

## International Conference on Industrial Engineering and Systems Management

May 13-15, 2009, Montreal, Canada

### Call for papers Special Track on Condition Based Maintenance

**Track chair:** Soumaya YACOUT– École Polytechnique de Montréal, Canada

#### Track Description

Condition based maintenance (CBM) is a maintenance strategy that recommends maintenance decisions based on the information collected through condition monitoring. It consists of three main steps: data acquisition, data processing and maintenance decision-making. Techniques for maintenance decision support in CBM can be divided into two main categories: diagnostics and prognostics. Fault diagnostics focuses on detection, isolation and identification of faults when they occur. Prognostics attempts to predict faults or failure before they occur. Research in that area has focused on three approaches for diagnosis and prognosis of faults: statistical, artificial intelligence, and model-based. We invite researchers and practitioners to present recent advances and new research directions in these domains. Submissions describing real case studies in condition based maintenance are highly recommended.

#### Recommended Topics

Researchers and practitioners are invited to submit complete original papers dealing with the following topics but are not limited to:

- Cluster analysis, multivariate statistical analysis, and principle components analysis
- Support vector machine
- Artificial neural networks
- Pattern recognition techniques
- Expert systems
- Kalman filter, mathematical modeling

#### Instructions to authors

Authors are requested to provide a full paper of 10 pages maximum, written in English. The full manuscript should be submitted in accordance with the template format of the conference (available at <https://symposia.cirrelt.ca/IESM09/en/Instructionstoauthors>)

#### Submission

The authors are requested to submit their draft papers online and select the proper special session at <https://symposia.cirrelt.ca/IESM09/en/Submission>.

#### Important deadlines

Draft papers and posters should be submitted by **November 15, 2008**

Authors will receive the acceptance notification by **February 15, 2009**

Final papers for presentation should be sent before **March 1, 2009**

For complete information, visit the IESM'09 Web Site at  
<http://cirrelt.ca/IESM2009>

