

This section of the ANNUAL TABLES contains new crystallographic and mineralogical data that appeared in 1923-1924, as recorded in 98 different publications. The various headings are: (1) Crystallography (minerals); (2) New crystalline forms of minerals; (3) Crystallography (inorganic substances); (4) Crystallography (organic substances); (5) Structure of crystals by X-rays; (6) Miscellaneous data including compressibility, thermal conductivity, heat of crystallization of mixed crystals, effect of pressure on melting point, etc.

This handy volume will be found to be indispensable to all mineralogists because of the wealth of material thus conveniently brought together from sources that, in many instances, would be difficult to consult in the original.

W. F. H.

PROCEEDINGS OF SOCIETIES

PHILADELPHIA MINERALOGICAL SOCIETY

Academy of Natural Sciences of Philadelphia, December 6, 1928.

A stated meeting of the Philadelphia Mineralogical Society was held on the above date with the president, Mr. Trudell, in the chair. Seventy persons were present, including thirty-two members.

Upon favorable recommendation by the council, Mr. Charles M. B. Cadwalader was elected a member.

Mr. James G. Manchester addressed the society on *Minerals of New York City and its Environs*. The results of thirty years of assiduous collecting within fifty miles of New York City were described and illustrated with a large series of colored lantern slides and beautiful specimens. Of particular interest were the minerals found in the excavations contiguous to Broadway, and those of the crystalline limestone of the upper end of Manhattan. The minerals of Tilly Foster; Kinkle's quarry, Bedford, N. Y.; the trap quarries of Paterson, and the Erie Cut, made the district a local collector's paradise. A rising vote of thanks was tendered to Mr. Manchester for his most interesting address.

Mr. Knabe reported finding blue quartz and garnet at Iveland Station. Mr. Strock described visits to Moore Station, the Perkiomen lead and zinc mines, and Perkiomenville, exhibiting large slabs of small heulandite crystals from the latter locality. Mr. Cienkowski described visits to Henderson, Mineral Hill, and Moore, Pa. Dr. Cajori reported finding jefferisite and clinocllore at Brinton's quarry. Mr. Biernbaum described a visit to the old Phoenixville lead mines which yield much pyromorphite suitable for microscopic mounts. Dr. Gilliland exhibited rhodonite crystals from Franklin, tourmaline from Newry, Maine, and an amethyst geode.

Dr. Newcomet described some experiments on the effect of radium emanations on smoky quartz, and the decolorization of this mineral at low temperatures.

SAMUEL G. GORDON, *Secretary*

NEW MINERAL NAMES

Monrepite

WALTER WAHL: Die Gesteine des Wiborger Rapakiwigebietes. (The Rocks of the Wiborg rapakiwi area). *Fennia*. (*Bull. Soc. Géogr. Finlande*), 45, No. 20, p. 87, 1925.

NAME: From the locality, Monrepos, near Wiborg, Finland.

CHEMICAL PROPERTIES: A ferro-ferri-mica. $H_2K Fe''_3Fe'''(SiO_4)_3$. Analysis: (quoted from H. Struve, *Mém. Acad. Imp. Sci. St. Petersburg*, Ser. VII, 1863, TVI No. 4) SiO_2 32.73, TiO_2 1.93, Al_2O_3 13.49, Fe_2O_3 15.41, FeO 23.39, MnO 0.84, MgO 1.77, Na_2O 0.48, K_2O 8.73, H_2O 0.75. Sum 99.52.

OCCURRENCE: Found as the black mica of the rapakiwi granite.

W. F. FOSHAG

Pseudoglaucophane

L. DUPARC: Sur une amphibole du groupe de la glaucophane. (An Amphibole of the Glaucophane Group). *Compt. Rend. Soc. Phys. Hist. Nat. Geneve*, 44, 48-49, 1927.

CRYSTALLOGRAPHIC PROPERTIES: Crystals greatly elongated with (110) and rarely (010).

OPTICAL PROPERTIES: Plane of the optic axes perpendicular to (100). Acute bisectrix = X. $Y = Z$ of normal glaucophane. Birefringence: $\gamma - \alpha = 0.014$, $\gamma - \beta = 0.0015$, $\beta - \alpha = 0.0115$. Pleochroism: X = pale yellow, Y = dark blue, Z = dark violet. Extinction Y on (100) = 6° . $2V = 40^\circ$.

OCCURRENCE: Found as a zone about normal glaucophane from the Urals. Also in a glaucophane schist (locality not given).

W. F. F.

Ferrothorite

A. LACROIX: *Minéralogie de Madagascar*, vol. 3, pp. 309-310, 1923.

NAME: a ferrous thorite.

CHEMICAL PROPERTIES: SiO_2 12.6, ThO_2 61.5, U_3O_8 2.8, Fe_2O_3 13.1, $H_2O +$ 5.5, $H_2O -$ 4.0; Sum 99.5.

OCCURRENCE: As reddish brown crystals several centimeters in length at Befarita, Madagascar, associated with betafite.

W. F. F.

NEW DATA

Rhomboclase

JOSEPH KRENNER: Zwei neue Mineralien aus Ungarn. (Two new minerals from Hungary). *Centr. Min. Geol.*, 1928. Abt. A, No. 8, 265-268. Preliminary description: *Akademiai Értesítő.*, 2, 96, 1891.

NAME: In allusion to its rhombic form and good cleavage.

CHEMICAL PROPERTIES: An acid sulfate of iron. $Fe_2O_3 \cdot 4SO_3 \cdot 9H_2O$. Analysis (by Josef Loczka): SO_3 49.27, Fe_2O_3 24.54, FeO 0.35, CuO 0.03, CaO 0.10, $Mg(Na_2)O$ 0.15, Al tr., H_2O (by difference) 25.54. Before the blowpipe large fragments shrink together and leave a cokelike slag, small fragments fuse to a pearl gray enamel.

CRYSTALLOGRAPHIC PROPERTIES: Orthorhombic. Crystals are tabular in habit. Forms: c (001), p (111), m (110), b (010), d (011). $a:b:c = 0.56965:1:0.94644$. $m:m = 58^\circ 36'$, $p:p = 101^\circ 28'$. Basal cleavage good.

PHYSICAL AND OPTICAL PROPERTIES: Color, colorless to gray. Transparent to opaque. Luster vitreous to greasy. Hd = gypsum. Flexible. Biaxial, negative. Axial angle large. $2H_0 = 137^\circ 9'$. Plane of the optic axes parallel to (100). Bire-

fringence fairly strong. (Larsen: The Microscopic Determination of the nonopaque Minerals gives $\alpha=1.533$, $\beta=1.555$, $\gamma=1.635$. 2V small, Z=elongation. The discrepancy between these figures and those of Krenner's lies in the fact that K. has mistaken the figure obtained on the base for that of the acute bisectrix.)

OCCURRENCE: Found with other sulfates at the pyrite mines of Szomolnok, Hungary.

Szomolnokite

Ibid., p. 268-270.

NAME: From the locality, *Szomolnok*, Hungary.

CHEMICAL PROPERTIES: A sulfate of iron, $\text{FeSO}_4 \cdot \text{H}_2\text{O}$. Analysis (by Josef Loczka): SO_3 47.96, FeO 39.42, Fe_2O_3 1.36, CuO 1.20, CaO 0.07, MgO 0.25, $\text{Na}_2(\text{K}_2)\text{O}$ 0.31, ZnO 0.14, H_2O 10.36. Before the blowpipe it becomes black and fuses to a dull gray enamel.

CRYSTALLOGRAPHIC PROPERTIES: Monoclinic. Prismatic crystals with (111), rarely small (113) and (110). $a:b:c=0.9544:1:1.8999$, $\beta=86^\circ 39' 54''$. $111:111=79^\circ 32'$.

PHYSICAL AND OPTICAL PROPERTIES: Color sulfur yellow, pea yellow, hyacinth red, or light brown. Transparent to translucent. Luster vitreous to greasy. Cleavage fair. Biaxial. Plane of the optic axes in the plane of symmetry. Birefringence strong.

OCCURRENCE: As crystals on schist or as botryoidal stalactites at the pyrite mines of Szomolnok, Hungary.

DISCUSSION: Isomorphous with kieserite. (Identical with ferropallidite.)

W. F. F.

Usbekite

I. KURBATOV AND V. KARGIN: Sur la Composition chimique d'une variété d'Ousbékite. (On the chemical composition of a variety of usbekite). *C. R. Acad. Sci. URSS.*, No. 75-80, 1927. (In Russian).

α -Usbekite: Color dark green. $2\text{RO} \cdot \text{V}_2\text{O}_5 \cdot 3\text{H}_2\text{O}$. Analysis: H_2O — 0.53, $\text{H}_2\text{O}+$ 12.98, MgO tr. CaO tr. MnO 0.44, ZnO none, NiO 0.84, CoO 0.06, CuO 30.37, PbO 0.15, Fe_2O_3 4.81, Al_2O_3 4.45, SiO_2 19.21, V_2O_5 26.42. Total 100.26, Sample impure.

β -Usbekite: Color pale green. $3\text{RO} \cdot \text{V}_2\text{O}_5 \cdot 4\text{H}_2\text{O}$. Analysis: SiO_2 9.95, Al_2O_3 49.07, Fe_2O_3 0.12, MnO 0.13, CaO 4.54, MgO tr., CuO 1.27, V_2O_5 1.08, H_2O — 19.22, CO_2 3.56, $\text{H}_2\text{O}+$ 10.96. Total 99.90.

W. F. F.

Tanatarite

J. J. TANATAR: Zur Frage über monokline Diaspore. *Bull. d. Geol.-Mineral. Assoz. Berginstilute z. Dnepro. Petrowsk.*, 1927. Abstr. *N. J. Ref.*, I. 146, 1928.

Tanatarite is monoclinic but with 2V 83° – 84° and not 51° – 60° . Plane of the optic axes parallel to the perfect cleavage.

W. F. F.