

EMIL KARL SAUER, (1929–2001)



Karl Sauer was born on October 10, 1929 in Regina, Saskatchewan. He is survived by his sister, Eleanor Matthews, of Atlanta, Georgia, niece Rachel and husband Robert Prioleau of Charleston, South Carolina, niece Jane and husband Andy Filo, of Atlanta, Georgia, and nephew David Ian Matthews of Atlanta, Georgia. Left to mourn are many close friends and colleagues. Karl was predeceased by his father Emil K.Sauer in 1968, his mother Eleanor in 1987 and his sister Dorothyea Sauer in 1952.

In 1952, Karl obtained his B.Sc. in Civil Engineering from Queens University. Following graduation, he joined the Saskatchewan Department of Highways, where he worked as a Project Engineer. During this time, he was responsible for over 30 road design and construction projects including 100 miles of the TransCanada Highway. From 1962 to 1964 he was the Assistant Design Engineer primarily establishing new geometric design and safety standards for the Provincial Highway system.

In 1964 Karl received his M.Sc. degree in Engineering Geology from Cornell University. From 1964 to 1967 Karl served as the Principal Geotechnical Engineer for the Department of Highways and was involved in the development of the original Geotechnical Section. During this time, he worked on site characterization for major bridges, gravel location investigations, slope stability analysis and mitigation, subgrade failure investigations and groundwater control investigations in subgrades.

In 1967 Karl completed his Ph.D. degree in Geotechnical and Transportation Engineering from the University of California, Berkeley. He then joined the Department of Civil Engineering at the University of Saskatchewan. Here he was able to pass on much of the knowledge gained during his time with the Department of Highways and to conduct research into problems he had encountered in the field. He instructed transportation engineering and engineering geology at the undergraduate level. His graduate classes included terrain evaluation and site investigation. Karl's research work involved the study of slope stability, in situ properties of clay shales, tills, glacial lacustrine clays and soft clays in groundwater discharge areas, and the basic physics of glacial processes. Karl supervised numerous graduate students, all who have gone on to successful careers. He was a prolific researcher who published over 40 refereed journal papers, a significant number of which won awards. Along with these publications was a book entitled "Airphoto Interpretation for Terrain Evaluation", and a number of chapters in other books.

In 1994 Karl took early retirement and formed a geotechnical consulting and research firm. Here he worked on many large projects for the Highway Department and the provincial mining industry, particularly potash. In 1996 he co-authored a set of geological site characterization guidelines for Saskatchewan Environment and Resource Management and the Saskatchewan Water Corporation. Karl was active in his profession until his untimely death.