

A Brief History of the Calgary Geotechnical Society

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The birth of geotechnique in Calgary - as in the rest of Alberta - is closely associated with **Dr. R.M. (Bob) Hardy** (1906-1985). Although Hardy was based in Edmonton, he was involved in a considerable amount of work in southern Alberta dating back to the 1940s, especially highway and airport construction related to the war effort. In 1951, Hardy and **Leroy "Chick" Thorsen** (1916-1996) established Materials Testing Laboratories (MTL) in Edmonton. In 1953, **Keith S. Goodman** (1921-2010) was transferred from Edmonton to Calgary to open its second branch. Despite its name, MTL engaged in much more than materials testing, undertaking numerous soil investigations related to foundation engineering and slope stability. It was, in fact, Calgary's first geotechnical firm, and Goodman likely has the distinction of being Calgary's first geotechnical engineer. MTL remained active until 1972, when its operations were consolidated under its parent company, R.M. Hardy and Associates.

The **Soil Mechanics Interest Group**, which would later become the **Calgary Geotechnical Society**, was formed in 1966. Its original participants included academics and practitioners in geotechnical and structural engineering, geology, groundwater, geophysics, and geography. Key members were **J.I. (Jack) Clark, P.Eng.** (1932-2010), **Henry H. Ricketts, P.Eng.** (1917-2010), and **Peter Gretener, P.Geol., P.Geoph.** (1926-2008). Clark was well known in the geotechnical community and the recipient of the Canadian Geotechnical Society (CGS) R.F. Legget Award in 1983. Ricketts was a structural engineer involved with the design of the Husky Tower, and Gretener (known amongst his colleagues as "Pore Pressure Pete") was an academic who believed strongly in inter-disciplinary dialogue.

The 1960s were exciting times for those interested in soils. The Sixth International Conference of the International Society of Soil Mechanics and Foundation Engineering (ISSMFE) was held in Montreal in 1965, spawning interest in geotechnique across Canada. In Calgary, a construction boom proved to be the source of many foundation-related issues that challenged established beliefs and stimulated innovation. Ongoing projects included new buildings at the University of Alberta's "Calgary Branch" (as the University of Calgary was known prior to 1966), the Foothills Provincial General Hospital (now called the Foothills Medical Centre), and the 626-foot-tall Husky Tower (presently known as the Calgary Tower).

The tower's shallow, ring foundation on Bow River floodplain gravels was the subject of several advanced technical studies, and is reportedly the first project in Calgary for which reliable data on both in situ ground properties and settlement performance were obtained. This provided the basis for more economical designs in the city's downtown core.

The activities of the Calgary Geotechnical Group intensified in the 1970s. The group, in cooperation with the University of Calgary, was instrumental in organizing the Calgary- Banff Canadian Geotechnical Society Conference in 1970. It also hosted numerous world-renowned consultants to speak at its monthly meetings on the U of C campus, including **Nathan M. Newmark** (1910-1981), **Frank E. Richart** (1918-1994), and **G. Geoffrey Meyerhoff** (1916-2003). Prominent engineers were recruited into groups to study the technological and economic feasibility of constructing crude oil and gas pipelines from Alaska and northern Canada to Alberta, mostly in permafrost areas.

The group continues to be very active today. In addition to the 1970 CGS Conference, the Calgary Geotechnical Society has hosted national CGS conferences in 1980, 1992, 2001, and 2010, as well as periodic symposia on topics of local interest. Presentation meetings take place each month and attendance is free thanks to funding by local geotechnical consultants and contractors. The annual schedule of presentations includes two Cross-Canada Lecture Tours (CCLTs) sponsored by the Canadian Foundation for Geotechnique, as well as a keynote presentation by a distinguished geoprofessional at the group's Annual General Meeting each spring.

The **Calgary Geotechnical Society Award** was introduced in 1998 to recognize individuals who have demonstrated exceptional effort, energy, and/or contributed to the art of geotechnique in Calgary. The first recipient was **Milos Stepanek, P.Eng.**, a geological engineer who, together with Hardy and Clark, conducted several landmark slope stability and slope stabilization studies in the Calgary area. In 2004, a **Student/EIT Award** was initiated to provide financial support for a graduate student, engineer, or geoscientist in training to attend the annual national conference of the Canadian Geotechnical Society. The intent of this award is to encourage young professionals to join in the Society's activities and to become its future leaders.

In 1998, a Heritage Working Group was formed within the Calgary Geotechnical Society, led by **Heinrich K. Heinz** and **Tai T. Wong**, members of the Group's Executive at the time. Over the years, information has been collected from various sources, and interviews have been conducted with individuals involved with the development of geotechnique in the city. In 2003, an interview was conducted with the late Jack Clark, which formed the basis for preparation of this brief note.

The Calgary Geotechnical Society maintains an informative and regularly updated website where further information can be found at www.cgygeosociety.org.

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