

## **Internal Seminar**

### **Ligand induced conformational changes in monomeric protein: Biophysical insight**

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Protein-ligands interaction and associated conformational alteration induced structural changes in the morphology of the protein, which depends on the binding affinity as well as nature of the ligands. All biological pathways are regulated by the protein molecules and the functional activity of protein depends on its correct amino acid position and native structure. Functional activity of protein molecules can be altered and it also depends on folding, unfolding and misfolding process or direct, indirect ligands interaction whether protein present in its functional and non-functional state. The ligands induced conformational alteration responsible for the stabilization and destabilization of the protein that are converted in to soluble and insoluble protein i.e. toxic fibril or amorphous structure which are involved in the various severe neurodegenerative disorders. There is some other factors which are responsible to induced the conformational alteration such as involve forces, surfactants, cosolvents, pH, temperature and other environmental factors that induced the aggregation process that fallow different aggregation phenomenon and form amorphous or amyloid aggregate of protein.

***Friday, Mar 16<sup>th</sup> 2018***

***11:30 AM (Tea/Coffee at 11:00 AM)***

***Seminar Hall, TIFR-H***