

**EMERGING TRENDS IN ADVANCED FUNCTIONAL MATERIALS 2016**

JANUARY 18 - 21, 2016

**INSTITUTE OF PHYSICS, BHUBANESWAR**

<b>18.01.2016 (Monday)</b>	
9:45 – 10:00	Inagural Session by <b>Prof. Sudhakar Panda</b> , Director, Institute of Physics, Bhubaneswar
10:00 – 11:00	<b>D. D. Sarma, IISc, Bengaluru</b> <b>Title:</b> "Understanding heterostructures with the help of high energy photoemission spectroscopy"
11:00 – 11:30	<b>TEA BREAK</b>
11:30 – 12:00	<b>M. M. Shaijumon, IISER, Thiruvananthapuram</b> <b>Title:</b> "Controllable Growth of Two-Dimensional Layered Nanomaterials"
12:00 – 12:30	<b>Madhu Thalakulam, IISER, Thiruvananthapuram</b> <b>Title:</b> "Spectroscopy of fractional quantum Hall quasiparticles using quantum point contacts"
12:30 – 13:00	<b>Manju Unnikrishnan, CSIR-IMMT, Bhubaneswar</b> <b>Title:</b> "Magnetic Proximity Effect as a Pathway to Spintronic Applications of Topological Insulators"
13:00 – 14:30	<b>LUNCH BREAK</b>
14:30 – 15:00	<b>Sunil Nair, IISER, Pune</b> <b>Title:</b> "Griffiths Phase in the antiferromagnetic Swedenborgite $DyBaCo_4O_7$ "
15:00 – 15:30	<b>Yogesh Singh, IISER, Mohali</b> <b>Title:</b> "Spin Liquids in Geometrically Frustrated Magnets"
15:30 – 16:00	<b>Surjeet Singh, IISER, Pune</b> <b>Title:</b> "Single Crystal Growth Using Travelling Solvent Floating Zone Technique"
16:00 – 16:30	<b>TEA BREAK</b>
16:30 – 17:00	<b>P. Jena, VCU, USA</b> <b>Title:</b> "From Clusters to Crystals: A Bottom-up Design of Energy Materials"
17:00 – 17:30	<b>Ujjal K. Gautam, IISER, Mohali</b> <b>Title:</b> "Supportless Electrocatalysis of Efficient Fuel Cell Reactions"
19:00 – 22:30	<b>CONFERENCE BANQUET, SPONSORED BY PREVAC</b> <b>Venue:</b> The Crown

<b>19.01.2016 (Tuesday)</b>	
9:30 – 10:00	<b>S. D. Mahanti, MSU, USA</b> <b>Title:</b> "Thermoelectricity, recent advances and future challenges"
10:00 – 10:30	<b>Kanishka Biswas, JNCSR, Bengaluru</b> <b>Title:</b> "Effect of Order-Disorder Phase Transition on the Thermoelectric Properties of Noble Metal Based Chalcogenides"
10:30 – 11:00	<b>Ramesh C. Mallik, IISER, Bengaluru</b> <b>Title:</b> "Enhanced Thermoelectric figure of merit in Skutterudite Materials"
11:00 – 11:30	<b>TEA BREAK</b>
11:30 – 12:00	<b>C. Narayana, JNCSR, Bengaluru</b> <b>Title:</b> "Pressure-induced electronic topological transition"
12:00 – 12:30	<b>S. Dhara, IGCAR, Kalpakam</b> <b>Title:</b> "Localized studies in single nanostructures using coupled surface probe microscopy"
12:30 – 13:00	<b>Nirmalya Ballav, IISER, Pune</b> <b>Title:</b> "Highly-Hydrophobic and Chemically-Rectifiable SURMOF Thin-Film Device"
13:00 – 14:00	<b>LUNCH BREAK</b>
14:00 – 16:00	<b>Poster Session</b>
16:00 – 16:30	<b>TEA BREAK</b>
16:30 – 16:45	ORAL 1 <b>Chandan Giri, IOP, Bhubaneswar</b> <b>Title:</b> "Magnetic Study of Dinuclear Iron(II) Complexes in Solution and Solid State"
16:45 – 17:00	ORAL 2 <b>Bharti Panigrahy, IISc, Bengaluru</b> <b>Title:</b> "Colloidal photoactive semiconductor-metal/metal alloy quantum dot hybrids for photocatalysis: Charge transfer dynamics study"
17:00 – 17:30	<b>Wolfgang Betz, PHI</b> <b>Title:</b> "Applications of 2- and 3-dimensional Analysis on Nanostructured Materials using XPS, Auger and Time-of-Flight SIMS"
18:00 – 22:00	<b>CULTURAL PROGRAM</b>
20:30 – 22:00	<b>DINNER</b>

<b>20.01.2016 (Wednesday)</b>	
9:30 – 10:00	<b>Arghya Taraphder, IIT, Kharagpur</b> <b>Title:</b> “Emergent phenomena at the LAO/STO hetero-interface”
10:00 – 10:30	<b>K. Senapati, NISER, Bhubaneswar</b> <b>Title:</b> “Superconducting proximity effect in NiBi <sub>3</sub> -Ni-NiBi <sub>3</sub> trilayer system”
10:30 – 11:00	<b>V. Adyam, IIT, Kharagpur</b> <b>Title:</b> “Multiferroicity in Geometrically Frustrated 114 Cobaltates”
11:00 – 11:30	<b>TEA BREAK</b>
11:30 – 12:00	<b>Saroj Nayak, IIT, Bhubaneswar</b> <b>Title:</b> “Materials Genomics for Functional Nanoelectronics: From Interconnects to Devices”
12:00 – 12:30	<b>Debraj Choudhury, IIT, Kharagpur</b> <b>Title:</b> “Enhancement of magnetocaloric effect by magneto-structural coupling”
12:30 – 12:45	ORAL 3 <b>Abin Varghese, IISER, Thiruvananthapuram</b> <b>Title:</b> “Micro-patterning MoS <sub>2</sub> to fabricate multi terminal devices ”
12:45 – 13:00	ORAL 4 <b>Prasana Sahoo, UNICAMP, Brazil</b> <b>Title:</b> “Real time tracking of cellular forces using InP nanowire arrays”
13:00 – 14:00	<b>LUNCH BREAK</b>
14:00 – 20:00	Trip to Konark
20:30 – 22:00	<b>DINNER</b>

<b>21.01.2016 (Thursday)</b>	
9:30 – 10:00	<b>M. K. Gupta, IISER, Bhopal</b> <b>Title:</b> "Piezoelectric Nanostructures Based Nanogenerators for Energy Harvesting"
10:00 – 10:30	<b>Ramesh Chandra Nath, IISER, Thiruvananthapuram</b> <b>Title:</b> "Collinear order in the frustrated three dimensional spin-1/2 antiferromagnet $\text{Li}_2\text{CuW}_2\text{O}_8$ "
10:30 – 11:00	<b>Sugata Ray, IACS, Kolkata</b> <b>Title:</b> "Origin of spin-orbital liquid state in a close $J=0$ iridate $\text{Ba}_3\text{ZnIr}_2\text{O}_9$ "
11:00 – 11:30	<b>TEA BREAK</b>
11:30 – 11:45	ORAL 5 <b>S. K. Pandey, SNBNCBS, Kolkata</b> <b>Title:</b> "Doping an antiferromagnetic insulator : A route to an antiferromagnetic metallic phase"
11:45 – 12:00	ORAL 6 <b>Kalpataru Pradhan, SINP, Kolkata</b> <b>Title:</b> "Understanding the Magnitude of the Resistivity Hump in CMR Manganites"
12:00 – 12:30	<b>Felix Leyssner, SPECS, Germany</b> <b>Title:</b> "Time-of-flight momentum microscopy"
<b>CONCLUDING SESSION</b>	
13:00 – 14:00	<b>LUNCH BREAK</b>
<b>CONFERENCE ENDS</b>	