

In the March issue of Counter-torque, I referred to four events which were planned to take place over the following three months. The first of these was our Annual Dinner/Lecture Meeting on April 8th, where our guest speaker was Dr Scott Menary, Professor of Physics at York University. I was in the UK in early April so unfortunately missed this important event. From all accounts, Dr Menary was able to explain some of the more recent developments in cosmology in a way that was understandable to mechanical engineers and their guests attending this event. The lecture was well received by those who attended

This was followed, on May 11th, by a tour of the Toyota Manufacturing Plant at Cambridge; this event was very well attended. It is the first plant outside of Japan to produce Lexus cars. Some CCB members from that area, who normally cannot attend our meetings and events, were able to attend this one. Following a very interesting and comprehensive tour of the plant, several participants visited a local restaurant and enjoyed a sociable lunch together. This event was organised by committee member Mohan Rao.



Toyota Plant, Cambridge ON

This year we continued to sponsor **Formula North** again and attended the event at the Molson Centre, Barrie over June 2nd – 5th, 2016. On the opening day, Thursday, June 2nd, Phil Apperly, our Hon-Secretary and I manned the IMechE table at the career fair. We were also given a 15-minute time slot to make a

presentation on the benefits of IMechE membership. We had not been told beforehand we could use visual aids; fortunately however, Phil had the Branch laptop with him which contained much information on the CCB and IMechE. During the morning, he was able to create a suitable slide show in support of our presentation.

This year there were 29 combustion cars entered; 15 from Canada and 14 from the USA; there were also 5 electric vehicles entered; 2 from Canada, 2 from the USA and 1 from the Czech Republic. In the combustion car class, the overall winners were the University of Missouri Science & Technology, and the Czech Technical University from Prague won in the Electrical category.

Phil Apperly volunteered as a Design judge for the event so he attended Formula North for three days. He took a number of photographs and a few of these are included here.



The IMechE booth on career day.



The winning Electric vehicle



There goes a course marker cone!



People power to the start line



At speed on the Autocross course



Testing tyre grip through the slalom.

On June 15th we were given a stimulating lecture by IMechE, Dr. Mike Blundell, Professor of Vehicle Dynamics and Impact at Coventry University.



Dr. Blundell was visiting the University of Windsor for 6 weeks and offered to come to Toronto and give a lecture on his area of expertise which is tyres.

The title of his lecture was:-
“The Pneumatic Tyre – Understanding its Role and Modelling its Performance in Virtual Computer Based Design”.

Until I listened to Dr. Blundell for about an hour I would have thought a tyre was a fairly straightforward vehicle component, nothing of the sort! Just one small fact - about 20% of a vehicle's fuel consumption is due to overcoming tyre rolling resistance, provided the tyre is well designed, properly maintained and properly inflated. This is just one indication that there is much more to tyres. It is obvious why there is so much incentive for manufacturers to improve tyre design.

This lecture concluded our program for the summer, during which we traditionally do not hold events.

We had hoped to start the fall with a plant tour of Pratt and Whitney, but unfortunately they were unable to accommodate us at this time. Hopefully we will do so in the first half of next year. We are presently trying to organise a tour of the ACE wind tunnel facility at UOIT in Oshawa, this may be of particular interest to our membership living to the East of the GTA.

Our Annual Festive Dinner/Lecture is now finalized for December 9th; full

details are in the attached flyer. In previous years, the Toronto chapter of our collaborative institution IET has always been an active participant in our Festive event. This year the IET offered to take on the responsibility of organizing the Festive Dinner/Lecture. You will see it should be an interesting event and I encourage as many as possible to attend.

In addition to the IET, we continue to collaborate with other UK-based organizations, these are: CIBSE, CIPS and BCS. The only recent event has been an IET event on September 17th at the Mill Street Brewery in the Distillery District.

On the administrative side of IMechE, the CCB is part of the Americas Region; in May 2016 the Chair of the Americas for the past 5 years, Dr Anthony Green, completed his term in office. His elected successor is Stuart Hamilton who is from Fort Worth Texas. I have had several e-mail exchanges with Stuart. In September Peter Dennis, our Hon-Treasurer, submitted the CCB budget request for 2017 to Stuart Hamilton and this is currently being reviewed at HQ in London.

I have already mentioned the CCB's Hon-Secretary, Phil Apperly, Hon-Treasurer Peter Dennis and Committee member Mohan Rao. There are also several other committee members who contribute to organizing the events and our webpage 'near you'. We owe all of these our thanks for their efforts in keeping the CCB operating over the year.

A fact of life is the CCB has an aging membership and many of us came to Canada in the 50's, 60's and 70's but there are few existing members immigrating to Canada now. However, a recently arrived younger member joined the CCB committee earlier this year, Nabeel Younis; he has expressed an interest in trying to generate IMechE membership among students, in the hope of starting student chapters. We all need to try and encourage membership if the CCB is to continue into the future.

In concluding, I hope as many of you as possible can get to our Festive Dinner/Lecture on December 9th. It is being 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 suggesting speakers and subjects or plant visits for any of our meetings. Without volunteering for the committee itself, suggesting a good speaker is something any member can do, particularly if they have a direct contact to them. I hope it is not too early to wish everyone all the best of the season and for the New Year.

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