



Module PMRF-ISSS110/II/2025

Visualizing molecules with DNA-PAINT: A Primer

Name of the PMRF student

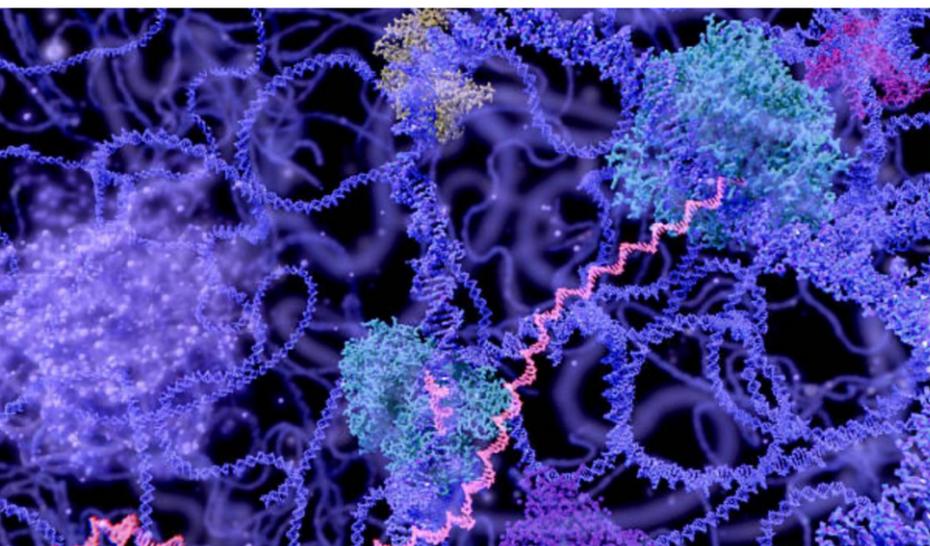
Micky Anand

Required background of the students taught

Any student with basic higher secondary level Chemistry, Biology and Physics knowledge along with light mathematics can take up this course for gaining knowledge and technical know-how on microscopy.

Online session coordinator

Will be chosen from the list of registrants



Details of the content of the module

Super-resolution microscopy embarks biology into the new age of seeing what has never been seen. This module will guide you through the following areas:

1. Introduction to principles of Microscopy and the diffraction limit of conventional imaging
2. Various SMLM techniques (STORM, PALM, SIM, PAINT, etc.) and their case studies/
3. DNA-PAINT- A versatile SMLM approach
4. Demonstration of image reconstruction from SMLM data acquired by DNA-PAINT

Mode Of Delivery: Lectures (twice a week)

Additional Problem-solving sessions based on the request of the students can be held.

Schedule of the module

ONLINE LECTURES- **TUESDAY (6-7:30 P.M.)**

AND SATURDAY (5-6:30 PM.)

Starting Date: 15th November 2025

Ending Date: 31st March 2026

Meeting link : Will be shared later

Contact email ID: issforum@gmail.com

Registration

link: <https://forms.gle/Zq4Sz5Z9yDJV1kAm7>