# ONTARIO TECH UNIVERSITY

**CLASS OF 2021 CONVOCATION** 











CONVOCATION
CELEBRATES THE
SUCCESS OF OUR
STUDENTS—THEIR
SUCCESS AT
ONTARIO TECH
AS WELL AS THE
ACCOMPLISHMENTS
THEY WILL ACHIEVE
IN THE FUTURE.

We can all take great pride in this moment.

After all, each of us—parents and friends, professors, academic advisors, members of the board—has helped to ensure the academic success of our students.

Although we're celebrating in a different format than past Convocations, our sentiment remains the same. We're proud of our students and we know they're well equipped to meet the challenges of today and in the future.

### **CHANCELLOR**

The Chancellor serves as the titular head of the university, presiding over Convocation and conferring all degrees, honorary degrees, certificates and diplomas on behalf of the university.

The Chancellor advocates for the university's vision as endorsed by the Board of Governors. and is an essential ambassador who advances the university's external interests

### MESSAGE FROM THE CHANCELLOR

Take a moment and think about your past four years. During a time of unprecedented change, you invested your time, effort and dedication to reach this Convocation. In the history of the world your period of studies represents a mere blip, but in your life, and in that of your families, your years at Ontario Tech University will rank among your most important.

44 I encourage you to remember your purpose and the lessons you have learned during your time at Ontario Tech. Continue to push forward, one step at a time, just as you have during your years at this university. 55

Reaching this milestone has not been without its challenges, for you and for your university. When you started this journey, who would have predicted that a tiny virus would cause so many vast adjustments in such a short space of time. Who would have thought that classes, lectures and even ceremonies like Convocation, would be experienced on-screen rather than in person? Yet, you persevered. You thought differently, adjusted and made things work, as did Ontario Tech's caring faculty and staff. That says a lot. It shows the sorts of amazing things that can happen, even under trying circumstances.

Now you reach the end of your journey and receive your degree. This moment speaks to finality, of course, but remember that a degree represents much more than just an elegant parchment: it also symbolizes your entrepreneurial skills, your flexibility to take on new challenges and your ability to adapt to technological change. It represents the sum of your efforts and the commitment of this university's faculty and staff.

As you embark on a new path, many challenges and roadblocks will inevitably arise. I encourage you to remember your purpose and the lessons you have learned during your time at Ontario Tech.

Continue to push forward, one step at a time, just as you have during your years at this university. And, remember your university is proud of you, and will always be here to support you as you do great things.

On behalf of the Board of Governors, I offer my warmest congratulations and best wishes.



regarthebtem Mitch Frazer Chancellor

#### 2020 - 2021 Members of the Board of Governors

Mitch Frazer. Chancellor Dietmar Reiner. Board Chair Laura Elliot. Vice-Chair Steven Murphy, President and Vice-Chancellor Azzam Abu-Rayash Liqun Cao

Kevin Chan Stephanie Chow

Lisa Edgar Laura Elliot Doug Ellis Francis Garwe Ran Hao Ferdinand Jones Kori Kingsbury Thorsten Koseck Dale MacMillan Maria Santos Kim Slade Trevin Stratton Roger Thompson Jim Wilson Lynne Zucker

# MESSAGE FROM THE PRESIDENT AND VICE-CHANCELLOR

Congratulations! You worked extremely hard to get to this day.

When I am not leading the university, I love to sail, and that sailor's perspective has proven particularly useful over the past year. Herman Melville, the great American writer wrote "...in this world, headwinds are far more prevalent than winds from astern...", and that has proven to be very true both on the water and in confronting a pandemic.

Inday you join an exclusive community of Ontario Tech alumni, making extraordinary contributions in the workplace and in academia. 77

When COVID-19 public-health restrictions took effect we were each forced to consider how to move forward. Yet, despite those headwinds, I always had faith that you, along with our exceptional faculty and staff, would prove just how adaptive and resilient our university community can be.

And, were you ever!

You adjusted quickly to new ways of working, studying and collaborating. You confirmed yourself as an innovative thinker, ready to lead, and driven to find solutions to problems. You showed you have the knowledge and skills for career and personal success. You demonstrated your resiliency to adapt to rapid technological and social change.

You also showed how you and your colleagues can make better communities, even during a pandemic. You ran tech-device drives to support the elderly. You saw our hockey teams launch an anti-bullying program and join the Pink-Shirt Day movement. You fostered equity, diversity and inclusion during Treaties Week, Pride Month and Black History Month.

In short, you showed how we as a university work together, even when staying apart.

Today, you join an exclusive community of Ontario Tech alumni making extraordinary contributions in the workplace and in academia. I'm confident you'll experience success as you start the next chapter in your life.

On behalf of our entire university community, congratulations and best wishes. And, as the old Irish saying goes, may the wind be always at your back.



Sincerely,

Dr. Steven Murphy

President and Vice-Chancellor

# MESSAGE FROM THE PROVOST AND VICE-PRESIDENT, ACADEMIC

On behalf of the university's Academic Team—the deans, professors, lecturers, lab technicians and advisors who form the heart of this university—I offer congratulations on your special graduation day. This represents one of life's most significant milestones; one of those special times that you will remember as an end, and maybe as a beginning.

Today I encourage you to reflect on the many different aspects of your Ontario Tech University experience. Those memories will remain with you, whether they are the new friendships you have made; your involvement with student clubs, societies or athletics; or your work with faculty members, as you pursued innovative projects or research.

This past year has not been an easy one yet you were flexible and responsive to new ways of learning, such as virtual classes, online tutorials, labs and meetings. You also displayed that unique spark of Ontario Tech ingenuity in your capstone projects, even as you found new ways to connect with your peers. These were challenging times but the fact that you thrived in spite of the challenges—or maybe, for some, because of them—is something that will serve you well throughout your career.

You may have your next steps figured out or perhaps they are still a work in progress. We at your university love to keep our eyes and ears open for the successes of our alumni, and today that includes you.

I invite you to stay connected with Ontario Tech through your Alumni Association and please be sure to share your future triumphs with us.

As you celebrate Convocation with those who have supported you, be as proud of your achievements as we are of you. And remember, your university will always be here to support you.

Once again congratulations on a job well done and best wishes for your future!



Sincerely,

Dr. Lori A. Livingston

Provost and Vice-President, Academic

 $\square\square$  We at your university love to keep our eyes and ears open for the successes of our alumni, and today that includes you. 99

# ORDER OF PROCEEDINGS

**Processional** 

**Opening of Convocation** 

Chancellor's Address
Mr. Mitch Frazer, Chancellor

President's Address

Dr. Steven Murphy,

President and Vice-Chancellor

Conferral of the Honorary Degree Mr. Mitch Frazer, Chancellor

Address to the Graduands
Honorary Degree Recipient

Conferral of Degrees

Mr. Mitch Frazer, Chancellor

**Closing of Convocation** 

Receptions

# CONFERRAL OF THE DEGREE

The Convocation ceremony has its roots in ancient traditions. It is rich in academic conventions and symbols that carry special significance and meaning. In present day, these traditions are seen in the colourful academic dress and the customs that are observed throughout the ceremony, which serve to honour the achievements of the graduates and recognize their new role and obligations as members of their respective disciplines, fields of study and the alumni community. The Provost presents the degree candidates to the Chancellor, who then confers the degree.

### **DISTINCTIONS**

Undergraduate students who have achieved a cumulative grade point average (GPA) of 3.8 or higher for the courses required for their degree will have the words with Highest Distinction added to their degree parchment and to the degree notation on their transcript. Undergraduate students who have achieved a cumulative GPA of 3.5 to 3.79 for the courses required for their degree will have the words with Distinction added to their degree parchment and to the degree notation on their transcript.

### HONORARY DEGREES

Honorary degrees recognize persons who have made an outstanding intellectual and/or scholarly contribution in their chosen field of academic eminence; provided outstanding service and/or contributions to greater society through non-academic achievements and/or public service; or made major contributions in areas relevant to the mission of the university and/or to Durham Region/Northumberland County.

The President selects the honorary degree recipients upon the recommendation of the Honorary Degrees Committee, following an open call for nominations that takes place in the fall of each year. This year the university will award the following honorary degrees:

#### DOCTOR OF LAWS, HONORIS CAUSA (LLD)

Awarded for outstanding achievement in social sciences in the broadest sense, or significant community contributions at the local, national or international levels.



# HONORARY DEGREE RECIPIENTS

# FACULTY OF BUSINESS AND INFORMATION TECHNOLOGY

Mr. Andreas Apostolopoulos

#### **FACULTY OF EDUCATION**

Ms. Noreen Taylor

# FACULTY OF ENERGY SYSTEMS AND NUCLEAR SCIENCE

The Right Honourable Brian Mulroney and Mrs. Mila Mulroney

## FACULTY OF ENGINEERING AND APPLIED SCIENCE

Dr. Mohamed Lachemi

#### **FACULTY OF HEALTH SCIENCES**

Mr. Paul Ralph

#### **FACULTY OF SCIENCE**

The Right Honourable Brian Mulroney and Mrs. Mila Mulroney

## FACULTY OF SOCIAL SCIENCE AND HUMANITIES

Ms. Tanya Talaga

# THE RIGHT HONOURABLE BRIAN MULRONEY AND MRS. MILA MULRONEY

Doctor of Laws, honoris causa

For their economic and environmental leadership, for their support for scientific research, and for their service to Canada—and indeed to the world—the university confers proudly upon The Right Honourable Brian Mulroney, CC, and Mrs. Mila Mulroney the honorary degrees of Doctor of Laws, honoris causa. For over five decades, Mr. and Mrs. Mulroney have made Canada a better place, through their political leadership, their international profile and as champions of charitable causes.

Mr. Martin Brian Mulroney was born in Baie-Comeau, Quebec in 1939, the son of an electrician. He attended St. Francis Xavier University, studying Arts and Commerce before majoring in Political Science. After graduating with honours in 1959, Mr. Mulroney started studying law at Dalhousie University, and then transferred to Laval University a year later.

In 1964, he took a position with the Montreal law firm of Howard, Cate, Ogilvy, and worked on the Commission of Inquiry into the St. Lawrence Ports; he also served as a commissioner on the Cliche Commission of Inquiry into the Quebec construction industry. Later he entered the business world, becoming President of Iron Ore of Canada. Each activity bolstered his status and recognition across Canada, particularly in his native Quebec. And, between all of his legal and business dealings, he met and married Ms. Mila Pivnicki; last month they celebrated their 48th wedding anniversary.

Born in Serbia, Mrs. Mulroney immigrated to Canada in 1958 with her family. Her psychiatrist father took a position at the Royal Victoria Hospital, and the family settled in Montreal, Quebec. Before she was married, she studied Engineering at Concordia University.

Politics soon beckoned for the Mulroneys. In 1983 Mr. Mulroney won the leadership of Canada's Progressive Conservative party. In the election the following year, he became Canada's 18th Prime Minister, leading his party to the greatest majority in Canadian history; four years later, he led his party to a second majority.

Throughout his career, Mr. Mulroney had developed a passionate belief that Canadian economic success could only be secured by unfettered access to foreign markets. He achieved that precious access by negotiating a 1988 Free Trade Agreement with the United States, and then, four years later, Canada jointly negotiated the creation of the North American Free Trade Agreement.

Mr. Mulroney's leadership, however, extended beyond trade and economics. In 1987, he hosted world leaders in Montreal, and more than 40 countries signed a pledge to cut drastically the use of ozone-destroying chlorofluorocarbons. A year later, in 1988, Mr. Mulroney hosted the landmark World Climate Change Conference in Toronto, a conference credited with officially putting climate change on the global agenda. Then, in 1991, he signed the Canada-United States Air Quality Agreement with U.S. President George H. W. Bush to reduce pollution that causes acid rain. For all of that, in 2006, Mr. Mulroney was named the 'greenest' prime minister in Canadian history.

Also during his term, language rights in New Brunswick were entrenched in Canada's constitution. The Nunavut Agreement with the Inuit of the Eastern Arctic set in motion the creation of a third territory in Canada, representing a major achievement in Indigenous land settlement. Internationally, Mr. Mulroney's opposition to apartheid won him respect around the world, and led to freedom for Nelson Mandela and the dismantling of apartheid in South Africa.

Mrs. Mila Mulroney's role, work and legacy has proven no less impressive. From 1984 to 1993, she served as National Chairperson of the Cystic Fibrosis (CF) Foundation of Canada raising millions of dollars

for research into this genetic killer of children, while spending countless hours visiting with, encouraging and consoling CF patients and their parents. Mrs. Mulroney also focused on various literacy projects working closely with Frontier College.

Today she maintains her leadership role on behalf of Cystic Fibrosis. Mrs. Mulroney also co-chairs Table of Hope/La Table du Partage, a leading Montreal charity that provides thousands of meals to more than 33 schools in Montreal neighbourhoods. She has also served as a Board Member of Astral Media Inc., the Foundation of The Toronto Hospital for Sick Children, Les Grands Ballets Canadiens and the McGill University School of Music. She currently serves as Vice-President of Cansult Communications. In 2019 she received the Knight of St. Sava Order of Diplomatic Pacifism from her native Republic of Serbia, honouring contributions to the motherland.

Mr. Mulroney resigned from politics in 1993, and returned to Montreal to practice law. The Mulroneys remain active in public policy, philanthropy and public life, and enjoy visits from their four children and 15 grandchildren.





### DEGREE CONFERRALS | FACULTY OF SCIENCE

Friday, June 25, 2021

**Doctor of Philosophy** Master of Science **Bachelor of Science (Honours)**  Bachelor of Science (Honours), **Co-Operative Education** Bachelor of Science and Management (Honours)

#### **DOCTOR OF LAWS, HONORIS CAUSA**

The Right Honourable Brian Mulroney

Mrs. Mila Mulroney

#### **DOCTOR OF PHILOSOPHY, APPLIED BIOSCIENCE**

Samira Barmaki

Thesis Title: Development of Non-covalent Chemical Probes for  $\mu$ ,  $\delta$  and  $\kappa$  Opioid Receptors

Sara Behnami

Thesis Title: Forward and reverse genetic approaches to investigate cellulose biosynthesis in Physcomitrium Patens

Davis Alexander Forman Thesis Title: Muscle Fatigue and Other Factors Influencing Forearm Muscle Activity

Sarah Anne Habibi

Thesis Title: Characterization of the ACC-1 Family of Cys-Loop Ligand Gated Ion Channels from the Parasitic Nematode Haemonchus contortus

Sarah Elizabeth MacKay Thesis Title: Water Quality and **Biotic Community Response** to an Urban - Rural Land-use Gradient in the Lake Simcoe Watershed

Carley O'Neill

Thesis Title: Comparing Exercise Responses to High Intensity Interval Training between Adults With and Without Asthma

#### **DOCTOR OF PHILOSOPHY, COMPUTER SCIENCE**

Brandon Christopher Laughlin Thesis Title: A Mixed-method Approach to Analyze the Robustness of Natural Language Processing Classifiers

Michael Alexander Miljanovic Thesis Title: Adaptive Serious Games for Computer Science **Fducation** 

#### **DOCTOR OF PHILOSOPHY, MODELLING AND COMPUTATIONAL SCIENCE**

David Oio Babalola Thesis Title: Towards Molecular Reconstruction in Coulomb Explosion Imaging

Kyle Ian Mills

Thesis Title: On deep learning in physics

Mia Carmela Mojica

Thesis Title: Computational Methods for Medical Image Registration

#### MASTER OF SCIENCE. **APPLIED BIOSCIENCE**

Jarret William Arbing Alexandra Anne Johnston Mark Andrew Wulczynski

#### MASTER OF SCIENCE, **COMPUTER SCIENCE**

Bahare Askari Firoozjayi Michael Ryan Chan Ravi Upendrakumar Chauhan

Katelyn Cushing Taher Dehkharghanian Md. Yousuf Hossain David Andrew Lennick Miguel Alejandro Lozano Gonzalez Daniel Austin MacCormick **Ghazal Reshad** Luisa Fernanda Rojas Garcia Sarina Sajadi Ghaemmaghami Michael Joseph John Valdron

#### MASTER OF SCIENCE. MATERIALS SCIENCE

Sameh Awny Hassan Khalil Hegazy Donna Marie Riel

#### MASTER OF SCIENCE, **MODELLING AND COMPUTATIONAL SCIENCE**

Leanna Ashley Calla Eric Ng

#### **BACHELOR OF SCIENCE** (HONOURS), APPLIED AND INDUSTRIAL **MATHEMATICS**

Kin Cheung Wilson Chan Brian Scott Frendo-Cumbo

#### **BACHELOR OF SCIENCE** (HONOURS), BIOLOGICAL **SCIENCE**

Nursan Abdullah 🖈

Irma Agil Artur Arutiunian Mahad Sharif Azhar Farah Jadzia Bacchus-Misir \*\* Fatima Bah Luc Bellefeuille Rahul Bhardwai Sonal Birdi Corrine Sara Briante \* Natalie Vita Diana Castelli Michael Paul Casullo-DaSilva Jaemel Travis Chapman Lyndsay Comeau Jesseca Duncan Gillian Mackenzie Fleming Hailee Frev Amy Anne Gostick Ameera Hack Terry-Ann Thandiwe Hemmings ★ Amani Jhanai Heslop Deborah Azobeda Ilegogie Ronathan Chifung Ip Rachael Ireland Abdurrahman Jawad Jethursan Jeyakumar Malika Karim Hajiani 🖈 Pushpitha Karthikeyan Lillian Kasulis Almira Khan Samira Zarin Khattak Governor General's Academic Medal (Silver) Faculty Medal Rujith Kovinthapillai Amanda Chloe Kratochvil Madison Anne Lamont \*\* Sydney Rayne Lilja Michael Van Ly Janine Grace Malong Melissa Marie Marcoccio Makenzie Carlos Mateus \* Anwar Mehren Gafoor Abdul Mohammed Themathuri Nanthakumar Ian Ravindra Narain

Naushin Nawal Mitchell Austin Ng \*\* Jennifer Susan Nichols \*\* Precious Anuoluwapo Owolabi Nawrid Nooren Oyshe Allana Rebecca Persaud Thiluxsaan Puvanendran Dharna Yakeen Rami Thanujan Rangeswaran Charizze Belle Recto Sarah Rijkenberg Exaltacao Rodrigues Lubna Salam Kristela Mae Santos Dylan Satesh Savroo Zill-E-Khadiia Shaikh Basma Shamliogli \*\* Shanzeh Shehryar Kristen Alexandria Mei-Nung Shen \* Amir Siddique Meera Kaur Sidhu

Christopher Summers
Jasdeep Suri
Modabbir Syed
Emily Kathleen Turner
Alana Chantel Tyner \*\*
Tina Walizadah

Leslie Chun Kit Yeung

Natasha Lian Sinanan

Sydney Elizabeth Stogios

BACHELOR OF SCIENCE (HONOURS), CHEMISTRY

Natalie Mariam Zitoun

Dalia Alaboudi
Xin Chen 
Marco Ming Cheong Chiu
Connor Robert Thomas Clark
Sarah Amy Davenport
Earl Rainer Dela Cruz
Isabelle Allensy Guillen Erasquin
Rony Gantous
Mackenzie Francis
Gfroerer-Priede

Megan Hutton
Roxana Denisa Irimus 
Muskan Joshi
Sujani Kaneshamoorthy
Stephen Thomas Winter Kerr
George Lagos
Mary-Kate Caycey Marren
Peter Daniel Melino 
Mopinsun Sivapalasingam
Ashaleni G Tharmarajah
Dimitrios Nickolaos Vernezos
Jireh-Eirene Danielle Viera
Yuwei Wang

BACHELOR OF SCIENCE (HONOURS), CHEMISTRY, CO-OPERATIVE EDUCATION

Thien Nguyen

BACHELOR OF SCIENCE AND MANAGEMENT (HONOURS), CHEMISTRY

Jil Sanjaykumar Patel

BACHELOR OF SCIENCE (HONOURS), COMPUTER SCIENCE

Moiz Abdul
Brandon Matthew Angod
Jude Gauthaman Antonyrajan
Keshopan Arunthavachelvan
Musabbir Baki

Tamilselvan Balasuntharam ★

Omer Baskurt
Thomas Blain
Nicholas Evan
George Rabideau Bode \*
Adam Alexander Bozzo
Dominic Lawrence Cabitac
Sean Allan Caldwell

Etienne Zacharie Hernandez Caronan Mei-Yu Chen

Stefan Sheldon Cross

Andre Dallaire

Spencer Patrick Denford

Yash Dhume

Vincent Peter Galloro ★★

Vital Golub ★★
Spencer Grav

Pasquale Guzzo-Foliaro

Ramzi Haddad

Connor Dustin Henderson \*

Minh Quang Huynh

Taabish Nasrudin Jeshani

Jessica 🖈

Sunu Pious Joseph

Paul Patrick Kerrigan

**Ammar Khan** 

Stacev Alison Koornneef

Erik Matthew

James Kostashuk \*

Calvin Donald Lapp

Kenny Le

Jia Rong Liu

Alvin Siu-Chun Lum

Pulkit Madan \*\*

Kabilan Manogaran ★★
Matthew Lynn Mepstead ★

Samatar Abdirashid Mumin

Ahmed Nadeem 🖈

Peter David Nagy

Raphael Jordan Nation \*\*

Adunife Kizito Okoye

Austin Joel Oligario

Colin Kevin James Orian 🖈

Yash Pandya

Margie Patel

Jessica May Querido \*

Martin Ridge Reventar \*

Syed Daniyal Shah

**Uday Shah** 

Tilova Shahrin

Sonika Sharma

Gajan Sivanesan

Geerthan Srikantharajah

Liam Michael Stachiw

Danooshan Sureshkumar

Yudi Tao

Harrish Patrick Thasarathan \*

Luke Tran 🖈

Anushan Vimalathasan

Isaiah Von Uders \*

Alexander Blair Waddell

Philip James Walton

Joshua Michael

Charles Wry ★★

Henry Zheng

#### BACHELOR OF SCIENCE (HONOURS), COMPUTER SCIENCE, CO-OPERATIVE EDUCATION

Mohammed Alhag

Aleem Alibhai

Arshdeep Benipal

Matthew King Chan

Leon Wei Leung Chow

Bevan Don Bosco

Stephanie Phung

Samuel Joseph Pilkey

Aaron-Christopher Williams

Leonard Ionut Zbona

# BACHELOR OF SCIENCE (HONOURS), FORENSIC SCIENCE

Jawaid Ahmed Amini 🖈

Benoit Alexandre Beaudoin

Earl Evan Rae Rodillas Beleran

Cassandra Erica Chase

Natalie Elise D'Hollander

Samuel David Goodfellow

Tavawn Andre Graham

King Yeen Li \*

Rebecca-Marie

Paulette Andrea Lobban

Victoria Dawn MacMillan

**Brandon Michael Matias** 

Nicole Milner

Alyssa Nikkel \*\*

Tulsi Kamlesh Rajani 🖈

Maryam Refaat Fakhori 🖈 Samantha Anne Marie Ringwood Muskan Vir

#### BACHELOR OF SCIENCE AND MANAGEMENT (HONOURS), FORENSIC SCIENCE

Chloe Chan

# BACHELOR OF SCIENCE (HONOURS), PHYSICS

Souzi Ebeidi-Kanama

Ivan Ha

Moriah Katherine Humphrey

Rvan Kwok 🖈

Rohit Singh \*

Blessing Chikomborero

Tirivangani

Dawson Matthew Willerton \*\*





### FACULTY MFDAIS

Faculty medals are awarded annually by each faculty to the student graduating from an undergraduate program who has achieved the highest cumulative GPA in the courses required for their degree, as approved by the dean of the faculty. To be considered, students must have completed at least half the course requirements at the university and have achieved a cumulative GPA of 3.5 or higher.

## FACULTY OF BUSINESS AND INFORMATION TECHNOLOGY

Nathan Albert Paul Labonte

#### **FACULTY OF EDUCATION**

Desiree Johnson

# FACULTY OF ENERGY SYSTEMS AND NUCLEAR SCIENCE

Nicholas Adam Bourne

## FACULTY OF ENGINEERING AND APPLIED SCIENCE

Joshua Shane Howorth Anton Shchukin

#### **FACULTY OF HEALTH SCIENCES**

Jeffrey Chen Kelly Elizabeth Mason

#### **FACULTY OF SCIENCE**

Samira Zarin Khattak

## FACULTY OF SOCIAL SCIENCE AND HUMANITIES

**Austin Kevin Chalmers** 

# OUTSTANDING THESIS AWARDS

Outstanding Thesis Awards recognize a student graduating from a thesis-based master's program and a student from a thesis-based doctoral program whose thesis has made, or is expected to make, a significant contribution to their field of study. To be considered, students must meet the following criteria:

- · Cumulative GPA of 3.7 or higher.
- Received an outcome of Acceptable without Required Revisions or Acceptable with Minor Revisions at their thesis defense.
- · No academic offenses on their record.

# 2021 OUTSTANDING MASTER'S THESIS AWARD RECIPIENT

Maciej Bartosz Lacki

Thesis Title:

Analysis, Development, and Control of Multi-Degree-of-Freedom Passive Haptic Devices Master of Applied Science, Mechanical Engineering

# 2021 OUTSTANDING DOCTORAL THESIS AWARD RECIPIENT

Haris Ishaq

Thesis Title:

Investigation of Integrated Systems for Clean Ammonia Synthesis

Doctor of Philosophy, Mechanical Engineering

# GOVERNOR GENERAL'S ACADEMIC MEDALS

The Governor General's Academic Medal was first awarded in 1873 by the Earl of Dufferin and has since become one of the most prestigious awards a student in a Canadian educational institution can receive. The Governor General's Academic Medals are awarded for academic excellence at four levels:

- · Bronze at the secondary school level.
- Collegiate bronze at the post-secondary, diploma level.
- · Silver at the undergraduate level.
- Gold at the graduate level.

To maintain a spirit of universality across the country, the directives were designed to ensure the medals are awarded on academic marks only, regardless of the intangible qualities of students' lives, such as good citizenship, moral behaviour or popularity. The medal can be awarded to only one student.

#### Gold Medal

The gold medal is awarded annually to the student graduating from a graduate-level program who has achieved the highest cumulative GPA for the courses required for their degree, as approved by the Admissions and Scholarship Committee. To be considered, students must have a cumulative GPA of 3.8 or higher.

# 2021 GOVERNOR GENERAL'S GOLD MEDAL RECIPIENT

#### Osamah Siddiqui

Doctor of Philosophy, Mechanical Engineering

#### Silver Medal

The silver medal is awarded annually to the student graduating from an undergraduate program who has achieved the highest cumulative GPA for the courses required for their degree, as approved by the Admissions and Scholarship Committee. To be considered, students must have completed a minimum of 60 credit hours at the university and have achieved a cumulative GPA of 3.8 or higher.

## 2021 GOVERNOR GENERAL'S SILVER MEDAL RECIPIENT

#### Samira Zarin Khattak

Bachelor of Science (Honours), Biological Science

# AWARDS FOR TEACHING EXCELLENCE

The university recognizes instructors who have demonstrated excellence in teaching. These awards distinguish those who have significantly enhanced the quality of learning for students through innovation and commitment, by fostering new instructional practices and learning activities, and through engagement in the scholarship of teaching and learning.

#### STUDENT CHOICE AWARD

Recognizes instructors selected by students from online course feedback and surveys. Awards were given in three categories: Teaching Assistant, Undergraduate and Graduate instructor.

### FACULTY OF BUSINESS AND INFORMATION TECHNOLOGY

Rajinder Khurmi, Teaching Assistant Joshua Lowe, Undergraduate Julie Thorpe, Graduate

#### **FACULTY OF EDUCATION**

Keisha Deoraj, Teaching Assistant Tricia Dwyer-Kuntz, Undergraduate Joseph Stokes, Graduate

### FACULTY OF ENERGY SYSTEMS AND NUCLEAR SCIENCE

Sarah Watt, Teaching Assistant Salam Ali, Graduate Rachid Machrafi, Undergraduate

### FACULTY OF ENGINEERING AND APPLIED SCIENCE

Anshuman Sharma, Teaching Assistant Anwar Abdalbari, Undergraduate

#### **FACULTY OF HEALTH SCIENCES**

Rufeyda Cosgun, Teaching Assistant Syed Qadri, Undergraduate Adam Dubrowski, Graduate

#### **FACULTY OF SCIENCE**

John Nemec, Teaching Assistant Rupinder Brar, Undergraduate

#### **FACULTY OF SOCIAL SCIENCE AND HUMANITIES**

Lyndsay Woolridge, Teaching Assistant Tanya Karam-Zanders, Undergraduate

### ABOUT ONTARIO TECH UNIVERSITY

Modern and forwarding-thinking, Ontario Tech University advances the discovery and application of knowledge to accelerate economic growth, regional development and social innovation. We inspire and equip our students and graduates to make a positive impact in a tech-focused world.

We believe it's not only about developing the next tech breakthrough. Understanding and integrating the social and ethical implications of technology are our key differentiator.

We adapt to the ever-changing educational landscape by experimenting with the most effective ways to deliver flexible and dynamic learning, giving more choices to more people. By offering a range of credentials and experiential learning opportunities, and sparking entrepreneurship activities, we provide learner-centred educational options.

Our students enjoy a stimulating campus life experience that includes hundreds of clubs, cultural and community events, recreational opportunities and a growing varsity athletics program featuring basketball, badminton, curling, dance, golf, hockey, rowing, soccer, and women's lacrosse.

In addition to excellence in teaching, we offer our students experiential learning opportunities through internships, co-ops, practicums, research projects and more. In fact, 85 per cent of upper-year undergraduate students participate in experiential learning.

We collaborate with industry, community, government and academic organizations, bringing them together with our researchers and students to uncover innovative solutions for our partners' most pressing problems. The home to more than 80 specialized research laboratories and facilities, we're committed to attracting passionate and capable scholars to our high-tech campus.



The university is proud to acknowledge the lands and people of the Mississaugas of Scugog Island First Nation, which is covered under the Williams Treaties. We are situated on the Traditional Territory of the Mississaugas, a branch of the greater Anishinaabeg Nation, which includes Algonquin, Ojibway, Odawa and Pottawatomi.



### THE UNIVERSITY COAT OF ARMS



The Coat of Arms was granted to the university on July 15, 2009 by Claire Boudreau, Chief Herald of Canada under the authority of the Governor General of Canada. The Coat of Arms offers a graphic representation of important facets of the university, as well as its history, values and achievements.

It highlights the university's ties to the regional, national and worldwide communities from which the university draws its mission and purpose. The university reserves the use of the Coat of Arms for commemorative and ceremonial purposes.

The Coat of Arms consists of a shield, a crest, supporters and a motto. The shield, at the centre of the arms, contains three elements: an open book, a canoe and a division line.

The open book denotes an institute of higher education. The inverted canoe alludes to intellectual exploration and signifies the university's location in Oshawa, which means portage or carrying place. The division line represents energy, innovation and community.

Atop the crest a falcon perches with its head facing forward to see the world as it is and to find ways to make a difference. The falcon, a symbol of leadership and persistence, holds a thunderbolt with flames at the top and bottom. Lightning bolts crossed behind the falcon emphasize the importance of technology. Thoroughbred horses flank the shield to reference Windfields Farm, which was located directly north of the university, and famed for breeding champion racehorses. As an official symbol of Canada, the horses also represent excellence, energy and agility. They stand on a mound of grass set with trillium flowers as a reference to Ontario. The university motto, Cogitando et Agendo Ducemus, means by thinking and doing, we shall lead.





### THE UNIVERSITY MACE

The mace symbolizes the authority, independence and responsibility of the university as a protector, creator and facilitator of knowledge. It is carried before the President and Vice-Chancellor, and the Chancellor in the Academic Procession and rests on its stand throughout the ceremony.

The mace was unveiled at Convocation in 2007. Designed and crafted by Beth Alber, Associate Dean, Faculty of Design at OCAD University in Toronto, Ontario, it consists of a strong handle of carved cherry wood, an elegant and hardy tree native to southern Ontario. Rings of polished quartz and sodalite, in the university's colours, top the wood. The handle supports a crown of silver in the form of an abstracted flower bud, which is intended to be a reminder of our unending responsibility to nurture, protect and celebrate academic achievement among students, faculty and staff. The surfaces of the petals are etched with the microscopic imprint of a poplar leaf, as a symbol of hope and endurance. The mace is supported by a base of Belmont Rose granite from a quarry in the Kawartha Lakes region, representing the foundation of knowledge and our interdependence with the surrounding community.

### **GONFALONS**

The gonfalon, a flag that hangs from a crosspiece or frame, originated in the medieval republics of Italy as an ensign of state or office. Universities from around the world have adopted gonfalons and they use them during Convocation ceremonies to symbolize the different academic areas within the university. The eight gonfalons displayed at the university's Convocation ceremonies represent the university and its seven faculties. Gonfalon carriers march at the head of their faculty during the procession, followed by the students who will graduate from each of the faculties during the ceremony.



University of Ontario Institute of Technology



Faculty of Business and Information Technology



Faculty of Education



Faculty of Energy Systems and Nuclear Science



Faculty of Engineering and Applied Science



Faculty of Health Sciences

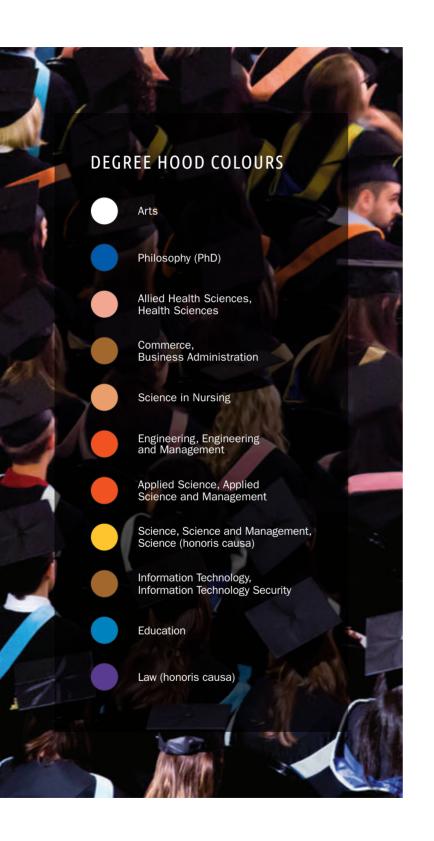


Faculty of Science



Faculty of Social Science and Humanities





### **ACADEMIC REGALIA**

The colourful academic dress worn in the Convocation ceremony was introduced more than 600 years ago. At the university, all graduates wear a gown, with a cap and hood. The gowns of bachelor's and master's graduates are black. The gowns of doctoral graduates are dark blue and trimmed in light blue. Mortarboards are worn by bachelor's and master's graduates, and velvet bonnets are worn by doctoral graduates. The hoods of bachelor's and master's graduates are black and the hoods of the doctoral graduates are dark blue. All degree hoods have an inside lining of royal blue as the colour of the university. The colour of the velvet trim on the hoods is distinctive of the degree that has been earned by the graduate. Graduate diploma recipients wear a black bachelor's gown.

The Chancellor and President and Vice-Chancellor wear gowns that are distinctive of the positions they hold in the university community. University governors who participate in the Convocation ceremony wear a gown and sash distinctive of the Board of Governors. University officers, faculty and staff who participate in the Convocation ceremony wear the academic dress distinctive of the institution from which they graduated and the degree they received. If the institution's colours are not available, participants will wear a black gown.



### MESSAGE FROM THE ALUMNI ASSOCIATION

Congratulations, class of 2021! You've persevered through lectures, labs, deadlines and even a global pandemic, and today, we celebrate all of your achievements. On behalf of the Alumni Association, welcome to our alumni family!

GG Convocation isn't the end of your relationship with the university; it's only the beginning.  $\sqrt[n]{2}$ 

Convocation isn't the end of your relationship with the university; it's only the beginning. We're committed to helping you succeed throughout your life, whether it's through alumni benefits or career development opportunities. I encourage you to visit our Alumni website (alumni.ontariotechu.ca) and social media channels to learn about everything available to you in your new role as #OTAlumni. From a wide variety of in-person and virtual programs

to events and other services, the Alumni Association Council and Alumni Office are here to help.

Alumni are the university's greatest ambassadors. You join our network of more than 23,500 graduates across our country and around the world. I hope you will join me in staying connected with our university and fellow alumni by sharing your experiences and accomplishments and by participating in alumni events.

Congratulations, you did it!



William Lee Faculty of Business and Information Technology, Class of 2017

Chair, Alumni Association Council

For an alternative format of this information, contact marketing@ontariotechu.ca.

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