

Students' Annual Seminar

Designing novel hydrophilic staplers to stabilize protein secondary and tertiary structure

Arighna Sarkar

Peptidomimetic drugs have been an area of active interest for treating many diseases related Protein-Protein Interactions (PPI's), which have conventionally been termed as “undruggable”. Constraining a peptide (by macrocyclisation) has many advantages in terms of a drug's therapeutic potential. In this talk, I will discuss about our recent efforts to develop novel hydrophilic dimeric staplers for protein secondary structure stabilization. I will also extrapolate this idea to stabilize protein tertiary structure (proteomimetics) using newly designed trimeric staplers and how it can be effectively used to disrupt extracellular PPI's taking the SARS-CoV-2 (coronavirus) as a model of investigation.

Monday, May 15th 2023

04:30 PM

Seminar Hall, TIFR-H