

WORKSHOP CUM SYMPOSIUM
ON
Bio-inspired Nanomaterials for Environmental Applications
February 12th-13th 2020
Organized by
Centre for the Environment
Indian Institute of Technology Guwahati, Assam, INDIA – 781039

Venue: Seminar Hall, Centre for the Environment, IIT Guwahati

Conference Program
Day-1 (February 12th, 2020)

Time	Event	Details
09.00 -09.30	Registration	Centre for the Environment
09.30 -10.00	Inauguration	Seminar Hall, Centre for the Environment
10.00 -10.30		Hi-Tea Foyer, Centre for the Environment
10.30-11.00	Invited Lecture	Prof. K.H. Aaron Lau (University of Strathclyde, Glasgow), Peptoid and Polyphenol Coatings for Enzyme Immobilization, Antibacterial and Antifouling Applications
11.00-11.30	Invited Lecture	Prof. Bishnupada Mandal (Department of Chemical Engineering, Indian Institute of Technology Guwahati , Assam India), Graphene Nanoparticle Incorporated Mixed Matrix Membrane for Enhanced CO₂ Separation from Power Plant Flue Gas
11.30-12.00	Invited Lecture	Prof. Mahuya De (Department of Chemical Engineering, Indian Institute of Technology Guwahati , Assam India), Adsorptive applications of nano structured carbons towards a cleaner environment
12.00-12.15	Oral Presentation-O-01	Abhijeet Mahana , Department of Botany, Mizoram University, Kinetic study of methylene blue degradation using green synthesized ZnO nanostructure
12.15-12.30	Oral Presentation-O-02	Bhanupriya Das (Department of Chemical Engineering, IIT Guwahati , Assam India), Biopolymer based Nanofibre anode for electricity generation and wastewater treatment in Microbial Fuel Cell
12.30-12.45	Oral Presentation-O-03	Dr Kamatchi Sankaranarayanan , IASST Guwahati, Multi-tasking Ionic Liquids for Applications in Nanomaterials and Sensors
12.45-01.00	Oral Presentation-O-04	Varun Saxena (Department of Biosciences and Bioengineering, IIT Guwahati), Application of bimetallic Al-doped ZnO nano-assembly for heavy metal removal and decontamination of wastewater
01.00-02.30		LUNCH Foyer, Centre for the Environment, IIT Guwahati
02.30-03.00	Invited Lecture	Prof. Sasidhar Gumma (Department of Chemical Engineering, Indian Institute of Technology Tirupati , AP India), Graphite Oxide decorated Uio-66 MOF for CR Dye Adsorption using Ultrasonication
03.00-03.30	Invited Lecture	Prof. Mohammad Jawed (Department of Civil Engineering, Indian Institute of Technology Guwahati , Assam India), Sewage Treatment – Ignored Challenges
03.30-03.45	Oral Presentation-O-05	Sayanti Ghosh (Centre for the Environment, IIT Guwahati), Study on Oily Wastewater Treatment in Aerobic Granular Reactors by Varying Hydraulic Retention Time
03.45-04.00	Oral Presentation-O-06	Swati Sharma (Department of Biosciences and Bioengineering, IIT Guwahati), Biosorption of methylene blue dye and lead removal from wastewater immobilized <i>Agrobacterium fabrum</i> SLAJ731
04.00-04.30		Tea Foyer, Centre for the Environment, IIT Guwahati
04.30-05.00	Invited Lecture	Prof. Lalit M. Pandey (Department of Biosciences and Bioengineering, Indian Institute of Technology Guwahati), Synthesis of multifunctional bio-sorbent beads for environmental applications
05.00-05.15	Oral Presentation-O-07	Arpita Shome (Department of Chemistry, IIT Guwahati), Protein Nanoparticles derived Highly Robust and Durable Superhydrophobic Cotton

05.15-05.30	Oral Presentation-O-08	Paulomi Bose (Centre for the Environment, IIT Guwahati), Electrocatalytic reduction of CO₂ to Value-Added Products using oxide of metals (M= Pb and Ni)
05.30-05.45	Oral Presentation-O-09	Soumi Sarkar (Department of chemical engineering, IIT Guwahati , Assam India), Hybrid method for removal of arsenic from water

Day-2 (February 13th, 2020)

Time	Event	Details
09.00-09.30	Invited Lecture	Prof. Mihir Kumar Purkait (Department of Chemical Engineering, Indian Institute of Technology Guwahati , Assam India), Responsive membrane for environmental application
09.30-10.00	Invited Lecture	Prof. Arup K Sengupta (Lehigh university, USA), Complementary Bio-Nano-IX Process for Mitigating Nitrate and Selenate problems in Contaminated Water Sources
10.00-10.15	Oral Presentation-O-10	Mohit Kumar Pandey (Tata Institute Of Social Science, Guwahati), Water Management: Tumbling Around
10.15-10.30	Oral Presentation-O-11	Ravula Rajasekhar (Centre for the Environment, IIT Guwahati), Green Synthesis Iron Oxide Nanoparticles its Application in Remediation of Contaminated Water
10.30-11.00	Tea Foyer, Centre for the Environment, IIT Guwahati	
11.00-11.30	Invited Lecture	Prof. Selvaraju Narayanasamy (Department of Biosciences an Bioengineering, IIT Guwahati), Bio-abatement of micropollutant on nano-based materials and modeling studies for circular economy
11.30-11.45	Oral Presentation-O-12	Chandra Bhanu Gupt (Centre for the Environment, IIT Guwahati), Potential utilization of bentonite for the remediation of contaminated water bodies
11.45-12.00	Oral Presentation-O-13	Rupshikha Patowary (Centre for the Environment, IIT Guwahati), Microbial Enhanced Oil Recovery (MEOR): Strategies to enhance its efficiency
12.00-12.15	Oral Presentation-O-14	Poulami Datta (Centre for the Environment, IIT Guwahati), Evaluation of Oil Washing Efficiency of the Biosurfactant Produced by Bacillus tequilensis from Assam Reservoir Soil
12.15-02.30	Lunch cum "POSTER SESSION" Foyer, Centre for the Environment, IIT Guwahati	
02.30-03.30	Workshop: Hands on training on Dye degradation using Photocatalyst By: Dr. Aruna Ivaturi, University of Strathclyde, Glasgow Venue: Laboratory, Centre for the Environment, IIT Guwahati	
03.30-04.00	Tea Break Foyer, Centre for the Environment, IIT Guwahati	
04.00-04.30	Invited Lecture	Prof. Aruna Ivaturi (University of Strathclyde, Glasgow), Nanomaterials for Environment and Healthcare
04.30-05.00	Invited Lecture	Prof. Animes K. Golder (Department of Chemical Engineering, Indian Institute of Technology Guwahati , Assam India), Bio-inspired synthesis and functionalization of metal nanoparticles for Environmental applications
05.00-05.15	Oral Presentation-O-15	Dr. Saran. S (Centre for the Environment, IIT Guwahati), Bio-Inspired Synthesis of Magnetically Separable Au-Pt@TiO₂ Catalysts for the Selective Oxidation of Glycerol to Value Added Chemicals
05.15-05.30	Oral Presentation-O-16	Anirban Chowdhury (Department of chemical engineering, IIT Guwahati , Assam India), Bio-inspired Synthesis of Cu₂O NPs and Its Application Towards Electrochemical CO₂ Reduction to formate
05.30-06.00	Valedictory Function	
06.00	Hi-Tea Foyer, Centre for the Environment, IIT Guwahati	