

Memorial to Sterling Brown Hendricks

1902–1981

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The death of Sterling Hendricks, due to the Guillain-Barré syndrome, removed from the scientific community one of its most brilliant investigators, unique in having been a major contributor to progress in such diverse fields as the crystal structure of inorganic and organic compounds and clay minerals, phase equilibria, plant growth and nutrition, and photoperiodism in plants. As Chief Scientist of the Mineral Nutrition Engineering Research Laboratory of the U.S. Department of Agriculture from 1943 until his retirement in 1970, he initiated and supervised research programs in the fields listed above and many others. His advice was sought on problems in many disciplines, and he was extremely generous in giving his time to help many scientists.

Sterling Hendricks was born in Elysian Fields, Texas, son of James G. and Daisy Gamblin Hendricks. He was educated at the University of Arkansas (Bachelor of Chemical Engineering, 1922), Kansas State University (M.S., 1924), and California Institute of Technology (Ph.D., 1926). His work at the California Institute of Technology, mainly with Linus Pauling and R. G. Dickinson, was concerned with crystal structures of inorganic and organic compounds, and he continued work in these fields with R.W.G. Wyckoff in 1926–1927 at the Geophysical Laboratory in Washington and in 1927–1928 at the Rockefeller Institute for Medical Research in New York. In 1928 he joined the Department of Agriculture in Beltsville, Maryland, and remained there until his retirement in 1970; in fact, he continued his research for some years beyond retirement.

Sterling Hendricks was author or co-author of 216 papers. The most important of these to geologists are listed in the attached partial bibliography. Perhaps the best known of these are his studies of the poorly crystallized, commonly disordered clay minerals of complex composition, the classic work on the polymorphism of the micas, and his contributions to the problems of the phosphate minerals and their role in fertilizers.

Hendricks's research received wide recognition. He was awarded the honorary LL.D. degree by the University of Arkansas in 1946 and the honorary D.Sc. degree by North Carolina State University in 1962 and by Kansas State University in 1963. He was awarded the Hillebrand Prize of the Chemical Society of Washington in 1937, the Washington Academy of Sciences Award in 1940, the Arthur L. Day Medal of the Geological Society of America in 1952, the Distinguished Service Award of the U.S. Department of Agriculture in 1953, the President's Distinguished Service Award in 1958, the Rockefeller Public Service Award in 1961, the Hoblitzelle Award in 1962, the National Medal for Science in 1976, and the Finson Medal of the International Association of Photobiology in 1976. Hendricks was a member of many scientific societies.

He served as president of the Chemical Society of Washington (1943), the Mineralogical Society of America (1954), and the American Society of Plant Physiologists (1958–1959). The mineral Hendricksite was named for him in 1966, an appropriate honor, because it is a trioctahedral zinc member of the Mica Group, to the structural elucidation of which he had contributed so much.

Sterling's early love for hiking with his brother Tom (T. A. Hendricks, geologist of the U.S. Geological Survey) led to his hobby, mountaineering. Although rather slight in build, he was famous for his skill and endurance, which led during World War II to his testing mountaineering equipment for the Quartermaster Corps during ascents of Mt. McKinley and of several previously unclimbed peaks in British Columbia.

Sterling married Edith Ochiltree February 21, 1931. He is survived by her, his daughter Martha O'Neill, and two grandchildren.

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