

# Inter IISER-NISER Chemistry Meet 2025

Indian Institute of Science Education and Research Pune

## 20-22 March 2025

### Schedule Book



# IINCM

2025 IISER Pune



Day **1**



**IINCM**  
2025 IISER Pune

20/03/2025

09:00

Welcome Remarks

09:02

Chair Welcome Remarks

09:05-  
09:10

Inaugural Address by Prof. Sunil S. Bhagwat, Director, IISER Pune

### Session 01: Chair- Prof. Nirmalya Ballav

09:15-  
09:35

**T01: Prof. Sunil S. Bhagwat**

Title: Development of a novel instrument for measuring foamability : TESFAM

09:35-  
09:55

**T02: Prof. Srinivas Hotha**

Title: CISTeR: A Chemical Glycan Editing Reaction Sequence

09:55-  
10:15

**T03: Prof. Vignesh Kuduva R**

Title: Role of 3d/4d-4f magnetic exchange interactions and diamagnetic 3d ions on the magnetic dynamics of Ln(III) ions in heterometallic {3d/4d-4f} Single-Molecule Magnets

10:15-  
10:35

**T04: Prof. Pushpita Ghosh**

Title: Spatiotemporal dynamics and emergent orders in chemical and biological systems

10:35-  
10:55

**T05: Prof. Sanjio Zade**

Title: Thiophene containing phenazine and pyrazinoquinoxaline as organic semiconductors

10:55-11:25 AM Tea Break

### Session-02: Chair - Prof. V. G. Anand

11:25-  
11:45

**T06: Prof. Sanjay Mandal**

Title: The Room-temperature Self-assembly of Tunable Metal-organic Frameworks Composed of Flexible Neutral Linkers with Six N-donor Atoms and Various Dicarboxylates

11:45-  
12:05

**T07: Prof. R. Boomi Shankar**

Title: A Chiral Organic Ferroelectric Exhibiting FeFET and Neuromorphic Applications

12:05-  
12:25

**T08: Prof. Amlan K Roy**

Title: An alternative grid-DFT method for atoms, molecules

12:25-  
12:45

**T09: Prof. Nagendra Kumar Sharma**

Title: Synthesis and Evaluation of Non-benzenoid Scaffold (Tropolone) Incorporated Biomacromolecules (Peptides and DNA)

12:45-02:20 PM Lunch Session

Day **1**



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### Session-03: Chair - Prof. Partha Hazra

02:30-  
02:50

**T10: Prof. Padmabati Mondal**

Title: Understanding Serotonin-Receptor Interactions, Binding and Stability via Molecular Dynamics Simulations: Key Residues for non-covalent Interactions and Signal Transduction

02:50-  
03:10

**T11: Prof. Ahanjit Bhattacharya**

Title: Applications of functional lipid assemblies in bottom-up construction of artificial cellular systems

03:10-  
03:30

**T12: Prof. Sanchita Sengupta**

Title: Multichromophoric Light-Harvesting Systems and Their Composites for Photocatalytic Hydrogen Evolution and Organic Transformations

### Session-04: Chair - Prof. Sujit K. Ghosh

03:35-  
03:55

**T13: Prof. Subhajit Roychowdhury**

Title: Evidence of Ferroelectric Distortions in Topological Crystalline Insulators via Transverse Thermoelectric Measurements

03:55-  
04:15

**T14: Prof. Debabrata Mukherjee**

Title: FLP-like (Cyclo)addition of Small Organic Molecules to a Stable Azomethine Ylide.

04:15-  
04:35

**T15: Prof. Bishnu Prasad Biswal**

Title: Nanoparticle Organic Networks: A New Class of Functional Materials

04:35-05:00 pm

:

Tea Break

05:00-06:30 pm

:

Poster Session

7:30 pm-9:30 pm

:

Dinner

**Session 04: Chair- Prof. A. A. Natu**09:10-  
09:30**T16: Prof. Hirendra Nath Ghosh**

Title: Ultrafast Plasmon Dynamics in Non-stoichiometric Near Infrared Active Semiconductor Nanocrystals

09:30-  
09:50**T17: Prof. Rajendar Goreti**

Title: Enantioselective Approaches for the Structure Assignment of Abietane Diterpenoid

09:50-  
10:10**T18: Prof. Biplab Maji**

Title: Asymmetric Reductive Coupling Reactions Catalyzed by Cobalt Diphosphine Complexes

10:10-  
10:30**T19: Prof. Pankaj Kumar Koli**

Title: Biomimetic Modelling of Interconversion of Nitric Oxide and its derivatives

10:30-  
10:50**T20: Prof. Himansu S Biswal**

Title: Can Thioamides be the Potential Surrogates of Amides?

**10:50-11:30 AM**

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**Photo session and Tea Break****Session 05: Chair- Prof. Amit K. Simlandy**11:30-  
11:50**T21: Prof. Angshuman Nag**

Title: Short-Wave Infrared Emitting Halide Perovskites

11:50-  
12:10**T22: Prof. Sureshkumar Devarajulu**Title: How Distal is Distal C(sp<sup>3</sup>)-H Activation?12:10-  
12:30**T23: Prof. Malay Rana**

Title: Amendments to MOF-5 and UiO-66 for Improved Applications: A Combined Experimental &amp; Computational Study

12:30-  
12:50**T24: Prof. Basudev Sahoo**

Title: Photocatalytic C-C Bond Functionalization of Ketone-Derived Dihydroquinazolinones

12:50-  
01:10**T25: Prof. Chandra Shekhar Purohit**

Title: Homo-Dimetalic Silver Purine Complexes as Neuromorphic Materials

**Lunch Break**



Day **2**



**IINCM**  
2025 IISER Pune

21/03/2025

### Session 06: Chair- Prof. Shabana Khan

02:30-  
02:50

**T26: Prof. Rajesh V**

Title: Biomimetic Pathways towards Therapeutic Natural Products

02:50-  
03:10

**T27: Prof. Jeetender Chugh**

Title: Probing conformational heterogeneity in an RNA recognition motif: implications for fibril formation

03:10-  
03:30

**T28: Prof. Dipak Samanta**

Title: Self-Assembled Coordination Cages: Exploring Chiral Induction and Iodine Capture

03:30-  
03:50

**T29: Prof. Somrita Ray**

Title: Enhancing the rate of a gated drift-diffusion process by optimal restart

03:50-  
04:10

**T30: Prof. Sudipta Roy**

Title:

04:10-  
04:30

**T31: Prof. Soumit Mondal**

Title:

04:30-05:00 pm

:

Tea Break

05:00-06:30 pm

:

Poster Session

7:30 pm-9:30 pm

:

Dinner

**Session 07: Chair- Prof. Subal Dey**09:10-  
09:30**T32: Prof. Raj Kumar Roy**

Title: A kinetically regulated methodology for the synthesis of sequence-controlled polypeptides

09:30-  
09:50**T33: Prof. Pritam Mondal**

Title: Mimicking Met-Tyr-Trp Crosslink Cofactor Biogenesis in Catalase-peroxidase KatG using Synthetic Porphyrin Iron(III)  $\pi$ -dication Species.

09:50-  
10:10**T34: Prof. Sachin Dev Verma**

Title: In-situ Visualization of Nanostructure Growth using Interferometric Scattering (iSCAT) Microscopy

10:10-  
10:30**T35: Prof. Adithya Lakshmanan**

Title: Ultrafast Structural Dynamics in Molecular Adducts Featuring Photo-initiated Proton-coupled Electron Transfer

10:30-  
10:50**T36: Prof. A. Muthukrishnan**

Title: Metal-Free Oxygen Electrocatalysts: Defects vs Heteroatom(s)

**10:50-11:20 AM****Tea Break****Session-08: Chair - Prof. Janardan Kundu**11:20-  
11:40**T37: Prof. Moumita Majumdar**

Title: Orbital engineering of heavier group 14 and 15 cationic compounds for catalytic functions

11:40-  
12:00**T38: Prof. Thirupathi Barla**

Title: 2-Keto-1,3- Indandione, a Versatile Ingredient for the Synthesis of Medicinally Important Carbocyclic- and Heterocyclic-Compounds

12:00-  
12:20**T39: Prof. Parikshit Moitra**

Title: Development of Novel Nanomaterials for Molecular Diagnosis of Certain Clinical Manifestations

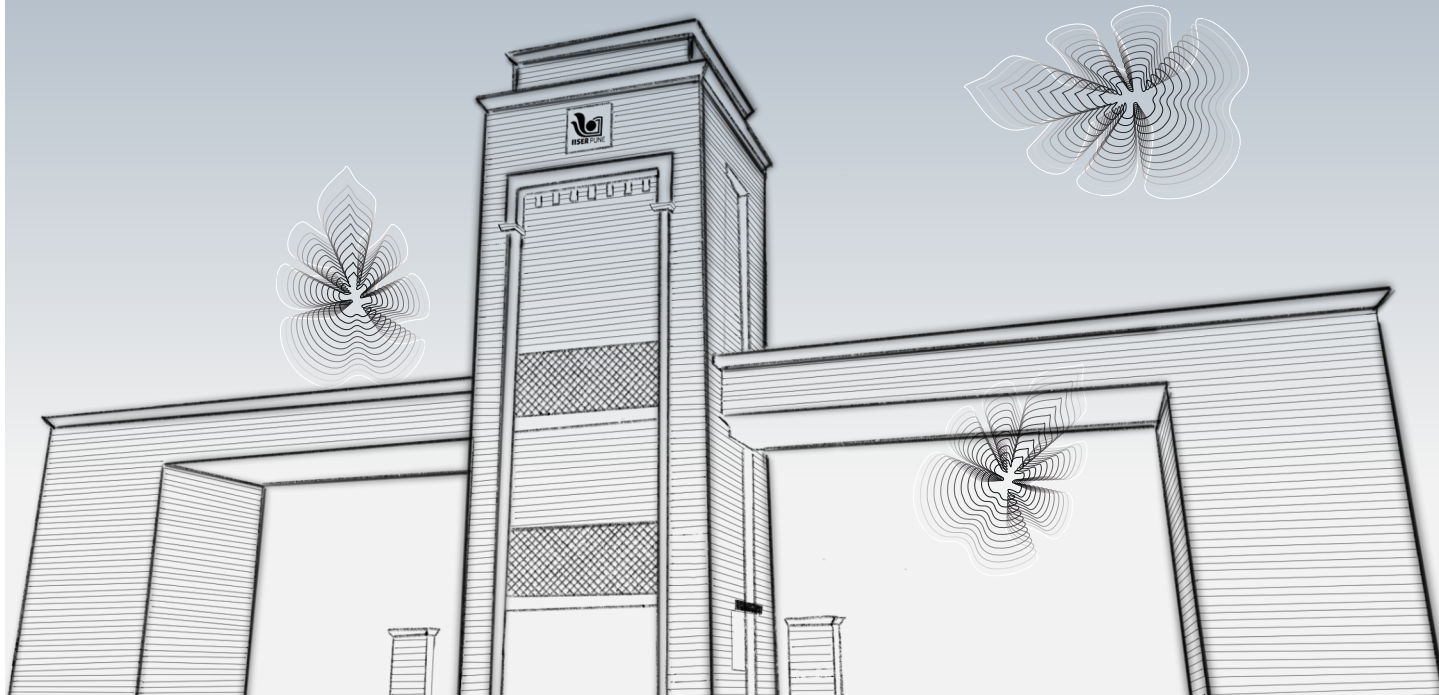
**Concluding Session****12:20- 01:15 PM****:****Prize Distribution and Vote-of-thanks**

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