Nineteenth list of new mineral names.

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PREVIOUS lists of this series have been given every three years at the ends of vols. 11–28 (1897–1949) of this Magazine. Lists 1–18 contained 2713 names and in the present list there are 222. Except for a few of the later names, they are all included in Dr. M. H. Hey's useful Index,[1] with page-references to the several lists, so providing a long-wanted general index.[2] References to Mineralogical Abstracts are given in the form [M.A. **11**–].

In the index to the 'new Dana' (7th edition, vol. 1, 1944) there is an entry 'unnamed mineral' with several page references. These have been pounced upon by Gagarin and Cuomo[3] and they have lavishly supplied names where the original authors had wisely refrained. Search of the recent literature revealed other unnamed minerals; and for Argentine minerals they have altered the spelling of names to conform with Spanish pronunciation. In all, they have provided 57 names, which it seems must be listed, if only for convenience of reference.

Only a small (and haphazard) selection has been made of the numerous compound names for artificially produced base-exchange products.

Allargentum. P. Ramdohr, 1950. Die Erzmineralien und ihre Verwachsungen, Berlin, pp. 205, 261, 264; Fortschr. Min., 1950, vol. 28 (for 1949), p. 69 („Allargentum"). Hexagonal ϵ-modification of silver containing antimony (Ag,Sb), Sb 8–15 %, as an exsolution product in dyscrasite from Cobalt, Ontario. Named from ἄλλος, another, and argentum, silver. [M.A. **11** 312.]

Allenite. G. Gagarin and J. R. Cuomo, 1949, loc. cit. p. 13 (allenita). $MgSO_4.5H_2O$ in the chalcanthite group; dehydration product of epsomite

[1] M. H. Hey, An index of mineral species & varieties arranged chemically. With an alphabetical index of accepted mineral names and synonyms. London (British Museum), 1950. [M.A. **11** –117.]

[2] The 1500 names in lists 1–10 are included in one alphabetical arrangement in the General Index (1926) to vols. 11–20 (1895–1925) of this Magazine.

[3] G. Gagarin and J. R. Cuomo, Algunas proposiciones sobre nomenclatura mineralógica. Comunic. Inst. Nac. Invest. Cienc. Nat. (Museo Argentino Cienc. Nat. 'Bernardino Rivadavia'), Cienc. Geol., Buenos Aires, 1949, vol. 1, no. 5, 21 pp. [M.A. **11**–128.] The cumbersome title of this periodical has not been repeated for the 57 names in the following list.

($MgSO_4.7H_2O$) as distinct from hexahydrite ($MgSO_4.6H_2O$, 6th List). Named after Dr. Eugene Thomas Allen (1864–), formerly chemist in the Geophysical Laboratory, Washington, who analysed in 1927 material from 'The Geysers', Sonoma Co., California. Not to be confused with allanite (T. Thomson, 1810). Synonyms, magnesium-chalcanthite, pentahydrite (qq.v.). Allenite is a trade-name for tungsten carbide tools. [M.A. **11**–517.]

Allevardite. S. Caillère and S. Hénin, 1950. Compt. Rend. Acad. Sci. Paris, vol. 230, p. 668; S. Caillère, A. Mathieu-Sicaud, and S. Hénin, Bull. Soc. Franç. Min. Crist., 1950, vol. 73, pp. 141, 193. A paper-like mineral from La Table in Savoie, near Allevard in Isère, previously referred to kaolinite, mica, and palygorskite. Named from the locality. Alternative names suggested are caillérite, déribérite, tablite, and tabulite (qq.v.). [M.A. **5**-521, **8**-225, **10**–43, 371, **11**–127, 190.]

Allophane-evansite, Allophane-chrysocolla. C. S. Ross and P. F. Kerr, 1934. Prof. Paper U.S. Geol. Surv., no. 185-G, p. 147 (allophane-evansite). Mixtures of amorphous minerals. [M.A. **6**–136.] Compare phosphate-allophane, 17th List.

Alpha-cerolite. I. I. Ginzburg and I. A. Rukavinshnikova, 1950. Mém. Soc. Russe Min., vol. 79, p. 33 (Альфа-керолит). *See* Beta-cerolite. [M.A. **11**–405.]

Aluminium-autunite. C. Frondel, 1951. Amer. Min., vol. 36, p. 671 (aluminum-autunite). Synonym of sabugalite (q.v.). [M.A. **11**-412.]

Alumoantigorite, Alumochrysotile, Alumodeweylite. N. Efremov, 1951. Fortschr. Min., vol. 29–30 (for 1950-51), p. 85 (Alumoantigorit, Alumochrysotil, Alumodeweylith). Serpentine minerals containing Al_2O_3 2·55–6·27 %. Compare Alumino-chrysotile (17th List).

Ammonia-nitre. Dana's Mineralogy, 7 edit., 1951, vol. 2, p. 305 (ammonia niter), Ammonium nitrate $(NH_4)NO_3$, nitrammite of C. U. Shepard, 1857, of doubtful occurrence in a Tennessee cave.

Ammonium-uranospinite. *See* hydrogen-uranospinite.

Anosovite. K. Kh. Tagirov, 1951. A. A. Rusakov and G. S. Zhdanov, Doklady Acad. Sci. USSR, 1951, vol. 77, p. 411 (Аносовит); D. S. Belyankin and V. V. Lapin, ibid., 1951, vol. 80, p. 421. Titanium oxide Ti_3O_5 as black orthorhombic crystals and in blast-furnace slag. Named after the Russian metallurgist P. P. Anosov. [M.A. **11**–415, 536.]

Arsenoestibio. F. Pardillo, 1947. Tratado de mineralogía, translation of 12th edit. of F. Klockmann and P. Ramdohr, Barcelona, p. 315; G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 5. Spanish form of stibarsen (16th List). *See* Wretbladite.

Auricupride. P. Ramdohr, 1950. Fortschr. Min., vol. 28 (for 1949),

p. 69 (Auricuprid). Synonym of cuproauride (15th List). [M.A. **11**–312.]

Aurosirita. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 4. Contraction in Spanish form of aurosmirid, aurosmiridium (14th and 17th Lists).

Aurostibite. A. R. Graham and S. Kaiman, 1951. Program & Abstracts, Min. Soc. Amer., Nov. 1951, p. 15; Bull. Geol. Soc. Amer., 1951, vol. 62, p. 1444; Amer. Min., 1952, vol. 37, pp. 292, 461. $AuSb_2$, cubic with pyrite structure, as minute grains in gold ores from Canada. [M.A. **11**-414.]

Bararite. Dana's Mineralogy, 7th edit., 1951, vol. 2, p. 106. Hexagonal fluosilicate of ammonium $(NH_4)_2SiF_6$, occurring, with cryptohalite (cubic $(NH_4)_2SiF_6$), over a burning coal seam at Barari, Jharia coalfield, India. [M.A. **3**–308, 6–42.]

Barium-autunite. J. Beintema, 1938. Rec. Trav. Chim. Pays-Bas, vol. 57, p. 171 (barium autunite). Artificial base-exchange product of autunite. *See* Calcium-autunite. Synonym of Bariumphosphoruranit, barium-uranite, uranocircite. [M.A. **4**–307, **7**–237, **11**–108.]

Belyankinite. V. I. Gerasimovsky and M. E. Kazakova, 1950. Doklady Acad. Sci. USSR, vol. 71, p. 925 (Белянкинит). $2CaO.12TiO_2.\frac{1}{2}Nb_2O_5.ZrO_2.SiO_2.28H_2O$. Platy yellowish-brown masses, optically biaxial, in nepheline-syenite-pegmatite from Kola peninsula, Russia. Named after Prof. Dmitry Stepanovich Belyankin Дмитрий Степанович Белянкин (1876–). [M.A. **11**–123.]

Belyankite. M. D. Dorfman, 1950. Doklady Akad. Sci. USSR, vol. 75, p. 852 (белянкит). $Ca_3Al_2F_{12}.4H_2O$ as white monoclinic crystals in kaolinized granite from Kazakhstan. Named after Prof. Dmitry Stepanovich Belyankin Дмитрий Степанович Белянкин (1876–). [M.A. **11**-311.]

Beta-cerolite. I. I. Ginzburg and I. A. Rukavishnikova, 1950. Mém. Soc. Russe Min., vol. 79, p. 33 (Бэта-керолит). $MgSiO_3.H_2O$, differing from alpha-cerolite (q.v.) in optical, thermal, and X-ray data. [M.A. **11**–405].

Blakeite. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 10 (blakeita). Titano-zirconate of Th, U, Ca, Fe, &c., described as zirkelite from Ceylon by G. S. Blake and G. F. H. Smith (Min. Mag. **16**–309), but differing in chemical composition and also apparently in crystalline form from the original zirkelite from Brazil (Min. Mag. **11**–86, 180). Named after George Stanfield Blake (1876–1940), formerly government geologist in Palestine. Not the blakeite of J. D. Dana, 1850, nor of C. Frondel and F. H. Pough, 1944 (17th List).

Boldyrevite. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 8 (boldyrevita). $NaCaMgAl_3F_{14}.4H_2O$ as yellow crusts, optically isotropic, in fumaroles on lava from the Klyuchevsky volcano in Kamchatka, described by S. I. Naboko in 1941 [M.A. **8**-342]. Named after Anatolii Kapitonovich Boldyrev Анатолий Капитонович Болдырев (1883–1946), professor of crystallography and mineralogy in the Mining Institute of Leningrad.

Buergerite. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 7 (buergerita). The 15*R* polymorph $Zn_{15}S_{15}$ of wurtzite. Named after Dr. Martin Julian Buerger (1903–) of the Massachusetts Institute of Technology, Cambridge, Mass. [M.A. **10**-532, **11**-126, 128.]

Byströmite. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 6 (byströmita). Monoclinic magnetic pyrites of Anders Byström, 1945, as distinct from hexagonal pyrrhotine. [M.A. **9**-224.]

—— B. Mason and C. J. Vitaliano, 1950. Progr. & Abstr. Min. Soc. Amer., p. 16; Amer. Min., 1951, vol. 36, p. 320; 1952, vol. 37, p. 53 (bystromite). Magnesium antimonate, $MgSb_2(O,OH)_6$, tetragonal, massive, pale blue-grey, from El Antimonio, Sonora, Mexico. Named after Anders Byström, Swedish mineral chemist, who determined the crystal structure of the artificial compound. [M.A. **11**-188, 516.]

Caillerite. Bull. Soc. Franç. Min. Crist., 1950, vol. 73, p. 147 (caillérite). G. T. Faust and M. Fleischer, Amer. Min., 1952, vol. 37, p. 135 (caillèrite). Alternative name suggested for allevardite (q.v.). Named after Mlle Simonne Caillère, of the Nat. Hist. Mus., Paris.

Calcantite. Italian (and Spanish, calcantita) spelling of chalcanthite.

Calcium-autunite. J. G. Fairchild, 1929. Amer. Min., vol. 14, p. 265 (calcium autunite), p. 269 (calcium-autunite). Artificially prepared autunite in which calcium can be replaced by Na, K, Ba, Mn, Cu, Ni, Co, Mg. Synonym of autunite. *See* Barium-autunite, Lead-autunite, Sodium-autunite. [M.A. **4**-307.]

Calcium-jarosite. D. I. Serdyuchenko, 1951. Doklady Acad. Sci. USSR, vol. 78, p. 347 (кальциевый ярозит), p. 348 (Ca-ярозит). An impure jarosite from Caucasus containing CaO 1·58 %, corresponding to 27·4 % Ca-jarosite $Ca[Fe_3(SO_4)_2(OH)_6]_2$, with K-jarosite, Na-jarosite, and 50·1 % carphosiderite. [M.A. **11**-366.]

Calcomenita. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 15. Spanish form of chalcomenite. [M.A. **11**-129.]

Calomelite. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 8 (calomelita). Synonym of calomel.

Camermanite. M. E. Denaeyer and D. Ledent, 1950. Bull. Soc. Franç. Min. Crist., vol. 73, p. 483; 1952, vol. 75, p. 231. Hexagonal

form of K_2SiF_6, dimorphous with cubic hieratite, in encrustations of potassium salts at chemical works.

Capillitite. V. Angelelli, 1948. F. Ahlfeld and V. Angelelli, Las especies minerales de la República Argentina, Jujuy, 1948, p. 143 (capillitita; misprint, capillita). E. E. Galloni, Amer. Min., 1950, vol. 35, p. 562 (ferroan zincian rhodochrosite). M. M. Radice, Notas Museo La Plata, 1949, vol. 56, Geol. no. 56, p. 231 (carbonato blanco). (Mn,Zn,Fe) CO_3, containing MnO 29·80, ZnO 14·88, FeO 13·93%. A variety of rhodochrosite from Capillitas, Catamarca. [M.A. **11**–119, 188, 403.]

Carbonate-whitlockite. C. Frondel, 1943. Amer. Min., vol. 28, p. 230; Dana's Mineralogy, 7th edit., 1951, vol. 2, p. 686. Whitlockite ($Ca_3P_2O_8$) containing some CO_2, in phosphate-rock, West Indies.

Chalcocyanite. Dana's Mineralogy, 7th edit., 1951, vol. 2, p. 578. Anhydrous cupric sulphate $CuSO_4$. To replace the name hydrocyanite (A. Scacchi, 1873), because the pure mineral contains no water (but is then white, not blue). Named from *χαλκός*, copper, and *κύανος*, dark blue.

Chernikite. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 10 (chernikita). Tantalo-tungstate of Ti, Ca, Fe, &c. from Kola, analysed in 1927 by G. P. Chernik Г. П. Черник. [Dana, 7th edit. **1**–741.]

Chilkinite. F. Permingeat, Bull. Soc. Franç. Min. Crist., 1951, vol. 74, p. 182. French spelling of shilkinite (16th List).

Chiropterite. O. Abel, 1922. [Höhlenkundliche Vorträge, Heft 7, Wien.] O. Abel and G. Kyrle, Die Drachenhöhle bei Mixnitz, Spelaeol. Monogr. Wien, 1931, vol. 7–8, p. 182 (Chiropterit). G. E. Hutchinson, Bull. Amer. Mus. Nat. Hist., 1950, vol. 96, p. 381. Bat guano in caves; named from chiroptera, order of bats. The Times, February 1, 1932 ("Battite").

Chrome-kaolinite. T. Sudo and T. Anzai, 1942. Proc. Imp. Acad. Tokyo, vol. 18, p. 403 (Chrome-kaolinte [*sic*]). Z. Harada, Journ. Fac. Sci. Hokkaido Univ., Ser. 4, 1948, vol. 7, p. 195 (Chrome Koalin [*sic*]), p. 200 (Chrome Kaolin). A green variety of kaolinite containing Cr_2O_3 0·41–1·12 %, occurring with nickel ores, and previously thought to be garnierite, from Urakawa, Sizuoka prefecture, Japan.

Chrome-halloysite. G. S. Gritzaenko and S. V. Grum-Grzhimailo, 1949. Mém. Soc. Russe Min., vol. 78, p. 61 (хромовый галлуазит). A pale blue variety of halloysite containing Cr_2O_3 0·59 %. [M.A. **11**–346, chromium halloysite.]

Clinostrengite. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 14 (clinostrengita). Monoclinic $Fe'''PO_4.2H_2O$, dimorphous with orthorhombic strengite. Syn. of phosphosiderite and metastrengite (q.v.).

Clinovariscite. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 14

(clinovariscita). Monoclinic $AlPO_4.2H_2O$, dimorphous with orthorhombic variscite. Synonym of metavariscite (10th List). [M.A. **8**-51.]

Cobalt-cabrerite. H. Meixner, 1951. Neues Jahrb. Min., Monatshefte, 1951, p. 17 (Kobaltcabrerit). Mixed crystals, $(Co,Mg)_3(AsO_4)_2.8H_2O$, with optical data intermediate between those of erythrite and hörnesite. *See* Nickel-cabrerite. [M.A. **11**–312.]

Cobaltocalcite. Dana's Mineralogy, 7th edit., 1951, vol. 2, p. 175. To replace the generally accepted name sphaerocobaltite (A. Weisbach, 1877) for rhombohedral $CoCO_3$. Not the cobaltocalcite of F. Millosevich, 1910 (5th List), a red cobaltiferous variety of calcite.

Collusite. K. Kinosita, 1944. [Journ. Japanese Assoc. Min. Petr. Econ. Geol., vol. 31, p. 11]; Z. Harada, Journ. Fac. Sci. Hokkaido Univ., Ser. 4, 1948, vol. 7, p. 151. A variety of tetrahedrite containing Sn 3·21 % from Japan. Error for colusite (13th List).

Colombianite. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 4 (colombianita). Gold-amalgam (Hg 57·4 %) from Colombia, South America, analysed by H. Schneider in 1848.

Comstockite. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 13 (comstockita). $(Mg,Cu,Zn)SO_4.5H_2O$, containing ZnO 5·60, MgO 9·40, CuO 9·00, H_2O 39·07 %, from the Comstock lode, Nevada. Syn. of zinc-magnesia-chalcanthite (C. Milton and W. D. Johnston, Econ. Geol., 1938, vol. 33, p. 761). (15th List.)

Cupro-mangano-aphthitalite. G. Bianchini, 1937. Rend. Accad. Sci. Fis. Mat. Napoli, ser. 4, vol. 7, p. 43 (aftitalite cupro-manganesifera). O. M. Shubnikova, Trans. Inst. Geol. Sci. USSR, 1940, no. 31, p. 53 (купро-мангано-афтиталит, cupro-mangano-aphthitalite). Aphthitalite from Vesuvius containing Cu 1·13, Mn 0·61 %. [M.A. **9**–144, 125.]

Cupromontmorillonite. M. Fleischer, 1951. Amer. Min., vol. 36, p. 793, abstract of the original paper, interpreting the Russian name medmontite (q.v.).

Curzite. S. J. Thugutt, 1949. Rocznik Polsk. Tow. Geol. (Ann. Soc. Géol. Pologne), vol. 18 (for 1948), p. 5 (curzite), p. 14 (courzite), p. 35 (kurcyt). Another spelling of kurtzite (18th List).

Dalyite. R. Van Tassel, 1952. Min. Mag., vol. 29, p. 850. Potassium zirconium silicate, $K_2ZrSi_6O_{15}$, triclinic, from Ascension Island, Atlantic. Named after Reginald Aldworth Daly (1871–), emeritus professor of geology, Harvard University.

Davisonite. Dana's Mineralogy, 7th edit., 1951, vol. 2, p. 939. Correction of the name 'dennisonite' as given by E. S. Larsen and E. V. Shannon, 1930 (12th List), after John Mason Davison (1840–1915) of the University of Rochester, New York. [Min. Mag. **11**–226; M.A. **4**-343.]

Déribérite. E. Lemoine, 1950, Bull. Soc. Franç. Min. Crist., vol. 73, p. 146. Alternative name suggested for allevardite (q.v.). Named after Maurice Déribéré of Paris, who gave a description of the mineral [M.A. **10**–43].

Descloizeauxita. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 15. Variant of descloizite (A. Damour, 1854), named after Alfred Louis Olivier Legrand Des Cloizeaux (1817–1897).

Eckrite. J. Ravier, 1951. Bull. Soc. Franç. Min. Crist., vol. 74, p. 10. A variety of soda-amphibole near arfvedsonite in its optical characters but near glaucophane in chemical composition. Named from the locality, Eqe (pronounced éckré), west Greenland. [M.A. **11**–365.]

Efremovite. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 14 (efremovita). Calcium ferri-phosphate кальциевый ферри-фосфат, $2CaO.3Fe_2O_3.2P_2O_5.10H_2O+16aq.$, of N. E. Efremov Н. Е. Ефремов, 1936, from Taman peninsula, Kuban. [M.A. **6**–439.]

Eisen-Åkermannit. *See* Iron-åkermanite.

Episcolecite. S. J. Thugutt, 1949. Rocznik Polsk. Tow. Geol. (Ann. Soc. Géol. Pologne), vol. 18 (for 1948), p. 15 (episcolecite), p. 35 (metaskolecyt). A suggested dimorphous form of scolecite as a derivative of sodalite. Compare metascolecite (1st List; *for* F. Rinne, 1894 *read* F. Rinne, 1890), epinatrolite and metanatrolite (6th List).

Epithomsonite. S. J. Thugutt, 1949, Rocznik Polsk. Tow. Geol. (Ann. Soc. Géol. Pologne), vol. 18 (for 1948), p. 5 (epithomsonite), p. 17 (metameric thomsonite), p. 35 (metatomsonit). A suggested dimorphous form of thomsonite as a derivative of sodalite; identified with the metathomsonite (q.v.) of M. H. Hey (1932). Compare epinatrolite and metanatrolite (6th List). [M.A. **11**–291.]

Eskebornite. P. Ramdohr, 1948 (MS.). H. Strunz Min. Tab., 2nd edit., 1949, p. 78 (Eskebornit). P. Ramdohr, Fortschr. Min., 1950, vol. 28 (for 1949), p. 70; Die Erzmineralien und ihre Verwachsungen, Berlin, 1950, p. 418. At first described as hexagonal iron selenide FeS [cf. achavalite, 18th List]. Later as cubic and containing also copper. Named from the locality, Eskeborn level, Tilkerode, Harz. [No relation to bornite.] [M.A. **11**–118, 312.]

Esporogelita. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 12. Spanish form of sporogelite (6th List).

Estibioluzonita. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 16. Spanish form of stibioluzonite.

Evaporate, Evaporite. A. W. Grabau, 1920. Principles of salt deposition, New York & London, pp. 14, 79 (evaporates), p. 15 (evaporate). C. P. Berkey, Bull. Geol. Soc. China, 1922, vol. 1, p. 24 (evaporate

changed to evaporite); reprinted in New York State Mus. Bull., 1924, no. 251, p. 116. Salts deposited from solution by evaporation, as distinct from precipitates deposited by reaction. [Cf. distillate, crystallate, precipitate.] [M.A. **1**-322, **2**-307, **10**-184, 567; Min. Mag. **28**-621.]

Ferri-alluaudite. Dana's Mineralogy, 7th edit., 1951, vol. 2, p. 674. Fe-alluaudite of P. Quensel, 1937 [M.A. **6**-485].

Ferristilpnomelane. A. N. Winchell, 1951. Optical mineralogy, pt. 2, 4th edit., p. 390. Oxidized ferrostilpnomelane (15th List); synonym of chalcodite.

Ferrite. K. Kristoffersen, 1950. K. Norske Vid. Selsk. Skrifter, for 1947, no. 4, p. 14 (grønnbrunt nåleformig mineral (ferritt), dikalsiumferritt $2CaO.Fe_2O_3$, tetrakalsiumaluminatferritt $4CaO.Al_2O_3.Fe_2O_3$), p. 308 (Ferrite, dicalcium alumoferrite). Used alternatively as a mineral or chemical name for green to brown needles, Ca_2AlFeO_5 to $Ca_2Fe_2O_5$, present in basic slags. Those of the composition Ca_2AlFeO_5 are identical with brownmillerite (16th List). For previous uses of the name ferrite see 6th List. [M.A. **11**-191.]

Ferritremolite. A. N. Winchell, 1949. Amer. Min., vol. 34, p. 224; Optical mineralogy, pt. 2, 4th edit., 1951, p. 437. Hypothetical molecule $Ca_2Fe''_3Fe'''_2O_2Si_8O_{22}$, in oxyhornblende. Compare ferrotremolite (13th List).

Ferritschermakite. A. N. Winchell, 1949. Amer. Min., vol. 34, p. 224; Optical mineralogy, pt. 2, 4th edit., 1951, p. 437. Hypothetical molecule $Ca_2Fe''(Al,Fe''')_4O_2Si_6Al_2O_{22}$, in oxyhornblende. Compare ferrotschermakite (17th List).

Ferrocarpholite. W. P. de Roever, 1951. Amer. Min., vol. 36, p. 736. $H_4FeAl_2Si_2O_{10}$, orthorhombic, analogous to carpholite with Fe in place of Mn. [M.A. **11**-413.]

Ferropericlase. C. E. Tilley, 1951. Min. Mag., vol. 29, p. 629. Iron-bearing variety of periclase, (Mg,Fe)O. Compare magnesiowüstite (14th List).

Ferrowollastonite. S. O. Agrell, 1950. Amer. Min., vol. 35, p. 1080. Synonym of iron-wollastonite (14th List).

Fleischerite. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 7 (fleischerita). The 6*H* polymorph Zn_6S_6 of wurtzite. Named after Dr. Michael Fleischer (1908–) of the United States Geological Survey. [M.A. **10**-532, **11**-126, 128.]

Fluor-mica. J. E. Comeforo, R. A. Hatch, and W. Eitel, 1950. Progr. & Abstr. Min. Soc. Amer., p. 9 (fluor-micas); Amer. Min., 1951, vol. 36, p. 313. R. A. Hatch, W. Eitel, and R. A. Humphrey, ibid., 1950,

p. 13; ibid., 1951, p. 317 (fluorine-micas, F-micas, F-phlogopite, F-muscovite, F-talc, F-pyrophyllite). Cf. Fluor-phlogopite (14th List).

Fluor-richterite. J. E. Comeforo, R. A. Hatch, and W. Eitel, 1950. Progr. & Abstr. Min. Soc. Amer., p. 8 (fluo-richterite); Amer. Min., 1951, vol. 36, p. 312. Artificial fluorine-amphiboles (p. 312), fluoramphibole, fluor-amphiboles (p. 313) containing F in place of OH. Compare fluor-amphibole (14th List) and fluor-tremolite (15th List).

Fojasite, fożasyt. S. J. Thugutt, 1949. Rocznik Polsk. Tow. Geol. (Ann. Soc. Géol. Pologne), vol. 18 (for 1948), p. 26 (fojasite), p. 35 (fożasyt). Polish spellings of faujasite, named by A. Damour in 1842 after Barthélemy Faujas de Saint-Fond (1741-1819).

Fosfo-escorodita. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 14. Spanish form of phospho-scorodite (q.v.).

Fosfosiderita. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 14. Spanish form of phosphosiderite. [M.A. **11**–129.]

Fringelite. M. Blumer, 1951. Mikrochem., Mikrochim. Acta, Wien, vol. 36-37, p. 1052 (Fringelit). A red hydrocarbon dye as minute birefringent crystals in the calcite of fossil crinoids in Jurassic limestone from Fringeli, Bern. Named from the locality. [M.A. **11**-519.]

Frondelite. M. L. Lindberg, 1949. Amer. Min., vol. 34, p. 541. A dufrenite-like mineral, $(Mn'',Fe'')Fe_4'''(PO_4)_3(OH)_5$, isomorphous with rockbridgeite (q.v.) with Mn″ in place of Fe″, orthorhombic, as radially fibrous masses from Brazil. Named after Prof. Clifford Frondel (1907–) of Harvard University. [M.A. **11**-8.]

Gallium-albite, gallium-anorthite, gallium-orthoclase, &c. J. R. Goldsmith, 1950. Journ. Geol. Chicago, vol. 58, p. 522 (gallium albite, germanium albite, gallium-germanium albite), p. 524 (gallium orthoclase, germanium orthoclase, gallium-germanium orthoclase), p. 527 (gallium anorthite, germanium anorthite, gallium-germanium anorthite). Artificial felspars with gallium in place of aluminium and germanium in place of silicon, $NaGaSi_3O_8$, $NaAlGe_3O_8$, $NaGaGe_3O_8$, &c. [M.A. **11**–326.]

Garibaldite. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 5 (garibaldita). Monoclinic β-sulphur = Sulfurite of J. Fröbel, 1845, from the fumaroles of Italian volcanoes. Named after Giuseppe Garibaldi (1807–1882), liberator of Italy.

Genaruttite. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 9 (genaruttita). Cadmium oxide, CdO, cubic (3rd List, p. 380) from Genarutta mine, Monteponi, Sardinia. Syn. of monteponite (18th List).

Germanium-albite, &c. *See* Gallium-albite.

Glimmerton. K. Endell, U. Hofmann, and E. Maegdefrau, 1935. Zement, Berlin-Charlottenburg. vol. 24, p. 627. A micaceous clay. Synonym of illite (15th list).

Gregorite. J. A. Paris, 1818. Trans. Roy. Geol. Soc. Cornwall, vol. 1, p. 226 (Gregorite (Menacchanite)). Synonym of ilmenite. Named after William Gregor (1761–1817), who discovered titanium. Not the gregorite of G. J. Adam, 1869, synonym of agnesite, also from Cornwall and named after William Gregor.

Guimarãesite. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 11 (guimarãesita). Tantalo-niobate of Ti, U, Fe, &c., as orthorhombic crystals from Divino de Ubá, Brazil, resembling ampangabeite but containing more Ti and less U. Named after the Brazilian mineralogist Djalma Guimarães, who described it in 1926 [M.A. **3**–113; Dana, 7th edit., 1944, vol. 1, p. 807].

Gunnbjarnite. O. B. Bøggild, 1951. Meddel. Grønland, vol. 142, no. 8, p. 3. $(Fe''',Al)_2O_3.3(Mg,Ca,Fe'')O.6SiO_2.3H_2O$, orthorhombic, as black micaceous plates in basalt, east Greenland. Named after Gunnbjørn Ulfsson, discoverer of Greenland about A.D. 900 [M.A. **11** 517].

Hanléite. L. L. Fermor, 1952. Geol. Mag. Hertford, vol. 89, p. 145 (hanléite). The garnet molecule $Mg_3Cr_2(SiO_4)_3$, represented by a mineral resembling uvarovite, described by F. R. Mallet in 1866, in chromite from near the Hanlé monastery, Kashmir. Named from the locality. [M.A. **11**-518.]

Hondurasite. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 6 (hondurasita). To replace the name selen-tellurium of E. S. Dana and H. L. Wells, 1890, which has been given in Spanish as teluroselenio (q.v.). Named from the locality, Honduras.

Hoppingite. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 8 (hoppingita). Mercuric iodide as minute scarlet cubes from Broken Hill, New South Wales. Described, as distinct from coccinite, by A. J. Moses, 1901, from material submitted by Roy Hopping, mineral dealer of New York.

Hühnerkobelite. M. L. Lindberg, 1950, Amer. Min., vol. 35, pp. 59, 75. Partly oxidized material with the composition $(Na_2,Ca)O.2(Fe,Mn)O.P_2O_5$, from Hühnerkobel, Bavaria, and Norrö, Sweden, previously referred to arrojadite, but differing from this in the X-ray pattern. Named from the locality. [M.A. **11**–126.]

Hummerite. A. D. Weeks, E. A. Cisney, and A. M. Sherwood, 1950. Progr. & Abstr. Min. Soc. Amer., p. 22. Hydrous magnesium vanadate, triclinic, similar in appearance to pascoite. Named from the locality, Hummer mine, Paradox valley, Montrose Co., Colorado. [M.A. **11**–189.]

Hurlbutite. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 7 (hurlbutita). The 4*H* polymorph Zn_4S_4 of wurtzite. Named after Dr. Cornelius Searle Hurlbut, Jr. (1906–) of Harvard University. [M.A. **11**–126, 128, **10**–532.]

—— M. E. Mrose, 1951, Program & Abstracts, Min. Soc. Amer., Nov. 1951, p. 19 (Hurlbutite); Bull. Geol. Soc. Amer., 1951, vol. 62, p. 1464; Amer. Min., 1952, vol. 37, p. 296. Calcium beryllium phosphate, $CaBe_2(PO_4)_2$, orthorhombic, in pegmatite from Newport, New Hampshire. [M.A. **11**–414.]

Huttonite. A. Pabst, 1950. Nature, London, vol. 166, p. 157; Amer. Min., 1951, vol. 36, p. 60. C. O. Hutton, Bull. Geol. Soc. Amer., July 1950, vol. 61, p. 678 (uranium-free thorite). Monoclinic thorium silicate, $ThSiO_4$, as minute grains in beach-sand from New Zealand. Named after Professor Colin Osborne Hutton, of Stanford University, California. [M.A. **11**–188, 209, 310.]

Hydrocancrinite. J. Wyart and M. Michel-Lévy, 1949. Compt. Rend. Acad. Sci. Paris, vol. 229, p. 131. An artificial hydrothermal product, $NaAlSiO_4.\frac{1}{2}H_2O$, with the same X-ray pattern as cancrinite. Compare lembergite (1st List). [M.A. **11**–93.]

Hydrogen-uranospinite. M. E. Mrose, 1950. Progr. & Abstr. Min. Soc. Amer., p. 18 (hydrogen-uranospinite); Amer. Min., 1951, vol. 36, p. 322. Artificial $H_2(UO_2)_2(AsO_4)_2.8H_2O$, isostructural with meta-torbernite-I. Replacements of H_2 by Na_2 and $(NH_4)_2$ yield sodium-uranospinite and ammonium-uranospinite. [M.A. **11**–365.]

Hydrosodalite. J. Wyart and M. Michel-Lévy, 1949. Compt. Rend. Acad. Sci. Paris, vol. 229, p. 131. An artificial hydrothermal product with the same X-ray pattern as sodalite, but with chlorine replaced by water and CO_2. Compare hydroxyl-sodalite (18th List). [M.A. **11**–93.]

Hydroxyl-herderite. Dana's Mineralogy, 7th edit., 1951, vol. 2, p. 820. The same as hydro-herderite of S. L. Penfield, 1894 (2nd List).

Illite-hydromica. C. Andreatta, 1949. Periodico Min. Roma, vol. 18, p. 11 (serie illiti-idromiche), p. 14 (illidromica). Titles & abstracts, Internat. Geol. Congress, 18th session, London, 1948, p. 126 (illite-idromica). Clay Minerals Bull., 1949, no. 3, p. 98 (illidromica, illite-hydromica). Rend. Soc. Min. Ital., 1950, vol. 6, p. 40. A micaceous mineral intermediate between illite and hydromica. [M.A. **11**–172, 347.]

Iraurita. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 5. Spanish form of iridium-gold (O. E. Zvyagintzev, 1934) [M.A. **6**–51], иридистое золото (V. I. Vernadsky, 1908), iridic gold (M. H. Hey, 1950).

Iridioplatinita. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 5.

Applied to Ir-Pt alloys rich in platinum. Иридистая платина (V. I. Vernadsky, 1908), iridic platinum (M. H. Hey, 1950). *See* Platinoiridita.

Iron-åkermanite. C. Hlawatsch, 1904. Tschermaks Min. Petr. Mitt., vol. 23, p. 422 (Fe-Åkermannit), p. 449 (Eisen-Åkermannit). N. L. Bowen, J. F. Schairer, and E. Posnjak, Amer. Journ. Sci., 1933, ser. 5, vol. 26, p. 282 (iron-akermanite). $2CaO.FeO.2SiO_2$, tetragonal, analogous to åkermanite with Fe in place of Mg. Present in slags and in the system CaO–FeO–SiO_2. [M.A. **5**–454.]

Iron-lazulite. L. Katz and W. N. Lipscomb, 1951. Acta Cryst., vol. 4, p. 345 (iron lazulite). Artificial $(Fe'',Fe''')_7(PO_4)_4(OH)_4$, tetragonal. [Not in agreement with the lazulite-scorzalite series, M.A. **11**–244, 426.]

Iron-reddingite. H. H. Woodard, 1951. Amer. Min., vol. 36, p. 881 (Iron reddingite). Synonym of phosphoferrite. [M.A. **11**–492.]

Irosita. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 5. Contraction in Spanish form of iridosmine, applied to Os-Ir alloys rich in osmium [M.A. **7**–162.] *See* Osirita.

Isiganeite. Z. Harada, Journ. Fac. Sci. Hokkaido Univ., Ser. 4, 1948, vol. 7, p. 154 (Isigane-isi) from [Journ. Electrochem. Assoc. Japan, 1939, vol. 7]. Variety of psilomelane, new mineral from Isigane mine, Sasaoka, E-Kasugai Co., Aiti prefecture. Japanese isi, ishi = stone, -ite.

Josenite. A. N. Winchell, Optical mineralogy, 1951, pt. 2, 4th edit., p. 133. Variant of josen (10th List).

Jujuite. F. Ahlfeld and V. Angelelli, Las especies minerales de la República Argentina, Jujuy, 1948, p. 132 (jujuita). G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 15. Variant of jujuyite (18th List). Named from prov. Jujuy, Argentina.

Kali-barium-felspar. Z. Harada, 1948. Journ. Fac. Sci. Hokkaido Univ., Ser. 4, vol. 7, p. 159 (Kali-Barium-Feldspar). A collective name to include celsian, hyalophane, and kasolite.

Kellerite. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 13 (kellerita). $(Mg,Cu)SO_4.5H_2O$, containing MgO 11·36, CuO 12·46, H_2O 38·31 %, as bluish-white earthy masses apparently pseudomorphous after chalcanthite, from Copaquire, Chile, described by H. F. Keller, Proc. Amer. Phil. Soc., 1908, vol. 47, p. 81.

Kenngottite. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 10 (kenngottita). Vitreous amorphous As_2O_3 (arsenolite) mentioned by J. F. L. Hausmann in 1850 and by Johann Gustav Adolph Kenngott (1818–1897) in 1852. Not the kenngottite (synonym of miargyrite) of W. Haidinger, 1857.

Kobeite. J. Takubo, Y. Ukai, and T. Minato, 1950. Journ. Geol. Soc. Japan, vol. 56, p. 509; abstract in Amer. Min., 1951, vol. 36, p. 924.

Titanate, niobate, and tantalate (Yt,Fe,U,&c.)(Ti,Nb,Ta,&c.)$_2$ (O,OH)$_6$, differing from euxenite, &c., in the low content of (Nb,Ta)$_2$O$_5$ (4·84–5·45 %). Black metamict crystals in pegmatite from Kobe, Kyoto, Japan. Named from the locality. [M.A. **11**–518.]

Kryzhanovskite. A. I. Ginzburg, 1950. Doklady Acad. Sci. USSR, vol. 72, p. 762 (крыжановскит). A monoclinic mineral, $MnFe_2'''(PO_4)_2(OH)_2.H_2O$, of the dufrenite group. Compare frondelite, laubmannite, and rockbridgeite (qq.v.). Named in memory of Professor Vladimir Ilich Kryzhanovsky Владимир Ильич Крыжановский (1881–1947), curator in the Mineralogical Museum of the Russian Academy of Sciences. [M.A. **11**–189.]

Ktenasite. P. Kokkoros, 1950. Tschermaks Min. Petr. Mitt., ser. 3, vol. 1, p. 342 (Ktenasit). Hydrous basic sulphate 3(Cu,Zn)O.SO$_3$.4H$_2$O, as blue-green monoclinic crystals from Lavrion, Greece. Named after Constantine A. Ktenas *Κωνσταντινος Α. Κτενας* (1885–1935), professor of mineralogy and petrology in the University of Athens. [M.A. **11**–125.]

Kyanotrichite. A. N. Winchell, Optical mineralogy, 1933, pt. 2, 3rd edit., p. 116. Variant of cyanotrichite, German Kyanotrichit, but the original German spelling (E. F. Glocker, 1839) was Cyanotrichit.

Latiumite. C. E. Tilley and N. F. M. Henry, 1952. Min. Soc. Notice, no. 78. Monoclinic sulphatic silicate Ca, K, Al, in ejected blocks from Albano, Latium, Italy. Named from the locality.

Laubmannite. C. Frondel, 1949. Amer. Min., vol. 34, p. 514. A dufrenite-like mineral, $(Fe'',Mn,Ca)_3Fe_6'''(PO_4)_4(OH)_{12}$, orthorhombic?, isostructural with andrewsite; from Polk Co., Arkansas. Named after Dr. Heinrich Laubmann of Munich; the 'dufrenite' from Bavaria which he described in 1923 may perhaps belong here. [M.A. **11**–8.]

Lead-alunite. H. Bassett, 1950, Journ. Chem. Soc. London, 1950, p. 1460 (lead alunite). Artificial $Pb[Al_2(OH)_4(H_2O)_2][SO_4]_2$ as mixed crystals with $H_2O[Al_3(OH)_5H_2O][SO_4]_2$, with the alunite X-ray pattern.

Lead-autunite. J. G. Fairchild, 1929. Amer. Min., vol. 14, p. 265 (lead autunite), p. 273 (lead-autunite). *See* Calcium-autunite.

Leonhardtite. W. Berdesinski, 1952. Neues Jahrb. Min., Monatshefte, p. 29 (Leonhardtit). $MgSO_4.4H_2O$, from the hydration of kieserite. Named after Johannes Leonhardt (1893–), professor of mineralogy and petrography in the University of Kiel. Not to be confused with leonhardite of J. R. Blum, 1843. [M.A. **11**–517.]

Litargita. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 9. Spanish spelling of lithargite (8th List). Synonym of litharge.

Lombaardite. H. J. Nel, C. A. Strauss, and F. E. Wickman, 1949. Mem. Geol. Surv. South Africa, no. 43, p. 45. Silicate of Al, Ca, Fe as

monoclinic needles, related to pumpellyite and epidote. From Zaaiplaats tin mine, Transvaal. Named after B. V. Lombaard, professor of geology, university of Pretoria. [M.A. **11**–127.]

Magnalumoxide. N. A. Bobkov and Y. V. Kazitzyn, 1951, Mém. Soc. Russe Min., vol. 80, p. 108 (магналюмоксид). A spinel mineral with excess sesquioxides (as in artificial spinel), $5(Mg,Fe)(Al,Fe)_2O_4.4(Al,Fe)_2O_3 = (Mg,Fe)_5(Al,Fe)_{18}O_{32}$. Black octahedral crystals from Aldan, SE. Siberia. [M.A. **11**–365.]

Magnesium-chalcanthite. A. N. Winchell, 1951. Optical mineralogy, pt. 2, 4th edit., p. 160 (Magnesium chalcanthite). $MgSO_4.5H_2O$, triclinic, the artificial analogue of chalcanthite (*see* copper-chalcanthite, 18th List). Synonym of allenite and pentahydrite (qq.v.).

Magnesium-melanterite. T. Wieser, 1950. Rocznik Polsk. Tow. Geol. (Ann. Soc. Géol. Pologne), vol. 19 (for 1949), p. 451 (melanteryt magnezowy), p. 470 (magnesium melanterite). A variety of melanterite containing 3–10 % MgO, from Poland. [M.A. **11**–301.]

Magniophilite. A. A. Beus, 1950. Doklady Acad. Sci. USSR, vol. 73, p. 1267 (магниофилит). $(Mn,Fe,Mg)_3(PO_4)_2$ as salmon-pink crystals intergrown with triphylite, in pegmatite from Turkestan. Differs from graftonite in containing Mg and more Mn than Fe. Named from magnesium and φιλός, a friend. [M.A. **11**–190.]

Magniotriplite. A. I. Ginzburg, N. A. Kruglova, and V. A. Moleva, 1951. Doklady Acad. Sci. USSR, vol. 77, p. 97 (магниотриплит). Triplite rich in magnesium. Synonym of talc-triplite. [M.A. **11**–311.]

Magny-monothermite. I. D. Sedletzky and P. S. Samodurov, 1949. Mém. Soc. Russe Min., ser. 2, vol. 78, p. 274 (Магний-монотермит). A clay mineral differing from monothermite (15th List) in containing MgO (2·89 %) in place of K_2O. [M.A. **11**–125.]

Mangan-alluaudite. Dana's Mineralogy, 7th edit., vol. 2, 1951, p. 674. Mn-alluaudite of P. Quensel, 1937. [M.A. **6**–485.]

Manganchalcanthite. A. N. Winchell, 1951. Optical mineralogy, 4th edit., part 2, p. 10. Variant of manganese-chalcanthite (9th List), artificial $MnSO_4.5H_2O$, triclinic.

Mangan-fluorapatite. B. Mason, 1941. Geol. För. Förh. Stockholm, vol. 63, p. 280 (mangan-fluorapatite), p. 281 (Mn-fluorapatite). Compare fluormanganapatite (9th List), mangan-hydroxyapatite (16th List).

Mangani-sicklerite. P. Quensel, 1952. Geol. Mag. Hertford, vol. 89, p. 59. Previously referred to as Mn-sicklerite (P. Quensel, 1937, 14th List, p. 609), manganese sicklerite (W. F. Foshag, Amer. Min., 1937,

vol. 22, p. 876), manganese-sicklerite (16th List), and mangan-sicklerite (Dana's Mineralogy, 7th edit., 1951, vol. 2, p. 672).

Mangankoninckite. A. A. Beus, 1950. Doklady Acad. Sci. USSR, vol. 73, p. 1267 (манганконинкит). $(Fe,Mn)PO_4.3H_2O$, a variety of koninckite containing Mn_2O_3 2·72 %, in pegmatite from Turkestan. [M.A. **11**–190.]

Manganleonite. H. Anspach, Zeits. Krist., 1939, vol. 101, p. 39 (Mn-Leonit). A. N. Winchell, Optical mineralogy, pt. 2, 4th edit., 1951, p. 167 (manganleonite). Artificial $K_2Mn(SO_4)_2.4H_2O$, monoclinic, isomorphous with leonite ($K_2Mg(SO_4)_2.4H_2O$). [M.A. **7**–393.]

Manganostilpnomelane. A. N. Winchell, 1951. Optical mineralogy, pt. 2, 4th edit., p. 390. Alternative name for parsettensite [M.A. **2**–251; Min. Mag. **25**–189].

Marburgite. S. J. Thugutt, 1949. Rocznik Polsk. Tow. Geol. (Ann. Soc. Géol. Pologne), vol. 18 (for 1948), p. 10 (marburgite), p. 35 (marburgit). The calcium-type of phillipsite, as distinct from the sodium-type ('herschelite'). Named from its locality, Marburg, Hesse.

Masicotite. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 9 (masicotita). Variant of massicottite (A. D'Achiardi, 1883) and massicotite (A. H. Chester, 1896). Synonym of massicot.

Matteuccite. G. Carobbi and C. Cipriani, 1952. Atti (Rend.) Accad. Naz. Lincei, Cl. Sci. fis. mat. nat., ser. 8, vol. 12, sem. 1, p. 23. Sodium bisulphate, $NaHSO_4.H_2O$, with mercallite ($KHSO_4$, 14th List) in saline stalactites from Vesuvius. Named after Vittorio Matteucci (1862–1909), a former director of the Vesuvian Observatory. [M.A. **11**–517.]

Medamaite. Z. Harada, Journ. Fac. Sci. Hokkaido Univ., Ser. 4, 1948, vol. 7, p. 153 (Medama-isi) from [Journ. Japanese Ceramic Assoc., 1943, vol. 51, p. 381]. A variety of diaspore from Mutuisi, Wake Co., Okayama prefecture. Japanese isi, ishi = stone, -ite.

Medmontite. F. V. Chukhrov and F. Y. Anosov, 1950. Mém. Soc. Russe Min., vol. 79, p. 23 (Медмонтит). A clayey mineral allied to montmorillonite containing CuO 20·96 %, from Kazakhstan. Named from медь (copper) and montmorillonite. *See* Cupromontmorillonite. [M.A. **11**–124.]

Melnikovite-marcasite. H. Rechenberg, 1950. Neues Jahrb. Min. Monatshefte, 1950, p. 141 (Melnikovit-Markasit). Colloform marcasite containing some water and crystallized from a gel. Analogous to melnikovite-pyrite (14th List). [M.A. **11**–353.]

Mendocita. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 15. Variant of mendozite. Named after the province of Mendoza, but in Spanish *z* before *e* or *i* is pronounced as *c*. [M.A. **11**–129.]

Metabasaluminite. F. A. Bannister, 1950. Min. Mag., vol. 29, p. 9. $Al_4SO_4(OH)_{10} = 2Al_2O_3.SO_3.5H_2O$, produced by heating hydrobasaluminite (18th List) at 150° C.

Meta-saléeite. M. E. Mrose, 1950. Amer. Min., vol. 35, p. 529 (meta-saléeite). Further alteration of name, saléite (13th List) and saléeite (15th List), for the Katanga mineral $Mg(UO_2)_2(PO_4)_2.8H_2O$ corresponding to meta-autunite, the name saléeite being transferred to the fully hydrated mineral with $10H_2O$. [M.A. **11**–230.]

Metasanidine. C. Oftedahl, 1949. Skrifter Norske Vidensk.-Akad. Oslo, I. Mat.-Naturv. Kl., for 1948, no. 3, p. 58 (meta-sanidine), p. 68 (metasanidine). An alkali-felspar showing partial exsolution of sanidine to cryptoperthite. [M.A. **11**–11.]

Metastrengite. Dana's Mineralogy, 7th edit., 1951, vol. 2, p. 769. Monoclinic $FePO_4.2H_2O$ dimorphous with orthorhombic strengite; named to correspond with metavariscite and variscite $AlPO_4.2H_2O$. Synonym of phosphosiderite (Bruhns and Busz, 1890) and clinostrengite (q.v.).

Metathomsonite. M. H. Hey, 1932. Min. Mag., vol. 23, pp. 93–97, 118, 120. Partially dehydrated thomsonite showing a change in phase; probably a high-temperature form identical with gonnardite. *See* Epithomsonite.

Meta-uranopilite. C. Frondel, 1951. Dana's Mineralogy, 7th edit., vol. 2, p. 582. Partially dehydrated uranopilite, β-uranopilite of R. Nováček, 1935 [M.A. **6**–148].

Metazeolites. R. Brauns, 1892. Neues Jahrb. Min., vol. ii, p. 240 (Metazeolithe), in abstract of F. Rinne, 1890, though not given in the original paper. The names metadesmine (1st List), metascolecite (1st List), metanatrolite (6th List), metaepistilbite, were given by F. Rinne, Sitz.-ber. Akad. Wiss. Berlin, 1890, pp. 1203–4, for partially dehydrated zeolites showing changes in optical properties and in some cases of crystal system.

Metazeunerite. A. E. Fersman and O. M. Shubnikova. Geochemist's and mineralogist's companion, 1937, p. 173 (Метацейнерит), $Cu(UO_2)_2(AsO_4)_2.8H_2O$; the same formula is given (p. 306) for zeunerite. J. W. Frondel, Amer. Min., 1951, vol. 36, p. 255 (meta-zeunerite); artificial zeunerite contains 5–$16H_2O$, and to be consistent with meta-autunite (4th List) and meta-torbernite (7th List) the natural mineral with $8H_2O$ might be called meta-zeunerite. Dana's Mineralogy, 7th edit., 1951, vol. 2, p. 993 (metazeunerite). [M.A. **11**–323, 432.]

Miltonite. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 13 (miltonita). Calcium sulphate hemihydrate, $CaSO_4.\frac{1}{2}H_2O$, obtained in the

preparation of thin sections of gypsum. [M.A. **8**–280.] Named after Dr. Charles Milton (1896–) of the United States Geological Survey. Found as a natural mineral in deserts in Central Asia, V. I. Popov and A. L. Vorobiev, 1949 [M.A. **11**–366]. Compare bassanite, 6th List.

Miserite. W. T. Schaller, 1950. Amer. Min., vol. 35, p. 911. $KCa_4Si_5O_{13}(OH)_3$, a pink, fibrous (orthorhombic?) alteration product of wollastonite in metamorphosed shale from Arkansas. Previously described as natroxonotlite (J. F. Williams, 1891). Named after Dr. Hugh Dinsmore Miser (1884–) of the United States Geological Survey. [M.A. **11**–187.]

Molibdomenita. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 15. Variant of molybdomenite.

Montesite. R. Herzenberg, 1949. Publ. Techn. Inst. Boliviano Ingen. Minas y Geol., Minería Boliviana, no. 45 (montesita). Lead sulphostannite, $PbSn_4S_5$, between teallite ($PbSnS_2$) and herzenbergite (SnS) in composition, and similar to them in appearance. From Bolivia. Named after the late Ismael Montes, founder of the School of Mines at Oruro. [M.A. **11**–10.]

Montroseite. A. D. Weeks, E. A. Cisney, and A. M. Sherwood, 1950. Progr. & Abstr. Min. Soc. Amer., p. 22. $2FeO.V_2O_3.7V_2O_4.4H_2O$, as black orthorhombic blades, from Paradox valley, Montrose Co., Colorado. Named from the locality. [M.A. **11**–189.]

Natro-autunite. A. E. Fersman and O. M. Shubnikova, 1937. Geochemist's and mineralogist's companion, Moscow, p. 177 (Натро(вый) отунит). Variant of sodium-autunite (q.v.).

Natro-melilite. O. M. Shubnikova and D. V. Yuferov, 1934. New minerals 1922–32, Leningrad, Moscow, 1934, p. 71 (натро-мелилит). Synonym of soda-melilite (12th List).

Neogastunite. H. Haberlandt and A. Schiener, Tschermaks Min. Petr. Mitt., 1951, ser. 3, vol. 2, pp. 311, 315 (Neogastunit). Presumably a local name for a uranium mineral, later identified as schröckingerite, from the hot springs at Bad Gastein, Salzburg. [M.A. **11**–433.]

Nickel-cabrerite. H. Meixner, 1951. Neues Jahrb. Min., Monatshefte, 1951, p. 19 (Nickelcabrerit). Synonym of cabrerite, $(Ni,Mg)_3(AsO_4)_2.8H_2O$. *See* Cobalt-cabrerite. [M.A. **11**–312.]

Nickel-magnetite. C. Doelter, 1926. Mineralchemie, vol. 3, pt. 2, p. 666 (Nickelmagnetit). Synonym of trevorite $NiFe_2O_4$ (10th List).

Nogizawalite. T. Kawai, 1949. Journ. Chem. Soc. Japan, Pure Chem. Sect., vol. 70, p. 268. Silicate and phosphate of rare-earths, Zr, Al, Fe, Mg, Ca, tetragonal. Named from the locality, Nogizawa village, Ishikawa district, Japan. [Perhaps a mixture of zircon, xenotime, &c.

Compare oyamalite, 11th List, and yamagutilite, 14th List.] [M.A. **11**–311.]

Nováčekite C. Frondel, 1951. Amer. Min., vol. 36, p. 680 (Novacekite). $Mg(UO_2)_2(AsO_4)_2.9H_2O$, pseudo-tetragonal, isomorphous with saléeite, the corresponding phosphate. From Schneeberg, Saxony. Named after Radim Nováček (1905–42), Czech mineralogist. [M.A. **11**–413.]

Ooguanolite. A. A. Hayes, 1855. Proc. Boston Soc. Nat. Hist., vol. 5, p. 167 (Oöguanolite). G. E. Hutchinson, Bull. Amer. Mus. Nat. Hist., 1950, vol. 96, p. 94 (ooguanolite). Sulphate of potassium and ammonium, $K_2SO_4.(NH_4)_2SO_4$, in a fossilized egg from guano deposits on an island off the coast of Peru. Named from ὠόν, egg, and guano. Compare taylorite ($5K_2SO_4.(NH_4)_2SO_4$) and guanapite. [M.A. **11**–245, 302, 551.]

Osirita. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 5. Contraction in Spanish form of osmiridium, applied to Os-Ir alloys rich in iridium. *See* Irosita. [M.A. **7**–162.]

Oxychildrenite. A. I. Ginzburg and N. V. Voronkova, 1950. Doklady Acad. Sci. USSR, vol. 71, p. 145 (оксичильдренит). An oxidized form of childrenite with (Fe,Mn)O changed to $(Fe,Mn)_2O_3$, from Kalbin Mts., Kazakhstan. [M.A. **11**–124.]

Paracancrinite. J. Wyart and M. Michel-Lévy, 1949. Compt. Rend. Acad. Sci. Paris, vol. 229, p. 133. An artificial hydrothermal product with the same X-ray pattern as cancrinite, but containing no calcium. [M.A. **11**–93.]

Pellouxite. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 9 (pellouxita). Lime, calcium oxide, CaO, reported from Vesuvius (calce, A. Scacchi, 1883). Named after the Italian mineralogist Alberto Pelloux (1868–1948).

Pentahydrite. C. Frondel, 1951. Dana's Mineralogy, 7th edit., vol. 2, p. 492. Magnesium sulphate pentahydrate, $MgSO_4.5H_2O$, triclinic; artificial, but occurring naturally in mixed crystals (*see* comstockite, kellerite). Named analogously to hexahydrite ($MgSO_4.6H_2O$). The same as allenite and magnesium-chalcanthite (qq.v.).

Perrierite. S. Bonatti and G. Gottardi, 1950. Atti (Rend.) Accad. Naz. Lincei, Cl. Sci. fis. mat. nat., ser. 8, vol. 9, sem. 2, p. 361. Titanosilicate of Yt, Ce, with some Th, Fe, Ca, P_2O_5 (near chevkinite); monoclinic (orthite habit). Found in beach-sand at Nettuno, Roma. Named in memory of the Italian mineralogist Carlo Perrier (1886–1948). [M.A. **11**–310.]

Phosphoscorodite. T. N. Shadlun and Y. S. Nesterova, 1947. Mém. Soc. Russe Min., vol. 66, p. 212 (Фосфоскородит). A white

powdery, optically biaxial mineral midway in composition between scorodite ($FeAsO_4.2H_2O$) and strengite ($FePO_4.2H_2O$). [M.A. **11**–11.]

Pigeonite-augite. E. Tröger, 1951. Neues Jahrb. Min., Monatshefte, 1951, pp. 136, 137 (Pigeonitaugit). A clinopyroxene intermediate between pigeonite and augite. [M.A. **11**–390.]

Platinoiridita. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 5. Variant of platiniridium, applied to Ir-Pt alloys rich in iridium. *See* Iridioplatinita.

Porpecita. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 4. Spanish pronunciation of porpezite. *See* Mendocita.

Potash-bentonite. P. F. Kerr and P. K. Hamilton, Glossary of clay mineral names, New York, 1949, p. 52 (potash bentonite). Syn. of meta-bentonite (C. S. Ross, 1928, 14th List), metabentonite (J. G. Kay, Journ. Geol. Chicago, 1931, vol. 39, p. 361). Compare potash-montmorillonite (14th List).

Pozzuolite. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 7 (pozzuolita). Solfuro arsenicale (Arsenschwefel), $As_2S_3.H_2O$, of E. Monaco 1903, from the solfatara of Pozzuoli, Italy. Not to be confused with pozzolana, pozzuolana, a volcanic tuff used for the manufacture of Roman cement.

Priderite. K. Norrish, 1951. Min. Mag., vol. 29, p. 496. $(K,Ba)_{1\cdot3}(Ti,Fe''')_8O_{16}$, minute red tetragonal crystals, previously mistaken for rutile in leucite-rocks from Kimberley, Western Australia. Related structurally to cryptomelane. Synthetic K-priderite and Ba-priderite (p. 500). Named after Rex Tregilgas Prider, professor of geology in the University of Western Australia.

Promullite. J. E. Comeforo, R. B. Fischer, and W. F. Bradley, 1948. Journ. Amer. Ceramic Soc., vol. 31, p. 259 (pro-mullite). An amorphous stage in the dehydration of kaolin, yielding mullite at a higher temperature. Synonym of metakaolin (10th List). Compare prokaolin (16th List) and promontmorillonite (15th List). [M.A. **11**–452.]

Reitingerite. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 11 (reitingerita). Zirconium oxide, ZrO_2, as nodular radially fibrous masses from Brazil, supposed by E. Hussak and J. Reitinger to be dimorphous with baddeleyite, but later shown to be identical. [Min. Mag. **13**–398, **21**–171.]. Named after J. Reitinger of Munich.

Robinsonite. L. C. Berry, J. J. Fahey, and E. H. Bailey, 1951. Program & Abstracts, Min. Soc. Amer., Nov. 1951, p. 8; Bull. Geol. Soc. Amer., 1951, vol. 62, p. 1423; Amer. Min., 1952, vol. 37, pp. 285, 438.

Still another lead sulphantimonite, $7PbS.6Sb_2S_3$, triclinic, from Nevada, and as artificial crystals. Named after Dr. S. C. Robinson, of the Geological Survey of Canada. [M.A. **10**–457–8 ('mineral X'), **11**–414.]

Rockbridgeite. C. Frondel, 1949. Amer. Min., vol. 34, p. 513. Dana's Mineralogy, 7th edit., 1951, vol. 2, p. 867. A dufrenite-like mineral, $(Fe'', Mn'')Fe'''_4(PO_4)_3(OH)_5$, orthorhombic, isomorphous with frondelite (q.v.). Named from one of the localities, Rockbridge County, Virginia. [M.A. **11**–7, 187.]

Rodita. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 4. Spanish spelling of rhodite. Not the rodite of A. Brezina, 1885, applied to the Roda (Spain) meteorite and a class of meteorites.

Rubiesite. C. Doelter, 1926. Mineralchemie, vol. 4, pt. 1, p. 838 (Rúbiesit). A mineral described in 1920 by S. Piña de Rúbies and evidently regarded by him as a mixture of sulphide, selenide, and telluride of bismuth and antimony. Doelter's only information was from [M.A. **1**–201].

Rumongite. S. Bracewell, 1950. Rep. Geol. Surv. British Guiana, for 1949, pp. 38, 40 ("Rumongite"). Provisional name for a mineral afterwards identified as ilmenorutile, from the Rumong-Rumong river, British Guiana. [M.A. **11**–251.]

Rutosirita. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 5. Contraction in Spanish form of ruthenosmiridium (15th List).

Sabugalite. C. Frondel, 1951. Amer. Min., vol. 36, p. 671. $HAl(UO_2)(PO_4)_2.16H_2O$, pseudo-tetragonal, isostructural with fully hydrated autunite. Crusts of minute platy yellow crystals in pegmatite. Named from the locality, Sabugal, Beira, Portugal. Syn. aluminium-autunite, aluminum-autunite (q.v.). [M.A. **11**–412.]

Sanderite. W. Berdesinski, 1952. Neues Jahrb. Min., Monatshefte, p. 28 (Sanderit). $MgSO_4.2H_2O$, from the hydration of kieserite. Named after Bruno (Hermann Max) Sander (1884–), professor of mineralogy and petrography in the Univerity of Innsbruck. [M.A. **11**–517.]

Scholzite. H. Strunz, 1949. Min. Tab., 2nd edit., p. 164 (Scholzit); Fortschr. Min., 1950, vol. 27 for 1948, p. 31. $Ca_3Zn(OH)_2(PO_4)_2.H_2O$, as colourless monoclinic crystals with blende and triplite in pegmatite from Hagendorf, Bavaria. Named after Dr. Adolf Scholz of Regensburg. [M.A. **11**–189.]

Shandite. P. Ramdohr, 1950. Die Erzmineralien und ihre Verwachsungen, Berlin, p. 820 (Shandit, in locality index only); Sitz.-ber. Akad. Wiss. Berlin, 1950, no. 6 (for 1949); Fortschr. Min. 1950, vol. 28 (for 1949), p. 70. M. A. Peacock and J. McArthur, Amer. Min., 1950, vol. 35, p. 425. Rhombohedral $Ni_3Pb_2S_2$ with X-ray pattern distinct

from parkerite and from the artificial β-phase in the system $Ni_3Bi_2S_2$–$Ni_3Pb_2S_2$. From Trial Harbour, Tasmania. Named after Professor Samuel James Shand (1882–), Scottish petrologist. [M.A. **11**-186, 187, 312, 466.]

Siderogel. H. Strunz, 1941. Min. Tab., p. 111 (Siderogel). Colloidal FeO(OH), in bog-iron-ore.

Silfbergite. Author?, date?. Zeits. Krist., 1924, vol. 60, p. 337 (abstracts, no ref.); Dana's Mineralogy, 7th edit., 1944, vol. 1, p. 702. Presumably the 'Mangan-Magnetit' (MnO 3·80 %) from Vester Silfberg, Sweden, analysed by M. Weibull, 1886. Not the silfbergite of M. Weibull, 1883.

Sinhalite. G. F. Claringbull and M. H. Hey, 1952. Min. Mag., vol. 29, p. 841. Borate $MgAlBO_4$, orthorhombic. Hitherto mistaken for brown gem olivine. Named from Sinhala, the Sanskrit name for Ceylon.

Sodium-autunite. J. G. Fairchild, 1929. Amer. Min., vol. 14, p. 265 (sodium autunite), p. 269 (sodium-autunite). *See* Calcium-autunite, natro-autunite.

Sodium-bentonite. J. W. Jordan, 1949. Min. Mag., vol. 28, p. 598. A highly swelling clay from Wyoming.

Sodium-uranospinite. *See* Hydrogen-uranospinite.

Sollyite. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 7 (sollyita). A fibrous lead sulpharsenite, $Pb_3As_4S_9$, from Binn, Switzerland, near to rathite in composition, but with interfacial angles near to dufrenoysite. Described (Min. Mag., 1919, **18**–360) by, and now named after, Richard Harrison Solly (1851–1925) of Cambridge.

Stibiobismutotantalite. M. C. Bandy, 1951. Rocks and Minerals, vol. 26, p. 521. A variety of stibiotantalite $(Sb(Ta,Nb)O_4)$ containing Bi_2O_3 3·98 %, from Mozambique. [M.A. **11**-477.]

Suomite. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 11 (suomita). Tantalic ochre (tantalochra of A. E. Nordensiöld, 1855) believed to be Ta_2O_5 as a brown coating on crystals of tantalite from Finland = Suomi.

Taaffeite. B. W. Anderson, 1951. Gemmologist, London, vol. 20, p. 76. B. W. Anderson, C. J. Payne, and G. F. Claringbull, Min. Mag., 1951, vol. 29, p. 765. B. W. Anderson, Gemmologist, 1952, vol. 21, p. 23 (pronounced "tarfite"; other names provisionally suggested, "bemagalite" and "berinel", refer to the chemical composition and to the relation to spinel). $BeMgAl_2O_8$, hexagonal. Known only as two small faceted gemstones resembling mauve-coloured spinel. Named after Count Edward Charles Richard Taaffe (1898–) of Dublin, who first detected it. [M.A. **11**-309, 369, 485.]

Tablite. Bull. Soc. Franç. Min. Crist., 1950, vol. 73, p. 151. 'Un antimonioarséniate de cuivre et de cobalt d'un gisement métallifère d'Afrique du Sud'. *See* Allevardite and tabulite.

Tabulite. E. Lemoine, 1950. Bull. Soc. Franç. Min. Crist., vol. 73, p. 146. Alternative name suggested for allevardite (q.v.). Named from the locality, La Table (mountain) in Savoie, near Allevard in Isère.

Tangenite. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 10 (tangenita). A betafite-like mineral containing TiO_2 32·27–35·05 % from Tangen near Kragerø, Norway, described by H. Bjørlykke, 1931 [M.A. **5**–425].

Tellite. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 8 (tellita). A single steel-grey crystal of unknown composition, from Binn, Switzerland, described crystallographically (triclinic?) by G. F. H. Smith (Min. Mag. **19**–40). Named after the Swiss national hero William Tell.

Teluroselenio. F. Pardillo, 1947. Tratado de mineralogía, translation of 12th edit. of F. Klockmann and P. Ramdohr, Barcelona, p. 318; G. Gagarin and J. R. Cuomo, 1949, loc. cit., 1949, p. 6. Spanish form of selen-tellurium. *See* Hondurasite.

Tieilite. G. Yamaguchi, 1944. [Journ. Japanese Ceramic Assoc., vol. 52, p. 6]; Chem. Abstr., 1951, vol. 45, col. 7925. Al_2TiO_5, orthorhombic, isomorphous with pseudobrookite (Fe_2TiO_5); prepared artificially, and present in abrasives. [M.A. **11**–415.]

Tinkalite. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 12 (tinkalita). Synonym of tincal = borax.

Titanelpidite. A. N. Winchell, 1951. Optical mineralogy, pt. 2, 4th edit., p. 455. Variant of titano-elpidite (11th List).

Torreyite. J. Prewitt-Hopkins, 1949. Amer. Min., vol. 34, p. 589. $(Mn,Mg,Zn)_8(SO_4)(OH)_{14}.4H_2O$, monoclinic, from Sterling Hill, New Jersey. Previously named δ-mooreite, but giving an X-ray pattern distinct from that of mooreite (12th List). Named after John Torrey (1796–1873), American botanist, chemist, and mineralogist. Not the torrelite of T. Thomson, 1836, or of J. Renwick, 1824. [M.A. **11**–9.]

Tschirwinskite. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 13 (tschirwinskita). Hydrous ferric phosphate, $Fe_2O_3.P_2O_5.2\frac{1}{2}H_2O$, from Kerch, Crimea, described in 1904 by Petr Nikolaevich Chirvinsky Петр Николаевич Чирвинский (1880–). Not the chirvinskite of N. K. Platonov 1941 (17th List).

Tungsten-powellite. O. H. Ödman, 1950. Årsbok Sveriges Geol. Undersök., vol. 44, no. 2, p. 23. A variety of powellite ($CaMoO_4$) containing WO_3 9·6–14·0 %. [M.A. **11**–473.]

Umanguita. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 15. Variant of umangite to accord with Spanish pronunciation. Named from the locality, Sierra de Umango, La Rioja, Argentina.

Villiersite. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 14 (villiersita). A nickel-bearing silicate (NiO 30·6 %), $(Ni,Mg,Fe,Co)_7Si_8O_{22}(OH)_2$ resembling talc, described by F. C. Partridge from Bon Accord, Transvaal [M.A. **9**–189]. Named after Dr. J. E. de Villiers of the Geological Survey of South Africa, who prepared the posthumous paper for publication.

Wherryite. J. J. Fahey, E. B. Daggett, and S. G. Gordon, 1950. Amer. Min., vol. 35, p. 93. $PbCO_3.2PbSO_4.Pb(Cl,OH)_2.CuO$. Pale green, finely granular, optically biaxial, from Mammoth mine, Arizona. Named after Edgar Theodore Wherry (1885–), professor of plant ecology, University of Pennsylvania. [M.A. **11**–127.]

Whitmanite. J. Murdoch, 1948. Progr. & Abstr. Min. Soc. Amer., 1948, p. 11. A preliminary spectroscopic analysis suggested Mg-Mn titanate. A later chemical analysis (Amer. Min., 1949, vol. 34, p. 835 [M.A. **11**–243]) showed only 0·4 % MnO, identifying the supposed new mineral with geikeilite. Named after the late Alfred Russell Whitman, of the University of California at Los Angeles.

Wilkinite. S. D. Wells, Paper, New York, 1920, vol. 27, no. 14, p. 19 (wilkinite); P. F. Kerr and P. K. Hamilton, Glossary of clay mineral names, New York, 1949, p. 68 (wilkonite). Trade-name for a highly colloidal bentonitic clay ('jelly rock') used in paper making.

Wolfeite. C. Frondel, 1949. Amer. Min., vol. 34, p. 692. $(Fe'',Mn'')_2(PO_4)(OH)$, with Fe > Mn, monoclinic; previously included in triploidite $(Mn'',Fe'')_2(PO_4)(OH)$. Named after Prof. Caleb Wroe Wolfe, of Boston University, Massachusetts, who first noticed the mineral (as triploidite) at North Groton, New Hampshire. [M.A. **11**–9.]

Wretbladite. G. Gagarin and J. R. Cuomo, 1949, loc. cit., p. 5 (wretbladita). The compound AsSb in the system As–Sb. To replace the name stibarsen = allemontite II (P. E. Wretblad, 1941, 16th List) which has been given in Spanish as arsenoestibio (q.v.). Named after P. Erik Wretblad of Fagersta, Sweden.

Yttrium-orthite. J. W. Frondel and M. Fleischer, 1950. U.S. Geol. Surv. Circular 74, p. 10 (yttrium orthite), p. 20 (Yttriumorthite). Synonym of yttro-orthite (13th List).

Yttroalumite. H. S. Yoder and M. L. Keith, 1951. Amer. Min., vol. 36, p. 522. The high-temperature tetragonal modification of $Yt_3Al_2(AlO_4)_3$. *See* Yttrogarnet. [M.A. **11**–364.]

Yttrogarnet. H. S. Yoder and M. L. Keith, 1951. Amer. Min., vol. 36, p. 522. Artificial $3Yt_2O_3.5Al_2O_3 = Yt_3Al_2(AlO_4)_3$ forming a con-

tinuous series of cubic mixed crystals with spessartine ($Mn_3Al_2(SiO_4)_3$). It is presumably present in natural yttrium-bearing spessartine (yttergarnet, ytter-garnet, yttriogarnet, emildine, erinadine). At about 1970° C. it is transformed to yttroalumite (q.v.). [M.A. **11**–364.]

Yttrotungstite. E. H. Beard, 1950. Colonial Geol. & Min. Resources, London, vol. 1, p. 51. To replace the name 'thorotungstite' [11th List] for a Malay mineral which contains rare-earths (Yt, Ce) and no Th. [M.A. **11**–189.]

Zinc-fauserite. L. Tokody, 1949. Földtani Közlöny, Budapest, vol. 79, p. 68 (Cinkfauserit, Hungarian), p. 78 (Zinkfauserint, misprint for Zinkfauserit, German). $(Mn,Zn,Mg)SO_4.5H_2O$, orthorhombic. A variety of fauserite containing ZnO 5·08 %, from Felsőbánya. [M.A. **11**–10.]

Zinc-saponite. C. E. Marshall, 1949. The colloidal chemistry of silicate minerals, p. 62 (zinc saponite). Syn. of sauconite [M.A. **10**–27].

SYSTEMATIC CLASSIFICATION OF NEW MINERALS[1]

Elements

Garibaldite, β-S, II.
Aurostibite, $AuSb_2$, VII.
Allargentum, Ag, Sb, VI.

Sulphides, etc.

Hurlbutite, Zn_4S_4, VI.
Fleischerite, Zn_6S_6, VI.
Buergerite, $Zn_{15}S_{15}$, V.
Eskebornite, (Fe,Cu)Se, VI.
Shandite, $Ni_3Pb_2S_2$, V.
Montesite, $PbSn_4S_5$, III.
Robinsonite, $7PbS.6Sb_2S_3$, I.

Haloids

Hoppingite, HgI_2, VII.
Belyankite, $Ca_3Al_2F_{12}.4H_2O$, II.
Boldyrevite, $NaCaMgAl_3F_{14}.4H_2O$, VII.
Bararite, $(NH_4)_2SiF_6$, VI.
Camermanite, K_2SiF_6, VI.

Oxides (Titanates, Aluminates)

Ferropericlase, VII.
Anosovite, Ti_3O_5, III.
Tieilleite, Al_2TiO_5, III.
Priderite, $(K,Ba)_{1\cdot3}(Ti,Fe''')_8O_{16}$, IV.
Taaffeite, $BeMgAl_2O_8$, VI.
Magnalumoxide, $(Mg,Fe)_5(Al,Fe)_{18}O_{32}$, VII.

Carbonate

Capillitite, $(Mn,Zn,Fe)CO_3$, V.

Nitrate

Ammonia-nitre, $(NH_4)NO_3$, III.

Borate

Sinhalite, $MgAlBO_4$, III.

Sulphates

Miltonite, $CaSO_4.\frac{1}{2}H_2O$, V.
Sanderite, $MgSO_4.2H_2O$.
Leonhardtite, $MgSO_4.4H_2O$.
Allenite (pentahydrite), $MgSO_4.5H_2O$. I.
Kellerite, $(Mg,Cu)SO_4.5H_2O$, I.
Comstockite, $(Mg,Cu,Zn)SO_4.5H_2O$, I.
Matteuccite, $NaHSO_4.H_2O$, II.
Manganleonite $K_2Mn(SO_4)_2.4H_2O$, II.
Metabasaluminite, $Al_4SO_4(OH)_{10}$.
Ktenasite, $3(Cu,Zn)O.SO_3.4H_2O$, II.
Torreyite, $(Mn,Mg,Zn)_8SO_4(OH)_{14}.4H_2O$, II.

[1] Only selected names given in the preceding alphabetical list are here included. Following A. E. H. Tutton (Crystallography, 1911, 1922) the crystal systems are indicated as: I triclinic, II monoclinic, III orthorhombic, IV tetragonal, V trigonal, VI hexagonal, VII cubic.

Wherryite,
$2PbSO_4.PbCO_3.Pb(Cl,OH)_2.CuO$.
Meta-uranopilite,
$(UO_2)_6(SO_4)(OH)_{10}.5H_2O$.

TUNGSTATE

Yttrotungstite.

PHOSPHATES, ETC.

Hurlbutite, $CaBe_2(PO_4)_2$, III.
Hühnerkobelite,
$(Na_2,Ca)(Fe'',Mn'')_2(PO_4)_2$, III.
Magniophilite, $(Mn,Fe,Mg)_3(PO_4)_2$.
Phosphoscorodite, $Fe(As,P)O_4.2H_2O$, III.
Mangankoninckite, $(Fe,Mn)PO_4.3H_2O$.
Wolfeite, $(Fe'',Mn'')_2PO_4(OH)$, II.
Frondelite, $(Mn'',Fe'')Fe'''_4(PO_4)_3(OH)_5$, III.
Rockbridgeite,
$(Fe'',Mn'')Fe'''_4(PO_4)_3(OH)_5$, III.
Laubmannite,
$(Fe'',Mn'',Ca)_3Fe'''_6(PO_4)_4(OH)_{12}$, III?
Kryzhanovskite,
$MnFe'''_2(PO_4)_2(OH)_2.H_2O$, II.
Iron-lazulite, $(Fe'',Fe''')_7(PO_4)_4(OH)_4$, IV.
Scholzite, $Ca_3Zn(OH)_2(PO_4)_2.H_2O$, II.
Cobalt-cabrerite,
$(Co,Mg)_3(AsO_4)_2.8H_2O$, II.
Nickel-cabrerite,
$(Ni,Mg)_3(AsO_4)_2.8H_2O$, II.
Sabugalite, $HAl(UO_2)(PO_4)_2.16H_2O$, IV.
Nováčekite, $Mg(UO_2)(AsO_4)_2.9H_2O$, IV.
Metazeunerite, $Cu(UO_2)(AsO_4)_2.8H_2O$, IV.
Metasaléeite, $Mg(UO_2)PO_4.8H_2O$, IV.

VANADATES

Hummerite, hyd. Mg, I.
Montroseite,
$2FeO.V_2O_3.7V_2O_4.4H_2O$, III.

ANTIMONATE

Byströmite, $MgSb_2(O,OH)_6$, IV.

TITANATES (with Nb, &c.)

Kobeite, $(Yt,Fe,U)(Ti,Nb,Ta)_2(O.OH)_6$.
Belyankinite, $2CaO.12TiO_2.\frac{1}{2}Nb_2O_5.ZrO_2.SiO_2.28H_2O$.

SILICATES

Huttonite, $ThSiO_4$, II.
Dalyite, $K_2ZrSi_6O_{15}$, I.
Iron-åkermanite, $2CaO.FeO.2SiO_2$, IV.
Hanléite, $Mg_3Cr_2(SiO_4)_3$, VII.
Yttrogarnet, $Yt_3Al_2(AlO_4)_3$, VII.
Miserite, $KCa_4Si_5O_{13}(OH)_3$, III?
Ferrocarpholite, $H_4FeAl_2Si_2O_{10}$, III.
Gunnbjarnite, $3(Mg,Ca,Fe)O.(Fe,Al)_2O_3.6SiO_2.3H_2O$, III.
Lombaardite,
$Ca_{10}(Fe,Mg)_5(Al,Fe)_{27}Si_{18}O_{89}(OH)_5$, II.
Perrierite, Si, Ti, Yt, Ce, &c., II.

HYDROCARBON

Fringelite.