MEMORIAL OF ROGER CLARK WELLS

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Roger Clark Wells, third Chief Chemist of the United States Geological Survey, died suddenly from a heart attack early in the morning of April 19, 1944, in the same hospital, where 10 hours earlier his predecessor, former Chief Chemist George Steiger had passed away. His death was most unexpected. I saw him the preceding Sunday; he looked very tired but he was cheerful and energetic, as always. No one thought the end was so close.

Dr. Wells was born at Peterboro, New York, October 24, 1877, son of Byron Wells and Lucy (Clark) Wells. He graduated from Harvard in 1901 and received his doctorate there three years later, working on the atomic weights of sodium and of chlorine, under Professor T. W. Richards. This early training in exact analytical chemistry is reflected in all his later analyses, all done with meticulous attention to accuracy. After holding instructorships at Harvard and Pennsylvania, and a year as research chemist with the General Electric Company, he was appointed physical chemist on the Geological Survey in 1908, becoming Chief Chemist in 1930.

Probably because of his early work on the atomic weight of sodium, he always retained a strong interest in that element and became Mineral Resources specialist on soda and sodium compounds. Later, with R. E. Stevens, he developed methods for the separation and determination of the rare alkalies.

His contact with the mineralogical work of the Survey evoked a strong interest in the chemical composition of minerals, especially those containing the less common elements, such as columbium, tantalum, zirconium, uranium, thorium, the rare earths, and the rare alkalies. His analysis of strüverite (bibliogr. no. 16) from South Dakota served as an introduction to the difficulty of analyzing minerals containing columbium, tantalum, and titanium and he carried out a vast number of researches into methods, before he was satisfied with the results. The atomic disintegration of uranium and the resultant products, and the application of the lead uranium ratio as a means of calculating the age of the earth, fascinated him and he served on the National Research Council, Division of Geology and Geography, Committee on Measurement of Geologic Time, for several decades. In the Council, he also served on the Committee on Sedimentation from 1919 to 1935 and on the Committee on Processes of Ore Deposition from 1928 to 1935. In 1916 he examined potash deposits in Chile and in 1920 he was a delegate to the First Pan-Pacific Scientific Congress in Honolulu.

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His office copies of the standard text books—those on analytical chemistry, Dana's Mineralogies, Clarke's Data of Geochemistry—are full of his written comments, notes in the text, on the margins, and on small slips of paper pasted in. His sets of his own publications, likewise, are full of such amending notes and comments, for he was ever anxious to have the latest and best data possible. These publications, with his written-in notes, are among the Chemical Laboratory's most cherished possessions.

Wells was co-author of the papers describing the new minerals loretteite, creedite, tungstenite, and brannerite, and he contributed many careful analyses of other minerals of complex composition.

Dr. Wells was a member of many scientific societies, among them the Washington Academy of Sciences in which he served as vice-president in 1923 and 1938. He was President of both the Washington Section of the American Chemical Society and the Geological Society of Washington. He also was a member of the American Institute of Mining and Metallurgical Engineers, and a Fellow of the American Association for the Advancement of Science, the Geological Society of America, and the Mineralogical Society of America. He was a member and former Elder of the Chevy Chase Presbyterian Church, and belonged to the Cosmos and Harvard Clubs of Washington and the Chevy Chase Citizens Association.

The administration of an increased chemical staff, with urgent war demands for a greatly increased output, placed a heavy burden on him in recent years. Yet, he remained the same kindly, cheerful, and conscientious leader, with no indication to his associates of the strain under which he was working. Ill but a week, his sudden death is a reflection of that strain.

In 1914 he married Etta May Card of Syracuse, New York, who, with two sons, Arthur Byron Wells and Roger Clark Wells, both in the service, survive him.

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