## Memorial to Victor Thomas Allen 1898–1986

## KENNETH G. BRILL, JR.

Department of Geology and Geological Engineering, Saint Louis University, St. Louis, Missouri 63156

Victor T. Allen passed away October 10, 1986, in Carlsbad, California after a short illness. He had retired from the chairmanship of the Department of Geology and Geological Engineering, Saint Louis University, in 1967. Victor (Vic to his friends) will be remembered for his many fine attributes, including dedication and thoroughness in his teaching, administration, and research, as well as his integrity in all phases of life and his loyalty to his friends. He was a Christian gentleman and devoted to his family.

Victor was born in Dubuque, Iowa, on October 28, 1898, and was raised in Cresco, Iowa. With his parents he moved to Minneapolis where he attended the University of Minnesota. He received the B.A. degree in 1921 and the M.S. degree in 1922. He held an assistantship in the Department of Geology both years. During the summers he did field work in northern



Minnesota for the Minnesota Geological Survey, working with Frank Grout and George Thiel. His M.S. dissertation on the mineralogical composition of Minnesota foundry sands was published in 1923 and presaged his interest in petrology. From 1923 to 1925 he was an instructor in geology at Western Reserve University (now Case-Western) in Cleveland, Ohio. During these years he taught summer courses at the Cleveland School of Education.

He was appointed instructor in the Department of Geological Sciences at the University of California–Berkeley in 1925. Under his mentor, George D. Louderback, he received the Ph.D. degree in 1928. His dissertation, "The Ione Formation of California," which dates the unroofing of the Sierra Nevada batholith, is considered a classic paper and is still on the reading lists of several departments. Victor continued his research on clay petrology and became internationally known in the field. His precise identification of clay minerals using a petrographic microscope was both a highly developed skill and an art.

He was appointed assistant professor of geology at Saint Louis University in 1928 and became associate professor the following year. In 1936 he advanced to full professor. Several summers' work with the Illinois State Geological Survey led to a series of papers on clays of weathered zones in glacial deposits, genesis and morphology of soils of Illinois, and underclays of Illinois coals. Additional summer work for the Missouri Geological Survey and Water Resources led to several papers on clays of Missouri and studies of Ordovician metabentonites of Missouri, Iowa, and Minnesota. He wrote a college level textbook, *This Earth of Ours* that was published in 1939.

During World War II, he took a leave of absence from the university and became commodity geologist for aluminum with the U.S. Geological Survey in Washington, D.C. Later he became senior geologist on a WAE basis. Following the war, he returned to the university and was appointed director of the Department of Geology and Geological Engineering in the Institute of Technology, a position he held until his retirement.

Victor's research was principally on laterite, bauxite, diaspore, and kaolin clays. He did consulting work in South America as well as in the United States. Grants from the National Science Foundation sent him to Europe on several occasions. On one trip he collected and studied lateritic bauxite deposits in seven European countries. On another occasion he visited the Hungarian bauxite deposits. At the XXI International Geological Congress in Copenhagen he presented a paper entitled "Comparison of Bauxite deposits of Europe with those of the United States." The next year he presented a paper at the 10th Pacific Science Conference in Honolulu on "Weathering of Basalt." With Joseph Fahey he discovered and named the mineral Mansfieldite. In all, Victor wrote 103 scientific papers. In the more than 40 years that Victor taught geology courses, he influenced the lives of thousands of students. He expected the most from them and did not tolerate careless work. Many have become well known in the fields of earth science. Over one eight-year period, eighteen of his students won prizes for papers submitted to annual contests sponsored by the American Institute of Mining and Metallurgical Engineers in which students from six midwestern universities competed. Two of these papers won national prizes. In addition to his many duties at the University, Victor found time to help persuade the Missouri State Department of Education to permit earth science courses to fulfill the science requirement at the middle and high school level.

He was a strong promoter of the local chapter of the Society of Sigma Xi, as well as being a Fellow of the Geological Society of America, the Mineralogical Society of America, the American Association for the Advancement of Science, and the Geological Society of Washington. He was also a Fellow of the International Institute of Arts and Letters, an organization with fewer than 2,000 members world-wide.

In 1930, Victor met Murl Lynch, who held a Fellowship in the English Department at Saint Louis University. They were married on August 17, 1932, in Grinnell, Iowa. This happy union lasted the rest of his life. Victor and Murl had two children, Rosella Mary and Robert Thomas.

He will be missed by his family, his many friends, and his former students and colleagues. He was dedicated to teaching and research and to the promotion of the earth sciences. His contributions to the field of clay petrology are profound and will be long-lasting. A fund has been established at Saint Louis University in his memory.

Victor is survived by his wife, Murl L. Allen of Carlsbad, California; his daughter, Rosella A. Verdon of Colorado Springs, Colorado; his son, Robert T. Allen of San Diego, California; and four grandchildren.

## SELECTED BIBLIOGRAPHY OF V. T. ALLEN

- 1928 Anauxite from the Ione formation of California: American Mineralogist, v. 13, p. 145-152.
- 1929 The Ione formation of California: University of California Publications Bulletin, Department of Geological Sciences, v. 18, p. 347–448.
- 1932 Petrographic and mineralogical study of the underclays of Illinois coal: American Ceramic Society Journal, v. 15, p. 564-574.
- 1935 Mineral composition and origin of Missouri flint and diaspore clays: Missouri Geological Survey and Water Resources, 58th Biennial Report, Appendix IV, p. 1–24.
- 1939 This Earth of Ours: Milwaukee, Wisconsin, Bruce Publishing Company, 364 p.
- 1941 Eocene anauxite clays and sands in the Coast Range of California: Geological Society of America Bulletin, v. 52, p. 271-294.
- 1948 (and Fahey, J. J., and Axelrod, J. M.) Mansfieldite, a new arsenate, the aluminum analogue of scorodite and the mansfieldite-scorodite series: American Mineralogist, v. 33, p. 122-134.
  Formation of bauxite from basaltic rocks: Economic Geology, v. 43, p. 619-626.
- 1952 (and Fahey, J. J.) New occurrences of minerals at Iron Mountain, Missouri: American Mineralogist, v. 37, p. 736-743.
- 1955 Diatomaceous earth (diatomite): Encyclopedia Britannica, v. 7, p. 324.
- 1959 Gumbotil and interglacial clays: Geological Society of America Bulletin, v. 70, p. 1483–1486.
- 1960 (and Johns, W. D.) Clays and clay minerals of New England and Eastern Canada: Geological Society of America Bulletin, v. 71, p. 75-86.
- (with Hesterman, J. W., Scheid, V. E., and Sohn, I. G.) Investigation of some clay deposits in Washington and Idaho: U.S. Geological Survey Bulletin 1091, 147 p.
- 1965 (with Sherman, G. D.) Genesis of Hawaiian bauxite: Economic Geology, v. 60, p. 89-99.
- 1966 (with Sherman, G. D.) Comparison of bauxite deposits in Oregon and Hawaii, U.S.A.: Academie Yougoslave des Sciences et des Arts, Zagreb, p. 83-98.
- 1968 (with Fahey, J. J., and Ross, M.) Kaolinite and anauxite in the Ione formation, California: American Mineralogist, v. 54, p. 206-211.