

Geoscience Honour Role Citation – Zoltan Hajnal

Dr. Zoltan “Zoli” Hajnal was born in Cegled, Hungary, a small town 60 km from Budapest. He received his elementary and high school education in his homeland and was a fourth year student at the University of Sopron in 1956 when the Hungary revolution broke out. After the revolution he left Hungary and made his way to Canada and Saskatchewan. Zoli completed his post-secondary education at the University of Saskatchewan where he obtained a Bachelor of Engineering in Geophysics in 1961, and continued on to a master’s degree in Geophysics, which he completed in 1963. Following that he worked as an interpretation geophysicist for Chevron Standard in Calgary from 1963 to 1965 but went back to academia to obtain his Ph.D. in Seismology from the University of Manitoba in 1970. On completion of his Ph.D. Zoli returned to the University of Saskatchewan in the capacity of a faculty member.

Although he did some early work in paleomagnetism of Precambrian rocks and the application of gravity surveys in the recognition of near surface buried valleys, Zoli’s main research interests have been on the use of seismic reflection and refraction studies to image the lithosphere of the Earth including sediments, the crust and the mantle. His research has not merely been focussed on the deep lithosphere, as he has applied seismic refraction and reflection techniques to studies of glacial deposits, also. To date, he has authored or co-authored some 90 papers about half of which have pertain to research carried out on surficial sediments or lithospheric and mantle materials underlying Saskatchewan.

His appointment as a co-leader of the Lithoprobe Trans–Hudson Orogen project with Dr. John Lewry gave him an opportunity to integrate his work and that of several other geophysicists into this multidisciplinary project, combining geology, geophysics and geochronology. The project has made a significant contribution to an improved understanding of the processes involved in the assembly of Laurentia, the precursor to the North American continent. More recently, Zoli has been involved in the Weyburn CO₂ Sequestration project. His work is specifically concerned with defining the structural setting and the petrophysical properties of a 3-D volume of the sedimentary succession associated with the Weyburn oil pool. This project is also multidisciplinary combining 3-D and 4-D seismic, geology and engineering to determine the long-term ability of the Weyburn pool reservoir rocks to store CO₂. He is also much in-demand for his expertise in the application of seismic methods in exploration for uranium in the Athabasca Basin.

Zoli’s contributions to geophysics have been recognized by his peers through elected memberships in the European Academy of Sciences, 2003, and the Hungarian Academy of Sciences, 2001. In addition he was voted honorary life memberships in the Canadian Society of Exploration Geophysicists, 1999, and the Hungarian Geophysical Society, 1996.

I am sure you will agree that Dr. Zoltan Hajnal meets the criteria for enrolment in the Saskatchewan Geological Society’s Geoscience Honour roll.