

**Abstract***NCSU SiC Power MOSFET Effort in Support of PowerAmerica Manufacturing Institute*

This webinar will describe the on-going effort at NCSU to create a open foundry process at X-Fab in support of the mission of PowerAmerica to encourage more participation in manufacturing SiC power MOSFETs. We have also developed a 1.2 kV SiC Power MOSFET with integrated JBS diode, called the JBSFET. This device reduces the SiC chip area by 40 % and reduces package count in half. In addition, we are working on improving the high frequency operation of SiC Power MOSFETs to accelerate their penetration into the silicon IGBT market.