

## ZDENEK (DAN) EISENSTEIN (1936 –2009)

By David Cruden



Both the Canadian and international geotechnical engineering communities, particularly those working in soft ground tunnelling, are deeply saddened by our loss of Dan Eisenstein to cancer this summer.

Zdenek Eisenstein was born in Pocatky, Czechoslovakia (in the present-day Czech Republic) in 1936. He received his engineering education at the Czech Technical University in Prague. After being awarded a doctorate in 1965, he pursued post-doctoral studies at Imperial College, London. He moved with his family to Edmonton in 1969, joining the academic staff of the Department of Civil Engineering at the University of Alberta as an Associate Professor in 1970 and was promoted to Professor in 1974. He retired from teaching in 1996, becoming an Emeritus Professor in 2001.

His clear enthusiastic instruction was well-recognized in the Faculty of Engineering. He introduced new courses in Continuum Mechanics both at the undergraduate and graduate levels. At the graduate level, he pioneered courses on Seepage and Drainage, Advanced Foundation Engineering, and a course on Tunnelling that he later delivered on at least four continents. He was a Visiting Professor in Brazil, South Africa, and Germany. He guided some forty students through their graduate degrees, published 160 or more technical papers, and made over a hundred technical presentations around the world. Eisenstein's academic career was highlighted by the award of Honorary Doctorate at a special convocation of his Alma Mater, the Czech Technical University in May 1991.

Dan was of particular assistance to the Canadian Geotechnical Society in editing the Proceedings of the 4<sup>th</sup> International Conference on Numerical Methods in Geomechanics and the 3<sup>rd</sup> Edition of the Canadian Foundation Engineering Manual. The Society nominated him for Fellowship into the Engineering Institute of Canada in 1990. Dan served the International Tunnelling Association as a member of the Executive Council (1987-89), First Vice President (1989 – 1992), and President (1992 - 1995.) He was elected to Honorary membership of the Association in 1997.

Dan's consultancy in soft ground tunnelling spread from Edmonton's Light Rail Transit to over 150 projects around the world. He gave expert advice on notable tunnelling projects such as the Rio Subterranean Tunnel in Buenos Aires, the Copacabana Metro line in Rio de Janeiro, the City Link tunnels in Melbourne, the Mrazovka tunnel in Prague and the Canada Line

subway in Vancouver. For the Los Angeles Metropolitan Transportation Authority, he chaired the Tunnel Advisory Panel; he was a reviewer for the Toronto Transit Commission and an advisor for the New York MTA.

Asked by the Edmonton Journal how he became the senior consultant on the Channel Tunnel (between Britain and France) he replied, "All it takes is about 30 years' worth of work, teaching, researching, writing papers, and presenting studies at international conferences. Somebody's bound to take notice." Many of us were well rewarded for doing so.

Dan is survived by his wife, Jana, daughters Alice and Jana, sons-in-law Dave Langston and Paul Levett, and five grandsons, Sam, Max, Cole, Theo, and Sidney.