



Module PMRF-ISSS060/2022

# Introduction to photonics

## Name of the PMRF student

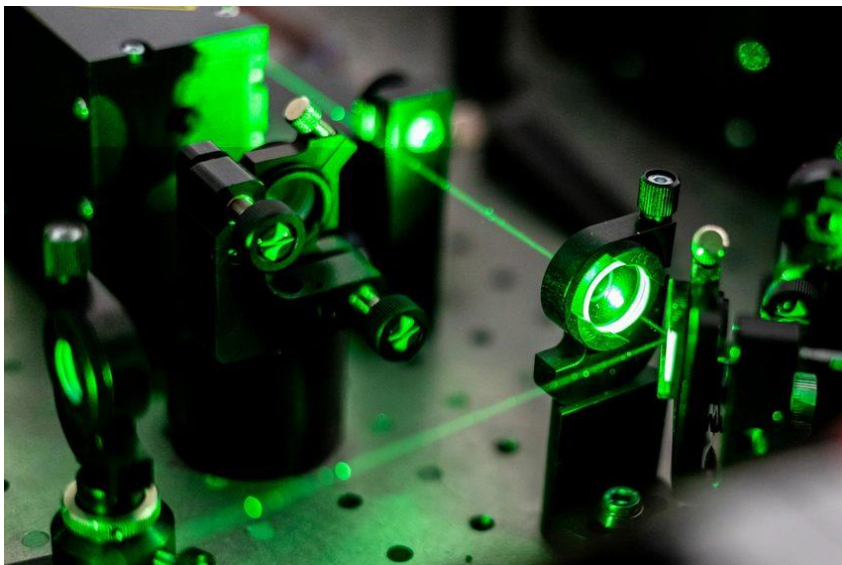
Mukta Janpandit

## Required background of the students taught

Physics, Electronics, Interested undergrads from any other technical fields

## Online session coordinator

Will be chosen from the list of registrants



## Details of the content of the module

This course will provide an overview of basic photonics and its applications. Topics covered include:

- Basic optics, Ray optics, Wave optics, Electromagnetic theory, and Maxwell's equations.
- Optical fibers and Waveguides
- Optical sources and detectors
- Integrated optics
- Light modulation- Electro-optic, Acousto-optic, Thermo-optic
- Fabrication Techniques for photonic integrated circuits
- Applications- telecommunications, sensing, computing.

## Schedule of the module

Start Date- 10<sup>th</sup> Feb 2023

Lecture Schedule-Every Friday, 3 - 5 PM

Number of Lectures- 6

End date- 17<sup>th</sup> March (tentative)

Meeting link : Will be shared later

[Link](#)

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

Registration link:

<https://forms.gle/KAL6jYmYVnL7KysMA>