

Seminar

Novel approaches to investigate contribution of protein motions to drug resistance

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One of the most intriguing questions in biology is how the local or global dynamics of protein change as a function of the evolution of drug resistance of enzymes that are potential targets for the treatment of a number of diseases. We will discuss how infrared spectroscopy and three-pulse photon echo peak-shift spectroscopy can be employed to explore the role that dynamics play in the evolution of drug resistance. In addition, we will discuss new approaches for site-specific incorporation of a number of carbon-deuterium labeled amino acids in larger proteins, which should extend the applications of carbon-deuterium bonds as infrared probes for understanding the biophysical basis of the evolution of drug resistance of many important enzymes.

Friday, Jan 12th 2018

04:00 PM (Tea/Coffee at 03:30 PM)

Seminar Hall, TIFR-H