering*, J. Ross Publications, Vol.5, Iss. 2, pp. 165-179, (2011), Dey, A. and Basudhar, P.K.
157. Uplift capacity of single bent pile and pile group considering arching effects in sand, *Geotechnical and Geological Engineering*, Vol. 28, No.4, pp. 337-347, (2010), Shelke, A., Basha, P.S., Basudhar, P.K., Patra, N.R. and Misra, S.
158. An experimental investigation on the local behaviour of steel-concrete interfaces at large openings in the PSC inner containment dome, *Nuclear Engineering and Design*, Elsevier, 240, 947-956, 2010, S.K. Chakrabarti, A. Kumar, and P.C. Basu.
159. Environmental factors affecting the levels of Legacy pesticides in airshed of Delmarva and Chesapeake Bays. *Env. Tox. Chem.* 2010, 29, 1893-1906, Goel, A.; McConnell, L.L.; Torrents, A.; Kuang, Z.; Hapeman, C.J.; Meritt, D.W.; Alexander, S.T.; Scudlark J.K. and Scarborough, R.
160. Scaling of Response Spectrum and Duration for Aftershocks, *Soil Dynamics and Earthquake Engineering*, Volume 30, Issue 8, 724-735, 2010, S. Das, V.K. Gupta.
161. Measurement of Number and Size Distribution of Particles Emitted from a Mid-Sized Transportation Multipoint Port Fuel Injection Gasoline Engine, *Fuel*, 89, 2230-2233 (2010), Tarun Gupta, Abhishek Kothari, Dhananjay Kumar Srivastava, Avinash Kumar Agarwal.
162. Aged Particles Derived from Emissions of Coal-fired Power Plants: The TERESA Field Results, *Inhalation Toxicology* (2010), Choong-Min Kang, Tarun Gupta, Pablo A. Ruiz, Jack M. Wolfson, Stephen T. Ferguson, Joy E. Lawrence, Annette C. Rohr, John Goldleski and Petros Koutrakis.
163. Toxic Potential Evaluation of Particulate Matter Emitted from a Constant Speed Compression Ignition Engine: A Comparison between Straight Vegetable Oil and Mineral Diesel, *Aerosol Science and Technology*, 44 (9), 724-733 (2010), Avinash Kumar Agarwal, Tarun Gupta and Abhishek Kothari.
164. Development and Performance Evaluation of an Indigenously Developed Air Sampler Designed to Collect Submicron Aerosol, *Annals of the Indian National Academy of Engineering (INAE)*, Vol. VII, 189-193 (2010), Tarun Gupta, Abhishek Chakraborty and Kamal Kant Ujinwal.
165. Chemical Characterization and Source Apportionment of Submicron (PM₁) Aerosol in Kanpur Region, *Aerosol and Air Quality Research*, 10, 433-445 (2010), Abhishek Chakraborty and Tarun Gupta.
166. Particulate Emissions from Biodiesel Vs Diesel Fuelled Compression Ignition Engine, *Renewable and Sustainable Energy Review*, 15(6), 3278-3300 (2011), Avinash Kumar Agarwal, Tarun Gupta and Abhishek Kothari.
167. The Secondary Organic Carbon (SOC) Formation from a CRDI Automotive Diesel Engine Exhaust, *SAE Technical Paper 2011-01-0642* (2011), Tarun Gupta, Neelabh Dikshit, Avinash Kumar Agarwal and Sudhir Gupta.
168. Oxidation Stability of Biodiesel Produced from Non-Edible Oils of African Origin, *SAE Technical Paper 2011-01-1202* (2011), Thomas Kivevele, Avinash Kumar Agarwal, Tarun Gupta and Makame Mbarawa.

169. Electrocardiographic and Respiratory Responses to Coal-Fired Power Plant Emissions in a Rat Model of Acute Myocardial Infarction: Results from the Toxicological Evaluation of Realistic Emissions of Source Aerosols (TERESA) Study, *Inhalation Toxicology*, 2011, Gregory A. Wellenius, Edgar A. Diaz, Tarun Gupta, Pablo A. Ruiz, Mark Long, Choong Min Kang, Brent A. Coull, John J. Godleski.
170. Experimental Study of the Effects of Environmental and Fog Condensation Nuclei Parameters on Rate of Fog Formation and Dissipation using a New Laboratory Scale Fog Generation Facility, *Aerosol and Air Quality Research*, 11, 140-154 (2011), Vivek Pratap Singh, Tarun Gupta, Sachchida Nand Tripathi, Chinmay Jariwala and Utpal Das.
171. Toxicological Evaluation of Realistic Emission Source Aerosols (TERESA) -Power Plant Studies: Assessment of Cellular Responses, *Inhalation toxicology* (2011), John Godleski, Edgar Diaz, Miriam Lemos, Chris Long, Pablo Ruiz, Tarun Gupta, Choong-Min Kang and Brent Coull.
172. Field Performance Evaluation of a newly Developed PM_{2.5} Sampler at IIT Kanpur, *Science of the Total Environment*, 409, 3500-3507 (2011), Tarun Gupta, Jaiprakash and Shefali Dubey.
173. Emissions from Diesel vs. Biodiesel Fuel Used in a CRDI SUV Engine: PM Mass and Chemical Composition, *Inhalation Toxicology*, 23(8), 449-458 (2011), Jitendra Gangwar, Tarun Gupta, Sudhir Gupta and Avinash Kumar Agarwal.
174. Toxicological Evaluation of Realistic Emission Source Aerosols (TERESA): Assessment of Breathing Pattern, *Inhalation Toxicology* (2011), Edgar A. Diaz, Miriam Lemos, Mark Long, Brent Coull, Pablo Ruiz, Tarun Gupta, Choong-Min Kang, Erick Vlassidis, and J.J Godleski.
175. Methods used for the development of neural networks for the prediction of water resources variables in river systems: Current status and future directions, *Environment Modeling & Software*, V 25, 891-909, 2010, H.R. Maier, A. Jain, G.C. Dandy, and K.P. Sudheer.
176. Error propagation in normalization of stable isotope data: a Monte Carlo analysis. *Rapid Commun. Mass Spectrom*, 24, 2697-2705, 2010, Skrzypek, G., R. Sadler, and D. Paul.
177. Monitoring paleovegetation shifts through stable carbon isotope variability in archaeologically recovered leporids. *Journal of the Texas Academy of Sciences*, v. 63, 2011, Munoz C., R. Mauldin, D. Paul and L. Kemp.
178. Seismic strengthening of non-ductile reinforced concrete frames using aluminum shear links as energy dissipation devices, *Engineering Structures*, Elsevier, vol. 32, no. 11, 3548-3557, 2010, D. R. Sahoo, and D. C. Rai
179. Modelling and instrumentation of geogrid reinforced soil barriers of landfill covers. *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, (2011), Rajesh, S., and Viswanadham, B.V.S.
180. Hydro-mechanical behaviour of geogrid-reinforced soil barriers for landfill covers system. *Geotextiles and Geomembranes*, Elsevier, 29(1), 51-64, (2011), Rajesh, S., and Viswanadham, B.V.S.
181. Development of a Motor-based differential settlement simulator setup for a Geotechnical Centrifuge. *Geotechnical Testing Journal*, ASTM, 33(6), 507-513, (2010), Rajesh, S., and Viswanadham, B.V.S.

182. Deformation behaviour of clay cap barriers of hazardous waste containment systems: full-scale and centrifuge tests. *Geotextiles and Geomembranes*, Elsevier, 28(3), 281-291, (2010), Gourc, J.P., Camp, S., Viswanadham, B.V.S., and Rajesh. S.
183. Investigation of a landslide in Russia – Finite element and Probabilistic approach. *International Journal of Geotechnical Engineering*, J. Ross Publishing, 4(4), 517-525, (2010), Rajesh, S., Krajewski, W., Bormann, A., and Phanikumar, B.R.
184. Performance assessment of deformation behaviour of landfill barrier at the onset of differential settlement. *International Journal of Environment Engineering*, Inderscience Enterprises Ltd., 2 (1-3), 269-289, (2010), Rajesh, S., and Viswanadham, B.V.S.
185. Performance of Seismically Loaded Shearwalls on Nonlinear Shallow Foundations, *International Journal for Numerical and Analytical Methods in Geomechanics*, Vol. 35, pp. 846-858, 2011, P. Raychowdhury and T. C. Hutchinson.
186. Seismic response of low-rise steel moment-resisting frame (SMRF) buildings incorporating nonlinear soil–structure interaction (SSI), *Engineering Structures*, Vol. 33 (3), pp. 958-967, 2011, P. Raychowdhury.
187. Liquefaction Characteristics Evaluation through different Stress-based Models: A Comparative Study, *Journal of Engineering Research and Studies (E ISSN 0976-7916)*, JERS, Vol. 2 (2), pp 131-142, P. Raychowdhury and P. K. Basudhar.
188. Altitude variation of aerosol properties over the Himalayan range inferred from spatial measurements, *Journal of Atmospheric and Solar-Terrestrial Physics*, 2011, U.C. Dumka, K.K. Moorthy, S.N. Tripathi, P. Hegde, and Ram Sagar.
189. High-Altitude Charged Aerosols in the atmosphere of Titan, *Planetary & Space Sciences*, 2011, M. Michael, S.N. Tripathi, P. Arya, A. Coates, A. Wellbrock and D.T. Young.
190. Experimental Study of the Effects of Environmental and Fog Condensation Nuclei Parameters on the Rate of Fog Formation and Dissipation Using A New Laboratory Scale Fog Generation Facility, *Aerosol and Air Quality Research*, V 11, 140-154, 2011, V.P. Singh, T. Gupta, S.N. Tripathi, C. Jariwala, and U. Das.
191. Inferring absorbing organic carbon content from AERONET data, *Atmospheric Chemistry and Physics*, V 11, 215-225, 2011, A. Arola, G. Schuster, G. Myhre, S. Kazadzis, S. Dey and S.N. Tripathi.
192. Effects of particle shape, hematite content and semi-external mixing with carbonaceous components on the optical properties of accumulation mode mineral dust, *Atmospheric Chemistry and Physics Discussion*, V 10, 1-48, 2010, S.K. Mishra, S.N. Tripathi, S.G. Aggarwal and A. Arola.
193. Numerical study for production of space charge within the stratiform cloud, *Journal of Earth System Science*, V 119, Issue 5, 627-638, 2010, A.K. Srivastva and S.N. Tripathi.
194. One year record of carbonaceous aerosols from an urban location (Kanpur) in the Indo-Gangetic Plain: Characterization, sources and temporal variability, *Journal of Geophysical Research*, V 115, No. D24313, 2010, Kirpa Ram, M.M. Sarin and S.N. Tripathi.
195. Climatological aspects of the optical properties of fine/coarse mode aerosol mixtures, *Journal of Geophysical Research*, 115, D19205, 2010, T. Eck, B.N. Holben, A. Sinyuk, R.T. Pinker, P. Goloub, H. Chen, B. Chatenet, Z. Li, R.P. Singh, S.N.

Tripathi, J.S. Reid, D.M. Giles, O. Dubovik, N.T. O'Neill, A. Smirnov, P. Wang and X. Xia.

196. Inter-comparison of thermal and optical methods for determination of atmospheric black carbon and attenuation coefficient from an urban location in northern India, *Atmospheric Research*, V 97, Issue 3, 335-342, 2010, Kirpa Ram, M.M. Sarin and S.N. Tripathi.

Chemistry

197. Naphthyridine–Imidazole Hybrid ligands for the Construction of Multinuclear Architecture, *Inorg. Chim. Acta.*, 2011, (Invited) S. M. W. Rahaman, D. Das, N. Sadhukhan, A. Sinha and Jitendra K. Bera.
198. Site-Directed Anchoring of N-Heterocyclic Carbene (NHC) on Dimetal Platform: Evaluation of a Pair of Diruthenium(I) Catalysts for Carbene-Transfer Reactions from Ethyl Diazoacetate, *Organometallic*, 2011, B. Saha, T. Ghatak, A. Sinha, S. M. W. Rahaman, and Jitendra K. Bera.
199. A Bicarbonato Bridged Diruthenium(I) Complex: Key Evidence for the Decarboxylation Step in the Base-Assisted Reduction of $\text{Ru}_2\text{Cl}_4(\text{CO})_6$, *Inorg. Chim. Acta.*, 2011, (Invited), T. Ghatak, A. Sinha, S. M. W. Rahaman, and Jitendra K. Bera.
200. Multimetallic Compounds Containing Cyclometalated Ir(III) Units: Synthesis, Structure, Electrochemistry and Photophysical Properties', *Inorg. Chim. Acta.*, 2011, (Invited), T. Hajra, Jitendra K. Bera and Vadapalli Chandrasekhar.
201. Perchlorate Reduction to Chloride by the Dimolybdenum(II) Core: Making a Case for Molybdenum Cofactor (MoCo) in the Perchlorate Reductase Enzyme', *Indian Journal of Chemistry - A*, 2011, 409. (Invited), M. Majumdar and Jitendra K. Bera.
202. A Ru^{II} -N-Heterocyclic Carbene (NHC) Complex from Metal-Metal Singly-Bonded Diruthenium (I) Precursor: Synthesis, Structure and Catalytic Evaluation, *J. Organomet. Chem.*, 2011, 696, 1248, A. Sinha, P. Daw, S. M. W. Rahaman, B. Saha, and Jitendra K. Bera.
203. Bimetallic Catalysis Involving Dipalladium(I) and Diruthenium(I) Complexes', *Chem. Eur. J.*, 2010, 16, 14459, R. K. Das, B. Saha, S. M. W. Rahaman, and Jitendra K. Bera.
204. Hydroxycarbonyl Complexes as Key Intermediates in the Base-Assisted Reduction of Ruthenium Carbonyls, *Dalton. Trans.*, 2010, 39, 11301. (Perspective article), A. Sinha, T. Ghatak and Jitendra K. Bera.
205. Mixed-Ligand Compounds Incorporating Quadruply Bonded Dimolybdenum(II) Core: Syntheses, Structures and Reactivity studies, *Inorg. Chim. Acta.*, 2010, 363, 3078. (Invited), Majumdar, S. M. W. Rahaman, A. Sinha, and Jitendra. K. Bera.
206. Anion Control Structural Variation of Silver(I) Coordination Polymers with a New Donor- π -Acceptor Ligand, *Inorganic Chemica Acta (Special Issue) (2011)*, S. Das, S. Sen and P. K. Bharadwaj.
207. Construction of Coordination Polymers with a Bifurcating Ligand: Synthesis, Structure, Photoluminescence and Magnetic Studies, *Cryst. Growth Des.* (2011), A. Aijaz, E. C. Sañudo and P. K. Bharadwaj.

208. Reversible Single-Crystal to Single-Crystal Exchange of Guests in a Seven-Fold Interpenetrated Diamondoid Coordination Polymer, *Cryst. Growth Des.* (2011), M. K. Sharma, P. Lama and P. K. Bharadwaj.
209. A Comparative Study of Third-Order Optical Nonlinearity of Symmetrical Dipolar Chromogenic Probes and Their Enhancement by Different Metal Ions, *Indian J. Chem. (A)* (special issue) (2011), A. Jana, J. M. Lim, S. W. Park, D. Kim and P. K. Bharadwaj.
210. A Dynamic Open Framework Exhibiting Guest and/or Temperature Induced Bicycle Pedal Motion in Single-crystal to Single-crystal Transformation, *Inorg. Chem.* 50, (2011), 1889, M. K. Sharma and P. K. Bharadwaj.
211. Three-Dimensional Porous Cd(II) Coordination Polymers with Large One-Dimensional Hexagonal Channels: High Pressure CH₄ and H₂ Adsorption Studies, *Inorg. Chem.* 50, (2011), 539, M. K. Sharma, Irena Senkowska, Stefan Kaskel and P. K. Bharadwaj.
212. Cryptand Derived Fluorescence Signaling Systems for Sensing Hg(II) ions: A Comparative Study, *Dalton. Trans.* (2011), 726, K. K. Sadhu S. Sen and P. K. Bharadwaj.
213. Coordination Polymers of Various Architectures Built with Mixed Imidazole/Benzimidazole and Carboxylate Donor Ligands and Different Metal Ions: Syntheses, Structural Features and Magnetic Properties, *New. J. Chem.* 34, (2010), 2502, A. Aijaz, P. Lama, E. C. Sañudo, R. Mishra and P. K. Bharadwaj.
214. A Dynamically Entangled Coordination Polymer: Synthesis, Structure, Luminescence, Single-Crystal-to-Single-Crystal Reversible Guest Inclusion and Structural Transformation, *Eur. J. Inorg. Chem.* (2010), 3829, A. Aijaz, P. Lama and P. K. Bharadwaj.
215. Microporous La(III) Metal-Organic Framework Using a Semi-rigid Tricarboxylic Ligand: Synthesis, Single-Crystal to Single-Crystal Sorption Properties and Gas Adsorption Studies, *Cryst. Growth Des.* 10, (2010), 3410, P. Lama, A. Aijaz, S. Neogi, L. J. Barbour and P. K. Bharadwaj.
216. Two-Dimensional Coordination Polymer with a Non-interpenetrated (4,4) Net Showing Anion Exchange and Structural Transformation in Single-Crystal to Single-Crystal Fashion, *Inorg. Chem.* 49, (2010), 5883, A. Aijaz, P. Lama and P. K. Bharadwaj.
217. Binding of Various Anions in Laterally Non-symmetric Aza-Oxa Cryptands Through H-bonds: Characterization of Water Clusters of Different Nuclearity, *Cryst. Engg. Comm.* 12, (2010), 2967, M. C. Das, S. K. Ghosh, S. Sen and P. K. Bharadwaj.
218. Coumarin Derived Chromophores in the Donor-Acceptor-Donor Format that Gives Fluorescence Enhancement and Large Two-Photon Activity in Presence of Specific Metal Ions, *Inorganic Chimica Acta* 363, (2010), 2824. (Special issue on Prof. Animesh Chakravarty), D. Ray, A. Nag, A. Jana, D. Goswami and P. K. Bharadwaj.
219. Role of Spacer in Single-or Two-Step FRET: Studies in Presence of Two Connected Cryptands with Properly Chosen Fluorophores, *Dalton. Trans.* (2010), 4146, K. K. Sadhu, S. Chatterjee, S. Sen and P. K. Bharadwaj.
220. Effect of Bulkiness on Reversible Substitution Reactions at Mn(II) Center with Cocomitant Movement of the Lattice DMF: Observation Through Single-Crystal

- to Single-Crystal Fashion, *Chem. Eur. J.* 16, (2010), 5070, M. C. Das and P. K. Bharadwaj.
221. Excess Electron and Lithium Atom Solvation in Water Clusters at Finite Temperature: An ab Initio Molecular Dynamics Study of the Structural, Spectral, and Dynamical Behavior of $(\text{H}_2\text{O})_6^-$ and $\text{Li}(\text{H}_2\text{O})_6$, *J. Phys. Chem. A* 114, (2010) 11869-11878, Subha Pratihar and A. Chandra.
 222. A first principles molecular dynamics study of excess electron and lithium atom solvation in water-ammonia mixed clusters: Structural, spectral, and dynamical behaviors of $[(\text{H}_2\text{O})_5\text{NH}_3]^-$ and $\text{Li}(\text{H}_2\text{O})_5\text{NH}_3$ at finite temperature, *J. Chem. Phys.* 134, (2011) 034302, Subha Pratihar and A. Chandra.
 223. A first principles molecular dynamics study of lithium atom solvation in binary liquid mixture of water and ammonia: Structural, electronic, and dynamical properties, *J. Chem. Phys.* 134, (2011) 024519, Subha Pratihar and A. Chandra.
 224. Single-particle and pair dynamical properties of acetone-methanol mixtures containing charged and neutral solutes: A molecular dynamics study, *J. Theo. Comp. Chem.* (2011), Rini Gupta and A. Chandra.
 225. Imine-functionalized, fluorescent organomercury and -tellurium compounds, *J. Organomet. Chem.* 695, (2010) 74-81, V. Chandrasekhar, Arun Kumar, M. D. Pandey.
 226. Trapping two different CdCl_2 1D-layered structures by a cyclocarbophosphazene-based ligand, *Cryst. Eng. Commun.* 12, (2010) 682-84, V. Chandrasekhar, T. Senapati.
 227. Silver-Guided Excimer Emission in an Adenine-Pyrene Conjugate: Fluorescence Lifetime and Crystal Studies, *Inorg. Chem.* 48, (2010) 2020-22, M. D. Pandey, A. K. Mishra, V. Chandrasekhar, S. Verma.
 228. Coordination polymers containing ferrocene backbone. Synthesis, structure and electrochemistry, *Dalton Trans.* (2010), 2684-91, V. Chandrasekhar, R. Thirumoorthi.
 229. Synthesis, Structure, and Two-Photon Absorption Studies of a Phosphorus-Based Tris Hydrazone Ligand $(\text{S})\text{P}[\text{N}(\text{Me})\text{N}=\text{CH}-\text{C}_6\text{H}_3-2\text{-OH}-4\text{-N}(\text{CH}_2\text{CH}_3)_2](3)$ and Its Metal Complexes, *Inorg. Chem.* 48, (2010) 4008-16, V. Chandrasekhar, R. Azhakar, B. Murugesapandian, T. Senapati, P. Bag, M. D. Pandey, S. K. Maurya, D. Goswami.
 230. In Situ Generated Hydrated Diorganotin Cations as Synthons for Hydrogen-Bonded and Coordination-Driven 1D-, 2D-, and 3D-Assemblies, *Crystal Growth Design*, 10, (2010) 3077-93, V. Chandrasekhar, P. Singh.
 231. Dinuclear metal phosphonates and -phosphates, *Inorganica Chimica Acta* (Special Animesh Chakravarthy Issue), 363, (2010) 2920-28, V. Chandrasekhar, P. Sasikumar, T. Senapati, A. Dey.
 232. Synthesis and structure of diorganotin dibromides, R_2SnBr_2 ($\text{R} = 2,4,6$ -trimethylphenyl or 2,4,6-trimethylbenzyl): Hydrolysis of $(2,4,6\text{-Me}_3\text{C}_6\text{H}_2\text{CH}_2)_2\text{SnBr}_2$, *J. Chem. Sci.* (Special issue on Organic and Related Solids), 122, (2010) 687-95, V. Chandrasekhar, R. Thirumoorthi.
 233. Molecular tailoring approach in conjunction with MP2 and RI-MP2 codes: A comparison with fragment molecular method, *J. Comput. Chem.* 31, (2010) 2405-2418.

A. P. Rahalkar, M. Katouda, S. R. Gadre, S. Nagase.

234. Appraisal of through-bond and through-space substituent effects via molecular electrostatic potential topography, *J. Phys. Chem. A* 114, (2010) 12330-12333, F. B. Sayyed, C. H. Suresh and Shridhar R. Gadre.
235. Ab Initio Investigation of Benzene Clusters: Molecular Tailoring Approach, *J. Chem. Phys.* 133, (2010) 1643081-12, A. S. Mahadevi, A. P. Rahalkar, S. R. Gadre and G. N. Sastry.
236. Molecular Cluster Building Algorithm: Electrostatic Guidelines and Molecular Tailoring Approach, *J. Chem. Phys.* 134, (2011) 084111-1-9, S.D. Yeole and S.R. Gadre (The work for some of these papers was initiated at the University of Pune).
237. BF₃ OEt₂-Mediated Highly Regioselective S_N2-Type Ring-Opening of N-Activated Aziridines and N-Activated Azetidines by Tetraalkylammonium Halides, *J. Org. Chem.*, 75, (2010) 137-151, M. K. Ghorai, A. Kumar and D. P. Tiwari.
238. Lewis Acid Catalyzed Highly Stereoselective Domino-Ring-Opening Cyclization of Activated Aziridines with Enolates: Synthesis of functionalized Chiral gamma-Lactams, *J. Org. Chem.* 75, (2010) 6173-6181, M. K. Ghorai, and D. P. Tiwari.
239. Domino Imino-Aldol-Aza-Michael Reaction: One-Pot Diastereo- and Enantioselective Synthesis of Piperidines, *J. Org. Chem.*, 75, (2010), 7061-7072, M. K. Ghorai, S. Halder, R. K. Das.
240. Structure and hydrogen bond vibrations of the jet-cooled 1:1 complex between 7- and formamide: A laser-induced fluorescence spectroscopy study, *Chemical Physics Letters*, 503, (2011) 203-209, M. K. Hazra, M. Mukherjee, D. Goswami, and T. Chakraborty.
241. Microscopic Probing of Two-photon Fluorescence for Cancer Diagnosis, *Current Science*, 100, (2011) 294-296, A. K. De, N. N. Mutyal, D. Goswami.
242. Probing Intermolecular Interaction through Thermal-Lens Spectroscopy, *Journal of Physical Chemistry: B*, 115, (2011) 262-268, I. Bhattacharyya, P. Kumar, and D. Goswami.
243. Fluorescence discrimination by tracing quantum interference in fluorescence microscopy, *Physical Review: A*, 83, (2011) 015402, A. K. De, D. Roy, and D. Goswami.
244. An efficient nanocomposite based on carbon nanotubes functionalized with a fluorescent ink for ultrafast optical limiting, *Materials Letters*, 65, (2011) 915-917, J. Gupta, C. Vijayan, S. K. Maurya and D. Goswami.
245. Towards Using Molecular Ions as Qubits: Femtosecond Control of Molecular Fragmentation with Multiple Knobs, *Pramana-Journal of Physics*, 75, (2010) 1065-1069, T. Goswami, D. K. Das, and D. Goswami.
246. Selective suppression of two-photon molecular fluorescence in laser-scanning microscopy by ultrafast pulse-train excitation, *Journal of Biomedical Optics Letters*, 15, (2010) 060502, A. K. De, D. Roy, and D. Goswami.
247. Fluorescence laser-scanning microscopy with one-photon ultrashort pulsed illumination, *Global Journal of Analytical Chemistry*, 1, (2010) 130-133, A. K. De and D. Goswami.
248. Decoding coherent information in femtosecond shaped laser pulses, *Current Science*, 99, (2010) 476-484, I. Bhattacharyya, A. Dutta, S. Ashtekar, S. K. Maurya, and D. Goswami.
249. Synthesis, structure, and two-photon absorption studies of a phosphorus-based tris hydrazone ligand (S)P[N(Me)N=CH-C₆H₃-2-OH-4-N(CH₂CH₃)₂]₃ and its

- metal complexes, *Inorganic Chemistry*, 49, (2010) 4008-4016, V. Chandrasekhar, R. Azhakar, B. Murugesapandian, T. Senapati, P. Bag, M. D. Pandey, S. K. Maurya, and D. Goswami.
250. Polarization induced control of single and two-photon fluorescence, *Journal of Chemical Physics*, 132, (2010) 0154508, A. Nag, and D. Goswami.
 251. Coumarin derived chromophores in the donor-acceptor-donor format that gives fluorescence enhancement and large two-photon activity in presence of specific metal ions, *Inorganica Chimica Acta*, 363, (2010) 2824-2832, D. Ray, A. Nag, A. Jana, D. Goswami, and P. K. Bharadwaj.
 252. A synthetic ditryptophan conjugate that rescues bacteria from mercury toxicity through complexation, *Tetrahedron Letters*, 51, (2010) 6111-6115, S. Mondal, S. Swaroop, G. Ramanathan, S. Verma.
 253. Twisted intramolecular charge transfer in a model green fluorescent protein luminophore analog, *Chemical Physics Letters*, 494, (2010) 295-300, B. K. Rajbongshi, P. Sen, G. Ramanathan.
 254. Synthesis of oxa-bridged derivatives from Diels-Alder bis-adducts of butadiene and 1,2,3,4-tetrahalo-5,5-dimethoxycyclopentadiene, *Beilstein J. Org. Chem.* 6, (2010), F. A. Khan, Karuppasamy Parasuraman.
 255. Synthesis and thermal properties of rigid oxa-bridged-containing dimmers and tetramers, *Tetrahedron*, 66, (2010) 8745, F. A. Khan, Karuppasamy Parasuraman and Bertrand Donnio
 256. Grob Fragmentation of Norbornyl α -Diketones: A Route to α -Ketoenols and Aromatic Compounds, *J. Org. Chem.* (2011), F. A. Khan, Ch. Nageswara Rao.
 257. Enantioselective Organocatalytic Biginelli Reaction: Dependence of the Catalyst on Sterics, Hydrogen Bonding, and Reinforced Chirality, *J. Org. Chem.* 76, (2011) 396, J.N. Moorthy, S. Saha.
 258. 6-Membered Pseudocyclic IBX Acids: Syntheses, X-Ray Structural Characterizations and Oxidation Reactivities in Common Organic Solvents, *J. Org. Chem.* 75, (2010) 8416, J.N. Moorthy, K. Senapati, K.N. Parida.
 259. C₃-Symmetric Proline-Functionalized Organocatalysts: Enantioselective Michael addition reactions, *Eur. J. Org. Chem.* (2010) 6539, J.N. Moorthy, S. Saha.
 260. A novel tetraarylpyrene host: Conformation-dependent inclusion of guest molecules in the crystal lattice, *J. Chem. Sci.*, 122, (2010) 697, P. Natarajan, P. Venugopalan, J.N. Moorthy.
 261. Functionalized proline with double hydrogen bonding potential: highly enantioselective Michael addition of carbonyl compounds to β -nitrostyrenes in brine, *Tetrahedron Lett.*, 51, (2010) 5281, S. Saha, S. Seth, J. N. Moorthy.
 262. Engineering of Ternary Co-Crystals Based on Differential Binding of Guest Molecules by a Tetraarylpyrene Inclusion Host, *Chem. Comm.*, 46, (2010) 3574, J. N. Moorthy, P. Natarajan, P. Venugopalan.
 263. Guest \subset Guest \subset Host Molecular Russian Dolls: Porous Honeycomb Networks via Trimeric Hydrogen-Bonded Self-Assembly of 3-Connecting 1,3,5-Tri(p-hydroxyphenyl) benzenes, *Chem. Eur. J.* 16, (2010) 7796, J. N. Moorthy, P. Natarajan.
 264. Bidentate Coordination of a Potentially Tridentate Ligand. A Mononuclear Four-Coordinate Ni(II) Complex Supported by Two o-Iminobenzosemiquinonato Units,

- Indian J. Chem. 50A, (2011) 484-490. (Special Issue on Bioinorganic Chemistry), A. Mukherjee and R. N. Mukherjee.
265. Azo-Containing Pyridine Amide Ligand. A Six-Coordinate Nickel(II) Complex and Its One-Electron Oxidized Species: Structure and Properties, *Inorg. Chim. Acta*, 363, (2010) 2720-2727. (Special Issue Dedicated to Professor Animesh Chakravorty on the occasion of his 75th birthday), A. K. Sharma, S. Biswas, S. K. Barman and R. N. Mukherjee.
 266. Coordination Polymers using (2-Pyridyl) alkylamine-appended Carboxylates: Magnetic Properties, *New J. Chem.* 34, (2010) 2357-2365 (Invited Perspective Article) Themed Issue: Coordination Polymers: Structure and Function, H. Arora and R. N. Mukherjee.
 267. $[(\eta^6\text{-C}_6\text{H}_6)\text{Ru}^{\text{II}}(\text{L})(\text{Cl}/\text{N}_3/\text{CN}/\text{CH}_3\text{CN})]^{+2}$ Complexes of Non-Planar Pyrazolylmethylpyridine Ligands: Formation of Helices Due to C-H \cdots X (X = Cl, N) Interaction, *J. Organomet. Chem.* 695, (2010) 1753-1760, H. Mishra and R. N. Mukherjee.
 268. Diphenoxo-Bridged Co^{II} and Zn^{II} Complexes of Tripodal N_2O_2 Ligands: Stabilization of M^{II} -Coordinated Phenoxyl Radical Species, *Eur. J. Inorg. Chem.* 2010, 1032-1042, A. Mukherjee, F. Lloret, and R. N. Mukherjee.
 269. Ligand Exchanges and Hydroxypalladation Reactions of the Wacker Process in Aqueous Solution at High Cl^- Concentration, *J. Phys. Chem. B*, 115, (2011) 2312-2321., Nisanth N. Nair.
 270. Aggregation-Induced Chemical Reactions: Acid Dissociation in Growing Water Clusters, *J. Am. Chem. Soc.*, 133, (2011) 4062-4072, Harald Forbert, Marco Masia, Anna Kaczmarek-Kedziera, Nisanth N. Nair, and Dominik Marx.
 271. Methanol synthesis on $\text{ZnO}(000)$. III. Free energy landscapes, reaction pathways, and mechanistic insights, *J. Chem. Phys.*, 134, (2011) 064710, Janos Kiss, Johannes Frenzel, Nisanth N. Nair, Bernd Meyer, and Dominik Marx.
 272. Charge Localization Dynamics induced by Oxygen Vacancies on the Titania $\text{TiO}_2(110)$ Surface, *Phys. Rev. Lett.*, 105, (2010) 146405, P. M. Kowalski, M. Farnesi Camellone, Nisanth N. Nair, B. Meyer, Dominik Marx.
 273. Revealing the Magnetostructural Dynamics of [2Fe-2S] Ferredoxins from Reduced-Dimensionality Analysis of Antiferromagnetic Exchange Coupling Fluctuations, *J. Phys. Chem. B*, 114, (2010) 11612-11619, S. Annamaria Fiethen, V. Staemmler, N. N. Nair, J. Ribas-Arino, E. Schreiner, D. Marx
 274. Magnetostructural Dynamics from Hubbard-U Corrected Spin-Projection [2Fe-2S] Complex in Ferredoxin, *J. Chem. Theor. Comput.*, 6, (2010) 569-575, N. N. Nair, J. Ribas-Arino, V. Staemmler, D. Marx.
 275. Palladium-catalyzed novel arylations of cyclic β -bromo α,β -unsaturated aldehydes with triarylbiaryls as multicoupling organometallic nucleophiles, *Synlett*, (2011) 273-279, M.L.N. Rao, D. Banerjee, R. J. Dhanorkar.
 276. Pd-catalyzed coupling of aryl iodides with triarylbiaryls as atom-economic multi-coupling organometallic nucleophiles under mild conditions, *Tetrahedron Letters*, 51, (2011) 6101-6104, M. L. N. Rao, D. Banerjee, R. J. Dhanorkar.
 277. Oxalyl chloride as carbonyl synthon in Pd-catalyzed carbonylations of triarylbiaryls and triaryliodonium organometallic nucleophiles, *Tetrahedron Letters*, 51, (2010) 4975-4980, M. L. N. Rao, V. Venkatesh, P. Dasgupta.

278. Palladium-catalyzed synthesis of 4-arylcoumarins using triarylbismuth compounds as atom-efficient multicoupling organometallic nucleophiles, *European Journal of Organic Chemistry*, 20, (2010) 3945-3955, M. L. N. Rao, V. Venkatesh, D. N. Jadhav.
279. Palladium-catalyzed cross-couplings of allylic carbonates with triarylbismuths as multi-coupling atom-efficient organometallic nucleophiles, *Journal of Organometallic Chemistry*, 695 (2010), 1518-1525, M.L.N. Rao, D. Banerjee, S. Giri.
280. Pd(0)-catalyzed couplings using bromide and chloride derivatives of Baylis-Hillman adducts with triarylbismuths as atom-efficient multi-coupling nucleophiles, *Tetrahedron*, 66, (2010) 3623-3632, M.L.N. Rao, D. Banerjee, R. J. Dhanorkar.
281. Pd-catalyzed domino synthesis of internal alkynes using triarylbismuths as multicoupling organometallic nucleophiles, *Organic Letters*, 12 (2010), 2048-2051, M. L. N. Rao, D. N. Jadhav, P. Dasgupta.
282. An expeditious and convergent synthesis of ailanthoidol, *Tetrahedron Letters*, 51 (2010), 1979-1981, M. L. N. Rao, D. K. Awasthi, D. Banerjee.
283. Control of Spins by Ring Deformation in a Diiron(III)bisporphyrin: Reversal of ClO_4^- and CF_3SO_3^- Ligand Field Strength on the Magnetochemical Series, *Chem Comm.* 47, (2011) 4790-4792, S. Bhowmik, S. K. Ghosh and S. P. Rath.
284. Syn-anti Conformational Switching: Synthesis and X-ray Structures of Tweezer and Anti Form in a Zinc Porphyrin Dimer Induced by Axial Ligands, *Inorg. Chim. Acta.*, 364, (2011) (Invited article in the Special Volume dedicated to Professor S. S. Krishnamurthy on the occasion of his 70th birth anniversary), S. Brahma, S. A. Iqbal and S. P. Rath.
285. Synthesis, Structure and Properties of a High-Spin Fe(III) Porphyrin with Nonequivalent Axial Ligands: Implications for the Hemoproteins, *Indian J. Chem., Sec. A.*, 50, (2011) 432 (Invited article in the Special Issue on Bioinorganic Chemistry dedicated to Professor S. Mitra on the occasion of his 70th birth anniversary), A. Chaudhary, R. Patra, and S. P. Rath
286. A Remarkably Bent Diiron(III)- μ -Hydroxo Bisporphyrin: Unusual Stabilization of Two Spin States of Iron in a Single Molecular Framework, *J. Am. Chem. Soc.*, 132, (2010) 17983-17985, S. K. Ghosh and S. P. Rath.
287. Binding of Catechols to Iron(III) Octaethyl Porphyrin: An Experimental and DFT Investigation, *Eur. J. Inorg. Chem.* (2010) 5211-5221, A. Chaudhury, R. Patra and S. P. Rath.
288. Effects of Axial Pyridine Coordination in a Saddle-Distorted Porphyrin macrocycle: Stabilization of Hexa-coordinated High-Spin Fe(III) and Air-stable Low-Spin Iron(II) Porphyrinates, *Dalton Trans.* 39, (2010) 5795-5806, R. Patra, S. Bhowmik, S. K. Ghosh and S. P. Rath.
289. Synthesis, Structure and Photocatalytic Activity of a Remarkably Bent, Cofacial Ethene-linked Diiron(III) μ -oxobisporphyrin, *Inorg. Chim. Acta.* 363, (2010) 2791-2799. (Invited article in the Special Volume dedicated to Professor A. Chakravorty on the occasion of his 75th birth anniversary), S. K. Ghosh, R. Patra and S. P. Rath.
290. Dangling Thiyl Radical: Stabilized in $[\text{PPh}_4]_2[(\text{bdt})\text{W}^{\text{VI}}(\text{O})(\mu\text{-S})_2\text{Cu}^{\text{I}}(\text{SC}_6\text{H}_4\text{S}^{\bullet})]$, *Inorg. Chem.*, (2011), Moumita Bose, Golam Moula, Ameerunisha Begum, and Sabyasachi Sarkar.

291. Bioinorganic chemistry of molybdenum and tungsten enzymes: a structural-functional modeling approach, *Coordination Chemistry Reviews*, 255, (2011) 1039-1054, Amit Majumdar, Sabyasachi Sarkar.
292. Selective Inclusion of DMF Molecules Within Non-covalent Cavity, *Inorg. Chim. Acta*, (2011), Biplab Maiti, Kuntal Pal and Sabyasachi Sarkar.
293. Hydrosulfido molybdenum (V) complexes in relevance to xanthine oxidase, *Indian Journal of Chemistry*, 50A, (2011) 401-408, Joyee Mitra, Sabyasachi Sarkar.
294. Multiwalled carbon nanotube-polystyrene composite modified Pt electrode as an electrochemical gas sensor, *Advance Science Letters*, 4, (2011) 558-560, Pradeep K. Chaudhury, Prashant Dubey, Manav Saxena and Sabyasachi Sarkar.
295. Growth stimulation of gram (*Cicer arietinum*) plant by water soluble carbon nanotubes, *Nanoscale*, 3, (2011) 1176-1181, Shweta Tripathi, Sumit Kumar Sonkar and Sabyasachi Sarkar.
296. A rapid quantification of serum free methionine by HPLC in relevance to poultry industry, *International Journal of Pharma and Bio Sciences* (2010), Nargish Parvin, Tapas K. Mandal, Vijaylaxmi Saxena, Sabyasachi Sarkar.
297. Influence of low and high-protein diets on body growth and glucose intensity in *Rattus norvegicus*, *International Journal of Pharma and Bio Sciences* (2010), Nargish Parvin, Tapas K. Mandal, Ashok K. Saxena, Sabyasachi Sarkar.
298. Synthesis, X-ray structure and solvent induced electronic states tuning of meso-tris(4-nitrophenyl)corrolato-copper complex, *Inorg. Chim. Acta*. 2010, 363, 4313-4318, Dibyendu Bhattacharya, Pinky Singh and Sabyasachi Sarkar.
299. A Nickel(II)- Sulfur Based Radical-Ligand Complex as a Functional Model of Hydrogenase, *Chem. Eur. J.*, 2010, 16, 12324-12327, Ameerunisha Begum, Golam Moula and Sabyasachi Sarkar.
300. Oxidative Degradation of Zinc Porphyrin in Comparison with its Iron Analogue, *Chem. Eur. J.*, 16, (2010) 10649-10652, Jagannath Bhuyan and Sabyasachi Sarkar.
301. Synthesis, Structural, Redox and Mössbauer Characterization of Four-Electron-Oxidized Tetrakis(cyclohexyl)iron(II)porphodimethene with Different Axial Ligations, *Eur. J. Inorg. Chem.* (2010), 3429-3435, Dibyendu Bhattacharya and Sabyasachi Sarkar.
302. HOMO based two electrons and one-electron oxidation in planar and nonplanar methoxy-substituted nickel tetraphenylporphyrins, *Inorg. Chim. Acta*. 363, (2010) 2778-2785, Suman Maji and Sabyasachi Sarkar.
303. Carbon Nanocubes and Nanobricks from Pyrolysis of Rice, *J. Nanosci. Nanotechnol.* 10, (2010) 4064 - 4067, Sumit Kumar Sonkar, Manav Saxena, Mitali Saha and Sabyasachi Sarkar.
304. Microviscosity inside a Nanocavity: A Femtosecond Fluorescence Up-Conversion Study of Malachite Green, *J. Phys. Chem. B* 114, (2010) 13988, Shehnawaz Rafiq, Rajeev Yadav and Pratik Sen.
305. Twisted intramolecular charge transfer in a model green fluorescent protein luminophore, *Chem. Phys. Lett.* 494, (2010) 295, Basanta K. Rajbongshi, Pratik Sen and Gurunath Ramanathan.
306. Physisorption Gives Narrower Orientational Distribution than Chemisorption on a Glass Surface: A Polarization-Sensitive Linear and Nonlinear Optical Study, *J. Phys. Chem. Lett.* 1, (2010) 2662, Shoichi Yamaguchi, Haruko Hosoi, M. Yamashita, Pratik Sen and Tahei Tahara.

307. Enantioselective Friedel-Crafts Alkylation of Pyrroles Catalyzed by Pybox-Diph-Zn(II) Complexes, *Org. Lett.*, 12, (2010) 80, P.K. Singh and V. K. Singh.
308. Asymmetric Organocatalytic Michael type Reaction of Phosphorous Ylides to Nitro Olefins: Synthesis of γ -Nitro- β -Aryl- α -Methylene Carboxylic Esters, *Tetrahedron Lett.* 51, (2010) 446, S. Alu, S. Selvakumar, and V. K. Singh.
309. Highly Enantioselective Organocatalytic Sulfa-Michael Addition to α , β -Unsaturated Ketones, *J. Org. Chem.*, 75, 20892010, N. K. Rana, S. Selvakumar, and V.K. Singh.
310. Highly Enantioselective Synthesis of 3-Cycloalkanone-3-Hydroxy-2-Oxindoles, Potential Anticonvulsants, *Tetrahedron Lett.*, 51, (2010) 2157, M. Raj, N. Veerasamy, V.K. Singh.
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.
312. Organocatalytic Enantioselective Direct Aldol Reaction in Aqueous Media Catalyzed by a Bifunctional Diamine Catalyst, *Synlett*, 4, (2011) 481-484, Vishnumaya Bisai and Vinod K. Singh.
313. Synthesis of Aminocyclitols and Trihydroxylated Indolizidinone from a D-Mannitol-Derived Common Building Block, *Eur. J. Org. Chem.* 2011, 1166-1175, Preeti Gupta, A. P. John Pal, Y. Suman Reddy, Yashwant D. Vankar.
314. An improved method of ring closing metathesis in the presence of basic amines: application to the formal synthesis of (+)-lentiginosine and other piperidines and carbamino sugar analogs, *Tetrahedron Lett.* 2011, 52, 781-786, Rima Lahiri, Hari Prasad Kokatla, Yashwant D. Vankar.
315. Synthesis of sugar-derived spiroaminals via lactamization and metathesis reactions, *Org. Biomol. Chem.* 9, (2011) 809-819, A. P. John Pal, P. Kadigachalam, A. Mallick, D. V. Ramana, and Yashwant D. Vankar.
316. (3S,4R,5R)-3-(2-Hydroxyethyl)piperidine-3,4,5-triol as an isofagomine analogue: synthesis and glycosidase inhibition study, *Tetrahedron: Asymm.*, 21, (2010) 2966-2972, Preeti Gupta, Suresh Dharuman, Yashwant D. Vankar.
317. Chemistry of 2-Nitroglycals: A One-Pot Three-Component Stereoselective Approach toward 2 C-Branched O-Galactosides, *J. Org. Chem.* 75, (2010) 8457-8464, Pavan K. Kancharla and Yashwant D. Vankar.
318. Synthesis of Fused Oxa-Aza Spiro Sugars from D-Glucose Derived \square -Lactone as Glycosidase Inhibitors, *Eur. J. Org. Chem.* (2010), 6957-6966, A.P. John Pal, Preeti Gupta, Y. Suman Reddy and Yashwant D. Vankar.
319. Molecular iodine-promoted N- and C-glycosylation of 1-C-alkyl (or phenyl)-Glycopyranoses, *Tetrahedron Lett.* 51, (2010) 6334-6337, A.P. John Pal, Asadulla Mallick, Y. Suman Reddy and Yashwant D. Vankar.
320. Synthesis of (-)-deoxoprosopphylline, (+)-2-epi-deoxoprosopinine and synthesis of (2R, 3R), (2R, 3S)-3-hydroxypipercolic acids from D-glycals, *J. Org. Chem.* 75, (2010) 4608-4611, Hari Prasad Kokatla, Rima Lahiri, Pavan K. Kancharla, Venkata Ramana Doddi and Yashwant D. Vankar.
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.

322. Decanuclear copper framework supported by a tripodal adenine ligand, *Inorg. Chem.* 2010, 49, 3691-3693, A. K. Mishra, S. Verma.
323. Silver-catalyzed intramolecular cyclization of 9-propargyladenine via N3 alkylation, *Chem. Commun.* 2010, 46, 3312-3314, R. K. Prajapati, J. Kumar, S. Verma.
324. Biotin interaction with human erythrocytes: Contact on membrane surface and formation of self-assembled fibrous structures, *Chem. Commun.* 2010, 46, 3890-3892, K. B. Joshi, V. Venkatesh, S. Verma.
325. Self-assembled morphologies from C₂- and C₃-symmetric synthetic biotin conjugates, *J. Org. Chem.* 2010, 75, 4280-4283, K.B. Joshi, K. Vijaya Krishna, S. Verma.
326. Interconnected trimeric, pentameric and hexameric metallacycles in a singular silver-adenine framework, *Inorg. Chem.* 2010, 49, 8012-8016, A. K. Mishra, S. Verma.
327. Sunlight mediated disruption of peptide-based soft structures decorated with gold nanoparticles, *Chem. Commun.* 2010, 46, 6992-6994, A.K. Barman, S. Verma.
328. Probing structural consequences of N9-alkylation in silver-adenine frameworks, *Dalton Trans.* 2010, 39, 10034-10037, A. K. Mishra, R. K. Prajapati, S. Verma.

Computer Science and Engineering

329. Palm-print based Recognition System using Phase-Difference, *Future Generation Computer Systems*, Elsevier Science, 2011, Badrinath G S and Phalguni Gupta.
330. Stockwell Transform based Palm-print Recognition, *Applied Soft Computing*, Elsevier Science, 2011, Badrinath G. S. and Phalguni Gupta.

Electrical Engineering

331. Role of single walled carbon nanotubes in improving the efficiency of poly-(3-hexylthiophene) based organic solar cells, *Journal of Applied Physics*, vol. 108, 094902-1-9, 2010, Arun Tej Mallajosyula, S. Sundar Kumar Iyer, and Baquer Mazhari.
332. Synthesis, Electrical and Optical Properties of Stable Yellow Fluorescent Fluoranthenes, *J.Org.Chem.*, V 75, 3656-3662, 2010, Atul Goel, Vijay Kumar, Sumit Chaurasia, Madhu Rawat, Ramesh Prasad and R. S. Anand.
333. An analytical model of the first eigen energy level for MOSFETs having ultra-thin gate oxides, *Journal of Semiconductor Technology and Science*, Vol. 10, No. 3, pp. 203-212, September 2010, B. Pavan Kumar Yadav and A.K. Dutta.
334. On the Soft Fusion of Probability Mass Functions for Multimodal Speech Processing, *EURASIP Journal on Advances in Signal Processing* Volume 2011 (2011), Article ID 294010, 14 pages, D. Kumar, P. Vimal, and Rajesh M. Hegde.
335. Power Quality Event Classification: Overview and Key Issues, *International Journal of Engineering, Sciences and Technology*, Vol. 2, No. 3, pp. 186-199, May 2010, D Saxena, SN Singh and KS Verma.
336. Charge transport properties of an organic solar cell, *Synthetic Metals* V 160, 2250-2254, 2010, F. Yakuphanoglu, RS Anand.

337. Iterative Detection of Turbo Coded Offset QPSK in the Presence of Frequency and Clock Offsets and AWGN, Signal, Image and Video Processing, Springer-Verlag London, Online First, October 2010, K. Vasudevan.
338. Generalized Regression Neural Network Based Bid Forecasting in Competitive Electricity Market, International Journal of Emerging Technologies and Applications in Engineering, Technology and Sciences, Vol. 3, No. 2, pp. 541-545, July'10-Dec'10, M. M. Tripathi, K.G. Upadhyay, SN Singh.
339. Forecasting of Spinning Reserve Using GRNN in California Electricity Market, International Journal of Emerging Technologies and Applications in Engineering, Technology and Sciences, Vol. 3, No. 2, pp. 552-556, July '10 - Dec '10, M. M. Tripathi, K.G. Upadhyay, SN Singh.
340. Multi-Objective Mean-Variance-Skewness Model for Generation Portfolio Allocation in Electricity Markets, Electric Power Systems Research, Vol. 80, No. 10, pp. 1314-1321, October 2010, Naran M. Pindoriya, SN Singh and SK Singh.
341. A Hessian based numerical convergence analysis of a dual-grid Tikhonov regularized Gauss-Newton reconstruction approach to electromagnetic tomography, Oral presentation at PIERS 2011, Marrakesh, Morocco, Mar 20-23, 2011. (PIERS: Progress in Electromagnetics Research), Naren Naik and Jerry Eriksson.
342. On the size and Dielectric Properties of the Interphase in Epoxy-Alumina Nano Composite, IEEE Transactions on Dielectrics and Electrical Insulation, Vol. 17, No. 6, pp. 1665-1675, 2010, P. Maity, N. Gupta, V. Parameswaran, S. Basu.
343. A Divide-by-Difference Filter Based Algorithm for Estimation of Generator Rotor Angle utilizing Synchrophasor Measurements, IEEE Trans. on Instrumentation & Measurements, Vol. 59, No. 6, pp. 1562-1570, June 2010, P Tripathy, SC Srivastava and SN Singh.
344. Visual Servoing of a Redundant Manipulator with Jacobian Matrix Estimation using Self-organizing Map, Robotics and Autonomous Systems, Vol 58, Issue 8, pp 978-990, August 2010, P. Prem Kumar and Laxmidhar Behera.
345. Optimal PMU Placement Method for Complete Topological and Numerical Observability of Power System, Electric Power Systems Research, Vol. 80, No. 9, pp. 1154-1159, September 2010, Ranjana Sodhi, SC Srivastava and SN Singh.
346. Multilevel Converter Fed Induction Motor Drive for Industrial and Traction Drive, IEEE Potentials, Vol. 29, Issue-5, pp. 28-32, October 2010, R. K. Behera and S. P. Das.
347. Improved Spurious Free Performance of Multi-layer Multi-permittivity Dielectric Resonator in MIC Environment, Progress in Electromagnetics Research B, vol. 30, pp. 135-156, 2011, R. K. Chaudhary, V. V. Mishra, K. V. Srivastava and A. Biswas.
348. A pre-filter based PLL for three-phase grid connected applications, Electric Power systems Research, Vol 81, Issue 1, pp 129-137, 2011, R. K. Sinha, P. Sensarma.
349. Waveguide Grating Using Quantum Well Intermixing, Intl. J. of Res. and Revs. in Appl. Sc., 5, pp 43-51(Oct. 2010), R K Sonkar and U. Das.
350. Droop control of converter interfaced microsources in rural distributed generation, IEEE Transactions on Power Delivery, Vol. 25, No. 4, pp. 2768-2778, Oct. 2010, R. Majumder, G. Ledwich, A. Ghosh, S. Chakrabarti and F. Zare.

351. A Novel Turbo Coded Pulse Position Modulation Scheme for Deep Space Optical Communications, *IEICE Transactions on Communications*, pp. 1260-1263, May 2010, Sangmok Oh, Inho Hwang, Adrish Banerjee, and Jeong Woo Lee.
352. Design Oriented Analysis of Modern Active Droop Controlled Power Supplies, in *IEEE Tran. On Ind. Elect.*, vol. 56, pp. 3704-3708, Sept. 2009, Santanu Mishra.
353. Design consideration for a low voltage high current voltage regulator modulator system, in *IEEE Tran. On Ind. Elect.*, pp. 1330-1338, April 2011, Santanu Mishra and Xingsheng Zhou.
354. On the inclusion of PMU current phasor measurements in a power system state estimator, *IET Generation, Transmission, Distribution*, Vol. 4, No. 10, pp. 1104-1115, 2010, S. Chakrabarti, E. Kyriakides, G. Ledwich, and A. Ghosh.
355. Design, Modelling and Simulation of H-tree Clock Distribution Networks, *Australian Journal of Electrical and Electronics Engineering-AJEEE*, Vol. 7, No. 3, pp. 257-264, 2010 (ISSN: 1448-837X), S. Choudhary and S. Qureshi.
356. An Adaptive Scheme for Minimal Load Shedding Utilizing Synchrophasor Measurements to Ensure Frequency and Voltage Stability, *Electric Power Components and Systems*, Vol. 38, No. 11, pp. 1211-1227, August 2010, Seethalekshmi K., SN Singh and SC Srivastava.
357. Self excitation and control of an induction generator in a stand-alone wind energy conversion system, *IET Renewable Power generation* , Vol 4, Issue 4, pp 383-393, 2010, S. Hazra, P. Sensarma.
358. Application of Computational Intelligence in Emerging Power Systems, *International Journal of Engineering, Sciences and Technology*, Vol. 2, No. 3, pp. 1-8, May 2010, SN Singh, KS Verma and D Saxena.
359. Three Degree of Freedom Robust Voltage Controller for instantaneous Current Sharing Among Voltage Source Inverters in Parallel, *IEEE Transactions on Power Electronics*, Vol 25, Number 12, 3003-3014, 2010, S. Shah, P. Sensarma.
360. Short-circuit current density and spectral response modelling of bulk-heterojunction solar cells, *Organic Electronics*, Volume 11, Issue 12, Pages 2032-2036, 2010, Suman Banerjee and S. Sundar Kumar Iyer.
361. Integrated MQW intermixed InGaAsP/InP waveguide photodiodes, *Opt. and Quantum Electr.*, Springer, 42, pp109-120 (2010), Published Online Dec. 09, 2010, T. Bhowmick and U. Das.
362. Adaptive Wavelet Neural Network Based Fast Dynamic ATC Determination, *IET Generation, Transmission & Distribution*, Vol. 4, No.4, pp. 519-529, April 2010, T Jain, SN Singh and SC Srivastava.
363. Characterization of CdSe Nanocrystals for Hybrid Solar Cells, *Integrated Ferroelectrics*, V 120, 1003/1 - 1007/5, 2010, Virendra Kumar Verma, Yashvinder Singh, Ram Narayan Chauhan, RS Anand, Jitendra Kumar.
364. Experimental Study of the Effects of Environmental and Fog Condensation Nuclei Parameters on the Rate of Fog Formation and Dissipation Using a New Laboratory Scale Fog Generation Facility, *Aerosol and Air Quality Res.*, 11, 140-154 (2011), V. P. Singh, T. Gupta, S. N. Tripathi, C. Jariwala, and U. Das.
365. Fuzzy Comprehensive Evaluation and Entropy Weight Decision-Making Method for Power Network Structure Assessment, *International Journal of Engineering, Sciences and Technology*, Vol. 2, No. 5, pp. 92-99, 2010, Yuguo Qi, Fushuan Wen, Ke Wang, Li Li, and SN Singh.

Humanities and Social Sciences

366. Handedness and handwriting: Are they related? *International Handwriting Analysis Review*, 5, 1-10. (2010). Braj Bhushan, D. Suar, & M.K. Mandal.
367. The Hindi adaptation and standardization of the Proactive Coping Inventory (PCI). *International Journal of Psychology and Psychological Therapy*, 10:2, 79-91, (2010), Braj Bhushan, R. Gautam, & E.S. Greenglass.
368. Posttraumatic stress and growth among Tibetan refugees: The mediating role of cognitive-emotional strategies. *Journal of Clinical Psychology*, 67:7, 1-16. 2011- D.Hussain, & Braj Bhushan.
369. Psychology of meditation and health: Present status and future directions. International. *Journal of Psychology and Psychological Therapy*, 10:3, 439-451, (2010), D. Hussain & Braj Bhushan.
370. Cultural factors promoting coping among Tibetan refugees: A qualitative investigation, *Mental Health, Religion & Culture*, 1-13. (2010). D. Hussain & Braj Bhushan.
371. Soteriological Journeys and Discourses of Self-Transformation: the Tablighi Jamaat and Svadhyaya in Gujarat. *South Asian History and Culture (Routledge) Vol. 1 (4)*, 2010 - Anindita Chakrabarti.
372. The Democratization of Censorship: Books and the Indian Public. *Economic & Political Weekly: Vol XLV: No.40, October 2 - 8, 2010-* Mini Chandran.
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.
374. A Foucauldian Reading of Paul Auster's *Travels in the Scriptorium*. *Notes on Contemporary Literature*, 40.5, November 2010: 2-5 - G. Neelakantan.
375. Two Versions of Oedipus in Philip Roth's *The Human Stain*. *Philip Roth Studies* 6:2 Fall 2010: 167-187 - G. Neelakantan.
376. More Real than the Real: Technocapitalism in Salman Rushdie's *Fury*. *Meridian Critic*, Vol. XVII, No. 2, 2010, pp. 41-55.- T. Ravichandran & Adrene Freeda D' Cruz.
377. Indian Cognitivism and the Phenomenology of Conceptualization'. *Phenomenology and the Cognitive Sciences*, Online First™, 30 June, 2010 - Rajesh Kasturirangan, Nirmalya Guha and Chakravarthi Ram-Prasad.
378. Deity and destiny: Patterns of fatalistic thinking in Christian and Hindu cultures. *Journal of Cross-Cultural Psychology*, February 28 2011. M.J. Young, M.W. Morris, J.Burrus, L. Krishnan & M.P. Regmi.

Industrial Management & Engineering

379. Organization Development Interventions for Prospectors: A Theoretical Framework and its Empirical Validation, *Global Business and Management Research*; ISSN: 1947-5667; Universal-Publishers, Boca Raton, USA, V 1(2); 2010; pp. 1-18; Sharadindu Pandey and RRK Sharma.

380. Relating culture to implementation of management information system in an organization, *International Journal of Business Research*, 10(1), 2010, pp. 133-140; Uma Nair S., RRK Sharma and Kripa Shanker.
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.
382. A New Lagrangian Relaxation Based Approach to solve Capacitated Lot-sizing Problem with Backlogging, *Global Business and Management Research*; ISSN: 1947-5667; Universal-Publishers, Boca Raton, USA; V 2(2&3); 2010; pp. 285-295; Mayank Verma and RRK Sharma.
383. Influence of Strategy and Culture on Management Control Systems (MCS): A Conceptual Framework, *International Journal of Strategic Management*, V 10(1); June 2010; 164-168; RRK Sharma, KK Lai and WG Chaoyang.
384. Relating critical success factors of information system implementation with the organizational strategy, *International Journal of Business Strategy*, 2010, V 10(2), pp. 119-123; Vinay Singh and RRK Sharma.
385. ERP implementation approach in defender organizations: An empirical study, *International Journal of Business Research*, 2010, V 10(2), 281-284; Adhir Tondon, RRK Sharma and Uma Nair S.
386. A Hybrid Genetic Search Based Approach to Solve Single Period Facility Layout Problem", *Asia Pacific Management Review*, V15(2), 2010, pp. 301-312; SP Singh and RRK Sharma.
387. Research Culture in Academia: A Conceptual Scheme and its Application, *AIMS International Journal of Management*, V5, No. 1, 2011, pp. 35-46; N Gupta, RRK Sharma and NK Sharma.
388. Is NGO Development Assistance Mismatched? An Epistemological Approach, *Critical Review*, 22 (2), 117 - 128, 2010, Jammulamadaka, Nimruji & Varman, Rahul.
389. Contract Workers at IITK: A Response to Commonly Held Misconceptions, *Sanhati Journal*, 7, May 23, 2010, Varman, Rahul.
390. What does Business have to Say about Maoism? An Analysis of the FICCI Task Force Report on National Security & Terrorism, *Sanhati Journal*, 14, Dec. 28, 2010, Varman, Rahul.
391. Online flow experiences: The role of need for cognition, self-efficacy, and sensation seeking tendency, *International Journal of Business Insights and Transformation*, 3 (2), 93-101, 2010, K. Srivastava, A. Shukla, A. & N. K. Sharma.
392. Relationship between service quality, loyalty and cross-buying intention: Moderating role of perceived risk and alternative attraction, *International Journal of Strategic Management*, 10 (2), 148-157, 2010, S. K. Mishra, & N. K. Sharma.
393. Creativity under concurrent and sequential task conditions, *Creativity Research Journal*, 22 (2), 139-150, 2010, D. Rastogi, & N. K. Sharma.
394. Innovating Telecom Service Design for Customer Satisfaction at the Bottom of the Revenue Pyramid, *Directions*, June 2010, pp 44-49, Dhawan, P, and Chatterjee, J.
395. Assessment of Citizen Empowerment under e-Government - Case Study Jankari - RTI, *Compendium of Papers 2010*, 146-150, Thinkers & Writers Forum, SKOCH Development Foundation, Mukhopadhyay SN and Chatterjee, J.

396. Leveraging the Modeling of ROI for Grid Computing, *International Journal of Information Technology, Communications and Convergence (IJITCC)*, UK, 2011, S.C. Misra and D. Vora.
397. Identifying Critical Changes Required for Adopting Agile Software Development Practices in Projects Practicing Traditional Plan Driven Practices, *International Journal of Quality and Reliability Management, EMERALD*, Vol. 27, No. 4, 2010, S.C. Misra, U. Kumar, and V. Kumar.
398. Modeling Critical Challenges Required for Adopting Agile Software Development Practices in Projects Practicing Traditional Plan Driven Practices, *Software Quality Professional Journal, American Society for Quality, AMERICAN SOCIETY FOR QUALITY Publication*, Vol. 12, No. 3, pp. 20-32, 2010, S.C. Misra, U. Kumar, and V. Kumar.
399. Coordination of Planning and Scheduling Decisions in Global Supply Chains with Dual Supply Modes. 2011. *International Journal of Production Economics*. 131, 473-482. Rohit Bhatnagar, Peeyush Mehta, Chee Chong Teo.
400. Towards a Competitive Market for Electricity and Consumer Choice in Indian Power Sector, *Energy Policy* Vol. 38 4196-4208 2010, Anoop Singh.

Materials Science and Engineering

401. Investigation of failure behavior of ferritic-austenitic type of dissimilar steel welded joints. *Engineering Failure Analysis*, (2011), M.K. Samal, M. Seidenfuss, E. Roos, Kantesh Balani.
402. Grain Growth Behavior of Aluminum Oxide Reinforced with Carbon Nanotube during Plasma Spraying and Post-Spray Consolidation. *International Journal of Applied Ceramic Technology*, Vol. 7 (6), (2010) 846-855, Kantesh Balani, S. Bakshi, D. Lahiri, A. Agarwal.
403. Microstructure, mechanical properties, and in vitro biocompatibility of spark plasma sintered hydroxyapatite-aluminum oxide-carbon nanotube composite, *Materials Science and Engineering C*, Vol. 30, (2010) 1162-1169, S. Kalmodia, S. Goenka, T. Laha, D. Lahiri, B. Basu, Kantesh Balani.
404. Fractal Model for Estimating Fracture Toughness of Carbon Nanotube Reinforced Aluminum Oxide, *Journal of Applied Physics*, Vol. 107 (12), (2010), 123532 (7 pp), A. Rishabh, M.R. Joshi, Kantesh Balani.
405. Effect of current density on the pulsed co-electrodeposition of nanocrystalline nickel-copper alloys, *J. Minerals, Metals and Materials (JOM)*, Vol. 62 (6), June (2010) 88-92, M. Agarwal, V. Kumar, S.R.K. Malladi, R. Balasubramaniam, Kantesh Balani.
406. Grain Growth Behavior of Al₂O₃ Nanomaterials: A Review, *Materials Science Forum*, Vol. 653, (2010) 87-130, A. Gupta, S. Sharma, M.R. Joshi, Parnika Agarwal, Kantesh Balani.
407. Grain Size-Wear Rate Relationship for Titanium in Liquid Nitrogen Environment; *Acta Materialia* 58 (2010) 2313-2323, A. Jain, J. Sarkar, B. V. Manoj Kumar, Harshavardhane, Bikramjit Basu.
408. Biological cell-electrical field interaction: stochastic approach; *Journal of Biological Physics* 37 [1] (2011) 39-50, A. K. Dubey, M. Banerjee and B. Basu.

409. Recent development of WC-based cermets and nanocomposites; *Journal of Materials Science* 46 (2011) 571-589, Amartya Mukhopadhyay and Bikramjit Basu.
410. Spark Plasma Sintered WC-ZrO₂-Co Nanocomposites with High Fracture Toughness and Strength; *J. Am. Cer. Soc.* 93 [6] (2010) 1754-1763, Amartya Mukhopadhyay, Dibyendu Chakrabarty and Bikramjit Basu.
411. Cytotoxicity and genotoxicity property of Hydroxyapatite-mullite eluates, *Journal of Biomedical Nanotechnology*, 7 [1] (2011) 74-75, S. Kalmodia, V. Sharma, Alok Pandey, Alok Dhawan and Bikramjit Basu.
412. Sintering, microstructure, mechanical properties and antimicrobial property of HAp-ZnO Biocomposites; *Journal of Biomedical Materials Research* 95B (2010) 430-440, Naresh Saha, Kahraman Keskinbora, Ender Suvaci and Bikramjit Basu.
413. Characterization of Hydroxyapatite-Perovskite (CaTiO₃) Composites: Phase evaluation and cellular response; *Journal of Biomedical Materials Research B* 95 (2010) 320-329. Ashutosh Dubey, Garima Tripathi and Bikramjit Basu.
414. Impedance spectroscopy and structural studies on silver doped hydroxyapatite; *Proc. Mater. Res. Soc. Symp.* 1239 (2010) VV 7-18. Brajendra Singh, Samayendra Kumar, Bikramjit Basu and Rajeev Gupta.
415. In vitro cellular adhesion and antimicrobial property of SiO₂-MgO-Al₂O₃-K₂O-B₂O₃-F glass ceramic, *Journal of Materials Science: Materials in Medicine* 21 (2010) 1297-1309. S. Kalmodia, A. R. Molla and B. Basu.
416. Sintering, phase stability and properties of calcium phosphate-mullite composites; *J. Am. Cer. Soc.* 93 [6] (2010) 1639 - 1649. Shekhar Nath, B. Basu, K. Biswas, K. Wang and R. K. Bordia.
417. Densification, Phase stability and in vitro biocompatibility property of hydroxyapatite-10 wt% silver composites; *Journal of Materials Science: Materials in Medicine* 21 (2010) 1273-1287. Shekhar Nath, S. Kalmodia and Bikramjit Basu.
418. Microstructure-Mechanical-Tribological Property Correlation of multistage spark plasma sintered tetragonal ZrO₂; *Journal of the European Ceramic Society* 30 (2010) 3363-3375. K. Madhav Reddy, Amartya Mukhopadhyay and Bikramjit Basu.
419. Influence of β -Si₃N₄ particle size and heat treatment on microstructural evolution of α : β -SiAlON ceramics; *J. Eur. Cer. Soc.* 31 (2011) 629-635. N. Calis Acikbas, R. Kumar, F. Kara, H. Mandal and B. Basu.
420. Achieving Uniform Microstructure and Superior Mechanical Properties in ultrafine grained TiB₂-TiSi₂ composites using innovative Multi Stage Spark Plasma Sintering; *Mat. Sc. Engg. A* 528 (2010) 200-207. Divya Jain, K. Madhav Reddy, Amartya Mukhopadhyay and Bikramjit Basu.
421. Studies on optical property of Fe₂O₃ nano-particles synthesized by mechanical milling; *Journal of Optics* 39[2] (2010) 102-109. D. Roy, P. Deb, A. Basumallick and B. Basu.
422. Inhibition of Grain growth during the final stage of multi-stage spark plasma sintering of oxide ceramics; *Scripta Materialia* 63 (2010) 585-588. K. Madhav Reddy, Nitish Kumar and Bikramjit Basu.
423. Thermal and Electrical Properties of TiB₂-MoSi₂; *Int. J. Ref. Metals and Hard Mat.* 28 (2010) 174-179. G. Brahma Raju, Bikramjit Basu and A.K. Suri.

424. Innovative multi-stage spark plasma sintering to obtain strong and tough ultrafine grained ceramics; *Scripta Materialia* 62 (2010) 435–438. K. Madhav Reddy, Nitish Kumar and Bikramjit Basu.
425. Does thermal conductivity play a role in sliding wear of metals in cryogenic environment? *ASME J. Tribology* 132 (2010) 041604-1-041604-5. Bikramjit Basu, Amartya Mukhopadhyay, Ankit Mishra and J. Sarkar.
426. Fretting wear behavior of calcium phosphate-mullite composites in dry and albumin-containing simulated body fluid conditions; *Journal of Materials Science: Materials in Medicine* 21 (2010) 1151-1161. Shekhar Nath, U. Raghunandan and Bikramjit Basu.
427. Microfracture and limited tribochemical wear of Silicon Carbide during high-speed sliding in Cryogenic Environment; *J. Am. Cer. Soc.* 93 [6] (2010) 1764-1773. Tufan Kumar Guha and Bikramjit Basu.
428. Abrasive wear behavior of detonation sprayed WC-12Co coatings: Influence of decarburization and abrasive characteristics; *Wear* 268 (2010) 1387–1399. P. Suresh Babu, Bikramjit Basu and G. Sundararajan.
429. Wear mechanisms of TiB₂ and TiB₂-TiSi₂ at fretting contacts with steel and WC-6 wt.% Co; *Int. J. Appl. Ceram. Technol.*, 7 [1] (2010) 89–103. G. Brahma Raju and Bikramjit Basu.
430. Combined Cryo and Room Temperature Ball Milling to Produce Ultrafine Halide Crystallites, *Materials and Metallurgical Transactions A*, vol. 42 (4) 2010, 1127-1137, Akash Verma, C.S.Tewary, A.K.Momdal and Krishanu Biswas.
431. Microstructural Evolution during Laser Resolidification of Fe -18 at% Ge Alloy, *Materials and Metallurgical Transactions A*, 41(3), 2010, 574-582, Krishanu Biswas and K.Chattopadhyay.
432. In vitro dissolution of calcium phosphate-mullite composite in simulated body fluid; *Journal of Materials Science: Materials in Medicine* 21 (2010) 1817-1828. Ashok Priya, Shekhar Nath, Bikramjit Basu and K. Biswas.
433. Modeling energy dissipation in slag-covered steel baths in steelmaking ladles, *Materials and Metallurgical Transactions B*, Vol.41 (5), 2010, pp.974-987, D.Mazumdar and R.I.L.Guthrie.
434. Mixing models for slag covered ladles, *ISIJ International*, 2010, Vol.50(8),pp.1117-1124. S. P. Patil, D. Satish, M. Peranandhanathan and D. Mazumdar.
435. Modeling of slag eye area in argon stirred ladles *ISIJ International*, Vol.50 (11), 2010, pp.1622-1631. M. Peranandhanathan and D. Mazumdar.
436. Influence of granulated blast furnace slag on the reaction, structure and properties of fly ash based geopolymer, *J. Materials Science*, Vol.45, 2010, 607-615, Sanjay Kumar, Rakesh Kumar and S. P. Mehrotra.
437. Effect of mechano-chemical activation on bioleaching of Indian ocean nodules by a fungus, *Minerals Engineering*, Vol. 23, 2010, 1207-1212, K. D. Mehta, Chitragada Das, Rakesh Kumar, B. D. Pandey and S. P. Mehrotra.
438. Anomalous reduction in surface area during mechanical activation of boehmite synthesized by thermal decomposition of gibbsite, *Powder Technology*, Vol. 208, 2011, 128-136. T. C. Alex, Rakesh Kumar, S. K. Roy and S. P. Mehrotra.
439. Structure and mechanical properties of Al-Ni-Ti amorphous powder consolidated by pressure-less, pressure-assisted and spark plasma sintering,

- Mater. Sci. Eng A 527 (2010) 3757. Suhrit Mula, K. Mondal, Sudipto Ghosh and Shyamal K. Pabi.
440. A relook at the preferred growth direction of solid-liquid interface during solidification of pure metals, *Acta Mater.* 58 (2010) 5342. C. Chattopadhyay, S. Sangal and K. Mondal.
 441. On the estimation of the solid liquid interfacial energy of glassy alloys as a function of temperature and structure, *IIM Transactions* 63 (2010) 787. Y. Rawat, C. Gupta and K. Mondal.
 442. Evaporated Organic Thin Films, *SMC Bulletin* 1 &2 (2010), 12-18. Saumen Mandal and M. Katiyar.
 443. Low temperature solution process for fabrication of electrodes on flexible substrate using gold nanoparticles, *International Journal of Nanosciences* 2010, Ashish, S. Mandal, M. Katiyar, Y.N. Mohaptra.
 444. Polysilane based ultraviolet light-emitting diodes with improved turn-on voltage, stability and colour purity" *Synthetic Metals*, 160 (2010) 1892-1895. Ranbir Singh, Monica Katiyar.
 445. Processing and properties of Cu-Al-Ni shape memory alloy strips prepared from elemental powders via a novel powder metallurgy route; *Metallurgical and Materials Transactions*, Vol 41A, (11), 2905-13, 2010. Mohit Sharma, S.K. Vajpai and R. K. Dube.
 446. Directly smelted lead-tin alloys; *JOM (J. of the Minerals, Metals and Materials Society)*, Vol 62, (8), 13-18, 2010. R. K. Dube.
 447. An assessment of the Sanskrit word Hemaghna used for lead metal: *Indian Journal of History of Science*, Vol 45, (3), 395-401, 2010. R. K. Dube.
 448. Synthesis and properties of Cu-Al-Ni shape memory alloy strips prepared via hot densification rolling of powder performs; *Powder Metallurgy*, M. Sharma, S.K.Vajpai and R.K.Dube.
 449. Preparation and properties of nanocrystalline Nickel-based soft magnetic material strip via a novel powder metallurgy route; *World Journal of Engineering*, Vol 7, Supplement 2, p 425, 2010. S.K. Vajpai and R.K. Dube.
 450. Numerical Modeling of Microwave Heating, *Science of Sintering*, 2010, v. 42, n. 1, pp. 99-124. A.K. Shukla, A. Mondal, A. Upadhyaya.
 451. Effect of Porosity and Particle Size on Microwave Heating of Copper, *Science of Sintering*, 2010, v. 42, n. 2, pp. 169-182. A. Mondal, A. Shukla, A. Upadhyaya, D. Agrawal.
 452. Microwave and Conventional Sintering of 90W-7Ni-3Cu Alloys with Premixed and Prealloyed Binder Phases, *Materials Science & Engineering A*, 2010, v. 527, n. 26, pp. 6870-6878. A. Mondal, A. Upadhyaya, D. Agrawal.
 453. Effect of Heating Mode on Sintering of Tungsten, *International Journal of Refractory Metals and Hard Materials*, 2010, v. 28, n. 5, pp. 597-600. A. Mondal, A. Upadhyaya, D. Agrawal.
 454. Comparative Properties of 85W-15Cu Powders Prepared Using Mixing, Milling and Coating Techniques, *Powder Metallurgy*, 2010, v. 53, n. 3, pp. 236-243. B. Özkal, A. Upadhyaya, M.L. Öveçoğlu, R.M. German.
 455. Experimental Study of Silica Nano-Powder Synthesis using a Diffusion Flame Reactor, *International Journal of Chemical Reactor Engineering*, 2010, v. 8, A149, pp. 1-9. D.P. Mishra, A. Upadhyaya, S.S. Panda.

456. Potentiodynamic Polarization Aspects of the As-Cast and Sprayed Al-Si, Al-Sn, and Al-Sn-Si Alloys in Sodium Chloride Solution, *Journal of Materials Engineering & Performance*, 2010, v. 19, n. 9, pp. 1357-1361. M. Anil, S. Balaji, A. Upadhyaya, M.K. Ghosh, S.N. Ojha.
457. Densification, Microstructure and Properties of Supersolidus Liquid Phase Sintered 6711Al-SiC Metal-Matrix Composites, *Science of Sintering*, 2010, v. 42, pp. 363-382. C. Padmavathi, A. Upadhyaya.
458. Effect of Heating Mode and Sintering Temperature on the Consolidation of 90W-7Ni-3Fe Alloys, *Journal of Alloys and Compounds*, 2011, v. 509, pp. 301-309. A. Mondal, A. Upadhyaya, D. Agrawal.
459. Microwave Sintering of Refractory Metals/Alloys: W, Mo, Re, W-Cu, W-Ni-Cu and W-Ni-Fe, *Journal of Microwave Power and Electromagnetic Energy JMPEE*, 2011, v. 44, n. 1, pp. 28-44. A. Mondal, D. Agrawal, A. Upadhyaya.
460. A Comparative Study of Densification and Microstructural Development in W-18Cu Composites using Microwave and Conventional Heating, *Material Research Innovation*, 2011, v. 14, n. 5, pp. 355-360. A. Mondal, A. Upadhyaya, and D. Agrawal.

Mechanical Engineering

461. Local hydrodynamics of flow in a pulsating heat pipe, *Frontiers in Heat Pipes*, 1, 023003(1-20), 2010, S. Khandekar, P.K. Panigrahi, F. Lefevre and J. Bonjour.
462. Perturbation of a Laminar Boundar-Layer by a Synthetic Jet for Heat Transfer Enhancement, *International Journal of Heat and Mass Transfer*, Vol. 53, pp. 5035-5057 2010, Adnan Qayoum, Vaibhav Gupta, P.K. Panigrahi and K. Muralidhar.
463. Influence of amplitude modulation on piezoelectric synthetic jet actuator, *Sensors & Actuators: A. Physical*, Vol. 162, 36-50 2010 Adnan Qayoum, Vaibhav Gupta, P.K. Panigrahi and K. Muralidhar.
464. Distributed Hydrogen Production from Ethanol in a Microfuel Processor: Issues and Challenges Renewable and Sustainable Energy Reviews, Vol. 15, pp. 524-533, 2011, M. K. Moharana, N. R. Peela, S. Khandekar and D. Kunzru.
465. Dropwise Condensation underneath Chemically Textured Surfaces: Simulation and Experiments, *ASME Journal of Heat Transfer*, Vol. 133, Issue 2, pp. 021501 (1-15), 2011, B. S. Sikarwar, N. K. Battoo, S. Khandekar and K. Muralidhar.
466. Thermally Induced Two-phase Oscillating Flow inside a Capillary Tube, *International Journal of Heat and Mass Transfer*, Vol. 53, pp. 3905-3913, 2010. S. P. Das, V. S. Nikolayev, F. Lefevre, B. Pottier, S. Khandekar and Bonjour J.
467. Automatic 3D spiral path generation for single point incremental forming, *ASME Journal of Manufacturing Science and Engineering*, V132, 061003: 1-10, 2010, R Malhotra, N V Reddy, J Cao.
468. Automatic setup planning system using a neutral part data format, V3, 107-125, 2011, S Bansal, N V Reddy.
469. Automatic recognition of intersecting features for side core design in two- piece permanent molds, V50, 421-439, 2010, R Bassi, N V Reddy, S Bedi.
470. Thermodynamics and mechanics of membrane curvature generation and sensing by proteins and lipids, *Annual Reviews in Physical Chemistry*, 62, 483-506, 2011, T. Baumgart, B. C. Capraro, C. Zhu, S. L. Das.

471. Influence of the bending rigidity and the line tension on the mechanical stability of micropipette aspirated vesicles, *Physical Review E*, 82, 021908, 2010, (Also appearing in the August 15, 2010 issue of *Virtual Journal of Biological Physics Research*) S. Das.
472. Adhesion of multi-component vesicle membranes. *Physical Review E*, 81, 041919, 2010, (Also appearing in the May 1, 2010 issue of *Virtual Journal of Biological Physics Research*) Y. Zhao, S. Das, Q. Du.
473. Oxidation Stability, Engine Performance and Emissions Investigations of Karanja, Neem and Jatropha Biodiesel and Blends, SAE 2011-01-0617, SAE Special Publication 2011 Deepak Khurana, Avinash Kumar Agarwal.
474. The Secondary Organic Carbon (SOC) Formation from a CRDI Automotive Diesel Engine Exhaust, SAE 2011-01-0642, SAE Special Publication 2011 Tarun Gupta, Neelabh Dixit, Avinash Kumar Agarwal.
475. Experimental Investigation on Intake Air Temperature and Air-Fuel Ratio Dependence of Random and Deterministic Cyclic Variability in a Homogeneous Charge Compression Ignition Engine, SAE 2011-01-1183, SAE Special Publication 2011 (SP-2312) Rakesh Kumar Maury, Avinash Kumar Agarwal.
476. Oxidation Stability of Biodiesel Produced from Non-Edible Oils of African Origin, SAE 2011-01-1202, SAE Special Publication 2011 (SAE COLL-TP- 00160) T.T. Kivevele, Avinash K. Agarwal, Tarun Gupta, M.M. Mbarawa.
477. Effect of Exhaust Gas Recirculation (EGR) on Performance, Emissions, Deposits and Durability of a constant Speed Compression Ignition Engine *Applied Energy*, Vol. 88, pp 2900-2907, August 2011. (ISSN # 0306-2619) Deepak Agarwal, Shrawan Kumar Singh, Avinash Kumar Agarwal.
478. Experimental Study of Combustion and Emission Characteristics of Ethanol Fuelled Port Injected Homogeneous Charge Compression Ignition (HCCI) Combustion Engine, *Applied Energy*, Vol. 88, 1169-1180, April 2011. (ISSN # 0306-2619) Rakesh Kumar Maurya, Avinash Kumar Agarwal.
479. Experimental investigation on the effect of intake air temperature and air-fuel ratio on cycle-to-cycle variations of HCCI combustion and performance parameters *Applied Energy*, Vol. 88, pp 1153-1163, April 2011. (ISSN # 0306-2619) Rakesh Kumar Maurya, Avinash Kumar Agarwal.
480. Toxic Potential Evaluation of Particulate Matter Emitted from a Constant Speed Compression Ignition Engine: A Comparison between Straight Vegetable Oil and Mineral Diesel, *Aerosol Science and Technology*, Volume 44, Issue 9, pp 724-733, 2010 (ISSN # 0278-6826) Avinash Kumar Agarwal, Tarun Gupta, Abhishek Kothari.
481. Measurement of Number and Size Distribution of Particles Emitted from a Mid-Sized Transportation Multipoint Port Fuel Injection Gasoline Engine, *Fuel*, Volume 89, Issue 9, pp 2230-33, September 2010. (ISSN # 0016-2361) Tarun Gupta, Abhishek Kothari, Dhananjay Kumar Srivastava, Avinash Kumar Agarwal.
482. Comparative Performance, Emission and Combustion Characteristics of Rice-bran Oil and It's Biodiesel in a Transportation Diesel Engine, *Journal of Engineering for Gas Turbine and Power*, Transactions of ASME, Volume 132, Issue 6, pp 064503-1-4, June 2010. (ISSN # 0742-4795) Avinash Kumar Agarwal, Atul Dhar.

483. Experimental Investigation of Preheated Jatropha Oil Fuelled Direct Injection Compression Ignition Engine: Part-I, Performance, Emission and combustion Characteristics, *Journal of ASTM International*, Volume 7, Issue 6, pp 1-13, June 2010. (ISSN: 1546-962X) Avinash Kumar Agarwal, Atul Dhar.
484. Experimental Investigation of Preheated Jatropha Oil Fuelled Direct Injection Compression Ignition Engine: Part-II, Engine Durability and Effect on Lubricating Oil, *Journal of ASTM International*, Volume 7, Issue 2, pp 46-60, February 2010. (ISSN: 1546-962X) Avinash Kumar Agarwal, Atul Dhar.
485. Development of Surface Functionalized Activated Carbon Fiber for Control of NO and Particulate Matter, *Journal of Hazardous Materials*, Volume 173, Issues 1-3, pp 211-222, 2010, (ISSN # 0304-3894) Rajveer Singh Rathore, Dhananjay Kumar Srivastava, Avinash Kumar Agarwal, Nishith Verma.
486. Oil Utilization in DI Engine by Preheating: Experimental Investigations of Engine Performance, Emissions and Combustion Characteristics, Part I, *Journal of Automobile Engineering, Proceedings of IMechE, Part-D*, Volume 224, Number 1, pp 73-84, 2010. (ISSN # 09544070) Avinash Kumar Agarwal, Atul Dhar and Karanja.
487. Oil Utilization in DI Engine by Preheating: Experimental Investigations of Engine Durability and Lubricating Oil Properties Part II, *Journal of Automobile Engineering, Proceedings of IMechE, Part-D*, Volume 224, Number 1, pp 85-97, 2010. (ISSN # 09544070) Avinash Kumar Agarwal, Atul Dhar and Karanja.
488. Experimental Investigation of the Effect of Biodiesel Utilization on Lubricating Oil Degradation and Wear of a Transportation CIDI Engine, *Journal of Engineering for Gas Turbine and Power, Transactions of ASME*, Volume 132, Issue 4, April 2010. pp 8011-8019. (ISSN # 0742-4795) Shailendra Sinha, Avinash Kumar Agarwal.
489. Two IPMC fingers based micro gripper for handling. *International Journal of Advanced Robotic Systems*, Vol. 8, no. 1, pp.1- 9, 2011, R. K. Jain, S. Datta, S. Majumder, Ashish Dutta.
490. Multi-objective GA based algorithm for 2D form and force closure grasp of prismatic objects. *International Journal of Robotics and Automation*, vol. 25, no. 2, pp. 142-153, 2010, S. Manepalli, Ashish Dutta, Anupam Saxena.
491. Design of a Partially Compliant Crank Rocker Mechanism Using Ionic Polymer Metal Composite for Path Generation. *Materials and Design*, vol. 31, pp. 2471-2477, 2010, B. Panda and Ashish Dutta.
492. Visual Motor Control of a 7 DOF Redundant Manipulator using Redundancy Preserving Learning Network. *Robotica*, Vol. 28, pp. 795-810, 2010, Swagat Kumar, Premkumar P., Ashish Dutta and Laxmidhar Behera.
493. Nonlinear stability analysis of a reduced order model of nuclear reactors: a parametric study relevant to the Advanced Heavy Water Reactor, *Nuclear Engineering and Design*, Vol. 241, pp. 134-143, 2011, P. Wahi and V. Kumawat.
494. Bifurcation analysis of thermoacoustic instability in a horizontal Rijke tube, *Journal of Spray and Combustion Dynamics*, Vol. 2, Issue 4, pp. 325-356, 2010, P. Subramanian, S. Mariappan, R. I. Sujith and P. Wahi.
495. Dynamo transition under Taylor-Green forcing, *Europhysics Letters*, Vol. 91, pp. 69001(1-6), 2010, R. Yadav, M. Chandra, M. K. Verma, S. Paul and P. Wahi.

496. Infinite dimensional slow modulations in a well known delayed model for orthogonal cutting vibrations, *Nonlinear Dynamics*, Vol. 62, Issue 4, pp. 705-716, 2010. K. Nandakumar, P. Wahi and A. Chatterjee.
497. Full characterization of act-and-wait control for first order unstable lag processes with delayed feedback. *Journal of Vibration and Control*, Vol. 16, Issue 7-8, pp. 1209-1233, 2010, T. Insperger, P. Wahi, A. Colombo, G. Stepan, M. Di Bernardo and S. J. Hogan.
498. Parametric Analysis of MR Polishing Fluid using Statistical Technique, *Int.J. Precision Technology*, Vol.2, No.1, pp.51-63, 2011, M. Das, A. Sidpara, V.K.Jain, P.S.Ghoshdastidar.
499. Color schlieren deflectometry for characterization of crystal growth processes: KDP and protein crystals, *Journal of Crystal Growth*, Vol. 312, pp. 817-830, 2010, Anamika S. Gupta, P.K. Panigrahi, and K. Muralidhar.
500. Control of flow in forced jets: a comparison of round and square cross-sections, *Journal of Visualization*, Vol. 13(2), pp. 141-149, 2010, Trushar Gohil, A. K. Saha, and K. Muralidhar.
501. Schlieren investigation of the square cylinder wake: joint influence of buoyancy and orientation, Vol. 22(5), *Physics of Fluids*, 054107-1 to -18, 2010, A. Kakade, S. K. Singh, P. K. Panigrahi, and K. Muralidhar.
502. Influence of amplitude and frequency modulation on flow created by a synthetic jet actuator, in *Sensors and Actuators: A (physical)*, Vol. 162, pp. 36-50, 2010, Adnan Qayoum, Vaibhav Gupta, P. K. Panigrahi, K. Muralidhar.
503. Simulation of oscillatory flow in an aortic bifurcation using FVM and FEM: a comparative study, *International Journal of Numerical Methods in Fluids*, 2010, Trushar Gohil, R.P.J. McGregor, D. Szczerba, K. Burckhardt, K. Muralidhar, and G. Szekely, (31 pages).
504. Imaging transport phenomena and surface micro morphology in crystal growth using optical techniques, *National Academy Science Letters*, Vol. 33(5-6), pp. 107-121, 2010, S. Verma and K. Muralidhar.
505. Flow separation at an open channel confluence, *ISH Journal of Hydraulic Engineering*, special issue, pp. 89-98, Vol. 16(3), 2010, S. K. Biswal, P. K. Mohapatra, and K. Muralidhar.
506. Simulation of vortex dynamics in a cylinder wake by the Immersed Boundary technique, *Progress in Computational Fluid Dynamics*, Vol. 10, No. 3, pp. 129-145, 2010, Sudipto Sarkar and S. Sarkar.
507. Vortex dynamics of a cylinder wake in proximity of a wall, *Journal of Fluids and Structures*, Vol. 26, pp. 19-40, 2010, S. Sarkar and Sudipto Sarkar.
508. Ductile failure simulation in spherodized steel using continuum damage mechanics coupled finite element formulation, *International Journal of Computational Methods*, Vol. 7, No. 2, 319-348, 2010, S.S. Gautam and P.M. Dixit.
509. Numerical simulation of fracture in cup drawing, *International Journal of Material Forming*, Vol. 3, No. 1, 117-120, 2010, R.K. Saxena, S.S. Gautam and P.M. Dixit.
510. On the Size and Dielectric Properties of the Interphase in Epoxy-alumina Nanocomposite, *IEEE transactions on dielectrics and electrical insulation* Volume: 17 Issue: 6 Pages: 1665-1675 Published: DEC 2010, P. Maity, N. Gupta, V. Parameswaran and S. Basu.

511. Poly-Ether-Ether-Ketone Composites Reinforced with Alumina Nanoparticles: Processing and Characterization, JOURNAL OF REINFORCED PLASTICS AND COMPOSITES Volume: 29 Issue: 18 Pages: 2771-2781 Published: SEP 2010, K. R. Reddy, V. Parameswaran, K. Sundaraiah, R. K. Singh, K. U. Bhaskar Rao and N.G.R. Iyengar.
512. Evaluation of elastic modulus of epoxy reinforced with 200 nm thick alumina platelets through finite element analysis, materials science and engineering a-structural materials properties microstructure and processing Volume: 527 Issue: 16-17 Pages: 3792-3799 Published: JUN 25 2010, V. Parameswaran and D.K. Shukla.
513. Dynamic shear strength of adhesive joints made of metallic and composite adherents, MATERIALS & DESIGN Volume: 31 Issue: 4 Pages: 2102- 2109, APR 2010, S. L. Raykhere, P. Kumar, R.K. Singh, V. Parameswaran.
514. Modelling the geodynamo: progress and challenges, Current Science, 99 (12), 1739-1750, 2010, B. Sreenivasan.
515. Tomographic KT-1 signature of phase-fraction distributions in multiphase bubble columns, Flow Measurement and Instrumentation, 21, pp 249-254, 2010, S. Gulati, M. Behling, P. Munshi, A. Luke, D. Mewes.
516. Tomographic Reconstruction of Elastic Constants in Composite Materials Using Numerical and Experimental Laser Ultrasonic Data, Research in Nondestructive Evaluation, 21, pp 61-90, 2010, S.K. Rathore, N.N. Kishore, P. Munshi, W. Arnold.
517. Tomographic Reconstruction of Defects in Composite Plates Using Genetic algorithms with Cluster Analysis, Research in Nondestructive Evaluation, 22, pp 31-60, 2011, N.N. Kishore, P. Munshi, M Ranamale, V. Ramakrishna, W. Arnold.
518. Chemo-Mechanical Magneto-Rheological Finishing (CMMRF) of Silicon for Microelectronics Applications, CIRP Annals-Manufacturing Technology, 59,323-328, 2010 V.K.Jain, P. Ranjan, V.K.Suri, R.Komanduri.
519. Rotational abrasive flow finishing (R-AFF) process and its effects on finished surface topography, International journal of machine tools and Manufacture, Volume 50, Pages 637-650, Issue 7, July 2010, Mammila Ravi Shankar, V.K . Jain and J Ramkumar.
520. Rheological characterization and characterization and performance evaluation of a new medium developed for abrasive flow finishing, International Journal of Precision Technology - Vol. 1, No.3/4, Pages. 302 - 313, 2010, Mammila Ravi Shankar, V.K. Jain, J Ramkumar and Kamal K. Kar.
521. Nano - Finishing of stainless - steel tubes R-MRAFF Process, Machining Science and Technology an International Journal, Vol. 14, No. 3, pp.365- 389, 2010, Manans Das, V.K. Jain and P.S Ghoshdastidar.
522. Parametric analysis of MR polishing fluid using statistical technique, Int. J. Precision Technology, Vol. 2, No. 1, pp.51, Manas Das, Ajay Sidpara, V.K. Jain, P.S. Ghoshdastidar.
523. Cutting tool condition monitoring system for high speed turning operations, International Journal of Manufacturing Technology and Management, Vol 21, 99-111, 2010, H.Chelladurai, V.K.Jain and N.S.Vyas.
524. Three-Dimensional Numerical Study of Flow and Species Transport in an Elevated Jet in Crossflow, Int J. Heat Mass Transfer, Vol. 54, pp. 92-105, 2011,

- P. Arora and A.K. Saha.
525. Domain mapping using nonlinear finite element formulation, *Int J CAD/CAM*, v8, pp29-36, 2009, Tangudu Srinivas Patro, Hari K. Voruganti, Bhaskar Dasgupta, Sumit Basu.
 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.
 527. Coarse-graining scheme for simulating uniaxial stress-strain response of glassy polymers through molecular dynamics, 2010, *Physical Review E: Statistical, Nonlinear, and Soft Matter Physics*, v81, n1, Majumder, Manoj K.; Ramkumar, S.; Mahajan, Dhiraj K.; Basu, Sumit.
 528. Single walled nanotubes as Kirchoff elasticas, *International Journal of Applied Mechanics*, 2010, v2, 719-743, *International Journal of Applied Mechanics*.
 529. Coarse grained molecular dynamics simulation of cross linking of DGEBA epoxy resin and estimation of the adhesive strength, 2010, invited paper for *Int J of Engng Sc and Technology*, Special Issue on Computational Mechanics, v2, n4, p17-30, Siva Prasad AVS, Tarun Grover and Sumit Basu.
 530. Void nucleation and disentanglement in glassy amorphous polymers, 2010, *Physical Review E*, v82, 011803-8, Dhiraj K Mahajan, Bhupinder Singh and Sumit Basu.
 531. Ageing and rejuvenation in glassy amorphous polymers, 2010, *Journal of Mechanics, Physics and Solids*, v58, 1474-1488, Dhiraj K Mahajan, Rafael Estevez and Sumit Basu.
 532. On the simulation of uniaxial, compressive behavior of amorphous, glassy polymers with molecular dynamics, *International Journal of Applied Mechanics*, v2, n3, pp 515-541, Dhiraj K Mahajan and Sumit Basu.
 533. Effect of CNT length and density on the properties of Carbon nanotube-coated Carbon fiber/polyester composite, *Carbon*, 2011, Prabhat K Agnihotri, Kamal K Kar, Sumit Basu.

Material Science Programme

534. Synthesis of Carbon Nanotubes on Nickel-Silica Catalyst Coated E-glass Fiber/Fabric and its Nanocomposites, *International Journal of Plastics Technology*, V 14, Issue (1), 65-79, 2010, A. Rahaman, K.K. Kar, D. Chaudhary.
535. Effects of Curing Agent and Carbon Black Filler Loading on Carbonization Behavior of Phenolic-Carbon Black Composites, V 31, Issue 12, 2069-2078, 2010, N.L. Ravikumar, K.K. Kar, S. Sarkar, D. Sathiyamoorthy.
536. Hysteresis Measurements and Dynamic Mechanical Characterization of Functionally Graded Natural Rubber-Carbon Black Composites, *Polymer Engineering and Science*, (2010), V 50, Issue 5, 871-877, 2010, S.S. Ahankari, K.K. Kar.
537. Hydrophilic Plasticized Biopolymers: Morphological Influence on Physical Properties, *Materials Letters*, V 64, Issue 7, 872-875, 2010, D. Chaudhary, Y. Dong, K. K. Kar.

538. The Fabrication of Carbon-nanotube-coated Electrodes and a Field-emission-based Luminescent Device, *Nanotechnology*, V 21, Issue 6, 065601/1-065601/5, 2010, S. Agarwal, B.Y. Sarada, K.K. Kar.
539. Processing and Mechanical Behavior of Carbon Black Graded Rubber Compounds, *Journal of Applied Polymer Science*, V 115, Issue 6, 3146-3154, 2010, S.S. Ahankari, K.K. Kar.
540. Formation and Magnetic Behaviour of Manganese Oxide Nanoparticles, *Mater. Sci. Eng. B*, V 167, Issue 153-160, 2010, S. Thota, B. Prasad, J. Kumar.
541. Synthesis and Magnetic Properties of Nanocrystals of Cubic Spinel: $MgMnO_3$, *Appl. Phys. Lett.*, V 97, 112507, 2010, M. S. Seehra, V. Singh, S. Thota, B. Prasad, J. Kumar.
542. The Influence of Insulating Substrate on the Electrical Measurements of Focuses Ion Beam Fabricated Electrodes with Nano-gap Spacing, *Nuclear Instruments and Methods in Physics Research B*, V 268, 3282-3286, 2010, A.K. Singh, N.S. Rajput, S.K. Tripathi, S Dhamodaran, N. Shukla, J. Kumar, V.N. Kulkarni.
543. Sol-gel Synthesis of Highly Luminescent Magnesium Oxide Nanocrystallites, *J. uminescence*, V 131, 640-648, 2011, A. Kumar, S. Thota, S. Varma J. Kumar, Ashok Kumar, Subhash Thota, Shikha Varma and Jitendra Kumar.
544. Perspective on Europium Activated Fine-grained Metal Molybdate Phosphors for Solid State Illumination, *J Materials Chemistry*, V 21, 3788-3795, 2011, A. Kumar, J. Kumar.
545. On the Sol-gel Synthesis and Phase, Optical, Magnetic and Impedance Behaviour of Strontium Cobaltite powder, *J. Alloys Compd.* V 509, 3859-3865, 2011, S.V. Jaiswal, J. Kumar.
546. On the Derivation of the Magnetocaloric Properties in Ferrimagnetic Spinel Mn_3O_4 , *J Appl. Phys.* V 109, 053902 (1-5), 2011, S. Thota, F. Guillou, V. Hardy, A. Wahl, W. Prellier, J. Kumar.

Mathematics and Statistics

547. Common fixed point theorems in Menger spaces with common property (E.A). *Comput. Math. Apl.* 60 (2010), No. 12, 3152- , J. Ali, M. Imdad, D. Bahuguna.
548. On nonlinear abstract neutral differential equations with deviated argument. *Nonlinear Dyn. Syst. Theory* 10 (2010), No. 3, 283-294, D. Pandey, A. Ujlayan, D. Bahuguna.
549. Laplace transform method for one-dimensional heat and wave equations with nonlocal conditions. *Int. J. Appl. Math. Stat.* 16 (2010), No. M10, 96-100, D. Bahuguna, S. Abbas, R.K. Shukla.
550. Semilinear hyperbolic integrodifferential equations with nonlocal conditions. *Nonlinear Dyn. Syst. Theory* 10(2010), D.N. Pandey, A. Ujlayan, D. Bahuguna.
551. A study of multiple-source approximation systems. *Transactions on Rough Sets XII*, LNCS 6190, 46-75, 2010, M.A. Khan, Mohua Banerjee.
552. Stochastically perturbed allelopathic phytoplankton model, *Elec. J. Diff. Eqn.* 2010(98), 2010, 1-15, S. Abbas, M. Banerjee
553. A primary infection model for HIV and immune response with two discrete time delays. *Diff. Eqn. Dyna. Syst.* 18, 2010, 385-399, P.K. Srivastava, M. Banerjee and P. Chandra.

554. Biological cell-electrical field interaction: Stochastic approach, *J. Biol. Phys.* 37, 2011, 39-50, A.K. Dubey, M. Banerjee and B. Basu.
555. Self-organised spatial patterns and chaos in a ratio-dependent predator-prey system, *Theor. Ecol.* 4, 2011, 37-53, M. Banerjee and S. Petrovskii.
556. A primary infection model for HIV and immune response with two discrete time delays. *Differential Eqn. & Dynamical System (DSDE)*, Vol. 18(4), 2010, pp. 385-399,, P.K. Srivastava, M. Banerjee, Peeyush Chandra.
557. Mathematical modeling of HIV dynamics: In vivo – *Mathematics Student*, Vol. 78, 2010, 7-27, Peeyush Chandra.
558. Mathematics Education in India: Some observations and Concerns, *Mathematics Student*, Vol. 78, 2010, 1-4, Peeyush Chandra.
559. How artificial rain can be produced? A mathematical model – *Nonlinear Analysis: Real World Applications*, Vol. 11, 2010, pp. 2659-2668, J.B. Shukla, A.K. Misra, R. Naresh, Peeyush Chandra.
560. Non-Darcy mixed convection in a fluid saturated square porous enclosure under suction effect: Part II, *J Porous Media*, Vol. 13(9), 799-805, 2010, S.V.S.N.V.G.K. Murthy, B.V.K.Rathish, V. Sangwan, M. Nigam, Peeyush Chandra.
561. Non-Darcy mixed convection in a fluid saturated porous enclosure under suction effect: Part I, *J Porous Media*, Vol.13(6), 537-554, 2010, B.V.K.Rathish, S.V.S.N.V.G.K. Murthy, V. Sangwan, M. Nigam, Peeyush Chandra,
562. On operators Cauchy dual to 2-hyperexpansive operators: the unbounded case, *Studia Mathematica*, 203(2011), 129-162, S.L. Chavan.
563. Inexact proximal point methods for variational inequality problems. *SIAM Journal of Optimization*, Vol. 20, 2010, 2653-2678, R. Burachik, J. Dutta.
564. Regularized gap functions and error bounds for vector variational inequalities, *Pacific Journal of Optimization*, Vol. 6, 2010, 497-510, C. Charitha, J. Dutta.
565. On note on approximate Lagrange multiplier rules, *Mathematical Programming, Series B*, Vol. 123, 2010, 161-171, M. Durea, J. Dutta, Chr. Tammer.
566. Lagrange multipliers for epsilon-Pareto solutions in vector optimization with non-solid cones in Banach Spaces, *Journal of Optimization Theory and Applications*, Vol. 145, 2010, 196-211, M. Durea, J. Dutta,Chr. Tammer.
567. Optimal time advancing dispersion relation preserving schemes. *J. Computational Physics*, Vol. 229, 3623-3651, 2010, M.K. Tajpoot, T.K. Sengupta, P.K. Dutt.
568. Local U-convexity. *J. Convex Analysis*. 18(2011), No. 3, S. Dutta, B.L. Lin.
569. Strong proximality of closed convex sets. *J. Approx. Theory* 163(2011), 547-553, S. Dutta, P. Shunmugaraj.
570. Projections in the convex hull of three isometrics on $C(\Omega)$. *J. Math. Anal. Appl.* 379(2011), 878-888, S. Dutta, A.B. Abubaker.
571. Bioconvection in a suspension of isotropically scattering phototactic algae, *Physics of Fluids* 22, 071901(2010), S. Ghorai, M. K. Panda & N. A. Hill.
572. Numerical approximation of modified Burgers' equation via hybrid finite difference scheme on layer – adaptive mesh, *Neural Parallel and Scientific Computations* 18 (2010), pp. 167-194, M. K. Kadalbajoo, V. Gupta.
573. Hybrid finite difference methods for solving modified Burgers and Burgers-Huxley equations, *Neural Parallel and Scientific Computations* 18(2010),pp. 409-422, M.K. Kadalbajoo, V. Gupta

574. A brief survey on numerical methods for solving singularly perturbed problems, *Applied Mathematics and Computation* 217(2010), pp. 3641-3716, M. K. Kadalbajoo, V. Gupta.
575. A singular perturbation approach to solve Burgers-Huxley equation via hybrid finite difference scheme on layer-adaptive mesh, *Communications in Nonlinear Science and Numerical Simulation* 16 (2011), pp. 1825-1844, M. K. Kadalbajoo, V. Gupta.
576. Collocation method using artificial viscosity for solving stiff singularly perturbed turning point problem having twin boundary layers, *Computers & Mathematics with Applications* 61(2011) pp. 1595-1607, M. K. Kadalbajoo, V. Gupta, P. Arora.
577. B-spline collocation method for solving singularly perturbed turning point problem having twin boundary layers, *International Journal of Computer Mathematics* 87 (2010) 3218-3235, M. K. Kadalbajoo, V. Gupta.
578. A layer adaptive B-spline collocation method for singularly perturbed one-dimensional parabolic with a boundary turning point, *Numerical Methods for Partial Differential Equations*, (Available online, DOI 10.1002/num.20574), M. K. Kadalbajoo, V. Gupta
579. Variable mesh finite difference method for self-adjoint singularly perturbed two-point boundary value problems, *Journal of Computational Mathematics*, M. K. Kadalbajoo, D. Kumar.
580. A computational method for singularly perturbed nonlinear differential-difference equations with small shift, *Applied Mathematical Modelling*, Vol. 34, Issue 9, Sept. 2010, pp. 2584-2596, M. K. Kadalbajoo, D. Kumar.
581. Variable mesh spline approximation method for solving singularly perturbed turning point problems having interior layer, *Neural, Parallel & Scientific Computations*, Vol. 18, No. 2, June 2010, pp. 207-220, M. K. Kadalbajoo, K. C. Patidar.
582. Numerical algorithm for singularly perturbed delay differential equations with layer and oscillatory behavior, *Neural, Parallel, and Scientific Computations*, 19, 2, 21-34, 2011, M.K. Kadalbajoo, V. P. Ramesh.
583. Time truncated acceptance sampling plans for generalized exponential distribution, *Journal of Applied Statistics*, Vol. 37, No. 4, 555-566, 2010, M. Aslam, D. Kundu, M. Ahmad.
584. On the comparison of the fisher information of the log-normal and generalized Rayleigh distributions, *Journal of Applied Statistics*, Vol. 37, No. 3, 391-404, 2010, A.S. Fawziah, R. Z. Mohammad, D. Kundu.
585. Generalized logistic distributions, *Journal of Applied Statistical Sciences*, Vol. 18, No. 1, 51-66, 2010, R.D. Gupta, D. Kundu.
586. Bivariate Birnbaum-Saunders distribution and associated inference, *Journal of Multivariate Analysis*, Vol. 101, 113-125, 2010, D. Kundu, N. Balakrishnan, A. Jamalizadeh.
587. Estimating the parameters of burst type signals, *Statistica Sinica*, Vol. 20, No.2, 733-746, 2010, S. Nandi, D. Kundu.
588. The generalized exponential cure rate model with covariates, *Journal of Applied Statistics*, Vol. 37, No. 9-10, 1625-1636, 2010, N. Kannan, D. Kundu, P. Nair, R.C. Tripathi.

589. Discriminating between the log-normal and log-logistic distributions, *Communications in Statistics- Theory and Methods*, Vol. 39, 280-292, 2010, A.K. Dey, D. Kundu.
590. An efficient and fast algorithm for estimating the parameters of two-dimensional sinusoidal signals, *Journal of Statistical Planning and Inference*, Vol. 140, 153-168, 2010, A. Prasad, S. Nandi, D. Kundu.
591. Survival models for step-stress experiments with lagged effects, special volume dedicated to W. Meeker, eds. Misha Nikulin, Nikolaos Limnios and N. Balakrishnan, *Advances in Degradation Modeling*, Birkhauser, 355-369, 2010, N. Kannan, D. Kundu, N. Balakrishnan.
592. Modified Sarhan-Balakrishnan singular bivariate distribution, *Journal of Statistical Planning and Inference*, Vol. 140, 526-538, 2010, D. Kundu, R.D. Gupta.
593. Parameter estimation of the hybrid censored log-normal distribution, *Journal of Statistical Computation and Simulation*, Vol. 81, No. 3, 275-287, 2011, S. Dube, B. Pradhan, D. Kundu.
594. Genetic algorithm based robust frequency estimation of sinusoidal signals with stationary errors, *Engineering Applications of Artificial Intelligence*, Vol. 23, 321-330, 2010, A. Mitra, D. Kundu.
595. *Statistical Signal Processing*, *International Encyclopedia of Statistical Science*, Springer, 2010, D. Kundu.
596. Bayesian inference and prediction of the inverse Weibul distribution for Type-II censored data, *Computational Statistics and Data Analysis*, Vol. 54, 1547-1558, 2010, D. Kundu, H. Howlader.
597. A class of absolute continuous bivariate distribution, *Statistical Methodology*, Vol. 7, 464-477, 2010, D. Kundu, R.D. Gupta.
598. Inference on Weibull parameters with conventional Type-I censoring, *Computational Statistics and Data Analysis*, Vol. 55, 1-11, 2011, A. Joarder, H. Krishna, D. Kundu.
599. The bivariate generalized linear failure rate distribution and its multivariate extension, *Computational Statistics and Data Analysis*, Vol. 55, 644-654, 2011, A.M. Sarhan, D.C. Hamilton, B. Smith and D. Kundu.
600. On some mixture models based on the Birnbaum-Saunders distribution and associated inference, *Journal of Statistical Planning and Inference*, Vol. 141, No. 7, 2175-2190, 2011, N. Balakrishnan, R.C. Gupta, D. Kundu, V. Leiva, A. Sanhueza.
601. Genetic algorithm and M-estimator based robust sequential estimation of parameters of nonlinear sinusoidal signals, *Communications in Nonlinear Sciences and Numerical Simulations*, Vol. 16, No. 7, 2796-2809, 2011, S. Mitra, A. Mitra, D. Kundu.
602. Time truncated group acceptance sampling plans for generalized exponential distribution, *Journal of Testing and Evaluation*, Vol. 39, No.4, 2011, M. Aslam, D. Kundu, C-H Jun, M. Ahmad.
603. Breaking the symmetries of the book graph and the generalized Petersen graph, *SIAM J. Discrete Math.* 23(2009), No.3, 1200-1216, A.K. Lal, B. Bhattachariya.
604. The distance matrix of a bidirected tree. *Electron. J. Linear Algebra* 18(2009), 233-245, R.B. Bapat, A.K. Lal, S. Pati.
605. On Fuglede's Conjecture for three Intervals. *Online Journal of Analytic Combinatorics*, Vol. 5, 1-24, 2010, D. Bose, C.P. Anil Kumar, R. Krishna, S. Madan.

606. Spectrum is periodic for n-intervals. *Journal of Functional Analysis*, Vol. 260, Issue 1, January 2011, 308-325, D. Bose, S. Madan.
607. Nearest neighbor estimates of entropy for multivariate circular distributions. *Entropy*, 2010, 12(5), 1125-1144, H. Singh, H. Vladimir, N. Misra.
608. An overview of the concepts and techniques of data mining. *Journal of Indian Statistical Association*, 2010, 48(1), 65-102, A. Mitra, N. Misra.
609. Standby redundancy allocations in series and parallel systems. *Journal of Applied Probability*, 2011, 48(1), 43-55, A.K. Misra, I. D. Dhariyal, N. Misra.
610. A numerical simulation of cardiac electric activity in LV based on Mono-domain model, *Journal of Mechanics in Medicine and Biology* 10(3), 1-14, 2010, B.V.K. Rathish, S.K. Pathak, V. Sangwan, S.V.S.S.N.V.G.K. Murthy, M. Nigam.
611. Three step taylor Galerkin method for singularly perturbed generalized Hodgkin-Huxley equation, *International Journal of Modelling, Simulation and Scientific Computing* 1(2), 257-276, 2010, B.V.K. Rathish, V. Sangwan, S.V.S.S.N.V.G.K. Murthy, M. Nigam.
612. Finite element analysis for Mass-Lumped three step taylor Galerkin method for time dependent singularly perturbed problems with exponentially fitted splines, *Numerical Functional Analysis and Optimization*, 2010, V. Sangwan, B.V.K. Rathish,
613. Serial changes in diffusion tensor imaging metrics of corpus callosum in moderate traumatic brain injury patients and their correlation with neuropsychometric tests: a 2-year follow-up study. *J. Heat Trauma Rehabil* 2010; 25(1):31-42, Kumar, Raj, Saksena, Sona, Husain, Mazhar, Srivastava, Arti, R.K.S. Rathore, Agarwal, Shruti, R.K. Gupta.
614. Comparative evaluation of dynamic contrast-enhanced perfusion with diffusion tensor imaging metrics in assessment of corticospinal tract infiltration in malignant glioma. *J. Comput Assist Tomogr* 2010, 34(1), 82-8 , Awasthi, Rishi, Verma, S. Kumar, Haris, Mohammad, Singh, Anup, Behari, Sanjay, Jaiswal, A. Kumar, Rajput, Dinesh, Pandey, Rakesh, R.K.S. Rathore, K.S. Ram, Pandey, M. Chandra, R.K. Gupta.
615. Correlation of CSF proinflammatory cytokines with MRI in tuberculous meningitis. *Acad Radiol*. 2010, 17(2), 194-200, A. Yadav, C. Chaudhary, A.H. Keshavan, A. Agarwal, S. Verma, K.N. Prasad, R.K.S. Rathore, R. Trivedi, R.K. Gupta.
616. Diffusion tensor MR imaging in children with pantothenate kinase-associated neurodegeneration with brain iron accumulation and their siblings. *AJNR Am J. Neuroradiol* 2010, 442-7, R. Awasthi, R.K. Gupta, R. Trivedi, J.K. Singh, V.K. Paliwal, R.K.S. Rathore.
617. Correlation of DTI metrics in the wall and cavity of brain abscess with histology and immunohistochemistry. *NMR Biomed* 2010, 23(3), 262-9 , R.K. Gupta, Srivastava, Savita, Saksena, Sona, R.K.S. Rathore, Awasthi, Rishi, Prasad, N. Kashi Husain Mazhar, Pandey, M. Chandra, Husain, Nuzhat.
618. A diffusion tensor imaging study of deep gray and white matter brain maturation differences between patients with spina bifida cystica and healthy controls. *J. Clin Neurosci* 2010, 17(7), 879-85, Kumar, Manoj, R.K. Gupta, Saksena, Sona, Behari, Sanjay, Malik, K. Gyanendra, Kureel, N. Shiv, Pandey, M. Chandra, R.K.S. Rathore.

619. Brain MR imaging and 1H-MR spectroscopy changes in patients with extrahepatic portal vein obstruction from early childhood to adulthood. *AJNR Am J Neuroradiol* 2010, 31(7), 1337-42, S.K. Yadav, S. Saksena, Srivastava, Anshu, Srivastava, Arti, V.A. Saraswat, M.A. Thomas, R.K.S. Rathore, R. K. Gupta.
620. Correlation of quantitative sensorimotor tractography with clinical grade of cerebral palsy, *Neuroradiology* 2010, 52(8), 759-65, Trivedi, Richa, Agarwal, Shruti, Shah, Vipul, Goyel, Puneet, Paliwal, K.Vimal , R.K.S. Rathore, R.K. Gupta.
621. Cerebral oedema in minimal hepatic encephalopathy due to extrahepatic portal venous obstruction. *Liver Int.* 2010, 30(8), 1143-51, Goel, Amit, Yadav, Santosh, Saraswat, Vivek, Srivastava, Arti, Thomas, M Albert, Pandey, M. Chandra, R.K.S. Rathore, R. Gupta..
622. Serum proinflammatory cytokines correlate with diffusion tensor imaging derived metrics and (1) H-MR spectroscopy in patients with acute liver failure. *Metab Brain Dis.* 2010, 25(3), 355-61, R.K. Gupta, S.K. Yadav, M. Rangan, R.K.S. Rathore, M.A. Thomas, K.N. Prasad, C.M. Pandey, V.A. Saraswat.
623. Mixed norm estimate for Radon transform on weighted $SL^p L^p$ spaces. *Proc. Indian Acad. Sci. Math. Sci.* 120, 2010, No.4, 441-456, A. Kumar, S.K. Ray.
624. Wiener-Tauberian type theorems for radial sections of homogeneous vector bundles on certain rank one Riemannian symmetric spaces of noncompact type, *Mathematische Zeitschrift*, P. Sanjoy, S.K. Ray, R. P. Sarjar.
625. Stein-rule estimation in ultrastructural model under exact linear restrictions, *Journal of Statistical Research (Invited paper for the special issue in honor of Professor Mir Maswood Ali)* Vol.42, No.2, 159-180, 2009, G. Garg, Shalabh.
626. Conference interval estimation in ultrastructural model, *Communications in Statistics (Theory & Methods)*, 38:5, 675-681, 2009, Pen-Hwang Liao, Shalabh.
627. Consistent estimation of regression parameter under replicated ultrastructural model with non-normal errors, *Journal of Statistical Computation & Simulation*, Vol. 79, No.3, 251-274, 2009, Shalabh, C.M. Paudel, N. Kumar.
628. Use of prior information in the consistent estimation of regression coefficients in a measurement error model, *Journal of Multivariate Analysis*, Vol.100, 1498-1520, 2009, Shalabh, G. Garg, N. Misra.
629. Optimality of Quasi-Score in the multivariate mean-variance model with an application to the zero-inflated poisson model with measurement errors, *Statistics*, Vol.44, No.4, 381-396, 2010, A. Kukush, A. Malenko, H. Schneeweiss and Shalabh.
630. Consistent estimation of regression coefficients in measurement error model using stochastic apriori information, *Statistical Papers*, Vol. 51, 717-748, 2010, Shalabh, G. Garg, N. Misra.
631. Sequential estimation of two dimensional sinusoidal models, *Journal of Probability and Statistics*, to appear 2011, A. Prasad, D. Kundu, A. Mitra.
632. Symmetric weight constrained traveling salesman problem: local search in OPSEARCH: Vol.47, Issue, 2010, P. Sharma.
633. A simple algorithm for thermo-elasto-hydrodynamic lubrication problems, *Research and Reviews in Applied Sciences*, 2010, Vol.1, No.3, 265-279, P. Sinha, H. Khan, A. Saxena.
634. Thermal elastohydrodynamic lubrication of line contact rough surfaces considering flow factor method, *contemporary engineering sciences*, 2010, Vol.3, No.3, 113-138, H. Khan, P. Sinha.

635. 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

636. CMB Polarization and Temperature Power Spectra Estimation using Linear Combination of WMAP 5-year Maps, Astrophysical Journal 714, 840, 2010, P. K. Samal, R. Saha, J. Delabrouille, S. Prunet, P. Jain and T. Souradeep.
637. Constraints on the Cosmological Constant due to Scale Invariance, Modern Physics Letters A 25, 1349, 2010, P. K. Aluri, P. Jain, S. Mitra, S. Panda and N. K. Singh.
638. Standard Model with Cosmologically Broken Quantum Scale Invariance} Modern Physics Letters A 25, 167 (2010), P. Jain and S. Mitra.
639. New physics, the cosmic ray spectrum knee, and pp cross section measurements, European Physics Journal C 68, 573 (2010), A. Dixit, P. Jain, D. W. McKay and P. Mukherjee.
640. Alignments in quasar polarizations: Pseudoscalar-photon mixing in the presence of correlated magnetic fields, Phys. Rev. D 83, 065014 (2011), N. Agarwal, A. Kamal and P. Jain.
641. Stochastic kinetics of a single headed motor protein: dwell time distribution of KIF1A EPL (EUROPHYSICS LETTERS) (EPS) vol.93, 58004 (2011), A. Garai and D. Chowdhury.
642. Distribution of dwell times of a ribosome: effects of infidelity, kinetic proofreading and ribosome crowding, PHYSICAL BIOLOGY (IOP, UK) vol.8, 026005 (2011). A.K. Sharma and D. Chowdhury.
643. Quality control by a mobile molecular workshop: quality versus quantity, PHYSICAL REVIEW E (APS, USA) vol.82, 031912 (2010). (Selected for the October 1, 2010, issue of the Virtual Journal of Biological Physics Research), A.K. Sharma and D. Chowdhury.
644. Mobility determination using frequency dependence of imaginary part of impedance ($\text{Im } Z$) for organic and polymeric thin films Appl. Phys. Lett. 98, 033304 (2011), Durgesh C. Tripathi, Awnish K. Tripathi, and Y.N. Mohapatra.
645. Improved dielectric properties and their temperature insensitivity in multilayered Ba_{0.8}Sr_{0.2}TiO₃/ZrO₂ thin films, Journal of Applied Physics 109, 064108 (2011), S. K. Sahoo, D. Misra, M. Sahoo, C. A. MacDonald, H. Bakhru, D. C. Agrawal, Y. N. Mohapatra, S. B. Majumder, and R. S. Katiyar.
646. ZrO₂ Layer Thickness Dependent Electrical and Dielectric Properties of ST/ZrO₂/BST Multilayer Thin Films Mater. Res. Soc. Symp. Proc. Vol. 1368, 2011 Materials Research Society, Santosh K. Sahoo, D. Misra, D. C. Agrawal, and Y.N. Mohapatra.
647. Leakage mechanism of Ba_{0.8}Sr_{0.2}TiO₃ /ZrO₂ multilayer thin films, Journal of Applied Physics 108, 074112 (2010), S. K. Sahoo, D. Misra, D. C. Agrawal, Y. N. Mohapatra, S. B. Majumder, and R. S. Katiyar.
648. Mobility with negative coefficient in Poole-Frenkel field dependence in conjugated polymers: Role of injected hot electrons Organic Electronics, Volume

- 11, Issue 11, November 2010, Pages 1753-1758, Awnish Kumar Tripathi, Ashish Gupta, Y.N. Mohapatra.
649. Fidelity susceptibility and general quench near an anisotropic quantum critical point: Phys. Rev. B V 83, 214302 (2011); Victor Mukherjee and Amit Dutta.
 650. Path dependent scaling of geometric phase near a quantum multi-critical Point; J. Stat. Mech: Theor. Expt.P03026 (2011); Ayoti Patra, Victor Mukherjee and Amit Dutta.
 651. Oscillating fidelity susceptibility near a quantum multicritical point: Phys. Rev. B 83, 075118 (2011); Victor Mukherjee, Anatoli Polkovnikov and Amit Dutta.
 652. Adiabatic multicritical quantum quenches: Continuously varying exponents depending on the direction of quenching: Eur. Phys. Lett. 92, 37004 (2010); Victor Mukherjee and Amit Dutta.
 653. Spin-Charge and Spin-Orbital Coupling Effects on Spin Dynamics in Ferromagnetic Manganites Phys.: Condens. Matter 22 (2010) 396001, Dheeraj Kumar Singh, Bhaskar Kamble, and Avinash Singh J.
 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.
 655. Signature effects of spin clustering and distribution of spin couplings on magnetization behaviour in Ni-Fe-Mo and Ni-Fe-W alloys J. Phys.: Condens. Matter 23 (2011) 306004, Mitali Banerjee, Avinash Singh, A K Majumdar, and A K Nigam.
 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.
 657. Onset and Melting of Local Orbital Order Avinash Singh and Dheeraj Kumar Singh arXiv: 1010.4424 (2010).
 658. An Effective Quantum Parameter for Strongly Correlated Metallic Ferromagnets arXiv: 1102.2115 (2011), Bhaskar Kamble and Avinash Singh.
 659. Exact Eigenstates Analysis of Finite Frequency Conductivity in Graphene, arXiv: 1105.2354 (2011) Rajyavardhan Ray and Avinash Singh.
 660. Magnetic Excitations in Iron Pnictides Nimisha Raghuvanshi, Sayandip Ghosh, arXiv: 1106.4421 (2011), Rajyavardhan Ray, Dheeraj Kumar Singh, and Avinash Singh.
 661. First-principles calculations of Born effective charges and spontaneous polarization of ferroelectric bismuth titanate, A. Roy, R. Prasad, S. Auluck and A. Garg, J. Phys. Condens. Matter 22,165902 (2010).
 662. A study of electronic and optical properties of $\text{NaBi}(\text{WO}_4)_2$: A disordered double tungstate crystal,, Physica B 405, 3267(2010), M. Tyagi, S. G. Singh, Sangeeta, R. Prasad, S. Auluck and D. J. Singh
 663. Harnessing surface wrinkle patterns in soft matter, Advanced Functional Materials, V 20, 2550 - 2564, 2010, S. Yang, Krishnacharya and P.-C. Lin.
 664. Adhesion selectivity using rippled surfaces, Advanced Functional Materials V 21, 547 - 555, 2011, Krishnacharya, S. Vajpayee, S. Yang, C.-Y. Hui and A. Jagota.

665. Wetting morphologies and their transitions in grooved substrates, *Journal of Physics: Condensed Matter*, V 23, 184108, 2011, R. Seemann, M. Brinkmann, S. Herminghaus, Krishnacharya, B. M. Law, S. McBride, K. Kostourou, E. Gurevich, S. Bommer, C. Herrmann and D. Michler.
666. Possible potentials responsible for stable circular relativistic orbits; *European Journal of Physics*, 32, 895-903, (2011), Prashant Kumar, Kaushik Bhattacharya.
667. Dynamics and symmetries of flow reversals in turbulent convection, *Phys. Rev. E*, 83, 067303, 2011, M. Chandra and M. K. Verma.
668. Bifurcations and chaos in large Prandtl-number Rayleigh-Bénard convection, *Int. J. Non-Linear Mech.*, 46, 772, 2011, Paul, P. Wahi and M. K. Verma.
669. Dynamics of reorientations and reversals of large-scale flow in Rayleigh-Bénard convection, *J. Fluid Mech.*, 668, 480-499, 2011, P. K. Mishra, A. K. De, M. K. Verma, and V. Eswaran.
670. Dynamo transition under Taylor-Green forcing, *EPL*, 91, 69001, 2010, R. Yadav, M. Chandra, M. K. Verma, S. Paul, and P. Wahi.
671. Statistical evidence for power law temporal correlations in exploratory behaviour of rats, *BioSystems*, 102, 77, 2010, C. K. Yadav, M. K. Verma, and S. Ghosh.
672. Energy spectra and fluxes for Rayleigh-Bénard convection, 81, *Phys. Rev. E*, 056316, 2010. PDF, P. K. Mishra and M. K. Verma.
673. 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
674. Crossover from paramagnetic compressed flux regime to diamagnetic pinned vortex lattice in a single crystal of cubic Ca₃Rh₄Sn₁₃, *Phys. Rev. B* 84, 014501 (2011), P. D. Kulkarni, S. S. Banerjee, C. V. Tomy, G. Balakrishnan, D. McK. Paul, S. Ramakrishnan and A. K. Grover.
675. Evolution in the time series of vortex velocity fluctuations across different regimes of vortex flow, *Physica C* 470, S830 (2010), S. S. Banerjee, Jaivardhan Sinha, Shyam Mohan, A.K. Sood, S. Ramakrishnan and A. K. Grover.
676. Metastable magnetization response of the vortex state due to patterned blind hole pins, *Physica C* 470, S817 (2010), S. S. Banerjee, Gorky Shaw, Jaivardhan Sinha, Shyam Mohan, Pabitra Mandal.
677. Simple flash evaporator for making thin films of compounds, *J. Vac. Sci. Technol. A*, V 28, 625-626, 2010, Hemnadhan, Ch. Bapnayya and S. C. Agarwal.
678. Potential Fluctuations in Phase Change Memory Materials, *Philos Mag. Letters*, V.91, 134-139, 2011, Ch. Bapnayya, Rajeev Gupta and S. C. Agarwal.
679. Thermodynamic Geometry and Phase Transitions in Kerr-Newman-AdS Black Holes, *JHEP* 1004 (2010) 118 (April, 2010) A. Sahay, T. Sarkar, G. Sengupta.
680. On the Thermodynamic Geometry and Critical Phenomena of AdS Black Holes, *JHEP* 1007 (2010) 082 (July, 2010), A. Sahay, T. Sarkar, G. Sengupta.
681. On The Phase Structure and Thermodynamic Geometry of R-Charged Black Holes, *JHEP* 1011 (2010) 125 (November, 2010), A. Sahay, T. Sarkar, G. Sengupta.
682. Photonic crystal sensors: an Overview, *Prog.Quant.Electr.* 34, 89-134, May 2010, R. V. Nair and R. Vijaya.
683. Stability studies on Continuous-wave broadband generated in an erbium-doped fiber ring laser using highly nonlinear fiber, *IEEE Photonics Journal* 2 (5), 703-711, Oct 2010, A. Ghosh, D. Venkitesh and R. Vijaya.

684. Laser emission from self-assembled active photonic crystal matrix, *J.Nanophotonics* 4, 049506, 2010, Posted also on the SPIE Letters Virtual Journal, 2010, S. Kedia, R.Vijaya, A.K.Ray and S. Sinha.
685. Nonlinear resonance phenomena of a doped fiber laser under cavity-loss modulation: experimental demonstrations, *Pramana - J. Phys.*, 75, 915-921, 2010, A. Ghosh, B.K.Goswami and R.Vijaya.
686. Emission studies on ZnO inverse photonic crystals derived from self-assembly, *Pramana - J.Phys.* 75, 975-983, 2010, S. Kedia, R.Vijaya, A.K.Ray, S. Sinha and K.Dasgupta.
687. Photonic stop band effect in ZnO inverse photonic crystal, *Opt.Mater.* 33, 466-474, 2011, S. Kedia, R.Vijaya, A.K.Ray and S. Sinha.
688. Charge transport and magnetic ordering in laser ablated Co₂FeSi thin films epitaxially grown on (100) SrTiO₃ *Journal of Physics D: Applied Physics*, v 43 p 255002, 30 June 2010, Anupam, Joshi, P.C.; Rout, P.K.; Hossain, Z.; Budhani, R.C.
689. Inducing magnetic order by Ru-substitution in PrFeSi *Journal of Magnetism and Magnetic Materials*, v 322, p 2545-9, Sept. 2010, Prasad, A.; Geibel, C.; Hossain, Z.
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.
691. Compact electrostatic beam optics for multi-element focused ion beams: Simulation and experiments, *Review of Scientific Instruments*, 82, 013510 (2011), Jose V. Mathew and S. Bhattacharjee.
692. Micron-focused ion beamlets, *Journal of Applied Physics*, 107, 093307 (2010), A. Chowdhury and S. Bhattacharjee.
693. 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, S. Paul, and S. Bhattacharjee.
694. Spin relaxation due to electron-electron magnetic interaction in high Lande g-factor semiconductors, *Journal of Applied Physics*, 108, 054505 (2010), Akashdeep Kamra, Bahniman Ghosh, Tarun K. Ghosh.
695. Tomography, Control and Characterization of Entanglement in Three level Atomic System; *Physical Review A* 82, 062301 (2010); S. N. Sandhya, V. Ravishankar.
696. Quarkonia in anisotropic hot QCD medium in a quasi-particle model; *Nucl. Phys.* A848:330-340, 2010; Vinod Chandra, V. Ravishankar.

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

Aerospace Engineering

1. Rotor Load Measurements and Stabilisation in Tethered Hover of a Mini-Helicopter, International Conference on Intelligent Unmanned Systems, Bali, Indonesia, November 2010, Swaroop, B., Ravinder, H., and Venkatesan, C.
2. Recognize the Cold Flow Perturbation Sources in a Dump Combustor with Taper Exit, FEDSM-ICNMM2010-31068, ASME 2010, 3rd Joint US-European Fluids Engineering Summer Meeting, August 2-4, 2010, Montreal, Canada, N. P. Yadav and A. Kushari.
3. Droplet Evaporation Modeling of some Conventional and Alternative Fuels at Low Pressure, FMFP10-TF-09, 37th National and 4th International Conference on Fluid Mechanics and Fluid Power, Dec. 16 - 18, 2010, IIT Madras, S. Dirbude, V. Eswaran and A. Kushari.
4. Droplet Evaporation Modeling of Vegetable Oil Derived Biofuel - Rapeseed Methyl Ester, Proceedings of ICTACEM 2010, 5th International Conference on Theoretical, Applied, Computational and Experimental Mechanics, Dec. 27 - 29, 2010, IIT Kharagpur. S. Dirbude, V. Eswaran and A. Kushari.
5. Unsteady Aerodynamics modeling for parameter estimation, ICAPES-2009 At Venice, Italy Oct.28-30 2009, Rakesh Kumar and Dr. A. K.Ghosh.
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.
7. Towards a micro-mechanics based damage model for unidirectional composites, 37th Solid Mechanics Conference, Warsaw (Poland), 2010, Murari V, Upadhyay CS.
8. Effect of Momentum Ratio on Non-reacting structure in an Axisymmetric Trapped Vortex Combustor, Proceedings of 10th Asian Symposium on Visualization, p. 477-486, 2010, P K Ezhil Kumar and D P Mishra.
9. Spray Characterization of a Dual mode Internally Mixed Swirl Co-axial Atomizer, Proceedings of 10th Asian Symposium on Visualization, p. 709-719, 2010, D P Mishra and Vivek J C.
10. Spray Characterization of a Dual mode Internally Mixed Swirl Co-axial Atomizer, Proceedings of ILLASS, 2010, D P Mishra and Vivek J C.
11. Effects of Heat Release on Flow Structure in an Axisymmetric Trapped Vortex Combustor, Proceedings of 8th Asia-Pacific Conference on Combustion, Hyderabad, 2010, P K Ezhil Kumar and D P Mishra.
12. Effects of Wall Thermal Conductivity on the Second Law Performance of a Hydrogen-Air Premixed Flame Annular Microcombustor, Proceedings of 8th Asia-Pacific Conference on Combustion, Hyderabad, 2010, Jejurkar S and D P Mishra.

Biological Engineering and Biosciences

13. Bone Morphogenetic Proteins are essential for Normal Adult physiology and survival UKPharmsci conference, University of Nottingham, Journal of Pharmacy and Pharmacology, Special issue UK-Pharmsci 2010,(Vol: 62, Number: 10, ISSN: 0022-3573, pages: 1500-1501) October 2010, A L Narayanan, P Parashar, A Nag and A Bandyopadhyay.

Chemical Engineering

14. Iron doped microporous activated carbon (phenolic resin) as an adsorbent for arsenic removal, CBEE 2009: Proceedings of the 2009 International Conference on Chemical, Biological and Environmental Engineering, 491-493 (2010), A. Sharma, A. Sharma and N. Verma, N. Sankararamakrishnan.
15. Bubble entrapment Phenomenon in liquids, In Proceedings of the 20th National and 9th International ISHMT-ASME Heat and Mass Transfer Conference, Mumbai (2010), Ray B., Biswas G. and Sharma A.
16. Iron doped microporous activated carbon (phenolic resin) as an adsorbent for arsenic removal, In CBEE 2009: Proceedings of the 2009 International Conference on Chemical, Biological and Environmental Engineering, Ed. L. Kai, 491-493 (2010), A. Sharma, Verma N and Sankararamakrishnan N.
17. Bio-Inspired Design of Hierarchically Structured Adhesives, Adhesion Society Meeting, 2011, Ed. P. Arul, A. Ghatak.
18. Sub-surface Fracture of a Thin Metallic Foil under Impact Loading, Adhesion Society Meeting, 2011, D. Bhandary, Ed. P. Arul, A. Ghatak.
19. Disproportionation of Toluene on Zeolite washcoated monoliths, Proceedings of the 2nd Conference on Advances in Chemical Engineering, pp3-9, Feb.2011, B.Mitra and D.Kunzru
20. Preparation, surface functionalization and characterization of carbon micro and nano fibers in adsorption applications, Carbon - 2010, July 11-15, 2010, University of Clemson, Clemson, US, J. Naik, Mekala B., A. Chakraborty, R. K. Singh, A. Sharma, N. Verma, H. C. Joshi, A. Srivastava.
21. Development of Carbon Nanofibers and Nanoparticles as Adsorbents for Mitigation of Gaseous, Aqueous and Biosystems, Golden Jubilee Outreach Conference, IIT Kanpur, October 20-23, 2010, N. Verma.

Civil Engineering

22. Flexural response of aqueduct resting on reinforced elastic foundation beds, National Conference on Recent Advances in Ground Improvement Techniques (RAGIT-2011), CBRI Roorkee, pp. 1-10, Dey, A. and Basudhar, P.K.
23. Burger model parameter estimation: An inverse formulation, IACMAG 2011, Australia, pp. 1-6, (2011), Dey, A. and Basudhar, P.K.
24. Load-Settlement Behaviour of Elastic-Perfectly Plastic GRFB, 14th Asian Regional Conference on Soil Mechanics and Geotechnical Engineering 23-27 May 2011, Hong Kong, China, pp. 1-6, CD ROM, (2011), Dey, A., Basudhar, P.K. and Chandra, S.

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., Bhokya, M. and Dey. A.
26. Applicability of Burger Model in Predicting the Response of Viscoelastic Soil Beds, Geo-Florida-2010: Advances in Analysis Modeling and Design, Florida, USA., Geotechnical Special Publication GSP 199, pp. 2611-2620, (2010), Dey, A. and Basudhar, P.K.
27. Flexural Analysis of Laterally Loaded Piles using CPT and PMT Results: A Comparative Study, Indian Geotechnical Conference – GeoTide 2009 (Geotechnics in Infrastructure Development), Guntur, Andhra Pradesh, India, (2010), Basudhar, P.K., Dey, A., Kundu, S., Singhal, R., and Kumar, A.
28. Innovative materials for asphalt pavements, Proceedings of All India Seminar on Advances in Materials & Techniques in Construction, The Institution of Engineers (India), U.P. State Centre & Kanpur Local Centre, IIT Kanpur, October 1-2, 2010, pp.2-8, S. N. Varma and A. Das.
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.
31. Measurement and Chemical Characterisation of Roadside Aerosol in the Delhi Region, Tarachand Lohia, Anil Mandaria, Gazala Habib, Tarun Gupta, Workshop Cum Seventeenth National Symposium on Environment (NSE-17), CESE, IIT Kanpur (13th -15th May, 2010).
32. First Direct Evidence of Strong Absorption Associated with Coarse Mode Particles Over CTCZ Region from Aircraft Experiment 2009, Jaidevi, J., Priya Choudhry, Marykutty Michael, S.N. Tripathi and Tarun Gupta, AGU Fall meeting, San Francisco, (13-17 Dec., 2010).
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).
34. Comparison of Past and Present Exposures to Trace Metals for a Student Cohort, Amit Singh Chauhan and Tarun Gupta, 3rd International Symposium on Metallomics, Münster, Germany (15-18 June, 2011).
35. Neural networks for hydrological modeling tool for operational purposes, Proceedings of EGU's General Assembly 2010, 2-7 May 2010, Vienna, Austria, D. Bhatt and A. Jain.
36. Comparison of various optimization methods for calibration of conceptual rainfall-runoff models, Proceedings of EGU's General Assembly 2010, 2-7 May 2010, Vienna, Austria. D. Bhatt and A. Jain.
37. A Proposed Rapid Visual Screening Procedure for Seismic Evaluation of RC-Frame Buildings in India, Earthquake Spectra, Volume 26, No. 3, August, pp. 709-729, Jain S K, Mitra K, Kumar M and Shah M, 2010.

38. The Possibility of Site Effects: the Anjar Case, following the past Earthquakes in Gujarat, India, *Seismological Research Letters*, Vol 82, No. 1, January-February, pp. 59-68, Rastogi B K, Singh A P, Sairam B, Jain S K, Kaneko F, Segawa S and Matsuo J, 2011.
39. Analysis of Buried Pipelines Subjected to Reverse Fault Motion, *Soil Dynamics and Earthquake Engineering*, Elsevier, Vol. 31, Issue 7, July 2011, pp. 930-940, Joshi S, Prashant A, and Jain S K, 2011.
40. Steps in Earthquake Proofing a Country – A Case Study of Myanmar, *Bulletin of the New Zealand Society for Earthquake Engg.*, Vol. 44, No. 2, June 2011, pp. 87-98, MacRae, G A, Myint, U T, and Jain, S K, 2011.
41. Two-Dimensional Nonlinear Seismic Analysis of Soil-Well-Pier System Considering Soil Nonlinearity, *Proceedings of the Ninth U.S. National and Tenth Canadian Conference on Earthquake Engineering*, CD-ROM, Paper No. 950, Toronto, Canada, 25-29 July, Mondal, G., and Jain, S.K., 2010 .
42. NICEE's Role in Promoting Confined Masonry as an Appropriate Technology for Building Construction in India, *Proceedings of the Ninth U.S. National and Tenth Canadian Conference on Earthquake Engineering*, CD-ROM, Paper No. 1689, Toronto, Canada, 25-29 July, Rai, D.C., and Jain, S.K., 2010.
43. A Rapid Visual Seismic Assessment Procedure for RC Frame Buildings in India, *Proceedings of the Ninth U.S. National and Tenth Canadian Conference on Earthquake Engineering*, CD-ROM, Paper No. 972, Toronto, Canada, 25-29 July, Jain, S.K., Mitra, K., Kumar, M., and Shah, M., 2010.
44. Some Recent Capacity Building Activities in India towards Seismic Risk Reduction, *Proceedings of the Ninth U.S. National and Tenth Canadian Conference on Earthquake Engineering*, CD-ROM, Paper No. 1677, Toronto, Canada, 25-29 July, Jain, S.K., 2010.
45. Seismic Testing of Steel Braced Frames with Aluminum Shear Yielding Dampers, 9th US National and 10th Canadian Conference on Earthquake Engineering, Toronto, Canada, 25-29 July 2010, Paper no. 496, July 2010, Rai, D. C. and Annam, P.
46. Use of Small-Scaled Burnt Clay Bricks for Shake Table Tests of Masonry Walls, 9th US National and 10th Canadian Conference on Earthquake Engineering, Toronto, Canada, 25-29 July 2010, Paper no. 1305, July 2010, V. Singhal, , and D. C. Rai.
47. NICEE's Role in Promoting Confined Masonry as an Appropriate Technology for Building Construction in India, 9th US National and 10th Canadian Conference on Earthquake Engineering, Toronto, Canada, 25-29 July 2010, Paper no. 1689, July 2010, D. C. Rai, and S. K. Jain.
48. Performance evaluation of the various clay-based landfill covers subjected to differential settlement: Centrifuge Study. *Proc. 6th International Congress on Environmental Geotechnics*, Eds. M. Datta, R.k. Srivastava, G.V. Ramana, and J.T. Sahu, Nov 8 – 12, India, Vol. 1, pp. 414 – 419, Viswanadham, B.V.S., and Rajesh, S. (2010).
49. Effect of geogrid reinforcement on the deformation behaviour of soil barrier for landfill covers. *Proc. 7th International Conference on Physical Modelling in Geotechnics*, Eds. Springman, Laue and Seward, June 28th – July 1st, Zurich, pp.1489-1495, Viswanadham, B.V.S., and Rajesh, S. (2010).

50. Use of Geogrid as a Resistive Layer for Landfill Cover: Centrifuge Study. Proc. 9th International Conference on Geosynthetics, Eds. E.M. Palmeira, D.M. Vidal, A.S.J.F. Sayao and M. Ehrlich, May 23-27, 2010, Guaruja, Brazil, pp. 999-1002, Rajesh, S., and Viswanadham, B.V.S. (2010).
51. Methodology for evaluation of hydraulic behaviour of clay based landfill covers in a geo-centrifuge. Proc. Indian Geotechnical Conference – 2010 Geotrenz, Dec 16-18, IIT Bombay, vol. 1, pp. 289-292, Viswanadham, B.V.S., and Rajesh, S. (2010).
52. Evaluation of deformation behaviour of soil barrier subjected to differential settlements using digital image analysis. Proc. Indian Geotechnical Conference-2009, Feb 18-20, Guntur, pp. 637-641, Rajesh, S., and Viswanadham, B.V.S. (2010).
53. Effects of Foundation Configuration Variation on Seismic Response of Moment-Frame Buildings, 2010 NASCC & The Structures Congress, May 12-14, Orlando, Florida, 2010, Z. Chen, T. C. Hutchinson, and P. Raychowdhury.
54. Applying Ecological Indicators to Watershed Health Assessment, Proceedings of ASCE World Environmental and Water Resources Congress, Palm Springs California, USA, CD-ROM, May 2011, Y. Hoque, S. Tripathi, M. Hantush and R. S. Govindaraju.
55. Hidden Markov Model based Probabilistic Assessment of Droughts, Proceedings of ASCE World Environmental and Water Resources Congress, Palm Springs California, USA, CD-ROM, May 2011, G. Mallya, S. Tripathi, R. S. Govindaraju.
56. Evaluating the Effectiveness of Signal-based Countermeasures on Pedestrian Safety, Accepted for Proceedings of the Transportation Research Board 90th Annual Meeting, January 2011, Washington DC, USA, V. Vasudeavn, S. Pulugurtha, S. Nambisan, M. Dangeti.
57. Analysis of Effects of CAFE Standards, Hybrid and Alternative Fuel Vehicles on Fuel Tax Revenues, Proceedings of the Transportation Research Board 90th Annual Meeting, January 2011, Washington DC, USA, V. Vasudeavn, S. Nambisan.
58. Developing a Methodology for Night Time Seat Belt Usage Data Collection, Proceedings of the Transportation Research Board 90th Annual Meeting, January 2011, Washington DC, USA, V. Vasudeavn, N. Bandaru, P. Kachroo.

Chemistry

59. Towards Stable trapping of single macromolecules in solution, Optical Trapping and Optical Micromanipulation VII - Proceedings of SPIE, Vol. 7762, Article No. 776203, 2010, A. K. De, D. Roy, and D. Goswami.
60. Femtosecond spatiotemporal control with multiple knobs, Lasers and Electro-Optics/Quantum Electronics and Laser Science Conference: 2010 Laser Science to Photonic Applications, CLEO/QELS 2010, Article No. 5501073, 2010, D. Goswami.
61. Spatio-temporal control in multiphoton fluorescence laser-scanning microscopy, Progress in Biomedical Optics and Imaging - Proceedings of SPIE, Vol. 7569, Article No. 756929, 2010, A. K. De, D. Roy, and D. Goswami.

Computer Science & Engineering

62. Bypass and Insertion Algorithms for Exclusive Last-level Caches, In Proceedings of the 38th IEEE/ACM International Symposium on Computer Architecture, pages 81-92, June 2011, Jayesh Gaur, Mainak Chaudhuri, and Sreenivas Subramoney.
63. Finding the bias and prestige of nodes in networks based on trust scores, International World Wide Web Conference (WWW 2011), Hyderabad, 28th March - 1st April 2011, Abhinav Mishra and Arnab Bhattacharya.
64. A Novel Robust Fingerprint Identification System based on Hierarchical Indexing, 3rd International Conference on Signal Acquisition and Processing (ICSAP 2011), Singapore, February 26-28, 2011, Rahul Goyal, Anand Mishra and Krithika Venkataramani.
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.
66. Distributed Generalized Dynamic Barrier Synchronization, 12th International Conference on Distributed Computing and Networking (ICDCN 2011), Bangalore, Jan 2-5, 2011, Shivali Agarwal, Saurabh Joshi and Rudrapatna Shyamasundar.
67. Entry - Exit based Target Tracking Using Non-overlapping Sensor Deployment, 17th International Conference on High Performance Computing (HiPC 2010), Goa, December 19-22, 2010, Deepak Jeswani, Ankit Kesharwani, Sneha S. Chaudhari, R.K.Ghosh and Vaishali Sadaphal.
68. Empowering Bus Transportation System Using Wireless Sensor Networks, 17th International Conference on High Performance Computing (HiPC 2010), Goa, December 19-22, 2010, Ankit Kesharwani, Vaishali Sadaphal, Maitreya Natu.
69. One hop key management for WSN, 17th International Conference on High Performance Computing (HiPC 2010), Goa, December 19-22, 2010, Avinash Kumar Chaurasia, R. K. Ghosh.
70. Enriching Textbooks Through Data Mining, 1st Annual Symposium on Computing for Development (ACM DEV 2010), Surrey, December 17-18, 2010, Rakesh Agrawal, Sreenivas Gollapudi, Krishnaram Kenthapadi, Nitish Srivastava and Raja Velu.
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.
72. Comparing Human Faces using Edge Weighted Dissimilarity Measure, 11th International Conference on Control, Automation, Robotics and Vision (ICARCV 2010), Singapore, December 7-10, 2010, Aditya Nigam and Phalguni Gupta.
73. Random Projection Trees Revisited, 24th Annual Conference on Neural Information Processing Systems (NIPS 2010), Vancouver, December 6-11, 2010, Aman Dhesi and Purushottam Kar.
74. Space-Efficient Structure for Indexing and Complete Query Management of String Databases, 16th International Conference on Management of Data (COMAD), December 6-10, 2010, Sourav Dutta and Arnab Bhattacharya.

75. Aggregate Skyline Join Queries: Skylines with Aggregate Operations over Multiple Relations, 16th International Conference on Management of Data (COMAD), December 6-10, 2010, Arnab Bhattacharya and B. Palvali Teja.
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.
78. TransCryptDFS: A Secure Distributed Encrypting File System, International Congress on Ultra Modern Telecommunications and Control Systems (ICUMT 2010), Moscow, October 18-20, 2010, Dharmendra Modi, Rohit Agrawalla and Rajat Moona.
79. Palmprint based Verification System Robust to Occlusion using Low-order Zernike Moments of Sub-images, Special Issue of Biometrics Systems and Applications in the Journal of Telecommunication Systems, Springer Verlag, 2010, Badrinath G. S., Naresh K. Kachi 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.
81. Improving speculative loop parallelization via selective squash and speculation reuse, 19th international Conference on Parallel Architectures and Compilation Techniques (PACT 2010), September 11-15, 2010, Ananthramu, S. S., Majeti, D., Aggarwal, S. K., and Chaudhuri, M.
82. Minimum Spanning Tree on Spatio-Temporal Networks, 21st International Conference on Database and Expert Systems Applications (DEXA 2010), Bilbao, Spain, August 30 - September 3, 2010, Viswanath Gunturi, Shashi Shekhar and Arnab Bhattacharya.
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 χ^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 inWiMAX Networks, IEEE International Workshop on Quality of Services, Tsinghua University, Beijing, China, June 16-18, 2010, Shubhadip Mitra, UmaMaheswari Devi, Parul Gupta, Malolan Chetlur and Shivkumar Kalyanaraman.
88. HybridLQI: Hybrid MultihopLQI for improving Asymmetric Links in Wireless Sensor Networks, 6th Advanced International Conference on Telecommunications

- (AICT 2010), Barcelona, Spain, May 9-15, 2010, Ashish Gupta, Mohit Sharma, Michel Marot and Monique Becker.
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.
 90. The Isomorphism Conjecture for Constant Depth Reductions, Journal of Computer and Systems Sciences (special issue on Karp's Kyoto Prize), volume 77(1), pages 3-13, 2011, Manindra Agrawal.
 91. Improving speculative loop parallelization via selective squash and speculation reuse, Proceedings of the 19th international conference on Parallel architectures and compilation techniques (PACT 2010), Vienna, Austria, September 2010, Available online in ACM Digital Library, Santhosh Sharma Ananthramu, Deepak Majeti, Sanjeev Kumar Aggarwal, Mainak Chaudhuri.
 92. Necessary and Sufficient Conditions for Success of the Metropolis Algorithm for Optimization', Proc. of 12th ACM GECCO Conference, pp 1417 -- 1424, 2010, Swagato Sanyal, Raja S and Somenath Biswas.

Electrical Engineering

93. Estimation of Degradation of Surrounding Dielectric due to Partial Discharges within Tree Tubules, Asian Conference on Electrical Discharges, November 7-10th, 2010, Xian, China, A. A. Ganjovi and N Gupta.
94. Selection based detection method for spectrum sensing for cognitive radio, SPCOM 2010, July 2010, IISc. Bangalore, Abhishek Mishra, Ankesh Garg, Adrish Banerjee.
95. An ANN Based Hybrid State Estimator, 16th National Power Systems Conference, Hyderabad, India, December 2010, A. Kumar and S. Chakrabarti.
96. Automatic and Robust Detection of Facial Features in Frontal Face Images, 2011 UKSim 13th International Conference on Modelling and Simulation, Cambridge, UK March 2011, Anima Mazumdar, Laxmidhar Behera and KS Venkatesh.
97. Optimum Orientation of Solar Panels and Review - Solar Tracker System, Proceedings of 34th National System Conference, 10-12 Dec 2010 held at NIT Surathkal, paper No. T4 DG115, Ankur Kumar Verma, RS Anand.
98. Significance of the MVDR-LP Spectral Ration in Whisper Detection, Proceedings of the NCC 2011, Jan. 2011, IISc Bangalore, Arpit Mathur and Rajesh M Hegde.
99. Modeling Control Situations in Power System Operations, International Conference on Autonomous and Intelligent Systems (AIS 2010) June 21-23, 2010, Povia de Varzim, Portugal, Arsad Saleem, Morten Lind and SN Singh.
100. Optimal design and control of a hand exoskeleton, 2010 IEEE International Conferences on Cybernetics & Intelligent Systems (CIS 2010) and Robotics, Automation and Mechatronics (RAM 2010), Singapore, 28-30 June, 2010, Felix Orlando, Ashish Dutta, Anupam Saxena and Laxmidhar Behera.
101. Denoising of Power Quality Events Using Wavelets, National Seminar in Recent Advances in Electrical Power and Energy System Management (RAEPESM-2011), March 25-26, 2011, MMMEC Gorakhpur, D Saxena, SN Singh and KS Verma.

102. Characterization of Power Quality events with wavelet transform, National Seminar in Recent Advances in Electrical Power and Energy System Management (RAEPESM-2011), March 25-26, 2011, MMMEC Gorakhpur, D Saxena, SN Singh and KS Verma.
103. Band-pass Filter using Symmetrical Left-Handed Transmission Line Zeroth-Order Resonators, in 5th German Microwave Conference (GeMiC) 2010 Berlin, Germany in March 2010, G. Naga Satish, K. V. Srivastava, A. Biswas and D. Kettle.
104. Scalability and RF Performance of Nanoscale Dopant-Segregated Schottky Barrier SOI MOSFET, Proc. TENCON, Nov. 21-24, 2010, Fukouka, Japan, pp 1921-1926, G. C. Patil and S. Qureshi.
105. A Novel Partially Insulated Schottky Source/Drain MOSFET: Short-Channel and Self-heating Effects, International Conference on Microelectronics (ICM), Cairo, Egypt, December 2010, G. C. Patil and S. Qureshi.
106. A System of Systems Approach to Face Feature Tracking in Real-Time Applications, IEEE Conf on System of Systems Engineering, 2010, (22-24, June) Loughbrough, UK, Himansu Singh, Vipul Arora, Laxmidhar Behera and Ashish Dutta.
107. Face Feature Tracking with Automatic Initialization and Failure Recovery, 2010 IEEE International Conferences on Cybernetics & Intelligent Systems (CIS 2010) and Robotics, Automation and Mechatronics (RAM 2010), Singapore, 28-30 June, 2010, Himansu Singh, Vipul Arora, Laxmidhar Behera and Ashish Dutta.
108. Image Based Visual Servoing of a 7 DOF Robot Manipulator Using Distributed Fuzzy Proportional Controller, IEEE World Congress on Computational Intelligence, Barcelona, Spain, July 18-23, 2010, Indrazno Siradjuddin, Laxmidhar Behera, T.M. McGinnity and Sonya Coleman.
109. Intelligent Control of Grid Connected Unified Doubly Fed Induction Generator, IEEE General Meeting Minneapolis, USA, July 25-29, 2010 (Panel Paper).
110. Large signal linearization of boost converter, in IEEE-Energy Conversion Congress and Exposition (ECCE), Atlanta, , GA, pp. 4410-4144, Sept. 2010, Kapil Jha and Santanu Mishra.
111. Wind Speed Forecasting using Multu-resolution Analysis based Adaptive Wavelet Neural Network, 16th National Power Systems Conference, Hyderabad, December 15-17, 2010, K Bhaskar and SN Singh.
112. Detection and Estimation of Frequency Hopping Signal using Wavelet Transform, 2nd UKIWCWS 2010, IIT Delhi, Mayank Sirotiya, Adrish Banerjee.
113. A Novel Approach of Human Motion Tracking with the Mobile Robotic Platform, 2011 UKSim 13th International Conference on Modelling and Simulation, Cambridge, UK March 2011, Meenakshi Gupta, Laxmidhar Behera and KS Venkatesh.
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.
115. Analysis of Dominant Frequency Tanges for Various Modes of EMI Generated by Switching Converters, in Proceedings of IEEE Conference on Power Electronics, Drives and Energy Systems (PEDES) 2010 & Power India 2010, Indian Institute of

- Technology Delhi, India, December 21-23, 2010, M. M. Jha, K. B. Naik, and S. P. Das.
116. Types of Electro Magnetic Interferences in SMPS and Using Y-Capacitor for Mitigation of Mixed Mode Noise, in Proceedings of IEEE-ICPCES 2010, MNNIT, Allahabad, India, November 29- December 01, 2010, M. M. Jha, K. B. Naik, and S. P. Das.
 117. Enabling Multimodal Pervasive Computing Systems for Agriculture and Transportation Applications (White Paper), VANET and Intelligent Transportation, Indo-US Workshop on Pervasive Communications and Computing Collaboration (PC3), IIT Delhi, Mar. 2011, New Delhi, India, Mohan M Trivedi and Rajesh M Hegde.
 118. A Comprehensive Survey on Multi-objective Evolutionary Optimization in Power System Applications, IEEE General Meeting Minneapolis, USA, July 25-29, 2010 (Panel Paper), Naran M Pindoriya, SN Singh and Kwang Y Lee.
 119. Particle Swarm Optimization Based Optimal Sizing and Sizing of Multiple Distributed Generations, 16th National Power Systems Conference, Hyderabad, December 15-17, 2010, Naveen Jain, SN Singh and SC Srivastava.
 120. Stability analysis of input-series output-parallel connected buck rectifiers, Proceedings of Emobility - Electrical Power Train, 2010, Leipzig, Germany, November 2010, P. Chaudhary, A. Agarwal and P. Sensarma.
 121. A Noise Space Decomposition based Method for Identifying Low Frequency Oscillations using Synchro-Phasor Measurements, IEEE General Meeting Minneapolis, USA, July 25-29, 2010, P Tripathy, SC Srivastava, SN Singh.
 122. Virtual Fabrication and Analysis of Bulk Heterojunction Organic Solar Cell, Proceedings ISPST 2010 held at IIT Kanpur, pp.65-67, Prabhat Kumar and RS Anand.
 123. Multilayer Multi-Permittivity Dielectric Resonator: A new approach for improved spurious free window, 40th European Microwave Conference 2010 Paris, pp. 1194-1197, Sept 2010, Raghvendra Chaudhary, Vishwa V. Mishra, K. V. Srivastava and Animesh Biswas.
 124. An Investigation on Three Element Multilayer Cylindrical Dielectric Resonator Antenna Excited by a Coaxial Probe for Wideband Applications, in IEEE Asia-Pacific Conference on Applied Electromagnetics (APACE 2010), Port Dickson, Malaysia. Nov. 2010, Raghvendra Kumar Chaudhary, Kumar Vaibhav Srivastava and Animesh Biswas.
 125. Four Element Multilayer Cylindrical Dielectric Resonator Antenna Excited by a Coaxial Probe for Wideband Applications, in National Conference on Communications (NCC 2011), 28 - 30 January 2011, IISc Bangalore, India, Raghvendra Kumar Chaudhary, Kumar Vaibhav Srivastava and Animesh Biswas.
 126. Study of the effect of sheet resistance, morphology of R.F. sputtered ITO thin films on device characteristics, Proceedings ISPST 2010 held at IIT Kanpur, pp.69-72, Ram Narayan Chouhan, RS Anand, Jitendra Kumar.
 127. Impact of vacuum annealing on the structural, electrical and optical behaviour of RF sputtered indium tin oxide thin films for photovoltaic applications, ICONSAT held at IIT Bombay from 17-20, 2010, pp.196, Ram Narayan Chauhan, R. S. Anand, Jitendra Kumar.

128. A Transient Monitor to Reflect the Quality of Synchrophasors, IEEE General Meeting Minneapolis, USA, July 25-29, 2010, Ranjana Sodhi, SC Srivastava, SN Singh.
129. A Forced Switching Technique for Current Controlled Three-level NPC AC-DC Converter, in Proceedings of IEEE Conference on Power Electronics, Drives and Energy Systems (PEDES) 2010 & Power India 2010, Indian Institute of Technology Delhi, India, December 21-23, 2010, R. K. Behera and S. P. Das.
130. Space Vector Modulation for a Three-level NPC ac-dc Converter System: An Experimental Investigation, in Proceedings of IEEE International Conference on Power, Control and Embedded Systems (ICPCES) 2010, MNNIT, Allahabad, India, November 29- December 01, 2010, R. K. Behera, and S. P. Das.
131. Implementation of a Reduced Order Stator-Flux Observer for Three Level NPC Inverter-Fed Induction Motor Drive, in Proceedings of IEEE-IPEC 2010, Suntech Singapore International Convention & Exhibition Centre, Singapore, October 27-29, 2010, pp. 95-101, R. K. Behera, S. K. Parida, S. Behera, and S. P. Das.
132. Group Delay Based Methods for Recognition of Distant Talking Speech, The 44th Asilomar Conference on Signals, Systems and Computers, TP7b-2, Nov. 2010, Pacific Grove, California, USA, Rohan Mandala, Mrityunjaya Shukla, and Rajesh Hegde.
133. Dielectric Spectroscopy of Epoxy based Nanodielectrics with Metal Oxide fillers, Conference on Electrical Insulation and Dielectric Phenomena, October 17-20th, 2010, West Lafayette, USA, R R Patel and N Gupta.
134. Improved Power Sharing among Distributed Generators using Web Based Communication, IEEE PES General Meeting, Minnesota, USA Jul. 2010, R. Majumder, G. Ledwich, A. Ghosh, S. Chakrabarti, and F. Zare.
135. A New NoC Architecture Based on Partial Interconnection of Mesh Networks, IEEE Symposium on Computer and Informatics (ISCI 2011), March 2011, Kuala Lumpur, Malaysia, S. Choudhary and S. Qureshi.
136. AWNN based Harmonic Estimation in Renewable Energy Sources, National Seminar in Recent Advances in Electrical Power and Energy System Management (RAEPESM-2011), March 25-26, 2011, MMMEC Gorakhpur, Sachin K Jain and SN Singh.
137. Dynamic Response Optimization of the Synthetic Ripple Modulator for a Point-of-Load Converter with Adaptive Voltage Positioning, in IEEE Proceedings on Compatibility and Power Electronics (CPE), Badajoz, Spain, pp. 402-405, May 2009, Santanu Mishra and Khai Ngo.
138. Dynamic Modeling of a hysteretic modulator, IEEE-International Symposium on Industrial Electronics, Bari Italy, pp. 798-802, July 2010, Santanu Mishra.
139. A 600MHz, 6th Order, Highly Linear Gm-C Bandpass Filter Design, in IEEE Asia Pacific Conference on Circuits and Systems (APCCS 2010), 6 - 9 December 2010, Hilton Kuala Lumpur and Le Meridien Kuala Lumpur, Malaysia, Saumen Mondal, Kumar Vaibhav Srivastava and Animesh Biswas.
140. A Switched-Boost Topology for Renewable Power Application, in IEEE-International Power Engineering Conference (IPEC), Singapore, pp. 758-762, Oct. 2010, Saurabh Upadhyay, Ravindranath Adda, Santanu Mishra, and Avinash Joshi.

141. A switching converter based electronic load, in IEEE-26th Applied power electronic conference (APEC), Fort Worth, TX, pp. 1394-1397, March 2011, Saurabh Upadhyay, Santanu Mishra, and Avinash Joshi.
142. A Comparative Study of the Methods of Inclusion of PMU Current Phasor Measurements in a Hybrid State Estimator, IEEE PES General Meeting, Minnesota, USA Jul. 2010, S. Chakrabarti, E. Kyriakides, G. Ledwich, and A. Ghosh.
143. Study of Space Charge Characteristics in Epoxy Resin and its Nanocomposites, International Conference on Solid Dielectrics, July 4 - 9th, 2010, Potsdam, Germany, S. Das and N. Gupta.
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.
145. SVM Based Power Swing Identification Scheme for Distance Relays, IEEE General Meeting Minneapolis, USA, July 25-29, 2010, Seethalekshmi K, SN Singh and SC Srivastava.
146. Reactive Power Capability of Unified DFIG for Wind Power Generation, IEEE General Meeting Minneapolis, USA, July 25-29, 2010 (Panel Paper), SN Singh, Jacob Østergaard, Bharat Singh.
147. Direct Torque Control (DTC) of Interior Permanent Magnet Synchronous Motor (IPMSM) With and Without Speed/Position Sensors, in Proceedings of International Conference on Power Electronics (IICPE) 2010, Jan 28-30, 2011, NSIT. New Delhi, S. P. Das and R. K. Gupta.
148. On line Client-wise cohort set selection for speaker verification using iterative normalization of confusion matrices, pp. 576--580, 2010 European Signal Processing Conference, EUSIPCO-2010, August 2010, Aalborg, Denmark, Srikanth N and Rajesh M Hegde.
149. Robust PI controller for multi-purpose voltage controlled VSI, Proceedings of Emobility-Electrical Power Train, 2010, Leipzig, Germany, November 2010, S. Shah and P. Sensarma.
150. A 6 mW Low Noise Amplifier for 3.1-10.6 GHz UWB Application, in National Conference on Communications (NCC 2011), 28 - 30 January 2011, IISc Bangalore, India, Varish Diddi, Kumar Vaibhav Srivastava and Animesh Biswas.
151. A Recurrent Quantum Neural Network Model Enhances EEG Signal for an improved Brain Computer Interface, IET Seminar on Assisted Living 6 April 2011, IET London: Savoy Place, Vaibhav Gandhi, Vipul Arora, Laxmidhar Behera, Girijesh Prasad, Damien Coyle and Martin McGinnity.
152. Compact Two Pole Bandpass Filter Using Symmetrical Composite Right/Left Handed Transmission Line with Vias, in IEEE Asia-Pacific Conference on Applied Electromagnetics (APACE 2010), Port Dickson, Malaysia. Nov. 2010, Viveka Nand Mishra, Raghvendra Kumar Chaudhary, Kumar Vaibhav Srivastava and Animesh Biswas.

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.
155. Multi item multi period capacitated lot sizing problem with backorders and setup considerations: strong and weak formulations, IEEE Transactions in China, 2010; pp. 195-199, ISBN 978-1-4244-7117-1/10; 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.
157. Quality Assessment Issues and Models for Rural Digital Services, I-CARE 2010, IBM-IRL Collaborative Academia Research Exchange, IBM Research Center, Bangalore, Oct 22, 2010, Conference CD Publication, Chatterjee, J.
158. Implementing Renewable Energy Certificates in India: Economic Analysis for a Proposed Regulatory Approach, International Conference on Infrastructure Finance, IIT Kharagpur, June 3-5, 2010, Anoop Singh.
159. Deriving Dividends from Publicly Funded Solar PV Systems: Lessons from three 100kW SPV systems in India with Rohit Dasrapuria, World Energy Congress, Montreal, Canada, 11-16 Sept. 2010. Anoop Singh, Rohit Dasrapuria.
160. Work-place Spirituality: A Fad or Relevant Paradigm, International Research Workshop on Spiritual and Ethical Foundations of Organizational Development, Rishikesh, 7-9 Oct, 2010, Puneet Rai and Arun P Sinha

Mechanical Engineering

161. Oscillatory Contact Line Motion Inside Capillaries, Proc. 15th International Heat Pipe Conference (IHPC), Clemson, USA, April 25-30, 2010, A. Tripathi, S. Khandekar and P.K Panigrahi.
162. Combined experimental and numerical study of synthetic jet in quiescent flow, 37th National and 4th International conference on Fluid Mechanics and Fluid Power, December 16-18, FMFP 2010-490, 2010, A. Kumar, A, K.Saha and P.K. Panigrahi.
163. Implementation of digital in-line holographic particle tracking velocimetry (DHPTV), 20th International and 9th ISHMT-ASME Heat and Mass Transfer Conference, IIT Mumbai, January 3-5, pp. 1-15, 2010, Dhananjay Singh and P.K. Panigrahi.
164. Flow and Thermal Fields in a Pendant Droplet Moving on a Lyophobic Surface, Proc. 14th International Heat Transfer Conference, August 8-13, Washington DC, USA, 2010, B. S. Sikarwar, K. Muralidhar and S. Khandekar.

165. Effect of Periodic Pulsations on Heat Transfer in Simultaneously Developing Laminar flows: A Numerical Study, Proc. 14th International Heat Transfer Conference, August 8-13, Washington DC, USA, 2010, B. Mehta and S. Khandekar.
166. Parametric Study of a Two-phase Oscillating Flow in a Capillary Tube, Proc. 15th International Heat Pipe Conference (IHPC), Clemson, USA, April 25-30, 2010, S. P. Das, F. Lefevre, L. Bonjour and S. Khandekar.
167. Formability and surface finish studies in single point incremental forming, 3rd international and 24th All India MTDR Conference, December 13-15, 2010, Visakhapatnam, 133 - 137, 2010, S Singh, A Bhattacharya, N V Reddy.
168. A non-discretized approach to visibility analysis for automatic mould feature recognition using STEP part model, 3rd international and 24th All India MTDR Conference, December 13-15, 2010, Visakhapatnam, 597 - 602, 2010, A Surti, N V Reddy.
169. Grain orientation during single point incremental forming, The 6th international conference on micro-manufacturing (ICOMM 2011), 35-39, March 7-10, 2011 Tokyo, A Bhattacharya, N V Reddy.
170. Performance, Emissions and Combustion Characterization of Biodiesel in a Generator Engine, (Paper No. B1-2), 5th International Conference on Innovations in Food and Bio-process Technology, AIT, Bangkok, Thailand. (ISBN 978-974-8257-81-5), December 2010, Avinash Kumar Agarwal, Atul Dhar.
171. Optimal design and control of a thumb exoskeleton. IEEE TENCON, Fukuoka, Japan, pp. 1492-1497 M. Felix Orlando, 2010, Ashish Dutta, Anupam Saxena and L. Behera.
172. Velocity kinematics of a rocker-bogie type planetary rover, IEEE TENCON, Fukuoka, Japan, pp. 939-944, 2010, Shrikant Parakh, Pankaj Wahi and Ashish Dutta.
173. Face feature tracking with automatic initialization and failure recovery, IEEE International Conference on Robotics, Automation and Mechatronics, Singapore, 2010, Himanshu Singh, Vipul Arora, Laxmidhar Behera, Ashish Dutta.
174. Optimal design and control of a hand exoskeleton for rehabilitation of stroke patients. IEEE International conference on Robotics, Automation and Mechatronics, Singapore, 2010, M. Felix Orlando, H. Akholkar, Ashish Dutta and Anupam Saxena.
175. A System of Systems Approach in Face feature Tracking for Real Time Applications. IEEE International Conference on System of Systems Engineering, UK, 2010 Himanshu Singh, Vipul Arora, Laxmidhar Behera, Ashish Dutta.
176. The nature of combustion driven oscillations in a premixed laboratory combustor, Proc. 8th Asia-Pacific Conference on Combustion, December 10-13, 2010, Hyderabad, India. L. Kabiraj, A. Saurabh, P. Wahi, and R.I. Sujith.
177. Nonlinear Dynamics of low-Prandtl number Rayleigh-Benard convection, Proc. IUTAM Symposium on Nonlinear Dynamics for Advanced Technologies and Engineering Design, July 27-30, 2010, Aberdeen, Scotland, UK. P. Wahi, P.K. Mishra, S. Paul and M.K. Verma.
178. Controlling the bifurcation in friction-induced vibrations using delayed feedback, Proc. 9th IFAC Workshop on Time Delay Systems (TDS 2010), June 7-9, 2010, Prague, Czech Republic. A. Saha and P. Wahi.

179. Experimental study of thermoacoustic instability in ducted premixed flames: Periodic, quasi-periodic and chaotic oscillations, Proc. International Summer School and Workshop on Non-Normal and Nonlinear Effects in Aero-and Thermoacoustics, May 17-21, 2010, Munich, Germany, Kabiraj L., A. Sourabh, P. Wahi, and R.L. Sujith.
180. Bifurcation analysis of thermoacoustic instability in a Rijke tube, Proc. International Summer School and Workshop on Non-Normal and Nonlinear Effects in Aero-and Thermoacoustics, May 17-21, 2010, Munich, Germany, P. Subramanian, S. Mariappan, P. Wahi and R.L. Sujith.
181. Transition from Bubbling to Jetting in Co-flowing Liquid Ambience, Proc. 7th International Conference on Multiphase Flow, ICMF 2010, May 30-June 4, Tampa, Florida, USA, 2010, I. Chakraborty, G. Biswas, P.S. Ghoshdastidar.
182. Computer Simulation of Drying of Food Products with Superheated Steam in a Rotary Kiln, Proc. 14th International Heat Transfer Conference, August 8-13, Washington D.C., USA, Paper No. IHTC-14-23201, 2010, Koustubh Sinhal, P.S. Ghoshdastidar, Bhaskar Dasgupta.
183. Flow and heat transfer in a pendant liquid drop sliding on an inclined plane, paper number 345, Proceedings of the 9th International ISHMT-ASME conference held at IIT Bombay during 4-6 January 2010, Basant S. Sikarwar, K. Muralidhar, and S. Khandekar.
184. Mathematical modeling and simulation of dropwise condensation on inclined surfaces exposed to a vapor flux, paper number 346, Proceedings of the 9th International ISHMT-ASME conference held at IIT Bombay during 4-6 January 2010, Nirmal K. Battoo, Basant S. Sikarwar, S. Khandekar, and K. Muralidhar.
185. 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 Madras in December 2010, paper number 76 (FMFP10-HT-12), Trushar Gohil, Arun K. Saha, and K. Muralidhar.
186. Lager-Eddy Simulation: A Preview, Workshop on Computational Fluid Dynamics, Centre for Modeling, Simulation and Design, University of Hyderabad, 21-25 September, 2010, S. Sarkar.
187. LES of flow separation over a flat plate with semicircular leading edge using immersed boundary method, 37th National & 4th International Conference on Fluid Mechanics and Fluid Power, IIT Madras, India, December 16-18, 2010, S. Sarkar, Ch. Niranjan Ch. Reddy and Jasim Sadique.
188. Study of self-sustaining cavity oscillations using LES, 37th National & 4th International Conference on Fluid Mechanics and Fluid Power, IIT Madras, India, December 16-18, 2010, S. Sarkar and B. L. Yashwanth.
189. Analysis of blast induced intracranial pressure dynamics in cerebrospinal fluid leading to traumatic brain injury, 37th National & 4th International Conference on Fluid Mechanics and Fluid Power, IIT Madras, India, December 16-18, 2010, B. L. Yashwanth, A. Sarkar and S. Sarkar.
190. Use of CFD Analyses to Predict the Aero-Thermal Behaviour of a Film Cooled Land Based Gas Turbine Blade, International O&M Conference, New Delhi, 13-14 February, 2011, S. Sarkar and R.N. Mehrotra.
191. Experimental study and Empirical Modeling of Magnetic Abrasive Finishing on Ferromagnetic and Non-Ferromagnetic Materials, 3rd International and 24th All

- India Manufacturing Technology Design and Research Conference, Andhra University, Visakhapatnam, December 13-15, 2010, V.K. Jain, Vinod Kumar, Mamilla Ravi Sankar.
192. Dependence of AFF process on Rheological Characteristics of Soft styrene based organic polymer abrasive medium". 3rd International and 24th All India Manufacturing Technology Design and Research Conference, Andhra University, Visakhapatnam, December 13-15, 2010, M. Ravi Sankar, V.K. Jain, J. Ramkumar.
 193. Investigation into machining of alumina ceramics using ECSM process, 3rd International & 24th AIMTDR Conference, 2010 December 13-15, 2010, Andhra University, India V.K. Jain, Manoj Singh, D.C. Agrawal, Ajay Sidpara.
 194. Some aspects of micro-fabrication using electro-discharge deposition process The 21st International Computer-Aided Production Engineering Conference (CAPE - 2010) April 13-14, 2010, University of Edinburgh, Scotland, U.K(2010), V. K. Jain, Shashank, Ajay Sidpara, Himanshu Jain
 195. Simultaneous Microchannel Formation and Copper Deposition on Silicon along with Surface Treatment, IEEM 2010 IEEE international conference in Macao during 7-10 Dec. 2010, V. Kulkarni, V. K. Jain, and K. A. Misra, .
 196. Traveling Down the Microchannels: Fabrication and Analysis, IEEE/ASME International Conference on Advanced Intelligent Mechatronics, Montréal, Canada, July 6-9, 2010, Anjali Kulkarni, V.K. Jain and K. A. Misra.
 197. Development of a Novel Technique to Measure Depth of Micro-channels: A Practical Approach for Surface Metrology, Proc. of the 3rd International Conference on Advances in Mechanical Engineering, S.V. National Institute of Technology, Surat, 2010, Anjali Kulkarni, V.K. Jain and K. A. Misra.
 198. Large Eddy Simulation of fluid flow and heat transfer in a square duct with different rib profiles, Proceeding of the 37th National and 4th International Conference on Fluid Mechanics and Fluid Power, December 16-18, 2010, IIT Madras, Chennai, India, A.G. Ramgadia and A.K.Saha.
 199. Flow Structures Past a Finite Square Cylinder Mounted on a Wall, Proceeding of the 37th National and 4th International Conference on Fluid Mechanics and Fluid Power, December 16-18, 2010, IIT Madras, Chennai, India, A. K. Saha.
 200. Combined Experimental and Numerical Study of Synthetic Jet In Quiescent Flow, Proceeding of the 37th National and 4th International Conference on Fluid Mechanics and Fluid Power, December 16-18, 2010, IIT Madras, Chennai, India, A. Kumar, P.K. Panda, V. Kumar, A.K. Saha and P.K. Panigrahi.
 201. Modal decomposition of free and forced circular jets at low and high Reynolds numbers, paper # T9(2), presented at the Annual March Meeting of the American Physical Society, Dallas, Texas, 21-25 March, 2011, Gohil Trushar, A.K. Saha and K. Muralidhar.
 202. Atomistically informed continuum model for long Carbon nanotubes, McMat 2011-4136, Prabhat K Agnihotri, Sumit Basu.
 203. An elasto-plastic gradient viscoplastic analysis of indentation size effects, Canadian Congress of Applied Mechanics, Vancouver Canada, 2011, Suman Guha, Sumit Basu, Sandeep Sangal.
 204. On the Deformation and Fracture of Solid Dielectrics Immersed in an Electric Field, XVth Asian Conference on Electrical discharges, Xian China, 2010, S N Khaderi and Sumit Basu.

Mathematics and Statistics

205. Communicative approximations as rough sets. In LNCS 6086, Proc. Rough Sets and Current Trends in Computing (RSCTC 2010), Warsaw, Poland, 2010, Eds. Szczuka, M.S. et al. (Springer-Verlag), 317-326, 2010, Mohua Banerjee, A. Pathak, G. Krishna, A. Mukerjee.
206. A preference-based multiple-source rough set model. In: LNCS 6086, Proc. Rough Sets and Current Trends in Computing (RSCTC 2010), Warsaw, Poland 2010, Eds. Szczuka, M.S. et al. (Springer-Verlag), 247-256, 2010, M.A. Khan, Mohua Banerjee.
207. Hybrid finite difference methods for solving modified burgers and Burgers-Huxley Equations at the Fourth International Conference on Neural, Parallel & Scientific Computations held during August 11-14, 2010 at Atlanta, USA. M.K. Kadalbajoo.
208. Analyzing non-stationary signals, at the 52nd meeting of the PAC on mathematical sciences (PAC-MS) at C.R. Rao advanced institute of Mathematics, Statistics and Computer Science, Hyderabad, Feb. 2011, A. Mitra.
209. Finite element analysis of three-step Taylor Galerkin approximation for singularly perturbed convection-diffusion equation, International Congress of Mathematicians August 19-27, 2010, Hyderabad, V. Sangwan, B.V.K. Rathish, S.K. Murthy, M. Nigam.
210. Darcy mixed convection in a fluid saturated 3D porous enclosure with a centrally buried isothermal cubical structure under suction effect, International Congress of Mathematicians, August 19-27, 2010, Hyderabad, S.V.S.N.V.G.K. Murthy B.V.K. Rathish, P. Chandra, V. Sangwan, M. Nigam.
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.
213. An extended three point approximating subdivision scheme in the proceedings of Computer Design and Applications Vol.2, IEEE Publication, 73-77, 2010, S. Daniel, P. Shunmugaraj.
214. A ternary 4-point subdivision scheme with a tension parameter for geometric modeling in the proceedings of Modeling, simulation and control, IEEE publication 128-132, 2010, S. Daniel, P. Shunmugaraj.
215. Effect of surface roughness on thermal elastohydrodynamic lubrication of line contacts using average flow model, 65th Annual meeting of the STLE, Las Vegas, NV, USA, May 16-20, 2010, P.Sinha, H. Khan.
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

218. Phase Analysis and Characterization of Rusts on Rail Steels, (Full paper) CORCON 2010, 23-25th September, Goa, A. Moon, A C Vajpei, R. Balasubramaniam, K. Mondal.
219. Preparation and Properties of Nanocrystalline Nickel-based Soft Magnetic Material Strip via a Novel Powder Metallurgy Route; The Eighteenth Annual International Conference on COMPOSITES/ NANO ENGINEERING (ICCE - 18), ICCE-18 Anchorage, Alaska, USA, July 4-10, 2010, R.K. Dube and S.K. Vajpai.
220. Phase Analysis and Characterization of Rusts on Rail Steels, (Full paper) CORCON 2010, 23-25th September, Goa, A. Moon, A C Vajpei, R. Balasubramaniam, K. Mondal.
221. Implication for process mineralogy for beneficiation of low grade iron ore resources containing high alumina from eastern part of India, Proc. of XI International Conference on Mineral Processing Technology (MPT-2010), held at NML, Jamshedpur, Eds. R. Singh, A. Das, P. K. Banerjee, K. K. Bhattacharyya and N. G. Goswami, Dec. 2010, 82–91, Vinod Kumar, G. N. Jadav, N. K. Khosla, S. P. Mehrotra, M. K. Mohanta and K. K. Bhattacharyya.
222. A study of separation of iron powder and preparation of Ti-Al alloy by selective electrolysis of ilmenite, Proc. of XI International Conference on Mineral Processing Technology (MPT-2010), held at NML, Jamshedpur, Eds. R. Singh, A. Das, P. K. Banerjee, K. K. Bhattacharyya and N. G. Goswami, Dec. 2010, 866-873. S. K. Maiti, M. C. Shekhar, K. M. Godiwalla, P. Bhattacharyya, B. Nayak, R. K. Minz and S. P. Mehrotra.
223. Physiochemical changes during mechanical activation of boehmite, Proc. of XI International Conference on Mineral Processing Technology (MPT-2010), held at NML, Jamshedpur, Eds. R. Singh, A. Das, P. K. Banerjee, K. K. Bhattacharyya and N. G. Goswami, Dec. 2010, 898-904, T. C. Alex, Rakesh Kumar, Ansu J. Kailath, S. K. Roy and S. P. Mehrotra.
224. Characterization and processing of electronic waste for the recovery of metal values, Proceedings of the XXV International Mineral Processing Congress, held in Brisbane, Australia during Sept. 6-10, 2010, A. Das, S. Chatterjee and S. P. Mehrotra.

Material Science Program

225. Physical and Mechanical Properties of High Molecular Weight Polystyrene Nanoparticles, 68th Annual Technical Conference - Society of Plastics Engineers, 1724-1728, 2010, P. Paik, Pradip and K. K. Kar.
226. I-V Characteristics of Nanogap Electrodes formed by Thermally Assisted Electromigration, 23rd International Vacuum Nanoelectronics Conference, Palo Alto, California, USA, July 26-30, 2010, P1-18 (page 64), A.K. Singh, N.S. Rajput, A. Banerjee, V. N. Kulkarni, J. Kumar.

Physics

227. Non-equilibrium dynamics near a quantum multicritical point, Statphys-Kolkata VII, organized SINP and S. N. Bose Center for Basic Sciences, Kolkata; J. Phys: Conf. Series 297 012008 (2011); Ayoti Patra, Victor Mukherjee and Amit Dutta.
228. Dynamo Transition, In Proc. International Symposium on Waves, Coherent Structures, and Turbulence in Plasmas (Kawfest), IPR Gandhinagar (Ed. A. Sen, S. Sharma, P. N. Guzdar), AIP Conference Proceedings series CP1308, p. 25 (2010) M. K. Verma, R. Yadav, M. Chandra, S. Paul, and P. Wahi.
229. Direct numerical simulation of dynamo transition for nonhelical MHD, In Proc. 23rd National Symposium on Plasma Science & Technology (PLASMA-2008), Mumbai 2008, Journal of Physics: Conference Series 208, p.012039 (2010), D. Nath, M. K. Verma, T. Lessiness, D. Carati, I. Sarris.
230. Anisotropic turbulence studies of liquid metal MHD flows using numerical simulations, In Proc. 23rd National Symposium, R. Kumar, M. K. Verma, and V. Kumar.
231. Investigation of stability of continuous wave broadband output from a fiber laser, PHOTONICS 2010: 10th International Conference on Fiber Optics & Photonics, paper no.454, Dec. 2010, A. Ghosh, D. Venkitesh and R.Vijaya.
232. Continuous wave broadband generation using specialty fibers in fiber laser cavity, PHOTONICS 2010: 10th International Conference on Fiber Optics & Photonics, paper no. 444, Dec. 2010, A. Ghosh, D. Venkitesh and R.Vijaya.
233. Experimental study of the dynamics of fiber ring laser under cavity-loss modulation, PHOTONICS 2010: 10th International Conference on Fiber Optics & Photonics, paper no. 332, Dec. 2010, A. Ghosh and R.Vijaya.
234. Density functional study of frequency-dependent polarizability of gold clusters, PHOTONICS 2010: 10th International Conference on Fiber Optics & Photonics, paper no. 406, Dec. 2010, D. Makwani and R.Vijaya.
235. Fabrication and optical characterization of SU-8 waveguides and distributed Bragg structures, PHOTONICS 2010: 10th International Conference on Fiber Optics & Photonics, paper no. 381, Dec. 2010, D. Makwani, R.Vijaya, A.Mallik and A. Bhatnagar.
236. Fabrication, characterization and band structure of 2-dimensional photonic crystal, PHOTONICS 2010: 10th International Conference on Fiber Optics & Photonics, paper no. 108, Dec. 2010, D. Makwani, M.S. Reddy, J. James and R.Vijaya.
237. Waveguide patterning on self-assembled photonic crystals, PHOTONICS 2010: 10th International Conference on Fiber Optics & Photonics, paper no. 298, Dec. 2010, D. Makwani, S. Kedia, J. James and R.Vijaya.
238. Emission studies in novel photonic crystal microcavities, PHOTONICS 2010: 10th International Conference on Fiber Optics & Photonics, paper no. 37, Dec. 2010, S. Kedia, R.Vijaya, A.K.Ray and S. Sinha.
239. Suppression of Spin Density Wave by Nickel Doping in EuFe_2As_2 AIP Conference Proceedings, v 1349, p 1293-4, 2011, Anupam; Paulose, P.L.; Hossain, Z.

240. Local Magnetic Behavior of ^{54}Fe In EuFe_2As_2 : Microscopic Study By Perturbed Angular Distribution Spectroscopy, AIP Conference Proceedings, v 1313, p 109-11, 2010. Mohanta, S.K., Layak, S.; Hossain, Z.; Srivastava, S.K.; Mishra, S.N.
241. A novel multi element focused ion beam system using microwave plasmas, Proceedings 25th National Symposium on Plasma Science and Technology (PLASMA 2010), IASST, Guwahati, pp. 71, December 8-11, 2010, Jose V. Mathew and S. Bhattacharjee.
242. Investigation on effect of excitation frequency on electron energy distribution functions in low pressure radio frequency bounded plasmas, Proceedings 25th National Symposium on Plasma Science and Technology (PLASMA 2010), IASST, Guwahati, pp. 52, December 8-11, 2010, S. Bhattacharjee, T. Lafleur, C. Charles and R. Boswell.
243. Experimental investigation of plasma oscillation due to interaction of high-power short-pulse microwaves with temporally growing self produced plasma, Proceedings 25th National Symposium on Plasma Science and Technology (PLASMA 2010), IASST, Guwahati, pp. 50, December 8-11, 2010, S. Pandey, I. Dey, D. Sahu and S. Bhattacharjee.
244. Experimental investigation of electron trapping and frequency sideband generation in nonlinear interaction of electromagnetic standing waves with an overdense plasma column, Proceedings 25th National Symposium on Plasma Science and Technology (PLASMA 2010), IASST, Guwahati, pp. 38, December 8-11, 2010, I. Dey, K. Roychowdhury and S. Bhattacharjee.
245. A compact microwave multicusp plasma source with magnetic filter and wave cutoff disc for generation of negative ions, Proceedings 25th National Symposium on Plasma Science and Technology (PLASMA 2010), IASST, Guwahati, pp. 35, December 8-11, 2010, D. Sahu and S. Bhattacharjee.
246. Submicron guiding using capillary tube and diagnostics of multi-element focused ion beams, Proceedings 25th National Symposium on Plasma Science and Technology (PLASMA 2010), IASST, Guwahati, pp. 30, December 8-11, 2010, S. Paul, A. Chowdhury, and S. Bhattacharjee.
247. Interaction of low energy micron focused ion beamlets with matter, Proceedings 25th National Symposium on Plasma Science and Technology (PLASMA 2010), IASST, Guwahati, pp. 27, December 8-11, 2010, A. Chowdhury, S. Paul, and S. Bhattacharjee.
248. Diagnostics of submicron multi-element focused ion beams from an intense microwave plasma, Proceedings of the 37th IEEE International Conference on Plasma Science (ICOPS-2010), June 20-24, 2010, Norfolk, VA, United States of America, Jose V. Mathew and S. Bhattacharjee
249. Observation of birefringence of waves in a bounded nonhomogeneous plasma confined in a magnetostatic well, Proceedings of the 37th IEEE International Conference on Plasma Science (ICOPS-2010), June 20-24, 2010, Norfolk, VA, United States of America, I. Dey and S. Bhattacharjee.

**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 Feb- 1st March 2011, Subramanian saderla, Sunil Sharma, AK Ghosh.

Biological Sciences and Bioengineering

2. Structure and Biomechanics of the Gastroesophageal Junction in Reflux Disease, Digestive Disease Week, New Orleans, USA, Gastroenterology, (Vol. 138, Issue 5, Supplement 1 , Page S-153), May 2010, S. Roy, J. Curcic, M. R. Fox, W. Schwizer, M. Fried, P. Boesiger, A. Pal.
3. A novel image analysis tool 'MRI3D' for detailed assessment of gastrointestinal structure in three dimensions, Digestive Disease Week, New Orleans, USA, Gastroenterology, (Vol. 138, Issue 5, Supplement 1 , Page S-662), May 2010. S. Banerjee, M. R. Fox, W. Schwizer, A. Pal.
4. Spatio-temporal study of root architecture regulated by ethylene, National Symposium on Food security in context of changing climate, jointly organized by The Society of Agricultural Professionals and C.S. Azad University of Agriculture and Technology, Kanpur, India, 2010, P. Basu, A. Pal, K. M. Brown.
5. A new algorithm for kinematic analysis of lateral root initiation and growth of chickpea seedling, National Conference of Plant Physiology, BHU, Varanasi, India. 2010, A. Pal, P. Basu.
6. Ethylene-auxin interplay in regulating root growth and growth angle of *Phaseolus vulgaris* L. at seedling stage, National Conference of Plant Physiology, BHU, Varanasi, India, 2010, P. Basu, K. M. Brown, A. Pal.
7. Structural studies on N-acetylglucosamine-1-phosphate uridyltransferase (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, Dharendra S. Katti (Bajpai-Saha Award for the best student paper presentation)
9. Fabrication of poly(lactide-co-glycolide) micro-/nano-particles having varying morphology using electrspraying technique. Poster presentation at XXI National Conference of the Society for Biomaterials and Artificial Organ, India (SBAOI), at Sardar Patel University, Ahmadabad, February 10-12, 2011. Anushree Seth, Dharendra S. Katti.
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

- University, Ahmadabad, February 10-12, 2011. Poonam Sharma, Dharendra S. Katti.
11. Fabrication of micro-structures of poly(alpha-3-hydroxybutyric acid) by electro-spraying/-spinning: Understanding influence of polymer concentration and solvent type. Poster presentation at XXI National Conference of the Society for Biomaterials and Artificial Organ, India (SBAOI), at Sardar Patel University, Ahmadabad, February 10-12, 2011. Binapani Mahaling, Dharendra S. Katti.
 12. Pullulan-clay nanocomposite gels for tissue engineering. Poster presentation at the Second International Conference on Multifunctional, Hybrid and Nanomaterials, 6-11 March, 2011 at Strasbourg, France. Poonam Sharma, Dharendra S. Katti.
 13. Functional dissection of the “non-PUF” part of PUF proteins. meeting on Germ Cells, 2010, , Cold Spring Harbor Laboratory, Cold Spring Harbor, New York, USA, 2010, K. Pushpa and K. Subramaniam.
 14. The translational regulator PUF-8 promotes mRNA processing/export in *C. elegans* germ cell nucleus. 2010 meeting on Germ Cells, Cold Spring Harbor Laboratory, Cold Spring Harbor, New York, USA, 2010, K. Pushpa and K. Subramaniam.
 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.
 16. PUF-8 and GAP-3 negatively regulate RAS/MAPK signaling in *C. elegans* germ cells. 79th Annual Meeting of the Society of Biological Chemists (India), Indian Institute of Science, Bangalore, 2010, S. Vaid, M. Ariz 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.
 18. Poster presentation: Comparative molecular dynamics simulations of anti-apoptotic proteins Mcl-1 and A1 in complex with pro-apoptotic Bad and Puma. IIT-K REACH Symposium, 2010. V. Modi, D. Lama and R. Sankararamakrishnan.
 19. Poster presentation: Possible regulatory role for a salt-bridge interaction in the transport activity of aquaporin channels: MD simulation of a mutant aquaporin. 7th Asian Biophysics Association (ABA) Symposium & Annual Meeting of the Indian Biophysical Society (IBS), New Delhi, 2011. R. K. Verma, A. Jain and R. Sankararamakrishnan.
 20. Poster presentation: Differences in binding affinities of pro-apoptotic BH3 peptides for the anti-apoptotic MCL-1 protein: MD simulations of six MCL-1 complex structures. 7th Asian Biophysics Association (ABA) Symposium & Annual Meeting of the Indian Biophysical Society (IBS), New Delhi, 2011. V. Modi, D. Lama and R. Sankararamakrishnan.
 21. Oral presentation: Residue conservation at helix-helix interfaces in secondary transporter Proteins. 7th Asian Biophysics Association (ABA) Symposium & Annual Meeting of the Indian Biophysical Society (IBS), New Delhi, 2011. Krishna Deepak and R. Sankararamakrishnan.

22. Poster presentation: Existence of a stable structure surrounding the start codon: A comparison between mRNAs having start codons with weak and strong Kozak contact. 7th Asian Biophysics Association (ABA) Symposium & Annual Meeting of the Indian Biophysical Society (IBS), New Delhi, 2011. P. D. Prayaga and R. Sankararamakrishnan.
23. Poster presentation: Differential binding affinities of anti-apoptotic MC1-1 and A1 proteins for the pro-apoptotic BH3 peptides: Understanding the molecular basis using MD simulations. 55th Annual Biophysical Society Meeting, Baltimore, U. S. A. 2011. V. Modi, D. Lama and R. Sankararamakrishnan.
24. A phosphatase-ubiquitin ligase complex regulates glucose metabolism, All India Cell Biology Conference and symposium on Quantitative Biology: from molecule to cell, Bose Institute, Kolkata, December 4-6, 2010, P.K. Singh and S. Ganesh.
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.
26. Identification and characterization of novel regulators of HSF1 and their role in heat-shock response, All India Cell Biology Conference and symposium on Quantitative Biology: from molecule to cell, Bose Institute, Kolkata, December 4-6, 2010, M. Upadhyay, S. Sengupta, I. Badhwar and S. Ganesh.
27. Defective autophagy in the mice model of lafora progressive myoclonous epilepsy, Keystone Symposium on Neurodegenerative Diseases: The Molecular and Cellular Basis for Neurodegeneration, Sagebrush Inn and Conference Center, Taos, New Mexico, USA, February 21 - 26, 2011, R. Puri, T. Suzuki, K. Yamakawa 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.
29. Role of Viscoelasticity in Instabilities and Pattern Formation in Thin Films, Indo-French Workshop/Seminar on Soft Interfaces: Self-organization, Functionalities and Applications, ESPCI, Paris, July 07-09, 2010, A. Sharma.
30. Controlling Adhesion by Micro-structures and Rheology: From Embedded Microchannels to Fractal Surface Textures, 4th World Congress on Adhesion and Related Phenomena (WCARP4 Conference), Arcachon, France, September 26-30, 2010, A. Sharma.
31. Self-organized Micro-Nano Hierarchical Structures in Soft Materials, International Workshop on Multiscale modeling, Simulation and Optimization, Erlangen, Germany, October 10-13, 2010, 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.
33. Scientific innovation and creativity: some case studies, Homi Bhabha Centre for Science Education, TIFR, December 22, 2010, A. Sharma.

34. Nanostructures and Interfaces of Carbon and Polymer-metal Nanoparticles, Joint Indo-Canadian workshop on Nanoscale Processes for Clean Coal and Bioinspired water and GHG Efficient energy technologies, Kolkata, January 21-23, 2011. A. Sharma.
35. Fabrication and functionalities of polymeric and carbon structures, National Review and Coordination Meeting on Nanoscience and Nanotechnology NSNT-2011, Delhi, February 25-27, 2011, A. Sharma.
36. Role of Sub-surface Micro-Structures on Bio-Inspired Adhesion, Gecko Workshop, Saarbrücken, Germany, 2010, A. Ghatak.
37. Development of a Microfuel Processor: Oxidative Steam Reforming of Ethanol and Water-Gas Shift Reaction on Noble Metal Catalysts in a Microreactor, International Conference on Environment 2010 (ICENV-2010), Penang, Malaysia, Dec.13-15, 2010, N.R.Peela, A.S.Sandupatla and D.Kunzru.
38. Disproportionation of Toluene on Zeolite Washcoated Monoliths', Conference on Advances in Chemical Engineering (AChemE 2011), Patiala, Feb.27-28, 2011, B.Mitra and D.Kunzru.
39. Pervaporation of Methyl-Ethyl Ketone from its aqueous solution: Development of Concentration Profile, International Scientific Conference on Pervaporation and Vapour Permeation, April 18-21, 2010, Torun (Poland). S. Ravi, T. Ravi and P.K. Bhattacharya.
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.
46. Surface interaction and catalytic reactivity of CO₂ with H₂ over Co/Al₂O₃ catalysts, pp.93-94, Chemference 2010, 13th-14th July 2010, IIT Kanpur, T. Das and G. Deo.
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.
48. Self assembled monolayer of n-alkanols on mica surface: A molecular dynamic study, 8th Liblice conference, Brno, Czech Republic, June 13-18, 2010, S. Khan and J.K. Singh.

49. Wetting transition of water on smooth and texture surface, PPPEPD, May 16-21, Suzhou, Jiangsu, China, 2010, R.C. Dutta, S. Khan and J.K. Singh.
50. Effect of Pore Morphology on Phase Transition and Cross over Behavior, PPPEPD, May 16-21, Suzhou, Jiangsu, China, 2010, S.K. Singh and J.K. Singh.
51. Prewetting of associating fluids near an active surface, PLMMP 2010, May 21-24, Kyiv, Ukraine, S. Khan and J.K. Singh.
52. Design of novel materials for the separation of organic impurities from aqueous medium, International Conference of Environmental Health and Technology (EH&T 2010), 13th March, 2010, IIT Kanpur, S.K. Singh, M.V.P. Srinivas, J.K. Singh.
53. Fluid Near Surfaces, Indo-American Frontiers of Engineering, March 10-13, Agra, India, 2010, J.K. Singh.
54. DNA separation in nano devices, Chemference 2010, IIT Kanpur, July 13-14, 2010, Tarak K Patra and Jayant K. Singh.
55. Self assembled monolayer of n-alkanols on mica surface, Chemference 2010, IIT Kanpur, July 13 - 14, 2010, Sandip Khan and Jayant K Singh.
56. Phase diagram of fluids confined at nanoscale, Reach Symposium, IIT Kanpur, India, October 10 - 12, 2010, Sudhir K. Singh, Rajat Srivastava and Jayant K. Singh.
57. Phase transitions of associating molecules near active surfaces, Reach Symposium, IIT Kanpur, October 10 - 12, 2010, Sandip Khan and Jayant K Singh.
58. Phase transition of water in graphite and mica pores, AIChE Annual Meeting, Salt Lake City, Utah, U.S.A, November 7 - 12, 2010, Rajat Srivastava, Hugh Docherty, Jayant K. Singh and Peter T Cummings.
59. Structure, dynamics and phase equilibria of 2D polymeric fluid, TCS10, IIT Kanpur, December 8-12, 2010, Tarak K Patra, Abhiram Hens and Jayant K. Singh.
60. Solvation of Sr²⁺ metal ion in different solvents: DFT and MD study, TCS 2010, IIT Kanpur, December 8-12, 2010, S. Mitra S, M Sk Ali, Sandip Khan, Jayant K. Singh.
61. Phase transition of water in graphite and mica pores, 55th DAE Solid State Physics Symposium, Manipal University, India, December 26 - 30, 2010, Rajat Srivastava, Hugh Docherty, Jayant K. Singh and Peter T Cummings.
62. Solvation of Sr²⁺ metal ion in different solvents: DFT and MD study, 55th DAE Solid state Physics Symposium 26, Manipal University, India, December 26 - 30, 2010, S. Mitra S, M SK Ali, Sandip Khan, Srinivas Tulishetty, Jayant K. Singh.

Civil Engineering

63. Innovative materials for asphalt pavements, Proceedings of All India Seminar on Advances in Materials & Techniques in Construction, The Institution of Engineers (India), U.P. State Centre & Kanpur Local Centre, 2010, S. N. Varma and A. Das, IIT Kanpur, A. Das.
64. Neural networks for hydrological modeling tool for operational purposes, Proceedings of EGU's General Assembly 2010, 2-7 May 2010, D. Bhatt and A. Jain, Vienna, Austria, Presented by D. Bhatt.
65. Comparison of various optimization methods for calibration of conceptual rainfall-runoff models, Proceedings of EGU's General Assembly 2010, 2-7 May 2010, D. Bhatt and A. Jain., Vienna, Austria, Presented by D. Bhatt.

66. Hydropower Survey using terrestrial laser scanning, 2nd Innovative LiDAR Solutions Conference, Toronto, 31May - 3 June 2011, Lohani, B., Palani, S., Muniya, and Balaji, N.
67. LASViewer-A LiDAR visualisation software, 2nd Innovative LiDAR Solutions Conference, Toronto, 31May - 3 June, Lohani, B., Manchawari, L.
68. NICEE's Role in Promoting Confined Masonry as an Appropriate Technology for Building Construction in India, 9th US National and 10th Canadian Conference on Earthquake Engineering, Toronto, Canada, 25-29 July 2010, Paper no. 1689, July 2010, D. C. Rai, and S. K. Jain.
69. Critical Appraisal of Plume and Alternate Hypotheses into the Origin of Melting Anomalies: Perspectives and Prospects of Research in India, Centre of Advanced Study in Geology, University of Lucknow, Lucknow on March 15-16, March 2011, D. Paul.
70. Probabilistic Drought Classification using Hidden Markov Models, International Conference on Sustainable Water Resources Management and Climate Change Adaptation, 2011, G. Mallya, S. Tripathi, R. S. Govindaraju, Durgapur, India, S. Tripathi.
71. High-altitude charged aerosols in the atmosphere of Titan, S.N. Tripathi, M. Michael, P. Arya, European Geophysical Union, Vienna, May 2-7, 2010.
72. Microphysical modelling of nitrile ice clouds in Titan's atmosphere, S. N. Tripathi, Paul N. Romani, and Carrie M. Anderson, European Geophysical Union, Vienna, May 2-7, 2010.
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.
74. First direct evidence of strong absorption associated with coarse mode particles over CTCZ region from Aircraft experiment 2009, J. Jaidevi, Priya Choudhry, Marykutty Michael, S.N. Tripathi, Tarun Gupta, American Geophysical Union, San Francisco, December 13-17, 2010.
75. Evaluating the Effectiveness of Signal-based Countermeasures on Pedestrian Safety, Accepted for Proceedings of the Transportation Research Board 90th Annual Meeting, January 2011, Washington DC, USA, V. Vasudeavn, S. Pulugurtha, S. Nambisan, M. Dangeti.
76. Analysis of Effects of CAFE Standards, Hybrid and Alternative Fuel Vehicles on Fuel Tax Revenues, Proceedings of the Transportation Research Board 90th Annual Meeting, January 2011, Washington DC, USA, V. Vasudeavn, S. Nambisan.
77. Developing a Methodology for Night Time Seat Belt Usage Data Collection, Proceedings of the Transportation Research Board 90th Annual Meeting, January 2011, Washington DC, USA, V. Vasudeavn, N. Bandaru, P. Kachroo.
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).
79. Basics of Health Effects Originating from Air Pollution, Tarun Gupta, delivered invited lecture at Summer camp in Civil Engineering, IIT-Kanpur, Kanpur, (17th June, 2010).

80. Development of PM₁ 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.
83. Coordination Polymers for Catalysis and Gas Adsorption, CGD-India Summit, IISc. Bangalore, December, 2010: Prof. P. K. Bharadwaj.
84. Metal Organic Frameworks: Synthesis and Applications, Frontiers in Chemistry, Indian Association for the Cultivation of Science, Kolkata, December 2010: Prof. P. K. Bharadwaj.
85. Functional Porous Metal-Organic Framework Built Using Rigid Carboxylate Based Linkers, 13th CRSI Conference, Bhubaneswar, February, 2011: 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.
91. Proton transfer pathways in aqueous systems of varying dimensions, National University Singapore, November 16, 2010, Prof. A. Chandra.
92. Molecular simulations of liquids and interfaces: An HPC activity at IITK, Indian Institute of Technology Kanpur, February 28, 2011 (CNR Rao Lecture) : 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.
96. Phosphorus-Supported Ligands: Versatile Coordination Platforms for the Assembly of Molecular Materials: Invited Lecture at the 1st International collaborative, 1st ICCS, NUS, Singapore, Nov 15-16, 2010: Prof. V. Chandrasekhar.
97. Single-Molecule Magnets: Synthetic Strategies: An Invited Talk in the International workshop on Advances in Magnetic phenomenon and materials, Manali, June 3-5, 2010: Prof. V. Chandrasekhar.
98. Single-Molecule Magnets: Synthetic Strategies: Frontiers in Chemistry, IACS, Kolkata, December 11-13 2010: Prof. V. Chandrasekhar.
99. Single-Molecule Magnets: Recent Advances: Distinguished Lecture, NISER Bhubaneswar, September 17, 2010: Prof. V. Chandrasekhar.
100. Single-Molecule Magnets: Sri Sathya Sai University, Prasanthi Nilayam, Puttaparthi, July 6 2010: Prof. V. Chandrasekhar.
101. Science: Some Inspiring Stories: DST-Inspire program for School Children, Lucknow, May 21 2010: Prof. V. Chandrasekhar.
102. Single-Molecule Magnets: Problems and Progress, TIFR Wednesday Colloquium, September 22, 2010, TIFR Bombay: 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.
104. Spatio-temporal control in multiphoton fluorescence laser-scanning microscopy, Progress in Biomedical Optics and Imaging, Multiphoton Microscopy in Biomedical Sciences X under BIOS Symposium, Photonics West 2010, San Jose, USA, A. K. De, D. Roy, and D. Goswami.
105. Femtosecond spatiotemporal control with multiple knobs, Lasers and Electro-Optics/Quantum Electronics and Laser Science Conference: 2010 Laser Science to Photonic Applications, CLEO/QELS 2010, San Jose, USA, May 18-20, 2010, (Invited Speaker: Joint CLEO/QELS Symposium on Quantum Control II), Debabrata Goswami.
106. Towards Stable trapping of single macromolecules in solution, SPIE NanoScience + Engineering – Optical Trapping and Optical Micromanipulation (OTOM '10), San Diego, CA, USA, Aug. 1-5, 2010, A. K. De, D. Roy, and D. Goswami.
107. Quantum Computing, Tutorial Lecture at the international conference on Simulated Evolution And Learning (SEAL-2010), IIT Kanpur, Dec. 1-4, 2010, Debabrata Goswami.
108. Quantum Computing Approaches via Femtosecond Spatiotemporal Control, International School on Quantum and Nano Computing Systems and Applications (QUANSAS-2010), Dec. 2-5, 2010, Debabrata Goswami.
109. Probing intra and intermolecular interactions through Femtosecond Laser Spectroscopy, Frontiers in Inorganic Chemistry (FIC-2010), IACS, Kolkata, Dec. 11-13, 2010, Debabrata Goswami.
110. Control of femtosecond laser driven retro-Diels-Alder reaction of dicyclopentadiene, Photonics-2010, IIT Guwahati, Dec. 12-15, 2010, D.K. Das, T. Goswami, and D. Goswami.

111. Two-Photon absorption study of Copper ion sensor based on conjugated pyrene and coumarin Schiff base, Photonics-2010, Dec. 12-15, 2010, IIT Guwahati, S. K. Maurya, M. D. Pandey, V. Chandrasekhar and D. Goswami.
112. Spectrally resolved femtosecond photon echo spectroscopy of Astaxanthin, Photonics-2010, Dec. 12-15, 2010, IIT Guwahati, Ajitesh Kumar, S.K. Karthick Kumar, A. Gupta and D. Goswami.
113. Spatiotemporal Control of Molecular Motions in Femtosecond Microscopy, Photonics-2010, Dec. 12-15, 2010, IIT Guwahati, Debabrata Goswami.
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.
115. Challenging the intra and intermolecular interacting forces: Towards spatiotemporal control of molecules, International Symposium on Facets of Weak Interactions in Chemistry, Saha Institute of Nuclear Physics Auditorium, Salt Lake, Kolkata, Jan. 13-15, 2011, Debabrata Goswami.
116. Nanoparticles in pulsed optical trap, Spectroscopy and Dynamics of Molecules and Clusters (SDMC), The Corbett Hideaway, Corbett National Park, Uttarakhand, Feb. 18-20, 2011, D. Roy and D. Goswami.
117. Ultrafast solution dynamics of IR144 in an organic solvent interfaced with water, Spectroscopy and Dynamics of Molecules and Clusters (SDMC), The Corbett Hideaway, Corbett National Park, Uttarakhand, Feb. 18-20, 2011, D.K. Das, T. Goswami and D. Goswami.
118. Intermolecular interaction in thermal lens spectroscopy, Spectroscopy and Dynamics of Molecules and Clusters (SDMC), The Corbett Hideaway, Corbett National Park, Uttarakhand, Feb. 18-20, 2011, P. Kumar and D. Goswami.
119. Control of femtosecond laser-driven chemical reactions transforming dicyclopentadiene into cyclopentadiene in supersonic molecular beams, Spectroscopy and Dynamics of Molecules and Clusters (SDMC), The Corbett Hideaway, Corbett National Park, Uttarakhand, Feb. 18-20, 2011, Debabrata Goswami.
120. Towards Using Molecules as Qubits: Mapping Coherence Flow within a Molecule, International Conference on Quantum Optics and Quantum Computing (ICQOQC-11), Mar. 24-26, 2011, JIIT, Noida, 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.
122. Design of DOPA crown peptide helices, Garima Tripathi and G. Ramanathan, 3rd Indian peptide symposium at Pune, Feb 2011: Dr. R. Gurunath.
123. Chemistry of Non-innocent Ligands. Molecular and electronic structure and properties, International Symposium on Frontiers in Inorganic Chemistry (FIC-2010), Indian Association for the Cultivation of Science, Kolkata (December 11-13, 2010), Suman Kumar Barman, Anuj K. Sharma and R. N. Mukherjee.
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.
125. Models for the Photosynthetic Reaction Center: Structure, Reactivity and Photophysical Properties of Porphyrin Dimers and Rationalization of Supramolecular Chirality, 13th CRSI National Symposium in Chemistry & 5th CRSI-RSC Symposium in Chemistry held at NISER, Bhubaneswar from Feb 04 - 06, 2011. S. Brahma, A. Chaudhary, A. Iqbal, and S. P. Rath.
 126. Models for the Photosynthetic Reaction Centre: Structure, Reactivity and Photophysical Properties of Porphyrin Dimers and Rationalization of Supramolecular Chirality, International Symposium on Frontiers in Inorganic Chemistry (FIC-2010) held at IACS, Kolkata from December 11-13, 2010. A. Iqbal, S. Brahma, A. Chaudhary and S. P. Rath.
 127. A Novel Series of Oxo and Hydroxo Bridged Fe(III) Bisporphyrins: Synthesis, Structure and Properties. International Symposium on Frontiers in Inorganic Chemistry (FIC-2010) held at IACS, Kolkata from December 11-13, 2010. S. Bhowmik, S. K. Ghosh, D. Sil and S. P. Rath.
 128. A Novel Series of Oxo and Hydroxo Bridged Fe(III) Bisporphyrins: Synthesis, Structure and Properties. Golden Jubilee Chemistry Conference Molecules, Supramolecules and Materials (MSM) held at IIT Kanpur from October 1-3, 2010. S. Bhowmik, S. K. Ghosh, D. Sil and S. P. Rath.
 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.
 132. National Symposium on Radiation and Photochemistry, Jodhpur, March 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.
136. Story of an Efficient Primality Test, Adobe Developer Summit, Noida, June 2010, Manindra Agarwal.
137. Automorphisms of Finite Rings and Their Role in Computer Science, Google India, Bangalore, June 2010, Manindra Agarwal.
138. On the Arithmetic Complexity of Euler Function, ICM Satellite Workshop, Bangalore, September 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.

141. On the Arithmetic Complexity of Euler Function, IBM Day, IIT Kanpur, November 2010, Manindra Agarwal.
142. The $P \neq NP$ Hypothesis, Talk at IISER Pune, November 2010, Manindra Agarwal.
143. PRIMES is in P, Invited Talk at SEAL conference, IIT Kanpur, December 2010, Manindra Agarwal.
144. On the Arithmetic Complexity of Euler Function, Invited Talk at KAUST Workshop, Jeddah, Saudi Arabia, February 2011, Manindra Agarwal.
145. Talash: Friend Finding in Federated Social Networks, Workshop on Linked Data on the Web (colocated with WWW 2011), Hyderabad, March 29th, 2011, Raturaj Dhekane and Brion Vibber.

Humanities and Social Sciences

146. Movement, Institutionalization and Sectarianism: Exploring the Question of Succession in Religious Movements – 36th Annual Conference, Indian Sociological Society. 27-29 December 2010, A. Chakrabarti.
147. Hindi Film Meets Bollywood: A Comparative Critique of Cultural Commodification, presented at the Annual IACLALS international conference held in Trivandrum, India, Jan. 27-29, 2011, Suchitra Mathur.
148. Ghostly Sirens, Haunting Serenades: 'Uncanny' Songs in Classic Hindi Cinema, Fables of Fear, CPRAC SIS, Thrissur, Kerala, August 7-8, 2010, Suchitra Mathur.
149. Textual Inoculations, Generic Mutations: Adventures of the 'English' Detective in Native L/Hands, 15th Triennial ACLALS Conference, University of Cyprus, June 6-11, 2010, Suchitra Mathur.
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.
152. Trade of CSG by ESCAP Members: A Gravity Analysis (Revised with theoretical justification), The Indian Econometric Society 47th Annual Conference, Indore, Jan 6-8, 2011. Somesh K.Mathur.
153. Contemporary Tribal resistance Movements in Orissa: Debate on Development and Displacement. XVII World Congress of Sociology (International Sociological Association), Gothenburg, Sweden, July 11-17, 2010, B.K. Pattnaik.
154. Science and Technology in India Contributing to Class Formation? Symposium, International Seminar entitled Science Technology and the Nation Central University of Hyderabad (funded by European Commission) under the auspices of Centre for Knowledge, Culture and Innovation Studies - March 24-26, 2011, B.K. Pattnaik.
155. Nature Versus Nurture: An Ecocritical Reading of R. K. Narayan's The English Teacher National Seminar on Revisiting the Classics: Text and Context and (Re)Interpretation, Department of Mathematics and Humanities, Institute of Technology, Nirma University 25 - 26 March 2011, T. Ravichandran.

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.
157. Political Violence, Internal Displacement and Children: Insights into Trauma Reactions, Suffering and Healing in Gujarat, India, International Conference on Intercultural aspects of mental disorders, University of Heidelberg, Germany. November, 2010, Kumar Ravi Priya.
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.
159. Perceived deprivation and perceived injustice under merit and need violation: The role of locus and norms. Paper presented at the Symposium on 'Justice', 20th Annual Conference of NAOP (National Academy of Psychology, India), JNU, New Delhi, December, 2010, L. Krishnan.

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.
161. An Interdisciplinary Approach to Teaching Service Innovation, The Art & Science of Service VI Conference, Madrid, Spain, June 2-4, 2010, Chatterjee, J. and Lemmink, J.
162. Market Characteristics and Regulatory Best Practices for Renewable Energy Certificates: An International Perspective, Renewable Energy 2010, 27 June - 2 July 2010, Yokohama, Japan, Anoop Singh.
163. Implementing Renewable Energy Certificates in India: Economic Analysis for a Proposed Regulatory Approach, International Conference on Infrastructure Finance, IIT Kharagpur, June 3-5, 2010, Anoop Singh.

Mechanical Engineering

164. Adhesion of two component vesicle, SIAM Conference on Life Sciences, 12-15 July, 2010, Y. Zhao, S. Das, Q. Du, Pittsburgh-USA.
165. Analytical study of Hopf bifurcations in frictional chatter models, Summer school and Conference on Advanced Problems in Mechanics (APM2010), July 1-4, 2010, Saint Petersburg, Russia. P. Wahi.
166. Nonlinear response of a flexible member supported non-ideally at one end, Summer school and Conference on Advanced Problems in Mechanics (APM2010), July 1-4, 2010, Saint Petersburg, Russia. S. Kumar, I. Sharma, and P. Wahi.
167. Design, fabrication and performance evaluation of a nonlinear quasi-zero stiffness vertical vibration isolator, Proc. IUTAM Symposium on Nonlinear Dynamics for Advanced Technologies and Engineering Design, July 27-30, 2010, Aberdeen, Scotland, UK. P. Wahi, R.H. Lokhande, R. Maurya, and A.K. Mallik.
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

- Madras in December 2010, paper number 76 (FMFP10-HT-12), Trushar Gohil, Arun K. Saha, and K. Muralidhar.
169. Behavior of Thin Walled Cylinders Under Pulse Loading, International Symposium on Impact and Plasticity IMPLAST 2010, October 12-14, Providence, Rhode Island, USA. A. Malladi, B. Aswin, P. Venkitanarayanan.
 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.
 171. Dipole generation and subcritical behaviour in the geodynamo, UK MHD Meeting, University of Leeds, 20--21 May 2010, B. Sreenivasan & C.A. Jones.
 172. Method of Characteristics for RELAP5 Simulations, Trans. American Nuclear Society, 102(2010), pp 601-602 G. Shrishrimal, P. Munshi.
 173. Numerical Simulation of exiting coolant flow of a pool type research reactor, Trans. American Nuclear Society, 102, (2010) pp 629-630, S. Soni, V. Eswaran, P. Munshi, S. Sengupta, P. K. Guchhait.
 174. Large Break LOCA Analysis of a Natural Circulation Reactor, Trans. American Nuclear Society, 102 (2010), pp 631-632, J.P. Tyagi, M. Kumar, H.G. Lele, P. Munshi.
 175. Unsteady State Heat Transfer Analysis in a Magnesium-Thermic-Reduction Reactor for Uranium Production, Trans. American Nuclear Society, 102(2010), pp 681-682, S. Soni, V. Eswaran, P. Munshi, S. Manna, S.B. Roy.
 176. Station Blackout Analysis of a Natural Circulation Reactor, Proc. ICAPP2010, American Nuclear Society (2010), paper 10025 J.P. Tyagi, P. Munshi, Mithilesh Kumar, H.G. Lele.
 177. Segregation in granular mixtures, Gordon Conference on granular and granular-fluid flow, B. R. Guru, A. Bhateja, I. Sharma, J. K. Singh.
 178. Detection of Shear and Pressure Waves in Metals by Dynamic Wavelet Fingerprinting in Laser Based Ultrasonics, QNDE2010, Sandiego, July 18-23, 2010, N. N. Kishore, Aparna Gajendragadkar, Pankaj Gupta, and V. Raghuram.
 179. Finite Element Modeling of Ultrasonic EMAT Technique for Crack Detection in Ferro-Magnetic Specimens, National Seminar on Non-Destructive Evaluation, Dec 9-11, 2010, Organized by ISNT, N. N. Kishore and T.H. Adithya.
 180. On the Deformation and Fracture of Solid Dielectrics Immersed in an Electric Field, XVth Asian Conference on Electrical discharges, Xian China, 2010, S N Khaderi and Sumit Basu.

Material Science Program

181. On the Sol-gel Synthesis and Characterization of Oxygen Permeable Strontium ferrite membrane, International Conference on Inorganic Membrane (ICIM-2010), Washington D.C., USA, 17-22 July 2010, S. V. Jaiswal, V.K. Kashyap, J. Kumar.
182. Carbon Nanomaterial Coated Glass Fiber Reinforced Epoxy Composites, International Conference on Carbon Nanotechnology: Potential and Challenges, IIT Kanpur, India, December 15-17, 2010, A. Rahaman, R. Sharma, K.K. Kar.
183. Exfoliated Graphite for Heavy Oil Sorption, International Conference on Carbon Nanotechnology: Potential and Challenges, IIT Kanpur, India, December 15-17, 2010, N. Sykam, K. K. Kar.

184. Synthesis of Carbon Nanotube Coated Alumina for Alumina Matrix Composites, International Conference on Carbon Nanotechnology: Potential and Challenges, IIT Kanpur, India, December 15-17, 2010, N. P. Reddy, R. Sharma, K.K. Kar.
185. Effect of CNT Growth Time on the Properties of CNT-Coated Carbon Fiber/Polyester Composites, International Conference on Carbon Nanotechnology: Potential and Challenges, IIT Kanpur, India, December 15-17, 2010, P. Agnihotri, S. Basu, K.K. Kar.
186. Carbon Nanotubes and Kirchoff's Elastica, International Conference on Carbon Nanotechnology: Potential and Challenges, IIT Kanpur, India, December 15-17, 2010, P. Agnihotri, S. Basu, K.K. Kar.
187. Synthesis of Carbon Nanocoils /Microcoils Coated Carbon Fiber: Effect of Growth Parameters, International Conference on Carbon Nanotechnology: Potential and Challenges, IIT Kanpur, India, December 15-17, 2010, R. Sharma, K.K. Kar.
188. Field Emission Study of Carbon Tubes Coated Kanthal wire, International Conference on Carbon Nanotechnology: Potential and Challenges, IIT Kanpur, India, December 15-17, 2010, S.R. Punugupati, K.K. Kar.
189. Carbon Nanotube Coated Tungsten Filament: Incandescence and Field Emission Properties, International Conference on Carbon Nanotechnology: Potential and Challenges, IIT Kanpur, India, December 15-17, 2010, R. Sharma, S.R. Punugupati, K.K. Kar.
190. Development of High Strength Functional-PEEK/HA/CNF Bionanocomposite, International Conference on Carbon Nanotechnology: Potential and Challenges, IIT Kanpur, India, December 15-17, 2010, S. Pramanik, K.K. Kar.
191. Synthesis of Various Carbon Nanomaterials: Effects of CVD Parameters, International Conference on Carbon Nanotechnology: Potential and Challenges, IIT Kanpur, India, December 15-17, 2010, A. Rahaman, R. Sharma, K.K. Kar.

Physics

192. Electronic Structure of Transition Metal Oxides, in Discussion Meeting on Electronic Structure at University Of Hyderabad, Jan 14-17 2011. R. Prasad.
193. Born Effective Charges, Spontaneous Polarization and Optical Properties of Bismuth Titanate from First-principles in International Conference on Quantum Effects in Solids of Today (I-ConQuEST) Dec 20-23, 2010 at NPL Delhi. R. Prasad.
194. Born Effective Charges, Spontaneous Polarization and Optical Properties of Ferroelectric Bismuth Titanate in Current Trends in Condensed Matter Physics, Dec 15-19, 2010, NISER, Bhubaneswar. R. Prasad.
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.
197. Changes in the Potential Fluctuations of GST Chalcogenides upon Switching, 17th International Symposium on Non Oxide Glasses, Nongbo, China, 2010, Ch. Bapanayya, Rajeev Gupta, and S. C. Agarwal, presented by, Ch. Bapanayya.

198. Investigation of stability of continuous wave broadband output from a fiber laser, PHOTONICS 2010: 10th International Conference on Fiber Optics & Photonics, paper no.454, Dec. 2010, A. Ghosh, D. Venkitesh and R.Vijaya, Guwahati, R.Vijaya.
199. Continuous wave broadband generation using specialty fibers in fiber laser cavity, PHOTONICS 2010: 10th International Conference on Fiber Optics & Photonics, paper no. 444, Dec. 2010, A. Ghosh, D. Venkitesh and R.Vijaya, Guwahati, R.Vijaya.
200. Experimental study of the dynamics of fiber ring laser under cavity-loss modulation, PHOTONICS 2010: 10th International Conference on Fiber Optics & Photonics, paper no. 332, Dec. 2010, A. Ghosh and R.Vijaya, Guwahati, R.Vijaya.
201. Density functional study of frequency-dependent polarizability of gold clusters, PHOTONICS 2010: 10th International Conference on Fiber Optics & Photonics, paper no. 406, Dec. 2010, D. Makwani and R.Vijaya, Guwahati, R.Vijaya.
202. Fabrication and optical characterization of SU-8 waveguides and distributed Bragg structures, PHOTONICS 2010: 10th International Conference on Fiber Optics & Photonics, paper no. 381, Dec. 2010, D. Makwani, R.Vijaya, A.Mallik and A. Bhatnagar, Guwahati, R.Vijaya.
203. Fabrication, characterization and band structure of 2-dimensional photonic crystal, PHOTONICS 2010: 10th International Conference on Fiber Optics & Photonics, paper no. 108, Dec. 2010, D. Makwani, M.S. Reddy, J. James and R.Vijaya, Guwahati, R.Vijaya.
204. Waveguide patterning on self-assembled photonic crystals, PHOTONICS 2010: 10th International Conference on Fiber Optics & Photonics, Guwahati, paper no. 298, Dec. 2010, D. Makwani, S. Kedia, J. James and R.Vijaya.
205. Emission studies in novel photonic crystal microcavities, PHOTONICS 2010: 10th International Conference on Fiber Optics & Photonics, paper no. 37, Dec. 2010, S. Kedia, R.Vijaya, A.K.Ray and S. Sinha, Guwahati, R.Vijaya.
206. Design, fabrication and characterization of Photonic crystals, Annual Symposium of the IITB – Monash Research Academy, Feb. 2011, M.S. Reddy, R.Vijaya and M.Premaratne, Mumbai, R.Vijaya.
207. A novel multi element focused ion beam system using microwave plasmas, Proceedings 25th National Symposium on Plasma Science and Technology (PLASMA 2010), IASST, Guwahati, pp. 71, December 8-11, 2010, Jose V. Mathew and S. Bhattacharjee.
208. Investigation on effect of excitation frequency on electron energy distribution functions in low pressure radio frequency bounded plasmas, Proceedings 25th National Symposium on Plasma Science and Technology (PLASMA 2010), IASST, Guwahati, pp. 52, December 8-11, 2010, S. Bhattacharjee, T. Lafleur, C. Charles and R. Boswell.
209. Experimental investigation of plasma oscillation due to interaction of high-power short-pulse microwaves with temporally growing self produced plasma, Proceedings 25th National Symposium on Plasma Science and Technology (PLASMA 2010), IASST, Guwahati, pp. 50, December 8-11, 2010, S. Pandey, I. Dey, D. Sahu and S. Bhattacharjee.
210. Experimental investigation of electron trapping and frequency sideband generation in nonlinear interaction of electromagnetic standing waves with an

- overdende plasma column, Proceedings 25th National Symposium on Plasma Science and Technology (PLASMA 2010), IASST, Guwahati, pp. 38, December 8-11, 2010, I. Dey, K. Roychowdhury and S. Bhattacharjee.
211. A compact microwave multicusp plasma source with magnetic filter and wave cutoff disc for generation of negative ions, Proceedings 25th National Symposium on Plasma Science and Technology (PLASMA 2010), IASST, Guwahati, pp. 35, December 8-11, 2010, D. Sahu and S. Bhattacharjee.
 212. Submicron guiding using capillary tube and diagnostics of multi-element focused ion beams, Proceedings 25th National Symposium on Plasma Science and Technology (PLASMA 2010), IASST, Guwahati, pp. 30, December 8-11, 2010, S. Paul, A. Chowdhury, and S. Bhattacharjee.
 213. Interaction of low energy micron focused ion beamlets with matter, Proceedings 25th National Symposium on Plasma Science and Technology (PLASMA 2010), IASST, Guwahati, pp. 27, December 8-11, 2010, A. Chowdhury, S. Paul, and S. Bhattacharjee.
 214. Diagnostics of submicron multi-element focused ion beams from an intense microwave plasma, Proceedings of the 37th IEEE International Conference on Plasma Science (ICOPS-2010), June 20-24, 2010, Norfolk, VA, United States of America, Jose V. Mathew and S. Bhattacharjee.
 215. Observation of birefringence of waves in a bounded nonhomogeneous plasma confined in a magnetostatic well, Proceedings of the 37th IEEE International Conference on Plasma Science (ICOPS-2010), June 20-24, 2010, Norfolk, VA, United States of America, I. Dey and S. Bhattacharjee.

INVITED TALKS DELIVERED**Aerospace Engineering**

1. Flight dynamics of Artillery rockets/shells, ARDE Pune, Oct-Nov 2010, A. K. Ghosh.
2. Experimental Techniques in Fracture, DMSRDE (Defense materials and stores research and development), Kanpur, Dec 07, 2010, R. Kitey.
3. Micromechanics based damage modeling for unidirectional composites: some recent developments, ICC-CFT2011 conference, IISc Bangalore, 2010, Murari V, C.S. Upadhyay.

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.
6. Cell culture engineering using new design of biomaterials- an Indian perspective. JAACT 2010 Program 23rd annual international meeting of the Japanese association for animal cell technology. Sep 1st -4th, 2010, JAPAN, Ashok Kumar.
7. Society of Biological Chemists Meeting, Bangalore, 2010, Dr. Balaji Prakash.
8. Connexios Biotech, Bangalore, 2010 Dr. Balaji Prakash.
9. Dept of Pharmacy, BITS-pilani, Hyderabad Campus, 2011 Dr. Balaji Prakash.
10. Surface modification of electrospun microfibers of PLGA for improved protein interactions. Invited talk at XXI National Conference of the Society for Biomaterials and Artificial Organ, India (SBAOI), at Sardar Patel University, Ahmadabad, February 10-12, 2011. Dharendra S. Katti.
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.
12. Germline Stem Cells: RNA-binding proteins take multiple avatars to maintain the fountain of youth. International Symposium on Alternate Animal Models in Biological Research: Present and Future Perspective in Toxicology, Indian Institute of Toxicological Research, Lucknow, 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.
14. From sequence analysis to simulations: Applications of HPC in modern biology. REACH Symposium, IIT-Kanpur, Oct. 2010, R. Sankararamakrishnan.
15. From microbial to mammalian aquaporins: Sequence analysis to simulations. Indo-Swiss Bioinformatics Symposium at IIT-Delhi, Oct. 2010, R. Sankararamakrishnan.
16. Structure of biomolecules: An overview. Workshop on Understanding Molecular Simulations: Theory and Applications. UMS 2010, IIT-Kanpur, Nov. 2010. R. Sankararamakrishnan.

17. Using molecular dynamics to understand the specificity of protein-ligand interactions. Joint Indo-Russian Workshop on Predictive Biology using Systems and Integrative Analysis and Methods, Institute of Microbial Technology, Chandigarh, Nov. 2010. R. Sankararamakrishnan.
18. Membrane protein modeling and simulations. MathBio Workshop on Protein Structure, Function and Folding, Indian Institute of Science, Bangalore, Dec. 2010. R. Sankararamakrishnan.
19. Flexibility in the drugs and their targets: Challenges in drug design investigated using molecular simulation approach. 3rd CDRI - NIPER Symposium on Medicinal Chemistry & Pharmaceutical Sciences, Lucknow, Mar. 2011. R. Sankararamakrishnan.
20. GPCR-binding flexible peptide hormones: Influence of membranes in the recognition of cognate receptors. Conference on Biomolecular Simulations: Algorithm and Applications. JNU, New Delhi, Mar. 2011. R. Sankararamakrishnan.
21. Novel non-covalent interactions in protein structures. 5th Indo-French Bioinformatics Meeting, Centre for DNA Finger-Printing & Diagnostics, Hyderabad, Mar. 2011. 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.
23. Defects in proteolytic process underlie neuropathology in Lafora disease: Invited talk delivered in the 79th Annual Meeting of the Society of Biological Chemists (India), Indian Institute of Science, Bangalore, December 13-15, 2010, S. Ganesh.
24. Molecular pathology of Lafora disease: the tale of two proteins: Invited talk delivered in the International Conference on Functional Genomics, Banaras Hindu University, Varanasi, October 2-4, 2010, S. Ganesh.
25. Laforin-malin act as suppressors of misfolded protein accumulation: Invited talk delivered in the International Symposium on Progressive Myoclonus Epilepsies in the New Millennium, Mariani Foundation, Venice, Italy, April 28, to May 2, 2010, 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.
27. Principles of asphalt pavement design - a discussion, (October 20, 2010), Conference on Infrastructure, Sustainable Transportation & Urban Planning, CiSTUP, IISc Bangalore, October 18-20, 2010, Das, A.
28. How to build good roads? (October 5, 2010), IGS Local Chapter, SGSITS, Indore, Das, A.
29. In quest of an optimal pavement design, (July 31, 2010), Indo-US Workshop on Highway and Airport Pavement Engineering: Challenges and Opportunities, IIT Kharagpur, July 30-31, 2010, 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.
32. Laser Scanning Technology", NSTL-DRDO, Vishakhapatnam, Bharat 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.
38. Proposal for Space Borne Measurements of Dust Properties and Clouds (CO₂ and H₂O) in Mars, Brain Storming Session on Mars, Physical Research Laboratory, Ahmedabad, March 2011, S.N. Tripathi.
39. Brain Storming Session on Technology Vision 2035, IT-BHU, Varanasi, May 2011, S.N. Tripathi.
40. Aerosol absorption, mixing state and radiative effects, Health, Safety, and Environment Group, Bhabha Atomic Research Center, Mumbai, June 09, 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

42. Organic Molecules, in A Short Course on Organic Electronics, 2010, IIT Kanpur, July 5, 2010, S.Panda.
43. Organic Chemical Sensors, in A Short Course on Organic Electronics, 2010, IIT Kanpur, July 10, 2010, S.Panda.
44. Plasma Etch - Silicon Deep Trench Applications, VLFM IIT Kanpur, Sept 9, 2010, S.Panda.
45. Plasma Etch - Silicon Deep Trench Applications, in Continuing Education Programme on Advanced Manufacturing Processes, DMSRDE, Kanpur, Sept. 21, 2010, S.Panda.
46. Electrolyte Insulator Semiconductor based Microfluidic Biosensor for Early Disease Detection, Invited Seminar at IMMT, Bhubaneswar, Dec. 16, 2010, S. Panda.

47. Organic Semiconductor Based Chemical Sensors, in UGC-NCRM Winter School on Polymers: Synthesis, Characterization and Applications, IISc Bangalore, Dec 12, 2010, S.Panda.
48. Chemical Sensors – Nature to Laboratory, CSIR Programme on Youth Leadership in Science, IMMT Bhubaneswar, Dec 23, 2010, S.Panda.
49. Plasma Etch – Silicon Deep Trench Applications, in Short Term Course on Micro Scale Engineering, IIT Kanpur, Jan 6, 2011, S.Panda.
50. Electrolyte Insulator Semiconductor based Microfluidic Biosensor for Early Disease Detection, Invited talk, 16th National Seminar on the Physics and Technology of Sensors (NSPTS), Lucknow University, Lucknow, Feb 12, 2011, S.Panda.
51. Electrolyte Insulator Semiconductor based Microfluidic Biosensor for Early Disease Detection, in 2nd Symposium on Indo-Swiss Collaboration in Biotechnology (ISCB), New Delhi, Mar 11, 2011, S.Panda.
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.
53. Adaptive Adhesion via Sub-surface Network of Fluid Filled microchannels, National Physical Laboratory, India, 2010, A. Ghatak.
54. Membrane Processes for Effluent Treatment, National course Environmental Health and Safety Management in Process Industries at Chemical Engineering Dept., I.I.T Roorkee from January 25-29, 2011. P K Bhattacharya.
55. Chemical Engineering: Directions and Opportunities, MANIT – Bhopal, October 23, 2010. PK Bhattacharya.
56. Plenary Lecture on Typical Liquid Mixtures Separations through Pervaporation: An Emerging Membrane Based Technology at S-CHEMCON 2010, 6th Annual Session, Students Chemical Engineering Congress 2010, Process Industries & Sustainable Development, 24-25 September, 2010 at RVR & JC College of Engineering, Guntur, Andhra Pradesh. PK Bhattacharya.
57. Multi-objective Optimization: Bio-mimetic Adaptations of Genetic Algorithm, IChE's Deepak Group's Padma Bhushan Prof. L. K. Doraiswamy CHEMCON Distinguished Speaker Lecture, CHEMCON Annual Meeting, Annamalai University, S.K. Gupta.
58. Population Balance-Based Model of Bubble Entrapment and Growth during Bulk Polymerization of Methyl Methacrylate (Invited Lecture), Symposium on Recent and Emerging Advances in Chemical Engineering (REACH 2010), IIT Madras, S.K. Gupta.
59. Step Growth Polymerization: a Personal Journey (Plenary Lecture), International Conference on Modeling, Optimization and Computing (ICMOC-2010), NIT Durgapur, S.K. Gupta.
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 Hyderabad, Hyderabad, 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.
65. Irreversible aging in aqueous Laponite suspension, Institute for Condensed Matter and Complex Systems, University of Edinburgh, Scotland, Yogesh M Joshi.
66. Unveiling thermodynamics at nanoscale. Amar Dye Chem Award Lecture, CHEMCON Annual Meeting, Annamalai University, Jayant K. Singh.

Chemistry

67. Organometallic and Organic Synthesis Highlights and New Perspectives, NEHU, Shillong Trinuclear Cu-NHC Complex: Synthesis, Structural Characterization, Reactivity and a Potential Transmetallating Agent, Ganapathi Anantharaman,* Renganathan Srirambalaji, Biswajit Santra, and Indranil Roy.
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. NSFMOOC, November 20, 2010, Bangalore: Dr. J. K. Bera.
72. ICOMC, July 19 - 23, 2010, Singapore: Dr. J. K. Bera.
73. Goldschmidt-2010", held at Knoxville, Tennessee, USA, June 15-19, 2010: Prof. A. Chandra.
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.
76. 1st International Collaborative and Cooperative Symposium, Singapore, November 15-16, 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.
80. Chemistry through Electrostatic Viewglasses, CLRI, Chennai: 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.
82. Molecular Tailoring : an Art of the Possible for Ab Initio Treatment of Large molecules and Molecular Cluster, TCS 2010, I.I.T. Kanpur: 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.
85. Lewis acid-mediated S_N2-type ring-opening of aziridines and azetidines: synthetic and mechanistic perspectives: NOST symposium-2010, Goa: Dr. M. K. Ghorai.
86. Ring-opening chemistry of small ring aza-heterocycles: mechanistic investigation and controlled stereoselection: Humboldt Kolleg 2011, IIAP Bangalore, 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.
90. University of Madras Golden Jubilee Alumni Endowment Award Lecture on February 23, 2011 at Department of Organic Chemistry, University of Madras, Guindy Campus, Chennai: Prof. F. A. Khan.
91. National Symposium on Organic Synthesis held during February 18-19, 2011 at IIS University Jaipur: Prof. F. A. Khan.
92. National Conference on Recent Trends in Organic Synthesis-2011 (RTOS-2011) held during February 24-26, 2011 at School of Chemistry, Bharathidasan University, Tiruchirappalli, Prof. F. A. Khan.
93. Organic Oxidations with IBX and Organocatalysis with Proline Current Trends in Organic Synthesis, Bangalore University, Bangalore, 9-10 April, 2010: Prof. J. N. Moorthy.
94. Rational Design of Organocatalysts for Enantioselective Transformations, Interface between Chemistry and Biology: A Perspective, September, IICT, Hyderabad, t 21-24 September, 2010: Prof. J. N. Moorthy.
95. Molecular Design for Manipulation of Organic Material Properties, Annual Meeting of the Indian Academy of Sciences, Goa, 12-15 November, 2010: Prof. J. N. Moorthy.
96. Importance of Weaker Interactions in Molecular Self-Assembly and Lattice Inclusion Compounds.
97. International conference on Facets of Weak Interactions, Calcutta University, Kolkata, 13-15 January, 2011: Prof. J. N. Moorthy.
98. Organic Oxidations with IBX and Organocatalysis with Proline Green Chemistry for Sustainable Future, 23-25 March 2011, Garhwal University, Srinagar, Uttarkhand, Prof. J. N. Moorthy.
99. Photoinduced Enolization, Isomerization and Cyclization Reactions in the Solid State Invited Speaker in the FIRST Gordon Conference on Crystal Engineering, Waterville Valley, New Hampshire, USA, June 6-11, 2010: Prof. J. N. Moorthy.
100. Influence of Sterics on the Photochemistry of Aromatic Aldehydes, Ketones and Chromenes Invited speaker in the biennial 'XXIII IUPAC Symposium on Photochemistry' Ferrara, Italy, July 11-16, Prof. J. N. Moorthy.

101. Exploitation of Sterics in the Oxidation Chemistry with IBX and Organocatalysis with Proline Indo-French Conference on Organic Synthesis (IFCOS), Villard de Lans, France, September 13-17, 2010: Prof. J. N. Moorthy.
102. Modern Trends in Inorganic Chemistry Research: A Tribute to Acharya Prafulla Chandra Ray, National Seminar (International Year of Chemistry: Chemistry in our lives) under the thrust area "Design, Synthesis, Interaction, Chemical and Biochemical Activities of Different Functional Molecules" on the occasion of the 150th Birth Anniversary of Acharya Prafulla Chandra Ray, Department of Chemistry, The University of Burdwan (March 15-17, 2011) (March 15, 2011): Prof. R. N. Mukherjee.
103. Metal-Coordinated Radicals. Bioinorganic and Inorganic Perspectives, Celebration of the 150th Birth Anniversary of Acharya Prafulla Chandra Ray and the International Year of Chemistry, "Frontiers in Synthetic and Bioorganic Chemistry 2011, Indian Institute of Science Education and Research (IISER) Kolkata, Mohanpur Campus March 13, 2011): Prof. R. N. Mukherjee.
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.
105. Metal-Coordinated Radicals. Inorganic and Bioinorganic Perspectives, Department of Chemistry, Indian Institute of Technology Kharagpur, Kharagpur (December 15, 2010): Prof. R. N. Mukherjee.
106. Metal-Coordinated Radicals. Inorganic and Bioinorganic Perspectives, "Emerging Trends in Chemical Sciences (ECTS-2011)" Department of Chemistry, Faculty of Science, Banaras Hindu University (February 19, 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.
108. Chemical Reactions In Silico, IIT Kharagpur, Kharagpur, Dr. Nisanth N. Nair.
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.
114. Triarylbismuthanes as atom-efficient multi-coupling organometallic nucleophiles for carbon-carbon bond formations in organic synthesis 11th Eurasia Conference on Chemical Sciences The Dead Sea, JORDAN, October 6-10, 2010: Dr. M. L. N. Rao.
115. New Generation Organometallic Reagents and Coupling Reactions: Triarylbismuths as Atom-economic Multi-coupling Organometallic GREEN reagents in Organic Synthesis, XIV NOST-Organic Chemistry Conference Cidade De Goa, GOA; Dec 5-8, 2010: Dr. M. L. N. Rao.

116. New Generation Organometallic Reagents for Coupling Reactions: Triarylbismuths as Atom-economic Multi-coupling Organometallic GREEN Reagents in Organic Synthesis: Dr. M. L. N. Rao.
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.
118. New Generation Organometallic Reagents and Coupling Reactions: Triarylbismuths as Atom-economic Multi-coupling Organometallic GREEN Reagents in Organic Synthesis: Dr. M. L. N. Rao.
119. National symposium on Organometallic Chemistry and Organic Synthesis: Highlights and Perspectives (OMCOS-2011), Department of Chemistry, North Eastern Hill University (NEHU), SHILLONG MARCH 28-29, 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.
122. Effects of Axial Ligand and their Orientations in a Nonplanar Porphyrinic Environment, International Conference on 60th Anniversary Conference on Coordination Chemistry in Osaka, JAPAN during September 27-30, 2010 organized by Chemical Society of Japan: Dr. S. P. Rath.
123. Modulation of Iron Displacements and Axial Ligand Orientations in a Nonplanar Porphyrinic Environment, International Conference on Porphyrin and Phthalocyanines held on New Mexico, USA during July 3-10, 2010: Dr. S. P. Rath.
124. A Novel Series of Oxo and Hydroxo Bridged Fe(III) Bisporphyrins: Synthesis, Structure and Properties, Department of Chemistry, University of California, Davis, USA on 12th July, 2010, Dr. S. P. Rath.
125. A Novel Series of Oxo and Hydroxo Bridged Fe(III) Bisporphyrins: Synthesis, Structure and Properties, DST Group Monitoring Workshop at Department of Chemistry, IITK on April 05, 2010: Dr. S. P. Rath.
126. Viscosity Inside A Nano-Cavity: A Femtosecond Fluorescence Up-Conversion Study Of Malachite Green Iupan Conference on Photochemistry 2010, Ferrara, Italy 14 July 2010: Dr. P. Sen.
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.
128. Frontiers of Chemistry: Molecules, Materials, and Drugs. Council Meeting ISCA 7th May 2010: Prof. Vinod K. Singh.
129. Role of Chemistry in Quality of Life. Council Meeting ISCA 7th May 2010: Prof. Vinod K. Singh.
130. Asymmetric Synthesis: Past, Present, and Future Perspectives. XIV Ischia Advanced School of Organic Chemistry (IASOC) conference, September 25-20, 2010, Italy: Prof. Vinod K. Singh.
131. Recent Progress in Enantioselective Organocatalytic Aldol Reaction, INDIGO meeting, October 3rd - 6th 2010 in Regensburg, Germany: Prof. Vinod K. Singh.

132. Organocatalytic syn- and anti-Aldol Reactions in Aqueous Medium, Annual meeting Indo-French Center for Organic Synthesis (IFCOS) VI meeting. September 14th-17th 2010, Université de Renne, Rennes Cedex, France Enantioselective: Prof. Vinod K. Singh.
133. Organic Synthesis: From Creativity to Sustainability and Human Well-being". "Dr. G.P.Chatterjee Memorial Lecture" for the year 2010-2011, Indian Science Congress, Jan 3-7, 2011, SRM University, Kattankulathur: Prof. Vinod K. Singh.
134. Enantioselective reactions catalyzed by chiral pybox-diph-metal complexes. 98th Indian Science Congress, Jan 3-7, 2011, SRM University, Kattankulathur: Prof. Vinod K. Singh
135. Enantioselective Organocatalytic Aldol Reaction, IISER Mohali 20-21st Feb. 2011: Prof. Vinod K. Singh.
136. Enantioselective Friedel-Crafts Alkylation Reactions Catalyzed by PYBOX-DIPH-Metal Complexes, National Symposia on Organic Synthesis, ICG, Jaipur, 18-19 Feb, 2011: Prof. Vinod K. Singh.
137. Creativity in Organic Synthesis and its Implications on Human wellbeing, University of Jammu, February 28, 2011: Prof. Vinod K. Singh.
138. Scalable Size and Complexities in Silver-Adenine Frameworks. First China-India-Singapore Symposium on Crystal Engineering, National University of Singapore, Singapore, 2010: Prof. S. Verma.
139. Development of New Methodologies in Carbohydrate Chemistry: Application in the Synthesis of Some Biologically Important Molecules, Department of Chemistry, IIT Guwahati, Guwahati (January 03, 2011): Prof. Y. D. Vankar.
140. Invited speaker and Session Presided at CLEO-2010 in San Jose, CA during May 18-20, 2010, Prof. D. Goswami.

Electrical Engineering

141. Ultra Wideband Microwave Imaging and Testing, One Day Workshop on Ultra Wideband Systems (UWBS-2011), Aligarh Muslim University, Aligarh, Department of Electronics Engineering, Aligarh, U.P., India, March 24, 2011, M.J. Akhtar.
142. Material and Process Development in Fabrication of Polymer Solar Cells, International Conference on Photochemical Conversion of Solar Energy, held Amirtha V. V. University Coimbatore, Invited Talk by Dr. RS Anand.
143. Organic Semiconductor Devices and Modules - Processing and Characterization, UGC-NRC-Material Winter School on Polymer Synthesis, Characterization and Application, 20 -24 Dec 2010 held at Department of Materials Engineering, IISc, Bangalore, Invited Talk by Dr. RS Anand.
144. Recent Advances in Solar Cell Technologies, National Conference on Innovations in Power Electronics, Controls and Systems, M.A.M Engineering College, Tiruchy, Tamil Nadu, 18 Mar 2011. Invited Talk by Dr. RS Anand.
145. Automatic and Robust Detection of Facial Features in Frontal Face Images, 2011 UKSim 13th International Conference on Modelling and Simulation, Cambridge, UK March 2011, Anima Mazumdar, Laxmidhar Behera and KS Venkatesh.
146. A Novel Approach of Human Motion Tracking with the Mobile Robotic Platform, 2011 UKSim 13th International Conference on Modelling and Simulation,

- Cambridge, UK March 2011. Meenakshi Gupta, Laxmidhar Behera and KS Venkatesh.
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.
 148. A System of Systems Approach to Face Feature Tracking in Real-Time Applications, IEEE Conf on System of Systems Engineering, 2010, (22-24, June) Loughbrough, UK, Himansu Singh, Vipul Arora, Laxmidhar Behera and Ashish Dutta.
 149. Face Feature Tracking with Automatic Initialization and Failure Recovery, 2010 IEEE International Conferences on Cybernetics & Intelligent Systems (CIS 2010) and Robotics, Automation and Mechatronics (RAM 2010), Singapore, 28-30 June, 2010, Himansu Singh, Vipul Arora, Laxmidhar Behera and Ashish Dutta.
 150. Optimal design and control of a hand exoskeleton, 2010 IEEE International Conferences on Cybernetics & Intelligent Systems (CIS 2010) and Robotics, Automation and Mechatronics (RAM 2010), Singapore, 28-30 June, 2010, Felix Orlando, Ashish Dutta, Anupam Saxena and Laxmidhar Behera.
 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 plenary 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, IIT 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.
 155. Criteria for choice of material for building organic solar cells DAE-SSPS-2010, Manipal University, 26th to 30th December, 2010. S. Sundar Kumar Iyer.
 156. Recent Developments in Solar Power Generation at the QIP sponsored short-term course on 'Intelligent System Applications to the Smart Electric Grid Solutions held at IIT Kanpur, 18th November, 2011. S. Sundar Kumar Iyer.
 157. Organic Electronics in Future of Electronics session at the 2nd The Indo-German Frontiers of Engineering Symposium, co-organized by the Department of Science and Technology (DST), Government of India and the Alexander von Humboldt Foundation at Potsdam, Germany, June 24 - 27, 2010. S. Sundar Kumar Iyer.
 158. Organic Solar Cells tutorial at the International Symposium on Photovoltaic Science and Technology at IIT Kanpur on 12th January, 2010. S. Sundar Kumar Iyer.
 159. Wind-Solar Hybrid Power Plant: Universal Renewable Power Module at GE Global Research Center Bangalore on Jan 27, 2011, Mishra S. K.
 160. DC-DC converter for microgrid application' at IEEE lecture at MNNIT Allahabad on Feb. 09, 2011, Mishra S. K.

161. A Hessian based numerical convergence analysis of a dual-grid Tikhonov regularized Gauss-Newton reconstruction approach to electromagnetic tomography, Oral presentation at PIERS 2011, Marrakesh, Morocco, Mar 20-23, 2011. (PIERS: Progress in Electromagnetics Research). Naren Naik and Jerry Eriksson.
162. Robust PI controller for multi-purpose voltage controlled VSI, Proceedings of Emobility - Electrical Power Train, 2010, Leipzig, Germany, 10.1109/EMOBILITY.2010.5668043, November 2010. S. Shah and P. Sensarma, P. Chaudhary.
163. Stability analysis of input-series output-parallel connected buck rectifiers, Proceedings of Emobility - Electrical Power Train, 2010, Leipzig, Germany, 10.1109 / EMOBILITY. 2010.5668072, November 2010. P. Chaudhary, A. Agarwal and P. Sensarma, P. Chaudhary.
164. Power Converters, Crompton Greaves Global R&D Ltd., Electronics Division, Mumbai, P. Sensarma.
165. Basics of Transmission Lines, Impedance Transformer, Matching Circuits, 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.
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.
169. RF and Microwave Measurement 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.
170. Composite Right/left Handed (CRLH) Meta-Material Transmission Line in IEEE Seminar on 'Meta-materials-A Paradigm in Electromagnetics' on Dec. 23 - Dec 24, 2010 organized by IEEE AP/MTT Joint Chapter, Gujarat Section. K.V.Srivastava.
171. Microwave Filter Design for RF Application," in 3-days short course on RFIC Design Penang, Malaysia Dec. 13 - Dec 15, 2010. Kumar Vaibhav Srivastava.
172. A Scheme to Prevent Distance Relay Mal-operation under Power Swing and Voltage Instability using Synchrophasor Measurements' in the ECE Department, Mississippi State University USA on 20th July 2010. Srivastava S.C.
173. Synchrophasors based Wide Area Monitoring, Protection and Control at Crompton Greaves Limited, R&D Division, Mumbai on 1st October 2010. Srivastava S.C.
174. Smart Grid: Few Concepts and System Perspective' in a QIP Course on Intelligent System Applications to the Smart Electric Grid Solutions at IIT Kanpur, November 15, 2010. Srivastava S.C.

175. Wide Area Monitoring and Control' during 16th National Power Systems Conference, Hyderabad, on December 15, 2010, Srivastava S.C, Dr. Saikat Chakrabarty.
176. Invited plenary lecture on 'Smart Management of Electricity Grid using Synchronphasor Technology' in National Seminar on Recent Advances in Electrical Power and Energy System Management (RAEPESM-2011), March 25-26, 2011, MMMEC Gorakhpur, Srivastava S.C.
177. International Conference on the European Energy Markets (EEM10), June 23-25, 2010, Madrid, Spain. Singh S.N.
178. IEEE General Meeting, July25-29, Minneapolis, USA, Singh S.N.
179. 4th 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.
181. National Conference on Emerging Trends in Engineering and Technology, Shree L R Tiwari College of Engineering, Mumbai, March 11,2 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.
183. Contemporary Resistant Movements in Orissa and Social Impacts of IT Revolution in India - UGC Lecture Series, Department of Sociology, University of Pondicherry (a Central University) October 25- 27, 2010. B.K. Pattnaik.
184. Science and Technology under Globalisation, Social and Economic aspects of Industrial Technology transfer from Developing countries to Developed countries. Lecture Series, Department of Humanities and Social Sciences IIT Guwahati, Dec. 14-18, 2010, B.K. Pattnaik.
185. Contemporary Tribal Resistance Movements in Orissa: Studies on Collective Mobilization by the Development Induced Displaced. - UGC Special Lecture series, Dept. of Sociology, North Eastern Hill University (NEHU), Shillong, March 3-5, 2011, B.K. Pattnaik.
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.
187. Disaster and Lifestyle: Cultural Considerations- Seminar on "*Prevention is Better than Cure: Ways to keep Lifestyle Diseases at Bay*". Hindu College, University of Delhi, September 8-10, 2011, Kumar Ravi Priya.
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.
190. Science Fiction and/as Science Communication, Indo-USSTF Science and Technology Forum workshop on Science Communication, Centre for Contemporary Studies, IISc, Bangalore, Dec. 13-15, 2010, Suchitra Mathur.
 191. Human Rights in the Era of Globalization. Keynote Address: National Seminar on *Globalization and Marginalized Groups*, Department of Sociology, Halim Muslim PG College, Kanpur, January 12, 2011 - Munmun Jha.
 192. Subjective well-being and Happiness: Regret, Felt Justice/ Injustice, and Parental attitudes as possible correlates. Invited talk at *PsyCon*, M.L.B. College, Bhopal, January 6-8, 2011. - L. Krishnan.
 193. Distributive justice in India - A comment on the state-of-the-art. State-of- the-Art Lecture (invited). 20th Annual Conference of NAOP (National Academy of Psychology, India), JNU, New Delhi - December, 2010. L. Krishnan.

Industrial Management and Engineering

194. Power Procurement, Bidding & Trading Strategy (Demand Forecasting)" Training Programme on Power Market and Power Trading for APTRANSCO, Hyderabad, 14-16 Dec. 2010 Organized by Indian Energy Exchange (IEX), Anoop Singh.
195. Indian Power Market: Road Ahead for Buyers, Sellers and Regulators", NPTI-PXIL Course on Power Markets, 14th - 16th July 2010, NPTI Faridabad, Anoop Singh.
196. Renewable Energy: Policy Options and Research Issues", Short term course on "Energy & Environment Management, 10-14 May 2010, NIT Hamirpur, Anoop Singh.
197. Energy & Environment Policy: Current Status and Research Issues", Short term course on "Energy & Environment Management, 10-14 May 2010, NIT Hamirpur, Anoop Singh.
198. Implementing Renewable Energy Certificates in India: Economic Analysis for a Proposed Regulatory Approach", Indo-European Workshop on Solar Energy, 20-22, April 2010, IIT Rajasthan, Anoop Singh.
199. Effective Regulation for Renewable Energy: An Analysis of Renewable Energy Certificates", India Energy Security Summit: Energy Security for a sustainable future, 03-04 March 2011, New Delhi, IPPAI, Anoop Singh.

Mathematics

200. Mathematical Modeling & Epidemiology at a refresher course in the Department of Mathematics, Delhi University, Dec. 22 and 23, 2010, Peeyush Chandra.
201. Resource person for the summer workshop on Mathematical Modeling, held at Kalasalingam University, Krishnankoil (TN), June 2010, Peeyush Chandra.
202. Resource person in the DST Workshop on 'Stability & Bifurcation Analysis and Pattern Formation in Mathematical Ecology and Epidemiology' at IIT Kanpur, Feb. 25-March 2, 2011, Peeyush Chandra.
203. Presented 02 lectures in the Centre of Advanced Study, Punjab University during December 22-25, 2010, M. K.Kadalbajoo.

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

206. Transport Processes at Micro Scales, National Workshop on Recent Advances in Micro-Electro_mechanical System, Institute of Technology, BHU, March 07-09, 2011, P. K. Panigrahi.
207. Optical Characterization of MEMS, National Workshop on Recent Advances in Micro-Electro_Mechanical System, Institute of Technology, BHU, March 07-09, 2011, P. K. Panigrahi.
208. Pulsating Heat Pipe Heat Exchangers, 21st International Symposium on Transport Phenomena, Kaohsiung City, Taiwan ROC, November 2010, S. Khandekar.
209. Biofuels Research: Challenges and Opportunities, Keynote Speech in 5th International Conference on Innovations in Food and Bio-process Technology, December 2010, AIT, Bangkok, Thailand, A.K. Agrawal.
210. Bifurcations in higher-dimensional nonlinear systems, Indo-UK workshop on Advanced Instability Methods, 10-12 January, 2011 Chennai, India, P. Wahi.
211. Dynamical systems approach to fluid convection, International seminar series on Applied Mechanics, Center for Applied Dynamics Research, University of Aberdeen, Aberdeen, Scotland, UK, July 16, 2010, P. Wahi.
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
214. Microscale Heat Conduction, presented during the QIP sponsored course on Microscale Transport Phenomena at IIT Kanpur, January 2011, K. Muralidhar.
215. Dropwise condensation on textured surfaces, presented during the QIP sponsored course on Phase Change Phenomena at IIT Kanpur, January 2011, K. Muralidhar.
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.
217. Recent developments in computational fluid flow and heat transfer, presented at Vellore Institute of Technology, Vellore, 4th February 2011, K. Muralidhar.
218. Mathematical modeling of fluid flow and transport phenomena in biological systems, presented during the QIP sponsored course on Biofluid Mechanics at IIT Kanpur, March 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.
220. Lager-Eddy Simulation: A Preview, Workshop on Computational Fluid Dynamics, Centre for Modeling, Simulation and Design, University of Hyderabad, 21-25 September, 2010, S. Sarkar.

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.
224. Equilibrium shapes of rubble-pile binaries, IIT Hyderabad, ME, Hyderabad, Ishan Sharma.
225. Stability of rubble-pile asteroids, IIT Kanpur, AE, Kanpur, Ishan Sharma.
226. Applications of Ultrasonic Tomography to find defects in Composite Materials, Preconference tutorial on Signal Analysis, Simulation and Modeling; National Seminar on Non-Destructive Evaluation, Dec 7-8, 2010, Organized by ISNT, N. N. Kishore.
227. Micromanufacturing: An Overview, 4th Int. and 24th AIMTDR conference held at Visakhapatnam (A.P.) during Dec. 13- Dec. 15, 2010, V. K. Jain.
228. Micromachining: An Overview, Pre-conference workshop held at Andhra University, Visakhapatnam (A.P.) during Dec. 10- Dec. 12, 2010, V.K. Jain.
229. Nanofinishing Techniques: An Overview, Indo-Austria workshop held at NFTDR at Hyderabad, Dec. 8-, 2010, V.K. Jain.
230. Flexible Manufacturing Processes, BCT Kumaon Engineering College, Department of Mechanical Engineering, Dwarahat, N V Reddy.
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

232. Present Understanding and Future prospects of Phase and Microstructure Evolution in Severe Plastic Deformation Processes, Coorg, Karnataka, 20-23rd February, 2011, Kallol Mondal.
233. Amorphous alloy and Its Composite for Futuristic Engineering Applications, at Institute of Engineers, Kanpur Chapter, 26th December 2010, Kallol Mondal.
234. Hydroxyapatite based bioceramic composites for hard tissue replacement and Analytical/Experimental study on cell-electric field interaction; SCTIMST, Trivandrum, 4th March, 2010, B. Basu.
235. Development of borides for armour applications; DMRL, Hyderabad, 5th March, 2010, B. Basu.
236. Processing-Microstructure-Biocompatibility relationship of HAp based composites and experimental results on influence of electric and magnetic field on cell-material interaction; Advanced Ceramics department, Universität Bremen, Germany, 5th July, 2010, B. Basu.
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.

239. Multi-Stage Spark Plasma Sintering to Develop ZrB₂-18wt%SiC-xwt%TiSi₂ Composites With Better Properties; 3rd International Ceramic Congress, ICC-3, held at Osaka, Japan during November 14-18, 2010, Basu.
240. Influence of moderate intensity Static Magnetic Field exposure on Bacterial cell adhesion and viability on biomaterial surface; 3rd International Ceramic Congress, ICC-3, held at Osaka, Japan during November 14-18, 2010, B. Basu.
241. Electrically Stimulated Enhancement of Cell Proliferation on Ferroelectric-Hydroxyapatite Composites; 3rd International Ceramic Congress, ICC-3, held at Osaka, Japan during November 14-18, 2010, B. Basu.
242. Bridging gap between Materials Science and Biology: An interdisciplinary approach to Design biomaterials; MRS-J Conference in Yokohama, Japan, 21st December, 2010, B. Basu.
243. Spark Plasma Sintering of HA-Ti composite: in Vitro biomineralization and cell culture; at the 35th International Conference & Exposition on Advanced Ceramics & Composites (ICACC), held in Daytona Beach, Florida, January 23-28, 2011, 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.
246. Cytotoxicity and genotoxicity property of Hydroxyapatite-mullite eluates, at the International Symposium on the Safe use of Nanomaterials and Workshop on Nanomaterial Safety: Status, Procedures, Policy and Ethical Concerns (SUN 2011), held at Lucknow, India, February 1-3, 2011, B. Basu.
247. Genotoxicity property of Hydroxyapatite-mullite eluates, at the Indo-Australian meet at IISc, Bangalore, sponsored by DBT, Government of India, February 7, 2011, B. Basu.
248. Bridging gap between Materials Science and Biology: An interdisciplinary approach to Design biomaterials; Department of Ceramic Engineering, Banaras Hindu University (BHU), Varanasi, India, 28th March, 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.
250. Hydrogen in steel, Mahindra Ugine Steel Industries, Khopoli, Maharashtra , 2011 January, D. Mazumdar.

Physics

251. MBI Workshop on Transport in a Cell, Mathematical Biosciences Institute, Columbus, Ohio, USA (2010), D. Chowdhury.
252. Adv. School on Living Mechanics: Cells, Tissues and Organisms, ICTS prog., National Centre for Biological Sciences, Bangalore (2010). D. Chowdhury.
253. TWIM: Tata Institute of Fundamental Research, India, and Weizmann Institute of Science, Israel, Interaction Meeting, Mumbai (2010). D. Chowdhury.

254. 4th India-Singapore Joint Physics Symposium, Singapore, (2011). D. Chowdhury.
255. Mobility, Diffusivity and Relaxation in Organic Semiconductors: Measurements that Challenge Models Invited Lecture delivered at Institute of Materials Research, Singapore in Symposium on Organic & Polymer Electronics: IMRE, December 9-10, 2010 Singapore.
256. Transport and Injection of Carriers in organic Semiconductors in SCDT Organic Electronics Course Indian Institute of Technology, Kanpur July 05, 2010.
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.
259. Challenges of turbulence simulations on petascale supercomputers, In Next Generation Application Challenges on PARAM Yuva, CDAC Pune, Feb. 2011 (Plenary talk). M.K. Verma
260. Field Reversals in Convection and Dynamo, in National Conference on Nonlinear Systems and Dynamics (NCNSD) 2011, Trichy, Jan. 2011. M.K. Verma.
261. Accurate Fluid Simulations Using Pseudo-spectral & Spectral-element Method, in Indo-Russian Workshop on High Performance Computing in Science and Technologies, CDAC Pune, Nov 2010. M.K. Verma.
262. Dynamo transition, in UAH Huntsville Workshop 2010 on Partially Ionized Plasmas throughout the Cosmos, Nashville USA, October 2010 (work with R. Yadav, M. Chandra, S. Paul, and P. Wahi). M.K. Verma.
263. Bifurcation and chaos in Rayleigh-Benard convection, in Perspectives in Nonlinear Dynamics (PNLD), IISc Bangalore, July 2010 (work with P. Wahi, P. Pal. S. Paul, and P. K. Mishra). M.K. Verma.
264. Varieties of organization in the flowing driven state of vortex matter, at International conference on Vortex Matter in Superconductors, Chicago, Organizers, Argonne National Laboratory, USA. July 31st - 5th Aug, 2011, Satyajit Banerjee.
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.
268. Photonic crystals - I, II and III", SERC School on Nano-Optics, Physics, Hamirpur, 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.
274. Entanglement and decoherence in quantum dots.; Indo Brazil Workshop on cold atoms, mesoscopic systems and QI processes, Hyderabad, Oct 16-18 2010, V. Ravishankar.
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.
9. World Seismic Safety Initiative (WSSI), National Technological University, Singapore, Board of Directors Meeting, 27-28 Feb. 2011, D. C. Rai.
10. Visited HS&E Group, BARC, Mumbai during June 5-12, 2011, S.N. Tripathi.

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.
13. University of Edinburgh, INSA visiting scientist, May - July 2010, Yogesh M Joshi.

Chemistry

14. Visiting Professor for a month during June-July, 2010, Univ. of Strasbourg, Strasbourg, France: Prof. J. N. Moorthy.

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.
19. National Institute of Science and Technology, NARA, Japan, 15 March - 27 March 2011, Behera L.
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 KGMU), 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.
26. Visited Power Grid Corporation of India Ltd., Gurgaon and Crompton Greaves Ltd., Mumbai, 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.
31. Was examiner for the PhD thesis of Mr Hari Varma, Dept of Instrumentation, I.I.Sc, Bangalore in July 2010, Naren Naik.

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.
36. Guest Professor- Academic and administrative advisory activities -March 2011, 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 Management Institute, Manipal; Maastricht University, School of Business, Netherlands, J.Chatterjee.

Mechanical Engineering

38. Northwestern University, Evanston, Collaborative Research work, May - June 2011, N.V. Reddy.
39. IIT Hyderabad, To interact with students and faculty, Nov 2010, N.V. Reddy.
40. IITChennai, Discussion on collaborative Research, Visitor, June 26, 2011, Prof. Sunil Kumar, dept. of Physics, IIT Chennai, S. Das.
41. University of Aberdeen, Aberdeen, Scotland, UK, P. Wahi.
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.
44. Universitaet Kassel, Alexander von Humboldt Fellowship, June 01-30, 2010, Prof. Dr. A. Luke, P.Munshi.
45. Ulsan National Institute of Science and Technology, Korea, Collaborative Research, Visitor, May 2010, Ishan Sharma.
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 piezo-resistive pressure sensors" at CEERI-PILANI. July 14-23, 2010. Bhattacharya.
50. Visited Maruti Udyog Limited for collaborative project on detection of reliability failures for automation in WELD shop 3, 23rd March, 2011, S. 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.
55. Chicago University, USA, Oct. 2010, National Center for Atmospheric Research, Boulder, USA, Oct. 2010, TIFR, India, June 2011 M.K. Verma.
56. Workshop at University Libre de Bruxelles, Belgium, Aug. 2011, CDAC Pune, June 2011. M.K. Verma.
57. Collaboration ENS, Paris, Aug. 2011. M.K. Verma.
58. Tata Institute of Fundamental Research, Mumbai, Research, Visiting Scientist, May - June, 2011, Satyajit Banerjee.
59. NIT Hamirpur, SERC school on Nano-optics, Invited speaker, 21-22 Sept, 2010, R.Vijaya.
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 in 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.
6. ISPRS Workshop on Digital Preservation of Archaeological Heritage, IIT Kanpur, 18-19 October 2010, Government and Industry participants, Bharat Lohani with Onkar Dikshit.
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

8. Delivered a lecture in ICTS School on “Understanding Molecular Simulations: Theory and Applications” UMS (2010) held at IIT Kanpur during November 4-13, 2010, Dr. P. A. Apte.
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.
10. Recent Trends in Fuels & Lubricant (continuing education programme), DMSRDE, Kanpur, Scientists of DRDO laboratories, 21 to 25 February 2011, Yogesh M Joshi.
11. Delivered a lecture in ICTS School on “Understanding Molecular Simulations: Theory and Applications” UMS (2010) held at IIT Kanpur during November 4-13, 2010, Dr. Jayant K. Singh.

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.
16. Convener of "School on Understanding Molecular Simulations: Theory and Applications", sponsored by ICTS, TIFR Mumbai, held at Indian Institute of Technology Kanpur, November 3-13, 2010. (Co-Conveners: Drs. M. Ranganathan, N. Nair (from IITK), S. Sengupta (IACS Kolkata) and S. Sastry JNCASR Bangalore): Prof. A. Chandra.

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.
18. A short course on "OFDM based next generation wireless standards", May 17-19, 2010 (co-organized with Aditya Jagannatham), Banerjee Adrish.
19. A short course on "Cognitive radio: The Next Frontier in Wireless Communications", November 23-25, 2010, Banerjee Adrish.
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.
22. Organized a National Workshop on 'Deployment and Use of NPTEL Courses' during 12-13 July 2010, 2010 at IIT Kanpur, Srivastava S.C.
23. Organized a National Workshop on 'Deployment and Use of NPTEL Courses' during 30-31 October 2010, 2010 at JSS NOIDA, Srivastava S.C.
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

25. Two Lectures: "Communication Across Cultures" and "Netiquette": Workshop on Soft Skills, Department of English, Babu Banarasi Das National Institute of Technology and Management, Lucknow. September 18, 2010, T. Ravichandran.
26. Two Lectures: "Cross-Cultural Communication" and "Non-Verbal Communication" - QIP Short Term Course on Culture and Communication- QIP Centre, Indian Institute of Technology Roorkee, Roorkee - June 21- 25, 2010, T. Ravichandran.
27. Two lectures: "Introduction to Human Rights" and "Naxalite Violence and Response", QIP Short-term course on Macro Human Culture and Social Environment. QIP Centre, IIT Roorkee, June 7 2010, Munmun Jha.

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-September 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

31. Transport Phenomena in Phase-Change and Reacting Systems, Short-term Course, Duration: 5days, Place IIT Kanpur, Date: January 10-15, 2011, Jointly organized M.K. Das and S. Khandekar.
32. Micro Scale Engineering, Short Term Course on January 3rd to January 8th (2011), Engg. College Teachers and Research Labs, P. K. Panigrahi.
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.
35. A one-week short course sponsored by Quality Improvement Program for engineering college teachers and industry entitled "Diesel Particulate and NOx Emissions: Formation and Control", September 10-14, 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.
37. Bio-Fluid Mechanics, Conducted QIP sponsored short term course March 04-09, 2011, A.K. Saha.
38. Conducted an AICTE sponsored course on "Micromanufacturing". V.K. Jain.

39. QIP Course on Mechanics of Fracture: A Modern perspective, 19-24 March, 2010.

Materials Science Program

40. Emerging Trends in Carbon Nanotechnology, Quality Improvement Programme, IIT-Kanpur, 14-18th December, 2010, Academic Institutions, K. K. Kar.
41. Carbon Nanotechnology: Potential and Challenges, International Conference, IIT-Kanpur, 15-17th December, 2010, Academic Institutions, National Laboratories, Private Industries, K. K. Kar.

ANY OTHER IMPORTANT ACTIVITY

Aerospace Engineering

1. International Conference on Intelligent Unmanned Systems, Bali, Indonesia, Nov. 2010, C. Venkatesh.
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.
4. Session Chairman: International Conference on Intelligent Unmanned Systems, Bali, Indonesia, Nov. 2010, C Venkatesan.
5. Establishing high strain rate and optical testing facilities in Aerospace Structures Laboratory, R. Kitey
6. Session Chair, Materials Conclave (Frontiers in nanostructured materials for next-generation nanotechnology), IIT Kanpur, Dec 21, 2010, R. Kitey.
7. 37th Solid Mechanics Conference, Warsaw, Poland from 6-10 September 2010, P.M. Mohite.
8. ICC-CFT2011, held at IISc Bangalore, January 2011, C.S. Upadhyay.
9. SOLMECH 2010, held at Warsaw (Poland), 6-10th September 2010, C.S. Upadhyay.
10. Arrestor Barrier Analysis tool for LCA (sponsored by ADA), C.S. Upadhyay.
11. PhD student has submitted thesis titled "Micromechanics based continuum damage model for ply failure in unidirectional composites". Student: V. Murari, 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.
14. Seminar Presented, Hydrogen Energy Production Methods, TERI, University, New Delhi, 2011, D.P. Mishra.
15. Editor, 8th Asia-Pacific Conference on Combustion, 2010, D.P. Mishra.
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
18. Editorial board member, International Journal for Turbines and Energy, 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
 22. National Mission Project on Pedagogic Development : Introduction to Combustion, D.P. Mishra
 23. Virtual Combustion and Atomization Lab, D.P. Mishra
 24. Design and development of pedal powered car, D.P. Mishra.
 25. Control, Automation and robotics (CAR) Conference-2011 which was held in Hostel fort canning, Singapore during 28th Feb- 1st March 2011, Dr. A.K. Ghosh.

Biological Science and Bio-engineering

26. Member of the Governing Council, Motility & Functional Disease Association, established 2011, A. Pal.
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.
30. International Travel Award received by Vivek Modi from the Biophysical Society, U. S. A. in the 55th Annual Biophysical Society Meeting held in Baltimore, U.S.A. in March 2011 for his work “Differential binding affinities of anti-apoptotic MC1-1 and A1 proteins for the pro-apoptotic BH3 peptides: Understanding the molecular basis using MD simulations.”
31. Associate Editor, Annals of Neurosciences (official journal of the Indian Academy of Neuroscience), S. Ganesh.

Civil Engineering

32. Co-chair, Technical Session-I, Indo-US Workshop on Highway and Airport Pavement Engineering: Challenges and Opportunities, July 30-31, 2010, IIT Kharagpur, Das, A.
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.
39. Editorial board GIM International, Netherlands, 2009-2011, 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.
46. Member, Working Group for preparation of Science Plan on Aerosol and Greenhouse Gases Monitoring Research by Indian Meteorological Department, December 2010 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.
50. Reviewer of TRB's Taxation and Finance Committee, Washington, DC, USA, V. Vasudevan.
51. Reviewer of Elsevier's Research in Transportation Economics, 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.
55. Infosys Prize in Engineering and Computer Science, Infosys Science Foundation (2010). (<http://www.infosys-science-foundation.com/laureates.html>), Ashutosh Sharma.
56. Kapitsa Gold Medal, Russian Academy of Natural Sciences, RANS (2010), Ashutosh Sharma.
57. R. C. Mehrotra Memorial Lifetime Achievement Award, The Indian science Congress Association (2010), Ashutosh Sharma.
58. J. C. Bose National Fellowship, Department of Science & Technology (2006-2011), Ashutosh Sharma (http://dst.gov.in/whats_new/press_releases05/two-prestigious.html).
59. Elected Fellow, TWAS--The Academy of Sciences for the Developing World (2010). <http://www.twas.org/>, Ashutosh Sharma.
60. INAE Visvesvaraya Chair Professorship, Indian National Academy of

- Engineering, New Delhi (2011-2013), Ashutosh Sharma.
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.
 65. Research Advisory Council, Hari Shankar Singhania Elastomer and Tyre Research Institute, Kankroli, 2009-2011, Ashutosh Sharma.
 66. Council Member (Materials), Indo-French Centre for the Promotion of Advanced Research (IFCPAR), New Delhi, 2008-2011, Ashutosh Sharma.
 67. Member, Governing Body, Translational Health Science & Technology Institute (THSTI; DBT-MIT-Harvard partnership institute), Faridabad, 2008, 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.
 74. Ashutosh Sharma, Member, The Nano Applications and Technology Advisory Group (NATAG), Department of Science & Technology, New Delhi (2008-2012).
 75. Coordinator, Indo-US Workshop on Fabronics: Science of Advanced Fabrication, Aurangabad, December 17-21, 2010, Ashutosh Sharma.
 76. Coordinator, Indo- French Workshop/Seminar on Soft Interfaces: Self-organization, Functionalities and Applications, ESPCI, Paris, July 07-09, 2010, 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
- I. I. T. – Roorkee
 - I.T.-BHU
82. MEMBER: EDUCATION & RESEARCH COMMITTEE. P.K. Bhattacharya
- Member (2010-2011), Research Degree Committee (RDC) of Applied Chemistry/Chemical Technology/Chemical Engineering, GB Technical University, Lucknow
 - Member, Board of Chemical Engineering Studies – MA N.I.T. Bhopal.
83. REVIEWER/EVALUATOR: PROJECTS/PROPOSALS/PATENTS, P.K. Bhattacharya
- Indo-US Science & Technology Forum
 - Indo-French Centre for the Promotion of Advanced Research (IFCPAR)
 - DBT (Department of Biotechnology, GOI)
 - DST (Department of Science & Technology, GOI)
 - CSIR (Council of Scientific & Industrial Research – GOI)
 - Dr. D. S. Kothari Postdoctoral Fellowship Scheme in Sciences under UGC
84. Ph. D. THESIS EXAMINER, P.K. Bhattacharya
- I. I. T. Kharagpur
 - I.I.T. – Roorkee
 - Anna University, Coimbatore
 - Jadavpur University, Kolkata, West Bengal
 - Jawaharlal Nehru Technological University, Anantapur (A.P.)
 - Vidyasagar University, Midnapore 721 102, West Bengal
85. SERVICE FOR NATIONAL BOARD OF ACCREDITATION (NBA). P.K. Bhattacharya
- Gandhi Institute of Technology, Gunupur (Orissa)
86. CONFERENCE/SYMPOSIUM - ORGANIZING COMMITTEE, P.K. Bhattacharya.
- Members of Scientific Committee of “International Scientific Conference on Pervaporation and Vapour Permeation [PERMEA-2010 - Membrane Science and Technology Conference of VISEGRAD Countries]”, April 18-21, 2010, Torun (Poland).
 - Member, External Advisory Committee, S-CHEMCON 2010, 6th Annual Session, Students Chemical Engineering Congress 2010, Process Industries & Sustainable Development, 24-25 September, 2010 at RVR & JC College of Engineering, Guntur, Andhra Pradesh.
 - 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,

- IIT Bombay S.K. Gupta.
88. Life membership of National Academy of Sciences India (NASI), Y.M. Joshi.
 89. Amer-Dye Chem Award, IChE 2010, Jayant K. Singh.
 90. Member of high level committee HPC facilities of ministry of earth sciences, Jayant K. Singh.
 91. REVIEWER/EVALUATOR: PROJECTS/PROPOSALS/PATENTS, 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

93. Convener of "Golden Jubilee Conference on Molecules, Supramolecules and Materials", held at IIT Kanpur, October 1-3, 2010 (Co-Conveners: Drs. J. Bera and S. Verma): Prof. A. Chandra.
94. Convener 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.
97. Co-organizer with K. Srihari and P. Sen: Spectroscopy Dynamics of Molecules and Clusters (SDMC-2011), Feb. 16-18, 2011: Prof. D. Goswami.
98. Chair: Indo-US Discussion Meeting with Lockheed-Martin Team & Indian Researchers on Quantum Computing, Fulbright House, New Delhi: Jan. 17, 2011: Prof. D. Goswami.
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.
101. Kinetic Monte Carlo simulations of Silicon Germanium thin films, Poster, Theoretical Chemistry Symposium (TCS 2010), December 8-12, 2010, IIT Kanpur, Pinku Nath and Madhav 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.
104. Member, Editorial Board of Inorganica Chimica Acta (Elsevier) (2011 - 2013): Prof. R. N. Mukherjee.
105. Editor-in-Chief, Journal of Spectroscopy and Dynamics, Simplex Academic Publishers: Prof. D. Goswami.
106. International Council Member, Optical Society of America, USA: Prof. D. Goswami.
107. Special Issue Dedicated to Professor Animesh Chakravorty on the occasion of his 75th birthday, Inorg. Chim. Acta 2010, 363, 2693-3138. Acted as Guest Editor

- 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.
 109. Vice President, Chemical Research Society of India (2011-2014): 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

113. Election to the Technical Expert Committee of the Election Commission of INDIA: Rajat Moona.
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.
131. Editorial Board Editor, International Journal of Renewable Energy Technology, 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.
136. Real-Time Digital Simulation Facility for Advance Research in Power and Control, S.C. Srivastava, S.N. Singh, S. Chakrabarti, Parthasarthy Sensarma.
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.
140. Chaired Sessions entitled Collective Mobilization by the Development Induced Displaced and Liberalizing research in science and technology; Institutional aspects at ISA XVII World Congress of Sociology (International Sociological Association), University of Gothenburg, Sweden. July 12 and 13, 2010, B.K. Pattnaik.
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.
142. Resource person in the Brainstorming Session on "M.Sc. (Integrated) Economics Programme" Doon University, Dehradun, February 7, 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
 149. Team- building. Institute of Chartered Accountants of India, Kanpur (for CA Trainees): July 2010 and February 2011 - 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).
 155. Paper presented at the Asia- Pacific Business Research Conference organized by the World Business Institute, Australia, Feb 22, 2011, Paper authored by Dr. Dr. S.K. Mathur & Ms. Archana Srivastava.
 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

158. International Conference on Technology and Business Management (ICTBM-11), SZABIST, Dubai, March 28-30, 2011, Peeyush Mehta, R K Amit.
159. 14th Annual conference of Society of Operations Management, NITIE. Mumbai, December 2010. Lokendra Devangan, R K Amit, Peeyush Mehta, Kripa Shanker, Sanjeev Swami.
160. 14th Annual conference of Society of Operations Management, NITIE. Mumbai, December 2010. Peeyush Mehta R K Amit.
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 Aided 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.
 166. Reviewer: American J of Operations Research; Computers and Mathematics; International J of Manufacturing Technology and Management, RRK Sharma.
 167. Reviewer: International Journal of Case Studies in Management, World Development, Philosophy of Management, Decision, Rahul Varma.
 168. Appointment as Editor: American J of Operations Research from Mar 20, 2011 for a period of one year, Dr. RRK Sharma.
 169. Appointed to Research Advisory Board of National Institute of Science Technology & Development Studies, CSIR, New Delhi, India. Jayanta Chatterjee.
 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.
 174. Study Group for System Loading Charges, UP Electricity Regulatory Commission, Anoop Singh.
 175. Advisory Committee for Capacity Building of distribution Personnel under R-APDRP, Ministry of Power, Government of India, Anoop Singh.
 176. Research Advisory Committee, Council of Power Utilities, New Delhi, Anoop Singh.
 177. Proposed Modification in the Methodology for Calculating Escalation Indices for Use in Tariff Based Competitive Bidding, Central Electricity Regulatory Commission, Nov. 2010, 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.
 181. Biography Dr.S. Misra, IME, appeared in Marquis Who's Who in Science and Engg , USA, 2010, Dr.S. Misra.
 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.
 186. Member of VLFM Thailand mission, March 22 – 25, 2011 (visited various universities, research laboratories and Industry) N. V. Reddy.
 187. Member, Scientific Committee, The 6th International Conference on Micro Manufacturing, March 7-10, 2011, Tokyo, Japan, N. V. Reddy.
 188. Co-organized the minisymposium on “Mechanics and Biophysics of Lipid Bilayer Membranes” at the SIAM Conference on Life Sciences (LS10), 2010, 12-15 July, 2010, Pittsburgh, USA, S. Das.
 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 corers 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, Sesion 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.
206. Editorial board member, Materials Science and Engineering: C - Materials for Biological Applications (Elsevier Journal), B. Basu.
207. International Editorial Board, Indian Institute of Metals-University Press Series Member, B. Basu.
208. Associate Editor, Bioceramics Development and Applications; Ashdin Publishing, Belgium, B. Basu.
209. Editorial board member, "Journal of Materials Engineering Innovation-IJMatEI", published by INDERSCIENCE PUBLISHERS, UK (<http://www.inderscience.com/ijmatei>), B. Basu.
210. Editorial board member, "International Journal of Biomaterials", published by Hindawi Publishing Corporation, USA (<http://www.hindawi.com/journals/ijbm>), 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

215. Editor-in-Chief, International Journal of Mechanical Engineering and Materials Sciences, ISSN: 0974-584X, K.K. Kar.
216. International-Editorial-Board, Journal of Clinical Rehabilitative Tissue Engineering Research, ISSN 1673-8225, CN 21-1539/R, WK3862, Wanfang, K.K.

- Kar.
217. Editorial Board, International Journal of Plastics Technology, ISSN 0972-656X (Print)/0975-072X (electronic), K.K. Kar.
 218. Editorial Advisory Board, Journal of Recent Patents on Electrical Engineering, Bentham Science, ISSN: 1874-4761, K.K. Kar.
 219. Editorial Advisory Board, Journal of Recent Patents on Engineering, Bentham Science, ISSN: 1872-2121, K.K. Kar.
 220. Editorial Advisory Board, Journal of Recent Patents on Nanotechnology, Bentham Science, ISSN: 1872-2105, K.K. Kar.
 221. Editorial Advisory Board, Journal of Recent Patents on Mechanical Engineering, Bentham Science, ISSN: 1874-477X, K.K. Kar.

Physics

222. Development of an Indigeneous 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.
224. Active participation in department/institute administration: Convenor DPGC, Chairman SPGC, M.Sc. Physics lab in-charge, Optics Shop in-charge. Z. Hossain.
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.