

Seminar

Chemical protein engineering to design inhibitors of disease related protein-protein interactions

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Appropriate utilisation of the cutting-edge chemical tools to synthesize and engineer proteins/peptides, biophysical and biochemical methods to probe their structure-function relationship, and biological assays to highlight their therapeutic implications is the theme of my thesis. In my presentation, I will discuss about novel approaches that simplify chemical protein synthesis, highlighting its successful implementation in the total chemical synthesis of the SARS-CoV-2 spike protein. In addition, our endeavours in chemical peptide engineering have led to the development of inhibitors that effectively impede the invasion of malaria parasites into red blood cells. Finally, I will discuss the innovative use of dynamic combinatorial chemistry to identify a peptide inhibitor of *Staphylococcus aureus* phenol-soluble modulins $\alpha 3$.

Friday, Jul 7th 2023

11:30 AM (Tea / Coffee 11.15 AM)

Auditorium, TIFR-H