

Programme Schedule

5 th January 2020 (Sunday)			
18:00-20:00	Registration at the Vikramshila Complex		
19:30-21:00	Dinner		
6 th January 2020 (Monday)			
8:00-9.30	Registration and Breakfast (Vikramshila Complex)		
9:30-11:00 (Kalidas)	Inauguration and Opening Lecture (Plenary Lecture I) by Pulickel M. Ajayan (Rice University, USA) <i>2D Materials Science</i> (Chair: Prof. I. Manna, IIT Kharagpur)		
11:00-11:30	Inaugural Tea		
11:30-12:15 (Kalidas)	(Plenary Lecture II) – by Brigitte Voit (Leibniz-Institut für Polymerforschung Dresden, Germany) <i>Responsive nanocapsules and multicompartments by self-assembly and templating approach</i> (Chair: Prof. S. K. Srivastava, IIT Kharagpur)		
12:15-13:00	(Plenary Lecture III) by Arindam Ghosh (Indian Institute of Science, Bangalore, India) <i>Facets of charge transfer across van der Waals heterostructures</i>		
13:00-14:30	Lunch		
	Kalidas Auditorium	Gargi Auditorium	Maitrayee Auditorium
	Chair: Amitava Patra (IACS, Kolkata)	Chair: Arup Dasgupta (IGCAR)	Chair: Arindam Ghosh (IISc., Bangalore)
14:30-15:00 (KN)	(KN-1) Arun K. Nandi (IACS, Kolkata) <i>Polyaniline-MoS₂ Quantum Dot Hybrid Gels for HER and Flexible Solid State Supercapacitor</i>	(KN-2) Rajeev Ranjan (IISc, Bangalore) <i>New insights into the complex structure-property relations in Na_{1/2}Bi_{1/2}TiO₃-based lead-free piezoceramics</i>	(KN-3) Saroj P. Dash (Chalmers University of Technology, Sweden) <i>Spin on 2D Electronics</i>
15:00-15:20 (IL)	(IL-1) Gerhard Maier (Polymaterials AG, Kaufbeuren, Germany) <i>S-PAN for Lithium-Sulfur Batteries: Scale-up and Synthesis in Refluxing Sulfur</i>	(IL-2) Anirban Chowdhury (IIT Patna) <i>Insights into the Remarkable Ionic Conductivity obtained for a Textured La₂Ce₂O₇ Ceramic via Pressureless Sintering</i>	(IL-3) Atindra N. Pal (SNBCBC, Kolkata) <i>Nonmagnetic spin filter based on single molecular junction</i>
15:20-15:40 (IL)	(IL-4) Sanjib Banerjee (IIT Bhilai) <i>Functional Polymer Materials with Tunable Properties for Emerging Application</i>	(IL-5) Ranjith Ramadurai (IIT Hyderabad) <i>Grain to Grain epitaxy like Multiferroic Composites of Lead-Free Ba_{0.85}Ca_{0.15}Zr_{0.1}Ti_{0.9}O₃/CoFe₂O₄ Through Pulsed Laser Ablation.</i>	(IL-6) Golap Kalita (Nagoya Inst. of Technology, Japan) <i>Heterojunction of 2D layered materials with wide bandgap semiconductors</i>
15:45-17:00	Tea break + Poster Session		
	Chair: E. Bhoje Gowd (CSIR-NIIST, Trivandrum)	Chair: Dipankar Mondal (INST, Mohali)	Chair: N. Pradhan (IACS, Kolkata)
17:00-17:30 (KN)	(KN-4) Suhrit Ghosh (IACS, Kolkata) <i>Directional Supramolecular Assembly and Functional Material</i>	(KN-5) Satish Patil (IISc, Bangalore) <i>Beyond Shockley–Queisser Limit with Singlet Fission</i>	(KN-6) Pravat K. Giri (IIT Guwahati) <i>Rare Earth Doped Highly Stable Ultrathin 2D Organometal Halide Perovskite Nanosheets with Tunable Light Emission and Fast Photoresponse</i>
17:30-17:50 (IL)	(IL-7) Bhabani K. Satapathy (IIT Delhi) <i>Dispersion nano-morphology and temperature dependence of electrical conductivity in PA 12/PP/MWCNT nanocomposites</i>	(IL-8) Vikas Rana (Peter Grünberg Institute, Germany) <i>Forming Free ReRAM Devices and its application beyond Data Storage</i>	(IL-9) Aavek Bid (IISc, Bangalore) <i>Quantum Phase Transition in Few-Layer NbSe₂ Probed through Quantized Conductance Fluctuations</i>
17:50-18:05 (OR)	(OR-1) Saamil Vadodaria (University of Birmingham, UK) <i>Fabrication of Supramolecular Complexes using Valvejet 3D Printing-Aided Colloidal Self Assembly</i>	(OR-2) Anuj Kumar (IIT Roorkee) <i>Filamentary Resistive Switching in MoS₂ based devices for Futuristic Non-Volatile Memory Applications</i>	(OR-3) Susanta K. Mohanta (GEC, Odisha) <i>Spin fluctuation and quantum phase transition in NbFe₂-bulk magnetization and hyperfine interaction studies</i>
19:00-20:00	Cultural Program		
20:00-22:00	Gala Dinner		

7th January 2020 (Tuesday)

8:00-9.30			
	Breakfast		
	Kalidas Auditorium	Gargi Auditorium	Maitrayee Auditorium
	Chair: Gerhard Maier (Polymaterials AG, Germany)	Chair: P. K. Giri (IIT, Guhawati)	Chair: Rabibrata Mukherjee (IIT Kharagpur)
09:30-10:00 (KN)	(KN-7) Kerstin G. Blank (Max Planck Institute for Colloids and Interfaces, Germany) <i>Mechanoresponsive 2D and 3D Interfaces for Cell Culture Applications</i>	(KN-8) Narayan Pradhan (IACS, Kolkata) <i>Some Exciting Features in Perovskite Nanocrystals</i>	
10:05-10:25 (IL)	(IL-10) Prakash C. Mondal (IIT Kanpur) <i>Electrochemically grown molecular layers for charge-transport studies</i>	(IL-11) Rohan Mishra (Washington University in St. Louis, USA) <i>Designing Stable Perovskites for Energy Applications One Atom at a Time</i>	(IL-12) Uttam Manna (IIT Guwahati) <i>Hydrophobicity or Superhydrophobicity—Which is Right Choice for Stabilizing Underwater Superoleophilicity?</i>
10:25-10:45 (IL)	(IL-13) Rik R. Koner (IIT Mandi) <i>Functional Soft Materials: From Molecular recognition to Catalysis</i>	(IL-14) U. Chandni (IISc, Bangalore) <i>Probing individual layers in encapsulated van der Waals heterostructures using EFM</i>	(IL-15) Suneel Kumar Srivastava (IIT Kharagpur) TBA
10:45-11:00 (IL)	(OR-4) Moumita Dhara (Univ. of Hyderabad) <i>Polymeric hollow nanocapsules with ferrocenyl shell as catalyst</i>	(OR-5) S. V. N. Pammi (Chungnam National University, Republic of Korea) <i>Self-powered & high-performance photodetectors using CVD fabricated perovskite films even after extreme light illumination conditions</i>	(OR-6) Shashikant Shingdilwar (IIT Bhilai) <i>Developing Functional Organic Mesoporous materials by ATRP and its Application in CO₂ capture technology</i>
11:00-11:15	Tea break		
	Chair: Suhrit Ghosh (IACS, Kolkata)	Chair:	Chair: Kousik Biswas (IIT Kharagpur)
11:15-11:45 (KN)	(KN-9) Reiko Oda (CNRS – Université Bordeaux, France) <i>Chiral molecule to chiral functional nanoobjects</i>	(KN-10) Amitava Patra (IACS, Kolkata) <i>Exciton Dynamics of Conjugated Polymer Nanoparticles for Light Harvesting</i>	
11:45-12:05 (IL)	(IL-16) Jurgen Pionteck (Leibniz Institute of Polymer Research Dresden, Germany) <i>Highly flexible rubber-based strain and vapor sensors</i>	(IL-17) Subrata Ghosh (IIT Mandi) <i>Materials to Device Design for Low Colour Temperature OLEDs: Light for Better Human Health</i>	(IL-18) Dillip K. Pradhan (NIT, Rourkela) <i>Ion Conduction Mechanism in Polymer Nano-Composite Electrolytes</i>
12:05-12:25 (IL)	(IL-19) Priyadarsi De (IISER, Kolkata) <i>Sequence Controlled Alternating Copolymers</i>	(IL-20) Supratim Banerjee (IISER Kolkata) <i>Cationic Cyanostilbenes: Versatile Motifs for Bio-analyte Sensing and the Design of Phototunable Luminescent Materials in Aqueous Media</i>	(IL-21) Sandeep Nagar (Malvern PANalytical) <i>in-operando XRD characterization solutions for battery research</i>
12:25-12:45 (IL)	(IL-22) E. Bhoje Gowd (CSIR-NIIST, Trivandrum) <i>Directed Assembly of Hierarchical Supramolecular Block Copolymers</i>	(IL-23) Sudip Malik (IACS, Kolkata) <i>Aryl-Substituted Buta-1,3-Diene as Solid State Emissive Organic Fluorophores</i>	(IL-24) Durga Basak (IACS, Kolkata) <i>Understanding the role of donor compensating defects in doped ZnO thin films towards development of n-type transparent conducting electrodes</i>
12:45-13:00 (OR)	(OR-7) Sumon Ganguli (University of Chittagong) <i>Improving the Heat Resistance of Enzymes Using Smart Compounds</i>	(OR-8) Arkalekha Mandal (NISER, BBSR) <i>Charge Transfer vs. Arene-Perfluoroarene Interactions in Modulation of Optical and Conductivity Properties in Cocrystals of 2,7-di-tertButylpyrene</i>	(OR-9) R. Padma Suvarna (JNTUCEA, Anantapuramu) <i>Structural and functional properties of Lanthanum Cobalt Titanate Nanoparticles</i>
13:05-14:30	Lunch		
	Chair: A. K. Nandi (IACS, Kolkata)	Chair: Chandra S. Rout (JAIN Univ.,	Chair: Achintya Dhar (IIT Kharagpur)

Bangalore)			
14:30-15:00 (KN)	(KN-11) Uday Maitra (IISc, Bangalore) <i>Nanostructured Materials from Bile Salt derived Metallohydrogels</i>	(KN-12) Vincent G. Gomes (University of Sydney, Australia) <i>Composites with quantum dots from sustainable sources for efficient supercapacitors and electrocatalysts for water splitting</i>	
15:00-15:20 (IL)	(IL-25) Biswajit Dey (Visva-Bharati University, Santiniketan) <i>Metallogels: The multi-functional materials</i>	(IL-26) Smrutiranjana Parida (IIT Bombay) <i>Carbon nanostructures derived from organic source for energy applications</i>	(IL-27) Somnath Bhowmick (IIT Kanpur) <i>Prediction of ferroelectricity, ferromagnetism and superconductivity in atomically thin materials</i>
15:20-15:40 (IL)	(IL-28) Bijay P. Tripathi (IIT Delhi) <i>Tunable Membranes Based on Switchable Microgels for Separation, Synthesis, and Catalytic Applications</i>	(IL-29) Senthil Kumar (CSIR-CERI, Karaikudi) <i>Design and manifestation in nanoscale electrocatalyst materials towards next generation energy applications</i>	(IL-30) Dr. Satyaprakash Sahoo (IOP, BBSR) <i>Manipulation of exciton and trion quasiparticles in monolayer WS₂ via charge transfer</i>
15:40-16:40	Poster Session + Tea Break		
	Chair: V. G. Gomes (University of Sydney)	Chair: Karabi Biswas (IIT Kharagpur)	Chair: P. K. Guha (IIT Kharagpur)
16:40-17:00 (IL)	(IL-31) Dipankar Mondal (INST, Mohali) <i>Magneto-Mechano-Electric Nanogenerator: A Possibilities of Harvesting Parasitic Magnetic Noises</i>	(IL-32) Sandip Dhara (IGCAR, Kalpakkam) <i>Spectroscopic Studies at Sub-diffraction Limit</i>	(IL-33) Emila Panda (IIT Gandhinagar) <i>Interrelation between electronic structure, microstructure and optoelectronic properties in oxide- and sulfide-based semiconductors</i>
17:00-17:20 (OR)	(IL-34) Chandra S. Rout (JAIN Univ., Bangalore) <i>Tuning the Physicochemical Properties of 2D Materials for Energy Storage Applications</i>	(IL-35) Sarat K Swain (VSSUT Burla) <i>Designing of Advanced Nanomaterials for sensing of Hg²⁺ ion</i>	(IL-36) Sunil Kumar (IIT Delhi) <i>Unraveling charge transfer dynamics in 2d materials using ultrafast terahertz spectroscopy</i>
17:20-17:35 (OR) 17:20-17:40 (IL)	(OR-10) Avijit Ghosh (CU Jharkhand) <i>Strategy for Efficient Power Generating Footwear through Hybrid Nanogenerator</i>	(OR-11) Suman Barua (University of Chittagong) <i>Inorganic Selenium Quantification Using Liquid Electrode Plasma-Optical Emission Spectrometry Combined with Solid Phase Extraction</i>	(IL-37) Zeiss Presentation: <i>Advancement of 3D Characterization of Materials</i>
17:35-17:50 (OR) 17:40-17:55 (OR)	(OR-12) Avinash Raulo (IIT Delhi) <i>PEDOT-S@PAN Nanofibers as Cathode Additives for Lithium-Sulfur Batteries</i>	(OR-13) Meghana M. Thomas (CSIR-NIST, Trivandrum) <i>Rapid, Visual Mode of Acetone Sensing Using Core-Shell Based Responsive Colloidal Photonic Crystals</i>	(OR-14) Soumya Saswati Sarangi (VSSUT, Burla) <i>MD Simulation studies for Young's Modulus of Metal Nanowires</i>
19:30-21:00	Dinner		

8th January 2020 (Wednesday)

Breakfast			
	Kalidas Auditorium	Gargi Auditorium	Maitrayee Auditorium
	Chair: Santanu Chattopadhyay (IIT Kharagpur)	Chair: Rahul Mitra (IIT Kharagpur)	Chair: S. Parida (IIT Bombay)
8:00-9:30			
09:30-10:00 (IL)	(KN-13) TBA	(KN-14) Arup Dasgupta (IGCAR, Kalpakkam) <i>Development of a Ni base oxide dispersion strengthened superalloy for high temperature applications</i>	
10:00-10:20 (IL)	(IL-38) Himansu S. Nanda (IIITDM, Jabalpur) <i>Design based Challenges in Development of Biomaterials and Bioadhesives for Future Clinic</i>	(IL-39) Dirtha Sanyal (VECC, Kolkata) <i>Room temperature ferromagnetism in organo lead halide perovskite: ab-initio calculation and experimental results</i>	IL-40) Jogendra N. Behera (NISER Bhubaneswar) <i>Metal organic frameworks (MOFs) as electrocatalyst for electrochemical oxygen and hydrogen evolution reactions</i>

10:20-10:40 (IL)	(IL-41) Debarati Chatterjee (IIT Palakkad) <i>Probing the Structural Properties of Bottle-brush Polymers via Scaling Laws</i>	(IL-42) Saurabh Ghosh (SRM Inst. of Science & Techno., Tamil Nadu) <i>First-principles Design of Functional Materials by Multimode Coupling</i>	(IL-43) P. Sujatha Devi (CSIR-NIIST, Trivandrum) <i>Unraveling the Importance of Functional Materials in Dye Sensitized Solar Cell</i>
10:40-11:00 (IL)	(IL-44) Tushar Jana (Univ. of Hyderabad) <i>Ion Exchange Membranes from Imidazole based Polymers</i>	(IL-45) J. Srinivas (NIT Rourkela) <i>Dynamic Analysis of two dimensional functionally graded Porous Microbeams</i>	(IL-46) S. T. Aruna (CSIR-NAL, Bangalore) <i>Advanced ceramics: From powders to products</i>
11:00-12:15	Tea break + Poster Session		
	Chair: Soumen Das (IIT Kharagpur)	Chair:	Chair:
12:15-12:35 (IL)	(IL-47) Bhaskar Bhaduri (IIT Kharagpur) <i>Novel copper nanoparticles grown carbon nanofibers supported on graphitic carbon nitride for adsorption application</i>	(OR-15) Bijuni C. Sutar (KMBB College of Engg & Technology) <i>Ferroelectric phase transition and Electrical Properties of Lead-Free Complex Perovskite: $(Sr_{0.2}Bi_{0.8})(Fe_{0.8}Ce_{0.2})O_3$</i>	(OR-16) Debasis Ghosh (JAIN Univ) <i>High Energy Density and Ultralong Cycle Life Enabled by Graphene-Polyethyleneimine Porous Scaffold for Li-S Batteries</i>
12:15-12:30 (OR)			
12:30-12:45 (OR)	(OR-17) Priyaranjan Mohapatra (VSSUT, Sambalpur) <i>Nano silver based composites for catalytic reduction of 4-nitrophenol</i>	(OR-18) Aafreen Fathima (SRM Inst. of Science & Techno., Tamil Nadu) <i>First-principles design of Polar Metals in Double Perovskite and Oxide Heterostructures</i>	(OR-19) Mihir K. Jha (IIT Bombay) <i>Ultrafast 200,000 mV/s flexible supercapacitor by engineering the chemical affinity of electrode-electrolyte interface</i>
12:35-12:50 (OR)			
12:45-13:00 (OR)	(OR-20) Anupama Bora (IIT Guwahati) <i>Polystyrene Nanocomposites prepared from Waster Thermocol encapsulated with green synthesized Silver Nanoparticles</i>	(OR-21) Suhas Ananda Uthale (VJTI, Mumbai) <i>Mechanical characterization of neat epoxy resin and its failure analysis using FEM</i>	(OR-22) Jayanta Parui (VIT Chennai) <i>Piezoelectric energy transformations in sol-gel grown PVP assisted pure and La modified PZT thick films on single side polished substrate</i>
12:50-13:05 (OR)			
13:00-14:30	Lunch		
	Chair:	Chair:	Chair:
14:30-14:45 (OR)	(OR-23) Puhup Puneet (IIT Delhi) <i>Helical Self-Assembly of Amino-acid Based Polymerized Ionic Liquids</i>	(OR-24) Himali Horo (IIT Guwahati) <i>Covalently conjugated 5-Fluorouracil-chitosan nanocarrier prodrug for photo-controlled delivery of antitumor drug</i>	(OR-25) Subhajyoti Samanta (IIT Ropar) <i>Development of Plasmon Mediated All Solid State Z-Scheme Heterojunction $BiVO_4/Au/C_3N_4$ Photocatalyst for the Selective Solar Methanol Production</i>
14:45-15:00 (OR)	(OR-26) Gobinda G. Khan (Tripura Univ.) <i>Surface Engineering of 1D Zinc Oxide Nanostructures for Energy Harvesting</i>	(OR-27) Neema P M (IIST, Kerala) <i>Reducing Action of WS_2 Nanosheets for the in-situ Synthesis of Silver Nanoparticle and Detection of Basic Aminoacids Using WS_2- AgNP Nanocomposite</i>	(OR-28) Sourav Mallick (IIT Kharagpur) <i>High Performance Energy Storage Devices Based on Cotton Fabric Derived Mesoporous Carbon Supported Manganese Tungstate Nanorod</i>
15:00-15:15 (OR)	(OR-29) Prashant Tyagi (CSIR-AMPRI, Bhopal) <i>Ternary lightweight polymer composites with enhanced properties utilizing functionalized agro-waste</i>	(OR-30) Anilkumar L. Yadav (IIT Delhi) <i>Templated Porous Structures of Cross-linked Polymer</i>	(OR-31) Alok Kumar Singh (IIT Kharagpur) <i>Enhancing ductility of economic grade dual-phase 600 steel by warm rolling and heat treatment schedule</i>
15:15-15:30 (OR)	(OR-32) Shrabanee Sen (CSIR-CGCRI) <i>Flexible Nanocomposites as Self Powered Sensors</i>	(OR-33) Shrilekha V. Sawant (Inst. of Chemical Technology, Mumbai) <i>Study of hydrogen adsorption isotherm parameters and kinetics for doped and undoped carbon nanotubes</i>	(OR-34) Harsh Chaliyawala (PDDU, Gandhinagar) <i>Novel camphor based graphene/Si nanowire arrays near infrared photodetector</i>
15:30-16:00		Valedictory	
19:30-21:00	Dinner		