5

Our faculty, staff and alumni continue to earn widespread recognition for outstanding achievements in research, teaching, professional endeavours and community service.

In 2017, we received more than 20% of major national and international awards won by engineering professors nationwide, while making up less than 6% of the engineering faculty in Canada. These awards include fellowships of the American Association for the Advancement of Science, the Canadian Academy of Engineering and the Engineering Institute of Canada.

Several professors were recognized for a lifetime of notable achievement. Paul Santerre (IBBME) earned a Governor General's Innovation Award, celebrating innovations that are exceptional, transformative and positive in their impact on quality of life in Canada. Both Molly Shoichet (ChemE, IBBME) and Michael Sefton (ChemE, IBBME) were named officers of the Order of Canada, one of the country's highest honours.

U of T Engineering professors in the early stages of their careers earned a number of prestigious awards. Angela Schoellig (UTIAS) was named to MIT Technology Review's list of *Innovators Under 35*, while Milica Radisic (IBBME, ChemE) earned the Steacie Prize, awarded each year to one engineer or scientist 40 years of age or younger who has made notable contributions to research in Canada. Wei Yu (ECE) was elected to the Royal Society of Canada's College of New Scholars, Artists and Scientists. Our faculty also garnered awards for innovation in teaching, such as the Joan E. Foley Quality of Student Experience Award earned by Jason Foster (EngSci).

The Faculty's achievements in communications and outreach were recognized with national and international awards from the Canadian Council for the Advancement of Education, the Council for Advancement and Support of Education and the International Association of Business Communicators.

Measuring Excellence

In 2017, U of T Engineering faculty members were recognized with 19 major awards and honours in recognition of their excellence in research, teaching and contributions to the engineering profession. Of the prestigious national and international awards that are presented annually to Canadian engineering professors, U of T Engineering professors earned 16, or 21.3% of the total, while representing just 5.8% of engineering faculty members nationally.

Figure 5.1 Summary of Major International, National and Provincial Awards and Honours, 2008 to 2017

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
International										
AAAS Fellowships (Engineering Section)	4	4	6	5	3			1	4	1
MIT Top 35 Under 35	1				1					1
U.S. National Academies*			1	1			1		1	
National										
Brockhouse Prize									1	
Canadian Academy of Engineering Fellowship	3	9	8	1	7	6	3	5	5	5
Engineering Institute of Canada Fellowship	3	4	3	3	3	3	3	2	3	1
Engineering Institute of Canada Awards			1	2	1	2		1	1	2
Engineers Canada Awards		1	3		1	1	1	1		1
Killam Research Fellowship*	2		2							
Killam Prize*	1						1		1	1
Manning Innovation Award							1			
Royal Society of Canada Fellowship*	1	1	2	4	3		2	2	1	2
Royal Society of Canada College of New Scholars, Artists and Scientists							1	1	1	1
Steacie Fellowship*		1			2	1	1	1	1	
Steacie Prize*					1					1
Synergy Award for Innovation		1			1					
Provincial										
Ontario Professional Engineers Awards	3	4	4	5	3	2	2	1	2	3
OCUFA Teaching Award			1					1	1	
Total	18	25	31	21	26	15	16	16	22	19

Data in this chapter are presented for the 2017 calendar year (January to December). Selected faculty, alumni and staff awards were received between summer 2017 and summer 2018.

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.

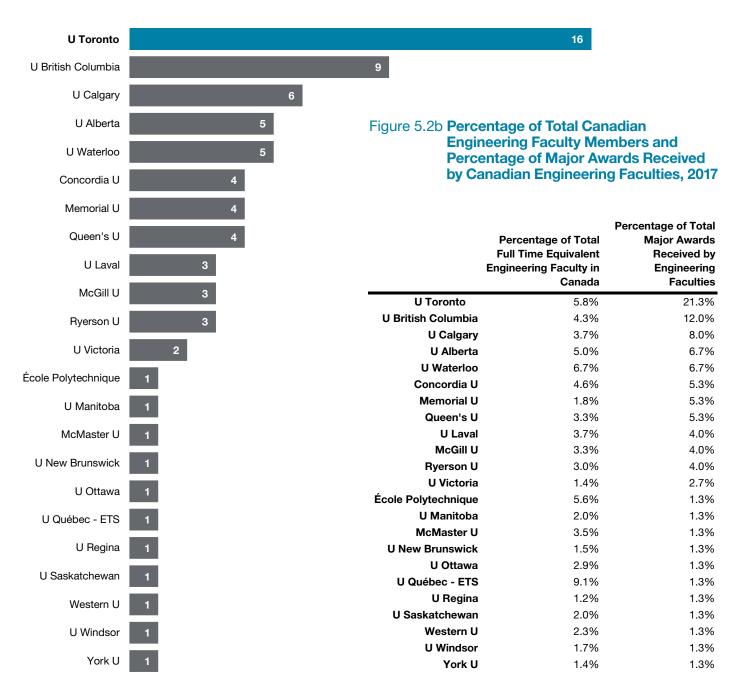
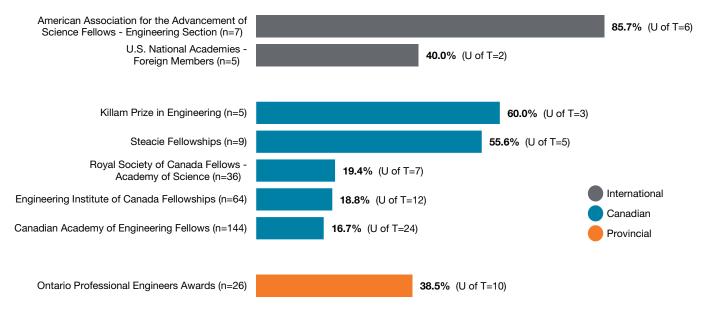


Figure 5.2a Number of Major National and International Awards Received by U of T Engineering Compared to Other Canadian Engineering Faculties, 2017

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, U.S. National Academies; National — Alan Blizzard Award, Brookhouse Prize, Canadian Academy of Engineering Fellowship, Engineering Institute of Canada Awards, Engineering Institute of Canada Fellowship, Engineers Canada Awards, Killam Prize (Engineering), Killam Research Fellowship, Manning Innovation Award, 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.

Figure 5.3 Number of Awards Received by U of T Engineering Faculty Compared to Other Canadian Engineering Faculties, 2013 to 2017



Selected Awards Received by Faculty

The following is a selected list of awards U of T Engineering faculty received between summer 2017 and summer 2018.

INTERNATIONAL

American Association for the Advancement of Science: Fellow David Sinton (MIE)

American Institute for Aeronautics and Astronautics: Associate Fellow Clinton Groth (UTIAS)

American Institute for Medical and Biological Engineering: Fellow Craig Simmons (MIE, IBBME)

Biochemical Engineering Journal: *Young Investigator Award* Radhakrishnan Mahadevan (ChemE) **The Combustion Institute:** *Fellow* Omer Gulder (UTIAS) Murray Thomson (MIE)

Institute of Electrical and Electronics Engineers: Fellow Ben Liang (ECE)

MIT Technology Review: *Top 35 Innovators Under 35* Angela Schoellig (UTIAS)

Optical Society of America: *Fellow* Mo Mojahedi (ECE) Joyce Poon (ECE)

Paper Industry International Hall of Fame Honghi Tran (ChemE)

Note 5.3: Data shown are by calendar year (January to December) and include faculty award recipients only.

NATIONAL

Canada Council for the Arts: *Killam Prize in Engineering* Molly Shoichet (ChemE, IBBME)

Canadian Academy of Engineering: Fellow

Robert Andrews (CivMin) Sanjeev Chandra (MIE) Tom Chau (IBBME) Heather MacLean (CivMin) Wei Yu (ECE)

Canadian Society for Chemical Engineering: Hatch Innovation Award Alison McGuigan (ChemE)

Canadian Society for Civil Engineering: Horst Leipholz Medal Shamim Sheikh (CivMin)

Canadian Society of Civil Engineering: Sandford Fleming Award Baher Abdulhai (CivMin)

Canadian Society for Mechanical Engineering: Fellow Sanjeev Chandra (MIE)

Engineering Institute of Canada: Fellow Brenda McCabe (CivMin)

Engineers Canada: Gold Medal Award Levente Diosady (ChemE)

E.W.R. Steacie Memorial Fund: Steacie Prize Milica Radisic (IBBME, ChemE)

IEEE Canada: C.C. Gotlieb Computer Award Yu Sun (MIE)

Office of the Governor General: Governor General's Innovation Award Paul Santerre (IBBME)

Office of the Governor General: Governor General's Meritorious Service Cross Tom Chau (IBBME) Order of Canada: Officer

Michael Sefton (ChemE, IBBME) Molly Shoichet (ChemE, IBBME)

Royal Society of Canada: Fellow Reza Iravani (ECE) Milica Radisic (IBBME, ChemE)

Royal Society of Canada College of New Scholars, Artists and Scientists: *Member* Wei Yu (ECE)

PROVINCIAL

Ontario Professional Engineers Awards: Entrepreneurship Medal Paul Santerre (IBBME)

Ontario Professional Engineers Awards: Research and Development Medal Jan Andrysek (IBBME) Craig Simmons (MIE, IBBME)

Ontario Professional Engineers Awards: Young Engineer Medal Jennifer Drake (CivMin)

Order of Ontario Tom Chau (IBBME)

TORONTO/U of T

Distinguished Professor in Forest Materials Bioengineering Ning Yan (ChemE)

Joan E. Foley Quality of Student Experience Award Jason Foster (EngSci)

Massey College Fellow Stewart Aitchison (ECE)

YWCA Toronto Woman of Distinction Milica Radisic (IBBME, ChemE)

Selected Awards Received by Staff, April 2017 to April 2018

INTERNATIONAL

International Association of Business Communicators (IABC) Gold Quill Award of Excellence, Innovate U outreach event

Engineering Strategic Communications, Engineering Outreach Office

IABC Gold Quill Award of Merit,

Story: Toronto's subways expose passengers to more air pollution than Montreal, Vancouver systems Engineering Strategic Communications

NATIONAL

Council for Advancement and Support of Education (CASE) District II Bronze Award, #EveryDropMatters CNE activation Engineering Strategic Communications

IABC Silver Leaf Award of Excellence, Innovate U outreach event Engineering Strategic Communications, Engineering Outreach Office

TORONTO

IABC Ovation Award of Excellence, #EveryDropMatters CNE activation Engineering Strategic Communications

IABC Ovation Award of Merit,

She Inspires Us video Engineering Strategic Communications, Engineering Outreach Office

U of T

True Blue Award Carla Baptista (MIE)

U of T Engineering Staff and Faculty Awards, 2014–2015 to 2017–2018

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. This award was established in memory of a dedicated Civil Engineering staff member.

2017–18: Mary Butera (ChemE) 2016–17: Joan DaCosta (UTIAS) 2015–16: Matthew Chow (ECE) 2014–15: Belinda Li (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.

2017–18: Vaughn Betz (ECE) 2016–17: Matthew Mackay (MIE) 2014–15: Scott Ramsay (MSE)

Faculty Teaching Award

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

2017–18: Manfredi Maggiore (ECE) 2016–17: Craig Simmons (MIE, IBBME) 2014–15: Jason Foster (EngSci)

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. This award was renamed in memory of an esteemed staff member who received this honour in 2011–2012.

2017–18: Shawn Mitchell (ECE) 2016–17: Andrey Shukalyuk (IBBME) 2015–16: Bruno Korst (ECE) 2014–15: Kelly Hayward (ECE)

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) 2014–15: Darlene Gorzo, Jaro Pristupa and Joe Wong (ECE)

McCharles Prize for Distinction in Early Career Research

The McCharles Prize was originally established in 1907 by Aeneas McCharles through a gift to the Faculty of Applied Science & Engineering at the University of Toronto. In 2007, the Faculty and the University re-established the McCharles Prize as an award for exceptional performance and distinction in early career research, typically on the part of a pre-tenure member of the Faculty of Applied Science & Engineering.

2017–18: Ding Yuan (ECE) 2015–16: Adam Steinberg (UTIAS)

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.

2017-18: Scott Sleeth (EngSci)

Quality of Student Experience Award (Frontline staff)

Presented to a staff member who has made significant improvements to the quality of student experience.

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) 2014–15: Mike Mehramiz (ECE)

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.

2017–18: George Eleftheriades (ECE) 2016–17: Greg Evans (ChemE) 2015–16: Alberto Leon-Garcia (ECE) 2014–15: Honghi Tran (ChemE)

Sustained Excellence in Leadership Award

Presented to a staff member who has demonstrated leadership in supporting the Faculty's education and/or research endeavors over a sustained period (typically 10 years or more). (This award replaces the Influential Leader Award, which was last presented in 2015–16).

2017–18: Kelly Chan (ECE) 2015–16: Leslie Grife (First Year Office) 2014–15: Joe Baptista (MIE)

Sustained Excellence in Teaching Award

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

2017–18: Graeme Norval (ChemE) 2016–17: Will Cluett (ChemE) 2014–15: Jonathan Rose (ECE)

Engineering Alumni Network Awards, 2014–2015 to 2017–2018

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.

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) 2014–15: Luca Casciato (MechE 1T5); Haruna Monri (CivE 1T5)

7T6 Early Career Award

Presented to an alumnus/alumna 10 years after graduation who is distinguished in the profession and community.

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) 2014–15: Stefanie Blain-Moraes (EngSci 0T5); Todd Reichert (EngSci 0T5, UTIAS PhD 1T1)

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.

2017–18: Alvin Mok (EngSci 0T3) 2016–17: Tom Chau (EngSci 9T2) 2015–16: Raffaello D'Andrea (EngSci 9T1) 2014–15: Janet Elliot (EngSci 9T0); Suneet Tuli (CivE 9T0)

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.

2017–18: Elias Kyriacou (ChemE 7T6) 2016–17: Don Andrew (CivE 5T4) 2015–16: Ross Pitman (GeoE 7T4) 2014–15: R. Christopher Hinde (CivE 5T0)

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.

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)

2014–15: William Breukelman (ChemE 5T5) Jan Carr (ElecE 6T8) Jay Cross (EngSci 7T5) Emil Frind (CivE 6T6)

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.

2017–18: Larry Seeley (ChemE 6T6, MASc 6T8, PhD 7T2) 2015–16: David Colcleugh (ChemE 5T9, MASc 6T0, PhD 6T2) 2014–15: Frank Dottori (ChemE 6T3)