

## PMRF-ISSS Teaching Programme

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

PMRF-ISSS047/2022.



## Semiconductor Characterization

Name of the PMRF student

Mohammad Ateeb Munshi

Required background of the students taught

Undergraduate course: EE, ECE, Materials science Engg., Physics and other related departments

**Online session coordinator** 

Will be chosen from the list of registrants



Details of the content of the module

Week 1: Resistivity

Week 2: Contact resistance

Week 3: Hall measurements

Week 4: C-V characterization

Week 5: Mosfet Threshold voltage

Week 6&7: Defects characterization (DLTS, DCTS)

Week 8: Oxide and interface trapped charge

Week 9 & 10: Optical characterization (Raman, PL, EL, Ellipsometry).

Week 11 and 12: Material characterization (AFM, SEM, TEM)

Week 13 Failure Analysis.

## Schedule of the module

Start Date: 15 september 2023

Tentative End Date: 30 October 2023

Day: Lectures will be uploaded every

Saturday.

Time: 6 PM – 7 PM IST

Meeting link

Link

Contact email ID: <u>isss.forum@gmail.com</u>

Registration link:

https://forms.gle/q6s38qTXbR1bTzb1A