Tata Institute of Fundamental Research
Survey No. 36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy Dist., Hyderabad – 500 046

Seminar

Regioselective Difunctionalisation / Cyclisation of Unsymmetrical Alkynes and Asymmetric Formal Cycloaddition of Bicyclo[1.1.0]buatnes (BCB)

Shubham Dutta

ICIQ-Tarragona, Spain

A growing interest in modern organic chemistry has sparked innovative solutions to regioselectivity issues, paving the way for exciting regioselective transformations of unsymmetrical alkynes. This seminar primarily focuses on cationic Pd-catalysed regioselective dicarbofunctionalisation of unsymmetrical alkynes, yielding valuable tetra-substituted olefins. Additionally, yne-tethered ynamides exhibit divergent reactivity while undergoing cyclisation via the ynamide moiety under polar conditions, and a radical-mediated reversal of the cyclisation pattern is demonstrated. The final section focuses on the asymmetric strain-release chemistry, specifically highlighting the asymmetric formal cycloaddition of bicyclo[1.1.0]butanes (BCBs) to synthesize chiral bridged piperidines and tetrahydrocarbazole derivatives.

Tuesday, Jan 6th 2026

16:00 Hrs (Tea / Coffee 15:45 Hrs)

Auditorium, TIFRH