



## **NSERC DESIGN ENGINEERING CHAIR DESIGN FOR EXTREME ENVIRONMENTS**

# **COLLOQUIUM ON DESIGN THEORY AND METHODOLOGY**

Date and venue: Friday, April 7, Macdonald Eng. Bldg., Room 357  
Time: 8:55a.m. – 12:30p.m.  
Chair: Prof. J. Angeles

**Coffee and muffins will be available at 8:30a.m.**

This is one of the seminars of the NSERC Design Engineering Chair. For inquiries, please contact **Irene Cartier** at e-mail: [cartier@cim.mcgill.ca](mailto:cartier@cim.mcgill.ca) or at tel. 398-6313.

## COLLOQUIUM ON DESIGN THEORY AND METHODOLOGY

This colloquium is organized by the NSERC Design Engineering Chair "Design for Extreme Environments" to allow students and professors at large to become acquainted with the work of the students registered in *MECH 593 Design Theory and Methodology*.

Date and venue: Friday April 7, 2006 MD 357

### PRELIMINARY PROGRAM

8:30 Coffee and muffins

8:55 *Introduction*, J. Angeles

9:00 *Parametric CAD and Simulation Software Tool*, C. Adourian, Computer Science

9:15 *Embodiment of a Medium-Sized Wind Farm for a Remote Community*, J.A. Chahwan, Electrical and Computer Engineering

9:30 *Design of a Rankine Steam Turbine Power MEMS Device*, J. Crocker, Mechanical Engineering

9:45 *Design of a Large Stroke Pulsatile Pump for Scaled Flow Visualization Experiments*, J.F. Robitaille, Mechanical Engineering

10:00 *Design of a Continuously Operating Blood Sugar Management System for Diabetic Patients*, A. Douglas, Mechanical Engineering

10:15 *Inventory Verification System*, S. El-Fashny, Mechanical Engineering

10:30 *Aerodynamics, Stability and Control of an Open-Class Aero Design® Airplane*, J.A. Escobar, Mechanical Engineering, Concordia University

10:45 Coffee break

11:00 *Design of Luggage for Traveling Family*, M.J. McGrath, Mechanical Engineering

11:15 *Design of a Window-Cleaning Robot*, V. Mirjalili, Mechanical Engineering

11:30 *Structural Design of an Open-Class Aero Design® Airplane*, Diego Quinones, Mechanical Engineering, Concordia

11:45 *Artificial Leg Capable of Ascending and Descending Stair*, T. Di Stefano, Mechanical Engineering

12:00 *Novel Design for Deep Brain Stimulation for the Control of Parkinson's Disease Related Tremors*, G. Sosale, Mechanical Engineering

12:15 *Design of a Rupturing Device for Supersonic Inlet Model*, H.C. Smith, Mechanical Engineering