



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

Ottawa, Oct 2026

The Canadian Society for Mechanical Engineering (CSME), founded in 1970, is pleased to announce the winning recipients of its 2027 technical awards, which may be bestowed biannually to members of the society for their outstanding contributions to specific areas of mechanical engineering in Canada. The following exceptional professionals will be presented with their medals on 1 June at the 2027 CSME International Congress to be hosted from 30 May to 2 June by UNB in Fredericton.

Please consider attending the 2027 CSME International Congress to congratulate these exceptional winners and attend keynote lectures: <https://www.csmecongress.org/>.

CSME Emerging Technologies Medal

For “exceptional research and innovation contributions to the field of multifunctional metamaterials”



Abdolhamid Akbarzadeh, Ph.D., FCSME
McGill University, Montreal, QC

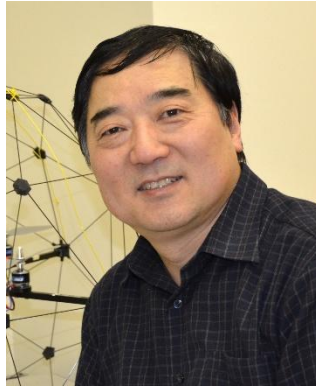
Dr. Abdolhamid Akbarzadeh is a Full Professor at McGill University, Canada Research Chair in Programmable Multifunctional Metamaterials, and Director of the Advanced Multifunctional and Multiphysics Metamaterials Laboratory. His research advances emerging technologies through architected materials integrating mechanical performance with sensing, actuation, energy harvesting, and adaptive functionalities.

His contributions include over 170 journal publications in Advanced Materials, Advanced Functional Materials, Advanced Science, Nature Communications, ACS Nano, Nano Energy, and Energy Storage Materials, and several patent-pending inventions. His distinctions include the I.W. Smith Award (2023), CSME Fellow (2025), and American Society of Mechanical Engineers IMECE Rising Stars (2026). Through these advances and the training of highly qualified personnel, he contributes to Canada's leadership in programmable metamaterial technologies.

Page 1 of 3

CSME Mechatronics Medal

For “exceptional research and innovation contributions to the field of mechatronics”



Youmin Zhang, Ph.D., FCSME
Concordia University, Montreal, QC

Dr. Youmin Zhang is a Professor at Concordia University. He is an internationally recognized leading researcher, engineer, and educator in fault-tolerant control and fault detection and diagnosis, with in-depth engineering applications to aerospace, mechatronics, autonomous systems, forest fire protection, smart grids, and safety-critical systems. He has published 12 books and over 360 journal papers, with over 39,459 citations and an h-index of 99 on Google Scholar.

His pioneering research has been successfully translated into industrial technologies and commercial UAV platforms, contributing to industrial innovation and business growth, while advancing engineering education and talent development. Dr. Zhang has trained over 180 HQPs. He is a Fellow of CSME and IEEE, a Co-Editor-in-Chief of IEEE Transactions on Industrial Electronics, and has served as General Chair and Program Chair of many international conferences.

CSME Jules Stachiewicz Medal

For “exceptional research and innovation contributions to the field of thermal science & engineering”



Sébastien Poncet, Ph.D., MCSME

University of Sherbrooke, Sherbrooke, QC

Dr. Sébastien Poncet, Professor of Mechanical Engineering at the Université de Sherbrooke, is recognized for his groundbreaking contributions to thermal fluid sciences and advanced energy systems. His innovative engineering research bridges the gap between fundamental physics on fluid flow and heat transfer in a wide variety of complex problems and real-world industrial applications, leading to major efficiency improvements in heating, ventilation, air conditioning, and industrial energy conversion systems.

By focusing on low environmental impact refrigerant and developing next-generation thermal management technologies, his work directly reduces greenhouse gas emissions and accelerates the transition toward sustainable energy solutions for the building and industrial sectors. Professor Poncet is the current chair of the technical committee on Thermal Science and Engineering at CSME. He organized the joint CSME/CFDSC International Congress in 2023 and is highly involved in the CSME society.