

ASET Colloquium

Speaker : Prof. Roop Mallik (*Department of Biological Sciences, TIFR, Mumbai*)

Title : Single Molecule Techniques

Date & Time : Friday 16 February 2018 at 16:00 hrs.

Venue : Lecture Theater (AG-66.)

Abstract :

"On average, humans have one mammary and one testicle", in the words of Nobel laureate Steven Chu. This certainly makes a case for studying individuals, and not just their averages. Accordingly, many techniques have been developed for imaging and manipulating single biological molecules over several decades. This has been possible in the background of improved molecular-level probes, sensitive detectors, data acquisition protocols and a host of other technologies. We will discuss how these advances have been driven by researchers across many disciplines, and has arguably brought the best out of them.

Single-biomolecule research, however, is expensive and is also artificial to some extent. This is because any biological process is driven by a large collection of molecules. This warrants the question:- How long does one continue to chase a molecule? Is it more useful to probe a molecule with the purpose of understanding the process that it controls? How does one tackle the complexity that lies between a molecule and its biological consequence?



Dr. Satyanarayana Bheesette
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