Seminar by the IEEE Ottawa Educational Activities, IMS/PES/RS Chapters, and Electrical Power Measurement Group of INMS/NRC

The IEEE Ottawa Section, with Electrical Power Measurements Group of NRC, is organizing a seminar on Instrumentation and Measurement for IEEE members and Non-members interested in the subject.

An Optically Isolated Hybrid Two-Stage Current Transformer for Measurements at High Voltage

by

Dr. Branislav Djokic, National Research Council, Ottawa

DATE: Thursday, September 22, 2005.
TIME: 10:40 a.m. Registration and Networking; 11:00 a.m. – 12:00 p.m. Seminar.
PLACE: National Research Council, 1200 Montreal Road, Ottawa, Building M-36, Kelvin Room.
PARKING: No fee at the visitor's parking. Please respect restricted areas.

Abstract The development of a high-voltage current measurement system for on-site/in-situ calibrations in power systems will be presented at the seminar. The system is based on an optically isolated hybrid two-stage current transformer with electronic circuitry that performs A/D conversion. It uses a fiber optic link for data transmission to a ground station, and a laser-driven fiber optic link for supplying power to the electronic circuitry of the remote module at high voltage. The uncertainty of the current ratio measurement is estimated to be less than $100 \cdot 10^{-6}$ both in-phase and quadrature.

Branislav Djokic (IEEE M'90-SM'97) received the Dipl.Ing. degree in Power Systems Engineering in 1981, Dipl.Ing. degree in Electronics in 1984, M.Sc. and Ph.D. degrees in Electrical Engineering in 1988 and 1993, respectively, from the University of Belgrade, Yugoslavia. From 1982 to 1990, he was with the R&D Institute Mihajlo Pupin, Belgrade, and worked on development of industrial and high accuracy systems for electrical power and energy measurements. From 1990 to 1994 he was a Staff Member of the School of Electrical Engineering, Belgrade University. In 1994 he joined the Institute for National Measurement Standards, National Research Council of Canada, Ottawa, Ontario, where he has been working in the field of electrical power and energy measurements. His research interests entail high accuracy measurement systems, data acquisition, measurement automation, and digital signal processing.

Dr. Djokić is a registered Professional Engineer in the Province of Ontario. He is currently Secretary of the IEEE Ottawa Section, and its Educational Activities Chair.

Admission: Free. Registration required for security reasons.
To ensure a seat, please register by e-mail:
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