Thirteenth list of new mineral names.[1]

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Alkanasul. J. Westman, 1931. Bol. Minero Soc. Nac. Mineria, Santiago de Chile, vol. 43 (año 47), p. 433; Zeits. Prakt. Geol., 1932, vol. 40, p. 110. Hydrous basic sulphate of aluminium, potassium, and sodium, $K_2SO_4.Na_2SO_4.2Al_2(SO_4)_3.6Al(OH)_3.6H_2O$, yellowish-white to bluish-grey, massive, occurring in large amount near Salamanca, Chile. Named from the chemical composition. [Evidently identical with natroalunite.] [M.A. **5**–200.]

Alleghanyite. C. S. Ross and P. F. Kerr, 1932. Amer. Min., vol. 17, p. 7. Manganese silicate, $5MnO.2SiO_2$, as pink orthorhombic grains, considered to be distinct from tephroite [$2MnO.SiO_2$]. Named from the locality, Alleghany County, North Carolina. [M.A. **5**–50.]

Alumo-chalcosiderite. A. Jahn and E. Gruner, 1933. Mitt. Vogtländ. Gesell. Naturfor., vol. 1, no. 8, p. 19 (Alumo-Chalkosiderit). A variety of chalcosiderite containing some alumina (Al_2O_3 10·45 %) replacing ferric oxide. [M.A. **5**–391.]

Amarillite. H. Ungemach, 1933. Compt. Rend. Acad. Sci. Paris, vol. 197, p. 1133; Bull. Soc. Franç. Min., [1934], vol. 56 (for 1933), p. 303. Hydrated sulphate of sodium and ferric iron $NaFe(SO_4)_2.6H_2O$, as yellow monoclinic crystals from Tierra Amarilla, Chile. Named from the locality. [M.A. **5**–390.]

[1] Previous lists of this series have been given every three years at the ends of vols. 11–22 (1897–1931) of this Magazine. The 1,506 names in the first ten lists are included in one alphabetical arrangement in the General Index (1926) to vols. 11–20 (1895–1925). References to 'Mineralogical Abstracts' are given in the form [M.A. 5–200].

'A compilation of gem names' by Gilbert Hart (Rocks and Minerals, Peekskill, New York, 1927–31, vols. 2–6) is an extension of the earlier list of W. T. Schaller (1918; 8th List) and contains many trivial, local, and trade names which are not included in the present lists.

Anhydrokaolin. R. Schwarz and G. Trageser, 1932. Chemie der Erde, vol. 7, p. 583 (Anhydrokaolin). Artificially dehydrated kaolin which passes with change in volume to metakaolin (10th List). [M.A. **5**–361.]

Antiglaucophane. W. N. Lodochnikov, 1933. Problems of Soviet Geology, vol. 2, p. 132 (антиглаукофан), p. 148 (antiglaucophane). Like glaucophane but differing (*ἀντι-*) somewhat in its optical characters. Compare Pseudoglaucophane (11th List).

Antimonpyrochlore. F. Machatschki, 1932. Chemie der Erde, vol. 7, pp. 67, 75 (Antimonpyrochlor). The pyrochlore-romeite group of minerals with the same type of cubic structure and the general formula $X_2Z_2(O,OH,F)_7$, where X = Na, Ca, Ce, &c., and Z = Nb, Ta, Ti, Sb, includes the chemical varieties niobpyrochlore (pyrochlore proper), tantalpyrochlore (microlite), niobtantalpyrochlore (neotantalite), antimonpyrochlore (romeite, atopite, schneebergite, weslienite), Bleiantimonpyrochlor (monimolite ?), titanantimonpyrochlore (mauzeliite, lewisite), and a hypothetical titanpyrochlore. [M.A. **5**–185.]

Ardealite. J. Schadler, 1931. *In* F. Halla, Zeits. Krist., vol. 80, p. 349; J. Schadler, Centr. Min., Abt. A, 1932, p. 40 (Ardealit). Hydrated double salt of calcium sulphate and acid phosphate, $CaHPO_4.CaSO_4.4H_2O$, isomorphous with brushite ($CaHPO_4.2H_2O$) and gypsum ($CaSO_4.2H_2O$), but not a mechanical mixture of these minerals; occurring in phosphate deposits in a cave in Transylvania, the old Romanian name for which is Ardeal. Named from the locality. [M.A. **5**–49.]

Ashcroftine. M. H. Hey and F. A. Bannister, 1932. Nature, London, vol. 130, p. 858. Min. Mag., 1933, vol. 23, p. 305. A zeolite of the composition $NaKCaAl_4Si_5O_{18}.8H_2O$, previously described as kalithomsonite (10th List), but shown to be tetragonal and to have no relation to thomsonite. From Greenland. Named after Mr. Fredrick Noel Ashcroft, of London.

Ashtonite. E. Poitevin, 1932. Amer. Min., vol. 17, p. 120. A zeolite related to ptilolite, but with 2RO instead of 1RO, the formula being $2(Ca,Na_2)O.Al_2O_3.9SiO_2.5H_2O$. As radiating masses from British Columbia. Named after the Honourable Wesley Ashton Gordon, Minister of Mines for Canada. [M.A. **5**–50.]

Balkhashite. S. V. Kumpan, Bull. Geol. Prosp. Service U.S.S.R., 1931, vol. 50, no. 7, p. 95 (балхашит), p. 100 (balkhashite). G. L. Stadnikov and Z. Vosdshinskaya, Brennstoff-Chemie, 1930, vol. 11, p. 414; G. L. Stadnikov, ibid., 1933, vol. 14, p. 227 (Balchaschit). A rubbery bitumen (elaterite) similar to coorongite formed by algae in lake Balkhash (Балхаш), Siberia.

Barium-anorthite. S. R. Nockolds and E. G. Zies, 1933. Min. Mag., vol. 23, p. 454 (barium anorthite). A plagioclase felspar containing BaO 5·5 %, from Broken Hill, New South Wales.

Barium-muscovite. L. H. Bauer and H. Berman, 1933. Amer. Min., vol. 18, p. 30. A variety of muscovite containing barium (BaO 9·89 %). Synonym of oellacherite (J. D. Dana, 1867). [M.A. **5**–284.]

Börzsönyite. F. Papp, 1933. Földtani Közlöny, Budapest, vol. 62 (for 1932), p. 61 (Börzsönyit). Suggested as an alternative for the names wehrlite (J. J. N. Huot, 1841) and pilsenite (A. Kenngott, 1853) for an incompletely determined bismuth telluride [probably identical with tetradymite] from Börzsöny = Deutsch-Pilsen, comitat Hont, Hungary; because the name wehrlite (F. Kobell, 1838) is also applied to a peridotite rock [earlier thought to be the mineral ilvaite], and the German name Deutsch-Pilsen for the locality is now not recognized in Hungary.

Boydite. (W. F. Foshag, Amer. Min., 1931, vol. 16, p. 338.) Local name for a borate mineral in California, since identified as probertite (12th List). [M.A. **5**–52.]

Braggite. F. A. Bannister, 1932. Min. Mag., vol. 23, p. 198. Sulphide of platinum, palladium, and nickel, (Pt,Pd,Ni)S, tetragonal, as minute grains in the concentrates of the Bushveld norite, Transvaal. Named after Sir William Henry Bragg and Professor William Lawrence Bragg, as being the first new mineral to be discovered by X-ray methods.

Brickerite. Barrande-Hesse, 1932. *In* F. Ahlfeld, Neues Jahrb. Min., Abt. A, 1932, Beil.-Bd. 66, pp. 42, 44 (Brickerit). Arsenate of zinc and calcium as white radially fibrous crusts from Bolivia. [M.A. **5**–200.]

Bultfonteinite. J. Parry, A. F. Williams, and F. E. Wright, 1932. Min. Mag., vol. 23, p. 145. Hydrous calcium silicate and

fluoride, $2Ca(OH,F)_2.SiO_2$ or $2Ca(OH)_2.2SiO_2.Ca(OH)_2.CaF_2$. Pink spherules of radiating triclinic needles from the Bultfontein diamond mine, Kimberley, South Africa. Named from the locality. *See* Dutoitspanite.

Caesium-biotite. F. L. Hess and J. J. Fahey, 1932. Amer. Min., vol. 17, p. 173 (Caesium biotite). A variety of biotite from South Dakota containing Cs_2O 3·14 %. [M.A. **5**–192.]

Chrome-beidellite. D. P. Serdyuchenko, 1933. Zap. Ross. Min. Obshch. (Mém. Soc. Russe Min.), ser. 2, vol. 62, p. 380 (хромовый байделит), p. 391 (chrome-beidellite). A variety of beidellite containing chromium (Cr_2O_3 5·02 %) and grading to wolchonskoite (volkonskoite), $(Cr,Fe^{III},Al)_2O_3.3SiO_2.nH_2O$; from northern Caucasus. [M.A. **5**–486.]

Chrome-nontronite. D. P. Serdyuchenko, 1933. Zap. Ross. Min. Obshch. (Mém. Soc. Russe Min.), ser. 2, vol. 62, p. 376 (хромовый нонтронит), p. 390 (chrome-nontronite). A variety of nontronite (chloropal) containing chromium and grading to wolchonskoite (volkonskoite), $(Cr,Fe^{III},Al)_2O_3.3SiO_2.nH_2O$. [M.A. **5**–486.]

Chromojadeite. A. Lacroix, 1930. Bull. Soc. Franç. Min., vol. 53, p. 226 (Chromojadéite). Synonym of tawmawite (A. W. G. Bleeck, 1907; 5th List) for a chromiferous jadeite from Tawmaw, Burma. [M.A. **5**–71.]

Clinoguarinite. G. Cesàro, 1932. Mém. (8°) Acad. Roy. Belgique, Cl. Sci., vol. 12, fasc. 3, p. 18. The optical orientation of guarinite points to two varieties, orthorhombic and monoclinic, which are termed orthoguarinite and clinoguarinite respectively. They occur intergrown in the same crystal and the former is no doubt a minutely twinned form of the latter, as in orthoclase and microcline. [M.A. **5**–426.]

Colusite. A name used locally for tin-bearing ores at Butte, Montana. At first thought to be a stanniferous tennantite (H. Schneiderhöhn and P. Ramdohr, Lehrbuch der Erzmikroskopie, 1931, vol. 2, p. 433. R. E. Landon, Amer. Min., 1932, vol. 17, p. 575; 1933, vol. 18, p. 114), but later described (R. E. Landon and A. H. Mogilnor, Amer. Min., 1933, vol. 18, p. 528. W. H. Zachariasen, ibid., p. 534) as a mineral of the zinc-blende group with the

composition $(Cu,Fe,Mo,Sn,Zn)_4(S,As,Te,Sb)_{3-4}$. Named from the Colusa claim, which was one of the earliest in the Butte district. [M.A. **5**–388.]

Corvusite. E. P. Henderson and F. L. Hess, 1933. Amer. Min., vol. 18, p. 199. Hydrated vanadic pentoxide and dioxide, $V_2O_4.6V_2O_5.xH_2O$, as bluish-black compact material in sandstone from Utah. Named on account of the colour from the Latin corvus, a raven. [M.A. **5**–293.]

Cuprosklodowskite. H. Buttgenbach, 1933. Ann. Soc. Géol. Belgique, vol. 56, Bull. p. B 331 (cuprosklodovskite). Hydrous silicate and uranate of copper as yellowish-green orthorhombic needles with the characters of sklodowskite [$MgO.2UO_3.2SiO_2.7H_2O$; 10th List] but with CuO in place of MgO; from Katanga, Belgian Congo. [M.A. **5**–389.]

Devitrite. G. W. Morey and N. L. Bowen, 1931. The Glass Industry, New York, vol. 12, p. 133; Journ. Soc. Glass Technology, Sheffield, 1931, vol. 15, abstracts p. A 133. Orthorhombic $Na_2O.3CaO.6SiO_2$, common in devitrified commercial glasses. Perhaps the same as reaumerite (6th List). [M.A. **3**–167.]

Duparcite. S. E. Nicolet, 1932. Schweiz. Min. Petr. Mitt., vol. 12, p. 543 (Duparcite). E. Brandenberger, ibid., p. 545 (Duparcit). Radiating groups of long prisms in hornstone from Morocco with characters very near those of idocrase and genevite (11th List). Named after Professor Louis Duparc (1866–1932), of Genève. [M.A. **5**–292.]

Dutoitspanite. A. F. Williams, 1932. The genesis of the diamond, London, vol. 1, pp. 171, 172. Synonym of bultfonteinite (q.v.). Named from the Dutoitspan diamond mine, Kimberley, South Africa, one of the localities of the mineral. [M.A. **5**–97.]

Eicotourmaline. W. N. Lodochnikov, 1933. Problems of Soviet Geology, vol. 2, p. 132 (эйкотурмалин), p. 148 (eicotourmaline). Like (εἰκός) tourmaline, but optically biaxial and containing no boron.

Enalite. K. Kimura and Y. Miyake, 1932. Journ. Chem. Soc. Japan, vol. 53, p. 93 (Japanese; English title on wrapper); abstract

in Amer. Min., 1933, vol. 18, p. 223. Hydrous silicate of thorium and uranium, $(Th,U)O_2.nSiO_2.2H_2O$, tetragonal, a variety of uranothorite, as orange-yellow grains with monazite in sands in the Ena district, Gifu prefecture, Japan. Named from the locality. [M.A. **5**–293.]

Esaidrite. (C. Andreatta, Atti (Rend.) R. Accad. Sci. Lincei, Roma, 1932, ser. 6, vol. 16, p. 62.) Italian form of Hexahydrite ($MgSO_4.6H_2O$, of R. A. A. Johnston, 1911; 6th List).

Feranthophyllite. A. N. Winchell, 1933. Optical mineralogy, part 2, 3rd edit., p. 241. A contraction of Ferroanthophyllite (9th List).

Ferroamesite. G. L. Dschang, 1931. Chem. Erde, vol. 6, p. 427 (Ferroamesit). A hypothetical molecule $H_4Fe_2Al_2SiO_9$ (corresponding with amesite $H_4Mg_2Al_2SiO_9$) to explain the composition of the chlorites. [M.A. **5**–39.]

Ferrotremolite. A. N. Winchell, 1932. Amer. Min., vol. 17, pp. 114, 472; Optical mineralogy, part 2, 3rd edit., 1933, p. 245. The end-member $H_2Ca_2Fe_5Si_8O_{24}$ of the tremolite-actinolite series, actinolite being really an intermediate member. [M.A. **5**–216.]

Ferruccite. G. Carobbi, 1933. Periodico Min. Roma, vol. 4, p. 410. Sodium fluoborate, $NaBF_4$, occurring as minute orthorhombic crystals in mixed fumarolic sublimations on Vesuvius. Named after Prof. Ferruccio Zambonini (1880–1932), of Napoli. [M.A. **5**–390.]

Galaxite. C. S. Ross and P. F. Kerr, 1932. Amer. Min., vol. 17, p. 15. Manganese aluminate, $MnAl_2O_4$, belonging to the spinel group, as black grains in manganese-ore from North Carolina. Named from the neighbouring town of Galax in Virginia, which itself is named from the local plant galax, milk-wort. Compare galactite; scarcely an appropriate name for a black mineral. [M.A. **5**–51.]

Ginorite. G. D'Achiardi, 1934. Periodico Min. Roma, vol. 5, p. 22 (ginorite). Hydrous borate of calcium, $H_{12}Ca_4B_{14}O_{29}.2H_2O$, as a compact white mass of minute monoclinic crystals from Tuscany. Named after Prince Piero Ginori Conti, of Firenze (Florence). [M.A. **5**–484.]

Girnarite. K. K. Mathur and A. G. Jhingran, 1931. Quart. Journ. Geol. Mining Metall. Soc. India, vol. 3, p. 100. An amphibole of the hastingsite group in nepheline-syenite at Mount Girnar, Kathiawar, India. Named from the locality. [M.A. **5**–391.]

Glaucocerinite. E. Dittler and R. Koechlin, 1932. Centr. Min., Abt. A, 1932, p. 13 (Glaukokerinit). A hydrous ultra-basic sulphate of zinc, aluminium, and copper, $Zn_{13}Al_8Cu_7(SO_4)_2O_{30}.34H_2O$, as sky-blue warty masses of soft waxy material, from Laurion, Greece. Named from γλαυκός, blue, and κήρινος, waxy. [M.A. **5**–49.]

Graebeite. A. Treibs and H. Steinmetz, 1933. Liebigs Ann. Chem., vol. 506, p. 171 (Graebeït). Brick-red smears in crevices in shale from a coal mine in Saxony, possessing dyeing properties, and identified as a mixture (graebeite a and graebeite b) of polyhydroxy-anthraquinones. Named after Carl Graebe (1841–1927), formerly Professor of Chemistry at Genève, who did much work on the anthracene series. [Cf. Hoelite, 10th List.] [M.A. **5**–391.]

Gränzerite. [J. E. Hibsch, MS.] R. Koechlin, Min. Taschenbuch Wiener Min. Gesell., 2nd edit., 1928, p. 27; Centr. Min., Abt. A, 1933, p. 203. J. E. Hibsch, Min. Böhm. Mittelgeb., 1934, p. 109. Synonym of sanidine. A druse mineral in basalt from Eulenberg, Bohemia. Named after Dr. Josef Gränzer, of Reichenberg, Bohemia. [M.A. **5**–296, 482.]

Gumucionite. R. Herzenberg, 1932. Revista Minera, Soc. Argentina Mineria y Geol., vol. 4, p. 65 (gumucionita); Centr. Min., Abt. A, 1933, p. 77 (Gumucionit). A raspberry-red botryoidal variety of blende containing some arsenic (As 0·64 %) from Bolivia. Named after the mining engineer Julio F. Gumucio, by whom it was found. [M.A. **5**–199, **5**–295.]

Harbortite. F. Brandt, 1932. Chemie der Erde, vol. 7, p. 392 (Harbortit). Hydrous aluminium (and iron) phosphate, $6Al_2O_3.4P_2O_5.17H_2O$, as white to brown spherulites in phosphatized laterite from Brazil. Named after Prof. Erich Harbort (1879–1929), of Berlin-Charlottenburg. [M.A. **5**–201.]

Huanite. *See* Juanite.

Hydrocalumite. C. E. Tilley, 1934. Min. Mag., 1934, vol. 23, p. 607. Hydrous calcium aluminate, $4CaO.Al_2O_3.12H_2O$, monoclinic,

in a chalk-dolerite contact-rock at Scawt Hill, Co. Antrim. Named from the chemical composition.

Hydroromeite. G. Natta and M. Baccaredda, 1933. Zeits. Krist., vol. 85, pp. 271, 273 (Idroromeite), p. 295 (Hydroromeit). Calcium-bearing antimony-ochres, $CaO.Sb_2O_5.3H_2O$ and $3CaO.2Sb_2O_5 8H_2O$, from Spain, shown by X-ray analysis to have the same cubic structure as romeite ($2CaO.Sb_2O_5$). [M.A. **5**-294.]

Idroromeite. *See* Hydroromeite.

Igalikite. O. B. Bøggild, 1933. Meddelelser om Grønland, vol. 92, no. 9. Approximate composition $NaKAl_4Si_4O_{15}.2H_2O$, as a polysynthetic aggregate of minute scales. From near Igaliko, south Greenland. Named from the locality. [M.A. **5**-484.]

Iso-orthoclase, Isorthoclase. T. F. W. Barth, Amer. Min., 1933, vol. 18, p. 478 (iso-orthoclase); A. N. Winchell, Elements of optical mineralogy, part 2, 2nd edit., 1927, p. 322 (Isorthoclase). Variants of the French Isorthose (L. Duparc, 1904; 4th List). [M.A. **5**-438.]

Jäneckeite. L. T. Brownmiller and R. H. Bogue, Amer. Journ. Sci., 1930, ser. 5, vol. 20, p. 251 (Janeckite). F. Krauss and G. Jörns, Zement, Charlottenburg, 1931, vol. 20, p. 341 (Jäneckeit). O. F. Honus, Chimie et Industrie, Paris, 1931, vol. 26, p. 1011 (Jaeneckéite). $8CaO.Al_2O_3.2SiO_2$, as a constituent of Portland cement clinkers. Named after E. Jänecke, who first distinguished it from alite (2nd List). [M.A. **4**-366.]

Janite. S. J. Thugutt, 1933. Arch. Min. Soc. Sci. Varsovie, vol. 9, p. 93 (janicie), p. 97 (janite). Hydrated silicate of Fe_2O_3,Al,Mg,Ca, &c., related to chloropal or celadonite, occurring in an altered glassy basalt from the Janowa valley, Volhynia, Poland. Named from the locality. [M.A. **5**-485.]

Jarlite. R. Bøgvad, 1933. Meddelelser om Grønland, vol. 92, no. 8, p. 3 (Jarlite). A fluoride, $NaSr_3Al_3F_{16}$, as small colourless monoclinic crystals, from the Greenland cryolite quarry. Named after Mr. C. F. Jarl, of Øresunds Chemiske Fabriker. *See* Metajarlite. [M.A. **5**-387.]

Johannsenite. W. T. Schaller, 1932. Amer. Min., vol. 17, p. 575; 1933, vol. 18, p. 113. N. L. Bowen, J. F. Schairer, and

E. Posnjak, Amer. Journ. Sci., 1933, ser. 5, vol. 26, p. 274. A monoclinic pyroxene $MnCaSi_2O_6$, isomorphous with diopside and dimorphous with bustamite. Named after Prof. Albert Johannsen, of Chicago.

Juanite. E. S. Larsen and E. A. Goranson, 1932. Amer. Min., vol. 17, pp. 343, 349, 354 (juanite, pronounced huanite). $10CaO.4MgO.Al_2O_3.11SiO_2.4H_2O$, white fibrous sheaves, perhaps orthorhombic, occurring as an alteration product of melilite. Named after the San Juan Mountains, Colorado. [M.A. **5**–146.]

Kiscellite. L. Zechmeister, G. Tóth, and A. Koch, 1934. Centr. Min., Abt. A, 1934, p. 60 (Kiscellit). A brown amber-like resin containing sulphur in place of oxygen, from the Kisczelli tályag (Hung.) = Kleinzeller Tegel (Germ.) beds of Oligocene age at Budapest. Named from the geological horizon, which is named from the locality Kis-Czell near Budapest. [M.A. **5**–485.]

Knollite. [A. Pelikan, MS.] R. Koechlin, Centr. Min., Abt. A, 1933, p. 204. Synonym of zeophyllite. Named after Mr. — Knoll. [M.A. **5**. 296.]

Kolbeckine. R. Herzenberg, 1932. Revista Minera, Soc. Argentina Mineria y Geol., vol. 4, p. 33 (Kolbeckina); Centr. Min., Abt. A, 1932, p. 354 (Kolbeckin). Tin sulphide, Sn_2S_3, as minute black scales from Bolivia. Evidently named after Prof. Friedrich Kolbeck, of the Mining Academy, Freiberg, Saxony. [Not the kolbeckite of F. Edelmann, 1926; 11th List.] [M.A. **5**–199.]

Lapparentite. H. Ungemach, 1933. Compt. Rend. Acad. Sci. Paris, vol. 197, p. 1133; Bull. Soc. Franç. Min., [1934], vol. 56 (for 1933), p. 303. Hydrated basic sulphate of aluminium, $Al_2O_3.2SO_3.10H_2O$, as monoclinic crystals resembling gypsum in appearance. From Chile. Named after Albert Auguste de Lapparent (1839–1908), of Paris. [M.A. **5**–390.]

Legrandite. J. Drugman and M. H. Hey, 1932. Min. Mag., vol. 23, p. 175. Hydrous zinc arsenate, approximating to $Zn_3As_2O_8.3H_2O$, but more exactly $Zn_{14}(AsO_4)_9OH.12H_2O$. Bundles of yellow acicular monoclinic crystals with blende from Mexico. Named after the late Mr. — Legrand, a Belgian mining engineer.

Letovicite. J. Sekanina, 1932. Zeits. Krist., vol. 83, p. 117 (Letovicit). Triammonium sulphate $H(NH_4)_3(SO_4)_2$ as pseudo-hexagonal scales from the decomposition of pyrite in coal at Letovice, Moravia. Named from the locality. [M.A. **5**–145.]

Leucoglaucite. H. Ungemach, 1933. Compt. Rend. Acad. Sci. Paris, vol. 197, p. 1134; Bull. Soc. Franç. Min., [1934], vol. 56 (for 1933), p. 303. Hydrated ferric sulphate, $Fe_2O_3.4SO_3,5H_2O$, as pale greenish-blue hexagonal crystals, from Chile. Named from the colour, λευκός, white, and γλαυκός, greenish-blue. [M.A. **5**–390.]

Leucophosphite. E. S. Simpson, 1932. Journ. Roy. Soc. W. Australia, vol. 18, p. 71. Hydrous phosphate of potassium, iron, and aluminium, perhaps $K_2(Fe,Al)_7(OH)_{11}(PO_4)_4.6H_2O$, as white chalky masses from Western Australia. Named from λευκός, white, and φωσφόρος. [M.A. **5**–148.]

Lusakite. A. C. Skerl and F. A. Bannister, 1934. Min. Mag., vol. 23, p. 598. Silicate of aluminium, cobalt (CoO 8·48 %), iron, magnesium, and nickel, $H_2O.4R^{II}O.9(Al,Fe)_2O_3.8SiO_2$, as deep-blue orthorhombic crystals, from near Lusaka, Northern Rhodesia. A cobaltiferous variety of staurolite. Named after the locality, the new capital of Northern Rhodesia.

Madisonite. R. S. McCaffery and J. F. Oesterle, 1924. Year Book Amer. Iron & Steel Inst., 1924, p. 286. $2CaO.2MgO.Al_2O_3.3SiO_2$(?) as a constituent of iron blast furnace slags. Evidently named after Madison, Wisconsin, where the authors are professors of metallurgy.

Maganthophyllite. A. N. Winchell, 1933. Optical mineralogy, part 2, 3rd edit., p. 241. A contraction of Magnesioanthophyllite (9th List).

Magnesiosussexite. J. W. Gruner, 1932. Amer. Min., vol. 17, p. 509. Hydrous borate of magnesium and manganese, $2(Mg,Mn)O.B_2O_3.H_2O$, intermediate between camsellite and sussexite, as fibrous veinlets in iron ore from Michigan. [Sussexite also contains a large proportion of magnesia, and camsellite still more.] [M.A. **5**–201.]

Mangano-anthophyllite. C. S. Ross and P. F. Kerr, 1932. Amer. Min., vol. 17, pp. 4, 17. A variety of anthophyllite occurring as a pink alteration product of rhodonite. [M.A. **5**–51.]

Mangan-muscovite. P. Eskola, 1914. Bull. Comm. Géol. Finlande, vol. 8, no. 40, p. 37 (manganese-muscovite). A compact, fine scaly, manganiferous (MnO 2·30 %) variety of muscovite of a deep violet colour, from Kimito, Finland. Bull. Soc. Franç. Min., 1933, vol. 56, p. 188 (Manganmuscovite).

Melosark. [A. Breithaupt, 1841, MS.] R. Koechlin, Min. Taschenbuch Wiener Min. Gesell., 2nd edit., 1928, p. 41; Centr. Min., Abt. A, 1933, p. 203 (Melosark). Synonym of melopsite. Named from *μῆλον*, apple, and *σάρξ*, flesh (*ὄψον*, meat). [M.A. **5**–296.]

Metacalciowardite. H. G. Clinton, 1929. Amer. Min., vol. 14, pp. 435, 436. An undescribed mineral, presumably a calciferous variety of wardite (1st List), occurring with other aluminium phosphates at Manhattan, Nevada. [M.A. **4**–296.]

Meta-chamosite. H. Jung, 1932. Chem. Erde, vol. 7, p. 598 (Meta-Chamosit). Artificially dehydrated chamosite. [M.A. **5**–284.]

Meta-jarlite. R. Bøgvad, 1933. Meddelelser om Grønland, vol. 92, no. 8, p. 7 (Meta-Jarlite). A fluoride, $NaSr_3Al_3F_{16}$, as small grey crystals enclosed in chiolite, from the Greenland cryolite quarry. Supposed to differ from jarlite (q.v.) in its optical characters. [M.A. **5**–388.]

Meta-thuringite. H. Jung, 1932. Chem. Erde, vol. 7, p. 596 (Meta-Thuringit). Artificially dehydrated thuringite. [M.A. **5**–284.]

Microantigorite. W. N. Lodochnikov, 1933. Problems of Soviet Geology, vol. 2, p. 121 (микроантигорит), p. 145 (microantigorite). A minutely crystalline antigorite.

Minyulite. E. S. Simpson and C. R. LeMesurier, 1933. Journ. Roy. Soc. Western Australia, vol. 19, p. 13. Hydrated basic phosphate of aluminium and potassium, $KAl_2(OH,F)(PO_4)_2.3\frac{1}{2}H_2O$, as radiating groups of white orthorhombic fibres, from Minyulo Well, Dandaragan, Western Australia. Named from the locality. [M.A. **5**–293.]

Mohavite. W. T. Schaller, 1928. Amer. Min., vol. 13, p. 453. Synonym of tincalconite (C. U. Shephard, 1878) or 'octahedral borax', rhombohedral $Na_2B_4O_7.5H_2O$. Named from the Mohave desert, California. [M.A. **4**–246.]

Mourmanite. French spelling of Murmanite (10th List). [M.A. **5**–198.]

Naujakasite. O. B. Bøggild, 1933. Meddelelser om Grønland. vol. 92, no. 9. Approximate composition $HNa_3Al_2Si_4O_{13}$, as micaceous scales, from Naujakasik, south Greenland. Named from the locality. [M.A. **5**–484.]

Nephritoid. G. P. Barsanov, 1933. Trav. Inst. Lomonossoff, Acad. Sci. Leningrad, no. 2, p. 5 (нефритоид, nephritoïde). A variety of serpentine similar to bowenite [Not the nephritoid of J. Fromme, 1909; 5th List.]

Neuquenite. A. W. Allen, 1932. Engin. & Mining Journ. New York, vol. 133, p. 566. A variety of asphalt from Neuquen Territory, Argentina, differing from rafaelite [11th List]. Named from the locality.

Orthoguarinite. G. Cesàro, 1932. *See* Clinoguarinite.

Oxoferrite. R. Schenck and T. Dingmann, 1927. Zeits. Anorg. Chem., vol. 166, p. 140 (Oxoferrit). Metallic iron with some FeO in solid solution.

Oxyhornblende. A. N. Winchell, 1932. Amer. Min., vol. 17, pp. 114, 472; Optical mineralogy, part 2, 3rd edit., 1933, p. 252. 'Basaltic hornblende' in which the ferrous oxide has been oxidized to ferric. [M.A. **5**–216.]

Paracoquimbite. H. Ungemach, 1933. Compt. Rend. Acad. Sci. Paris, vol. 197, p. 1133; Bull. Soc. Franç. Min., [1934], vol. 56 (for 1933), p. 303. Violet rhombohedral crystals dimorphous with the hexagonal coquimbite, $Fe_2(SO_4)_3.9H_2O$, the two often grown in parallel position. From Chile. [M.A. **5**–390.]

Parryite. A. F. Williams, 1932. The genesis of the diamond, London, vol. 1, p. 172. An undescribed hydrous calcium silicate from the diamond mines at Kimberley, South Africa. Named after John Parry (1863–1931), chemist to the De Beers Consolidated Mines at Kimberley. [M.A. **5**–97.]

Phosphoro-orthite. F. Machatschki, 1931. Centr. Min., Abt. A, 1930, p. 347 (Phosphoroorthit, Phosphorerdenepidot). A variety of orthite in which some phosphorus takes the place of silicon. Synonym of nagatelite (12th List). [M.A. **5**–52.]

Porcelainite. A. L. Roussin, 1932. *In* W. H. Taylor, Journ. Soc. Glass Techn. Sheffield, 1932, vol. 16, p. 118. Later replaced by Porzite (q.v.). Porcelainite has long been used as a trade-name for certain kinds of white stoneware. Not the porcellanite (= porcelain-jasper) of J. T. A. Peithner, 1794.

Portlandite. C. E. Tilley, 1933. Min. Mag., vol. 23, p. 419. Calcium hydroxide, $Ca(OH)_2$, as hexagonal plates in a chalk-dolerite contact-rock at Scawt Hill, Co. Antrim. So named because crystals of this substance had been earlier observed in Portland cement. (Portland cement was named in 1824 because of its resemblance in colour to the oolitic limestone—Portland stone—from the Isle of Portland in Dorsetshire.)

Porzite. A. J. Bradley and A. L. Roussin, 1932. Trans. Ceramic Soc. Stoke-on-Trent, vol. 31, p. 426. A fibrous constituent of porcelain, belonging to the fibrolite-mullite series. The X-ray pattern shows a closer relation to that of 'pink mullite' than to that of 'grey mullite'. E. Posnjak and J. W. Greig (Journ. Amer. Ceramic Soc., 1933, vol. 16, p. 579) suggest it is identical with mullite. [M.A. **5**-323, 473.]

Potash-anorthoclase. K. Kimizuka, 1932. Japanese Journ. Geol. Geogr., vol. 9, p. 225. A triclinic felspar of the composition $Or_{66}Ab_{31}An_3$. [M.A. **5**-363.]

Prokaolin. R. Schwarz and G. Trageser, 1932. Chemie der Erde, vol. 7, p. 566 (Prokaolin). Precipitated amorphous $Al_2O_3.2SiO_2.nH_2O$, from which kaolin can be prepared artificially. [M.A. **5**-361.]

Pseudo-edingtonite. M. H. Hey, 1934. Min. Mag., vol. 23, pp. 491, 493. Potassium and sodium pseudo-edingtonites are base-exchange products of edingtonite with a crystal-structure different from that of edingtonite.

Pseudosillimanite. J. de Lapparent, 1920. Compt. Rend. Congrès Soc. Sav. Sci. Paris, 1920, p. 77; Bull. Serv. Carte Géol. Alsace Lorraine, Strasbourg, 1923, vol. 1, p. 54 (pseudosillimanite). An undetermined mineral occurring as minute prisms resembling fibrolite (sillimanite) in a metamorphic phthanite containing radiolaria from Alsace. A similar mineral is recorded from Tierra del

Fuego by E. H. Kranck, Acta Geogr. Helsingfors, 1932, vol. 4, no. 2, p. 146 (pseudosillimannite), p. 150 (pseudo-sillimannite).

Radiofluorite. F. L. Hess, 1931. Amer. Journ. Sci., ser. 5, vol. 22, p. 220; 1933, ser. 5, vol. 25, p. 426. Strongly radioactive fluorite, suggested to be $(Ca,Ra)F_2$. W. L. Brown (Univ. Toronto Studies, Geol. Ser., 1932, no. 32, p. 56) shows that the supposed radioactive effect on a photographic plate is due to phosphorescence. [M.A. **5**–52, 235, 330.]

Rilandite. E. P. Henderson and F. L. Hess, 1933. Amer. Min., vol. 18, p. 202. Hydrous basic silicate of chromium and aluminium (Cr_2O_3 47·59 %), as brownish-black pitch-like masses in sandstone from Colorado. Named after Mr. J. L. Riland, of Meeker, Colorado. [M.A. **5**–293.]

Rosickyite. J. Sekanina, 1931. Zeits. Krist., vol. 80, p. 174 (Rosickýit). Monoclinic γ-sulphur as minute crystals from the decomposition of pyrite nodules in Cretaceous clay in Moravia. Named after Prof. Vojtěck Rosický, of Brno (= Brünn), Moravia. [M.A. **5**–49.]

Safranite. Gemmologist, London, 1933, vol. 2, pp. 346, 375; 1933, vol. 3, p. 61; 1934, vol. 3, p. 328. Deutsche Goldschmiede-Zeitung, 1933, vol. 36, p. 207. Neues Jahrb. Min., Abt. A, Ref. I, 1934, p. 154. Safranite or Topaz-safranite, trade-names for yellow gem quartz, sometimes sold as topaz. Apparently named from safran, French for saffron.

Saleite. J. Thoreau and J. F. Vaes, 1932. Bull. Soc. Belge Géol., vol. 42, p. 96 (saléite). Hydrous phosphate of uranium and magnesium, $MgO.2UO_3.P_2O_5.8H_2O$, as yellow square plates (orthorhombic) from Katanga. Named after Prof. Achille Salée, of Louvain, Belgium. [M.A. **5**–292.]

Sanbornite. A. F. Rogers, 1932. Amer. Min., vol. 17, pp. 117, 161. Barium metadisilicate, $BaSi_2O_5$, as white pearly cleavages, triclinic, from California. Named after Mr. Frank Sanborn, of the Division of Mines, California. [M.A. **5**–145.]

Serpophite. W. N. Lodochnikov, 1933. Problems of Soviet Geology, vol. 2, p. 120 (Серпофит), p. 145 (Serpophite, serpentinophite). Suggested for the compact varieties of serpentine. A combination of the synonyms serpentine and ophite.

Soda-tremolite. H. Berman and E. S. Larsen, 1931. Amer. Min., vol. 16, p. 143. E. S. Larsen and E. A. Goranson, Amer. Min., 1932, vol. 17, pp. 351–353. A variety of tremolite with the formula $Na_2CaMg_5Si_8O_{22}(OH)_2$. [M.A. **5**–216.]

Strontium-anorthite. E. Dittler and H. Lasch, 1931. Sitzungsber. Akad. Wiss. Wien, Math.-naturw. Kl., Abt. I, p. 659 (Strontiumanorthit). Artificially prepared $SrAl_2Si_2O_8$, triclinic and isomorphous with anorthite. [M.A. **5**–102.]

Thoreaulite. H. Buttgenbach, 1933. Ann. Soc. Géol. Belgique, vol. 56, Bull. p. B 327. Tantalate of tin, perhaps $SnO_2.Ta_2O_5$, as brown crystals, perhaps monoclinic, in pegmatite from Katanga. Named after Prof. Jacques Thoreau, of Louvain, Belgium. [M.A. **5**–389.]

Tilleyite. E. S. Larsen and K. C. Dunham, 1933. Amer. Min., vol. 18, p. 469. Silicate and carbonate of calcium, $Ca_2SiO_4.CaCO_3$, monoclinic (?), in a contact metamorphic rock at Crestmore, California. Named after Prof. Cecil Edgar Tilley, of Cambridge. [M.A. **5**–387.]

Topaz-safranite. *See* Safranite.

Tuhualite. P. Marshall, 1932. New Zealand Journ. Sci. Techn., vol. 13, p. 202. A violet-coloured variety of alkali-amphibole with pleochroism colourless, purplish violet, and deep violet, occurring in comendite from Mayor (= Tuhua) Island, Bay of Plenty, New Zealand. Named from the locality. [M.A. **5**–295.]

Uranolepidite. J. Thoreau, 1933. Ann. Soc. Géol. Belgique, Publ. Congo Belge, annex to vol. 55, p. C 3 (uranolépidite), p. C 5 (uranolepidite). Hydrous uranate of copper $CuO.UO_3.2H_2O$, as dark green lamellar masses, monoclinic or triclinic, from Katanga. Identical with Vandenbrandeite (q.v.). Apparently named from uranium and λεπίς, λεπίδος, scale. [M.A. **5**–389.]

Uranothorianite. R. C. Wells, J. G. Fairchild, and C. S. Ross, 1933. Amer. Journ. Sci., ser. 5, vol. 26, p. 47 (footnote). Suggested for a mineral intermediate between uraninite and thorianite, $(U,Th)O_2$.

Vandenbrandeite. A. Schoep, 1932. Ann. Musée Congo Belge, A, Ser. I Minéralogie, Tervueren (Belgique), vol. 1, fasc. 3, p. 22.

Hydrous uranate of copper, $2CuO.2UO_3.5H_2O$, perhaps triclinic, as a dark-green alteration product of uraninite and chalcopyrite; from Katanga. Named after P. Van den Brande, of the Geological Survey of Katanga. *See* Uranolepidite. [M.A. **5**–292.]

Vishnevite. D. S. Belyankin, 1931. Bull. Geol. Prosp. Service U.S.S.R., vol. 50, no. 47, p. 751 (вишневит), p. 752 (vishnevite). The original spelling of Wischnewite (12th List). Named from the locality, Vishnevy Mountains (Вишневые горы), southern Ural. [M.A. **4**–499.]

Wüstite. R. Schenck and T. Dingmann, 1927. Zeits. Anorg. Chem., vol. 166, p. 141 (Wüstit). Ferrous oxide containing excess of oxygen due to the presence of Fe_3O_4 in solid solution. Named after Geheimrat F. Wüst, of Düsseldorf. [M.A. **5**–252, 470.]

Yttro-orthite. A. E. Fersman, 1931. Pegmatites, Leningrad, vol. 1, p. 310 (иттро-ортит). A variety of orthite containing 8% Yt_2O_3, from Kareliya.

SYSTEMATIC CLASSIFICATION OF NEW MINERALS.[1]

ELEMENTS.

Rosickyite, γ-S.

SULPHIDES.

Braggite, (Pt,Pd,Ni)S.
Colusite, (Cu,Fe,Mo,Sn)(S,As,Te).
Kolbeckine, Sn_2S_3.

HALOIDS.

Jarlite, $NaSr_3Al_3F_{16}$.

OXIDES.

Uranothorite, $(U,Th)O_2$.
Galaxite, $MnAl_2O_4$.

HYDROXIDES.

Portlandite, $Ca(OH)_2$.
Hydrocalumite, $4CaO.Al_2O_3.12H_2O$.

SULPHATES.

Letovicite, $H(NH_4)_3(SO_4)_2$.
Amarillite, $NaFe(SO_4)_2.6H_2O$.
Lapparentite, $Al_2O_3.2SO_3.10H_2O$.
Leucoglaucite, $Fe_2O_3.4SO_3.5H_2O$.
Paracoquimbite, $Fe_2(SO_4)_3.9H_2O$.
Glaucocerinite, $Zn_{13}Al_8Cu_7(SO_4)_2O_3.34H_2O$.

BORATES.

Ferruccite, $NaBF_4$.
Ginorite, $H_{12}Ca_4B_{14}O_{29}.2H_2O$.
Magnesiosussexite, $2(Mg,Mn)O.B_2O_3.H_2O$.

PHOSPHATES, ETC.

Ardealite, $CaHPO_4.CaSO_4.4H_2O$.
Harbortite, $6Al_2O_3.4P_2O_5.17H_2O$.
Minyulite, $KAl_2(OH,F)(PO_4)_2.3\frac{1}{2}H_2O$.
Leucophosphite, $K_2(Fe,Al)_7(OH)_{11}(PO_4)_4.6H_2O$.
Alumo-chalcosiderite.
Legrandite, $Zn_3As_2O_8.3H_2O$.
Brickerite, Arsenate Zn,Ca.
Saleite, $MgO.2UO_3.P_2O_5.8H_2O$.
Hydroromeite, $CaO.Sb_2O_5.3H_2O$.
Corvusite, $V_2O_4.6V_2O_5.xH_2O$.

[1] Only a selection of the names given in the preceding alphabetical list is here included.

TANTALATES.

Thoreaulite, $SnO_2.Ta_2O_5$.

URANATES.

Vandenbrandeite, $CuO.UO_3.2H_2O$.

SILICATES.

Barium-anorthite.
Strontium-anorthite.
Barium-muscovite.
Mangan-muscovite.
Caesium-biotite.
Sanbornite, $BaSi_2O_5$.
Alleghanyite, $5MnO.2SiO_2$.
Johannsenite, $MnCaSi_2O_6$.
Soda-tremolite, $Na_2CaMg_5Si_8O_{22}(OH)_2$.
Tillevite, $Ca_2SiO_4.CaCO_3$.
Bultfonteinite, $2Ca(OH,F)_2.SiO_2$.
Devitrite, $Na_2O.3CaO.6SiO_2$.
Jäneckeite, $8CaO.Al_2O_3.2SiO_2$.
Madisonite, $2CaO.2MgO.Al_2O_3.3SiO_2$.
Enalite, $(Th,U)O_2.nSiO_2.2H_2O$.
Yttro-orthite, var. of orthite.
Phosphoro-orthite, var. of orthite.
Lusakite,
$H_2(Co,Fe,Mg,Ni)_4(Al,Fe)_{18}Si_8O_{48}$.
Juanite,
$10CaO.4MgO.Al_2O_3.11SiO_2.4H_2O$.
Rilandite, hyd. sil. Cr,Al.
Igalikite, $NaKAl_4Si_4O_{15}.2H_2O$.
Naujakasite, $HNa_3Al_2Si_4O_{13}$.
Cuprosklodowskite,
$CuO.2UO_3.2SiO_2.7H_2O$(?).
Ashcroftine, $NaKCaAl_4Si_5O_{18}.8H_2O$.
Ashtonite,
$2(Ca,Na_2)O.Al_2O_3.9SiO_2.5H_2O$.

HYDROCARBONS.

Balkhashite.
Graebeite.
Kiscellite.