



## **Fabrication of Wide Bandgap Power Devices**

*December 4-5, 2019*

*NCSU Nanofabrication Facility (<https://nnf.ncsu.edu/>)*

*Sponsored by PowerAmerica (<https://poweramericainstitute.org/>)*

*Monteith Research Center, North Carolina State University*

### **Day 1**

<b>8:30 am – 9:00 am</b>	Breakfast
<b>9:00 am – 9:15 am</b>	Introductions
<b>9:15 am – 9:45 am</b>	Overview of Nanofabrication Equipment and Processes (lecture)
<b>9:45 am – 10:15 am</b>	Window Tour of Cleanroom
<b>10:15 am – 10:30 am</b>	Break
<b>10:30 am – 11:30 am</b>	Structural and Electrical Properties of Wide Bandgap Materials (lecture)
<b>11:30 am – 11:45 am</b>	Break
<b>11:45 am – 12:15 pm</b>	Introduction to electron microscopy techniques and WBG imaging (lab)
<b>12:15 pm – 1:00 pm</b>	Lunch
<b>1:00 pm – 2:00 pm</b>	Fundamentals of wide bandgap power devices (lecture)
<b>2:00 pm – 3:45 pm</b>	Fabrication of Wide Bandgap Power Devices I (lab)
<b>4:00 pm – 5:00 pm</b>	Wrap Up/Discussion/Q&A

## Day 2

<b>8:30 am – 9:00 am</b>	Breakfast/Recap
<b>9:00 am – 9:15 am</b>	Preview of Day 2 Activities
<b>9:15 am – 11:00 am</b>	Fabrication of Wide Bandgap Power Devices II (lab)
<b>11:00 am – 12:15 pm</b>	Analytical Instrumentation Facility (AIF) tour
<b>12:15 pm – 1:00 pm</b>	Lunch
<b>1:00 pm – 1:30 pm</b>	Introduction to the electron microscope instrument (lecture)
<b>1:30 pm – 3:00 pm</b>	Characterization of Wide Bandgap Power Devices (lab)
<b>3:00 pm – 3:15 pm</b>	Break
<b>3:15 pm – 4:45 pm</b>	Keynote Seminar
<b>4:45 pm – 5:15 pm</b>	Review/Evaluations