



Chemistry and Biology of Glycans

One-day Symposium

Organized by Department of Chemistry IITB

Convener: Prof. Suvarn S. Kulkarni

November 24, 2025

Venue: EMBA Hall, SOM, IIT Bombay, Mumbai, India



IT: Invited talk (30 Min); ST: Student talk (10 Min) including Q/A

10:30 AM-11:00 AM	Registration
11:00 AM-11:15 AM	Inauguration and Opening Remark by Prof. Santosh J. Gharpure
Session 1 Chairperson: Prof. Nandita Madhavan	
11:15 AM-11:45 AM	IT1: Prof. Carmen Galan, University of Bristol, United Kingdom “Synthetic Glyco-Tools for Exploring and Exploiting the Glycome”
11:45 AM-12:15 PM	IT2: Prof. Luca Unione, CICbioGUNE, Spain “Probing Glycan Receptor Specificities of Human Flu Viruses by Chemoenzymatic Synthesis, NMR, Modelling, and Cell Biology”
12:15 PM-12:25 PM	ST1: Cristina Fernández Pérez, CICbioGUNE, Spain “Unravelling Viral Haemagglutinin Preferences to Host Glycans by Chemoenzymatic Synthesis and NMR”
12:25 PM-12:35 PM	ST2: Criss Dcosta, Indian Institute of Technology Bombay, India “Developing Potent Inhibitors to Resist Resistance”
12:35 PM-12:45 PM	ST3: Anikleerthi L.M., Indian Institute of Technology, Bombay, India “Diastereoselective Gelation in ROMP Polymers from Sugar Cyclic Nitrones: Multifunctional Organogels for Adsorption and Insulation”
12:45 PM-02:30 PM	Lunch break/Networking
Session 2 Chairperson: Prof. Pradeepkumar P. I.	
02:30 PM-03:00 PM	IT3: Prof. Alexei V. Demchenko, Saint Louis University, USA “New Methods For Chemical Glycosylation”
03:00 PM-03:30 PM	IT4: Prof. Michaela Wimmerova, Masaryk University, Brno, Czech Republic “Lectins in Host-Pathogen Interactions: Structure, Function, and Their Analytical Potential”

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03:30 PM- 03:40 PM	ST4: Smriti Subir Mukherjee , Indian Institute of Technology Bombay, India “Palindromic Redox-Sensitive Peptidic Anion Transporter that Promotes Healthy Breast Cells over Breast Cancer Cells”
03:40 PM-03:50 PM	ST5: Dr. Archana A. Shirsat , Indian Institute of Technology Bombay, India “Orthogonal Amide Coupling Strategy for Conjugation-Ready Trisaccharide of <i>Vibrio cholerae</i> O100”
03:50 PM-04:20 PM	Tea break
Session 3 Chairperson: Prof. Irishi N. N. Namboothiri	
04:20 PM-04:50 PM	IT5: Prof. Valentin Wittmann , University of Konstanz, Germany “Chemical Tools for Glycobiology”
04:50 PM-05:00 PM	ST6: Krishna S. Gupta , Indian Institute of Technology Bombay, India “Lewis Acid-Promoted Hydroalkoxylation Reduction/Cycloaddition of Cyclopropenes: A Unified Route to Synthesize THF, THP, Oxaspirolactones and Spiroketal”
05:00 PM-05:10 PM	ST7: Siddhesh Shewade , Indian Institute of Technology Bombay, India “Targeting Phenylalanine tRNA Synthetase of the Malarial Parasite using Nucleosideamino Acid Conjugates”
05:10 PM-05:20 PM	ST8: Dr. Aishwarya Shelke , Indian Institute of Technology Bombay, India “Total Synthesis of Rare Sugar Containing Oligosaccharide Repeating Units of ESKAPE Pathogens”
05:20 PM-05:30 PM	Closing remarks
05:30 PM-06:00 PM	High Tea