Publication and Outreach Activities

Books

7. Power system analysis, Prof. Saikat Chakrabarti
8. Synchrophasor applications in power systems, Prof. Saikat Chakrabarti


28. Learning Physics from Traditional Indian Stories, produced by Shiksha Sopan, Prof. H. C. Verma

29. Introductory Mechanics, Prof. Mahendra Kumar Verma

30. Nonlinear Dynamics, Prof. Mahendra Kumar Verma

31. Animations for mechanics with Prof. Gaurav Dar, BITS Pilani at Goa, Prof. Mahendra Kumar Verma
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Civil Engineering


Computer Science and Engineering


Electrical Engineering


12. Rajesh M. Hegde, Multi modal signal processing and delivery systems for intelligent human computer communication, Directions, Vol. 11, No.1, pp.68–83, June 2010 (Prof. Rajesh M. Hegde)


Humanities and Social Sciences


Industrial and Management Engineering


Material Science and Engineering


Mathematics and Statistics


Mechanical Engineering


Physics


Aerospace Engineering


Biological Sciences and Bio-engineering


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175. Ganneboyina, S. R. and Ghatak A. Multi-helical micro-channels for rapid generation of drops of water in oil, Microfluidics and Nanofluidics, April, 2013. Published online.


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217. C. B. Bheeter, J. K. Bera and H. Doucet Palladium-Catalysed Direct Heteroarylation of Bromobenzenes Bearing SO2R Substituents at C2 or C4 RSC Advances, 2013,


284. Synthesis of Coordination Polymers with d^{10} Metal Ions and a New Linear Ligand : X-ray Structural and Luminescence Studies, M. Ahmad and P. K. Bharadwaj, Polyhedron ( Special Issue on Alfred Werner ), (2013), 52, 1145.


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**Humanities and Social Sciences**


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**Biological Sciences and Bio-engineering**


**Chemical Engineering**


29. Modelling of Electrodialytic Removal of Multiple Ions From Synthetic Solutions Tuesday, Jogi Ganesh Dattatreya Tadimetri, Shilpi Jain, Navneet Kumar, Sujay Chattopadhyay, Amiya Kumar Ray and P.K. Bhattacharya, 2012 Annual Meeting in Pittsburgh, PA, October 30, 2012:


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Chemistry


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Civil Engineering


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Computer Science and Engineering

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**Electrical Engineering**


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145. Seema Awasthi, Animesh Biswas and Jaleel Akhtar, “Compact bandstop filter using triangular metamaterial mushroom resonators” Asia Pasific Microwave Conference, Kaohsiung, Taiwan, 4-7 December 2012.

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Humanities and Social Sciences


241. Paper entitled Tracing Back the ‘Psychosocial’ in WHO’s Definition of Health: A Critique of Quantitative Studies of Health in Social Sciences, Tenth Annual Conference of the Indian Association of Social Sciences and Health (IASSH), held at Department of Social Medicine and Community Health, Jawaharlal Nehru University, 21-23 November 2012 (jointly with Kumar Ravi Priya).

242. Paper entitled Health Professional’s constructions of women’s health during midlife transition: a study in Kanpur Nagar, Tenth Annual Conference of the Indian Association of Social Sciences and Health (IASSH), held at Department of Social Medicine and Community Health, Jawaharlal Nehru University, 21-23 November 2012 (jointly with Vibha Dikshit).


Industrial and Management Engineering


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Materials Science and Engineering


Mathematics and Statistics

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299. Debasis Kundu, “Step-Stress Model and Introduction”, Presented at the Kuwait University, April, 2013.

300. Debasis Kundu, “Analysis of Partially Complete Time and Type of Failure Time Data”, Presented at the Kuwait University, April, 2013.

301. "On least absolute deviation estimator of one dimensional chirp model", (jointly with Ananya Lahiri & Debasis Kundu), Statistics.

302. B.V.Rathish Kumar & Vivek Sangwan, “ A uniformly convergence analysis of three step Taylor Galerkin FE monotone iterative DDS for SPPDEs”, MAFELAP-2013, 10-14, June, 2013 at Brunel University, London, Communicated:


**Mechanical Engineering**


321. Aquatic Multi-Robot System for Lake Cleaning, Pranay Agarwal and Bishakh Bhattacharya, CLAWAR-2013.

322. Active Shape Control of Parabolic Antenna Systems Using Shape Memory Alloy (SMA), Praveen Kumar D, B. S Munjal and Bishakh Bhattacharya, ICIUS – 2013.


345. Title: Coiled Carbon Nanotube (CCNT) grown on Carbon Fiber / Polypyrrole composite electrode for supercapacitors Authors: JayeshCherusseri, Raghunandan Sharma, Kamal K Kar Reference: December 3-4, 2012, Dept. of Physics, Karunya University, Coimbatore, Tamilnadu. National Conference on Nanomaterials 2012 (NCN 2012)

346. Title: Coiled Carbon Nanotube (CCNT) coated Carbon Fiber /PEDOT: PSS composite electrode for supercapacitors Authors: JayeshCherusseri, Raghunandan Sharma, Kamal K


Physics


382. A Study of Generalized Parton Distributions For the Proton in AdS/QCD, D. Chakrabarti and C. Mondal; to be published in the conference proceedings of NTSE-2013 held in May, 2013, Ames, USA.


393. Durgesh C. Tripathi and Y. N. Mohapatra Doped/undoped Organic Heterostructures: Analysis of Temperature Dependence of J-V Characteristics 9th International Conference on Organic Electronics (ICOE-2013), Grenoble, France

394. Amruth C, Ashish, Swati Yadav, Shweta¹, Basanagouda B.P., and Y.N. Mohapatra All Inkjet Printed Organic Capacitor on Plastic Substrate 9th International Conference on Organic Electronics (ICOE-2013), Grenoble, France

PAPERS PRESENTED IN SEMINARS/CONFERENCE/WORKSHOPS/SYMPOSIA

Biological Sciences and Bio-engineering


2. R. Khatry, and D P Mishra, Finite element analysis of bamboo and joints using steel members under various loading conditions for design study”, proceedings of International Conference on Emerging Trends in Engineering & Technology (IETET), 2012.


Chemical Engineering


Chemistry

11. A lecture entitled “Chemistry of C-2 Substituted Glycals en route to Some Glycosidase Inhibitors” was delivered in “CRSI Mid year meeting Symposium” at CDRI, Lucknow on July 21, 2012.

12. Delivered two lectures at “Sikkim Government College, Tedong, Gangtok,” on April 12, and April 13, 2013 (i) Selected reagents for transformations addressing selectivity in organic synthesis and (ii) “Carbohydrates: Much more than mere source of energy” in a Science Academies’ workshop titled “Modern Trends in Chemistry” sponsored by the Academies of Sciences, India”.


Computer Science and Engineering

17. Manish Bajpai, P Gupta, P Munshi, Multi-core CPU based three-dimensional image reconstruction for limited view tomography, The 7th world congress on industrial process tomography, Karkov, Poland, 2013

18. Aditya Nigam, Anvesh T and Phalguni Gupta, Iris Classification Based on its Quality, 9th International Conference on Intelligent Computing, Nanning, China, July 2013

Electrical Engineering
20. S. Das and U. Das, "Pixel isolation and dark current reduction in Type-II InAs/GaSb superlattice photodiodes by femto-second laser annealing", assigned the number 423682, The Scientific World Journal, special issue on "Narrow-Gap Semiconductors and Low-Dimensional Structures for Optoelectronic Applications"
21. Mukesh Kumar Singh, Govind Sharma and Naren Naik, "Joint optimization of SINR and power allocation to relays in cluster-based wireless sensor networks".
22. Ashish Vyas, Rishabh Maheshwari, Pradeep Kumar, and Naren Naik, "Dual antenna array for radiolocation of RCIED trigger".

Humanities and Social Sciences

30. Caregiving experiences of family members of relatives with paranoid schizophrenia: Abio-psychosocial approach , International Conference on Schizophrenia, organized by SCARF, Chennai , 21st -23rd September, 2012 (jointly with B. Banerjee)
31. Socio-cultural structuring of health beliefs: Implications for health behaviour and clinical practice. Tenth Conference of Indian Association for Social Sciences and Health on Health, Regional Disparities and Social Development, organized by Centre of Social Medicine and Community Health, School of Social Sciences, Jawaharlal Nehru University, New Delhi, 21 - 23 November, 2012 (jointly with B. Banerjee)
32. Illness perception: Narratives and social representations. 4th Global Conference: Storytelling Global reflections on narrative, organized by the Inter-Disciplinary.Net, U.K, 21 - 24 May, 2013,Prague, Czech Republic (The paper was part of a panel titled, 'In sickness and in health: Individual/community dynamics in Indian cultural narratives' that was jointly proposed along with two other colleagues)
33. Rane, M. & Bhushan. B. Exploring the effect of imagery on visual identity: An eye-tracking study

**Materials Science and Engineering**


35. Deepa Singh, Deepak Gupta and Ashish Garg, Interface Morphology Driven Control of Electrical Properties of PVDF-TrFE and PMMA Blend M-I-M Capacitors

36. Tapendu Mandal, B.K. Mishra and Ashish Garg and D. Chaira, Optimization of process variables for the mehanosynthesis of nanocrystalline hydroxyapatite


**Mathematics and Statistics**

44. A. Ganguly, D. Kundu and Sharmishta Mitra. “Bayesian Analysis of Simple Step-Stress Model under Weibull Lifetimes”;

45. D. Samanta, A. Ganguly, D. Kundu and Sharmishta Mitra. “Order Restricted Bayesian Inference for Exponential Simple Step-Stress Model”.

**Mechanical Engineering**


**Physics**

50. Dynamics of electrically polarized magnetic monopoles in spin ice.
INVITED TALKS DELIVERED

Biological Sciences and Bio-engineering


Chemistry

2. Department of Organic Chemistry, IISc Bangalore, April 26, 2012
3. School of Chemistry, University of Hyderabad, Hyderabad (July 31, 2012)
4. Department of Chemistry, IIT Kharagpur, Kharagpur (December 21, 2012)
5. Institute of Chemistry and Biochemistry, Freie Universität, Berlin, Germany on June 03, 2013.
8. Institut für Anorganische Chemie, Georg-August-Universität Göttingen Tammannstrasse 4, Göttingen, Germany on April 23, 2013
10. Institut für Anorganische Chemie, Karlsruher Institut für Technologie, Germany on February 04, 2013.
11. Department of Chemistry and Earth Sciences, Heidelberg University, Germany on January 08, 2013.

Electrical Engineering


Materials Science and Engineering

Mechanical Engineering

20. Lecture 1: INTRODUCTION TO INVERSE METHODS; Lecture 2: APPLICATIONS OF INVERSE TECHNIQUES, presented at the Department of Mechanical Engineering, IIT Roorkee, 2nd July 2012.  
21. EXTRACTING DATA FROM IMAGE SEQUENCES USING INVERSE TECHNIQUES, Plenary Lecture at the National Workshop on Image Processing Applications in Industry, Medicine, and Aerospace, organized by DRDL Hyderabad held at the Research and Innovation Center, IITM research Park during 28-29 December 2012. 
22. MODELING METHANE PRODUCTION FROM A HYDRATE RESERVOIR VIA SIMULTANEOUS DEPRESSURIZATION AND CO2 SEQUESTRATION, Keynote Lecture at the Gas Hydrates Symposium held at National Institute of Oceanography, Goa on 18th January 2013  
23. IMAGING UNSTEADY THREE DIMENSIONAL FLUID FLOW AND TRANSPORT PHENOMENA, Plenary lecture at the National Laser Symposium-21 held at BARC Mumbai during 6-8 February 2013. 
25. FUNDAMENTALS AND MODELING OF DROPWISE CONDENSATION, three Invited Lectures delivered at IIT Roorkee, 24th June 2013.

Physics

27. International Conference on Light Cone Physics (LC-2012): Hadron and Particle Physics, Delhi, India, 10-15 Dec, 2012.  


33. Colloquium, "Exploring the coexistence of order parameter and a search for broken symmetry in the vortex state of superconductors", Department of Physics, IIT Kanpur, Jan. 20, 2012.

CONTINUING EDUCATION ACTIVITIES

Civil Engineering


Computer Science and Engineering
