

At the Copper World Mine, loellingite is a very minor mineral in a deposit consisting of a few simple sulfides. These minerals are sphalerite, most abundant; chalcopyrite, next; and pyrrhotite, minor; but more abundant than loellingite. Pyrite and galena have not been observed. The gangue mineral is tremolite, but some biotite-like micas were observed along the walls of the ore. The ore deposit is lenticular and parallels the foliation of the granitic schist. In less than eighteen months of operation this small deposit has produced over 1.5 million pounds of zinc, and may continue on as a small producer for many years. Thus with the reopening of a small mine rich in zinc sulfide ore, a mineral new to Arizona has been found.

Acknowledgments

The writer wishes to acknowledge the assistance of R. L. Dye and J. H. Bathrick, operators of the Copper World Mine, for saving several specimens of loellingite for future study, and to Drs. B. S. Butler and M. N. Short for permission to use the laboratory facilities at the University of Arizona.

PROCEEDINGS OF SOCIETIES

PHILADELPHIA MINERALOGICAL SOCIETY

The Academy of Natural Sciences of Philadelphia, January 3, 1946

Dr. W. Hersey Thomas presided, with 55 persons present. Dr. J. D. H. Donnay spoke on "DIFFRACTION OF X-RAYS IN CRYSTALS." He stated that d/n values had been tabulated for approximately 2500 substances. Mr. Birchall exhibited a small collection of minerals obtained by his son who was with the U. S. Army in Belgium.

February 7, 1946

Dr. Thomas presided; 54 persons were present. Mr. John Cochrane reviewed "THE INDUSTRIAL APPLICATIONS OF THE SULFUR GROUP ELEMENTS—SULFUR, SELENIUM, AND TELLURIUM." Mr. Kissileff described a trip to New Hampshire and Vermont with Mr. Gordon, exhibiting specimens from pegmatites.

March 7, 1946

Dr. Thomas was in the chair, with 72 persons present. Dr. Richard M. Foose spoke on "THE BROWN IRON ORES OF PENNSYLVANIA." By means of stratigraphic, structural and physiographic control, a large ore body was found at White Rocks in Cumberland County. Isopach maps of the overburden and ore body, and logs of drilling were shown. The paragenesis of the iron and manganese oxides was probable as follows: (1) replacement of clay by limonite of rust-brown color, (2) replacement by dark brown or black limonite, (3) replacement by manganese oxides, and (4) replacement by goethite. Associated minerals are: barite, sphalerite, pyrite, jasper, quartz, wavellite, collophane. Impurities in the oxides include Co, Ni, Ti, V, etc. The concentration was probably affected by descending solutions from overlying, impure limestones.

Mr. Kissileff exhibited zeolites from Perkiomenville, Pa., and Mr. Jehle had on exhibition pyritic fossils from Germany.

April 4, 1946

Dr. Thomas was in the chair, with 60 persons present. Dr. John Putnam Marble addressed the society on "RANDOM REMARKS ON RARE EARTHS," with illustrations of deposits in the Kola Peninsula. The concentration of rare earths by some plants was alluded to, as well as the remarkable concentration in water-filled sink holes in Wyoming, in sufficient quantity to kill young trout. Mr. Morgan exhibited marcasite crystals from Blue Ball quarry, and Mr. Cochrane showed some calcite from the same locality. Mr. Gordon described barite and siderite from Frostburg, Maryland.

CHARLES A. BELZ, *Secretary*

THE NEW YORK MINERALOGICAL CLUB, INC.

Abstract of meeting of April 17, 1946

The speaker of the evening was Dr. Herman Yagoda who spoke on "ANALYTICAL PATTERN TECHNIQUES OF RADIO-ACTIVE AND LUMINESCENT MINERALS." The method consists in placing a polished surface in contact with a photographic emulsion desensitized to light. Either a physical or a chemical pattern may be obtained for study. The talk was illustrated with color lantern slides.

PURFIELD J. KENT, *Secretary*

Abstract of meeting of May 15, 1946

The speaker of the evening was Ralph J. Holmes, who spoke on the "OCCURRENCE OF NICKEL-COBALT MINERALS IN THE ZINC DEPOSIT AT FRANKLIN, NEW JERSEY." He showed that several specimens agreeing with the description of chloanthite, NiAs_2 , were complex mineral assemblages, instead of the single isometric arsenide. Skutterudite is present but is a very minor constituent, encrusting large nodular masses of rammelsbergite and parammelsbergite, which are in part rimmed with gersdorffite. Veinlets of safflorite (?) transect the other arsenides. No loellingite was observed, but in some cases "halos" of arsenopyrite rim the nickel-cobalt minerals. This increases the number of species of important varieties at Franklin to 159. The talk was illustrated with color lantern slides.

Dr. F. H. Pough showed two extremely interesting colored motion pictures of volcanoes, one of Paricutin and the other of the eruption of Mauna Loa in 1942.

PURFIELD J. KENT, *Secretary*

DISCREDITED SPECIES

Hydrogiobertite, Hydrodolomite

S. CAILLÈRE, Contribution a l'étude de l'hydromagnésite et de quelques autres hydrocarbonates magnésiens: l'hydrogiobertite, l'hydrodolomite et la giorgiosite. *Bull. soc. franc. minéral.*, **66**, 55-70 (1943).

Optical, x-ray, and thermal study of hydrogiobertite and hydrodolomite from Vesuvius, the type locality, show these minerals to be mixtures of hydromagnesite and calcite.

MICHAEL FLEISCHER

NEW DATA

Giorgiosite

S. CAILLÈRE, *op. cit.*

Optical, x-ray, and thermal study of giorgiosite indicate that it is a distinct mineral species.

M.F.