Memorial to Edward Jacob Zeller (1925–1996)

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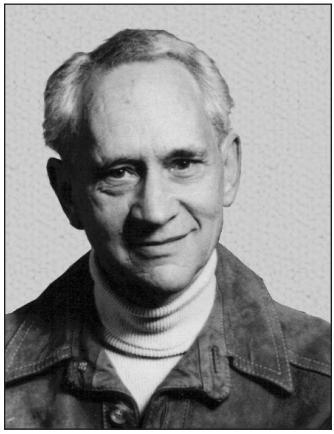

Edward Jacob Zeller died of natural causes while on vacation in Boulder, Colorado, on 14 January 1996 at the age of 70. He was born in Peoria, Illinois, on 6 November 1925. He was a University of Kansas professor of geology and noted polar research geologist.

Zeller graduated from the University of Illinois in 1946, and obtained his master's degree under Lowell R. Laudon in endothyroid Formanifera (micropaleontology) at the University of Kansas (KU) in 1948. He followed M. Luke Thompson from KU to the University of Wisconsin where he received his doctorate (geology) in 1951. However, Zeller had started to work with Farrington Daniels, the noted chemist, one year earlier in geochemistry and thermoluminescence and served five more years at the University of Wisconsin as a post-doc with Daniels.

Zeller joined the KU faculty in 1956 and was made a full professor of geology in 1963. He also received the designation of professor of physics in 1969, was made director of the Radiation Physics Laboratory in 1971, and retired in 1991. He taught geochemistry, advanced geochemistry, and nuclear geology and during his tenure he supervised six doctoral and 11 master's students.

His early research involved the thermoluminescence of geological materials and geologic age determination and he was one of the first to introduce electron-spin resonance for geologic dating. He also continued his master's research subjects in the study of Paleozoic Foraminifera and Mississippian stratigraphy. For most of his forty years in research, however, Ed's work was focused on solid state physics and the affects of radiation on matter.

Much of his research was centered in the Antarctic and Arctic with his longtime research partner and wife, Gisela Dreschhoff. He calculated he had spent a total of three years in Antarctica, Greenland, and Spitsbergen. One of his major polar projects was mapping Earth's record of solar activity by studying the effects of energetic solar protons on the nitrate content in ice cores. He was also involved with studies on the disposal of radioactive waste, atmospheric pollution, sunspot cycles, climatic change, faulting in the U.S. Midcontinent, and natural hydrogen production.

Zeller was a fellow of the Geological Society of America, and a member of the American Association for the Advancement of Science, American Association of Petroleum Geologists, American Geophysical Union, American Polar Society, Antarctican Society, Explorers Club, Geochemical Society, Society of Economic Paleontologist and Mineralogists, and Sigma Xi.

He was a National Science Foundation senior post-doctoral fellow to the University of Bern in Switzerland in 1961–1962, a recipient of the Antarctica Service Medal from the National Academy of Science in 1966, and the Group Achievement Award from the National Aeronautics and Space Administration in 1983. He was recognized by the KU Department of Geology with

the Haworth Distinguished Alumni Award on the occasion of his retirement in 1991. In 1971, Ed had the Zeller Glacier in Antarctica named for him, and Gisela was honored with Dreschhoff Peak in Victoria Land, Antarctica.

On a personal note, Ed was fluent in German, had a pilot's license, and kept his single-engine Cessna at the Lawrence Airport.

Zeller was one of KU's most distinguished scientists and had an unusually broad and diversified career. In an interview for the *G-Hawker*, the KU geology newsletter, Ed noted he got bored easily, and thus changed the direction of his studies many times. Ernie Angino, one of his colleagues, noted he was a garden hose of ideas, and had more ideas in five minutes than some individuals have in five years, and another colleague noted he was on the edge of the mainstream and thus his research was always interesting and exciting.

ACKNOWLEDGMENTS

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