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## MEMORIAL OF AUSTIN FLINT ROGERS

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Austin Flint Rogers died on March 10, 1957 in Berkeley, California, a few months short of his eightieth birthday. He was one of the founders of the Mineralogical Society of America and in 1927 was elected president. He stood for many years as one of the leaders in a group of senior scientists who were instrumental in establishing mineralogy as a science in North America.

Professor Rogers' scientific activity began in Missouri and Kansas, covered a moderate period in New York, and throughout a large part of his career centered in California. He was born in Lathrop, Missouri, August 15, 1877. While a student in the Central High School in Kansas City, a chemistry teacher encouraged his interest in natural science, and the collection of minerals and fossils from the quarries in the vicinity became a serious hobby. Dr. Rogers attended the Missouri School of Mines for one year and then transferred to the University of Kansas where he received the A.B. degree in 1899 and the A.M. degree a year later. In 1901 he was awarded a fellowship at Columbia University where he studied in the Department of Mineralogy with Professors Alfred J. Moses and Lea M. Luquer. The Ph.D. degree at Columbia University was awarded to Professor Rogers in 1902.

It was at this time that Dr. David Starr Jordan, then President of Stanford University, was looking for a young man to initiate the study of mineralogy at the youthful university President Jordan had been building academically in California. Through his friendship with Dr. Nicholas Murray Butler, President of Columbia University, his attention became focused on a young doctorate recipient at Columbia, Austin Rogers. In 1902 Dr. Rogers began a career at Stanford University, where over the years geologists on the Pacific Coast came to look with respect on the famous staff of Stanford geologists which, along with Professor Rogers, included Professors John Casper Branner, James Perrin Smith and Cyrus Fisher Tolman.

The teaching contribution that Dr. Rogers made at Stanford University covered a span of forty years. During that time no student graduated from Stanford without having taken at least the Introduction to Mineralogy course. The interest a few had developed in the subject as undergraduates led them to continue as graduate students. Students from other universities were also attracted to the Stanford group and came for graduate training. Several doctorate degrees in mineralogy from Stanford University were achieved in this way (including the writer's). These men comprised a nucleus of enthusiastic mineralogists who joined

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Austin Flint Rogers 1887–1957 the faculties of other universities and carried on the teaching and scientific work that Professor Rogers had so ably demonstrated to them in their student days.

In the field of mineralogical research, Dr. Rogers showed an inquiring mind which led beyond mineralogical techniques toward a better understanding of the physical and chemical environment under which minerals grow. He became an authority in several fields of mineralogy. His work on magmatic sulfide minerals written with Professor Tolman still stands after many years as a major fundamental contribution to the subject. His contributions to the mineralogy of phosphate minerals are among the most authoritative publications on the subject. He was keenly interested in the way minerals form and devoted a large amount of time to field collection followed by microscopic study. The breadth of this interest is well shown by the variety of minerals and mineral groups in the appended bibliography of 99 titles.

Those who saw Professor Rogers only in the classroom missed the rare opportunity of watching him as he proved his capabilities in other activities. One hobby was culinary. Looking back on student days at Stanford, the writer well remembers a memorable Thanksgiving Day dinner which included a nicely browned turkey and all of the trimmings cooked, arranged and served by Dr. Rogers himself.

In his later years Professor Rogers became interested in gems. A discovery of jade in California led to his enthusiasm for the subject, reflected in the assembly of a small gem collection; a popular lecture series was also inaugurated. The proceeds from these lectures were contributed to Chinese relief during the second world war.

In true mineralogical tradition, Professor Rogers discovered and named several new minerals. In recognition of his old friend of student days, he named one mineral *kempite* in honor of James Furman Kemp, for many years professor of economic geology at Columbia University. Other new minerals that he discovered were named sanbornite, wilkeite and cornuite. Rogersite and austinite were named by others in his honor.

The educational influence of Dr. Rogers extended far beyond Stanford University. His textbook, written as an introduction to mineralogy, is accurate, concise, informative and has been widely used. The optical descriptions of minerals in the textbook "Optical Mineralogy" originally prepared by Professor Rogers as the second half of a book written jointly with the author have been used on a worldwide basis. His guidance was valued by the Mineralogical Society of America where he served as an Associate Editor of the *American Mineralogist* for many years. In 1930, Stanford University created the Austin F. Rogers Teaching Fellowship in Mineralogy in recognition of his interest in the science.

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Professor Rogers received the Erasmus Haworth Award conferred on distinguished alumni by the University of Kansas in 1950. He was elected a fellow of the American Academy of Arts and Sciences. In addition to being a charter fellow of the Mineralogical Society of America, he was a fellow of the Geological Society of America. He was a member of the Mineralogical Society of Great Britain and the Société frangaise de Mineralogie.

Throughout his academic career, Dr. Rogers constantly maintained a high standard of achievement and was particularly objective in appraising not only the work of his students but his own work as well. He formed a strong attachment for many students, but personal preference was no substitute for demonstrated performance when term marks were prepared.

Dr. Rogers, who was married in 1902, is survived by a daughter, Genevieve and a son, Ronald. His retirement from Stanford University in 1942 did not mean the end of his career. On the contrary, he continued to promote interest in mineralogy by delivering lectures on gem stones until the time of his final illness.

All who had the good fortune to be associated with Professor Rogers are grateful for the experience of having known one of the great contributors to American mineralogy.

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