

Dear CCB members,

In my previous counter-torque I referred to three future planned events, the first was a plant tour of Pratt and Whitney, but they were unable to accommodate us for the remainder of 2016. We had hoped to replace this plant tour with one of the ACE wind tunnel and climatic facility at UOIT in Oshawa. Although this has taken longer to organise than expected we have now arranged a plant tour for Thursday, April 6th. Details of this are included with this mailing. This facility is one of the most advanced of its kind and I hope as many members as possible will attend. It should be particularly convenient for members living in and to the east of the GTA.

The other event I referred to was our Annual Festive Dinner/Lecture event which was held on Friday, December 9th. We have always held this event in collaboration with the IET Toronto Local Network and this year they offered to organise the event at our usual venue in the North York Novotel. Their speaker for this event was Frank Johnson BSc, MASC, PhD, FIET who is a Fellow of the IET, a member of the IET Council, and helps direct a number of companies including the award-winning oceanographic company RBR Ltd which is now run by his son. He has a BSc in electronics, an MASC in engineering applied to gynecology and a PhD in engineering applied to neurophysiology. After the hundredth academic publication in fields ranging over the gamut of medicine from orthopedics to microbiology he decided to work for a living and has held posts in industry ever since. From all of this

it is likely Frank Johnson could have spoken about almost anything!



For those who did not attend the Dinner/Lecture, they certainly missed a stimulating talk entitled "Medical Engineering – The next 50 years." In the abstract for his talk Dr Frank Johnson wrote it is either bravado or hubris to predict such a sweep of progress, but using the maxim of "nothing new under the sun" he continued by offering to trace his experience since completing postgraduate work at U of T in the early 1970's and cheerfully extrapolate from that. Not only is medical engineering a prime example of "horizontal innovation" but it provided a basis for a career switch to oceanography and back again. Michael Faraday provides a backdrop with his synthesis of disciplines and commentary on the received wisdom of his age. We shall repeat his experiments which explored space travel through the natural history of the candle, demolished phlogiston theory with a bucket of ice, and ushered in Maxwell's equations with a compass, a wire and a "voltaic pile" cell. Faraday's Christmas Lectures set the standard for a light-hearted ramble through science that should be accessible for all ages.

There will even be a Lego robot navigating "blind" as a bat. Where will all of this take us in the next fifty years?

Frank Johnson certainly delivered on his promise and approximately 50 engineers and guests enjoyed this wide ranging, thought provoking and often amusing lecture on a wide range of issues about where medical engineering will take us over the next 50 years.

We are planning to continue with this pattern at our Annual Meeting Dinner/Lecture on Friday, March 31st. Our guest speaker at this event will be Dr John Fernandes, a Forensic Pathologist at Hamilton Health Sciences and Associate Professor in Pathology at McMaster University. Full details of this event will be found in the flyer accompanying this issue of Counter-torque.

As mentioned earlier we have a visit to the ACE wind tunnel / climate facility at UOIT arranged for Thursday, April 6th which is during the week after the Annual Meeting.

Once again we will be sponsoring the Formula North Event to be held at the Barrie Molson Centre from June 1st to June 4th. Last year there were 28 combustion engine cars, 14 from Canada and 14 from the USA; there were also 4 electric cars entered. For this year's Formula North there are even more competitors entered, there are 31 combustion cars and 13 electric cars. Our participation at Formula North gives us the opportunity to let all the competing teams know about the Institution of Mechanical Engineers and the

CCB. Our Hon Secretary Phil Apperly and Hon Treasurer Peter Dennis have both volunteered as judges for this year's Formula North.



In addition to our own meetings we continue to work with collaborating institutions through them inviting us to their meetings and we, in turn, inviting them to ours. In November we received an invitation from CIBSE (Chartered Institute of Building Services Engineers) to a meeting on "Daylight Simulation & LEED v4" The notification from CIBSE said despite the numerous health and environmental benefits of daylight, daylighting can often hinder occupant comfort and building performance if not designed appropriately. A more recent invitation was received from the British Computer Society for an event on February 28th when the presentation was on "Lessons in Disruptions from the Asian e-commerce market" Clearly not all of these presentations have mechanical engineering content, although many do. I believe giving CCB membership information of what is taking place with other local UK based Institutions is worthwhile.

In October of last year we learnt of the passing of Dr. Anthony Green. Many of you may already know of this sad event. Anthony was a former Central Canada Branch Vice Chair and more recently last May he completed a 5 year term as Chair of the Americas Region. At that time he

let us know he had been diagnosed with leukemia and was to have a bone marrow transplant as part of the treatment.



Dr Anthony Green

The Central Canada Branch submitted the following message to the on-line obituary page:

The Central Canada Branch of the Institution of Mechanical Engineers send their deepest sympathy to Anthony's family and friends. Anthony was a Fellow of the UK-based Institution of Mechanical Engineers, a former Vice-Chairman of the Central Canada Branch (during which period he helped organize lectures and visits) and most recently, chair of the Americas Region; covering both North and South America. He was also known to a number of our members through his work with CRA. In all these roles Anthony was an enthusiastic and energetic leader and supporter of Institution activities at all levels. In his last e-mail to the Americas Region, of which the Central Canada Branch is a part, Anthony wrote on April 30th at the completion of his term as regional Chair:

"I have enjoyed immensely being able to lead the Region and be a part of the outstanding developments and associations. I have established several collegial and professional relationships and become a friend to many of you. As immediate past

Chair and beyond I hope these associations may continue".

Sadly, for all his many colleagues and friends in the Institution of Mechanical Engineers, his hope of a continuing association with Institution members will not be realized except in memory. He will be missed by many of us in Central Canada and throughout the Americas Region.

In concluding, I hope as many of you as possible can get to at least one of our meetings in the coming months. Most of our events are held at the Novotel, North York which is reasonably central to the GTA, is accessible by car and has direct access from North York Centre subway station. I would also welcome any CCB members to suggest speakers and subjects for our meetings. Without volunteering for the committee itself, suggesting a good speaker or plant visit is something any member can do, particularly if they have a direct contact to the speaker.

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Chair
Institution of Mechanical Engineers