Advanced High Frequency Device Characterization

DSOV134A Oscilloscope and M8195A Arbitrary Waveform Generator (Birck)

UXR0134A Oscilloscope and M8196A Arbitrary Waveform Generator (Wang)

February 8th, 2024 | 12:00 PM – 3:00 PM

BRK 1001 Conference Room

Lunch Provided: Be sure to RSVP at dekaa@purdue.edu

Topics Covered:

- Basics of time domain measurements using oscilloscopes and AWGs.
- Best practices and recommendations to fully utilize power of new test equipment to get desired data sets and measurement results.
- Talks on relevant research by Purdue community.
- Conclusion and Q&A

Learn Measurement Fundamentals

This seminar will begin by covering the basics of time domain instrumentation such as oscilloscopes and arbitrary waveform generators. It will focus on Keysight's Ultra High Performance UXR Oscilloscope coupled with the 92 GSa/s M8196A Arbitrary Waveform Generator which offer unparalleled flexibility for both digital and RF analysis. The UXR platform spans 10 – 110 GHz of bandwidth and can provide 2 GHz of digital down conversion anywhere in its entire bandwidth span. The 92 GSa/s M8196A has 32 GHz of bandwidth, sub 9ps risetimes, and frequency response compensation to help clean up non-ideal signal paths.Finally, after reviewing the highlights of current relevant research within the groups and staff, Keysight will provide best practices and recommendation on how to utilize and maximum capability of new equipment to achieve desired data sets and measurement results.

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About the speakers:

Mark Johnson has been an Application/Solutions Engineer with Keysight/Agilent since 2000 focusing on Fiber-Optics, High Speed Signal Integrity, Jitter and Phase Noise applications. He has a Master of Physics degree from the University of Lancaster in the United Kingdom with a focus on low temperature superconductors and superfluids. Prior to joining Agilent Mark worked for Texas A&M University helping build superconducting magnets for future Hadron colliders.

Jonathan Kinney is an RF/uW solution engineer with Keysight Technologies in Chicago, IL. Jon has been with Keysight for 9 years after receiving his BSEE from the University of Illinois Urbana-Champaign and MSEE from the University of Illinois Chicago. His expertise in electromagnetics and communications systems has enabled Jon to support Keysight customers in all industries across the Midwest as well as become a technical lead in emerging automotive sensing applications and quantum control systems

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