



Engineers Canada AWARDS

The Engineers Canada Awards recognize individual engineers and engineering students for their contributions to the engineering profession and to Canadian society. Eight exceptional individuals received awards in 2009.

Gold Medal Award Morden Yolles, P.Eng.

Morden Yolles has been recognized in the engineering and architectural fields for his impact, creativity, vision, leadership in design and his engineering skills.

He was the first in Canada to design structural load-bearing walls with rubble aggregate concrete – a combination of concrete and large split stones. His firm not only designed the tallest building in Canada, it also worked on The Katimavik at Montréal's Expo 67, Esso Plaza in Calgary, the Metropolitan Toronto Zoo, Trent University and the Ontario Science Centre in Toronto.

An officer of the Order of Canada, Morden Yolles is world renowned for his contributions to the integration of engineering and design.



National Award for an Engineering Project or Achievement Project: Engineering Accessible Healthcare Chris Backhouse, P.Eng.

Chris Backhouse and his team have combined micro-electronics, micro-optics, micro-fabrication and nanobiotechnology to dramatically reduce the cost of medical diagnostics. Their primary focus has been to make important technologies more accessible through miniaturization and integration.

These micro-fluidic technologies have the potential to put the functionality of an entire lab upon a single micro-fabricated chip. Their ever-shrinking instruments for genetic diagnostics are now smaller than a cell-phone and the technology is less expensive. The resulting state-of-the-art medical diagnostic systems will benefit Canadian society by improving the accessibility of our health care and providing a significant manufacturing opportunity for Canadian industry.

Chris Backhouse sets the example of true multidisciplinary effort in the engineering profession.



Young Engineer Achievement Award Laura Lucier, P.Eng.

Laura Lucier is a member of the Canadian Space Agency's Robotics Flight Control Team posted at the Johnson Space Center in Texas. She is one of only nine Canadian flight controllers and the first Canadian woman to work as a robotics flight lead. Laura is responsible for developing safe and efficient robotics task choreography for the robotic arm and for training crewmembers for the flights. She is required to be an expert in mechanical, software, video, electrical and thermal systems.

The high-profile work that she is doing has furthered Canada's standing as a world leader in aerospace robotics and on-orbit operations.



Medal for Distinction in Engineering Education Susan McCahan, P.Eng.

Susan McCahan is the first-year chair at the University of Toronto responsible for the Faculty of Applied Science and Engineering's high school liaison and recruiting activities both in Canada and worldwide.

Susan is best recognized for coordinating the implementation of an innovative first-year design course. It is a service learning course that pairs first-year student design teams with community-based organizations to solve design problems. She received the Alan Blizzard Award for leading the implementation of the course called Engineering Strategies and Practice.

Finally, Susan McCahan was awarded the 3M National Teaching Fellowship, one of Canada's most prestigious teaching honours. Susan demonstrates a combination of compassion, practicality and rigour, and creates classroom climates welcoming to all of her students.



Award for the Support of Women in the Engineering Profession Diane Riopel, P.Eng. PhD

Diane Riopel is a specialist in industrial engineering at l'École Polytechnique de Montréal. Her high-profile academic career focuses on two key issues: the promotion of the French language within the technical and scientific communities and the advocacy of women's involvement in the engineering profession.

She is a co-chairholder of the Marianne-Mareschal Chair, created to encourage young women to consider a career in engineering. The core focus of the chair is to increase education and demystify the engineering profession, offer mentorship initiatives as well as offer assistance and achievement programs.

Diane Riopel's dedication is further evidenced by her involvement in numerous conferences and symposiums.



Service Award for Professional Service William R. Sutherland, FEC, P.Eng.

Bill Sutherland has extensive experience in management and design associated with marine, geotechnical and environmental engineering projects. He has been involved with many large industrial and land development projects and is a member of the project team for the multimillion-dollar design/build project for the infrastructure development and the treatment plants for the clean up of the Halifax Harbour.

Bill Sutherland has made a long commitment of educating the public to better understand the role of engineering and professional engineers in the Canadian society. He has been very active with Engineers Nova Scotia, including serving as president in 1992, and was the president of Engineers Canada in 1999. He was also recently named a Fellow of Engineers Canada.



Gold Medal Student Award Frédéric Ammann

Frédéric Ammann is the president of Éclipse, a team of students disciplined in electrical engineering and mechanics and computer science, from the École de technologie supérieure in Montréal. The team's goal is to build a solar car and to improve clean technologies in the automotive field.

He has demonstrated his leadership qualities through his passion for understanding the entire inner workings of the solar car, which involves the electrical, mechanical, computer, physics and chemical engineering fields. Frédéric Ammann is also responsible for various aspects of the project, including designing electrical systems, financing, task splitting, teamwork, member flexibility and work atmosphere. He has a passion for global change and a drive for excellence.



Service Award For Community Service Bernard Lamarre, ing. O.C., O.Q.

Bernard Lamarre has played a critical role in leading the Canadian consulting engineering industry into the international arena. He has been responsible for significant infrastructure developments worldwide and is an officer in the Order of Canada and the Ordre national du Québec.

Since his retirement from SNC-Lavalin, he devotes his time to the Groupe Bellechasse Santé and to the Old Port of Montréal Corporation, the Montreal Museum of Fine Arts and the Société de développement Angus. Bernard Lamarre is the chairman of the Board of Directors of l'École Polytechnique de Montréal.



Engineers Canada gratefully acknowledges the sponsors of the 2009 Engineers Canada Awards



To learn more, visit engineerscanada.ca