

Friday 15 November

10am

**F206, Hydrogen Energy
Platform, Bât F, UTBM**

H. Alan MANTOOTH

Distinguished Professor of Electrical
Engineering and Computer Science at
the University of Arkansas, AR, USA



H. Alan Mantooth is a Distinguished Professor of Electrical Engineering and Computer Science at the University of Arkansas.

He has led several centers of excellence on power electronics for grid modernization, more electric transportation and cybersecurity.

He is the director of the UA Power Group, under which MUSiC will reside, and is a Fellow of the IEEE. He currently serves as Editor-in-Chief of the IEEE Open Journal on Power Electronics, and is Division II Director-Elect for the IEEE Board of Directors



UNIVERSITY OF
ARKANSAS

College of Engineering
Electrical Engineering

An Emerging Silicon Carbide Ecosystem for Harsh Environment Electronics

The material properties of silicon carbide (SiC) have been well-documented for power semiconductor device applications. Many investigators have utilized these devices in prototypes demonstrating the system-level savings and converter efficiencies that are unmatched with silicon. However, it is still not possible for researchers, small businesses, and even most large businesses and government labs to perform low-volume prototyping in this technology due to the lack of an open fab facility for such activities. This talk will describe how this gap is being filled not only for power devices, but also for low-voltage microelectronics that can survive harsh environments compared to silicon. This talk will illuminate the audience on the possibilities for a new era in wide bandgap research, development, and preproduction prototyping never before available..