



The Canadian Society for Mechanical Engineering
A constituent society of the Engineering Institute of Canada

La Société Canadienne de génie mécanique
Une société constituante de l'Institut canadien des ingénieurs

NEWS COMMUNIQUÉ

25 March 2024

The Canadian Society for Mechanical Engineering (CSME), founded in 1970, is pleased to announce the winning recipients of its 2024 regular awards. These awards may be bestowed to members of the society for their outstanding contributions to specific areas of mechanical engineering in Canada.

In addition to the three previously-announced 2024 technical award winners, five exceptional engineers will be presented with regular society awards during the 28 May banquet of the 2024 CSME International Congress hosted on 26-29 May by the MIE Department of the University of Toronto, ON.

Please consider attending the 2024 CSME International Congress to congratulate all of these exceptional award winners and network with colleagues: <https://www.csmecongress.org/>.

Clifford N. Downing Award

For “distinguished service to the CSME over many years.”



Ali Dolatabadi, Ph.D., FCSME

Professor, University of Toronto, ON

Dr. Ali Dolatabadi is a leading researcher and educator in the field of multiphase flows and surface engineering. His research on multiphase flows develops fundamental understanding of sprays for thermal spray processes, and of droplet dynamics, heat transfer and phase change for development and characterization of novel functional coatings. His research group has developed electro-catalytically active electrodes for hydrogen evolution, micro filtration membranes, superhydrophobic, icephobic, and slippery coatings. He has provided valuable and consistent service to the mechanical engineering community through his roles in CSME as well as the Engineering Institute of Canada (EIC).

He was the Chair of Student Affairs on the CSME Board from 2010-2012, was elected Senior Vice President of the CSME (2012-2014) and subsequently President of the CSME (2014-2016). During his mandate as President of the CSME, he collaborated with several stakeholders to build collaborative partnerships and address EDI challenges to better serve mechanical engineers (ME) across the country.

I.W. Smith Award

For “outstanding achievement in creative mechanical engineering within 10 years of PhD degree”



Dan Romanyk, Ph.D., MCSME

Assistant Professor, University of Alberta, Edmonton, AB

Dr. Dan Romanyk is an Assistant Professor in the Department of Mechanical Engineering, with additional appointments in Biomedical Engineering and the School of Dentistry, at the University of Alberta. He also completed his PhD and Postdoctoral Fellowship at the University of Alberta. Dr. Romanyk’s primary areas of research surround the mechanical characterization of natural and synthetic biomaterials in the craniofacial environment and studying the biomechanics of orthodontic treatment. In 2022, Dr. Romanyk served as the Planning and Events Chair for the CSME International Congress, where he was also named as the Chair of the Student Affairs Committee. Through both research and service activities as an early-career academic, Dr. Romanyk has made significant contributions to the field of mechanical engineering.

2024 CSME Fellows

For “excellence in mechanical engineering and significant contributions to the progress of the profession”



Carlos Escobedo, Ph.D., FCSME (2024)

Professor, Queen’s University, Kingston, ON

Dr. Carlos Escobedo is a Full Professor at Queen’s University who served as Technical Chair for the CSME for 5 years, and continues to volunteer for the society to the present. He holds a B.Eng. (UNAM, MX), a master’s (U Toronto) and PhD (U Victoria) in Mechanical Engineering, and has ample industrial experience. He was founder and Head of the Mechanical Engineering Division at Innovamedica R&D, where he was part of a team that developed an artificial heart that was commercialized and successfully implanted in humans. His contributions to the nanotech-based sensing field include multiple articles and co-authored IP that led to the creation of the multi-awarded startup Spectra Plasmonics. He is the recipient of several awards including the Excellence in Research Award (Queen’s), the Early Researcher Award (Ontario Government), and the TD Bank’s 10 Most Influential Hispanic Canadians Award which honours 10 outstanding Hispanics from across Canada each year.

2024 CSME Fellows (cont'd)



Patrik Lee, Ph.D., FCSME (2024)

Professor, University of Toronto, ON

Professor Patrick Lee received his Ph.D. in Mechanical Engineering from the University of Toronto in 2006 and is the founding director of Multifunctional Composites Manufacturing Laboratory at the University of Toronto. Dr. Lee is an international leader in the areas of polymer foam processing/characterization, nanolayered composites, bioinspired hybrid composites, and processing-structure-property relationships of nanocomposites and foams. He has 95 journal publications, over 140 refereed conference abstracts/papers, 5 book chapters, and 30 filed/issued patent applications and invention disclosures.

Among his honors, Dr. Lee received the G.H. Duggan Medal from CSME in 2020, the US National Science Foundation Early Faculty Career Development Award (NSF CAREER) in 2018, the Polymer Processing Society (PPS) Morand Lambla award in 2018, and the Hanwha Advanced Materials Non-Tenured Faculty Award in 2017.



André McDonald, Ph.D., FCSME (2024)

Vice-President & Professor, University of Alberta, Edmonton, AB

Dr. McDonald is the Associate Vice-President (Strategic Research Initiatives and Performance) and a Professor of Mechanical Engineering at the University of Alberta. His work in heat transfer has been innovative, diverse, interdisciplinary, and sits at the nexus of heat transfer, materials science, and advanced manufacturing. His research on the metallization of polymers is internationally recognized as cutting-edge work on the functionalization of polymeric structures to provide heating for airfoils and mitigate freezing in pipes.

Through leadership roles as President of the ASM Thermal Spray Society Board, Editor-in-Chief of the Journal of Thermal Spray Technology, and Director of the Experiential Learning in Innovation, Technology, and Entrepreneurship Program for Black Youth, he has facilitated dissemination and awareness of new knowledge and technology development and supported work-integrated training of engineering students through academic-government-industry-community partnerships.