PowerAmerica | Next Generation Power Electronics Manufacturing Innovation Institute

Wide Bandgap Devices and Applications Short Course
November 12 - 14, 2024

All times are Eastern Daylight Time (EDT)

The course will be presented online in real-time, with opportunity for Q&A with the instructors

Link to join the live course will be sent to registered attendees
To register or learn more: PowerAmericaInstitute.org/shortcourse

Tuesday, November 12	
10:50 – 11:00	**Welcome** Victor Veliadis, PowerAmerica Executive Director & CTO
11:00 – 12:15	**Electrical Screening of Commercial SiC Power Devices: An Urgent Issue** Presenter: Prof. Anant Agarwal Affiliation: Ohio State University
12:15 – 1:30	**How SiC Power devices shape the future of power electronics** Presenter: Peter Friedrichs Affiliation: Infineon
1:30 – 2:45	**Potential Applications of SiC MOSFETs in Electric Power Distribution Systems** Presenter: Juan Carlos Balda Affiliation: Univ. of Arkansas
2:45 – 3:00	**Break**
3:00 – 4:15	**EV Inverter and Applications of Power Electronics in Hybrid Powertrain** Presenter: Brij Singh Affiliation: John Deere
4:15 – 5:30	**Reliable GaN FETS for Power Supply Applications** Presenter: Sandeep Bahl Affiliation: Texas Instruments

Wednesday, November 13	
11:00 – 12:15	**GaN Power Devices: From Technology to Reliability-limiting Processes** Presenter: Matteo Meneghini Affiliation: Univ. of Padova
12:15 – 1:30	**Optimizing SiC MOSFET Chip and Packaging Design to Match Specific Application Requirements** Presenter: David Levett Affiliation: Consultant
1:30 – 2:45	**SiC Epitaxy Basics** Presenter: Michael MacMillan Affiliation: Consultant
2:45 – 3:00	**Break**
3:00 – 4:15	**Topologies for High-Voltage GaN Applications** Presenter: Tushar H. Dhayagude Affiliation: Transphorm, a Renesas Company
4:15 – 5:30	**SiC Fabrication in a SiC Fab** Presenter: Victor Veliadis Affiliation: PowerAmerica

Thursday, November 14	
11:00 – 12:15	**TBA** Presenter: Fang Luo Affiliation: Stony Brook University
12:15 – 1:30	**Silicon Carbide Substrates: Advantages, Challenges and Solutions** Presenter: Elif Balkas Affiliation: Wolfspeed
1:30 – 2:45	**TBA** Presenter: Llew Vaughn Edmunds Affiliation: Navitas
2:45 – 3:00	**Break**
3:00 – 4:15	**SiC Power MOSFET Design from the Ground Up** Presenter: Dallas Morisette Affiliation: Purdue University
4:15 – 5:30	**TBA** Presenter: TBA Affiliation: Omdia