

*Seventeenth list of new mineral names.*<sup>1</sup>

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**Al-chamosite.** [L. M. Miropolsky, 1936. *Uchen. Zapis. Kazan. Univ.*, vol. 96, no. 3, p. 70.] O. M. Shubnikova, *Trans. Inst. Geol. Sci. USSR*, 1938, no. 11 (*Min. Geochem. Ser.*, no. 3), p. 13 (Алшамозит, алюминиевый шамозит, Al-chamosite). An oolitic chamosite rich in alumina ( $\text{Al}_2\text{O}_3$  37.14%), from Bashkir republic, Russia. [M.A. 9-185.]

**Alpha-vredenburgite.** B. Mason, 1943. *Geol. För. Förh. Stockholm*, vol. 65, p. 263 (Alpha-vredenburgite), pp. 157, 268 ( $\alpha$ -vredenburgite). Homogeneous tetragonal  $(\text{Mn,Fe})_3\text{O}_4$ , as distinct from the usual mixture of cubic and tetragonal  $(\text{Mn,Fe})_3\text{O}_4$  distinguished as  $\beta$ -vredenburgite. [M.A. 9-37.]

**Alumino-chrysotile.** D. P. Serdyuchenko, 1945. *Compt. Rend. (Doklady) Acad. Sci. URSS*, vol. 46, p. 117. Chrysotile containing  $\text{Al}_2\text{O}_3$  5.68%, in the series serpentine-parakaolinite,  $\text{H}_4(\text{Mg}_3\text{Al}_2)\text{Si}_2\text{O}_9$ ; from Caucasus. [M.A. 9-185.]

**Aurosmiridium.** Dana's System of mineralogy, 1944, 7th edit., vol. 1, p. 111. Another spelling of aurosmirid (14th List).

**Banalsite.** W. C. Smith, F. A. Bannister, and M. H. Hey, 1944. *Min. Mag.*, vol. 27, p. 33; *Nature*, London, vol. 154, p. 336. W. C. Smith, *Min. Mag.*, 1945, vol. 27, p. 63. A barium-felspar with sodium,  $\text{BaNa}_2\text{Al}_4\text{Si}_4\text{O}_{16}$ , as orthorhombic crystals from Benallt mine, Wales. Named from the chemical formula.

**Barium-plagioclase.** S. R. Nockolds and E. G. Zies, 1933. *Min. Mag.*, vol. 23, p. 448 (barium plagioclase), p. 454 (barium anorthite, 13th List; not the barium anorthite = celsian of H. Sjögren, 1895, 1st List). E. R. Segnit, *Min. Mag.*, 1946, vol. 27, p. 171 (barium-plagioclase). Plagioclase containing BaO 3-5% from Broken Hill, New South Wales.

**Bastinite.** D. J. Fisher, 1945. *Program and Abstracts, Min. Soc. Amer.*, 26th Annual Meeting, p. 9; *Rep. Invest. Geol. Surv. South Dakota*, 1945, no. 50, p. iv; *Amer. Min.*, 1946, vol. 31, p. 192. Lithium phosphate with some iron and manganese, as colourless triclinic crystals on fractured surfaces of lithiophilite, from Custer, South Dakota. Named after Prof. Edson Sunderland Bastin (1878-) of the University of Chicago. [M.A. 9-262.]

**Belomorite, Беломорит.** Trade-name for moonstone from the White Sea (Белое Море). A. E. Fersman, *Precious and coloured stones of USSR*, Leningrad, 1925, vol. 2, p. 30. [M.A. 9-146.]

<sup>1</sup> Previous lists in this series have been given every three years at the ends of vols. 11-26 (1897-1943) of this Magazine. The 1560 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. 9-].

**Beryllium-orthite.** P. Quensel, 1945. *Arkiv Kemi, Min. Geol.*, vol. 18A, no. 22 (Berylliumorthit). Beryllium-bearing ( $\text{BeO}$  3.83%) orthite, regarded as a synonym of muromontite. [M.A. 9-257.]

**Beta-vredenburgite.** M. Fleischer, 1944. *Amer. Min.*, vol. 29, p. 247.  $\beta$ -Vredenburgite of B. Mason, *Geol. För. Förh. Stockholm*, 1943, vol. 65, pp. 157, 268. See Alpha-vredenburgite.

**Beyerite.** C. Frondel, 1943. *Amer. Min.*, vol. 28, p. 532. E. W. Heinrich, *ibid.*, 1946, vol. 31, p. 198. Carbonate of bismuth (and calcium) as minute tetragonal crystals and earthy masses from Schneeberg, Saxony, and Pala, California. Named after Adolph Beyer (1743-1805), mining engineer of Schneeberg, Saxony, who in 1805 recognized 'luftsaures Wismuth'. Not to be confused with bayerite (12th List). [M.A. 9-6.]

**Bismuth-parkerite.** J. W. du Preez, 1944. *Ann. Univ. Stellenbosch*, vol. 22, sect. A, p. 101 (Bismuth-Parkerite). Parkerite (14th List), originally described as a nickel sulphide, has been found to contain also bismuth and lead. The end-members bismuth-parkerite and lead-parkerite form mixed crystals in the system  $\text{Ni}_3\text{Bi}_2\text{S}_2\text{-Ni}_3\text{Pb}_2\text{S}_2$ . [M.A. 9-5, 126.]

**Blakeite.** C. Frondel and F. H. Pough, 1944. *Amer. Min.*, vol. 29, p. 211. Anhydrous ferric tellurite as reddish-brown microcrystalline (cubic?) crusts from Goldfield, Nevada. Named after Professor William Phipps Blake (1826-1910), who was the first to recognize tellurium minerals in California. [M.A. 9-62.]

**Blastonite.** R. E. van Alstine, 1944. *Econ. Geol.*, vol. 39, p. 117. Local name for brecciated fluorite in a matrix of cryptocrystalline quartz from Newfoundland. [M.A. 9-252.]

**Brasilianite.** F. H. Pough and E. P. Henderson, 1945. *Mineração e Metalurgia*, Rio de Janeiro, vol. 8, p. 334 (Brasilianita); *Anais Acad. Brasileira Cienc.*, vol. 17, p. 15 (Brasilianite); *Amer. Min.*, vol. 30, p. 572 (Brazilianite). Hydrous phosphate of aluminium and sodium,  $\text{Al}_3\text{Na}(\text{PO}_4)_2(\text{OH})_4$ , as yellow-green monoclinic crystals of gem quality, from Brazil. Named from the locality. [Not the brazilianite of J. Mawe, 1818 (= wavellite), A. H. Chester, 1896.] [M.A. 9-186.]

**Calciocelsian.** E. R. Segnit, 1946. *Min. Mag.*, vol. 27, p. 169. Celsian, containing  $\text{CaO}$  4%, from Broken Hill, New South Wales.

**Calogerasite.** C. P. Guimarães, 1944. *Mineração e Metalurgia*, Rio de Janeiro, vol. 8, p. 135; *Anais Acad. Brasileira Cienc.*, vol. 16, p. 255 (Calogerasita). Synonym of simpsonite (15th List). Named after João Pandiá Calogeras (1870-1935). [M.A. 9-127, 186.]

**Cattierite.** P. F. Kerr, 1945. *Amer. Min.*, vol. 30, pp. 483, 498. Cobalt disulphide,  $\text{CoS}_2$ , cubic with pyrite structure, from Shinkolobwe, Belgian Congo. Named after Felicien Cattier, chairman of the Union Minière du Haut Katanga. [M.A. 9-188, 224.]

**Chirvinskite.** N. K. Platonov, 1941. *Compt. Rend. (Doklady) Acad. Sci. URSS*, vol. 33, p. 361 (chirvinskite). A metamorphosed bitumen near shungite and anthraxolite, representing a stage in the alteration to graphite, from Caucasus.

Named after Prof. Petr Nikolaevich Chirvinsky, Петр Николаевич Чирвинский (1880-). [M.A. 9-125.]

**Chloritoserpentine.** See Serpochlorite.

**Christensenite.** T. F. W. Barth and A. Kvalheim, 1944. Sci. Results Norwegian Antarctic Expeditions 1927-28, Norske Vidensk.-Akad. Oslo, no. 22. A solid solution of nepheline (5%) in tridymite, from Deception Island, Antarctic. Named after Lars Christensen (1884-), consul and shipowner of Sandefjord, Norway, who instituted and financed the expeditions. [M.A. 9-261.]

**Chromamesite.** [I. A. Zimin, Mineralnoe Syre, Moscow, 1935, no. 10, p. 61.] O. M. Shubnikova, Trans. Inst. Geol. Sci. USSR, 1938, no. 11 (Min. Geochem. Ser., no. 3), p. 12 (Хромистый амезит, Chrom-amesite), p. 13 (хромамезит), p. 35 (Chromamesite). Analysis of amesite from the Urals containing  $\text{Cr}_2\text{O}_3$  0.77% is interpreted as a mixture of the molecules  $\text{H}_4\text{Mg}_2\text{Al}_2\text{SiO}_9$  (amesite) 95.6%,  $\text{H}_4\text{Fe}_2\text{Al}_2\text{SiO}_9$  (daphnite) 3%, and  $\text{H}_4\text{Mg}_2\text{Cr}_2\text{SiO}_9$  (chromamesite) 1.4%.

**Conchilites.** T. L. Tanton, 1944. Trans. Roy. Soc. Canada, ser. 3, vol. 38, sect. 4, p. 99. Shell-shaped concretions of limonite. Named from *κόγχη* shell, and *λίθος* stone. [M.A. 9-127.]

**Cosmolite.** Synonym of meteorite; probably much earlier than M. Selga, Publ. Manila Observatory, 1930, vol. 1, no. 9, p. 25 (kosmolite), p. 51 (cosmolita, cosmolito), applied to meteorites and tektites. F. C. Leonard, Popular Astronomy, Northfield, Minnesota, 1944, vol. 52, p. 352, reprinted in Contributions to the Society for Research on Meteorites, 1945, vol. 3 (for 1944), p. 161, 'in view of the cosmic origin of meteorites, it is perhaps unfortunate that they were not termed *cosmolites*'. [M.A. 4-442, 9-289.]

**Daunialite.** C. Andreatta, 1943. L'Industria Mineraria d'Italia e d'Oltremare, Faenza, April, 1943, no. 4, reprint p. 22. A siliceous montmorillonitic clay of sedimentary origin, containing 25% of organic silica, as distinct from bentonite of volcanic origin. Named from the locality Castelnovo della Daunia, Puglia, Italy. [M.A. 9-263.]

**Eckermannite.** O. J. Adamson, 1942. Geol. För. Förh. Stockholm, vol. 64, p. 329; *ibid.*, 1944, vol. 66, p. 194. An alkali-amphibole containing  $\text{Na}_2\text{O}$  11.30,  $\text{K}_2\text{O}$  2.41%,  $\text{Na}_4\text{Mg}_2\text{AlFe}^{\text{III}}(\text{Si}_4\text{O}_{11})_2(\text{O},\text{OH},\text{F})_2$ , from Norra Kärr, Sweden. Named after Professor Claes Walther Harry von Eckermann (1886-) of Stockholm. [M.A. 9-87.]

**Ferrikaolinite.** D. P. Serdyuchenko, 1945. Compt. Rend. (Doklady) Acad. Sci. URSS, vol. 46, p. 118. Hypothetical molecule  $\text{H}_4\text{Fe}_2\text{Si}_2\text{O}_8$ , corresponding to kaolinite.

**Ferropigeonite.** W. N. Benson, 1944. Trans. Roy. Soc. New Zealand, vol. 74, p. 115 (ferropigeonite), p. 117 (ferro-pigeonite). Pigeonite (restricted to material with optic axial angle  $2V$  0-30°) is subdivided into magnesian pigeonite, pigeonite, and ferropigeonite. Pigeonite of other authors with  $2V$  30-45° is called subcalcic augite. [M.A. 9-151.]

**Ferrotine.** O. M. Shubnikova, Trans. Lomonosov Inst. Acad. Sci. USSR, 1937, no. 10, p. 223 (Ферротин, Ferrotine).  $Fe_nO_{n+1}$  (FeO 61.30,  $Fe_2O_3$  33.20%), strongly magnetic scales and grains from a river in Siberia. (Evidently partially oxidized magnetite.)

**Ferrotschermakite.** A. N. Winchell, 1945. Amer. Min., vol. 30, p. 29. A hypothetical molecule  $Ca_2Fe_3''Fe_2'''Al_2Si_6O_{22}(OH)_2$  to explain the composition of aluminous amphiboles. See Tschermakite. [M.A. 9-271.]

**Formanite.** H. Berman and C. Frondel, 1944. Dana's System of mineralogy, 7th edit., vol. 1, p. 757. Tantalate of yttrium, &c.,  $YtTaO_4$ , corresponding with the niobate fergusonite, from Cooglegong, Western Australia, analysed by E. S. Simpson (1909). Named after Francis Gloster Forman, government geologist of Western Australia.

**Franquenite.** R. Van Tassel, 1944. Bull. Mus. Hist. Nat. Belgique, vol. 20, no. 16, p. 9. Hydrous sulphate of iron, aluminium, and magnesium,  $2(Mg,Fe)SO_4 \cdot 6(Fe,Al)OHSO_4 \cdot 41H_2O$ , as yellow efflorescences from Franquénies, Belgium. Named from the locality. [M.A. 9-125.]

**Gamagarite.** J. E. de Villiers, 1943. Amer. Min., vol. 28, p. 329. Vanadate of barium, iron, and manganese,  $Ba_4(Fe,Mn)_2V_4O_{15}(OH)_2$ , as dark-brown monoclinic needles in manganese ore from Gamagara ridge, Postmasburg, South Africa. Named from the locality. [M.A. 9-5.]

**Genthelvite.** J. J. Glass, R. H. Jahns, and R. E. Stevens, 1944. Amer. Min., vol. 29, p. 178. The zinc end-member,  $Zn_4Be_3Si_3O_{12}S$ , of the helvine group. Named from helvine and after Prof. Frederick Augustus Louis Charles William Genth (1820-1893), of Philadelphia, who in 1892 described, under the name danalite, a single crystal containing 85% of this component. [M.A. 9-62.]

**Glaucopargasite.** P. R. J. Naidu, 1944. Quart. Journ. Geol. Mining Metall. Soc. India, vol. 16, p. 138. A blue amphibole from Mysore intermediate in composition between glaucophane and pargasite. [M.A. 9-189.]

**Groutite.** J. W. Gruner, 1945. Amer. Min., vol. 30, p. 169.  $HMnO_2$  as orthorhombic crystals of the diaspore group distinct from manganite, from Cuyuna range, Minnesota. Named after Professor Frank Fitch Grout (1880-) of the University of Minnesota. [M.A. 9-126.]

**Gumbrine.** A. A. Tvalchrelidze, 1929. [Гумбрин — фуллерова земля из Гумбри. Gumbrine—fuller's earth from Gumbri. Pamphlet issued by the trust for the mining-chemical industries of Georgia, Tiflis]; Mineral resources of Georgia, edited by S. A. Godabrelidze, Tiflis, 1933, p. 148 (Гумбрин, Russian), p. ix (გუმბრინი, Georgian), p. xv (goumbrine, French). Fuller's earth, similar to floridine (10th List), from Gumbri (Гумбри) near Kutais, Georgia (Грузия), Transcaucasia. Named from the locality. [M.A. 3-68, 8-106.]

**Hanušite.** J. V. Kašpar, 1942. Chem. Listy, Praha, vol. 36, no. 6, p. 78 (Hanušit). Hydrated magnesium silicate,  $H_2Mg_2(SiO_3)_3 \cdot H_2O$ , an alteration product of pectolite from Bohemia. Named after Josef Hanuš (1872-), professor of analytical chemistry in the Technical Institute, Praha. [M.A. 9-6, 260.]

**Haringtonite.** N. W. Wilson, 1945. Bull. Inst. Mining Metall. London, no. 470, p. 12. A provisional name for an unidentified mineral resembling guadalcazarite, from Harington Kop, Murchison Range, Transvaal. (Not to be confused with haringtonite of T. Thomson, 1831.) [M.A. 9-127.]

**Hedleyite.** H. V. Warren and M. A. Peacock, 1945. Univ. Toronto Studies, Geol. Ser., no. 49, p. 55. Bismuth-tellurium alloy  $\text{Bi}_7\text{Te}_3$ , a solid solution of  $\text{Bi}_5$  in  $\text{Bi}_2\text{Te}_3$ , as rhombohedral cleavage flakes, from Hedley, British Columbia. Named from the locality. [M.A. 9-126.]

**Hedroicite.** O. M. Shubnikova, Trans. Inst. Geol. Sci. USSR, 1940, no. 31 (Min.-Geochem. Ser. no. 6), p. 46. Another transliteration of гедройцит, gedroitite (15th List).

**Hematophanite.** Dana's System of mineralogy, 1944, 7th edit., vol. 1, p. 728. Another spelling of haematophanite (12th List).

**Hydroallanite.** E. S. Simpson, 1938. Journ. Roy. Soc. Western Australia, vol. 24 (for 1937-38), p. 113. Hydrated variety of allanite from Cooglegong, Western Australia.

**Hydrogadolinite.** E. S. Simpson, 1938. Journ. Roy. Soc. Western Australia, vol. 24 (for 1937-38), p. 113. Hydrated variety of gadolinite from Cooglegong, Western Australia.

**Hydrogrossular.** C. O. Hutton, 1943. Trans. Roy. Soc. New Zealand, vol. 73, p. 174 (Hydrogrossular). For members of the series  $3\text{CaO} \cdot \text{Al}_2\text{O}_3 \cdot 3\text{SiO}_2 - 3\text{CaO} \cdot \text{Al}_2\text{O}_3 \cdot 6\text{H}_2\text{O}$  between grossular and hibschite (= plazolite,  $3\text{CaO} \cdot \text{Al}_2\text{O}_3 \cdot 2\text{SiO}_2 \cdot 2\text{H}_2\text{O}$ ). Compare garnetoid, grossularoid, and hydrogarnet (16th List). [M.A. 9-61.]

**Hydrolepidocrocite.** B. P. Krotov, 1936. Compt. Rend. (Doklady) Acad. Sci. URSS, 1943, vol. 40, p. 115 (Hydrolepidokrokite). A. E. Fersman and O. M. Shubnikova, Sputnik geokhimiya i mineraloga, 1937, p. 137 (Гидролепидокрокит). Lepidocrocite with adsorbed water,  $\gamma\text{-FeOOH} \cdot \text{aq}$ , dimorphous with hydrogoethite ( $\alpha\text{-FeOOH} \cdot \text{aq}$ ). The hydrogoethite (3rd List) originally described is in reality hydrolepidocrocite. [M.A. 9-62.]

**Iron-talc.** J. W. Gruner, 1944. Amer. Min., vol. 29, p. 363 (iron talc). See Minnesotaite.

**Jusite.** I. Gramling-Mende and G. Leopold, 1943. Neues Jahrb. Min. Monatshefte, Abt. A, 1943, p. 178 (Jusit). Hydrated silicate of calcium with some alumina (8-23%) and alkalis (3-61%),  $(\text{Si,Al})_6(\text{Ca,Na,K})_5 \cdot 5\text{H}_2\text{O}$ , as white radiating needles, probably orthorhombic. Named from the locality, Jus, Schwäbische Alb, Württemberg. [M.A. 9-37.]

**Kerchenite.** Another spelling of kertschenite (4th List), being the English transliteration of керченит, from Kerch (Керчь), Crimea. [M.A. 9-92, 311.]

**Kladnoite.** R. Rost, 1942. Rozpravy České Akad., 1942, vol. 52, no. 25 (Kladnoit). An organic compound  $\text{C}_6\text{H}_4(\text{CO})_2\text{NH}$  (phthalimide) as monoclinic crystals formed in burning waste heaps in the Kladno coal basin, Bohemia. Compare kratochvilite (15th List). Named from the locality. [M.A. 9-186.]

**Korunduvite.** N. G. D'Ascenzo, 1945. The gem-table, Philadelphia, Pennsylvania. To replace the name corundum, because of the confusion with carborundum [and conundrum]. From the Sanskrit kuruvinda. [M.A. 9-191.]

**Kribergite.** T. Du Rietz, 1945. Geol. För. Förh. Stockholm, vol. 67, p. 78 (Kribergit). Hydrated phosphate and sulphate of aluminium,  $2\text{Al}_2\text{O}_3 \cdot 2(\text{P}_2\text{O}_5, \text{SO}_3) \cdot 5\text{H}_2\text{O}$ , as white chalk-like masses from Kristineberg mine, Västerbotten, Sweden. Named from the locality. [M.A. 9-188.]

**Kyanophilite.** B. R. Rao, 1945. Current Sci. Bangalore, vol. 14, p. 196 (kyanophylite). Hydrous silicate of aluminium, as apple-green lumps in association with kyanite-graphite-schist in Mysore. Named from kyanite and φίλος, friend. [M.A. 9-188.]

**Landsbergite.** D. R. Hudson, 1943. Metallurgia, Manchester, vol. 29, p. 56. Abbreviation of the name moschellandsbergite (15th List). Named from the locality, Landsberg, near Ober-Moschel, Rhenish Bavaria. [M.A. 9-55.]

**Lead-parkerite.** J. W. du Preez, 1944. Ann. Univ. Stellenbosch, vol. 22, sect. 4, p. 101 (Lead-Parkerite). See Bismuth-parkerite.

**Libyanite.** C. Fenner, 1937. Newspaper article in 'The Australasian', Melbourne, October 2, 1937. Silica-glass from the Libyan Desert. (Native silica-glass had already been named lechatelierite, 7th List.) [Min. Mag., 25-425.]

**Livite.** L. A. Kulik, 1941. Meteoritica, Acad. Sci. USSR, vol. 1, p. 75 (*Lusum* . . . Кварцевое стекло из Ливии) [*sic*], p. 122 (Livit . . . Silica glass). Incorrect form of libyanite (q.v.). [M.A. 9-295.]

**Lomonosovite.** 'A sodium phosphate-titanium silicate' occurring with chinglusuite and nordite in the Kola peninsula, mentioned without description by V. I. Gerasimovsky, Compt. Rend. (Doklady) Acad. Sci. URSS, 1941, vol. 32, p. 498. Named after the pioneer Russian mineralogist Michael Vasilevich Lomonosov, Михаил Васильевич Ломоносов (1711-65). [M.A. 8-279.]

**Mackayite.** C. Frondel and F. H. Pough, 1944. Amer. Min., vol. 29, p. 211. Hydrous tellurite of iron, perhaps  $\text{Fe}_2(\text{TeO}_3)_3 \cdot x\text{H}_2\text{O}$ , as green tetragonal crystals from Goldfield, Nevada. Named after John William Mackay (1831-1902), an Irishman who made a great fortune on the Comstock lode in Nevada. [M.A. 9-62.]

**Magaugite.** F. Walker, 1943. Amer. Journ. Sci., vol. 241, p. 518. Alternative name for endiopsidite [16th List] for augite rich in magnesium. [M.A. 9-151.]

**Mahadevite.** S. Ramaseshan, 1945. Proc. Indian Acad. Sci., Sect. A, vol. 22, p. 177. A bronze-coloured mica intermediate in composition between muscovite and phlogopite, from Warangal, Hyderabad. Named after Professor C. Mahadevan of Andhra University. [M.A. 9-189.]

**Manganese-chlorite.** H. von Eckermann, 1927. Geol. För. Förh. Stockholm, vol. 49, p. 450; 1944, vol. 66, p. 721. A chlorite from Långban, Sweden, containing 1.06% MnO. (The manganchlorite of A. Hamberg, 1890, contained 2.28% MnO.) [M.A. 3-474, 9-256.]

**Manganese-merwinite.** H. J. Goldschmidt and J. R. Rait, 1943. *Nature*, London, vol. 152, p. 356 (manganese-merwinite). A slag mineral,  $3\text{CaO} \cdot \text{MnO} \cdot 2\text{SiO}_2$ , analogous to merwinite with Mn in place of Mg. [M.A. 9-102.]

**Mansfieldite.** V. T. Allen and J. J. Fahey, 1945. *Program and Abstracts, Min. Soc. Amer.*, 26th Annual Meeting, p. 7; *Amer. Min.*, 1946, vol. 31, p. 189. Hydrated aluminium arsenate,  $\text{AlAsO}_4 \cdot 2\text{H}_2\text{O}$ , isomorphous with scorodite, as white cellular crusts in clay from Hobart Butte, Oregon. Named after Dr. George Rogers Mansfield (1875-) formerly of the United States Geological Survey. [M.A. 9-262.]

**Minnesotaite.** J. W. Gruner, 1944. *Amer. Min.*, vol. 29, p. 363. Hydrous silicate of ferrous iron (magnesium, &c.),  $(\text{OH})_{5.5}(\text{Fe}^{2+}, \text{Mg})_{5.5}(\text{Si}, \text{Al}, \text{Fe}^{3+})_8\text{O}_{18.5}$ , with the crystal-structure of talc and regarded as an iron-talc, of abundant occurrence in iron ores in Minnesota. Named from the locality. [M.A. 9-88.]

**Montbrayite.** M. A. Peacock and R. M. Thompson, 1945. *Program and Abstracts, Min. Soc. Amer.*, 26th Annual Meeting, p. 21; *Amer. Min.*, 1946, vol. 31, p. 204. Gold telluride,  $\text{Au}_2\text{Te}_3$ , as tin-white triclinic crystals from Montbray, Quebec. Named from the locality. [M.A. 9-262.]

**Nagolnite.** G. Vavrinecz, 1936. *Földtani Közlöny*, Budapest, vol. 66, p. 250; 1937, vol. 67, p. 60 (Nagolnit). Hypothetical molecule  $\text{H}_4\text{Al}_2\text{SiO}_7$ , as a constituent of many orthochlorites, corresponding to V. I. Vernadsky's chlorite acid  $\text{H}_2\text{Al}_2\text{SiO}_6(+\text{H}_2\text{O})$ , and approximating in composition to Y. V. Samoilov's  $\alpha$ -chloritite (7th List) from Nagolno, Donetz, Russia. Named from the locality. [M.A. 7-361.]

**Němecite.** J. V. Kašpar, 1941. *Rozpravy České Akad.*, 1941, vol. 51, no. 14 (němecit); *Bull. Internat. Acad. Sci. Bohême*, 1943, vol. 43 (for 1942), p. 276. Hydrous ferric silicate,  $\text{H}_4\text{Fe}_2\text{Si}_2\text{O}_9 \cdot 5\text{H}_2\text{O}$ , as a limonite-like encrustation on pyrrhotine from Chiuzbaia (= Kisbánya), Romania. Named after Alois Němec, mineral collector and engineer, of Přerov, Moravia. Probably identical with hisingerite and canbyite (10th List). [M.A. 9-186.]

**Neodigenite.** P. Ramdohr, 1943. *Zeits. Prakt. Geol.*, vol. 51, pp. 1, 9 (Neodigenit). Cubic  $\text{Cu}_9\text{S}_5$  in the system  $\text{Cu}_2\text{S}-\text{CuS}$ , and in copper ores. The original digenite (A. Breihaupt, 1844) of approximately this composition is a mixture of chalcosine and covelline, but N. W. Buerger [M.A. 7-482; 8-254, 364] has transferred the name digenite to cubic  $\text{Cu}_9\text{S}_5$ . [M.A. 9-263.]

**Neoglaucinite** [A. V. Kazakov, 1938. *Trans. Sci. Inst. Fertilizers, Moscow*, no. 140, p. 146.] O. M. Shubnikova, *Trans. Inst. Geol. Sci. USSR*, 1940, no. 31 (*Min.-Geochem. Ser.*, no. 6), p. 45 Неоглаукозит, Neoglaucinite). A variety of glaucinite of distinctive form and colour, from phosphorite mines in the Moscow region.

**Novoelpidite.** Mentioned without description by V. I. Gerasimovsky, *Compt. Rend. (Doklady) Acad. Sci. URSS*, 1939, vol. 22, p. 263, as an associate of chkalovite in the Kola peninsula. [M.A. 7-314.]

**Oakite.** Mentioned by J. W. Gruner (*Amer. Min.*, 1943, vol. 28, pp. 174, 615) as due to W. E. Richmond. Tentative name for a supposed new manganese mineral, afterwards identified with lithiophorite, from White Oak Mountain, Tennessee.

**Oligonsiderite.** F. Ulrich and R. Munk, 1936. *Schlägel und Eisen*, Teplitz-Schönau, reprint p. 10 (Oligonsiderit). Manganese concretions containing  $\text{FeCO}_3$  43-73,  $\text{MnCO}_3$  33-31% from Slovakia. Synonym of oligon-spar = oligonite. Not to be confused with oligosiderite in A. Daubrée's (1867) classification of meteorites.

**Ondřejite.** J. V. Kašpar, 1944. *Věda Přírodní*, Praha, vol. 23, p. 132 (Ondřejit). Hydrated carbonate and silicate of magnesium, calcium, and sodium, as a white powder on aragonite from Zbrašov caves, Hranice, Moravia. Named after Prof. Augustin Ondřej of the Technical High School of Praha. [M.A. 9-261.]

**Oxykerchenite.** Another spelling of oxykertschenite (5th List). *See* kerchenite. [M.A. 9-92, 311.]

**Parakaolinite.** D. P. Serdyuchenko, 1945. *Compt. Rend. (Doklady) Acad. Sci. URSS*, vol. 46, p. 117. End-member of the series serpentine-parakaolinite,  $\text{H}_4(\text{Mg}_3, \text{Al}_2)\text{Si}_2\text{O}_8$ . *See* Alumino-chrysotile. [M.A. 9-185.]

**Parathuringite.** O. Koch, 1884. *Inaug.-Diss. Jena*, p. 37 (Parathuringit). A mineral from Vogtland very similar to thuringite, but with the composition  $\text{Al}_5\text{Fe}_5\text{Mg}_2\text{Si}_5\text{O}_{31}\cdot 9\text{aq}$ .

**Partridgeite.** J. E. de Villiers, 1943. *Amer. Min.*, vol. 28, pp. 336, 468. Manganese and ferric oxide  $(\text{Mn}, \text{Fe})_2\text{O}_3$ , differing from sitaparite in colour and etching reactions; from Postmasburg, South Africa. Named in memory of Francis Chamberlain Partridge (1903-1939), formerly of the Geological Survey of South Africa. [M.A. 9-4, 5.]

**Pennantite.** W. C. Smith, F. A. Bannister, and M. H. Hey, 1946. *Min. Mag.*, vol. 27, p. 217. A manganese-rich chlorite,  $(\text{Mn}, \text{Al})_6(\text{Si}, \text{Al})_4\text{O}_{10}(\text{OH})_8$ , as orange-coloured optically uniaxial scales from Benallt manganese mine, Wales. Analogous to thuringite with  $\text{MnO}$  (39%) in place of  $\text{FeO}$ . Named after Thomas Pennant (1726-98), Welsh zoologist and mineralogist.

**Phosphate-allophane.** S. G. Gordon, 1929. *Amer. Min.*, 1929, vol. 14, p. 105 (phosphate allophane); *Proc. Acad. Nat. Sci. Philadelphia*, 1944, vol. 96, p. 355 (Phosphate allophane, Phosphate-Allophane). A variety of allophane containing  $\text{P}_2\text{O}_5$  7.97%. [M.A. 9-209.]

**Polymignyte.** Dana's System of mineralogy, 1944, 7th edit., vol. 1, p. 764. Another spelling of polymignite (J. J. Berzelius, 1824).

**Protomelane.** L. L. Fermor, 1945. *Proc. South Wales Inst. Engin.* vol. 61, p. 30. Barium-bearing psilomelane as distinct from potassium-bearing psilomelane (cryptomelane, 16th List). [M.A. 9-189.]

**Pseudo-apatelite.** A. Magne, 1942. *Bull. Soc. Franç. Min.*, vol. 65, p. 41 (pseudo-apatélite). Abstract in *Amer. Min.*, 1945, vol. 30, p. 86 (Pseudoapatelite).  $(\text{Fe}, \text{Al})_2(\text{OH})_4\text{SO}_4\cdot \text{H}_2\text{O}$  or  $5\text{Fe}_2\text{O}_3\cdot 2\text{Al}_2\text{O}_3\cdot 7\text{H}_2\text{O}\cdot 21\text{H}_2\text{O}$ , described by A. Lacroix in 1910 as apatelite, but differing from the apatelite ( $3\text{Fe}_2\text{O}_3\cdot 4\text{SO}_3\cdot 6\text{H}_2\text{O}$ ) of A. Meillet (1841) in containing  $\text{Al}_2\text{O}_3$  11.0%. [M.A. 9-126.]

**Pseudokrokydolith.** C. Hintze, *Handbuch Min., Ergänzungsband*, 1937, p. 514 (Pseudokrokydolith). German form of pseudo-crocidolite (6th List).



**Pseudothuringite.** O. Koch, 1884. Inaug.-Diss. Jena, p. 27 (Pseudothuringit). A mineral from Vogtland very similar to thuringite, but with the composition  $Al_4Fe_4^{7+}Mg_2Si_3O_{18}\cdot 5aq$ .

**Rabdopissite.** A. N. Krishtofovich, 1927. Bull. Com. Géol. URSS, vol. 44 (for 1925), p. 57 (рабдописсит). O. M. Shubnikova, Trans. Inst. Geol. Sci. USSR, 1940, no. 31 (Min. Geochem. Sér., no. 6), p. 61. Rods of brown bituminous material (C 66.72, H 7.49, N 0.49, O + S 25-30%) in coal from Siberia. Named from *ράβδος*, a rod, *πίσσα*, pitch.

**Ramsdellite.** M. Fleischer and W. E. Richmond, 1943. Econ. Geol., vol. 38, p. 278. Orthorhombic  $MnO_2$  dimorphous with tetragonal pyrolusite (= polianite). Named after Prof. Lewis Stephen Ramsdell (1895-) of the University of Michigan, who described the material in 1932. [M.A. 5-180, 9-4.]

**Saltspär.** P. M. Murzaev, 1941. Compt. Rend. (Doklady) vol. 33, p. 306 (saltspär). Coarsely crystallized and cleavable halite. [M.A. 9-127.]

**Sebkhainite.** L. Berthon, 1922. L'industrie minérale en Tunisie, p. 176 (Sebkhainite). Mixed salts containing carnallite (60%), epsomite, and halite from salt-pans (sebkhas) in Tunisia. Compare mellahite (11th List).

**Serpochlorite** or **Chloritoserpentine.** [A. A. Menyailov, 1935. Mat. Petr. Geol. Kuznetz Ala-tau, Acad. Sci. USSR, Ser. Siberia, no. 19, p. 64.] O. M. Shubnikova, Trans. Inst. Geol. Sci. USSR, 1938, no. 11 (Geochem. Sér., no. 3), p. 14 (Серпохлорит, Serpochlorite, Хлоритосерпентин, Chlorite-serpentine), p. 35 (Chloritoserpentine). Undefined variety of blue-green chlorite occurring in serpentine rocks.

**Sillenite.** C. Frondel, 1943. Amer. Min., vol. 28, p. 525. Body-centred cubic modification of  $Bi_2O_3$  as greenish waxy masses from Durango, Mexico. Named after Dr. Lars Gunnar Sillén of Stockholm, who prepared the material artificially. [M.A. 7-234]. [M.A. 9-6.]

**Sjögrenite.** J. S. Krenner, 1910. Compt. Rend. Congrès Géol. Intern., XI Session, 1910, Stockholm, 1912, vol. 1, p. 129 (Sjögrenit); Földtani Közlöny, Budapest, 1913, vol. 43, pp. 10, 121. P. Quensel, Geol. För. Förh. Stockholm, 1946, vol. 68, p. 110. Hydrous ferric phosphate,  $5Fe_2O_3\cdot 3P_2O_5\cdot 8H_2O$ , probably triclinic. First described from Cornwall by E. Kinch, F. H. Butler, and H. A. Miers (Min. Mag., 1886, vol. 7, p. 85) as distinct from dufrenite. Named after Sten Anders Hjalmar Sjögren (1856-1922) of Stockholm. Not the sjögrenite of C. Frondel, 1940 (16th List). [M.A. 9-263.]

**Tibergite.** N. H. Magnusson, 1930. Avh. Sveriges Geol. Undersök., Ser. Ca, no. 23, p. 46 (tibergit), p. 107 (tibergite). A brownish-purple variety of amphibole rich in alkalis,  $Al_2O_3$  and  $Fe_2O_3$ , containing  $R_2(Al,Fe)_4Si_2O_{12}$  in addition to the richterite molecule; from Långban, Sweden. Named after Mr. H. V. Tiberg, formerly manager of the Långban mines. [M.A. 9-4.]

**Titanhaematite.** A. B. Edwards, 1938. Proc. Australasian Inst. Mining & Metall., n. ser., no. 110, p. 42 (titanohematite). C. O. Hutton, New Zealand Journ. Sci. Techn., Sect. B, 1945, vol. 26, p. 299 (titanhaematite). Haematite with

TiO<sub>2</sub> in solid solution, with dark brown to black streak. When more than about 10% of TiO<sub>2</sub> is present the excess separates out as intergrowths of ilmenite. [M.A. 9-263.]

**Titano-thucholite.** G. Aminoff, 1943. Geol. För. Förh. Stockholm, vol. 65, p. 31 (Titano-Thucholite). O. H. Ödman, Årsbok Sveriges Geol. Unders., 1944, vol. 38, no. 6, pp. 3, 7. A radioactive bituminous mineral differing from thucholite (12th List) in containing titanium (TiO<sub>2</sub> 4.5%), from Boliden, Sweden. [M.A. 9-37, 257.]

**Trömelite.** W. L. Hill, G. T. Faust, and D. S. Reynolds, 1944. Amer. Journ. Sci., vol. 242, p. 467, 545. An artificial calcium phosphate, perhaps 7CaO.5P<sub>2</sub>O<sub>5</sub>. Named after Gerhard Trömel of Düsseldorf, who made the first systematic study of the system CaO-P<sub>2</sub>O<sub>5</sub>. [M.A. 9-92.]

**Tschemakite.** A. N. Winchell, 1945. Amer. Min., vol. 30, pp. 29, 44. A hypothetical 'Tschemak molecule' Ca<sub>2</sub>Mg<sub>3</sub>Al<sub>4</sub>Si<sub>6</sub>O<sub>22</sub>(OH)<sub>2</sub> to explain (together with the corresponding iron molecule Ca<sub>2</sub>Fe<sub>3</sub>Fe<sup>2+</sup>Al<sub>2</sub>Si<sub>6</sub>O<sub>22</sub>(OH)<sub>2</sub>, named ferrot-schemakite) the composition of aluminous amphiboles. Named after Gustav Tschemak (1836-1927) of Vienna. Not the tschemakite of F. Kobell, 1873, a synonym of albite. [M.A. 9-271.]

**Vaesite.** P. F. Kerr, 1945. Amer. Min., vol. 30, pp. 483, 498. Nickel disulphide, NiS<sub>2</sub>, cubic with pyrite structure, from Kasompi mine, Belgian Congo. Named after Johannes Vaes, mineralogist to the Union Minière du Haut Katanga. [M.A. 9-188, 224.]

**Velikhovite.** [I. V. Lopukhov, Mineralnoe Syre, Moscow, 1931, no. 2, pp. 152, 154.] O. M. Shubnikova, Trans. Inst. Geol. Sci. USSR, 1938, no. 11 (Min. Geochem. Ser., no. 3), p. 32 (Велиховит, Velikhovite). A bitumen (C 77.34, H 7.71, N 2.00, O 10.59, S 2.36) with shining conchoidal fracture. Named from the locality, Velikhov (Велихов), Urals.

**Vernadite.** A. G. Betekhin, 1944. Bull. Acad. Sci. URSS, Sér. Géol., no. 4, p. 35 (Вернадит, p. 45 (vernadite). Colloidal hydrated MnO<sub>2</sub> as a weathering product of manganese ores; considered to be a manganic acid H<sub>2</sub>MnO<sub>3</sub>, giving rise to salts of the psilomelane group. Named after Vladimir Ivanovich Vernadsky, Владимир Иванович Вернадский (1863-1945), who had predicted its existence. Distinct from vernadskite (6th List). [M.A. 9-185.]

**Viséite.** J. Mélon, 1943. Ann. Soc. Géol. Belgique, vol. 66, Bull. p. 53 (viséite). Hydrous silico-phosphate of aluminium and calcium, 5Al<sub>2</sub>O<sub>3</sub>.5CaO.3SiO<sub>2</sub>.3P<sub>2</sub>O<sub>5</sub>. 25-30H<sub>2</sub>O, as white, wart-like, optically isotropic masses. Named after the locality, Visé, Belgium. [M.A. 9-88, 188.]

**Yenerite.** J. Steiger and O. Bayramgil, 1943. Schweiz. Min. Petr. Mitt., vol. 23, p. 616 (Yenerit). O. Bayramgil, *ibid.*, 1945, vol. 25, p. 46. Sulphantimonite of lead, 11PbS.4Sb<sub>2</sub>S<sub>3</sub>, between boulangerite and falkmanite (15th List); from Işıkdag, Turkey. Named after Hadi Yener, formerly director of M.T.A. (Maden Tetkik ve Arama Enstitüsü, Turkish Mining Research Institute). [M.A. 9-37, 262.]

**Zincselénide.** H. Rose, 1927, Fortschr. Min. Krist. Petr., vol. 12, p. 73 (Zinkselénid). W. Geilmann and H. Rose, Neues Jahrb. Min. Geol., Abt. A,

1928, pp. 797, 803, 807. Dana's System of mineralogy, 7th edition, 1944, p. 215 (Zincselene). An incompletely determined mineral, supposed to be selenide of zinc, occurring in selenium ores from Andreasberg, Harz. [M.A. 4-76.]

**Zirfesite.** E. E. Kostyleva, 1945. Compt. Rend. (Doklady) Acad. Sci. URSS, vol. 48, p. 502. Hydrous silicate of zirconium, iron, &c.,  $(ZrO_2, Fe_2O_3)SiO_2 \cdot nH_2O$ , as a powdery clay-like mineral from the alteration of eudialyte in the Kola peninsula. Named from the composition Zr, Fe, Si. [M.A. 9-261.]

### SYSTEMATIC CLASSIFICATION OF NEW MINERALS<sup>1</sup>

#### SULPHIDES, ETC.

Vaesite,  $NiS_2$ .  
Cattierite,  $CoS_2$ .  
Neodigenite,  $Cu_9S_5$ .  
Zincselene,  $ZnSe$ ?  
Montbrayite,  $Au_3Te_3$ .  
Hedleyite,  $Bi_7Te_3$ .  
Bismuth-parkerite,  $Ni_3Bi_3S_2$ .  
Lead-parkerite,  $Ni_3Pb_3S_2$ .  
Yenerite,  $11PbS \cdot 4Sb_2S_3$ .

#### OXIDES.

Sillenite,  $Bi_2O_3$ .  
Titanhaematite.  
Ramsdellite,  $MnO_2$ .  
Partridgeite,  $(Mn, Fe)_2O_3$ .  
Alpha-vredenburgite,  $(Mn, Fe)_3O_4$ .

#### HYDROXIDES.

Hydrolepidocrocite,  $\gamma\text{-FeOOH} \cdot aq$ .  
Groutite,  $HMnO_2$ .  
Vernadite,  $H_2MnO_3$ .

#### CARBONATES.

Beyerite, carb. Bi, (Ca).  
Ondřejite, hyd. carb. & sil. Mg, Ca, Na.

#### SULPHATES.

Pseudo-apatelite,  $(Fe, Al)_2(OH)_4SO_4 \cdot H_2O$ .  
Franquenite,  
 $2(Mg, Fe)SO_4 \cdot 6(Fe, Al)OHSO_4 \cdot 4H_2O$ .

#### PHOSPHATES, ETC.

Bastinite, phos. Li, (Fe, Mn).  
Trömelite,  $7CaO \cdot 5P_2O_5$ ?  
Brasilianite,  $Al_3Na(PO_4)_2(OH)_4$ .  
Sjögrenite,  $5Fe_2O_3 \cdot 3P_2O_5 \cdot 8H_2O$ .  
Kribergite,  $2Al_2O_3 \cdot 2(P_2O_5, SO_3) \cdot 5H_2O$ .  
Viseite,  $5Al_2O_3 \cdot 5CaO \cdot 3SiO_2 \cdot 3P_2O_5 \cdot 25-30H_2O$ .  
Mansfieldite,  $AlAsO_4 \cdot 2H_2O$ .  
Gamagarite,  $Ba_4(Fe, Mn)_2V_4O_{15}(OH)_2$ .

#### TANTALATES.

Formanite,  $YtTaO_4$ .

#### TELLURITES.

Blakeite,  $Fe_2(TeO_3)_3$ ?  
Mackayite,  $Fe_2(TeO_3)_3 \cdot xH_2O$ .

#### SILICATES.

Banalsite,  $BaNa_2Al_4Si_4O_{16}$ .  
Calciocelsian.  
Barium-plagioclase.  
Belomorite = moonstone.  
Ferropigeonite.  
Eckermannite, alkali-amphibole.  
Tibergite, alkali-amphibole.  
Ferrotschermakite.  
Glaucopargasite.  
Beryllium-orthite.  
Manganes-merwinite,  $Ca_3MnSi_2O_8$ .  
Genthelvite,  $Zn_4Be_3Si_3O_{12}S$ .  
Lomonosovite, Na,  $P_2O_5$ ,  $TiO_2$ ,  $SiO_2$ .  
Zirfesite,  $(ZrO_2, Fe_2O_3)SiO_2 \cdot nH_2O$ .  
Mahadevite, a mica.  
Pennantite,  $(Mn, Al)_6(Si, Al)_4O_{10}(OH)_8$ .  
Manganes-chlorite.  
Nagolnite,  $H_4Al_2SiO_7$ .  
Al-chamosite.  
Chromamesite.  
Némecite,  $H_4Fe_2Si_2O_9 \cdot 5H_2O$ .  
Neoglaucinite.  
Hanušite,  $H_2Mg_2(SiO_3)_3 \cdot H_2O$ .  
Alumino-chrysothite.  
Minnesotaite,  
 $(OH)_{5.5}(Fe'', Mg)_{5.5}(Si, Al, Fe''')_8O_{18.5}$ .  
Jusite  $(Ca, Na, K)_5(Si, Al)_6O_{10} \cdot 5H_2O$ ?  
Ferrikaolinite.  
Parakaolinite.  
Daunialite, Si-montmorillonite.  
Gumbrine, fuller's earth.

#### HYDROCARBONS.

Chirvinskite.  
Kladnoite,  $C_6H_4(CO)_2NH$ .  
Rhabdopissite.  
Titanio-thucholite.  
Velikhovite.

<sup>1</sup> Only selected names given in the preceding alphabetical list are here included.