



Sloan Career Cornerstone Center

Profiles of Chemists



Charles Bucknam

**Coordinator, Analytical Chemistry
Newmont Metallurgical Services
Denver, CO**

Education:

B.S. - Chemistry, California State University, Stanislaus

M.S. - Chemistry, Northern Arizona

Job Description:

Coordinator Analytical / Environmental Chemistry

Interview:

Charles Bucknam worked as a chemist at a winery and in the pulp and paper industry before joining Newmont Metallurgical Services where he now analyzes mined ores. Bucknam discovered that training in one industry can be effectively applied to another. For example, he says, "My background from the paper industry was to do material balances. When I came to the copper mining business, I looked at the material that was going through the mill and the gold we were getting out of it, and I realized that something was going wrong. I wanted to figure out exactly how much gold we were losing." He used his knowledge of material balances to help accomplish this.

Bucknam is essentially an analytical chemist specializing in inorganic analysis. In his career, he has held a variety of positions. He has been the person in charge of instrumental analysis, measuring gold content in a number of inorganic materials; a shift supervisor, overseeing assay and quality control labs; and a member of the staff in Newmont's exploration research lab. He also developed new processes for analysis of gold automated systems for sample preparation. He says his job has given him the opportunity to continuously expand his knowledge of mineral deposits and allowed him to travel and work with mining problems all over the world.

"In each job, you need to develop a working relationship between industry and government. Every new mine has its own set of problems, Bucknam explains. Often at the heart of this relationship are the environmental concerns of the region. "We work hard to develop mining processes that have a low environmental impact," he says.

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