Agenda Day 1

28 November 2018

OXFORD INSTRUMENTS

	NANO: FROM SCIENCE TO TECHNOLOGY
9:00 - 9:30	***Registration - Victor Menezes Convention Centre***
9:30 - 10:00	**Inauguration & introduction** | *Prof. A. K. Suresh, IIT Bombay & Ian Wright, Oxford Instruments Asia*
10:00 - 10:30	**Keynote: GaAs and GaN based Devices / MMIC Technology for Space and Defence Applications - R&D to Production** *Dr Anant Naik, CEO GAETEC*
10:30 - 11:00	**Plenary talk: Emerging concepts in nanoelectronics with atomic membranes,** *Prof. Arindam Ghosh, IISc Bangalore*
11:00 - 11:30	***Tea break and change of hall***

	FABRICATION: FROM LAB TO FAB	CHARACTERISATION & QUANTUM COMPUTING
11:30 - 12:00	**Introduction to general deposition technology: ICP CVD, PECVD, ALD** *Dr Ravi Sundaram, Oxford Instruments, UK*	**Breaking the millikelvin barrier for electron temperatures in nanoelectronic devices** *Professor Richard P Haley, Lancaster University, UK*
12:00 - 12:30	**Introduction to general etch technology** *Mr Ian Wright, Oxford Instruments, Singapore*	**A programmable superconducting quantum processor with three pairwise coupled qubits** *Dr Vijayaraghavan, TIFR, Mumbai*
12:30 - 13:00	**GaN based nanostructures and its applications** *Prof. Dipankar Saha, IIT Bombay*	**Principles and methods of dilution refrigeration** *Simon Mitchinson, Oxford Instruments, UK*
13:00 - 14:00	***Lunch***	
14:00 - 14.30	**Dielectric thin films for applications in crystalline silicon solar cells** *Prof. Anil Kottantharayil, IIT Bombay*	**Transmission Kikuchi Diffraction: an inter link between TEM and EBSD** *Prof. Sushil Mishra, IIT Bombay*
14:30 - 15:00	**Perovskite solar cells - towards commercialization** *Prof. Sushobhan Avasthi, IISc Bangalore*	**Manipulation of electrons in one-dimension** *Dr Sanjeev Kumar, University College London*
15:30 - 16:00	***Break***	
16:00 - 16:30	**Power devices front end processing** *Stephanie Baclet, Oxford Instruments, UK*	**Cooper pair injection into a degenerate semiconductor at high magnetic fields** *Dr Kantimay Das Gupta, IIT Bombay*
16:30 - 17:00	**Flexible micro-nano sensors for healthcare applications** *Prof. Siddhartha Panda, IIT K*	**Nanomechanics with graphene drums** *Dr. Mandar Deshmukh, TIFR Mumbai*

Agenda Day 2

29 November 2018

OXFORD INSTRUMENTS

	FABRICATION: FROM LAB TO FAB	LIFE SCIENCES
9:00 - 9:30	***Registration - Victor Menezes Convention Centre***	
9:30 - 10:00	**Fabrication techniques for 2D materials based devices: Growth, etch & ALD** *Dr Ravi Sundaram, Oxford Instruments, UK*	**Biophysical Insights into the Role of Membrane Dynamics in Diseases** *Dr Shobhna Kapoor, IIT Bombay*
10:00 - 10:30	**2D materials for optoelectronic applications** *Prof. Saurabh Lodha, IIT Bombay*	**A unique solution for fast confocal imaging in life sciences** *Dr Bruno Combettes, Oxford Instruments Andor, UK*
10:30 - 11:00	**Importance of interface-engineering between ALD high-k dielectrics and 2D & 1D materials** *Prof. Abhay A. Sagade, SRM*	**Amazing nanotechnology: Applications in health care & more** *Prof. Jayesh Bellare, IIT Bombay*
11:00 - 11:30	***Break***	
11:30 - 12:00	**Non-lithographic, frugal route to wearable energy storage devices** *Prof. C. Subramaniam, IIT Bombay*	**Intracellular logistics at nanoscale – reaching destinations through obstacles & random walk** *Dr Krishanu Ray, TIFR*
12:00 - 12.30	**III-V etching** *Ian Wright, Oxford Instruments, UK*	**Excellence software for multidimensional image rendering and analysis** *Dr Bruno Combettes, Oxford Instruments Andor, UK*
12:30 - 13.00	**Solutions for VCSEL fabrication** *Stephanie Baclet, Oxford Instruments UK*	**Fabrication techniques for biomedical device on-chip diagnostics & life sciences** *Dr Ravi Sundaram, Oxford Instruments, UK* **Low temperature photolysis studies of vitamin B12** *Manju Kumar, Oxford Instruments, India*
13:15 - 13:30	**Final remarks -** *Ian Wright, Oxford Instruments, UK*	
13.30 - 14:30	***Lunch***	

	PARALLELL WORKSHOPS		
	FABRICATION & CHARCTERISATION	AFM	EBSD & SEM
14:30 - 15:30	**Careers Workshop** *Dr Ravi Sundaram, Oxford Instruments, UK*		**Transmission Kikuchi Diffraction (TKD) in the SEM: Extending the capabilities of conventional EBSD** *MMMF lab, IIT Bombay*
15:30 onwards	**LAB TOUR TBD**	**Introduction & demo of BIOAFM, Force curve measurements. Liquid imaging & more** *Mr.Kishore Kumar. Ground flooor New BSBE*	