Department of Chemical Engineering, IIT Hyderabad CH5036-Industry Lecture Series Jan-May 2025





Date: 05-02-2025 Time: 04:00 PM (IST)

Speaker: **Dr. Sriram Krishnamurthy** Affiliation: Schrodinger India Pvt Ltd

Title: Using Molecular Simulations To Tackle Real World

Challenges *Venue:* LHC-01

Abstract

Molecular simulations are transformative computational tools that have significantly advanced how scientists and engineers tackle real-world challenges across diverse fields. By offering detailed molecular-level insights, these techniques bridge the gap between theoretical research and practical applications, driving innovations in health, environmental sustainability, energy, and materials science. Over the years, molecular simulations have played a pivotal role in addressing complex real world problems. In this talk, I will provide a brief overview of the history of molecular simulation techniques and share case studies that highlight their profound impact on scientific research and development.

Biography

Sriram is a Senior Scientist in Schrodinger with expertise in molecular dynamics simulations, specializing in materials science. He holds a B.Tech and M.Tech in Chemical Engineering, as well as a Ph.D. in Soft Matter Physics from IIT Madras. Currently serving as a Materials Science Education Specialist, Sriram combines his deep scientific knowledge with a passion for advancing education in the field.

His work has been recognized with the prestigious Institute Research Award for Best Thesis, and his research has led to several impactful publications based on his doctoral work. Beyond his professional pursuits, Sriram enjoys reading and is an avid football enthusiast.