



IEEE

**Ottawa
Section**



**Seminar by IEEE Ottawa IMS, PES and RS-PELS Chapters, Ottawa Educational Activities,
and
Algonquin College IEEE Student Branch**

*The IEEE Ottawa Section is inviting all interested IEEE members and nonmembers to a seminar
on*

***Quantum Voltage Standards and Electrical Power Standards
at National Measurement Institute Australia***

By

***Dr. Dimitrios Georgakopoulos, Research Scientist
National Measurement Institute, Sydney, Australia***

DATE: **Tuesday, September 2, 2014.**

TIME: Refreshments, Registration and Networking: **18:00**; Seminar: **18:30 – 20:00**

PLACE: [Algonquin College, T-Building](#), Room T129, 1385 Woodroffe Ave., Ottawa.

PARKING: No fee after 5 p.m. at the Parking Lots 8 & 9. Please respect restricted areas.

Abstract - Advances in quantum electrical metrology and access to low uncertainty electrical standards by instrument manufacturers and calibration laboratories are making low uncertainty measurements feasible at decreasing costs. In the area of electrical power, a number of applications, driven either by regulation or innovation, create new opportunities for National Metrology Institutes. E.g., wide area power quality monitoring systems using synchronisation based on global positioning systems require challenging measurements (such as measurements of phasor quantities and frequency rate of change). Other applications, such as the efficiency measurements of solid-state lighting and the electrical power of appliances in standby mode require measurements under distorted voltage and current conditions and at low power factors. This talk will give an overview of the activities in these areas at the National Measurement Institute, Australia, with emphasis on the technical challenges involved.

Speaker's Bio - Dimitrios Georgakopoulos received his B.Eng. Degree in Electrical Engineering from the Technological Educational Institution of Piraeus, Greece in 1996; M.Sc. Degree in Electronic Instrumentation Systems and Ph.D. in Electrical Engineering and Electronics from the University of Manchester, UK, in 1999 and 2002, respectively. From 2002 to 2007, he worked as a research scientist at the National Physical Laboratory (NPL), UK. In 2007, he joined the National Measurement Institute, Australia, as a research scientist, where he has been working on the development of quantum voltage standards and low-frequency electromagnetic compatibility (EMC) measurement standards.

Admission: Free. Registration required.

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