



**RAMAIAH
UNIVERSITY**
OF APPLIED SCIENCES



**INSTITUTION'S
INNOVATION
COUNCIL**
(Ministry of Education Initiative)

**Faculty of Natural Sciences (FNS) &
Faculty of Life and Allied Health Sciences (FLAHS)**

THE 2025 NOBEL PRIZE IN CHEMISTRY

Celebrating the Spirit of Scientific Excellence

VENUE

A206, RAMAIAH TECHNOLOGY CAMPUS,

DATE: 21/11/2025

KEYNOTE SPEAKER



Dr. Tapas Kumar Maji, FASc, FTWAS

Professor, Chemistry and Physics of Materials Unit, JNCASR

**Title: Metal-Organic Frameworks (MOFs): The Material, The Chemistry
& The Legacy**

The **2025 Nobel Prize in Chemistry** marks a remarkable recognition of **Metal-Organic Frameworks (MOFs)** — crystalline, porous materials that have revolutionized materials science and chemistry. Built from the coordination driven assembly of metal ions or clusters with organic linkers, MOFs embody the concept of reticular chemistry, enabling the rational design of frameworks with **unprecedented structural and functional diversity**.

This talk will trace the **journey of MOFs**—from the pioneering discoveries by **Professors Robson, Kitagawa, and Yaghi**, to their roles in addressing global challenges such as **CO₂ capture and conversion, green hydrogen production, water harvesting and purification, and targeted drug delivery**.

