



2017

ONTARIO NETWORK OF WOMEN IN ENGINEERING



After attending this event, I think engineers solve and improve current problems/concerns but also create new things to help people in their profession/life.

**- PARTICIPANT IN OUTREACH PROGRAM**

# SUCCESS OF ONWiE

Celebrating 12 years of excellence, the Ontario Network of Women in Engineering (ONWiE) promotes the engineering profession to girls and young women across Ontario. ONWiE is a unique partnership between all the accredited schools and faculties of engineering across Ontario, collaborating to provide opportunities for women and girls to explore and excel in engineering professions. With the support of our sponsors and partners, we're proud to continue delivering high-quality programming that encourages diversity and new voices in engineering.

ONWiE outreach programs such as Go ENG Girl and Go CODE Girl are now offered across Canada as a way for girls to discover the exciting world of engineering and meet current engineering students.

In June 2018 Rohini and I will be passing the leadership of ONWiE to a new chair and coordinator. They will take over the ONWiE leadership for a five year period and we are looking forward to working with them.

It has been a pleasure for us to serve as your ONWiE chair and coordinator for the past five years and we look forward to the continued success of ONWiE in the future.



Mary A. Wells PhD, FEC, P.Eng.  
ONWiE Chair



Ms. Rohini Wittke  
ONWiE Coordinator

For more information please contact us at [onwie.ca](http://onwie.ca).

# ONWiE SUMMIT

To prepare for a change in leadership in 2018, we held a summit at the University of Waterloo on Friday November 24th with close to 40 people in attendance. The purpose of the summit was to bring the ONWiE members together to reflect on the past twelve years of collaboration as well as consider our future together and priorities we should focus on.

From this summit, it is very clear that ONWiE's strategic strength continues to be in doing *creative, purposeful engineering outreach* to girls aged 9-17, engaging *parents as partners* in influencing and raising awareness of engineering as a possible career path, *changing the narrative* around who belongs in engineering and what is needed to succeed through that outreach. As a group, ONWiE is committed to reshaping ideas and inspiring possibilities for the future. They accomplish this by *collaborating, engaging, sharing best practices and providing opportunities*.



The career paths of boys and girls already start to diverge by the age of 15. 15 year old boys are, on average, more than twice as likely as girls to expect to work as engineers, scientists or architects. And while 0.5% of girls want to be Information and Communications Technology (ICT) professionals, almost 5% of boys do.

– OECD REPORT “THE PURSUIT OF GENDER EQUALITY AN UPHILL BATTLE”, OCTOBER 2017

## **THE IMPORTANCE OF DIVERSITY IN ENGINEERING**

Engineering is a profoundly creative profession and creativity is not something that just happens. It is the result of making unexpected connections between things we already know. Without diversity of thought, the life experiences we bring to an engineering problem are limited. As a consequence, we need diversity in engineering teams to design the best engineering solutions.

## **PROVIDING OPPORTUNITIES FOR WOMEN AND GIRLS**

Since 2005, the Ontario Network of Women in Engineering (ONWiE) has been promoting the engineering profession to girls and young women across Ontario. ONWiE is a unique partnership between the accredited schools and faculties of engineering across Ontario, collaborating to provide opportunities for women and girls to explore engineering career options. ONWiE continues to offer a collaborative platform, enabling member institutions to jointly develop activities and initiatives. ONWiE members and supporters work together to improve the participation rate of female students and professionals in engineering across Ontario.

ONWiE is committed to inspiring the next generation of thought-leaders and change-agents through:

### **Collaborating**

ONWiE members and supporters work together to improve the participation rate of females as students and professionals in engineering in Ontario.

### **Engaging**

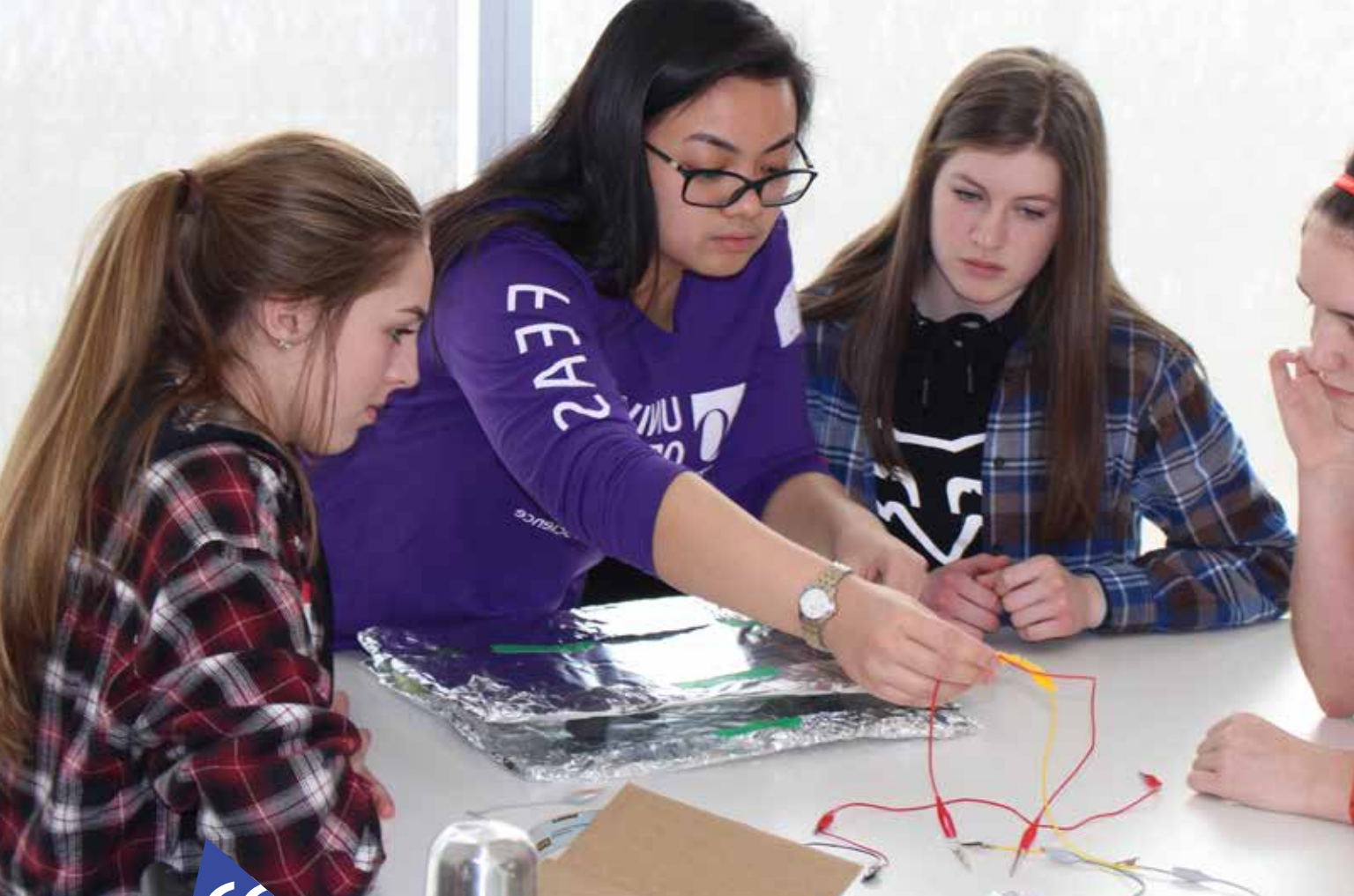
Through programs such as Go ENG Girl, Go CODE Girl and Badge Day, ONWiE members engage girls and young women in hands-on activities and introduce them to engineering profession.

### **Sharing best practices**

Through communication of best practices and opportunities around mentorship, communication materials and assessment strategies.

### **Providing opportunities**

By offering opportunities for participants to network and to share information and available resources related to women in engineering across Ontario.



Engineers are the behind the scenes people who are hardworking and have creativity and intelligence to make the world a better place

- PARTICIPANT IN OUTREACH PROGRAM

# GO ENG GIRL/GÉNIALES, LES FILLES

Go ENG Girl/GÉNiales les filles engaged over 1200 girls in grades 7-10 in 2017. Throughout the month of October, these girls visited one of sixteen accredited university or college campuses across Ontario, meeting with engineering students and professionals and engaging in hands-on engineering activities. Go ENG Girl also expanded outside Ontario and was offered at 60% off all the accredited school and faculties of applied science and engineering across Canada from BC to Newfoundland.

This program encourages girls to think like engineers, designing creative solutions to challenging problems, developing a new understanding about the diversity of careers possible as an engineer, and the importance of pursuing math and science prerequisites in high school. Thanks to the help of our sponsors, Go ENG Girl/GÉNiales, les filles is offered free of charge to girls and their parents. To date, over 17,000 girls and their parents have participated in this program.



## 2017 BY THE NUMBERS

**1200 GIRLS**

**850 PARENTS  
AND GUARDIANS**

## AFFILIATES

University of British Columbia  
Simon Fraser University  
University of Northern BC  
University of Calgary  
University of Alberta  
University of Manitoba  
Université de Moncton  
University of New Brunswick  
University of PEI  
Memorial University (NFLD)





# BADGE DAY

**Badge Day** gives Girl Guides the opportunity to visit an accredited engineering university or college campus, and participate in hands-on activities to earn their engineering badges. Having engaged close to 1500 girls grades 4 - 6 in 2017, this program is modeled after the success of Go ENG Girl and has been coordinated by ONWiE since 2010. During Badge Day, the Girl Guides completed activities to meet the requirements for their badges in physics, engineering and aerospace. Activities are facilitated to leave participants with a confidence in the sciences and inspiration to keep their options open in high school and beyond.



## 2017 BY THE NUMBERS

**1500 girls**

**8 ONWiE members offered a Badge Day program**

I thought this would be boring, but  
it's the best thing I've done at girl guides!



– BADGE DAY PARTICIPANT



# GO CODE GIRL/ ALLEZ CODER LES FILLES

Go CODE Girl/Allez coder les filles provides an exciting opportunity for girls in grades ranging from 7 to 11 across Ontario to learn about the exciting world of coding and software development, and discover opportunities in computing and engineering fields. Go CODE Girl educates, inspires and equips girls with the digital skills, confidence and resources needed to pursue education in technology, computing and engineering.

## 2017 BY THE NUMBERS

540 girls

11 ONWiE members  
offered a Go CODE  
Girl program



How the engineering profession can increase the representation of women is a well-documented dilemma, but it only tells part of the story. There are women in Ontario and elsewhere who are already leading engineering teams at important companies, building cutting-edge technologies at start-ups, and adding value to community projects

– JENNIFER AHLUWALIA, PENG. *Engineering Dimensions*, January 2018



# LOOKING FORWARD

2017 was ONWiE's 12th anniversary. 12 years of collaborating across Ontario to help solve a chronic issue around low enrollments of women in engineering. ONWiE continues to build on its successes and in the spirit of collaboration Go ENG Girl is now being offered across Canada. ONWiE continues to reach out to girls and their families with the message that engineering is an exciting, hands-on, and people-oriented field and that science and math have real-world applications.

## MARK YOUR CALENDARS

**GO ENG GIRL/  
GENIALES, LES FILLES**  
**October 13, 2018**  
**October 20, 2018**

**GO CODE GIRL**  
**January-March, 2018**

**BADGE DAY**  
**varies (typically in  
January-June, 2018)**

# 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 over 500 volunteers who helped make the events as exciting and insightful as possible.

## THANK YOU!



### CARLETON UNIVERSITY

Christine Riddell, Nikhitha Gajudhur



### CONESTOGA COLLEGE

Janine Vanry, Karen Kokkelink, Leanne O'Donnell, Rebecca Dougherty, Karen Cain, Ignac Kolenko



### LAKEHEAD UNIVERSITY

Heather Moynihan and Meilan Liu



### LAURENTIAN UNIVERSITY

Francine Sivazlian



### McMASTER UNIVERSITY

Carm Vespi, Linda Coughlin



#### QUEEN'S UNIVERSITY

Scott Compeau, Desuree Vandendam, WISE Outreach, EWB Youth Venture, Robogals



#### ROYAL MILITARY COLLEGE OF CANADA

Sara Creber



#### RYERSON UNIVERSITY

Nika Zolfaghari and Shari Hodges



#### UNIVERSITY OF GUELPH

WISE group at Guelph, Lauren Zweep



#### UNIVERSITY OF ONTARIO INSTITUTE OF TECHNOLOGY

Michelle Tsui-Woods, Brittany MacFarlane, Dr. Min Dong, Yasmin Abdulla



uOttawa

#### UNIVERSITY OF OTTAWA

Carolyne Bjerring, Julie Olivier, Katherine Dickinson, Pamela Lee-Shanok



#### UNIVERSITY OF TORONTO

Dawn Britton, Dominic Abogado, Justin Carter



#### UNIVERSITY OF WATERLOO

Lyndia Stacey, Caity Dyck, Martin Scherer, Joel Mieske



#### UNIVERSITY OF WINDSOR

Shelly Scurr, Edwin Tam, Mike Konstantino



#### WESTERN UNIVERSITY

Kelsey Lavigne, Joanne Moniz, Lesley Munteer



#### YORK UNIVERSITY

April Lico, Diana Lee, Amy Gaukel, Marisa Sterling, Gayathry Wright

# THANK YOU TO OUR SUPPORTERS

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

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