

# 34th IEEE Canadian Conference of Electrical and Computer Engineering

<https://ccece2021.ieee.ca/>

## Panel Discussion on “Evolving Dynamics of Industry-Academia Collaborations”

**September 13<sup>th</sup> 15:30-16:30 ET**

To register click on <https://events.vtools.ieee.org/m/280541>. The Zoom link and passcode will be emailed to registrants the day prior

**Organized by: Dr. Deyasini Majumdar, Chair, IEEE R7 Education Activities Committee  
Dr. Rossitza Marinova, IEEE R7 Training Co-ordinator**

A key measure of a productive tech ecosystem in any society is the successful transition of new graduates from academia into industry. While the academic system primarily focuses on building a broader knowledge base, a very important factor for successful transition of the trainees is their industry-readiness. Hence, the need for dynamically evolving industry-academia collaborations.

While technological trends largely dictate the needs of the dynamically evolving industrial ecosystem, recent times have highlighted the need for easily scalable methods that can help effectively empower students transitioning into industry.

This panel discussion aims to focus on the dynamically evolving requirements of the tech ecosystem and the challenges and trends that drive current and next-gen industry-academia interfaces.

Each panelist will provide a short, pre-recorded presentation extending over 5-10 minutes with their thoughts/perspectives on the topic in discussion, including trends, challenges and proposed solutions.

Once all the pre-recorded presentations by the panelists have been run, a live QA session moderated by Deyasini Majumdar and Rossitza Marinova will follow.

**Panelists:** (bios on next page)



**(i) Dr. Witold Kinser** – Professor University of Manitoba & Ex-Vice President, IEEE EAB



**(ii) Dr. Mohammad Moshirpour** – MEng Software Program Director, University of Calgary



**(iii) Julia Elvidge** – Ex-President & Co-Founder Chipworks, Co-Founder SheBoot, Advisor Invest Ottawa

**(iv) Dr. Tom Murad** – Country Lead - Engineering & Technical Excellence, Siemens Mobility



## Panelist Bios

### **Dr. Witold Kinser** – Professor, University of Manitoba & Ex-Vice President, IEEE EAB

Witold Kinsner is Professor in the Department of Electrical and Computer Engineering, University of Manitoba, Winnipeg, Canada. He also held Faculty positions at McMaster University and McGill University, and was a co-founder and Director of Research of the Industrial Applications of Microelectronics Centre from 1979 to 1987. He has been involved in research on cognitive systems, computational intelligence, robust real-time computing engines, and computer memories and polyscale signal processing. Applications included biomedical, industrial monitoring and controls, aerospace, and space. He has authored and co-authored over 825 publications in the above areas, as well as supervised 78 Master's and Doctorate graduate students, over 210 undergraduate final-year thesis/capstone project students, and mentored 37 summer research students. He organized and delivered many events in STEAM outreach, including space camps, discovery weeks for Indigenous high-school students, ham radio courses and events, and designing and building satellites. He leads an IEEE LEO Satellites and Systems Small Project intended to provide a better understanding of the advances in nanosatellites and associated systems.

Since 1971, he has been very active all the IEEE levels: Region 7 (IEEE Canada), Council, Section, Chapter, and Student Branch. He was elected IEEE Canada President Elect 2014-2015, IEEE Director Elect (Region 7) 2014-2015, IEEE Canada President/Director 2016-2017, Past President 2018-19, and IEEE Educational Activities Vice President, 2018-19. He has been an Editor and Member of Editorial Boards of several journals. He is a Fellow of the Engineering Institute of Canada (FEIC), a Fellow of Engineers Canada (FEC), a Fellow of the Canadian Academy of Engineering (CAE), a Fellow of the World Academy of Art and Science (WAAS), a Life Senior Member of the Institute of Electrical & Electronics Engineers (IEEE), a member of the Association of Computing Machinery (ACM), the American Association for the Advancement of Science (AAAS), the Engineers Geoscientists Manitoba (APEGM), and a member of ten IEEE societies.

### **Dr. Mohammad Moshirpour** – MEng Software Program Director, University of Calgary

Dr. Mohammad Moshirpour is a senior instructor, software engineering teaching chair, and the director of MEng in software engineering at the Department of Electrical and Software Engineering at the University of Calgary. His research interests include software design and development, software requirements engineering, machine learning, and software engineering training and education. He is the recipient of several awards due for his work in the development of tools and methodologies for software engineering practices and education including the 2021 D2L Innovation Award.

### **Julia Elvidge** – Ex-President & Co-Founder Chipworks, Co-Founder SheBoot, Advisor Investor, Ottawa

Julia Elvidge works with high technology companies as an advisor, board member and investor. She is the co-founder of SheBoot, a bootcamp for women entrepreneurs getting ready for the investment phase of their business. In addition, Julia works as an advisor at Invest Ottawa, is a Director for Capital Angel Network's (CAN) Board and a member of the Hardware Catalyst Initiative (HCI) VentureLAB Advisory Board.

Educated as an electrical engineer, Julia designed microchip circuits and analyzed semiconductors before she moving into the business side of technology. As co-founder and President, Julia helped build Chipworks into an industry leader - delivering patent and technology intelligence products and services to major electronics companies across Asia, North America and Europe. Key business experience includes scaling a business with a focus on strategic planning, execution, leadership development and culture along with shifting the business focus from services to SaaS products. Chipworks was sold to Techinsights in June 2016 and Julia exited the business in 2017.

### **Dr. Tom Murad** – Country Lead - Engineering & Technical Excellence, Siemens Mobility

Tom Murad is a member of Engineering Order of Honour - Professional Engineers Ontario "PEO", is a respected Technology leader, thinker, Board Member, an award-winning Educator and distinguished speaker on the topics of: Engineering, Technology and Technical talents / skills development and education. An advocate of Innovation and creativity specifically in the Areas of Digitalization, Smart Infrastructure and Industrie 4.0 In 2010, he Joined Siemens in Canada, prior to his current role he was the Country Lead of Engineer-ing, Technology & Academics for Siemens Canada as well as the founder of the Siemens Canada Engineering and Technology Academy "SCETA", that he established and directed since October 2014. Before that, he was the Head of the "Expert House" and Engineering Director for Siemens Canada's Industry sector since 2010. Prior to joining Siemens, Tom was the Senior VP and COO of AZZ- Blenkhorn & Sawle for many Years with an extensive career in Professional Engineering and Executive Management of In-novative Technical Operations including Academic and R&D work in Electrical power, Industrial Controls and Automation. He is also serving as a member of various advisory Boards of Directors in the Industry and Academia.

Dr. Murad holds a Bachelor of Engineering (Electrical & Electronics), and a Doctorate (Ph.D.) in Power Electronics and Industrial Controls from Loughborough University of Technology in the UK, with a Leadership Program Certificate from Schulich Business School, York University in Ontario, Canada.