



**S N BOSE NATIONAL CENTRE
FOR BASIC SCIENCES**

Block JD, Sector III, Salt Lake, Kolkata 700 106

DEPARTMENTAL SEMINAR

Chemical, Biological & Macro-Molecular Sciences

19th April, 2022

4.00 PM

ONLINE / FERMION

SPEAKER



**Dr. Soumya De,
Assistant Professor
School of Bioscience, IIT Kharagpur**

TITLE OF THE TALK

**Insights into structure and dynamics of folded and disordered proteins
by NMR spectroscopy**

ABSTRACT

NMR spectroscopy is a versatile technique to study both structure and dynamics of proteins. Apart from well-folded proteins, this technique can also be used to study intrinsically disordered proteins at atomic resolution. I will present our research on two topics that will highlight the versatility of NMR spectroscopy.

- 1) We are studying the dynamics of intrinsically disordered regions in transcription factors to understand how short motifs facilitate interaction with other partner proteins, thereby modulating the transcription factor function.
- 2) We are studying an intein enzyme, which catalyzes protein splicing reactions. Lessons learned from the structural and dynamic basis of its function are being used to engineer the enzyme with specific biotechnological applications.

HOST FACULTY

Prof. Rajib K Mitra and Dr. Suman Chakrabarty
CHEMICAL, BIOLOGICAL & MACRO-MOLECULAR SCIENCES
