**Bio: Professor R Paul Young Ph.D., FREng., FRSC**
**W.M. Keck Chair Emeritus and Senior Fellow Massey College, University of Toronto**
**International (Foreign) Secretary, Royal Society of Canada**
**Formerly Vice-President, Research and Innovation, University of Toronto**
http://civil.engineering.utoronto.ca/staff/professors/paul-young/

Professor Young is an engineering geophysicist who has focused his research and engineering career on developing seismic methods and instrumentation to monitor fractures and rock quality. Over the past 40 years, he has pioneered techniques for monitoring and interpreting induced seismicity in the mining, energy and nuclear waste disposal industries. Through his research groups at Queen's University and the University of Toronto, Canada, Keele University and Liverpool University, UK, as well as through spin off companies such as ESG, Canada and Applied Seismology Consultants, UK, innovative scientific advances have been made in applied seismology and rock mechanics. He has published over 275 scientific papers in refereed journals and conference proceedings, supervised over 45 Ph.D. students and post-doctoral research fellows and developed innovative instrumentation systems for induced seismicity/acoustic emission monitoring. He continues to develop geophysical imaging techniques for rock fracture and investigate the synergy with numerical modeling and further facilitate the movement of science from the laboratory to industry.

Professor Young has provided leadership at the very highest levels. In the last 20 years, he has served as Vice-President of the University of Toronto, responsible for Research and Innovation (2007-2014), has served as Chair of the Department of Civil Engineering and Director of the Lassonde Institute for Mining at the University of Toronto, has held the W.M. Keck Chair in Seismology and Rock Mechanics at the University of Toronto, the Chair of Earth Science at the University of Liverpool and has been President of the British Geophysical Association. He has chaired national boards including TRIUMF (Canada's Nuclear and Particle Physics Laboratory), and Canada's U15 committee (Vice Presidents, Research from Canada's leading 15 universities). He has also been an invited member of committees that provide advice to government, notably he was a member of the Council of Canadian Academies Expert Panel that reported to Environment Canada on the environmental impacts of shale gas development, and as Chair of the Expert Panel for the Canadian Federal Government on Future Developments for Canada's National Labs. He is currently International (Foreign) Secretary, Chair of the International Committee and member of Council of the Royal Society of Canada. He is also Chair of the Canadian Science Publishing Board and Board Member of the American Rock Mechanics Association (ARMA).

He has been awarded many honours for his research and innovation, notably, Fellow of the Royal Academy of Engineering, Fellow of the Royal Society of Canada, the Willet G. Miller Medal of the Royal Society of Canada for his research in Earth Sciences, the Queen Elizabeth II Diamond Jubilee Medal for services to Canada, and the John A. Franklin Award for Rock Mechanics by the Canadian Geotechnical Society. He is also a Fellow of the American Association for the Advancement of Science, a Fellow of the Institute of Materials, Minerals and Mining and is a Chartered Engineer.

Professor Young continues to provide collegial leadership, scientific and project management advice to academia, industry and government.