Organized by Centre for Nano and Soft Matter Sciences, Bengaluru

## **Programme**

Day 1: 21 March 2018

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) Covalent Linking of 2D Nanosheets Resulting in Improved and New Properties				
	PL 2 Mark C Hersam (Northwestern University, USA) Mixed-Dimensional van der Waals Heterostructures				
11:15 – 11:45	Tea/Coffee				
Parallel Sessions	Session 2A (Hall A)	Session 2B (Hall B)			
11:45 – 13:15	Chair: Goutam De	Chair: A K Ganguli			
	IL 1 Takayoshi Sasaki (NIMS, Japan) Function Design via Heteroassembly of 2D	IL 4 A Ajayaghosh (NIIST, Trivandrum) Hybrid Materials by Self-assembly of			
	Oxide and Hydroxide Nanosheets	π-Gelators on Carbon Nanotubes			
	IL 2 Ayan Datta (IACS, Kolkata) Symmetry Breaking in Low-Dimensional Flat Materials	IL 5 D Bahadur (IIT Bombay, Mumbai) Quantum Dot to 3D Graphene and Derivatives: Processing and Some Health Care Applications			
	IL 3 Mainak Majumder (Monash Univ., Australia)	CT 1			
	Facile Production of Nano-structured Carbons from Framework Materials & their Electrochemical Properties	CT 2			
Poster Session 13:30 – 15:00	Session 3 (Entrance Lobby) Posters: Sl. Nos. 1 – 80				
15:00 – 16:30	Session 4 (J N Tata Auditorium) Chair: S Swaminathan				
	PL 3 Cato T Laurencin (Univ. Connecticut, USA) Nanotechnology and Regenerative Engineering: A Biomaterials Approach				
	National Research Award in Nano Science &	Technology for the year 2018 - Lecture			
10.00 17.00	(To be announced during conference)				
16:30 – 17:00	Tea/Coffee				
Parallel Sessions	Session 5A (Hall A)	Session 5B (Hall B)			
17:00 – 18:30	Chair: Satish Patil	Chair: Uday Maitra			
	IL 6 Mukundan Thelakkat ( <i>Univ. Bayreuth</i> ,	Young Career Award in Nano Science &			
	Germany)	Technology for the year 2018 – Lecture			
	Importance of Nanostructures and Nanoscience in Opto-electronic Applications	(To be announced during conference)			
	IL 7 Amitava Patra (IACS, Kolkata)	Young Career Award in Nano Science &			
	Graphene – based Hybrid Materials for Photon	Technology for the year 2018 – Lecture			
	Direct Correlation between Photo-Conversion				
	Efficiency and Ultrafast Charge Transfer Dynamics in Quantum Dot Solar Cell	CT 4			
	Harvesting  IL 8 Hirendra N Ghosh (INST, Mohali)  Direct Correlation between Photo-Conversion  Efficiency and Ultrafast Charge Transfer	(To be announced during conference)  CT 3			

Organized by Centre for Nano and Soft Matter Sciences, Bengaluru

## Day 2: 22 March 2018

8:00 - 9:00	Registration				
9:00 – 10:30	Session 6 (J N Tata Auditorium) Chair: Navakanta Bhat				
	PL 4 A K Sood (I/Sc, Bengaluru) Probing 2D Nanomaterials using Ultrafast Time-Resolved Terahertz Spectroscopy PL 5 Chennupati Jagadish (Australian National University, Australia) Semiconductor Nanowires for Optoelectronics, Energy and Neuroscience Applications				
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 9 Arindam Ghosh (IISc, Bengaluru) Flow of Charge and Heat across Layered Heterostructures		IL 13 Ranjani Viswanatha (JNCASR, Bengaluru) Enigma of Mn Emission in Doped Quantum Dots		
	IL 10 Rahul R Nair (Univ. Manchester, UK) Tunable Graphene-Based Membranes		IL 14 Anunay Samanta (Univ. Hyderabad, Hyderabad) All-Inorganic Perovskite and Perovskite- Related Materials: Photoluminescence and Carrier Dynamics		
	IL 11 B R Mehta (IIT Delhi, New Delhi) KPFM based Nanoscale Mapping of 2D Materials based Junctions for Solar Cell and Thermoelectric Applications		IL 15 T Govindaraju (JNCASR, Bengaluru) Molecular Architectonics to Nanoarchitectonics		
	IL 12 U Ramamurty (IISc, Bengaluru) Crystal Structure - Mechanical Property Correlations using Nanoindentation: Some Recent Results		IL 16 Yongmei Zheng (Beihang Univ., China) Bioinspired Multi-gradient Micro- and Nanostructured Surfaces to Control Dynamic Wettability		
Poster Session 13:30 – 15:00	Session 8 (Entrance Lobby) Posters: Sl. No. 81 – 160				
Parallel Session 15:00 – 17:00	Session 9A (Hall A) Chair: N Jayaraman CT 5 - 12	Session 9B (H Chair: Sandee CT 13 - 20		Session 9C (Hall C) Chair: Kanishka Biswas CT 21 - 28	
17:00 – 17:30	Tea/Coffee	3. 10 20		0.2.20	

Organized by Centre for Nano and Soft Matter Sciences, Bengaluru

Day 3: 23 March 2018

	Day 3: 23 Marcr	12010			
8:00 - 9:00	Registration				
9:00 - 10:30	Session 10 (J N Tata Auditorium)				
	Chair: S Sampath				
	PL 6 David Cahen (WIS, Israel)				
	Proteins as Optoelectronic Materials				
	PL 7 Kaustav Banerjee (UCSB, USA)				
	2D Materials for Smart Life				
	2D Materials for Official Life				
11:15 – 11:45	Tea / Coffee				
Parallel Sessions	Session 11A (Hall A) Session 11B (Hall B)				
11:45 – 13:15	Chair: Chandrabhas Narayana	Chair: K A Suresh			
11.43 – 10.13	<u>-</u>				
	IL 17 B L V Prasad (NCL, Pune)	IL 21 Timothy S Fisher (UCLA, USA)			
	A Generic and Scalable Synthesis of	Multifunctional Graphene Petal-based			
	Monodispersed Metal Sulphide Quantum Dots	Heterostructure Nanocomposites			
	IL 18 N Ravishankar (IISc, Bengaluru)	IL 22 Stefan Heun (INCNR, Italy)			
	Nucleation and Growth of Nanostructures and	Quantum Transport in Few-layer Black			
	Hybrids – Some General Principles	Phosphorus			
	•	·			
	IL 19 T Pradeep (IIT Madras, Chennai)	IL 23 Rabibrata Mukherjee (IIT KGP,			
	Reactions between Nanoparticles	Kharagpur)			
		Morphology Control in Thin Patterned Polymer			
		Films			
	IL 20 Rainer Adelung (Kiel Univ., Germany)	IL 24 M Eswaramoorthy (JNCASR,			
	Wrapping 2D layers in 3D: Fabrication and	Bengaluru)			
	Application of High Free Volume Aero(carbon)	Ni-Pd Bimetallic Catalysts for the Direct			
	Materials	Synthesis of $H_2O_2$ – Unusual Enhancement of			
	Wateriais	Pd Activity in Presence of Ni			
		Fu Activity in Fresence of Ni			
Dantan Oassian	0				
Poster Session	Session 12 (Entrance Lobby)				
13:30 – 15:00	Posters: SI. No. 161 – 240				
Parallel Sessions	Session 13A (Hall A)	Session 13B (Hall B)			
15:00 – 16:45	Chair: Subi J George	Chair: Reji Philip			
10.00 10.40	IL 25 Praveen K Vemula (inStem, Bengaluru)	IL 28 Sang Jun Cho (Park Systems Corp,			
	Prophylactic Nano Materials for Biomedical	South Korea)			
	Applications	Non-contact AFM with Self-Optimizing and			
		Pinpoint Scan Control for Quantitative Nano-			
		Metrology			
	IL 26 Reji Varghese (IISER-TVM,	IL 29 Sun Wanxin (Bruker, Singapore)			
	Thiruvananthapuram)				
	DNA Decorated Soft Nanostructures				
	IL 27 Amitav Sanyal (Boğaziçi Univ., Turkey)	CT 30			
	Designing Functional Polymeric Nanomaterials				
	for Biomedical Applications	OT 04			
	10. Diamodical rippiloadiono	CT 31			
	CT 29	CT 32			
17:00 – 17:15	Valedictory, J N Tata Auditorium				
17:15 – 17:45	Tea/Coffee				
17.13 - 17.43	100/00/100				