

# IMA Commission on New Minerals, Nomenclature and Classification (CNMNC)

## NEWSLETTER 20

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### New minerals and nomenclature modifications approved in 2014

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The information given here is provided by the IMA Commission on New Minerals, Nomenclature and Classification for comparative purposes and as a service to mineralogists working on new species.

Each mineral is described in the following format:

**Mineral name, if the authors agree on its release prior to the full description appearing in press**

Chemical formula

Type locality

Full authorship of proposal

E-mail address of corresponding author

Relationship to other minerals

Crystal system, Space group; Structure determined, yes or no

Unit-cell parameters

Strongest lines in the X-ray powder diffraction pattern

Type specimen repository and specimen number

Citation details for the mineral prior to publication of full description

**Citation details concern the fact that this information will be published in the *Mineralogical Magazine* on a routine basis, as well as being added month by month to the Commission's web site.**

**It is still a requirement for the authors to publish a full description of the new mineral.**

NO OTHER INFORMATION WILL BE RELEASED BY THE COMMISSION

**NEW MINERAL PROPOSALS APPROVED IN  
FEBRUARY 2014****IMA No. 2013-120**

Mojaveite



Blue Bell claims in the Soda Mountains, 11 km W of Baker, San Bernardino County, California, USA (35°14'31"N, 116°12'17"W); Aga mine on Otto Mountain, 1.5 km NW of Baker (35.27215°N, 116.09487°W); Bird Nest drift on the SW flank of Otto Mountain, 0.75 km NW of the Aga mine (35.27677°N, 116.09927°W)

Stuart J. Mills\*, Anthony R. Kampf, Andrew G. Christy, Robert M. Housley, George R. Rossman and Joe Marty

\*E-mail: [smills@museum.vic.gov.au](mailto:smills@museum.vic.gov.au)

Structurally related to bluebellite (IMA 2013-121)

Trigonal:  $R\bar{3}$

$$a = 8.316(2), c = 13.202(6) \text{ \AA}$$

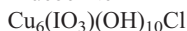
4.403(91), 2.672(28), 2.512(100), 2.110(27), 1.889(34), 1.570(39), 1.481(34), 1.338(14)

Cotype material is deposited in the collections of the Mineral Sciences Department, Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, California 90007, USA, catalogue numbers 64091 and 64092 (Blue Bell claims) and 64093 and 64094 (Bird Nest drift)

How to cite: Mills, S.J., Kampf, A.R., Christy, A.G., Housley, R.M., Rossman, G.R. and Marty, J. (2014) Mojaveite, IMA 2013-120. CNMNC Newsletter No. 20, June 2014, page 550; *Mineralogical Magazine*, **78**, 549–558.

**IMA No. 2013-121**

Bluebellite



Blue Bell claims in the Soda Mountains, 11 km W of Baker, San Bernardino County, California, USA (35°14'31"N, 116°12'17"W)

Stuart J. Mills\*, Anthony R. Kampf, Andrew G. Christy, Robert M. Housley, George R. Rossman and Robert R. Reynolds

\*E-mail: [smills@museum.vic.gov.au](mailto:smills@museum.vic.gov.au)

Structurally related to mojaveite (IMA 2013-120)

Trigonal:  $R\bar{3}$

$$a = 8.3017(5), c = 13.259(1) \text{ \AA}$$

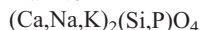
4.427(99), 2.664(35), 2.516(100), 2.213(9), 2.103(29), 1.8990(47), 1.5663(48), 1.4788(29)

Cotype material is deposited in the collections

of the Mineral Sciences Department, Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, California 90007, USA, catalogue numbers 64083 to 64090  
How to cite: Mills, S.J., Kampf, A.R., Christy, A.G., Housley, R.M., Rossman, G.R. and Reynolds, R.R. (2014) Bluebellite, IMA 2013-121. CNMNC Newsletter No. 20, June 2014, page 550; *Mineralogical Magazine*, **78**, 549–558.

**IMA No. 2013-122**

Flamite



Southern Hatrurim Basin, Negev desert, Israel (31°10'26"N, 35°17'31"E)

Ella V. Sokol\*, Yurii V. Seryotkin, Svetlana N. Kokh, Yevgeny Vapnik, Elena N. Nigmatulina, Sergey V. Goryainov, Elena V. Belogub and Victor V. Sharygin

\*E-mail: [sokol@igm.nsc.ru](mailto:sokol@igm.nsc.ru)

Known structure type

Hexagonal:  $P6_3$

$$a = 43.373(2), c = 6.8270(4) \text{ \AA}$$

2.897(19), 2.765(44), 2.759(42), 2.713(100), 2.518(29), 2.402(23), 1.967(18), 1.762(32)

Type material is deposited in the collections of the Central Siberian Geological Museum, V.S. Sobolev Institute of Geology and Mineralogy, 3 Ac. Koptyuga Avenue, Novosibirsk, 630090 Russia, catalogue number XIII-341/1

How to cite: Sokol, E.V., Seryotkin, Y.V., Kokh, S.N., Vapnik, Y., Nigmatulina, E.N., Goryainov, S.V., Belogub, E.V. and Sharygin, V.V. (2014) Flamite, IMA 2013-122. CNMNC Newsletter No. 20, June 2014, page 550; *Mineralogical Magazine*, **78**, 549–558.

**IMA No. 2013-123**

Maruyamaite



Kumdy-Kol area, Kokchetav Massif, Kazakhstan

Aaron Lussier, Neil A. Ball, Frank C. Hawthorne\*, Darrell J. Henry, Rentaro Shimizu, Yoshihide Ogasawara and Tsutomu Ota

\*E-mail: [frank\\_hawthorne@umanitoba.ca](mailto:frank_hawthorne@umanitoba.ca)

Tourmaline supergroup

Trigonal:  $R\bar{3}m$ ; structure determined

$$a = 15.955(10), c = 7.227(4) \text{ \AA}$$

6.415(23), 4.237(59), 3.995(69), 3.498(42), 2.974(85), 2.581(100), 2.046(54), 1.923(36)

Type material is deposited in the collections of the National Museum of Nature and Science, Tsukuba, Japan, registered number NSM-MF15696

How to cite: Lussier, A., Ball, N.A., Hawthorne, F.C., Henry, D.J., Shimizu, R., Ogasawara, Y. and Ota, T. (2014) Maruyamaite, IMA 2013-123. CNMNC Newsletter No. 20, June 2014, page 550; *Mineralogical Magazine*, **78**, 549–558.

#### IMA No. 2013-125

Pilawite-(Y)



Piława Górna quarry, Góry Sowie Block, Lower Silesia, Poland (50°42'11.77"N, 16°44'12.36"E)  
Adam Pieczka\*, Frank C. Hawthorne, Mark A. Cooper, Eligiusz Szełęg, Adam Szuszkiewicz, Krzysztof Turniak, Krzysztof Nejbort and Sławomir S. Ilnicki

\*E-mail: pieczka@agh.edu.pl

Structurally related to palermoite

Monoclinic:  $P2_1/c$ ; structure determined

$a = 8.571(5)$ ,  $b = 7.261(4)$ ,  $c = 11.187(6)$  Å,  
 $\beta = 91.00(2)^\circ$

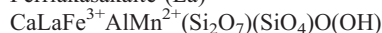
3.921(38), 3.044(100), 2.791(43), 2.651(46), 2.583(54), 2.485(62), 2.408(45), 2.147(42)

Type material is deposited in the collections of the Mineralogical Museum of the University of Wrocław, Wrocław, Poland, catalogue number MMWr IV7676

How to cite: Pieczka, A., Hawthorne, F.C., Cooper, M.A., Szełęg, E., Szuszkiewicz, A., Turniak, K., Nejbort, K. and Ilnicki, S.S. (2014) Pilawite, IMA 2013-125. CNMNC Newsletter No. 20, June 2014, page 551; *Mineralogical Magazine*, **78**, 549–558.

#### IMA No. 2013-126

Ferriakasaite-(La)



Shobu, Ise City, Mie Prefecture, Japan  
Mariko Nagashima\*, Daisuke Nishio-Hamane, Norimitsu Tomita, Tetsuo Minakawa and Sachio Inaba

\*E-mail: nagashim@yamaguchi-u.ac.jp

Epidote supergroup

Monoclinic:  $P2_1/m$ ; structure determined

$a = 8.8733(2)$ ,  $b = 5.7415(1)$ ,  $c = 10.0805(3)$  Å,  
 $\beta = 113.845(2)^\circ$

9.220(26), 3.509(47), 2.899(100), 2.871(40), 2.710(35), 2.706(35), 2.614(53), 2.573(26)

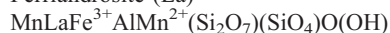
Type material is deposited in the collections of

the National Museum of Nature and Science, Tsukuba, Japan, specimen number NSM M-43919

How to cite: Nagashima, M., Nishio-Hamane, D., Tomita, N., Minakawa, T. and Inaba, S. (2014) Ferriakasaite-(La), IMA 2013-126. CNMNC Newsletter No. 20, June 2014, page 551; *Mineralogical Magazine*, **78**, 549–558.

#### IMA No. 2013-127

Ferriandrosite-(La)



Shobu, Ise City, Mie Prefecture, Japan

Mariko Nagashima\*, Daisuke Nishio-Hamane, Norimitsu Tomita, Tetsuo Minakawa and Sachio Inaba

\*E-mail: nagashim@yamaguchi-u.ac.jp

Epidote supergroup

Monoclinic:  $P2_1/m$ ; structure determined

$a = 8.8779(1)$ ,  $b = 5.7399(1)$ ,  $c = 10.0875(2)$  Å,  
 $\beta = 113.899(1)^\circ$

9.223(23), 3.510(46), 2.900(100), 2.870(40), 2.710(35), 2.706(35), 2.615(53), 2.573(26)

Type material is deposited in the collections of the National Museum of Nature and Science, Tsukuba, Japan, specimen number NSM M-43920

How to cite: Nagashima, M., Nishio-Hamane, D., Tomita, N., Minakawa, T. and Inaba, S. (2014) Ferriandrosite-(La), IMA 2013-127. CNMNC Newsletter No. 20, June 2014, page 551; *Mineralogical Magazine*, **78**, 549–558.

#### IMA No. 2013-128

Liebermannite



Zagami meteorite, fell at Zagami, Katsina Province, Nigeria

Chi Ma\*, Oliver Tschauer and John R. Beckett

\*E-mail: chi@gps.caltech.edu

K analogue of lingunite

Tetragonal:  $I4/m$ ; structure determined

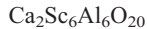
$a = 9.14(4)$ ,  $c = 2.74(2)$  Å  
6.463(53), 2.890(100), 2.036(87), 1.859(16), 1.442(27), 1.368(13), 1.317(16), 1.266(15)

Type material is deposited in the collections of the Smithsonian Institution's National Museum of Natural History, Washington DC, USA, registration number USNM 7619

How to cite: Ma, C., Tschauer, O. and Beckett, J.R. (2014) Liebermannite, IMA 2013-128. CNMNC Newsletter No. 20, June 2014, page 551; *Mineralogical Magazine*, **78**, 549–558.

## IMA No. 2013-129

Warkite



Murchison meteorite, fell at Murchison, Victoria, Australia and Vigarano meteorite, fell near Vigarano Pieve, Ferrara, Italy

Chi Ma\*, Alexander N. Krot, Kazuhide Nagashima and Oliver Tschauer

\*E-mail: chi@gps.caltech.edu

Sapphirine group

Triclinic:  $P\bar{1}$ 

$a = 10.367$ ,  $b = 10.756$ ,  $c = 8.895$  Å,  $\alpha = 105.98$ ,  
 $\beta = 96.04$ ,  $\gamma = 124.72^\circ$

8.067(53), 8.063(51), 4.802(55), 2.684(74),  
2.684(72), 2.544(100), 2.541(78), 2.540(77)

Type material is deposited in the collections of the Field Museum, Chicago, Illinois, USA (Murchison) and the Smithsonian Institution's National Museum of Natural History, Washington DC, USA, registration number USNM 7618 (Vigarano)

How to cite: Ma, C., Krot, A.N., Nagashima, K. and Tschauer, O. (2014) Warkite, IMA 2013-129. CNMNC Newsletter No. 20, June 2014, page 552; *Mineralogical Magazine*, **78**, 549–558.

## IMA No. 2013-130

Iyoite



Ohku mine, Sadamisaki Peninsula, Shikoku Island, Ehime Prefecture, Japan (33°24'42"N, 132°10'52"E)

Daisuke Nishio-Hamane\*, Koichi Momma, Masayuki Ohnishi, Norimasa Shimobayashi, Ritsuro Miyawaki, Norimitsu Tomita and Tetsuo Minakawa

\*E-mail: hamane@issp.u-tokyo.ac.jp

Mn-Cu ordered analogue of botallackite

Monoclinic:  $P2_1/m$ ; structure determined

$a = 5.622(2)$ ,  $b = 6.586(2)$ ,  $c = 5.719(2)$  Å,  
 $\beta = 91.55(3)^\circ$

5.7155(100), 2.8547(22), 2.8432(28),  
2.5596(62), 2.5330(14), 2.4929(37),  
2.0304(17), 2.0016(17)

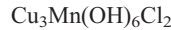
Type material is deposited in the collections of the National Museum of Nature and Science, Tsukuba, Japan, specimen number NSM M-43864

How to cite: Nishio-Hamane, D., Momma, K., Ohnishi, M., Shimobayashi, N., Miyawaki, R., Tomita, N. and Minakawa, T. (2014) Iyoite, IMA 2013-130. CNMNC Newsletter No. 20,

June 2014, page 552; *Mineralogical Magazine*, **78**, 549–558.

## IMA No. 2013-131

Misakiite



Ohku mine, Sadamisaki Peninsula, Shikoku Island, Ehime Prefecture, Japan (33°24'42"N, 132°10'52"E)

Daisuke Nishio-Hamane\*, Koichi Momma, Masayuki Ohnishi, Norimasa Shimobayashi, Ritsuro Miyawaki, Norimitsu Tomita and Tetsuo Minakawa

\*E-mail: hamane@issp.u-tokyo.ac.jp

Related to kapellasite and haydeite

Trigonal:  $P\bar{3}m1$ ; structure determined

$a = 6.4156(4)$ ,  $c = 5.7026(5)$  Å

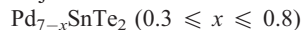
5.7024(100), 2.7961(12), 2.7779(24),  
2.4971(76), 1.9892(27), 1.6038(17),  
1.5439(20), 1.3491(12)

Type material is deposited in the collections of the National Museum of Nature and Science, Tsukuba, Japan, specimen number NSM M-43864

How to cite: Nishio-Hamane, D., Momma, K., Ohnishi, M., Shimobayashi, N., Miyawaki, R., Tomita, N. and Minakawa, T. (2014) Misakiite, IMA 2013-131. CNMNC Newsletter No. 20, June 2014, page 552; *Mineralogical Magazine*, **78**, 549–558.

## IMA No. 2013-132

Kojonenite



Minneapolis Adit, Howland Reef, Stillwater Complex, Stillwater Valley, Montana, USA (45°33'11"N, 109°53'03"W)

Chris J. Stanley\* and Anna Vymazalová

\*E-mail: C.Stanley@nhm.ac.uk

Known synthetic analogue

Tetragonal:  $I4/mmm$ 

$a = 4.001(1)$ ,  $c = 20.929(3)$  Å

10.4650(29), 2.4906(52), 2.1986(100),  
2.0930(18), 2.0025(48), 1.4469(17),  
1.4160(12), 1.1905(17)

Type material is deposited in the collections of the Natural History Museum, London, UK, registered number BM 1981,134

How to cite: Stanley, C.J. and Vymazalová, A. (2014) Kojonenite, IMA 2013-132. CNMNC Newsletter No. 20, June 2014, page 552; *Mineralogical Magazine*, **78**, 549–558.

**IMA No. 2013-133**

Bernarlottiite

 $\text{Pb}_6(\text{As}_5\text{Sb}_3)\text{S}_{18}$ Ceragiola area, Seravezza marble quarries,  
Apuan Alps, Tuscany, ItalyPaolo Orlandi, Cristian Biagioni\*, Elena  
Bonaccorsi, Yves Moëlo and Werner H. Paar

\*E-mail: biagioni@dst.unipi.it

Sb-rich homeotype of baumhauerite

Triclinic:  $P\bar{1}$ ; structure determined $a = 23.501(8)$ ,  $b = 8.386(2)$ ,  $c = 23.704(8)$  Å, $\alpha = 89.88(1)$ ,  $\beta = 102.93(1)$ ,  $\gamma = 89.91(1)^\circ$ 

3.851(s), 3.794(s), 3.278(s), 3.075(s), 2.748(vs),

2.363(s), 2.221(vs), 1.935(s)

Type material is deposited in the collections of  
the Museo di Storia Naturale, Università di Pisa,  
Via Roma 79, Calci (Pisa), Italy, catalogue  
number 19687How to cite: Orlandi, P., Biagioni, C.,  
Bonaccorsi, E., Moëlo, Y. and Paar, W.H.  
(2014) Bernarlottiite, IMA 2013-133. CNMNC  
Newsletter No. 20, June 2014, page 553;  
*Mineralogical Magazine*, **78**, 549–558.**NEW MINERAL PROPOSALS APPROVED IN  
MARCH 2014****IMA No. 2013-124**

Thalliumpharmacosiderite

 $\text{TlFe}_4[(\text{AsO}_4)_3(\text{OH})_4]\cdot 4\text{H}_2\text{O}$ Crven Dol Canyon, Rozsdan region, Macedonia  
(41°8'54"N, 21°57'13"E)Mike S. Rumsey\*, Stuart J. Mills, John Spratt,  
David G. Hay and Gunnar Farber

\*E-mail: m.rumsey@nhm.ac.uk

Pharmacosiderite group

Cubic:  $P\bar{4}3m$  $a = 7.987(8)$  Å

3.266(67), 2.832(100), 2.665(53), 2.525(87),

2.414(60), 2.309(60), 1.882(53), 1.784(73)

Type material is deposited in the type collec-  
tions of the Natural History Museum, London,  
UK, registered number BM 2013,151 and the  
Museum Victoria, Australia, specimen numbers  
M52852 and M52853How to cite: Rumsey, M.S., Mills, S.J., Spratt,  
J., Hay, D.G. and Farber, G. (2014)  
Thalliumpharmacosiderite, IMA 2013-124.  
CNMNC Newsletter No. 20, June 2014, page  
553; *Mineralogical Magazine*, **78**, 549–558.**IMA No. 2013-136**

Eckermannite

 $\text{NaNa}_2(\text{Mg}_4\text{Al})\text{Si}_8\text{O}_{22}(\text{OH})_2$ 

Jade Mine Tract, Kachin Province, Myanmar

Roberta Oberti\*, Massimo Boiocchi, Frank C.  
Hawthorne, Neil A. Ball and George E. Harlow

\*E-mail: oberti@crystal.unipv.it

Amphibole supergroup

Monoclinic:  $C2/m$ ; structure determined $a = 9.8087(7)$ ,  $b = 17.845(1)$ ,  $c = 5.2905(4)$  Å, $\beta = 103.660(1)^\circ$ 

8.407(42), 3.395(59), 3.257(34), 3.128(56),

2.966(33), 2.702(100), 2.574(36), 2.525(56)

Type material is deposited in the collections of  
the Department of Earth and Planetary Sciences,  
American Museum of Natural History, New  
York, NY, USA, specimen number AMNH  
H108401How to cite: Oberti, R., Boiocchi, M.,  
Hawthorne, F.C., Ball, N.A. and Harlow, G.E.  
(2014) Eckermannite, IMA 2013-136. CNMNC  
Newsletter No. 20, June 2014, page 553;  
*Mineralogical Magazine*, **78**, 549–558.**IMA No. 2013-137**

Magnesio-arfvedsonite

 $\text{NaNa}_2(\text{Mg}_4\text{Fe}^{3+})\text{Si}_8\text{O}_{22}(\text{OH})_2$ 

Jade Mine Tract, Kachin Province, Myanmar

Roberta Oberti\*, Massimo Boiocchi, Frank C.  
Hawthorne, Neil A. Ball and George E. Harlow

\*E-mail: oberti@crystal.unipv.it

Amphibole supergroup

Monoclinic:  $C2/m$ ; structure determined $a = 9.867(1)$ ,  $b = 17.928(2)$ ,  $c = 5.2839(6)$  Å,  $\beta$  $= 103.799(2)^\circ$ 

8.451(46), 3.399(68), 3.273(39), 3.144(63),

2.970(34), 2.708(100), 2.526(60), 2.167(37)

Type material is deposited in the collections of  
the Department of Earth and Planetary Sciences,  
American Museum of Natural History, New  
York, NY, USA, catalogue number H35024How to cite: Oberti, R., Boiocchi, M.,  
Hawthorne, F.C., Ball, N.A. and Harlow, G.E.  
(2014) Magnesio-arfvedsonite, IMA 2013-137.  
CNMNC Newsletter No. 20, June 2014, page  
553; *Mineralogical Magazine*, **78**, 549–558.**IMA No. 2013-139**

Silicocarnotite

 $\text{Ca}_5[(\text{PO}_4)(\text{SiO}_4)](\text{PO}_4)$ Hatrurim Basin, Negev Desert, Israel  
(31°12'31"N, 35°17'09"E)

Evgeny V. Galuskin\*, Joachim Kusz, Frank

Gfeller, Irina O. Galuskina, Yevgeny Vapnik, Mateusz Dulski and Piotr Dzierzanowski

\*E-mail: evgeny.galuskin@us.edu.pl

Known synthetic analogue

Orthorhombic:  $Pnma$ ; structure determined

$a = 6.7230(1)$ ,  $b = 15.4481(2)$ ,  $c = 10.0847(2)$  Å  
3.900(17), 2.949(61), 2.810(100), 2.588(55),  
2.167(18), 2.030(30), 1.952(22), 1.865(62)

Type material is deposited in the collections of the Museum of Natural History, Bernastrasse 5, CH-3005 Bern, Switzerland, catalogue number NMBE-42716

How to cite: Galuskin, E.V., Kusz, J., Gfeller, F., Galuskina, I.O., Vapnik, Y., Dulski, M. and Dzierzanowski, P. (2014) Silicocarnotite, IMA 2013-139. CNMNC Newsletter No. 20, June 2014, page 553; *Mineralogical Magazine*, **78**, 549–558.

#### IMA No. 2013-140

Katophorite

$\text{Na}(\text{NaCa})(\text{Mg}_4\text{Al})(\text{Si}_7\text{Al})\text{O}_{22}(\text{OH})_2$

Jade Mine Tract, Kachin Province, Myanmar

Roberta Oberti\*, Massimo Boiocchi, Frank C. Hawthorne, Neil A. Ball and George E. Harlow

\*E-mail: oberti@crystal.unipr.it

Amphibole supergroup

Monoclinic:  $C2/m$ ; structure determined

$a = 9.8573(8)$ ,  $b = 17.962(1)$ ,  $c = 5.2833(4)$  Å,  
 $\beta = 104.707(2)^\circ$

8.421(55), 3.378(61), 3.129(69), 2.942(43),  
2.700(100), 2.583(46), 2.536(65), 2.334(41)

Type material is deposited in the collections of the Department of Earth and Planetary Sciences, American Museum of Natural History, New York, NY, USA, catalogue number H32374

How to cite: Oberti, R., Boiocchi, M., Hawthorne, F.C., Ball, N.A. and Harlow, G.E. (2014) Katophorite, IMA 2013-140. CNMNC Newsletter No. 20, June 2014, page 554; *Mineralogical Magazine*, **78**, 549–558.

#### IMA No. 2013-141

Bonazziite

$\text{As}_4\text{S}_4$

Khaidarkan deposit, Fergana Valley, Alai Range, Osh Oblast, Kyrgyzstan

Luca Bindi\*, Giovanni Pratesi, Maurizio Muniz-Miranda, Matteo Zoppi, Laura Chelazzi, Giovanni O. Lepore and Silvio Menchetti

\*E-mail: luca.bindi@unifi.it

A polymorph of realgar and pararealgar

Monoclinic:  $C2/c$ ; structure determined

$a = 9.956(1)$ ,  $b = 9.308(1)$ ,  $c = 8.869(1)$  Å,  
 $\beta = 102.55(2)^\circ$

5.74(100), 4.86(30), 4.10(60), 3.92(50),  
3.12(60), 2.95(50), 2.86(80), 2.371(30)

Type material is deposited in the mineralogical collection of the Museo di Storia Naturale, Sezione di Mineralogia e Litologia, Università di Firenze, Via La Pira 4, I-50121, Firenze (Italy), catalogue number 47534/G

How to cite: Bindi, L., Pratesi, G., Muniz-Miranda, M., Zoppi, M., Chelazzi, L., Lepore, G.O. and Menchetti, S. (2014) Bonazziite, IMA 2013-141. CNMNC Newsletter No. 20, June 2014, page 554; *Mineralogical Magazine*, **78**, 549–558.

### NEW MINERAL PROPOSALS APPROVED IN APRIL 2014

#### IMA No. 2013-138

Ivsite

$\text{Na}_3\text{H}(\text{SO}_4)_2$

Great Tolbachik Fissure eruption, Tolbachik Volcano, Kamchatka Peninsula, Russia (55°49'48"N, 160°19'48"E)

Stanislav K. Filatov, Genadii A. Karpov, Andrey P. Shablinskii, Sergey V. Krivovichev\*, Lidiya P. Vergasova and Anton V. Antonov

\*E-mail: s.krivovichev@spbu.ru

Known synthetic analogue

Monoclinic:  $P2_1/c$ ; structure determined

$a = 8.655(1)$ ,  $b = 9.652(1)$ ,  $c = 9.147(1)$  Å,  
 $\beta = 108.76(1)^\circ$

4.010(53), 3.949(87), 3.768(100), 3.610(21),  
3.022(22), 2.891(42), 2.7635(49), 2.7320(70)

Type material is deposited in the collections of the Mineralogical Museum, St Petersburg State University, St Petersburg 199034, Russia, sample number 1/19608

How to cite: Filatov, S.K., Karpov, G.A., Shablinskii, A.P., Krivovichev, S.V., Vergasova, L.P. and Antonov, A.V. (2014) Ivsite, IMA 2013-138. CNMNC Newsletter No. 20, June 2014, page 554; *Mineralogical Magazine*, **78**, 549–558.

#### IMA No. 2014-001

Segerstromite

$\text{Ca}_3(\text{As}^{5+}\text{O}_4)_2[\text{As}^{3+}(\text{OH})_3]_2$

Cobrizza mine, Sacramento district, Copiapó Province, Atacama Region, Chile (27°49'45"S, 70°14'03"W)

Hexiong Yang, Benjamin N. Schumer, Robert A. Jenkins, J. Rueben Bautista, Robert T. Downs and Stanley H. Evans

\*E-mail: hyang@u.arizona.edu

New structure type

Cubic:  $I2_13$ ; structure determined

$a = 10.7627(2) \text{ \AA}$

4.351(34), 3.775(25), 3.389(82), 3.104(33),

2.875(100), 2.111(45), 1.905(27), 1.748(34)

Cotype material is deposited in the collections of the Mineral Museum of the University of Arizona, Tucson, Arizona, USA, catalogue number 19800 and with the RRUFF Project, deposition number R130753

How to cite: Yang, H., Schumer, B.N., Jenkins, R.A., Bautista, J.R., Downs, R.T. and Evans, S.H. (2014) Segerstromite, IMA 2014-001. CNMNC Newsletter No. 20, June 2014, page 554; *Mineralogical Magazine*, **78**, 549–558.

#### IMA No. 2014-002

Petersite-(Ce)

$\text{Cu}_6\text{Ce}(\text{PO}_4)_3(\text{OH})_6 \cdot 3\text{H}_2\text{O}$

Cherry Creek District, Yavapai County, Arizona, USA (34°34'N, 112°5'W)

Shaunna M. Morrison\*, Kenneth J. Domanik, Hexiong Yang and Robert T. Downs

\*E-mail: shaunnamm@email.arizona.edu

Mixite group

Hexagonal:  $P6_3/m$ ; structure determined

$a = 13.2197(18)$ ,  $c = 5.8591(9) \text{ \AA}$

6.610(100), 5.724(31), 4.327(6), 3.305(10),

3.175(4), 2.862(6), 2.627(4), 2.426(6)

Type material is deposited in the collections of the Mineral Museum of the University of Arizona, Tucson, Arizona, USA, catalogue number 19801 and with the RRUFF Project, deposition number R050541

How to cite: Morrison, S.M., Domanik, K.J., Yang, H. and Downs, R.T. (2014) Petersite-(Ce), IMA 2014-002. CNMNC Newsletter No. 20, June 2014, page 555; *Mineralogical Magazine*, **78**, 549–558.

#### IMA No. 2014-003

Ferrivauxite

$\text{Fe}^{3+}\text{Al}_2(\text{PO}_4)_2(\text{OH})_3 \cdot 5\text{H}_2\text{O}$

Siglo XX Mine, Llaguvia, Potosí, Bolivia (18°25'00"S, 66°37'59"W, ~4000 m asl)

Gunnar Raade\*, Joel Grice and Ralph Rowe

\*E-mail: gunn-ra@online.no

Vantasselite-vauxite group

Triclinic:  $P\bar{1}$ ; structure determined

$a = 9.198(2)$ ,  $b = 11.607(3)$ ,  $c = 6.112(2) \text{ \AA}$ ,  
 $\alpha = 98.237(9)$ ,  $\beta = 91.90(1)$ ,  $\gamma = 108.658(9)^\circ$   
10.834(100), 8.682(24), 8.242(65), 6.018(28),  
5.918(23), 5.491(29), 4.338(26), 2.898(32)

Type material is deposited in the collections of the Natural History Museum, University of Oslo, PO Box 1172 Blindern, NO-0318 Oslo, Norway, catalogue number 43576 and the Canadian Museum of Nature, PO Box 3443, Station 'D', Ottawa, Ontario, K1P 6P4, Canada, catalogue number CMNMC 86850

How to cite: Raade, G., Grice, J. and Rowe, R. (2014) Ferrivauxite, IMA 2014-003. CNMNC Newsletter No. 20, June 2014, page 555; *Mineralogical Magazine*, **78**, 549–558.

#### IMA No. 2014-005

Pieczkaite

$\text{Mn}_5(\text{PO}_4)_3\text{Cl}$

Southeastern shoreline of a small, unnamed island in Cross Lake, Manitoba, Canada (54°41'N, 97°49'W)

Kim Tait, Frank C. Hawthorne\*, Neil Ball and Yassir Abdu

\*E-mail: Frank.Hawthorne@umanitoba.ca

Apatite supergroup

Hexagonal:  $P6_3/m$ ; structure determined

$a = 9.504(4)$ ,  $c = 6.347(3) \text{ \AA}$

3.453(15), 3.174(24), 2.794(100), 2.744(88),

2.639(34), 2.514(25), 1.853(25), 1.750(22)

Type material is deposited in the collections of the Department of Natural History (Mineralogy), Royal Ontario Museum, 100 Queens Park, Toronto, Ontario M5S 2C6, Canada, catalogue number M56483

How to cite: Tait, K., Hawthorne, F.C., Ball, N. and Abdu, Y. (2014) Pieczkaite, IMA 2014-005. CNMNC Newsletter No. 20, June 2014, page 555; *Mineralogical Magazine*, **78**, 549–558.

#### IMA No. 2014-006

Geschieberite

$\text{K}_2(\text{UO}_2)(\text{SO}_4)_2 \cdot 2\text{H}_2\text{O}$

Svornost (Einigkeit) mine, Jáchymov (St Joachimsthal) ore district, Western Bohemia, Czech Republic

Jakub Plášil\*, Jan Hloušek, Anatoly V. Kasatkin, Radek Škoda, Milan Novák and Jiří Čejka

\*E-mail: plasil@fzu.cz

Known synthetic analogue

Orthorhombic:  $Pna2_1$ ; structure determined

$a = 13.7778(3)$ ,  $b = 7.2709(4)$ ,  $c = 11.5488(2) \text{ \AA}$

6.882(100), 5.622(53), 4.589(12), 4.428(16), 3.681(18), 3.304(15), 3.079(14), 3.006(17)

Type material is deposited in the collections of the Fersman Mineralogical Museum, Russian Academy of Sciences, Moscow, Russia, registration number 4537/1

How to cite: Plášil, J., Hloušek, J., Kasatkin, A.V., Škoda, R., Novák, M. and Čejka, J. (2014) Geschieberite, IMA 2014-006. CNMNC Newsletter No. 20, June 2014, page 555; *Mineralogical Magazine*, **78**, 549–558.

## NEW MINERAL PROPOSALS APPROVED IN MAY 2014

### IMA No. 2014-007

Mendigite



Dellen (Ziegłowski) quarry, 1.5 km NE of Mendig, Laacher See area, Eifel region, Rhineland-Palatinate (Rheinland-Pfalz), Germany

Nikita V. Chukanov\*, Sergey M. Aksenov, Ramiza K. Rastsvetaeva, Konstantin V. Van, Dmitry I. Belakovskiy, Igor V. Pekov, Vladislav V. Gurzhiiy, Willi Schüller and Bernd Ternes

\*E-mail: chukanov@icp.ac.ru

Closely related to bustamite

Triclinic;  $P\bar{1}$ ; structure determined

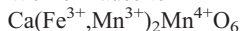
$a = 7.0993(4)$ ,  $b = 7.6370(5)$ ,  $c = 7.7037(4)$  Å,  $\alpha = 79.58(1)$ ,  $\beta = 62.62(1)$ ,  $\gamma = 76.47(1)^\circ$   
3.72(32), 3.40(20), 3.199(25), 3.000(26), 2.885(100), 2.691(21), 2.397(21), 1.774(37)

Type material is deposited in the collections of the Fersman Mineralogical Museum, Russian Academy of Sciences, Moscow, Russia, registration number 4420/1

How to cite: Chukanov, N.V., Aksenov, S.M., Rastsvetaeva, R.K., Van, K.V., Belakovskiy, D.I., Pekov, I.V., Gurzhiiy, V.V., Schüller W. and Ternes, B. (2014) Mendigite, IMA 2014-007. CNMNC Newsletter No. 20, June 2014, page 556; *Mineralogical Magazine*, **78**, 549–558.

### IMA No. 2014-008

Wernerkrauseite



Bellerberg volcano (Caspar quarry), Ettringen, Eifel, Rhineland-Palatinate, Germany

Evgeny V. Galuskin\*, Biljana Lazic, Günter Blass, Remo Widmer and Irina O. Galuskina

\*E-mail: evgeny.galuskin@us.edu.pl

Post-spinel structure type

Orthorhombic;  $Pnma$ ; structure determined

$a = 9.0548(2)$ ,  $b = 2.8718(1)$ ,  $c = 10.9908(2)$  Å  
4.698(44), 4.527(54), 2.748(62), 2.646(100), 2.450(77), 2.425(37), 1.818(43), 1.778(30)

Type material is deposited in the collections of the Museum of Natural History, Bernastrasse 5, CH-3005 Bern, Switzerland, catalogued number NMBE 42804

How to cite: Galuskin, E.V., Lazic, B., Blass, G., Widmer, R. and Galuskina, I.O. (2014) Wernerkrauseite, IMA 2014-008. CNMNC Newsletter No. 20, June 2014, page 556; *Mineralogical Magazine*, **78**, 549–558.

### IMA No. 2014-009

Flinteite



Northern fumarole field, First scoria cone of the Northern Breakthrough of the Great Tolbachik Fissure Eruption, Tolbachik volcano, Kamchatka Peninsula, Far-Eastern Region, Russia (55°41'N, 160°14'E, 1200 m asl)

Igor V. Pekov\*, Natalia V. Zubkova, Vasilii O. Yapaskurt, Sergey N. Britvin, Marina F. Vigasina, Evgeny G. Sidorov and Dmitry Y. Pushcharovsky

\*E-mail: igorpekov@mail.ru

Known synthetic analogue

Orthorhombic;  $Pna2_1$ ; structure determined

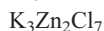
$a = 26.809(1)$ ,  $b = 12.4085(6)$ ,  $c = 7.2512(3)$  Å  
6.229(27), 5.123(88), 3.629(98), 3.599(100), 3.133(35), 3.039(26), 2.897(35), 2.688(46)

Type material is deposited in the collections of the Fersman Mineralogical Museum, Russian Academy of Sciences, Moscow, Russia, registration number 4529/1

How to cite: Pekov, I.V., Zubkova, N.V., Yapaskurt, V.O., Britvin, S.N., Vigasina, M.F., Sidorov, E.G. and Pushcharovsky, D.Y. (2014) Flinteite, IMA 2014-009. CNMNC Newsletter No. 20, June 2014, page 556; *Mineralogical Magazine*, **78**, 549–558.

### IMA No. 2014-010

Mellizinkalite



Glavnaya Tenoritovaya (Major Tenorite) fumarole, Second scoria cone of the Northern Breakthrough of the Great Tolbachik Fissure Eruption, Tolbachik volcano, Kamchatka Peninsula, Far-Eastern Region, Russia (55°41'N, 160°14'E, 1200 m asl)



Igor V. Pekov\*, Natalia V. Zubkova, Vasilii O. Yapaskurt, Inna S. Lykova, Dmitriy I. Belakovskiy, Marina F. Vigasina, Evgeny G. Sidorov, Sergey N. Britvin and Dmitry Y. Pushcharovsky

\*E-mail: igorpekov@mail.ru

New structure type

Triclinic:  $P\bar{1}$ ; structure determined

$a = 6.7737(4)$ ,  $b = 10.571(1)$ ,  $c = 11.073(1)$  Å,  
 $\alpha = 117.93(1)$ ,  $\beta = 106.909(5)$ ,  $\gamma = 90.389(8)^\circ$   
 9.20(69), 6.40(100), 5.712(47), 4.608(92),  
 3.499(55), 3.473(73), 3.393(66), 3.075(49)

Type material is deposited in the collections of the Fersman Mineralogical Museum, Russian Academy of Sciences, Moscow, Russia, registration number 4533/1

How to cite: Pekov, I.V., Zubkova, N.V., Yapaskurt, V.O., Lykova, I.S., Belakovskiy, D.I., Vigasina, M.F., Sidorov, E.G., Britvin, S.N. and Pushcharovsky, D.Y. (2014) Mellizinkalite, IMA 2014-010. CNMNC Newsletter No. 20, June 2014, page 556; *Mineralogical Magazine*, **78**, 549–558.

#### IMA No. 2014-011

Romanorlovite

$K_8Cu_6Cl_{17}(OH)_3$

Glavnaya Tenoritovaya (Major Tenorite) fumarole, Second scoria cone of the Northern Breakthrough of the Great Tolbachik Fissure Eruption, Tolbachik volcano, Kamchatka Peninsula, Far-Eastern Region, Russia (55°41'N, 160°14'E, 1200 m asl)

Igor V. Pekov\*, Natalia V. Zubkova, Vasilii O. Yapaskurt, Sergey N. Britvin, Marina F. Vigasina, Inna S. Lykova, Evgeny G. Sidorov and Dmitry Y. Pushcharovsky

\*E-mail: igorpekov@mail.ru

New structure type

Tetragonal:  $I4/mmm$ ; structure determined

$a = 17.5804(7)$ ,  $c = 15.9075(6)$  Å  
 12.48(56), 11.74(36), 8.80(100), 7.97(34),  
 6.71(40), 3.165(32), 2.933(80), 2.607(38)

Type material is deposited in the collections of the Fersman Mineralogical Museum, Russian Academy of Sciences, Moscow, Russia, registration number 4544/1

How to cite: Pekov, I.V., Zubkova, N.V., Yapaskurt, V.O., Britvin, S.N., Vigasina, M.F., Lykova, I.S., Sidorov, E.G. and Pushcharovsky, D.Y. (2014) Romanorlovite, IMA 2014-011. CNMNC Newsletter No. 20, June 2014, page 557; *Mineralogical Magazine*, **78**, 549–558.

#### IMA No. 2014-012

Spaltiite

$Tl_2Cu_2As_2S_5$

Lengenbach quarry, Im Feld, Binntal, Canton Wallis, Switzerland

Stefan Graeser\*, Dan Topa, Herta Effenberger, Emil Makovicky and Werner H. Paar

\*E-mail: stefan.graeser@unibas.ch

New structure type

Monoclinic:  $P2_1/c$ ; structure determined

$a = 15.846(8)$ ,  $b = 10.024(5)$ ,  $c = 6.343(3)$  Å,  
 $\beta = 99.037(8)^\circ$

4.002(40), 3.907(100), 3.643(80), 3.484(30),  
 3.128(30), 2.980(50), 2.647(60), 2.506(50)

Type material is deposited in the collections of the Natural History Museum Basel, Switzerland, catalogue number S210 and the Natural History Museum Vienna, Austria, specimen number N 9581

How to cite: Graeser, S., Topa, D., Effenberger, H., Makovicky, E. and Paar, W.H. (2014) Spaltiite, IMA 2014-012. CNMNC Newsletter No. 20, June 2014, page 557; *Mineralogical Magazine*, **78**, 549–558.

#### IMA No. 2014-013

Favreauite

$PbBiCu_6O_4(SeO_3)_4(OH)\cdot H_2O$

El Dragón mine, Antonio Quijarro Province, Potosí Department, Bolivia (19°49'15''S, 65°55'0''W)

Stuart J. Mills\*, Anthony R. Kampf, Robert M. Housley, Andrew G. Christy, Brent Thorne, Yu-Sheng Chen and Ian M. Steele

\*E-mail: smills@museum.vic.gov.au

New structure type

Tetragonal:  $P4/n$ ; structure determined

$a = 9.860(4)$ ,  $c = 9.700(5)$  Å  
 5.67(100), 3.470(76), 3.190(35), 2.961(40),  
 2.831(68), 2.709(33), 2.632(34), 2.247(36)

Cotype material is deposited in the collections of the Museum Victoria, Australia, registration number M53004 and the Natural History Museum of Los Angeles County, Los Angeles, USA, catalogue numbers 64111, 64112, 64113

How to cite: Mills, S.J., Kampf, A.R., Housley, R.M., Christy, A.C., Thorne, B., Chen, Y.-S. and Steele, I.M. (2014) Favreauite, IMA 2014-013. CNMNC Newsletter No. 20, June 2014, page 557; *Mineralogical Magazine*, **78**, 549–558.

**NOMENCLATURE PROPOSAL APPROVED  
IN MARCH 2014****IMA 13-C: Mayenite supergroup**

A proposal to modify the nomenclature of the mayenite supergroup has been approved. As a consequence, the mineral brearleyite has been discredited as being the same as chlormayenite; mayenite has been redefined and renamed chlormayenite; kyuygenite has been renamed chlorkyuygenite; a group nomenclature has been established for the mayenite supergroup.

**NOMENCLATURE PROPOSALS APPROVED  
IN APRIL 2014****IMA 13-E: Barylite-clinobarylite**

The proposal 13-E has been accepted and the mineral “clinobarylite” is discredited since it corresponds to the polytype barylite-1*O*. The mineral reported in the literature as barylite corresponds to the polytype barylite-2*O*.

**IMA 14-A: Thénardite**

The proposal 14-A has been accepted and the mineral name “thenardite” becomes thénardite, in agreement with its original spelling.

**IMA 14-C: Litidionite**

The proposal 14-C has been accepted and the mineral name “lithidionite” becomes litidionite, in agreement with its original spelling.

**REVISED CHEMICAL FORMULAE**

A paper on the mineral magbasite has been recently published [*Mineralogical Magazine*, **78** (2014), 29–45] in which the ideal chemical formula of the mineral is given as  $\text{KBaFe}^{3+}\text{Mg}_7\text{Si}_8\text{O}_{22}(\text{OH})_2\text{F}_6$ . These data were examined carefully by the CNMNC officers and were considered reliable. Accordingly it was agreed to modify the formula of magbasite in the official IMA List of Minerals.

A paper on the mineral widenmannite has been recently published [*American Mineralogist*, **99** (2014), 276–282] in which the ideal chemical formula of the mineral is given as  $\text{Pb}_2(\text{OH})_2[(\text{UO}_2)(\text{CO}_3)_2]$ . These data were examined carefully by the CNMNC officers and were considered reliable. Accordingly it was agreed to modify the formula of widenmannite in the official IMA List of Minerals.

**ERRATUM****IMA No. 2013-107 Zuktamrurite**

In CNMNC Newsletter 19, the space group was given incorrectly. The correct space group is orthorhombic, *Pnmm*.