



Wayne C. Hazen (1917-2009)

2005 Medal of Merit Recipient

Wayne C. Hazen was born in Berkeley, California, in 1917, and received his B.Sc. degree in Chemistry from the University of California in 1940. He then embarked on a career in industrial chemistry. His technical contributions in solvent extraction are used worldwide in producing uranium and copper. Along the way, he learned to fly planes and helicopters; raised six children; trekked across the Himalayas, Europe, and Africa; was issued 25 patents; and founded a leading metallurgical Research and Development firm.

Wayne's career began in 1940 at Pan American Engineering Co., where he worked on a process to recover manganese from various ores. In 1943, he moved to Battelle Memorial Institute, where he developed an interest in surface chemistry and flotation kinetics. This led to his first patent. Inquisitiveness and determination were typical of Wayne: "Wayne was never interested in all of the reasons why something couldn't be done, he was only interested in how to do it."

After a stint at Day and Zimmerman Engineering Company from 1946 to 1947, Wayne left for Los Alamos National Laboratory, where he developed procedures and equipment for remote control processing of plutonium used in atomic weapons. He left Los Alamos in 1954 for Boulder, Colorado, where he and Gus Henrickson opened a research laboratory for Kerr-McGee Oil Industries to apply solvent extraction technology to recovering vanadium and uranium.

In 1961, Wayne and his father started Hazen Research in Golden, Colorado. Among other notable activities, Hazen Research did the initial research and pilot plant operations for developing a copper solvent extraction process using General Mills' LIX reagent. This process, now known as the SX-EW Process, was transferred to the first industrial demonstration leach circuit at the Blue Bird Mine in Miami, Arizona. Today the SX-EW process is used universally throughout the world as a premiere process for the extraction of copper from oxidized copper ores. Wayne resigned as president and CEO of Hazen Research in 1983, but continued on as Vice President and Advisor until May 2005. He was elected a Fellow of The Metallurgical

Mining Foundation of the Southwest
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Society in 1980, and, in 1999, received an Honorary Doctorate from the Colorado School of Mines. The company he founded 44 years ago now employs 95 people and is headed by his son, Nick. Wayne's extraordinarily prolific career has had a lasting effect on numerous clients, colleagues, and industries.