

**Laurentian's School of Engineering and
the Centre for Excellence in Mining Innovation (CEMI)**
cordially invites you attend a Guest Lecture.
Tuesday, March 11, 2008 at 4:30pm
Willet Green Miller Centre – Ministry of Labour Boardroom

Title: Optimal system operation (with application to mine ventilation systems)

Speaker: Antonio Araujo; PDF School of Engineering

Abstract: Optimal operation of processes encompasses a wide range of decisions from business optimization at the top of the hierarchy to regulatory control at the bottom. Its applicability is vast and can be seen working in such diverse fields as biological systems, the country-wide economy, cake making, mine ventilation and oil businesses.

The focus of this presentation is on demonstrating a procedure that leads to practical implementation of optimal operations. We will briefly discuss some theoretical issues, which are the building blocks of the proposed procedure, and then illustrate application using a series of industrial case studies that have been developed in the course of research led by Dr. Shang. We will also give some direction on how to optimize operation of mine ventilation systems.

Speaker's background: After graduating Antonio worked for over 8 years in the petrochemical industry in Brazil. He then joined the Norwegian University of Science and Technology and received his PhD in 2007. Most recently, he has been working on a CEMI sponsored project on practical application of a plant-wide control design procedures to mining and metallurgical industries.

Principal investigator: Helen Shang, Associate Professor in the School of Engineering at Laurentian University. She has extensive research experience in the area of process control as applied to a variety of industrial processes.

Please RSVP by e-mail to Shannon Katary at skatary@miningexcellence.ca by Monday, March 10, 2008.