

5th Trilateral Conference on Advances in Nanoscience: Energy, Water & Healthcare

Programme Overview

25-28 September 2014, Shenyang
Guo Kexin building 310 (graduate building)

Time		Friday, 26 September 2014		Saturday, 27 September 2014		Sunday, 28 September 2014
8:30-8:50	Opening	Welcome and opening remarks 1. Representative of Institute of Metal Research, Chinese Academy of Sciences 2. Representative of Chinese Materials Research Society 3. Representative of NSFC 4. Chair of Conference		[I-20] Surface and Interface Structure Control of Noble Metal Nanocrystals for Catalysis and Bioapplications Nan-Feng Zheng , <i>Xiamen University (China)</i>		[I-40] Bottom-up meets Top-down: An Integrated Approach for Future Nanoscale CMOS & MEMS Systems V. Ramgopal Rao , <i>IIT Bombay (India)</i>
8:50-9:10	Session 1 Chair Hui-Ming Cheng	[I-1] Nano-materials for Energy Storage Applications in Lithium Ion Batteries B.V.R Chowdari , <i>National University of Singapore (Singapore)</i>	Session 5 Chair Chong-Haur Sow	[I-21] New Generation Transparent Conducting Electrodes Giridhar U. Kulkarni , <i>Jawaharlal Nehru Centre for Advanced Scientific Research (India)</i>	Session 9 Chair Jiaguo Yu	[I-41] Efficient Hole-conductor-free, Fully Printable Mesoscopic Perovskite Solar Cells Toward Low-cost Strategy Hong-Wei Han , <i>Huazhong University of Science and Technology (China)</i>
9:10-9:30		[I-2] Copper-Graphene Nanocomposites with Enhanced Mechanical Properties G. Sundararajan , <i>International Advanced Research Centre for Powder Metallurgy and New Materials (India)</i>		[I-22] Energy Photocatalytic Materials Jia-Guo Yu , <i>Wuhan University of Technology (China)</i>		[I-42] Semiconductor Nanostructures for Multi-functional Devices Samit K Ray , <i>IIT Kharagpur (India)</i>
9:30-9:50		[I-3] The Road for Carbon Nanotube Commercialization Fei Wei , <i>Tsinghua University (China)</i>		[I-23] Novel Materials and Devices for Future Low Power Electronics Saurabh Lodha , <i>IIT Bombay (India)</i>		[I-43] Carbon Catalysis for Energy Related Reaction Dang-Sheng Su , <i>Institute of Metal Research, Chinese Academy of Sciences (China)</i>
9:50-10:10		[I-4] Nanostructured Catalytic Materials for Energy Technology, Thermodynamics of Free and Confined Clusters: Size sensitive melting, influence of geometry and glassy behavior Dilip G. Kanhere , <i>University of Pune (India)</i>		[I-24] Understanding the Formation Mechanism of Organic-Inorganic Hybrid Perovskite Hua-Gui Yang , <i>East China University of Science and Technology and Griffith University (China)</i>		[I-44] Experiments and Devices Based on Single Functional Nanowires A.K. Raychaudhuri , <i>S.N.Bose National Centre for Basic Sciences (India)</i>
10:10-10:30		Tea / Coffee Break		Tea / Coffee Break		Tea / Coffee Break
10:30-10:50	Session 2 Chair B.V.R Chowdari	[I-5] Carbon-based Nanostructures for Energy Conversion and Storage: Synthesis, Performance and Mechanism Zheng Hu , <i>Nanjing University (China)</i>	Session 6 Chair Ashok K Ganguli	[I-25] Glancing Angle Deposited Nanostructures and Applications Liang Li , <i>Soochow University (China)</i>	Session 10 Chair Rongming Wang	[I-45] Hot Injection Synthesis of Iron Pyrite Nanoparticles for Solar Energy Harvesting Thirumany Sritharan , <i>Nanyang Technological University (Singapore)</i>
10:50-11:10		[I-6] Design of Nanostructures for Energy and Environmental Applications Ashok K Ganguli , <i>Institute of Nanoscience & Technology and Indian Institute of Technology (India)</i>		[I-26] Ferromagnetism in Mg-doped AlN Surfaces and Nanowires Yuan-Ping Feng , <i>National University of Singapore (Singapore)</i>		[I-46] Highly Efficient Nano-adsorbents for the Removal of Arsenic (III, V) from Water Qi Li , <i>Institute of Metal Research, Chinese Academy of Sciences (China)</i>
11:10-11:30		[I-7] Structure & Electronic Structure of Rechargeable Battery Electrode Materials at Atomic Scale Lin Gu , <i>Institute of Physics, Chinese Academy of Sciences (China)</i>		[I-27] Exploration of Novel Nanostructured Materials for Solar Cells Wen-Hua Zhang , <i>Institute of Dalian, Chinese Academy of Sciences (China)</i>		[I-47] Fabrication and Characterization of GaN Based Nanopillar Arrays for Energy Related Applications Rajendra Singh , <i>IIT Delhi (India)</i>
11:30-11:50		[I-8] Recent Development of Lithium Iron Phosphate and Its Derives, and Solid Electrolytes for Lithium Ion Batteries Lu Li , <i>National University of Singapore (Singapore)</i>		[I-28] Metal oxide – glycol nanofluids: Unique Properties & Applications in Thermal Management K.S. Rajan , <i>SASTRA University (India)</i>		[I-48] Rational Synthesis, Defect Controlling and Optoelectronic Properties of GaN Nanostructures Bao-Dan Liu , <i>Institute of Metal Research, Chinese Academy of Sciences (China)</i>
11:50-12:10		[I-9] Titan Themis – the New Aberration Corrected S/TEM - Its Application in Graphene/CNT and Catalytic Process Si-Qun Xiao , <i>FEI Company, Shanghai (China)</i>		[I-29] The Latest Development of JEOL Atomic Resolution Electron Microscope Suzuki , <i>JEOL Company</i>		Concluding remarks
12:20-13:30		Lunch Break		Lunch Break		Lunch Break
13:30-13:50	Session 3 Chair G. Sundararajan	[I-10] Nanostructured Catalytic Materials for Energy Technology Hua-Chun Zeng , <i>National University of Singapore (Singapore)</i>	Session 7 Chair Nafeng Zheng	[I-30] Engineered Polymeric Nano-capsules for Effective Delivery of Therapeutics Ashok M. Raichur , <i>Indian Institute of Science (India)</i>		
13:50-14:10		[I-11] Surface and Interface Structure Control of Magnetic Nanomaterials Rong-Ming Wang , <i>Beihang University (China)</i>		[I-31] Nano-theranostics for Imaging-guided Photo Therapy of Tumor: Fighting Cancer Metastasis Zhuang Liu , <i>Soochow University (China)</i>		
14:10-14:30		[I-12] Synthesis and Applications of Size Selected Metal, Alloy and Metal-graphene Composite Nanoparticles B.R. Mehta , <i>IIT Delhi (India)</i>		[I-32] Synthesis of Fe ₃ O ₄ Nanorings and Nanodiscs for Biomedical Applications Jun Ding , <i>National University of Singapore (Singapore)</i>		
14:30-14:50		[I-13] Fabrication of Nanoparticles and Their Applications in Printing Technologies Yan-Lin Song , <i>Institute of Chemistry, Chinese Academy of Sciences (China)</i>		[I-33] Chemical Synthesis of Exchange-Coupled Nanocomposite magnets Yang-Long Hou , <i>Peking University (China)</i>		
14:50-15:10		[I-14] Design and Synthesis of Nanostructured Carbon Materials for Energy Storage Xu Li , <i>Institute of Materials Research & Engineering (Singapore)</i>		[I-34] Organic/Inorganic Hybrid Functional Resin Composites for Bioapplication Mei-Fang Zhu , <i>Donghua University (China)</i>		
15:10-15:30		Tea / Coffee Break		Tea / Coffee Break		
15:30-15:50	Session 4 Chair Giridhar U. Kulkarni	[I-15] Well-defined Graphene Polymers for Energy Applications Lin-Jie Zhi , <i>National Center for Nanoscience and Technology (China)</i>	Session 8 Chair Huachun Zeng	[I-35] Electrochemical Nanowire Devices for Energy Storage Li-Qiang Mai , <i>Wuhan University of Technology (China)</i>		
15:50-16:10		[I-16] Estimation of Sliding Wear Behavior of Tungsten Carbide Nano Particle Reinforced Iron Composites Muthusamy Kamaraja , <i>IIT Madras (India)</i>		[I-36] Nanotechnology in Water Treatment Yanbiao Liu , <i>National University of Singapore (Singapore)</i>		
16:10-16:30		[I-17] Interfacial Soft Matter for Biolubrication and Friction Control Feng Zhou , <i>Lanzhou Institute of Chemical Physics Chinese Academy of Sciences (China)</i>		[I-37] Optimization of the Energy Density of Carbon-Based Supercapacitors Feng Li , <i>Institute of Metal Research, Chinese Academy of Sciences (China)</i>		
16:30-16:50		[I-18] A Focused Laser Beam: Useful Tool for Nanoscience Research Chong-Haur Sow , <i>National University of Singapore (Singapore)</i>		[I-38] Nano-composite Polymeric Membranes and Draw Solutes for Clean Water Production, Seawater Desalination and Osmotic Power Generation (Neal) Tai-Shung Chung , <i>National University of Singapore (Singapore)</i>		
16:50-17:10		[I-19] Morphological Control and Properties of Nickel Nanomaterials Lin Guo , <i>BeiHang University (China)</i>		[I-39] Self-Assembly of Graphene Oxide for Energy Storage Quan-Hong Yang , <i>Tianjin University (China)</i>		