



Module PMRF-ISSS077/II/2025

## Studying 3D Artificial Tissues: Methods and Applications

### Name of the PMRF student

**Mouchandra Paul**

### Details of the content of the module

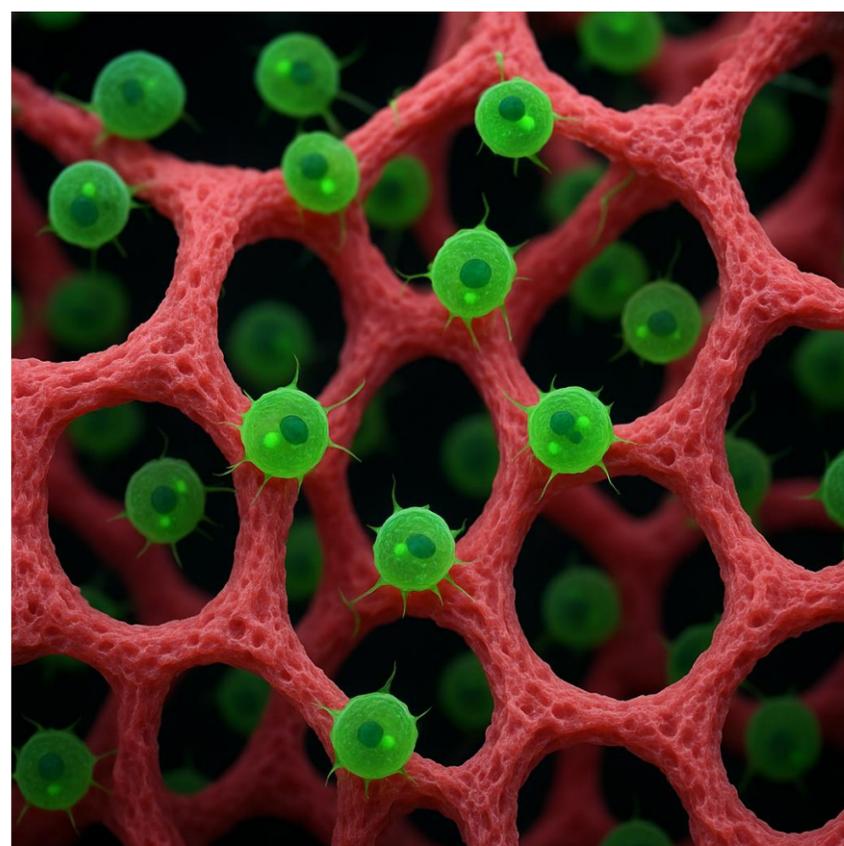
This course will provide learners with a comprehensive understanding of artificial tissues that replicate the structural and functional properties of native tissues. It will cover their fabrication methods, analytical techniques for studying them, and their applications in areas such as drug screening, disease modelling, and biomedical research.

In this course, we will cover the following topics-

- Why 3D tissues? Comparison with 2D cultures
- Biomaterials for 3D artificial tissues
- Fabrication approaches
- Challenges in culturing cells in 3D
- Techniques to study structural & functional features of an artificial tissue
- Discussion of case-studies on 3D disease models, drug screening models etc.

### Required background of the students taught

Intended for UG or PG students from chemical engineering, biomedical/Life science/ biotechnology engineering, material science engineering and other related disciplines.



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### Schedule of the module

Start date: 23<sup>rd</sup> Aug' 25

End date: 25<sup>th</sup> Oct'25

Timings: Saturdays, 4 – 6 PM

Last date of registration: 22<sup>th</sup> Aug'25

Meeting link : Will be shared later

Contact email ID: [issf.forum@gmail.com](mailto:issf.forum@gmail.com)

Registration: Link:

<https://forms.office.com/r/29SXh8PLcY?origin=IprLink>

Or Scan this QR code to register

