

Professional Engineers Ontario



Advancing and regulating engineering practice in the public interest

CONTENTS

PRESIDENT'S MESSAGE

to enforcement efforts and the development of additional professional practice guidelines and standards to ensure engineering work is done by professional engineers. It is also why we expressed our displeasure at the government's surprising decision late in 2015 to cancel the proclamation of the repeal of the industrial exception, subsection 12(3)(a) of the Professional Engineers Act, without consulting us. Permanently abandoning this repeal, which has been interpreted much more broadly by Ontario industry than originally intended, signals to that sector that it does not need engineering licence holders to be successful. In fact, it misleads manufacturers into thinking they do not need to make engineering "investments" to fuel their future growth of new products and productivity enhancements. This perception is incorrect in philosophy-and in law.

COLLABORATION

Because engineering is a self-regulating profession in Canada, each member has a part to play in regulating it. Future leaders in self-regulation will have to make a commitment to self-monitoring, self-surveillance and relentless selfimprovement that makes Orwell read like Pollyanna. I believe members should be involved in all major regulation changes affecting our profession.

I have been fortunate this year to have served on such a co-operative and productive team. I have enjoyed working with the dedicated men and women on Council who shared my focus on regulatory matters and worked hard to advance and regulate the practice of engineering to protect the public interest. My heartfelt thanks to PEO's Registrar, Gerard McDonald, P.Eng., his senior management team and their staff, for their ongoing support of our concerted efforts, as well as to everyone who contributed to PEO initiatives. It has been an honour to represent you as PEO President.

PEO STAFF CONTACTS

Association staff can provide information about PEO. For general inquiries, simply phone us at 416-224-1100 or 800-339-3716. Or, direct dial 416-840-EXT using the extensions below.

EXECUTIVE

Registrar *Gerard McDonald, P.Eng., MBA Senior Executive Assistant Becky St. Jean

LICENSING AND REGISTRATION

Deputy Registrar, Licensing and Registration *Michael Price, P.Eng., MBA, FEC
Manager, Admissions Moody Farag, P.Eng.
Manager, Licensure Pauline Lebel, P.Eng.
Manager, Registration Lawrence Fogwill, P.Eng.
Supervisor, Examinations Anna Carinci Lio

REGULATORY COMPLIANCE

*Linda Latham, P.Eng.
Counsel, Regulatory Compliance Leah Price, LLB
Manager, Complaints and Investigations Ken Slack, P.Eng.
Manager, Enforcement Cliff Knox, P.Eng., MBA, FEC

TRIBUNALS AND REGULATORY AFFAIRS T'l la and Damilatam. Affain

Deputy Registrar, Tribunais and Regulatory Affairs				
*Johnny Zuccon, P.Eng., FEC	1081			
Director, Policy and Professional Affairs Bernard Ennis, P.Eng.	1079			
Manager, Policy Jordan Max	1065			
Manager, Standards and Practice José Vera, P.Eng. 64	47-259-2268			
Manager, Tribunals Salvatore Guerriero, P.Eng., LLM	1080			

COMMUNICATIONS

Director, Communications	
*Connie Mucklestone	
Editor, Engineering Dimensions Jennifer Coombes	
Manager, Communications David Smith	

CORPORATE SERVICES

Chief Administrative Officer *Scott Clark, B.Comm, LLB, FEC (Hon)				
Director, People Development Fern Gonçalves, CHRL				

Manager, Building Operations John Cookson Manager, Chapters Matthew Ng, P.Eng., MBA, FEC Manager, Government Liaison Program Jeannette Chau, P.Eng., MBA 647-259-2262 EXT Acting Manager, Engineering Intern Program Tracey Caruana, P.Eng. 1102 Manager, Secretariat Ralph Martin 1104 FINANCE Director of Finance *Chetan Mehta, MS, MBA 1060 Manager, Financial Services and Procurement Peter Cowherd 1055 INFORMATION TECHNOLOGY 1049 Acting Director, Information Technology *Zico Sarmento 1056 Senior IT Project Manager Paula Habas

1095 *Member of Senior Management Team

2015-2016 PEO COUNCIL AND

- 1076 ENGINEERS CANADA DIRECTORS Officers
- 1099 President Thomas Chong, MSc, P.Eng., PMP, FEC Past President 1118
- J. David Adams, P.Eng., MBA, FEC President-Elect 1074
 - George Comrie, MEng, P.Eng., CMC, FEC Vice President (elected)
 - Patrick Quinn, PhD (honoris causa), P.Eng., CEng, FCAE, FEC
 - Vice President (appointed) Bob Dony, PhD, P.Eng., FIET, FEC **Executive Members**
 - Rebecca Huang, LLB, MBA Changiz Sadr, P.Eng., FEC, CTP, CTME, ITILv3

Councillors Councillors-at-Large

Bob Dony, PhD, P.Eng., FIET, FEC Rovdon A. Fraser, PhD, P.Eng., FEC Roger Jones, P.Eng., FEC, MBA, SMIEEE

Northern Region Councillors 1061 Serge Robert, P.Eng.

1062

1106

- Dan Preley, P.Eng.
- Eastern Region Councillors Charles M. Kidd, P.Eng., FEC 1068 David Brown, P.Eng., BDS, C.E.T.

East Central Region Councillors Nicholas Colucci, P.Eng., MBA, FEC

1126 Changiz Sadr, P.Eng., FEC, CTP, CTME, ITILv3

Western Region Councillors Len C. King, P.Eng., FEC Ewald Kuczera, MSc, P.Eng.

1103

1117

West Central Region Councillors Danny Chui, P.Eng., FEC Warren Turnbull, P.Eng.

- 1107 Lieutenant Governor-in-Council Appointees Ishwar Bhatia, MEng, P.Eng., FEC
- Santosh K. Gupta, PhD, MEng, P.Eng., FEC 1115 Richard J. Hilton, P.Eng. Rebecca Huang, LLB, MBA Vassilios Kossta Mary Long-Irwin 1084 Sharon Reid, C.Tech. Rakesh K. Shreewastav, P.Eng., AVS, FEC
- 1090 Marilyn Spink, P.Eng.

Engineers Canada Directors

Annette Bergeron, P.Eng., FEC 1109 George Comrie, P.Eng., FEC Diane Freeman, P.Eng., FEC 1108 Chris D. Roney, P.Eng., BDS, FEC Rakesh Shreewastav, P.Eng., AVS, FEC

CONTENTS

- 2 Council list/staff contacts/contents
- 3 President's message
- 4 Registrar's report/Register
- 5 2015 Statistics at a glance 6-9
- Step by step: Advancing and regulating engineering practice in the public interest
- 10-11 Abbreviated financials (full financial statements available on PEO's website and in the May/June issue of Engineering Dimensions)
- 12-13 Chapter highlights
- 14-15 Honours
- 16-19 Volunteers





Thomas Chong, M.Sc., P.Eng., PMP, FEC President

When I began my term as President and Chair of PEO, I committed to engaging with the engineering community to help raise the relevance and value of our profession. As a long-time volunteer with the association, I have always believed that enhancing the relevance and value of the P.Eng. licence to society and to our licence holders is one of the most important roles of the association. This can be difficult at times because, as the theme of the annual review implies, the world in which PEO regulates and advances engineering practice is constantly moving and shifting-much like the water in which we're finding our way, step by step. I am pleased

to report, however, that we have taken great strides on this front by leading change throughout PEO operations, with an agile strategic thinking approach in three priority areas: innovation, recognition and collaboration.

INNOVATION

During the year, I challenged PEO senior management to find innovative ways to reduce costs and improve the organization's efficiency and operational effectiveness. The team responded with a surplus budget and was devoted to fiscal responsibility, while delivering high-quality regulatory programs, designing thoughtful policy and, above all, working to improve and protect the health, safety and well-being of Ontarians. We also enhanced our outreach efforts to students, interns and women in engineering, and increased learning and development opportunities for our nearly 1000 volunteers working in the chapter system and in the various committees of PEO. PEO's 36 chapters also received a 10 per cent increase in funding in 2016, to enable healthy growth, outreach efforts in their local communities and enhanced involvement with regulatory functions.

Innovation is based on taking good ideas and developing them into something new and valued. And PEO's Ottawa Chapter is doing just that with its Innovative Entrepreneur Leadership Program. I was privileged to attend the kick-off of this innovative program in Ottawa, on September 30, 2015. Also in attendance was Councillor Marianne Wilkinson (Ward 4 Kanata North, Ottawa), who praised it as a "lead to win" entrepreneurship program. I commend the program's fusion of the entire innovation chain, stretching from basic and applied research to business case and proposal for early-stage financing for new companies. A true collaboration and fusion of PEO, the Ontario Society of Professional Engineers (OSPE), the learned societies, universities, government and industry, I believe this program, rolled out across the province, could play a real part in helping to shift our economy into high gear again, restoring growth, boosting employment, helping small business thrive, restoring manufacturing competitiveness, bringing back Ontario's leadership in high technology, and shifting the country away from dependence on natural resources.

I will watch the program's growth with interest, from an intraentrepreneurship to inter-entrepreneurship synergy, acting as an enabling tool to stimulate economic development with engineering as the innovative backbone. It can further blossom into a new innovation hub, engineering/ technology incubator and accelerator, or engineering change lab. It helps recognize and nurture the innovative talents of the best and brightest engineering practitioners to help them grow their big ideas. I look forward to seeing it emulated in other chapters.

RECOGNITION

Continuously improving our core, self-regulatory functions is key to PEO earning greater recognition, which is why we devoted significant attention

Good engineers reduce costs, improve productivity and protect the health, safety and well-being of all Ontarians. Engineering must be viewed as an investment for the future of any wealth-generating enterprise, not as a cost of production. Canadian companies need engineering help to ensure they stay in business, for the long term. Money chases good ideas. If we stimulate economic development with engineering as the innovation backbone, we will generate many more good ideas. Remember that engineering creates wealth, well-paid jobs, public safety, prosperity and a better quality of life for those in Ontario and around the world.

PEO is also working to increase the profile of volunteers to the profession through the creation of a new form of volunteer recognition award. If approved, this award would be presented by the Lieutenant Governor of Ontario, the Honourable Elizabeth Dowdeswell, at PEO's Order of Honour gala. Let's keep our fingers crossed that this worthy cause for our profession is realized.

The seven town hall meetings held throughout the province from late September until late November were certainly an exercise in collaboration. These meetings provided an opportunity to consult with members on how PEO might best strengthen the engineering profession by implementing recommendations from the Elliot Lake Commission of Inquiry in ways that make sense for both practitioners and the public. Specific attention was paid to the recommendations aimed at creating a specialist designation for those inspecting existing buildings and signing structural adequacy reports, and putting into place a continuing professional development program for PEO licence holders. My sincere thanks go to the more than 500 engineers and engineering interns who attended the meetings and gave us valuable feedback.

Along with our work serving the public, PEO also extended its support to local communities and charities this year, including our Big Bike Ride with OSPE, which raised donations for the Heart and Stroke Foundation. I am deeply proud of the strong culture of volunteering across PEO, and I would like to thank all our volunteers for the passion and dedication shown to these very important causes. I'm pleased to report we are already working toward our Big Bike Ride in 2016.

2015 STATISTICS AT A GLANCE



Gerard McDonald, P.Eng., MBA Registrar

The year began with the launch of PEO's 2015-2017 Strategic Plan and implementation of targeted initiatives to provide Council and staff a common direction to achieve our vision of becoming the trusted leader in professional self-regulation. The plan is designed to be our blueprint as we regulate and advance the practice of engineering to protect the public interest.

With each step we take, the better prepared we are to deal with the inevitable change that comes from a constantly evolving profession. As a regulator, PEO must anticipate and respond quickly and effectively to diverse issues, including emerging engineering disciplines; the increased pace of technological change: and incursions upon our mandate to regulate engineering practice. Yet, we must always ensure our actions are balanced, inclusive and evidence-based. I'm pleased to report we have made strides in 2015 on many important initiatives.

Of the 98 strategies identified in the Strategic Plan, 47 were completed by early January 2016, and 48 are in progress. Further, 65.7 per cent of the activities associated with specific strategies are complete, with another 18.4 per cent in progress. The overwhelming majority of activities in progress are on track at this point. I encourage you to follow our progress over the next two years via our website at: http://www.peo.on.ca/index.php?ci_ id=28289&la_id=1.

PEO's outreach to encourage licensure of those gualified was also fruitful. In 2015, PEO issued 2449 P.Eng. licences to new applicants, only 36 fewer than the all-time high issued in 2014. Nearly 50 per cent of these new applications came as a result of PEO's Financial Credit Program, which enables qualified graduates of Canadian Engineering Accreditation Board-accredited engineering programs and international engineering graduates with Bachelor of Engineering or Applied Science degrees to apply for PEO's professional engineer licence, and be registered in the Engineering Intern program for the first year, at no cost.

Changes in 2015 to Regulation 941/90 related to limited licences led to a substantial increase in applications for this licence type, which enables its holder to practise and be responsible for engineering work done within the limitation noted on the licence. A new class of limited licence, for limited

licence holders who are certified engineering technologists and members of the Ontario Association of Certified Engineering Technicians and Technologists, was also created. Members of this class can use the protected title licensed engineering technologist and LET designation.

Other amendments to the regulation permit limited licence holders to be responsible for the engineering services provided to the public under a PEO Certificate of Authorization (C of A), either as an employee of a C of A firm or after obtaining their own C of A; officially recognize engineering interns with the protected title of EIT; require the Academic Requirements and Experience Requirements committees to specify the academic or experience requirements to be met when either committee determines an applicant does not meet the requirements for licensure; and update the requirements to obtain a temporary licence. These amendments were included in the Ontario government's Open for Business Act. 2010 and their implementation improves PEO's transparency, accountability and effectiveness in regulating professional engineering.

We also continue work on PEO's proposed continuing professional development program. Currently referred to as the "Continuing Professional Competence Program" or (CP)², our program incorporates feedback from seven town hall meetings hosted by President Chong during the year. Council has committed to putting any mandatory elements of the program to a vote of the members. A new volunteer task force is now designing the program's details and online interface with a target of having interactive online risk review and reporting forms available by late in 2016 to enable members to test the program prior to any referendum on making it mandatory.

As the administrative body for a self-regulating profession, PEO relies on dedicated volunteers who capably serve as members of committees, task forces and chapters, whose work helps to develop many of the policies that guide the association. I would like to extend my sincere appreciation to all our volunteers and staff for their many and varied contributions in 2015.

The Register at December 31, 2015				
Total P.Eng. licences	79,735			
Certificates of Authorization	5,250			
Provisional licences	23			
Consulting Engineer Designations	1,085			
Engineering interns	12,596			
Limited Licences	250			



*Financial Credit Program

COMPLAINTS COMMITTEE

Activity	2015	2014
Complaints filed	62	69
Complaints disposed of by committee	81	91
Referred to Discipline Committee	7	6
Not referred to Discipline Committee and no other action taken	56	62
Not referred to Discipline Committee and other action taken	18	23

ENFORCEMENT

Activity	2015	2014
File carry-over from previous year	298	338
Files opened	482	392
Violation type (%)		
Title	92%	95%
Practice	5%	3%
Both title and practice	3%	2%
Source of inquiry		
PEO staff initiated	71%	73%
Public	29%	27%
Files closed	489	432
Compliance achieved (%)	97%	96%
Court prosecution	5	0
Files to carry over at December 31	291	298

Wr

PEO website at www.peo. on.ca.

2015 PEO Committee, Task Force Reports

committees and task forces

2016 PEO Annual General

Meeting and posted on the

Annual reports of PEO

will be provided at the

Ac Ма Pre Ма

Ac





COMPLAINTS REVIEW COUNCILLOR (CRC)

Activity	2015	2014
Applications for review	8	8
Dismissals without a review	3	0
Notices to conduct a review	9	7
CRC reports issued	2	5
Caseload	9	6

DISCIPLINE COMMITTEE

Activity	2015	2014
Matters referred to discipline	8	7
Pre-hearing conferences held	6	4
Matters pending (caseload)	17	12
Hearings completed	5	3
Written final decisions issued	5	6

REGISTRATION COMMITTEE

tivity	2015	2014
quests for hearings	4	5*
e-hearing conferences held	3	6
atters pending (caseload)	10	10
arings completed	2	2
itten final decisions issued	2	3

*Note: includes one premature application

STEP BY STEP



Former PEO president Annette Bergeron, P.Eng., FEC, chair of the regulator's CPDCQA Task Force, outlines the concept of a proposed continuing professional development program at the November 12 town hall.

CONTINUING PROFESSIONAL DEVELOPMENT

At its November meeting, Council approved the guiding principles and basic elements of the Continuing Professional Development, Competence and Quality Assurance (CPDCQA) Task Force's final report (www.peo.on.ca/index.php?ci_ id=29313&la_id=1). The report is the culmination of 18 months of work by the task force to develop a proposed program of continuing professional development that it believes would be effective, pragmatic, improve the regulation of professional engineering and recognize the diversity of practitioners' needs and resources.

This proposed program, currently referred to as the "Continuing Professional Competence Program" or (CP)², incorporates feedback from seven town hall meetings in the fall of 2015 attended by more than 500 EITs and P.Engs.

- In formulating the plan, the task force developed a framework that it believes:
- recognizes the licence of both practising and non-practising engineers;
- focuses on maintaining provision of competent engineering services rather than introducing a bureaucratic hurdle;
- ensures CPD requirements are based on the risk the work of each licence holder presents to the public and the profession;
- encourages licence holders and employers to adopt riskmitigation measures; and
- improves on programs implemented by regulators elsewhere in Canada.

With the CPDCQA's work complete, Council stood down the task force and approved creating a new task force to finalize a risk review form, the continuing professional development requirement algorithm, and criteria for acceptable technical activities. Terms of reference for the task force were approved at Council's February 2016 meeting.

It is anticipated that by late 2016 members will be able to try out simple, online forms to conduct a voluntary selfassessment of their practice risk, determine their professional development requirements and report continuing professional development achieved. This will allow members to test out the program prior to a referendum of licence holders on making it mandatory. At its September 2015 meeting, Council committed to putting any mandatory elements of a PEO continuing professional development program to a vote of the members.

AMENDMENTS TO ENGINEERING REGULATION 941

Long-awaited amendments to Regulation 941/90 of the *Professional Engineers Act* (PEA), intended to strengthen regulation of the profession, were filed April 2, 2015 by the Registrar of Regulations for Ontario. Several of these amendments became effective on their filing. Others became effective on July 1, 2015, when corresponding pending amendments to the PEA were proclaimed.

These amendments included changes to introduce the new licensed engineering technologist (LET) class of limited licence, which provides limited licence holders who are certified engineering technologists and members of the Ontario Association of Certified Engineering Technicians and Technologists (OACETT) a protected title and designation from PEO that reflect the holder's willingness to be held professionally accountable by both the licensing and certification bodies.

Further, the academic requirement for a limited licence was generalized to accommodate applicants with technical degrees, or diplomas in a broader range of disciplines. Applicants for a limited licence are now expected to demonstrate an equivalent depth of knowledge within the proposed limitation of their licences to that expected of applicants for a professional engineer licence.

PEO also changed its Certificate of Authorization (C of A) to permit limited licence holders to be responsible for engineering services offered or provided to the public.

The amendments also established an engineering intern class of person whose interests are related to PEO's. Engineering interns can use the protected EIT designation and engineering intern title to reflect their commitment to professionalism and place on the path to becoming professional engineers.

The changes also provided greater clarity to licence applicants about how they might meet licence requirements, and increased PEO's accountability and transparency. Specifically, PEO's Academic Requirements Committee (ARC) and Experience Requirements Committee (ERC) must now specify the academic or experience requirements to be met when either committee determines an applicant does not meet the requirements for licensure. Previously, ARC was required only to recommend to the Registrar the examinations or other academic requirements an applicant must complete, while ERC was required only to determine whether an applicant meets the experience requirements and so inform the Registrar.

These changes in the profession come after more than 13 years of constructive and continuous collaboration and negotiation involving PEO, OACETT and the office of the Attorney General of Ontario.

REPEAL OF THE "INDUSTRIAL EXCEPTION"

PEO was disappointed to learn of the Ontario government's decision in November to remove permanently a yet-to-beproclaimed provision in the PEA that would have helped ensure a safer, more efficient and more innovative workplace at little cost to the province's manufacturing sector.

Included within the *Open for Business Act, 2010*, the provision would have repealed subsection 12(3)(a) of the PEA (sometimes called the "industrial exception"), which allows non-engineers to carry out acts of professional engineering on equipment or machinery used to produce products for their employer in their employer's facility. The repeal was to take effect on September 1, 2013, following three years of transition planning and consultation with stakeholders. On June 12, 2013, however, the proclamation date was postponed indefinitely by the government.

Since then, PEO has been working with the Ministry of Labour, undertaking research into recent prosecutions under the Occupational Health and Safety Act involving injuries to employees in manufacturing environments.



Additionally, PEO has consulted extensively with industry and invested heavily in assisting manufacturers to achieve voluntary compliance. Based on this outreach, PEO believes only 7 per cent of manufacturing employers are likely to be affected by the repeal. Through its voluntary compliance program, PEO has invested close to \$500,000 to assist companies with their licensing costs.

Ontario is the only province with such an exception to licensing requirements in its engineering legislation, and PEO remains committed to demonstrating the value licence holders bring to Ontario manufacturing.

ENFORCEMENT SUCCESSES

The year saw an increase in the number of substantive enforcement inquiries from external practitioners and members of the public, as well as the prosecution of a number of matters through the courts.

Enforcement is legal action PEO takes against individuals or entities who practise engineering without a licence or lead others to believe they are qualified to do so, or who offer engineering services without holding a Certificate of Authorization (C of A). With only a few exceptions, only PEO licence holders can practise professional engineering, and only people or entities holding Cs of A issued by PEO can offer or provide professional engineering services to the public.

In 2015, five enforcement files resulted in court prosecution. They were:

- Erie Structures and its principals were ordered by the Ontario Superior Court of Justice in February to stop representing that they can perform "engineering" or that the company has "engineers" and to pay PEO's application costs.
- In April, the Ontario Court of Justice fined Dilip Chhaniyara of Brampton for copying the seal of a professional engineer onto drawings for two building projects in 2013.
- The Ontario Superior Court of Justice in May ordered Behzad Vaghei and his company, P.Eng. Design & Drafting Services, to stop using terms, titles and descriptions restricted to professional engineers and authorized professional engineering firms.
- Danilo Marasigan, operating as Danmar Design, was fined in June by the Ontario Court of Justice for applying fake professional engineers' seals to drawings submitted to the City of Toronto's building department. Marasigan had been ordered in March by the Superior Court of Justice to cease possessing or copying the seals of professional engineers.



PEO's 2015-2016 Council, back row, left to right: Bill Kossta, Charles Kidd, P.Eng., FEC, Rakesh Shreewastav, P.Eng., FEC, Marilyn Spink, P.Eng., Ewald Kuczera, P.Eng., Sharon Reid, C.Tech., Serge Robert, P.Eng., Dan Preley, P.Eng., Mary Long-Irwin, Len King, P.Eng., FEC, Nicholas Colucci, P.Eng., FEC, David Brown, P.Eng., C.E.T., Changiz Sadr, P.Eng., FEC, Warren Turnbull, P.Eng., and Roger Jones, P.Eng., FEC. Front row, left to right: Ishwar Bhatia, P.Eng., FEC, David Adams, P.Eng., FEC, Patrick Quinn, PhD (honoris causa), P.Eng., FEC, George Comrie, P.Eng., FEC, Thomas Chong, P.Eng., FEC, Bob Dony, PhD, P.Eng., FEC, Santosh Gupta, PhD, P.Eng., FEC, and Danny Chui, P.Eng., FEC.



PEO Registrar Gerard McDonald, P.Eng. (left), joined Ontario Society of Professional Engineers CEO Sandro Perruzza in offering opening remarks at the March 30 Engineers Want In symposium at Ryerson University.

• In December, the Ontario Court of Justice fined former professional engineer, Michael Martin Cook of Belleville for using a facsimile of an engineer's seal and signing a Commitment to General Review by an Engineer.

PROFESSIONAL STANDARDS

Council approved a practice guideline for professional engineers who practise forensic engineering, offer professional forensic engineering services, or conduct forensic engineering investigations. The *Guideline for Professional Engineers Providing Forensic Engineering Investigations*, developed by PEO's Professional Standards Committee, "addresses forensic engineering practice and provides information on how practitioners should carry out forensic engineering activities in an ethical and legal manner."

The guideline is available at www.peo.on.ca/index.php/ ci_id/1834/la_id/1.htm.

OCEPP DISCONTINUED

After considering an extensive analysis of PEO's Ontario Centre for Engineering and Public Policy (OCEPP), Council decided in November to discontinue the program. OCEPP had operated since October 2008 with a mission to engage engineers in the development of public policy; ensure public policy development takes into account appropriate technical requirements; develop innovative solutions to public policy problems based on technology; and help engineering professionals translate complex technical issues into publicly accessible information.

Council based its decision on there being other options available for introducing the engineering professional into public policy debates, including the Ontario Society of Professional Engineers, Engineers Canada and many engineering faculties, which have developed specialized public policy centres.



Jeannette Chau, P.Eng. (left), PEO's manager, government and student liaison programs, presents PEO's MPP Awards to Progressive Conservative MPP Jim McDonell, P.Eng. (second from left), Liberal MPP Sophie Kiwala (fourth from left) and NDP MPP Teresa Armstrong (second from right). Also pictured are Madeleine Meilleur (third from left), PEO Vice President George Comrie, P.Eng., FEC (third from right), and PEO GLC Chair Darla Campbell, P.Eng. (far right).



Queen's Park reception guests included (left to right) former PEO councillor Sandra Ausma, P.Eng., PEO Registrar Gerard McDonald, P.Eng., and Ontario Attorney General Madeleine Meilleur.



Ontario opposition leader Patrick Brown (second from left) discussed pressing PEO concerns September 8 with Registrar Gerard McDonald, P.Eng. (left), and President Thomas Chong, P.Eng., FEC. Progressive Conservative Party MPP Sylvia Jones (right) also attended the meeting with the PC party leader.

GOVERNMENT LIAISON PROGRAM

In 2015, PEO's Government Liaison Program (GLP) continued to host a number of initiatives to engage provincial legislators. The goal was to meet PEO's mandate to regulate the profession in the public interest.

MPPs regularly attend PEO events, including licence ceremonies, town hall meetings, annual meetings and awards galas. PEO leadership and GLP representatives frequently meet with MPPs and key ministers to discuss issues of concern to the profession.

Queen's Park Day reception

PEO's annual Queen's Park Day reception was held this year on October 21, with nearly 200 participants, including eight ministers and 48 other MPPs. This annual event provides a unique opportunity for engineers to meet and engage with government representatives across all parties, portfolios and the province.

The reception also featured the first Engineering Games. Three teams of MPPs, students and professional engineers were tasked with building a structure using only the supplied materials to underscore the importance of building resilient infrastructure. The winning team was led by Peter Milczyn, MPP (Etobicoke-Lakeshore), Parliamentary Assistant to the Minister of Economic Development, Employment and Infrastructure.

The third annual GLP MPP Awards were also presented during the evening. The awards are given to one MPP from each party to recognize their support for PEO and its work on behalf of the public. The recipients this year were Liberal MPP Sophie Kiwala (Kingston and the Islands), PC MPP Jim McDonell, P.Eng. (Stormont-Dundas-South Glengarry), and NDP MPP Teresa Armstrong MPP (London-Fanshawe).

The Grand River Chapter received the 2015 PEO Chapter Award for building relationships with their MPPs and being actively involved in Government Liaison Program activities. The Kingston Chapter received honourable mention

Take Your MPP to Work Days

Building on the success of the last two years of Take Your MPP to Work Day events, PEO chapters organized their MPPs to visit local engineering companies to learn more about PEO and the work professional engineers do in their communities. These events help increase MPPs' understanding of engineering work and PEO's regulatory role. They also develop deeper relationships between the MPPs, local engineers and PEO chapters. Highlights from 2015 Take Your MPP to Work Days, include:

- London Chapter hosted Teresa Armstrong, MPP (London-Fanshawe), NDP Critic of Citizenship, Immigration and International Trade, and Seniors' Affairs, at Upper Thames Valley Conservation Authority on January 21, 2016.
- Kingston Chapter organized an event for Sophie Kiwala, MPP Kingston and the Islands, Parliamentary Assistant to the Minister of Tourism, Culture and Sport, at Bombardier on March 13.



Yvan Baker, MPP (Etobicoke Centre), Parliamentary Assistant to the President of the Treasury Board, visited Kinectrics on July 20. With him in the photo (left to right) are PEO Etobicoke Chapter GLP Committee Member Harvey Pellegrini, P.Eng., Kinectrics President and Chief Executive Officer David Harris and Vice-President Engineering & General Manager John D'Angelo, P.Eng.

- East Toronto Chapter hosted Arthur Potts, MPP (Beaches-East York), Parliamentary Assistant to the Minister of Agriculture, Food and Rural Affairs, at R.C. Harris Water Treatment Plant on April 10.
- Indira Naidoo-Harris, MPP (Halton), Parliamentary Assistant to the Minister of Health and Long-Term Care, spent time at Siemens Canada with the Oakville Chapter on May 22.
- Etobicoke Chapter hosted Yvan Baker, MPP (Etobicoke Centre), Parliamentary Assistant to the President of the Treasury Board, at Kinectrics on July 20.
- Sudbury Chapter organized an event for France Gélinas, MPP (Nickel Belt), NDP Aboriginal Affairs, Francophone Affairs and Health and Long-Term Care Critic, at SNOLAB on September 11.

GLP Academies and Congresses

PEO hosted regional GLP academies and congresses to assist chapter GLP volunteers to learn about strategies and tactics to engage government.

• The Northern Region GLP Academy was held on June 6 in Timmins. Guest political speakers were NDP House Leader Gilles Bisson, MPP (Timmins-James Bay), and Timmins Mayor Steve Black, P.Eng.



The East Central and West Central regions GLP Academy was held on December 5 in Toronto, with guest speaker (centre) Deputy NDP Leader Jagmeet Singh, MPP (Bramalea-Gore-Malton).



Student delegates at the annual PEO student conference included (left to right) Grant Mitchell, Michelle Liu, Kieran Broekhoven, Madeline Amszej, Ian Strasser, Melissa Buckley, ESSCO vice president of communications, and Abdullah Barakat.

The Western Region GLP Academy was held on June 13 in Blue Mountain. PC Interim Leader Jim Wilson, MPP (Simcoe-Grey), and Ann Hoggarth, MPP (Barrie), Parliamentary Assistant to the Ministry of Labour, attended and spoke.
The Eastern Region GLP Academy was held on October 3 in Ottawa, with guest speakers Marie-France Lalonde, MPP (Ottawa-Orléans), Jim McDonell, P.Eng., MPP (Stormont-Dundas-South Glengarry), and Jack MacLaren, P.Eng., MPP (Carleton-Mississippi Mills).

ENGINEERING STUDENT SOCIETIES' COUNCIL OF ONTARIO

PEO continues to forge strong links with Ontario's undergraduate engineering student community. Each year, PEO joins forces with the Engineering Student Societies' Council of Ontario (ESSCO) to present learning opportunities about the profession and inform students of the benefits of licensure.

In November, approximately 70 student leaders from across Ontario participated at PEO's annual student engineering conference at the University of Ottawa. They heard from a variety of speakers and professional engineers about how each had combined sustainability with their other passions and careers.

Engaging the next generation of professional engineers is an important goal of ESSCO and PEO, as is introducing delegates to the work of PEO and the benefits of obtaining a licence.

BALANCE SHEET as at December 31, 2015		2015	2014	
ETS		Cash in interest-bearing accounts	\$ 1,851,432	\$ 1,739,886
		Marketable securities at fair value	6,403,767	6,331,704
	CURRENT	Accounts receivable	527,314	498,159
	CURRENT	Prepaid expenses and deposits	225,778	204,332
ASS		Other assets	390,279	443,952
	Capital assets (Note 3)		9,398,570	9,218,033
			37,711,302	37,062,729
	TOTAL ASSE	TS	47,109,872	46,280,762
		Accounts payable and accrued liabilities (Note 15)	2,174,710	1,385,054
		Fees in advance and deposits	9,067,119	8,843,131
.IES	CURRENT Current portion of long-term debt (Note 5)		928,000	901,000
			12,169,829	11,129,185
LIAE	LONG	Long-term debt (Note 5)	7,539,000	8,467,000
	TERM	Employee future benefits (Note 6)	13,074,900	11,153,100
	TOTAL LIA	BILITIES	32,783,729	30,749,285
Net assets (Note 7) Total liabilities and net assets		(Note 7)	14,326,143	15,531,477
		47,109,872	46,280,762	

Approved by the Board

rement of CASH FLOWS ended December 31, 2015		2015	2014
	Excess of revenue over expenses	\$ 931,176	\$ 1,349,236
OPERATING	Add (deduct) items not affecting cash		
	Amortization	1,798,805	1,790,891
	Amortization-other assets	67,395	56,323
	Employee future benefits expensed	1,274,700	1,418,300
	Change in unrealized losses on marketable securities	98,181	(68,450)
	Loss (gain) on disposal of marketable securities	(22,636)	37,612
		4,147,621	4,583,912
	Change in non-cash working capital items (Note 10)	963,043	(502,014)
		5,110,664	4,081,898
	Repayment of mortgage	(901,000)	(878,000)
FINANCING	Contributions to employee future benefit plans	(1,489,410)	(1,226,500)
		(2,390,410)	(2,104,500)
	Net change in marketable securities	(147,608))	(950,351)
	Additions to capital assets	(2,447,378)	(2,124,541)
	Additions to other assets	(13,722)	(214,863)
INVESTING		(2,608,708)	(3,289,755)
Increase (decrease) in cash		111,546	(1,312,357)
Cash, beginning of year		1,739,886	3,052,243
Cash, end of year		1,851,432	1,739,886

S У

TATEMENT OF REVENUE, EXPENSES AND CHANGES IN NET ASSETS rear ended December 31, 2015		20	L 5	2014
	P.Eng. revenue	\$ 15,134,2	71	\$ 14,840,457
REVENUE	Application, registration, examination and other fees	6,064,2	34	5,884,172
	Building operations (Note 4)	2,127,0	16	2,083,065
	Advertising income	292,6	79	355,572
	Investment income	97,2	19	219,885
		23,715,4	19	23,383,151
	Staff salaries and benefits/retiree and future benefits	10,708,6	85	10,303,016
	Building operations (Note 4)	2,444,6	78	2,362,885
	Purchased services	1,352,8	25	1,090,528
	Engineers Canada	938,5	79	901,420
	Amortization	924,5	28	978,437
	Chapters (Note 13)	793,0	66	722,121
	Volunteer expenses	786,7	67	761,264
	Occupancy costs (Note 4)	765,8	74	732,760
	Computers and telephone	715,8	13	773,951
S	Legal (corporate, prosecution and tribunal)	567,7	44	649,465
EXPENSE	Transaction fees	508,2	53	508,034
	Contract staff	496,2	37	666,368
	Postage and courier	475,6	76	424,151
	Consultants	362,6	05	240,431
	Recognition, grants and awards	162,2	39	187,667
	Professional development	155,2	51	109,170
	Office supplies	131,9	55	121,723
	Printing	128,4	46	161,002
	Insurance	105,7	84	97,304
	Staff expenses	104,3	07	91,355
	Advertising	83,9	42	90,348
		22,713,2	54	21,973,400
Excess of revenue over expenses before the undernoted		1,002,1	65	1,409,751
Council discretionary reserve expenses (Note 8)		70,9	89	60,515
Excess of revenue over expenses		931,1	76	1,349,236
Remeasurement and other items		(2,136,5	0)	390,900
Net assets, beginning of year		15,531,4	77	13,791,341
Net assets, end of year		14,326,1	43	15,531,477

*The above information is an abbreviated version of PEO's 2015 financial statements. The full report appears in the May/June 2016 issue of *Engineering Dimensions* and on PEO's website.

CHAPTER HIGHLIGHTS

PEO chapters-36, organized into five regions across the provincewere formed more than 50 years ago to link members-at-large with PEO Council, and to be a local presence for engineering. In 2015, they organized licence certificate ceremonies, hosted technical seminars and social events, provided a forum for members to exchange knowledge and ideas, and offered professional networking opportunities. Members involved in PEO chapter activities also continued a long-standing tradition of donating their time, energy and expertise to promoting awareness among grade school students of the role of math and science in their daily lives and engineering as a career.



Laurentian University students put together an interactive display at **Sudbury Chapter's** booth March 7 at the New Sudbury Shopping Centre.

In March, PEO volunteers across Ontario spent time spreading the word about the profession during **National Engineering Month (NEM) 2015**. The year's theme, "Make a world of difference," was highlighted in all of the 280 NEM-funded events held in schools, colleges and universities, malls, libraries and community centres across Ontario. NEM 2015 saw many new and creative outreach events run by PEO chapters. These events reflected the broad scope of what engineering is and the value the profession has to society and the environment. PEO's **Brantford** and **Niagara Chapters** staged events for the first time with great success. The **Oakville Chapter** received innovation funding for their event, Change the World, and the **Lake Ontario Chapter** kicked off a special new outreach event called Go CODE Girl.



2015 Engineering Innovations Forum committee members and presenters included (seated, left to right): Signa Butler, Douglas Birkenshaw, B.Arch., and Jeff Miller, P.Eng., and (standing, left to right) Sharon Rashid, P.Eng., Katie Pfisterer, Andrew Lee, Rajiv Rattan, P.Eng., Pat Scanga, P.Eng., Paul Annis, C.E.T., Noorein Ladha, P.Eng., David Kirkland, P.Eng., and Paul DiNovo, P.Eng.

On March 25, the **York Chapter** convened a day-long Engineering the Future of GTA Transportation symposium, which drew more than 350 people to the Markham Event Centre, northeast of Toronto. The event included presentations from municipal officials, consulting engineers, automotive innovators and transportation authorities. Special guests included Markham Mayor Frank Scarpitti; Metrolinx President and CEO Bruce McCuaig; Charles Halasz, P.Eng., head of rail electrification, Siemens Canada; Jonathan Hack, P.Eng., Bombardier Aerospace; Paul May, P.Eng., York Region Rapid Transit Corporation; and Ersoy Gulecoglu, P.Eng., head of the Metrolinx sustainability team. In addition to an overview of the transit situation in the greater Toronto area (GTA), the symposium offered insights into various modes of travel, including car and rail, public transit developments, and ecofriendly air traffic. Presenters emphasized the challenges faced by engineers and policy-makers in easing traffic congestion and providing alternatives to car travel.



FEC (right), with presenter Jim Harris at the 2015 Volunteer Leadership Conference.

Chris Kan, P.Eng.,

PEO's **Volunteer Leadership Conference**, April 24 in Toronto, focused on two traditionally distinct groups—chapter and committee volunteers—to look for ways for them to work together to help PEO fulfill its core objectives. The "connecting volunteers" event, held the day before the annual general meeting (AGM), replaced the pre-AGM Penta Forum held for the last few years.

Discussion topics related to the report of the Elliot Lake Commission of Inquiry were continuing professional development, specialist designations, public access to information in PEO's register, ethical behaviour, proactive enforcement and protecting whistleblowers. Licensure topics related to the Canadian experience requirement, foreign credential recognition, matching applicants' knowledge and experience, structuring engineering internships, assisting applicants with the licensing process, and the repeal of the industrial exception.

Keynote presenter and conference facilitator Jim Harris, author of the international bestseller *Blindsided*, and a wellknown management consultant, outlined the advantages of crowd sourcing and social media-enabled networking in assisting businesses and corporations around the world to innovate and build healthier returns on their investments.

In August, the **West Toronto Chapter** teamed up with the Toronto Rehabilitation Institute (TRI) and University of Toronto's faculty of applied science and engineering to show local youth what engineering is all about through the Women



Minister addresses licence presentation ceremony The Honorable Glen Murray, Minister of the Environment and Climate Change, implored newly licensed engineers to put their talents to use in developing adaptation strategies for the "existential crisis" of climate change. Speaking July 29 at the **East Toronto Chapter's** licence presentation ceremony, he said engineering as a profession can play a leading role in developing new standards to help communities withstand the impact of climate change on infrastructure and other vital public resources. Twenty-five new engineers received their licence certificates during the ceremony. Ka Ming Liu Yuan, P.Eng. (second from left), receives his certificate from East Toronto Chapter Chair Hugo Maureira, P.Eng. (left). To Yuan's right are PEO Councillor Roger Jones, P.Eng., OSPE President and Chair Karen Chan, P.Eng., Minister Murray, and PEO Councillor Changiz Sadr, P.Eng., FEC.

in Engineering and Science (WIES) Design Competition. The hands-on competition took place over two weekends and engaged more than 50 students in grades 6 to 9 and 30 volunteers in projects involving engineering design and prototype building. To align with the theme of this year's competition—the 2015 Parapan Am games—participants were tasked with designing and building a prototype of a prosthetic arm. They worked in teams of three or four, along with an engineering mentor who studies or works in the field. The groups came up with innovative and thoughtful designs, which were judged based on strength, cost efficiency and creativity. The winning teams were recognized for their user-centred designs and clearly communicated ideas.

The International Plowing Match and Rural Expo, held from September 22-26 in Finch, Ontario, attracted more than 82,000 visitors and featured a strong presence from the Upper Canada Chapter. The chapter's booth was located in the Education section at the show and representatives promoted engineering through interactions with approximately 2000 visitors. The booth featured demonstrations of a LEGO robot tractor and young students talking about what they hoped to be in the future. Older attendees enjoyed seeing the LEGO robot tractor in operation, talking about how technology is changing agriculture and discussing the engineering profession. The chapter was successful in creating connections with area schools and several teachers expressed interest in having PEO volunteers visit their classes to discuss engineering, demonstrate the LEGO robot, and work with students interested in technology and applied science.

The **York Chapter** expanded its active networking efforts November 7 with an "accelerated mentoring" event for recent graduates and newly licensed engineers. The day-long program, which attracted nearly 40 engineers and engineering interns (EITs), featured career advice from six veteran engineering practitioners, and an opportunity for recent graduates to share experiences on the road to their first career-related employment. The event included a "straight talk" panel that fielded questions from EITs related to translating work experience into their first, full-time engineering position. They also offered insights into resume writing, career shifting and general tips on standing out in the job market.

The theme for the 2015 **Chapter Leaders Conference** was chapters as the link to the future. Held November 21, just prior to that evening's Ontario Professional Engineers Awards gala, the conference enabled chapter volunteers to share best practices and generate ideas for enhanced regulatory operation. The morning session featured two small-group discussions. The first examined the role of chapters in keeping recent engineering graduates on the path to licensure; the second focused on developing peer solutions to operational issues common to chapters. Engineering interns (EITs) played a prominent role in the path to licensure discussion, with many suggesting that more exposure to chapters and PEO would help keep recent graduates focused on the path to the professional licence.

As with previous chapter leadership conferences, the 2015 event included a "people's choice" story contest, in which representatives from selected chapters describe popular events held over the last 24 months. The audience then votes on the top stories. This year's winner was the Windsor-Essex Chapter for its support of the 2014 Canada-Wide Science Fair, held in Windsor.

The conference keynote speaker, Natalie Panek, a missions systems specialist with MDA and leading proponent of women in technology professions, described her repeated efforts to win a place in NASA's astronaut training program as an object lesson in perseverance and determination.



The **Ottawa Chapter** launched an entrepreneurship program that its leaders hope will cement ties between engineers and business leaders in the local community. Officially unveiled September 30 after a successful pilot, the Innovative Entrepreneur Leadership Program links expertise from industry, universities and entrepreneurship resource centres with aspiring entrepreneurs to ensure successful application of innovative science and technology to profitable new businesses. Tapan Das, P.Eng. (second from left), chair of the Ottawa Chapter's Innovative Entrepreneur Leadership Program, outlined the program details at the reception. Also attending were (left to right) OSPE Vice Chair Michael Monette, P.Eng.; Ottawa Chapter Treasurer Joe Podrebarac, P.Eng.; PEO Councillor Ishwar Bhatia, P.Eng., FEC; PEO President Thomas Chong, P.Eng., FEC; Registrar Gerard McDonald, P.Eng.; and OSPE Executive Director Sandro Perruzza. The chapter hopes to work with other chapters to create and deliver similar entrepreneurial programs of value to engineers.





Members of the Ontario engineering community and supporters gathered November 21 at the **Ontario Professional Engineers Awards (OPEA)** gala to recognize and be inspired by the achievements of outstanding engineers. Ten professional engineers were honoured with individual awards and, new for 2015, a group project award was also presented. The team behind the St. Lawrence Seaway Management Corporation's innovative, hands-free mooring system won the first-ever OPEA Engineering Project or Achievement Award. Visit PEO's YouTube channel to watch the vignettes of the award recipients: https://www.youtube.com/playlist?list=PL6gbYTeVW xhlkbnO8pAXEx40BRuh2xzme.

The 2015 Ontario Professional Engineers Award recipients are, back row, from left: Benoit Nolet, P.Eng. (representing the St. Lawrence Management Corporation—Award for Engineering Project or Achievement); Seth Dworkin, PhD, P.Eng. (Engineering Medal—Young Engineer); Andrew Daugulis, PhD, P.Eng. (Engineering Medal—Research and Development); Brian Isherwood, P.Eng. (Engineering Medal—Engineering Excellence); and William D. Goodings, P.Eng. (Citizenship Award). Front row, from left, Michael A. Butt, P.Eng. (Engineering Medal—Management); Sushanta Kumar Mitra, PhD, P.Eng. (Engineering Medal-Engineering Excellence); Claire M.C. Kennedy, P.Eng., LLB (Citizenship Award), Cristina Amon, ScD, P.Eng. (Professional Engineers Gold Medal); Jeanette M. Southwood, P.Eng., FEC (Engineering Medal—Engineering Excellence); and M. Hesham El Naggar, PhD, P.Eng. (Engineering Medal-Research and Development).



Eight professional engineers were inducted into PEO's Order of Honour at the April 24 gala in Toronto for providing exceptional volunteer service to the profession. Recognized were: N. (Madu) Suthanan, P.Eng., FEC (Member); John Simmonds, P.Eng., FEC (Member); Sucha Singh Mann, P.Eng., FEC, PMP (Member); Vera Straka, P.Eng. (Member); Christopher Yuen Fun Kan, P.Eng., FEC (Officer); Tapan Das, PhD, P.Eng. (Member); Oscar R. Avila, P.Eng., MBA (Member); and Michael Kwok-Wai Chan, P.Eng. (Member). Visit PEO's YouTube channel to watch the vignettes of the award recipients: https://www.youtube.com/ playlist?list=PL6gbYTeVWxhmK7-V2DRnbKArLMoWz75bg.



Emma Barlow, EIT, was presented the 2015 G. Gordon M. Sterling Engineering Intern Award, which celebrates professional leadership achievements of engineering interns and funds leadership development training. Barlow received the award to recognize her commitment to the profession through extensive volunteer work.

VOLUNTEERS

Throughout its history, PEO has relied heavily on the participation and contribution of volunteers in both its governance and operation. In 2015, more than 1000 professional engineers, engineering interns and nonengineers volunteered their time to work on behalf of the association. This list includes those who have served on PEO committees and their subcommittees, task forces, chapter executives and the Government Liaison Program, as well as those who have represented PEO on external

В

boards and advisory groups and volunteered for chaptersponsored programs. PEO is fortunate to have so many individuals with a strong desire to serve and improve the profession. PEO Council gratefully recognizes and thanks all those who have served the profession in a wide variety of activities and events throughout the year. For more information on the many opportunities available to participate in PEO, contact Viktoria Aleksandrova, MEd, committee coordinator, at valeksandrova@peo.on.ca.

Samuel A.L. Abd el Malek, P.Ena. Galal Abdelmessih, P.Eng. Paul Acchione, P.Eng. Sarah Ackert-Ferguson, P.Eng. J. David V. Adams, P.Eng. Joseph (Joe) L. Adams, P.Eng. Steven Adema, P.Eng. Vivender Adunuri, P.Eng. Ali Afshar, P.Eng. Umar Afzaal, P.Eng. Haris Ahmadzai, P.Eng. Rashid Ahmed, P.Eng. Mohanad Al-Ajaj, EIT Mohammad Shaquat Alam, P.Eng. Md Shah Alamgir, P.Eng. Behzad Alavi, P.Eng. Abel Aleman Chavez, P.Eng. Nanda Alfonso, P.Eng. Greg A. Allen, P.Eng. William (Bill) C. Allison, P.Eng. Sunita Alves, P.Eng. Ryszard (Richard) J. Ambrozy, P.Eng. Shereen Amin James H. Amson, P.Eng. Anmol Anand, EIT Gheorghe (George) Apostol, P.Eng. Maricon Aquino, P.Eng. Nanjappan Ardhanarisamy, P.Eng. Matt Arndt, EIT Michael M. Arthur, P.Eng. John Arvanitis, P.Eng. Narayana Asogan, P.Eng. Mukul Asthana, P.Eng. Jon Atkinson, P.Eng. Behrouz (Bruce) Atrie, P.Eng. Magdy Milad Attia, P.Eng. Sandra Ausma, P.Eng Richard Elliott Austin, LLB

Oscar Avila, P.Eng. Jeanette Biemann, P.Eng. Afshin Azadmanesh Samimi, Tarun Biju P.Eng. P.Ena. George Bilian, P.Eng. Arshad Azhar, P.Eng. Nigel Birch, P.Eng. Naeim Azizi Tavakkoli, P.Eng.

Shelley Bacon, P.Eng. Devinder S. Bahra, P.Eng. Shahzad Baig, P.Eng. John D. Bailes, P.Eng. Steven Bailey, P.Eng. Jim Bailey, P.Eng. Spencer Bain Jack Baker, P.Eng. Michael A. Ball, P.Eng. Stella Harmantas Ball, LLB Paul R. Ballantyne, P.Eng. Adam Balogh, P.Eng. Vajahat Banday, P.Eng. Pregrad Banjanin, P.Eng. Souheila Bardakii, P.Eng. Douglas R. Barker, P.Eng. Mike Barker, P.Eng. Roger F. Barker, P.Eng. Emma Barlow, EIT Sharon Barr, P.Eng Hafiz Liagat Bashir, P.Eng. Harmail Basi, P.Eng. Norbert (Norm) Karl Becker, P.Eng. Bozena Bednarska, P.Eng. Nazifa Beganovic, EIT Christian G.V. Bellini, P.Eng. Mark L. Bendix, P.Eng. James E. Bennett, P.Eng. Annette M. Bergeron, P.Eng. Larry Betuzzi P.Eng. Rahul Bhardwaj, P.Eng. Ishwar Bhatia, P.Eng. Axar Bhavsar, EIT Satyendra Bhavsar, P.Eng.

Jeremy T. Bishop, P.Eng. Shiva Bissoon, P.Eng. Duncan E.F. Blachford, P.Eng. Allison Black, P.Eng. Michael Blair, P.Eng. Lauren Blake, P.Eng. Victor Blandon, P.Eng Mazivar Bolour, P.Eng. Alice Bom, P.Eng. Andre Bom, P.Eng. Dave Boogaart, P.Eng Guy Boone, P.Eng. Ron Bose Spiridon Bot, P.Eng. Jo-Anne Boucher, P.Eng. Frederick Bourgoin Mohamed Boutazakhti, P.Eng. Roger Boutette, P.Eng. Andrew J. Bowers, P.Eng. Peter R. Braund, LLM John R.S. Bray, P.Eng. Robert Bressan, P.Eng. Peter J. Broad, P.Eng. Helmut G. Brosz, P.Eng. David W. Brown, P.Eng. Randal G. Brown, P.Eng. Dave Buck, P.Eng. Jeff Bueckert, P.Eng Michael Burdett, EIT Ruben A. Burga, P.Eng. Michael P. Burrell, P.Eng. Brian Buss, P.Eng. Betty Anne Butcher, P.Eng. C Dan Cacciotti, P.Eng.

Karen Cain, P.Eng. Sanjiwan D. Bhole, P.Eng. lan Cameron, P.Eng. Md Soharab U. Bhuiyan, Darla Dee W. Campbell, P.Eng.

Colin S. Cantlie, P.Eng. Peigang (Nathan) Cao, P.Eng. Diego Cardenas, P.Eng. Jeremy S. Carkner, P.Eng. Matt Carson, P.Eng. David B. Caryll, P.Eng. V. Pelegrino Castaldo, P.Eng. Dan Castellan, P.Eng. Jamie J. Catania, P.Eng. Carlo Ceccarelli, P.Eng. Anthony (Tony) A. Cecutti, P.Ena. Karen Chan, P.Eng. Kwok-Wai (Michael) Chan, P.Eng. Raju Chander, P.Eng. Jian Ming (Jimmy) Chang, P.Eng. Michael A. Chapman, P.Eng. George Charitou, P.Eng. Patrick Chartrand, EIT Deep Chaudhary, EIT Joe Chellakudam, EIT V. George Chelvanayagam, P.Eng. Jason Chen, P.Eng. Ian Cheng, P.Eng. Kevin C. Chessman, P.Eng. Anna-Lyn Cheung, P.Eng. Stephane Chiasson, EIT Chantal Chiddle, P.Eng. Jim Chisholm, P.Eng. Myles Chisholm, EIT Corneliu E.E. Chisu, P.Eng. Brett Chmiel, P.Eng. Richard Chmura, P.Eng. Damien Ch'ng, P.Eng. Raymond Chokelal, P.Eng. Thomas Chong, P.Eng. Naser Choudhury, EIT Wan Tat (Vincent) Chu. P.Eng. Danny Chui, P.Eng. Gheorghe (George) Ciobanu,

P.Eng.

Bruce E. Clarida, P.Eng. Ronald Clarkin, P.Eng. John Clavton, P.Eng. Kenneth E. Clupp, P.Eng., C.Tech Parvaneh (Gina) Cody, P.Eng. Nicholas (Nick) P. Colucci, P.Ena. Brendan Colven, EIT Frederick (Rick) Comrie, P.Eng. George R. Comrie, P.Eng. Al Cook, P.Eng. Adam Core, EIT Andrei (Andrew) Cornel, P.Eng. Marie Corriveau Dan Cosmin, P.Eng. Daniel P. Couture, P.Eng. Joseph Cozzolino, EIT Michelle Croal Jonathan Crocco, EIT Daniel Crosthwaite, P.Eng. Adriana Csiba, P.Eng. D Darlene Daigle, P.Eng. Bogdan Damjanovic, P.Eng. Darryl Danelon, P.Eng. Michael Dang, P.Eng. Bo Dang, EIT Farid N.F. Danial, P.Eng. Gordon Danson, P.Eng. Tapan Das, P.Eng. Shovini Dasgupta, P.Eng Humberto DaSilva, P.Eng. Fred Datoo, P.Eng. Valerie J. Davidson, P.Eng. Laurel Davis, EIT William D. De Angelis, P.Eng. Ingrid de Buda, P.Eng.

Roger E.E. De Gannes, P.Eng.

J. Charles De la Riviere, P.Eng.

Benjamin de Haan, P.Eng

Jordan De Mello, EIT

David Dengler, P.Eng Sevag Derghazarian Anand Deshpande, EIT Savio J. DeSouza, P.Eng. Peter M.A. DeVita, P.Eng. Mervin J. Dewasha, P.Eng. Pankaj Dhawan, P.Eng. Rup Dhawan, P.Eng. David Dias, P.Eng. Jennifer Diaz, P.Eng. Katherine Diep, EIT Orville Dillenbeck, P.Eng. Milorad Dimitrijevic, P.Eng. Yehoudith (Judith) Dimitriu, P.Eng. George Dimitrov, P.Eng. Levente Laszlo Diosady, P.Eng. Denis Dixon, P.Eng. Andrew J. Donlan, P.Eng. Robert D. Dony, P.Eng. Hitesh Doshi, P.Eng. M. Andrew Dowie, P.Eng. Mircea I. Dreve, P.Eng. Linda Drisdelle, P.Eng. Joseph D'souza Ryan D'Sylva, P.Eng. James Dunlop, P.Eng. Robert A. Dunn, P.Eng. Sean Dunne, P.Eng. E. Afshin Ebtekar, P.Eng. Maha Elia, P.Eng. Israa El-Sabbagh Ali El-Takch Tabot Eneme, EIT

Stephen De Santis, P.Eng.

Laura Deakin

Lenny D'Elia, P.Eng.

Dan Demers, P.Eng.

Helen Deng, P.Eng.

Andrew Demeter, P.Eng.

Márta J. Ecsedi, P.Eng Ayman El Ansary, P.Eng. Kamal E.H. Elguindi, P.Eng. Keith A. Ellison, P.Eng. Waguih H. ElMaraghy, P.Eng. Khaled El-Rahi, P.Eng. Jalal S. Emami, P.Eng. Nancy England, P.Eng. Hassan Erfanirad, P.Eng. David W. Euler, P.Eng. Zbigniew Ewertowski, P.Eng.

John Faello, P.Eng. Katy Falk, EIT Amir Z.Y. Fam, P.Eng. Maliheh Farahnak, P.Eng. Steve Favell, P.Eng Charlene Fawcett, P.Eng. Reda Fayek, P.Eng. John Fear, P.Eng. Jim Fedorkiw, P.Eng Zeke Fedun, P.Eng. Brian Fenoulhet, P.Eng. Roy Fernandes, P.Eng. David S. Filer, P.Eng. James Finch, ISP Jonathan Fitzpatrick, P.Eng. Roy H. Fletcher, P.Eng. Tristan Fletcher, EIT Roberto V. Floh, P.Eng. Rabiz N. Foda, P.Eng. Larry Frankum, P.Eng. Roydon A. Fraser, P.Eng. Bradley Free, EIT Diane L. Freeman, P.Eng. Jerry Fridrich, P.Eng. Aubrev A. Friedman, P.Eng. Peter R. Frise, P.Eng. Amanda Froese, P.Eng. G. Keith Fuller, P.Eng.

G Scott Gagnon, P.Eng. Peter Gallo, P.Eng. Ketan M. Gandhi, P.Eng. Nilima Gandhi, P.Eng. Ammori Ganem Mohamed P.Eng. Mireille Gascon, EIT M. Stephen Georgas, P.Eng., LLB Chris George, P.Eng. Stelian George-Cosh, P.Eng. David N. Germain, J.D. Ramy Ghattas, P.Eng. Amin Ghobeity, P.Eng. J. Shawn Gibbons, P.Eng. Syed Gilani, P.Eng. Harmeet Gill, P.Eng. Ranjit Gill, P.Eng. Ryan Gillespie, P.Eng. G. Ross Gillett, P.Eng. Ben Gittings, P.Eng. Dalila C. Giusti, P.Eng. Mark Gledhill, P.Eng. John Glover, P.Eng. Nirmal Gnanapragasam, P.Eng. Branislav Gojkovic, P.Eng. Navid Golbon, P.Eng.

Peter J. Golem

Desmond Gomes, P.Eng.

Terry Gomez, P.Eng.

Preeti Gorapalli, P.Eng.

Lloyd Gorling, P.Eng. Cory Goulet, P.Eng. Dragan Grandic, P.Eng. Don Grandy, P.Eng. Ed Grandy, P.Eng. David Grant, P.Eng. Bob Gravelle, P.Eng. Jason A. Green, P.Eng. Gordon Griffith, P.Eng. Radomir Grigorov, P.Eng. Mohinder S. Grover, P.Eng. Niveen Guindy, P.Eng. Nihal J (Tilak) Gunaratne. P.Eng. Liang Guo, P.Eng. Ravi K. Gupta, P.Eng. Santosh K. Gupta, P.Eng. Brooke Guzar, P.Eng. н

Eric Haapamaki, P.Eng. Jonathan W. Hack, P.Eng. Matt Irvine, P.Eng. Momina Ishfaq Henry Haemel, P.Eng. Doug Hamilton, P.Eng. Armick Ivanian, EIT Faiz S. Hammadi, P.Eng. Catharine Hancharek, P.Eng. Kazi Hague, P.Eng. David Jackowski Doug Harris, P.Eng. William (Bill) E. Jackson. Michael Harris, P.Eng. P.Eng. Kellie Harrison, EIT Ron Jackson, P.Eng. Ahsan Hashmi, P.Eng. Monica Jain, P.Eng. R. Douglas (Doug) Hatfield. Albert Jakubowski, P.Eng. P.Eng. Peter Jancic, P.Eng. Brian Haydon, P.Eng. Henry J. Jansen, P.Eng. Mark Haynes, P.Eng. lyyad Jariri, P.Eng. John Hazel, P.Eng. Peter Jarrett P.Eng. Yahya Hematy, P.Eng. R.K. (Jeff) Jeffcoatt, P.Eng. Ryan Heppler, P.Eng. Roger Jeffreys, P.Eng. Araceli Hernandez, P.Eng. Ayvun E. Jeganathan, P.Eng. Lesley Herstein Jeganaesan (Jega) Bill Heska, P.Eng. Jeganathan, P.Eng. John Hettinga, P.Eng. Lance Jelinski Nancy E. Hill, P.Eng. Aneesh John W.J. Richard Hilton, P.Eng. Vilayil I. (V.I.) John, P.Eng. Robert C. Hindle, P.Eng. Richard Jones, P.Eng. Roger E. Jones, P.Eng. Barry Hitchcock, P.Eng. Ross L. Judd, P.Eng. Mai-Linh Ho, EIT Richard (Rick) J. Hohendorf, Wanda M. Juricic, P.Eng P.Eng. Jaak Jurimae, P.Eng. Edna Hon, P.Eng. Ray Hong P.Eng. Mohammad Horriyat, P.Eng. David A. Kahn, P.Eng. Md Akhtar Hossain, P.Eng. Sanjay Kalra, EIT Gary O. Houghton, P.Eng. Christopher Y.F. Kan, P.Eng. Graham Houze, P.Eng. Satish C. Kanauija, P.Eng. J. David K. Howard, P.Eng. Thiru Kannan, P.Eng. Sen Hu, P.Eng. Eugen Karanxha, P.Eng. Junbin Huang, EIT Lindsay Keats, P.Eng. Zenas Keizars Rebecca Huang, LLB

P.Eng.

Kevin Hughes, P.Eng. Richard Hui, P.Eng. Harsharan (Jeff) Hujan, P.Eng. Murad Hussain, P.Eng. Paula Hutchison, P.Eng.

Magued W.M. Ibrahim. P.Eng. Shawky Y.T. Ibrahim, P.Eng. Elise Idnani, P.Eng. Vanni lemma, P.Eng. Daniela Iliescu, P.Eng. Daniel (Dan) Ilika Samer Inchasi, P.Eng. C. Tyler G. Ing, P.Eng. Peter Inman, P.Eng. Marios Ioannidis, P.Eng. Gordon Ip, P.Eng. Donald R. Ireland, P.Eng. John Ireland, P.Eng

Amanda Kellett, P.Eng. Neil A. Kennedy, P.Eng. Dale D. Kerr, P.Eng. Wayne P. Kershaw, P.Eng Vyjavanthi Keshavamurthy, P.Eng. Mohsin Keyvani, P.Eng. Ahmad Khadra, EIT Mohammad Khalid, P.Eng. Asif Khan, P.Eng. Muhammad Khan, P.Eng. Nazli Khan, P.Eng. Saleemullah Khan, P.Eng. Diamal (Joseph) Khatamay, P.Eng. Charles M. Kidd, P.Eng. David L. Kiguel, P.Eng. Daniel King, EIT Leonard (Len) C. King, P.Eng. Matt Kirby, EIT Tim Kirkby, P.Eng. Ian Kirkland, P.Eng. Artemy Kirnichansky, P.Eng. Robert D. Kivi, P.Eng. John Kizas, P.Eng. Clarence J. Klassen, P.Eng. Andrew Klochek, P.Eng. Kam Fai (Solomon) Ko, P.Eng. Michael Koeber, P.Eng. Robert A. Kominar, LL.B. Alan Korell P.Eng. Robyn Korenic, P.Eng. Ken Korman, P.Eng. Ida Kos, P.Eng. Vassilios (Bill) Kossta Vitali D. Kovaltchouk, P.Eng. Thomas Kraici, P.Eng. Georg Kralik, P.Eng. Berta B. Krichker, P.Eng. Ewald J. Kuczera, P.Eng. Ramesh Kumar, EIT Rishi Kumar, P.Eng. Vinod Kumar Tom Kurtz, P.Eng Yuri A. Kuzyk, P.Eng. Aung Koko Kyaw, EIT

Jennifer Ladanchuk, P.Eng. Amity Lam, P.Eng. Katie Lam, P.Eng. Leigh Andrew Lampert, LL.B. Drew Lampman, P.Eng. Lin (Victor) Lan, P.Eng. Robert Langlois, P.Eng. Ryan Langlois, EIT Richard Lapointe, EIT Vlad Lappo, P.Eng Philip (Phil) J.A. Lasek, P.Eng. K.P. Desmond Lau, P.Eng. Alana Lavoie Andrew Harry Lawton, P.Eng. John Le, EIT Ben LeBlanc, P.Eng. Annabelle Lee, P.Eng. Chee C. Lee, P.Eng. Erica Lee (Garcia), P.Eng. Jeffrey Lee, P.Eng. Norbert Lee, P.Eng. C. LeRoy Lees, P.Eng. Fiona Leong, EIT Dexter T.S. Lestage, P.Eng. Andriy Levytskyy, P.Eng. Guo Min (Galen) Li, P.Eng. Hao Li Robert Li, P.Eng. Daniel Liao, P.Eng. John W. Lill, P.Eng. Coellen Linkie, P.Eng. Ray Linseman, P.Eng. Tony Linton, P.Eng. Ramiro Liscano, P.Eng. Meilan Liu, P.Eng. George Livanos, P.Eng. Mary Long-Irwin Bob Loree, P.Eng. Joseph (Joe) Lostracco, P.Eng. Keith Loucks, P.Eng. James R.H. Lowe, P.Eng. Paul Lozada, P.Eng. Doug Luckett, P.Eng. Pawel Lukawski, P.Eng. Lawrence Lupton, P.Eng. Nanda Lwin, P.Eng. Dave Lyons, C.E.T.

Μ

Tyson Macaulay Lisa MacCumber, P.Eng. Travis MacDonell, P.Eng. Brenden MacKinnon, P.Eng. Bosko Madic, P.Eng. Yogaranee (Ranee) Mahalingam, P.Eng. Parisa Mahdian, P.Eng. Michael L.J. Maher, P.Eng. Gary Mahony, P.Eng. Jennifer Main, P.Eng. E. Philip (Phil) Maka, P.Eng. Amin Mali, P.Eng. Christopher K.J. Maltby, P.Eng. Hubert Mamba, EIT Marie Manchester Sucha Mann, P.Eng. Dan Manns, P.Eng. Mehri Mansouri, P.Eng.

Argyrios (Gerry) Margaritis, P.Eng. Marco Mariotti, P.Eng. John R. Mark, P.Eng. Nazmy B. Markos, P.Eng. Kerri Marshall, P.Eng. Ian D. Marsland, P.Eng. Donald L. Marston, P.Eng. Alexei Martchenko, P.Eng. Dora Martinho, EIT Michael Mastronardi, P.Eng. Stan Mathew, P.Eng. Sneha Mathrani, EIT Olli Matikainen, P.Eng. Hugo Maureira, P.Eng. Mark Maxwell, P.Eng. Cristina Mazza Don McDougald, P.Eng. Sean P. McCann, P.Eng. George C. McCluskey, P.Eng. Tracy L. McColl, P.Eng. James S. McConnach, P.Eng. Sean McConnell, P.Eng. D.J. McDonald, P.Eng. Ryan McDougall, EIT Stacev McGuire, P.Eng. Rory McIntyre, EIT Peter McKenna, P.Eng. Kenneth (Ken) C. McMartin, P.Eng. J. Patrick (Pat) McNally, P.Ena.

Dany Mejia, EIT Andrew Melchers, EIT Florin D. Merauta, P.Eng. Greg Merrill, P.Eng. Constantin Mighiu, P.Eng. Ken Millard, EIT Bruce Miller, P.Eng. Bruce Milliken, P.Eng. Katherine E. Milsom, P.Eng. Huirong Min, P.Eng. Matt Minnick, P.Eng. Dan Mireanu, P.Eng. Bahram Mirpourian, P.Eng. Cameran Mirza, P.Eng. Leslie (Les) Mitelman, P.Eng. Sushanta Mitra, P.Eng. 0 Elmer A. Mittelstaedt, P.Eng. Mihailo (Michael) Mladjenovic, P.Eng. George Mlynsky, P.Eng. Jiteshkumar D. Modi, P.Eng. Michael E. Moffatt, P.Eng.

Jagannathan Mohan, P.Eng.

Michael D. Monnette, P.Eng.

Magdi E. Mohareb, P.Eng.

David W. Moncur, P.Eng.

Nicholas (Nick) Monsour. P.Eng. Manuel Montejo, P.Eng. Lindsay Mooradian, EIT V. Alan Moore, P.Eng. Colin T. Moore, P.Eng. Vassilli Mordatch, P.Eng. M. Clare Morris, P.Eng. Vic Morris, P.Eng. Robert C. Morrison, P.Eng. Jason Morrow, P.Eng. Max Morrow, P.Eng. Praneeta R.C. Moti, P.Eng. Miriam S. Mozes, P.Eng. Zoran Mrdja, P.Eng. Janko (John) Mrkonjic, P.Eng. Muhammad Mudassar, P.Eng. Harald Mueller-Scholten Anis Muhammad, P.Eng. Alain F. Mukama, P.Eng. Vimbai Munyukwi, P.Eng. Thamir (Tom) Murad, P.Eng.

Ν Maged B. Naguib, P.Eng. Girgis (George) F. Nakhla. P.Eng. Sohail Naseer, P.Eng. Rashmikant (Rashmi) Nathwani, P.Eng. Ted Naugler, P.Eng. Suresh R. Neethirajan, P.Eng. Mulugeta Negussie, EIT Jeff Neilson, P.Eng. Eric Z. Nejat, P.Eng. Edward (Ed) Nelimarkka, P.Ena. Theodore Nemetz, LLB Oscar Nespoli, P.Eng. Franz T. Newland, P.Eng. Wayne Ng, P.Eng. Rodica Nitu, P.Eng. Thomas (Tom) Norton, P.Eng. Leila Notash, P.Eng. Francois Nzotungwanimana, P.Eng. Juwairia Obaid, EIT

Mehwish Obaid, P.Eng. Jacinta O'Brien, P.Eng. Dickson Odame-Osafo, P.Eng. Frank O'Donnell, P.Eng. Volker Oettershagen, P.Eng. Mike O'Flaherty, P.Eng. Jeffrey Oke, EIT Attila Olah, P.Eng. Alvin Olar, P.Eng. Tomiwa Olukiyesi, P.Eng. Catalin G. Onea, P.Eng. Gheorghe (George) Oprea, P.Eng. Haroon Oqab, EIT Mario A. Orbegozo, P.Eng. Renan Orquiza, P.Eng. Brennan Orr, P.Eng. Daniel R. Ospina, P.Eng.

Ρ

Michael Paciocco, EIT Victor (Vic) V. Pakalnis, P.Eng. Aloke Kumar Pal, P.Eng. Tibor M. Palinko, P.Eng. Efeng (Michael) Pan, P.Eng. Pankaj Panchal, P.Eng. Orijit Pandit, P.Eng. Harneet Panesar, P.Eng. Ravinder Panesar, P.Eng. Manraj Pannu, P.Eng. Michael Pathak, EIT H. Richard Patterson, P.Eng. Bhuwani Paudel, P.Eng. Anthony J. Paz, P.Eng. Doug Pease, P.Eng. Harvey Pellegrini, P.Eng. Miguel Pelletier, P.Eng. John Penaranda, P.Eng. Rick Perchuk, P.Eng. Kent Percival, P.Eng. M. Neville J. Perera, P.Eng. Ravi K. Peri, P.Eng. David Perrier, P.Eng. Wendy Perry, P.Eng. Jon Petrenas, EIT Vasilj Petrovic, P.Eng. Nicholas Pfeiffer, P.Eng. Heiner Phillipp, P.Eng. Mary Jane Phillips, P.Eng. Richard A. Piatti, P.Eng. Randy Pickle, P.Eng. Danielle Piercey, EIT Adrian Pierorazio, P.Eng. Des Pigott, P.Eng. Marc Pilon, EIT Richard Pinder, P.Eng. Mike Pinet, P.Eng. Robert Plant Joseph Podrebarac, P.Eng. Robert Poirier, P.Eng. Shannon Pole, EIT Lawrence (Larry) E. Pond, P.Eng. Donna Poon, EIT Edward Poon, P.Eng. Remon Pop-Iliev, P.Eng. Kris Popiolek, P.Eng. Andrew T. Poray, P.Eng.

David R. Porter, P.Eng. Anne S. Poschmann, P.Eng. Saverio Pota, P.Eng. J. Guy Potvin, P.Eng. Karin Pratte, P.Eng. Danny (Dan) R.D. Preley, P.Eng. Robert J. Primeau, P.Eng. Jen Prine A. Rebecca Pringlemeir, P.Eng. Robert B. Pula, P.Eng. Dennis B. Pupulin, P.Eng. Eugene J. Puritch, P.Eng.

Alix Quinlan, P.Eng. Steve Quinlan, P.Eng. Patrick J. Quinn, P.Eng.

R

Bob Radenovic, P.Eng. Ranka Radonjic-Vuksanovic, P.Eng. Majid Rahimi-Chatri, P.Eng. Touraj Rahnamoun, P.Eng. Julija Rakocevic, P.Eng. Venkatasubramanian Raman. P.Eng. Elena Ramierz Cortes, EIT Mario R. Ramirez-Roldan, P.Eng. Vito Raponi, EIT Comondore (Ravi) Ravindran, P.Eng. Farzad Rayegani, P.Eng. Donald C. Redmond, P.Eng. Saif Rehman, P.Eng. Shiraz Y. Rehmani, P.Eng. Sharon Reid, C.Tech. Amaila Rey-McIntyre, EIT Behnaz Rezaie, P.Eng. Behnam Rezvannia, P.Eng. Louis Richard, P.Eng. Glenn J. Richardson, P.Eng Phil Riegle, P.Eng. Stephen Rivett, P.Eng. Amin S. Rizkalla, P.Eng. Ghaus M. Rizvi, P.Eng. Luc Roberge, P.Eng. Serge Robert, P.Eng. Kathleen L. Robichaud, LLB Andrew J. Robinson, P.Eng. David C. Robinson, P.Eng. Edward J. Rohacek, P.Eng. Christopher (Chris) D. Roney, P.Eng. Shaun V. Rose, P.Eng. Steven V. Rose, P.Eng.

L. Brian Ross, P.Eng. Yuliya (Julia) Rozhko, P.Eng. Peter Rozitis, P.Eng. Peter Cornelius Rusch, P.Eng. M. Titus Rusu, P.Eng.

S

Alex Saagi, EIT Omid Sadeghi, EIT Changiz Sadr, P.Eng. Saeid Safadel, P.Eng. Farhad Saghezchi, P.Eng. Virendra K. Sahni, P.Eng. Jag Saini, EIT Magdy S. Samaan, P.Eng. Julien Samson, P.Eng. William S. Sanabria Nunez, P.Ena. Cjaotam Sandhu, P.Eng. Paymon Sani, P.Eng. Sushanth Sankaran, P.Eng. Suzanne Santvr, P.Eng Deva Sarathchandran, P.Eng. Marcelo Sarkis, P.Eng. Steve Saxton, P.Eng. Carlie Scalesse Pat F. Scanga, P.Eng. Scott Schelske, P.Eng. Peter J. Schmidt, P.Eng. Angela Scott, P.Eng. Peter F. Scott, P.Eng. Paul A. Seager, P.Eng. Ryan Seguin, P.Eng. George S. Semaan, P.Eng. Uditha Senaratne, P.Eng. Sean Sennanyana, P.Eng. Angel Serah Kenneth J. Serdula, P.Eng. Vladimir (Walter) Serov, P.Eng. Donna E.E. Serrati, P.Eng. Rohan Service, P.Eng. Kong Seto, P.Eng. Giovanni (John) B. Severino, P.Eng. Tahir Shafiq, P.Eng. Imtiaz Shah, P.Eng. Shailesh Shah, P.Eng. Urmish Shah, P.Eng. Abdul Waheed Shaikh, P.Eng. Sangeeta Shakrawar, EIT Pappur Shankar, P.Eng. Sat N. Sharma, P.Eng. Kevin Shaw, P.Eng. Jeff Shaw, EIT Heather D. Sheardown, P.Eng. Medhat Shehata, P.Eng Shamim A. Sheikh, P.Eng.

Nicholas Shelton, P.Eng. Bilal Sherazi, EIT Paul Short P.Eng. Rakesh K. Shreewastav, P.Eng.

Manojkumar Shukla, EIT Ankesh Siddhantakar, EIT Duncan Sidey, P.Eng. Francis (Frank) E. Sigouin-Allan, P.Eng. Juri Silmberg, P.Eng. Cora Silveira, EIT John Simmonds, P.Eng. Jane Simmons, EIT Ferdo B. Simov, P.Eng. Mike Simpson, P.Eng. Wayne Simpson, P.Eng. Ellen Sinclair. EIT Arthur Sinclair, P.Eng. Sonia Singh, LLB Chester Skomra, P.Eng. John Slavin, P.Eng. John M. Smith, P.Eng. Philip (Phil) J. Smith Megan Smith David M. Spacek, P.Eng. Jaclyn Spackman, EIT Evelyn J. Spence, LLB Ryan Spencer, P.Eng. Marilyn Spink, P.Eng. Gerry St. Denis, P.Eng. John St. Marseille, P.Eng. Jacqueline A. Stagner, P.Eng. Steven Stang, P.Eng. Andrew J. Steen, P.Eng. Marisa E. Sterling, P.Eng. Valerie Sterling Stela Stevandic, P.Eng. J. Allen (Al) Stewart, P.Eng. Darla Stoddart, P.Eng. Maria Story, P.Eng. Vera A. Straka, P.Eng. Brandon Stuart, P.Eng. Ramesh M. Subramanian, P.Eng. Col. Simon Sukstorf, P.Eng. Greg Sullivan, EIT Vic Sundar, P.Eng. Brian W. Surgenor, P.Eng. Madu Suthanan, P.Eng. Kathryn G. Sutherland, P.Eng.

Kathryn G. Sutherland, P.En John Zane Swaigen, LLB Heather D.M. Swan, P.Eng. Albert F. Sweetnam, P.Eng. Barna Szabados, P.Eng.

Saleh A. Tadros, P.Eng. Lui Tai, P.Eng.

James Tait, EIT Noubar Takessian, P.Er Anthony C. Tam, P.Enc Kenneth Tam, EIT Radwan Tamr, P.Eng. Carmelo Tancioco, P.E. Henry E. Tang, P.Eng. Sasa (Sasha) Tasic, P.E Rana Tehrani Lorena Tere, EIT William G. Teron, P.En Sue Tessier, P.Eng. Mihir A. Thakkar, P.En Randhir Thayil, EIT Ronny Theiss, P.Eng. Ken Thomas, P.Eng. Matt Thomas, P.Eng Simon Thomas, EIT Fraser Thomason Christopher D. Thomps P.Eng. Gary M.A. Thompson, Stephanie Thomson, E Uthayakaren Thurairaja P.Eng. Elmer Ting, P.Eng. David R. Tipler, P.Eng. Mark Torrie, P.Eng. Cesar Trillo, P.Eng. Seimer Tsang, P.Eng Gabriel Tse, P.Eng. Stephen H. Tsui, P.Eng Warren Turnbull, P.End John E. Turner, P.Eng. Seamus Tynan, P.Eng. U Muhammad Kaleem Ul David J. Uren, P.Eng. v Diana Valdez Arce, P.E Karen Valentine, LLB J. Steven Van der Woe P.Eng. Andrew Van Dyk, P.En

Andrew Van Dyk, P.Eng. Derek Van Ee, P.Eng. Syd van Geel, P.Eng. Joseph Van Meter, P.En Andrew Van Vroenhow S. Sarma Vangala, P.Er William J. Van-Heyst, P Edgar B. Vargas, P.Eng Betsy M. Varghese, P.E Shahriar Varkiani, P.En Ajai K. Varma, P.Eng. Megha Mariam Varugh Madan Vasantha, P.En Ivan Vasiljevic, P.Eng.

	Renato L. Veerasammy,
ng.	P.Eng.
g.	Bill Veitch, P.Eng.
	Jon Velasco, P.Eng.
	Rick Vender, P.Eng.
ng.	Francesco (Frank) L. Verardi, P.Eng.
na.	Joseph Vidican, P.Eng.
5	John O.G. Vieth, P.Eng.
	Nick Vlachopoulos, P.Eng.
α.	Milan Vvas. P.Eng.
9.	innan i jas, i ziigi
a	w
9.	Odav Wade'e
	Bandy Walker P Eng
	William R. Walker, P.Eng.
	Stophon Wall P Eng
	Graham Walner, P.Eng
	Jianguo Wang, F.Eng.
son,	iviingchun (David) vvang,
D	P.EIIG. Diniing (Elvis) Wang, D.Eng
P.Eng.	Philipping (Elvis) wang, P.Eng.
an,	Lija Ward, Ell
	Kenneth J. Warden, P.Eng.
	R. Anthony Warner, P.Eng.
	Trevor Wartman
	Pawel Waszczur, EIT
	Matt Weaver, P.Eng.
	Gerald (Gerry) S. Webb,
	P.Eng.
	Julie Wedzinga, P.Eng.
J.	Richard H. Weldon, P.Eng.
	Michael C. Wesa, P.Eng.
	Barry Westhead P.Eng.
	Larry Westlake, P.Eng.
	Rob Whipple, P.Eng.
lah, EIT	Michael White, P.Eng.
	Zack White EIT
	Leanne Whiteley-Lagace,
	P.Eng.
ing.	Dave Wilder, P.Eng.
	James J. Wilkinson, P.Eng.
rd,	Priscilla Williams, EIT
	Robert B. Willson, P.Eng.
g.	John Wilson, P.Eng.
	Andrea Winter, P.Eng.
	Helen L. Wojcinski, P.Eng.
ng.	Wai-Man (Fanny) Wong,
en	P.Eng.
ng.	Matthew Wong, P.Eng.
P.Eng.	Dennis Woo, P.Eng.
].	David Wood, P.Eng.
Eng.	Gareth Wood, P.Eng.
ig.	Thomas H. Woolhouse, P.Eng.
-	Ryan Worral, P.Eng.
nese	Donald J. Worth, P.Eng.
ıg.	Zhihuan (Joanna) Wu, P.Eng.
-	

X

Yu Song (Matthew) Xie, P.Eng. Qi (Sharon) Xue, P.Eng.

Υ

Kaoru Yajima, P.Eng. De Zi Yang, P.Eng. Anton Yatsenko, EIT Arash Yazdani, EIT Rana Yekta, EIT Tze-Wei (John) Yeow, P.Eng. Patrick Yeung, P.Eng. Shigong (George) Yin, P.Eng. Panch Yogeswaran, P.Eng. Richard S. Yoon, P.Eng. Craig A. Young, P.Eng. Daniel (Danny) J. Young, P.Eng. Dorothy Yu, EIT

Ζ

Dave Zackon, P.Eng. Abu Zahid, P.Eng. Peter Zandbergen, P.Eng. Otto Zander, P.Eng. Boze Zekan, P.Eng. Sufang (Sarah) Zhang, P.Eng. Della Zhang Peng Zhang, P.Eng. Paul Zhao, EIT Zhong Liu, P.Eng. Jingyu Zuo, EIT Richard Zytner, P.Eng. Malgorzata S. Zywno, P.Eng.

PEO CORE VALUES

Accountability • Respect • Integrity • Professionalism • Teamwork

OUR VISION

The trusted leader in professional self-regulation

OUR MISSION

Regulate and advance the practice of engineering to protect the public interest

Through the *Professional Engineers Act*, PEO governs licence and certificate holders and regulates professional engineering in Ontario to serve and protect the public.



Professional Engineers Ontario

40 Sheppard Avenue West, Suite 101 Toronto, ON M2N 6K9

Tel: 416 224-1100 or 800 339-3716

Enforcement Hotline: 416 840-1444 or 800 339-3716 Ext. 1444

Website: www.peo.on.ca