

THE 15TH ANNUAL CLAUDETTE MACKAY-LASSONDE FALL FORUM

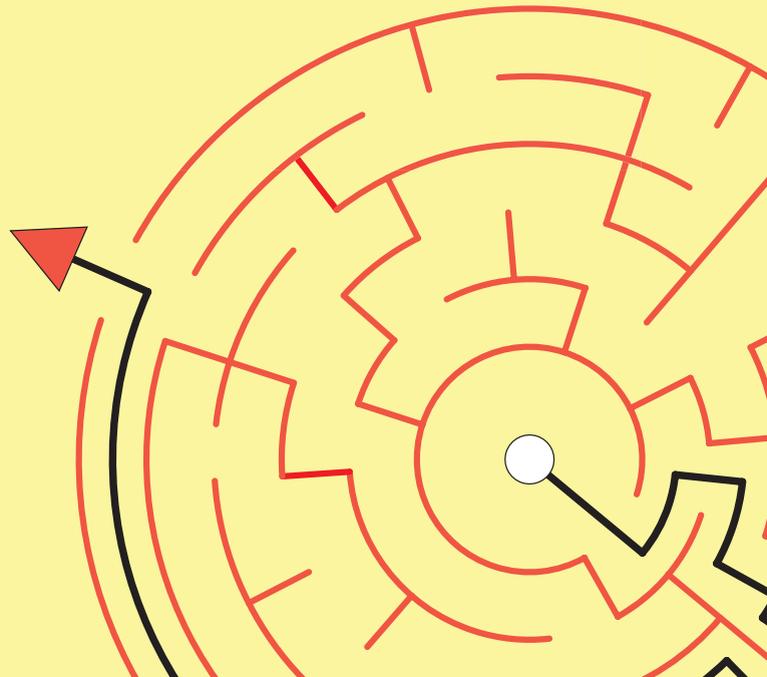
NAVIGATING THE GLASS OBSTACLE COURSE



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OF PROFESSIONAL
ENGINEERS

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#WEACForum



Dear Guests,

On behalf of the Ontario Society of Professional Engineers' (OSPE) Women in Engineering Advocacy Committee (WEAC), welcome to the 15th Annual Claudette MacKay-Lassonde Fall Forum. Entitled Navigating the Glass Obstacle Course, today's conference will examine the "glass obstacle course" that has been associated with Science, Technology, Engineering, and Mathematics (STEM) fields.

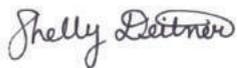
Coined by American researchers Kris De Welde and Sandra L. Laursen in 2011, the metaphor emerged from a study the pair conducted between 2003 and 2006 of a cohort of 19 women and 9 men who were about to earn their doctorates in STEM disciplines. The researchers concluded that the obstacles the women in their study experienced were often implicit, subtle, and unanticipated. As a result, they described these barriers as glass.

Today's event has attracted government, industry, academia, engineers, engineering students and interns, as well as individuals outside the engineering profession. In addition to exploring the barriers women may encounter – from starting their post-secondary engineering program, entering the workforce, working towards licensure, and progressing through the corporate ladder – speakers and panelists will share initiatives and best practices to support and retain women. We also hope today's discussions will provide attendees with strategies they can employ to maneuver around these unexpected barriers.

Be sure to join the conversation online and share your perspectives by using #WEACForum. We also encourage you to connect with fellow attendees and visit our sponsor tables. Thank you to our sponsors – **ARUP, Diamond Schmitt Architects, GHD, SNC Lavalin, the University of Toronto Faculty of Applied Science and Engineering, McEwen Mining Inc., Siemens Canada, and Seneca College and University of Ontario Institute of Technology** – for helping us make this event a great success.

Finally, we would like to thank our distinguished speakers, moderators, the Honourable Indira Naidoo-Harris, and the Honourable Mark Gerretsen for generously contributing their time and expertise.

Thank you for coming and enjoy the day.



Shelly Deitner, P.Eng.
Director, Ontario Society of Professional Engineers
Chair, Women in Engineering Advocacy Committee
30 by 30 Co-Champion for Ontario



Sandro Perruzza, B.Sc.
Chief Executive Officer, Ontario Society of Professional Engineers
30 by 30 Co-Champion for Ontario



Shelly Deitner, P.Eng.

- Director, Ontario Society of Professional Engineers
- Chair, Women in Engineering Advocacy Committee (WEAC)
- 30 by 30 Co-Champion for Ontario

Shelly Dietner, P.Eng. is a civil engineer with GHD Limited. Shelly's 13 years of work experience in environmental remediation, particularly soil and sediment remediation projects across North America, is complemented by extensive involvement with a variety of advocacy organizations and community initiatives in both Canada and the United States.

Shelly has dedicated much time and effort to supporting fellow female engineers and recent grads by “promoting women to aspire, advance and achieve in STEM fields.” Shelly is currently a mentor as part of OSPE's Engineering Professional Success Pilot Mentorship Program. Through her employer, she assumes a similar mentoring role as an industry sponsor for the Queen's University Department of Civil Engineering 4th year Capstone Design Project course, which connects graduating students with alumni and professional engineers. She is also an International Ambassador for the Society of Women Engineers, within which she has taken up a number of different roles from membership on the Outreach Committee to Chair of the Programs Committee for the Chicago Regional Section.

Shelly holds a Bachelor of Science in Civil Engineering from Queen's University.

NOTES



Sandro Perruzza, B.Sc.

- Chief Executive Officer, Ontario Society of Professional Engineers

Sandro Perruzza joined OSPE as CEO in July 2014. A strategic thinker and innovative leader, Sandro holds over ten years of executive management experience. Sandro is recognized for his ability to build high-growth organizations. He specializes in increasing revenue, developing innovative strategy, improving client-services, and building corporate government relations through a collaborative approach.

In his previous role as Chief of Client Services at Workplace Safety & Prevention Services (WSPS), Sandro provided leadership to over 150 professional staff, including five Directors and one Vice President. During his time at WSPS, Sandro was a sitting member of the Ministry of Labour's Prevention Operations Forum and on the Board of Directors of Minerva, which worked to embed health and safety curriculum into University business and engineering programs across Canada.

Prior to joining WSPS, Sandro worked at the Ontario Service Safety Alliance for over 11 years where he served as Executive Director of Corporate Development, Acting Vice President of Client Services and Director of Sales.

Sandro holds a Bachelor of Science in Statistics from McMaster University.

NOTES



Jonathan Hack, P.Eng., MBA, PMP®

- President and Chair, Ontario Society of Professional Engineers

Jonathan has been active on the OSPE board since 2013. Since that time, he has been on the executive committee, and as Treasurer he chaired the Audit and Finance Committee in 2015. In addition he has led the Research and Innovation Taskforce, and had OSPE responsibilities for the PEO / OSPE Government Liaison Committee (GLC).

Jonathan is an innovation leader in the Canadian aerospace sector. He joined Bombardier Aerospace in 2010 after an extensive career in the automotive industry (23 years) with General Motors – both in Canada, and internationally. Jonathan is currently leading Bombardier’s aerospace R&D efforts in the area of advanced aircraft interiors and cabin systems development initiatives. In addition to his research responsibilities, Jonathan also has responsibility for University / College Relations, and Government Relations in Ontario, and is very active on various sector policy initiatives to improve aerospace sector growth in Ontario, and across Canada.

Jonathan is active on the AIAC (Aerospace Industries Association of Canada) Technology and Innovation Committee, the NSERC Ontario Advisory Board, and is on the Board of Directors of the Green Aviation Research and Development Network (GARDN). In addition, Jonathan is active on the advisory boards for several colleges and universities in Ontario. Jonathan is an active member of the Downsview Aerospace Innovation and Research consortia – which supports the vision to create an aerospace campus hub for research and training at Downsview Park.

Jonathan believes that engineers need to play a greater role in influencing government and major stakeholders in matters involving science and engineering. He is committed in ensuring that engineers are much more visible in public policy discussions where technical issues are involved.

Jonathan holds B.Eng & Mgt degree (mechanical) from McMaster University and an MBA from York University and resides in Burlington.

NOTES

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**GREETINGS FROM
THE HONOURABLE
MARYAM MONSEF
(PETERBOROUGH—KAWARTHA)**



The Honourable Maryam Monsef (Peterborough-Kawartha)

• Minister of Status of Women

As Minister of Status of Women, I extend my best wishes to each of you participating in the 15th Annual Claudette MackayLassonde Fall Forum.

While Canada has made real progress towards gender equality over the years, we know there is still a lot of hard work to do to make it a reality.

That's why your efforts to encourage more women to study engineering at the post-secondary level, to consider engineering as a career, and to take on leadership roles in the workplace and the profession as a whole are so valuable.

I commend you for coming together to help build a more progressive, diverse and equal engineering profession. At the same time, you are helping change the conversation about how critical equality is within the STEM fields, especially if we are to create the kind of inclusive prosperity we all desire.

I thank you for all of these efforts. And I look forward to working with you as we advance our country's incredible journey towards equality for all.

Thank you.

A handwritten signature in black ink, appearing to read 'Maryam Monsef', with a long horizontal line extending to the right.

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AGENDA

TIME	SESSION	SPEAKERS
8:30 – 9:15 am	REGISTRATION & REFRESHMENTS	
9:15 – 9:25 am	WELCOME REMARKS	<ul style="list-style-type: none"> • Sandro Perruzza Chief Executive Officer, Ontario Society of Professional Engineers (OSPE) 30 by 30 Co-Champion for Ontario • Jonathan Hack, P.Eng., MBA, PMP® President and Chair, Ontario Society of Professional Engineers (OSPE)
9:25 – 9:35 am	GREETINGS FROM THE GOVERNMENT OF ONTARIO	<p>The Honourable Indira Naidoo-Harris (Halton) Minister Responsible for Early Years & Child Care/Minister of the Status of Women</p> <p>INTRODUCTION BY: Amee Sandhu, Head, Compliance Operations, SNC-Lavalin</p>
9:35 – 9:55 am	Setting the Landscape	Valerie J. Davidson, B.Eng., MSc, PhD, P.Eng. University Professor Emerita, School of Engineering, University of Guelph
9:55 – 10:10 am	Reaching 30% by 2030	<ul style="list-style-type: none"> • Jeanette Southwood, FCAE, FEC, LL.D. (h.c.), P.Eng., IntPE Vice-President, Strategy and Partnerships, Engineers Canada • Julia Chehaiber, MEBT, Practice Lead, Community Engagement, Engineers Canada
10:10 – 11:10 am	PANEL 1: Corporate Best Practices	<ul style="list-style-type: none"> • Erin McConahey, Principal in Mechanical Engineering, ARUP • Tom Murad, Ph.D., P.Eng. F.E.C., SM.IEEE, Head of Siemens Canada Engineering and Technology Academy Siemens Canada Limited (SCETA) • Vivian Yoanidis, Director of Diversity and Inclusion, Hydro One • Amee Sandhu, Head, Compliance Operations, SNC-Lavalin <p>MODERATED BY: Shelly Deitner, P.Eng., Chair, Women in Engineering Advocacy Committee (WEAC)</p>
11:10 – 11:30 am	The Gender Wage Gap in Ontario	Emanuela Heyninck, LL.B. , Commissioner, Ontario Pay Equity Commission
11:30 – 11:50 am	NETWORKING BREAK	
11:50 – 12:10 pm	The Gender Wage Gap in Engineering	Eleana Rodriguez, MBA , Business Development Leader, Mercer Canada
12:10 – 1:15 pm	LUNCH & NETWORKING: #Ironringirls	PRESENTATION BY: Mina Dezz, EIT , Founder of Ironringirls
1:15 – 2:15 pm	PANEL 2: Addressing Negative Workplace Cultures & Barriers to Advancement	<ul style="list-style-type: none"> • Dr. Tracey Adams, Professor and Chair of Sociology, University of Western Ontario • Tanya van Biesen, Executive Director, Catalyst Canada • MP Mark Gerretsen (Kingston and the Islands) • Mélinda Nycholat, P.Eng., Defense Construction Canada (DCC), Vice-President, Operations—Procurement • Julia Serink, P.Eng., Principal, GHD <p>MODERATED BY: Réjeanne Aimey, P.Eng., Director, Ontario Society of Professional Engineers (OSPE)</p>

TIME	SESSION	SPEAKERS
2:15 – 3:15 pm	PANEL 3: Examining Post-Secondary Engineering Programs	<ul style="list-style-type: none"> • Dr. Cristina Amon, P.Eng. Dean, Faculty of Applied Science and Engineering, University of Toronto • Dr. Thomas Duever, P.Eng., FCIC Dean, Faculty of Engineering and Architectural Science (FEAS), Ryerson University • Marisa Sterling, P.Eng., FEC Assistant Dean, Inclusivity and Diversity, Lassonde School of Engineering • Dr. Mary Wells, P.Eng. Incoming Dean, the University of Guelph's newly renamed College of Engineering and Physical Sciences <p>MODERATED BY: Annette Bergeron, P.Eng., MBA, FEC, President-Elect, Engineers Canada, and Corporate Director, Electrical Safety Authority and Engineers Canada</p>
3:15 – 3:30 pm	NETWORKING BREAK	
3:30 – 4:15 pm	PANEL 4: Best Practices from Other Professions	<ul style="list-style-type: none"> • Persis Lam, Architect, Diamond Schmitt Architects, and Executive Committee Member, Building Equality in Architecture Toronto (BEAT) • Karen McCardle, CPA, CA, Director, Research, Guidance, and Support, Chartered Professional Accountants of Canada • Sandra Nishikawa, Counsel, Legal Services and Inquiries, Ontario Human Rights Commission and Bencher, Law Society of Upper Canada <p>MODERATED BY: Kathy Lurette, C.E.T., Senior Vice President of Business Transformation, Alectra Utilities</p>
4:15 – 4:25 pm	Wrap-up and Closing Remarks	<p>Shelly Deitner, P.Eng., Chair, Women in Engineering Advocacy Committee (WEAC) Director, Ontario Society of Professional Engineers (OSPE) 30 by 30 Co-Champion for Ontario</p>
4:25 – 5:00 pm	NETWORKING	

**GREETINGS FROM THE
HONOURABLE INDIRA
NAIDOO-HARRIS
(HALTON)**



The Honourable Indira Naidoo-Harris (Halton)

- Minister Responsible for Early Years & Child Care
- Minister of the Status of Women

Indira Naidoo-Harris was first elected to the Ontario legislature in 2014 as the MPP for Halton. Naidoo-Harris currently serves as Minister of the Status of Women and Minister Responsible for Early Years and Child Care. She was previously Associate Minister of Education, focusing on Early Years and Child Care. Before that, she was Associate Minister of Finance, focusing on the Ontario Retirement Pension Plan, and Parliamentary Assistant to the Minister of Health and Long-Term Care, focusing on Long-Term Care.

Naidoo-Harris was born in Durban, South Africa. Her family immigrated to Canada to pursue the dreams they could not achieve under apartheid. They settled in central Alberta, where Naidoo-Harris grew up in a small rural town. She later earned a B.A. in Political Science at the University of Lethbridge.

After graduate work at the University of Alberta, Naidoo-Harris moved to the U.S. for two years, where she began a career in journalism by working briefly for NBC and PBS. She went on to build a career as a writer, reporter, producer and news anchor at the international, national and regional levels.

She moved to Ontario in the 1990s to work for CBC-TV's *The National* and *Midday News*, and since then she has anchored for *CBC Newsworld*, *CBC's The National* and *CTV Newsnet*, as well as for local stations *CBC Toronto*, *CBC Ottawa*, *TVO* and *OMNI Television*. She has also anchored for *CBC Radio* regional and national programs, including *World Report* and *The World at Six*, and hosted the current affairs shows *Cross Country Check-Up* and *The Current*. Naidoo-Harris has won numerous awards for her work and volunteerism in national and international causes.

Naidoo-Harris has lived in Halton for more than 20 years, and has sat on the Board of Directors for the *Reel World Film Festival*, the *Nelson Mandela Children's Fund of Canada* and the *Journalism Advisory Council* at the *University of Western Ontario*.

NOTES

SETTING THE LANDSCAPE

"People ask me all the time, 'What is it like to be a woman at Google?' I'm not a woman at Google, I'm a geek at Google. And being a geek is great!"

Marissa Mayer, Yahoo CEO

PANEL 1:

CORPORATE BEST PRACTICES

"I want to make sure we use all our talent, not just 25 percent. Don't let anyone rob you of your imagination, your creativity, or your curiosity. It's your place in the world; it's your life. Go on and do all you can with it, and make it the life you want to live."

Mae Jemison, first African American woman in space



Ameer Sandhu

- Head, Compliance Operations, SNC-Lavalin

Ms. Sandhu joined the Ethics and Compliance Department of SNC Lavalin in 2013. She was recently promoted to Head of Compliance Operations, managing SNC-Lavalin's global team of Regional Compliance Officers, ensuring effective implementation of the SNC-Lavalin Ethics and Compliance Program around the world. She is also the Sector Compliance Officer for the Mining and Metallurgy Sector.

Prior to joining the Ethics and Compliance department at SNC-Lavalin, she was Senior Legal Counsel at SNC-Lavalin's Candu Energy, as well as its predecessor, Atomic Energy of Canada Limited (AECL).

She is an experienced in-house counsel, compliance officer, project lawyer and commercial operations manager with over fifteen years of wide ranging experience in assisting clients and business partners pursue and complete major domestic and international proposals, transactions and projects.

Ms. Sandhu is accredited by Trace International as a Trace Anti-Bribery Specialist. Ms. Sandhu is a member of the Canadian Bar Association's Anti-Corruption Team, as well as the Legal Committee of Transparency International – Canada. She is a frequent speaker on ethics and compliance topics, and occasionally, on diversity as well.

She is a past chair and current member of the Canadian Corporate Counsel Association's Diversity Committee, as well as a past Executive member of the Ontario Bar Association's chapter of the CCCA. Ms. Sandhu is also on the Finance Committee of the Ontario Bar Association.

She obtained her LLB from McGill University. Her MA from Queens University, and her BA from the University of Toronto, were both in history. She was called to the Ontario bar in 2000.

She is a proud recipient of a CCCA Mentoring Service Award (2017), for her work mentoring younger lawyers in Ontario.

THE GENDER WAGE GAP IN ONTARIO AND IN ENGINEERING

"What we should be doing is identifying the barriers and getting them out of the way so that everybody has a fair chance to get where they want to go. If we want a good standard of living, if we want economic development, if we want the best science we can, if we want everybody's voice heard, we need diversity. It's not just a good idea, it's essential."

Dr. Imagen Coe, Dean, Faculty of Science, Ryerson University

LUNCH PRESENTATION

#Ironringgirls

"We need to get away from saying it's only about being good at math and science. If you're passionate about something and you want to make a difference, I guarantee there's a way to do that with engineering."

Elizabeth Bierman, Past President of the Society of Women Engineers (SWE)

PANEL 2:

**ADDRESSING NEGATIVE
WORKPLACE CULTURES
AND BARRIERS TO
ADVANCEMENT**

"I hadn't been aware there were doors closed to me until I started knocking on them."

Gertrude B. Elion, Biochemist and Pharmacologist

PANEL 3:

**EXAMINING
POST-SECONDARY
ENGINEERING
PROGRAMS**

*"It is time for parents to teach young people early on that in diversity
there is beauty and there is strength."*

Maya Angelou



Dr. Cristina Amon, P.Eng.

- Dean, Faculty of Applied Science and Engineering, University of Toronto

Cristina Amon is Dean and Alumni Professor in Bioengineering at the University of Toronto's Faculty of Applied Science & Engineering. Under her leadership, Canada's #1 ranked engineering school has become a global hub for inter-disciplinary research and education known for its strategic Faculty-wide initiatives, cross-Faculty centres and institutes, and innovative undergraduate and graduate programming. Her commitment to outreach and diversity has set a new standard for Engineering schools worldwide; the number of women faculty members at U of T Engineering has doubled in the last decade and the Faculty celebrated an historic 40% women first-year undergraduate enrolment for its second consecutive year in 2017.

Prior to her deanship at U of T, Amon was the Raymond J. Lane Distinguished Professor of Mechanical Engineering and Director of the Institute for Complex Engineered Systems at Carnegie Mellon (until 2006). She received her master's and doctorate degrees from MIT in 1988. Her research pioneered multidisciplinary thermal designs and made ground-breaking innovations to transient thermal management, optimization algorithms for renewable energy, nanoscale transport in semiconductors and biological systems. Her scholarly contributions are published in 16 book chapters and over 350 articles in education and research literature.

She has been inducted into the Canadian Academy of Engineering, Hispanic Engineer Hall of Fame, National Academy of Engineering, Royal Academy of Spain and Royal Society of Canada, and elected fellow of all major professional societies in her fields. Additional accolades include the ASEE Westinghouse Medal, ASME Heat Transfer Memorial Award and SWE Achievement Award, the highest honour.

Professor Amon received the Engineers Canada Award for the Support of Women in 2010, was named one of the YWCA's Women of Distinction in 2011 and one of Canada's 25 Most Influential Women in 2012, and received the Ontario Professional Engineers Gold Medal in 2015 – the most prestigious honour for engineering public service, technical excellence and professional leadership.

NOTES

PANEL 4:

**BEST
PRACTICES
FROM OTHER
PROFESSIONS**

*"Success is a mixture of skills, competence, luck and hard work: with a bit of effort,
I believe the world can be at our feet."*

Julie Payette, Canada's Governor General, former astronaut and engineer

ABOUT OSPE

The Ontario Society of Professional Engineers (OSPE) is the voice of the engineering profession in Ontario. We represent the entire engineering community, including professional engineers, engineering graduates and students who work or will work in several of the most strategic sectors of Ontario's economy.

OSPE elevates the profile of the profession by advocating with governments, offering valued member services and providing opportunities for ongoing learning, networking and community building.

OSPE was formed in 2000 after members of Professional Engineers Ontario (PEO) voted to separate regulatory and advocacy functions into two distinct organizations.

ABOUT WEAC

The core objective of the Women in Engineering Advocacy Committee (WEAC) is to work towards the creation of a more progressive and diverse engineering profession by encouraging the full participation of women in the profession. WEAC encourages women in Ontario to study engineering at the post-secondary level, consider engineering as a career and to pursue licensure as Professional Engineers; and take on leadership roles in the workplace and within the governance structure of the engineering profession. WEAC advances its advocacy agenda by engaging with the engineering profession, government, educators, and other stakeholders.

BREAKING BARRIERS FOR WOMEN IN STEM

This initiative will address barriers that contribute to the underrepresentation of women in STEM (Science, Technology, Engineering and Mathematics), and aims to increase the participation of women in STEM programs and careers.

This project is guided by three successful women and change leaders in STEM fields:

- **Kathy Lerette, C.E.T.**, Senior Vice-President, Business Transformation, Alectra Utilities
- **Annette Bergeron, P.Eng., MBA**, President-Elect, Engineers Canada
- **Valerie Davidson, P.Eng., PhD**, Professor Emerita, University of Guelph

OSPE will work with students, educational institutions, employers, governments, STEM professionals, parents and other stakeholders to:

- Collect and analyze grassroots perspectives
- Develop and pilot strategies to address systemic barriers including using technology-based tools designed to support women and girls in STEM
- Create and promote workplace and government policy recommendations



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BREAKING BARRIERS FOR WOMEN IN STEM

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We want your insights on the barriers that contribute to the underrepresentation of women in STEM and what can be done to encourage and retain more Women. We welcome insights from both women and men.

HOST A STRATEGIC FOCUS GROUP

If you are interested in hosting a focus group session with Women working in STEM at your company to share your stories and input into development of our tools, resources and policy recommendations, please contact Tess O'Mara, Project Administrator, at tomara@ospe.on.ca

LEAD PARTNER

Ontario Association of Certified Engineering Technicians and Technologists (OACETT)

OTHER PARTNERS

Professional Engineers of Ontario (PEO), Engineers Canada, McMaster University, Queens University, Mohawk College, Niagara College, Canadian Manufacturers and Exporters, Electricity Human Resources Canada, Alectra Utilities, Ontario Network of Women in Engineering (ONWiE)

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BEHIND EVERY GREAT ENGINEER.