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Memorial of John Walter Gruner 1890–1981

TIBOR ZOLTAI

Department of Geology and Geophysics University of Minnesota Minneapolis, Minnesota 55455

John Walter Gruner was born in 1890 in Neurode, a small town in the Sudentenland which is now part of Poland. After finishing his high school education he worked for two years and saved enough money to come to the U.S. in 1912. Three years later he enrolled at the University of New Mexico and received his B.A. in 1917. He continued his studies at the Unviersity of Minnesota and earned an M.S. degree in 1919. After that he accepted an assistant professorship at Oregon State University for an academic year in 1919 then returned to Minnesota as an instructor and completed the Ph.D. requirements in 1922. Soon after that he was promoted to assistant (1923) and to associate (1926) professorship and later to full professorship (1944). With the exception of two sabbatical leaves (1926-27 and 1937–38), he taught continuously at the University of Minnesota until his retirement in 1959. He was an excellent and thorough teacher. He set very high standards of performance for himself both in teaching and in research. Only the best students could satisfy his expectations. In spite of that 12 students have completed Master's and 28 have completed Ph.D. programs under his direction. They all became successful members of the scientific or the industrial community. The number of undergraduate students who took his mineralogy and lithology courses (or physics and geography courses during the war) number over a thousand.

Dr. Gruner, or J.W. to his friends, was an equally productive research scientist. He published a large number of scientific papers of which many became classics in mineralogy and crystallography. After returning from his sabbatical year at the University of Leipzig where he worked with Friedrich Rinne and Ernst Schiebold, he became one of the first professors of mineralogy in the US to teach X-ray diffraction (1927). He and his students determined a number of crystal structures, including several difficult layer silicate structures. All of his early crystal structure models have since been refined and all



were found to be basically correct. For decades he was the leading authority in the mineralogy and geology of the iron formations of Minnesota and of the radioactive mineral deposits of Colorado. He also discovered and named two new minerals: groutite, in honor of his former teacher and collegue, F. F. Grout, and minnesotaite, in testimony of his loyalty to the state of Minnesota.

The value of his contributions to mineralogy and geology were recognized by his collegues, who elected him as their president of the Crystallographic Society of America (predecessor of the American Crystallographic Association) (1947–1948); and the Mineralogical Society of America (1949–1950). After his retirement his contributions to mineralogy and crystallography were acknowledged by the award of the Roebling Medal (1962) of the Mineralogical Society of America, the highest scientific award in America in the field of mineralogy.

Other recognition of his achievements included: an Honorary Doctor of Science degree of the University of New Mexico (1963), and the Distinguished Service Award of the University of Minnesota Chapter of Sigma Xi (1960), in which chapter he served as president (1953–1954). In 1965 the University of Minnesota sponsored and NSF supported an "International Conference on Rock-Forming Minerals" which was dedicated to his 75th birthday. In 1972, a group of his former students wrote and dedicated in his honor GSA Memoir No. 135 entitled "Studies in Mineralogy and Precambrian Geology." This publication is usually referred to as the "Gruner Volume."

In 1919 he married an equally exceptional person, Opal Garrett. In the following years they had three children: Wayne (1921), Hazel (1924) and Garrett (1928), and maintained an ideal and happy marriage till her death in 1966.

All of us who were fortunate to know him as a scientist and as a man bend our heads with sorrow to the will of God. It appears to be appropriate to close our commemoration with the message of S. A. Underwood, the favorite poem of Opal and J.W.:

"We need it ev'ry hour-a purpose high,

To give us strength and pow'r to do or die, We need it ev'ry hour—a firm, brave will, That though hate's cloud may low'r, shall conquer still.''

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¹ To receive a copy of the complete bibliography, order Document Am-82-191 from the Business Office, Mineralogical Society of America, 2000 Florida Avenue, N.W., Washington, D.C. 20009. Please remit \$1.00 in advance for the microfiche.