



The Engineering Institute of Canada

Medal Citation - 2003

Dr. Norbert R. Morgenstern - A Member of the Canadian Geotechnical Society and a Fellow of the EIC

Professor Morgenstern graduated in civil engineering from the University of Toronto, and then obtained a DIC and PhD from the Imperial College of Science and Technology, London. He returned to Canada to join the University of Alberta, where he is now Professor Emeritus of Civil and Environmental Engineering and is regarded as one of the world's pre-eminent civil engineers. As a brief background on Professor Morgenstern cannot possibly put adequate measure to his achievements, a citation prepared by Dr. Jack Clark, himself a well known Canadian, perhaps does it best. I will read this citation with apologies to Dr. Clark for any losses sustained, as some modifications were necessary to fit the evening's format.

As a Researcher: Dr. Morgenstern's research work obtained international prominence during his period as a PhD student and a Lecturer in civil engineering at the Imperial College of Science and Technology, London, UK. When he returned to Canada in 1968 to take up a faculty position at the University of Alberta, he lost no time in positioning himself, his colleagues and his students at the forefront of geotechnical research in Canada. He avoided the traditional "safe research" and instead plunged directly into major geotechnical challenges facing Canada in the development of our frontier areas. These included the Artic, the Beaufort Sea, the Alberta Tar Sands and Mines. He attracted very talented graduate students from around the world and gradually built up, what many believe the strongest geotechnical engineering faculty in North America. His students are highly sought after, both by industry and by universities. Many of his former students have now also distinguished themselves in the field of geotechnical engineering as researchers, teachers and practitioners.

As a Teacher: One of the most impressive aspects of Dr. Morgenstern's career was that he expanded his research activities, supervised more graduate students and responded to requests for special advisory services from the private sector and governments; he never abandoned his commitment to teaching. He continued to teach undergraduate soil mechanics and geotechnical engineering from the time he arrived at the University of Alberta until he retired and indeed he still gives lectures at the undergraduate level. It was the inspiration of his teaching at the undergraduate level that encouraged many students to undertake postgraduate studies in geotechnical engineering. The quality and thoroughness of his courses he taught are legend and are recalled with deep appreciation by all of his former graduate students. He introduced new courses to meet the demands of society and the profession and help position the faculty of civil engineering of the University of Alberta to respond to the emerging needs of the developing resource sectors in frontier regions.

As a Practitioner: Dr. Morgenstern has always been accessible to industry and governments seeking his advice towards the solutions of practical problems encountered throughout the world. He is particularly well known for his work on dams and for his work on slope stability. For example, in Hong Kong, which is so highly urbanized, and where slopes are such a problem that they present a major natural hazard, Dr. Morgenstern has contributed his engineering ingenuity in ensuring the safety of people and property. He has helped guide new and more environmentally and cost effective solutions to the development of tar sands and disposal of the tailings that are such an important part of any tar sands mining development. He has pioneered work in permafrost areas and along the offshore. He has demonstrated a strong commitment to safety, protection of the environment and sustainability for the developments in which he has been engaged.

As a Citizen: Dr. Morgenstern has served his community in many ways since he established a home for himself and his family in Alberta in 1968. He has contributed to the symphony in Edmonton, to literary activities lecturing on a wide range of subjects throughout the world, encouraging professional growth in developing countries serving on important advisory and review boards for major engineering activities and structures, and as a leader in learned societies dedicated to improving professional practice.

Dr. Morgenstern has received numerous honours and awards throughout the world. One such is, recently, the Order of Canada, representing one of the highest honours a Canadian citizen can receive. To remind the audience, the Sir John Kennedy Medal is given for "outstanding services to the engineering profession, or of noteworthy contributions to the science of engineering". Dr. Morgenstern has fulfilled these expectations completely. And now to receive Canada's highest medal of honour for engineering – THE SIR JOHN KENNEDY MEDAL.

Ladies and Gentlemen, and Mr. President – Professor Norbert R. Morgenstern