

George Vernon Keller: 16 December 1927–17 April 2012



George Vernon Keller

George Keller was born in New Kensington PA, USA on 16 December 1927 and passed away on 17 April 2012 in Evergreen CO. Dr Keller received his Bachelor of Science (1949) and Master of Science (1952) degrees in Geophysics and his Doctorate (1954) in Geophysics and Mathematics from Pennsylvania State University. During his career he was employed by the US Geological Survey (USGS) (1952–1963) and by the Colorado School of Mines (1964–1993).

While with the USGS, Dr Keller's assignments included management of studies of geophysical aspects of nuclear weapons testing, the impact of earth properties on communications, surveys of the Arctic Ocean during the International Geophysical Year, and participation in the early USGS planning team for Deep Sea Drilling (AMSOC).

At the Colorado School of Mines, Dr Keller's principal areas of interest were in the development and applications of electrical geophysical methods to exploration for mineral and energy resources. He served as Head, Department of Geophysics, from 1974 to 1983. He retired from teaching 1 May 1993.

He received a distinguished service award from the US Department of Interior in 1959, was awarded the first Halliburton Award for outstanding professional achievement in 1979, served as a senior Fulbright scholar at Moscow University in 1979, was invited on a distinguished lecture tour by the Japan Association for Advancement of Education during the summer of 1986, and served as a Senior NATO Scholar at the University of Pisa in 1991. He has served as a consultant to many companies and government agencies involved in the earth sciences. Most important among the government assignments were: as a member of President Johnson's Blue Ribbon Committee on Mine Safety; as a member of President Carter's Energy Research Advisory Board, subcommittee on Geothermal Energy; and as chairman of the Committee Advisory to the Los Alamos Scientific Laboratory on the Hot Dry Rock Project. In 1996, he was named a Centennial Fellow of the College of Earth and Mineral Sciences at Pennsylvania State University.

Dr Keller formed 'Group Seven, Inc.' in 1970 to provide electrical geophysical services to the energy industries. During the 1970s, Group Seven grew to a company with approximately 60 employees and carried out geophysical surveys for a large number of energy companies and government agencies, including Exxon, Chevron, Union Oil, Phillips Oil, Gulf Oil, the Governments of Indonesia and Nicaragua through the US Agency for International Development, the Government of Kenya through the UN Development Program, the US Geological Survey, the US Department of Reclamation, the US Navy and the US Department of Energy. Group Seven was integrated into United Syscoe Mines (Canada) in 1981.

Dr Keller has published extensively, including more than 200 technical papers in his own name, more than 2000 pages of translations of technical articles, which originally appeared in the Russian literature, and eight books and texts on the electrical methods of geophysical prospecting. He served as translation editor of the journal *Soviet Mining Science*, published by Plenum Press from its inception in 1965 until 1994. During that period he was responsible for supervisory editing of some 15 000 pages of technical articles originally published in Russian.

Most important among Professor Keller's publications are seven books dealing with electrical geophysical methods. One of these books became a classic reference and is regularly cited to this day. The book, first published in 1966, was co-authored with his colleague and friend from the USGS, Frank Frischknecht, and was titled *Electrical Methods in Geophysical Prospecting*. Its popularity is emphasised by the fact that a second edition was published in 1982.

In 1994, Dr Keller began research on the detection and identification of hand guns. This research led to the award of US Patent 5552705 on 3 September 1996.

George Keller married his childhood sweetheart Amber in 1945; she passed away in 1995. He married Liudvika in 1997. George is survived by his wife Liudvika, son George Stephen and wife Chong, grandson Justin, and daughter Susan Diane.

In Dr Keller's honour, a Scholarship has been established entitled: Graduate Scholarship in Transient Electromagnetics in Honour of G. V. Keller. Pledges, which will be matched dollar for dollar to a maximum of US \$5000, should be sent to Kurt Strack via kurt@KMSTechnologies.com.

