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- 276. Hysteresis Measurements and Dynamic Mechanical Characterization of Functionally Graded Natural Rubber: Carbon Black Nanocomposites, Proceedings of International and INCCOM-6 Conference on Future Trends in Composite Materials and Processing, Indian Institute of Technology Kanpur, 12-14<sup>th</sup> December, 2007, pp. 448-453, S. Sandeep Ahankari and Kamal K. Kar.
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### Humanities and Social Sciences

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# Chemistry

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## **Physics**

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- 316. Some Unusual Electronic Patterns on Graphite Surface, to appear in Pramana (MESODIS-2006, IIT-Kanpur) [A.K. Gupta]
- 317. Instabilities in superconductors and in intense laser produced plasmas, Satyajit S. Banerjee, Shyam Mohan, Jaivardhan Sinha, Subendhu Kahaly, G. Ravindra Kumar, Proceedings of the 52nd DAE Solid State Physics Symposium, pg. 17, 2007.
- 318. Advances in magneto-optical imaging, Satyajit S. Banerjee, Proceedings of the 52nd DAE Solid State Physics Symposium, pg.1249, 2007.
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- 323. Large-scale behaviour of turbulent convection governed by low-dimensional fixed-points, in the Proceedings of ETC-11 (Porto), p. 609, 2007, M. K. Verma, J. J. Niemela, K. Kumar, S. Pal, and D. Carati.
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#### SEMINAR PRESENTED

## Aerospace

- 1. Shape Optimization for low Reynolds Number Flows, 14th International Conference on Finite Elements in Flow Problems, FEF07, Santa Fe, New Mexico, USA, March 26-28, 2007, D.N. Srinath, and S Mittal.
- 2. Mittal, Instabilities in flow past half a cylinder I 14th International Conference on Finite Elements in Flow Problems, FEF07, Santa Fe, New Mexico, USA, March 26-28, 2007, B. Kumar, J. J. Kottaram, A.K. Singh, and S.
- 3. Hysteretic behavior of circular cylinder undergoing vortex-induced vibration at low Reynolds, International Conference on Computation al Methods 2007 (ICCM2007), Hiroshima, Japan, April 4-6, 2007, TK Prasanth, and Sanjay Mittal.
- 4. Finite Element Methods in Fluid Flows, invited lecture at Civil Engineering, Chuo University, Tokyo, April 2, 2007, Sanjay Mittal.
- 5. Finite Element Methods in Fluid Flows, Aerospace Technologist, Meet; February 1-2, IIT Madras, Chennai, 2007, Sanjay Mittal.
- 6. Effect of a trip wire on flow past a bluff body, Proceedings of the lUTAM Symposium on Unsteady Separated Flows and their Control, Cnrfu, Greece, 18-22 June, 2007, Suresh Behara and Sanjay Mittal.
- 7. Effect of a trip wire on flow past a bluff body, the Proceedings of the National Conference on Wind Tunnel Testing (NCWT-2007), IIT Kanpur, India, July 12-14, 2007, Sanjay Mittal, Ashis Nandy and Kamal Poddar.
- 8. Hysteresis in vortex-induced vibration of a circular cylinder in the laminar regime, in the Proceedings of SAROD 2007- 3, d Symposium on Applied Aerodynamics and Design of Aerospace Vehicles, Hotel Mascot, Thiruvananthapuram, India, November 22-23, 2007, TK Prasanth, and Sanjay Mittal.
- 9. Finite element simulation of transition in the wake of a stationary circular cylinder, in the Proceedings of SAROD 2007- 3rd Symposium on Applied Aerodynamics and Design of Aerospace Vehicles, Hotel Mascot, Thiruvananthapuram, Ind ia, November 22-23, 2007, Suresh Behara, and Sanjay Mittal.
- 10. Aerodynamics of Mixed Compression Air Intake, in the Proceedings of SAROD 2007- 3Td Symposium on Applied Aerodynamics and Design of Aerospace Vehicles, Hotel Mascot, Thiruvananthapuram, India, November 22-23, 2007, Sanjay Mittal and Vivek P.

- 11. Flow-induced oscillations of two circular cylinders in tandem arrangement at low Re, in the Proceedings of the 7<sup>th</sup> Asian CFD Conference, Indian Institute of Science, Bangalore, India, November 26-30, 2007, TK Prasanth, and Sanjay Mittal.
- 12. Parallel computation on a Linux cluster: scalab ility study, in the Proceedings of the 7th Asian CFD Conference, Indian Institute of Science, Bangalore, India, November 26-30, 2007, Suresh Behara, and Sanjay Mittal.
- 13. Secondary instability in the wake of a bluff body, in the Proceedings of the T h Asian CFD Conference, Indian Institute of Science, Bangalore, India, November 26-30, 2007, Sanjay Mittal, Tariq Haque and Dhawal Buaria.
- 14. Global Instabilities in Non Parallel Flows, in the Proceedings of the 7<sup>th</sup> Asian CFD Conference, Indian Institute of Science, Bangalore, India, November 26-30, 2007, Sanjay Mittal.
- 15. VIV of two cylinders in tandem arrangement at low Re, in Book of Papers of the 5th Conference on Bluff Body Wakes and Vortex-Induced Vibrations BBVI V5, 12-15 December, Costa do Sauipe, Brazil, 2007, TK Prasanth, and Sanjay Mittal.
- 16. Hysteresis in VIV at low Re: effect of blockage & m\*, in Book of Papers of the 5th Conference on Bluff Body Wakes and Vortex-Induced Vibrations BBVIV5, 12-15 December, Costa do Sauipe, Brazil, 2007, Sanjay Mitt al and TK Prasanth.
- 17. Controlled Atomization: Needs and Challenges, , International Workshop on Advances in Combustion Science and Technology, Dec. 31st 2007- Jan. 2nd 2008, IIT Kanpur, A. Kushari.
- 18. Gas Turbine Combustion and Power Generation, IIT Kanpur Reach Symposium, March 2008. Khajuraho, A. Kushari.
- 19. Seminar on Aeroelasticity in Helicopters, Department of Aerospace Engineering, PARK College of Engineering and Technology, Coimbatore, August 2007, Dr. C. Venkatesan.
- 20. Seminar on Experimental studies on autonomous mini helicopter, Strategic Application of Lighter than Air vehicles, SASE, DRDO, Manali, Oct. 2007, Dr. C. Venkatesan.

## Biological Science and Bio-engineering

- 21. The Indian Institute of Technology Network. Opening talk at the meeting 2008 Annual Symposium: Exploring Collaborations with India, University of Nottingham, UK,18th March 2008, Prof. Pradip Sinha.
- 22. Genome-wide analysis and homology modeling of major intrinsic proteins in plants: Conservation in helix interface and diversity in selectivity filter.

- Invited talk, Indo-French Bioinformatics Meeting, Montpellier, France, 19<sup>th</sup> to 21<sup>st</sup> November, 2007, Dr. R. Sankararamakrishnah.
- 23. MD simulations of Bcl-2 apoptotic proteins: Functional significance of conformationally flexible regions, Invited talk, Indo-US Workshop on Spatial Kinematics and Protein Conformations. Indian Institute of Science, Bangalore, 10th to 11th December, 2007, Dr. R. Sankararamakrishnah
- 24. Bacterial adaptation to stress: uncovering structure-function relationships in Rel proteins. Invited speaker at the meeting 2008 Annual Symposium: Exploring Collaborations with India, University of Nottingham, 18th March 2008, Dr. Balaji Prakash
- 25. A Charge Reversal Differentiates (p)ppGpp Synthesis by Monofunctional and Bifunctional Rel Proteins. Invited speaker at First Annual Protein/Peptide Conference Pepcon 2008, BIT Life Sciences, Shenzhen, China, 23<sup>rd</sup> April 2008, Dr. Balaji Prakash.
- 26. Genetic diagnosis in Lafora disease: promises, challenges and pitfalls. Invited talk delivered in the International Conference on Genetic and Molecular Diagnosis in Modern Medicine, Kamineni Educational Society, Hyderabad, January 7-9, 2008, Dr. S. Ganesh.
- 27. Ubiquitin proteasome dysfunction in Lafora disease, Invited talk delivered in the BSI Forum, RIKEN Brain Science Institute, Wako-shi, Japan, December 19, 2007, Dr. S. Ganesh.
- 28. Advances in molecular genetics of neurological disorders, Distinguished Seminar Series, Department of Biotechnology, Alagappa University, Karaikudi, July 14, 2007, Dr. S. Ganesh.
- 29. Development of plant-parasitic nematodes, Centre for Biomolecular Studies, Univ. of Nottingham, UK, March 18, 2008, Dr. K. Subramaniam.
- 30. Biomechanical study of human stomach: gastric motility vs. drug design, Annual Symposium of Centre for Biolmolecular Sciences, Univ. of Nottingham, UK, March 18<sup>th</sup> 2008, Dr. Anupam Pal.
- 31. Biomechanics of transport through the GI Tract, Golden Jubilee Celebration Symposium, Central Mechanical Engineering Research Institute, Durgapur, July 2007, Dr. Anupam Pal.
- 32. Computational Biomechanical Analysis Leads to New Diagnostic Procedure for Dysphagia, Symposium on Assistive Technology, IIT Kanpur, February 2007, Dr. Anupam Pal.

#### Chemical

- 33. Invited Lecture on Pressure driven membrane processes for Effluent Treatment at Dairy Australian Industries Ltd. (DAIL) at Melbourne, Australia on 19th February, 2008, P.K. Bhattacharya.
- 34. Invited Lecture on Pressure driven membrane processes: Principles and Applications at Department of Chemical Engineering and Bio-molecular Engineering, University of Melbourne, Australia on 19th February, 2008, P.K. Bhattacharya.
- 35. Invited Lecture on Pressure driven membrane processes: viable unit operations for effluent treatment in National Seminar on Recent Advances in Chemical Engineering Operation and Process in Chemical and Allied Industries, at Institute of Technology, Guru Ghasidas University, February 5-6, 2008, P.K. Bhattacharya.
- 36. Invited Lecture on Pressure Driven Membrane Processes for Effluent Treatment, in All India Seminar on Zero effluent discharge- latest development In recycling during 22-23 December, 2007; Organized By The Institute of Engineers (India) West Bengal State Centre Chemical Engineering Division at Kolkata, P.K. Bhattacharya.
- 37. Invited Lecture on Pressure Driven Membrane Processes: Phenomena and Design during 10-14 December 2007 in QIP Short-Term Course at Department of Chemical Engineering, Indian Institute of Technology Guwahati, P.K. Bhattacharya.
- 38. Keynote Lecture on Pervaporation: an emerging separation technique for liquid mixtures, during 12-14 December 2007 in National Conference on Frontiers of Chemical Engineering at Department of Chemical Engineering, Indian Institute of Technology, Guwahati, P.K. Bhattacharya.
- 39. Department of Chemical Engineering, Cornell University, USA, 10<sup>th</sup> March, 2008, A. Ghatak.
- 40. Department of Chemical Engineering, University of Akron, USA, 7<sup>th</sup> March, 2008, A. Ghatak.
- 41. Department of Mechanical Engineering, University of Alberta, Canada, 5<sup>th</sup> March, 2008, A. Ghatak.
- 42. National Chemical Laboratory, Pune, 20th February, 2008, A. Ghatak.
- 43. Template Assisted Generation of Complex 3D Microchannels for Fabricating Microfluidic Channels. Unilever Research Center, Bangalore, 8th February, 2008, A. Ghatak.
- 44. Bhopal Gas Tragedy Revisited Invited talk delivered at (1)Petronas, Malaysia, Kerteh Integrated Petrochemicals Complex (KIPC), Kerteh, March

- 26, 2008 (2) Petronas, Malaysia, Petronas Towers, Kuala Lumpur, March 27, 2008, J.P. Gupta.
- 45. Rheological study of aging soft glasses of laponite, 18th Mid-Year Meeting of Indian Academy of Sciences, Bangalore, July 2007, Yogesh M. Joshi.
- 46. Ageing Dynamics in Soft Materials, National Chemical Laboratory-Pune, July 2007, Yogesh M. Joshi.
- 47. Ageing Dynamics in Soft Materials, Department of Physics, Indian Institute of Technology-Kanpur, September 2007, Yogesh M. Joshi.
- 48. Time-stress superposition in soft glassy materials,  $4^{nd}$  complex fluids symposium, Indian Institute of Technology Bombay , 2008, Yogesh M. Joshi, Reddy G. R. K.
- 49. Inhibition of Coke Formation During Pyrolysis of Hydrocarbons, Dept. of Petroleum Chemical Engineering, Aligarh Muslim University, March 7, 2008, D. Kunzru.
- 50. Chemical Sensors In Summer Course on Organic Electronics, 2007, Organized by Samtel Centre for Display Technologies, June 25-July 20, 2007, IIT Kanpur, S. Panda.
- 51. Plasma Etch of Silicon Deep Trench -- In a short course, Plasma Basics and Industrial Applications, Organized by the Department of Chemical Engineering, November 3-4, 2007, IIT Kanpur, S. Panda.
- 52. Stability of viscoelastic shear flows past deformable solid media, Invited lecture at the Fluid Dynamics Colloquium, Jawaharlal Nehru Center for Advanced Scientific Research, Bangalore, April 2007, V. Shankar.
- 53. Stability of fluid flow in neo-Hookean tubes and channels, Invited talk, Fourth National Symposium on Rheology of Complex Fluids, IIT Bombay, February 2008, V. Shankar.
- 54. Stability of fluid flow past deformable solids, Invited seminar, Mechanical Engineering Department, IIT Kanpur, March 2008, V. Shankar.
- 55. University of Erlangen-Nuernberg, Germany, A. Sharma.
- 56. National Institute of Standards and Technology (NIST, Maryland) , A. Sharma.
- 57. Northwestern University, A. Sharma.
- 58. Proctor & Gamble (Cincinnati), A. Sharma.
- 59. Multi-scaleMulti-scale simulation of Cluster formation and Self Assembly, Indo-US workshop, IIT K, 2007, Jayant K. Singh.
- 60. Surface phase morphological transitions on functional surfaces, REACH 2008, Jayant K. Singh.

### Civil

- 61. Visited Bhartiya Vidya Bhavans Sardar Patel College of Engineering, Andheri (West), Mumbai during August 24-26, 2007 as NBA expert for accreditation of their BE Civil Engineering Programme.
- 62. Visited National Institute of Technology, Tiruchirappalli, Tamilnadu during March 28-30, 2008 as NBA expert for accreditation of their M.Tech.Structural Engineering Programme.
- 63. Design of bituminous pavements for airports, CRRI-SHELL workshop on Future Technologies in Bituminous Construction for Highways and Airfield Pavements, October 27, 2007, New Delhi, Das Animesh.
- 64. Principles of bituminous pavement design and the recent trends, Short term course on Pavement Engineering with Geosynthetics: Looking Ahead, April 25, 2007, IIT Delhi, Das Animesh.
- 65. Seismic Bearing Capacity using Pseudo-Dynamic Approach in the Dept. of Civil Engineering, IIT, Kharagpur, 2007, Ghosh, Priyanka.
- 66. Integrated approaches for runoff forecasting, REACH2008 Symposium, 15-18 March 2008, Khajuraho, M.P., Organized by IIT Kanpur, India. f) Jain Ashu, Water resources: Challenges and possible solutions, 5 May 2007, Water Resources Day Celebrations of the Institution of Engineers (India) Ltd., HBTI, Kanpur, Jain Ashu.
- 67. Invited Speaker, World Housing Encyclopedia: A Global Earthquake Housing Safety Initiative of EERI & IAEE, Procedings of the International Workshop on Information Platforms for Disaster Reduction, 3-4 October 2007, Tsukuba, Japan, Murty, C.V.R.,.
- 68. Invited Speaker, Vision 2020: Disaster Education as a Component of Higher Engineering Education- Structural Engineering, National Round Table of INAE Fellows and Others, Vellore, 9-10 January 2008, Murty, C.V.R.
- 69. Keynote Speaker, Role of Architects in Ensuring Earthquake Safe Built Environment, International Workshop of the South-Asian Association for Regional Cooperation of Architects (SAARCH), 12-14 March 2008, New Delhi, Murty, C.V.R.

# Computer Science

- 70. Determinant versus Permanent. Invited talk at Theory and Applications of Models of Computation, Shanghai, May 2007, Manindra Agrawal.
- 71. Determinant versus Permanent. Invited talk at Algebraic Algorithms and Error Correcting Codes, Bangalore, Dec 2007, Manindra Agrawal.

- 72. Automorphisms of Finite Rings and Their Role in Computer Science. ISI Bangalore, Feb 2008, Manindra Agrawal.
- 73. Fermats Last Theorem: From Integers to Elliptic Curves. TCS TACTiCS meeting, Thiruvanantpuram, Feb 2008, Manindra Agrawal.
- 74. Identity Testing for Depth Four Circuits. IMSc Chennai, Mar 2008, Manindra Agrawal.
- 75. Polynomial Time Recognition of Insertion Languages, IMSc Chennai, Mar 2008, Somenath Biswas.

#### Electrical

- 76. Nonsystematic turbo codes, Department of Electronics Engineering, Cheng-Shiu University, Kaohsiang, Taiwan, July 2007, Adrish Banerjee.
- 77. PAPR reduction for OFDM signals, National Conference on Wireless and Optical Communication (WOC-2007), Chandigarh, December 2007, Adrish Banerjee.
- 78. Cognitive radio: A physical layer communication perspective, National Workshop on Signal Processing and its Application to Software Defined Radio, Kolkata, January 2008, Adrish Banerjee.
- 79. Communication over Relay Channels, Tutorial talk in Fourteenth National Conference on Communications, Mumbai, February 2008, Adrish Banerjee.
- 80. Optical networks: protection and restoration, Invited talk at NIT Hamirpur, Himanchal Pradesh, 15 March 2008, Y. N. Singh.
- 81. Future of learning management and support system, invited talk in Elearn-2007, 14 December 2007, CDAC Noida, UP, Y. N. Singh.
- 82. Brihaspati Learning Management System: An open source initiative, Rakshpal Bahadur Management Institute, Bareilly, 6 October 2007, Y. N. Singh.
- 83. Demystifying Next Generation Networks, Institute of Engineering and Technology, Rohilkhand University, Bareilly, 5 October 2007, Y. N. Singh.
- 84. Learning Management System: How to use it effectively? MIT School of Telecommunication, Pune, 30 August 2007, Y. N. Singh.
- 85. Introduction to Switching Systems, MIT School of Telecommunications, Pune, 29 August 2007, Y. N. Singh.
- 86. Next generation networks: Basics, TEQIP short course on Signal processing and control, Electrical Engineering Department, NIT Hamirpur, Himanchal Pradesh, 12 July 2007, Y. N. Singh.
- 87. Routing in Networks: Basics, TEQIP short course on Signal processing and control, Electrical Engineering Department, NIT Hamirpur, Himanchal Pradesh, 11 July 2007, Y. N. Singh.

- 88. Machine Vision Applications in Navigation, Surveillance and more, CITICOMS 2007, Coimbatore, 27-29 August 2007, K. S. Venkatesh.
- 89. Vision Everywhere: the Rising Role of Artificial Vision, KRIYA08, An International Techno-Management Festival: Feb 1, 2 & 3, K. S. Venkatesh.
- 90. Visual Inspection, Metrology and Surveillance, Division Lecture at DRHR, BARC Mumbai, Feb 25th, 2008, K. S. Venkatesh.
- 91. History and Prospects of Electronic Surveillance, HBTI Kanpur TechERA 2008 1st and 2nd of March, 2008, K. S. Venkatesh.
- 92. Engineering Solutions Using Artificial Vision, Azad Institute of Technology, Lucknow: March 19th, 2008, K. S. Venkatesh.
- 93. The 2007 International Conference on Machine Learning; Models, Technologies and Applications, Las Vegas, Nevada, USA, June 25-28, 2007, R. M. K. Sinha.
- 94. Workshop on Technologies and Corpora for Asia-Pacific Speech Translation, 3rd IJCNLP, Hyderabad, Jan 11, 2008, R. M. K. Sinha.
- 95. Fabrication of Semiconductor Lasers, , Seminar, IIT Bombay, Oct. 08, 2007, U. Das.
- 96. Refractive Index and Absorption in Interdiffused Nano-Structures, International conference-cum-workshop on Nanoscience and Nanotechnology, AIT, Gurgaon, 17-21 Dec. 2007, R. K. Sonkar, T. Bhowmick and U. Das.
- 97. Quantum Well Intermixed Lateral Grating Assisted Weighted Directional Coupler, Department of Electronics Engineering, Institute of Technology, Banaras Hindu University (IT-BHU), Varanasi, Dec. 27-29, 2007, A. Barve, U. Das, and R. Nag.
- 98. An experimental investigation of the effects of environmental and fog condensation nuclei parameters on fog visibility Posterpresentation, IASTA-2007, NPL, N. Delhi, India, 14-16 Nov., 2007, V. Pratap, V. Bharat, N. Tripathi, S. N. Tripathi, T. Gupta, A. Mishra, and U. Das.
- 99. Presentation on New Neuron Models and Applications, 23<sup>rd</sup> December, 2007, MAIT, Delhi, India, Dr P.K.Kalra.
- 100. Lecture on Model Based Audio Source Separation, December, 2007, DD Course, Electrical Engineering Department, IIT Kanpur, India, Dr P.K.Kalra.
- 101. Lecture on Video Compression, December, 2007, DD Course, Electrical Engineering Department, IIT Kanpur, India, Dr P.K.Kalra.
- 102. Presentation on Agriculture Power Demands and Management, 1-2 Oct. 2007, USAID workshop, Pune, India, Dr P.K.Kalra.
- 103. Delivered an invited lecture on Fossil and Bio-fuels: Energy and Environment in Indian Perspective at the International Conference

- organized by IIT Europe Alumni at Paris, France on 12th May 2007, Dr S.C.Srivastava.
- 104. Delivered an invited lecture on Technologies that will Change the Future at IIT London Alumni workshop at London, U.K. on 14<sup>th</sup> May 2007, Dr. S.C. Srivastava.
- 105. Delivered an invited lecture on Secure Operation of Power System in Electricity Markets in a one day workshop organized at IIT Khargpur on 4<sup>th</sup> August, 2007, Dr.S.C.Srivastava.
- 106. Delivered an invited lecture in a short term training course on Best Practices in Distribution organized at IIT Kanpur during 27-29 November, 2007, Dr. S. C. Srivastava.
- 107. Delivered an invited talk on Emerging Technologies in Power Sector at EMCO Mumbai on 23<sup>rd</sup> January 2008, Dr.S.C.Srivastava.
- 108. Delivered an invited lecture on Reactive Power Concepts and its Management in Power Systems at a workshop organized by Powergrid in Kanpur 30th January 2008, Dr.S.C.Srivastava.
- 109. Short-term course on Power System Control, Stability and Operation, Andhra University College of Engineering, Vishakhapattanam, October 25-27, 2007, (Guest Lectures), Dr S.N.Singh.
- 110. 2<sup>nd</sup> Workshop on Laboratory Teaching in Electrical Engineering (LTEE-08), KNIT Sultanpur, India, Feb 28-29, 2008 (Key Note speaker), Dr. S.N.Singh.
- 111. Democritus Univ. Xanthi, Greece during May 2007, Dr. S.N. Singh.
- 112. Seminar on Power Electronic Applications in Power Systems and Power Quality, Vasavi College of Engineering, Hyderabad, March 10, 2008, Dr.P. Sensarma.
- 113. Invited Lecture on Kinetic modelling of plasma discharges, Short Term Course on Plasma Basics and Industrial Applications, IIT Kanpur, Nov 2007, Dr.N.Gupta.
- 114. Seminar on Surface Degradation characteristics on nano-composites, INSA Lyon, France, July, 2007, Dr.N.Gupta.
- 115. Delivered the IEEE sponsored seminar entitled Design and Implementation of an Optimum Power Quality Conditioner (UPQC) with Minimum VA Loading in CDAC, Trivandrum, June 27, 2007, Dr. S.P.Das.
- 116. Delivered an invited talk entitled Harmonics and Power Quality Standards in Power Q: National Seminar Cum Exposition on Power Quality and Reliability, 15-16 October 2007, New Delhi, Organised by CII LM Thapar Centre for Competitiveness, Chandigarh, Dr. S. P.Das.
- 117. Delivered an invited talk entitled Power Quality Problems and Solutions Lohia Starlinger, Kanpur, May 10, 2007, Dr. S. P.Das.

- 118. Delivered an invited seminar on Electric Drives during the National Workshop Development in Power, Power Electronics, and Drives in Vasavi College of Engineering, Hyderabad, March 10, 2008, Dr. S. P. Das.
- 119. Antennas Research at IIT Kanpur, Presented at University of Kansas, Lawrence, USA, Dr. A.R.Harish.
- 120. Passive and active RFID and location technology research an overview, Presented at Boeing, St. Louis, USA, Dr. A. R. Harish.

# Industrial & Management

- 121. Combinatorial Optimization Problems Learning Manual for workshop on Mathematical Modeling optimization and their applications 23-27 April ,2007 Delhi, Ashok K. Mittal.
- 122. Operations management a view from patents literature Operations management seminar, SCMHRD Pune Aug12,2007, Ashok K. Mittal.
- 123. Productivity for sustainable development HAL lucknow Feb,2008, Ashok K. Mittal.
- 124. (Inaugura Address) Are the Five Factors in the FFM the Quarks of Personality? , National Conference-cum-Workshop on Advances in Five-Factor Model of Personality and Factor Analytic Methodology, Department of Psychology, University of Pune, January 30-31, 2008, Sharma, N. K..
- 125. Research Methodology, MIT, Ghaziabad, July 11, 2007, Sharma, N. K.
- 126. Factor Analytic Methodology, Department of Psychology, University of Pune, January 31, 2008, Sharma, N. K. .
- 127. Bankers Institute of Rural Development, Lucknow, Training Session on Applications of ICT for rural development, April, 2007, Sarkar, Runa.
- 128. Workshop to Critique 11<sup>th</sup> Five year Plan, 3i Network, New Delhi, Focus on Environmental Policies, May 2007, Sarkar, Runa.
- 129. European Commission Review Panel, Brussels, Overview of activities conducted under the AEGIS of OPAALs project by IIT Kanpur, September 2007, Sarkar, Runa.
- 130. Infovision 2007, The Knowledge Summit, Mumbai, Panelist for Social Networks and the Semantic Web, December 2007, Sarkar, Runa.
- 131. The Strategy Academy, New Delhi, Training session on Application of Macroeconomics to everyday Business for executives all across the country through video conferencing, March 2008, Sarkar, Runa.
- 132. The Future of Energy Markets in India: Structure and its Regulation, IITK REACH Symposium, Khajuraho Mar. 15-18, 2008, Singh, Anoop.
- 133. The role of integrated gasification combined cycle in clean coal, Clean Coal Asia 2007 Conference, Singapore, 17-18 Oct. 2007, Singh, Anoop.

- 134. Retention in the times of downsizing and restructuring: end of HRM? , NIPM UP chapter Kanpur, 27th October 2007, Varman, Rahul.
- 135. Measurement of Bullwhip Effect in a Supply Chain, Joint Work in Mechanical Aerospace and Industrial Engineering, IIT Kanpur and NTU, Singapore [10th July, 2007], K.Shanker, S.Agrawal and R.N.Sengupta.
- 136. DEAL as a Model for Participatory Social Innovation, Sciences & the Humanities in the Knowledge Society: Indo-German Deliberations on Research Policy, NISTADS & German Centre for Research in Higher Education, New Delhi, April 3-4, 2007, Jayanta Chatterjee.
- 137. Retail Marketing in the Networked Society Seeking Some New Meanings, Keynote Address, Seminar on Retail Management, Jagran Institute of Management, Kanpur, April 14 2007, Jayanta Chatterjee.
- 138. The Digital Ecosystem Framework and the Web 2.0 as a Knowledge Co-Creation Process - What we learnt form the DEAL Project, Keynote Address, Info Vision 2007: Knowledge Summit, International School of Information Management and rediff.com. Mumbai, December 17-18, 2007, Jayanta Chatterjee.
- 139. Social Marketing Strategy for Agricultural Innovation The Digital Eco-System Model, Tenth National Conference on e-Governance, Chandigarh, February 2-3, 2008, Jayanta Chatterjee.
- 140. Marketing Rural Digital Services in India Design Challenges for SST, International Conference on Services Marketing & Technology Applications, TAPMI, Manipal, February 15-16, 2008, Jayanta Chatterjee.
- 141. Creating Value Through Collaboration: The New Mantra in Global Business, Lal Bahadur Shastri Institute of Management & Development Studies, Lucknow. March 1, 2008, Jayanta Chatterjee.
- 142. Genealogy of Sub-Prime crises and its impact on the Indian markets, American Express, Gurgaon, 19th November 2007, B.V.Phani.
- 143. Differences in Management for Different Types of IT-Based Enterprises Conference on India & Other Emerging Economies (BRIC) A Comparative Study, SAS Institute of Information Technology, Mohali, 24 Oct 2007, Sinha, Arun P.
- 144. Innovation & Management Lecture at Dr. IT Planets Institute of Technology & Management, near Chandigarh, 24 Oct 2007, Sinha, Arun P. .
- 145. Managing Innovation and Change in Public Situations Half Day Training Session to Conservators of Forests, National Forest Academy, Dehradun, 25 Oct 2007, Sinha, Arun P.
- 146. Two way clustering of Gene Expression Data Analysis invited speaker at the workshop on Bio Informatics organized held at Tirupathi on Feb 22 2008, B. Chandra.

- 147. Data Mining and its Applications, IMR College, Ghaziabad, February 14, 2008, B. Chandra.
- 148. Database Management Systems and its Applications, Amity University, Noida, March 7, 2008, B. Chandra.

### Materials and Metallurgical

- 149. Galvanic corrosion of light metal couples for automotives, Florida International University, Miami 15 May 2007, R. Balasubramaniam.
- 150. Galvanic corrosion of light metal couples for automotives, Arizona State University, Tempe 17 May 2007, R. Balasubramaniam.
- 151. New Insights on Indian Wootz Steel, Salem Steel Plant, Salem 09 June 2007, R. Balasubramaniam.
- 152. Marvels of Indian Iron Through the Ages, Indian Institute of Technology, Kanpur, 19 August 2007, R. Balasubramaniam.
- 153. Marvels of Indian Iron Through the Ages, National Science Museum, Lucknow, 07 Sep 07, R. Balasubramaniam.
- 154. Story of the Delhi Iron Pillar, Indian Institute of Technology, Bombay, 14 September 2007, R. Balasubramaniam.
- 155. Y-TZP Ceramics: Toughness tailoring and Tribological Properties, Department of Materials and Metallurgical Engineering, University Polytechnica Cataluynya (UPC), Barcelona, Spain on 28<sup>th</sup> May, 2007 (Invited talk), B. Basu.
- 156. Microstructure and Properties of WC-based Nanocomposites and Hapcontaining Biocomposites at MTM, Katholieke Universiteit Leuven, Belgium on 31st May, 2007. (Invited talk), B. Basu.
- 157. Microstructure and Properties of WC-based Nanocomposites and Hapcontaining Biocomposite at CIRIMAT, ENSIACET, Toulouse, France on 4<sup>th</sup> June, 2007. (Invited talk), B. Basu.
- 158. How to design Hap-based Biocomposites? at Fourth Research Conference of the European School of Materials Science and Engineering, held at UPC, Barcelona on 7-8th June, 2007. (Invited talk), B. Basu.
- 159. Spark Plasma Sintering Process and opportunities to develop of Nanoceramics/Nanocomposites using SPS at Focussed Workshop on Sintering at Coorg, India, 2-6<sup>th</sup> December, 2007. (Invited talk), B. Basu.
- 160. Designing Biomaterials for Hard Tissue Replacement Applications at Indo-US workshop on Ceramics for Medical Applications, 10-12<sup>th</sup> December, 2007, Chennai, India. (Invited talk).B. Basu Friction and Wear properties of selfmated Alumina and Zirconia in Cryogenic Environment at ALUMINA-2008, CGCRI, Kolkata, India on 28<sup>th</sup> February, 2008. (Invited talk), B. Basu.

- 162. Opportunities to develop Nanoceramics and ceramic Nanocomposites using spark plasma sintering Secure Materials Center, Materials & Structures Laboratory, Tokyo Institute of Technology, Japan on 4<sup>th</sup> March, 2008. (Invited talk), B. Basu.
- 163. Understanding the deformation of high purity metals (Ti, Cu) during cryogenic sliding conditions presented at 11<sup>th</sup> Lightweight Alloys Seminar National Institute of Materials Science (NIMS), Tsukuba, Japan, 5<sup>th</sup> March, 2008. (Invited talk), B. Basu.
- 164. Densification and Properties of spark plasma sintered Y-TZP Nanoceramics and WC-ZrO<sub>2</sub> Nanocomposites, Extreme Energy-Density Research Institute, Nagaoka University of Technology, Japan, 6<sup>th</sup> March, 2008. (Invited talk), B. Basu.
- 165. Opportunities to develop Nanoceramics and ceramic Nanocomposites using spark plasma sintering COE talk at Institute for Materials Research/Deputy Director, Tohoku University, 7th March, 2008 (Invited talk), B. Basu.
- 166. Fundamental process engineering in steelmaking: From laboratory to steel melt shop, NMD ATM, 2007, Mumbai, D. Mazumdar.
- 167. Yield improvement in steel melt shop through reduction in tundish skull, NMD ATM, 2007, Mumbai, D. Mazumdar.
- 168. Activated Sintering of Stainless Steels, at International Symposium on Advances in Stainless Steels (ISAS 2007) (April 2007), A. Upadhyaya.
- 169. Microwave Sintering at DMRL, Hyderabad on January 26, 2008, A. Upadhyaya.
- 170. Process Cost Optimization through Sintering Time Compression, at Kanpur Institute of Engineering and Technology (KIET) on March 1, 2008, A. Upadhyaya.
- 171. Alloy Design through PM Route for ITER, at the Institute of Plasma Research (IPR), Gandhinagar on April 30, 2008, A. Upadhyaya.

### Mechanical

- 172. Delivered a seminar in the 2<sup>nd</sup> Joint IIT Kanpur-NTU Singapore workshop in Mechanical, Aerospace and Industrial Engineering, IIT Kanpur, 5<sup>th</sup> -6<sup>th</sup> April 2008, P.K. Panigrahi.
- 173. Delivered a series of lectures (9 hours) on Optimization theory in IIIT Hyderabad, Dec 2007, B. Dasgupta.
- 174. Lecture, Micro-heaters, Micro-pumps and PCR micro-reactors for biological applications, NUT-IITK symposium, Indian Institute of Technology, Kanpur, Apr. 2008, S. Bhattacharya.

- 175. Lecture, Lab on chip analysis of Nucliec acids, Workshop on environmental science and engineering, Indian Institute of Technology, Kanpur, Jan. 2008, S. Bhattacharya.
- 176. Institute Lecture Miniaturized Nucliec acid analysis using micro-chips, Samtel Center for Display Technologies, Indian Institute of Technology-Kanpur, September 2007, S. Bhattacharya.
- 177. Institute Lecture BioMEMS and Lab on chip approaches for analysis of nucleic acids, Biosciences and Bioengineering department, Indian Institute of Technology-Kanpur, August 2007, S. Bhattacharya.
- 178. Invited lecture Bio Micro Electro Mechanical Systems, Meghnad Shaha Institute of Technology, Techno India Group, Kolkata, August 2007, S. Bhattacharya.
- 179. Invited Talk on Modeling of Free Surface Flows and Bubble Formation in Film Boiling, National Workshop CFD Approach on Fluid Flow, Heat and Mass Transfer, IIT Roorkee, April 12-13, 2007, G. Tomar and G. Biswas.
- 180. Delivered a series of lectures (9 hours) on Optimization theory in IIIT Hyderabad, Dec 2007, B. Dasgupta.
- 181. Invited talk (CMERI Golden Jubilee Lecture Series, lecture only) Mathematical Analysis of Turbulent Flows for Practical Applications, CMERI, Durgapur, December 3, 2007, G. Biswas.
- 182. Modeling of Free Surface Flows with a Focus on the Analysis of Bubble Formation in Film Boiling, Bhatnagar Memorial Lecture (lecture only) at the Congress of Indian Society of Theoretical and Applied Mechanics (ISTAM), BNM Institute of Technology, Bangalore, December 14-16, 2007, G. Biswas.
- 183. Prediction of bubble growth in film boiling using a variant of coupled level-set and volume-of-fluid method, 2<sup>nd</sup> Joint Workshop NTUS-IITK Workshop in mechanical, Aerospace, Industrial and Management Engineering, IIT Kanpur, April 5-6, 2008, G. Tomar, G. Biswas and A. Sharma.
- 184. Introduction to Experiments; Schlieren and Shadowgraph; Inverse Techniques; three lectures given during the QIP course entitled Modern Measurement Techniques in Solid and Fluid Mechanics, held during 7-12 May 2007 at IIT Kanpur (coordinators: P. Venkitanarayanan and S. Khandekar), K. Muralidhar.
- 185. Using lasers in micromachining, lecture given during the QIP course entitled Micromachining during 18-15 June 2007 at IIT Kanpur, coordinator: V.K. Jain, K. Muralidhar.
- 186. Generalized modeling of flow and transport in porous media, presented at the Joint IIT Kanpur NTU Singapore symposium on Mechanical, Aerospace, and Industrial Engineering held at NTU Singapore during 10-11 July 2007, K. Muralidhar.

- 187. Laser measurements in Fluid and Thermal Sciences, Keynote lecture delivered at the International Conference on Recent Trends in Mechanical Engineering, College of Engineering, Ujjain, KN 46-52, October 2007, K. Muralidhar.
- 188. Reconstruction of Time-dependent Concentration Gradients around a KDP crystal growing from its aqueous solution, Subir Kar Memorial Lecture delivered at the 37th Fluid Mechanics and Fluid Power Conference, BIT Mesra (Ranchi), during 10-12 December 2007; also see pp 195-208 in the conference proceedings, K. Muralidhar.
- 189. Growth of YAG crystals in a Czochralski Process, presented at the INAE Annual Convention held during 7-8 December 2008 at RCI Hyderabad, K. Muralidhar.
- 190. Exploitation of gas hydrates as an energy source, presented at the second REACH symposium of IIT Kanpur at Khajuraho held during 15-18 March 2008, K. Muralidhar.
- 191. 7th Asian Computational Fluid Dynamics Conference, held in Bangalore, 26-30th Nov07, Dr. S. Sarkar.
- 192. University Institute of Chemical Technology, Mumbai, UICT- Alkyl Amine Foundation Day Young Scientist Award Lecture, 4<sup>th</sup> August 2007, A.K. Agarwal.
- 193. Presented seminar in Rajiv Gandhi Technical University, Bhopal, 2007, A.K. Agarwal.
- 194. Incremetal Sheet Metal Forming at Multi Scales. Northwestel11 University. Evanston. USA, Indo-US workshop on Advanced and Futuristic Manufacturing, June 20-21, 2007, N.V. Reddy.
- 195. Rapid Manufacturing, University of Waterloo, Waterloo, Canada, July 17, 2007, N.V. Reddy.
- 196. Flexibility in Manufacturing Processes. CMERI, Durgapur. December 14.2007, N.V. Reddy.
- 197. Incremental Sheet Metal Forming, DMRL, Hyderabad, December 2007, N.V. Reddy.
- 198. Optimization problems in elementary geometry lecture delivered in Department of Mathematics, University of Alabama at Huntsville, U.S.A, June 21, 2007, A. K. Mallik.
- 199. From natural numbers to numbers and curves in nature, lecture delivered at Mechanical Engineering Department, Vanderbilt University, Nashville, U.S.A, June 22, 2007, A.K. Mallik.
- 200. Mathemagical Black Holes, lecture delivered at IISER, Mohali, December 5, 2007, A.K. Mallik.

- 201. The Puzzling Primes, lecture delivered at IIIT, Hyderabad, January 10, 2008, A.K. Mallik.
- 202. Sir Alfred Bray Kempe An Amateur Kinematician. Lecture delivered at IIT Delhi, March 07, 2008, A.K. Mallik.
- 203. From Natural Numbers to Numbers and Curves in Nature. Lecture delivered at IIT Delhi, March 07, 2008, A.K. Mallik.
- 204. Invited lecture on Smart Materials & Design of Intelligent Systems during a two day refresher course on Advances in Materials & Material Selection in Design in Department of Mechanical Engineering, Harcourt Butler Technological Institute during March 10-11, 2007, B. Bhattacharya.
- 205. Invited lecture on Health Monitoring of Composite Structures with Smart Sensors during a two day refresher course on Composite Materials: Potential & Challenges in Department of Mechanical Engineering, Harcourt Butler Technological Institute during December 28-29, 2007, B. Bhattacharya.
- 206. Invited Talk on Finite Element Modeling of Metal Forming Processes: Issues and Challenges on the occasion of the inauguration of the R & D Centre of Sandvik Asia Ltd, Pune on February 27, 2008, P.M. Dixit.
- 207. Phase-Change Thermal Management Technology, invited in-house lecture series delivered at Mumbai and Delhi to industry participants, February, 2008, S. Khandekar.
- 208. Properties of Pendant Drops on Textured Surfaces, lecture delivered during 1st Joint NTUS-IITK Workshop in Mechanical, Aerospace and Industrial Engineering, Singapore, July 2007, S. Khandekar.
- 209. Remote Access Real Time Laboratory via Internet, lecture delivered during QIP short-term course titled Modern Experimental Techniques in Mechanics of Fluids and Solids, IIT Kanpur, May 2007, S. Khandekar.
- 210. Non-Intrusive Temperature Measurement Techniques, lecture delivered during QIP short-term course titled Modern Experimental Techniques in Mechanics of Fluids and Solids, IIT Kanpur, May 2007, S. Khandekar.
- 211. World Energy Resources: Status and Perspectives, lecture delivered during QIP short term course titled Advances in Vehicle Emission Control Technology, IIT Kanpur, May 2007, S. Khandekar.
- 212. Fuel Cell Technology in the background of World Energy Resource Perspective, lecture delivered in National Workshop titled Fuel Cell Technology: Progress and Prospects, IIT Kanpur (supported by Shastri Indo-Canadian Institute, New Delhi), Kanpur (UP), 2007, S. Khandekar.

#### **Humanities and Social Sciences**

- 213. Presented Reports of Vulnerability Mapping and District Situation Analysis for HIV/AIDS in Six Districts of UP, based on studies sponsored by UNICEF Lucknow, UPSACS, Lucknow, 19 July 2007, A.K. Sharma.
- 214. Lectures on Research Methods, Department of Political Science, Christ Church College, Kanpur, 12-14 January 2008, A.K. Sharma.
- 215. Lectures on Research Methods, Department of Sociology, Banaras Hindu University, Banaras, 24-25 January 2008, A.K. Sharma.
- 216. Grammar of Conceptual Space, Plenary Lecture, International Conference of South Asian Languages (ICOSAL-8), Aligarh Muslim University, Aligarh, India, 2008, Achla M. Raina.
- 217. Semantics of Events, Invited Lecture, Department of Linguistics, BHU, Varanasi, India, 2008, Achla M. Raina.
- 218. Human Development: Whats Rights Got to do With It? Invited Lecture. Third Refresher Course in Economics: Macro Economic Issues of the Indian Economy: Theory and Practice, UGC-Academic Staff College, Benaras Hindu University, Varanasi, 8 September 2007, Munmun Jha.
- 219. Terrorism and Human Rights. Invited Lecture. Human Rights Training and Sensitization Workshop for Jail Officials. Centre for Human Rights, Bihar Institute of Public Administration and Rural Development, 26 April 2007, Munmun Jha.
- 220. Human Rights Concepts. Invited Lecture. Human Rights Training and Sensitization Workshop for Jail Officials. Centre for Human Rights, Bihar Institute of Public Administration and Rural Development, 25 April 2007, Munmun Jha.
- 221. Presented a paper on Towards a Self-Reliant Indian Consumer: Problems in Perspective in the National Seminar on Consumer Protection in India: Problems and Prospects at G. B. Pant Social Science Institute, Allahabad, during 25-26, February 2008, T. Ravichandran.
- 222. Delivered an Invited and Sponsored Lecture on Postmodern Textual Complexities and Advocated Curatives at Kogakuin University, Tokyo, Japan on 3 November 2007, T. Ravichandran.
- 223. The Mind and the Body Matrix in Cyberpunk, in the 6<sup>th</sup> International Symposium on Advanced Technology (ISAT) on Kansei: Developments and Applications held from 4 to 6 November, 2007 at Kogakuin University (Tokyo Urban Tech), Tokyo, Japan. First Plenary Paper Presentation, T. Ravichandran.
- 224. Delivered an invited lecture on Qualitative Research Tools during the training session organized at IIT Kanpur on September 28, 2007 on District

- Situation Analysis of HIV/AIDS amongst the adolescents in Vaishali and Muzaffarpur districts of Bihar, Kumar Ravi Priya.
- 225. Presented the paper entitled, Experiencing Our True and Transcendental Self: What Recent Developments in Qualitative Research has to Offer to Researchers and Participants at the National Seminar on Indian Psychology: Theories and Models at SVAYASA, Bangalore on 26-28 December, 2007, Kumar Ravi Priya.
- 226. Delivered invited talk (Partially funded by the Russian Academy of Sciences to visit, IHNST, RAS, Saint Petersburg, Russia) entitled: Current Problems of Science and the Public Understanding of the Role of Science and Technology in Developing Countries, in the XXIII, Session entitled, Fundamental Problems of Sociology and Economy of science: Past and Present, of the International School of Science and Technology Sociology, during Oct. 15-1 2007, IHNST, Russian Academy of Sciences, Saint Petersburg, Russia, 2007, Binay K Pattnaik.
- 227. Delivered the key note address as the chief speaker to the UGC funded National Seminar organized by the DAV College Kanpur, on the theme Environment and Development, on 19th February 2007 Title of the Key Note Address: Indigenous Vision for Ecologically Sound Development, Binay K Pattnaik.
- 228. Presented an invited paper entitled: Globalization and the Scientific Technological regime in India: Aspects of Change, at the UGC and UNDP sponsored international seminar entitled: Globalization: Potentialities and Predicaments, Organized by the Department of Sociology, University of Calcutta, Kolkata, during January16-17, 2007, Binay K Pattnaik.
- 229. Participated as discussant in Science Teaching Conference, Eklavya, Indore, 1-2, December, 2007, A. Madan.
- 230. Participated as discussant in National Seminar on Field Studies in the Sociology of Education in India, NCERT, New Delhi, 22-24 November, 2007, A. Madan.
- 231. Mahatma Gandhi Yuva Samvad Yatra: Dialogues with Youths in selected Districts of Uttar Pradesh, National Seminar on Youths, Banwasi Seva Ashram, Sonbhadra, 20-21 March 2008, A. K. Sharma.
- 232. Presented a paper entitled, Developing the Rural Poor: Experiences of Banwasi Seva Ashram, Sonbhadra, National Seminar on Revitalization of Rural Institutes: Problems and Prognosis, Gandhi Smriti & Darshan Samiti, New Delhi, 15-16 March 2008, A. K. Sharma.
- 233. Towards a rethinking of merit and meritocracy, invited paper presented at National Seminar organized by Centre for Social Empowerment, B.R. Ambedkar Open University, Hyderabad, 5-6 July 2007, A. Madan.

- 234. Human factor research in psychology: Some findings and concern. UGC National Seminar on Applied Cognitive Psychology, DDU Gorakhpur University, March 27-28, 2008, B. Bhushan.
- 235. Psychology of Meditation and Health: Present Status and Future Directions. International seminar on Health Psychology, Agra, February 21-23, 2008, D. Hussain & B. Bhushan.

# Chemistry

- 236. Invitation from ICAM-2007 for a short Lecture on hybrid materials to be held at Bangalore, from Oct. 8-13, 2007, Dr. G. Anantharaman.
- 237. Invitation from MTIC-XII for a short Lecture to be held at IIT-Madras, from Dec. 5-7, 2007, Dr. G. Anantharaman.
- 238. Charge defects in hydrogen bonded systems: Ab initio molecular Dynamics studies, IIT Guwahati, May 08, 2007, Dr. A. Chandra.
- 239. Vibrational spectral diffusion in water and aqueous solutions, Bhabha Atomic Research Centre, Mumbai, June 21, 2007, Dr. A. Chandra.
- 240. Hydrogen bond dynamics in liquid water, Department of Chemistry, University of Kalyani, December 14, 2007, Dr. A. Chandra.
- 241. Inside water: A molecular view, Burdwan Raj College, Burdwan, January 04, 2008, Dr. A. Chandra.
- 242. Quantum simulations of charge defects in hydrogen bonded clusters and chains, Department of Chemistry, University of Burdwan, February 08, 2008, Dr. A. Chandra.
- 243. Synthetic Nucleases: Recyclable hybrid Polymeric/Dendrimeric catalysts for phosphate ester hydrolysis and plasmid cleavage, Invited Talk at IUMRS-ICAM Conference held in Bangalore, 8-13 2007, Dr. V. Chandrasekhar.
- 244. Synthetic Nucleases: Recyclable hybrid Polymeric/Dendrimeric catalysts for phosphate ester hydrolysis and plasmid cleavage, An Invited talk at Bio-Inorganic Winter School, IIT Bombay, November 30 2007, Dr. V. Chandrasekhar.
- 245. Chairman, International Conference on the Applications of Mossbauer Spectroscopy, ICAME-2007, October 14-19, 2007, I.I.T. Kanpur, INDIA, Dr. N.S. Gajbhiye.
- 246. Advanced Materials: Past, present and Future, National Conference on Advanced Materials, March 6-8, 2008, U.P.-College Varanasi, Dr. N.S. Gajbhiye.
- 247. FASCINATING WORLD OF ADVANCED MATERIALS AND THE ROLE OF CHEMISTRY, 26<sup>th</sup> Annual Conf. Indian Council of Chemists,

- Department of Chemistry, H S Gaur University, Sagar, March 25-27 2008, Dr. N.S. Gajbhiye.
- 248. What do we at IIT Kanpur Ultrafast Pulse Shaping Laboratory, Debabrata Goswami, Department of Chemistry and Center for Molecular and Biomolecular Imaging Seminar, French Center for Molecular and Biomolecular Imaging Duke University 2220 French Family Science Center, 124 Science Drive, Durham, NC 27708, USA, June 10 (2007), Dr. D. Goswami.
- 249. Ultrafast Pulse Shaping—From Quantum Computing to Medical Imaging, Debabrata Goswami, Physics Colloquium, Dept. of Physics, IIT Kanpur, Aug. 9 (2007), Dr. D. Goswami.
- 250. Department of Chemistry, IIT Madras Jan 2007, Dr. B.D. Gupta.
- 251. Imidazolin-5-ones as biodegradable optoelectronic materials TIFR, Mumbai June 2007, Dr. R. Gurunath.
- 252. Modelling the green fluorescent protein -Intriguing results and applications IISER Mohali, Chandigarh February 2008, Dr. R. Gurunath.
- 253. Invited Lecture at NOST Symposium during July 07-10, 2007, Goa, Dr. F.A. Khan.
- 254. Invited Lecture at the annual meeting of Indo-French Center for Organic Synthesis (IFCOS) held at Manoir de la Vicomté, close to Rennes and Dinard, France during September 12-13, 2007, Dr. F.A. Khan.
- 255. Medal lecture at CRSI meeting during February 1-3, 2008 at IISc, Bangalore, Dr. F.A. Khan.
- 256. Plenary lecture in a National conference on Recent Advances in Drug Discovery Research held during March 15-16, 2008 at Poona College, Pune, Dr. F.A. Khan.
- 257. Guest of Honor, and Inaugural address on Nano Science and Nano Technology at Manomaniam Sundranar University, held at Sarah Tucker College, Tirunelveli, October 11 2007, Dr. S. Sundar Manoharan, Dr. F.A. Khan.
- 258. Guest of Honor, and Inaugural address on Nano Science and Nano Technology at the National seminar on Current Trends in Chemistry, at Bishop Heber College, Tiruchirapalli, held on October 12, 2007, Dr. S. Sundar Manoharan.
- 259. Invited talk at the Indo-NUS symposium on current trends in Physics, held at IIT Chennai, Topic: XPS studies on Ruthenates and Manganites. A novel redox chemistry, Feb 27-March 01, 2008, Dr. S. Sundar Manoharan.
- 260. Materials chemistry conference organized at Munnar by Professor CNR Rao and JNCASR, Bangalore, Sept 29-October 1st 2007, Topic: While light emission in organic molecules, Dr. S. Sundar Manoharan.

- 261. Invited talk in International Conference on Materials for Advanced Technologies (ICMAT) held at Singapore by IUMRS, Topic: Sonochemcial synthesis of Nanomaterials., June 29th to July 02, 2007, Dr. S. Sundar Manoharan.
- 262. Special symposium on Spintronics at Techkriti IIT K, Chemistry of Spintronic Manganites, February 16th 2008, Dr. S. Sundar Manoharan.
- 263. Control of Molecular Organization and Development of Organic Functional Materials, Dr. J.N. Moorthy.
- 264. NSC (National Seminar on Crystallography), Kolkota, March 05-08, 2008, Dr. J.N. Moorthy.
- 265. National Institute of Technology, Durgapur, West Bengal (February 28, 2008), Dr. R.N. Mukherjee.
- 266. 8th Refresher Course in Chemistry, UGC-Academic Staff College, Banaras Hindu University, Varanasi (January 22, 2008), Dr. R.N. Mukherjee.
- 267. Guru Nanak Dev University, Department of Chemistry, Amritsar (October 24-26, 2007), Dr. R.N. Mukherjee.
- 268. Bimala Churn Law Memorial Lecture, Indian Association for the Cultivation of Science, Kolkata (February 29, 2008), Dr. R.N. Mukherjee.
- 269. Technische Universität-Kaiserslautern, Fachbereich Chemie, Germany (July 13, 2007), Dr. R.N. Mukherjee.
- 270. Technische Universität-Berlin, Institut für Chemie, Germany (July 12, 2007), Dr. R.N. Mukherjee.
- 271. Technische Universität-Braunschweig, Institut für Anorganische und Analytische Chemie, Germany (July 11, 2007), Dr. R.N. Mukherjee.
- 272. Georg-August-Universität Göttingen, Institut für Anorganische Chemie, Germany (July 10, 2007), Dr. R.N. Mukherjee.
- 273. Universität Paderborn, Department Chemie, Anorganische und Analytische Chemie, Germany (July 9, 2007), Dr. R.N. Mukherjee.
- 274. Freie Universität-Berlin, Institut für Chemie und Biochemie, (July 5, 2007), Dr. R.N. Mukherjee.
- 275. Philipps-Universität Marburg, Anorganische Chemie, Germany (July 4, 2007), Dr. R.N. Mukherjee.
- 276. Justus-Liebig-Universität Gieβen, Institut für Anorganische und Analytische Chemie, Germany (July 3, 2007) , Dr. R.N. Mukherjee.
- 277. Max-Planck Institute für Bioanorganische Chemie, Mülheim an der Ruhr, Germany , (July 2, 2007) , Dr. R.N. Mukherjee.
- 278. Chemical Center, Lund University, Sweden (April 16, 2007), Dr. R.N. Mukherjee.
- 279. Elastic Effects in Thin Films, Department of Mechanical Engineering, IIT Kanpur, 27-03-08, Dr. Madhav Ranganathan.

- 280. Gerhard Ertl: Nobel Prize in Chemistry 2007, Physics Society, IIT Kanpur, 27-03-08, Dr. Madhav Ranganathan.
- 281. Recent advances in cross-coupling reactions for organic synthesis, 8<sup>th</sup> Refresher course in chemistry, Academic staff college, Banaras Hindu University, Varanasi, January 28, 2008, Dr. M.L.N. Rao.
- 282. New atom-efficient organometallic reagents for cross-coupling reactions in organic synthesis, 8th Refresher course in chemistry, Academic staff college, Banaras Hindu University, Varanasi, January 28, 2008, Dr. M.L.N. Rao.
- 283. Organobismuths for C-C bond formations in organic synthesis, School of Chemistry, University of Hyderabad, Hyderabad, Feb 4, 2008, Dr. M.L.N. Rao.
- 284. Invited Talk during ACS meeting, August 18-24, 2007, Boston, Dr. V.K. Singh.
- 285. Invited talk during September 23-28, 2007 for Indo-Russian visit at Moscow, Dr. V.K. Singh.
- 286. Invited lecture at the national conference on quantum chemistry, soft computing and optimization titled Quantum control by creating local phase space barriers?, Prof. S. P. Bhattacharya festschrift, IACS (Kolkata), April 2008, Dr. K. Srihari.
- 287. Invited lecture at the fifth discussion meet on spectroscopy and dynamics of molecules and clusters titled Dynamical assignment of quantum states; recent advances and challenges, Mamallapuram, February 2008, Dr. K. Srihari.
- 288. Invited lecture at the CRSI-RSC joint symposium titled Dynamical tunneling: Mechanism and Control, Bangalore, January 2008, Dr. K. Srihari.
- 289. Invited lecture at the Trombay Symposium on Radiation and Photochemistry titled On the nature of vibrational energy flow in the molecular state space, Pune, January 2008, Dr. K. Srihari.
- 290. Invited lecture at the Workshop on coherent control of optical phenomena titled Bichromatically driven double well: parametric perspective of the control landscape, IITK, India, July 2007, Dr. K. Srihari.
- 291. Modern Reagents in Organic Chemistry at Department of Chemistry, D.D.U. Gorakhpur Univeristy, Gorakhpur on June 21st, 2007, Dr. Y.D. Vankar.
- 292. Design and Synthesis of Newer Glycosidase Inhibitors at Department of Chemistry, IIT Madras, Chennai November 30, 2007, Dr. Y.D. Vankar.
- 293. Delivered two lectures entitled (a) Modern Reagents in Organic Chemistry (b) Carbohydrates: much more than mere sources of energy at the Department of Chemistry, NIIT Jallanadhar on February 15 and 16, 2008, Dr. Y.D. Vankar.

- 294. Delivered a lecture entitled Synthesis of Glycosidase Inhibitors: Molecules of Potential Therapeutic Importance at the R & D Centre of Nagarjuna Fertilizers, Hyderabad on February 18, 2008, Dr. Y.D. Vankar.
- 295. Stimuli-Responsive Soft Structures, JNC Conference on Advanced Materials, Munnar, Kerala (October 2007), Dr. Sandeep Verma.
- 296. Bioinspired Paradigms for Metal-Nucleobase Frameworks, Thiruvanan-thapuram, Kerala, (January 2008), Dr. Sandeep Verma.
- 297. Deen Dayal Upadhyaya University, Gorakhpur 2007, Dr. V.K. Yadav.
- 298. Indian Institute of Chemical Technology 2007, Dr. V.K. Yadav.
- 299. Emerging Areas in Chemical Sciences (Refresher Course), Gorakhpur University 2007 (a series of 4 lectures), Dr. V.K. Yadav.

### Mathematics and Statistics

- 300. 12 lectures delivered in Sponsered Traning Program, Uttaranchal Council of Science and Technology, Puari, June 3-16, 2007, D. Bahuguna
- 301. Talk on Logics from Rough Sets, IRIT, Universite Paul Sabatier, France, May 2007, M. Banerjee.
- 302. Talk talk On Orlicz Spaces of Entire Functions, Department of Mathematics, Jammu University, Jammu, September 2007, M. Gupta.
- 303. Two invited talks at Department of Mathematics And Computer Science, Sri Satys Sai Institute of Higher Learning, Puttaparthi, September, 2007, M. K. Kadalbajoo.
- 304. Two invited talks at Centre of Advanced Study, Department of Mathematics, Punjab University, Chandigarh, December 7-11, 2007, M. K. Kadalbajoo.
- 305. Invited talk Fractal Modeling: Simulation and Prediction, at Systems Science Centre, Portland State University, Portland, USA, June 8, 2007. G. P. Kapoor.
- 306. Prof. Ramnath Mohanty Memorial Lecture on Carlesons Theorem, at Orissa Mathematical Society, Cuttack, January 2008, S. Madan.
- 307. Invited talk, The Poisson Summation Formula, Ravenshaw University, Orissa, March 2008, S. Madan.
- 308. Talk, on Fugledes Conjecture for Three Intervals, IMSc, Chennai, March 2008, S. Madan.
- 309. Talk on Bilinear Multipliers, at Institute of Mathematics and Application, Bhubaneshwar, November 7, 2007, P. Mohanty.
- 310. Talk on e is transcendental at Institute of Mathematics and Application, Bhubaneshwar, November 8, 2007, P. Mohanty.

- 311. Talk on Wavelets in PDES, at LTI, CRP-HT-Research Center, 29 J. F. Kennedy Av, Luxembourg, June 11, 2007, B. V. Rathish Kumar.
- 312. Talk on An overview of Finite Element Analysis in ADSS at ISFM, Loius Pasteur University, Strasbourg, France, June 14, 2007, B. V. Rathish Kumar.
- 313. Talk On Parallel Computations in Conjugate Problem in Thermo-Hydraulic Analysis of window based ADSS, at Universit'e de Marne-La-Vall'ee, Paris, December 6, 2007, B. V. Rathish Kumar.
- 314. Three lectures on Geometric applications of Sturm Comparison theorem and its modern generalizations, Department of Pure Mathematics, Calcutta University, March 16-22, 2008, G. Santhanam.
- 315. Talk on The Fourier Algebra of a Locally Compact Group, at Department of Mathematics, University of Jammu, Jammu, December 7, 2007, U. B. Tewari.

## **Physics**

- 316. Presented a Physics Colloquium: Quantum phase transition in YbIr<sub>2</sub>Si<sub>2</sub> and excitonic mass enhancement in Pr-compound, at Dept. Physics, I.I.T. Kanpur, August (2007), Dr. Z. Hossain.
- 317. Presented a Lecture series on Non-local Quantum Field Theory at IOP Bhubaneswar on 17/3/08, 20/3/08,24/3/08, 26/3/08, Prof. S.D. Joglekar.
- 318. Seminar entitled STM studies of Electronically Inhomogeneous Surfaces, Mar 2008, at Physics Department, Pondicherry University, Ponicherry, India, Dr. Anjan K. Gupta.
- 319. Colloquium entitled STM studies of Electronically Inhomogeneous Surfaces, Aug 2007, Colloquium at IITK, Physics Department, Dr. Anjan K. Gupta.
- 320. Seminar entitled STM Study of Strain-Induced Nano-Scale Electronic Patterns on Graphite Surface at CRTBT, Grenoble, France in May 2007, Dr. Anjan K. Gupta.
- 321. Invited talk entitled Spin Polarized Scanning Tunneling Microscopy (SP-STM), in Spintronics session organized at IITK Techkriti-08 in Feb-08 , Dr. Anjan K. Gupta.
- 322. Four lectures entitled Scanning Probe Microscopy, in a Summer School on Condensed Matter Physics at HRI, Allahabad in June 2007, Dr. Anjan K. Gupta.
- 323. Invited Talk U-Controlled Frustration in the Triangular-Lattice Antiferromagnet in Workshop on Correlated Electrons and Frustrated Magnetism (CEFM07) in Goa from Nov 25 Dec 5 2007, organized under the

- auspices of the newly set up `Centre for Theoretical Sciences (CTS) of TIFR, Dr. Avinas Singh.
- 324. Invited talks (4 nos.) Lecture Series on Superconductivity, at a School Organized on Condensed Matter Physics, at Harish Chandra Research Institute Allahabad, 5th June 2007, Dr. S. Banerjee.
- 325. Invited talk on Advances in Magneto-optical Imaging; Institute Colloquium Presented at the Tata Institute of Fundamental Research, July 18, 2007, Dr. S. Banerjee.
- 326. Invited talk on Advances in magneto-optical imaging and imaging instabilities in vortex matter; East Asia symposium on Superconducting Electronics, IIT Delhi 14<sup>th</sup> December, 2007, Dr. S. Banerjee.
- 327. Invited talk on Instabilities in superconductors and giant magnetic fields associated with plasmas; Department of Atomic Energy, Solid State Physics Symposium, Mysore, 27th to 31st Dec. Mangalore, 2007, Dr. S. Banerjee.
- 328. Invited talk on Plasma based nanoscale science and technology with multielemental focused ion beams, Organization: Special invited lecture, Center of Excellence (COE) Advanced Research Seminar, Research and Education Center of Nano Vision Science, Shizuoka University, Hamamatsu, Japan Date: December 19, 2007, Dr. S. Bhattacharjee.
- 329. Invited talk on Subnanosecond electron transport in polarized electromagnetic waves and the quasi steady state interpulse plasma, Organization: 22nd National Symposium on Plasma Science and Technology (PLASMA 2007), Institute for Plasma Research (IPR) and Plasma Science Society of India (PSSI), Gandhinagar, India, Date: December 6, 2007, Dr. S. Bhattacharjee.
- 330. Invited talk on Microwave plasma sources for focused ion beams, Organization: Short Term Course on Plasma Basics and Industrial Applications, Department of Chemical Engineering, Indian Institute of Technology Kanpur, India, Date: November 3, 2007, Dr. S. Bhattacharjee.
- 331. Invited talk on Multielemental Focused Ion Beams ,Organization: National Symposium on Ion Beam Technology and Applications (SIBTA 2007), Bhabha Atomic Research Center (BARC) and BRNS, Department of Atomic Energy, Government of India, Mumbai, India, Date: September 20, 2007, Dr. S. Bhattacharjee.
- 332. Invited talk on Development of a microwave plasma based negative ion source and study of plasma dynamics through a transverse magnetic filter in the negative ion source Organization: Board of Research in Fusion Sciences, National Fusion Programme, NFP Experts Committee meeting, Institute for Plasma Research, Gandhinagar, India, Date: April 4, 2007, Dr. S. Bhattacharjee.

- 333. Two talks on (i) Ion Beams for materials engineering and analysis; (ii) Rutherford backscattering and channeling at Solid State Physics Laboratory, Delhi on Aug 20, 2007, Dr. V.N. Kulkarni.
- 334. Focused ion beams for application in nano technology at Ansal Institute of Technology on December 19, 2007, Dr. V.N. Kulkarni.
- 335. Talk on Large-scale behaviour of turbulent convection governed by low-dimensional fixed-points, in European Turbulence Conference ETC-11, held at Porto, 2007 (work with J. J. Niemela, K. Kumar, S. Pal, and D. Carati), Dr. M.K. Verma.
- 336. Talk on Magnetic field generation and critical Reynolds and Prandtl numbers, in Statphys 23, held at Genova, 2007 (work with D. Carati, I. Sarris, T. Lessinnes, and K. Kumar), Dr. M.K. Verma.
- 337. Talk on Universal scaling laws for large events in driven nonequilibrium systems, in Physics of Fluctuations Far From Equilibrium, held at MPI-PKS, Dresden 2007 (work with S. Ghosh, J. Banerjee, S. Manna), Dr. M.K. Verma.
- 338. Seminars on Dynamo at (a) ETH, Zurich; (b) University of Volos, Volos, Greece; (c) Notre Dame University, USA; (d) University of Delhi, Delhi; (e) IIT Kanpur, Dr. M.K. Verma.
- 339. Invited talk on Strained Epitaxy of Giant Coercivity Cobalt-Platinum Nanodots Indo-Brazil Meeting on Nanomaterials, NCL Pune, October 2007, Dr. R.C. Budhani.
- 340. Invited talk on Superconductor-ferromagnet heterostructures South Asia Applied Superconductivity Conference, IIT Delhi September 2007, Dr. R.C. Budhani.
- 341. Invited talk on Antagonistic orders in epitaxial thin film heterostructures IUMRS-ICAM, Bangalore 2007, Dr. R.C. Budhani.
- 342. Invited talk on Competing orders in hole doped perovskite oxides of the manganite family 3<sup>rd</sup> Indo-Japan conference on ferroics and multiferroics, February 2008 IACS Kolkata, Dr. R.C. Budhani.
- 343. Invited talk on Physics on the Moon, delivered at the Discussion Meeting in Experiments in Future Lunar Missions, Physical Research Laboratory, Ahmedabad (Sep 13-14, 2007), Dr. S. Raychaudhuri.
- 344. Invited talk on Identifying Graviton Signals at the LHC: a discussion, delivered at the Workshop on the Physics of Warped Extra Dimensions, IIT Kharagpur (Feb 21-23, 2008), Dr. S. Raychaudhuri.
- 345. Invited talk on Extra Dimensions and the LHC, delivered at the Discussion Meeting on BSM Physics: Modern Developments in SUSY breaking, Extra Dimensional Theories and Unparticles, Centre for High Energy Physics, Indian Institute of Science, Mar 27-29, 2008, Dr. S. Raychaudhuri.

346. Lecture Series at CCMT School on Condensed Matter, I.I.Sc., Bagalore, March 2008, Dr. D. Chowdhury.

### CONFERENCES ATTENDED OUTSIDE IIT KANPUR

# Aerospace

- 1. International Conference on IC Engine and Combustion, Hyderabad 2007, Dr. D. P. Mishra.
- 2. International Biomedical Modeling School and Workshop Organized by : TIFR s Cent for Applicable Mathematics (TI FR- CAM), TIFR s National Center for Biological Sciences (NCBS) and Mathematics and Medical Physiology Group, The Institute for Mathematics and Scientific Computing, University of Graz, TIFR S Nat ional Center for Biological Science s (NCBS), Bangalore, India, Feb 27 t o March 2, 2008, Dr. Brijest Eshpuniyani.
- 3. 31Sf Indian Social Science Congress, SNDT Womens University, Mumbai, 26-31, Dec. 2007, Dr. Kunal Ghosh.
- 4. Symposium on Applied Aerodynamics & Design of Aerospace Vehicles (SAROD2007), Thiruvanthapuram, Nov. 22-023, 2007, Dr. Kunal Ghosh.
- 5. XV-National Seminar on Aerospace Structures, Coimbatore, Oct. 2007, C. Venkatesan.
- 6. 21-st National Convention of Aerospace Engineers, IIT Kanpur, Nov. 2007, C. Venkatesan.
- 7. American Helicopter Society Aeromechanics Specialists Conference, San Francisco, USA, Jan. 2008, C. Venkatesan.
- 8. Design, Development and Concurrent Flight Testing of Aerospace Vehicles and Systems, ASTE Air Force, Bangalore, Feb. 2008

### Biological Science and Bio-engineering

- 9. Annual Drosophila Research Conference, Town and Country Resort, San Diego, 3<sup>rd</sup> -5<sup>th</sup> April, 2008, Prof. Pradip Sinha.
- 10. Conference: Indian Society of Developmental Biology Annual Meeting 2007, Hotel Holiday Inn, Agra, October 18<sup>th</sup>-19<sup>th</sup>, 2007, Convener of conference/Talk presentation, Prof. Pradip Sinha.
- Conference: 10<sup>th</sup> International Conference on Advanced Materials (IUMRS ICAM 2007), Title of Talk: Supermacroporous Cryogels for Biomedical and Bioengineering Applications. International Conference on Advanced Materials (IUMRS-ICAM 2007), Bangalore, India, 8-13<sup>th</sup> October, 2007
- 12. Invited talk & chairing session, Dr. Ashok Kumar.

- 13. Conference: Stem cell and tissue engineering symposium, Title: Bioengineering Applications of Supermacroporous Cryogels. Plastic, Reconstructive and Aesthetic Surgery, Hacettepe University, Ankara-TURKEY, May 11-15th, 2007, Type of Presentation: Invited talk & chairing session, Dr. Ashok Kumar.
- 14. Conference: Exploring collaboration with India, Title: New generation of biomaterials for bioengineering applications, CBS, Nottingham University, UK, March 18th, 2008, Invited talk, Dr. Ashok Kumar.
- 15. Conference: Exploring collaboration with India, New generation of biomaterials for bioengineering applications, CBS, Nottingham University, UK, March 18th, 2008, Invited participant, Dr. R. Sankararamakrishnan.
- 16. Conference: Indian Society of Developmental Biology Annual Meeting 2007, Hotel Holiday Inn, Agra, October 18th-19th, 2007, Talk presentation, Dr. J. Sen.
- 17. Conference: Discussion meeting on Mechanisms of pattern formation, Organized by the Indian Academy of Sciences Orange County Resorts, Coorg, Karnataka, December 6<sup>th</sup>-9<sup>th</sup>, 2007, Talk presentation, Dr. J. Sen.
- 18. Conference: International conference on Model Organisms and Stem cells in development, regeneration and disease, National Center for Biological Sciences, TIFR, Bangalore, February 23<sup>rd</sup>-25<sup>th</sup>, 2008, Talk presentation, Dr. J. Sen.
- 19. Conference: Annual Scientific Symposium, The University of Nottingham, U.K., 17<sup>th</sup> March 2008 to 20<sup>th</sup> March 2008, Type of Participation Invited speaker, Dr. Balaji Prakash.
- 20. Conference: First Annual Protein/Peptide Conference (PepCon 2008), Shenzhen, China, 22<sup>nd</sup> April 2008 to 24<sup>th</sup> April 2008, Invited speaker, Dr. Balaji Prakash.
- 21. Conference: International Conference on Genetic and Molecular Diagnosis in Modern Medicine, Title: Genetic diagnosis in Lafora disease: promises, challenges and pitfalls: Kamineni Educational Society, Hyderabad (January 7-9, 2008), Invited talk, Dr. S. Ganesh.
- 22. Conference: 16<sup>th</sup> International C. elegans meeting, Title: Binding of maternal RNA-binding proteins to the 3 UTR is essential for the translational control of nos-2, University of California at Los Angeles, June 27-July 1, 2007, Contributed paper, Dr. K. Subramaniam
- 23. Conference: Trends in Human Genetics, Toshali Sands, Puri, August 20-22, 2007, Invited speaker, A. Bandopadhyay.

- 24. Conference: Indian Society of Developmental Biology Annual Meeting 2007, Hotel Holiday Inn, Agra, October 18th-19th, 2007, Invited speaker, A. Bandopadhyay.
- 25. Conference: Discussion meeting on Mechanisms of pattern formation, Organized by the Indian Academy of Sciences, Orange County Resorts, Coorg, Karnataka, Dates: December 6<sup>th</sup>-9<sup>th</sup>, 2007, Invited speaker, A. Bandopadhyay.
- 26. Conference: Indian Society of Developmental Biology Annual Meeting 2007, Hotel Holiday Inn, Agra, Dates: October 18<sup>th</sup>-19<sup>th</sup>, 2007, Invited speaker, Dr. D.S. Katti.
- 27. Conference: Exploring collaboration with India, New generation of biomaterials for bioengineering applications, CBS, Nottingham University, UK, March 18th, 2008, Invited participant, Dr. D.S. Katti.
- 28. Conference: National Workshop on Mathematical Modeling in Biology, Title: Mathematical model of GI motility, Titupati, India, February 2008, Invited presentation, Dr. Anupam Pal
- 29. Conference: 4th Congress of Federation of Indian Physiological Societies, Role of gastric flow in mixing, emptying and drug release analyzed using computer simulation, New Delhi, India, January 2007, Invited presentation, Dr. Anupam Pal

### Chemical

- 30. National Seminar on Recent Advances in Chemical Engineering Operation and Process in Chemical and Allied Industries, at Institute of Technology, Guru Ghasidas University, February 5-6, 2008, P.K. Bhattacharya.
- 31. All India Seminar on Zero effluent discharge- latest development In recycling during 22-23 December, 2007; Organized By The Institute of Engineers (India) West Bengal State Centre Chemical Engineering Division at Kolkata, P.K. Bhattacharya.
- 32. National Conference on Frontiers of Chemical Engineering at Department of Chemical Engineering, Indian Institute of Technology, Guwahati during 12-14 December 2007, P.K. Bhattacharya.
- 33. Invited speaker at Indo-US Frontiers of Engineering Symposium (IAFOE) 27<sup>th</sup> Feb-1<sup>st</sup> March 2008 held at IRVINE, USA, A. Ghatak.
- 34. Invited speaker at Symposium on complex fluids at Indian Institute of technology, Bombay, 21st-22nd Feb, 2008, A. Ghatak.

- 35. Presented poster at Gordon Research Conference on Physics and Chemistry of Microfluidics at NH, USA, July, 2007, A. Ghatak.
- 36. World Congress on Safety of Oil and Gas Industry 2007, April, 2007, Gyeongju, South Korea; paper presented, J.P. Gupta.
- 37. 2007 International Seminar against Disaster, Yeocheon City, Korea, July, 2007: Invited talk, J.P. Gupta.
- 38. Seventh IIASA DPRI Forum on Integrated Disaster Risk Management, Stresa, Lake Maggoire, Italy, September 19-21, 2007: Invited lecture, J.P. Gupta.
- 39. 2007 4th International Conference on Environmental Disaster and Emergency Response, October 2, 2007, Douliou, Taiwan.; Keynote address, J.P. Gupta.
- 40. Mary Kay OConnor Process Safety Center 2007 Symposium Beyond Regulatory Compliance, Making Safety Second Nature, College Station, Texas, USA, October, 2007. Paper presented. (by a substitute since I could not go.), J.P. Gupta.
- 41. Gas & Oil Exposition & Conference, Oct. 31-Nov. 2, 2007, New Delhi: Paper presented, J.P. Gupta.
- 42. All Sites Energy Conservation and CDM Meet 2007, Reliance Industries Ltd., Hazira Complex, Surat, November 21, 2007: Keynote lecture, J.P. Gupta.
- 43. Technical Seminar on Industrial Process Safety Management, Federation of Indian Chambers of Commerce and Industry, New Delhi, November 23, 2007, Invited talk, J.P. Gupta.
- 44. Indian Institute of Chemical Engineers Diamond Jubilee Conference, Kolkata, Dec. 27-30, 2007 IPCL Award Lecture. J.P. Gupta.
- 45. R&D Conclave II of Petroleum Industry, 9<sup>th</sup>-11<sup>th</sup> January 2008,Goa: Participant, J.P. Gupta.
- 46. 8th ASEE MEC Professional Development Conference and Exhibition, Baharain, February 16-20, 2008: Paper presented, J.P. Gupta.
- 47. 79th annual meeting of Society of Rheology, Salt Lake City, 2008, Yogesh M. Joshi.
- 48. 4th complex fluids symposium, Indian Institute of Technology Bombay, 2008, Yogesh M. Joshi.
- 49. 2<sup>nd</sup> ISSS Conference on MEMS, Microsensors, Smart Materials, Structures and Systems, November 16-17, 2007, Pilani, S. Panda.
- 50. Indo-US workshop on Science and Technology at the Nano-Bio Interface, February 19-22, 2008, Bhubaneswar, S. Panda.

- 51. Self-organized patterning of soft solids, National Workshop on Nanomaterials and Nanotechnology, University of Lucknow (Materials Research Society of India), Lucknow, March 2007, A. Sharma.
- 52. Self-organized materials and interfaces, Recent Developments in Nanomaterials, Benaras Hindu University, March 2007, A. Sharma.
- 53. Soft nanosciences and patterning, IITK-NUS Symposium, April 2007, A. Sharma.
- 54. Self-organized manufacturing, National Review and Coordination Meeting on Nanoscience and Nanotechnology, Hyderabad, February 2007, A. Sharma.
- 55. Meso-fabrication and functionalities in soft materials, Bangalore Nano 2007, Bangalore, December 2007, A. Sharma.
- 56. Novel self-organized meso-fabrication and functionalities on small scales in soft materials. Indo-US Workshop on Advanced Manufacturing, IIT Kanpur, October 2007, A. Sharma.
- 57. Novel self-organized meso-fabrication, Indo-Australia Symposium MNNA, New Delhi, December 2007, A. Sharma.
- 58. Self-organizing soft materials: Wetting, adhesion and surface interactions, Symposium on Chemical Engineering-an evolving arena, Bangalore, December 2007, A. Sharma.
- 59. Self-organized meso-fabrication and functionalities on small scales in soft materials, Indo-US Advanced Studies Institute on Nanoscale Science and Engineering, Chennai, January 2008, A. Sharma.
- 60. Self-organized meso-fabrication and functionalities on small scales, International Conference on Nano Science and Technology (ICONSAT 2008), Chennai, February 2008, A. Sharma.
- 61. National Conference on Frontiers in Chemical Engineering 2007 held in IIT Guwahati, December 12-14, 2007, Chair of Nanotechnology session, Jayant K. Singh.
- 62. Complex fluid symposium, Feb 20-22, 2008, IIT Bombay, Jayant K. Singh.

### Civil

- 63. Poster presentation: Rajbongshi, P. and Das, A. Reliability based automated design of flexible pavements, January 15, 2008, 87th TRB annual meeting, Washington, D. C.
- 64. Invited participant and poster presentation: Das, A., Pavement Engineering research at IIT Kanpur, Indo-US Frontiers of Engineering Symposium, February 28- March 1, Irvine, California.

- 65. International Conference on Civil Engineering in the New Millennium: Opportunities and Challenges (CENeM-2007) 11-14 January, Bengal Engineering and Science University, Shibpur, Howrah, India, Ghosh, P.
- 66. 3<sup>rd</sup> Indian International Conference on Artificial Intelligence (IICAI2007), December 17-19, 2007, Pune, Jain, Ashu.
- 67. National Workshop on Science and Technology in Disaster Management Earthquake, Land Slide and Tsunami, New Delhi, 02 03 April 2007, Jain, Sudhir K.,.
- 68. UL INDIA FIRE ADVISORY COUNCIL MEET at New Delhi, 24-25 APRIL 2007, Jain, Sudhir K..
- 69. Global IIT Alumni Conference, Santa Clara, USA, July 2007, Jain, Sudhir K.,
- 70. Structural Engineers World Conference (SEWC 2007), Bangalore, Nov 2-7, 2007, Jain, Sudhir K.,
- 71. 8<sup>th</sup> Pacific Conference on Earthquake Engineering, Singapore, December 5 7, 2007, Jain, Sudhir K.,.
- 72. International Workshop on Active Fault in Kutch and its Implications Towards Seismic Microzonation, Bhuj, January 18-19, 2008, Jain, Sudhir K.,.
- 73. International Conference & Exhibition on Gaseous Fuells from 3-6, Feb. 2008, Goa, Jain, Sudhir, K.,.
- 74. International Workshop on Information Platforms for Disaster Reduction, 3-4 October 2007, Tsukuba, Japan, Murty, C.V.R.,
- 75. Vision 2020: Disaster Education as a Component of Higher Engineering Education, National Round Table of INAE Fellows and Others, Vellore, 9-10 January 2008, Murty, C.V.R.,
- 76. 2007 Australian Earthquake Engineering Society Conference, 23-25 November 2007, Wollongong, Australia, Murty, C.V.R.
- 77. International Conference on Construction Managing Earthquake Risk, New Delhi, 30-31 January 2008, Murty, C.V.R.
- 78. National Workshop on Structural Health Monitoring, Non-destructive Evaluation and Retrofitting of Structures, New Delhi, 07-08 March 2008, Murty, C.V.R.
- 79. Role of Architects in Ensuring Earthquake Safe Built Environment, Proceedings of the South-Asian Association for Regional Cooperation of Architects (SAARCH), 12-14 March 2008, New Delhi, Murty, C.V.R.
- 80. Attended 18th Engineering Mechanics Division Conference at the Inn at Virginia Tech and Skelton Conference Center in Blacksburg, Virginia, USA, ASCE, Patra, N.R.

- 81. Fifth International Symposium on Environmental Hydraulics, Tempe, Arizona, USA, December 4-7, 2007, Presented contributed paper, Patra, N.R.
- 82. Hydro-2007 National conference, Surat, Gujarat, India, December 21-22, 2007. Chaired a session Patra, N.R..
- 83. Attended Indian Aerosol Science and Technology Association Biannual meeting held in New Delhi from 14-16 November, Tripathi, S.N..

# Computer Science

- 84. Theory and Applications of Models of Computation. Shanghai, May 2007, Manindra Agrawal.
- 85. Algebraic Algorithms and Error Correcting Codes, Bangalore, Dec 2007, Manindra Agrawal.
- 86. ICDCIT 2007 at Bangalore, Dec 17-20, 2008, Ratan K. Ghosh.
- 87. ICUICM 2008 at Suwon, South Korea, Jan 30-Feb 1st, 2008, as invited speaker, Ratan K. Ghosh.
- 88. The 2007 International Conference on Machine Learning; Models, Technologies and Applications, Las Vegas, Nevada, USA, June 25-28, 2007, R.M.K. Sinha.
- 89. Workshop on Technologies and Corpora for Asia-Pacific Speech Translation, 3rd IJCNLP, Hyderabad, Jan 11, 2008, R.M.K. Sinha.
- 90. Third International Conference on Advances in Computer Science and Technology, Thailand, April 2007, Sanjeev K. Aggarwal.
- 91. Requirement Engineering 2007, October 2007, Sanjeev K. Aggarwal.
- 92. Intels Asia Academic Forum, New Delhi, October 2007, Sanjeev K. Aggarwal.
- 93. International Conference on Distributed Computing and Internet Technologies, 2007, Bangalore, Dec 2007, Sanjeev K. Aggarwal.
- 94. High Performance Computing 2007, Goa, Dec 2007, Sanjeev K. Aggarwal.
- 95. India Software Engineering Conference 2008, Hyderabad, Feb 2008, Sanjeev K. Aggarwal.
- 96. 26th International Conference on Applied Informatics, Software Engineering 2008 (SE 2008) Innsbruck, Austria, Feb 2008, Sanjeev K. Aggarwal.
- 97. 2nd REACH Symposium, Khajuraho, India, March 15-17, 2008, Sanjeev K. Aggarwal.
- 98. 16<sup>th</sup> Asian Test Symposium, Beijing (P.R. China), 2007, for presenting contributed paper, Shashank K. Mehta.

- 99. International Symposium on Combinatorics, Algorithms, Probability and Experimental Methodologies (ESCAPE), Hangzhou, China, April 7-9 2007, for presenting a contributed paper, Sumit Ganguly.
- 100. Approximation, Randomization, and Combinatorial Optimization. Algorithms and Techniques, 10th International Workshop, APPROX 2007, and 11th International Workshop, RANDOM 2007, Princeton, USA, August 20-22, 2007, for presenting a contributed paper, Sumit Ganguly.
- 101. Second Workshop on Scalable Streams Processing Systems (SSPS) 2008, Nantes, France, March 29, 2008, for presenting a contributed paper, Sumit Ganguly.
- 102. SIGCHI 2008, Florence Italy, for presenting a contributed paper, T.V. Prabhakar.
- 103. ISEC 2008, Hyderabad, as Chair for the tutorials and workshop, T.V. Prabhakar.

### Electrical

- 104. Interspeech-2007, August 27-31, 2007, Antwerp, Belgium (contributed paper), S. Umesh.
- 105. Fourteenth National Conference on Communications, Mumbai, February 2008 (delivered a tutorial and chaired a session), R. K. Bansal.
- 106. The 10th International Symposium on Wireless Personal Multimedia Communications (WPMC 2007), December 2007, at Jaipur, India (contributed paper and chaired a session), Adrish Banerjee.
- 107. National Conference on Wireless and Optical Communication (WOC-2007), Chandigarh, December 2007 (invited talk and chaired a session), Adrish Banerjee.
- 108. National Workshop on Signal Processing and its Application to Software Defined Radio, Kolkata, January 2008 (invited talk), Adrish Banerjee.
- 109. Fourteenth National Conference on Communications, Mumbai, February 2008 (delivered a tutorial and chaired a session), Adrish Banerjee.
- 110. XII International Conference on Speech and Computer (SPECOM2007), Moscow, Russia, October 15th-18th, 2007 (contributed paper), Pradip Sircar.
- 111. IEEE International Conference on Communications, ICC 2007, 24-28 June at Glasgow, UK (contributed paper), A. K. Chaturvedi.
- 112. Pan IIT Summit with Motorola,  $1^{st}$  Nov at New Delhi (invited attendee) , A. K. Chaturvedi.

- 113. Wireless World Research Forum (WWRF), 5-7 Nov at Chennai (contributed paper), A. K. Chaturvedi.
- 114. National Conference on Communications, NCC 2007, 1-3 Feb at Mumbai (contributed papers and chaired a session), A. K. Chaturvedi.
- 115. IEEE TENCON 2007, Taipei, Taiwan (contributed paper and co-chaired a session), Y. N. Singh.
- 116. IEEE Multi-conference on Systems and Control (MSC-2007), Oct 1-3, 2007, Singapore (contributed paper), K. S. Venkatesh.
- 117. IEEE Tencon, 2007 .Taipei, Taiwan 29 October 2007. Paper presentation, Dr. P. K. Kalra.
- 118. IJCNN 2007. Orlando, Florida, USA. August 2007. Paper presentation, Dr P.K.Kalra.
- 119. IEEE-ISIC-07 (International Symposium on Intelligent Control) Singapore. 1-3 Oct, 2007, Dr P.K.Kalra.
- 120. IEEE Power Engineering Society General Meeting 2007, Tampa, USA, June 24-28, 2007. Presented contributed papers and also served as one of the panelists, Dr. S. C. Srivastava.
- 121. International Roundtable on Lightning Protection, May 22-25, 2007, Colomdo, Srilanka organized by NAM S&T Centre New Delhi. Presented a paper and Chaired a Session, Dr. R. Arora.
- 122. 14th International Conference on Intelligent System Applications to Power Systems (ISAP07), 5 8 November, 2007, Kaohsiung, Taiwan, pp. 63-70 (Best Paper Award), Dr S.N.Singh.
- 123. Dr S.N.Singh,2<sup>nd</sup> International Conference on Power Systems (ICPS2007), CPRI Bangalore, 12-14 December 2007 (Session Chairman), Dr S.N.Singh.
- 124. International Conference on Power Electronics (ICPE 07) at Daegu, S. Korea, Oct 30 Nov 1, 2008, Session Chair, Dr. P. Sensarma.
- 125. National Power Electronics Conference (NPEC 2007) at Bangalore, Dec 17 Dec 19, 2008, Session Chair, Dr. P. Sensarma.
- 126. Dr Nandini Gupta, International conference on Polymeric Materials in Power Engineering, CPRI Bangalore, Oct 2007, presenting paper.
- 127. A Model-Free Redundancy Resolution Technique for Visual Motor Coordination of a 6 DOF Robot Manipulator, IEEE MSC, 2007 Singapore, Swagat Kumar, Amit Shukla, Ashish Dutta and Laxmidhar Behera
- 128. Direct Adaptive Control using Single Network Adaptive Critic, IEEE Int Conference on SoSE, San Antonio, USA, April 2007, Swagat Kumar, Radhakant Padhi and Laxmidhar Behera.
- 129. Workshop on Recent Advances on Control & Learning (January 07 09, 2008), TCS, Hyderabad, Dr R.Potluri.

- 130. National Power Electronics Conference (NPEC 2007), IISc Bangalore, during Dec. 17-19, 2007. Presented a technical paper and chaired the technical session entitled Matrix Converters during the conference, Dr.S.P.Das.
- 131. IEEE Antennas and Propagation Symposium, Honolulu, Hawaii, June 2007, Dr.A.R.Harish.
- 132. IEEE Applied Electromagnetics Conference 2007, University College of Technology, Calcutta, 19-20 Dec 2007, Dr.A.R.Harish.
- 133. SPIE Optics and Photonics, San Diego, CA, Aug 2007, Dr.A.Ghosh.

## Industrial & Management

- 134. ORSI 2007 Delhi Dec, 2007, Ashok K Mittal.
- 135. Second National conference on Management Science and Practice IIM Ahemdabad, March21-23, 2008, Ashok K Mittal.
- National Convention Quality Circle Forum of India Kolkatta Dec27-30,
  2007, NWCT-2007 IIT Kanpur July13-14,2007, Ashok K
  Mittal.
- 137. Operational research in IT and SCM Madurai Sep6-8 ,2007, Ashok K Mittal.
- 138. 2<sup>nd</sup> National convention on seamless engineering Vadodara May31,2007, Ashok K Mittal.
- 139. 18th Kanpur chapter convention of quality circles Kanpur 6-7 October 2007, Ashok K Mittal.
- 140. National conference on mathematical Modeling Delhi 28-29 april,2007, Ashok K Mittal.
- 141. Web2for Dev, Participatory Web for Development Conference at Rome, as participant and to socialize the DEAL and AGROPEDIA projects, Sarkar, September, 2007, Runa.
- 142. Second IEEE International Conference on Digital Ecosystems and technologies, Phitsanulok, Thailand, Two papers presented, February, 2008, Sarkar, Runa.
- 143. National Conference on the Emerging Trends in the Photovoltaic Energy Generation and Utilization, Indian Institute of Technology Kanpur, 27-29 Mar., 2008, Singh, Anoop.
- 144. National Seminar on UP Economy at the Cross Road, Giri Institute of Development Studies, Lucknow, 25-26 Mar. 2008, Singh, Anoop.
- 145. Singh, Anoop. IITK REACH Symposium, Khajuraho Mar. 15-18, 2008, Singh, Anoop.

- 146. World Energy Congress, Rome, Italy, 11-15 November 2007, Singh, Anoop.
- 147. Clean Coal Asia 2007 Conference, Singapore, 17-18 Oct. 2007, Singh, Anoop.
- 148. Energy Technology Conclave, 13-14th Mar., 2008, New Delhi, Singh, Anoop.
- 149. International Conference on Power Exchange, 20th Feb., 2008, New Delhi, Singh, Anoop.
- 150. Workshop on Integrated Gasification Combine Cycle Technology (IGCC), 20th Feb., 2008, New Delhi, Singh, Anoop.
- 151. Global Energy Markets Program, SARI/Energy, 25-29<sup>th</sup>, 2008, New Delhi, Singh, Anoop.
- 152. International Workshop on New Forms of Enterprises: Actionable Knowledge and Grassroots Innovation, NISTADS, New Delhi, November 14-16, 2007, Varman, Rahul.
- 153. Notes from Small Industry Clusters: Making sense of knowledge and barriers to innovation. Reliability based Portfolio Optimization, 22<sup>nd</sup> European Conference on Operational Research, Prague, Czech Republic [8<sup>th</sup> 11<sup>th</sup> July, 2007], K.Agrawal and R.N.Sengupta.
- 154. Reliability based Dynamic Portfolio Optimization, 22<sup>nd</sup> European Conference on Operational Research, Prague, Czech Republic [8<sup>th</sup> 11<sup>th</sup> July, 2007], R.N.Sengupta.
- 155. Indo-China Workshop on Role of SSMEs in the Post-Industrial Society, Organized by the Soft Science & Technology Council of the Shaanxi Province, China at Xian., May 23 24, 2007, Contributed Paper & Panelist, Jayanta Chatterjee.
- 156. Service Science Management & Engineering Conference, Organised by ACM & IBM, Banglore, June 2007, Invited Speaker & Session Chair, Jayanta Chatterjee.
- 157. OPAALS Conference, Organised by European Commission, FP 6, DBE Research Group, Brussels, September, 10 13, 2007, Panelist, Jayanta Chatterjee.
- 158. Agricultural Ontology Service Conference (AOS 8), Organised by FAO, Rome, September 20 22, 2007, Lead Discussant, Jayanta Chatterjee.
- 159. Expert Consultation Group Workshop on International Information System for Agriculture, Organised by CGIAR, CABI, FAO & NAL, Rome, September, 23 24, 2007, Country Presentation, Jayanta Chatterjee.

- 160. Web 2 for Dev Participatory Web for Development, First Global Conference, Organised by CTA, DIFD & FAO, Rome, September, 24 27, 2007, Contributed Paper & Panelist, Jayanta Chatterjee.
- 161. International Workshop on New Forms of Enterprises, Organised by NISTADS, New Delhi, November, 14 16, 2007, Invited Paper, Jayanta Chatterjee.
- 162. 1st Joint Workshop in Mechanical, Aerospace and Industrial Engineering, Nanyang Technological University, Singapore, July 10-11, 2007, Paper Presentation, Peeyush Mehta.
- 163. 11th Annual International Conference of Society of Operations Management, Symbiosis Institute of Operations Management, Nashik, December 21-23, 2007, Session Chair on Supply Chain Management and Paper Presentation, Peeyush Mehta.
- 164. 3<sup>rd</sup> Japan-India Joint Seminar in Production/Quality Control and Micro/Nano Manufacturing Science, University of Electro-Communications, Tokyo, March 10-14, Paper Presentation, Peeyush Mehta.
- 165. Workshop on Entrepreneurship Education: Skills, Concepts and Pedagogy, NEN-STVP, July 3-5,2007, Bangalore, B.V.Phani.
- 166. Workshop on New Venture Creation Developing a Business Plan, NEN-STVP, October 3-5,2007, Bangalore, B.V.Phani.
- 167. Workshop on Outside the box Experiential Learning Methods, NEN-Stanford-IIMB, January 14-16,2008, Bangalore, B.V.Phani.
- 168. Entrepreneurship Educator Development Course, Wadhwani Foundation-ISB, Dec 16-April 21,07-08, Hyderabad, B.V.Phani.

### Materials and Metallurgical

- 169. Corrosion Behavior of Novel Phosphoric Irons and Commercial Grade Steels in Simulated Concrete Pore Solutions, at ASTM International Symposium on Advances in Electrochemical Techniques for Corrosion Monitoring and Measurement 22 –23 May 2007, Norfolk, Virginia, USA, G. Sahoo and R. Balasubramaniam.
- 170. Environmental Degradation of Aeroengine Components and Remedies, National Seminar on Emerging Trends in Repair and Reclamation Technology of Aeroengine Components (EMTECH 2007), Air Force Station, Chakeri, Kanpur, 29-30 October 2007, R. Balasubramaniam.
- 171. How to design Hap-based Biocomposites?, at Fourth Research Conference of the European School of Materials Science and Engineering, held at UPC, Barcelona on 7-8th June, 2007, B. Basu.

- 172. Spark Plasma Sintering Process and opportunities to develop of Nanoceramics/Nanocomposites using SPS, at Focussed Workshop on Sintering at Coorg, India, 2-6<sup>th</sup> December, 2007, B. Basu.
- 173. Designing Biomaterials for Hard Tissue Replacement Applications, at Indo-US workshop on Ceramics for Medical Applications, 10-12<sup>th</sup> December, 2007, Chennai, India, B. Basu.
- 174. Friction and Wear properties of self-mated Alumina and Zirconia in Cryogenic Environment at ALUMINA-2008, CGCRI, Kolkata, India, 28 February, 2008, B. Basu.

### Mechanical

- 175. COPEN 20087 attended at Engineering College Trivendrum (Keral), chaired one session on Non-traditional Manufacturing Processes, V.K. Jain.
- 176. Indo-Germany symposium on Nano Manufacturing Technology organized by CMTI Bangalore, V.K. Jain.
- 177. Invited Lecture, Microfluidics and Bio MEMS, Central Mechanical Engineering Research Institute, Durgapur. (Directors invitation) December, 2007, S. Bhattacharya.
- 178. Invited Lecture, Miniaturized Nucleic acid analysis, Indian Institute of Chemical Biology, Kolkata, (Directors Invitation) January 2008, S. Bhattacharya.
- 179. Lecture Biomimetic designs of Microfluidic Systems, Reach Symposium, 2008, Kajuraho, March 2008, S. Bhattacharya.
- 180. Educational Environment in India: A review Invited talk (coauthored with S.G. Dhande) at the 10th KAST International Symposium on Interdisciplinary Education for Science and Technology Innovation, September 13-14, 2007 in Seoul, Korea.
- 181. Modeling of Free Surface Flows with a Focus on the Analysis of Bubble Formation in Film Boiling, Bhatnagar Memorial Lecture (lecture only) at the Congress of Indian Society of Theoretical and Applied Mechanics (ISTAM), BNM Institute of Technology, Bangalore, December 14-16, 2007, G. Biswas.
- 182. Analysis of Formation of Vapor Columns in Flim Boiling (IMECE2007-41124), Proceedings of IMECE 2007, 2007 ASME International Mechanical Engineering Congress and Exposition, November 11-15, Seattle, USA, 2007, G. Tomar, G. Biswas and A. Sharma.
- 183. Educational Environment in India, A review Iinvited talk (coauthored with S.G. Dhande) at the 10th KAST International Symposium on

- Interdisciplinary Education for Science and Technology Innovation, September 13-14, 2007 in Seoul, Korea
- 184. SAE INDIA International Mobility Conference-2008, January 2008, New Delhi, India, A.K. Agarwal.
- 185. ASME Internal Combustion Engine Division Fall Technical Conference-2007, October 14-17, 2007, Charleston, SC, USA, A.K. Agarwal.
- 186. Sir Alfred Bray Kempe an amateur kinematician an invited talk delivered at IFToMM Workshop on History of Mechanisms and Machines, Bangalore Dec. 14, 2007, A. K. Mallik.
- 187. Research and Challenges (REACH) Symposium, Khajuraho (MP), India, March 2008, S. Khandekar.
- 188. 8th ASME/ISHMT International Heat and Mass Transfer Conference, Hyderabad, India, 2008, S. Khandekar.
- 189. International Workshop on Nuclear Thermal-Hydraulics, BARC, Mumbai, 2008, S. Khandekar.
- 190. Joint NTUS-IITK Workshop in Mechanical, Aerospace and Industrial Engineering, Singapore, July 2007, S. Khandekar.
- 191. 14th International Heat Pipe Conference, Florianopolis, Brazil, April 2007, S. Khandekar.
- 192. Fifteenth National Seminar on Aerospace Structures (NASAS-2007), Coimbatore, October 15-16, 2007 Presented a paper, P. Venkitanarayanan.
- 193. 19th National and 8th ISHMT-ASME Heat and Mass Transfer Conference, Hyderabad, January 3-5, 2008: presenting contributed paper, A.K. Saha.
- 194. SICE International Conference on Instrumentation Control and Information Technology, Kagawa, Japan, Paper presentation. Sept. 17-20, 2007, A. Dutta.
- 195. Indo-US workshop on Advanced and Futuristic Manufacturing, June 20-21, 2007, N.V. Reddy.
- 196. 23rd National Convention of Mechanical Engineers, Theme: Emerging Trends in Manufacturing Systems and technologies, September 10-12, 2007, Hyderabad, N.V. Reddy.
- 197. International Symposium on Automotive Sheet Metal Forming. (Invited Paper) December 17-18, 2007, Tata Nagar, N.V. Reddy.
- 198. Visits to DMRL, Hyderabad, December 24, 2007, N.V. Reddy.
- 199. SICE International Conference on Instrumentation Control and Information Technology, Kagawa, Japan, Paper presentation. Sept. 17-20, 2007, A. Dutta.

#### **Humanities and Social Sciences**

- 200. Event Representations in the Conceptual Space, International Conference of South Asian Languages (ICOSAL-8), Aligarh Muslim University, Aligarh, India, 2008. Achla M. Raina.
- 201. Semantics of the Co-eventual Verb in Hindi, International Conference of South Asian Languages (ICOSAL-8), Aligarh Muslim University, Aligarh, India, 2008. Kiran Pandey and Achla M. Raina.
- 202. Semantic Structure of the Indian Sign Language, International Conference of South Asian Languages (ICOSAL-8), Aligarh Muslim University, Aligarh, India, 2008. Purushottam Kar and Achla M. Raina.
- 203. Multiword Expressions in the Concept Space, International Conference of South Asian Languages (ICOSAL-8), Aligarh Muslim University, Aligarh, India, 2008. Somsukla Banerjee, Achla M. Raina and Harish Karnick.
- 204. Locating India in Minority Dislocations: Representations of Hindu-Muslim Power Flux in Asif Currimbhoys Refugee and Girish Karnads Tughlaq in the IACLALS International Conference on Performing the Post-Colonial: Imaging/Imagining India through Film, Theatre, Music and Dance held at the Department of English, Mohanlal Sukhadia University, Udaipur, 28-30 January 2008, T. Ravichandran.
- 205. De/Reterritorialising of Inner/Outer Ecosphere in Anita Desais Voices in the City and Kiran Desais Inheritance of Loss in the Tenth International Conference of the Forum on Contemporary Theory: Thinking Territory: Affect and Attachment towards Land in South Asia, held in Goa in collaboration with the Department of English, Goa University, 16-19 December 2007, T. Ravichandran.
- 206. Why a cultural psychology of trauma reactions and healing: The case of Kachchh earthquake at the International Conference on Psychology in Mental Health at the National Institute of Mental Health and Neuro Sciences (NIMHANS), Bangalore, India on 26-28 July, 2007, Kumar Ravi Priva.
- 207. Self growth along with the survivors of trauma: My experiences of constructing grounded theory of post-earthquake suffering and healing at the 8th Advances in Qualitative Methods Conference at Banff, Alberta, Canada from September 21-24, 2007, Kumar Ravi Priya.
- 208. Issues in Human Values for Ultimate Global Success, Seminar on Gross National Human Values GNV: The Determining Factor for the Global Status of any Nation, Amity University, NOIDA, 20 April 2007, A.K. Sharma.

- 209. Socio-ecology of Domestic Water Consumption in India: A Comparative Study of Scarcity and Contamination Regions, German Environmental Sociology Summit 2007, Leuphana University of Luneburg, Germany, 8-10 November 2007, Pradip Swarnakar and A. K. Sharma.
- 210. Not post in Translation: Chemmeen on Alien Shores, National Seminar on Nation and Translation organized by Department of English, Pondicherry University and Central Institute of Indian Languages, Mysore at Pondicherry University: February 2008, Mini Chandran.
- 211. Of Centres and Peripheries: Cultural Subversion in VKNs Short Stories, National Conference on Postcolonial Discourse in Bhasha Literatures organized by Faculty of Arts, Benares Hindu University in Varanasi: September 2007, Mini Chandran.
- 212. The Democratization of Censorship: Books and the Indian Public, International Conference on A World Elsewhere: Orality, Manuscript and Print in Colonial and Postcolonial Cultures jointly organized by Rhodes University and Centre for the Book in Cape Town, South Africa: April 2 4, 2007, Mini Chandran.
- 213. Presented a contributed paper entitled Performing Postcoloniality in the Global Marketplace:Indian Popular Culture and Science Fiction/Fantasy in the 21<sup>st</sup> Century, by Suchitra Mathur, at the Annual IACLALS national conference held at Udaipur, India, from Jan. 28-30, 2008.
- 214. Presented a contributed paper entitled Capes Transformed to Snakes: The Indianisation of the American Comic Superhero, by Suchitra Mathur, at Comics as a Nexus of Culture, an international conference organised at PfalzAkademie, Lambrecht, Germany, May 25-27, 2007.
- 215. Nations Security and the Environment: A Case Study of Intensive Military Training Activities in India, The International Symposium on Society and Resource Management 2007 (ISSRM 2007), during 17-21 June, 2007 at Park City, Utah, USA, P.M. Prasad and K.N. Narasimha.
- 216. Consumerism and the Liability Rules: An Economics Perspective, National Seminar on Consumers Protection in India: Problems and Prospects, February 25-26, 2008, G. B, Pant Social Science Institute, Allahabad, P. M. Prasad.
- 217. The National Conference on Applied Cognitive Psychology, ISI, Kolkata, 29-30 November, 2007, Contributed paper, Effect of Cognitive Load, Actual Duration and Paradigm on Time Estimation, Khan, A., Dixit, S., & Sharma, N.K.
- 218. The 12<sup>th</sup> International and 43<sup>rd</sup> National Conference of the Indian Academy of Applied Psychology, Department of Applied Psychology, University of Calcutta, Kolkata, 7-9 February, 2008, Contributed paper,

Trends in Coping with Cancer: A Study of Male and Female Patients, Mehrotra, A. & Dixit, S.

## Chemistry

- 219. International Conference on Advanced Materials, ICAM-2007 held at Bangalore, from Oct. 8-13, 2007, Dr. G. Anantharaman.
- 220. Modern Trends in Inorganic Chemistry, MTIC-XII, held at IIT-Madras between Dec. 5-12, , Dr. G. Anantharaman.
- 221. Chemical Research Society of India CRSI, held at Bangalore between Feb. 1 3, 2008 at IISc Bangalore, Dr. G. Anantharaman.
- 222. Asian Conference on Coordination Chemistry in Okazaki, Japan on 29<sup>th</sup> July to 2<sup>nd</sup> August. Invited talk on the topic titled Organometallic Chemistry of the [Ru<sub>2</sub>(CO)<sub>4</sub>]<sup>2+</sup> Core, Dr. J.K. Bera.
- 223. International Conference on Advanced Materials in Bangalore, India on October 8-13. Invited talk on the topic titled 1,8-Naphthyridine Based Hybrid Materials: Structural Diversity and Intramolecular Electron Transfer, Dr. J.K. Bera.
- 224. Chemical Research Society of India Mid Year Meeting in Gwahati, India on May 21, 2007. Invited talk on the topic titled Intra-ligand electronic coupling mediated through dimetal bridge: Dependence on metal ions and ancillary ligands, Dr. J.K. Bera.
- 225. 30th International Conference on Solution Chemistry, held at Murdoch University, Perth, Australia, July 16-20 (Invited lecture), Dr. A. Chandra.
- 226. 16th Canadian Symposium on Theoretical Chemistry, held at Memorial University, St. Johns, Newfoundland and Labrador, Canada, August 4-9, 2007, (Invited Lecture), Dr. A. Chandra.
- 227. National Conference on Windows of Chemistry, held at Bankura Sammilani College, February 8-10, 2008 (Invited Lecture), Dr. A. Chandra.
- 228. Fifth Discussion Meeting on Spectroscopy and Dynamics of Molecules and Clusters, held at Mahabalipuram, February 22-24, 2008 (Session Chair), Dr. A. Chandra.
- 229. India-UK Frontiers of Science Symposium, held at Hyderabad, March 4-7, 2008 (Invited Participant) , Dr. A. Chandra.
- 230. IUMRS-ICAM Conference held in Bangalore, 8-13 2007, V. Chandrasekhar.

- 231. National Symposium and conference on solid state chemistry and allied areas, ISCAS-2007, Nagpur, 28-30 Nov, (2007), Chaired the session and invited as Guest of Honour, Dr. N.S. Gajbhiye.
- 232. National Conference on Advanced Materials, March 6-8, 2008, U.P.-College Varanasi, Key note Speaker, Dr. N.S. Gajbhiye.
- 233. 26<sup>th</sup> Annual Conf. Indian Council of Chemists, Department of Chemistry, H S Gaur University, Sagar, March 25-27 2008, Key note speaker, Dr. N.S. Gajbhiye.
- 234. Al-Azhahar International Science Conference, March 24-26, 2008, Cairo, Egypt, Invited talk, Dr. N.S. Gajbhiye.
- 235. The Power of Coherence, D. Goswami, Symposium on Quantum Computing, Dayalbag Educational Institute, Agra, December 22, 2007.
- 236. Femtosecond Chirped Pulse Adiabatic Control of Condensed Phase Multiphoton Processes, Debabrata Goswami, Brijuni Conference on Laser Pulse Shaping and Coherent Control of Molecules, Brijuni Islands, Croatia, Aug. 26 31, 2007, Dr. D. Goswami.
- 237. Laser phase Induced Enhancement of Two-photon Absorption, Amit Nag and Debabrata Goswami, 5th International Workshop on Optimal Control of Quantum Dynamics: Theory and Experiments sponsored by Max-Planck-Gesellschaft (Max-Planck Society), Deutsche Forschungsgemeinschaft (German Research Foundation) and Munich Center for Advanced Photonics held at the Ringberg Castle, Tegernsee, Germany, Nov.28 to Dec.1 (2007), Dr. D. Goswami.
- 238. Control of Two-photon Fluorescence by Slow Amplitude Modulation, A.K. De, D. Goswami, 5th International Workshop on Optimal Control of Quantum Dynamics: Theory and Experiments sponsored by Max-Planck-Gesellschaft (Max-Planck Society), Deutsche Forschungsgemeinschaft (German Research Foundation) and Munich Center for Advanced Photonics held at the Ringberg Castle, Tegernsee, Germany, Nov.28 to Dec.1 (2007), Dr. D. Goswami.
- 239. Laser induced fluorescence spectroscopy of aromatic molecules with large amplitude vibrations, Partha Biswas, Debabrata Goswami, and Tapas Chakraborty, Poster: PC-82, DAE-BRNS Trombay Symposium on Radiation & Photochemistry, Yashada, Pune, January 7-11, 2008, Dr. D. Goswami.
- 240. Dynamics of Coherence in Femtosecond Induced Nonlinear Processes, Debabrata Goswami, Fifth Asian Conference on Ultrafast Phenomena, National University of Singapore, Jan. 9-12 (2008), Dr. D. Goswami.
- 241. Simultaneous TDM,WDM and CDMA with a Femtosecond Laser: Decoding by Non-degenerate Optical Gating, I. Bhattacharyya, S.K.

- Maurya and D. Goswami, 5<sup>th</sup> Asian Conference on Ultrafast Phenomenon held at NUS, Singapore during Jan.06 to Jan. 09 (2008), Dr. D. Goswami.
- 242. Two-photon absorption Cross-section from a Simultaneous absorption and Emission Measurement, 5<sup>th</sup> Asian Conference on Ultrafast Phenomenon held at NUS, Singapore, Jan. 06 to Jan. 09 (2008), Dr. D. Goswami.
- 243. Towards Spectroscopy of Trapped Macromolecules in Solution, A.K. De and D. Goswami, Spectroscopy and Dynamics of Molecules and Clusters (SDMC) Discussion Meeting 08, Mahabalipuram, Tamil Nadu, February 22-24 (2008), Dr. D. Goswami.
- 244. Shedding some light on quantum computation, D. Goswami, India-UK Frontiers of Science Symposium, Session: Quantum Computing, March 4-7 (2008), Dr. D. Goswami.
- 245. Delivered an invited talk in the international symposium ISCB-2008 at BITS Pilani, Rajasthan, India (22-25 Feb, 2008), Dr. M. K. Ghorai.
- 246. 39th Middle Atlantic Regional Meeting of the American Chemical Society, Collegeville, PA, USA, May 16-18, 2007, Dr. B.D. Gupta.
- 247. Frontiers in chemistry, Indo-German symposium, IIT Kanpur, Oct 26-28, 2007, Dr. B.D. Gupta.
- 248. MTIC, Chemistry Department, IIT Madras, Dec 2007, Dr. B.D. Gupta.
- 249. Bidegradation of N, N -Dimethyl formamide by paracoccus species strain DMF in the international Conference on Catalysis and fince chemicals at NAnyang TEchnological University Singapore December 2007, Shiv Swaroop and R. Gurunath.
- 250. Guest of Honor, and Inaugural address on Nano Science and Nano Technology at Manomaniam Sundranar University, held at Sarah Tucker College, Tirunelveli, October 11 2007, Dr. S. Sundar Manoharan.
- 251. Guest of Honor, and Inaugural address on Nano Science and Nano Technology at the National seminar on Current Trends in Chemistry, at Bishop Heber College, Tiruchirapalli, held on October 12, 2007, Dr. S. Sundar Manoharan.
- 252. Invited talk at the Indo-NUS symposium on current trends in Physics, held at IIT Chennai, Topic: XPS studies on Ruthenates and Manganites. A novel redox chemistry, Feb 27-March 01, 2008, Dr. S. Sundar Manoharan.
- 253. Materials chemistry conference organized at Munnar by Professor CNR Rao and JNCASR, Bangalore, Sept 29-October 1st 2007, Topic: While light emission in organic molecules, Dr. S. Sundar Manoharan.

- 254. Invited talk in International Conference on Materials for Advanced Technologies, (ICMAT) held at Singapore by IUMRS, Topic: Sonochemcial synthesis of Nanomaterials., June 29th to July 02, 2007, Dr. S. Sundar Manoharan.
- 255. Advances in Synthetic and Medicinal Chemistry (ASMC 2007), St. Petersburg, Russia, 28th August to 1st September 2007, Dr. J.N. Moorthy.
- 256. National Symposium on Modern Trends in Inorganic Chemistry (MTIC-XII), Indian Institute of Technology Madras, Madras (December 6-8, 2007), Dr. R.N. Mukherjee.
- 257. Department of Science & Technology (DST) Sponsored Winter School in Bioinorganic Chemistry, Department of Chemistry, Indian Institute of Technology Bombay, Mumbai, November 26, 2007, Dr. R.N. Mukherjee.
- 258. National Convention of Chemistry Teachers and National Conference on Chemistry Vision 2020, Department of Chemistry, Hislop College, Nagpur, October 28, 2007, Dr. R.N. Mukherjee
- 259. International Conference on Biological Inorganic Chemistry (ICBIC 13), Vienna, Austria, July 15-20, 2007, Dr. R.N. Mukherjee
- 260. Triarylbismuthanes as atom-efficient organometallic reagents for carbon-carbon bond formations, International Symposium on Advances in Synthetic and Medicinal Chemistry, ASMC 07, Aug 27-31, St. Petersburg, Russia, Dr. M.L.N. Rao.
- 261. Iron(III) catalyzed Homo- and Cross- aldol reaction for the synthesis of α, β-unsaturated enals, International symposium on catalysis and fine chemicals (C & FC), Dec 16-21, 2007, Nanyang Technological University, Singapore, Dr. M.L.N. Rao.
- 262. National Symposium on Modern Trends in Inorganic Chemistry (MTIC-XI) held on IIT Madras from Dec. 6-8, 2007, Dr. S.P. Rath
- 263. ACS meeting, Boston, August 18-24, 2007, Dr. V.K. Singh.
- 264. Organic Chemistry Conference, May 2007, Goa as Organizer, Dr. V.K. Singh.
- 265. National conference on quantum chemistry, soft computing and optimization, Kolkata, April 2008, Dr. K. Srihari.
- 266. Spectroscopy and Dynamics of Molecules and Clusters, V. Mamallapuram, India, February 2008, Dr. K. Srihari.
- 267. Second CRSI-RSC joint symposium, Bangalore, January 2008, Dr. K. Srihari.
- 268. Trombay symposium on radiation and photochemistry, Pune, January 2008, Dr. K. Srihari.

- 269. Delivered a talk on Frontier Areas of Research in Organic Chemistry in a workshop held by DST for Sensitisation of Women Scientists Scheme at Gorakhpur on 21<sup>st</sup> June, 2007, Dr. Y.D. Vankar.
- 270. A lecture entitled Synthesis of some useful glycosidase inhibitors and related bioactive molecules was delivered in a National Symposium on Organic Chemistry and Drug Research held at Central Drugs Research Institute, Lucknow on June 28, 2007, Dr. Y.D. Vankar.
- 271. A lecture entitled Fused and bicyclic heterocycles as glycosidase inhibitors delivered in Indo-French symposium on Organic Synthesis held at Dinard, France, September 12, 2007, Dr. Y.D. Vankar.
- 272. A lecture entitled Synthetic Approaches towards Glycosidase Inhibitors delivered in Indo-Russian symposium as part of Mendeleev Conference in Moscow on September 24, 2007, Dr. Y.D. Vankar.
- 273. A lecture entitled Synthesis of Glycosidase Inhibitors: Molecules of Potential, Therapeutic Importance was delivered in an Indo-German conference held at IIT Kanpur on October 28, 2007, Dr. Y.D. Vankar.
- 274. Singapore International Chemistry Conference-5, Singapore, December 2007; presented an invited paper, Dr. Sandeep Verma.
- 275. National Organic Symposium Trust-XII, Goa, India 2007, Dr. V.K. Yadav.
- 276. 13th SIAM Conference on Parallel Processing for Scientific Computing PP08, Atlanta, Georgia, March 12-14, 2008. Presented the poster A Parallel Algorithm for Elliptic Eigenvalue Problems on Polygonal Domains Using Spectral Method, Lokendra Kumar Balyan.
- 277. Annual Conference of Indian Mathematical Society, University of Pune, Pune, December 27-30, 2008. Chaired a session and organised a symposium on Biomathematics, Peeyush Chandra.
- 278. National Workshop on Mathematical Modelling in Biology, S. P. Womens University, Tirupati, February 25, 2008 invited talk on Mathematical Modeling in Epidemiology, Peeyush Chandra.
- 279. International Conference on Nonlinear and Variational Analysis, University of Limoges, France, June 20-22, 2007, J. Dutta.
- 280. Annual meeting of the Indian Academy of Sciences, November 2007, Thiruvananthapuram, India, A. K. Ghosh.
- 281. Great Plains Operator Theory Symposium, University of Nebraska, Lincoln, Nebraska, USA, May 15-20, 2007. Delivered talks Approximation Numbers of Matrix Transformations and Inclusion Maps and Representation Theorems for operators of type  $l_{p,q}^{v,w,\psi}$  M. Gupta and L. R. Acharya.
- 282. Indian Math. Soc. Annual Meeting, University of Pune, Pune, December 27-30, 2007. Chaired a session, M. Gupta.

- 283. Symposium in Mathematics, Punjab University, Chandigarh, Feb 29-March 1, 2008. Delivered the talk On Certain Type of Modular Sequence Spaces, M. Gupta.
- 284. 5th International Conference of Dynamic Systems and Applications, Atlanta, Georgia; May30- June 2,2007. invited lecture and chaired a session, M. K. Kadalbajoo.
- 285. CMMSE-07 conference, Chicago, Illinois, USA, June 19-23, 2007. invited talk in the special session on Numerical Solution of ODEs, M. K. Kadalbajoo.
- 286. 73rd Annual Conference of the IMS, Pune University, Pune, December 26-29, 2007. Contributed paper M. K. Kadalbajoo.
- 287. 5th International conference on Dynamic Systems and Applications, Atlanta, Georgia, USA, May30-June2, 2007. Chaired a technical session and delivered the invited talk on Stability of Bivariate Fractal Interpolation Surfaces and Quantification of Tsunami Intensity, G. P. Kapoor.
- 288. IIT 2007-Global Conference, Santa Clara, California, USA, July 6-8, 2007, G. P. Kapoor.
- 289. Workshop On Topological Dynamics, Differential Equations and Applications, University of Hyderabad, March 14-15, 2008. Delivered two talks Fractal Interpolation: Theory and Applications, G. P. Kapoor.
- 290. Hyderabad Symposium of Probability and Statistics, University of Hyderabad, Hyderabad December 17-19, 2007. Invited speaker and presented the talk Texture Modeling, Debasis Kundu.
- 291. Platinum Jubilee Conference of the Indian Statistical Institute, I.S.I. Kolkata, January 01-04, 2008, Invited speaker and presented the talk Bayesian Optimal Sampling Plan, Debasis Kundu.
- 292. National Conference on Emerging Trends in Statistical Methods and Optimization Techniques, held at University of Jammu, Jammu, Feb 22 23, 2008 Invited speaker and presented the talk On Progressive Censoring, Debasis Kundu.
- 293. 73rd meeting of the IMS, Pune University, Pune. Delivered the invited talk Graph Structure via its Laplacian Matrix, A. K. Lal.
- 294. Trends of Harmonic Analysis, Strobl, Austria, June 18-22, 2007. Delivered the talk On Fugledes Conjecture for three intervals, S. Madan.
- 295. 10th Discussion Meeting in Harmonic Analysis, IISc Bangalore, December 28, 2007- January 1, 2008 S. Madan.
- 296. Commutative Algebra and Algebraic Geometry 2007, ISI, Bangalore, July 16-20. Delivered the talk Multiplication Modules, A. K. Maloo.

- 297. Trends of Harmonic Analysis, Strobl, Austria, June 18-22, 2007, P. Mohanty.
- 298. 10th Discussion Meeting in Harmonic Analysis, IISc Bangalore, December 28, 2007- January 1, 2008, P. Mohanty.
- 299. Workshop in Commutative Algebra and Algebraic Geometry, IIT Madras, June 10-23, 2007, Anand Parkash.
- 300. Banach Algebra 2007, Quebec City, Quebec, Canada, July 3-12, 2007. Chaired a session, S. R. Patel.
- 301. 73rd Annual Conference of the Indian Mathematical Society, Unversity of Pune, Pune, December 27-30, 2007. paper presentations , S. Pradhan & Jaydev
- 302. Fifth International Conference on Dynamic Systems and Applications, Atlanta, USA, May 30 June 2, 2008. invited talk An Overview of the Oscillation of Implicit Differential Equations. Also chaired a session, V. Raghavendra.
- 303. 10th Discussion meeting in Harmonic Analysis, Department of Mathematics, Indian Institute of Sciences, Bangalore, December 28, 2007-January 1, 2008, S. K. Ray.
- 304. 10th Discussion meeting in Harmonic Analysis, Department of Mathematics, Indian Institute of Sciences, Bangalore, December 28, 2007-January 1, 2008, R. Rawat.
- 305. Workshop on Geometry and Topology, Department of Mathematics, Pune University, Pune, January 2-9, 2008. Gave the course of lectures Introduction to Riemannian Geometry, G. Santhanam.
- 306. International Conference on Modelling and Computation held at ISI Delhi from 9th to 10th January 2008. Presented the paper A Benders Partitioning Based Heuristic for Solving the Optimal Communications Spanning Tree Problem, P. Sharma.
- 307. Geometric Modeling and Imaging, Zurich, July 2007. Presented the paper Some Non- Stationary subdivision Schemes, P. Shunmugaraj.
- 308. 62nd Annual Meeting of the STLE, Philadelphia, PA, USA, May 6-10, 2007. Presented the paper Thermal and roughness effects in a slider bearing with special reference to load generation in parallel sliders, P. Sinha.
- 309. The 2007 International Conference on Bioinformatics and Computational Biology (BIOCOMP 07), LAS VEGAS, NV, USA, June 24-28, 2007. Presented the paper Chemical defense mechanism of two competing species via toxicant emission, P. Sinha.

310. A conference on Harmonic Analysis and Operator Theory, IISC, Bangalore, December 28, 2007-January 1, 2008. Chaired a session, U. B. Tewari.

# Physics

- 311. Attended International Conference on Magnetic Materials held at S.I.N.P, Kolkata during December 11-16, 2007- oral presentation, Z. Hossain.
- 312. Conference: Non-perturbative gravity and gauge theories; S.N. Bose National centre for Basic Sciences, Kolkata; Dates: January 7-12, 2008; Invited talk by Dr S.D. Joglekar.
- 313. Conference: Non-perturbative gravity and gauge theories; S.N. Bose National centre for Basic Sciences, Kolkata; Dates: January 8, 2008; Chairing a session by Dr S.D. Joglekar
- 314. SERC preparatory school in High Energy Physics; BHU, Varanasi 26/11/2008; Chief Guest Dr. S..D. Joglekar
- 315. SERC preparatory school in High Energy Physics; BHU, Varanasi, 26/11/2008-08/12/2008; (Invited) 12 (1.5 hour) lectures on Quantum Field Theory by Dr. S. .D. Joglekar
- 316. Invited talk in East Asia symposium on Superconducting Electronics, IIT Delhi 14th December, 2007, Dr S. Banerjee.
- 317. Invited talk and poster session in Department of Atomic Energy, Solid State Physics Symposium, 27th to 31st Dec. Mysore, 2007. and also was awarded the Young Achievers Award at this conference), Dr S. Banerjee.
- 318. Invited oral lecture in Conference: National Symposium on Ion Beam Technology and Applications (SIBTA 2007); BARC, Mumbai; Dates: September 19 21 (2007), Dr S. Bhattacharjee.
- 319. Invited oral lecture in Conference: 22nd National Symposium on Plasma Science and Technology (PLASMA 2007), Institute for Plasma Research (IPR) and Plasma Science Society of India (PSSI); IPR, Ahmedabad; Dates: December 6-10 (2007), Dr S. Bhattacharjee.
- 320. Presented poster in Conference: XXVIII International Conference on the Phenomena of Ionized Gases (ICPIG 2007); Prague, Czech Republic; Dates: July 15 20 (2007), Dr S. Bhattacharjee.
- 321. Invited talk in 18<sup>th</sup> International Conference on ION Beam Analysis; University of Hyderabad, Hyderabad, September 23-28 2007, Dr V.N. Kulkarni.

- 322. Invited talk in 15<sup>th</sup> International conference on Surface Modification of Materials by Ion Beams; Mumbai , September 30-Oct 5 2007, Dr V.N. Kulkarni.
- 323. Invited talk in International Conference cum workshop on Nanoscience and Nanotechnology; AIT, Gurgaon December 17-21, 2007, Dr V.N. Kulkarni.
- 324. Contributed a paper in European Turbulence Conference ETC-11, held at Porto in May 2007, Dr. M.K. Verma.
- 325. Dr. M.K. Verma contributed a paper Statphys 23, held at Genova in July 2007, Dr. M.K. Verma.
- 326. Invited talk in Physics of Fluctuations Far From Equilibrium, held at MPI-PKS, Dresden 2007 July 2007, Dr. M.K. Verma.
- 327. Attended MHD Summer school; Brussels; July 2007, Dr. M.K. Verma.
- 328. Oral presentation in 18<sup>th</sup> International Conference on Ion Beam Analysis, Hyderabad, Sept 23<sup>rd</sup> 28<sup>th</sup> 2007, Dr. S. Dhamodaran.
- 329. Invited talk on Title:Anisotropic & transverse quenching of a a transverse XY chain Conf.: Colloquium at Saha Institute of Nuclear Physics, Kolkata (Jul 2007), Dr. Amit Dutta.
- 330. Invited talk on Title: Adiabatic Dynamics of Quantum Spin Chains; Conf.: One Day Meeting On The Frontiers Of Theoretical Sciences, Indian Association of the cultivation of Sciences, Kolkata, (August 17, 2007, Dr. Amit Dutta.
- 331. Invited talk on Title: Effect of discontinuity in threshold distribution on the avalanche size distribution of a random fiber bundle model, Dr. Amit Dutta.
- 332. Conf.: Statistical Physics Approaches to Multi-Disciplinary Problems, IIT Guwahati, Jan 7 13, 2008, Dr. Amit Dutta.
- 333. Invited for discussion for collaborative efforts in an Indo-US Agricultural Knowledge Initiative, Joint Workshop on Harnessing the Benefits of Biotechnology at the National Agricultural Science Center Complex, New Delhi on March 27-29, 2008, Dr. Asima Pradhan.
- 334. Invited talk The Exciting Frontiers of Physics: A tour of some random spots, National Workshop on Innovative Physics Experiments, IIT Kanpur, June 11, 2007, Dr. Y.N. Mohapatra.
- 335. Transport in Organic Semiconductors: A Primer on Practice and Problems, during One day Tutorial in Summer School on Organic Electronics, SCDT, IIT Kanpur on July 12, 2007 in Short Course on Organic Electronics, SCDT, IIT Kanpur June25-July 20, 2007, Dr. Y.N. Mohapatra.

- 336. Lecture on Transport in Organic Semiconductors: A Primer on Practice and Problems, on July 11, 2007 in Short Course on Organic Electronics, SCDT, IIT Kanpur June25-July 20, 2007, Dr. Y.N. Mohapatra.
- 337. Conducted a Half Day Tutorial on Organic Semiconductors at TIFR, Mumbai, organized by International Workshop on Physics of Semiconductor Devices, 2007. IWPSD 2007, Dr. Y.N. Mohapatra.
- 338. Delivered a Lecture on, Liquid Crystal Displays: An Introduction, in Short course on Audio and Video Processing, Coding and Displays held at IIT Kanpur, Nov 26-Dec.06, 2007, Dr. Y.N. Mohapatra.
- 339. Delivered an Invited Lecture on "Evolution of Photo- and electroluminescence Spectra in Blends of red emitting AVPV Oligomer and PVK, K. Biswas, Awnish Tripathi, A. Ajayaghosh and Y. N. Mohapatra, Invited Oral Presentation in 10th International Conference on Advanced Materials, 9-13 October, IURS-ICAM, Bangalore, 2007
- 340. Delivered an Invited Lecture on Embedded Nanoscale Heterostructures for Photoelectronic Applications Polymers for Optoelectronic Applications, delivered at Jamia-Millia Islamia, National Nanotechnology Seminar, January 30, 2008, Dr. Y.N. Mohapatra.
- 341. Delivered an Delivered an Invited Lecture on Nanotechnology : A tour of some recent developments at L.N.M. I.IT, Jaipur, on December 31, 2007, Dr. Y.N. Mohapatra.
- 342. Delivered a Meal Lecture on Organic Semiconductors as Electronic Materials: Impact of Defects and Disorder induced DOS, MRSI Medal Lecture, Annual General Meeting of Indian Materials Society Trivandrum, February 18 2008, Dr. Y.N. Mohapatra.
- 343. Delivered an Engineers Day Theme Lecture on Convergence of Technologies for Rapid Development, Professor Y. N. Mohapatra delivered the talk on this topic during the celebrations organized by the Kanpur Chapter of the Institution of Engineers at IIT Kanpur on September 15, 2007, Dr. Y.N. Mohapatra.
- 344. Delivered an ICPR Periodical Lecture in Practical and Theoretical Rationality: This lecture, entitled Scientific Rationality, was delivered by Professor Y N Mohapatra, Department of Physics, Indian Institute of Technology, Kanpur, on Friday, 14 March, 2008, Dr. Y.N. Mohapatra.

#### **OTHER ACTIVITIES**

# (A) TECHNOLOGY DEVELOPED

## Aerospace

1. Design of a novel micro-combustor, D. P. Mishra

## Biological Science and Bio-engineering

- 2. Development of cell separation technology using supermacroporous cryogels (process and product ready for transfer), Dr. Ashok Kumar
- 3. Development of cigarette filter accessory using supermacroporous cryogel (process and product ready for transfer), Dr. Ashok Kumar
- 4. Development of bilayer wound dressing scaffold for skin tissue engineering using PVP-Iodine complex (upper layer) and gelatine (bottom layer) from supermacroporous cryogel (proof of the principle established, further development needed), Dr. Ashok Kumar
- 5. Development of disposable cell culture bioreactor using supermacroporous cryogels for therapeutic protein production (process ready for transfer), Dr. Ashok Kumar
- 6. Development of cryogel filter for leukocyte depletion from blood for safe blood transfusion, Dr. Ashok Kumar
- 7. Jointly with Hindustan Latex Ltd (proof of principle established, further development needed), Dr. Ashok Kumar
- 8. Name of the technology: RNAi-based Method to engineer plants for nematode resistance, Dr. K. Subramaniam
- 9. Transfer status: Ready for transfer, already one company, Nemgenix, Perth, Australia, is evaluating this technology, Dr. K. Subramaniam
- 10. Low Cost Visual 3-D modeling with Texture Mapping for Small Objects ready for transfer, K. S. Venkatesh.
- 11. E-Signboard, a Device-free HCI for Interactive Public Annunciation System further refinement needed, K. S. Venkatesh
- 12. Language Independent Book Copying Machine with Search Features further refinement needed, K. S. Venkatesh
- 13. A working prototype developed and tested using UHF RF IDs for automatic Vehicle Identification. Tags using ISO 18000B standard was tested on Coaches for speeds up to 80 kmph. Tags and system employing EPC standard was developed and tested and for speeds up to 50 kmph on trains

- and speeds up to 150 kmph on automobiles. Further development required before technology transfer, Joseph John.
- 14. IGBT Gate Drive Card with integrated short-circuit protection, power isolation, extremely small pulse-width capability and special measures to prevent nuisance tripping; ready for transfer, Dr. P. Sensarma.
- 15. UHF RFID tag antenna, prototypes are undergoing testing at the partnering organization, Dr.A.R.Harish.
- 16. Continuous Wireless Monitoring of the Cervical Dilation of a Pregnant Woman, Invention Disclosure Number 07TUL059, filed June 27, 2007, Utility patent application filed under Docket Number5280.691, University of Oklahoma P. K. Verma, A. K. Ghosh, J.J. Sluss, Jr., S. Cheng, M. Martens, R.C. Huck, S. Chen, and A. Kaul.
- 17. A Free Space Optics Based Identification and Interrogation System, Invention Disclosure Number 07TUL043, filed May 11,2007,University of Oklahoma, A.K. Ghosh, P.K. Verma, S. Cheng, A. Venugopalan, R.C. Huck.
- 18. Functionally graded wide-band polymeric composites for microwave absorbers and method of manufacturing same, Application No.:-737/DEL/2007, 28th March 2007, India (2007), Kamal K. Kar, Ahankari Sandeep Sureshrao and Animesh Biswas
- 19. Foil Air Bearing for an air-cycle machine used in cooling the cabin of an aircraft under a Project from HAL. The bearing designed for 70,000 rpn has been fabricated and tested by HAL, S. Sarkar.
- 20. SMA based Angle Encoder, Work carried out as a part of M Project, Technology is transferred to GM, seeking for industrial partner for mass-production, B. Bhattacharya.
- 21. Conduit crawling vehicle for health monitoring, Work carried out as a part of M. Tech Thesis and M. Des research, Technology ready to be transferred searching for industrial partner, B. Bhattacharya.
- 22. SMA based morphing of Antenna and other complaint shapes, Work carried out as a part of ISRO project, Technology is being developed, B. Bhattacharya.
- 23. A microwave generated subcutoff multicusp plasma source for production of multielemental focused ion beams has been developed. Ready for transfer, Dr. Sudeep Bhattacharjee.
- 24. A special holder for performing current-voltage (I-V) characteristics of vacuum nano-gaps has been developed. Its application to measure space-charge-limited flows in a nano-gap has been accepted for publication in Applied Physics Letters (April 2008), Dr. Sudeep Bhattacharjee
- 25. The invention is related to the preparation and scale up process of poly glycolic acid, poly lactic acid and poly (dl-lactide-co-glycolide) (PLG)

thermoplastic polymers that are used as matrices of molded slow-releasing drugs. These polymers are of great interest because of their excellent biocompatibility, biodegradability and mechanical strength. The bioabsorbable and hydrolysable properties have standardized these polymers as potential candidates to be used as a matrix in the form of various molded drugs. The main objective is to identify an in-expensive and convenient process to prepare the PLG polymer indigenously and to further a scale up process to meet the requirements for nano-encapsulation of drugs and proteins for sustained drug release. A project was funded to realize this objective by the Department of Science and Technology with collaboration with an Industry partner, LIFE CARE INNOVATIONS PVT LTD. Gurgaon, Dr. S. Sundar Manoharan, A patent is being filed on this invention.

## (B) SOFTWARE DEVELOPED

# Biological Science and Bio-engineering

- 1. KineRoot software for studying kinematics of plant root growth, further development needed, Dr. Anupal Pal
- 2. JAVA code for Gene Expression Profiling and Gene Network Analysis, Ready for Transfer (Developed as part of DST funded project), Sanjeev Garg.
- 3. SCORM module developed in Brihaspati, Brihaspati \_sync live lecture delivery tools completed, Dr. Y. N. Singh.
- 4. Fingerprint Separation s/w and GUI Interface.StatusSubmitted, Dr. P. K. Kalra.
- 5. Audio separation s/w and GUI Interface. Status- Submitted, Dr. P. K. Kalra.
- 6. Image compression s/w and GUI InterfaceStatus Submitted, Dr. P. K. Kalra.
- 7. Day Ahead Auction Software for power exchange. Status Submitted, , Dr. P. K. Kalra.
- 8. Software for Determination of V-I characteristics of a Shunt Inductor, transferred and successfully deployed in an industry, Dr. P. Sensarma.

#### Mechanical

- 9. Developed a LES code for complex geometry using Immersed Boundary method, S. Sarkar.
- 10. Software code titled Two-phase pressure drop and heat transfer in minichannels developed for Indian Space Research Organization under the sponsored project ME/ISRO/20050083, S. Khandekar.

## **Physics**

- 11. A 3D Monte Carlo simulation code for studying electron dynamics in a gas in the presence of electromagnetic waves has been developed. The code includes electron neutral collisions, wave amplitudes and phases. Actual experimental data on collision cross section of the gas with electron energy is taken into account. Further development of the code is in progress, Dr. Sudeep Bhattacharjee.
- 12. Developed SPECTRAL Method for TURBULENCE simulation, Dr. M.K. Verma.

## (C) INDUSTRIES VISITED

- 1. Visiting Professor, Dept. Biotechnology, Lund University, Sweden and Industry visit: Protista Biotechnology AB, Lund, Sweden, April 07- July, 07, Dr. Ashok Kumar.
- 2. RIKEN Brain Science Institute, Wako, Japan. December 16-23, 2007. As part of a collaborative research project, Dr. S. Ganesh.
- 3. University of Melbourne, Australia: from 16<sup>th</sup> to 23<sup>rd</sup> February, 2008. Visit was part of collaborative project from DBT (India) & DSIT (Australia) on Milk Neutraceuticals with regard to methodologies to be adopted and executed, P.K. Bhattacharya.
- 4. Gas Authority of India Ltd., Pata, Auriaya, P. K. Bhattacharya & D. Kunzru.
- 5. Transpek-Silox Pvt. Ltd., Vadodara, Gujrat, P. K. Bhattacharya.
- Kaygee Loparex India Pvt. Ltd., Mumbai. Plant visit and discussion in order to explore possible research collaboration, 10-12<sup>th</sup> December, 2007, A. Ghatak.
- 7. Unilever Research Center, Bangalore, Invited to present a talk and discussion about possible research collaboration. 7th-9th February, 2008, A. Ghatak.
- 8. Research Fellow, School of Chemical and Biomedical Engineering, Nanyang Technological University, Singapore, June 2007, Jayant K. Singh.
- 9. Bokaro Steel Plant for development of a Ladle Identification and Tracking System, K. S. Venkatesh.
- 10. Visiting Assistant Professor, Department of Electrical Engineering, National Yunlin University of Science & Technology, Taiwan, July-August 2007, Adrish Banerjee.

- 11. Visit to BSNL Headquarters, New Delhi for research collaboration with IIT Kanpur. Visited BSNL in August and November 2007, Joseph John.
- 12. Several visits to RDSO Lucknow in connection with field trials and interactions towards the research project on Trackside Bogie Monitoring System, Joseph John.
- 13. Visiting Assistant Professor, University of Kansas, Lawrence, USA, taught a course on Advanced Antennas, and conducted research on antennas for airborne radar applications, Jan 2007 May 2008, Dr. A. R. Harish.
- 14. General Motors, Bangalore, India, Discussion on project proposal titled Prognosis and Diagnosis in Automobile industry, Dr. P. K. Kalra.
- 15. TVS Motor, Hosur, Bangalore, Data Collection for project titled Condition Monitoring of Engine, Dr. P. K. Kalra.
- 16. HAL and Hyundai Motors, Kanpur, India, Technical Discussion on Audio based Engine Condition Monitoring, Dr. P. K. Kalra.
- 17. Visited Centre for Advanced Power Systems (CAPS) at University of Talhasse, Florida, USA on 29th June 2008, Dr. S. C. Srivastava.
- 18. Visited EMCO Limited, Mumbai to attend their International Advisory Committee Meeting during 23-24 January 2008, Dr. S. C. Srivastava.
- 19. Visiting Faculty at University of Windsor, Canada, May-June 2007, Dr. Nandini Gupta.
- 20. Visit to INSA Lyon, France, July 2007, Dr. Nandini Gupta.
- 21. Visit to CPRI, Bangalore, discussion on collaborative research, Oct 2007, Dr. Nandini Gupta.
- 22. Visit to IHI, Japan for talks on research collaboration, February 2008, Dr. Nandini Gupta.
- 23. Visit to EMCO Ltd, Mumbai, for talks on research collaboration, March 2008, Dr. Nandini Gupta.
- 24. Visit to BARC, Mumbai, research collaboration, March 2008, Dr. Nandini Gupta.
- 25. Attended IEEE R10 PES Chapter Chairs meeting in Beijing, China, Oct 2007, Dr. Nandini Gupta.
- 26. C-DAC, Trivandrum in June 2007 as a member of PRC for a Project review of NaMPET, Dr. S. P. Das.
- 27. SAF Yeast Sandila in Nov. 2007 and in Feb. 2008 for a Consultancy project, Dr. S. P. Das.
- 28. INT, France from 21-24 Jan. 2008 to take part in International Crossroads and for Research collaboration, Dr. S. P. Das.
- 29. IHI, Japan, to have a technical collaboration between IHI Japan and IIT Kanpur, during 20-22 Feb. 2008, Dr. S. P. Das.
- 30. BHEL, Bhopal, Jan 2008, Dr. P. Sensarma.

- 31. SAF Yeast (India) Pvt. Ltd, Sandilla, Dist Hardoi, U.P, Feb 2008, Dr. P. Sensarma.
- 32. ISAC, ISRO Satellite Centre, Bangalore, March 2008, Dr. P. Sensarma.
- 33. Visited Mazandaran University of Science and Technology, Iran, June-July, 2007, N. K. Sharma.
- 34. Visiting Scholar in the department of Statistik und Ökonometrie at Justus-Liebig-Universität Gießen, Gießen, GERMANY, 1st 15th July, 2007, R.N. Sengupta.
- 35. Visiting Faculty at S.P.Jain Centre of Management, Dubai, 21st 26th July, 2007, R.N. Sengupta.
- 36. School of Management, Xian Jiao Tong University, China, May 2007, Research Collaboration, Jayanta Chatterjee.
- 37. Helsinki University of Technology & Helsinki School of Economics, Finland, September, 2007, Teaching & Research Collaboration, Jayanta Chatterjee.
- 38. Army Management Studies Board & Military College of Engineering, Secunderabad, November, 2007, Research Project, Jayanta Chatterjee.
- 39. NIT Kurukshetra, Kurukshetra University, December, 2007, Academic Expert Group, Jayanta Chatterjee.
- 40. International Crops Research Institute for Semi-Arid Tropics, ICRISAT, Hyderabad, January, 2008, Research Collaboration, Jayanta Chatterjee.
- 41. Attended the DST-SERC school on Texture and Microstructure held at IISc Bangalore between 24-28th March, 2008, Dr. K. Mondal.
- 42. Visited Vizag steel, Vishakhapatnam; JSPL, Raigarh; JSW, Torangallu; Hospet Steel Hospet; Jindal stainless, Hissar; Kalyani Carpenter special steels limited, Pune, Dr. Mazumdar.
- 43. Visited HAL. GTRE, NAL, S. Sarkar.
- 44. Indian Institute of Management, Calcutta, to develop course curriculum for the VLFM program, December, 2007, 2 weeks, B. Bhattacharya.
- 45. Satellite Application Centre Ahemdabad, to develop antenna morphing technology, November, 2007, B. Bhattacharya.
- 46. DLN coating facility, Salt Lake, Kolkata, Purpose: Invited Lecture and Capabilities of this facility, August 2007, S. Bhattacharya.
- 47. National Center for Biological Sciences, Purpose: Research Meeting with Drs. Saudamini, Panicker, December 07, S. Bhattacharya.
- 48. Spranktronics, Bangalore, Industry visit for product exploration, December 07, S. Bhattacharya.
- 49. Central Mechanical Engineering Research Institute, Research Council Meeting, December 07, S. Bhattacharya.
- 50. Indian Institute of Chemical Biology (Directors invitation), Invited Lecture, January 08, S. Bhattacharya.

- 51. Visited T.I.F.R., Mumbai during 28<sup>th</sup> Feb- 2<sup>nd</sup> March for collaborative research, Dr. Z. Hossain.
- 52. Visited National Centre for Education and Research and Training, New Delhi; Purpose: To develop a book Exemplar Problems in Physics, November 4-7, 2007 and March 2-5, 2008, Dr. S. D. Joglekar.
- 53. Visited France and Germany for research collaboration with international experimental groups; Neutron scattering group, ILL, Grenoble, France and Magnetism groups, Regensburg and Berlin, Germany, Dr. Avinash Singh.
- 54. Department of Chemistry and Center for Molecular and Biomolecular Imaging, Duke University, Durham, USA, Collaborative Research with Prof. W.S. Warren, Chair (Chemistry), June 2007, Dr. D. Goswami.
- 55. Invited Professor, Institut de Recherche en Informatique de Toulouse (IRIT), Universite Paul Sabatier, France, May 1-31, 2007, M. Banerjee.
- 56. Department of Mathematics, University of New South Wales, Sydney, Australia, 1st May 1-30, 2007, J. Dutta.
- 57. Department of Mathematics, University of South Australia, Adelaide, May 17-21, 2007, J. Dutta.
- 58. Department of Mathematics, University of Limoges, France, June 7- July 5, 2007, J. Dutta.
- 59. Department of Economic Theory, Universidad Autonoma de Barcelona, Spain, July 23-26, 2007, J. Dutta.
- 60. IIM Lucknow, July 13, 2007, P. Sharma.

# (D) PATENTS

1. A Device for Extracting Power from to and fro Wind, Patent Number 212643, Date of Grant: I0 December 2007, Patent Office, New Delhi. (purpose: to extract power from the waves in an Oscillating Water Column Wave Energy Device; A wind turbine of novel design), Dr. Kunal Ghosh

#### POSTER DISPLAY

Title: Storm Security Devuce for Savonius Wind Turbine and Saving of Fossil Fuel by using Wing Sails for Ship Propulsion, REACH Symposium, Khajuraho, March 2008.

Conference attended outside Kanpur

31Sf Indian Social Science Congress, SNDT Womens University, Mumbai, 26-31 Dec. 2007.

2. Symposium on Applied Aerodynamics & Design of Aerospace Vehicles (SAROD2007), Thiruvanthapuram, Nov. 22-023, 2007 Paper in Humanities area

- I . Amend Hindu Code to Annihilate Caste and Brahmanical Privilege, 31, Indian Social Science Congress, SNDT Womens University, Mumbai, 26-31,2007.
- 2. Estimation of Inertia Tensor through experiment (patent filed), Dr. C. Venkatesan.
- 3. Mattiasson, Bo; Galaev, Igor Yu; Kumar, Ashok; Dainiak, Maria. Process for adsorption-based separation of bioparticles from an aqueous suspension. PCT/SE 2006/000556.
- 4. Title: Pathogen resistant transgenic plants, associated nucleic acids and techniques involving the same, US Patent application, Serial number: 11/783,916, April 13, 2007, Granting Agency: US Patents and Trademarks Office, Dr. K. Subramaniam.
- 5. Generation of Submicron to Macroscopic Patterns and Objects by Successive Miniaturization Using Shrinkable Materials and Articles Formed Thereby, Filed for protection in India, Application File Number: DEL/0522/2007, Inventors: A. Ghatak, A. Sharma, R. Mukherjee, A. L. Das, V. Katiyar and M. Kulkarni.
- 6. Patent application no. 2706/DEL/2007 WDM optical packet switch incorporating fiber Bragg grating and circulator.
- 7. Patent application no. 2707/DEL/2007 All-optical reflector based WDM optical packet switch.
- 8. A novel 2/3-Dimensional Soft-lithography technique to formulate microchannels and evaluation of various associated mechanical and biological phenomena, under the process for filing Indian Patent, R K Singh, S. Bhattacharya and B. Basu.
- 9. Magnetic Float Levitative Finishing, 833/DEL/2007, J. Ramkumar.
- 10. A novel viscoelastic media used in nano finishing of materials thro AFM process and method of manufacture thereof, 591/DEL/2007, J. Ramkumar.
- 11. Butt Joint using Reinforced adhesives, 591/DEL/2007, J. Ramkumar.
- 12. A novel 3-D soft lithography technique to formulate micro-channels in polymers, Shantanu Bhattacharya, Rajeev Kumar Singh, Bikramjeet Basu., Patent approved the IIT-Kanpur patent office, February, 2008.
- 13. Agarose nanoplatinum composites, Shantanu Bhattacharya, Shubhra Gangopadhyay., filed at the US patent and Trademark Office on July, 2007, patent pending.
- 14. IIT Kanpur filed: Optical enhancement of two-photon absorption process, Patent Application No. 704/DEL/2008, Dated: 19-03-2008, Inventors Name: Dr. D. Goswami, Chemistry, and students Sumit Ashtekar, M.Sc. & Amit Nag, Graduate Student, Chemistry Dept.

15. An Improved organic optoelectronic device - Ref. no. 3263/ RQ- DEL 2007, B. K. Rajbhongshi, G. Bhattacharjya, V. Jain, A. Tej. S.S.K. Iyer, and R. Gurunath

# (E) AWARDS AND HONOURS

# Aerospace

- 1. Fellow, Indian Academy of Sciences, since 2007, Dr. Sanjay Mittal.
- 2. Member, Steering Committee, Second Indo-US Frontiers of Engineering Symposium (FOE), 2008, Dr. Sanjay Mittal.
- 3. Member, Organizing Committee, REACH Symposium, IIT Kanpur, March 7-10, Hotel Timber Trail Heights, Dr. Sanjay Mittal.
- 4. Associate Editor , International Journal of Aerospace Engineering, Hindawi Publishing Corporation, since 2007, Dr. Sanjay Mittal.
- 5. Member, Board of Editors, Computer Modeling in Engineering & Sciences (CMES), Tech Science Press, since 2007, Dr. Sanjay Mittal.
- 6. Scopus Young Scientist in Engineering, Elsevier, 2007, Dr. Sanjay Mittal.

# Biological Science and Bio-engineering

- 1. Editorial board member of the Open Journal of Biotechnology (Bentham Science Publishers), 2007, Dr. Ashok Kumar
- 2. Assistant editor, Nanoscale Research Letters, Springer New York, 2007, Dr. Ashok Kumar
- 3. Joy Gill Chair Professor for young faculty at the Department of Biological Sciences and Bioengineering, awarded by Joy and Manmohan Gill Endowment Fund, Dr. R. Sankararamakrishnan.
- 4. Rajat Puri (PhD student): Prof A.S.Mukerjee Memorial prize for best oral presentation by young scientist at the annual conference of the Indian Society of Cell Biology (Dec 14-16, 2007 Banaras Hindu University, Varanasi), Dr. S. Ganesh.
- 5. Deepti Dubey (PhD student) own Dr. D.M. Kar prize for best oral presentation by young neuroscientist at the annual conference of International symposium on advances in Neurosciences and Silver Jubilee Conference of Indian Academy of Neurosciences (Nov 22-25, 2007 Banaras Hindu University, Varanasi), Dr. S. Ganesh.

- 6. Rajat Puri (PhD student): International travel award for attending for excellent presentation in the Neuro2007 conference, jointly organized by the Japan Neuroscience society and the Japanese society for neurochemistry and the Japanese neural network society, and held in Yokohama, (Sep 10-12, 2007), Dr. S. Ganesh.
- 7. Sonali Sengupta (Postdoctoral Fellow): International travel award for attending for excellent presentation in the Neuro2007 conference, jointly organized by the Japan Neuroscience society and the Japanese society for neurochemistry and the Japanese neural network society, and held in Yokohama, (Sep 10-12, 2007), Dr. S. Ganesh.
- 8. Editorial board member of the journal Journal of Biomedical Nanotechnology published by American Scientific Publishers, USA. Since April 2007, Dr. D. S. Katti.
- 9. Better Phosphorus Acquisition through Optimal Root Architecture of Common Bean (Phaseolus vulgaris L.). Paramita Basu and Anupam Pal—awarded best poster in National Symposium on Legumes for Ecological Sustainability: Emerging Challenges and Opportunities organized by Indian Institute of Pulse Research and Indian Society of Pulses Research and Development, Kanpur, India, 2007, Dr. A. Pal.
- 10. IIChE Golden Jubilee Young Achiever Award (2007), Yogesh M. Joshi.
- 11. IIChE Golden Jubilee Young Achiever Award (2007), A. Ghatak.
- 12. IIChE Golden Jubilee Young Achiever Award (2007), V. Shankar
- 13. IITK- Research Symposium Research Award, 2007, A. Ghatak.
- 14. Member of Advisory / Editorial Board (from 2008 ) for International Journal of Chemical Sciences ISSN 0972-768X, P. K. Bhattacharya.
- 15. Member, Editorial Board, International Journal of Chemical Engineering, D. Kunzru.
- 16. Chevron Corporation Chair Professor, Dept. of Chemical Engineering, I.I.T. Kanpur (since June 2007), D. Kunzru.
- 17. IPCL Award for Safety and Hazard Management in Petrochemical Industry, Indian Institute of Chemical Engineers Diamond Jubilee Conference, Kolkata, December, 2007, J.P. Gupta.
- 18. Member of Editorial Board, Chemical Engineering Science (2007-2010). (http://www.elsevier.com/wps/find/journaldescription.cws\_home/215/description#description), A.Sharma.
- 19. Dow Professor M.M. Sharma Distinguished Visiting Professorship in Chemical Engineering Endowment, University Institute of Chemical Technology (UICT), Mumbai (2007), A.Sharma.
- 20. IITK- Research Symposium Research Award, 2007, Jayant K. Singh,

- 21. The Fast Track Project Grant for Young Scientists from Science and Engineering Research Council (SERC), Department of Science and Technology (DST), Govt. of India (2007), Ghosh, P.
- 22. Second best paper award in IASTA national Conference held in National Physical Laboratory, Delhi, India, November 14-16, 2007, Tripathi, S.N.
- 23. Member National Technical Advisory Committee of Centre for Development of Advanced Computing (CDAC), R. M. K. Sinha.
- 24. Member Working Group on Technology Development for Indian Languages (TDIL), MCIT, Govt. of India, R. M. K. Sinha.
- 25. Member PRSG on OCR and OHR Consortia, MCIT, Govt. of India, R. M. K. Sinha.
- 26. Member PRSG on English to IL MT Consortia, MCIT, Govt. of India, R. M. K. Sinha.
- 27. Welliver Faculty Fellowship, Boeing, USA, Dr. P. K. Kalra
- 28. Member of CII for Skill Development, Education and Power,
- 29. CII (Confederation of Indian Industries), Dr. P. K. Kalra.
- 30. Vice Chairperson, Technical Activities of IEEE India Council for the year 2008, Dr. S. C. Srivastava.
- 31. Member of the International Advisory Committee of EMCO Limited, Mumbai, India (2007-2010) , Dr. S. C. Srivastava.
- 32. Re-nominated as Member DST-SERC Project Advisory Committee Member on Electrical, Electronics and Computer Engineering for 3 years (2007-2009), Dr. S. C. Srivastava.
- 33. Prize Paper Award at the International Conference on Power Electronics, ICPE-07, at Daegu, S. Korea, Dr. P. Sensarma.
- 34. Prize Paper Award at the National Conference on Power Electronics, NPEC 2007, at Bangalore, India, Dr. P. Sensarma.
- 35. Best Paper Award at the National Conference on Power Electronics, NPEC 2007, at Bangalore, India, Dr. S. P. Das.
- 36. Listed in Whos Who in Science & Engineering (2007), Dr. S. N. Singh.
- 37. Listed in Whos Who in World (2007), Dr. S. N. Singh.
- 38. 21st Century Award for Achievement by IBC Cambridge, England (2007), Dr. S. N. Singh.
- 39. Listed in Leading Engineers of the World 2007, IBC Cambridge, England (2007), Dr. S. N. Singh.
- 40. First Prize in a technical paper titled Short-Term Zonal Load Forecasting in PJM Electricity Market Based on Adaptive Wavelet Neural Network, in the IEEE Sponsored Student paper Contest and Technical Symposium (SPCTS-2007) at DA-IICT, Gandhinagar, 28-30 Sept 2007, Dr. S. N. Singh.

- 41. Best Paper Award of 14<sup>th</sup> International Conference on Intelligent System Application to Power Systems (ISAP07) held during Nov 4-8, 2007, Kaohsiung, Taiwan, Dr. S. N. Singh.
- 42. Administrator, IEEE Online Communities ( January 2006 to date) , Dr. S. N. Singh.
- 43. Moderator, IEEE Online Communities (April 2003 to date), Dr. S. N. Singh.
- 44. Editorial board member, International Journal of Electrical and Power Engineering, Dr. S. N. Singh.
- 45. Associate Editor, International Journal of Electrical Energy Systems, Dr. S. N. Singh.
- 46. Editor of International Journal of Systems Signal Control and Engineering Application, Dr. S. N. Singh.
- 47. Guest Editor, International Journal of Energy Technology and Policy (2007), Dr. S. N. Singh.
- 48. UKIERI Standard Research Award of £144,000 for the project on Innovations in Intelligent Assistive Systems, IITK and University Ulster, UK, Dr. L. Behera.
- 49. Amity Best global HR Faculty award, Ashok K Mittal.
- 50. President Operational Research Society of India, Ashok K Mittal.
- 51. Vice President and Director Quality Circle Forum of India Hyderabad, Ashok K Mittal.
- 52. Member, Bihar Council of Science & Technology, Sinha, Arun P.
- 53. Reviewer: ACR (American Consumer Research) Doctoral Dissertation Competition, N. K. Sharma.
- 54. Reviewer: SCP (Society for Consumer Psychology) Doctoral Dissertation Competition, N. K. Sharma.
- 55. Member, Academic Senate, Indian Institute of Technology Kanpur Roorkee, N. K. Sharma.
- 56. Member, Board of Governors, International Academy of Business and Economics, USA, R.R.K. Sharma.
- 57. Member, Board of Governors, Society of Management Science, IIM Ahmedabad, India, R.R.K. Sharma.
- 58. Reviewer: Handbook of Technology Management: John Wiley, USA; Feb 08, R.R.K. Sharma.
- 59. Consulting editor, E-Social Sciences, Rahul Varman.
- 60. Reviewer for the following journals/ conferences: (i) Journal of workplace rights, (ii) Dark Side Case Writing Competition CMS AOM, USA, Rahul Varman.
- 61. Indo US Science and Technology Forum (IUSSTF) Fellowship 2008, R. N. Sengupta.

- 62. Member, International Advisory Committee, International Conference on Knowledge Management, ICKM 2008, Columbus, Ohio, Jayanta Chatterjee.
- 63. Reviewer: Management Review; Eastern Finance Association Annual Meetings; 11<sup>th</sup> Annual Convention of the Strategic Management Forum, B. V. Phani.
- 64. Member: Program Committee-2008-EFA Meeting- Florida 44th Annual Meetings, April 9 12, 2008; TradeWinds Island Grand Resort; St. Pete Beach, Florida, B. V. Phani.
- 65. Co-Chair, National Workshop on Intellectual Property Rights, 25<sup>th</sup> Feb to 29<sup>th</sup> Feb 2008, IIT Kanpur, B. V. Phani.
- 66. Reviewer, 44th Annual Meetings of Eastern Finance Association, April 9 12, 2008; Trade Winds Island Grand Resort; St. Pete Beach, Florida, B. V. Phani.
- 67. Reviewer, 43<sup>rd</sup> Annual Meeting of Eastern Finance Association, April 18 21, 2007, New Orleans, Louisiana, B. V. Phani.
- 68. Member Program Committee- 11<sup>th</sup> Annual Convention of the Strategic Management Forum; May 10 12, 2008, B. V. Phani.
- 69. Member, Program Committee, National Workshop on Intellectual Property Rights, 31st March to 1st April 2007, IIT Kanpur, B. V. Phani.
- 70. Reviewer, Management Review, Indian Institute of Management Bangalore, B. V. Phani.
- 71. Participant, Workshop on Measuring Intangibles in a Knowledge Economy (MIKE), EU-Asia Link Project, 2<sup>nd</sup>-6<sup>th</sup> September 2007, Barcelona, Spain, B. V. Phani.
- 72. Chairman, Innovators workshop on Grass root innovation, 6<sup>th</sup> April, 2007, 2007-08, B. V. Phani.
- 73. Member, Management Committee of Endowment Fund-IIT Kanpur, 2007-08, B. V. Phani.
- 74. Poster paper titled Sinter-Bonding of Stainless Steel Substrate with Boride Based
- 75. Cermets (B. Palanisamy and A. Upadhyaya) was awarded the Best Poster Award in the International Symposium on Advances in Stainless Steels (ISAS 2007) held between 9-11 April 2007 at Chennai.
- 76. Paper titled: Mathematical Modeling of Post-Combustion in a EAF by D. Mazumdar (coauthors: A.S Mujumdar and Wu Xonghua) received the Best oral paper presentation award at NMD ATM 2007 held at Mumbai in November 2007.
- 77. nominated on the panel of foreign reviewers, Austrian Science Foundation (FWF), 2007-present, Dr. B. Basu.

- 78. Nominated as member of the editorial board of Materials Science and Engineering: C Materials for Biological Applications (Elsevier Journal), Dr. B. Basu.
- 79. International Coble Award from the American Ceramic Society. The award shall be presented in the Department of Atomic energy (DAE) Solid State Physics Symposium on October 6, 2008 in Pittsburgh, USA, the Award by the Department of Atomic energy (DAE) Solid State Physics Symposium. This award honors late Professor R. L. Coble (Emeritus Professor, MIT, USA). Since the inception of this award in 1996, Dr. Bikramjit Basu will be the first Indian from India and second from Asia to receive this award.
- 80. INSA Scientist of the Year 2008 Award by The Indian National Science Academy, Dr. Ashish Garg.
- 81. DAE Young Scientist Award for the Year 2008, Dr. J. Ramkumar.
- 82. President of the Indian Society of Theoretical and Applied Mechanics (ISTAM) for the year 2008, Dr. Gautam Biswas.
- 83. 2008 SAE Ralph R. Teetor Educational Award recipient. The award is given to young engineering educators in automotive engineering, Dr. Avinash Agarwal.
- 84. Chair the Automobile Technology Park under the Board for Smart Materials Research & Technology (B\_SMART) of the National Program on Smart Materials, Dr. N. S. Vyas.
- 85. Chair a session entitled Digital Empowerment-Outcome of Desktop Revolution as a part of the International Conference on Engineering Education and Research (ICEER) 2007, to be held in Victoria (Australia) in December 2007, Dr. A. Chatterjee.
- 86. Indian National Science Academys INSA Young scientist award for the year 2007 on December 23rd 2007, Dr. Avinash Agarwal.
- 87. Member of the Editorial Board of ISurfSE: International Journal of Surface Science and Engineering published by Inderscience, UK, Dr. V. K. Jain.
- 88. Chosen for the Young Scientist Award (2007-08) Engineering Sciences given by the Indian Science Congress Association, Dr. J. Ramkumar.
- 89. Elected Fellow of the National Academy of Sciences, India. He has also been elected as the Indian Representative to the apex body for promotion of research in Mechanics, International Union of Theoretical and Applied Mechanics (IUTAM) for four years wef January 2008, Dr. Gautam Biswas.
- 90. Invited by the Editor of Journal of Clinical Rehabilitative Tissue Engineering Research (CRTER) to be a member of the International Reviewer Board, Dr. Kamal Kar
- 91. Fellows of Indian Academy of Engineering, Professors P. Munshi and V. Eswaran.

- 92. The doctoral work of Atul Srivastava (PhD-2006) has been given the best thesis award of INAE. The title of his thesis: Optical imaging and control of convection around a KDP crystal growing from its aqueous solution.
- 93. The Korean Academy of Science and Technology (KAST) has invited <u>Dr. Gautam Biswas</u> to deliver an invited talk on Educational Environment in India: A review at the symposium. The 10th KAST International Symposium on Interdisciplinary Education for Science and Technology Innovation scheduled to take place from September 13-14, 2007 in Seoul, Korea
- 94. Honored with the prestigious <u>Shanti Swarup Bhatnagar prize</u> in Engineering Sciences, <u>Dr. Kalyanmoy Deb.</u>
- 95. Invited to join the Editorial Advisory board of Recent Patents on Mechanical Engineering, a publication of Bentham Science Publishers Ltd., Dr. Avinash Agarwal.
- 96. Conferred for the Alkyl Amines UICT Foundation Day Young Scientist Award for the year 2007, Dr. Avinash Agarwal.
- 97. Chosen to receive the Grover Medal for Young Scientist by the International Heat Pipe Committee, Dr. Sameer Khandekar.
- 98. Invited to join the review board of International Journal of Computational Science, Dr. Bhaskar Dasgupta.
- 99. Invited to join the editorial board of IJMTM International Journal of Machine Tools and Manufacture, Dr V.K. Jain.
- 100. The PhD work entitled Optical imaging of convection around a KDP crystal growing from its aqueous solution by Atul Srivastava has been chosen for the <a href="https://example.com/best-PhD">best-PhD</a> thesis award (2006) during the National Laser Symposium held at RRCAT Indore.
- 101. Invited by the IEEE Industrial Electronics Society to be on their panel of reviewers (on papers related to Thermal management/modeling and experimentation/applications), Dr. Sameer Khandekar.
- 102. Delivered a keynote address entitled Mathematical Modelling of Turbulence at the National Conference on CFD Applications in Power and Industry Sectors organized by the Corporate R&D of BHEL Hyderabad during 17-18 November 2006. Further, he chaired a session on Applications of CFD in Power Plant Accessories, Dr. Gautam Biswas.
- 103. Invited to join the editorial board of International Review of Mechanical Engineering (IREME), <u>Dr. P. K. Panigrahi</u>.
- 104. Selected for the Young Scientists award for the year 2006 by the Systems Society of India. The award will be presented on 2nd November 2006 in the inaugural session of the National Systems Conference, <u>Dr. Bishakh Bhattacharya</u>.

- 105. Elected Fellow, <u>American Society of Mechanical Engineers (ASME)</u>, <u>Dr. Gautam Biswas</u>.
- 106. Delivered a Keynote lecture at the <u>Third Asian Vehicle Emission Control Conference (AVECC 2006)</u> held at Jaipur during 20th- 22nd September 2006. The title of his talk: 2/3 Wheeler Vehicular Emissions: New technologies available and impact on air quality from 2-wheeler industry, <u>Dr. B. P. Pundir</u>.
- 107. Selected for Innovative students project Award-2006 (based on the M.Tech. Thesis) by Indian National Academy of Engineering, New Delhi, Mr. Prabhat Agnihotri.
- 108. <u>Honored for his citations</u>, Dr Kalyanmoy Deb.
- 109. has been elected Fellow of the Indian Academy of Sciences, Bangalore, <u>Dr. Kalyanmoy Deb.</u>
- 110. <u>Dr V.K. Jain</u> has been appointed to the Editorial Board of International Journal of Advanced Manufacturing, a Springer-Verlag publication.
- 111. <u>Dr. Sameer Khandekar</u> has been granted the DAE Young Scientist Award of BRNS, DAE to work on the research project entitled, Development of a Novel Pulsating Heat Pipe-based Compact Heat Exchanger.
- 112. <u>Dr. Anupam Saxena</u> has been granted the <u>AICTE</u> Career Award for Young Teachers for a period of three years.
- 113. Biography published in Marquis Whos Who in the World, 25th Silver Anniversary Edition, 2008, B. Bhushan.
- 114. Included in the online database of The Asia Pacific Directory of Academics (previously The Australian Directory of Academics), 2007, B. Bhushan, S. Mathur.
- 115. Membership of International Association of University Professors of English, Switzerland, G. Neelakantan.
- 116. Guest Editorship for Creative Forum: Special Number on Cyberpunk Literature, No. 1, January 2009, T. Ravichandran.
- 117. Included in the online database of The Australian Directory of Academic & Research Associations, 2008, P. Murali Prasad.
- 118. Rated as outstanding teacher for the course PHY624-Magnetism in materials, Dr. Z. Hossain.
- 119. Young Achievers award, 2007 -08, awarded by the Department of Atomic Energy (DAE) at the Solid State Physics Symposium, Mysore 27th 31st Dec. 2007, Dr. Satyajit Banerjee.
- 120. Center of Excellence (COE) award for travel, stay and special invited lecture at the Advanced Research and Education Center of Nano Vision Science, Shizuoka University, Hamamatsu, Japan (December 14 20, 2007), Dr. Sudeep Bhattacharjee

- 121. Swarnajayanti fellowship 2006. Awarded by Department of Science and Technology, India, Dr. M.K. Verma.
- 122. Best Poster Award to the student of Dr. R.C. Budhani for the poster Pulsed laser deposition of epitaxial CrN films on (100) MgO Gyanendra Singh, N. K. Pandey and R. C. Budhani, Presented at IUMRS-ICAM 2007. [RCB]
- 123. IRCC Research & Industrial Consultancy Awards for 2006 IIT Bombay Research Paper Award for 2006, Dr. T. Sarkar.
- 124. Ramanna Fellowship, DST, Dr. J. K. Bera.
- 125. Shanti Swarup Bhatnagar Prize in Chemical Sciences, Council of
- 126. Scientific and Industrial Research, Government of India, 2007, Dr. A. Chandra.
- 127. Fellow, Indian National Science Academy, New Delhi, Dr. V. Chandrasekhar.
- 128. Fellow, National Academy of Sciences, Allahabad, Dr. V. Chandrasekhar.
- 129. Prof. J N Mukherjee, Award (2008), Indian Chemical Society, Kolkata, Dr. N. S. Gajbhiye.
- 130. AVRA Young Scientist Award 2006 (2007), Dr. F.A. Khan.
- 131. Awarded Chemical Research Society of India (CRSI) Bronze Medal 2008, Dr. R.N. Mukherjee.
- 132. Vice President, Chemical Research Society of India, Bangalore (2008 2011), , Dr. R.N. Mukherjee.
- 133. Member, Editorial Board, Research Letters in Inorganic Chemistry (2008 ), Dr. R.N. Mukherjee.
- 134. Fellow, Indian National Science Academy (2008), Dr. R.N. Mukherjee.
- 135. J C Bose Fellowship by the Department of Science & Technology, New Delhi, 2008, Dr. R.N. Mukherjee.
- 136. Member, Advisory Board of Dalton Transactions (RSC) (2008 2009), Dr. R. N. Mukherjee.
- 137. Awarded a collaborative joint research project with Prof. I. Fritsky, by India and Ukraine Joint Science & Technology Committee, (University of Kiev, Ukraine) (2008 2011), Dr. R.N. Mukherjee.
- 138. Awarded a collaborative joint research project with Prof. Ebbe Nordlander, (University of Lund, Sweden) (2007–2011), Dr. R.N. Mukherjee.
- 139. Vigyan Ratna Samman of U.P., Dr. V. K. Singh.
- 140. Bhagyatara Award of Panjab Univ, Dr. V. K. Singh.
- 141. FASc, Ramanna Fellow, Dr. V. K. Yadav.
- 142. Member, Steering Committee, Association for Logic in India, M. Banerjee.
- 143. Won the Kishore Vaigyanik Protsahan Yojna Fellowship, 2007, Ankur Jain (Y7072).

- 144. Elected as an associate of the Indian Academy of Sciences, 2007, A. K. Ghosh.
- 145. Senior Associate Editor, Applied Mathematics and Computation, M. K. Kadalbajoo.
- 146. Editorial Board Member of (1) Journal of Modern Applied Statistical Methods, (2) Journal Statistics and Its Applications, (3) Journal Communications in Statistics Theory and Methods and (4) Journal Communications in Statistics Simulation and Computation, Debasis Kundu.

# (F) CONTINUING EDUCATION ACTIVITIES

## Aerospace

Coordinator, Combustion and Spray, QIP short-term course, December 2007,
 P. Mishra.

## Biological Science and Bio-engineering

2. ChIP-on-chip workshop, Sponsored from DBT Project, IIT Kanpur, 11<sup>th</sup> – 13<sup>th</sup> March 2008, Number attended from academic, Industry: Academic: 2, Industry: 3, Pradip Sinha.

## Chemical

- 3. Got sanction for DST SERC School on Newer Optimization Techniques for Chemical Engineering Applications to be conducted during June 09-14, 2008, Sanjeev Garg.
- 4. Coordinator of a Short course Plasma Basics and Industrial Applications, November 3-4, 2007, IIT Kanpur, S. Panda.

#### Civil

- 5. Self-sponsored Short course: Principles of Pavement and Traffic Engineering, March 12-14, 2008, IIT Kanpur, co-coordinator: Dr. P. Chakroborty, 51 participants from academia and industry, Das, Animesh.
- 6. Experimental Methods in Earthquake Engineering at IIT Kanpur in March 2008, Durgesh C Rai, C.V.R. Murty and Sudhir K. Jain.

- 7. Seismic Design of Steel Structures at IIT Kanpur in October 2006, Murty, C.V.R., Durgesh C. Rai and Sudhir K. Jain.
- 8. 2 Lectures at AirForce Administrative College, Coimbatore, Tripathi, S.N.,.

# Computer Science

9. Program Optimization for Multi-core Architectures, CDTE course for faculty from Engineering Institutes, July 2-7, 2008, Sanjeev K. Aggarwal.

#### Electrical

- 10. A short course on Principles and Practices in Radio Frequency Identification (RFID), Nov.10-15, 2007, I.I.T. Kanpur, Dr.A.R.Harish.
- 11. A short course on Audio & Video: Processing, Transmission, Coding and Display, Nov.-Dec. 2007, I.I.T. Kanpur, Dr.A.Banerjee & Dr.K.S.Venkatesh.
- 12. Coordinator of Short-term Training course On Recent Practices in Electric Power Distribution at IIT Kanpur, November 27-29, 2007, Dr. S. N. Singh.
- 13. Application of MATLAB® in Engineering, 3 weeks quality improvement Program for Faculties, Number attended 60 faculties from local colleges, Venue-MAIT, Rohini, New Delhi, Organized By- MAIT and IIT Kanpur, December, 2007, Dr. P. K. Kalra.
- 14. Short Term Course on Recent Advances in Testing and Design of Insulation for QIP and industry participants, Dec 2007, Dr. Nandini Gupta.

## Industrial & Management

- 15. National Workshop on Project Financing for Energy and Infrastructure Sector from 19-22 April, 2007 at IIT Kanpur. About 30 participants from academic and industry, Singh, Anoop.
- 16. Organized a QIP and Self-sponsored course on Supply Chain Management at IIT Kanpur, Sep 30- Oct 5, 2007. 30 QIP candidates and 10 industry candidates, Peeyush Mehta.
- 17. Organized a Self-sponsored course on Supply Chain Management at IIT Kanpur through SIIC, Jan-Feb, 2008. 55 industry candidates, Peeyush Mehta.

## Materials and Metallurgical

- 18. A short course on Modeling in Metals Processing: concept, theory and application, organized by Dr. D. Mazumdar was held at IIT Kanpur between 21 to 24 December, 2007. The course was attended by 19 participants from academia and industries and research institues.
- 19. The course co-ordinator for Materials for Biomedical Applications (BIOMAT-2007), 7-11<sup>th</sup> May, 2007, sponsored by Centre for Development of Technical Education (CDTE), IIT-K. More than 10 participants from Academic Institutes and R & D Laboratories across the country took part, Dr. B. Basu.
- 20. Organized a short-term course on Ultrafine grained materials and Nanocomposites (NANOMAT-2007), 12-16<sup>th</sup> March 2007, sponsored by Centre for Development of Technical Education (CDTE), IIT-K. More than 10 participants from Academic Institutes and R & D Laboratories across the country took part, Dr. B. Basu and Dr. Gouthama.

#### Mechanical

- 21. Delivered series of lectures in the QIP course Modern Experimental techniques in mechanics of fluids and solids at IIT Kanpur from May 7-11, 2007, P.K. Panigrahi.
- 22. Inaugural Joint Iitk Ntu Singapore Workshop In Mechanical, Aerospace, And Industrial Engineering, 10-11<sup>th</sup> July 2007, organized at the Department of Mechanical and Aerospace Engineering, NTU Singapore in the areas of computational mechanics, multi-scale modeling, micro-scale transport, energy, and supply chain management. Coordinators: K. Muralidhar and M. Damodaran.
- 23. Coordinated, 2nd National Workshop on Smart Materials for Design of Intelligent Systems & Industrial Applications (SMDISA 2007), 23-24 March 2007, 42 participants from industry and academic institutes, B. Bhattacharya.
- 24. Conducted International Conference on advance materials and composite at IIT Kanpur from Dec 12<sup>th</sup> 14<sup>th</sup>, 2007– INCCOM-06, J. Ramkumar.
- 25. A one-week short course sponsored by Research Designs and Standards Organization, Indian Railway for engineers from Engine Development Directorate Fundamentals of Internal Combustion Engines from 23<sup>rd</sup> 27<sup>th</sup> March 2007. (Coordinator: Dr Avinash Kumar Agarwal).
- 26. A one-week short course sponsored by Research Designs and Standards Organization, Indian Railway for engineers from Engine Development Directorate Advanced Internal Combustion Engine Technology from 13<sup>th</sup> 17<sup>th</sup> September 2007. (Coordinator: Dr Avinash Kumar Agarwal).

- 27. Course Coordinator QIP Short Term course titled Modern Experimental Techniques in Mechanics of Fluids and Solids, IIT Kanpur, May 07-11, 2007 (in association with Dr. V. Venkitanarayanan, Department of Mechanical Engineering), 40 participants, S. Khandekar.
- 28. Workshop Coordinator National Workshop titled Fuel Cell Technology: Progress and Prospects, IIT Kanpur (supported by Shastri Indo-Canadian Institute, New Delhi), Kanpur (UP), 2007 (about 40 participants including international speakers), S. Khandekar.
- 29. International and INCCOM-6 Conference on Future Trends in Composite Materials and Processing, Innovations in Composites for the New Century, IIT-Kanpur, 12-14<sup>th</sup> December 2007, K.K. Kar.

#### **Humanities and Social Sciences**

- 30. A Lecture on Success in Interviews on 11 August 2007 during the Workshop on Interview Skills organised by the Department of Mathematics and Statistics, IIT Kanpur, T. Ravichandran.
- 31. Lectures on Listening Skills, Reading Skills, Telephone Skills Netiquettes, Oral Presentation, Successful Interviews to the Korean participants of the Summer Course on Organic Electronics 2007 held between 25 June and 20 July 2007 organised by Samtel Centre for Display Technologies, IIT Kanpur, T. Ravichandran.
- 32. Conducted a Workshop: For CA trainees of Institute of Chartered Accountants of India, Kanpur, L. Krishnan. Two sessions: Aug 2007 1) Team Building 2) Interpersonal Communication, Two sessions: Feb. 3, 2008 1) Team Building 2) Interpersonal Communication
- 33. Convener (Co-Convener Prof. A.K. Sinha, HSS Department): The 17<sup>th</sup> Annual Conference of National Academy of Psychology (NAoP), India Dec. 17 to 19, 2007 at IIT Kanpur. Theme: Psychology, Technology and Society. L. Krishnan.
- 34. Conducted a 1-day Workshop at NABARD, NBSC, Lucknow, October 6, 2007: Personality assessment with Cattells 16 PF (Training session), L. Krishnan.

#### Mathematics and Statistics

35. Co-ordinator, 2nd Indian Winter School on Logic, January 14-26, 2008, IIT Kanpur, M. Banerjee.

- 36. 2. Organized DST NationalMeet of Research Scholars in Mathematical Sciences (NMRSMS 2007), October 30 November 4, 2007, A. K. Lal.
- 37. 3. Organised Fourth Annual Foundation School (NBHM), December 3-27, 2007, S.Madan, S. K. Ray and P. Mohanty.

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

## Aerospace

- 1. Elected as an executive member of the combustion institute (India Section) for 2007-2009.
- 2. Chaired a technical session in the International Conference on IC Engine and Combustion, Hyderabad 2007.

#### Chemical

- 3. Reviewed two papers for Journal of Chemical Physics (a journal published by American Institute of Physics), P. A. Apte.
- 4. Chairman of 2<sup>nd</sup> Technical Session in National Seminar on Recent Advances in Chemical Engineering Operation and Process in Chemical and Allied Industries, at Institute of Technology, Guru Ghasidas University, February 5-6, 2008, P.K. Bhattacharya.
- 5. Chairman, Plenary Session during Overview of Membrane based Effluent Treatment at IIT-Kanpur, in All India Seminar on Zero effluent discharge-latest development In recycling during 22-23 December, 2007; Organized By The Institute of Engineers (India) West Bengal State Centre Chemical Engineering Division at Kolkata, P.K. Bhattacharya.
- Chairman, Technical Session during National Conference on Frontiers of Chemical Engineering at Department of Chemical Engineering, Indian Institute of Technology Guwahati during 12-14 December 2007, P.K. Bhattacharya.
- 7. Member, PAC (Chemical Engineering), DST, N. Delhi, D. Kunzru.
- 8. Member, Board of Governors, Rajiv Gandhi Institute of Petroleum Technology, Rai Bareli, U.P., D. Kunzru.
- 9. Designed, fabricated and operated a Spinning Disc Reactor as part of Process Intensification efforts. Cost approx. Rs. 70,000/- Imported one costs about Rs. 55 lacs (It has better instrumentation). Cooperative efforts of Students

- Anuj Kumar, Aviral Chopra, K Malayaz, fabricated by Mr. Visvakarma in Chemical Engineering Department workshop, J. P. Gupta.
- 10. Council Member (Engineering & Materials), Indo-French Centre for the Promotion of Advanced Research (IFCPAR), New Delhi, 2008-2010. A. Sharma
- 11. Member, Board of Governors, Indian Institute of Science Education and Research (IISER), Mohali (2007-2009), A. Sharma.
- 12. Member, Research Council, National Institute for Interdisciplinary Science and Technology (NIST-CSIR), Trivendrum (2007-09), A. Sharma.
- 13. Member, Research Advisory Committee, Indian Association for the Cultivation of Science, Kolkata (2007-09), A. Sharma.
- 14. Member, Sectional Committee for Engineering and Technology, Indian Academy of Sciences (2007-2008), A. Sharma.
- 15. Member, Sectional Committee for Engineering and Technology, Indian National Science Academy (2006-2008), A. Sharma.
- 16. Member, Sectional Committee on Chemical Engineering and Biotechnology, Indian National Academy of Engineering (2005-2008), A. Sharma.
- 17. Member, Program Advisory Committee for Chemical Engineering Program (PAC-ChE), Department of Science and Technology, New Delhi (2007-1010), A. Sharma.
- 18. Member, The Nano Applications and Technology Advisory Group (NATAG), Department of Science & Technology, New Delhi (2008-2010), A. Sharma.
- 19. Member, Platinum Jubilee Advisory Group of the Indian Academy of Sciences, Bangalore (2008), A. Sharma.
- 20. Member, External Review Committee, School of Computational Sciences, Korea Institute of Advanced Studies (KIAS), Seoul (ten yearly review; 2007), A. Sharma.
- 21. Member (UGC Nominee), Advisory Committee, Center for Advanced Studies, Phase VII at University Institute of Chemical technology, Mumbai (2007-), A. Sharma.
- 22. Member (UGC Nominee), Advisory Committee, Center for Advanced Studies, Department of Chemical Engineering, Benaras Hindu University Institute of Technology (2007-), A. Sharma.
- 23. Member, SSB Prize Advisory Committee in Engineering Sciences (2007), A. Sharma.
- 24. Project granted by DRDO (Rs. 80 lacs approx) on Metal impregnated activated carbon fibers for the control of chemical warfare agents, N. Verma.
- 25. Reviewed manuscript of J. Catal., Catalysis Today, Appld. Catal. Gen A; G. Deo

#### Electrical

26. Submitted a joint research proposal in collaboration with Telecom Management sudParis to IFCPAR, Dr.Y. N. Singh.

## Materials and Metallurgical

- 27. Attended the Discussion Meeting on Processing of ODS Alloys for Clad Tubings in Fast-Breeder Reactor held at IGCAR, Kalpakkam on May 21, 2007, Dr. A. Upadhyaya.
- 28. Attended the Discussion Meeting on Material Requirements for ITER Project held on September 14, 2007 at IGCAR Kalpakkam, Dr. A. Upadhyaya.

# (H) ANY OTHER IMPORTANT ACTIVITY NOT SPECIFIED IN ABOVE COLUMNS

### Aerospace

- 29. Elected as an executive member of The combustion institute (India Section) for 2007-2009, D. P. Mishra.
- 30. Chaired a technical session in the International Conference on IC Engine and Combustion, Hyderabad 2007, D. P. Mishra.

## Biological Science and Bio-engineering

31. Received a major World Bank-funded project (Rs.5.5 crores) through Indian Council of Agricultural Research (ICAR), for a period of five years. This has been awarded to a consortium led by Dr. K. Subramaniam to apply the RNAi-based technology to investigate plant-nematode interactions. Other members of this consortium are National Research Centre of Plant Biotechnology, Indian Agricultural Research Institute and Indian Institute of Pulses Research.

- 32. Received Extramural Grants, Title of the research program Creating a BMP-responsive reporter cell line, Granting agency CSIR, Amount Rs. 11,06,000, Date of commencement: April, 2007, Dr. A. Bandopadhyay.
- 33. Title of the research program Identification and Functional characterization of
- 34. BMP target genes in Osteogenesis. Granting agency: DST, Amount: Rs. 22,86,000, Date of commencement 30 May, 2007 Dr. A. Bandopadhyay.
- 35. Joined editorial board of Indian Journal of Biomechanics published by Indian Society of Biomechaincs, 2008, Dr. A. Pal

# Computer Science

- 36. Fellow of Indian National Science Academy, October 2007, Manindra Agrawal.
- 37. Fellow of Mational Academy of Sciences, August 2007, Manindra Agrawal.
- 38. TPC member for: ISCC 2008, ICDCN 2008, ICDCIT 2007, ICDCIT 2008, IC3 2008, IEEE Mass2008, IFIP Network 2008. ACM Compute 2008, WoM 2008, Ratan K. Ghosh.
- 39. Program Committee Member, FSTTCS 2007, Sumit Ganguly.
- 40. Member national Technical Advisory Committee of Centre for Development of Advanced Computing (CDAC), R.M.K. Sinha.
- 41. Member Working Group on Technology Development for Indian Languages (TDIL), MCIT, Govt. of India, Member PRSG on OCR and OHR Consortia, MCIT, Govt. of India, R.M.K. Sinha.
- 42. Member PRSG on English to IL MT Consortia, MCIT, Govt. of India, R.M.K. Sinha.
- 43. Chair for tutorial and workshop during 1st India Software Engineering Conference (ISEC), Hyderabad, Feb 19-22, 2008, T.V. Prabhakar.

#### Industrial & Management

- 44. Member, Working Group on Power for the 11th Five-Year Plan (Sub-groups on Policy, and Regulatory Issues and Financial Issues), Planning Commission, Government of India, Singh, Anoop.
- 45. Guest Editor, International Journal of Energy Sector Management (special issue related to India and China), Emerald, Singh, Anoop.
- 46. Reviewer (i) Energy: The International Journal, Elsevier; (ii) IEEE Transactions on Power Systems, Singh, Anoop.

- 47. Case Studies on Industrial Clusters: A Study of Kanpur Leather & Footwear, Varanasi Silk Saree and Moradabad Brassware Clusters. Report submitted to DSIR, N Delhi, IIT Kanpur, Dec. 2007, Rahul Varman & Manali Chakrabarti.
- 48. Critiquing Globalisation. Review of Questioning Globalization by Kavaljit Singh. Madhyam Books, Delhi & Zed Books, London and New York, 2005. Economic and Ploitical Weekly, 42, 9, 3012-3014, 2007, Rahul Varman.
- 49. National conference on Intellectual property rights, Feb28-March, 2008 IIT Kanpur, Ashok K Mittal/B.V. Phani/ P.M. Prasad .
- 50. IPR cell (Chair) MHRD New Delhi, Ashok K Mittal.
- 51. Development of Power Sector in UP. Agency: Giri Institute of Development Studies for a Study Group formed by Planning Commission to Prepare a Road Map for Rapid Economic Development of UP, Singh, Anoop.
- 52. The Institutional Framework for Rural Energy Service from Renewables Agency: Dept. of Economics, University of Cambridge, Cambridge (UK). (with Dr. Karsten Neuhoff and Mr. James Cust of Dept. of Economics, University of Cambridge, UK), Singh, Anoop.
- 53. Principal Investigator, NAIP, National Agriculture Innovation Project. Govt. of India, ICAR & World Bank,, (NAIP/IME/20070258), Jayanta Chatterjee & Runa Sarkar.
- 54. Principal Investigator, WP7, OPAALS, sponsored by European Commission, (EC/IME/20060101), Jayanta Chatterjee.
- 55. Co-Investigator, WP6 & 10, OPAALS, sponsored by European Commission, (EC/IME/20060100), Jayanta Chatterjee.
- 56. Knowledge Integration in a Research Network, RCI, Defence Research & Development Organisation (Ongoing since 2005), Jayanta Chatterjee.
- 57. Principal Investigator, Technology Seed Fund Support (Technology Development Board), 2007-08, B. V. Phani.
- 58. Principal Investigator, SIDBI Innovation and Incubation Centre, 2007-08, B. V. Phani.
- 59. Principal Investigator, Seed Fund Weather Risk Management, 2007-08, B. V. Phani.
- 60. Principal Investigator, Technopreneur Promotion Program (TePP), 2007-08, B. V. Phani.
- 61. Principal Investigator, Seed Fund Multifacet Software Solutions Limited, 2007-08, B. V. Phani.
- 62. Principal Investigator, Seed Fund Whorl Engineering Solutions, 2007-08, B. V. Phani.
- 63. Principal Investigator, SIIC-MCIT Framework For National Entrepreneurs Support Programme, 2007-08, B. V. Phani.
- 64. Principal Investigator, Small Industry Cell, IIT Kanpur, B. V. Phani.

- 65. DRDO Advanced research project on crypt analysis using machine learning algorithms, April 2008, B. Chandra.
- 66. DST has sanctioned a project on Developing new split measures for classification in decision trees, B. Chandra.

# Materials and Metallurgical

- 67. As a part of the Industrial Tour (MME390), the III yr MME students visited TATA Motors factory at Lucknow and Ordnance factory at Kanpur. The tour was conducted by Dr. K. Mondal.
- 68. Drs. R. Balasubramaniam, A. Upadhyaya and B. Basu were Convenors and Co-Convenors, respectively, for the International Conference on Metals and Alloys: Past, Present and Future that was held at IIT Kanpur between 07 and 10 December 2007. (Detailed conference report is attached herewith).
- 69. Dr. B. Basue was the Convener the International Workshop (Theme Meeting) on Nanoceramics and Nanocomposites, held at IIT Kanpur during 8-9 September, 2007 (<a href="http://www.iitk.ac.in/infocell/announce/nanoceram/">http://www.iitk.ac.in/infocell/announce/nanoceram/</a>).
- 70. TRADITION AND INNOVATION IN THE HISTORY OF IRON MAKING AN INDO EUROPEAN PERSPECTIVE by Girija Pande and Jan af Geijerstam (Eds.), PAHAR Parikrama, Talla Danda, Nainital 283 002, 2002. review published in Indian Journal of History of Science, 42 (2007) 111-115.
- 71. PERSIAN STEEL: THE TANAVOLI COLLECTION by James Allen and Brian Gilmour, Oxford University Press, 2000. review published in Indian Journal of History of Science, 42 (2007) 713-726.
- 72. Archaeometallurgical activities: Investigation of Dimensions of Delhi Iron Pillar, 08 January 2008, ii. Investigation of Gupta Temple at Eran, Madhya Pradesh, 9 Feb 2008, R. Balasubramaniam.

## Mechanical

73. Designed a cascade tunnel with a sweeping row of wake-generating cylinders to mimic the stator-rotor interactions, S. Sarkar.

- 74. Coordinated the activities on behalf of IIT Kanpur towards a national initiative on Futuristic Technologies for Gas Turbines in the country, S. Sarkar.
- 75. Initiation Grant Proposal, Indian Institute of Technology, Kanpur, Multiplex assaying of water borne pathogens using a Micro-chip platform, Funded (Sep. 2007- Sep. 2008). (Amount: Rs. 10, 00,000), S. Bhattacharya.
- 76. Department of Biotechnology, Government of India, Integrated Dielectrophoresis based concentration and real time PCR based identification of food pathogens in a single microchip, Submitted. (August 2007). (Amount: Rs. 49, 00,000), S. Bhattacharya.
- 77. Department of Information Technology, Ministry of Communication and Information Technology, Government of India, Bio-nano-photonics, Submitted (November 2007). (Amount: Rs.3 crores), S. Bhattacharya.
- 78. Bhaba Atomic Research Center, Exploratory studies for micro-Nanoscale structures and studying micro/ nano-scale transport, Submitted (November 2007). (Amount: Rs. 50, 00,000), S. Bhattacharya.
- 79. Organized INDO-GERMAN WINTER ACADEMY (A Brainstorming Academic Conclave on several exciting research themes, attended by the bright young undergraduates of various IITs and University of Erlangen-Nuremberg, Germany) at IIT Guwahati together with Prof. Subhash Mishra (IIT Guwahati), G. Biswas.

### **Humanities and Social Sciences**

- 80. Member of advisory committee of Pragat Shikshan Sansthan, Phaltan, Maharashtra, A. Madan.
- 81. Member of advisory committee of Early Literacy Project, New Delhi, A. Madan.
- 82. Visiting faculty for dual-mode (contact and online) MA programme in Elementary Education, conducted by Tata Institute of Social Sciences, Mumbai, Madan.
- 83. Invited as Visiting Professor by Kyushu University, Japan (August to November 2007), B. Bhushan.
- 84. GUEST EDITOR to special issues of the International Journal: PERSPECTIVES IN GLOBAL DEVELOPMENT & TECHNOLOGY, (BRILL ACADEMIC PUBLISHERS, BOSTON & LEIDEN)1. Volume. 6. No.4, 2007. 2. And Volume. 7. No.1.2008, Devoted to the theme: Science and Technology under Globalization, Binay K. Pattnaik.
- 85. Festival Chairperson, Alfaaz, the IITK Literary Festival, Mar. 2008, S. Mathur.

- 86. Festival Chairperson, Umang, the IITK Media Festival, Jan. 2008, S. Mathur.
- 87. 2006-Present Faculty coordinator for English Speaking and Writing Instruction for Lakshya, an adult education programme run by the DRPG office, S. Mathur.
- 88. Beyond blaming the victim. The Hindu. (June 3, 2007), J. Das, & Kumar Ravi Priya.

## **Physics**

- 89. Actively participated in department/institute administration (member DPGC, workshop, warden), Dr. Z. Hossain.
- 90. Refereed papers for Physical Review B, Solid State Comm, Dr. Z. Hossain.
- 91. Examiner for Ph.D. thesis from Jamia Millia Univ, Delhi, Dr. Z. Hossain.
- 92. A summer course (PHY103) during 2007 to undergraduate students with backlogs in this particular subject, Dr. S. Bhattacharjee.
- 93. Involved in installing a major facility for cross disciplinary research, namely1.7 MV Tandetron accelerator, with microprobe and heavy ion irradiation. Beam lines have been designed and fabricated for carrying out research in solid state materials and other cross disciplinary field with a focus on development of futuristic technology. The facility is expected to be ready by mid June 2008, Dr. V.N. Kulkarni.
- 94. Authored a book Introduction to Mechanics. To be published in July 2008 by University Press, Dr. M.K.Verma.
- 95. Involved in the installation of 1.7MV Tandetron accelerator, the major facility coming up at IITK, Dr. S. Dhamodaran.
- 96. Involved in On re-structuring of UG/PG curricula in India, white paper prepared as a member of a Discussion Group set up jointly by the three Indian Academies of Science as preparation for the next Five Year Plan, Dr. S. Raychaudhuri.
- 97. Guest Faculty for the course New Physics at the LHC: Generic Framework at the 23<sup>rd</sup> SERC Main School on Theoretical High Energy Physics, IIT Mumbai (Feb 12-16, 2008), Dr. S. Raychaudhuri.
- 98. Coordinator of the Working Group on New Physics at TeV Scale and Precision Electroweak Studies, at the 2007 ILC workshop at DESY, Hamburg (May June 2007), Dr. S. Raychaudhuri.
- 99. Member of the National Organising Committee for the DAE Symposium on High Energy Physics, Benaras (Jan 2009, scheduled), Dr. S. Raychaudhuri.

- 100. Member of the Programme Advisory Committee for the International Centre for Theoretical Studies, to be set up at Bangalore by the DAE, Dr. S. Raychaudhuri.
- 101. Short Video clips [~15 minutes] for 6 experiments were made. Also, a lecture on Error Analysis was video taped [~45 min]. These are available in the Brihaspati, Dr. S.C. Agarwal.

# Chemistry

- 102. Time comb pulses through ultrafast pulse shaping, S.K. Karthick Kumar and Debabrata Goswami, Kiran—A Bulletin of the Indian Laser Association, 18(2), 17-20 (2007), Dr. D. Goswami.
- 103. Ultrafast pulse shaping: Applications in microscopy, molecular control and computing, D. Goswami, Directions: Reach Symposium 2007, 8(2), 124-128 (2007).
- 104. Guided summer research fellow of IASc, Bangalore, Dr. F.A. Khan.
- 105. Collaborative research at the Jacobs University, Bremen, Germany for 23 days (03 Dec 2007 to 26 Dec 2007) through the support of Royal Society of Chemistry (RSC) Journal Grants, Dr. J.N. Moorthy.
- 106. Invited to give a set of ten lectures on Classical-Quantum correspondences and semiclassical methods in Chemistry at the Inorganic and Physical Chemistry division, Indian Institute of Science, January 2008, Dr. K. Srihari.
- 107. DST PAC member, Dr. V.K. Yadav.

#### Mathematics and Statistics

- 108. Member, Steering Committee, Association for Logic in India, M. Banerjee.
- 109. Won the Kishore Vaigyanik Protsahan Yojna Fellowship, 2007, Ankur Jain (Y7072).
- 110. Elected as an associate of the Indian Academy of Sciences, 2007, A. K. Ghosh.
- 111. Senior Associate Editor, Applied Mathematics and Computation, M. K. Kadalbajoo.
- 112. Editorial Board Member of (1) Journal of Modern Applied Statistical Methods, (2) Journal Statistics and Its Applications, (3) Journal Communications in Statistics Theory and Methods and (4) Journal Communications in Statistics Simulation and Computation, Debasis Kundu.