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# NEW MINERAL NAMES*

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## Bigcreekite*

L.C. Basciano, L.A. Groat, A.C. Roberts, R.A. Gault, G.E. Dunning, R.E. Walstrom (2001) Bigcreekite: a new barium silicate mineral species from Fresno County, California. Can. Mineral., 39, 761–768.

Four listed electron microprobe analyses, with high totals because of water loss, average $Na_2O$ 0.11, CaO 0.03, SrO 0.02, BaO 48.88, $SiO_2$ 38.16, $H_2O$ (calc.) 22.94, sum 110.14 wt%, corresponding to $Ba_{1.00}Na_{0.01}Si_{2.00}O_5{\cdot}4H_2O$, ideally $BaSi_2O_5{\cdot}4H_2O$. Occurs as white to colorless, millimeters-long, subhedral tabular grains, elongate [100]. Brittle, white streak, vitreous to pearly luster, $H$ = 2–3, perfect {010} and {001} cleavages, uneven fracture, nonfluorescent, $D_{meas} = 2.66$, $D_{calc} = 2.76$ g/cm$^3$ for $Z = 4$. Optically biaxial positive, $\alpha = 1.537(2)$, $\beta = 1.538(2)$, $\gamma = 1.541(2)$, $2V_{meas} = 59.2(5)$, $2V_{calc} = 60°$, moderate dispersion $r < v$, nonpleochroic, orientation $X = b$, $Y = a$, $Z = c$. Single-crystal X-ray structure study ($R = 0.035$) indicated orthorhombic symmetry, space group $Pnma$, $a = 5.038(6)$, $b = 9.024(3)$, $c = 18.321(6)$ Å as refined from a Debye–Scherrer powder pattern (114 mm, Cu$K\alpha$ radiation) with strongest lines of 5.068 (100,013), 4.054(85,022), 2.974(45,031), 2.706 (60,124), 2.327(40,035), and 2.257(75,126).

The mineral occurs within fractures, <0.5 mm wide, transverse to sanbornite-quartz gneiss at the Esquire no. 7 claim along Big Creek, Fresno County, California. The new mineral name is for the type locality. The mineral also occurs as a fracture fill in lenses of barium silicates, including sanbornite, at Trumbull Peak, Mariposa County, California. Type material is in the M.Y. Williams Museum at the University of British Columbia, Vancouver, Canada. **J.L.J.**

## Clearcreekite*

A.C. Roberts, L.A. Groat, M. Raudsepp, T.S. Ercit, R.C. Erd, E.A. Moffat, J.A.R. Stirling (2001) Clearcreekite, a new polymorph of $Hg_3^{1+}(CO_3)(OH){\cdot}2H_2O$, from the Clear Creek claim, San Benito County, California. Can. Mineral., 39, 779–784.

The mineral occurs as a pale yellowish green cluster of subhedral, tabular crystals, up to 0.17 mm long, showing {001} and {010}. Transparent, vitreous luster, brittle, pale greenish yellow streak, uneven fracture, good {001} cleavage, $H$ not determinable, nonfluorescent, no effervescence in concentrated HCl, $D_{calc} = 6.96$ g/cm$^3$ for $Z = 4$, blackens upon exposure to X-radiation. Single-crystal X-ray study indicated monoclinic symmetry, space group $P2_1/n$; $a = 6.760(4)$, $b = 9.580(4)$, $c = 10.931(4)$ Å, $\beta = 105.53(5)°$ as refined from a 114 mm Debye–Scherrer pattern (Cu$K\alpha$ radiation) with strongest lines of 7.09(70,011), 5.32(40,$\bar{1}$11), 4.62(90,012), 2.831 (100, 023,211), 2.767(100,$\bar{2}$21,220,131), and 2.391 (40,040, $\bar{2}$04). Electron microprobe analysis gave Hg 81.41 wt%, and on the basis of a crystal-structure determination the composition is $Hg_2O$ 84.65, $CO_2$ 6.16, $H_2O$ 6.36 wt%, corresponding to $Hg^{1+}_{2.92}(C_{1.01}O_{2.98})(OH)_{1.04}{\cdot}2H_2O$, ideally $Hg_3(CO_3)(OH){\cdot}2H_2O$, which is the monoclinic polymorph of peterbaylissite (orthorhombic). Absorption bands for $H_2O$ and carbonate are present in the IR spectrum.

The mineral is associated with edoylerite and cinnabar in a specimen of brecciated magnesite-quartz from a prospect pit near the former Clear Creek mercury mine, New Idria district, San Benito County, California. The new mineral name is for the locality. Type material is in the Systematic Reference Series of the National Mineral Collection at the Geological Survey of Canada, Ottawa. **J.L.J.**

## Ekatite*

P. Keller (2001) Ekatite, $(Fe^{3+},Fe^{2+},Zn)_{12}(OH)_6[AsO_3]_6[AsO_3,HOSiO_3]_2$, a new mineral from Tsumeb, Namibia, and its crystal structure. Eur. J. Mineral., 13, 769–777.

The mineral occurs as sprays of brownish black needles, each up to 2 mm long and <0.2 mm in diameter, elongate [001] and with indistinct {$hk$0}. Vitreous luster, translucent, brittle, brown streak, $H$ = 3, no cleavage, nonfluorescent, $D_{calc} = 4.06$ g/cm$^3$ for $Z = 1$. Optically uniaxial positive, $\omega = {\sim}1.99$, $\varepsilon = {\sim}2.08$, strongly pleochroic, $O$ = dark brownish black, $E$ = medium brown, both with a greenish tint. Electron microprobe analysis gave FeO 21.19, $Fe_2O_3$ 27.26 (Fe partitioned on the basis of the structure determination), ZnO 3.80, $As_2O_3$ 42.56, $SiO_2$ 2.12, $H_2O$ (calc.) 3.42, sum 100.35 wt%, corresponding to $(Fe^{3+}_{5.95}Fe^{2+}_{5.14}Zn_{0.81})_{\Sigma 11.90}(OH)_{6.00}(As_{1.01}O_3)_{6.00}[(AsO_3)_{1.43}(HOSiO_3)_{0.61}]_{\Sigma 2.04}$. The IR spectrum has absorption bands at 3484 and 3465 cm$^{-1}$, confirming the presence of OH. Single-crystal X-ray structure study ($R = 0.043$) indicated hexagonal symmetry, space group $P6_3mc$, $a = 12.773(2)$, $c = 5.051(1)$ Å; strongest lines of the powder pattern (57 mm Debye–Scherrer, Fe$K\alpha$

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* Before publication, minerals marked with an asterisk were approved by the Commission on New Minerals and Mineral Names, International Mineralogical Association.

radiation) are 11.11(30,100), 6.37(50,110), 3.220(100,211,220), 2.766(30,400), 2.420(70,401,410), 1.867(20,402), 1.672(30,521), and 1.507(30,701,431).

The mineral is an oxidation product occurring on a matrix of chalcocite and etched quartz from the Tsumeb mine, Namibia. The new mineral name is for Namibian mining engineer Dieter Ekat (1935–1996). Type material is in the Museum of the Institut für Mineralogie und Kristallchemie, Universität Stuttgart, Germany. **J.L.J.**

### Londonite*

W.B. Simmons, F. Pezzotta, A.U. Falster, K.L. Webber (2001) Londonite, a new mineral species: the Cs-dominant analogue of rhodizite from the Antandrokomby granitic pegmatite, Madagascar. Can. Mineral., 39, 747–755.

The mineral occurs as crystals in the central units and in miarolitic cavities of the Antandrokomby (type locality), Antsongombato, and Ampanivana granitic pegmatites in central Madagascar. Crystals are up to 7 cm across, showing {110}, {221}, {211}, {111}, and rarely {100}. Colorless, white, or yellow, vitreous luster, white streak, brittle, no cleavage, conchoidal fracture, $H = 8$, weak yellow-green fluorescence in short-wave UV light, $D_{meas} = 3.34$, $D_{calc} = 3.42$ g/cm$^3$ for $Z = 1$. Optically isotropic, $n = 1.693(1)$. Electron microprobe analyses gave $Li_2O$ 0.04, $Cs_2O$ 8.37, $Rb_2O$ 1.04, $Na_2O$ 0.11, $K_2O$ 2.21, CaO 0.14, MnO 0.05, BeO (calc.) 15.49, $Al_2O_3$ 25.10, $Fe_2O_3$ 0.06, $B_2O_3$ (calc.) 47.39, $SiO_2$ 0.07, sum 100.07 wt%, corresponding to $(Cs_{0.48}K_{0.38}Rb_{0.09}Na_{0.03}Ca_{0.02}Mn_{0.01})_{\Sigma 1.01}(Al_{3.98}Li_{0.02}Fe_{0.01})_{\Sigma 4.01}Be_4[(B_{10.99}Si_{0.01})_{\Sigma 11.00}Be]_{\Sigma 12.00}O_{28}$, ideally $CsAl_4Be_4(B,Be)_{12}O_{28}$. Isometric, space group $P\bar{4}3m$ by analogy with rhodizite, $a = 7.3205(3)$ Å. Strongest lines of the X-ray powder pattern (diffractogram) are 3.276(35,210), 2.9898(100,211), 2.4410(50,300,221), 2.1132(70,222), 1.9568(35,321), and 1.7759(40,410,322).

The mineral, which is the Cs-dominant analog of rhodizite, is associated with microcline, albite, quartz, tourmaline, spodumene, danburite, beryl, pollucite, fluorapatite, and many other minerals. The new name is for petrologist David London (b. 1953) of the University of Oklahoma. Type material is in the Museum of Natural History of Milan, Italy, and in the Department of Geology and Geophysics, University of New Orleans, Louisiana. **J.L.J.**

### Micheelsenite*

A.M. McDonald, O.V. Petersen, R.A. Gault, O. Johnsen, G. Niedermayr, F. Branstätter (2001) Micheelsenite, $(Ca,Y)_3Al(PO_3OH,CO_3)(CO_3)(OH)_6 \cdot 12H_2O$, a new mineral from Mont Saint-Hilaire, Quebec, Canada and the Nanna pegmatite, Narsaarsuup Qaava, South Greenland. Neues Jahrb. Mineral. Mon., 337–351.

The mineral occurs as fibrous to acicular crystals, elongate [001] to 1 mm and up to 10 μm in diameter, that are in loosely packed spherical aggregates, or variably fan-shaped to randomly oriented, matted. Some crystals are strongly striated [001], terminated {001}, and hexagonal in cross-section. White to colorless, transparent to translucent, vitreous luster, white streak, brittle, splintery fracture, good {100} and {001} cleavages, $H = 3½–4$, nonfluorescent, merohedral twinning across (001), $D_{meas} = 2.15(1)$, $D_{calc} = 2.17(1)$ g/cm$^3$ for $Z = 2$, strong effervescence in dilute HCl. Optically uniaxial negative, $\omega = 1.532(1)$, $\varepsilon = 1.503(1)$. Electron microprobe analyses of three crystals averaged CaO 16.90, $Al_2O_3$ 6.70, $Y_2O_3$ 18.07, $Gd_2O_3$ 0.84, $Dy_2O_3$ 2.65, $Ho_2O_3$ 0.51, $Er_2O_3$ 1.88, $SiO_2$ 0.07, $P_2O_5$ 7.80, $SO_3$ 0.53, $CO_2$ (calc.) 8.38, $H_2O$ (calc.) 43.01, sum 107.34 wt%, corresponding to $(Ca_{1.96}Y_{1.06}Dy_{0.09}Er_{0.06}Gd_{0.03}Ho_{0.02})_{\Sigma 3.20}Al_{0.85}[P_{0.71}C_{0.24}S_{0.04}Si_{0.01})_{\Sigma 1}O_3(OH)](CO_3)(OH)_6 \cdot 12H_2O$, simplified as $(Ca,Y)_3Al(PO_3OH,CO_3)(CO_3)(OH)_6 \cdot 12H_2O$. The presence of $CO_3$ and $H_2O$ is indicated in the IR spectrum. Single-crystal X-ray structure study ($R = 0.0294$) gave hexagonal symmetry, space group $P6_3$, $a = 10.828(3)$, $c = 10.516(4)$ Å as refined from a 114 mm Gandolfi pattern (Cu$K\alpha$ radiation) with strongest lines of 9.38(100,100), 4.59(70,102), 3.77(50,112), 3.36(55,211), 2.491(80,213), and 2.143 (64,223,402).

The mineral, which is a sulfate-free member of the ettringite group, occurs as a late-stage hydrothermal product in the Nanna pegmatite at Narsaarsuup Qaava, Greenland, and in the Narssârssuk pegmatite, Greenland; the mineral also occurs in pegmatites, hornfels, marble xenoliths, and silicate cavities at the Poudrette quarry, Mont Saint-Hilaire, Quebec. Mont Saint-Hilaire and Nanna are designated holotype localities, and most of the data abstracted are for material from Mont Saint-Hilaire. The new mineral name is for mineralogist H.I. Micheelsen (b. 1931) of the University of Copenhagen, Denmark. Type material is in the Canadian Museum of Nature, Ottawa, and in the Geological Museum of the University of Copenhagen. **J.L.J.**

### Orthojoaquinite-(La)*

S. Matsubara, J.A. Mandarino, E.I. Semenov (2001) Redefinition of a mineral in the joaquinite group: orthojoaquinite-(La). Can. Mineral., 39, 757–760.

The mineral occurs in nepheline-sodalite syenite pegmatites of the Ilímaussaq alkaline complex, southern Greenland, and was described by Semenov et al. (*Am. Mineral.*, 52, 1762–1769, 1967). Chemical analysis of the mineral, which is orthorhombic and was recognized as being a member of the joaquinite group, gave a composition corresponding to $(Ba_{1.99}Ca_{0.01})_{\Sigma 2.00}(Na_{1.11}K_{0.07})_{\Sigma 1.18}(La_{0.88}Ce_{0.81}Nd_{0.18}Pr_{0.09})_{\Sigma 1.96}(Fe^{2+}_{0.95}Mn_{0.14})_{\Sigma 1.09}(Ti_{1.64}Nb_{0.25}Fe^{3+}_{0.07}Th_{0.02})_{\Sigma 1.98}Si_{8.01}O_{26}[(OH)_{0.37}O_{0.35}F_{0.28}]_{\Sigma 1.00} \cdot 1.00H_2O$, simplified as $Ba_2Na(La,Ce)_2Fe^{2+}Ti_2Si_8O_{26}(OH,O,F) \cdot H_2O$, which is taken to be the La analog of orthojoaquinite-(Ce). **J.L.J.**

### Theoparacelsite*

H. Sarp, R. Černý (2001) Theoparacelsite, $Cu_3(OH)_2As_2O_7$, a new mineral: its description and crystal structure. Archs Sci. Genève, 54, 7–14.

The mineral occurs, within 1 mm geodes of cuprite, as anhedral grains 0.2 × 0.1 × 0.05 mm, as smaller equidimension crystals, and as rectangular crystals elongate [010], flattened {001}, showing {001}, {010}, {100}, {110}, and {101}; also pulverulent, and as pseudomorphs after olivenite. Electron microprobe analysis gave CuO 48.77, $As_2O_5$ 47.68, $H_2O$ (by difference) 3.55, sum 100 wt%, corresponding to $Cu_{2.99}As_{2.02}H_{1.92}O_9$, ideally $Cu_3(OH)_2As_2O_7$. Crystals are dark pistachio green, translucent, vitreous to adamantine luster, brittle, yellowish green streak, conchoidal fracture, perfect {001} cleavage, *H* not determinable, no twinning, nonfluorescent, soluble in HCl, $D_{calc}$ = 4.72(1) g/cm$^3$ for the ideal formula and $Z = {}^2/_3$. Optically biaxial positive, $\alpha$ = 1.81(1), $\beta$ = 1.82(1), $\gamma$ = 1.86(1), $2V_{meas}$ = 57(3), $2V_{calc}$ = 54(1)°, moderate dispersion $r > v$, orientation $X = a$, $Y = c$, $Z = b$; moderately pleochroic, $\alpha$ = light olive green, $\beta$ = olive green, $\gamma$ = dark green. Single-crystal X-ray structure study ($R$ = 0.063) indicated orthorhombic symmetry, space group *Pmma*, $a$ = 8.3212(8), $b$ = 2.9377(3), $c$ = 4.6644(5) Å. Strongest lines of the X-ray powder pattern (114 mm Gandolfi, Cu$K\alpha$ radiation) are 3.104(100,201), 2.486(70,011), 2.400(25,210), 1.672 (30,212), 1.596(25,411), and 1.330(25,601,221). The structure is disordered, with As sites ${}^2/_3$ occupied.

The mineral is associated with olivenite, cornubite, connellite, clinotyrolite, cuprite, native copper, algodonite, domeykite, and others at the Roua copper occurrences, Var valley, Alpes-Maritimes area, France. Type material is in the Natural History Museum of Geneva, Switzerland. The new mineral name is for Swiss scientist Paracelse, who was Philippus Theophrastus van Hohenheim (1493–1541). Paracelse is a Greek–Roman translation of Hohenheim. **J.L.J.**

### $SnGeS_3$

J. Sejkora, P. Berlepsch, E. Makovicky, T. Balić-Zunić (2001) Natural $SnGeS_3$ from Radvanice near Trutnov (Czech Republic): its description, crystal structure refinement and solid solution with $PbGeS_3$. Eur. J. Mineral., 13, 791–800.

Complete mineralogical data, including a single-crystal X-ray structure determination, are given for monoclinic $SnGeS_3$ that crystallized from subsurface hot gasses in a coal dump that has been burning for >20 years at a former mine at Radvanice, Czech Republic. In addition to the Sn end member of $SnGeS_3$, solid solution with up to 70 mol% Pb substitution for Sn has been determined. Closely associated phases are $Bi_3S_2$, $Cd_4GeS_6$, SnS, $CdIn_2S_4$, GeAsS, $GeS_2$, and solid solutions of Bi-Sb, $Bi_2S_3$-$Sb_2S_3$, and $Bi_2S_3$-$Bi_2Se_3$.

**Discussion.** The burning is stated to be the result of spontaneous combustion, but the authors appropriately adhere to the CNMMN rule that combustion products are not to be considered as minerals. **J.L.J.**

### Monoclinic $TiO_2$

A. El Goresy, Ming Chen, L. Dubrovinsky, P. Gillet, G. Graup (2001) An ultradense polymorph of rutile with seven-coordinated titanium from the Ries crater. Science, 293, 1467–1470.

The mineral occurs in the shocked gneisses of the Ries crater, Germany, as fine-grained, polycrystalline, monomineralic aggregates, to at least 100 μm, and as single grains. Reflectance is higher than that of rutile, and a characteristic blue internal reflection is present. Electron microprobe analysis gave $TiO_2$ 97.69, FeO 0.14, $Nb_2O_5$ 0.20, sum 98.03 wt%, identical to that of adjacent rutile. Indexing of the X-ray powder pattern (21 lines listed) gave a monoclinic cell with $a$ = 4.606(2), $b$ = 4.986(3), $c$ = 4.933(3) Å, $\beta$ = 99.17(6)°, probable space group $P2_1/c$ by analogy with the synthetic equivalent; $D_{calc}$ = 4.72 g/cm$^3$. Strongest lines are 2.929(100,$11\bar{1}$), 2.626(91,111), 2.437(42,002), 2.017(40,$21\bar{1}$), 1.742(40,022), and 1.686 (42,$12\bar{2}$, 220). The mineral is sensitive to X-radiation, gradually transforming to rutile.

The origin is inferred to be by direct reconstructive transformation from rutile. The new mineral is variously surrounded by shock-twinned ilmenite, rutile, titanite, and the $\alpha$-$PbO_2$-type polymorph (*Am. Mineral.*, 85, p. 1846, 2000). **J.L.J.**

### Eudialyte analog

R.K. Rastsvetaeva, A.P. Khomyakov (2001) Modular structure of a potassium-rich analogue of eudialyte with a doubled parameter *c*. Crystallogr. Reports, 46, 647–653.

The mineral occurs as bright pink, anhedral grains, each 1–2 mm, and as aggregates to 2 cm in diameter, in ultraagpaitic pegmatites at Rasvumchorr Mountain, Khibiny alkaline massif, Russia. Transparent, vitreous luster, conchoidal fracture, $D_{meas}$ = 2.86, $D_{calc}$ = 2.84 g/cm$^3$ for $Z$ = 3. Optically uniaxial positive, $\omega$ = 1.598, $\varepsilon$ = 1.600. Single-crystal X-ray structure study ($R$ = 0.045) indicated trigonal symmetry, space group *R*3*m*, $a$ = 14.249(1), $c$ = 60.969(7) Å, ideal formula $Na_{27}K_8Ca_{12}Fe_3Zr_6[Si_{52}O_{144}](O,OH,H_2O)_6Cl_2$. **J.L.J.**

## NEW DATA

### Alacranite

P.C. Burns, J.B. Percival (2001) Alacranite, $As_4S_4$: a new occurrence, new formula, and determination of the crystal structure. Can. Mineral., 39, 809–818.

Single-crystal X-ray structure study ($R$ = 0.066) of alacranite that occurs as euhedral to subhedral crystals, to 0.1 mm, indicated monoclinic symmetry, space group *C*2/*c*, $a$ = 9.943(1), $b$ = 9.366(1), $c$ = 8.908(1) Å, $\beta$ = 102.007(2)°, formula $As_4S_4$, $D_{calc}$ = 3.503 g/cm$^3$ for $Z$ = 4. The mineral occurs in a grab sample of epithermal-style mineralization recovered from Conical Seamount near Lihir Island, Papua New Guinea.

**Discussion.** Somewhat different cell dimensions were reported in the original description of alacranite (*Am. Mineral.*, 73, p. 189, 1988), which gave the formula as $As_8S_9$, $D_{meas}$ = 3.43, $D_{calc}$ = 3.43 g/cm$^3$. **J.L.J.**

### Fedorite

R.H. Mitchell, P.C. Burns (2001) The structure of fedorite: a reappraisal. Can. Mineral., 39, 769–777.

Single-crystal X-ray structure study of fedorite confirmed the previously determined triclinic unit cell. The ideal new general formula is $A_{2\text{-}3}M_7T_{16}O_{38}X_2{\cdot}nH_2O$, where A = Na, K, Ba, Ca; M = Ca, Na, Mn$^{2+}$, Fe$^{2+}$; T = Si, Al, Ti; X = F, Cl, OH, and $n \approx 3$. In fedorite, A is dominated by Na, M by Ca, and decreases of Ca in M are compensated by the entry of monovalent cations to interlayer sites to maintain charge balance. **J.L.J.**

### Marthozite

M.A. Cooper, F.C. Hawthorne (2001) Structure topology and hydrogen bonding in marthozite, $Cu^{2+}[(UO_2)_3(SeO_3)_2O_2](H_2O)_8$, a comparison with guilleminite, $Ba[(UO_2)_3(SeO_3)_2O_2](H_2O)_3$. Can. Mineral., 39, 797–807.

Single-crystal X-ray structure study ($R = 0.057$) of marthozite from the Musonoi mine, Shaba Province, Democratic Republic of Congo, indicated orthorhombic symmetry, space group $Pbn2_1$, $a = 6.9879(4)$, $b = 16.4537(10)$, $c = 17.2229(10)$ Å, $D_{calc} = 4.37$ g/cm$^3$ for $Z = 4$ and the new formula given above. At room temperature there is spontaneous formation of a lower hydrate whose formula is indicated to be $Cu[(UO_3)_3(SeO_3)_2O_2](H_2O)_6$. The lower hydrate is orthorhombic with $a$ and $c$ dimensions similar to those of marthozite, but with $b$ reduced to about 15.8 Å. **J.L.J.**

### Schwartzembergite

M.D. Welch, F.C. Hawthorne, M.A. Cooper, T.K. Kyser (2001) Trivalent iodine in the crystal structure of schwartzemburgite, $Pb^{2+}_5I^{3+}O_6H_2Cl_3$. Can. Mineral., 39, 785–795.

Single-crystal X-ray structure study ($R = 0.018$) of schwartzembergite from the San Rafael mine, Sierra Gorda, Chile, gave pseudotetragonal symmetry, space group $I4/mmm$, $a = 3.977(1)$, $c = 12.566(4)$ Å. Electron diffraction patterns showed the presence of a $C$- or $I$-centered orthorhombic supercell, related to the subcell by $a = 2a_{sub}$, $b = 6b_{sub}$, $c = c_{sub}$, which is probably caused by ordering of $Pb^{2+}$ and $I^{3+}$. New compositional data and the structure determination indicate that schwartzembergite is $Pb^{2+}_5I^{3+}O_6H_2Cl_3$, the first record of trivalent I in a mineral. **J.L.J.**

### Welshite

E.S. Grew, U. Hålenius, M. Kritikos, C.K. Shearer (2001) New data on welshite, e.g., $Ca_2Mg_{3.8}Mn^{2+}_{0.6}Fe^{2+}_{0.1}Sb^{5+}_{1.5}O_2[Si_{2.8}Be_{1.7}Fe^{3+}_{0.65}Al_{0.7}As_{0.17}O_{18}]$, an aenigmatite-group mineral. Mineral. Mag., 65, 665–674.

One of two listed electron microprobe analyses (Li, Be, B by secondary ion mass spectrometry) gave $Li_2O$ 0.007, BeO 5.11, MgO 17.43, CaO 12.86, MnO 1.01, FeO 1.12, ZnO 0.04, $B_2O_3$ 0.005, $Al_2O_3$ 2.96, $Fe_2O_3$ 13.03, $SiO_2$ 19.47, $As_2O_5$ 3.44, $Sb_2O_5$ 22.89, sum 99.38 wt%; the two analyses correspond approximately to the simplified formula given in the title of the paper. It is concluded that at least one tetrahedral site is >50% occupied by Be, and that one octahedral site is >50% occupied by Sb, thus indicating that welshite is a distinct species in the aenigmatite group. **J.L.J.**

## ERRATA

We are grateful to D.G.W. Smith and J. Ferraiolo for pointing out that, in the abstract of Ca-Nb labuntsovite (*Am. Mineral.* 86, p. 1114, 2001), the $[Si_6O_{48}]$ component of the formula should be $[Si_{16}O_{48}]$. In the abstract for $Nd(CO_3)[(OH),H_2O]$ (*Am. Mineral.*, 84, p. 1466, 1999) $Nb_2O_3$ 32.42 should read $Nd_2O_3$ 32.42.