



Module PMRF- ISSS052/II/2023

GaN HEMT for power applications

Name of the PMRF student

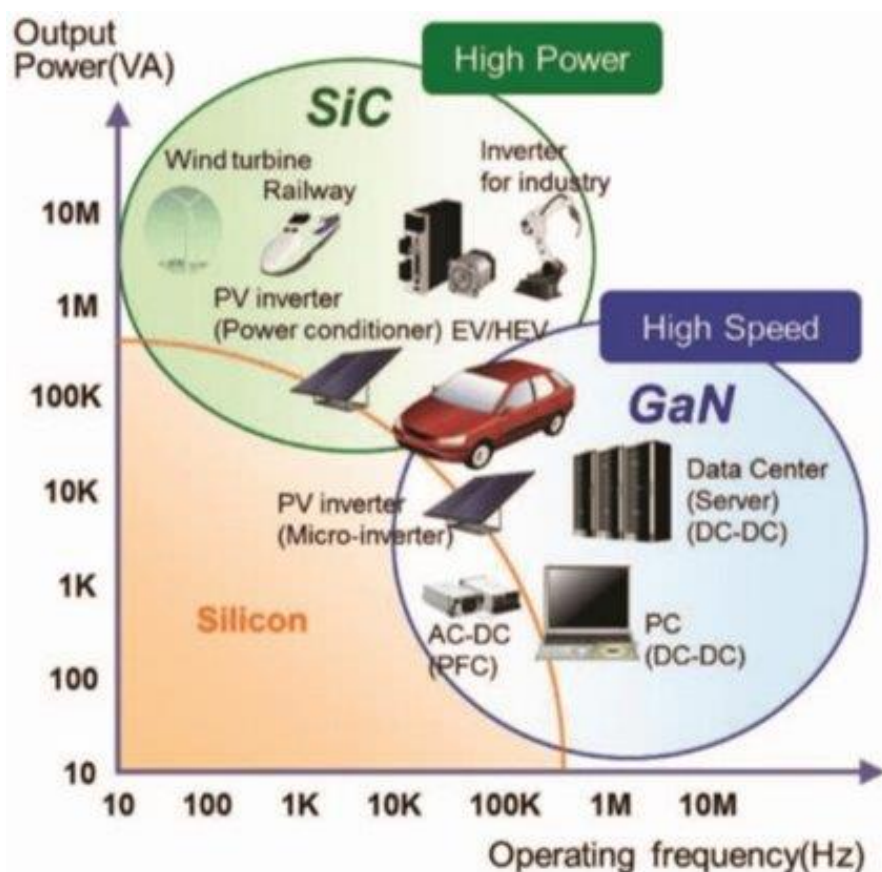
Mehak Ashraf Mir

Required background of the students taught

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

Online session coordinator

Will be chosen from the list of registrants



Schedule of the module

Start Date: 1st Oct, 2023

Tentative End Date: 31st, Dec 2023

Day: Recorded Lectures will be uploaded
every Sunday.

Time: 7 PM – 8 PM IST

Details of the content of the module

Week 1: Introduction to power converters-
brief overview

Week 2 : Comparison of Si, SiC and GaN for
power applications

Week 3: AlGaN/GaN working principle

Week 4&5: Growth of GaN HEMT epitaxial
stack

Week 6 & 7: Design and fabrication of GaN
HEMT transistor

Week 8: Design challenges in GaN HEMT

Week 9 & 10-: Fabrication challenges in GaN
HEMT technology

Week 11, 12 & 13: Reliability challenges in GaN
HEMT.

Meeting link

Link

Contact email ID: issf.forum@gmail.com

Registration link:

https://docs.google.com/forms/d/e/1FAIpQLSdOtPB8ojeA6IbFXcVOwnwASO424LCfYeGgURyQNbNAIBkGaA/viewform?usp=sf_link