

LORNE GOLD (1928–2018)

By Bob Frederking, Harry Baker and Michael Bozozuk



Dr. Lorne Gold, a respected member of Canada's geotechnical community, died in Ottawa on December 11, 2018 at the age of 90. He was recognized by both engineers and scientists for his contributions to northern engineering and more specifically in the areas of ice, snow and permafrost. He was a mentor to staff at the National Research Council and generously shared his knowledge and experience with the broader engineering and scientific communities in Canada, many of whom experienced rewarding visits to NRC in Ottawa, where he provided advice and encouragement.

Dr. Gold graduated from the University of Saskatchewan in 1950 and in the same year started his career in snow and ice research, joining the Division of Building Research at NRC. He formed and led a small team which pioneered ice and snow studies applied to ice pressures on dams and bridge piers. This applied work was supported by fundamental research on the fracture and failure behaviour of ice, which has been published in a series of journal articles extending over five decades. His research work was always of the highest caliber. One of his most cited papers, "Use of ice covers for transportation", 1971, *Canadian Geotechnical Journal*, is still a widely used reference for making practical assessments of the quality of floating ice covers and their ability to safely support vehicles and equipment. He was author or co-author of over 100 publications, as well as a book "The Canadian Habbakuk Project: A Project of the National Research Council of Canada", an engaging story of a top secret wartime project centered on ice engineering.

In 1969 Dr. Gold became the head of the Geotechnical Section at NRC, and expanded his research management responsibilities over a broader range of geotechnology including permafrost, northern engineering and soil mechanics. In 1974 he was appointed Assistant Director of the Division of Building Research. Through his time as Assistant and Associate Director, until his retirement in 1986, he continued his careful review of all scientific and technical papers written by the 80 research officers in DBR.

In addition to his research and management responsibilities, Dr. Gold served the profession of engineering in Canada as an active member of technical societies. He was a member of the Canadian Geotechnical Society, served on its Board of Directors from 1976-1983, and was an Associate Editor of the *Canadian Geotechnical Journal* from 1964-81. He was also a member of the Canadian Society of Civil Engineering of which he was elected a Fellow in 1989. He chaired the Associate Committee on Geotechnical Research from 1976 to 1983. In

this capacity he was instrumental in fostering and stimulating research by organizing workshops, publishing technical memoranda and promoting communication within the geotechnical community in Canada. His contributions to science and engineering in Canada have been recognized by his election as a Fellow of the Royal Society of Canada and a Fellow of the Canadian Academy of Engineering.