

## ABSTRACTS OF MINERALOGIC LITERATURE

THE LIMITS OF MIXED CRYSTALS IN MUSCOVITE AND BIOTITE. H. E. BOEKE. *Neues Jahrb. Min. Geol.*, 1916, I, 83-117; thru *J. Chem. Soc.*, 110, II, 570, 1916.

The results of 207 analyses of these minerals are plotted on a tetrahedral diagram, and indicate the mean compositions to be on a line between  $R_2O.R_2O_7.2SiO_2$  and  $2RO.SiO_2$  respectively. (R standing for various replaceable metals.) E. T. W.

THE GENERAL APPLICATION OF THE REGULAR TETRAHEDRON TO THE REPRESENTATION OF FOUR-COMPONENT SYSTEMS; ITS APPLICATION TO ALKALINE AND ALUMINOUS AMPHIBOLES. H. E. BOEKE. *Neues Jahrb. Min. Geol.*, 1916, I, 118-125; thru *J. Chem. Soc.*, 110, II, 570, 1916.

A general formula is given for projecting analyses to any desired plane in a tetrahedral diagram, and is illustrated by application to the amphiboles. E. T. W.

MINERALS FROM LOWER TUNGUZAKA IN A. CHEKANOVSKII'S COLLECTION. E. E. KOSTULEVA. *Bull. acad. sci. Petrograd*, 1916, 1069-82; Abstract by H. M. Gordin, reprinted by permission from *Chem. Abstr.*, 11, (10), 1387, 1917.

Detailed description of several minerals, chiefly zeolites.

NEW OBSERVATIONS ON THE STRUCTURE OF THE METEORITES OF CANON DIABLO; INFERENCES WITH REGARD TO THE CIRCUMSTANCES OF THE FALL OF THESE IRONS. S. MEUNIER. *Compt. rend.*, 162, 171-173, 1916; abstract by L. W. Riggs, reprinted by permission from *Chem. Abstr.*, 11, (10), 1387, 1917.

From a reëxamination of the Widmannstätten figures and other physical characters, suggestions are made concerning the geologic history of these meteorites.

MICROSCOPIC INVESTIGATION OF SMALTITE AND CLOANTHITE. A. BEUTELL. *Centr. Min. Geol.*, 1916, 180-185; thru *Chem. Abstr.*, 11, (15), 2179, 1917.

Surfaces of these minerals were attacked by various reagents, and their lack of homogeneity demonstrated. Several different arsenides of cobalt and nickel are present. The so-called skutterudite is apparently a pseudomorph. E. T. W.

TWO CASES OF TRUE GROWING-TOGETHER OF DIFFERENT KINDS OF MINERALS; I. QUARTZ AND FLUORITE. II. QUARTZ AND MUSCOVITE. G. KALB. *Centr. Min. Geol.*, 1916, 201-206; thru *Chem. Abstr.*, 11, (15), 2179, 1917.

Definite crystallographic relationships are exhibited by the faces of these minerals which grow in contact with one another. E. T. W.

MINERALS FROM THE MANGANESE ORE-DEPOSITS OF OBERHALBSTEIN, GRISONS, SWITZERLAND. F. P. MÜLLER. *Centr. Min. Geol.*, 1916, 457-459; thru *J. Chem. Soc.*, 112, II, 149, 1917.

The deposits occur in schists, associated with serpentine. Zoisite, epidote, piedmontite, rhodochrosite, rhodonite, and a possibly new hydrous manganese silicate are present. The last is red-brown, sub-metallic,  $H. = 3\frac{1}{2}$ ,  $D. = 2.6$ ,  $n = 1.54$ , optically —, uniaxial; an analysis is given. E. T. W.

NOTICE.—The plate enclosed in this number was planned for the frontispice of the April number, but was omitted thru error. It should be pasted into the latter, along the inner edge of page ii, so as to face page 31.