

Day 1, 18 December 2019

IYPT2019 Talk at Conference Centre (11:00-12:30)

Kankan Bhattacharyya

Mendeleev's Periodic Table. Searching Sanskrit Grammar in Chemistry

Registration at Conference Centre

Time	Plenary Session at Dr. Bhupen Hazarika Auditorium (Session Chair: Dipankar Bandyopadhyay, Co-chair: Siddhartha Sankar Ghosh)
14:45-14:48	Welcome note by Parameswar Krishnan Iyer, Convener, ICANN2019
14:48-14:51	Address by Dipankar Bandyopadhyay, HOC, Centre for Nanotechnology
14:51-14:53	HOC, Centre for Nanotechnology, Conveners Welcomes Director, IITG and Release of Abstract Book
14:53-14:58	Speech by Director, IIT Guwahati & Patron, Convener, ICANN2019
14:58-15:00	Institute Anthem
15:00-15:45	Biman Mandal Bioengineered Human Tissues & Organs: The Way Forward
15:45-16:30	Arun Chattopadhyay A New Form of Nanoscale Particles from Molecular Assemblies with Emergent Optical Properties
16:45- 19.00	Welcome Reception and Interaction at Dr. Bhupen Hazarika Auditorium

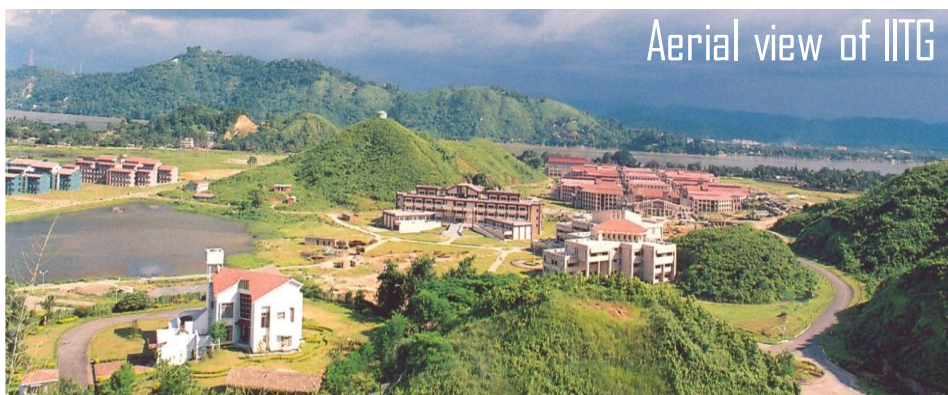


Day 2, 19 December 2019

Time	Parallel Session at Conference Centre	
	HALL 1 (Session Chair: Arun Tej M Co-chair: Praveen V K)	HALL 2 (Session Chair: Chayan K. Nandi Co-chair: Akshai Kumar A S)
9:00-9:20	Sreejith Shankar Multifunctional Nanoscale Electrochromic Films and Devices for Smart Energy Utilization	Mohammad Adil Afroz Benzene Carboxylic Acid Derivative Assisted Passivation of Perovskites for Stable and High-Performance Inverted Perovskite Solar Cells
9:20-9:40	Mahesh Agarwal Current-voltage characteristics of $[\text{Ta}_2\text{O}_5]_{1-x}[\text{TiO}_2]_x$ ($x = 0.08$) thin films	Suparna Bhattacharjee PVA capped CdS/ZnS core shell Nanoparticles: Synthesis and Characterization
9:40-10:00	Tinku Basu Electrochemical rapid nano sensing: A smart replacement of time consuming laboratory testing	Sauvik Raha Synthesis of Fe_3O_4 nanoparticles/ ZnO nanorods anchored on $g\text{-C}_3\text{N}_4$ sheets for express visible light driven degradation of an aqueous solution of Pantoprazole
10:00-10:30	Deepa Khushalani New Materials for Energy Capture and Storage	A S Achalkumar Fluidic Columnar Phase for Organic Electronics
10:30-11:00	Praveen V K Supramolecular Helical Polymers of Functional \square -Systems	Uttam Manna Orthogonal Chemical Functionalities in Rational Integration of Different Biomimicked Wettabilities
11:00-11:15	Group Photography at Admin Building	
11:15-11:30	Refreshments	

Time	Plenary Session at Conference Centre	
	HALL 1 (Session Chair: Parameswar K Iyer)	HALL 2 (Session Chair: Siddhartha S. Ghosh)
11:30-12:15	Ganpati Ramanath Molecularly-tailored inorganic nanomaterials and interfaces with novel properties	Hirendra Nath Ghosh Ultrafast Exciton, Bi-Exciton, and Trion Dissociation Dynamics in Metal- Semiconductor Hetero Interface
12:15-13:00	Satish A Patil Role of Spin Density in Singlet Fission	Deep Jariwala Nanoelectronic Devices with Atomically- Thin Van der Waals Heterostructures
13:00-14:00	Lunch	
14:00-15:30	Poster Session I at Conference Center	
15:30-15:45	Refreshments	
Time	Parallel Session at Conference Centre	
	HALL 1 (Session Chair: Ganpati Ramanath Co-chair: Priyadarsi De)	HALL 2 (Session Chair: Deep Jariwala Co-chair: Vijayakumar C Nair)
15:45-16:15	Akshai Kumar A S Pincer Complexes in Catalytic Conversions: Synthesis of Fuel and Value-Added Chemicals	Chayan K Nandi Unique Fluorescent Nanodot as a Marker to Ease the Method of Correlative Super Resolution Microscopy
16:15-16:45	Priyadarsi De Sequence Controlled Alternating Copolymers as pH-Responsive Drug Delivery Vehicle	Vijayakumar C Nair Photophysics and Applications of Hybrid Perovskite Materials
16:45-17:05	Deepanjalee Dutta Biomaterials for theranostics and invitro 3D cell culture platforms	MAMONI PROBHA BORAH Synthesis of nano particles from rice husks-an agro waste for functional finish on union fabrics

17:05-17:25	Kuldeep Mahato Nanosensor for serotonin determination in clinical samples based on metallic/reduced graphene oxide nano-composite	Md. Harunar Rashid Shape-Tunable CuO-Nd(OH) ₃ Nanocomposites with Excellent Adsorption Capacity in Organic Dye Removal
17:25-17:55	Short Talk I Dinesh Joshi Lekhika Pathak Mamta Singh Syed Nazrin Ruhina Rahman	Short Talk II Amit Kumar Harit Basanagouda Patil Jitesh Agarwal Tushar Kanta Sahu
By 18:30	Vehicles leave Conference center for Banquet Venue	
19:00-onwards	Banquet Dinner	



Short Talk I

Rasmita Barik	Stable flexible electrospun SnO ₂ nanofibers as supercapacitor and enhanced capacity and improved cycling stability
Dinesh Joshi	Characterization of Silica-based Nanofluids for Enhanced Oil Recovery
Lekhika Pathak	A bio-nanochip approach for the diagnosis of dormant tuberculosis
Mamta Singh	A Single Dose Polymeric Nanovaccine with broader serotype coverage against Pneumococcal disease
Syed Nazrin Ruhina Rahman	Lyophilized reconstitutable solid dry powder: a strategy to enhance the shelf-life of liquid retentive, non-phospholipid based oil-in-water nanosized emulsions containing cyclosporine A

Short Talk II

Amit Kumar Harit	Fluorene based anionic conjugated polyelectrolyte for defect passivation and compatibilizing layer in perovskite solar cell
Basanagouda Patil	Enhanced Mobilities in PDPPT-DTT Organic Field Effect Transistors upon OTS-SAM Treatment
Jitesh Agrawal	Growth of ZnO Nanowalls Over Rigid and Flexible Substrate for High Responsivity Photodetectors
Tushar Kanta Sahu	Tuning the Surface and Bulk Recombination Kinetics by Sequential Metal and Non-metal Incorporation in Hematite-Based Photoanode for Superior Photoelectrochemical Water Oxidation

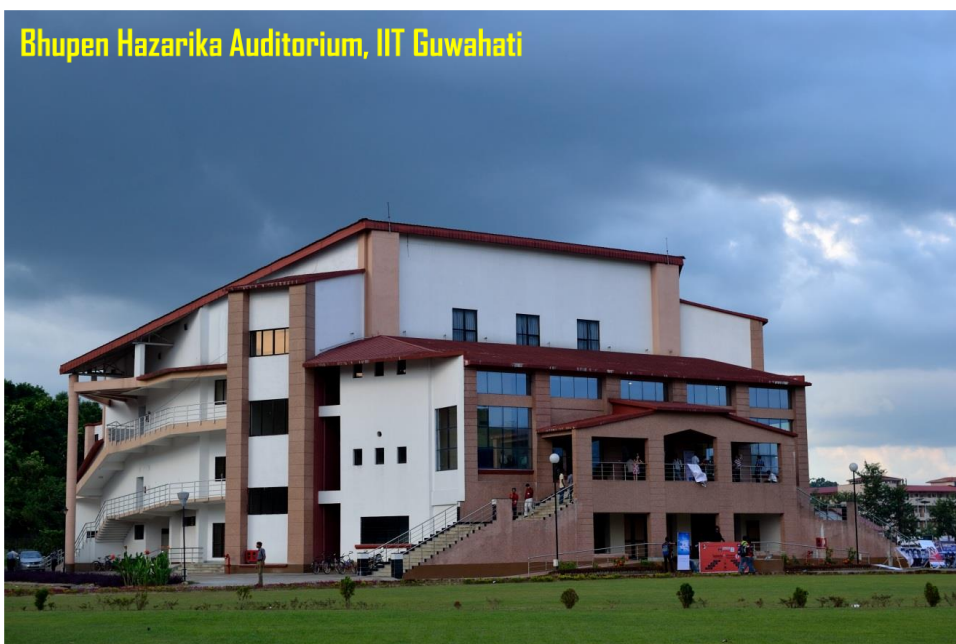
Day 3, 20 December 2019

Time	Parallel Session at Conference Centre	
	HALL 1 (Session Chair: Ashok K Ganguli Co-chair: Subho Dasgupta)	HALL 2 (Session Chair: Han Young Woo Co-chair: Sayan Bhattacharyya)
9:00-9:20	Ankush Raina Lubrication characteristics of oils containing nano additives	Dhirendra Singh Kshatri Structural properties of SrAl ₂ O ₄ : Eu ²⁺ , Dy ³⁺ thin films deposited by electron beam evaporation deposition method
9:20-9:40	Shubhra Mishra Surface morphology of SrS: La ³⁺ thin films deposited by e-beam evaporation deposition method	Ankur Solanki Charge transport mechanism in perovskite based solar cell and memory devices
9:40-10:10	Kalyan Raidongia Energy from the Nanofluidic Transport of Water through Nanochannels between Packed Silica Spheres	Upashi Goswami Nanomaterials for theranostic applications
10:10-10:40	Sandip Chakrabarti Facile Synthesis of Carbon Nanosheets and Their Applications	Shyam S Pandey Design & Development of NIR Dyes for DSSCs by Altering the Anchoring Groups Aiming Towards High Stability and Efficiency
10:40-11:10	Subho Dasgupta Printed devices based on oxide semiconductors: from high power to paper electronics	Sayan Bhattacharyya Being Non-noble is Noble in Water Electrolysis
11:10-11:30	Refreshments	

Time	Plenary Session at Conference Centre	
	HALL 1 (Session Chair: Shyam S Pandey)	HALL 2 (Session Chair: Roy P Paily)
11:30-12:15	Ashok K Ganguli Structural modification in reverse micelles and growth of anisotropic nanostructures	Han Young Woo Organic Photovoltaic Materials for Green Energy Sources
12:15-13:00	Satadal Saha Health for a Billion	Rajeev Ahuja Materials for Li & Na Batteries from a Materials Science Point of View
13:00-14:00	Lunch	
14:00-15:30	Poster Session 2 at Conference Center	
15:30-15:45	Refreshment	
Time	Parallel Session at Conference Centre	
	HALL 1 (Session Chair: Satadal Saha Co-chair: S S Bhattacharya)	HALL 2 (Session Chair: Rajeev Ahuja Co-chair: Sreekantha Jonnalagadda)
15:45-16:15	Deep Jariwala Heterostructures and Heterointerfaces in the Atomically-Thin Limit	Mohammad Qureshi Engineering functional metal oxides/sulphides for photo (electro) chemical water splitting
16:15-16:45	S S Bhattacharya Phase-Pure Multicomponent Equimolar Oxides as a Novel Class of Functional Materials: Synthesis, Characterisation and Properties	Sreekantha Jonnalagadda Novel Nanocomposites and mixed oxides as Reusable catalysts for Organic synthesis and water treatment
16:45-17:15	Anil Bidkar Red blood cell membrane coated nanocarriers in cancer therapy	Subrata Ghosh Materials for Nano-/Microelectronics: An Approach toward Indigenization
	Subrata Mondal Strategically designed multi targeted fluorescent polymer nano dot crosses BBB and impairs neuronal damage in Alzheimer disease	

17:15-17:35	<p>Ankit Chowdhury Design of point of care device</p>	<p>Anjalu Ramchiary High photocatalytic activity of TiO_2/WO_3 heterojunction: Cascadal carrier transfer through the interfaces</p>
17:35-17:55	<p>Ajit Kumar Meikap Dielectric properties, current-voltage and ferroelectric hysteresis behaviour of polymer-carbon nanotubes nanocomposite films</p>	<p>Rahul Narsimhan A Organic nanoparticles as a charge trapping element for high performance non-volatile memory device</p>
17:55-18:25	<p>Short Talk III Dipyaman Mohanta Pankaj Chauhan Akbar Mohammad Amit Kumar Singh</p>	<p>Short Talk IV Ankur Chaurasia Amrita Singh Sukanya Borthakur Niwesh Ojha Bharat Bhushan Sharma</p>

Bhupen Hazarika Auditorium, IIT Guwahati



Short Talk III

Rasmita Barik	Stable flexible electrospun SnO ₂ nanofibers as supercapacitor with enhanced capacity and improved cycling stability
Dipyaman Mohanta	Band gap engineered CoSnO ₃ -rGO nanocomposite: A novel dual functional photo(electro)catalyst towards water oxidation and degradation of Imidacloprid
Pankaj Chauhan	Effect of Fe ³⁺ -porphyrin on the photocatalytic performance of V ₂ O ₅ nanowires
Akbar Mohammad	Biofilm-Assisted Fabrication of Ag@SnO ₂ -g-C ₃ N ₄ Nanostructures for Visible Light-Induced Photocatalysis and Photoelectrochemical Performance
Amit Kumar Singh	Formic Acid-Powered Ferrobots for Energy Generation

Short Talk IV

Ankur Chaurasia	Effect of aspect ratio and orientation of rectangular h-BN nanosheets on tensile strength of h-BN/PE nanocomposites- A molecular dynamics study
Amrita Singh	Environment friendly ZnO/SiO ₂ based nanopesticide formulation for sustainable agriculture
Sukanya Borthakur	WO ₃ @g-C ₃ N ₄ 2-D nanocomposite: an efficient recyclable photocatalyst for sunlight driven mineralization of organic pollutants
Niwesh Dja	Visible light-driven enhanced CO ₂ reduction by water over Cu modified S-doped g-C ₃ N ₄
Bharat Bhushan Sharma	Structural stability of dry and water submerged h-BN nanosheets

Day 4, 21 December 2019

Time	Parallel Session at Conference Centre	
	HALL 1 (Session Chair: Mohammad Qureshi Co-chair: Sangam Banerjee)	HALL 2 (Session Chair: Shyam S Pandey Co-chair: Prashant Sonar)
9:00-9:20	Sabyasachi Pramanik White Light Emitting Quantum Dot Complex as Sensor	Shatrudhan Palsaniya MnO ₂ Nanorods Functionalized RGO/PANI Nanocomposites for High Performance Density Energy Storage Materials
9:20-9:40	Thoudam Debraj Singh Effects of molecular weight and structural conformation of multivalent-based elastin-like polypeptides on tumor accumulation and tissue biodistribution	Harsh Chaturvedi Low Cost Flexible Heaters from Materials to Market
9:40-10:10	Prasenjit Mal Weak Interactions to Control C-S Bond Formation Reactions	Prashant Sonar Dye Based Organic Semiconductors for Transistors, Sensing and Light Harvesting Devices
10:10-10:40	Sangam Banerjee Magnetic properties of nanomaterials	Shree Prakash Tiwari Highly Stable Flexible Organic TFTs with TIPS-Pentacene on Unconventional Substrates for Circuit and Sensing Applications
10:40-11:05	Short Talk V Aashish Kakoria Datta Pawde Raghubeer Bangari	Short Talk VI Saran Sarangapany Tushar Debnath Navneet Verma Anju K S

11:05-11:20	Refreshments
Time	Plenary Session at Dr. Bhupen Hazarika Auditorium Session Chair: Arun Chattopadhyay Co-chair: Parameswar Krishnan Iyer
11:20-12:00	Sharath Sriram Functions from flaws: Devices that harness vacancies and deficiencies in oxide thin films
12:00-12:40	Dipankar Bandyopadhyay Electrorheology at the Micro or Nanoscale Soft-Assemblies
12:40-13:00	Poster Awards and Valedictory Session
13:00-onwards	Lunch

Short Talk V

Aashish Kakoria	Chitosan/Nylon-6 (40/60) nanofibrous membrane fabricated by solution blowing technique for Cu (II) removal
Datta Pawde	Systematic Development of Janus Nanosized Emulsions by Quality by Design (QbD) Approach
Raghubeer Bangari	Removal of Methyl Orange from Aqueous Stream by Boron Nitride Nanosheets.

Short Talk VI

Saran Sarangapany	Bio-inspired synthesis of magnetically separable of Au-Pt@TiO ₂ nanocomposite and their catalytic reduction of organic pollutants
Tushar Debnath	Vibrational Wave-packet Dynamics in Hybrid Perovskite Nanocrystals by Pump-Probe Spectroscopy
Navneet Verma	Specific Fluorescent Carbon Nano Dots and its Application to Correlative Microscopy
Anju K S	Synthesis and characterisation of TiO ₂ -Ag/Au nanofibers for surface enhanced Raman spectroscopy applications