NEW MINERALS: NEW SPECIES

CLASS: SILICATES

Anauxite

E. Dittler and J. E. Hibsch: Tsch. Min. Petr. Mitt., 36, 85, 1923.

CHEMICAL PROPERTIES: A hydrous silicate of alumina; $3Al_2O_3$. 10 SiO₂. $8H_2O$. Analysis: SiO₂ 56.56, TiO₂ 0.38, Al_2O_3 26.09, Fe_2O_3 2.69, MgO 0.11, CaO 0.40, H_2O 13.58. Total 99.87. (Mean of two closely agreeing analyses.)

CRYSTALLOGRAPHIC PROPERTIES: Orthorhombic, with faces (110), (010), (001). $(\overline{110})$:(110) nearly 60°.

PHYSICAL AND OPTICAL PROPERTIES: Platy grains, silvery white to bluish white. Luster pearly. a=1.54, $\gamma=1.55$; a=c, $\beta=b$, $\gamma=a$. 2V medium large. Plane of the optic axis parallel to (010). Acute bisectrix normal to the plates (001). H=2 1/2. Sp. Gr. 2.524.

OCCURRENCE: As plates and aggregates in the clays of Bilin, Bohemia, a constituent of the so-called "cimolite." This cimolite is a mixture of the anauxite and an amorphous clay and results from the action of carbonated waters upon basalt.

DISCUSSION: Anauxite is similar to kaolinite but seems to differ from it in some essential respects.

	Anauxite	Kaolinite
Cryst.	Orthorhombic	Monoclinic
Sp. Gr.	2.524	2.6 - 2.65
Orientation	Plane of optic axes	Plane of optic axes
	to (100)	to (010)
Extinction	Parallel	Inclined
Composition	$3\mathrm{Al}_2\mathrm{O}_3.10\mathrm{SiO}_2.8\mathrm{H}_2\mathrm{O}$	Al ₂ O ₃ .2SiO ₂ .2H ₂ O.

The relationships of the clay minerals are very obscure but anauxite, having been so well characterized, may be classed as a new species until further work clears up this group of minerals. W. F. FOSHAG.

DISCREDITED SPECIES

Barettite

A. D'Ambrosio: Sulla Barettite di Traversella (Barettite from Traversella), Annal. del Museo Civico di Storis Nat. Geneva, 51, 1, (1924).

A reanalysis of the material from Traversella, the original locality for barettite, gave the following composition: H_2O 13.04, SiO_2 41.55, MgO 39.99, FeO 2.09, Al_2O_3 3.28. This corresponds to normal serpentine. W. F. F.

Stasite

Alfred Schoep: Les Mineraux uraniferous (radioactifs) du Congo belge (The Uranium Minerals of the Belgian Congo). *Bull. Soc. Gecl. Belg.*, **33**, 190, (1923).

Stasite, given as a dimorphous form of dewindtite, is shown to be optically, as well as chemically, the same as the latter mineral. The name dewindtite is retained for the species. W. F. F.

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Harringtonite

Adele Brauns and R. Brauns: Die Chemische Zusammensetzung von Harringtonite. (The chemical composition of harringtonite). *Centr. Min. Geol.*, p. 545, (1924).

New analyses of harringtonite from Larne, Antrim, Ireland, showed the mineral to be thomsonite or more properly faroelite. Analysis: SiO_2 41.34, Al_2O_3 30.44, CaO 11.35, Na₂O 5.20, H₂O 12.12. (Average of 3 analyses). W. F. F.

ABSTRACTS

CALCITE CRYSTALS FROM HOLYWELL, NORTH WALES. E. D. MOUNTAIN. *Mineralog. Mag.*, 20, 212-216 (1924).

Crystals of two distinct habits are described. One type, pyramidal, consists essentially of the hex, bipyr. $(91\overline{7})$, with base and curved rhombohedron between $(33\overline{2})$ and $(55\overline{4})$ and modified by small faces of (110) and (100). The second habit, prismatic, consists of the prism $(2\overline{11})$ and a curved rhombohedron varying from $(11\overline{1})$ to $(55\overline{4})$, modified by (100) and a scalenohedron $(21\overline{2})$. W. F. H.

ALLOPALLADIUM FROM BRITISH GUIANA. L. J. SPENCER. Mineralog. Mag., 20, 217-219 (1924).

Three metallic grains from the neighborhood of the Kaieteur gorge on the Potaro river were determined as the rare, hexagonal modification of palladium known as allopalladium. The material is brittle and the aqua regia solution yielded with ammonium chloride scarlet colored isotropic octahedrons of what is thought to be $(NH_4)_2PdCl_6$. Sp. gr. approx. 12. Good cleavage. W. F. H.

THE CHEMICAL COMPOSITION AND OPTICAL PROPERTIES OF A BASALTIC HORNBLENDE FROM HUNGARY. Miklos Vendl. Mineralog. Mag., 20, 237-240 (1924).

The optical properties and chem. comp. were determined on the same sample. SiO₂ 40.17, TiO₂ 3.78, Al₂O₃ 15.09, Fe₂O₃ 5.49, FeO 5.99, MnO 0.09, CaO 11.21, MgO 12.48, Na₂O 2.27, K₂O 1.55, H₂O+2.10, H₂O-0.25. The comp. can be expressed in terms of an isomorphous mixture of metasilicates and aluminates. Sp. gr. 3.178 at 20°C. $\alpha = 1.6698$, $\beta = 1.6825$, $\gamma = 1.6929$; $\gamma - \alpha = 0.0231$. $c: \gamma =$ +8.8°. 2V=82°45'. Pleochroism was observed; $\alpha =$ pale yellow, $\beta =$ dark brown, $\gamma =$ dark olive green. W. F. H.

ON THE OCCURRENCE OF PETALITE AND PNEUMATOLYTIC APATITE IN THE MELDON APLITE, OKEHAMPTON, DEVONSHIRE. W. F. P. McLintock. *Mineralog. Mag.*, 20, (103), 140-150 (1923).

Petalite has not previously been found in Britain but in the Meldon aplite it is quite common. It is pinkish to red in color and decomposes to a pink clay-like material which has been called montmorillonite by earlier writers. Under the microscope the clay-like material shows a fibrous structure with n=1.49 parallel to the length and slightly greater perpendicular thereto. The apatite also found in the aplite is no doubt of pneumatolytic origin and showed eight forms. W. F. H.