



ICONSAT²⁰¹⁸

INTERNATIONAL CONFERENCE ON
NANOSCIENCE AND TECHNOLOGY
MARCH 21-23, 2018. BENGALURU

Organized by Centre for Nano and Soft Matter Sciences, Bengaluru

Programme

Day 1: 21 March 2018

8:00 – 9:00	Registration	
9:00 – 9:45	Inauguration, J N Tata Auditorium	
9:45 – 11:15	Session 1 Chair: D D Sarma	
	PL 1 C N R Rao (JNCASR, Bengaluru) <i>Covalent Linking of 2D Nanosheets Resulting in Improved and New Properties</i> PL 2 Mark C Hersam (Northwestern University, USA) <i>Mixed-Dimensional van der Waals Heterostructures</i>	
11:15 – 11:45	Tea/Coffee	
Parallel Sessions 11:45 – 13:15	Session 2A (Hall A) Chair: Goutam De	Session 2B (Hall B) Chair: A K Ganguli
	IL 1 Takayoshi Sasaki (NIMS, Japan) <i>Function Design via Heteroassembly of 2D Oxide and Hydroxide Nanosheets</i>	IL 4 A Ajayaghosh (NIIST, Trivandrum) <i>Hybrid Materials by Self-assembly of π-Gelators on Carbon Nanotubes</i>
	IL 2 Ayan Datta (IACS, Kolkata) <i>Symmetry Breaking in Low-Dimensional Flat Materials</i>	IL 5 D Bahadur (IIT Bombay, Mumbai) <i>Quantum Dot to 3D Graphene and Derivatives: Processing and Some Health Care Applications</i>
	IL 3 Mainak Majumder (Monash Univ., Australia) <i>Facile Production of Nano-structured Carbons from Framework Materials & their Electrochemical Properties</i>	CT 1
		CT 2
Poster Session 13:30 – 15:00	Session 3 (Entrance Lobby) Chair: K George Thomas Posters: P 1 – 80	
15:00 – 16:30	Session 4 (J N Tata Auditorium) Chair: S Swaminathan	
	PL 3 Cato T Laurencin (Univ. Connecticut, USA) <i>Nanotechnology and Regenerative Engineering: A Biomaterials Approach</i> PL 4 National Research Award in Nano Science & Technology for the year 2018 - Lecture <i>(To be announced during conference)</i>	
16:30 – 17:00	Tea/Coffee	
Parallel Sessions 17:00 – 18:30	Session 5A (Hall A) Chair: Subi J George	Session 5B (Hall B) Chair: Uday Maitra
	IL 6 Mukundan Thelakkat (Univ. Bayreuth, Germany) <i>Importance of Nanostructures and Nanoscience in Opto-electronic Applications</i>	IL 9 Young Career Award in Nano Science & Technology for the year 2018 – Lecture <i>(To be announced during conference)</i>
	IL 7 Amitava Patra (IACS, Kolkata) <i>Graphene – based Hybrid Materials for Photon Harvesting</i>	IL 10 Young Career Award in Nano Science & Technology for the year 2018 – Lecture <i>(To be announced during conference)</i>
	IL 8 Hirendra N Ghosh (INST, Mohali) <i>Direct Correlation between Photo-Conversion Efficiency and Ultrafast Charge Transfer Dynamics in Quantum Dot Solar Cell</i>	CT 3
		CT 4

PL = Plenary Lecture
(45 min)

IL = Invited Lecture
(30 min)

CT = Contributed Talk
(15 min)

Day 2: 22 March 2018

8:00 – 9:00	Registration		
9:00 – 10:30	Session 6 (J N Tata Auditorium) Chair: Navakanta Bhat		
	PL 5 A K Sood (<i>IISc, Bengaluru</i>) <i>Probing 2D Nanomaterials using Ultrafast Time-Resolved Terahertz Spectroscopy</i> PL 6 Chennupati Jagadish (<i>Australian National University, Australia</i>) <i>Semiconductor Nanowires for Optoelectronics, Energy and Neuroscience Applications</i>		
10:30 – 11:00	Tea/Coffee		
Parallel Sessions 11:00 – 13:00	Session 7A (Hall A) Chair: Aninda J Bhattacharyya	Session 7B (Hall B) Chair: Balaji R Jagirdar	
	IL 11 Arindam Ghosh (<i>IISc, Bengaluru</i>) <i>Flow of Charge and Heat across Layered Heterostructures</i>	IL 15 Ranjani Viswanatha (<i>JNCASR, Bengaluru</i>) <i>Enigma of Mn Emission in Doped Quantum Dots</i>	
	IL 12 Rahul R Nair (<i>Univ. Manchester, UK</i>) <i>Tunable Graphene-Based Membranes</i>	IL 16 Anunay Samanta (<i>Univ. Hyderabad, Hyderabad</i>) <i>All-Inorganic Perovskite and Perovskite-Related Materials: Photoluminescence and Carrier Dynamics</i>	
	IL 13 B R Mehta (<i>IIT Delhi, New Delhi</i>) <i>KPFM based Nanoscale Mapping of 2D Materials based Junctions for Solar Cell and Thermoelectric Applications</i>	IL 17 T Govindaraju (<i>JNCASR, Bengaluru</i>) <i>Molecular Architectonics to Nanoarchitectonics</i>	
	IL 14 U Ramamurty (<i>IISc, Bengaluru</i>) <i>Crystal Structure - Mechanical Property Correlations using Nanoindentation: Some Recent Results</i>	IL 18 Sang Jun Cho (<i>Park Systems Corp, South Korea</i>) <i>Non-contact AFM with Self-Optimizing and Pinpoint Scan Control for Quantitative Nano-Metrology</i>	
Poster Session 13:30 – 15:00	Session 8 (Entrance Lobby) Chair: A Sundaresan Posters: P 81 – 160		
Parallel Session 15:00 – 17:00	Session 9A (Hall A) Chair: N Jayaraman	Session 9B (Hall B) Chair: Sandeep Kumar	Session 9C (Hall C) Chair: Kanishka Biswas
	CT 5 - 12	CT 13 - 20	CT 21 - 28
17:00 – 17:30	Tea/Coffee		

PL = Plenary Lecture
(45 min)

IL = Invited Lecture
(30 min)

CT = Contributed Talk
(15 min)

8:00 – 9:00	Registration	
9:00 – 10:30	Session 10 (J N Tata Auditorium) Chair: S Sampath	
	PL 7 David Cahen (WIS, Israel) <i>Proteins as Optoelectronic Materials...</i> PL 8 Kaustav Banerjee (UCSB, USA) <i>2D Materials for Smart Life</i>	
11:15 – 11:45	Tea / Coffee	
Parallel Sessions 11:45 – 13:15	Session 11A (Hall A) Chair: Chandrabhas Narayana	Session 11B (Hall B) Chair: K A Suresh
	IL 19 B L V Prasad (NCL, Pune) <i>A Generic and Scalable Method for the Preparation of Monodispersed Metal Sulfide Nanocrystals</i>	IL 23 Timothy S Fisher (UCLA, USA) <i>Multifunctional Graphene Petal-based Heterostructure Nanocomposites</i>
	IL 20 N Ravishankar (IISc, Bengaluru) <i>Nucleation and Growth of Nanostructures and Hybrids – Some General Principles</i>	IL 24 Stefan Heun (INCNR, Italy) <i>Optimization of Few-layer Black Phosphorus for Low-temperature Magneto-transport Studies</i>
	IL 21 T Pradeep (IIT Madras, Chennai) <i>Reactions between Nanoparticles</i>	IL 25 Rabibrata Mukherjee (IIT KGP, Kharagpur) <i>Morphology Control in Instability mediated Meso Patterning of Polymer Thin Films</i>
	IL 22 Rainer Adelung (Kiel Univ., Germany) <i>Wrapping 2D layers in 3D: Fabrication and Application of High Free Volume Aero(carbon) Materials</i>	IL 26 M Eswaramoorthy (JNCASR, Bengaluru) <i>Ni-Pd Bimetallic Catalysts for the Direct Synthesis of H₂O₂ – Unusual Enhancement of Pd Activity in Presence of Ni</i>
Poster Session 13:30 – 15:00	Session 12 (Entrance Lobby) Chair: P S Anil Kumar Posters: P 161 – 238	
Parallel Sessions 15:00 – 16:45	Session 13A (Hall A) Chair: Satish Patil	Session 13B (Hall B) Chair: Reji Philip
	IL 27 Praveen K Vemula (inStem, Bengaluru) <i>Prophylactic Nano Materials for Biomedical Applications</i>	IL 30 Yogesh Jeyaram (Bruker, Bengaluru) <i>Nano-electrical Measurement in Liquid</i>
	IL 28 Reji Varghese (IISER-TVM, Thiruvananthapuram) <i>DNA Decorated Soft Nanostructures</i>	CT 30
		CT 31
	IL 29 Amitav Sanyal (Boğaziçi Univ., Turkey) <i>Designing Functional Polymeric Nanomaterials for Biomedical Applications</i>	CT 32
		CT 33
	CT 29	CT 34 Award for Excellence in Nano Research for the year 2018 - Lecture <i>(donated by C N R Rao Education Foundation)</i> <i>(To be announced during the conference)</i>
17:00 – 17:15	Valedictory, J N Tata Auditorium	
17:15 – 17:45	Tea/Coffee	