# **Institution of Mechanical Engineers**

**Central Canada Branch** 



# **Branch Annual Report 2007**

#### **Purpose**

This Annual Report is to record the affairs of the Central Canada Branch of the Institution of Mechanical Engineers for the period from 1<sup>st</sup> January to 31<sup>st</sup> December 2007.

### **Branch Committee – as from the Annual Meeting March 2007**

Position	Name	<b>Membership Grade</b>
Chairman	VC Mathur	Fellow
Vice-Chair	Vacant	-
Programme Chair	R Vijh*	Fellow
Hon. Sec**	B. Barnett/ P Apperly	Member/ Fellow
Hon. Treasurer	D. Pigott	Fellow
Recruitment	I. Mansell	Fellow
& Retention		
Historian	R. Parsons	Fellow
& Archives		
Web Manager	S.R. Hitner	Asst. Member
Past Chairman	S.C Armstrong	Fellow
USA Northern Rep	Vacant	-
Manitoba Panel Chair	F.E. Stock	Fellow
Ordinary member	T. Ponniah	Asst. Member
Co-opted member	R. Vijh	Fellow

<sup>\*</sup>Appointed October \*\*Changeover occurred during November

#### **Branch Events**

We continued with the IMechE CCB orchestrated programme collaboration with three other U.K. professional engineering institutions active in Canada, plus some consultation with the Gas Turbine & Diesel Engineers. The year began with the conclusion of the 2006/2007 Energy Lecture Series.

From September onward we broadly followed the London HQ adopted themes of Energy, Transportation, Education and the Environment.

### January 21st, 6:15 p.m. Subways and Tunnelling

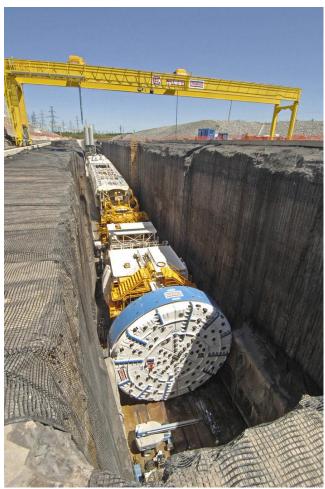
This meeting was cancelled due to the unavailability of the speaker, plus some miscommunication which affected the time available to provide a substitute lecture (see May event).

# Feb $20^{\rm th}$ 6:30pm Empire Legendary Oriental Cuisine North York, Chinese New Year Banquet and lecture

This event was presented by BCS. Following a multi-course meal, Scott Eidt gave a lecture on Wind Energy & Power Plant Challenges. He noted that 40 wind-generation turbines are currently installed in Ontario, but that others are on-hold pending planning authorization.

# Fri, 23<sup>rd</sup> Mar 8:15pm Annual meeting, Dinner and Lecture

Toronto Board of Trade, Airport Centre, 830 Dixon Road, Etobicoke. Following our Branch Annual Meeting and catered dinner, Andre Mech gave a talk entitled "Climate Change- Latest developments", particularly focusing on the business opportunities raised by the trading of Carbon Credits etc.



# Tues, 17<sup>th</sup> Apr at 6:30 pm Plant visit and Lectures Pratt & Whitney, *Courtneypark Drive East, Mississauga, L5T 1J3*

Mr. Barry Barnett (CCB Hon Sec) and Mr. Richard Bradshaw gave talks on the new PW 600 family of turbojets and the Very Light Jets (VLJ's) they were designed for, as well as on fuel consumption issues and possible alternate fuels. These talks were followed by a Plant tour which included both manufacturing and test areas.

# Tues, 15<sup>th</sup> May, 6:15 p.m. The Niagara Tunnel Project, Westin Bristol Place Hotel

Presented by the ICE, Mike Hughes of the Acres Group spoke about the 14.4m diameter boring machine which is making a third diversion of water from the falls, and which will contribute greatly to Ontario's power supply.

# Saturday June 23<sup>rd</sup> Annual planning meeting

Figure 1 14.4m dia. Tunnelling Machine

Representatives from IMechE, IET, BCS, ICE and IDGTE met at the Gosling farm north of the Hockley Valley to discuss the upcoming year's

programme, and to celebrate the previous year's.

### Saturday 7<sup>th</sup> July, at Erindale Park, IET/ IMechE joint BBQ and Technical presentations.

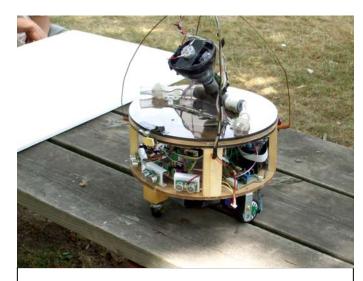


Figure 3 Self-steering robot

Following an excellent barbeque, we had presentations from University of Guelph on recent developments in Automotive Technology as applied to their Formula SAE cross-country race-car, and from Ryerson University on some of their Biomedical and Security Research projects. The customary games and social time followed.

# **2007 – 2008 Programme**

# September 18<sup>th</sup> Tall Building Design, Dominion Club King St W, Toronto

ICE presented a lecture by Agha Hassan of Halcrow-Yolles spoke specifically about the



Figure 4 Guelph SAE racer



Figure 2 Ryerson students Poster session

building where the lecture was delivered, one of the slenderest residential structures in the world.

October 9<sup>th</sup> Engineered Wetlands: Sustainable ecological treatment systems Airport Marriott hotel.

Bill Stiebel of Jacques Whitford addressed members on how naturally-occurring grasses and sedges, in collaboration with planned, aerated gravel beds etc. can deal with the waste of small and medium communities without the introduction of harsh chemicals into the landscape.

# November 20th Robotic Surgery, MDA Airport Rd Brampton.

Unfortunately this well-subscribed lecture was cancelled by the company at a late date due to concerns over possible Intellectual Property disclosure.

## November 30<sup>th</sup> Annual IET/ IMechE Christmas Dinner at the Westin Bristol Place Hotel

Following a catered meal and some IET presentations, Jag Mohan from Centennial College gave a talk on "How is technology driving the evolution and transformation of post secondary education, in the fields of Science and Technology?" Learning outcomes are more and more driven by the perceived needs of the marketplace, and people qualified today may need requalifying before their career is completed.

#### Meeting attendance

Attendance at the above meetings varied from around 20 up to 60. The collaborative effort has worked fairly well, with lessons learned applied to apportionment of meeting costs between the Societies.

# Relations with the Institution of Engineering & Technology, British Computer Society and Institution of Civil Engineers

Our joint programme on project management is a major step in fostering good relations with other UK professional institutions. In addition to holding joint lectures we also hold an annual Xmas dinner with IEE. We continue the good camaraderie.

#### **Relations with PEO / CCPE**

Formal contacts continued during 2007 through Past Chair Stephen Armstrong, who now serves on the Trustee Board, the Institution's governing body.

#### **IMechE Headquarters Support**

The Branch has, as usual, been well supported by headquarters staff during the past year. The Past Chair Stephen Armstrong attended the Trustee Board meetings in the UK during the year. Support from London HQ could not be better.

#### **Professional Reviews**

**No** professional review Interviews were held during 2007. Rules for overseas candidates appeared to have stiffened up, requiring a UK visit or video-conferencing to UK. The branch is considering whether we can purchase equipment to facilitate this new process. We have a number of candidates who hope to make formal application for upgrade during 2008. Mr Ivor Mansell corresponds with the candidates and tries to point them in the right direction.

#### **Equipment/Infrastructure Update**

To make use of upcoming initiatives such as live webcasts and videoconferences with HQ and others, we are investigating the purchase of suitable equipment such as a laptop computer with webcam, etc. Actual purchase is expected shortly.

Investigation is also proceeding into how to use such equipment, with minor additional purchases if necessary, to enable Committee meetings to take place with remote attendance by members with mobility affected by distance, bad weather or health, or even when travelling out of the area.

We are also about to purchase portable audio equipment that will include wireless microphones and enable us to stage events at locations where no sound system exists.

#### Web Activities

The CCB has continued to update the web site at <a href="www.imeche-ccb.org">www.imeche-ccb.org</a>. The web site and the Internet are used where possible as the preferred method to communicate with members. In line with recent improvements on the UK website, your committee implemented improvements and updates to our own site, bringing us in-line with the UK model. We are very happy with our enhanced online image. E-mail addresses are allocated to individual office-holders and are listed below. These addresses will be transferred from individual to individual as office-holders change. They are:-

branch-chair@imeche-ccb.org hon-treasurer@imeche-ccb.org hon-secretary@imeche-ccb.org website-manager@imeche-ccb.org

#### **Financial situation**

The Branch Treasurer's Report summarises the current position, and should be available at the Annual Meeting. Because our lectures have attracted members of other societies this year, not all of whom have cost-sharing agreements with us; we have been somewhat victims of our own success. Our budget, as always is vetted and approved by London, but we are always at the mercy of the fluctuating value of the Canadian Dollar. To help balance our budget, we have designed our programmes to share costs with other UK professional institutions, and also included some on-premises events that do not require us to bear the costs of a hall and catering.

### Acknowledgements

I would like to express my gratitude to all members of the Branch Committee for contributing to CCB through their time and talents. I would like to highlight the extra special contributions of the following:-

- Phil Apperly, for his unstinting support. He voluntarily takes on burdens that would faze many of us and always has a no-fuss solution to any difficulty. His acceptance of the position of Hon. Sec. is a great blessing to CCB.
- Ivor Mansell for support in the area of membership retention and general counsel. Many sensitive issues were resolved with his sage guidance and totally unflappable response in crisis situations.
- Ravi Vijh for his acceptance of the duties of Program Chair and his several excellent contributions to the development of our Programme Events.

- Des Pigott for staying on top of our finances and providing us with timely and accurate reporting
- Tim Ponniah for his continuing help in many ways even after stepping down from the position of Hon. Sec. Many events flyers, mailings, etc., would have been quite impossible to issue without his timely and dedicated help. Tim has always been a source of support and brings a highly proactive attitude to the Committee.
- Steve Hitner for enhancing our web site. Our online image has truly been made very impressive..
- Ron Parsons for maintaining our archives. He is reviewing our historical documentation and identifying important documents that will eventually be archived by Phil Apperly. This will protect the history of the branch for future generations.
- Barry Barnett for his work as Hon. Sec. For part of the year and for organizing and hosting the P&W plant visit. It is unfortunate that he was unable to continue in this position due to outside commitments.
- The Institution's staff in the UK for keeping us up-to-date and informed. We have received many direct communications from Maria Taylor (International Affairs), Lucy Barling, Penelope Barrett, and Joanna Fox, Manager, Regional & International Operations (awards and recognition).
- Other acknowledgments ---
  - Frank and Jaynne Gosling, for continuing support through the now legendary annual barbeque and for hosting the main Programme Planning Meeting
  - o Don Lawson for behind-the-scenes support through his extraordinary counsel and practical guidance

# **Strategic issues**

- We seek to continue to provide a broad and interesting programme of events including talks and visits to meet the objectives of I Mech E and members' CPD goals.
- Recruit volunteers to serve on the Branch Executive and ensure sufficient experienced Committee members to form a cadre from which to select Branch Officers
- Be cost effective and operate within the agreed Business Plan.
- Assist members moving to the area and arrange Professional Interviews when requested to do so by the UK.
- Work with HQ on the evolution of the Institution. Provide insight on overseas
  perception of changes, and constructive criticism of proposed changes to
  Governance and operations as appropriate.
- Work with PEO, OSPE, IET, ICE, BCS and others to further the aims of the Institution and its members.
- Continue to develop communication means such as Counter-torque, e-mail and the web site to assist in keeping members well informed.
- Develop a strategy to attract younger (under 55) members to the committee.

#### VC Mathur, MScEng, DRC (Glas), CEng, FIMechE, PEng,

Chairman, Central Canada Branch. Feb 2008