

# CAE Conference & Induction Ceremony 2023

## PROGRAM



The Canadian  
Academy of  
Engineering



L'Académie  
canadienne  
du génie

300 – 55 Metcalfe Street, Ottawa, Ontario, K1P 6L5 | 613-235-9056 | [www.cae-acg.ca](http://www.cae-acg.ca)

wifi: Laurel Point Conference | password: LPWelcomesU

# WELCOME MESSAGE

Dear attendees,

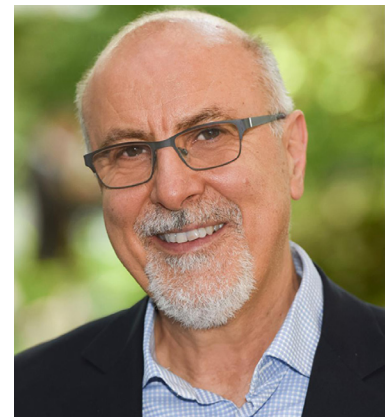
Welcome to beautiful Victoria, British Columbia and the 36th Annual Conference and Induction Dinner of the Canadian Academy of Engineering. We are coming together for these three days on the traditional territory of the ləkʷəŋən peoples and the lands of the Songhees, Esquimalt and WSÁNEĆ peoples whose historical relationships with the land continue to this day.

This is the first time the CAE Annual Conference has extended over two days. We wish to thank Fellows of the Academy and guests who are presenting on a wide range of topics. We would like to give a particular thanks to the faculty and administration of the University of Victoria, without whom this conference would not be possible.

Thank you,



**Robert J. Crawhall**  
Executive Director



**Soheil Asgarpour**  
Board President

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# SCHEDULE AT A GLANCE

## Welcome Reception

June 19 7:30 - 9:00 pm	<i>Meet up with old acquaintances and form new ones</i> <b>Terrace Ballroom</b>
June 19 8:00 pm	<b>Official Welcome</b> <ul style="list-style-type: none"><li>• <a href="#">Dr. Soheil Asgarpour, Ph.D., P.Eng, FCIM, FCSSE, FCAE</a>, President of CAE and President and CEO at PTAC</li><li>• <a href="#">Dr. Elizabeth Croft, Ph.D., P.Eng, FEC, FSAME, FCAE, FTSE</a>, Vice President, Academic and Provost at the University of Victoria</li></ul>

All sessions will take place in the Spirit Room

## Networking Breakfast

June 20 8:00 - 8:45 am	<i>Meet up with old acquaintances and form new ones</i> <b>Terrace Ballroom</b>
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## Welcome and Land Acknowledgment

June 20 8:50 - 9:10 am	<i>Welcome and Land Acknowledgment</i> <ul style="list-style-type: none"><li>• <a href="#">Dr. Soheil Asgarpour, Ph.D., P.Eng, FCIM, FCSSE, FCAE</a>, President of CAE and President and CEO at PTAC</li><li>• <a href="#">Dr. Robert Crawhall, Ph.D., P.Eng, PMP, ICD.D, FCAE</a>, Executive Director at the Canadian Academy of Engineering</li></ul>
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## Keynote Speakers and dignitaries

June 20 9:10 - 10:30 am	<ul style="list-style-type: none"><li>• <a href="#">Dr. Mina Hoorfar, BAsC, MASc, PhD, P.Eng., FCAE</a>, Dean of Engineering and Computer Science, and Professor, Mechanical Engineering at the University of Victoria</li><li>• <a href="#">Hon. Dr. Senator Rosa Galvez, Ph.D., P.Eng, FEC, FCSCE, FCAE</a>, Senator at Senate of Canada</li><li>• <a href="#">Dr. Alan Winter, PhD., FCAE</a>, President at Winteck Consulting Inc. and Adjunct Professor at the University of Victoria, Former BC Innovation Commissioner at the BC Provincial Government</li><li>• <a href="#">The Honourable Bowinn Ma</a>, British Columbia's Minister of Emergency Management and Climate Readiness</li></ul>
June 20 10:30 - 10:45 am	<i>Break</i> <b>Spirit Foyer</b>

# SCHEDULE AT A GLANCE

## Panel Discussion on Resilient Building

<b>June 20</b> 10:45 - 11:30 am	<ul style="list-style-type: none"><li>• <a href="#"><u>Andrew Pape-Salmon, P.Eng., MRM, FCAE</u></a>, Adjunct Professor, Department of Civil Engineering at the University of Victoria and Executive Director at BC Ministry of Emergency Management and Climate Readiness</li><li>• <a href="#"><u>Christy Love, P.Eng., CPHC</u></a>, Principal, Senior Project Engineer at RDH Building Science Inc.</li></ul>
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## CAE Programs Update

<b>June 20</b> 11:30 - 12:00 pm	<ul style="list-style-type: none"><li>• <a href="#"><u>Dr. Robert Crawhall, PhD, P.Eng., PMP, ICD.D, FCAE</u></a>, Executive Director at the Canadian Academy of Engineering</li><li>• <a href="#"><u>Dr. Soheil Asgarpour, PhD, P.Eng, FCIM, FCAE, CAE</u></a>, President of CAE and President and CEO at PTAC</li><li>• <a href="#"><u>Dr. Oskar Sigvaldason, PhD., P.Eng., FCAE</u></a>, Chair of the CAE Future of Engineering Committee</li></ul>
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## Networking Luncheon

<b>June 20</b> 12:00 - 1:00 pm	<i>Meet up with old acquaintances and form new ones</i> <b>Terrace Ballroom</b>
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## Panel Discussion on Fusion and Fission Energy

<b>June 20</b> 1:00 - 2:30 pm	<ul style="list-style-type: none"><li>• <a href="#"><u>Dr. Axel Meisen, C.M., PhD, P.Eng., Eurlng, FCAE, FCIC</u></a>, President at Fusion Energy Council of Canada and Professor Emeritus at the University of British Columbia</li><li>• <a href="#"><u>Dr. Michel Laberge, PhD</u></a>, Founder and Chief Scientist at General Fusion Inc.</li><li>• <a href="#"><u>Mr. Bibake Uppal, MBA, MSc, BA</u></a>, Business Development Manager, Kyoto Fusioneering Ltd.</li><li>• <a href="#"><u>Dr. Igor Pioro, PhD, P.Eng., FCAE, FASME, CSME, EIC</u></a>, Professor, Faculty of Engineering and Applied Science at OntarioTech</li></ul>
<b>June 20</b> 2:30 - 2:45 pm	<i>Break</i> <b>Spirit Foyer</b>

# SCHEDULE AT A GLANCE

## Panel Discussion on Equity, Diversity and Inclusion in Engineering

<b>June 20</b> 2:45 - 3:45 pm	<ul style="list-style-type: none"><li>• <a href="#"><u>Dr. Elizabeth Croft, Ph.D., P.Eng, FEC, FSAME, FTSE, FCAE</u></a>, Vice President, Academic and Provost at the University of Victoria</li><li>• <a href="#"><u>Ms. Jessica Vandenberghe, P.Eng, MSc, FEC, FGC(Hon)</u></a>, Assistant Dean, Community and Culture, Faculty of Engineering and Computer Science at the University of Victoria</li><li>• <a href="#"><u>Karen Savage, P.Eng., FEC, FCAE</u></a>, President at Horizon Engineering Inc.</li><li>• <a href="#"><u>Dr. Laleh Behjat, PhD, P.Eng., FCAE</u></a>, NSERC Chair for Women in Science and Engineering (Prairie Region)</li><li>• <a href="#"><u>Dr. Kevin Hall, BSc, MSc, PhD, FRSN, MAICD, FCAE</u></a>, President and Vice Chancellor at the University of Victoria</li></ul>
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## Panel Discussion on Clean Energy Pathways

<b>June 20</b> 3:45 - 5:00 pm	<ul style="list-style-type: none"><li>• <a href="#"><u>Dr. David Wilkinson, Ph.D., P.Eng, C.M., FRSC, FCIC, FEIC, FCAE</u></a>, Professor and Canada Research Chair, Chemical and Biological Engineering at the University of British Columbia</li><li>• <a href="#"><u>Hon. Dr. Rosa Galvez, Ph.D., P.Eng, FEC, FCSCE, FCAE</u></a>, Senator at the Senate of Canada</li><li>• <a href="#"><u>Brad Buckham, PhD, P.Eng.</u></a>, Chair, Professor, Mechanical Engineering at the University of Victoria</li><li>• <a href="#"><u>Mark Warren, BAsC, MBA</u></a>, Director, Business Innovation and Measurement at FortisBC</li></ul>
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## Gala Dinner and Fellow Induction Ceremony

<b>June 20</b> 5:45 - 6:30 pm	<i>Reception</i> <b>Terrace Patio</b>
<b>June 20</b> 6:30 - 9:30 pm	<i>Gala Dinner and Induction Ceremony</i> <b>Terrace Ballroom</b>

# SCHEDULE AT A GLANCE

June 21, 2023

## Networking Breakfast

June 21 8:00 - 8:45 am	<i>Meet up with old acquaintances and form new ones</i> <b>Terrace Ballroom</b>
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## Panel Discussion on Future Networks for Ubiquitous Intelligence

June 21 8:45 - 9:45 am	<ul style="list-style-type: none"><li>• <a href="#"><u>Dr. Robert Crawhall, PhD, P.Eng., PMP, ICD.D, FCAE</u></a>, Executive Director at the Canadian Academy of Engineering</li><li>• <a href="#"><u>Dr. Alberto Leon-Garcia, PhD., FCAE</u></a>, Professor, Department of Electrical and Computer Engineering at the University of Toronto</li><li>• <a href="#"><u>Dr. Lin Cai, P.Eng., FEIC, FIEEE, RSC College Member, NSERC Steacie Fellow, FCAE</u></a>, Professor, Department of Electrical and Computer Engineering at the University of Victoria</li><li>• <a href="#"><u>Dr. Song Guo, FIEEE, FCAE</u></a>, Changjiang Chair Professor, Department of Computing at the Hong Kong Polytechnic University</li></ul>
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## Panel Discussion on Electric Grids

June 21 9:45 - 10:45 am	<ul style="list-style-type: none"><li>• <a href="#"><u>Mr. Guy van Uytven, P.Eng, FCAE, FCSSE</u></a>, Power Systems Consultant for the African Development Bank, Nairobi Kenya</li><li>• <a href="#"><u>Mr. Ken Putt, P.Eng, FCAE, FCSSE, FEC, FEIC, FGC</u></a>, Independent Director at PTAC</li></ul>
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June 21 10:45 - 11:00 am	<i>Break</i> <b>Spirit Foyer</b>
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## Panel Discussion on Infrastructure Projects

June 21 11:00 - 12:00 pm	<ul style="list-style-type: none"><li>• <a href="#"><u>Colin Smith, M.S., MBA, FEC, P.Eng., FCAE</u></a></li><li>• <a href="#"><u>Dr. Yves Beauchamp, C.M., C.Q., PhD, P.Eng. FCAE</u></a>, Vice Principal, Administration and Finances at McGill University</li><li>• <a href="#"><u>Jesse Unke, P.Eng., PE, PMP, ENV SP, CCIP</u></a></li><li>• <a href="#"><u>Dr. Thomas Froese, B.A.Sc., M.A.Sc., PhD</u></a>, Honorary Affiliate Professor, Department of Civil Engineering at the University of Victoria</li></ul>
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# SCHEDULE AT A GLANCE

June 21, 2023

## Networking Luncheon

June 21 12:00 - 1:00 pm	<i>Meet up with old acquaintances and form new ones</i> <b>Terrace Ballroom</b>
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## Panel Discussion on Engineering Capacity for the Energy Transition

June 21 1:00 - 1:45 pm	<ul style="list-style-type: none"><li>• <a href="#">Dr. Robert Crowthall, PhD, P.Eng., PMP, ICD.D, FCAE</a>, Executive Director at the Canadian Academy of Engineering</li><li>• <a href="#">Dr. Kevin Hall, BSc, MSc, PhD, FRSN, MAICD, FCAE</a>, President and Vice Chancellor at the University of Victoria</li><li>• <a href="#">Heather Kennedy P.Eng., FCAE</a>, Corporate Director/Former Energy Executive</li></ul>
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June 21 1:45 - 1:55 pm	<i>Break</i> <b>Spirit Foyer</b>
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## Panel Discussion on Forestry

June 21 2:00 - 3:45 pm	<ul style="list-style-type: none"><li>• <a href="#">Dr. Ron Crotogino, PhD., FCAE</a>, Retired</li><li>• <a href="#">Bill Adams, BAsC, Meng, MBA, FCAE</a>, Vice President, Sustainability &amp; Innovation at Mercer International</li><li>• <a href="#">Dr. Ian de la Roche, PhD.</a>, Adjunct Professor at the University of British Columbia and Owner at Delaroché Consultancy</li><li>• <a href="#">Dr. Tom Browne, PhD., FCAE</a>, Principal at Tom Browne and Associates</li><li>• <a href="#">Dr. Richard Berry, PhD, FCAE</a>, Chief Technology Officer (retired) at CelluForce</li></ul>
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June 21 3:45 - 4:00 pm	<b>Closing Remarks</b> <a href="#">Dr. Mina Hoorfar, BAsC, MAsC, Ph.D., P.Eng, FCAE</a>
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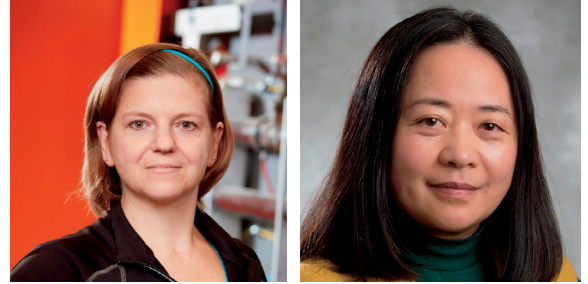
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Congratulations to  
 Dr. Monica Emelko and Dr. Carolyn Ren  
 for their outstanding contributions to  
 engineering, and for being role models  
 in their fields and communities.  
 It is an honour to witness  
 their induction into the  
 Canadian Academy of Engineering.



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