



**The Engineering Institute of Canada
2018 Award Citation
Julian C. Smith Medal**
(recognizing achievement in the development of Canada)



Edward Arthur McBean

Nominated by the Canadian Society for Civil Engineering

Dr. Ed McBean is a world-class expert, Canada Research Chair, and University of Guelph Leadership Chair Professor in water security. An eminent scholar, Ed is nationally acclaimed for building expertise in Canada, developing methods to facilitate protection of critical water security issues. Based on an excellent understanding of how 'theory translates to influence engineering practice', Ed has used strategic insights into methods for assessing vulnerability and risks, reflecting that when you are dealing with an essential of life, you must be appropriately reflective of the many ways by which water supply systems can fail (e.g. water treatment, flooding, desertification, risk management).

Ed used his extensive skillset of mathematical modeling and statistics, as well as a collaborative style, to develop innovations to guide engineering decision-making in such areas as improved renewal/rehabilitation procedures of buried water infrastructure. This led to developing less vulnerable water supply systems for First Nations communities, and for improved water security concerns related to solid waste management. As an educator, Ed has guided more than 160 graduate students, allowing these graduates to become architects of strong Canadian engineering practice in water security issues.

Ladies and gentlemen, and Mr. President, as a Recipient of the Julian C. Smith Medal, please welcome Edward McBean.