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 Environ. 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; Kinklé’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 jeffersite and clinohlore 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

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

CHEMICAL PROPERTIES: A ferro-ferri-mica. $H_2KFe'Fe''Fe'''(SiO_3)_n$. Analysis: (quoted from H. Struve, Mem. Acad. Imp. Sci. St. Petersburg, Ser. VII, 1863, TVI No. 4) $SiO_3 32.73, TiO_2 1.93, Al_2O_3 13.49, FeO 15.41, Fe_2O_3 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


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°. $2V = 40°$.

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

W. F. F.

Ferrothorite


NAME: A ferriferous thorite.

Chemical Properties: $SiO_2 12.6, ThO_2 61.5, U_2O_3 2.8, Fe_2O_3 13.1, H_2O + 5.5$, $H_2O^-$ 4.0; Sum 99.5.

Occurrence: As reddish brown crystals several centimeters in length at Be-farita, Madagascar, associated with betaite.

W. F. F.

NEW DATA

Rhomboclase


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, FeO 54.24, FeO 24.54, FeO 0.35, CaO 0.03, MgO 0.10, Mg (NaO) 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: $c \ (001), \ p \ (111), \ m \ (110), \ b \ (010), \ d \ (011)$. $a : b : c = 0.56965:1:0.94644$. $m : m = 58°36'$, $p : p = 101°28'$. 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. $2H_o = 137°9'$. Plane of the optic axes parallel to (100). Bire-
fringence fairly strong. (Larsen: The Microscopic Determination of the nonopaque Minerals gives α = 1.533, β = 1.555, γ = 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, FeSO₄·H₂O. Analysis (by Josef Loczka): SO₄ 47.96, FeO 39.42, Fe₂O₃ 1.36, CuO 1.20, CaO 0.07, MgO 0.25, Na₂(K₂)O 0.31, ZnO 0.14, H₂O 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 = 0.954:1:1.8999, β = 86°39'54". 111:111 = 79°32'.


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


α-Usbekite: Color dark green. 2RO·V₂O₅·3H₂O. Analysis: H₂O = 0.53, H₃O⁺ = 12.98, MgO tr. CaO tr. MnO 0.44, ZnO none, NiO 0.84, CoO 0.06, CuO 30.37, PbO 0.15, Fe₂O₃ 4.81, Al₂O₃ 4.45, SiO₂ 19.21, V₂O₅ 26.42. Total 100.26, Sample impure.

β-Usbekite: Color pale green. 3RO·V₂O₅·4H₂O. Analysis: SiO₂ 9.95, Al₂O₃ 49.07, Fe₂O₃ 0.12, MnO 0.13, CaO 4.54, MgO tr., CuO 1.27, V₂O₅ 1.08, H₂O = 19.22, CO₂ 3.56, H₃O⁺ = 10.96. Total 99.90.

W. F. F.

Tanatarite


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.