

Soon after the March issue of Counter-torque, many of us attended our Annual Dinner/Lecture meeting held at the Novotel, North York on March 31st. After an enjoyable meal we were fascinated and well entertained by a lecture titled "A Potpourri of Forensics", given by Dr. John R Fernandes MDCM FRCSC FRCPC. Dr. Fernandes works full time as a category A Forensic Pathologist at Hamilton Health Sciences and has been appointed Associate Professor in Pathology at McMaster University. We learnt forensic pathology is a subspecialty of pathology in which it is endeavoured to address medical issues regarding the cause of death of individuals often due to trauma, but also due to natural diseases and toxins. Dr Fernandes spoke of what is involved in providing evidence at homicide trials. He introduced engineering into his talk by referring to industrial accidents and the part that science plays in his work. The lecture was well received by those who attended. These evenings are very good value in all respects and we have been able to attract some excellent speakers. I am often surprised we do not attract more CCB members to these events.

On April 6<sup>th</sup> we had a tour of the ACE (Automotive Centre of Excellence) facilities at the University of Ontario Institute Of Technology in Oshawa. This is a modern major Canadian facility which can produce extreme climatic conditions not only for automotive research but for Aerospace and other customers who want to develop and test their theories and products. They can combine these conditions with a hurricane force wind-tunnel if required. CCB Branch member Phil Duggan was the Design Project Manager for the UOIT ACE test facility.



Members were very slow to register for this tour; to the point we were thinking we would have to cancel this tour. However, in the final days there were numerous registrations and eventually 23 members and guests attended this facility. Our guide for this tour was Mr. Pierre Hinse who had been involved with the operation of the facility since its inception. Everyone found this tour very interesting and were impressed with the facilities. Pierre demonstrated many features of the facility and he certainly had a lot of questions from fellow engineers. He answered them all in detail and I think we kept him quite a bit later than he expected!



On the subject of registration for tours and events; many members have a tendency to leave this until just before the date. This makes it difficult to confirm numbers to the organisations involved. As previously mentioned, we almost cancelled the ACE tour, and then it turned out to be great success. It is better to register early, then if you have to cancel, let us know as soon as you know you will not be able to attend.

Once again, we continued to sponsor Formula North and attended the event at the Molson Centre, Barrie over June 1<sup>st</sup> – 4<sup>th</sup>, 2017. On the opening day, Thursday, June 1<sup>st</sup>, Phil Apperly, our Hon-Secretary, manned the IMechE table at the career fair and was also a judge for the event so attended each day. Other Committee members could not attend, as they normally would, due to prior personal commitments.

This year there were 31 combustion cars entered, from Canada and the USA; there were also 13 electric cars entered. In the combustion car class overall results were The University of Michigan, Ann Arbor, came out on top with the Polytechnique Montreal



Carleton vehicle waiting for the flag to drop at the autocross event



The Ohio team's digital dash

coming second and the Ohio State University were third. As might be expected with advancing technology, again this year the lap times for the electric vehicles crept ever closer to those of the combustion-engined vehicles.

*The lap record at the Nürburgring has recently (12 May 2017) fallen to a 1000kW NIO EP9 prototype in a time of 6 min 45.9 seconds. They are available for only a couple of million a pop! (photo below).*



Phil Apperly took a number of photographs at Formula North and a couple of these are included above.

We will probably try and sponsor this event again in 2018 as a Bronze level supporter. If we do so, members are welcome to attend and support us at our table at the career fair. As is our practice, we do not plan events or plant tours over the summer months of June through August because attendance has always been extremely low over these months.

Our most recent event was a lecture given by Peter Mulcaster, a previous Chair of the Central Canada Branch. This was held at the Novotel North York on October 19<sup>th</sup>; Peter's talk was titled "A Railway History of Niagara-on-the-Lake". After a long engineering career, in both the UK and Canada, Peter is now retired and lives in Niagara-on-the-Lake where he is a member of the Canadian Railroad Historical Association (CRHA), Niagara Division. This made him very well qualified to enlighten us on a totally different side of the Niagara-on-the-Lake we all know.



**Peter Mulcaster P.Eng, FIMechE CEng**

Peter started by saying it seems unlikely that NOTL (The local abbreviation for the town) was ever a railway town; however, in earlier times, the town was served by two railways, one steam, the other electric, both running through the centre of the town. Peter explored the origins of the railway dating back to 1839 and the resulting economic and strategic benefits it had for travel, tourism, industry, agriculture and the military up until its closure in 1959. Several relevant topics were covered, such as railway safety, construction and equipment. The talk utilized period maps and black and white photographs.

I am sure all present learnt a great deal about the Niagara-on-the-Lake of the past and the considerable engineering achievements of an era long passed.



Our Annual Festive Dinner/Lecture is now finalized for Friday, December 8<sup>th</sup>; full details are in the attached flyer.

In previous years the Toronto chapter of our collaborative institution IET has always been an active participant of our Festive event. Once again, the IET have offered to take on the responsibility of organizing the Festive Dinner/Lecture this year. You will see it should be an interesting event and very relevant to all of us who use the increasingly busy roads. I encourage as many as possible to attend and register early as we are in the smaller Stage Door room with a limit of 40 attendees.

In addition to the IET we continue to collaborate with other UK based organisations, these are: CIBSE, CIPS and BCS. One recent event was organised by the BCS (British Computer Society) and was held at the Royal Canadian Military Institute on October 17<sup>th</sup>. The talk was given by Kevin McGurgan OBE – UK Consul General & Director-General, International Trade. This well attended talk was on "Brexit, Innovation and Disruption", we heard about the current Brexit situation and also the workings of the UK Science and Innovation Network (SIN). The meeting was attended by at least four from the Central Canada Branch.

On the administrative side of IMechE, the CCB is part of the Americas Region, the current Chair is Stuart Hamilton. In September Peter Dennis, our Hon-Treasurer, submitted the 2018 CCB budget request to Stuart Hamilton and this is currently being reviewed at HQ in London.

Once again, I need to point out 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. We all need to try and encourage membership if the CCB is to continue into the future.

In conclusion, I hope as many of you as possible can get to our Festive Dinner/Lecture on December 8<sup>th</sup>. 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 to suggest speakers and subjects for any of our meetings. Without volunteering for the committee itself, suggesting a good speaker / visit is something any member can do, particularly if they have a direct contact to the speaker / business. 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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