

**ARTHUR WILLIAM FAHRENWALD****1890-1983**

Arthur Fahrenwald was a distinguished Honorary Member of the Association of American State Geologists. He was a native son of South Dakota, but eventually by choice became a son of Idaho. After graduating from the South Dakota School of Mines in 1914 with a B.A. in metallurgical engineering, he met his partner for life, Lola Ellsworth, in Rapid City. They were married in 1916 and subsequently raised three children, Arthur W., Mary Lou, and Richard E.

In 1916 and 1917 he taught mining and metallurgy at the New Mexico School of Mines, receiving the professional degree of Metallurgical Engineer in 1916. At Socorro he also served as the school's baseball and basketball coach, as well as being Athletic Director. For most of his life he continued to be an ardent athlete, a skilled tennis player, and in later years a fine golfer. Even in his 80's, if he couldn't find a partner, he could be seen golfing alone on the Elks Club course in Moscow.

In 1917 he moved to the Texas School of Mines as an instructor. This move was supposed to provide opportunities for exploration in Mexico, but the activities of Francisco "Pancho" Villa in that country blocked that plan. The next year he moved to Great Falls, Montana, to become head of the Physics and Chemistry Department at the high school there. The great flu epidemic of World War I closed the school, so in 1919 he moved to Idaho as an ore assay engineer with the U.S. Bureau of Mines.

In 1929 he joined the University of Idaho's College of Mines as a professor of Metallurgy. In the following year he became Dean, but at this stage in his career he did not have a taste for administration and returned to teaching. Five years later, however, he changed his mind and accepted the appointment of Dean, thereby also becoming the Chief of the Idaho Bureau of Mines and Geology and State Geologist. He remained in that dual position until retiring in 1954. Thus, as a metallurgist, he had 20 consecutive years as an active member of the Association of American State Geologists. After stepping down, he was able to give undivided time to research, with the title of Research Professor of Mining and Metallurgy. In 1960, age dictated that the word Emeritus be added to his title, recognizing 31 years of uninterrupted service on the faculty at Idaho and 41 years on the campus of Moscow.

Some looked upon Dean Fahrenwald in his later active years as a totally dedicated scientist, more interested in his research and laboratory work than the chores of administration or the continuing challenges of teaching. Though never viewed as a warm and congenial colleague, he brought international distinction to Idaho and was always highly regarded and respected here as a top-flight professional. In 1970 he was awarded an Honorary Doctor of Science degree by the University of Idaho, paying tribute to his many professional contributions to the mining industry over a period of 56 years. In mining technology he is remembered as preeminent in the development of widely used machinery relating to grinding and crushing of ores and to hydraulic classification and flotation. He published over 50 significant papers and held numerous patents. His professional honors

include the National Society of Professional Engineers' recognition as 1956's Engineer of the Year, and the coveted Robert H. Richards Award from the American Institute of Mining, Metallurgical, and Petroleum Engineers.

After complete retirement, the Fahrenwalds remained in Moscow, saying "we love it here and can live just like we want to." He had always felt this way, as evidenced by the fact that some years earlier he had agreed to move to a major university as head of its metallurgy department, but as the time drew near for departure he became convinced that it was all a mistake. Therefore, he requested and received a release and continued to live in north Idaho.

On the occasion of his 90th birthday in 1980, we presented him with a certificate of honor and recognition, to help him realize he was still well remembered. My comments at that time were as follows:

It is with deep pleasure for me and our faculty in the College of Mines and Earth Resources at the University of Idaho to salute this giant of the minerals industry and its associated educational areas. The meritorious professional citation that our college presents on this birthday is but a symbol of our high regard and respect for the proud and distinguished records of an outstanding metallurgist, teacher, administrator, and innovative inventor of equipment which is still basically standard in the industry and continues to be of prime value and use. The Fahrenwald flotation machine, more than any other device, has made a phenomenal contribution to the increase of mineral production in the mining industry.

The Fahrenwald Mining and Metallurgy Laboratory at the University of Idaho has been named in his memory.

Maynard M. Miller  
Director  
Idaho Geological Survey