

## **IET Toronto Local Network**

### **IEEE Hamilton Section – Power Chapter**

**Technical presentation on:**

## **Experiences in Scutineering and Investigating Race Car Accidents and Electrical Safety Considerations in Race Car Construction**

**Speaker: Laurence Polley, P.Eng., CHSC, C&R Engineered Solutions Inc.**

**Supported by the IET Toronto Local Network and IEEE Hamilton Section**

**Date: 16<sup>th</sup> September 2015**

**Time: Arrive at 18:30, presentations starts at 18:45 for approx. 1 hour**

#### **Abstract:**

This seminar will explore the somewhat murky world of Tech Inspection, some of the causal factors in typical racing incidents, and the importance of electrical safety during car construction and testing. Topics will include typical issues with:

1. Safety equipment – belts, helmets and clothing.
2. Overall car presentation.
3. Welding.
4. Wiring and electrical stuff.
5. Wheels and suspension.
6. Steering.
7. Wings and things.



Examples of what not to do will also be presented, calling on Laurence's experience as a racer, as a team manager in amateur and pro racing, and as an SCCA, CASC and SAE Formula Scutineer. Factors affecting electrical safety in car construction and testing will also be explored. Laurence will use examples from his experiences investigating various incidents including several fatalities in both racing and industrial situations to emphasize key factors in his presentation.

## The Speaker

### **Laurence Polley, B.Sc., M.B.A., P.Eng., CHSC**

C&R Engineered Solutions Inc. (C&R) specializes in Safety Compliance Engineering, including Pre-Start Health and Safety Reviews (PSR), Engineering Analysis in response to Ministry of Labour orders and Work Refusals, and engineering assistance for accident investigations and remedial work. C&R Engineered Solutions Inc. holds a Certificate of Authorization from Professional Engineers Ontario (PEO) for its safety compliance engineering activities.



Laurence Polley, P.Eng., President of C&R Engineered Solutions Inc. has 35+ years experience in the start-up, development and management of high growth, high tech companies in Canada and the USA, including development and implementation of business plans, financial strategies and regulatory compliance. Laurence received his B.Sc. in Electrical Engineering from Queen's University in 1968 and his M.B.A. from York University in 1976. He is a registered Professional Engineer (P.Eng.), has been granted a Certified Health & Safety Consultant (CHSC) designation by the Canadian Society of Safety Engineering (CSSE), and is a member of CSSE, the Canadian Standards Association (CSA), National Fire Protection Association (NFPA), Society of Automotive Engineers (SAE), and the International Society of Automation (ISA).

Laurence has extensive experience in evaluating the safety compliance of technically complex equipment and provides engineering support for remedial activities. Laurence has conducted safety compliance audits and provided engineering reports regarding compliance with various government regulations and industry standards including:

- Occupational Health and Safety Acts and Regulations in New Brunswick, Quebec, Ontario, Alberta and British Columbia.
- Canadian and Ontario Electrical Safety Code including classification of hazardous areas.

He has also provided expert testimony and reports in support of Coroner's investigations, in response to Ministry of Labour charges, and in civil arbitration of equipment performance.

Laurence sits on four Technical Committees at CSA involved in the development of health and safety standards for Control of Hazardous Energy (Z460), Incident Investigation and Prevention (Z1005), Work in Extreme Conditions (Z1010), and Nanotechnology (Z12885). In addition, Laurence is a frequent speaker at various industrial and association seminars on topics such as Workplace Electrical Safety, Machine Guarding, Hazardous Area Classification, the PSR Process, Industrial Risk Assessments, and Safety Performance Requirements for Engineered Controls.

In his "spare" time Laurence serves on the Board of Directors of the Central Ontario Section of SAE and the Toronto Chapter of CSSE, is a member of the Safety Review Committee of the Canadian Automobile Sport Club (CASC) and is a nationally licensed Technical Scrutineer performing Safety Audits of race cars and facilities and investigations of racing accidents. Laurence is a 2-time GT-2 champion, race series organizer, race team manager in amateur and pro racing including 13 and 24 hour endurance events, and has held many management roles in SCCA, CASC and ASN Canada over the last 30 years.

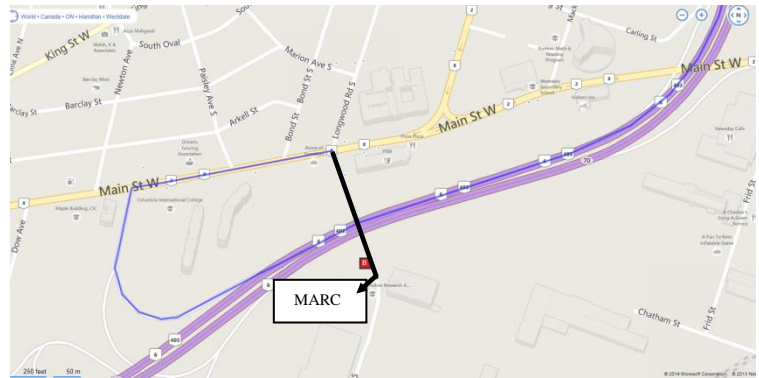
## **The Venue**

Room: **MARC – 266**

McMaster Automotive Resource Centre (MARC)  
200 Longwood Road South,  
Hamilton, Ontario, Canada, L8P 0A6

<https://mcmasterinnovationpark.ca/mcmaster-university-automotive-resource-centre>

### **McMaster Automotive Resource Centre (MARC)**



## **Attendance**

Attendance is free, but please confirm in advance via email to Prof. Nigel Schofield at:  
[nigels@mcmaster.ca](mailto:nigels@mcmaster.ca)