

## **Alumnus and noted expert on meteorites to deliver Samuel R. Scholes Jr. Lecture**

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An Alfred University alumnus who is one of the country's foremost experts on meteorites will deliver the annual Samuel R. Scholes Jr. Lecture at 8 p.m. April 13 in Nevins Theater in the Powell Campus Center on the AU campus. Dr. Carleton Moore '54 will deliver a lecture entitled "The Chemistry of Meteorites: Messengers from Time and Space," during which he will discuss the different types of meteorites, their chemistry and origin. He will bring samples of different types of meteorites, including those from Mars and the moon. Moore, who holds a B.S. from Alfred University, was a student of Samuel Ray Scholes, Jr. '38. Another AU alumnus, Dr. Joshua Fierer, '59, a retired professor of pathology who now practices in Florida, created the Samuel Scholes Jr. Lecture in honor of his mentor and lifelong friend. After graduating from AU, Moore earned a Ph.D. from California Institute of Technology. He first taught at Wesleyan University and since 1961 has been a faculty member at Arizona State University and director of its Center for Meteorite Studies. The Center has one of the largest and most important collections of meteorites in the world. Moore is currently Regents' Professor Emeritus of Chemistry and Geology. He was chosen by NASA as a principal investigator to analyze over 200 Apollo mission lunar samples for carbon and sulfur from the Apollo 11-17 missions. As part of the Apollo program he was on the Lunar Sample Preliminary Analysis Team in Houston. For this work he was awarded an honorary Doctor of Science degree from Alfred University in 1977. He co-authored papers on the first unambiguous detection of amino acids in meteorites. In addition to writing over 200 published papers on meteorites, lunar samples and analytical chemistry, he authored several books, one of which *Principles of Geochemistry*, has been translated into several foreign languages including Burmese, and coauthored a book with Barry Goldwater on the Grand Canyon. He edited the Meteoritical Society's journal *Meteoritics* for 20 years and served a term as president of the Society. His research on desert varnish led to a successful U.S. Patent on a chemical method of replacing rock varnish, which is used for environmental remediation. In 2000 the International Astronomical Union named asteroid 5046 after him, giving it the name "Carletonmoore." In 42 years of teaching, he taught over 8,000 students in chemistry and geology. He also mentored 38 graduate students, including E. K. Gibson whose discovery in 1996 of possible fossils in Martian meteorites helped prime the start of the NASA Astrobiology Program. He is currently working on understanding the distribution of formic acid in chondritic meteorites and on the detection of water deposited salts in Martian meteorite samples.