

MINERALOGICAL SOCIETY (LONDON)

The anniversary meeting of the Society was held on Thursday, November 2nd, 1950, in the apartments of the Geological Society of London, Burlington House, Piccadilly, W.1 (by kind permission).

The following papers were read:

(1) PRIDERITE, A NEW MINERAL FROM THE LEUCITE LAMPROITES OF THE WEST KIMBERLEY AREA, WESTERN AUSTRALIA.

By Mr. K. Norrish (communicated by Prof. R. T. Prider).

Priderite is the name suggested for a new mineral with the formula $(K, Ba)_{1.3}(Ti, Fe)_8O_{16}$. X-ray diffraction studies show that the mineral is body centered, tetragonal with $a = 10.11$ and $c = 2.96 \text{ \AA}$. Structurally the mineral resembles cryptomelane KMn_8O_{16} , the Ti of priderite being equivalent to the Mn of cryptomelane. Synthetic K- and Ba-priderites appear to be isostructural and they are probably members of a series analogous to cryptomelane-hollandite.

(2) SOME NOTABLE HABIT CHANGES IN BARYTES FROM WESTMORLAND AND DURHAM.

By Mr. W. F. Davidson and Mr. A. F. Seager.

A number of barytes specimens recently discovered in the Silver Band mine, Westmorland, show marked habit changes, associated with beautiful color zoning. Initially, the crystals were elongated on $[a]$ with a large development of $\{011\}$ and $\{001\}$. The final habit is tabular on $\{001\}$, with $\{110\}$ and $\{102\}$ as subsidiary forms. Some specimens show fluorescence. A specimen from the Cow Green mine, Teesdale, Co. Durham, is also described.

(3) NEW OCCURRENCES OF DUFTITE.

By Dr. G. F. Claringbull.

During an examination of bayldonite and other copper lead arsenates, a specimen of supposed bayldonite from Mapimi, Mexico, was found to be isomorphous with descloisite and to give an x-ray powder pattern near to but not identical with conichalcite. Other specimens from localities in Cumberland sent for identification by Mr. W. F. Davidson give patterns matching that of the Mapimi material and all are closely similar to duftite $(CuPbAsO_4OH)$ from Tsumeb, S.W. Africa. Chemical tests confirm the presence of Cu and Pb.

(4) THE BREECE, NEW MEXICO, METEORITIC IRON.

By Dr. Carl W. Beck, Dr. Lincoln LaPaz and Mr. Louis H. Goldsmith.

The investigation of this siderite (50 kg., found 1921) shows it to be a medium octahedrite composed chiefly of kamacite with lesser amounts of taenite and plessite fields. The most interesting constituent is cohenite as well defined lamellae in the unusual arrangement similar to the familiar Reichenbach and Brezina lamellae.

The following were taken as read or read in abstract:

(5) JACOBSITE FROM THE TAMWORTH DISTRICT OF NEW SOUTH WALES.

By Dr. F. L. Stillwell and Mr. A. B. Edwards.

(6) THE USE OF THE GNOMONIC PROJECTION IN THE DETERMINATION OF THE INDICATRIX OF CRYSTALS.

By Mr. N. Joel.

(Titles and abstracts kindly submitted by G. F. Claringbull, General Secretary.)