

with the formula $\text{SrB}_6\text{O}_{10} \cdot 2\text{H}_2\text{O}$. X-ray powder photographs are similar to those of material from Lang, California, the only other recorded locality for this mineral. The physical and optical characters of the Yorkshire material are essentially similar to those previously recorded but show minor differences. The mineral is confined to the lower evaporite bed of the Aislaby boring.

The following paper was taken as read:—

(1) THE ORTHOCLASE-MICROCLINE INVERSION.

By Dr. W. S. Mackenzie.

The variable lattice of microcline is discussed and two examples of the association of monoclinic and triclinic potash feldspar are described. The differences in the nature of the change from one form to the other in these two occurrences are considered important for establishing the relation between orthoclase and microcline.

A meeting of the Society was held on Thursday, March 25th, 1954, at 5 p.m., in the apartments of the Geological Society of London, Burlington House, Piccadilly, W.1 (by kind permission).

The following papers were read:

(1) ON BASSETITE AND URANOSPATHITE.

By Prof. C. Frondel.

Re-examination of the original materials described by Hallimond has led to the identification of additional specimens in the Harvard collections, and analyses have been obtained. Bassetite proves to be the ferrous iron compound, not a calcium salt resembling autunite in composition. In uranospalthite the non-volatile constituents correspond with a composition between torbernite and zeunerite, though the very low density and refractive index suggest that it will be a higher hydrate. On exposure to normal conditions in the Harvard laboratories both minerals were subject to alteration, with optical changes corresponding with those in the original description, due to loss of water. X-ray measurements are given for analyzed crystals from the Harvard material.

(2) MANGANESE AMPHIBOLES FROM SITASAONGI MINE, BHANDARA DISTRICT, INDIA.

By Mr. S. A. Bilgrami.

Three manganese amphiboles, winchite, juddite, and a new variety, are described together with chemical analyses and optical properties. The winchite occurs in a feldspathic gneiss, the others in pegmatite which cuts a manganese ore band. The chemical composition of these amphiboles is discussed and their possible origin suggested.

(3) TRANSITIONAL OPTICS OF SOME INTERMEDIATE PLAGIOCLASE FELDSPARS.

By Dr. I. D. Muir.

The optical properties of the analyzed andesine from the iron-rich facies of the Beaver Bay diabase are transitional between the standard low- and high-temperature forms. Comparisons made with plagioclases from similar dolerites and gabbros indicate that andesines and labradorites transitional between the true low- and high-temperature states are common. Confirmation of the transitional nature of these plagioclases has been obtained by x-ray rotation photographs. After heat treatment the minerals were subjected to a further optical and x-ray examination.