**S N BOSE NATIONAL CENTRE**
**FOR BASIC SCIENCES**
*Block JD, Sector III, Salt Lake, Kolkata 700 106*

# DEPARTMENTAL SEMINAR
# Chemical and Biological Sciences

**13th February,2024** **4.00 PM** **ONLINE / FERMION**

## SPEAKER

Dr. Soumya De
Associate Professor,
Department of Bioscience and Biotechnology,
Indian Institute of Technology, Kharagpur

## TITLE OF THE TALK

## Intrinsically disordered proteins: Functionality of chaos

## ABSTRACT

Proteins that lack a well-defined three-dimensional structure are referred to as intrinsically disordered proteins (IDPs). These proteins defy the well-accepted structure-function paradigm and depict a chaotic system. Nonetheless, it has been established that IDPs play crucial biological roles. The underlying mechanism of these functions stems from the ability of IDPs to interact with multiple partners, which is a consequence of their structural plasticity. We use NMR spectroscopy to study the dynamics of IDPs, and their interaction with DNA, RNA and partner proteins. I will discuss our work on the IDP mediated regulation of the HOX transcription factors.

## HOST FACULTY

**Dr. Suman Chakrabarty**
**ASSOCIATE PROFESSOR, CHEMICAL and BIOLOGICAL SCIENCES**

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