Our U of T Engineering community continues to earn local, national and international recognition for outstanding achievements in research, teaching, professional leadership and community service.

In 2018, we received more than 15% of major national and international awards won by Canadian engineering professors, while making up 6% of the engineering faculty in Canada. This year, these included fellowships in the Royal Society and the Canadian Academy of Engineering, as well as the Engineers Canada Awards.

Our international recognition grew this year with the induction of our faculty members into academies around the world. Paul Young (CivMin) was inducted into the U.K.’s Royal Academy of Engineering and Molly Shoichet (ChemE, IBBME) was inducted into the Royal Society (U.K.), the world’s oldest scientific academy and one of the most prestigious.

Several professors were recognized for a lifetime of notable achievements, including Levente Diosady (ChemE) who was inducted into the Order of Canada. Tom Chau (IBBME) received the Governor General’s Innovation Award, which celebrates innovations that are exceptional, transformative and positive in their impact on quality of life in Canada.

U of T Engineering professors in the early stages of their careers also earned a number of prominent awards. Shoshanna Saxe (CivMin) received the Ontario Professional Engineers Young Engineer Medal and Jennifer Drake (CivMin) garnered the Young Engineer Achievement Award from Engineers Canada. Alison McGuigan (ChemE) was inducted into the Royal Society of Canada’s College of New Scholars, Artists and Scientists.

Our faculty also garnered honours for innovation in teaching, such as the President’s Teaching Award earned by Will Cluett (ChemE), and the Northrop Frye Award received by Michael Carter (MIE). We also received recognition for equity, diversity and inclusion, such as the International Day for the Elimination of Racial Discrimination Recognition Award presented to Mikhail Burke. In addition to external accolades, we continue to recognize the excellence of our staff and faculty through a number of internal awards for research, teaching, leadership and dedication to improving the student experience.
### Measuring Excellence

In 2018, U of T Engineering faculty earned 12 major awards and honours in recognition of our excellence in research, teaching and contributions to the engineering profession.

**Figure 5.1** Summary of Major International, National and Provincial Awards and Honours, 2009 to 2018

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Data in this chapter are presented for the 2018 calendar year (January to December). Selected faculty, alumni and staff awards were received between summer 2018 and summer 2019.

Note 5.1: (*) denotes U of T performance indicator. Data shown are by calendar year (January to December) and include faculty award recipients only. Please see Appendix G to read descriptions of the listed awards and honours.
Of the prestigious national and international awards that are presented annually to Canadian engineering professors, U of T Engineering professors earned 10, or 15.2% of the total, while representing just 6.0% of engineering faculty members nationally.

Figure 5.2a Number of Major National and International Awards Received by U of T Engineering Compared to Other Canadian Engineering Faculties, 2018

Figure 5.2b Percentage of Total Canadian Engineering Faculty Members and Percentage of Major Awards Received by Canadian Engineering Faculties, 2018

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Note 5.2a, b: Data shown are by calendar year (January to December) and include faculty award recipients only. The following major awards are included: International — American Association for the Advancement of Science Fellowship (Engineering Section), MIT Top 35 under 35, the National Academy of Inventors, the Royal Academy of Engineering and the U.S. National Academies; National — Brockhouse Prize, Canadian Academy of Engineering Fellowship, Engineering Institute of Canada Awards, Engineering Institute of Canada Fellowship, Engineers Canada Awards, Governor General's Innovation Awards, Killam Prize (Engineering), Killam Research Fellowship, Manning Innovation Award, Order of Canada, Royal Society of Canada Fellowship (Engineering/Physical Sciences), Royal Society of Canada College of New Scholars, Artists and Scientists, Steacie Fellowship, Steacie Prize and Synergy Awards for Innovation.
The following is a selected list of awards U of T Engineering faculty received between summer 2018 and summer 2019:

**INTERNATIONAL**

**American Concrete Institute: Honorary Member**
Doug Hooton (CivMin)

**American Physical Society: Fellow**
Nazir Kherani (ECE, MSE)
Hoi-Kwong Lo (ECE)

**American Society of Metals: Thermal Spray Society Hall of Fame**
Javad Mostaghimi (MIE)

**Association for Computing Machinery: Distinguished Member**
Natalie Enright Jerger (ECE)

**Institute of Electrical and Electronics Engineers: Fellow**
Stewart Aitchison (ECE)
Paul Chow (ECE)
Mark Fox (MIE)
Hans-Arno Jacobsen (ECE)

**International Association for Travel Behavior Research: Lifetime Achievement Award**
Eric Miller (CivMin)

**International Union of Pure and Applied Chemistry: Distinguished Women in Chemistry or Applied Chemistry Award**
Molly Shoichet (ChemE, IBBME)

**National Academy of Inventors: Fellow**
Yu Sun (MIE)

**Optical Society of America: Fellow**
Amr Helmy (ECE)
Hoi-Kwong Lo (ECE)

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**Note 5.3:** Data shown are by calendar year (January to December) and include faculty award recipients only.
Royal Academy of Engineering: Fellow
Paul Young (CivMin)

Royal Society (U.K): Fellow
Molly Shoichet (ChemE, IBBME)

Society for Biomaterials: Clemson Award for Contributions to the Literature
Paul Santerre (IBBME)

Canadian Academy of Engineering: Fellow
Frank Kschischang (ECE)
Zheng-Hong Lu (MSE)
Harry Ruda (MSE)

Canadian Academy of Health Sciences: Fellow
Michael Carter (MIE)

Canadian Society for Civil Engineering: Fellow
Robert Andrews (CivMin)

Canadian Society for Mechanical Engineering: I.W. Smith Award
Eric Diller (MIE)

Canadian Society for Mechanical Engineering: Robert W. Angus Medal
Markus Bussmann (MIE)

Delta Management Clean50: Emerging Leader
Shoshanna Saxe (CivMin)

Engineers Canada: Young Engineer Achievement Award
Jennifer Drake (CivMin)

Engineering Institute of Canada: Fellow
Robert Andrews (CivMin)
Andrew Jardine (MIE)
Jeff Packer (CivMin)

Engineering Institute of Canada: Julian C. Smith Medal
Heather MacLean (CivMin)

Order of Canada: Officer
Levente Diosady (ChemE)

IEEE Canada: M. B. Broughton Central Canada Award
Wai Tung Ng (ECE)

Office of the Governor General: Governor General's Innovation Award
Tom Chau (IBBME)

Royal Society of Canada College of New Scholars, Artists and Scientists: Member
Alison McGuigan (ChemE)

Senior Women Academic Administrators of Canada: Angela Hildyard Recognition Award – Influential Leader
Susan McCahan (MIE)

Ontario Professional Engineers Awards: Entrepreneurship Medal
Milos Popovic (IBBME)

Ontario Professional Engineers Awards: Research and Development Medal
Milica Radisic (IBBME, ChemE)

Ontario Professional Engineers Awards: Young Engineer Medal
Shoshanna Saxe (CivMin)

Northrop Frye Award
Michael Carter (MIE)

President’s Teaching Award
Will Cluett (ChemE)

University Professor
Elizabeth Edwards (ChemE)
Chapter 5: Awards and Honours

Annual Report 2019
Faculty of Applied Science & Engineering

U of T Engineering Staff and Faculty Awards, 2015–2016 to 2018–2019

Each year, U of T Engineering recognizes the excellence of our staff and faculty through a number of awards for research, teaching, leadership and dedication to improving the student experience.

Agnes Kaneko Citizenship Award
Presented to a staff member who has served with distinction and made contributions to the Faculty’s mission above and beyond their job description over a long period of time.

2018–19: Jennifer Rodrigues (ECE)
2017–18: Mary Butera (ChemE)
2016–17: Joan DaCosta (UTIAS)
2015–16: Matthew Chow (ECE)

Early Career Teaching Award
Presented in recognition of exceptional teaching by a faculty member who has taught at U of T for less than six years.

2018–19: Arthur Chan (ChemE)
2017–18: Vaughn Betz (ECE)
2016–17: Matthew Mackay (MIE)

Faculty Teaching Award
Recognizes a faculty member who demonstrates outstanding classroom instruction and develops innovative teaching methods.

2018–19: Jason Anderson (ECE)
2017–18: Manfredi Maggiore (ECE)
2016–17: Craig Simmons (MIE, IBBME)

Harpreet Dhariwal Emerging Leader Award
Presented to a staff member who leads by example in their dedication to the Faculty’s mission. Recipients are held in high regard by colleagues and demonstrate potential to assume more senior leadership roles within the Faculty.

2018–19: Caroline Ziegler (Office of the Dean)
2017–18: Shawn Mitchell (ECE)
2016–17: Andrey Shukalyuk (IBBME)
2015–16: Bruno Korst (ECE)

INTERNATIONAL

Council for Advancement and Support of Education (CASE) — District II Honourable Mention
Plunge A Prof Staff & Faculty Campaign
Engineering Advancement & Alumni Relations, Engineering Strategic Communications

Canadian Council for the Advancement of Education (CCAE) — Prix d’Excellence: Best Photo
Skule Bnad Pride
Engineering Strategic Communications

NATIONAL

Canadian Council for the Advancement of Education (CCAE) — Prix d’Excellence: Best New Idea
Plunge A Prof Staff & Faculty Campaign
Engineering Advancement & Alumni Relations, Engineering Strategic Communications

U of T

International Day for the Elimination of Racial Discrimination Recognition Award
Mikhail Burke (Dean’s Office)

Selected Awards Received by Staff, April 2018 to April 2019
Innovation Award
Presented to staff who, individually or as a team, address a problem creatively by developing a new technology or making significant improvements to an existing system or method.

2017–18: Sarah Steed (Office of Advancement)
2016–17: Pauline Martini (ChemE)
2015–16: Roberta Baker, Raymond Cheah, Shilpa Gantotti and Catherine Riddell (Engineering Strategic Communications)

Quality of Student Experience Award (Behind-the-scenes staff)
Presented to a staff member who has made significant improvements to the quality of student experience.

2018–19: Teresa Didiano (Troost ILead)
2017–18: Scott Sleeth (EngSci)

Barbara McCann Quality of Student Experience Award for Frontline Staff
Presented to a staff member who has made significant improvements to the quality of student experience.

2018–19: Jho Silverio Nazal (MIE)
2017–18: Jennifer Fabro (Office of the Registrar)
2016–17: Cori Hanson (Office of the Registrar)
Endang (Susie) Susilawati (ChemE)
2015–16: Carla Baptista (MIE)

Safwat Zaky Research Leader Award
Presented to a faculty member or team who has shown leadership in innovative, interdisciplinary and/or collaborative research initiatives that have enhanced the Faculty’s research profile within the broader community.

2018–19: Stewart Aitchison (ECE)
2017–18: George Eleftheriades (ECE)
2016–17: Greg Evans (ChemE)
2015–16: Alberto Leon-Garcia (ECE)

Catherine Gagne Sustained Excellence in Leadership Award
Presented to a staff member who has demonstrated leadership in supporting the Faculty’s education and/or research endeavours over a sustained period (typically 10 years or more).

2018–19: Krisztina Harmath (ECE)
2017–18: Kelly Chan (ECE)
2015–16: Leslie Grife (First Year Office)

Sustained Excellence in Teaching Award
Recognizes a faculty member who has demonstrated excellence in teaching over the course of at least 15 years.

2018–19: Frank Kschischang (ECE)
2017–18: Graeme Norval (ChemE)
2016–17: Will Cluett (ChemE)

The Engineering Alumni Network’s annual awards honour graduates for outstanding contributions to U of T Engineering and to the profession.

L.E. (Ted) Jones Award of Distinction
Inspired by the contributions of Professor Emeritus L.E. (Ted) Jones, this award honours an alumnus/alumna for his or her support and dedication to U of T Engineering and its arts community.

2018–19: Robert Bazzocchi (EngSci 1T9); Emma Sexton (IndE 1T9)
2017–18: Reena Cabanilla (ChemE 1T8)
2016–17: Allan Kuan (EngSci 1T4 + PEY, CivE MASc 1T7); Alex Perelgut (EngSci 1T6 + PEY)
2015–16: Xiao Fionna Gan (EngSci 1T6)

7T6 Early Career Award
Presented to an alumnus/alumna 10 years after graduation who is distinguished in the profession and community.

2018–19: Holly Johnson (MechE 1T0)
2017–18: Huda Idrees (IndE 1T3); Cameron Robertson (EngSci 0T8, UTIAS MASc 0T9)
2016–17: Andrew Gillies (MechE 0T7); Christopher Wilmer (EngSci 0T7)
2015–16: Gimmy Chu (ElecE 0T6)
2T5 Mid-Career Achievement Award
Presented to an alumnus/alumna 25 years after graduation who has earned respect within the profession and broader community, attained significant achievement and exhibits promise of further contributions.

2018–19: Maryam Shanechi (EngSci 0T4)
2017–18: Alvin Mok (EngSci 0T3)
2016–17: Tom Chau (EngSci 9T2)
2015–16: Raffaello D’Andrea (EngSci 9T1)

Malcolm F. McGrath Alumni Achievement Award
Named in honour of Malcolm McGrath on his retirement as assistant dean, alumni liaison, this award recognizes contributions of personal service to the Faculty, University or to the greater community.

2018–19: James Courtney (EngSci 6T6, Physics MSc 1967, PhD 1971, MBA 1985)
2017–18: Elias Kyriacou (ChemE 7T6)
2016–17: Don Andrew (CivE 5T4)
2015–16: Ross Pitman (GeoE 7T4)

Engineering Alumni Hall of Distinction Award
The Hall of Distinction is an assembly of extraordinary alumni, selected by their peers for their lifelong accomplishments. These are graduates who have ultimately defined what is most exemplary in the engineering profession.

2018–19:
Deborah Goodings (CivE 7T5)
John A. MacDonald (ElecE 7T9)
Shawn Qu (MSE PhD 9T5)
Bob Simmonds (EngSci 7T5)

2017–18:
Alfred Aho (EngPhys 6T3)
Janis Chodas (EngSci 7T8, UTIAS MASc 8T0)
Bob Howard (IndE 7T2)
Brian Kernighan (EngPhys 6T4)
Catherine Lacavera (ECE 9T7)

2016–17:
Rocco Martino (Physics 5T1, Astrophysics MASc 5T2, UTIAS PhD 5T6)
Kathy Milsom (CivE 8T3)
Jonathan Rose (EngSci 8T0, ECE MASc 8T2, PhD 8T6)
The Honourable Tom Siddon (UTIAS MASc 6T6, PhD 6T9)

2015–16:
Paul Henderson (EngBus 5T7)
Ali Khademhosseini (ChemE 9T9, IBBME MASc 0T1)
Ronald Sidon (IndE 6T6)
John Weber (MechE 7T9)

Engineering Alumni Medal
As the Engineering Alumni Association’s highest honour, this award is presented to an alumnus/alumna who has demonstrated superior accomplishment and serves as an outstanding role model for students.

2018–19: Levente Diosady (ChemE 6T6, MASc 6T8, PhD 7T2)
2017–18: Larry Seeley (ChemE 6T6, MASc 6T8, PhD 7T2)
2015–16: David Colcleugh (ChemE 5T9, MASc 6T0, PhD 6T2)

Honorary Member
This year, the EAN recognizes a special friend of the Faculty for her outstanding and sustained efforts, enhancing the international reputation of the Faculty and providing excellent learning opportunities for our graduate students. The following colleague will be named an honorary member of the Engineering Alumni Network:

2018–19: Laura Fujino