

Physical Chemistry Symposium 2023

3rd – 5th July, Faculty Hall, Indian Institute of Science, Bangalore

Schedule

All talks are in 30 mins + 5 mins Q&A format

Time	Speaker	Title
Monday	3rd July 2023	
8:50 am	Welcome	
Session 1	Chair: Priyadarsi De	
9:00 am	Parbati Biswas	Conformation And Relaxation Dynamics Of Ring Polymers In Dilute Solutions
9:35 am	K. Srihari	Isomerization In An Optical Cavity: Lessons From A Simple Model
10:10 am	S. K. Asha	Eco-Friendly Synthetic Strategies For Conjugated Polymers
10:45 am	Tea/Coffee	
Session 2	Chair: Dulal Senapati	
11:05 am	S. Umamathy	Influence Of Solvents In Chemical Reactions: A Raman Study
11:40 am	Ravindra Pandey	Understanding Nanoparticle Membrane Interactions By Probing The Interfacial Water Structure In Response To Surface Charges
12:15 pm	Himangshu P. Goswami	Learning Heat Engines' Quantum Space From Nonequilibrium Fluctuations
12:50 pm	Lunch	
Session 3	Chair: Rohit Srivastava	
2:30 pm	Prasanta Das	Infrared Absorption Of Phenolated Triclosan In Aqueous Solution
3:05 pm	Ananya Debnath	Interface Water Probes Heterogeneity Length And Time Scale Of Membranes
3:40 pm	Tea/Coffee	
Session 4	Chair: Rama Kant	
4:00 pm	Srabanti Chaudhury	Simple Discrete State Stochastic Approaches To Probe Reaction Dynamics In Chemical And Biological Processes
4:35 pm	Priyadarsi De	Amino Acid-Derived Alternating Polyampholytes
5:05 pm	N. Sivakrishna	Crystallography And In Silico Studies Of Cyclin Dependent Kinases (Cdk) And Sulphonamides: For The Development Of Potent Anticancer Drugs
7:00 pm	Conference Dinner (Main Guest House)	
Tuesday	4th July 2023	
Session 5	Chair: S. K. Asha	
9:00 am	Paresh Chandra Ray	Influence Of Quantum Confinement On The Linear And Nonlinear Optical Properties Of Nanoscale Materials For Possible Biomedical Applications

9:35 am	Rama Kant	Theory For Electron Transfer On Atomically Stepped Electrode/Electrolyte Interface
10:10 am	P. Elumalai	Tuneable Electrocatalytic Activities Of Nanocomposites As Air-Breathing Electrode For Rechargeable Li-Air Battery
10:45	Tea/Coffee	
Session 6	Chair: Parbati Biswas	
11:05 am	Ganapathy Ayappa	Using Molecular Dynamics Simulations To Study Interactions Of Molecules With The Bacterial Cell Envelope
11:40 am	Dulal Senapati	Concepts Of Physical Chemistry To Design Nanoscale Materials For Energy, Sensing, And Therapeutics
12:15 pm	Debarati Chatterjee	Probing The Facilitated Diffusion Of DNA Target Search By A Binding Protein In A Disordered Background
12:50 pm		
Session 7	Chair: Ravindra Pandey	
2:30 pm	B. Rajakumar	Temperature Dependent Kinetics Of Criegee Intermediate With N-Butyraldehyde And Isobutyraldehyde Using Cavity Ring Down Spectroscopy
3:05 pm	Bedabyas Behera	Detailed Mechanism And Kinetics Of Reactions Of Anti- And Syn-CH ₃ CHOO With HC(O)OH: Infrared Spectra Of Conformers Of Hydroperoxyethyl Formate
3:40 pm	Tea/Coffee	
Session 8	Chair: Shubhadip Chakraborty	
4:00 pm	Nandita Maiti	Novel Plasmonic Nanomaterials For Sensing Of Environmental Pollutants And Investigating Light-Induced Surface Reactions
4:35 pm	Pallavi Debnath	A Few Analytical Calculations In Polymers
Wednesday	5th July 2023	
Session 9	Chair: Srabanti Chaudhury	
9:00 am	Manabendra Chandra	Harvesting Hot Charge Carriers Via Visible-Light Excitation Of Plasmonic Nanoparticles For Photocatalysis
9:35 am	Rati Sharma	Exploring Signalling Pathways Through Theory And Experiment
10:10 am	Naiwrit Karmodak	Multiscale Modelling Of The Stability And Catalytic Activity Of Materials In Electrochemical Environments
10:45 am	Tea/Coffee	
11:00 am	Group photo	
11:15 am	Visit to Chemical Sciences Building and Lunch	