

SONWIE

2018

ONTARIO NETWORK OF WOMEN IN ENGINEERING



Engineers run the world.

- GO END GIRL PARTICIPANT

ONWIE

The Ontario Network of Women in Engineering (ONWiE) recognises that we're better together! All of the accredited schools and faculties of engineering across Ontario collaborate to encourage young women to consider engineering as a career. Our sponsors and partners help us to offer high quality outreach programs that celebrate diverse approaches to engineering. We are proud that our flagship programs such as Go ENG Girl and Go CODE Girl are offered across Canada.

I am excited to be taking over the leadership of this pioneering and successful initiative. Over the past 13 years Valerie Davidson and Mary Wells have provided inspiring leadership. Big shoes to fill! Our new Network Coordinator Danielle Gibbons and I look forward to helping engineering become truly diverse and inclusive.

Kin gr

Kim Jones

Associate Professor, Chemical Engineering, McMaster University Chair, ONWiE

Danielle Gibbons
ONWiE Coordinator

For more information please contact us at onwie.ca



The hands-on group activity for girls was valuable in showing my daughter that a group of girls can get things done and solve problems.



GO ENG GIRL/GÉNLALES LES FILLES

Go ENG Girl/GENiales, les filles offers girls in grades 7-10 the chance to learn more about engineering through a series of fun hands-on activities and exhibits. Female undergraduate students, professional engineers and professors take part in the day to share their stories of passion, inspiration and success. Parents are encouraged to attend and participate to learn more about the importance of women in engineering and the unique opportunities available to their daughters.

In 2018 two schools were able to expand Go ENG Girl beyond their main campuses to offer hands-on engineering activities to rural students, with Western University hosting an event in Sarnia, and UOIT hosting an event in Port Perry. Now in its 14th year, Go ENG Girl continues to educate and inspire the next generation of female engineers.



2018 BY THE NUMBERS

1200 GIRLS ACROSS CANADA

480 VOLUNTEERS AND ORGANIZERS

25 ONWIE MEMBER SCHOOLS



In 2018 Go ENG Girl was offered at campuses across Canada!



GO CODE GIRL/ **ALLEZ CODER LES FILLES**

Open to girls in grades 7-11, Go CODE Girl/Allez codez les filles programs are designed to introduce girls to the wide range of career possibilities available in the rapidly-growing fields of technology, computing and software engineering. At Go CODE Girl, students discover the digital skills that will drive tomorrow's coolest communications, imaginative innovations and essential societal improvements.

2018 **BY THE NUMBERS**

630 GIRLS ACROSS CANADA

12 ONWIE MEMBER **SCHOOLS**



Coding is today's language of creativity. All our children deserve a chance to become creators instead of consumers of computer science.





ENGAGING GIRL GUIDES

Badge Day gives Girl Guides the opportunity to visit an accredited engineering university or college campus and participate in interactive activities to earn their engineering and science badges.

In 2018 we engaged 1300 girls across Ontario. During Badge Day, activities are facilitated by engineering student volunteers to leave participants with confidence in the sciences and inspiration to pursue science, technology, engineering and Mathematics (STEM) through high school, post-secondary and beyond.



2018 BY THE NUMBERS

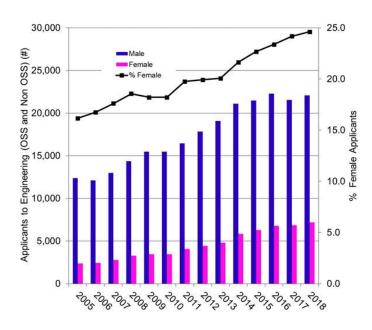
1300 GIRLS ACROSS CANADA

7 ONWIE MEMBER SCHOOLS



INSPIRING THE NEXT GENERATION OF **FEMALE ENGINEERS**

There has been a consistent increase of the number of women applying to engineering programs in Ontario. In 2018, nearly a quarter of applicants were women. We look forward to surpassing Engineers Canada's 30 by 30 goal (30% of newly licenced engineers by 2030).





DONNA STRICKLAND WINS THE NOBEL PRIZE IN PHYSICS

In 2018, Guelph native and University of Waterloo physics professor Dr. Donna Strickland was awarded the Nobel Prize in physics for research conducted while she was completing her PhD at the University of Rochester. Dr. Strickland, along with Gérard Mourou and Arthur Askin, were awarded the prize for their work discovering chirped pulse amplification, a technique that underpins today's short-pulse, high-intensity lasers, which have become a key part of corrective eye surgeries.

Dr. Strickland's win makes her only the third woman to win the physics prize, and the first Canadian female scientist to do so.

Dr. Strickland started her career as an undergraduate in the engineering physics program at McMaster University. At McMaster, she was one of three women in a class of 25. Strickland graduated with a B.Eng. degree in engineering physics in 1981, before moving on to the University of Rochester where she would complete her award-winning research.

Dr. Strickland's win is an important moment for women in STEM. She serves as an inspirational role model to all young women aspiring to do great things in STEM. We congratulate Dr. Strickland on her enormous achievement.



THE NEXT GENERATION OF ONWIE

2018 was a transition year for ONWiE, with Mary Wells passing on the torch on to Chair Kim Jones at McMaster University. Over the next five years we'll continue to build on the successes of ONWiE, with plans to keep expanding the program to accredited engineering institutions across Canada. Of particular focus are rural and northern communities, where there is greater need for educational outreach programs.

The year ahead will see the 2019 ONWiE Summit, where we'll come together to refocus our ideas and efforts in order to maintain the momentum surrounding women in engineering. ONWiE will continue to reach out to girls and their families with the message that engineering is an inclusive, creative, people-oriented field that can shape the world for the better.



To engineer a better society, we need people of different genders, races, and backgrounds solving our problems.

BEHIND THE SCENES

ONWiE events are supported by a dedicated team of leaders at each campus locations. Teams are comprised of engineering students, faculty, staff, and alumni who manage all aspects of the program. This year, these dedicated individuals were joined by more than 500 volunteers who helped make the events as exciting and insightful as possible.

THANK YOU!

Provincial Partners



CARLETON UNIVERSITY

Christine Riddell, Kyra Bloomfield



CONESTOGA COLLEGE

Karen Cain, Christine Burns, Janine Vanry, Leanne O'Donnell, Nancy Hauck



LAKEHEAD UNIVERSITY

Dr. Meilan Liu and Heather Moynihan



LAURENTIAN UNIVERSITY

Fran Sivazlian, Derek Gransden



McMASTER UNIVERSITY

Carm Vespi, Linda Coughlin



QUEEN'S UNIVERSITY

Desurée Vandendam, Scott Compeau



ROYAL MILITARY COLLEGE OF CANADA

Sara Creber



RYERSON UNIVERSITY

Nika Zolfaghari



UNIVERSITY OF GUELPH

WISE Group at Guelph, Hanna Bennett, Lauren Zweep



UNIVERSITY OF ONTARIO INSTITUTE OF TECHNOLOGY

Michelle Tsui-Woods, Vanessa Ironside



UNIVERSITY OF OTTAWA

Katherine Dickson



UNIVERSITY OF TORONTO

Dominic Abogado, Dawn Britton



UNIVERSITY OF WATERLOO

Caity Dyck, Vanessa Moniz, Lyndia Stacey, Rohini Wittke, Jared Stryker, Karim Karim



UNIVERSITY OF WINDSOR

Dr. Jennifer Johrendt, Mike Konstantino, Shelly Scurr



WESTERN UNIVERSITY

Kelsey Lavigne, Joanne Moniz, Lesley Mounteer





YORK UNIVERSITY

Jane Goodyer, Amy Gaukel, Gayathry Wright, WISE Club



National Partners



MEMORIAL UNIVERSITY

Kathryn Hong, Tiuri Lomond, Andy Fisher



SIMON FRASER UNIVERSITY

Daniela Abasai



UNIVERSITÉ DE MONCTON

François Duguay



UNIVERSITY OF ALBERTA

Ilana Young, Mara Steiner



UNIVERSITY OF BRITISH COLUMBIA - OKANAGAN

Marie Reid



THE UNIVERSITY OF BRITISH COLUMBIA

UNIVERSITY OF BRITISH COLUMBIA - VANCOUVER

Erin Fehr



UNIVERSITY OF CALGARY

Dr. Qiao Sun, Emily Wyatt, Alison Barrett, Christina Chow



University of Manitoba

UNIVERSITY OF MANITOBA

Nusraat Masood



UNIVERSITY OF NORTHERN BRITISH COLUMBIA

Nicole Gibson, Keanna Woidak, Natalie Linklater, Todd Whitcombe and Steve Helle



UNIVERSITY OF PRINCE EDWARD ISLAND

Dr. Amy Hsiao

THANK YOU TO OUR SUPPORTERS

ONWiE gratefully acknowledges the support of our provincial and local supporters.

PROVINCIAL SUPPORTERS

PLATINUM SPONSORS

The Council of Ontario Deans of Engineering



LOCAL SUPPORTERS

Bharti School of Engineering Okanagan School District 23

Brunsfield Centre PEO Lambton Chapter

CIM Richard L'Abbé Makerspace

City of London Schulich School of Engineering

Dillon Consulting Stantec

Execulink Telecom Thyssen Mining

Glencore UNBC Active Minds

Goodman School of Mines Union Gas

Iron Ring Camp 3 University of Ottawa Faculty of Engineering

New Gold University of Prince Edward Island Faculty of Sustainable Design Engineering

McElhanney Waterloo alumni

McMaster Faculty of Engineering Western Sarnia-Lambton Research Park

MQN Architects