

## PMRF-ISSS Teaching Programme

Prime Minister Research Fellowship students' teaching requirement facilitated by the Institute of Smart Structures and Systems



Module PMRF-ISSS064/II/2024

## Techniques in Cell Biology

Name of the PMRF student

## S Manasa Veena

Required background of the students taught

Basic Biology, UG/PG in Life sciences/Biotechnology



Details of the content of the module

- 1. Introduction to cell culture
- 2. Cell culture media
- 3. Cell lines, development of cell lines
- 4. Types of cell cultures
- 5. Cell separation techniques
- 6. Differentiation
- 7. Transformation
- 8. Microscopy (Light microscopy, AFM, SEM, TEM)
- 9. Immunostaining, FRET, FRAP
- 10. Annexin assay
- 11. MTT assay
- 12. Calcein/PI assay
- 13. Proliferation assay
- 14. Knock out, Knock down assays

## Schedule of the module

16 April 2024 – 25 April 2024

Video lectures would be uploaded everyday by 8pm.

10-12 hrs of course tentatively

Meeting link: Will be shared later

Contact email

ID: veenamanasa@iisc.ac.in

Registration link:

https://forms.gle/xcqKPET5j3sqd5Tq8

