# 3. Awards and Honours

The Faculty received a record number of major awards and honours in 2008. In fact, the U of T Engineering Faculty is disproportionately recognized for its excellence. We account for 5.1% of all national Engineering faculty and received 31% of all major international and national awards.

The success of our awards program has been enhanced by the newly created Faculty Committee on Nominations for Honours and Awards chaired by Michael Charles, Professor and Dean Emeritus and supported by a full-time staff position. The Committee's dedicated efforts have raised the Faculty's profile among Canada's top Engineering organizations, such as the Engineering Institute of Canada, the Canadian Academy of Engineering, and Professional Engineers Ontario. Their work continues to produce excellent results: from January to July 2009 our scholars have already received 21 major awards.

The University of Toronto and the Faculty of Applied Science and Engineering also recognize the outstanding contributions of staff, faculty, and alumni. Awards and honours are presented in a range of categories, including: outstanding contributions by staff; exceptional early performance and distinction in research; excellence in teaching early in a faculty members' career; and overall excellence in teaching.

# Summary of Selected Major Awards September 2007 to April 2009

Prestigious awards and honours are an important measure of scholarly excellence in research, teaching, and service to the profession. Receiving such honours from both national and international bodies is an indication of excellence.

## **Major International Awards and Recipients**

**ASME Heat Transfer Memorial Award** 

Cristina Amon, MIE

**Campus Representative Award:** 

**American Society for Engineering Education** 

Susan McCahan, MIE

Computer Award: Institute of

**Electrical and Electronics Engineers** 

K.C. Smith, ECE

**Excellence in Clinical Engineering Leadership** 

**Award: American** 

**College of Clinical Engineering** 

Tony Easty, IBBME

Fellow: American Association for the Advancement of Science

Grant Allen, ChemE; Brendan Frey, ECE;

M.J. Phillips, ChemE; Chris Yip, ChemE;

Peter Zandstra, IBBME; Jean Zu, MIE

Fellow: American Institute for

Medical and Biological Engineering

Paul Santerre, IBBME;

Peter Zandstra, IBBME

Fellow: American Institute of

Aeronautics and Astronautics

Peter Hughes, UTIAS

Fellow: American Society of

Mechanical Engineers

Ross Ethier, MIE; Masahiro Kawaji,

ChemE; Shaker Meguid, MIE;

Jean Zu, MIE

Fellow: Association for Computing Machinery

Jonathan Rose, ECE

Fellow: Institute of Electrical and Electronics

**Engineers** 

Francis Dawson, ECE; Brendan Frey,

ECE; Jorg Liebeherr, ECE;

Jonathan Rose, ECE

Fellow: International Union of

Societies for Biomaterials Science

and Engineering

Molly Shoichet, ChemE

Fellow: University of Tokyo

School of Engineering Javad Mostaghimi, MIE

Foreign Member: Royal Academy of Spain

Cristina Amon, MIE

Founders Award:

**Society for Biomaterials** 

Michael Sefton, IBBME

**IBM Faculty Award: IBM** 

Andreas Moshovos, ECE

International Hall of Fame:

The Paper Industry

Doug Reeve, ChemE

KAUST Global Research
Partnership Award: King
Abdullah University of Science

and Technology
Ted Sargent, ECE

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Kiyo Tomiyasu Award: Institute of Electrical and Electronics Engineers

George Eleftheriades, ECE

Senior Prize: International Photoacoustic and

**Photothermal Association** 

Andreas Mandelis, MIE

Sloan Research Fellowship:

Alfred P. Sloan Foundation

Aaron Wheeler, IBBME

Top 35 Innovators Under 35: MIT Technology

Review

Milica Radisic, ChemE

Women Engineer Inaugural Award:

**Electronics and Photonics** 

**Packaging Division** 

Cristina Amon, MIE

Yeram S. Touloukian Award:

**American Society of Mechanical** 

**Engineers** 

Andreas Mandelis, MIE

Young Investigator Award: NARSAD

Julie Audet, IBBME

## Major National Awards and Recipients

**Alouette Award: Canadian Space** Agency

Robert Zee, UTIAS

Award for Innovation: Canadian **Manufacturers and Exporters** 

James Smith, ChemE

Canada Medal: Society of Chemical Industry

Brian Wastle, ChemE 6T7

Canada's Top 40 Under 40: **Caldwell Partners** 

Paul Salvini, CivE; Peter Zandstra, IBBME

**Canadian Materials Physics Gold** Medal Award: Canadian Institute of Mining, Metallurgy and Petroleum

Doug Perovic, MSE

**Canadian Metal Chemistry Award: Canadian** 

Institute of Mining,

Metallurgy and Petroleum Stavros Argyropoulos, MSE

**Engineers Canada Gold Medal** 

Morden Yolles, CivE 4T8

**Engineers Canada Medal of Distinction** 

Susan McCahan, MIE

E.W.R. Steacie Fellowship: NSERC

Brendan Frey, ECE

**Excellence in Innovation in Civil Engineering** 

**Award: Canadian Society** for Civil Engineering

Jeffrey Packer, CivE; Constantin Christopoulos, CivE; Carlos de Olivera,

CivE

Fellow: Canadian Academy of Engineering

Barry Adams, CivE; Cristina Amon, MIE; William Bawden, CivE; Michael Collins, CivE; Levente Diosady, ChemE; Masahiro Kawaji, ChemE; Alex McLean, MSE; Javad Mostaghimi, MIE; Doug Perovic, MSE;

Jonathan Rose, ECE; Willem Vanderburg, CivE

Fellow: Canadian Institute of Food Science and Technology

Levente Diosady, ChemE

Fellow: Canadian Society for Mechanical Engineering

Cristina Amon, MIE; Javad Mostaghimi, MIE; Hani Naguib, MIE; Yu Sun, MIE

Fellow: Chemical Institute of Canada

Grant Allen, ChemE; Graeme Norval, ChemE

Fellow: Engineering Institute of Canada

Barry Adams, CivE; Cristina Amon, MIE; Michael Charles, ChemE: Michael Collins, CivE; Mark Fox, MIE; Alberto Leon-Garcia,

ECE; Jim Wallace, MIE

Fellow: Royal Society of Canada

George Eleftheriades, ECE; Molly Shoichet,

ChemE; Paul Young, CivE

Fred Beamish Award:

Canadian Society for Chemistry

Aaron Wheeler, IBBME

International Award:

Society of Chemical Industry

Larry Seeley, ChemE 7T2

John S. Bates Memorial Gold Medal: **Canadian Pulp and Paper Association** 

Donald B. Mutton, ChemE 4T9, PhD 5T3

John H. Chapman Award of Excellence: **Canadian Space Agency** 

Peter Hughes, UTIAS

Jules Stachiewicz Medal: Canadian Society

for Mechanical Engineering

Charles Ward, MIE

Kalev Pugi Award:

Society of Chemical Industry

Stephen Dunn, ChemE 7T1

Killam Prize: Canada Council for the Arts

Michael Sefton, IBBME

Killam Research Fellowship:

Canada Council for the Arts

Elizabeth Edwards, ChemE; Molly Shoichet,

**LeSueur Memorial Medal:** Society of Chemical Industry

David Boocock, ChemE

Medal for Outstanding Achievement in

**Industrial and Applied Physics:** 

**Canadian Association of Physicists** 

Andreas Mandelis, MIE

Order of Canada (Member):

**Governor General of Canada** 

Barry French, UTIAS

Robert W. Angus Medal:

**Canadian Society for Mechanical Engineering** 

Chul Park, MIE

Wighton Fellowship:

**Sandford Fleming Foundation** 

Paul Jowlabar, ChemE

## **Major Provincial Awards and Recipients**

**Engineering Medal for** 

**Entrepreneurship: Professional** 

**Engineers Ontario** 

Howard Goodfellow, ChemE 6T4

**Engineering Medal for Management: Professional Engineers Ontario** 

Jan Carr, ECE 6T8; Lloyd McCoomb, CivE 6T8

**Engineering Medal for Research and Development: Professional Engineers Ontario** 

Greg Evans, ChemE; Nazir Kherani, ECE; Javad Mostaghimi, MIE; Chul Park, MIE; Milos Popovic, IBBME

George Warren Fuller Award: Ontario Water Works Association

Robert Andrews, CivE

**Gold Medal: Professional Engineers Ontario** 

Walter Curlook, MMS 5T0, MASc 5T1, PhD 5T3, Hon. Doc. 0T2; Anne Sado, MIE 7T7

Leadership in Faculty Teaching Award: **Province of Ontario** 

Yu-Ling Cheng, ChemE

Young Engineer Medal:

**Professional Engineers Ontario** 

Constantin Christopoulos, CivE; Dwayne Shirley, MSE

Figure 3.1 Summary of Major International, National and Provincial Awards and Honours 2000–2009

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009(1)
International										
AAAS Fellowship*						1	1	2	4	
Guggenheim Fellowship*					1			1		
MIT Top 35 Under 35				1		1			1	
NAE Fellowship*						1	1			
National										
3M Teaching Fellowship*								1		
Alan Blizzard Award								1		
Canada's Top 40 Under 40				1			2	2	2	
CAE Fellowship						3	2	1	3	9
EIC Fellowship					1		2	2	3	4
Killam Research Fellowship*									2	
Killam Prize*				1					1	
Royal Society of Canada Fellowship*	1	1		2		1	1	1	1	1
Steacie Fellowship*				2	1	1				1
Synergy Award for Innovation					1	1				1
Provincial										
PEO Medals			1	1	1	4	2	3	5	5
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Total	1	1	1	8	5	13	11	14	22	21

Note: (\*) Denotes U of T Performance Indicator. (1) Data for 2009 are from January to July. Includes faculty and alumni award recipients.

#### \*AAAS Fellowship

Recognition for meritorious efforts to advance science or its applications from the American Association for the Advancement of Science.

# \*Guggenheim Fellowship

Intended for men and women who have demonstrated exceptional capacity for productive scholarship.

## MIT Top 35 Under 35

Awarded to world's top 35 young innovators under the age of 35 by MIT Technology Review magazine.

## \*NAE Fellowship

Election to the National Academy of Engineering is among the highest professional distinctions accorded to an engineer.

## \*3M Teaching Fellowship

Canada's highest teaching award in recognition of teaching excellence and educational leadership.

## Alan Blizzard Award

In recognition of exemplary collaboration in university teaching as it enhances student learning.

#### Canada's Top 40 Under 40

Honours top 40 Canadians who have reached a significant level of success prior to age 40.

## **CAE** Fellowship

The Canadian Academy of Engineering elects Fellows for distinguished achievements and career-long service to the engineering profession.

#### **EIC Fellowship**

Engineering Institute of Canada recognizes exceptional contributions to engineering in Canada and for service to the profession and to society.

## \*Killam Research Fellowship

Awarded by the Canada Council for the Arts to an established scholar who has demonstrated outstanding research ability and has published research results in substantial publications in their field. Recipients have the opportunity to devote two years to full-time research as part of this Fellowship.

#### \*Killam Prize

Awarded by the Canada Council for the Arts to distinguished Canadian scholars doing research in one of five fields of study, including engineering.

# \*Royal Society of Canada Fellowship

Highest Canadian honour a scholar can achieve in the arts, humanities and sciences.

## \*Steacie Fellowship

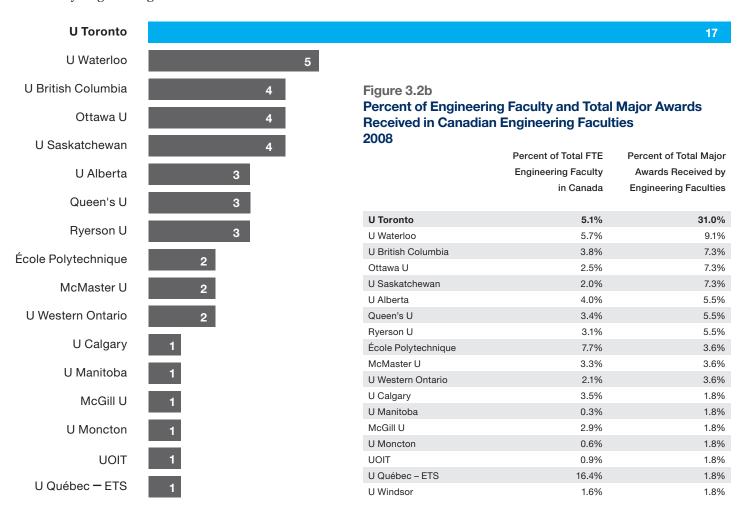
Awarded by NSERC to enhance the career development of outstanding and highly promising scientists and engineers.

## **Synergy Award for Innovation**

Recognizes examples of universityindustry collaboration that stand as a model of effective partnership.

# Figure 3.2a Number of Awards Received by U of T Engineering Compared to Other Canadian Engineering Faculties 2008

U of T Engineering received 5 major international awards and 12 national awards, which is 31% of all major awards received by Engineering Faculties in Canada.



**Note:** The following major awards are included above: International – AAAS Fellowship (Engineering Section), MIT Top 35 Under 35, NAE Fellowship; National – Canada's Top 40 Under 40, CAE Fellowship, EIC Fellowship, Killam Prize (Engineering), Royal Society of Canada Fellowship (Engineering/Physical Sciences), Steacie Fellowship, Synergy Awards for Innovation.

The following Canadian Universities have accredited Engineering programs:

- University of Alberta
- · University of British Columbia
- University of Calgary
- Carleton University
- Concordia University
- Dalhousie University
- · University of Guelph
- Lakehead University
- · Laurentian University
- Université Laval
- · University of Manitoba
- McGill University
- McMaster University
- Memorial University of Newfoundland

- Université de Moncton
- Université du Québec à Montréal
- University of New Brunswick
- · University of Northern British Columbia
- · University of Ontario Institute of Technology
- University of Ottawa
- École Polytechnique
- Université du Québec en Abitibi-Témiscamingue
- Université du Québec à Chicoutimi
- Université du Québec École de Technologie Supérieure (ETS)
- Université du Québec en Outaouais
- Université du Québec à Rimouski

- Université du Québec à Trois-Rivières
- Queen's University
- University of Regina
- Royal Military College of Canada
- Ryerson University
- · University of Saskatchewan
- Université de Sherbrooke
- Simon Fraser University
- · University of Toronto
- · University of Victoria
- University of Waterloo
- University of Western Ontario
- University of Windsor
- York University

# Summary of University of Toronto Awards Received by Engineering September 2007 to April 2009

#### **Arbor Award**

Caprice Boisvert, MIE 9T3; Roland Bergman, MSE 5T5; Sydney C. Cooper, CivE 4T5; Dave Fenwick, EngBus 5T3; Joseph Paul Grieco, CivE 7T0; Claire Kennedy, ChemE 8T9; Murray Metcalfe, IndE 7T7; Larry Seeley, ChemE 6T6, MASc 6T8, PhD 7T2; Som Seif, IndE 9T9; Arshia Tabrizi, ECE 9T5; Bill Troost, ChemE 6T7; Paul Walters, MinE 5T6; Bert Wasmund, ChemE PhD 6T6; William C. Winegard, MSE 4T9, MASc 5T0, PhD 5T2, Hon. Doc. Law 7T3

### **Breaking the Glass Ceiling Award**

Milica Radisic, ChemE

## Carolyn Tuohy Impact on Public Policy Award

Doug Reeve, ChemE

### Chancellor's Award

Barbara McCann, Faculty Registrar

#### **Faculty Award**

David Zingg, UTIAS

## Joan E. Foley Quality of Student Experience Award

Greg Evans, ChemE

#### McLean Award

Peter Zandstra, IBBME

#### **Northrop Frye Award**

Bryan Karney, CivE

### **President's Teaching Award**

Yu-Ling Cheng, ChemE

#### Stepping Up Award

Alina Balosin; Helen Bright; Dani Couture; Khuong Doan; Pierina Filippone; Catherine Gagne; Steve Martin; Sergei Metropolitansky; Dan Pettigrew; Austra Ozolins; Nelly Pietrepaolo; Jean Robertson; Sean Suleman; Alex Tichine; Georgette Zintay

#### **TATP Teaching Excellence Award**

Vinod Muthusamy, ECE

## Vivek Goel Faculty Citizenship Award

Ron Venter, MIE

### Note:

## **Arbor Award**

The University of Toronto Alumni Association recognizes volunteers for outstanding personal service to the University.

## Breaking the Glass Ceiling Award

Women in Science and Engineering at U of T celebrates outstanding accomplishments of women professors.

# Carolyn Tuohy Impact on Public Policy Award

The University of Toronto Alumni Association recognizes excellence in teaching, research, and the impact of scholarship on public policy.

## Chancellor's Award

The University of Toronto Alumni Association presents this award for outstanding contributions by an administrative staff member.

## **Faculty Award**

Presented by the University of Toronto Alumni Association for excellence in teaching, research, and professional endeavours.

## Joan E. Foley Quality of Student Experience Award

The University of Toronto Alumni Association presents this award to a student, alumni, administrative staff or faculty member who has made significant contribution to improving the quality of academic or extracurricular student life on campus.

## McLean Award

Prestigious award for early-career researchers at U of T.

## **Northrop Frye Award**

Presented by the University of Toronto Alumni Association to a faculty member in recognition of distinguished achievements in linking teaching and research.

## **President's Teaching Award**

Recognizes sustained excellence in teaching, research in teaching, and the integration of teaching and research.

#### Stepping Up Award

Recognizes staff who contribute to one of the U of T academic plan's five major goals: enhancing the student experience; interdisciplinary activity; linking academic programs to research experiences; outreach; and equity and diversity.

## TATP Teaching Excellence Award

The University's Teaching
Assistant's Training Program
recognizes the impact of excellent
teaching assistants each year.

# Vivek Goel Faculty Citizenship Award

Presented by the University of Toronto Alumni Association for distinction in multiple leadership committees, governance bodies, and external organizations complementary to the University's academic mission.

# Summary of U of T Engineering Awards 2001–2009

# **Faculty Teaching Award**

The highest teaching tribute awarded by the Faculty.

2009	John Carter	ECE
2008	Tarek Abdelrahman	ECE
2007	Raviraj Adve	ECE
2006	Frank Kschischang	ECE
2005	Ross Ethier	MIE
2004	Kim Pressnail	CivE
	Z.G. Vranesic	ECE
2003	David Kuhn	ChemE
2002	Bryan Karney	CivE
2001	Tony Sinclair	MIE

# **Early Career Teaching Award**

In recognition of excellence in teaching early in a career.

2009	Craig Simmons	MIE
2008	Hani Naguib	MIE
2007	Wei Yu	ECE
2006	Ali Sheikholeslami	ECE
2005	Evan Bentz	CivE
2004	Paul Gauvreau	CivE
2003	Parham Aarabi	ECE
2002	R. Ben Mrad	MIE
2001	Baher Abdulhai	CivE

# **McCharles Prize for Early Career Research**

This award was re-introduced in 2008 to recognize exceptional performance and distinction in research early in a career. Originally established in 1907 with a gift from Aeneas McCharles, this award will be presented again in 2010 and then every three years.

2008 Wei Yu ECE

# **Agnes Kaneko Award**

Presented to a staff member who has made an outstanding contribution to the Faculty over an extended period of time. This award was established in memory of Agnes Kaneko, a Civil Engineering staff member who was known for her excellent work and dedication to the Faculty.

2009	Renzo Basset	CivE
2008	Linda Espeut	ECE
2007	Brenda Fung	MIE
2006	Peter Leesti	CivE
2005	Sandra Walker	EngSci
2005	Yvonne MacNeil	IBBME
2004	Kelly Chan	ECE
2003	Bob Manson	ECF
2002	Ella Lund-Thomsen	ECE
2001	Teresa Miniaci	MSE