



SCIENCE CLUB
UNIVERSITY SCIENCE COLLOQUIUM

'Soft Functional Materials from Bile Salts'

Speaker



Professor Uday Maitra

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<http://orgchem.iisc.ernet.in/faculty/um>

Abstract

Functional molecular gels are being increasingly investigated owing to their potential applications in various fields such as biomaterials, sensing, optoelectronics etc. Among many known gelators, bile acid derivatives are known to form self-assembled fibrillar networks (SAFINs), eventually leading to the immobilization of solvent molecules around them. During the past few years we have developed a variety of gels from bile acid derivatives, and with metal salts derived from them.

This lecture will start with an introduction to soft, gel-like materials and their applications in various fields. Our own work on the use of these novel soft materials for the design of luminescent hydrogels, and drug and enzyme sensors will also be highlighted.

When?

Saturday 17th February 2018
at 12:00 Noon

Where?

PC Ray Hall,
Department of Chemistry ,
Savitribai Phule Pune University, Pune

Contact Details

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About Speaker

Professor Uday Maitra



Professor Uday Maitra After his BSc from Presidency College, Calcutta and MSc from IIT Kanpur, Uday Maitra got his PhD from Columbia University in 1986 working with Prof. Ronald Breslow. Following a postdoctoral stay at the University of California at Berkeley with Prof. Paul Bartlett, he returned to India, and after a year at IIT Kanpur moved to IISc Bangalore in 1989.

His research interests are in the Chemistry of Bile acids; Hydrogels, Metallohydrogels and Organogels; Organic-inorganic hybrid materials; Enzyme sensing, etc. He is among the first in India to initiate detailed studies on small molecule derived gels which are an important class of soft materials. Very recently his group has developed a general strategy for low cost, paper based photo-luminescent enzyme sensors.

He is also greatly interested in Chemistry Education and is a regular participant in a variety of outreach programmes for high school and undergraduate students. He has received a number of awards and honours including the S.S. Bhatnagar Award in Chemical Sciences in 2001, and is an elected fellow of the Indian Academy of Sciences and the Indian National Science Academy.