Tata Institute of Fundamental Research
Survey No. 36/P, Gopanpally Village, Serilingampally, Ranga Reddy Dist., Hyderabad – 500 046

Colloquium

Allosteric Mechanisms in Ribonucleotide Reductase complex mapped by X-ray Crystallography and Cryo-Electron Microscopy

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Mycobacteria harbor Class Ib Ribonucleotide reductase complex, consisting of the nrdE, nrdF, nrdI and nrdH genes. These form various binary and ternary complexes depending upon the context. The end result of the complexes is the conversion of ribonucleotide di-phosphates to deoxy-ribonucleotide diphosphates. This is among the most fundamental biochemical reactions in all life forms, whereby deoxy ribonucleotides needed for synthesis and repair of DNA are produced. The structures solved in my laboratory address some of the mechanistic questions. An overview of these will be presented.

Tuesday, Oct 17th 2023

4:00 PM (Tea / Coffee 03.45 PM)

Auditorium, TIFR-H