

Twenty-eighth list of new mineral names

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SINCE the cumulative total of names in the 28 Lists has now passed 5000—the exact number being difficult to determine because many are mentioned *en passant* (cf. expandite, this List)—it seems an appropriate moment to restate their objective. The introductory note to the 1st List (*Min. Mag.* 11-323 (1897)) started ‘The following is a list of recently published names, which are not to be found in the 6th edition (1892) of Dana’s System of Mineralogy. Although it can scarcely be hoped to make such a list complete, it may still be useful for reference.’ Spencer extended the scope somewhat with the 2nd List: ‘In addition to names which have recently been published are a few earlier names which are not to be found in some of the larger works of reference’; and by the 5th List he was able to say, ‘In the present list are included several trivial names which have been recently applied for trade purposes to the cheaper gem-stones. Although such names are here listed alphabetically for convenience of reference, it is to be hoped that they will not find their way into mineralogical literature’ (cf. *Min. Mag.* 23-624, footnote). It will be seen, therefore, that our inclusion of a distressingly large number of deplorably trivial trade names is in the interest of reference, and does not constitute a departure from precedent. We hope that they may serve as a guide and a warning to authors in the throes of coining names for genuinely new species. We assume, with regret, that it is beyond anyone’s powers to control the flow of mineral-sounding names from commerce, but we could wish that editors of lapidary and hobby periodicals would exercise some form of censorship (particularly in respect of the seemingly endless varietal names for dirty quartz and chalcedony).

It is almost fifty years since Spencer (*Min. Mag.* 20-363) expressed a wish for an international committee to control mineralogical nomenclature, which we now have. ‘It is especially important . . . to bear in mind that science is world-wide, and its language should, as far as possible, be adapted to meet international needs. The tendency to adapt names to particular languages should rather be discouraged.’ ‘The correct pronunciation of the names so adopted for general use need not be considered seriously. . . . International usage depends mainly on the printed word (in Roman characters) and it is in this that standardization is needed. If a name with a derivation peculiar to one language is changed, with a mistaken idea of adapting it to some other language, then confusion will follow and the name may be lost in an alphabetical index.’ ‘The question of the alteration of the form of names with the idea of adapting them to different languages resolves itself into whether (i) the correct pronunciation, or (ii) the correct spelling of the printed word, is the more important. For international

science the latter is surely to be considered first. . . . Unless obviously in error, species names should be accepted in as nearly as possible the same form as that given by the first author. If they are to be adapted to specially suit every language, unnecessary confusion will only follow.' 'Nothing is gained, only confusion, by unnecessarily changing names in this way.'

We make no apology whatever for quoting Spencer *in extenso*, for it would seem from both recent surveys and our own experience that few people read the literature back further than some ten or twenty years. In spite of everything that has been said on the subject of standardized nomenclature, the present List contains a number of undesirable variants that cannot be considered mere printer's errors, and the first part of the fourth appendix to Hintze's *Handbuch der Mineralogie* contains over 100 names resulting from (German) phonetic back-transliteration from the Cyrillic of names that were originally given in the Roman alphabet. It is a feature of the Russian language that translation into Cyrillic is necessarily phonetic, however misconceived the phonetic interpretation may occasionally be. It should surely be possible to give a list of Cyrillic spellings with their Roman originals—which would be useful—whereas we can see no excuse whatever for these back-transliterations, which have *not* been included in the present List.

The present List contains some 395 indexed entries, including valid species and polytypes (115); artificial species, excluding gem and trade names (20); doubtful or inadequately described species (21); errors, variant (mostly German) spellings, and mistransliterations or mistranslations (107); unnecessary and undesirable names for gem-stones, rocks, mixtures, and commercial products (65); improved names and corrected spellings (3); and a portmanteau entry (diaman-, etc.). We have not troubled to trace printed references to the various trade and commercial names, which are included solely for convenience of reference; for most of these we are indebted to Messrs. R. Webster and M. J. O'Donoghue (*priv. comm.*), who have encountered them through their involvement with the gem trade.

To save space, references to some journals are given in shortened form: A.M., *Amer. Min.*; Bull., *Bull. Soc. franç. Min. Crist.*; C.M., *Canad. Min.*; Докл., Докл. акад. наук СССР (*Compt. Rend. Acad. Sci. URSS*); M.A., *Min. Abstr.*; M.M., *Min. Mag.*; Zap., Зап. всесоюз. мин. общ. (*Mem. All-Union Min. Soc.*). Also: Hintze, C. Hintze, *Handbuch der Mineralogie, Ergänzungsband 4, Lieferung 1* (K. F. Chudoba, editor).

Achrite. Variant of or error for achirite, *syn.* of dioptase. R. Webster, *Gems*, 1962, p. 752.

Aidyrlyit. Mistransliteration of Айдырлыт, aidyrlit [14th List], appearing consistently in Strunz *Min. Tab.* (all 5 editions). [A mixture, M.A. 11–177.]

Aktaschit, Germ. trans. of Акташит, aktashite (26th List). Hintze, 2.

Al-antigorite. H. Strunz, 1970. *Min. Tab.* 5th edn, 458 (Al-Antigorit). The naturally occurring aluminian serpentine ('Al-serpentine'; cf. aluminous-serpentine, 20th List) from the Lake Superior region [M.A. 15–411; 19–268]. An unnecessary name for a variety.

Aldshanit, Germ. trans. of Алджанит, aldzhanite (27th List). Hintze, 2.

Al-lizardite. S. W. Bailey and S. A. Tyler, 1960. *Econ. Geol.* 55, 150 [M.A. 15–411].

An unnecessary name for aluminian lizardite, from the Lake Superior region. Cf. Al-antigorite, this List.

Aluminium phosphocristobalite. R. J. Manly, Jr., 1950. A.M. **35**, 108 (Aluminum phosphocristobalite). *Syn.* of phosphocristobalite (this List).

Aluminium phosphotridymite. R. J. Manly, Jr., 1950. A.M. **35**, 108 (Aluminum phosphotridymite). *Syn.* of phosphotridymite (this List).

Aluminohydrocalcite, error for alumohydrocalcite (C.M. **10**, 88).

Alumochrysocolla. F. V. Chukhrov, B. B. Zvyagin, A. I. Gorshakov, L. P. Ermilova, and E. S. Rudnitskaya, 1968. Изв. Акад. наук СССР (*Bull. Acad. Sci. URSS*), no. 6, 29 (Алюмохризоколла). Superfluous name for an aluminian chrysocolla.

Alumoferrichrysocolla. F. V. Chukhrov, B. B. Zvyagin, A. I. Gorshakov, L. P. Ermilova, and E. S. Rudnitskaya, 1968. Изв. Акад. наук СССР (*Bull. Acad. Sci. URSS*), no. 6, 29 (Алюмоферрихризоколла). A superfluous name for an aluminian ferrian chrysocolla.

Alumotungstite. Th. G. Sahama, 1971, in M. Fleischer, *Glossary of Mineral Species*, 3. $(\text{W}, \text{Al})_{16}(\text{O}, \text{OH})_{48} \cdot x\text{H}_2\text{O}$, the aluminium analogue of yttriotungstite (19th List).

Amensite. I. C. Jahanbagloo and T. Zoltai, 1968, A.M. **53**, p. 23. Error for amesite; not to be confused with amansite (an error for amausite, see *Chem. Index*, 1955, 2nd edn, 326).

Anarakite. D. Adib and J. Ottemann, 1972. *Neues Jahrb. Min., Monatsh.* 335. Green crystals from the Kali-Kafi ore deposit, Anarak, Iran, with the composition $(\text{Cu}, \text{Zn})_2(\text{OH})_3\text{Cl}$, are regarded as a zincian variety of a fourth polymorph, additional to atacamite, paratacamite, and botallackite, and indexed on a monoclinic cell. Named for the locality. [The powder data are identical with those of paratacamite and can be indexed on the rhombohedral cell of the latter; the mineral is possibly a zincian paratacamite.—M.H.H.] [M.A. 73–1934; Bull. **96**, 245; A.M. **58**, 560; Zap. **102**, 445.]

Andremeyerite. Th. G. Sahama, J. Siivola, and P. Rehtijärvi, 1973. *Bull. Geol. Soc. Finland*, **45**, 1. Pale emerald-green monoclinic crystals ($a 7\cdot464$, $b 13\cdot794$, $c 7\cdot093 \text{ \AA}$, $\beta 118^\circ 15'$) in vesicles of lava from Mt Nyiragongo, Zaïre; $4[\text{BaFe}_2\text{Si}_2\text{O}_7]$. Named for André Meyer. [A.M. **59**, 381.]

Anthodite. N. Kashima, 1965. [*Mem. Ehime Univ., Sect. 2, Ser. D*, **5**, 79]; abstr. M.A. **18**–282. ‘Flower-like dripstone’; an alternation of calcite and aragonite.

Argentocuproauride. L. V. Razin and K. V. Yurkina, 1971. [Геол.рудн.мин. no. 1, 93 (Аргентокупроаурид)], abstr. Zap. **102**, 437. A superfluous name for an argen-tian variety of cuproauride (15th List).

Armstrongite. N. V. Vladyskin, V. I. Kovalenko, A. A. Kashaev, A. N. Sapozhnikov, and V. A. Pisarskaya, 1973. Докл. **209**, 1185 (Армстронгит). A brown monoclinic mineral ($a 14\cdot04$, $b 14\cdot16$, $c 7\cdot81 \text{ \AA}$, $\beta 109^\circ 33'$) from a pegmatite in the Khan-Bogdinskii massif is near $\text{CaZr}(\text{Si}_6\text{O}_{15}) \cdot 2\cdot5\text{H}_2\text{O}$. Named for N. Armstrong. [M.A. 74–504; A.M. **59**, 208; Zap. **103**, 364.]

Arsentsumebite. L. Vésignié, 1935. Bull. **58**, 4 (14th List). This material, supposed to be the arsenate analogue of tsumebite (6th List) was shown by C. Guillemin (Bull. **79**, 15 and **71** (1956)) to be duftite. The arsenate analogue of tsumebite has since been

- found by R. A. Bideaux, M. C. Nichols, and S. A. Williams (A.M. **51**, 258 (1966)), and the name is revived (Arsentsumebite) for this new material by K. F. Chudoba (Hintze, Erg. **4**, 5 (1974)).
- Asoproit**, Germ. trans. of Азопроит, azoproite (26th List). Hintze, 6.
- As-tsumebite**. L. Fanfani and P. F. Zanazzi, 1967. M.M. **36**, 522. A provisional name for the arsenate analogue of tsumebite described by R. Bideaux *et al.* (A.M. **51**, 258 (1966)). *Syn.* of arsentsumebite (this List).
- Atheneïte**. A. M. Clark, A. J. Criddle, and E. E. Fejer, 1974. M.M. **39**, 528. A few grains in the arsenopalladinite concentrates from Itabira, Minas Gerais, Brazil, are hexagonal, a 6·798, c 3·483 Å, with composition $2[(\text{Pd}, \text{Hg})_3\text{As}]$. This material was supposed to be arsenopalladinite (which is in fact anorthic), and the cell-dimensions given by Claringbull and Hey (M.A. 13–237) refer to atheneïte. Named, in oblique reference to its palladium content, from Pallas Athēnē. [M.A. 74–1444.]
- Azurite**. An objectionable trade name for a sky-blue smithsonite. R. Webster, *Gems*, 1962, p. 753. (Cf. L. J. Spencer, A.M. **22**, 683.)
- Babepfite**. Variant transliteration of Бабефйт, Babefphite (25th List), (the two -s are for fluorine and phosphorus, F and P. *Dokl. Acad. Sci. U.S.S.R. (Earth Sci. Sect.)*, 1967, **167**, 152.
- Balawinskit**, Germ. trans. of Балавинскит, balavinskite (26th List). Hintze, 6.
- Balkanite**. V. A. Atanassov and G. N. Kirov, 1973. A.M. **58**, 11. A steel-grey mineral from the Sedmochislenitsi mine, Bulgaria, with tennantite, bornite, chalcopyrite, etc., is orthorhombic, a 10·62, b 9·42, c 3·92 Å. Composition $[\text{Cu}_9\text{Ag}_5\text{HgS}_8]$, checked by synthesis. Named for the locality. [M.A. 73–288; Zap. **103**, 355.]
- Bambollaite**. D. C. Harris and E. W. Nuffield, 1972. C.M. **11**, 738. Microcrystalline aggregates with klockmannite and tellurites at the Bambolla mine, Moctezuma, Sonora, Mexico, are tetragonal, a 3·865, c 5·632 Å; composition $\text{Cu}(\text{Se}, \text{Te})_2$. Named from the locality. [Bull. **96**, 234; A.M. **58**, 805; Zap. **102**, 443; M.A. 74–1445.] Name first used by R. V. Gaines, *Min. Record*, 1970, **1**, 41, and the erroneous form bombollalite by I. Kostov, *Mineralogy*, 1968, p. 150.
- Barium-francevillite**. V. P. Rogova, G. A. Sidorenko, and N. N. Kuznetsova, 1966. Zap. **95**, 448. Material that does in fact fall within the definition of Francevillite (21st List), but is somewhat richer in Ba than the original, was described as a new mineral *Syn.* of Francevillite. [M.A. 19–55.]
- Barnesite**. A proprietary trade name for rare-earth oxides used for polishing. J. Sinkankas, *Gemstone and Mineral Data Book*, 1972, p. 67. Not the barnesite (of Ross, 1959). [22nd List.]
- Baumhauerite-I**. W. Nowacki, 1966. *Jahrb. Naturhist. Mus. Bern*, 1966–8, 71. *Syn.* of Baumhauerite.
- Baumhauerite-II**. H. Rösch and E. Hellner, 1959. *Naturwiss.* **46**, 72. An *artificial* product in the system $\text{PbS}-\text{As}_2\text{S}_3$, with twice the a -axis of Baumhauerite. Also occurs naturally.
- Bauranoite**. N. P. Rogova, L. N. Belova, G. P. Kiziarov, and N. N. Kisnezova, 1973. Zap. **102**, 75 (Баураноит). Veinlets of minute brown grains from an unnamed

Russian locality; $\text{BaO} \cdot 2\text{UO}_3 \cdot 4\text{--}5\text{H}_2\text{O}$. Named from its composition. [M.A. 74-505; Bull. 96, 234; A.M. 58, 1111; Zap. 103, 358.]

Bicchulite. C. Hemi, I. Kusachi, K. Henni, P. A. Sabine, and B. R. Young, 1973. *Min. Journ. [Japan]*, 7, 243. An alteration product of gehlenite at Fuka, Okayama Prefecture, Japan, and an isotropic mineral in a coating on a wollastonite rock from Carneal, Northern Ireland, are identical with the artificial gehlenite hydrate of Carlson (1964). Cubic, $a = 8.837 \text{ \AA}$; $4[\text{Ca}_2\text{Al}_2\text{SiO}_7 \cdot \text{H}_2\text{O}]$. Named for the Bicchu (= Bitchu) township.

Bjarebyite. P. B. Moore, D. H. Lund, and K. L. Keester, 1973. *Min. Record*, 4, 282. Emerald green monoclinic crystals ($a = 8.930$, $b = 12.073$, $c = 4.917 \text{ \AA}$, $\beta = 100.15^\circ$) from the Palermo pegmatite, North Groton, New Hampshire, gave an electron-probe analysis agreeing with a formula $\text{BaFeMnAl}_2(\text{PO}_4)_3(\text{OH})_3$, with some Sr and Mg.

Blei-Barysilit, original form of Lead Barysilite (*q.v.*).

Boakite. A trade name for a brecciated green and red jasper. R. Webster, *Gems*, 1962, p. 753.

Bomballalite. Error for bambollaite, this List.

Borgehlenit. Original form of Boron-gehlenite, *q.v.*

Bornite, Orange. Murdoch, 1916. This ore-microscopic term has been used for material later identified as renierite, mawsonite, or stannite (A.M. 50, 900; M.A. 16-540).

Boron-gehlenite. H. Bauer, 1962. *Neues Jahrb. Min., Monatsh.* 127 (Borgehlenit). Artificial $\text{Ca}_2\text{B}_2\text{SiO}_7$, isomorphous with Gehlenite and giving mix-crystals with the latter. Name modified by P. Černý, C.M. 1970, 10, 636.

Boron-melilite. J. Tarney, A. W. Nicol, and G. F. Marriner, 1973. M.M. 39, 158. An artificial product, $\text{Ca}_2\text{SiB}_2\text{O}_7$, obtained by heating datolite to 700°C . Tetragonal, $a = 7.14$, $c = 4.82 \text{ \AA}$; isostructural with melilite and named accordingly. [M.A. 73-3730.]

Borovskite. A. A. Yalovai, A. F. Sidorov, N. S. Rydashevskii, and I. A. Budko, 1973. Zap. 102, 427 (Боровский) Pd_3SbTe_4 , cubic ($a = 5.794 \text{ \AA}$), in pentlandite-chalcopyrite-pyrrhotine ores of the Khautovaar deposit, Karelia. Named for I. B. Borovsky. [Zap. 102, 425; 103, 356.]

Brannockite. J. S. White, Jr., J. E. Arem, J. A. Nelen, P. B. Leavens, and R. W. Thomssen, 1973. *Min. Record*, 4, 73. Thin hexagonal plates from the Foote Company's spodumene mine at Kings Mountain, Cleveland County, North Carolina, have $a = 10.0167$, $c = 14.2452 \text{ \AA}$; composition $2[(\text{K},\text{Na})\text{Li}_3\text{Sn}_2\text{Si}_{12}\text{O}_{30}]$, a lithium-tin member of the osumilite group. Named for K. C. Brannock. [M.A. 73-4078; A.M. 58, 1111.]

Brassite. F. Fontan, M. Orliac, F. Permingeat, R. Pierrot, and R. Stahl, 1974. Bull. 96, 365. White cryptocrystalline crusts and powdery coatings on specimens from Jachymov, Czechoslovakia, and other localities are identical with synthetic $\text{MgHAsO}_4 \cdot 4\text{H}_2\text{O}$. Orthorhombic, $a = 7.472$, $b = 10.891$, $c = 16.585 \text{ \AA}$. Named for R. Brasse. [M.A. 74-3462.]

Braunite-II. P. R. de Villiers and F. H. Herbstein, 1967. A.M. 52, 20. Material from South Africa with the composition of Braunite but with a c -axis double that of Braunite is probably an ordered phase, and is named provisionally. [M.A. 18-281.]

Brezianit, error for Brezinait (Hintze, 13).

- η' -bronze.** A. H. Clark, 1972. *Neues Jahrb. Min., Monatsh.* 108. (η' -Cu₆Sn₅). A natural occurrence of this alloy in oxidized tin ores at Panasqueira, Beira Beixa, Portugal, is recorded. [M.A. 73-811; Bull. 96, 244; Zap. 102, 437.]
- Brunogeierite.** J. Ottemann and B. Nuber, 1972. *Neues Jahrb. Min., Monatsh.* 263. Grey encrustations on tennantite in the Tsumeb ores, S.-W. Africa, have the composition (Ge,Fe)Fe₂O₄, with Ge \gg Fe. Cubic, a 8·409, spinel structure. Named for Dr. Bruno Geier. [M.A. 73-805; Bull. 96, 234; A.M. 58, 348; Zap. 102, 445.]
- Bunkolite.** K. Kinoshita, 1927. [*Journ. Geol. Soc. Japan*, 34, 52], quoted in *Intro. Jap. Min.* 109 (1970), Geol. Surv. Japan. A massive hydrated silicate of Mn²⁺ and Mn³⁺ from the Takayama mine, a branch of the Bunko mine, Hiroshima Prefecture, Japan: 'believed to be a variety of penwithite.' [Zap. 101, 286.]
- Buonnemite,** error for Vuonnemite (Zap. 102, 423).
- Buserite.** R. Giovanoli, W. Feitknecht, and F. Fischer, 1971. *Helv. Chim. Acta*, 54, 1112. The '10 Å Manganite' from deep-sea nodules described by W. Buser (in *Oceanography*, Amer. Ass. Adv. Sci., 1959, 962) is named.
- Caesium astrophyllite.** A. F. Efimov, V. D. Dusmatov, A. A. Ganzeev, and Z. Kataeva, 1969. In A. A. Ganzeev, A. F. Efimov, and N. G. Semenova, Геохимия (Geokhimiya) 1969, 340 (Цезийастрофиллит). A provisional name for the material subsequently described as Caesium kupletskite (27th List).
- Ca-gübelite,** variant of Calcium-gübelite, *q.v.*
- Ca-Langbeinit,** unnecessary variant of calcium langbeinite (this List). Hintze, 15.
- Calbenite.** *Syn.* of myrickite (6th List), a *var.* of chalcedony. R. Webster, *Gems*, 1962, p. 755.
- Calciocatapleite.** A. M. Portnov, V. T. Dybinchik, and L. S. Solntseva, 1972. Докл. 202, 430 (Кальциокатаплеит, Calciokatapleite). CaZrSi₃O₉.H₂O, the calcium analogue of catapleite, described but not named in 1964 (M.A. 16-648; A.M. 49, 1153) is now named. (Cf. M.M. 35-1129.) [Zap. 102, 453.]
- Calciorinkite.** H. Strunz, 1970. *Min. Tab.* 5th edn, 513. Variant of calciumrinkite (14th List), *syn.* of götzenite (21st List).
- Calciouranoite.** V. P. Rogova, L. N. Belova, G. P. Kiziyarov, and N. N. Kuznetsova, 1974. Zap. 103, 108 (Кальциураноит). Material with the composition CaO.2UO₃.5H₂O gives X-ray powder data very near those of metacalciouranoite (*q.v.*), which has only 2 H₂O. Named from the composition.
- Calciriebeckite.** *Dokl. Acad. Sci. U.S.S.R. (Earth Sci. Sect.)*, 1966, 169, 195. Erroneous translation of Кальциевый рибекит, calcian riebeckite (Докл. 1966, 169, 1162). [M.A. 69-3260.]
- Calcium chondrodite.** R. M. Gan'ev, Yu. A. Kharitonov, V. V. Ilyukhin, and N. V. Belov, 1969. *Soviet Physics—Doklady*, 14, 946. This is a mistranslation of Кальциевый хондродит (Докл. 188, 1821) correctly translated calcian chondrodite, but the latter is in fact a misnomer, the material described being Calcio-chondrodite (22nd List).
- Calcium-gübelite.** G. Frenzel, 1971. *Neues Jahrb. Min., Abh.* 115, 164. (Calcium-Gübelit, Ca-Gübelit). A calcian variety of gübelite (= hydromuscovite). [M.A. 73-677.]

- Calcium-langbeinite.** G. W. Morey, J. J. Rowe, and R. O. Fournier, 1964. *Journ. Inorg. Nucl. Chem.* **26**, 53. Artificial $K_2Ca_2(SO_4)_3$ is cubic and isomorphous with langbeinite above 200 °C., anisotropic and biaxial below 200 °C.
- Calcium-Pharmakosiderit.** K. Walenta, 1966. *Tschermaks Min. Petr. Mitt.*, ser. 3, **11**, 154, fn. The calcium analogue of pharmacosiderite occurs at Krunkelbachtal, Menzenschwand, Südschwarzwald. Cf. alumopharmacosiderite, 14th List.
- Calcium seidozerite.** Erroneous translation of Кальциевый сейдозерит, calcian seidozerite [M.A. 17–78] (*Soviet Physics—Crystallography*, 1966, **10**, 565) [M.A. 17–736]. Cf. calcium catapleite (24th List), of which it is a replacement product.
- Calcjarlite.** A. S. Povarennykh, 1973. Конституция и свойства минералов, сб. 7, 131–5. $Na(Ca,Sr)_3Al_3(OH)_2F_{14}$, with $Sr < Ca$; the calcium analogue of jarlite. Named from the composition.
- Calcybeborosilite.** A. S. Povarennykh and V. D. Dusmatov, 1970. Инерфракрасные спектры поглощения новых минералов из щелочных пегматитов Средней Азии. Съ.: Конституция и свойства минералов, Киев, по. 4, стр. 7. (Калькибеборосилит). The unnamed Mineral A of Semenov, near $(Ln,Ca)_2(B,Be)_2Si_2O_8(OH)_2$, from the Alaisk ridge, Tadzhikistan (A.M. 49, 443) is named according to Povarennykh's chemical system (A.M. 58, 968).
- Catalinaite.** Variant of catalinitite (6th List), a locality variety of jasper. R. Webster, *Gems*, 1962, p. 754.
- Caysichite.** D. D. Hogarth, G. Y. Chao, A. G. Plant, and H. R. Steacy, 1974. C.M. **12**, 293. Crusts up to 2 mm thick on fractures in a granite pegmatite at the Evans-Lou feldspar mine, 22 miles N. of Ottawa, are orthorhombic, a 13·282, b 13·925, c 9·727 Å; $4[(Yt,Ca)_4Si_4O_{10}(CO_3)_3 \cdot 4H_2O]$. Named for its composition (Ca,Y,Si,C,H).
- Ce-britholite.** A. V. Rudneva, A. V. Nitikin, and N. V. Belov, 1962. Докл. **146**, 1182 (Се-бритолит). *Syn.* of Cesluosil, which is shown to be closely related to Britholite. [M.A. 17–395.]
- Cesbronite.** S. A. Williams, 1974. M.M. **39**, 744. Bright green crusts of steep bipyramidal crystals from the Bambollita mine, Moctezuma, Sonora, Mexico, are orthorhombic, a 8·624, b 11·878, c 5·872 Å, cell-contents $2[Cu_5(SeO_3)_2(OH)_6 \cdot 2H_2O]$. Named for F. Cesbron.
- Ce-Vesuvian.** H. Strunz, 1970. *Min. Tab.*, 5th edn, 399. An unnecessary name for cerian idocrase (vesuvianite).
- Chalcocite, Tetragonal.** A. H. Clark and R. H. Sillitoe, 1971. *Neues Jahrb. Min., Monatsh.* 418. A tetragonal phase of composition $Cu_{1.96}S$, occurring at Mina María, Quebrada Puquios, Atacama, Chile; breaks down to djurleite. [M.A. 72–1369.]
- Chalcomalachite.** Author and date? A mixture of calcite and malachite. R. Webster, *Gems*, 1962, p. 754.
- Chalmeleonite.** Presumably an error for chameleonite, author and date? 'Change colour tourmaline.' R. Webster, *Gems*, 1962, p. 754.
- Chengbolite.** W.-C. Sun, C.-L. Li, Y.-W. Jen, Y. T. Chang, W.-L. Cheng, S.-F. Yuan, and C.-L. Chang, 1973. [*Acta Geol. Sinica*, **1**, 89]; abstr. M.A. 74–2472. $PtTe_{2-x}$, with x up to about $\frac{1}{3}$ and a little Pd; distinct from moncheïte (23rd List); a 4·041, c 5·220 Å [tetragonal or hexagonal?].

Cherlbuitite. Error for Hurlbutite, resulting from back-transliteration through Херлбутит (*Dokl. Acad. Sci. U.S.S.R.*, 1967, **176**, 152).

Chernykhite. G. Ankinovich, E. A. Ankinovich, I. V. Rozhdestvenskaya, and V. A. Frank-Kamenetskii, 1972. *Zap.* **101**, 451 (Черныхит). Veinlets and dark-green leaflets up to 5 mm across in shales in Karatau, Kazakhstan, are monoclinic, a 5·29, b 9·182, c 20·023 Å, β 95° 41'; composition $(\text{Ba}, \text{K})_{1-x}(\text{V}^{3+}, \text{Al}, \text{V}^{4+}, \text{Mg})(\text{Si}, \text{Al})_4\text{O}_{10}(\text{OH})_2$, with $x \approx \frac{1}{2}$, the barium analogue of roscoelite. Named for V. V. Chernykh. [A.M. **58**, 966; M.A. 74–506; *Zap.* **102**, 455.] Nothing to do with Chernikite (of Gagarin and Cuomo), 19th List.

Chlorohastingsite. *Dokl. Acad. Sci. U.S.S.R. (Earth Sci. Sect.)*, 1966, **169**, 116. Erroneous transliteration of Хлоргастингсит, Chlorhastingsite (25th List).

Chloropal. P. Schneiderhohn, 1965. *Tschermaks Min. Petr. Mitt.*, ser. 3, **10**, 385. A mixture of $\frac{1}{4}$ nontronite and $\frac{3}{4}$ opal-cristobalite. Not to be confused with the Chloropal of Berhardi and Brandes, 1822, for which the current name is nontronite. [M.A. 17–494].

Chlor-utahlite. Variant of or error for chlor-utahlite (6th List). R. Webster, *Gems*, 1962, p. 754.

Chrome fluorite. R. T. Liddicoat, 1970. *Gems and Gemmology*, **13**, 231. An undesirable term for a green fluorite from South America.

Chrysophrase. Green, artificially dyed chalcedony. R. Webster, *Gems*, 1962, p. 754. Either an error for chrysoprase, or a coinage to suggest it.

Cirolite. A trade name for *artificial* yttrium aluminate, $\text{Yt}_3\text{Al}_5\text{O}_{12}$. R. Webster, *priv. comm.* Other trade names include: yttrogarnet (19th List); triamond, diamonite (*et sim.*) (this List); also astrilite, YAG (yttrium aluminium garnet), Di'Yag, geminair, and Linde simulated diamond. (M. J. O'Donoghue, *priv. comm.*).

Clinobisvanite. P. J. Bridge and M. W. Pryce, 1974. M.M. **39**, 847. Monoclinic (a 5·186, b 11·708, c 5·100 Å, β 90° 26') BiVO_4 , a dimorph of pucherite, occurs at Yinnie-tharra and other localities in Western Australia as yellow powder and orange aggregates. Named for the composition and symmetry.

Coelestobaryt. H. Puchelt and G. Müller, 1964. *Sedimentology and Ore Genesis. Developments in Sedimentology*, **2**, 144. *Syn.* of strontiobarite. Not to be confused with celestobarite, a *syn.* of barytocelestine.

Co-Ludwigite. W. Götz and V. Herrmann, 1966. *Naturwiss.* **53**, 475. An *artificial* analogue of Ludwigite, with the composition $\text{Co}_2^{2+}\text{Co}^{3+}\text{O}_2\text{BO}_3$. [M.A. 18–86.]

Corundolite. A trade name for (colourless) *synthetic* spinel, $\text{MgO} \cdot 2\text{Al}_2\text{O}_3$ [presumably in allusion to the excess of alumina compared with natural spinel]. R. Webster, *priv. comm.* Cf. erinite, (dialite), rozircon, strongite (this List); other trade names include alumag and magalux (M. J. O'Donoghue, *priv. comm.*).

Corunuvite, Corvunuvite, errors for Cornubite (*Intro. Jap. Min.* **32** (1970), Geol. Surv. Japan). [*Zap.* **101**, 284.]

Covellin, Blaubleibender. G. Frenzel, 1959. *Neues Jahrb. Min., Abh.* **93**, 115. A copper sulphide from Messina, Transvaal, approximating to $\text{Cu}_{1.40}\text{S}$. [M.A. 15–352.]

Creolite. A superfluous name for a red and white banded jasper from California. R. Webster, *Gems*, 1962, p. 755.

- Crusite.** Error for or variant of crucite (of Delamétherie), a *syn.* of chiastolite. R. Webster, *Gems*, 1962, p. 755.
- Cr-Zr-armalcolite.** I. M. Steele and J. V. Smith, 1972. *Nature (Phys. Sci.)*, **237**, 105. An oxide of Ti, Fe, Cr, and Zr, near Phase X of Peckett *et al.* [M.A. 73-2950], from lunar fines 14166, 6 (Apollo 14 mission). [M.A. 73-2756.]
- Cuprospinel.** E. H. Nickel, 1973. C.M. **11**, 1003. Irregular grains and lamellar intergrowths with hematite on an oxidized ore dump at Baie Verte, Newfoundland, are cubic, a 8·369, with spinel structure; composition CuFe_2O_4 ; also with some Mg and Al. Named from the composition and structure. [M.A. 73-2941; Bull. **96**, 236; A.M. **59**, 381; Zap. **103**, 357.]
- Dallasite.** A superfluous name for an unspecified green and white rock from Vancouver Island, British Columbia. R. Webster, *Gems*, 1962, p. 755.
- Damburite.** An objectionable trade name for artificial light-red corundum. R. Webster, *Gems*, 1962, p. 755. Not to be confused with danburite.
- Dialite.** Trade name for a doublet cut stone, with a crown of colourless *artificial* spinel and a base of strontium titanate. R. Webster, *priv. comm.* Also known as 'Carnegiegem'; cf. 'Laser gem', a similar doublet but with an *artificial* corundum crown. M. J. O'Donoghue, *priv. comm.*
- Diaman-, Diamon-.** Many artificial substances have received trade names starting thus, implying relationship to diamond because of their hardness or lustre. Diamonite, diamonair, diamone, diamonique, diamonte, diamanite: *artificial* yttrium aluminate, $\text{Yt}_3\text{Al}_5\text{O}_{12}$ (cf. yttrogarnet, 19th List; cirolite and triamond, this List). Diamontina: *artificial* strontium titanate, SrTiO_3 (cf. fabulite, maravelite, and symant, this List). Diamondite, diamantin(e), diamontine: *artificial* Al_2O_3 (see under zirconolite, this List, for other names). Diamantine: 'a crystallized boron abrasive powder'. Ref.: M. J. O'Donoghue, *priv. comm.*; J. Sinkankas, *Gemstones and Mineral Data Book*, 1972, p. 70; R. Webster, *Gems*, 1962, p. 755, also *priv. comm.* Also, diamantane $\text{C}_{10}\text{H}_{16}$, a 3-dimensional hydrocarbon.
- Distrene.** A trade name for a variety of polystyrene. R. Webster, *Gems*, 1962, p. 755. Not to be confused with disthene (*syn.* of kyanite).
- Ditroite.** A variant of ditröyte, a *syn.* of sodalite (and of nepheline). R. Webster, *Gems*, 1962, p. 755.
- Drysdallite.** F. Čech, M. Rieder, and S. Vrána, 1973. *Neues Jahrb. Min., Monatsh.* 433. Soft black polycrystalline masses from the uranium deposit of Kapijimpanga, Solwezi, Zambia, are identical with synthetic MoSe_2 . Hexagonal, a 3·287, c 12·929 Å. Named for A. R. Drysdall.
- Duranusite.** Z. Johan, C. Laforêt, P. Picot, and J. Feraud, 1973. Bull. **96**, 131. Minute grains with arsenic and realgar at Duranus, Alpes Maritimes, France, are orthorhombic, a 3·576, b 6·759, c 10·074 Å; composition 2[As_4S]. Named from the locality. Edinite. An objectionable *syn.* (author and date?) of prase. R. Webster, *Gems*, 1962, p. 755. Not to be confused with edenite.
- Eicosyl alcohol.** C. J. Kelly, 1970. A.M. **55**, 2118. The fluorescent substance present in the red calcite of Deutsch-Altenburg, Austria, is eicosyl alcohol, $\text{C}_{20}\text{H}_{41}\text{OH}$. [M.A. 71-2301.]

- Eisen (III)-Spinelle. H. Strunz, 1970. *Min. Tab.* 5th edn, 177. A group name for the ferric iron spinels.
- Eldoradoite. An objectionable and superfluous name (author and date?) for a blue chalcedony. R. Webster, *Gems*, 1962, p. 755. Not the (equally objectionable) El Doradoite (Watkins, 1912; 8th List), a blue (yellowish, acc. to Webster) quartz.
- Emeraldine. A trade name for green dyed chalcedony. R. Webster, *Gems*, 1962, p. 755. Not to be confused with emeraldite (this List), nor with emeraudine, a *syn.* of dioptase.
- Emeraldite, Emeralite. A trade name for a pale green tourmaline. R. Webster, *Gems*, 1962, p. 755. Not to be confused with emeraldite (of?) (22nd List), an error for smaragdite, nor with emeraldine (this List), nor yet with emerilite (variant of emerylite, a *var.* of margarite).
- Eosite. Author and date? A trade name for a white and red quartzite rock, containing pyrite crystals. R. Webster, *Gems*, 1962, p. 173. Not the eosite (of Schrauf, 1871). Cf. leonite (this List).
- Erinide. A trade name for a yellowish-green *artificial* spinel. R. Webster, *Gems*, 1962, p. 756. Not to be confused with erinadine, with the erinites of van der Lingen, of Haidinger, of Thomson, or of Beudant, nor with erinoid, a casein resin. See under corundolite, this List.
- Eulebrite, error for Culebrite. Dana, *Syst. Min.*, 3rd edn, 1850, 481.
- Expandite. Also hemiexpandite, oligoexpandite, plioexpandite, and pleistoexpandite. F. Scheffer, H. Fölster, and B. Meyer, 1961. *Chemie der Erde*, 21, 232. Group names for 3-layer clay minerals with differing swelling characteristics.
- Fabulite. A trade name for *artificial* SrTiO_3 . H. Strunz, *Min. Tab.*, 1970, 5th edn, 525. Other trade names include diamontina, (dialite), marvelite, symant, and zeathite (all this List); also diagem, Bal de Feu, dynagem, Kenneth Lane jewel, and lustigem. M. J. O'Donoghue and R. Webster, both *priv. comm.*
- Fairburnite. Yet another locality variety of agate, from Fairburn, South Dakota. R. Webster, *Gems*, 1962, p. 756; J. Sinkankas, *Gemstones of North America*, 1959, p. 349 (Fairburn agate).
- Faseriges SiO_2 .** A. & A. Weiss, 1954. *Naturwiss.* 41, 12. An *artificial* fibrous orthorhombic modification of SiO_2 formed by heating SiO in air or *in vacuo*: *Icma*, $a = 4.72 \text{ \AA}$, $b = 5.16$, $c = 8.36$; $D = 1.95-1.98$. Not to be confused with faserquarz, a fibrous chatoyant variety of quartz. [M.A. 12-515.]
- Fe-pennantite.** R. A. H[owie], 1970. M.A. 70-2356. An analogue of pennantite (17th List) with $\text{Fe} \approx \text{Mn}$ from Ushatan, Atasui, Kazakhstan, described by M. M. Kayupova (Zap. 1967, 96, 155) under the name Железистый пеннантит (ferroan pennantite).
- Ferrichinglusuite. A. I. Soklakov and M. D. Dorfman, 1964. [Минералы СССР, 15, 167]; abstr. M.A. 18-160. A metamict mineral from Khibina with $\text{Fe}:\text{Mn}$ about 2:1, compared with about 1:4 in chinglusuite (15th List). The evidence that the mineral is a variety of chinglusuite is not convincing. German variant ferri-tschinglusuit, Strunz, *Min. Tab.* 1970, 5th edn, p. 526 (cf. tschinglusuite, 20th List).
- Ferrichrysocolla. F. V. Chukhrov, B. B. Zvyagin, A. I. Gorshakov, L. P. Ermilova,

- and E. S. Rudnitskaya, 1968. Изв. Акад. наук СССР (*Bull. Acad. Sci. URSS*), no. 6, 29 (Феррихризоколла). Superfluous name for a ferrian chrysocolla.
- Ferri-Eisen-Turmalin.** K. F. Chudoba, 1974. Hintze, 28. An unnecessary name for the ferric iron tourmaline of Frondel *et al.* (A.M. 51, 1501). Not buergerite, 25th List.
- Ferrihydrite.** F. V. Chukhrov, B. B. Zvyagin, A. I. Gorshkov, L. P. Ermilova, and E. S. Rudnitskaya, Изв. Акад. наук СССР, сер. геол. 1971, no. 1, 3 (Ферригидрит). The phase $\text{HFe}_5\text{O}_8 \cdot 4\text{H}_2\text{O}$ described by W. E. Towe and R. M. Bradley, *Journ. Colloid Sci.* 1967, 24, 386, occurs naturally in two deposits in the Altai, the Belousovsk and the Leninogorsk; $a 5.08$, $c 9.4$ Å. Named from the composition. [Zap. 101, 281.]
- Ferroankerite.** Y. Mincheva-Stefanova and M. Gorova, 1967. [*Bull. Geol. Inst., Ser. Geochem. Min. Petr.* (Bulgaria), 16, 95]; abstr. M.A. 18–282. An unnecessary name for a member of the dolomite family, $\text{Ca}_2\text{FeMg}(\text{CO}_3)_4$.
- Ferrobustamite.** P. A. Rapoport and C. W. Burnham, 1973. *Zeits. Krist.* 138, 419. 'Iron rhodonite' from Skye described by C. E. Tilley (A.M. 33, 736; M.A. 11–16; but Tilley actually used the name Iron-wollastonite, 14th List; cf. ferrowollastonite, 19th List) is shown to have the bustamite structure and is renamed. Data of Rutstein (A.M. 56, 2040) indicate a gap in the series ferrowollastonite–ferrobustamite. [A.M. 59, 632.]
- Ferrochalcanthite.** G. A. Yurgenson, 1971. Zap. 100, 359 (Феррохалькантит). $(\text{Fe}, \text{Cu})\text{SO}_4 \cdot 5\text{H}_2\text{O}$, with $\text{Fe} \approx \text{Cu}$; syn. of Ferrocuprochalcanthite, internationalized form of iron-copper-chalcanthite, 9th List. [M.A. 72–3309.]
- Ferrolite.** Author and date? A name proposed for a black iron slag to be used as gemstones. R. Webster, *Gems*, 1962, p. 756.
- Fluochrysotile.** Pu Wang and Wan-chuen Lu, 1965. [*Kexue Tongbao*, no. 9, 822]; abstr. M.A. 19–226. An unnecessary name for a fluorian chrysotile. Cf. fluor-antigorite, 24th List.
- Fluor-chlor-hydroxyapatite.** P. G. Cooray, 1970. A.M. 55, 2038. A variety of apatite with $\text{OH}:\text{F}:\text{Cl}$ approaching 1:1:1; the material described, from Ceylon, had $\text{OH}:\text{F}:\text{Cl} = 0.76:0.56:0.66$, and contained some carbonate. [M.A. 71–2322.] Cf. fluor-chlor-oxyapatite, 25th List.
- Fluoromontmorillonite.** A.-M. Hecht and E. Geissler, 1972. Bull. 95, 291. A synthetic product of composition $\text{Mg}_{5.1}\text{Na}_{0.7}\text{Si}_8\text{F}_4\text{O}_{20}\text{Na}_{1.1} \cdot n\text{H}_2\text{O}$.
- Foskorite.** L. Winand, 1963. *Bull. Soc. roy. Sci. Liège*, 32, 575. A phosphate rock from South Africa; a mixture of apatite and dolomite. [M.A. 17–261.]
- Gaidonnayite.** G. Y. Chao, 1973. C.M. 12, 143; G. Y. Chao and D. H. Watkinson, *ibid.* 316 (1974). An orthorhombic dimorph of catapleiite, $\text{Na}_2\text{ZrSi}_3\text{O}_9 \cdot 2\text{H}_2\text{O}$, with $a 11.740$, $b 12.820$, $c 6.691$ Å, occurs in the nepheline syenite of Mont-St.-Hilaire, Quebec. Named for Gabrielle Donnay. [M.A. 74–1446.]
- Galchait,** Germ. trans. of Галхайт, galkhaite (this List). Hintze, 31.
- Galkhaite.** V. S. Gruzdev, V. I. Stepanov, N. G. Shumkova, N. M. Chernitsova, R. H. Yudin, and I. A. Bryzgalov, 1972. Докл. 205, 1194 (Галхайт). HgAsS_2 , cubic $a 10.41$, from Gal-Khaya, Yakutia, and Khaidarkan, Kirgizia. Named for the type locality. [M.A. 73–1936; A.M. 59, 208; Zap. 102, 439.]

- Gerassimovskite, spelling variant of or error for Gerasimovskite (22nd List). *Medd. Grönland*, 1967, **181**, no. 5. [M.A. 71-477.]
- Glaukosphaerite.** M. W. Pryce and J. Just, 1974. M.M. **39**, 737. Green fibrous spherules from Hampton East Location, Kambalda, Western Australia, are monoclinic, a 9·34, b 11·93, c 3·07 Å, β 90 to 91°. Composition $4[(\text{Cu}, \text{Ni})_2\text{CO}_3(\text{OH})_2]$, the nickel analogue of rosasite. Named for the colour and habit.
- Godlewskite, Germ. trans. of Годлевскит, godlevskite (26th List). Hintze, 33.
- Goodletite. An unnecessary rock name; the limestone matrix of Burma ruby. R. Webster, *Gems*, 1962, p. 757.
- Grenalite. Error for or variant of grenatite (of Saussure), *syn.* of staurolite. R. Webster, *Gems*, 1962, p. 757. Not to be confused with greenalite (4th List).
- Guanine.** B. Unger, 1846. *Ann. Chem. Pharm.* **59**, 58. Unger (*Ann. Chem. Phys. (Poggendorff)*, 1844, **62**, 158; 1845, **65**, 222) isolated from guano from North Chincha Island, Peru, a compound he believed to be xanthine (xanthic oxide, Harnoxyd), a purine base. P. Einbrodt (*Ann. Chem. Pharm.* 1846, **58**, 15) showed that this identification could not be correct; Unger (*ibid.* 18) agreed, and later fully described the base, naming it guanine from its source. Formula $\text{C}_5\text{H}_5\text{N}_5\text{O}$. Natural occurrence confirmed in bat guano from Murra-el-elevyn Cave, Nullarbor Plain, Western Australia, by P. J. Bridge, M.M. **39**, 467 and 889.
- Guyanaite**, corrected spelling of Guayanaite (25th List); M.A. **19**-127.
- Haapalaite.** M. Huhma, Y. Vuorelainen, T. A. Hakli, and H. Papunen, 1973. *Bull. Geol. Soc. Finland*, **45**, 103. Thin bronze-red scales in the Kokka serpentinite, 33 km NNW. of Outokumpu, Finland, are hexagonal, a 3·64, c 34·02 Å; composition $2(\text{Fe}, \text{Ni})\text{S} \cdot 1\cdot61(\text{Mg}, \text{Fe})(\text{OH})_2$. Valleriite group. Named for P. Haapala. [A.M. **58**, 1111; Zap. **103**, 355.]
- Heideite.** K. Keil and R. Brett, 1974. A.M. **59**, 465. Rare anhedral grains in the Bustee meteorite, up to 0·1 mm in diameter, are probably monoclinic. Composition $(\text{Fe}, \text{Cr})_{1+x}(\text{Ti}, \text{Fe})_2\text{S}_4$. Named for F. Heide.
- Henritemierite, error for Henritermierite (M.A. 69-2890).
- Heulandite-B. F. A. Mumpton, 1960. A.M. **45**, 351. *Syn.* of Metaheulandite (2nd List). [M.A. 15-355.]
- Heyite.** S. A. Williams, 1973. M.M. **39**, 65. Orange-yellow crystals from the Betty Jo claim, Ely, White Pine County, Nevada, have a 8·910, b 6·017, c 7·734 Å, β 111° 53'. Composition $[\text{Pb}_5\text{Fe}_2(\text{VO}_4)_2\text{O}_4]$. Cf. also M.M. 1973, **39**, 69. Named for M. H. Hey. [M.A. 73-2943, 2944; A.M. **59**-382; Zap. **103**, 361.]
- Hilairite.** G. Y. Chao, D. H. Watkinson, and T. T. Chen, 1974. C.M. **12**, 237. Small pale-brown trigonal crystals (a 10·556, c 15·851 Å) from Mont-St.-Hilaire, Quebec, previously listed as ROM 1 and as UK 20, have the composition $\text{Na}_2\text{ZrSi}_3\text{O}_9 \cdot 3\text{H}_2\text{O}$, and are named for the locality.
- Hoch-Bassanit. H. Strunz, 1970. *Min. Tab.* 5th edn, 291. A new name by the same author for β -bassanite (24th List).
- Hoch-Schapbachit. H. Strunz, 1944. *Min. Tab.*, 1st edn, 72 (and in all subsequent editions). The high-temperature cubic modification (α -AgBiS₂) of schapbachite. Now a *syn.* of schapbachite (*Min. Tab.*, 1970, 5th edn, pp. 125 and 534), which

- becomes the high-temperature phase following the redefinition of matildite [M.A. 70-1585] as low-temperature hexagonal β -AgBiS₂. [Note: the α - and β - usage is reversed by J. H. Wernick, A.M. 45, 591.]
- Hodruschit, Germanized spelling of hodrushite, hodrušit (26th List). Hintze, 37.
- Hwanghite, variant of Huanghoite, 23rd List. (Докл. 1972, 202, 422.)
- Hyalithe. Trade name for a red, brown, green, or black glass. R. Webster, *Gems*, 1962, p. 757. Not to be confused with hyalite.
- Hydroascharite. R. von Hodenberg and R. Kühn, 1972. *Kali und Steinsalz*, 6, 104. An unnecessary name for a szájbelyite with some extra water. [M.A. 74-480.]
- Hydrograndite (27th List). Probably a direct coinage from grandite (5th List); a group name.
- Hydroromarchite.** R. M. Organ and J. A. Mandarino, 1971. C.M. 10, 916. White crystals formed on tin pannikins lost about 1801 to 1821 in the Winnipeg River, Ontario, at Boundary Falls, are identical with artificial 5SnO₂·2H₂O. Anorthic, a 11·5, b 6·03, c 19·8 Å, α 99°, β 60° 30', γ 88° 30'. (Cf. *Acta Cryst.* 1961, 14, 65.) [Bull. 96, 241; A.M. 57, 1555; Zap. 101, 280.] Cf. romarchite, this List.
- Hydroserpentine. H. Strunz, 1970. *Min. Tab.*, 5th edn, 462. (Hydroserpentin). A group name for the hypothetical minerals hydroantigorite and hydroamesite (both 22nd List); not the hydroserpentine (of Frank-Kamenetsky, 1960) (22nd List).
- Iimoriite.** A. Kato and K. Nagashima, 1970. *An Introduction to Japanese Minerals*, 39 and 85. Purplish-grey masses from Fusamata, Kawamatamachi, Fukushima Prefecture, Japan, are anorthic, a 11·6, b 6·65, c 26·2 Å, α 94·3°, β 95·0°, γ 93·6°. Composition near Yt₅(SiO₄)₃(OH)₃. Named for S. Iimori and T. Iimori. [Zap. 101, 287.] Cf. Victoria-stone, this List.
- Ilmajokite, variant (German style) transliteration of Ильмайокит, Ilmaiokite (27th List), M.A. 73-807; A.M. 58, 139 (1974); Zap. 102, 453.
- Iocite, erroneous transliteration of Иоцит, Iozite (10th List). *Dokl. Acad. Sci. U.S.S.R. (Earth Sci. Sect.)*, 1969, 180, 133 (translation of Докл. Акад. наук СССР, 1968, 180, 449). [M.A. 71-1353.]
- Irhtemite.** R. Pierrot and H.-J. Schubnel, 1972. Bull. 95, 365. Spherulites of fine monoclinic needles from Irhtem, Bou Azzer, Anti-Atlas, Morocco, have a 16·73, b 9·48, c 10·84 Å, β 97° 15'; composition Ca₄MgH₂(AsO₄)₄·4H₂O. Obtained synthetically by hydrolysis of basic CaMg arsenates and by dehydration of picropharmacolite. Named for the locality. [M.A. 73-1397; Bull. 96, 237; A.M. 59, 209; Zap. 102, 450.]
- Iridarsenite.** D. C. Harris, 1974. C.M. 12, 280. Monoclinic 4[IrAs₂] (a 6·060, b 6·071, c 6·158 Å, β 113° 16') occurs as inclusions up to 0·06 mm diameter in rutheniridoxite from New Guinea; identical with artificial material. Named from the composition.
- Iscorite.** J. Smuts, J. G. D. Steyn, and J. C. A. Boeyens, 1969. *Acta Cryst. B* 25, 1251. An artificial iron silicate, 2[Fe₇SiO₁₀], monoclinic, found in a steel furnace. [M.A. 71-1751.]
- Isomertieite.** A. M. Clark, A. J. Criddle, and E. E. Fejer, 1974. M.M. 39, 528. A few grains in the arsenopalladinite concentrates from Itabira, Minas Gerais, Brazil,

- have a composition near that of mertieite (this List), but are pseudo-cubic, $a 12.283 \text{ \AA}$; unit-cell contents $16[(\text{Pd,Cu})_6(\text{Sb,As})_2]$. Metrically cubic but optically uniradial. Named from its chemical similarity to mertieite. [M.A. 74-1444.]
- Isowolframite.** N. P. Senchilo and K. A. Mukhlya, 1972. [Изв. акад. наук Казах. ССР, сер. геол. 4, 45]; abstr. A.M. 58, 560. An unnecessary name for members of the hübnerite-ferberite series with FeWO_4 40 to 60 mol. % [Zap. 103, 362.]
- Jadine.** Trade name for an Australian chrysoprase. R. Webster, *priv. comm.* Not to be confused, as presumably intended, with jadeite or jade.
- Jagowerite.** E. R. Meagher, M. E. Coates, and A. E. Aho, 1973. C.M. 12, 135. Light green crystalline masses in a Palaeozoic carbonaceous argillite at $63^\circ 35' \text{ N.}$, $132^\circ 48' 30'' \text{ W.}$ in the Yukon Territory, are anorthic, $a 6.04$, $b 6.964$, $c 4.971 \text{ \AA}$, $\alpha 116^\circ 51'$, $\beta 86^\circ 6'$, $\gamma 112^\circ 59'$; $\text{BaAl}_2(\text{PO}_4)_2(\text{OH})_2$. Named for J. A. Gower.
- Jahnsite.** P. B. Moore, 1974. A.M. 59, 48. Short prismatic monoclinic crystals of variable colour (greenish-yellow to purplish-brown) with a wide range of phosphates in the Tip Top pegmatite, Custer, Custer County, South Dakota, have $a 14.94$, $b 7.14$, $c 9.93 \text{ \AA}$, $\beta 110.16^\circ$, and composition $2[\text{CaMnMg}_2\text{Fe}_2^{3+}(\text{PO}_4)_4(\text{OH})_2 \cdot 8\text{H}_2\text{O}]$. Named for R. H. Jahns.
- Jamborite.** N. Morandi and G. Dalrio, 1973. A.M. 58, 835. Green pseudomorphs after millerite, occurring in ophiolites near Bologna and Modena, Italy, consist of tiny hexagonal crystals, $a 3.07$, $c 23.3 \text{ \AA}$, with composition $(\text{Ni}^{2+}, \text{Ni}^{3+})(\text{OH})_2(\text{OH, S, H}_2\text{O})$ with some Co and Fe. The name, for J. L. Jambor, is intended to include the unnamed nickel hydroxide of Jambor and Boyle (C.M. 1964, 8, 116). [M.A. 74-1447.]
- Joséite** D. A. A. Godovikov, K. V. Kochetkova, and Yu. G. Lavrentev, 1971. Zap. 100, 425. (Жозеит-Д). Material from Ustarasa has the composition $\text{Bi}_{3.78}\text{Pb}_{0.24}\text{Te}_{1.56}\text{S}_{1.42}$; perhaps identical with the unnamed mineral of E. A. Dumink-Barkovskii (Zap. 97, 332). [Zap. 101, 278.]
- Kafehydrocyanite.** A. S. Povarennykh and L. D. Rusakova, 1973. Геол. журнал, 33, part 2, 24 (Кафегидроцианит). Pale yellowish-green stalactites at the Medvezhii Log mine, Olkhovsk, eastern Sayan, prove to consist of potassium ferrocyanide, $\text{K}_4\text{Fe}(\text{CN})_6$. Named from the composition. [M.A. 74-508; A.M. 59, 209; Zap. 103, 353.] Unrelated to hydrocyanite.
- Kali-Klinoptilolith.** K. F. Chudoba, 1974. C. Hintze, Handb. Min., Erg.-Bd. 4, 43. Translation of Potassium-clinoptilolite (this List).
- Kalium-Pharmakosiderit.** K. F. Chudoba, 1974. C. Hintze, Handb. Min., Erg.-Bd. 4, 44. *Syn.* of pharmacosiderite. (The name is not used by Walenta in the reference cited; he writes: Der Name Pharmakosiderit hätte nur für das kaliumhaltige Eisenarsenat Gültigkeit.) Cf. Alumopharmacosiderite, 14th List.
- Kanaekanite.** A. S. Povarennykh and V. D. Dusmatov, 1970. Инфракрасные спектры поглощения новых минералов из щелочных пегматитов Средней Азии. Сб.; Конституция и свойства минералов. Киев, no. 4, стр. 7 (Канаэканит). The 'ekanite' from Central Asia (M.A. 19-177; 69-1044), which differs from Ceylon (type) ekanite in containing K and Na, is recognized as a separate species and named from its composition.
- Kanemite.** Z. Johan and G. F. Maglione, 1972. Bull. 95, 371. Small spherules of platy

orthorhombic crystals, a 7·28, b 20·507, c 4·956 Å, space group $Pnmb$, occur at the Andjia saline, Kanem, Chad; composition $4[\text{NaHSi}_2\text{O}_4(\text{OH})_2 \cdot 2\text{H}_2\text{O}]$. Named for the locality. [M.A. 73-1938; Bull. 96, 237; A.M. 59, 210; Zap. 102, 454.]

Kaolite. 'Moulded imitation cameos, etc., in baked clay'. R. Webster, *Gems*, 1962, p. 758. A thoroughly objectionable name.

Karibibite. O. von Knorrung, Th. G. Sahama, and P. Rehtijärvi, 1973. *Lithos*, 6, 265. Brownish-yellow fibres in löllingite from the Karibib pegmatite, S.W. Africa, are orthorhombic (a 27·91, b 6·53, c 7·20 Å); $6[\text{Fe}_2^{3+}\text{As}_4^{3+}\text{O}_9]$, with some replacement of As^{3+} by 3H^+ . Named for the locality. [A.M. 57, 1315; 59, 382; M.A. 74-1448.]

Kazakovite. A. P. Khomyakov, E. I. Semenov, E. M. Eskova, and A. A. Voronkov, 1974. Zap. 103, 342 (Казаковит). A rhombohedral member of the lovozerite family, a 10·18, c 13·06 Å, composition $\text{Na}_6\text{H}_2\text{TiSi}_6\text{O}_{18}$, from Mt. Karnasurt, Lovozero massif, is named for M. E. Kazakova.

Keystoneite. Author and date? Chalcedony coloured blue by chrysocolla [?]. R. Webster, *Gems*, 1962, p. 758.

Khibinskite. A. P. Khomyakov, A. A. Voronkov, S. I. Lebedeva, V. P. Bykov, and K. V. Yurkina, 1974. Zap. 103, 110 (Хибинскит). Monoclinic pseudorhombohedral crystals (a 19·22, b 11·10, c 14·10 Å, β 116° 30') from the Khibina massif have the composition $16[\text{K}_2\text{ZrSi}_2\text{O}_7]$; named from the locality. Cf. Khibinite, 15th List, a rock name.

Killalaite. R. A. Nawaz, 1974. M.M. 39, 544. Monoclinic colourless crystals (a 9·3, b 9·9, c 7·7 Å, $\beta \approx 105^\circ$) in a thermally metamorphosed limestone at Killala Bay, Inishcrone, Co. Sligo, Ireland, have composition $2[2\text{Ca}_3\text{Si}_2\text{O}_7 \cdot \text{H}_2\text{O}]$. Named from the locality. [M.A. 74-1449.]

Kirschsteinite, error for Kirschsteinite. *Dokl. Acad. Sci. U.S.S.R. (Earth Sci. Sect.)*, 1970, 190, 136. [M.A. 73-2800.]

Kogarkoite. A. Pabst and W. N. Sharp, 1973. A.M. 58, 116. Monoclinic crystals from the Lovozero massif, Kola Peninsula, U.S.S.R., and Hortense Hot Spring, Colorado, are identical with synthetic $12[\text{Na}_3\text{SO}_4\text{F}]$; a 18·073, b 6·949, c 11·440 Å, β 107° 43'. Distinct from schairerite (12th List; $\text{Na}_{21}(\text{SO}_4)_7\text{F}_8\text{Cl}$), galeite (21st List; $\text{Na}_{15}(\text{SO}_4)_5\text{F}_4\text{Cl}$), and sulphohalite ($\text{Na}_6(\text{SO}_4)_2\text{FCl}$). Named for L. N. Kogarko, who first described the Lovozero material. [M.A. 73-2912; Zap. 103, 360.]

Komarovit, Germ. trans. of Комаровит, komarovite (27th List). Hintze, 47.

Krutaite. Z. Johan, P. Picot, R. Pierrot, and M. Kraček, 1972. Bull. 95, 475. Small (< 1 mm) grains, mostly included in clauthalite from the Petrovice ore deposit, Moravia, Czechoslovakia, of CuSe_2 with some Co, Ni, and Fe, are cubic, a 6·056 Å, and isostructural with pyrite. Named for Dr. T. Kruta. [M.A. 73-2945; Bull. 96, 238; A.M. 59, 210; Zap. 103, 356.]

Lafittite. Z. Johan, J. Mantienne, and P. Picot, 1974. Bull. 97, 48. Small grains (up to 0·2 mm) with routhierite in the black dolomites of Jas Roux, Hautes-Alpes, France, are monoclinic, a 11·484, b 14·020, c 6·388 Å, β 90·0°. Composition $8[\text{AgHgAsS}_3]$. Named for P. Lafitte.

Larosite. W. Petruk, 1971. C.M. 11, 209; ibid. 1972, 11, 886. Small acicular crystals

- with chalcosine and stromeyerite from the Foster mine, Cobalt, Ontario, are orthorhombic, $a\ 22\cdot15$, $b\ 24\cdot03$, $c\ 11\cdot76$ Å. Composition $10[(Cu,Ag)_{21}PbBiS_{14}]$. Named for Mr. LaRose. [M.A. 73-3556, 74-1450; A.M. 59, 382; Zap. 102, 441.]
- Launavite**, error for Launayite (25th List). C.M. 9, 744.
- Lavendrine**. An absurd trade name for amethystine quartz. R. Webster, *Gems*, 1962, p. 759.
- Lazurquartz**. Author and date? A totally unnecessary name for blue quartz (chalcedony). R. Webster, *Gems*, 1962, p. 759. For comments on azur-, lazur-, etc., see L. J. Spencer, A.M. 22, 683.
- Lead barysilite**. W. Petter, A. B. Harnick, and U. Keppler, 1971. *Zeits. Krist.* 123, 445 (Blei-Barysilit). The *artificial* compound $18[Pb_3Si_2O_7]$, an analogue of Barysilite. Cf. lead-barylite, 25th List.
- Lemuanite**, error for Lemoynite (26th List). C.M. 9, 585.
- Leonite**. Author and date? 'Tibet stone (eosite).' R. Webster, *Gems*, 1962, p. 759. Not the leonite (of Tenne), nor the eosite (of Schrauf); see eosite, this List.
- Leukophosphatit**. H. Strunz, 1970, *Min. Tab.*, 5th edn, p. 348. A name for the *artificial* 'kubische Modifikation des Leukophosphits' of O. E. Radczewski and E. Wanderer, 1965, *Naturwiss.* 52, 426. Note that the formulae of leukophosphatit, $(K,H)Fe^{3+}(PO_4)_3(OH)_4 \cdot 6-7H_2O$, and of leucophosphite, $K_2(Fe,Al)_7(OH)_{11}(PO_4)_4 \cdot 6H_2O(?)$ [13th List], now $(K,NH_4)Fe^{3+}_2(PO_4)_2OH \cdot 2H_2O$, are not obviously compatible.
- Liebenbergite**. S. A. de Waal and L. C. Calk, 1973. A.M. 58, 733. Minute pale-green remnant grains in a nickel serpentine at the Bon Accord deposit, Barberton Mountain Land, South Africa, approach the end-member Ni_2SiO_4 ; olivine group. Orthorhombic, $a\ 4\cdot727$, $b\ 10\cdot191$, $c\ 5\cdot955$ Å. Named for W. R. Liebenberg. *Artificial* Ni_2SiO_4 has been called nickel olivine (15th List). [M.A. 74-3465.]
- Loesserite**. Soviet Physics—*Doklady*, 1962, 7, 173. Mistransliteration of Лессерит, Lesserite, now a *syn.* of inderite [A.M. 45, 732]. [M.A. 16-133.]
- Lovdarite**. Yu. P. Menshikov, A. P. Denisov, E. I. Uspenskaya, and E. A. Lipatova, 1973. Докл. 213, 429 (Ловдарит). Radiating aggregates and colourless orthorhombic prisms ($a\ 38\cdot79$, $b\ 6\cdot776$, $c\ 7\cdot012$ Å) occur in pegmatoidal deposits on Mt. Karnasurt, Lovozero massif, Kola peninsula. Near $4[(Na,K,Ca)_4(Be,Al)_2Si_6O_{16} \cdot 4H_2O]$. Named from Lovozero and дар, a gift; [M.A. 74-2476.]
- Lusterite**. A trade name for *artificial* rutile. M. J. O'Donoghue, *priv. comm.* See under titania, this List.
- Macrokaolinite**. W. C. Isphording and W. Lodding, 1968. *Clays Clay Min.* 16, 257. A rock name; illite plus montmorillonite, etc., including large grains ($\geq 0\cdot2$ mm) of kaolinite. This type of nomenclature invites confusion. [A.M. 58, 1115.]
- Magnesium-Astrophyllit**, variant of magnesio-astrophyllite (26th List). Hintze, 52.
- Magnesium hornblende**. W. M. Kowalski, 1967. *Polska Akad. Nauk, Prace Geol.* 42, 83. A mistranslation of Hornblenda magnezowa, Magnesian hornblende (*ibid.* 37). [M.A. 71-1312.]
- Magnesium-pennantite**. R. A. H[owie]. M.A. 70-2356. An analogue of pennantite (17th List) with Mg:Mn about 2:1 from the Zhumast deposit, Atasui, Kazakhstan,

described by M. M. Kayupova (Zap. 1967, **96**, 155) under the name Магнезальный пеннантит (magnesian pennantite).

Magniosiderite. P. V. Zaritsky, 1964. Докл. **155**, 1341 (Магниосидерит). *Syn.* of magnesian chalybite, including sideroplesite and pistomesite.

Mangan-sahlite. V. A. Zharikov and K. V. Podlessky, 1955. Докл. **105**, 1096 (манган-салит). An unnecessary name for a manganoan sahlite, from limestone skarns in Western Karamazar. [M.A. 13-56.]

Manganchinglusuite. A. I. Soklakov and M. D. Dorfman, 1964 [Минералы СССР, **15**, 167]; abstr. M.A. **18**-160. A metamict mineral from Khibina with about twice as much MnO as chinglusuite (15th List), and 3 or 4 times as much Fe. Evidence that the mineral is a variety of chinglusuite is not convincing. German variant Mangan-Tschinglusuit, *Strunz. Min. Tab.* 1970, 5th edn, 551.

Manganese aluminium chromite. Incorrect translation of Хромит марганцево-алюминиевый, manganoan aluminian chromite (M.A. 70-705).

Manganese-shadlunite, variant of Mn-shadlunite (Mn-шадлунит). A.M. **58**, 1114 (1973).

Manganobabingtonite, erroneous translation of Марганцевый бабингтонит, Manganese babingtonite. *Dokl. Acad. Sci. U.S.S.R.* 1966, **169**, 128; translation of Докл. Акад. наук СССР, 1966, **169**, 434. *Syn.* of Manganbabingtonite (26th List).

Marvelite. A trade name for artificial SrTiO_3 . M. J. O'Donoghue, *priv. comm.* See under fabulite, this List.

Mattagamite. R. I. Thorpe and D. C. Harris, 1973. C.M. **12**, 55. Grains up to 0.1 mm in altaite from the Mattagami mine, Matagami Lake, Quebec, are orthorhombic a 5.305, b 6.289, c 3.866 Å. Composition CoTe_2 , with variable amounts of Fe and Sb. Named from the locality. [A.M. **59**, 382.]

Maw-sit-sit. Author and date? A dealers' trade name for a green decorative jadeite-albite rock, named for the locality: Maw-sit-sit, Tawmaw area, Burma. E. Gübelin, *Journ. Gemmology*, 1965, **9**, 329 and 372. Cf. jade-albite, 24th List.

Mazzite. E. Galli, E. Passaglia, D. Pongiluppi, and R. Rinaldi, 1974. *Contr. Min. Petr.* **45**, 99. Tiny hexagonal needles (a 18.392, c 7.646 Å) from Mont Semiol (= Mont Simiouse), Loire, France; a zeolite near $\text{K}_2\text{Mg}_2\text{Ca}_{1.5}\text{Al}_{9.5}\text{Si}_{26.5}\text{O}_{72} \cdot 28\text{H}_2\text{O}$. Named for F. Mazzi. Note that Mont Semiol is the type locality for another hexagonal zeolite, offretite. [M.A. 74-3466.]

Medfordite. An unnecessary name for a variety of moss agate. R. Webster, *Gems*, 1962, p. 759.

Melkowit, Germ. trans. of Мелковит, melkovite (26th List). Hintze, 58.

Melonjosephite. A.-M. Fransolet, 1973. Bull. **96**, 135. Dark-green fibrous masses in the pegmatite of Angarf-Sud, Zenaga, Anti-Atlas, Morocco, are orthorhombic, a 9.548, b 10.847, c 6.380 Å; composition $4[\text{CaFe}^{2+}\text{Fe}^{3+}(\text{PO}_4)_2\text{OH}]$, with some Mg. Named for Joseph Mélon.

Mendiffit. J. Fröbel, 1843. *Grundzüge eines Systems der Krystallologie*, 32. Composition given as $\text{PbCl}_2 + 2\text{Pb}$, i.e. $\text{PbCl}_2 \cdot 2\text{PbO}$. *Syn.* of mendipite.

Mercurarsite, Меркурарсит, *syn.* of aktashite (26th List). Zap. **102**, 440 and 457 (1973) apparently a provisional name, referring to the composition.

- Mertieite.** G. A. Desborough, J. J. Finney, and B. F. Leonard, 1973. A.M. **58**, 1. Brassy-coloured grains from Goodnews Bay, Alaska, are pseudohexagonal, a_h 15·04, c_h 22·41 Å; composition $Pd_5(Sb,As)_2$. Named for J. B. Mertie, Jr. [M.A. 73-2946; Zap. **103**, 353.]
- Metaberyllite.** E. I. Semenov, 1972. [Мин. Ловозерск. щелочн. масс., Изд. Наука]; abstr. Zap. **102**, 75 (Метобериоллит). $Be_3SiO_5 \cdot 2H_2O$, from the Lovozero massif; a lower hydrate of beryllite (20th List).
- Metacalciouranoite.** V. P. Rogova, L. N. Belova, G. P. Kiziarov, and N. N. Kusnezova, 1973. Zap. **102**, 75 (Метакальцуроит, metacalsuranoite). Fine-grained orange aggregates replacing pitchblende at an unnamed Russian locality have a composition $(Ca,Ba,Na_2)O \cdot 2 \cdot 1 UO_3 \cdot 1 \cdot 7 H_2O$. Named from its composition. [M.A. 74-505; Bull. **96**, 239; A.M. **58**, 1111; Zap. **103**, 358.]
- Metakalzuranoit, Germ. trans. of Метакальцуроит, metacalciouranoite (this List). Hintze, 59.
- Meta-lodèvite.** H. Agrinier, F. Chantret, J. Geffroy, B. Hery, B. Bachet, and H. Vachey, 1972. Bull. **95**, 360 (Méta-lodèvite). Tetragonal platy crystals from Lodève, Hérault, France, have $a = b = 7 \cdot 16$, $c 17 \cdot 20$ Å, space-group $P4_2/m$, though the optical properties ($2V_a$ 27 to 37°) suggest orthorhombic symmetry. Composition $Zn(UO_2)_2(AsO_4)_2 \cdot 10H_2O$. Named for the locality. [M.A. 73-1940; Bull. **96**, 239; A.M. **59**, 210; Zap. **102**, 450.]
- Metaranquilit.** Author? *Intro. Min. Japan*, 39 (1970), Geol. Surv. Japan. A lower hydrate of ranquilit (22nd List) from the Togo mine, Tottori Prefecture, Japan. $(CaO)_{1.5}(UO_3)_2(SiO_2)_5 \cdot 10H_2O$; no further details. [Zap. **101**, 286.]
- Meymacite.** R. Pierrot and R. Van Tassel, 1965. Bull. **88**, 613. The Meymacite of Carnot (1874) is shown to be Ferritungstite, and the name is reinstated for amorphous $WO_3 \cdot 2H_2O$. [M.A. 17-695.]
- Mg-wollastonite.** I. Shinno, 1970. *Journ. Jap. Assoc. Min. Petr. Econ. Geol.* **63**, 146. An artificial product with the composition of diopside but the crystal-structure of wollastonite. [M.A. 71-1002.] Cf. magnesium-wollastonite, 18th List.
- Micatite.** A misleading trade name for a phenolic resin plastic. R. Webster, *Gems*, 1962, p. 759. Nothing to do with micaultite (error for micaultlite).
- Miromirite,** error for miomirite (27th List). A.M. **58**, 560.
- Mn-alumochromite.** E. I. Nefedov and N. I. Shuvalova, 1968. Zap. **97**, 90 (Мн-алюмохромит). An unnecessary name for manganoan alumochromite. See alumochromite, 14th List.
- Mn-ferripalygorskite,** see Mn-palygorskite.
- Mn-ferrisepiolite,** see Mn-sepiolite.
- Mn-palygorskite.** E. I. Semenov, 1969. [Инст. мин. геохим. крист. редк. элем. 1969, 100]; abstr. A.M. **55**, 2139 (1970). A red pleochroic mineral, $\alpha 1 \cdot 56$, yellowish, $\gamma 1 \cdot 58$, red-brown, from Siorarsuit, Ilimaussaq, Greenland, is regarded as identical with material ($\alpha 1 \cdot 545$, $\gamma 1 \cdot 58$) from Karnasurt, Lovozero, Kola Peninsula; the latter has a composition near $NaMgMnFe_2AlSi_7O_{20}(OH)_2 \cdot 10H_2O$. X-ray data are near those of palygorskite. The name Mn-ferripalygorskite is also used, apparently for the same mineral. Cf. ferripalygorskite, 22nd List.

- Mn-Schadlunit, Germ. trans. of Mn-шадлунит, Mn-shadlunite (this List). Hintze, 60.
- Mn-sepiolite.** E. I. Semenov, 1969. [Инст. мин. геохим. крист. редк. элем. 1969, 100]; abstr. A.M. 55, 2138 (1970). A dark reddish-brown pleochroic mineral, α 1.72, yellowish, $\gamma \parallel [001]$ 1.74, red-brown, from Nakalak Mountain, Ilimaussaq, Greenland, is formulated as $Mn_4Fe_4Si_{12}O_{30}(OH)_6 \cdot 8H_2O$ and as $(Fe,Mn)_9Si_{12}O_{30}(OH)_6 \cdot 10H_2O$ (no analysis). X-ray powder data resemble those of sepiolite. The name Mn-ferrisepiolite is also used, apparently for the same mineral. Cf. ferri-sepiolite, 22nd List.
- Mn-shadlunite.** T. L. Evstigneeva, A. D. Genkin, N. V. Troneva, A. A. Filimonova, and A. I. Tsepina, 1973. Zap. 102, 63 (Мн-шадлунит). A manganoan variety of shadlunite (*q.v.*), with Mn replacing most of the Pb, from the Oktyabr copper deposit, Norilsk, Siberia. Cubic, a 10.73 Å. [M.A. 73-4082; A.M. 58, 1114.]
- Mpororoite.** O. von Knorring, Th. G. Sahama, and M. Lehtinen, 1972. *Bull. Geol. Soc. Finland*, 44, 107. A fine-grained greenish-yellow alteration product of scheelite, in the Mpororo tungsten deposit, Kigezi, Uganda, is monoclinic, a 8.27, b 9.32, c 16.40 Å, β 92° 29'; composition 5 [(Al,Fe)₂W₂O₉.6H₂O]. Named for the locality. [A.M. 58, 1112; Zap. 103, 362.]
- Mtorodite.** E. H. Rutland, 1970. [*Zeits. deut. gemm. Ges.* 19, 141]; quoted in C. Hintze, *Handb. Min.* (K. F. Chudoba, editor), *Erg.-Bd.* 4, 62. A green chromian chalcedony. Named for its locality in Rhodesia. A variant of matorolite, 26th List.
- Murataite.** J. W. Adams, T. Botinelly, W. N. Sharp, and K. Robinson, 1974. A.M. 59, 172. Black anhedral grains or poorly developed crystals in a pegmatite in the St. Peters Dome area, Colorado, are cubic, a 14.863 Å; composition 8[(Na,Yt,Ln)₄(Zn,Fe)₃(Ti,Nb)₆O₁₈(F,OH)₄], with Er > Dy > Gd the predominant lanthanons. Named for K. J. Murata. [M.A. 74-3467.]
- Nambulite.** M. Yoshi, Y. Aoki, and K. Maeda, 1972. *Min. Journ. [Japan]*, 7, 29. Reddish-brown veinlets in braunite ores at the Tunakozowa mine, Kitakami mtns, Japan, are anorthic, a 7.621, b 11.761, c 6.731 Å, α 92° 46', β 95° 5', γ 106° 52'; composition near LiNaMn₈Si₁₀O₂₈(OH)₂. Named for M. Nambu. Differs from hydrorhodonite (Engström, 1875) in containing much less water. [A.M. 58, 1112.]
- Natrium-Betpakdalit, German form of sodium betpakdalite (27th List). Hintze, 63.
- Natriummordenit, German form of sodium mordenite (26th List). Hintze, 64.
- Natrofairchildite.** Yu. L. Kapustin, 1971. [Мин. карбонатитов, Изд. наука, 1971, 181]; abstr. Zap. 103, 359. $Na_2Ca(CO_3)_2$, from the Vuoriyarvi massif, Karelia, ω 1.525, ϵ 1.459, strongest X-ray powder lines 3.18, 2.64, 6.71, 2.20, 1.891 Å. [Probably identical with nyerereite, 24th List, which has not been adequately described—M. H. H.]
- Natrophisingerite. A. I. Soklakov and M. D. Dorfman, 1964. [Минералы СССР, 15, 167]; abstr. M.A. 18-160. A metamict mineral (locality not given) formulated $R_{0.26}Mn_{0.02}Fe_{2.69}Si_3O_{10} \cdot 7.1H_2O$, where R is largely Na. The evidence that it is a variety of hisingerite is not convincing.
- Nickel-chrysotile. H. Strunz, 1957. *Min. Tab.* 3rd edn, 323 (Nickel-Chrysotil). An unnecessary name for nickeliferous chrysotile. Cf. nickel-antigorite (22nd List) and Ni-serpentine (this List).

- Nimesite.** Z. Maksimović, 1972. [Bull. Sci. Cons. Acad. Sci. Arts. R.S.F. Yugoslav., sect. A, 17, 224]; abstr. A.M. 58, 1112 (1973). The nickel analogue of amesite, in green fibrous aggregates from the Marmara bauxite, Greece. Not to be confused with nimite, 26th List, a chlorite.
- Ni-serpentine.** D. M. Roy and R. Roy, 1954. A.M. 39, 957-75. Artificially prepared serpentine minerals with Ni substituting for Mg. Cf. nickel-antigorite (22nd List) and nickel-chrysotile (this List).
- Olschanskit, Germ. trans. of Ольшанскит, olshanskyite (26th List). Hintze, 67.
- Orpheite.** I. Kostov, 1968. Mineralogy (Oliver & Boyd, London), 474. B. Kolkovski, [Годишник Софийск. унив., Геол.-геогр. фак., геол., 1971/2, 64, 107], abstr. Zap. 102, 451. $H_6Pb_{10}Al_{20}(PO_4)_{12}(SO_4)_5(OH)_{40} \cdot 11H_2O$, from the Modjarovo deposit, Rhodope Mts, Bulgaria.
- Ortho-armalcolite.** S. E. Haggerty, 1973. Nature (Phys. Sci.), 242, 123. A premature name for a colour variety of armalcolite (27th List). [A.M. 59, 632.]
- Orthoenstatite.** N. Morimoto and K. Koto, 1969. Zeits. Krist. 129, 65. Syn. of enstatite.
- Oxyallanite.** W. A. Dollase, 1973. Zeits. Krist. 138, 41. An artificial product; allanite loses hydrogen on heating and forms oxyallanite.
- Oxy-Turmalin,** German variant of oxytourmaline (25th List). Hintze, 69.
- Palladoarsenide.** V. B. Begizov, V. I. Meshchankina, and L. S. Dubakina, 1974. Zap. 103, 104 (Палладоарсенид). Monoclinic Pd_2As (a 9.25, b 8.47, c 10.44 Å, β 94.0°), from the Oktyabr copper-nickel deposit. Named from the composition.
- Palladium-Wismutid,** Germ. trans. of Визмутид палладия, palladium bismuthide (25th List). Hintze, 69.
- Pamirite.** Labuntsov, 1930. Quoted in Yu. K. Vorobev, Zap. 1967, 96, 333. Described as a distinct species intermediate between forsterite and clinohumite, but is shown to be merely forsterite. [M.A. 19-44.]
- Para-armalcolite.** S. E. Haggerty, 1973. Nature (Phys. Sci.), 242, 123. A premature name for a colour variety of armalcolite (27th List). [A.M. 59, 632.]
- Paraboleïte.** A. Mücke, 1972. Fortschr. Min. 50, Beiheft 1, 67 (Paraboleit). A name proposed for all minerals intermediate between boléite and pseudoboleïte, and particularly for the material with composition $2[28PbCl_2 \cdot 24Cu(OH)_2 \cdot 6AgCl \cdot 8H_2O]$ and tetragonal cell dimensions a 15.249, c 30.831 Å from Mina Santa Ana, Caracoles, Sierra Gorda, Chile. [Should not have been named—M. F.] [A.M. 59, 221.]
- Paradokrasit,** German variant of paradocrasite (27th List). Hintze, 70.
- Paranatrolite.** A. A. Maier, N. S. Manuilova, and B. G. Varshai, 1964. Докл. 154, 363 (Паранатролит). A supposed polymorph of natrolite, produced by dehydration and rehydration, differing only in dielectric constant and ease of dehydration. Is merely natrolite with some lattice breakdown (E. E. Senderov and G. V. Yukhnovich, 1964. Геохимия, 849).
- Para-schachnerite.** E. Seeliger and A. Mücke, 1972. Neues Jahrb. Min. Abh. 117, 1 (Para-Schachnerit). $2[Ag_{1.2}Hg_{0.8}]$, orthorhombic pseudohexagonal, formed by loss of Hg from moschellandsbergite at the Vertrauen Gott mine, Obermoschel, Pfalz,

- Germany.** *a* 2·96, *b* 5·13, *c* 4·83 Å. Named for Dr. D. Schachner. [M.A. 73–1941; Bull. 96, 240; A.M. 58, 347.]
- Paraveatchite**, error for *p*-Veatchite. J. R. Clark, *in* J. Murdoch and R. W. Webb, *Calif. Div. Mines Geol. Bull.* 173 (1964), suppl. 2, 16; cf. A.M. 55, 1936. The pre-fixed *p* (for primitive) was mistaken for *p* for para.
- Pellyite.** J. H. Montgomery, R. M. Thompson, and E. P. Meagher, 1972. C.M. 11, 444. A colourless to pale yellow mineral in contact metamorphic skarns near the headwaters of the Pelly and Ross Rivers, Yukon Territory, is orthorhombic, *a* 15·677, *b* 7·151, *c* 14·209 Å, composition $4[\text{Ba}_2\text{Ca}(\text{Fe},\text{Mg})_2\text{Si}_6\text{O}_{17}]$. Named from the locality. [A.M. 58, 806; Zap. 102, 453.] Unrelated to pumpellyite, 11th List.
- Pentagonite.** L. W. Staples, H. T. Evans, Jr., and J. R. Lindsay, 1973. A.M. 58, 405. Prismatic orthorhombic crystals, *a* 10·298, *b* 13·999, *c* 8·891 Å, from Owyhee Dam, Oregon, have composition $4[\text{CaVOSi}_4\text{O}_{10}\cdot 4\text{H}_2\text{O}]$, and are dimorphous with cavanite (25th List). [M.A. 73–4079, 4080.]
- Pharaonite.** E. M. El Shazly and G. S. Saleeb, 1972. *Rept. 24th Int. Geol. Congr., Montreal, sect. 14*, 192. Prismatic crystals up to 14 cm long, from St. John's Island, Egypt, are hexagonal, *a* 12·74, *c* 5·35 Å, composition $(\text{Na},\text{Ca},\text{K})_{5\cdot76}\text{Mg}_{2\cdot87}(\text{Al},\text{Si})_{12}\text{O}_{26}\text{Cl}_{1\cdot49}(\text{SO}_4)_{0\cdot80}\cdot 2\cdot3\text{H}_2\text{O}$. An unnecessary name for a magnesian cancrinite. [A.M. 58, 1113.]
- Phenaksite**, error of transliteration for Fenaksite (Фенаксит; 22nd List). *Soviet Physics—Doklady*, 1964, 9, 80. [M.A. 17–178.]
- Phenaxite**, error of transliteration for Fenaksite (Фенаксит; 22nd List). *Soviet Physics Doklady*, 1971, 15, 902 [M.A. 71–2672.]
- Phosphocristobalite.** R. J. Manly, Jr., 1950. A.M. 35, 111. *Artificial*. A polymorph of berlinitite (AlPO_4) with the cristobalite structure; formed by heating evansite and some other Al phosphates. Named from the analogy with cristobalite.
- Phosphotridymite.** R. J. Manly, Jr., 1950. A.M. 35, 111. *Artificial*. A polymorph of berlinitite (AlPO_4) with the tridymite structure; formed by heating wavellite and some other Al phosphates. Named from the analogy with tridymite.
- o*-Phthalic acid.** M. Louis, J.-C. Guillemin, J.-C. Goñi, and P.-P. Ragot, 1968. *Proc. 4th Intern. Meeting on Organic Geochem., Amsterdam*, 1968, 535. A constituent of the oil included in the calcite matrix of quincite. [M.A. 72–1768.]
- Picrogalaxite.** T. Yoshimura, 1936. [*Journ. Geol. Soc. Japan*, 43, 444], quoted in *Intro. Jap. Min.* 116 (1970), Geol. Surv. Japan. A magnesian galaxite from the Oashi mine, Tochigi Prefecture, Japan.
- Picrourbanite.** T. Yoshimura, 1937. [*Journ. Geol. Soc. Japan*, 44, 561], quoted in *Intro. Jap. Min.* 117 (1970), Geol. Surv. Japan. A clinopyroxene from the Nodotamagawa mine, Iwate Prefecture, Japan. [Zap. 101, 286.]
- Pikrourbanit**, German variant of Picrourbanite (this List). Hintze, 73.
- Pleochroite.** H. G. Midgley, 1968. *Trans. Brit. Ceram. Soc.* 67 (1), 1. An *artificial*, highly pleochroic (deep-blue to colourless) monoclinic (pseudo-orthorhombic) phase occurring in high-alumina cements. Composition $\text{Ca}_{22}\text{Fe}_3\text{Al}_{14}(\text{Al}_2\text{O}_7)_8(\text{AlO}_4)_4(\text{SiO}_4)_2$. [M.A. 69–289.]

Plumboalophane, variant of Plumbalophane (Bombicci, 1868). [Godishn. Univ. Sofia, Fak. Geol.-Geogr., Geol. **63**, 217]; abstr. A.M. **58**, 348. An unnecessary name for an alophane with a little PbO [Zap. **103**, 365.]

Plumbonacrite. J. K. Olby, 1966. *Journ. Inorg. Nucl. Chem.* **28**, 2507. A synthetic phase, $Pb_{10}(CO_3)_6(OH)_7O$; hexagonal, a 9.076, c 24.96 Å; previously mis-named hydrocerussite (cf. Cowley, *Acta Cryst.* 1956, **9**, 391, also Reed, *ibid.* 1957, **10**, 142). Not the plumbonacrite of Heddle (M.M. 1889, **8**, 203), a name proposed to replace hydrocerussite (Nordenskiöld, 1877), 'Not being a hydrated cerussite.' [A.M. **52**, 563.]

Plumbozinkocalcit, Germ. trans. of Плюмбозинкокальцит, plumbozincocalcite (26th List). Hintze, 75.

Polyamphibole. V. I. Gorshakov and L. D. Yur'ev, 1965. Докл. Акад. наук СССР (*Compt. Rend. Acad. Sci. URSS*), **163**, 143 (Полиамфибол). The term polyamphibole rocks is used for rocks containing two distinct amphiboles [M.A. 69–521.]

Potassium allevardite. Yu. M. Korolev, 1965. Докл. **162**, 650 (Калиевый аллевардит), transl. as *Dokl. Acad. Sci. U.S.S.R. (Earth Sci. Sect.)*, 1965, **162**, 143 (Potassium allevardite). The potassium analogue of allevardite (19th List), with 5% K_2O , from Kuli-Kolon, U.S.S.R. [M.A. 19–179.] But allevardite is now considered to be rectorite [A.M. **49**, 446].

Potassium-clinoptilolite. H. Minato and Y. Takano, 1964. [*Nendo Kagaku (Journ. Clay Sci. Soc. Japan)*], abstr. M.A. **19**, 130. A variety in which the principal cation is potassium.

Prasemalachite. Author and date? Prase enclosing malachite; a useless name. R. Webster, *Gems*, 1962, p. 761.

Prelaumontite. N. Katayama, 1958. [*Journ. Geol. Soc. Japan*, **45**, 458], quoted in *Intro. Jap. Min.* **120** (1970), Geol. Surv. Japan. Syn. of laumontite; fully hydrated material from the Ashio mine, Tochigi Prefecture, Japan, and three other localities was compared with partially dehydrated specimens accepted as laumontite.

Pseudotetrahedrite. K. Tatsuka and N. Morimoto, 1973. A.M. **58**, 425. Tetrahedrite is shown to have a variable composition, and may be Cu-rich, near $Cu_{14}Sb_4S_{13}$, or Cu-poor, near $Cu_{12}Sb_4S_{13}$; while material near Cu_9SbS_3 has a superstructure, with a cell-edge double that of normal tetrahedrite, and is named. [M.A. 73–3709.]

Pteochroite, error for Pleochroite (this List) (*New Scientist*, **63**, 235).

Quetzalcoatlite. S. A. Williams, 1973. M.M. **39**, 261. Greenish-blue hexagonal crystals, a 10.097, c 4.944 Å, from the Bambollita mine, Moctezuma, Sonora, Mexico, have the composition $[Cu_4Zn_8(TeO_3)_3(OH)_{18}]$. Named for the Toltec god Quetzalcoatl. [M.A. 74–510.]

Raite. A. N. Merkov, Y. P. Menshikov, and A. P. Nedorezova, 1973. Zap. **102**, 54 (Раит). Radiating fibrous needles from pegmatite in the Karnasurt Mts, Ilmaoik valley, Lovozero tundra, Kola Peninsula, approximate to $(Na,Ca,K,Ln)_4(Mn,Ti,Fe^{3+},Mg,Fe^{2+})_8(Si_2\{O_4(OH)_3\}_7)_4 \cdot 5H_2O$. Named for the papyrus boat Ra. [M.A. 73–4081; Bull. **96**, 240; A.M. **58**, 1113; Zap. **103**, 363.]

Raswumit, Germ. trans. of Расвумит, rasvumite (27th List). Hintze, 78.

Rathite-IV, Rathite-V. W. Nowacki and C. Bahezre, 1964. *Schweiz. Min. Petr. Mitt.*

- 44, 7.** Doubtful sulphosalts from the Lengenbach quarry, Binnatal, Switzerland. No formulae given. Rathite-IV (longest cell edge 45·96 Å) is later (*Jahrb. Naturhist. Mus. Bern*, 1963–5, 296) withdrawn as ‘weitgehend identisch’ with sartorite, and rathite-V (longest cell edge $17 \times 8\cdot26 = 140\cdot42$ Å) becomes the new rathite-IV.
- Riebeckrichterite.** T. Yoshimura, 1937. [*Journ. Geol. Soc. Japan*, **44**, 561], quoted in *Intro. Jap. Min.*, 118 (1970), Geol. Surv., Japan. A variety of richterite from the Noda-Tamagawa mine, Iwate Prefecture, Japan. [Zap. **101**, 286.]
- Robertsite.** P. B. Moore, 1974. A.M. **59**, 48. Blood-red to black, highly pleochroic plates and fibres with other phosphates in the Tip Top pegmatite, Custer, Custer County, South Dakota, are monoclinic, a 17·36, b 19·53, c 11·30 Å, β 96·0°; composition $8[\text{Ca}_3\text{Mn}_4^{3+}(\text{PO}_4)_4(\text{OH})_6 \cdot 3\text{H}_2\text{O}]$. Named for Willard L. Roberts.
- Rogueite.** Another unnecessary name for a variety of jasper, this time greenish and from Oregon. R. Webster, *Gems*, 1962, p. 762. Not to be confused with roquesite (23rd List).
- Romarchite.** R. M. Organ and J. A. Mandarino, 1971. C.M. **10**, 916. Black crystals formed on tin pannikins lost about 1801–21 in the Winnipeg River at Boundary Falls, Ontario, are identical with synthetic SnO. Tetragonal, a 3·79, c 4·83 Å, $P4/nmm$. Named for the Royal Ontario Museum of Archaeology. [Bull. **96**, 241; A.M. **57**, 1555; Zap. **101**, 280.]
- Rosaline.** *Syn.* of thulite, *var.* of zoisite. R. Webster, *Gems*, 1962, p. 762.
- Roselite.** Error for or variant of rosolite (4th List). R. Webster, *Gems*, 1962, p. 762. Not to be confused with the roselite of (Lévy), β -roselite (beta-roselite, 21st List), nor rosellite (*syn.* of rosellan). Cf. xalostocite (4th List).
- Rössingite.** J. W. von Backström, 1970. [*Uranium exploration geol., Proc. of a panel held in Vienna*, 143]; abstr. M.A. 72–1028. Mentioned, without details, as a mineral from the Rössing uranium deposit, Swakopmund, S.W. Africa.
- Routhierite.** Z. Johan, J. Mantienne, and P. Picot, 1974. Bull. **97**, 48. Dark-red veins in the black dolomites of Jas Roux, Hautes-Alpes, France, are tetragonal, a 9·977, c 11·290 Å; composition $8[\text{TlHgAsS}_8]$, with some Cu and Ag replacing Tl and some Zn replacing Hg. Named for P. Routhier.
- Royalite.** Trade name for a purplish-red glass. R. Webster, *Gems*, 1962, p. 762.
- Rozircon.** An objectionable and misleading trade name for a pink *artificial* spinel. R. Webster, *Gems*, 1962, p. 762. See under corundolite, this List.
- Rubolite.** An unnecessary name for a red variety of common opal. R. Webster, *Gems*, 1962, p. 762. Not to be confused with rubellite.
- Ruthenarsenite.** D. G. Harris, 1974. C.M. **12**, 280. Orthorhombic $4[\text{RuAs}]$ (a 5·628, b 3·239, c 6·184 Å) occurs as inclusions up to 0·1 mm diameter in rutheniridosmine from New Guinea; identical with artificial material. Named from the composition.
- Saffronite.** Variant of safranite (13th List), *syn.* of citrine. R. Webster, *Gems*, 1962, p. 762.
- Santanaite.** A. Mücke, 1972. *Neues Jahrb. Min., Monatsh.* 455. Hexagonal yellow platelets from the Santa Ana mine, Caracoles, Sierra Gorda, Chile, gave a 9·03, c 39·84 Å. Composition Pb 88·0, Cr 1·9%, from which the formula $\text{Pb}_{11}\text{CrO}_{16}$ is deduced. [In fact, allowing for the probable analytical error, the formula could be

- anywhere between $Pb_{11}CrO_{13}$ and $Pb_{11}CrO_{19}$ —*M.H.H.*] [M.A. 73–2948; Bull. 96, 245; A.M. 58, 966; Zap. 103, 357.]
- Sartorite-II.** H. Rösch and E. Hellner, *Naturwiss.* 1959, **46**, 72. An *artificial* product in the system PbS – As_2S_3 with a *b*-axis double that of sartorite.
- Sazhinite.** E. M. Eskova, E. I. Semenov, A. P. Khomyakov, M. E. Kazakova, and N. G. Shumyatskaya, 1974. Zap. 103, 338 (Сажинит). Orthorhombic $2[Na_3CeSi_6O_{15}\cdot 6H_2O]$, a 7·35, b 7·50, c 15·62 Å, from Karnasurt Mt, Lovozero massif, is named for N. P. Sazhina.
- Schachnerite.** E. Seeliger and A. Mucke, 1972. *Neues Jahrb. Min., Abh.* 117, 1. $2[Ag_{1.1}Hg_{0.9}]$, hexagonal, a 2·978, c 4·842 Å, formed by loss of Hg from moschellandsbergite at the Vertrauen Gott mine, Obermoschel, Pfalz, Germany. Named for Dr. D. Schachner. [M.A. 73–1941; Bull. 96, 242; A.M. 58, 347; Zap. 102, 437.]
- Schadlunit, Germ. trans. of Шадлунит, shadlunite (this List). Hintze, 83.
- Scherbinaite, error for shcherbinaite (Zap. 102, 445).
- Schneiderhöhnlite.** J. Ottemann, B. Nuber, and B. H. Geier, 1973. *Neues Jahrb. Min., Monatsh.* 517. Brown crystal aggregates from Tsumeb, S.W. Africa, are anorthic, a 8·940, b 9·998, c 9·145 Å, α 63°00', β 11°620', γ 81°79'. Composition $8FeO\cdot 5As_2O_3$. Named for H. Schneiderhöhn. [M.A. 74–3468.]
- Schtscherbinait, Germ. trans. of Щербинайт, shcherbinaite (this List). Hintze, 84.
- Sc-perrierite. E. I. Semenov, M. P. Kulakov, L. P. Kostynina, M. E. Kazakova, and A. S. Dudykina, 1966. Геохимия, 2, 244 (Sc-Перьерит); transl. as *Geochem. Internat.* 1966, 3, 160 (Sc-perrierite). An unnecessary name for scandian perrierite. [M.A. 19–53.]
- Segelerite. P. B. Moore, 1974. A.M. 59, 48. Pale-green prismatic orthorhombic crystals with a wide range of phosphates in the Tip Top pegmatite, Custer, Custer County, South Dakota, have a 14·826, b 18·751, c 7·307 Å, and composition $8[CaMgFe^{3+}(PO_4)_2OH\cdot 4H_2O]$. Named for Curt G. Segeler.
- Sekaninaite.** J. Stanek and J. Miskovsky, 1968. Quoted by H. Strunz, *Min. Tab.* 5th edn, 1970, 406. The iron analogue of cordierite, from Dolní Bory, Moravia (cf. *Casopis Min. Geol.* 1964, 9, 191). A name proposed to replace Eisencordierit (3rd List) or Iron-cordierite (10th List). [Zap. 102, 453.]
- Semenovite.** O. V. Petersen and J. G. Ronsbo, 1972. *Lithos*, 5, 163. Twinned tetragonal crystals, a 13·866, c 9·892 Å, in albitites of the Ilimaussaq alkalic intrusive, S. Greenland, have a composition $2[(Ca,Ln,Yt,Mn,Na)_{12}(Si,Be)_{20}O_{40}(O,OH,F)_8\cdot H_2O]$. Named for E. I. Semenov. [A.M. 58, 1114; Zap. 102, 454.]
- Shadlunite.** T. L. Evstigneeva, A. D. Genkin, N. V. Trobeva, A. A. Filimonova, and A. T. Tsepin, 1973. Zap. 102, 63 (Шадлунит). Veinlets in cubanite in the Talnakh and Oktyabr copper deposits, Norilsk, Siberia, are cubic with a 10·91 Å and composition $(Fe,Cu)_8(Pb,Cd)S_8$, with $Pb:Cd \approx 2$. Named for T. Shadlun. [M.A. 73–4082; Bull. 96, 242; A.M. 58, 1113; Zap. 103, 355.]
- Shcherbinaite.** L. F. Borisenko, 1972. Zap. 101, 464 (Щербинайт). Crystalline V_2O_5 occurs on the walls of fissures on the Berzymyanny volcano, Kamchatka. Named for V. V. Shcherbina. Cf. A.M. 56, 1487. [A.M. 58, 560; Zap. 102, 445.]
- Silicomonzite.** I. Ya. Nekrasov, 1972. Докл. 204, 491 (Силикомонацит). An un-

necessary name for a silicatian monazite from the Kular district. [A.M. **58**, 348; Zap. **102**, 451.] Cf. silicorhabdophane, 22nd List (addenda), and sulphate-monazite, 24th List.

Silikomonazit, Germ. trans. of Силикомонацит, silicomonazite (this List). Hintze, 85.

Simanite, error for Seamanite, through back-transliteration of Симанит. *Soviet Physics—Doklady*, 1971, **16**, 272 (translation of Докл. Акад. наук СССР, 1971, **197**, 1070). [M.A. 72–1860.]

Sogdianovit, error for Sogdianite (26th List). A.M. **54**, 1221; **55**, 1073.

Solongoite. S. V. Malinko, 1974. Zap. **113**, 117 (Солонгоит). Monoclinic crystals (a 7·93, b 7·26, c 12·54 Å, β 94°) from the Solongo deposit, Buryat A.S.S.R., have the composition $2[\text{Ca}_4\text{B}_6\text{O}_8(\text{OH})_9\text{Cl}]$. Named from the locality.

Sorit, Germ. trans. of Зорит, Zorite (this List). Hintze, 86.

Sparklite. A trade name for colourless zircon. R. Webster, *Gems*, 1962, p. 763.

γ -Spodumene. C. T. Li, 1972. A.M. **57**, 321. The *artificial* compound $\text{LiAlSi}_2\text{O}_6$ -III, having a structure based on that of β -quartz.

Starolite. A trade name for a rose-quartz doublet showing asterism. R. Webster, *Gems*, 1962, p. 763. Not, apparently, the starolite of the 8th List, nor to be confused with staurolite nor starlite (11th List).

Straschimirit, Germ. trans. of Страшимирит, strashimirite (26th List). Hintze, 89.

Strashimirite, error for strashimirite (26th List). M.A. 69–1541.

Strongite. A trade name for *artificial* (synthetic) spinel. R. Webster and M. J. O'Donoghue, both *priv. comm.* See under corundolite, this List.

Strontiapatite. D. McConnell, 1973. *Apatite: its crystal chemistry, mineralogy, utilization, and geologic and biologic occurrences*. Vienna and New York (Springer), 90. The name strontium apatite having been used in four different senses (15th, 16th, 22nd, and 23rd Lists), $(\text{Sr,Ca})_5(\text{PO}_4)_3(\text{OH},\text{F})$, the strontium apatite of Efimov, Kravchenko, and Vasileva, is renamed. A useful clarification. [M.M. 39–617.]

Stumpfite. Z. Johan and P. Picot, 1972. Bull. **95**, 610. Small, highly reflecting grains in platinum concentrates from Driekop, Transvaal, are hexagonal, a 4·175, c 5·504 Å; $2[\text{Pt}(\text{Sb,Bi})]$, with the nickeline structure. Named for E. F. Stumpf, who first described (but did not name) the mineral (M.M. 1961, **32**, 833). [Bull. **96**, 243; A.M. **59**, 211; Zap. **103**, 354.]

Sudburyite. L. J. Cabri and J. H. Gilles Laflamme, 1974. C.M. **12**, 275. Small inclusions, up to 0·1 by 0·018 mm, in cobaltite or maucherite from Copper Cliff South mine, Sudbury, Ontario, are hexagonal, a 4·06, c 5·59 Å, have the composition $2[\text{PdSb}]$, with or without some Ni replacing Pd; nickeline structure. Named from the locality.

Sulphate ferrithorite. E. V. Sveshnikova, D. N. Knyazeva, and M. T. Dmitrieva, 1964. [Минералы СССР, **15**, 239], abstr. in M.A. 18–280. A sulphur-bearing (1·35% SO_3 , 4·19% S) fluorian ferrian thorite from the Enisei region. Cf. ferrithorite, 16th List.

Sulphojoséite. E. A. Dunin-Barkovskaya, V. V. Lider, and V. N. Rozhansky, 1968. Zap. **97**, 332 (Сульфожозеит). *Syn.* of Joséite-A. [M.A. 69–569.]

Symant. A trade name for *artificial* SrTiO_3 . H. Strunz, *Min. Tab.*, 1970, 5th edn, 579. See under fabulite, this List.

Syntholite. Trade name for *artificial* corundum simulating alexandrite. R. Webster, *Gems*, 1962, p. 763. See under zirconolite, this List.

Tadzhikit, Germ. trans. of Таджикит, tadzhikite (27th List). Hintze, 91.

Talenite, error for Thalenite, through back-transliteration of Таленит. *Soviet Physics—Doklady*, 1972, **17**, 88.

Talnachit, Germ. trans. of Талнахит, talnakhite (25th List). Hintze, 92.

Tansanit, German variant of tanzanite (26th List). Hintze, 92.

Tantal-aeschynite. V. A. Kornetova, V. B. Aleksandrov, and M. E. Kazakova, 1963.

Труды Мин. муз. Акад. наук СССР, **14**, 108 (Тантал-эшнит). Cf. M. S. Adusumilli, *Journ. Mineralogia, Recife, Ed. Esp.* **6**, 11 (1968) and M. S. Adusumilli, C. Kieft, and E. A. J. Burke, *M.M.* **39**, 571 (1974). This name was applied by Kornetova *et al.* to a mineral with $Ti:Nb:Ta = 0.89:0.52:0.57$, metamict but giving an X-ray powder pattern similar to that of aeschynite after heating, from a Siberian pegmatite; Adusumilli *et al.* regard this as merely a tantalian aeschynite, and reserve the name for material with $Ta > Ti$ or Nb , such as occurs as idiomorphic metamict crystals at São Jose do Sabugí, Paraíba State, Brazil (this also gives an X-ray pattern similar to that of aeschynite after heating, orthorhombic with $a = 5.34$, $b = 10.97$, $c = 7.38$ Å). [M.A. 71–2325.]

Tarasowit, Germ. trans. of Тарасовит, tarasovite (26th List). Hintze, 92.

Tasheranit, Germ. trans. of Тажеранит, tazheranite (26th List). Hintze, 93.

Tellurantimony. R. I. Thorpe and D. C. Harris, 1973. *C.M.* **12**, 55. Lath-shaped crystals in altaite, up to 0.17×0.35 mm, are rhombohedral ($a = 4.258$, $c = 30.516$ Å) and isostructural with tellurbismuth. Named from the composition, Sb_2Te_3 . [A.M. 59, 382.]

Temagamite. L. J. Cabri, J. H. G. Laflamme, and J. M. Stewart, 1973. *C.M.* **12**, 193.

Small grains (to 0.1 mm) in chalcopyrite from the Temagami deposit, Ontario, are probably orthorhombic ($a = 11.57$, $b = 12.16$, $c = 6.76$ Å); weakly anisotropic. Composition Pd_3HgTe_3 . Named for the deposit (formerly spelt Timagami).

Teremkowit, Germ. trans. of Теремковит, teremkovite (26th List). Hintze, 93.

Tetrawickmanite. J. S. White, Jr., and J. A. Nelen, 1973. *Min. Record*, **4**, 24. A tetragonal polymorph of the cubic mineral wickmanite, $MnSn(OH)_6$, (25th List) occurs in honey-yellow crystals at the Foote Mineral Company's spodumene mine, Kings Mountain, Cleveland County, North Carolina. $a = 7.7870$, $c = 7.797$ Å. (Cf. M.A. 9–209.) [M.A. 73–2949; A.M. 58, 966; Zap. **103**, 358.]

Tinaxite, erroneous transliteration of Тинаксит (Tinaksite, 24th List). *Soviet Physics—Doklady*, 1971, **16**, 338 (translation of Докл. 1971, **198**, 575). [M.A. 72–1803.]

Titania. The old chemical name for titanium dioxide has now been used as a trade name for *artificial* rutile. H. Strunz, *Min. Tab.*, 1970, 5th edn, 582. Other trade names include: astryl, brillante, diamothyst, kimberlite gem, lusterite (this List), miridis, tirum gem, titanium [*sic*], and titanstone (from a collection of 26 names supplied by M. J. O'Donoghue, *priv. comm.*).

Titanium lueshite, a mistranslation of титановый луешит, titanian lueshite (*Dokl. Acad. Sci. U.S.S.R. (Earth Sci. Sect.)*, **171**, 160).

- Titan-Lueshit. K. F. Chudoba, 1974. Hintze, 95. A mistranslation of титановый луешит, titanian lueshite (*Докл.* **171**, 956 (1966)).
- Tjanschanit, Germ. trans. of Тяньшанит, tienshanite (26th List). Hintze, 95.
- Tochilinite.** N. I. Organova, A. D. Genkin, V. A. Drits, S. P. Molotkov, O. V. Kuzmina, and A. L. Dmitrik, 1971. *Zap.* **100**, 477 (Точилинит). Bronze-black grains and fibrous aggregates from the Lower Maman intrusive, Voronezh, U.S.S.R., are monoclinic, $a = 5.4$, $b = 15.7$, $c = 10.7$ Å, $\beta = 95^\circ$; composition $6\text{Fe}_{1-x}\text{S} \cdot 5(\text{Mg}, \text{Fe})(\text{OH})_2$, the FeS analogue of valleriite. Named for M. S. Tochilin. [M.A. 73-1943; A.M. 57, 1552; *Zap.* **101**, 277.]
- Totschilinit, Germ. trans. of Точилинит, tochilinite (this List). Hintze, 96.
- Tozalite, error for tosalite (25th List). Bull. **95**, 164.
- Triamond. A trade name for *artificial* yttrium aluminate. M. J. O'Donoghue, *priv. comm.* See under cirolite, this List.
- Tripleline. A thoroughly objectionable trade name for emerald-coloured beryl triplet cut stones. R. Webster, *Gems*, 1962, p. 764. Not to be confused with triplite, triploidite, nor even tripestone.
- Tschelkarit, Germ. trans. of Челкарит, chelkarite (27th List). Hintze, 97.
- Tschernowit, Germ. trans. of Черновит, chernovite (25th List). Hintze, 97.
- Tschernychit, Germ. trans. of Черныхит, chernykhite (this List). Hintze, 98.
- Tulameenite.** L. J. Cabri, D. R. Owens, and J. H. G. Laflamme, 1973. C.M. **12**, 21. Rounded grains up to 0.4 mm occurring with platinum minerals in placers of the Tulameen River area, British Columbia, have composition Pt_2CuFe ; tetragonal, $a = 3.891$, $c = 3.577$ Å; closely matches synthetic Pt_2CuFe . Named for the locality. [A.M. 59, 383.]
- Uduminelite.** Author? *Introd. Japanese Min.* (1970), 126. White acicular crystals, $\alpha = 1.623$, $\beta = 1.626$, $\gamma = 1.621$ (?) in cracks of perthite in a pegmatite at Udumine, Fukushima Prefecture, Japan. Composition $\text{Ca}_3\text{Al}_8(\text{PO}_4)_2\text{O}_{12} \cdot 2\text{H}_2\text{O}$. Named from the locality. [A.M. 58, 806; *Zap.* **101**, 284.]
- Ultralite. Trivial trade name for red-violet *artificial* sapphire. R. Webster, *Gems*, 1962, p. 764.
- Urea. P. J. Bridge, 1973. M.M. **39**, 346. The organic compound urea, $\text{CO}(\text{NH}_2)_2$, occurs as tetragonal bipyramids in guano from a cave or rock shelter near Toppin Hill, Western Australia. [M.A. 74-511.]
- Uricite.** P. J. Bridge, 1974. M.M. **39**, 889. Anhydrous uric acid, occurring in bird-guano deposits in Dingo Donga Cave, Western Australia. Named for the composition.
- Vabanite. Author and date? There seems to be no end to the trivial names for dirty quartz; this one is a jasper from California. R. Webster, *Gems*, 1962, p. 764. Not to be confused with vebaite (6th List), nor with urbanite.
- Vanadin-Spinelle. H. Strunz, 1970. *Min. Tab.*, 5th edn, 177. An unnecessary group name for coulsonite (14th List). Cf. Vanadiumspinell (24th List).
- Vanadiochrome spinel. C. O. Mathiesen, 1970. *Norges Geol. Undersög.* **266**, 86. An unnecessary name for a vanadian chromian magnetite. [A.M. 57, 1004.]
- Vanadiorutile. C. O. Mathiesen, 1970. *Norges Geol. Undersög.* **266**, 86. Unnecessary name for a vanadian rutile. [A.M. 57, 1004.]

- Vanadium-Arsen Germanit. K. F. Chudoba, 1974. *C. Hintze, Handb. Min., Erg.-Bd. 4*, 101. An unnecessary name for the vanadian arsenian germanite (Ванадиево-мышьяковый германит) of I. M. Mitryaeva, M. A. Yarenskaya, E. A. Kosyak, and A. N. Muratova (*Zap.* **97**, 325).
- Variolite. An old rock name (author and date?) denoting 'stones that have rounded protuberances, of a different nature from the common mass of the stone, from their resemblance to variolae'. Localities Durance and the river Drae, France. R. Kirwan, *Mineralogy*, 1794 (2nd edn), **1**, 368. The name was dropped from Dana's *Syst. Min.*, 1892 (6th edn), after appearing in earlier editions, but has reappeared in R. Webster, *Gems*, 1962, p. 764, as a var. of orthoclase.
- Vashegyrite. Error for vashegyite (5th List). R. Webster, *Gems*, 1962, p. 764.
- Venaite. I. Kostov, 1968. *Mineralogy* (Oliver & Boyd, London), 167. $\text{Pb}_3\text{BiSbS}_3$; no details are given.
- Vermilite. Author and date? Cinnabar in opal. Presumably derived from vermilion. R. Webster, *Gems*, 1962, p. 764.
- Victoria-stone. S. Iimori, before 1969. Also called Iimori-stone. An *artificial* material, radially fibrous and 'mineralogically similar to the nephrite of the amphibole group', produced in a variety of colours for cutting as cabochons. *Lapidary Journal*, 1969, p. 696. Not iimoriite, this List.
- Vigorite. Trade name for a phenolic resin plastic. R. Webster, *Gems*, 1962, p. 764.
- Vincentite. E. F. Stumpfl and M. Tarkian, 1974. M.M. **39**, 525. Minute grains (7 to 10 μm , rarely up to 40 μm) in iron-bearing platinum from the Riam Kanan River, SE. Borneo, have composition $(\text{Pd}, \text{Pt})_3(\text{As}, \text{Sb}, \text{Te})$ with $\text{Pd} > \text{Pt}$ and $\text{As} \approx (\text{Sb} + \text{Te})$; the X-ray pattern cannot be matched by that of arsenopalladinite, mertieite, isomertieite, stibiopalladinite, or atheneïte. Named for E. A. Vincent. [M.A. 74-1452.]
- Violite. Trade name for a purple *artificial* corundum. R. Webster, *Gems*, 1962, p. 764. Not to be confused with violan, violaite (3rd List), violarite (10th List), nor with violite (of Melville), a var. of copiapite. See under zirconolite, this List.
- Vioralite, error for Violarite. *Intro. Jap. Min.* **13** (1970), Geol. Surv. Japan.
- Vuonnemite.** I. V. Bussen, A. P. Denisov, H. I. Zabavnikova, L. V. Kozyreva, Yu. P. Menshikov, and E. A. Lipatova, 1973. *Zap.* **102**, 423 (Буоннемит, wuonnemit). A member of the lomonosovite-murmanite family from the Khibina massif; anorthic, a 7.02, b 14.15, c 5.38 Å, α 93° 40', β 89° 30', γ 87° 30'. Composition $\text{Na}_4\text{TiNbSi}_4\text{O}_{17} \cdot 2\text{Na}_3\text{PO}_4$. [*Zap.* **103**, 362.]
- Welshite.** P. B. Moore, 1970. *Min. Record*, **1**, 161. $\text{Ca}_2\text{Mg}_4\text{SbFeO}_2(\text{Be}_3\text{Si}_3\text{O}_{18})$. Rare, deep-brown prisms occurring with adelite at Långban, Sweden. Published without chemical analysis, crystallographic, or optical data in a review article; etymology not stated.
- White clinohumite. Labuntsov, 1930, quoted in Yu. K. Vorobev, *Zap.* **96**, 333. *Syn.* of Pamirite (this List). [M.A. 19-44.]
- Wickmannite, error for Wickmanite. *Norsk. geol. Tidsskr.* 1972, **52**, 193.
- Wilconite. Error for or variant of wilsonite, var. of scapolite. R. Webster, *Gems*, 1962, p. 764.

- Wimsit, Germ. trans. of Вимсит, vimsite (26th List). Hintze, 104.
- Wodingite, error for Wodginite (23rd List). *Dokl. Acad. Sci. U.S.S.R. (Earth Sci. Sect.)*, 1966, **167**, 109 (translation of Докл. 1966, **167**, 1135). [M.A. 69-1485.]
- Wuonnemite, German-style transliteration of Вуоннемит, Vuonnemite (Zap. **102**, 423).
- Wyllieite.** P. B. Moore and J. Ito, 1973. *Min. Record*, **4**, 131. Deep greenish-black crystalline masses from the Victory mine, Custer, Custer County, South Dakota, formerly identified as triphylite, are monoclinic, $a = 11.868$, $b = 12.382$, $c = 6.35$ Å, $\beta = 114.52^\circ$. Composition near $4[\text{Na}_2\text{Fe}_2^{2+}\text{Al}(\text{PO}_4)_3]$, with some $(\text{OH})_4$ replacing PO_4 and some Mn and Mg. Related to arrojadite. Named for P. J. Wyllie. [A.M. **59**, 211; M.A. 74-3469.]
- Yagite, error for yagiite (26th List). Bull. **95**, 163.
- Yokosukalite, variant of Yokosukaite (23rd List). *Intro. Jap. Min.* **120** (1970), Geol. Surv. Japan.
- Yttrium-Bastnäsit, undesirable variant of Bastnaesite-(Yt) (27th List). Hintze, 105.
- Zeathite. A trade name for *artificial* SrTiO_3 . R. Webster, *priv. comm.* See under fabulite, this List.
- Zinc chkalovite. *Soviet Physics—Cryst.*, 1970, **14**, 918. *Syn.* of Zn-chkalovite.
- Zinc-chromium spinel.** C. Milton, D. Appleman, E. C. T. Chao, F. Cuttita, J. L. Dinnin, E. J. Dwornik, M. Hall, B. L. Ingram, and H. J. Rose, Jr., 1967. *Progr. Abstr. Ann. Meet. Geol. Soc. Amer.* **151**. Minute violet-coloured crystals of a spinel high in zinc and chromium occur with grimaldite and mcconnellite in the ‘merumite’ [18th List] from Guyana. [M.A. **19**-127.]
- Zinc mica. B. W. Evans and R. G. J. Strens, 1966. *Nature*, **211**, 619. *Syn.* of Hendricksite (25th List). [M.A. 18-39.]
- Zincnontronite. M. R. Enikeev, 1970. [Труды Ташкент. унив. 1970, **371**, 56]; abstr. Zap. **103**, 365 (Цинкнонтронит). An unnecessary name for a zincian nontronite.
- Zinc-stottite.** B. H. Geier and J. Ottemann, 1970. *Neues Jahrb. Min., Abh.* **114**, 89. Material from Tsumeb, S.W. Africa with composition near $\text{ZnFeGe}_2(\text{OH})_{12}$, referred to primarily as Mineral A, is named zinc-stottite on p. 91. [A.M. **56**, 1488.]
- Zink-Chrom-Spinell, undesirable variant of zinc-chromium spinel (this List). Hintze, 106.
- Zinkstottit, Germ. variant of zinc-stottite (this List). Hintze, 107.
- Zirconlite. A misleading trade name for a white *artificial* sapphire. R. Webster, *Gems*, 1962, p. 765. Contains no zirconium, and not to be confused with zirkelite (1st List), zirconite, nor zirconolite (21st List). Trivial trade names that have been used for artificial corundum include adamite (8th List); aloxite (7th List); alundum (5th List); damburite, diamantin(e), diamondite, diamontine, syntholite, ultralite, violite (this List); walderite (27th List); and ‘Crown Jewels’ (M. J. O’Donoghue, *priv. comm.*).
- Zircophyllite.** Yu. L. Kapustin, 1972. Zap. **101**, 459 (Циркофиллит). $(\text{K}, \text{Na})_3(\text{Fe}, \text{Mn})_7 (\text{Zr}, \text{Ti})_2\text{Si}_8\text{O}_{24}(\text{O}, \text{OH}, \text{F})_7$, with $\text{Zr}:\text{Ti} \approx 4:1$. The Zr analogue of astrophyllite, from the Korgeredabinsh massif, Tuva. [M.A. 73-2951; Bull. **96**, 244; A.M. **58**, 967; Zap. **102**, 454.]

Zirkophyllitt, German-style transliteration of Циркофиллит, Zircophyllite (Zap. 102, 454).

Zn,Cd-chkalovite. M. A. Simonov and N. V. Belov, 1965. Докл. 164, 406. (Zn,Cd-чкаловит). *Artificial* $\text{Na}_4\text{ZnCd}(\text{Si}_2\text{O}_6)_2$ an analogue of Chkalovite (15th List). In N. V. Belov, *Min. Sborn. Lvov*, 1966, 20, 143, this compound is misnamed Zn-chkalovite (Zn-чкаловит). [M.A. 19-177.]

Zn-chkalovite. E. L. Belokoneva, Yu. K. Egorov-Tismenko, M. A. Simonov, and N. V. Belov, 1970. Кристаллография, 14, 1060 (Zn-чкаловит); *Soviet Physics-Cryst.*, 1970, 14, 918, (Zn-chkalovite, Zinc chkalovite). *Artificial* $\text{Na}_2\text{ZnSi}_2\text{O}_6$, analogous to Chkalovite (15th List). Also, in error, for $\text{Na}_4\text{ZnCd}(\text{Si}_2\text{O}_6)_2$ (N. V. Belov, *Min. Sborn. Lvov*, 1966, 20, 143). [M.A. 70-3011.]

Zn-Fahlerz. B. M. Honnorez-Guerstein, 1971. *Min. Depos.* 6, 111. A zincian tetrahedrite is named Zn-Fahlerz in the summaries only. [A.M. 57, 326.]

Zonite. Trade or lapidary trivial name for a chert or jasper, from Arizona. R. Webster, *Gems*, 1962, p. 765. Not related to zonolite (11th List).

Zorite. A. N. Merkov, I. V. Bussen, E. A. Goiko, E. A. Kulitskaya, Yu. P. Menshikov, and A. P. Nedorezova, 1973. Zap. 102, 63 (Зорит). Rosy crystals from the same pegmatite as raite (this List) and ilmaikite (27th List) are orthorhombic, a 23·9, b 7·23, c 14·25 Å, with composition $\text{Na}_2\text{Ti}(\text{Si},\text{Al})_3\text{O}_9 \cdot n\text{H}_2\text{O}$. Named from зори, зорка, the rosy tint of dawn. [M.A. 73-4081; Bull. 96, 244; A.M. 58, 1113; Zap. 103, 364.]