

DEPARTMENT OF CHEMISTRY

organizes

Seminar on Fundamentals of Metal Organic Framework and their Electrochemical Applications

Under the aegis of DBT STAR College Programme

Resource Person



Dr. S. VISWANATHAN
Associate Professor
Department of Industrial Chemistry
Alagappa University
Karaikudi

Event details: 📅 26.08.2025 ⌚ 10.30 A.M. 📍 St. Joseph's Auditorium

Objectives of the event

- ❖ Introducing the fundamental concepts of MOFs, including their structural components, coordination chemistry, and the principles behind their design.
- ❖ Explaining various synthesis methods of MOFs and green approaches, along with their advantages, limitations, and scalability for practical applications.
- ❖ Describing the structural characteristics of MOFs, including porosity, surface area, thermal stability, and tunable functionalities, and their relevance in electrochemical processes.
- ❖ Highlighting the potential of MOFs as functional materials in electrochemical systems, particularly in applications such as supercapacitors, batteries, fuel cells, and electrocatalysis.
- ❖ Discussing the mechanistic role of MOFs in enhancing charge transfer, ion diffusion, and redox activity, thereby improving the efficiency of electrochemical devices.
- ❖ Encouraging collaborative and interdisciplinary research by connecting materials science, electrochemistry, and nanotechnology

Presided By
Rev. Sr. Dr. Victoria
Principal