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# CSSE Newsletter



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## President's Editorial

Dear Esteemed Members,

I am filled with immense pride and gratitude for the remarkable impact Senior Engineers continue to make as a collective body in the field of engineering and in our communities.

The past couple of years have presented unprecedented challenges, with the global pandemic and significant global conflict, altering the landscape of how we work and interact. Despite these hurdles, our society has demonstrated resilience, adaptability, and unwavering commitment to the good of society.

I commend each and every one of you for your dedication to upholding the highest standards of engineering excellence. Your perseverance and ingenuity have not only contributed to the advancement of our profession but have also inspired future generations of engineers. As the Dean of Engineering, in the University of Calgary's Schulich School of Engineering, I hear first-hand how future engineers have been inspired by your collective accomplishments.

Looking ahead, I am filled with optimism for what we can achieve together. As we navigate the ever-evolving technological landscape and address the pressing issues of sustainability, inclusivity, and innovation, I am confident that our collective expertise and passion will continue to drive positive change for the betterment of society.

I continue to encourage those in our engineering community to engage more in public discussions where engineering knowhow and experience can help inform decision makers. Remain actively engaged in our society, whether through participating in events, sharing your knowledge and experiences, or mentoring aspiring engineers. Your contributions are invaluable in shaping the future of engineering and ensuring its relevance in an ever-changing world.



President Bill Rosehart

## President's Editorial (Continued)

In closing, I extend my heartfelt gratitude to each member of our society for your continued support and dedication. I would like to also extend special thanks to the many volunteers whose dedication and hard work are instrumental in ensuring the continued success of our society. Through their exemplary leadership, we are provided with valuable opportunities to share our experiences and actively engage with the broader community, further enriching the impact and influence of experienced engineers across Canada.

Best regards,

**Bill Rosehart**, P.Eng, PhD, FCSSE, FEIC, FCAE  
President, Canadian Society of Senior Engineers  
Dean & Professor, Schulich School of Engineering, University of Calgary

## CSSE Annual General Meeting (AGM)

The CSSE AGM will be held via Zoom™ on **May 9, 2024** immediately following the next CSSE Board meeting. Post-COVID it has been decided that all national CSSE meetings will be virtual. The Board meeting will be held from 11-1:00 p.m. MDT and the **Annual General Meeting (AGM)**, chaired by President **Bill Rosehart**, will run from **1-3:00 p.m. MDT**. So, regionally, adjust your times to your local time. With both meetings expected to last up to 2 hours. Separate Zoom invitations will be sent out for the two meetings to allow  $\frac{1}{2}$  hour for AGM networking from 12:30 pm MDT in advance of the formal AGM meeting start time. Meeting links with the agenda and available documents will be sent out in early April, with a reminder and any agenda revisions or additional documents sent out the last week of April.

## Canadian Academy of Engineering

The CAE, a member of the International Council of Academies of Engineering and Technological Sciences (CAETS), is exploring opportunities for CSSE Members and CAE Fellows to collaborate more closely on initiatives of mutual interest.

Liaison: **Ken Putt** [kwputt@shaw.ca](mailto:kwputt@shaw.ca)



The CAE AGM will be held on May 6th, 2024 from 11:00 to 1:00 EDT.

The CAE Annual Conference will be held at Western University in London on May 27 through 29.

The CAE has several major reports in the final stages of preparation. For links to past and future CAE Reports and information on the CAE 2024 AGM or Annual Conference at Western contact **Nancy Cardin** at [ncardin@cae-acg.ca](mailto:ncardin@cae-acg.ca) or go to [www.cae-acg.ca](http://www.cae-acg.ca).

## New CSSE Members

**John Wood, P. Eng. (LM-AB), FEC, FEIC, FGC (Hon.)** earned a B.Sc. in chemical engineering in 1970 from Queen's University at Kingston, and an MBA from University of Alberta in 1978. His engineering career included refineries and technical marketing.

**Wood** served in leadership roles in many industry, engineering and academically-oriented organizations, including the Canadian Institute of Energy, Calgary Professional Club, Gas Processing Association, Canada, Royal Military Colleges Club of Canada, Canadian Society for Chemical Engineering (CSCHE), Canadian Society for Engineering Management (CSEM), the Alberta Professional Engineers and Geoscientists Association (APEGA), and The Corporation of the Seven Wardens (Iron Ring).

**John** served on numerous APEGGA (now APEGA) committees, two consecutive terms on Council, then all executive positions culminating as APEGGA President (1995-96). He is an APEGGA Honorary Life Member. He was also registered with The Association of Professional Engineers and Geoscientists of British Columbia (now EGBC). **John** was named a Fellow of Engineers Canada, an Honorary Fellow of Geoscientists Canada, and a Fellow of The Engineering Institute of Canada.

**Marcello Pavan, PhD. P.Phys.** is Head of Academic and User Programs at TRIUMF. Prior to this role, he was TRIUMF Outreach Coordinator. He is passionate about scientific research, and sharing these passions with students and the community at large. **Dr. Pavan** has published numerous scientific articles and has taught first-year physics at UBC since 2011. In 2019 he was awarded the Killam Teaching Award by UBC.

**Dr. Pavan** received a B.A.Sc. and an M.A.Sc. in Engineering Physics and a Ph.D. in Physics, all at UBC. After a brief time at the University of Trieste in Italy, **Dr. Pavan** spent four years at the Laboratory for Nuclear Science at M.I.T. before returning to TRIUMF in 1999. He worked as a research associate for several years before transitioning to education, outreach, and communications roles. At the Canadian Association of Physicists he served as chair of communications from 2016-2020 where he helped lead a revamp of CAP communications, including introducing e-newsletters, social media engagement, press release protocols, as well as a communications needs assessment and new strategic communications plan. He is currently overseeing the undergraduate and graduate student development programs, as well as managing TRIUMF's extensive visitor program.



### Recruit a New Member!

If you have a friend who is not a CSSE member, simply refer them to the CSSE website at [www.seniorengineers.ca](http://www.seniorengineers.ca)

### Changed Your Coordinates?

If you have a new mailing (or emailing) address, please inform the CSSE Administration Office at [administrator@seniorengineers.ca](mailto:administrator@seniorengineers.ca) or (613) 795-9363.

## CSSE Members in the News

**Dr. Soheil Asgarpour**, PhD, P. Eng., FCAE, FCIM, FCSSE, President and CEO of the Petroleum Technology Alliance Canada PTAC, gave four invited presentations at COP 28 in Dubai in December, 2023. **Soheil's** presentations were entitled, "Canada's Path to Net-Zero Emissions, Enhancing Environmental Excellence: Alberta Upstream Petroleum Research Fund Program, Exploring Methane Technology Advancements: The CRIN Program and How Collaboration is Key to Developing Clean Technology to Decarbonize the Oil and Gas Sector."

**William Rosehart**, PhD, P. Eng., FCAE, FCSSE, FEIC, CSSE President, has been awarded the Association of Professional Engineers and Geoscientists of Alberta APEGA 2024 Centennial Leadership Award. The Award was presented by APEGA in recognition of **Dr. Rosehart** attaining the highest distinction relating to his exemplary engineering career in teaching and research.

**Dr. Stephanie Willerth**, PhD, P. Eng., FBSE, FCSSE, has been elected as a Fellow of Biomaterials Science and Engineering (FBSE) by the International Union of Societies for Biomaterials Science and Engineering (IUSBSE).

UVic Engineering and Computer Science's Professor Willerth is an international expert in using novel biomaterials to engineer neural tissue from stem cells. Her interdisciplinary research has developed novel bioprinting techniques for generating functional models of healthy and diseased neural tissues. She is the first person from UVic to ever be elected a Fellow of IUSBSE.

*\*If Members are aware of other CSSE Members who's recent accomplishments should be brought to Members' attention, contact current CSSE Newsletter editor at [kwputt@shaw.ca](mailto:kwputt@shaw.ca)*

## Honours and Awards Committee - 2024 CSSE Fellowship Awards

CSSE Fellowships are awarded annually to Canadian Engineers who have distinguished themselves in academic or practice pursuits over a minimum of twenty years since graduation. Nominations have been rigorously reviewed by the CSSE Honours and Awards Committee. Thanks to CSSE Members who nominated this slate of accomplished Engineers. For information: Chair **Colin Smith**: [colinsmith.ca@gmail.com](mailto:colinsmith.ca@gmail.com).

### CSSE 2024 Fellowships

**Achari, Gopal**, Calgary, AB

**Behjat, Laleh**, Calgary, AB

**Buckham, Bradley**, Victoria, BC

**Gordon, Aidan**, Vancouver, BC

**Greenwood-Madsen, Tom**, Edmonton, AB

**Nicell, Jim A.**, Montreal, QC

**Pollard, Alan**, Winnipeg, MB

**Roberts, Scott**, Victoria, BC

**Sadiq, Rehan**, Kelowna, BC

**Stanley, Stephen**, Edmonton, AB

**Trudell, Cheryl**, Calgary, AB

**Winkel, Gordon**, Edmonton, AB

## Charitable Donations Committee

The CSSE Board of Directors, upon the recommendation of the Charitable Donations Committee, approved a donation of \$1,000 to the Youth Science Foundation for the CSSE Senior Award at the 2024 Canada-Wide Science Fair and a \$1,181 matching donation to top up the VIES \$5,000 donation that the CSSE Vancouver Island Branch made to match member donations of \$6,181 to three engineering student scholarship endowments. Chair **Chan Wirasinghe**: [wirasing@ucalgary.ca](mailto:wirasing@ucalgary.ca)

## CSSE Regional News

### Quebec

CSSE Director **Suzelle Barrington**, PhD, P.Eng., FCAE, FCSSE has relevant information on the **Montreal Chapter** of the Canadian Academy of Engineering and the **Montreal CSSE Chapter**. Contact Suzelle at: [suzelle.barrington@consumaj.com](mailto:suzelle.barrington@consumaj.com).

### Manitoba

**CSSE Winnipeg Chapter** - The Manitoba Branch is considering an event on 'Artificial Intelligence vs. Authentic Intelligence in Engineering Design' and is seeking suggestions on a presenter. Since the recent Vancouver Island Engineering Society's (VIES') event of March 1, 2024 on '**The Scientific and Practical Challenges of Artificial Intelligence**' provided an interesting perspective on the general topic, Manitoba members will be provided with the link to VIES recording of the event.

A presentation describing the Association of Professional Engineers and Geoscientists of Manitoba (APEGM) initiative on Equity, Diversity, and Inclusion (EDI) in the profession that senior engineers might not be aware of is planned for April. For details, contact **Dave Ennis** [dave.ennis@outlook.com](mailto:dave.ennis@outlook.com) or **Alan Pollard**, CSSE webmaster, at [alan@pollard.ca](mailto:alan@pollard.ca).

### Alberta

**CSEM/CSSE Calgary** - CSSE Calgary members are invited to attend the CSEM monthly luncheons. The Calgary Section of the Canadian Society for Engineering Management (CSEM-Calgary) conducts a series of luncheons on topics related to engineering management, held at 11:45 am once a month from October to May in the Tivoli Room, Danish Canadian Club, 727 11 Ave. SW, Calgary. To register go to <http://www.csem-scgi.org/calgary.html>.

Tuesday, April 16, 2024

HR Milner M2 Generating Station Expansion

Speaker: **Bob Emmott**, President & CEO, Maxim Power

Tuesday, May 14, 2024

Carbon Capture

Speaker: **Derek Macdonald**, Demac Energy Consultants

Tuesday, June 18, 2024

Eco Sustainability

Speaker: **Peter Kilty**, Sr. VP Parkland Fuels

## CSSE Regional News *(Continued)*

The **CSSE Edmonton Chapter** holds monthly Zoom meetings with an invited speaker. **Tom Madsen** is the Zoom Coordinator and sends out monthly meeting invitations which provide more details on the speaker and topic a couple of weeks prior to meeting. Meetings are normally held on the third Thursday of the month starting at 12:45 PM Mountain Time and with Q and A's to follow. Depending on speaker availability, it is periodically necessary to move the meeting to a different day, usually the Wednesday preceding or the Friday following the third Thursday.

CSSE Members' friends and colleagues are welcome to join such Zoom meetings. If you are aware of individuals whom you think would be interested in benefitting from these meetings please forward this notice to them. Anyone not on the Edmonton Chapter mailing list who would like to receive the more detailed monthly meeting invitations should contact **Tom Madsen**. [tcmadsen@telus.net](mailto:tcmadsen@telus.net)

Thursday, April 18, 2024

Thermodynamics in Cell and Tissue

Cryopreservation: How Math Can Save Knees

Speaker: **Dr. Janet A. W. Elliott**, Professor  
Chemical and Materials Engineering,  
University of Alberta

Thursday, May 16, 2024

Impact of Electric Vehicles  
on the Electric Grid

Speaker: **Matthew Chang**, Senior Engineer,  
Distribution System Planning, ATCO Electric

## British Columbia

### CSSE Vancouver Island Branch/Vancouver Island Engineering Society

#### (VIES) 2024 Spring Program: Technical Speaker Series & Special Events

Friday, April 12, 2024

Hydrogen Powered Locomotive

Speaker: **Dr. Kyle Mulligan**, AVP (Operation Technologies), CP Rail, Calgary

Friday, May 3, 2024

Kicking Horse Canyon

Highway Improvement Project

Speaker: **Bruce Hamersley & James Williams**,  
Basis Engineering, Vancouver

Friday, June 7, 2024

How Energy Companies are Preparing  
to Meet "Net Zero" Goals

Speaker: **Bill Whitelaw**, Managing Director,  
Strategy and Sustainability,  
geoLOGIC Systems, Calgary

## VIES NEWS - Follow us on LinkedIn!

Stay connected with VIES by following our LinkedIn page, where we continue to provide timely updates on our events and share relevant engineering news from around Vancouver Island and beyond. We believe in keeping our community informed and engaged. Our LinkedIn presence is an essential platform for staying up to date with our latest activities, discussions, and developments. Access VIES there to be a part of this vibrant network and stay informed about VIES upcoming events and initiatives. <https://www.linkedin.com/company/viengsoc>

## Regional News *(Continued)*

### Scholarships and Awards

VIES supports three endowed scholarships for Engineering and Computer Science students at UVic:

- A CSSE EIC Vancouver Island Award for graduates of area high schools;  
<https://extrweb.uvic.ca/donate-online/csse-eic>
- A Bonnie and Ken Putt Award for women engineering students;  
<http://extrweb.uvic.ca/donation/bonnie-ken-putt>
- A VIES Leaders Entrance Award to attract highly accomplished new engineering students.  
<https://extrweb.uvic.ca/donate/vies-leadership>

### Scholarship Donation Matching Campaign

In the fall of 2023, to incentivize scholarship donations, the Vancouver Island Branch of the CSSE (VIES) generously agreed to match member donations made before year end, up to a total of \$5,000. The VIES matching grant funds would be sourced from the VIES share of registration fees from Technical Speaker Series presentations run by the Branch in conjunction with EGBC. Local members exceeded expectations and generously donated a total of \$6,181 to the three scholarships at UVic's Faculty of Engineering and Computer Science:

the CSSE/EIC Vancouver Island Award, the Bonnie and Ken Putt Award, and the VIES Leaders Entrance Award. Further, in February of this year, the CSSE topped up the matching amount with a \$1,181 contribution so that all of the members' donated funds were subsequently matched. Hence, a total contribution of \$12,362 was made to the three scholarship endowments.

The inaugural winner of the \$2000 VIES Leaders Entrance Award was first year UVic mechanical engineering student **Jordyn Espenell**, a gifted scholar/athlete from Winnipeg.

## Correspondence with the CSSE Administration Office

All "snail-mail" correspondence, including cheques, and enquiries, should be sent to:

**The Canadian Society of Senior Engineers**  
464 Briar Avenue  
Ottawa, Ontario K1H 5H6

[administrator@seniorengineers.ca](mailto:administrator@seniorengineers.ca)

Phone calls: 613-795-9363

Dues and donations can be paid securely by credit card by going to the "Members" page at the CSSE website [seniorengineers.ca](http://seniorengineers.ca)

## VICTORIA IN-PERSON SPECIAL PANEL EVENT\*- 23 APRIL 2024

(\*See <https://www.viengsoc.ca> for Registration Details)

### Advanced AI: Friend or Foe

This special panel session on "*Advanced AI: Friend or Foe*" promises to be a thought-provoking and enlightening event, delving into the multifaceted implications of artificial intelligence in various domains. With speakers addressing crucial viewpoints encompassing education, ethics, art, intellectual property, and healthcare, attendees can expect to gain valuable insights into the potential impact of AI on these areas.

This session will provide attendees with a nuanced understanding of not only the capabilities and promises of AI, but also the potential ethical and societal challenges that come with its advancement. By participating in this panel, attendees will have the opportunity to engage in meaningful conversations, broaden their perspectives, and gather actionable insights from experts in the field, making it a must-attend event for anyone interested in the future of AI and its impact on society.

### Panel Members:

**MC and Moderator – Bob McDonald** has been communicating science internationally through television, radio, print and live presentations for more than 40 years. He is the host of CBC Radio's QUIRKS & QUARKS, the award-winning science program with a national audience of nearly 500,000 people. He is also a regular reporter for CBC Television's THE NATIONAL as well as Gemini-winning host and writer of the children's series Heads Up! **McDonald** has also hosted The Greatest Canadian Invention and the seven-part series Water Under Fire.



**Education – Dr. Elizabeth Croft, PhD, P. Eng., FCAE, FCSSE, UVic Vice President (Academic) and Provost** is a visionary and forward-thinking leader with a track record of building inclusive, collegial and collaborative partnerships. On July 1, 2022, she began her five-year term as Vice-President Academic and Provost at UVic.

**Dr. Croft** holds a B.A.Sc. in Mechanical Engineering from the University of British Columbia, an M.A.Sc. in Mechanical Engineering from the University of Waterloo, and a PhD from the University of Toronto. **Dr. Croft** is recognized internationally as an expert in the field of human-robot interaction.





## VICTORIA IN-PERSON SPECIAL PANEL EVENT\*- 23 APRIL 2024

**Ethics and Privacy - Elizabeth Denham, CBE, LL. D. (hon.)** was the UK Information Commissioner at the Information Commissioner's Office in Cheshire from July 2016, taking over the role from Christopher Graham, until November 2021. Denham previously held the title of Information and Privacy Commissioner for British Columbia, having been appointed to that role in May 2010. Prior to this she had been the Assistant Privacy Commissioner of Canada from 2007.



**Creative Arts and IP - Judith and Garfield Reeves-Stevens** are a New York Times-bestselling husband-and-wife writing/producing team. In June, 2013, at the Constellation Awards ceremony in Toronto, the writing couple were honored with the Constellation Award for "Outstanding Canadian Contribution to Science Fiction Film or Television" for their role in creating the series, Primeval: New World. In genre media, the Reeves-Stevenses are well known for their involvement with the Star Trek franchise. In addition to having written twenty Star Trek books, including six novels on their own, ten novels with **William Shatner**.



**Healthcare - Dr. Ernie Chang M.D., Ph.D. (physician and computer scientist)** now retired and living in Victoria. He has been an Associate Professor at UVIC in CSc, and was in family practice in Victoria for 20 years. His industrial experience includes: the founder of Axia Inc, the CEO of Infoward, and Department Head of Advanced Technologies at the Alberta Research Council. His contributions are in cognitive science, health data analytics, artificial intelligence and he has served in the governance of BC medical associations.

