

Posters presenters TIFRH In-House Symposium 2025

Sr. No.	Name of the poster presenter	Title of the poster
1	Santu Nath	Finite-Size Scaling in the Aging Dynamics of a Glass-Forming Liquid
2	Aaheli Shee Burman	Understanding emergence of apico-basal polarity and progressive epithelialization using otic-epidermal organoids
3	Riya Verma	Effects of resetting in a model with quenched disorder
4	Sanak Banerjee	Actin Relocalization Driven Cellular Rearrangements During Non-Neural Ectoderm Morphogenesis
5	Marwa	Regulatory Dynamics of Ribonucleotide reductase in DNA Damage Responses
6	Arun Kumar Manna	Light-activated nanopores in gas-permselective membrane
7	Rishi Mukherjee	Non-Linear pulse compression using multi-pass gas cell to overcome pulse energy and repetition rate limitation
8	Komal Jindal	Mechanistic Insights into Shape-Selective Molecular Recognition through Rotational Dynamics in MOFs using Ab-initio molecular dynamics
9	Shirshadri Chakraborty	A Synthetic Fluorescent Peptide for Live and Fixed Imaging of E-Cadherin in Cell and Tissue Systems
10	Akash Narayan	Deciphering the minimal functional domain of PfRALP1, an indispensable malaria parasite protein
11	Ananya Nayak	Investigating the first electron transfer in CytochromeP450cam catalytic cycle
12	Akta Singh	Spatiotemporal Dynamics in Supramolecular Polymers
13	KM. Archana Yadav	Ion-selective mixed matrix membrane using functionalized Metal Organic Framework
14	Surajit Das	Enhancing NMR Shielding Predictions of Atoms-in-Molecules Machine Learning Models with Neighborhood-Informed Representations
15	Atreyee Majumdar	Unlocking inverted singlet–triplet gap in alternant hydrocarbons with heteroatoms
16	Arighna Sarkar	Polyvalent thioester as chemical connectors: Towards synthesis of homo/hetero peptide or protein multimeric units
17	Swathi C S	What does city living do to behaviour and physiology of a nocturnal bird?
18	Hridey Narula	Liquid-Phase Energy Transfers in Bubbly Flows
19	G V S Devakinandan	Cnpy1 is a candidate endoplasmic reticulum chaperone of Vomeronasal type 2 GPCRs.
20	Padmanabha Bose	Ring polymers: a model with diverse phases and applications
21	Susmita Kundu	C6 alkane isomer diffusion selectivity in the oriented nanochannels of MOF thin films
22	Harsha Kumar	From Hover to Hibernate: Transcriptomic Architecture of Torpor in a Tiny Endotherm
23	Sourankur Chakrabarti	Investigating the role of IDRs in SIRT1 for transcription factor recruitment during physiological transitions
24	Bijan Sarkar	Fluorescence quenching in a confined environment of a metal-organic framework

25	Sheetal Chawla	Protease evolution for inhibition of immune checkpoint interaction
26	Rajarshi Ghosh	Modulating MOF Photoresponse via Donor-Acceptor Interaction for Polarity-Based Molecular Sensing
27	Soni Prajapati	Clustering Behaviour of ABPs in 2D setup
28	Tanmoy Ghosh	Constitutive model for discontinuous shear thickening in epithelial tissues
29	Zeba Rani	From cytoskeleton to genome protector : Role of nuclear actin in DNA damage repair
30	Pratikshya Pattnaik	Impact of Extracellular Matrix Remodeling on Epithelial Defence Against Cancer
31	Resmi Bera	Regulation of SOCE by Unc13D
32	Abhikarsh	"Investigating the role of Syntaxin-11 in immunodeficiency and peripheral immune tolerance."
33	Srita Dutta	The active site lysine residue is a key contributor in determining the stereoselectivity of DERA
34	Arko Guha	Mic19 controls the kinetics of membrane remodelling mediated by Mic60
35	SK Yasir Hosen	Life without Polyphosphates
36	Shivang Mathur	Interaction induced topological phase in a 1-D heterostructure
37	Binayak Banerjee	Biomechanics of phagocytosis and trogocytosis
38	Shilpa Prakash	Fluctuating hydrodynamics and steady-state correlations in the Light-Heavy model
39	Prithvi Bhat	Appearance of pseudogap in SYK model with superconductivity
40	Projwal Kanti Kanjilal	Quantum Phase Transition between Spin-glass and Dimer Quantum Phase of interacting Sachdev-Ye layers
41	Satyam Pandey	Quantitative Inference of Cell Adhesion from Cell Shape and Softness.
42	Mansi Tarani	Zero to ultralow field NMR
43	Chandankumar Hegde	Schemes of Atomic Magnetometry
44	suwendu panda	Catalysis by nanoporous MOF thin film in a cross-flow microfluidics
45	Soumitra Kolya	Mode-coupling theory for aging in active glasses: relaxation dynamics and evolution towards steady state
46	Sukhmeet Kaur	Hibernation and daily torpor: Global and phylogenetic pattern in mammals
47	Rakesh Mahato	Mechanistic Basis of Mic10 Oligomerization and Cristae Junction Formation
48	Shravasti Misra	Oxidative stress and G-quadruplexes in the regulation of transcription and translation
49	Pikaso Latua	Chemigenetic control over boosting phagocytosis in vivo
50	Puneet Pareek	Effect of persistent velocity correlations on dynamical heterogeneity of active glasses
51	Harsha Sharma	Exploring functions of polyphosphates(polyP) in Drosophila innate immunity
52	Sonia, Saptarnab Ganguly	Impact of physiological transitions on metabolic and energetic heterogeneity in the small intestine
53	Sritama Datta	Investigating the role of STX11 in Store-Operated Calcium Entry
54	Rayantan Sadhukhan	Tuning the Electrocatalytic Hydrogen Evolution Reaction of

		Transition Metal Dichalcogenide Janus Structures by Solvent Treatment
55	Sushreeta Chakraborty	Signalling role of glycerophospholipids in neuro-immune interactions
56	Praver Gupta	Nuclear morphodynamics guide competitive elimination of pre-cancerous cells from Epithelia
57	Purabi Sarkar	Alcohol oxidation in cross-flow microfluidic reactor using MOF as a heterogeneous catalyst
58	sourabh singh	Femtosecond Laser Interactions with Water Microjets: From Nonlinear Optics to Relativistic Plasma Dynamics
59	Swathi	GPCR-targeted imaging and manipulation of homeostatic microglia in living systems
60	Kiran Kumar Panigrahi	High-Power, Broadband, Deep-IR Femtosecond Optical Parametric Oscillator Based on CdSiP ₂
61	Srishti Priya	Bidirectional Interplay of metabolism and alternative splicing
62	Payal chaubey	Chemogenetic control of microglia phagocytosis
63	Nandita Mohandas	Tweaking the Water Rigidity at Noble Metal Interfaces for Enhanced Alkaline Hydrogen Production via myo-Inositol Coating - A Bioinspired Approach
64	Tilottama Baisakhi	Development of MOF-coated capillary for micro volume sample analysis
65	Shuvadip Pradhan	Regulating Li Ion Transport via Solvent and Ions Clustering using Ternary Salts in Non- Fluorinated Solvents for Extended Cyclability Zero Excess Lithium Metal Batteries
66	Vasu Malhotra	Unlocking the Reactivity of CAAC-Based Diazoalkene towards Heavier Chalcogens
67	Bijoy Chetry	Electron-Rich Carbon-Carbon Single Bonds
68	Priyanka Sarkar	Cycloaddition of CAAC- and NHC-Based Diazoalkenes with Diphosphene: Access to Electronically-Tunable Heterocycles and Alkenes
69	Ankita Mondal	Electron-Rich Alkene Based pi-(Non)-Conjugated Materials
70	Jay Phadke	Daily Torpor in Tropical Microbats
71	Mukesh Kumar	Characterization of a free-flowing liquid sheet and plasma mirror at high repetition rate (up to 10 kHz)
72	Sudip De	Triazenyl Radical: A New Class of n-type Dopant
73	Shreya Pandit	Making n-type (Semi) Conducting Polymer for Optoelectronic Devices
74	Manjulika Mondal	Adduct Based n-type Dopant
75	Pratishtha Sharma	Basal regulation of mitochondrial biogenesis
76	Ritwija Maity	Regulation of Mitofusin in neurodegenerative mutants.
77	Meera V, Abel Paul Joseph	Sb ₂ S ₃ as a platform for reconfigurable nanophotonics.
78	Priyankar Pandey	HYPERBOLIC METAMATERIALS FOR ENHANCED SCINTILLATION
79	Dr. Pramod Kumar Sharma	A hybrid superconducting quantum circuits lab at TIFRH
80	Antik Bhattacharya	Enhanced Long Wavelength Mermin-Wagner-Hohenberg Fluctuations in Active Crystals and Glasses
81	Subhadip Pradhan	Disentangling Bias in Protein Dynamics Measured by MAS NMR
82	Rashmiranjan Bhutia	Diffusive Noise Controls Early Stage of Genetic Demixing