

CSME Student Affairs News

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Student Paper and Design Competitions, CSME Forum 2004, University of Western Ontario

2nd Student Paper Competition

The Student Paper Competition was first incorporated at the CSME Forum 2002 at Queen's University. The competition was developed under the management of Dr. Marius Paraschivoiu, from Concordia University in Montréal. The second Student Paper Competition was incorporated into the CSME Forum 2004 at the University of Western Ontario. The competition admits papers from both graduate and undergraduate students. The student entering the competition must be the lead author of the paper, and clearly, should actually have composed the text. An additional requirement is student membership in the CSME.

The graduate student component of the paper competition is radically different from most that are encountered at conferences in the following regard. Rather than having a *special* exclusive student paper symposium, the adjudicators cycle through the regular symposia. There are two major evaluation components: the text itself, and the presentation at the Forum. The evaluation of the papers is based on technical content; innovation and creativity. While the criteria for the presentation include the overall quality of the presentation, and ability to answer questions. The competition had 31 participants from across Canada. Engine Control Systems (The Lubrizol Corporation) and Unicell Limited provided generous support with their equal contributions.

Unicell Limited, *FIRST PRIZE* - \$500

The Unicell Limited first prize of \$500.00 was awarded to Andrew A. Fratpietro from the Department of Mechanical & Aerospace Engineering, Carleton University for his paper entitled *Relative Measurement for Kinematic Calibration Using Digital Image Processing*, co-authored by M.J.D. Hayes (this is not a typographical error, Andrew is indeed my M.A.Sc. student, and I his *exceptionally proud* thesis supervisor!!!:-).



Andrew Fratpietro: winner of Unicell Limited *FIRST PRIZE*.

Engine Control Systems, *SECOND PRIZE - \$300*

The Engine Control Systems second prize of \$300.00 was awarded to Serhiy Yarusevych from the Department of Mechanical and Industrial Engineering, University of Toronto for the paper entitled *Experimental Investigation of Airfoil Boundary Layer Separation at Low Reynolds Numbers*, co-authored by J.G. Kawall and P.E. Sullivan.

Engine Control Systems, *THIRD PRIZE - \$200*

The Engine Control Systems third prize of \$200.00 was awarded to R.J. Ho from the Department of Mechanical and Industrial Engineering, University of Toronto for the paper entitled *Generalised Element Coupling Constraints for Nonlinear Explicit Finite Element Analyses*, co-authored by R.G. Sauve and S.A. Meguid.

The highest levels of thanks are owed to all participants, especially the winners, the sponsors, judges, and Marius Paraschivoiu for taming this particularly nasty spirited organizational beast.

27th Annual Student Design Competition

The 27th Annual Student Design Competition was held at the University of Western Ontario on June 3, 2001. Participants consisted of 8 teams, from mechanical engineering departments in universities from across Canada. Sponsors this year included Materials and Manufacturing Ontario (MMO), Sun Microsystems, Integrated Manufacturing Technologies Institute, and Pratt & Whitney Canada.

Materials and Manufacturing Ontario *FIRST PRIZE - \$2000*

First prize was awarded to Matthew Campbell, Chris Turnbull, and Tyler Bell from the University Western Ontario for their design project entitled *Aquarium and Rotary Stage for Optical CT*. Note: Brian Thompson and Marc Rosen flank the winning students in the accompanying photos.



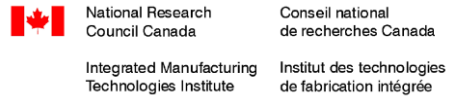
Sun Microsystems
SECOND PRIZE for innovation - \$1500



Second prize for innovation was awarded to Dave Gainey, Nathan Doupe, and Benn Porter from the University of Western Ontario for their design project entitled *Design of an Instrument to Characterize a Hockey Stick*.



IMTI-NRC
SECOND PRIZE for Manufacturing - \$1500



The Integrated Manufacturing Technologies Institute second prize for manufacturing was awarded to Allan Berggren, Shawn Kraft, Christine Wilson, and Kira Yakimovich from the University of Alberta for their project entitled *The Portable Man Lift*.



Pratt & Whitney Canada
THIRD PRIZE - \$1000



The Pratt & Whitney Canada third prize was awarded to Mark Polkington and Lee Priest from the University of Toronto for their design project entitled *PLC Based Production Control System*.



The CSME is again indebted to Dr. Brian Thompson, Chair of the Student Design Competition, whose hard work helped make the competition so successful. Additional thanks are owed to the Judges who gave freely their time and expertise, and to all the student participants.