



## **Frank Wood McQuiston (1904-1987)**

2009 Inductee from Mining's Past

Frank McQuiston was one of the unassuming giants of twentieth century non-ferrous metallurgy. He was raised in some of the leading mining communities of the west where he gained experience in flotation and smelting in part-time jobs to fund his education.

He graduated from the University of California in 1931. He held several jobs at various California mines and also owned an assaying business until 1934, when he obtained employment at the Empire Mine as an assistant assayer at \$5 a day. Here he started his long association with Newmont, of which he ultimately became Vice President of Metallurgy.

In his career, he pioneered and advanced flotation, achieving separation of complex lead/zinc/copper/gold and silver ores into separate concentrates of the three base metals. This was vital in the economic operation of several Newmont mines, including the Resurrection and Idarado in Colorado, as well as in Newmont's African interests, Tsumeb and Palabora. At these, he also designed their smelters. However, he considered his crowning achievement to be the successful design and construction of the Carlin mill, which basically launched the current Nevada gold development.

Newmont loaned McQuiston to the U.S. Government twice - during World War II to solve problems that Bagdad Copper had recovering molybdenum and during the "Cold War" to the Atomic Energy Commission to secure uranium supplies. In this, he conducted secretive operations obtaining uranium supplies from Belgian Congo and from South Africa, where he assisted in the recovery of uranium from the tailings of the gold mines. To do this, he equipped acid plants and introduced ion exchange technology, which has become a nearly universal recovery method for uranium production.

During this same period of AEC involvement in securing uranium from Africa, he also became involved with a high-grade lead/zinc mine in Morocco on behalf of Newmont. His efforts there

resulted in his being awarded the order of “Ouissara Alaourite-Cheritien” for outstanding service to the Moroccan government.

Frank McQuiston will be remembered for his involvement in numerous world class operations in which Newmont had varying interests, such as O’okiep, Palabora, and Tsumeb in Africa; Similkameen in British Columbia; Dawn Uranium in Washington; and last, but not least, Carlin in Nevada.