



Margaret D. Foster

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MEMORIAL OF MARGARET D. FOSTER

March 4, 1895–November 5, 1970

JOSEPH J. FAHEY, *U.S. Geological Survey, Washington, D.C. 20242*

Dr. Margaret Dorothy Foster, the first woman chemist employed by the U.S. Geological Survey, died November 5, 1970 after a short illness, at Holy Cross Hospital, Silver Spring, Maryland.

Dr. Foster was born in Chicago, Illinois, March 4, 1895, the daughter of The Reverend James Edward and Minnie MacAuley Foster. About two years later her brother Robert James joined this sedate Presbyterian family.

After the death of her father in 1910 the family moved to Jacksonville, Illinois, where Illinois College is located. It was at this institution that "Dot", as she was known to all her friends, majored in chemistry and in 1918 received her A.B. degree. Her M.S. was obtained in 1923 from George Washington University and her Ph.D. in 1936 from American University, both in Washington, D.C. From Illinois College she received an honorary Doctor of Science degree in 1956, and an Outstanding Alumni Award in 1962.

-Three days after receiving her A.B. degree Dot joined the staff of the U.S. Geological Survey and was assigned to the Water Resources Branch. There she soon developed a high degree of skill in the analysis of natural waters that equalled the best efforts of her male colleagues.

After several years of routine water analysis, Dot started a research assignment that resulted in her first paper, published in 1923. Then followed papers presenting new methods for the quantitative measurement of some of the constituents of natural waters, manganese, boron, fluoride, and sulfate. This was followed by her classical work on the ground waters of the South Atlantic Coastal Plain and of the Houston-Galveston area, Texas.

Looking for new worlds to conquer, Dr. Foster transferred in 1942 to the Section of Chemistry and Physics under the leadership of Dr. Roger C. Wells. After about two years the Manhattan Project came into being and she was among those picked for that assignment. Here again her work was productive, resulting in two new quantitative methods of analysis, one for uranium and one for thorium.

After the Manhattan Project had come to a close, Dot became interested in the platy minerals: clays, micas, chlorites, and glauconites. Work in this field continued until her final illness, and resulted in a series of

papers on base exchange, the composition and swelling of clays, the layer charge relations of dioctahedral and trioctahedral micas, to name only a few. Her dedication to research in geochemistry is strongly brought into focus by the fact that though officially retired at 70 years of age in March of 1965, she continued her laboratory work, publishing about a half dozen more papers.

Dr. Foster was a member of the American Chemical Society and the Geological Society of Washington (Secretary 1945–1946). She was a fellow of the Washington Academy of Sciences and the Mineralogical Society of America.

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MEMORIAL OF PAUL DIMITRI KRYNINE

September 19, 1902-September 12, 1964

THOMAS F. BATES AND JOHN C. GRIFFITHS, *The Pennsylvania State University, University Park, Pa. 16802*

Paul Dimitri Krynine, Professor of Geology and formerly head of the Department of Mineralogy at The Pennsylvania State University died September 12, 1964, of Hodgkins disease. He was born September 19, 1902, of Dimitri P. and Raisa R. Krynine in the town of Krasnoyarsk, Siberia. He spent the first seven years of his life there, while his father, a civil engineer, assisted in the completion of the Trans-Siberian Railroad. In 1909 the family traveled to Buenos Aires where the elder Krynine worked for the Argentine government as a highway engineer. Paul attended a French grammar school and developed, among numerous other scholarly attributes, a proficiency for languages which served him throughout his life. The Krynines returned to Russia in 1917 and Paul completed his schooling in that country with a B.S. in Geology from the University of Moscow in 1924. He then emigrated to the United States and completed another B.A. in Geology at the University of California (1927) before going to work for three years for the Standard Oil Company of California in tropical jungle country of Mexico. It was during this period that his father fled Communist Russia and took a position teaching Soils Engineering at Yale where Paul joined him in 1931 with the purpose of studying sedimentary petrography. Sustained efforts on the part of father and son to get Raisa Krynine out of Russia were unsuccessful, although she was allowed to receive money sent for her support until her death in the 1940's.