## An NSF Summer: Bringing the excitement of science to school

Throughout the summer, teachers around the country participate in their own form of summer school. They explore science and engineering at the source, from venturing into copper mines to working alongside ship builders – rekindling their enthusiasm and gathering new information to inspire and challenge their students in the coming year. These news tips highlight a few examples of the summer learning projects supported by the National Science Foundation (NSF).

Contents of this News Tip:

## Summer school prepares teachers for Earth Science



A group of teachers from around the country spent the summer in Michigan learning about earth science by exploring the mining industry:

Above: A teacher practicing with a jackleg drill in a copper mine in Michigan's Upper Peninsula.

Right: A teacher using a drill to blast through rocks in a copper mine in Michigan's Upper Peninsula.



Photo credit: Francis Otuonye , Tennessee Technological University

This fall, high school and middle school teachers from around the country will be sharing knowledge about minerals, mining and other geologic topics with their students after returning from the Teachers' Earth Science Institute, a program supported by NSF.

Teachers teamed up with university researchers and engineers to conduct original research, both in the lab and in the field. Topics ranged from geological exploration and mineral identification to mineral processing and environmental protection. The teachers conducted some of their research in the copper mines of Michigan's Upper Peninsula.

The teachers learn how mining has become a high-tech, global industry that produces metals and minerals for such industries as manufacturing, medicine and jewelry. Organizers hope the program will enhance the teaching of earth science in middle and high schools, as well as provide historical and social context for minerals.

