Agenda Day 1 | Thu 5th Dec | BTNT 2019 | Bhubaneswar

OXFORD INSTRUMENTS

	NANO: FROM SCIENCE TO TECHNOLOGY	
8:00 -9:00	REGISTRATION	
9:00- 9:30	INAUGURATION AND INTRODUCTION | Prof. Sudhakar Panda - Director, NISER, Dr Ian Wright, Oxford Instruments, UK, *Mr. Mangesh Kulkarni-India Country Director, Oxford Instruments & Dr. Shubhankar Bedanta,Convenor BTNT 2019, NISER*	
9:30-10:00	HIGH-TEA	
	SESSION I	
10:00-10:30	KEYNOTE | **Electronics and mechanics at nanoscale with one atom thick graphene,** Prof. Mandar Deshmukh, Tata Institute of Fundamental Research, Mumbai	
10:30-11:00	PLENARY TALK | **Elemental Mapping Techniques: Application to Nanostructures,** Prof. Satyam Parlapalli, Institute of Physics, Bhubaneswar	
11:00-11:15	BREAK	
	SESSION II: FABRICATION (PLASMA TECHNOLOGY)	**SESSION III: CHARACTERISATION (NANOSCIENCE)**
11:15-11:45	**Introduction to general etch technology** Dr Ian Wright, Oxford Instruments, Singapore	**Switching thermometry: How to measure temperature by flipping a coin?** Prof. Maciej Ludwik Zgirski, Institute of Physics, Polish Academy of Sciences (IP PAS)
11:45-12:15	**Introduction to general deposition technology: ICP CVD, PECVD, ALD** Mr. Gurpal Singh, Oxford Instruments, India	**Charge to spin current conversion efficiency: role of topological insulator, antiferromagnetic and Heusler alloy** *Dr. Braj Bhusan Singh,* National Institute of Science Education and Research
12:15-12:45	**Silicon Nanophotonic Devices for Optical Communication and Interconnects.** Dr. Mukesh Kumar, Indian Institute of Technology - Indore	**The equilibration dynamics of polarized quantum Hall edges at graphene p-n junction** Prof. Anindya Das, Indian Institute of Science -Bangalore
12:45-13:15	**ALD & Plasma Enhanced Chemical Vapour Deposition (PECVD) in Photovoltaics** Dr. Shekhar Bhattacharya, KAUST, Saudi Arabia	**Edge state fractionalization at Integer Quantum Hall boundary** Dr. Tanmay Maiti, Saha Institute of Nuclear Physics Kolkata
13:15-14:45	LUNCH	
	SESSION IV	**SESSION V**
14:45-15.15	**Fabrication techniques for Graphene and 2D materials-based devices: Growth & Etch** Dr Ian Wright, Oxford Instruments, Singapore	**Flux coupled hybrid cavity-qubit electromechanical system** Prof. Vibhor Singh, Indian Institute of Science -Bangalore
15:15-15:45	**Electron Beam and Ion Beam Technology for Nanofabrication** Mr. Otto Carel, Raith Nanofabrication, Germany	**Static and dynamic magnetization in magnetic antidot lattice arrays** Dr. Sougata Mallick, University of Paris Saclay
15:45-16:15	**Photonic Integrated Circuits for On-chip Sensing Platforms** Mr. Viphretuo Mere, Indian Institute of Science -Bangalore **Fabrication of Integrated Photonics Device Structures in Silicon Platform** Mr. Arnab Goswami, Indian Institute of Technology, Madras	**Extending your microanalysis capabilities with EBSD: from CCD to CMOS technology** Dr. A. R. Renjith, Oxford Instruments, India
16:15 - 18:00	TEA AND POSTER SESSION	

Agenda Day 2 | Fri 6th Dec | BTNT 2019 | Bhubaneswar

9:00-9:30	REGISTRATION	
	SESSION VI	
9:30-10:00	**PLENARY TALK | Chemically exfoliated few layer MoS_2: What do we understand of its properties,** Prof. D.D. Sharma, Indian Institute of Science - Bangalore	
10:00-10:30	BREAK	
	SESSION VII: CHARACTERISATION (NANOSCIENCE)	**SESSION VIII: LIFE-SCIENCES**
10:30-11:00	**Quantum information processing with multi-modal superconducting circuits** Prof. Rajamani Vijayaraghavan, Tata Institute of Fundamental Research - Mumbai	**A Microscopy Journey from nn to cm resolution** Mr. Colin Wright, Oxford Instruments Andor Technology
11:00-11:30	**Universal Dynamics of Interface in Thin Films seen from the studies on Magnetic Domain Walls Motion** Prof. Vincent Jeudy, University of Paris Saclay	**Nanobioceramic Coatings for orthopaedic applications** Dr. T.M. Sridhar, University of Madras
11:30-12:00	**Phase transition & dielectric relaxation mechanism of Perovskite-type framework** Dr. Varadarajan Sridharan, Indira Gandhi Centre for Atomic Research	**The Ideal Solution to Interactively Analyze Microscopy Images** Mr Daniel Reisen, Imaris – Bitplane (Webex Session)
12:00-12:30	**Charge amplification approaching the quantum limit** Prof. Madhu Thalakulam, Indian Institute of Science Education and Research Thiruvananthapuram	**Overcoming Uncertainties in The Nano-Mechanical Characterization of Biological Cells Using AFM Based Nanoindentation Technique** Prof. Vishwanath Managuli, Manipal Institute of Technology (MIT-MAHE), Karnataka
12:30 - 14:00	LUNCH	
	Session IX: MATERIALS RESEARCH	
14:00 - 14:30	**Luminescent thermometry,** Prof. K K. Nanda, Indian Institute of Science -Bangalore	
14:30 - 15:00	**Insulator mediated coupling between ferromagnet and superconductor in heterostructures,** *Dr. Champalal Prajapat, Bhabha Atomic Research Centre, Mumbai*	
15:00 - 15:30	**Tailoring the electronic properties in synthetic cuprate layers,** *Prof. Debakanta Samal, Institute of Physics, Bhubaneswar*	
15:30 - 16:00	**Surface and Interface study of various materials using TOF-SIMS** Prof..Manas Dalai, CSIR - Institute of Minerals and Materials Technology - Bhubaneshwar	