

Emerging Trends in Physics of Surfaces, Interfaces and Nanostructures



Nov 24 - 25, 2017

Indian Association for the Cultivation of Science (IACS)

S. N. Bose National Centre for Basic Sciences (SNBNCBS)



PROGRAMME

Date: Friday, 24th Nov. 2017 (Venue : IACS)

9:30 AM - 10:00 AM	Registration	
Session Chair: Debashis Mukherjee		
10:00 AM - 10:15 AM	Inauguration	
10:15 AM - 10:45 AM	Keynote - 01	Samit K. Ray (SNBNCBS) <i>Semiconductor Nanostructures – Role of Surfaces & Interfaces</i>
10:45 AM - 11:00 AM	Tea Break	
Session Chair: Debshankar Ray		
11:00 AM - 11:25 AM	Invited - 01	B. N. Dev (IACS) <i>Superconductivity of Cobalt</i>
11:25 AM - 11:50 AM	Invited - 02	R. Muralidharan (CENSE Bglr) <i>Role of surfaces and interfaces in GaN based High Electron Mobility transistors</i>

11:50 AM - 12:15 PM	Invited - 03	Ajay Gupta (Amity Univ.) <i>Study of interfaces in magnetic thin films and multilayers</i>
12:15 PM - 12:40 PM	Invited - 04	Shikha Verma (IOP Bhubaneswar) <i>Enhanced Photoabsorption, Super-Paramagnetism and DNA Biocompatibility in ion implanted TiO₂ (110)</i>
12:40 PM - 02:00 PM	Lunch	
Session Chair: Amit K. Roy		
02:00 PM - 02:25 PM	Invited - 05	G. P. Das (IACS) <i>Probing Quantum Structures : Experiment versus Theory</i>
02:25 PM - 02:50 PM	Invited - 06	Chiranjib Mitra (IISER Kolkata) <i>Surface enhanced topological transport in Topological Insulators by tuning the chemical potential</i>
02:50 PM - 03:15 PM	Invited - 07	Dileep Kumar Gupta (UGC-DAE CSR) <i>Origin of exchange bias in unconventional magnetic layered nanostructures; an in-situ investigation</i>
Session Chair: Subham Majumder, Chhayabrita Maji		
03:15 PM - 04:15 PM	Poster session + Tea Break	
Session Chair: G. P. Das		
04:15 PM - 04:40 PM	Invited- 08	P. V. Satyam (IOP, Bhubaneswar) <i>A Three Decade Journey from Dirty Surfaces to Ultra Clean Surfaces</i>

04:40 PM - 06:00 PM	Special Felicitation Programme
06:00 PM	Departure for Dinner
07:00 PM onwards	Dinner

Date: Saturday, 25th Nov, 2017 (Venue : SNBNCBS)		
10:00 AM - 10:10 AM	Introductory Remark	
Session Chair: Indra Dasgupta		
10:10 AM - 10:40 AM	Keynote - 02	Pushan Ayyub (TIFR) <i>Can Superconductivity Persist in Arbitrarily Small Particles?</i>
10:40 AM - 11:05 AM	Invited - 09	Saroj Nayak (IIT Bhunaneswar) <i>Atomic Scale Materials for Energy and Energy Efficient Devices</i>
11:05 AM - 11:30 AM	Invited - 10	Kalyan Chattopadhyay (JU) <i>Band engineered low dimensional p-type transparent conducting oxides as emerging functional material</i>
11:30 AM - 11:45 AM	Tea Break	
Session Chair: Shyamal Bhadra		
11:45 AM - 12:10 PM	Invited - 11	I. Manna (IIT Kharagpur) <i>Laser and Plasma assisted surface engineering of metallic components</i>
12:10 PM - 12:35 PM	Invited - 12	Saibal Basu (BARC)

		<i>Neutron and X-ray Reflectometry: from Snapshots to Kinetics of Interface Alloys</i>
12:35 PM – 01:00 PM	Invited - 13	Anjan Gupta (IIT Kanpur) <i>Effect of gate-field-dependent interface-states in graphene-on-SiO₂ on electronic inhomogeneity and transport</i>
12:55 PM - 02:30 PM	Lunch	
Session Chair: Anjan Barman		
02:30 PM - 02:55 PM	Invited - 14	Milan Sanyal (SINP) <i>Self Assembly of Nanostructures</i>
02:55 PM - 03:20 PM	Invited - 15	Indranil Das (SINP) <i>Spin Polarized Transport and Magneto-transport in Magnetic Nanostructured Thin Films</i>
03:20 PM - 03:40 PM	Tea Break	
Session Chair: Subodh K. Dey		
03:40 PM - 04:00 PM	Invited - 16	B. Sundaravel (IGCAR) <i>Studies of Impurity-defect interactions with Ion Channeling and DFT calculations</i>
04:00 PM - 04:20 PM	Invited - 17	Kuntala Bhattacharjee (IIST) <i>Microwave Assisted 2H to 1T-2H Mixed Phase in Exfoliated MoS₂ Nanostructures</i>
04:20 PM - 04:40 PM	Invited - 18	Sumalay Roy (Delhi Univ.) <i>Atomic structures and correlated electronic properties of un-doped and doped Bi₂Se₃ (0001) surfaces</i>
04:40 PM - 05:00 PM	Remarks by B.N. Dev & conclude	