

# Advanced Material and Device Characterization

Using the Keysight B1500A Parameter Analyzer

12:00 pm – 1:30 pm

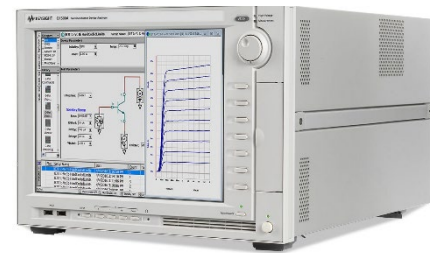
November 2, 2023

BRK 1001 conference room

**Lunch provided:** please RSVP to Neil Dilley [ndilley@purdue.edu](mailto:ndilley@purdue.edu)

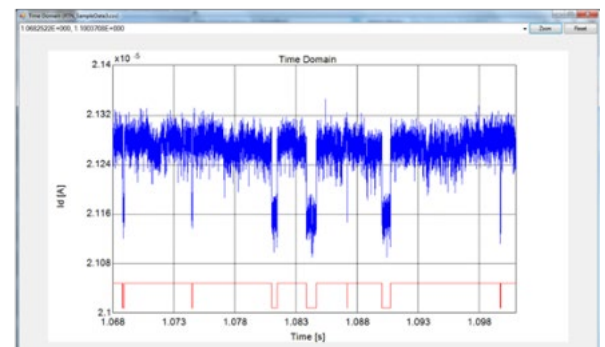
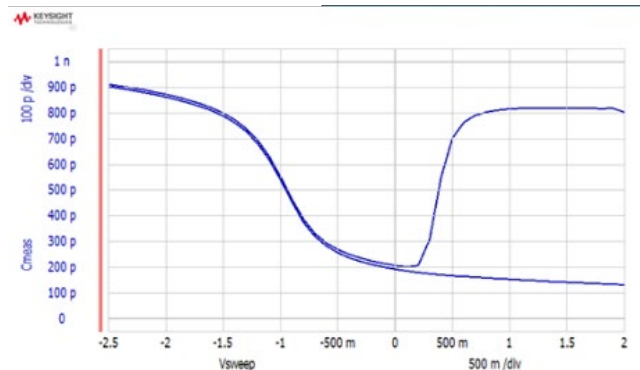
## Topics Covered:

- Material & Device Measurement Overview
- Current/Voltage Measurement Basics
- Capacitance Measurement
- Fast and Fast Pulsed IV Measurement



## Learn Measurement Fundamentals

This seminar will begin by covering the basics of current-voltage (IV) measurement, including source/measure unit (SMU) operation, making correct connections for low-current measurements, performing 4-wire (Kelvin) measurements, and selecting optimal measurement settings. It will then cover the fundamentals of capacitance-voltage (CV) measurements, including the basics of LCR meter operation and considerations when making on-wafer CV measurements. Finally, since high-speed measurements are increasingly important for modern semiconductor devices, the seminar will conclude with a discussion of high-speed pulsed measurement techniques and their applications.



Keysight enables innovators to push the boundaries of engineering by quickly solving design, emulation, and test challenges to create the best product experiences. Start your innovation journey at [www.keysight.com](http://www.keysight.com).