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# CSSE Newsletter



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## President's Editorial

Time goes, you say? Ah no!

Alas, Time stays, we go.

(Austin Dobson, The Paradox of Time)

I feel like saying Time flies, but if Time stays then it must be me who is flying. Senior talk 😊

Just an introduction to say that the 2022 Spring Directors' Meeting & Annual General Meeting is fast approaching and will be held Thursday, May 12, 2022. Both meetings will be held by videoconference.

As you will see later in this Newsletter CSSE/SCIS is proud to nominate for 2022 eleven outstanding new Fellows. The quality of the nominees bodes well for our Society's further development.

One of our major raison d'être is the promotion of engineering education. With this in mind, I made a presentation in bulk power system planning to graduate and post graduate students at the University of Victoria and the Schulich School of Engineering of the University of Calgary about the option of linking BC to Southern California with a buried +/-500 kV HVDC cable. About 30 participants interested in system planning attended. The presentation can be found on our webpage and the podcast is also available at <https://echo360.ca/media/910a5e78-2a8d-4daa-94ee-3a6870875aa1/public>

Another major goal of CSSE is to promote intellectual exchange and fellowship and I must say that the monthly conferences held by our Western branch (VIES) are gaining in popularity thanks to our relationships with UVIC and the Vancouver Island branch of the Professional Engineers and Geoscientists of BC.



President Guy Van Uytven

## President's Editorial *(Continued)*

To wit:

Topic and Presenter	Date	Number of Participants
Victoria's Centre for Ocean Applied Sustainable Technologies Julie Angus, President & CEO Open Ocean Robotics	1 October 2021	25
Small Modular Reactors Brent Smith, New Brunswick Power	5 November 2021	230
The Emergent Hydrogen Economy Dr. David Layzell, the Transition Accelerator UoC	3 December 2021	133
Emergency Response - Developing a new clinically relevant ICU ventilator fast John Walmsley, VP, G2V Optics	7 January 2022	51
Quantum Software and Computer Trends Dr. Hausi Müller, UVIC	4 February 2022	75

These Technical Speakers' Series presentations have been attended from CSSE Members and EIC colleagues from across Canada and can be attended virtually for a \$10 nominal administrative fee. The Vancouver Island Engineering Society (VIES), our CSSE Victoria unit and EGBC (Engineers & Geoscientists BC) are pleased to jointly present these sessions.

Upcoming scheduled conferences are:

### 4 March:

A Voltage Boost for Vancouver Island's EV Capacity.

**Presenter:** Ray Brougham, President and Founder at Rainhouse Manufacturing Canada Ltd., Victoria.

### 1 April:

UVIC Engineering - 21st Century Vision

**Presenter:** Dr. Mina Hoorfar, Dean of Engineering and Computer Science, University of Victoria.

For information on registration, please contact VIES at [secretary@viengsoc.ca](mailto:secretary@viengsoc.ca).

I hope you will all attend, virtually, our upcoming AGM. In the meantime, should you have any questions, comments or suggestions you can always email me at [guyvanuytven@shaw.ca](mailto:guyvanuytven@shaw.ca).

**Guy Van Uytven**, P.Eng., MBA, FCSSE  
President CSSE/SCIS

## Canadian Academy of Engineering – Upcoming activities



Please check out the following program:

**NEM 2022: CAE Canadian Engineering Grand Challenges Webinar**

March 7, 2022 12:00 PM - 2:00 PM ET

**Sustainable, Intelligent Next G Systems**

March 15, 2022 10:00 AM - 3:00 PM ET

**NEM 2022: CAE Building Gender Inclusive Workplaces Webinar**

March 24, 2022 6:00 PM - 8:00 PM ET

To register use the following link:

<https://www.cae-acg.ca/canadian-academy-of-engineering-canadian-engineering-grand-challenges-seminar/>

### Save the Date!

The 2022 Spring Directors' Meeting & Annual General Meeting will be held Thursday, May 12, 2022. Both meetings will be held by videoconference. Further details will follow including timing, support materials and links to connect to the meetings.

Hoping to see you there,

**Jim Beckett, Secretary**

### 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: 613-890-9363

Dues and donations can be paid securely by credit card by going to the "Members" page at the CSSE website

[www.seniorengineers.ca](http://www.seniorengineers.ca)



## CSSE-SCIS Announces 2022 Fellows

**Guy Van Uytven**, President of CSSE-SCIS, is pleased to announce that the following distinguished Canadian engineers have been elected to Fellowship by its Board of Directors:

- **Marcia Friesen**, Dean, Price Faculty of Engineering, University of Manitoba, Winnipeg, MB
- **Marcel Gingras**, Major (A), retired, Project Management Consultant, Victoria, BC
- **Mina Hoorfar**, Dean, Faculty of Engineering and Computer Science, University of Victoria, BC
- **Digvir Jayas**, Vice-President (Research and International), University of Manitoba, Winnipeg, MB
- **Michelle Mahovlich**, Director of Engineering and Public Works, City of Langford, BC
- **Dharminderpal (Pal) Mann**, CEO and Registrar, Engineers Nova Scotia, Halifax, NS
- **Axel Meisen**, President Emeritus, Memorial University, Victoria, BC
- **John Newhook**, Dean, Faculty of Engineering, Dalhousie University, Halifax, NS
- **Bryan Norrie**, President (retired), Midwest Power Products, Winnipeg, MB
- **Bill Rosehart**, Dean, Schulich School of Engineering, University of Calgary, AB
- **Stephanie Willerth**, Professor, University of Victoria, BC

The Society extends its congratulations to this year's Fellows and wishes them well in their future endeavours and contributions to Canada's engineering and societal advancement.

**Colin Smith**, PEng, PE, FCSSE  
Chair, CSSE Honors and Awards Committee

### 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)

## New Member

### **Kevin Hall** President and Vice Chancellor - University of Victoria

On Nov. 1, 2020, **Kevin Hall** took office as the eighth president and vice-chancellor in the University of Victoria's 57-year history. Throughout his career as a senior leader working for three world-class institutions, **Dr. Hall** has served at many levels and functions at a university—from faculty member, research centre director and department chair, vice-president and senior deputy vice-chancellor of global engagement and partnerships at the University of Newcastle (UON) in New South Wales, Australia, and now as President and Vice-Chancellor at the University of Victoria.



A civil engineer whose research and industry leadership have already made a global impact, **Dr. Hall** carries out trans-disciplinary research across several major themes including water quality modeling, development of environmental monitoring and pathogen detection systems, syndromic surveillance, and water and health in marginalized communities. **Professor Hall** holds several international patents and has developed associated start-ups. His research has been incorporated into Engineering Design Manuals both nationally and internationally.

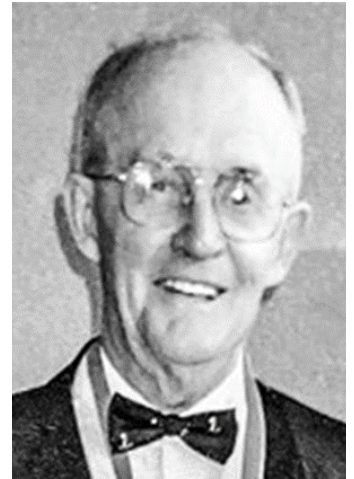
**Professor Hall** visioned and built entrepreneurship and innovation initiatives at the University of Newcastle, leading the establishment of the Integrated Innovation Network (I2N) hubs and incubators. A highly respected leader in the higher education sector, **Professor Hall** was appointed by the Minister of Education to the Australia Research Council Advisory Council. He was a founding board member of the Sydney School of Entrepreneurship and a member of the NSW Minister for Health's China Advisory Committee. **Professor Hall** has been a board member for over 30 corporations, university organizations, government, and not-for-profit entities including the Sydney School of Entrepreneurship, Intersect (Australia), Newcastle Innovation (Australia), Hunter Medical Research Institute (Australia), Newcastle Institute for Energy and Resources (Australia), Cooperative Research Centre - Contamination Assessment and Remediation of the Environment; TRIUMF (Canada's national laboratory for particle and nuclear physics), C4 Network (Technology transfer consortium), Guelph-Waterloo Biotechnology Partnership, Waterloo University Accelerator Centre, SHARCNET (high performance computing network) and several other corporations.



## Members who have left us

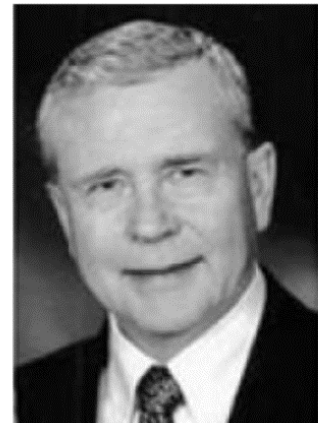
### Colin Campbell, FCSSE

**Colin** passed away on January 30th, 2022. He was a structural engineer establishing his own company in Calgary which he operated for decades, namely C.H. Campbell Consulting Engineers and then Campbell Woodall and Associated. In 1992-93, he was one of the first President of the General Members Group following its transformation into a Federation of Member Technical Societies. Colin facilitated the progression of the General Members Group of EIC into the Canadian Society for Engineering Management (CSEM). **Colin** was a long-time support of the EIC in general and the Calgary CSEM joint CSEM branch with the CSSE; he was also a former Member of the EIC Life Members Organization (LMO) which became the Canadian Society of Senior Engineers (CSSE). Colin Campbell was a Fellow of the CSSE, CSCE, EIC among his numerous other awards and recognitions. He received EIC's John B. Sterling Medal in 2001. As regards his EIC service, he is most remembered and appreciated for the key role he played in helping transform EIC's General Members Group into the CSEM.



### David Kemp

**David** passed away on January 5th, 2022. He spent 35 years with Manitoba Telephone System, worked at the Microelectronics Centre at the University of Manitoba and went on consulting activities in Europe. **Dave** served as a Board member of both the Electronics Industry Association of Manitoba and the Canadian Institute of Management. He also served as Chair of the Library of the City of Winnipeg Public Library System. Dave was a volunteer for 59 years with IEEE (Institute of Electrical and Electronic Engineers). An IEEE Life Senior member, **Dave** held a variety of volunteer positions and served as IEEE Canada President, Region 7 Director, and IEEE secretary. **Dave** was also a senior member and Fellow of the Engineering Institute of Canada and a member of the Canadian Society of Senior Engineers.



### George Atherley Beer, FCSSE

**George** passed away on January 23rd, 2022. For many years, he assisted his long time Physics colleague from Chalk River, **Dr. Lyle Robertson**, with the CSSE VICTA Program. For the Vancouver Island Engineering Society (VIES), **George** actively supported, adjudicate UVic Engineering Students' Work Term technical reports each semester, originally for the best written and communicated paper. On the conclusion of the first adjudication, **George** suggested that VIES should also recognized the student whose paper best exemplified the engineering student's positive impact on his or her employer. **George's** suggestion led to Camp 23 of the Wardens of the Iron Ring funding such an award that has remained to this day.



## Interested in Collaborating?

### Engineers of Tomorrow

Engineers of Tomorrow is a nationally incorporated not-for-profit. Established in 2014, our mission is to tell better stories about engineering today, and have an impact on the engineers of tomorrow. From the clean water we drink to the technology in our hands, engineering underpins every aspect of modern life and has a major role to play in solving the global challenges of today and tomorrow.



Our vision is that one day every Canadian - regardless of gender, ethnicity, orientation, religion, ability or thinking style - understands the power of engineering to unlock and shape positive societal change. We look forward to a day when everyone understands there's a place for them in engineering.

Our flagship outreach program - Engineer in Residence - reaches more than 300 K-12 classrooms across Canada! Add to that the other complimentary engineering awareness programs we support - like the Future City Experience - and we're connecting with almost 10,000 young students.

We need your help! We're always on the lookout for engineers that are passionate about what they do and want to share that with others. If you'd like to join our passionate team of volunteers for one of our upcoming programs, please visit [engineersoftomorrow.ca](https://engineersoftomorrow.ca)

*Related links that may be helpful/of interest:*

Global Heroes Article (April 2021): <https://www.globalheroes.com/find-the-engineers-of-tomorrow-with-better-stories-today/>

Our blog: <https://engineersoftomorrow.ca/blog/>

Annual Report: <https://engineersoftomorrow.ca/annual-report/>

EIR Program Report: <https://eir.ca/about/eir-program-report/>

### Canada Wide Science Fair 2022

The 2022 Fair will be virtual and we will be looking for help with judging from all across the country. Thanks to many of your efforts at previous Fairs the judging process has given young scientists a chance to share their excitement with experts (you!) and we hope that we can turn to you again this year.



Youth Science Canada  
Sciences jeunesse Canada

Youth Science Canada is currently completing the new judge registration system and CSSE will be contacted once the system is ready to accept registrations.

<https://youthscience.ca/science-fairs/cwsf/virtual-2022/schedule/>

Judging will take place on Monday May 16th and Tuesday May 17th. Most likely we will not need everybody on both days (more judges are required on the Monday). There is typically some judge training on the Sunday evening (May 15th).

Anyone interested can contact: [suzellebarrington@sympatico.ca](mailto:suzellebarrington@sympatico.ca)



Proud of the impact your achievements have had on society?

Why not contribute your story to the EIC Oral History Interview project? CSSE is a partner in this project.

Please provide a summary of your achievements to **Suzelle Barrington**, ing, agr. FCSSE, FCAE, Chair CSSE History and Archive Committee:

[suzellebarrington@sympatico.ca](mailto:suzellebarrington@sympatico.ca)

## Black History Month - Contributions to Engineering

Diversity has always been part of the success stories of our Canadian engineers. This month is dedicated to the achievement of Black Canadians, including that of engineers.



Among many, Engineers Canada has published an article on Black Engineers of Canada (BEC) founded in 2020 with a mission to provide an enabling environment for growth and leadership by developing pathways to excellence for Black engineers and engineering graduates.

With the recent attention to anti-black racism, in 2020, **Iretomiwa Olukiyesi**, P.Eng., started fielding calls about how to improve diversity at some companies. Organizations such as the Black North Initiative challenged companies to pledge to cultivate meaningful change and end anti-Black systemic racism. Against this backdrop, **Olukiyesi** and **Ayo Abiola**, P.Eng. realized that Black engineers need a community.

Read more at: <https://engineerscanada.ca/news-and-events/news/black-engineers-of-canada-is-making-a-difference-for-black-engineers-in-canada>

OSPE (Ontario Society of Professional Engineers) features several engineers having contributed to our Canadian Engineering history. Below are two Black engineers featured on the website, and we invite you to read the full article presenting even more achievements from our Black colleagues: <https://ospe.on.ca/community/black-history-month-stem-trailblazers/>



**Iretomiwa Olukiyesi**,  
P.Eng., Professional  
Engineers Ontario  
Member

Photo courtesy of PEO



## Black History Month - Contributions to Engineering (Continued)

OSPE indicates that despite such evidence of important contribution to our Canada achievements, International Engineering Graduates (IEGs) continue to face significant challenges to practice engineering in Canada. Data from OSPE's most recent labour market analysis suggests that IEGs are significantly underemployed and face wage disparities. Given the number of highly-skilled immigrants that enter our country, this is an opportunity cost. By excluding IEGs from the engineering profession, employers are missing out on the benefits of diversity and are limiting the growth and potential of their enterprises.

Ontario-born **Elijah McCoy** was a mechanical engineer with more than 50 patented inventions to his name. Although **McCoy** patented everything from the portable ironing board to the lawn sprinkler, he is best known for his self-regulating drip-cup lubricator. This invention drastically improved the efficiency and safety of locomotives and machinery in factories and mines in the early 1870s. **McCoy's** patents were held in Canada, the United States, France, Austria, Germany, Great Britain and Russia.



In 1954, Nova Scotia's **Clotilda Yakimchuk** became the first Black graduate of the Nova Scotia Hospital School of Nursing. She also received a post graduate midwifery diploma from Colony Hospital in Grenada, a post graduate psychiatric nursing certificate from the Nova Scotia Hospital and a diploma in adult education from St.FX University. **Ms. Yakimchuk** served as President of the Registered Nurses' Association of Nova Scotia (now known as The College of Registered Nurses of Nova Scotia), and to date, is the only elected Black president in the organization's 100-year history.



May we all share this history of accomplishment and support our Black colleagues.



To end, don't forget National Engineering Month coming this March 2022.

Check out interesting events at: <http://nemontario.ca/>