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Message from the Chair



Parisa Mahdian, P.Eng., M.Eng.
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Professional Engineers Ontario
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Thank you to all of the members who re-elected me as their chair for 2019. I look forward to another great year working together with our executive board to deliver a calendar full of different events and tours. We have chosen a strong board again this year, which is made up of new and existing members. We will continue to improve service to our membership through different seminars and tours.

In March, we coordinated a National Engineering Month event at Holy Trinity High School in Oakville, where over 250 attended to learn about engineering through design competitions and meeting engineers. We also continue to collaborate with our local communities regularly. Bay Area Science and Engineering Fair (BASEF), Town of Oakville Children’s Festival, and robotic programs are to name a few of our regular engineering outreach activities. These help us to expand our name in the Oakville and Milton communities.

We are also planning great speaking events for our members. We started the year with presentations on the steel industry, climate change, and small modular reactors from industry experts. We had our first plant tour – visiting the Burlington Water Treatment Plant. We continue to develop relationships with our local politicians as part of our Government Liaison Program (GLP). This year we are once again running our Licensure Assistance Program (LAP) for the sixth consecutive year, which has already commenced as of this publication. Our annual BBQ is scheduled to be held at Kelso Conservation Park on Sunday June 23, 2019 where you will have a chance to meet your new executive board and some of your local politicians. We look forward to seeing many of our members and their families at this family event.

Just a reminder that chapter communications are via email and through updates on our chapter website. It is vital that you maintain your contact information in PEO records in order to get notified of our upcoming events and activities. We are always looking for interested individuals who like to initiate individual events or join our chapter’s volunteer at large. Join us and be part of PEO volunteers!

Please visit our website at www.peo-oakvillechapter.ca, stay tuned for our upcoming e-blasts and I look forward to seeing you soon!

Annual General Meeting & Licence Ceremony January 23, 2019



The PEO Oakville Chapter Annual General Meeting (AGM) was held on January 23rd, 2019 at Rattlesnake Golf Club. The AGM was attended by over 60 people, including guests.

It was due to the efforts of our Government Liaison Program Committee that we were able to have municipal and provincial government guests in attendance. They gave us their perspective of the activities at different levels of government as well as improvements being made in our communities from an engineering perspective.

A dozen new engineers also received their P.Eng licences during the evening. The new professional engineers were presented their official certificates by Halton Regional Councilors Tom Adams and Colin Best as well the chapter executive.

During the AGM, members had an opportunity to vote for a new 2019 executive board, which consists of volunteers who have put their name forward and nominated prior to the AGM. Congratulations again to all of the new licencees and the new executive board!



National Engineering Month (NEM)

March 2, 2019

Oakville Chapter again partnered with the For Inspiration and Recognition of Science and Technology (FIRST) robotic Team 3161 (Tronic Titans) from Holy Trinity Catholic Secondary School to host our annual NEM event on March 2, 2019 in Oakville. We welcomed 300+ attendees (including 170 students and their parents) to this event and received positive feedback.

The event was held at Holy Trinity Catholic Secondary School on Saturday, March 2nd 2019 from 10:00 am to 2:00 pm. The celebration started off with our engineer volunteers showcasing their work interactively and giving children a sense of what their profession is and what their everyday tasks are. We then had a short briefing with speeches and introductory videos about engineering. After the briefing, we enjoyed the various presentations of robotic student groups which were truly inspiring. The second part of the celebration was the Design Challenge in which we formed groups and assigned a biomedical engineering design challenge to the groups. After lunch, we announced the winning teams and some random draws which was the best part of the day! The event was as predicted, a success!

This year, we had Pam Damoff, Parliamentary Secretary to the Minister of Health, MP-Oakville North-Burlington and Oakville Regional and Town (Ward 6) Councillor Tom Adams bring greetings to open the event. Effie Triantafilopoulos, Parliamentary Assistant to the Minister of Health and Long-Term Care (Long-Term Care), MPP-Oakville North-Burlington gave out prizes to the design challenge winners and participants later in the day.



Opening Keynote speaker. Left to Right: Sohail Nasser, P.Eng., Chapter GLP Chair, Jeffrey Lee, P.Eng., Chapter Treasurer & PEO GLC Member, Pam Damoff, MP-Oakville North-Burlington, Oakville Town Councillor Tom Adams, Oakville Regional and Town (Ward 6), Sarah Majlesi, P.Eng., Education Committee Chair, Parisa Mahdian, P.Eng., Oakville Chapter Chair, Roger Balech, Team 3161 Lead Mentor.



MPP Effie Triantafilopoulos with Junior level Design Challenge Winners. Left to Right: Norbert Lee, P.Eng., Oakville Chapter Vice-Chair, Parisa Mahdian, P.Eng., Oakville Chapter Chair and Effie Triantafilopoulos, MPP-Oakville North-Burlington



PEO Oakville Chapter and student volunteering team

We would also like to thank our main event sponsor Ontario Power Generation for their generous sponsorship and our many volunteers from our chapter, Holy Trinity teachers and students to make this event possible and successful.

Highlights from the event can be seen here: <https://youtu.be/EkQAuRuxyZ4> . Many thanks to Team 3161 who put this beautiful video together.



FLL Demo



FRC Demo

Digital Transformation of the Steel Industry

March 19, 2019

Mike Dudzic, general manager of process automation at ArcelorMittal Dofasco provided a technical presentation on *Digital Transformation and the 'Smart Factory of the Future'* from an end user's perspective. The presentation covered Main Building Blocks of Industry 4.0 and what the 'Smart Factory of the Future' might resemble. He also provided an outline of how a company might get started on the road to Digital Transformation. The presentation concluded with how to achieve long-term sustainability. The presentation was well-received by approximately 60 PEO members in attendance.



BASEF 2019

March 29, 2019

On Friday March 29th, 2019, the PEO Oakville Chapter participated as special awards judges for the Bay Area Science and Engineering Fair (BASEF). Every year students from grade seven through twelve from Hamilton, Halton Region, Haldimand County, Norfolk County, County of Brant and Six Nations come together to present science and engineering projects. Students all have an opportunity to win numerous awards. This year BASEF raised over \$300,000 in awards.

The PEO Oakville Chapter provided three awards for projects related to engineering design and innovation to solve a problem. Congratulations to the winners of the PEO Oakville Chapter Special Awards:

Mitchell Clapperton (Gr. 7/8)
 – *Aero-Tronics: A High Pressure Aeroponics System for Sustainable Indoor Agriculture*



Mitchell is in grade 8 at Guy B. Brown Elementary School. He won a gold medal and three special awards including the PEO Oakville Chapter award, including a trip to the Canada Wide Science Fair in Fredericton, NB in May. This is Mitchell's second time at BASEF. We wish Mitchell many more success in his future education achievements.

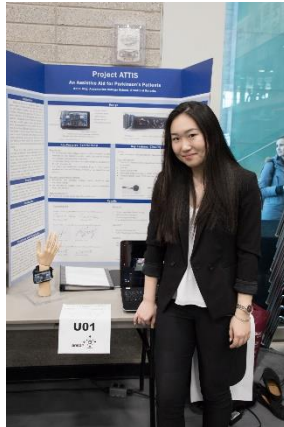
Gyu Tae Bae (Gr. 9/10) – *Can we combine Flying Wing and Machine Learning Technology for quicker emergencies response*



Gyu is a grade 10 student at White Oaks Secondary School. He won a silver medal and 6 special awards, including the PEO Oakville Chapter award. Congratulations Gyu!

Anne Jing (Gr. 11/12) – Project ATTIS

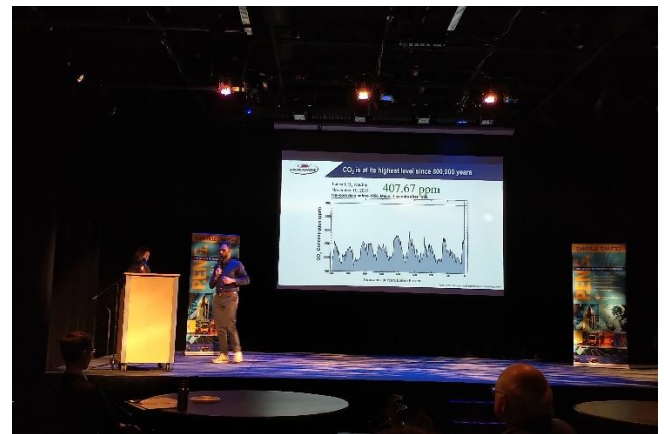
Anne Jing is one of four student advisors on BASEF organizing board this year. She is in grade 12 at Assumption College School. This year, she won a prestigious trip to International Science and Engineering Fair in Phoenix, AZ. Anne won a total of \$1750 in cash this year at BASEF, the most of any student, and won the ArcelorMittal Dofasco Pinnacle 2nd Best in Fair award, along with eight other awards including a gold medal and the PEO Oakville Chapter award. We wish Anne the best of success!



500,000 people in the Halton Region. The Burlington Plant is a conventional filtration plant with intermediate ozonation providing primary disinfection. This is the largest water treatment facility in the Halton Region with a rated capacity of 263 million liters per day.

Climate Change Resilience April 15, 2019

Dr. Matt Macdonald and Daisy Wu from Ontario Power Generation delivered a presentation on *Climate Change Adaptation and Mitigation Strategies* to an audience of about 60 people on April 15, 2019. They discussed the fundamentals of climate change and the effect of carbon dioxide on climate over the past 150 years.



Water Treatment Plant Tour April 12, 2019

PEO Oakville Chapter arranged a tour of the Burlington water treatment plant for members on April 12th, 2019.



The Burlington Water Purification Plant is a Class IV water treatment plant which, in conjunction with the Oakville Water Purification Plant and the Burloak Water Purification Plant, serve an estimated population of

Small Modular Reactors May 9, 2019

Dr. Victor Snell, who was formerly director of licensing at AECL-CANDU, spoke to approximately 100 PEO and Canadian Nuclear Society (CNS) members about the development history of small modular reactors and the current state of design. The focus of his talk was on the fundamental safety function of nuclear reactors - control, cool and contain any hazards.

Inherent, passive and active safety with respect to different reactor designs were discussed. The merits of small modular reactors include spreading out capital expenditures over smaller units, matching demand more closely, locating in remote locations and different approaches to safety.



Government Liaison Program Update

The Government Liaison Program (GLP) was established to ensure that the government, PEO members and the public continue to understand and recognize PEO's regulatory mandate, in particular its role in regulating the profession in the public interest. GLP goals include:

- Helping foster a better understanding of engineering work among Members of Provincial Parliament (MPPs);
- Increasing MPPs' understanding of PEO's regulatory role to protect the public interest;
- Offering unique knowledge and expertise to government before considering new policy related to engineering work and regulation of engineering; and
- Developing relationships among MPPs, local engineers and PEO chapters.



In February and April, our chapter had meetings with Parm Gill, MPP-Milton, and Effie Triantafilopoulos, MPP-Oakville North-Burlington at their respective constituency offices. We provided information about the P.Eng. licensure process. We also emphasized that our licence holders work in different sectors of the community and continue, through licensure, to protect the public interest. Both MPPs assured our chapter that we have their continued support and attendance at future chapter events.

In addition, we continue to meet with our local politicians at our events. We had different levels of government representatives at our National Engineering Month celebration at Holy Trinity High School, including Pam Damoff, MP-Oakville North-Burlington, Effie Triantafilopoulos, MPP-Oakville North-Burlington, Oakville Town Councillor Tom Adams, Oakville Regional and Town (Ward 6). We met with Stephen Crawford, MPP-Oakville, at the Trafalgar Park Community Centre during a community free skate event sponsored by the MPP on March 30. We also attended the 2019 Budget Event with the Honorable Vic Fedeli, Minister of Finance hosted by the Oakville Chamber of Commerce in Oakville on May 6, 2019.

If anyone is interested in knowing more about the Government Liaison Program or would like to join our chapter's GLP committee or like to participate as a host for next year's Take Your MPP to Work, please contact GLP Committee at glp@peo-oakvillechapter.ca for more information.

May 30, 2019

Human Capital Risk Management



Ed Small from Hire Results Ltd. will be delivering a presentation on Human Capital Risk Management for PEO members on May 30, 2019 at the Queen Elizabeth Park Community & Cultural Centre. Join the PEO Oakville Chapter to hear about how to properly assess human capital.

June 23, 2019

Annual BBQ



The PEO Oakville Chapter will hold its Annual BBQ Event for members and their families on June 23rd, 2019 at Kelso Conservation Area, Milton to offer thanks and gratitude to the chapter members for their support during the year.

August 17, 2019

Oakville Children's Festival



The PEO Oakville Chapter will be participating in the Oakville Children's Festival on August 17th, 2019. The chapter will be looking for volunteers to assist with this full-day event. Individuals interested in volunteering should contact Sarah Majlesi at education@peo-oakvillechapter.ca.

PEO Oakville Chapter 2019 Engineering Student Entrance Scholarship

Professional Engineers Ontario Oakville Chapter is pleased to announce that we are currently accepting applications for scholarship(s) valued at **\$500 – \$1000**.

The scholarships will be awarded on the basis of academics, community contributions, extracurricular activities and the student's intention to pursue a career in engineering profession. To qualify for this award, the student must be graduating from a secondary school in Oakville or Milton in 2019, and be enrolled in a Canadian Engineering Accreditation Board (CEAB) accredited Ontario university engineering program for 2019-2020 school year.

REQUIREMENTS:

Applicants must:

- be graduating from a secondary school in Oakville or Milton in 2019
- have proof of acceptance or enrollment in a full-time CEAB-accredited Ontario University Engineering program for 2019-2020
- complete Scholarship Application Form, attached hereto
- provide a transcript covering last two years of schooling
- provide copy of resume including:
 - ✓ school involvement, extracurricular, volunteer and community activities
 - ✓ participation in science fairs, workshops, competitions and Oakville Chapter activities
 - ✓ awards and other recognition

IMPORTANT INFORMATION:

- Complete applications and supporting documents, excluding reference letter, must be submitted as one document in word or pdf format. **Applications with multiple documents will not be accepted.**
- Application filenames must be formatted as First Name_LastName_PEOScholarshipYear, eg. Jane_Smith_PEOScholarship2019. **Applications with incorrect filenames will not be accepted.**
- Reference letter must be sent in separately by the referee to education@peo-oakvillechapter.ca
- Award recipients will be notified by September 2019
- All applicants are encouraged to visit PEO Oakville Chapter events. For more information visit <http://www.peo-oakvillechapter.ca/>
- Applicants are also encouraged to sign up for PEO SMP (Student Membership Program), which is available at no cost to the student. For more information visit <http://www.engineeringstudents.peo.on.ca/>

APPLICATION DEADLINE:

Complete application packages must be sent via email To: education@peo-oakvillechapter.ca, CC: education2@peo-oakvillechapter.ca **no later than 11:59 pm on Sunday, June 30th, 2019 for consideration.**

For more information and for access to the application form, please refer to: www.peo-oakvillechapter.ca/scholarship2019 .



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