



Module PMRF-ISSS003/IV/2026

Reliability challenges in power GaN devices

Name of the PMRF student

Mehak Ashraf Mir

Required background of the students taught

Graduate course: EE,
ECE, Physics and other related
departments

Details of the content of the module

Day 1: Introduction to GaN
power devices

Day 2 : Reliability overview

Day 3 : OFF state reliability

Day 4 : Current collapse

Day 5 : Hot carrier reliability

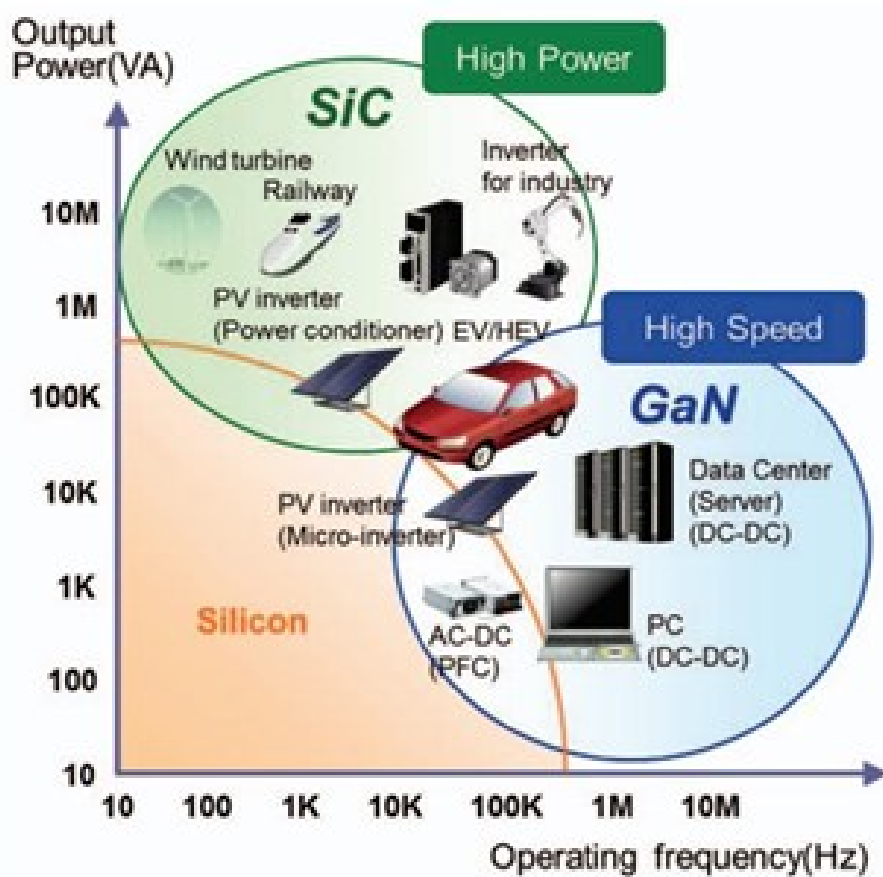
Day 6 : Gate stack reliability

Day 7: OFF state 3T
breakdown

Day 8 : Current injection
based reliability

Day 9 : ESD reliability

Day 10: Cryogenic reliability



Schedule of the module

Start Date: 27th April 2026 Tentative

End Date: 7th May 2026

Day: Recorded Lectures will be
uploaded each day

Time: 7 PM – 8 PM IST

Meeting link : Will be shared later

Contact email ID: issf.forum@gmail.com

Registration link:

<https://docs.google.com/forms/d/1foM1zZ7sMpW5uQ0ifYv4DqA-pd4bYK7kkFx1NquZpWY/edit>