## PROMOTING A PROGRESSIVE & DIVERSE ENGINEERING PROFESSION

The 16th Annual Claudette MacKay-Lassonde Fall Forum

## IT'S TIME WE AGT





# Throughout history, women have made notable contributions to the engineering profession.

Claudette MacKay-Lassonde, Elsie MacGill, Ursula Maritius Franklin, Veena Rowat, and Roberta Bondar are only some examples of the trailblazers who persevered and overcame barriers in a male-dominated world to help shape Canada into the country it is today. Despite this, women continue to be highly underrepresented in science, technology, engineering, and math (STEM).

At the post-secondary level, women account for only 20 per cent of students enrolled in under-graduate engineering programs in Canada, and only 17 per cent of practicing licensed engineers are women.



WOMEN IN ENGINEERING -THE CANADIAN LANDSCAPE

# Another concerning figure is the pay gap that exists between men and women in engineering.

OSPE's analysis of 2016 Census data suggests that there are large discrepancies in pay at senior levels of engineering responsibility, ranging from a 7 to 10 per cent difference. That pay disparity for women at the most senior level of engineering responsibility results in a \$15,000 gap, amounting to more than \$300,000 of income loss for a woman over 20 years.

Moreover, OSPE's *Breaking Barriers for Women in STEM* project reports that women continue to face workplace cultures that undervalue and discriminate them based on their gender. Action to address these issues is essential to attracting and retaining women in STEM.



#### WOMEN IN ENGINEERING -THE CANADIAN LANDSCAPE

Understanding and addressing these challenges is an ambitious undertaking that OSPE has been heavily involved in:

- Since 2003, OSPE's Women in Engineering Advocacy Champions
   Task Force (WE ACT) has been encouraging women to study
   engineering, pursue engineering as a career, obtain their licence,
   and seek leadership roles
- As a proud 30 by 30 champion, an initiative by Engineers Canada to increase the number of female licensed engineers to 30% by 2030. To support this initiative, OSPE offers several resources to support women in engineering. Funded by Status of Women Canada, OSPE launched an 18-month Pilot Mentorship Program in 2015. Research shows that the career phase between graduation and licensure is an opportune time to support women's engagement in the profession and help them transition to successful careers in engineering.



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- OSPE recently signed Electricity Human Resources Canada's Leadership Accord on Gender Diversity, which commits to improving opportunities for women in the Canadian workplace through recruitment, retention, career progression, and training and development
- OSPE's Breaking Barriers for Women in STEM project, funded by Status of Women Canada, focuses on shifting workplace cultures and practices, so that they are more inclusive of women



The 16<sup>th</sup> Annual Claudette-Mackay Lassonde Fall Forum brought forth a clear call to action: "It's Time We Act".

The event presented an opportunity for over 800 enthusiastic engineers, engineering graduates, students, public figures, thought leaders and trailblazers to discuss opportunities and strategies for how to support and encourage women to join and remain in the engineering profession. Overall, the conference left attendees with new insights, but also new challenges. The issues are clear, the solutions are achievable, but what is really needed is action.







## Objectives:

To provide a platform for modern-day trailblazers to share strategies women can use to navigate barriers and achieve success.

To motivate key decision-makers, within both public and private sector organizations to implement programs and policies that will attract and retain women to STEM fields.

## Objectives:

To facilitate an open and constructive dialogue on multi-sectoral collaboration that will ultimately lead to better solutions and prevent unproductive overlap.

To educate students and young professionals on the exciting opportunities available to them in STEM fields.

## lt's not just about numbers:

Recruiting more women is essential to improving levels of representation. However, attracting more women to STEM is only half the job. Ensuring women are valued, respected, and provided with equal opportunities to their male counterparts is equally important.

## Women are unique:

To create inclusive and supportive workplaces, it is essential that employers recognize the unique needs of their female employees. Employers must ask themselves hard questions about whether their current policies and programs are conducive to the success of women. These should include considerations of flexible work arrangements such as part-time employment, job-sharing options, virtual work, maternity and paternity leave.

## Exposure is necessary:

Women should be exposed to the numerous opportunities available to them within the STEM sector. STEM employers and advocates must improve the ways in which they market professions to demonstrate that women can access and flourish in engineering.

#### Men matter:

Data shows that many of the senior-level positions within both the public and private sector are still held by men. Educating men on how to shift their behaviour and change their language is important. Men should be encouraged to champion and sponsor women within the engineering profession in order to create positive and lasting change.

# Working together leads to better outcomes:

Several organizations are working to move the dial on gender parity in STEM. Sharing best practices will help all organizations to strengthen their own programs and policies but will also prevent the duplication of existing efforts. Partnering with others will enable the creation of more holistic approaches to addressing the issue of gender parity.

#### Data is needed:

Organizations need to look at gender-based data within their operations in order to create actionable and measurable plans to address gaps and optimize opportunities.

2 Plenary Sessions 4 Panels

Over 800 Attendees

24+ Speakers

70+ Partners

30+ Booths

**5** Networking Opportunities

OSPE would like to thank everyone who joined online discussions using the #ltsTimeWeAct hashtag - from the forum and afar. Before, during and following the conference, Facebook, Instagram, LinkedIn and Twitter were filled with inspirational messages, new connections, organic conversations, strategic takeaways and motivational goals that elevated important conversations on equity, diversity and inclusion in STEM.



49.1K Impressions (1)



1,324 Engagements



109 Link Clicks



"The roles on gender equality: it is equally as important for men to stand up as it is for women not to sit down... Diversity is about inviting people – inviting women – to the party. Inclusion is about inviting them to

dance. I think that when we speak about inclusion, we really have to articulate what we mean and translate that into action. Giving lip service to diversity is only lip service unless you mean that. And that is a management responsibility."

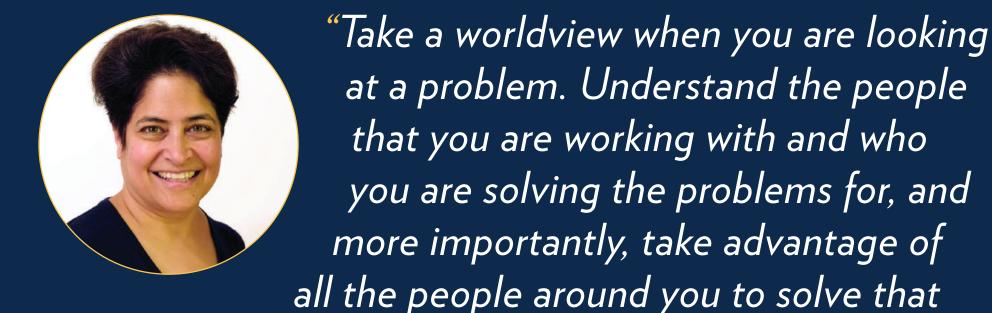
- Nicole Girard, Acting Associate Deputy Minister, Safety and Security, Transport Canada



"As the Deputy Minister of Public Service and Procurement Canada, I'm proud to be part of a public sector that strives for gender equality... For me—whether in government,

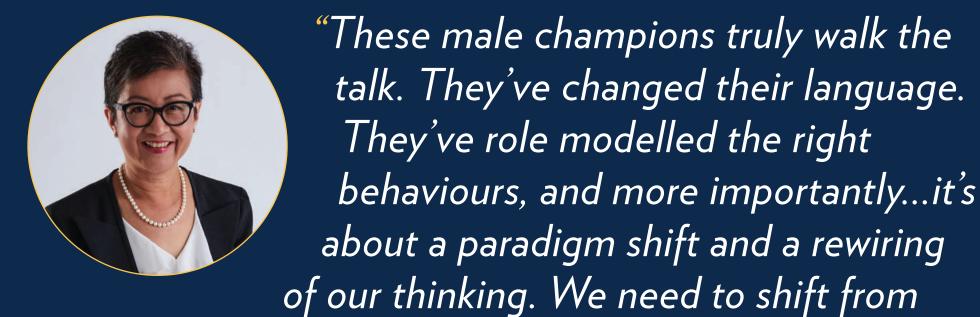
academia, or in the private sector—those of us in leadership roles need to drive the change. We need to demonstrate equality at the highest levels. Girls and young women need role models. They need to be able to see themselves in science and engineering jobs and they need mentors to provide guidance."

<sup>-</sup> Deputy Minister Mme Lemay, P.Eng., Public Services and Procurement Canada



problem. Because things that seem impossible if you just look at it from one group of people working in one place, are perfectly doable somewhere else in the world... if you get global teams together, you will have better ideas, you will have more robust ideas – ideas that will sell."

<sup>-</sup> Nutan Behki, Head of Global Services Centre, Nokia



strictly a 'mentoring' role to' sponsoring' role...when a male leader mentions a female colleague and her accomplishments or contributions, he's actually sponsoring her..."

- May Ngui, CPEng., Manager Canberra Australia, GHD



"For me, early in my career, networking seemed almost like a hinderance and was competing with my career. I had, and still have a very strong work ethic, and networking was not contributing to my projects. So I

quickly realized that was a mistake that I was making. So my advice is network. And be yourself when you network...Make networking fun. Be open to engaging with people. It shouldn't feel like a chore."

- Lyla Garzouzi, P.Eng, Director, Distribution Asset Management, Hydro One



"Establishing and maintaining your credibility is imperative. I assess credibility to include competence, confidence and courage.

Resilience at all levels – emotional, physical and physiological is a necessity – you need to be able to bounce back from a 'taking a hit' – that comes from the courage of doing. Leadership

at every level and in every role will change. My role has evolved and now sees me bridging the engineering space with the executive leadership decision space. Our collective mission as strong, powerful and brilliant women is to get out of the trenches and into the C-Suite, because from that perch, you can act – you can target your influences, champion with conviction and lead the charge."

- Colonel R.Hulan, CD, Chief of Staff, Director General Information, Management Operations

In 2019, OSPE will continue to be leader on the path to achieving gender parity in STEM and looks forward to continuing the conversation and working to achieve these objectives together.





#### OSPE'S 2019 CLAUDETTE MACKAY-LASSONDE FORUM

Spring/Summer in Kitchener-Waterloo

We will motivate and inspire women to join the engineering profession and show them that the possibilities are endless.

We will inspire engineering students and recent graduates to acquire the skills they need to become the engineers of tomorrow.

We will contribute to evidence-based policy-making by conducting research and developing recommendations for all levels of government.

We will host events to create a chorus of voices, break down silos, and generate ideas of how to tackle new or existing challenges.

We will inspire action and we will expect results.

Will you join us?



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Public Services and Procurement Canada / Services publics et Approvisionnement Canada





























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Gouvernement du Canada

Canada Border Services Agency / Agence des services frontaliers du Canada Innovation, Science and Economic Development Canada / Innovation, Sciences et Développement économique Canada

















Government of Canada

Gouvernement du Canada

Agriculture and Agri-Food Canada / Agriculture et Agroalimentaire Canada

Canadian Coast Guard / Garde côtière canadienne

Canadian Nuclear Safety Commission / Commission canadienne de sûreté nucléaire

Defence Construction Canada / Construction de Défense Canada

Environment and Climate Change Canada / Environnement et Changement climatique Canada

National Defence / Défense nationale

Public Services and Procurement Canada / Services publics et Approvisionnement Canada

Transport Canada / Transports Canada

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