

U.S. BUREAU OF MINES' SAFETY LAMP COLLECTION, PITTSBURGH RESEARCH CENTER

by **Hank Edenborn**
Pittsburgh, Pennsylvania

The Pittsburgh Research Center of the U.S. Bureau of Mines (USBM) is located on 250 acres in Allegheny County, Pennsylvania, about 13 miles south of Pittsburgh. The land was purchased in 1910, the year the Bureau was created, to allow large-scale underground research to be carried out in a coal mine located on the property and to provide the mining industry with safer coal mine explosives. In 1979, the USBM research activities in the Pittsburgh area were centralized on the site. The original Experimental Mine (now on the National Register of Historic Places) is still in use, as is the Safety Research Coal Mine, where new mining equipment and procedures are evaluated before transferring them to industry. Other unique research facilities on the site include the Mining Equipment Test Facility (METF), which includes the mine roof simulator, capable of exerting three million pounds of force for load tests of various roof supports. Research is also conducted at the Wire Rope Research Facility to improve safety in the hoisting of personnel and materials in underground mines. Active areas of research at the Center include subjects in the fields of electrical and electronics systems, environmental technology, explosives, fires and explosions, ground and methane control, and dust control and ventilation.

The Pittsburgh Research Center has a small, but impressive collection of 44 mine safety lamps on display in the lobby of one of its main administrative buildings (see photograph on opposite page). These include a wide variety of lamps, ranging from the well-known (e.g. Clanny, Ackroyd & Best, and Wolf) to the more

obscure (e.g. Naylor, Cremer, Chesna, and Szombathy). Examples of special gas detection lamps include a Gray lamp with Clowes's hydrogen attachment, an Ackroyd & Best lamp with Coyninghame-Cadman indicator, and others such as Hughes Bros., Clanny, Wolf, Davis Deputy, Freimann & Wolf, and Gray. Some carbide cap lamps and other mining memorabilia are located in display cabinets in this and other buildings on the site.

Arrangements to see the Bureau of Mines lamp collection can be made by contacting Jacquie Jansky, Technology Transfer Officer at the Pittsburgh Research Center at 412-892-6615, or writing to her at the Pittsburgh Research Center, U.S. Bureau of Mines, P.O. Box 18070, Pittsburgh, PA 15236.

There are 35 lamps shown on opposite page, many of these lamps can be recognized.

Top Row (left to right): The first two lamps are Huges Bros. Davy lamps, a Huges Bros Clanny lamp, and at least two Ackroyd & Best lamps.

Middle Row (left to right): Towards the middle are a Davis Deputy lamp, Wolf lamp, Ackroyd & Best lamp, and a Cremer lamp. The end two lamps are an Ashworth-Hepplewhite lamp and a Kohler lamp.

Bottom Row (left to right): Shown are an Elein lamp, Gray lamp with stokes gas detecting attachment, Ackroyd & Best lamp with a Conyninghame-Cadman gas detector, a special gas detecting lamp, Chesna lamp, an acetylene lamp, Belgium acetylene lamp, Wolf acetylene lamp, Serppol acetylene lamp, Singing flame lamp later design, Wolf Fleissner singing flame lamp.

