



Module PMRF-ISSS124/II/2024

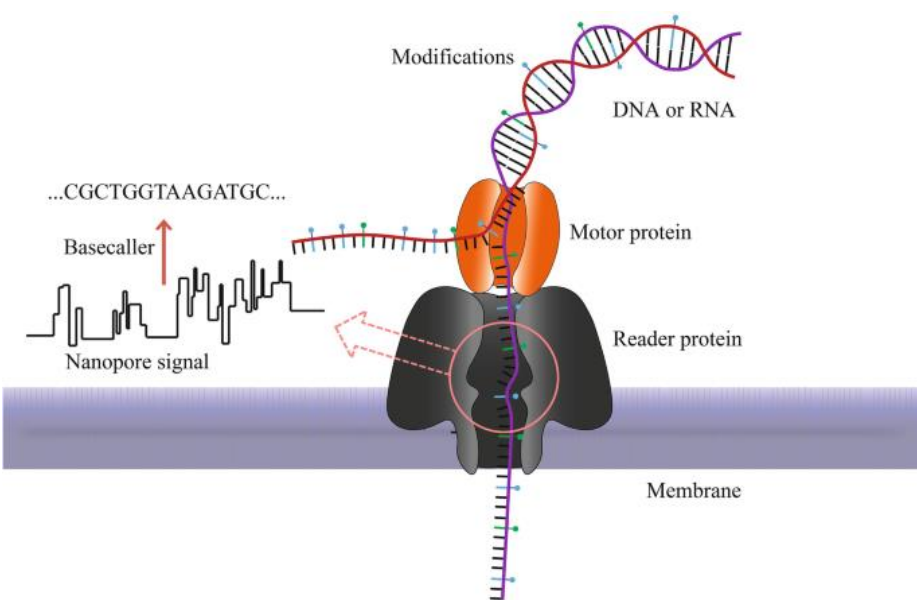
Nanopore Biosensor

Name of the PMRF student

Avisekh Pal

Required background of the students taught

Electronics System Engineering (ESE), Electrical Engineering (EE), Nanoscience and Engineering, Physics, Chemistry, Biology, Material Science



Details of the content of the module

Module 1: Introduction to Nanotechnology

Module 2: Biosensors

Module 3: Nanopore sequencing technique

Module 4: Fabrication of nanopores

Module 5: Characterization of nanopores

Module 6: COMSOL simulation of nanopore

Module 7: Electrical-based sensing using nanopores

Module 8: Optical-based sensing using nanopores

Module 9: Application of nanopores

Module 10: Future of nanopore technology

Schedule of the module

Start date: August 17, 2024

End date: December 29, 2024

Total duration: 50 hours

Class schedule: Every Saturday and Sunday

Class timings: 10 am to 11:30 am

Recorded lectures will be uploaded regularly

Meeting link : Will be shared later

Contact email ID: issf.forum@gmail.com

Registration link:

<https://forms.gle/WBj6G2QGGKm92zUdA>