

Technical Program

08:30 - 08:55	Registration & Coffee	
08:55 - 09:00	Chairman's Address	
	Session I	
09:00 - 09:15	Satyaghosh Maurya	Understanding assembly pathway of biological nano-pore forming toxins
09:15 - 09:30	Bharadwaj Vemparala	Modelling bacterial signalling systems and the effect of crosstalk
09:30 - 09:45	Vadhana V	Towards addressing confinement induced transitions of a lennard-jones fluid: a molecular dynamics study
09:45 - 10:00	Shivanand	Molecular Simulation Studies on Clathrate Hydrates
10:00 - 10:15	Ravi Kumar	Free energy calculations of solids with flexible molecules
10:15 - 11:15	Coffee & Poster Session I	
	Session II	
11:15 - 12:00	Dr. Hyacinth Mary Bastian, Team Lead, Shell Technology Center, Bangalore	Energy Transition: Role of long range research @ Shell
12:00 - 12:45	Dr. Bhushan Toley	Increasing global access to medical diagnostic testing using paper-based microfluidics
	Session III	
14:00 - 14:15	Ganesh Madabattula	Self-discharge in electrochemical double layer capacitors
14:15 - 14:30	Aslam Ansari	Alternative designs to harness natural convection in flow batteries
14:30 - 14:45	Phani Kanth	Stress relaxation in a bacterial suspension: The active-to-passive transition
14:45 - 15:00	Sagar Bharatraj	Rheology of dense granular chute flow: Simulations to Experiments
15:00 - 15:15	Peter Varun Dsouza	Secondary flows under simple shear for granular systems
15:15 - 16:15	Coffee & Poster Session II	
	Session IV	
16:15 - 16:30	Satyapaul A. Singh	Role of hydrogen and oxygen activation over Pt and Pd doped composites for catalytic hydrogen combustion
16:30 - 16:45	Neha Lamba	Supercritical transesterification: An approach towards sustainable biodiesel production
16:45 - 17:00	Ravi Kiran M	WGS activity and detailed kinetic modeling of WGS over platinum based bimetallic Ceria
17:00 - 17:15	Rimzhim	Ag & Cu impregnated Fe doped ZnO for bacterial inactivation under visible light
17:15 - 17:30	Prizes & Vote of Thanks	
17:30 - 18:00	High Tea	

Poster Session I

P1	Amannuel	New physical insights into shear history dependent polymorphism in PVDF
P2	Amit Behera	Using molecular dynamics simulations to understand the role of cholesterol during pore formation in lipid bilayers
P3	Arjun Gopal	Modelling combination therapy of oncolytic viruses with immune checkpoint blockade drugs
P4	Aswin Vinod	Antifreeze Proteins - A Molecular Dynamics Study
P5	Bhanjan Debnath	The lift force and the torque on a disc immersed in a rotating granular material: simulation using the discrete element method
P6	Ch. Anil	Development of ionic substituted manganese oxide catalysts for CO oxidation
P7	Ch. Sai Kumar	Catalytic isomerization in 1-pentene: Density Functional Investigation
P8	Disha Jain	Dry reforming of methane over Ce-pyrochlores
P9	Gokulakrishnan Subramanian	Fenton based advanced oxidation processes for water treatment
P10	Ilanila.I.P	Probing the kinetics of protein-lipid interactions in Giant Unilamellar Vesicles (GUVs)
P11	Jatin Panwar	Suction Microfluidics: Architecture and Applications.

Poster Session II

P12	Mani Sravani	Study of High Mach Number Turbulent flow in a channel by DSMC Simulations
P13	Naveen Kumar	Study of the mechanical behaviour of hair fibre
P14	Nuruddin Bahar	Towards DNA Origami-based Magnetic Nanopropellers
P15	Rajasekaran M	Water adsorption on graphene oxide
P16	Ramkumar	Step Towards Mimicking Biology With DNA Origami-Graphene Hybrid Nanopore
P17	Rubesh Raja	Using mathematical models to improve the treatment of hepatitis C virus (HCV) infection
P18	Saurabh	Characterizing DNA Aptamer based biosensors using single molecule spectroscopy and Fluorescence Lifetime Imaging Microscopy
P19	Subhasish Baral	Synergy between innate and adaptive immune responses may decide the fate of HCV infection
P20	Suhas Mukherjee	Insights of preferential CO oxidation mechanism over copper substituted cobalt oxide supports
P21	Suraj Jagtap	Self-assembly of M13 bacteriophage