

The IEEE Montreal Section is inviting all interested IEEE Montreal members and other engineers, technologists, and students to a technical seminar on:

### "Instrumentation and Measurement"

## By

# Eng. Robin Lauzière (Hydro Quebec)

➤ DATE: Thursday November 3<sup>rd</sup>, 2011

> TIME: 18h:00

- > PLACE: Concordia University, Electrical & Computer Engineering Department, Room EV011.119
- > ADMISSION: Free. Registration required
- To ensure a seat, please send an email to: Dr. Nazih Khaddaj Mallat at <a href="mazih@ieee.org">nazih@ieee.org</a>.
- > Food and Refreshments will be served

### **Abstract:**

Acceptance and efficiency testing is a practice that utilities use worldwide in order to ensure the proper performance and contractual guarantees of newly installed hydro generators. Hydro-Québec's generation testing department has the primary mission of performing these tests. The department is composed of a multidisciplinary team of engineers, technologists, and computer specialists who are deployed province-wide in order to accomplish their mission. Every generating station being unique, this implies that every testing solution must also be unique. Over the years their work has resulted in significant savings in the operating schemes of the generation equipment, as well as early detection of potentially critical design flaws. This presentation will start with a brief history of Hydro-Québec's testing department, followed by an overview of how they integrate different instrumentation and measurement equipment in order to increase the reliability and accuracy of their results. The presentation will end with different examples to demonstrate how these methods resulted in a success story for Hydro-Québec.

#### **Biography:**

**Robin Lauziere** received his Bachelor's degree in electrical engineering from the Université du Québec à Trois-Rivières. He is currently team leader for the generation commissioning and special testing department at Hydro-Quebec. Before joining the testing department, he was a commissioning and testing engineer at Hydro-Québec's Mercier and Rocher de Grand-Mère generating stations. He also worked for BC Hydro in the generation engineering maintenance services department. During his time at BC Hydro he spearheaded the development of a telemetry air gap monitoring system. His preliminary work on the system laid the foundations for a fully functional telemetry air gap monitor installation on a 500 MW generator. Within IEEE, Mr. Lauzière has volunteered as the Saint-Maurice section secretary and is currently the webmaster.