



# Chapter News

SEPTEMBER 2013

EAST TORONTO CHAPTER

VOLUME 2013-2

## Chair's Message

Bringing Engineering To The Public,  
AND Bringing The Public To  
Engineering

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LEAN-ing Toward Success ... A Six-  
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2013 Annual General Meeting  
AND Seminar

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## Chair's Message

East Toronto Chapter is active in several areas of interest to its members. Of particular importance this year has been the implementation of the Licensure Assistance Program (formerly known as the Mentorship Program). This is a new program sponsored and supported by PEO. Its objective is to bring together experienced engineers and engineering graduates in the roles of Guide and Intern respectively. The aim is to provide guidance to the intern on a one-on-one basis over a period of six months. The guide and the intern commit to meeting at least two hours a month over that period. Our announcement of the program had a good response and it has been in progress since last May. We intend to run a session of the program again starting in early 2014. This program is free of charge for the intern and the guide volunteers his or her time. Another way in which we have responded to our members' expectations has been by organizing a series of seminars on topics that were selected by the members attending East Toronto Chapter's AGM last February. The topics are diverse and, though technical in nature, are presented in the light of relevant and current issues in Ontario. Thus, seminars have been presented on transit expansion plans (Metrolinx ... The Big Move), Take Back Manufacturing ... North America, etc. Seven seminars have taken place to date and five are scheduled for the remainder of this year. The detailed description of the upcoming seminars is included in this newsletter. Seminars are announced to members by this newsletter and also by email blast as each event date draws near. Please get involved in your chapter's activities and keep in touch to let us know what matters to you for our future planning. You are encouraged to attend and bring your ideas to the chapter's AGM on 29 of January 2014, or you can bring your concerns/suggestions forward at any time by contacting me or any member of the board. Our email addresses are listed in this newsletter.

*Hugo Maureira, P.Eng.  
Chair*

## Bringing Engineering To The Public, AND Bringing The Public To Engineering

Many of our members ask if family members, friends, co-workers and or colleagues, both professional engineers and others, can attend our seminars.

Six of the ten Essential Purposes of Article 2 of the East Toronto Chapter By-laws refer to engineering and the public: (a) enhance a local presence for the engineering profession throughout Ontario; (e) provide a forum for the local discussion of professional and civic affairs; (f) enhance the professional development, competency and social responsibility of professional engineers; (g) serve as an information resource for professional engineers, the public and society; (h) promote public awareness of the engineering profession in the local community; and (i) provide a local point of contact for the community to access information on the profession of engineering. Family members, friends, co-workers and or colleagues — ALL will be WELCOMED at the seminars and tours hosted by East Toronto Chapter. For seminars, we ALWAYS have PLENTY of space. If we appear to be reaching the room capacity, we will work with the speaker to arrange a second presentation. For tours, we are limited only by the capacity of our host facility, several of whom have graciously accommodated a second tour when response overwhelmed their limit for a single event, usually one week after the first tour.

We look forward to WELCOMING members and guests, professional engineers and "civilians" to all of our seminars and tours.



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## Seminar: Structural Castings for Queen Richmond Centre West

This world class development includes both the modernization of an existing historic Toronto building and the construction of a new multi-storey, reinforced concrete office building perched atop three 70-foot-tall architecturally exposed structural steel "delta frames." Cast Connex Corporation provided design-build services for the unique 35,000-lb cast steel nodes that form the central kernel points of the delta frames. The magnitude of the loading required that the 1-metre-diameter tubular members of the frames, along with the cast steel nodes, be concrete filled for composite strength. The three delta frames are primary elements in the gravity and lateral force resisting systems for the building.

Cast Connex is the industry leader in the use of cast steel structural components in the design and construction of building and bridge structures. Their products include pre-engineered connections that simplify the design and enhance the performance of structures. The company also offers design and design-build services for custom cast steel nodes and components.

### Guest Speaker:

Shannon Hilchie, P.Eng.,  
Engineering and Technical Sales

Engineer Hilchie studied structural engineering at Dalhousie University before moving to Toronto, where she started her career as a structural engineering consultant. After almost 10 years with Blackwell Engineering, three of those as an Associate, Shannon saw great opportunity in joining Cast Connex Corporation. As a Project Manager and ETABS modelling expert with Blackwell, Shannon was able to work on many exciting projects, including the Canadian Peace Plaza, University of Toronto, Varsity Centre for High Performance Sports and the 30 College NCFs Longhouse. Through these projects, she was able to interact with a selection of first-class architects, fabricators and general contractors. She has experience in all building types, but practised structural design with a primary focus on steel structures.

Date: Tuesday, 08 October 2013  
Time: 6:30 p.m. - 9:30 p.m.

Location: S. Walter Stewart Public Library, 170 Memorial Park Drive  
Via TTC: From Coxwell Station on Bloor-Danforth subway, take the O'Connor "70" or "70A" or "70B" bus NORTH to the third traffic light (Mortimer), then walk one block north and one block west.

Via Automobile: Limited free parking on north side

of library, and on side streets.  
Cost: Free. Light Refreshments. Limited to 80 members plus guests.

Please confirm attendance with John Glover, P.Eng., at [gloveryyz@gmail.com](mailto:gloveryyz@gmail.com) or 416-463-3169. Please include: 1. your name, 2. your telephone number, and 3. the number of people attending.

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## Seminar: Structure Design In Arctic Regions

In the era of economic recession and high price of minerals, the development of the natural resources like gold, iron and diamond mines in the three arctic territories of Nunavut, Northwest Territories and Yukon is a major focus of the Canadian government in recent years, as proven through the frequent visits and speeches from different federal government ministers in different times. Many major mining companies in the world are investing billions of dollars to develop different diamond, iron, gold, copper, uranium and other mines in the arctic and sub-arctic regions in the world.

Due to the extreme cold weather, lack of sunlight and the presence of permafrost soil, the design of infrastructure in the arctic and sub-arctic region has been very challenging. On top of that, several foundations on permafrost soil have been reported to have failed in recent years. Foundation work has become even more challenging in the absence of sufficient air and ground temperature data and global warming, thought to lead to the continuous melting of the frost layers in these regions.

During this presentation, the guest speaker will discuss several technical aspects of design of structures in such cold weather and their foundations on permafrost soil for future infrastructure projects in Alaska, Greenland, the Scandinavian countries and the three arctic provinces in Canada.

### Guest Speaker:

Faizul M. Mohee, P.Eng., P.M.P.,  
LEED Green Associate, M.E.Sc., Ph.D.  
candidate, Lead Civil/Structural Engineer,  
Energy Solutions Canada, Mississauga.

Engineer Mohee is a licensed professional engineer in Ontario (P.Eng.), a certified project manager (P.M.P.) and an accredited LEED Green Associate. He has six years' work experience in civil and structural analysis and design engineering. His work experience includes nuclear refurbishment projects, mining infrastructure projects, several residential and commercial high rise building projects, power transmission/distribution lines and

substation projects, airport structures, and seaport structures and their foundations on frost and permafrost soil. His work experiences include projects in Canada, USA and Asia. Previously, he worked at HATCH in Mississauga, at GENIVAR in Montreal and at PowerGrid in Asia. Faizul earlier completed his master's in civil engineering from University of Toronto, and he is pursuing his Ph.D. at the University of Waterloo.

Date: Tuesday, 22 October 2013  
Time: 6:30 p.m. - 9:30 p.m.

Location: S. Walter Stewart Public Library, 170 Memorial Park Drive  
Via TTC: From Coxwell Station on Bloor-Danforth subway, take the O'Connor "70" or "70A" or "70B" bus NORTH to the third traffic light (Mortimer), then walk one block north and one block west.  
Via Automobile: Limited free parking on north side of library, and on side streets.  
Cost: Free. Light Refreshments. Limited to 80 members plus guests.

Please confirm attendance with Arthur Sinclair, P.Eng., at [arthur@veritec.ca](mailto:arthur@veritec.ca). Please include: 1. your name, 2. your telephone number, and 3. the number of people attending.

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## Seminar: Essential Steps for Career Management

Take control of your career through clarifying:

- your achievements
- objectives and strategies for effective career conversations
- an effective networking strategy
- personal branding and self marketing

Guest Speaker: Joanne Collins

Ms. Collins is an expert in career management and career transition, with over 12 years' experience in the private, public and non-profit sectors. Joanne has coached clients from a variety of occupations and levels, from front line unionized workers to middle managers, to senior executives. She has guided clients through all facets of career transition, including assessment, resume development and self marketing, researching, networking, interviewing and negotiating offers. Joanne also has clients prepare for the first 90 days of transitioning into a new role.

As an Associate Consultant at Knightsbridge Human Capital, Joanne has extensive experience creating and delivering career transition services, including career coaching, seminar and webinar delivery and the facilitation of Knightsbridge's KAS team to a weekly work search group for senior



management and director level clients.

Joanne is also an expert in organizational career development, and teaches the subject at George Brown College. She has launched various workplace initiatives, including a workplace wellness partnership, a mentoring program and a career mobility strategy. She created a four-module career planner and an interview skills video for City of Toronto employees. She is qualified to administer various career assessment instruments.

Joanne has appeared as a career expert on City TV, CBC Radio and CFRB talk radio, and has written articles for various publications, including The Toronto Star and The Toronto Sun. Prior to career consulting, she worked for six years in various facets of the broadcasting industry. Joanne holds an honours diploma in career counselling from George Brown College, as well as a Bachelor of Applied Arts in Broadcasting from Ryerson Polytechnic University. She is currently pursuing her M.Ed. in Adult Education at OISE/University of Toronto.

Date: Thursday, 07 November 2013  
Time: 6:30 p.m. - 9:30 p.m.

Location: S. Walter Stewart Public Library, 170 Memorial Park Drive  
Via TTC: From Coxwell Station on Bloor-Danforth subway, take the O'Connor "70" or "70A" or "70B" bus NORTH to the third traffic light (Mortimer), then walk one block north and one block west.  
Via Automobile: Limited free parking on north side of library, and on side streets.  
Cost: Free. Light Refreshments. Limited to 80 members plus guests.

Please confirm attendance with Shahzad Baig, P.Eng., at [baig.toronto@yahoo.ca](mailto:baig.toronto@yahoo.ca) Please include: 1. your name, 2. your telephone number, and 3. the number of people attending.

## Seminar: LEAN-ing Toward Success ... A Six-Step Approach to Improving the Operation of a Business...

As Canada strives to improve productivity and remain world competitive, many are finding that the implementation of LEAN and Six Sigma principles have become a firm prerequisite for continuous improvement, and essential for success in the innovation journey for any business process or engineering activity.

Learn how to approach the implementation of LEAN and understand this powerful toolkit to identify the waste in any business process. We will explain how LEAN thinking and innovative processes will become survival tactics and a prerequisite for us all. The speaker will provide an

introduction to LEAN tools in a simple, pragmatic way, and advise how to move toward the SME/ASQ/AME LEAN Certification process. If you are starting to think about LEAN or are already implementing this concept, this event is for you!

After the workshop, you will be invited to access the LEAN self-analysis online toolkit and take the SME Toronto LEAN survey, which will provide insight, identify gaps and develop awareness on LEAN.

### Guest Speaker:

Nigel Southway, C.Eng., IEEE, BIM Diploma in Management Studies, Bristol England, Author

After a career as an engineering manager and change agent at Motorola in the mid '80s, Mr. Southway moved to consulting on continuous improvement. He co-authored the textbook "CYCLE TIME MANAGEMENT The Fast Track To Time Based Productivity Improvement" on the concept and implementation of business cycle time reduction, which became one of the advanced thought-ware that later developed into the more commercial LEAN thinking concepts and application. He has been an architect of change for several major manufacturing companies across many industrial sectors on organizational change and improvement: LEAN, Six Sigma, ERP, DFM, NPI, technology transfer, plant re-organization and relocation.

Mr. Southway has more than 40 years' broad business and industry experience. He is the Owner of NEXUS CONSULTING SERVICE, which provides coaching and education on business productivity improvement and advanced manufacturing engineering to all types of business sectors and industries. Nexus helps clients develop a strategy and a vision to attack waste, capture productivity improvements, increase profits, and become more competitive in the global market.

Nigel currently is coaching, consulting and educating worldwide on business improvement initiatives, joint ventures, new product introduction systems and global technology transfer projects, with a recent emphasis in China, Russia and of course CANADA. He has been a member of the Society of Manufacturing Engineers for many decades, and assists on LEAN thinking and implementation and related business improvement topics. Nigel is SME Toronto Chair in 2012-2013, and a member of the SME Executive Committee. He recently received the SME President's Award.

Mr. Southway is the leading advocate for the Take Back Manufacturing Forum and the North American Reshoring initiative in Canada.

Date: Tuesday, 19 November 2013  
Time: 6:30 p.m. - 9:30 p.m.

Location: S. Walter Stewart Public Library, 170 Memorial Park Drive  
Via TTC: From Coxwell Station on Bloor-Danforth subway, take the O'Connor "70" or "70A" or "70B" bus NORTH to the third traffic light (Mortimer), then walk one block north and one block west.  
Via Automobile: Limited free parking on north side of library, and on side streets.  
Cost: Free. Light Refreshments. Limited to 80 members plus guests.

Please confirm attendance with John Bailes, P.Eng., at [jdbailes@worldline.ca](mailto:jdbailes@worldline.ca). Please include: 1. your name, 2. your telephone number, and 3. the number of people attending.

## Seminar: An Approach to Computational Thinking

Engineers still dedicate too much effort to solve the numerical problems they find in their professional endeavours. Current problem-solving environments (PSE) are quite powerful, but users' lack of a sound background on problem solving severely limits their proficiency with these software tools. Seen as an exit from such a stagnating point, a new turn in problem solving, called computational thinking, has been gaining momentum since 2006, still as an unsettled subject matter. The talk exposes some of the challenges faced by engineering problem posing and solving, and describes a rational way to the thinking needed to tackle them. The proposed approach applies dichromatic graphs to represent and develop the problem and the algorithm that solves the former. Thanks to this visual means, abstract concepts and processes become clear, making the method both rigorous and intuitive. Consequently, this approach has proven itself useful for engineering education and practice alike. A real-life example is included to illustrate some of the key theoretical ideas involved in the method.

### Guest Speaker:

Jose Martinez-Escanaverino, B.Sc., Ph.D.

Dr. Martinez-Escanaverino is a scholar with experience in engineering education and research at universities in Cuba, Venezuela, Brazil, Germany and Mexico. He is also an engineering consultant with international experience in complex industrial problem solving. He holds Ph.D. and B.Sc. degrees in engineering from the Higher Polytechnic Institute of Havana, Cuba. In addition, he was a member of the Cuban Academy of Sciences from 1996 to 2011, and the Coordinator of its Engineering Sciences Section from 2003-2008. Currently, Dr. Martinez-Escanaverino is a Canadian permanent resident. For more than 20 years, he has developed a method of



computational thinking, and applied it successfully to the solution of a number of problems of electromechanical drives, working jointly with such transnational enterprises as Flender, Mannesmann Rexroth, Schneider, Siemens, ABB, Sumitomo, and Sherritt. His courses are well accepted by graduate students in master and Ph.D. programs of technical universities in Cuba and Venezuela. Papers and talks on the method have been presented in events of the Cuban Academy of Sciences (ACC), the Inter-American Network of Academies of Science (IANAS) and the ASME and IEEE in Cuba, Chile, Mexico, Canada and the USA.

Date: Thursday, 05 December 2013  
Time: 6:30 p.m. - 9:30 p.m.

Location: S. Walter Stewart Public Library, 170 Memorial Park Drive  
Via TTC: From Coxwell Station on Bloor-Danforth subway, take the O'Connor "70" or "70A" or "70B" bus NORTH to the third traffic light (Mortimer), then walk one block north and one block west.  
Via Automobile: Limited free parking on north side of library, and on side streets.  
Cost: Free. Light Refreshments. Limited to 80 members plus guests.

Please confirm attendance with Hugo Maureira, P.Eng., at hamxyz070@gmail.com. Please include: 1. your name, 2. your telephone number, and 3. the number of people attending.

## 2013 Annual General Meeting AND Seminar

The Annual General Meeting is open to all East Toronto Chapter members, each of whom may invite one guest; all attendees are welcome to remain for the seminar, which will follow the AGM. The Chapter Secretary will present the Minutes of the previous year's (2012) AGM; the Chapter Treasurer will present the 2013 Financial Statements as at 2013 December 31; the Chapter Chair will present the 2013 Statement of Chapter Activities.

In accordance with Chapter By-Laws, the 2014 Chapter Board shall be elected at this AGM, from members of the 2013 Board who wish to stand for renomination, and from candidates nominated by two members and accepted by the nominee. Strictly speaking, candidates' names are to be submitted to the Nominating Committee (comprising two members-at-large appointed by the Secretary) during October and November of 2013. However, as for more than two decades past, nominations will be accepted up to the calling of the vote on the final slate presented at the AGM. Members wishing to plan, organize or assist in chapter events of a technical or social nature are urged to stand for nomination.

## Seminar: Evidence-Based Automobile Fuel Efficiencies

This seminar will review over five years of branded test driving of over 300 new vehicles, based on the speaker's data, which is original and proprietary — and very different from the Ministry of the Environment's fuel guide published annually. The seminar also will speak about price pressures on the top 10 test drives, based on the speaker's global value model.

Guest Speaker:  
William Vukson, B.A. (Honours), M.A.

Mr. Vukson has a Bachelor of Arts from Victoria College, University of Toronto, majoring in economics, economic history and mathematics & statistics. He has a Master of Arts from Katholieke Universiteit Lueven, Lueven, Belgium, majoring in international financial economics and monetary policy.

William has worked as an account officer with a major Canadian investment bank, an editor of "Financije," an economic journal for the eastern Mediterranean, and an economic consultant to trade banks and stock exchanges in several European countries. He was publisher and editor of "The G7 Report" on free trade effects on the Canadian and U.S. automotive industry, and currently is an automotive consultant and economic journalist, a regular contributor to Autotracker in 2011 and 2012. He is a member of the Automobile Journalists Association of Canada (AJAC), and is the only auto analyst/journalist in Canada quoted by a Bank of Canada Publication. His bestselling book, "The Great Auto Crash," was on the Globe and Mail's bestseller list in 2010 for two months, at the peak of the automotive industry's collapse. William is the new Editor of the publication, "Automotive Finance and Investment Report."

Date: Wednesday, 29 January 2014  
Time: 6:30 p.m. - 9:30 p.m.

Location: The Arts and Letters Club of Toronto, 14 Elm St.  
Via TTC: Two short blocks north of Dundas Station, Yonge subway  
Via Automobile: Limited, expensive, pay-at-the-kiosk parking on side streets, flat-rate parking below nearby hotel, office and hospital towers.  
Cost: Free. Light Refreshments.

To enable us to submit our order for the light refreshments, please confirm your attendance by January 8, 2014, by contacting Kong Seto, P.Eng., at kong.seto@gmail.com. Please give 1. your name, 2. your telephone number, and 3. the number of people attending.

## 2013 Chapter Board

### Officers

Chair	Hugo Maureira, P.Eng. hamxyz070@gmail.com
Vice-Chair	John Glover, P.Eng. gloveryyz@gmail.com
Secretary	John D. Bailes, P.Eng. jdbailes@worldline.ca
Treasurer and Webmaster	Robert Li, P.Eng. li.robt@gmail.com
Past Chair	Nick Gurevich, P.Eng. nick.gurev@yahoo.ca

### Executives

Chair, GLP Committee	Shah Alamgir, P.Eng. shah_alamgir99@hotmail.com
Chair, Education Outreach	Shahzad Baig, P.Eng. baig.toronto@yahoo.ca
Member, GLP Committee	Naser Choudury, EIT naser.choudhury@gmail.com
Chair, EIT Mentoring	Ron Clarkin, P.Eng. rclarkin@sympatico.ca
Member, GLP Committee	Mai-Linh Ho, EIT mho@rvanderson.com
Member, Events Committee	Peter Jancic, P.Eng. jancic@rogers.com
Member, Events Committee	Georges Livanos, P.Eng. glivan@pathcom.com
Member, Events Committee	Dan Mireanu, P.Eng. dan.mireanu@gmail.com
Chair, New Members & AGM	Kong Seto, P.Eng. kong.seto@gmail.com
Member, Events Committee	Arthur Sinclair, P.Eng. arthur@veritec.ca
Member, Events Committee	David Zackon, P.Eng. zackon@centtel.com