

Internal Seminar

**Biophysical studies on protein folding,
intermediates and drug-protein interactions**

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As all biological processes depend on protein stability and their appropriate folded conformation, it is very essential to understand how proteins fold into their biologically active states, and how these active states are stabilized. Different models have been proposed to describe the phenomenon of folding. The common feature of these models is the prediction of the presence of an intermediate. It is important to study the initial events of protein folding since the kinetic intermediates or partially folded states subsequently folds into its predestined three dimensional conformation, giving the proteins its functional uniqueness. One such intermediate state of particular importance is molten globule state which typically lays half way between the natively folded and completely unfolded state.

The success of drug delivery depends on the efficiency of the route of administration, which in turn relies on the properties of the drug and its transport vehicle. The use of surfactant micelles as drug delivery devices has offered several advantages. The development of surfactant based efficient drug delivery requires qualitative and quantitative understanding of drug interaction with the surfactant micelles as well as drug interactions with the protein when delivered under such conditions.

Thursday, Jul 14th 2016

2:00 PM (Tea/Coffee at 1:45 PM)

Seminar Hall, TCIS