

NATCOSEB XX

Department of Chemistry, IIT Guwahati in association with ISSST, Kolkata

09 to 11 December 2021

Scientific Program

Day 1: Thursday, 9th December 2021

14:30 – 15:00	Inauguration <ul style="list-style-type: none">Welcome address by HOD, Department of Chemistry, IIT GuwahatiAddress by the Secretary, ISSSTAddress by the President, ISSSTAddress by the Guest of Honour, Director, IIT GuwahatiVote of thanks by the convenor	
15:00 – 15:40	Plenary lecture (Chair: Prof. Manabendra Ray)	
	Prof. Amitava Das	Guanidinium Derivatives as Cationic C3-Symmetric Gelators: Counter Anion Induced Chirality and Li-ion

Session Break

15:50 – 16:20	IL-1 Dr. Ketan C. Kuperkar	Self-Assembly and Micellar Transition Induced in Cationic Surfactant-Additive System
16:20 – 16:50	IL-2 Prof. Nand Kishore	Drug Partitioning in Colloidal Self Assemblies: Correlation of Structure-Property-Energetics Relationships
16:50 – 17:20	IL-3 Dr. Sangita Roy	Minimalist Peptide Engineering at the Nanoscale for Applications in Healthcare
17:20 – 17:35	OP-1 Mr. Arnab Banerjee	Hydrodynamic and Conformational Characterization of Aqueous Sodium Alginate Solutions with varying Salinity
17:35 – 17:50	OP-2 Mr. Arpan Mal	Interaction of the Heme Protein (Myoglobin) with Sodium Salts of Cholic and Deoxycholic acids in Phosphate buffer: A Detail Physicochemical and Molecular Docking Investigation.
17:50 – 18:05	OP-3 Mr. Manas Barai	Micro-Structural investigations on Oppositely Charged mixed Surfactant gels with Potential Dermal Applications

Day 2: Friday, 10th December 2021

15:00 – 15:40	B. N. Ghosh Memorial Lecture (Chair: Prof. K. P. Das)	
	Prof. T. S. Pal	Surface Enhanced Raman Scattering (SERS) for Chemical Analysis
15:40 – 16:20	IL-4 Prof. Pralay Maiti	Control Drug Delivery for Better Healthcare
16:20 – 16:50	IL-5 Dr. Uttam Manna	Michael Addition Reaction for Achieving Durable Bio-inspired Liquid Wettability
16:50 – 17:05	OP-4 Ms. Oindrila Biswas	Transmembrane Cl ⁻ /HPO ₄ ²⁻ Antiport Activities of 2-Benzimidazolylthiourea Receptors.
17:05 – 17:20	OP-5 Ms. Payel Dowari	Artificial Hydrolase: Systematic Development and Immobilization on Silica Surface for Enhancement of Activity, Enantio-Selectivity and Reusability.

17:20 – 17	OP-6 Ms.Shikha Ayeri	Smart Microgel-Stabilized Pickering Liquid Crystal-in-Water Emulsions and their Response. Towards Amphiphiles
17:35 – 17:55	JSST Best Paper award lecture Dr. Sathish Sundararaman	Evaluation of E-Fenton Process in Decolourization of Azo Dye (Congo Red) and its optimization studies using RSM
17:55 – 18:10	Industrial Lecture Dr. Rishi Gupta	

Day 3: Saturday, 11th December 2021

15:00 – 15:30	Syamasi Gupta Award Lecture (<i>Chair: Prof. Amiya Panda</i>)	
	Prof. Debapatim Das	Exploring the Possibility of Creating Life-Like Systems Using Supramolecular Peptide Amphiphiles
15:30 – 16:00	IL-6 Dr. I. Mukherjee	Encountering Emulsion formation at Oil Production and Processing Units (up and down stream) and smarter way of utilizing Emulsion Breaker (Demulsifier) chemistries at various Process Units.
16:00 – 16:30	IL-7 Dr. A. A. Dar	Triple-Mode Orthogonal Emission Color Tuning with White Light ON/OFF Switching from a Trimolecular Cocktail in Cationic Micelles for Prospective Anticounterfeitng Applications.
16:30 – 17:00	IL-8 Prof. S. S. Bhagwat	Fractional additions - Large property changes
17:00 – 17:30	IL-9 Dr. R. Verghese	Responsive DNA Nanostructures for Cancer Therapy
17:30 – 18:00	IL-10 Dr. Subhabrata. Maiti	Dynamic Modulation of Surface pH of a Catalytic Nanoparticle
18:00 – 18:15	Award Distribution and concluding ceremony	