

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

## NEWSLETTER 24

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### New minerals and nomenclature modifications approved in 2015

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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 2015

### IMA No. 2014-086

Nolzeite



Poudrette quarry, Mont Saint-Hilaire,

La-Vallée-du-Richelieu RCM, Montérégie,

Québec, Canada (45°33'48.84"N, 73°8'26.80"W)

Monika M. Haring\* and Andrew M. McDonald

\*E-mail: mx\_haring@laurentian.ca

Related to steedeite

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

$a = 6.894(1)$ ,  $b = 7.632(2)$ ,  $c = 11.017(2)$  Å,  $\alpha =$

$108.39(3)$ ,  $\beta = 99.03(3)$ ,  $\gamma = 103.05(3)^\circ$

$10.113(100)$ ,  $6.911(16)$ ,  $3.593(13)$ ,  $3.520(9)$ ,

$3.026(15)$ ,  $2.808(50)$ ,  $2.675(12)$ ,  $2.463(12)$

Type material is deposited in the collections of

the Canadian Museum of Nature, Gatineau,

Quebec, Canada, catalogue number CMNMC

86851

How to cite: Haring, M.M. and McDonald, A.M.

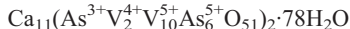
(2015) Nolzeite, IMA 2014-086. CNMNC

Newsletter No. 24, April 2015, page 248;

*Mineralogical Magazine*, **79**, 247–251.

### IMA No. 2014-088

Morrisonite



Packrat mine, near Gateway, Mesa Co.,

Colorado, USA (38°38'51.28"N,

109°02'49.77"W)

Anthony R. Kampf\*, John M. Hughes, Joe

Marty and Barbara P. Nash

\*E-mail: akampf@nhm.org

Related to vanarsite and packratite

Monoclinic:  $P2_1/c$ ; structure determined

$a = 14.957(2)$ ,  $b = 48.208(6)$ ,  $c = 23.836(3)$  Å,

$\beta = 90.034(6)^\circ$

$12.21(69)$ ,  $11.35(100)$ ,  $9.87(16)$ ,  $9.15(23)$ ,

$6.81(12)$ ,  $6.10(11)$ ,  $2.936(16)$ ,  $2.839(12)$

Co-type material is deposited in the collections

of the Natural History Museum of Los Angeles

County, Los Angeles, California, USA, cata-

logue numbers 64149, 65554, 65555 and 65556

How to cite: Kampf, A.R., Hughes, J.M., Marty,

J. and Nash, B.P. (2015) Morrisonite, IMA 2014-

088. CNMNC Newsletter No. 24, April 2015,

page 248; *Mineralogical Magazine*, **79**, 247–251.

### IMA No. 2014-089

Suseinargiuite



Su Seinargiu, Sarroch, Cagliari, Sardinia, Italy  
Paolo Orlandi\*, Cristian Biagioni, Yves Moëlo,  
Jessica Langlade and Eric Faulques

\*E-mail: paolorlandi.pisa@gmail.com

The Na-Bi analogue of wulfenite

Tetragonal:  $I4_1/a$

$a = 5.296(1)$ ,  $c = 11.673(2)$  Å

$3.146(\text{vs})$ ,  $2.912(\text{mw})$ ,  $2.652(\text{mw})$ ,  $1.964(\text{m})$ ,

$1.975(\text{mw})$ ,  $1.728(\text{mw})$ ,  $1.616(\text{mw})$ ,  $1.580(\text{w})$

Type material is deposited in the mineralogical

collections of the Museo di Storia Naturale,

Università di Pisa, Via Roma 79, Calci (PI),

Italy, catalogue number 19692

How to cite: Orlandi, P., Biagioni, C., Moëlo,

Y., Langlade, J. and Faulques, E. (2015)

Suseinargiuite, IMA 2014-089. CNMNC

Newsletter No. 24, April 2015, page 248;

*Mineralogical Magazine*, **79**, 247–251.

### IMA No. 2014-090

Ferrostalderite



Lengenbach quarry, Imfeld, Binn Valley,

Canton Valais, Switzerland (46°21'54"N,

8°13'15"E)

Luca Bindi\*, Cristian Biagioni, Fabrizio

Nestola, Ralph Cannon, Philippe Roth and

Thomas Raber

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

The Fe-dominant analogue of stalderite

Tetragonal:  $I\bar{4}2m$ ; structure determined

$a = 9.8786(5)$ ,  $c = 10.8489(8)$  Å

$4.092(70)$ ,  $3.493(23)$ ,  $3.396(35)$ ,  $3.124(17)$ ,

$2.937(100)$ ,  $2.656(19)$ ,  $2.470(19)$ ,  $2.435(33)$

Type material is deposited in the mineralogical

collection of the Museo di Storia Naturale,

Università di Firenze, Via La Pira 4, Firenze,

Italy, catalogue number 3148/I

How to cite: Bindi, L., Biagioni, C., Nestola, F.,

Cannon, R., Roth, P. and Raber, T. (2015)

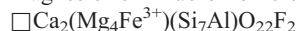
Ferrostalderite, IMA 2014-090. CNMNC

Newsletter No. 24, April 2015, page 248;

*Mineralogical Magazine*, **79**, 247–251.

### IMA No. 2014-091

Magnesio-ferri-fluoro-hornblende



Portoscuso, Cagliari, Sardinia, Italy

(39°14'57.4"N, 8°24'19.4"E)

Roberta Oberti\*, Massimo Boiocchi, Frank C.

Hawthorne, Neil A. Ball and Luigi Chiappino

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

Amphibole supergroup

Monoclinic:  $C2/m$ ; structure determined  
 $a = 9.839(5)$ ,  $b = 18.078(9)$ ,  $c = 5.319(3)$  Å,  
 $\beta = 104.99(3)^\circ$   
 8.412(89), 3.389(55), 3.121(64), 2.738(34),  
 2.711(100), 2.599(45), 2.553(61), 2.164(36)  
 Type material is deposited in the collections of  
 the Mineralogical Museum of the Dipartimento  
 di Scienze della Terra e dell'Ambiente,  
 University of Pavia, sample number 2014-01  
 How to cite: Oberti, R., Boiocchi, M.,  
 Hawthorne, F.C., Ball, N.A. and Chiappino, L.  
 (2015) Magnesio-ferri-fluoro-hornblende, IMA  
 2014-091. CNMNC Newsletter No. 24, April  
 2015, page 248; *Mineralogical Magazine*, **79**,  
 247–251.

## NEW MINERAL PROPOSALS APPROVED IN MARCH 2015

### IMA No. 2014-092

Karpenkoite  
 $\text{Co}_3(\text{V}_2\text{O}_7)(\text{OH})_2 \cdot 2\text{H}_2\text{O}$   
 Little Eva mine, Yellow Cat District, Grand Co.,  
 Utah, USA (38°50'17"N, 109°31'35"W)  
 Anatoly V. Kasatkin\*, Jakub Plášil, Igor V.  
 Pekov, Fabrizio Nestola, Jiří Čejka, Dmitriy I.  
 Belakovskiy, Marina F. Vigasina, Federico  
 Zorzi and Brent Thorne  
 \*E-mail: anatoly.kasatkin@gmail.com  
 The Co analogue of martyite  
 Trigonal:  $P\bar{3}m1$   
 $a = 6.016(4)$ ,  $c = 7.234(6)$  Å  
 7.15(100), 5.19(18), 4.20(25), 3.59(21),  
 2.95(54), 2.77(21), 2.60(36), 2.44(33)  
 Type material is deposited in the collections of  
 the Fersman Mineralogical Museum of the  
 Russian Academy of Sciences, Moscow, Russia,  
 registration number 4605/1  
 How to cite: Kasatkin, A.V., Plášil, J., Pekov,  
 I.V., Nestola, F., Čejka, J., Belakovskiy, D.I.,  
 Vigasina, M.F., Zorzi, F. and Thorne, B. (2015)  
 Karpenkoite, IMA 2014-092. CNMNC  
 Newsletter No. 24, April 2015, page 249;  
*Mineralogical Magazine*, **79**, 247–251.

### IMA No. 2014-093

Polloneite  
 $\text{AgPb}_{46}\text{As}_{26}\text{Sb}_{23}\text{S}_{120}$   
 Pollone deposit at Valdicastello Carducci, near  
 Pietrasanta (LU), Tuscany, Italy  
 Dan Topa\*, Frank N. Keutsch, Emil Makovicky,  
 Uwe Kolitsch and Werner Paar  
 \*E-mail: dan.topa@nhm-wien.ac.at

Sartorite homologous series  
 Monoclinic:  $P2_1$ ; structure determined  
 $a = 8.413(2)$ ,  $b = 25.901(5)$ ,  $c = 23.817(5)$  Å,  
 $\beta = 90.01(3)^\circ$   
 3.80(m), 3.42(w), 3.24(m), 3.02(s), 2.40(w),  
 2.13(w)  
 Type material is deposited in the reference  
 collection of the Naturhistorisches Museum  
 Wien, catalogue number N 9786  
 How to cite: Topa, D., Keutsch, F.N.,  
 Makovicky, E., Kolitsch, U. and Paar, W.  
 (2015) Polloneite, IMA 2014-093. CNMNC  
 Newsletter No. 24, April 2015, page 249;  
*Mineralogical Magazine*, **79**, 247–251.

### IMA No. 2014-094

Bosiite  
 $\text{NaFe}_3^{3+}(\text{Al}_4\text{Mg}_2)(\text{Si}_6\text{O}_{18})(\text{BO}_3)_3(\text{OH})_3\text{O}$   
 Darasun mine, Transbaikalia, Eastern-Siberian  
 Region, Russia (52°20'24"N, 115°29'23"E)  
 Andreas Ertl, Ivan A. Baksheev, Gerald Giester,  
 Christian L. Lengauer, Vsevolod Y. Prokofiev  
 and Lidiya D. Zorina  
 \*E-mail: andreas.ertl@a1.net  
 Tourmaline supergroup  
 Trigonal:  $R3m$ ; structure determined  
 $a = 16.101(3)$ ,  $c = 7.327(2)$  Å  
 8.051(58), 4.648(28), 4.279(46), 4.025(57),  
 3.543(50), 3.008(58), 2.606(100), 2.068(45)  
 Type material is deposited in the collection of  
 Naturhistorisches Museum Wien, Austria, cata-  
 logue number N 9793  
 How to cite: Ertl, A., Baksheev, I.A., Giester,  
 G., Lengauer, C.L., Prokofiev, V.Y. and Zorina,  
 L.D. (2015) Bosiite, IMA 2014-094. CNMNC  
 Newsletter No. 24, April 2015, page 249;  
*Mineralogical Magazine*, **79**, 247–251.

### IMA No. 2014-095

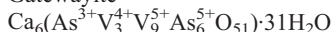
Crimsonite  
 $\text{PbFe}_2^{3+}(\text{PO}_4)_2(\text{OH})_2$   
 Silver Coin mine, Valmy, Iron Point district,  
 Humboldt Co., Nevada, USA (40°55'44"N,  
 117°19'26"W)  
 Anthony R. Kampf\*, Paul M. Adams, Stuart J.  
 Mills and Barbara P. Nash  
 \*E-mail: akampf@nhm.org  
 The P analogue of carminite  
 Orthorhombic:  $Cccm$ ; structure determined  
 $a = 16.2535(13)$ ,  $b = 7.4724(4)$ ,  
 $c = 12.1533(9)$  Å  
 5.86(42), 4.53(45), 3.485(64), 3.190(100),  
 2.902(54), 2.502(77), 2.268(54), 1.781(39)

Type 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 number 65558

How to cite: Kampf, A.R., Adams, P.M., Mills, S.J. and Nash, B.P. (2015) Crimsonite, IMA 2014-095. CNMNC Newsletter No. 24, April 2015, page 249; *Mineralogical Magazine*, **79**, 247–251.

#### IMA No. 2014-096

Gatewayite



Packrat mine, Gateway district, Mesa Co., Colorado, USA (38°38'51.28"N, 109°02'49.77"W)

Anthony R. Kampf\*, John M. Hughes, Joe Marty and Barbara P. Nash

\*E-mail: akampf@nhm.org

Related to vanarsite and packratite

Monoclinic:  $P2_1$ ; structure determined

$a = 11.1850(4)$ ,  $b = 16.8528(4)$ ,  
 $c = 20.7146(15)$  Å,  $\beta = 91.166(6)^\circ$   
13.16(47), 11.13(8), 9.70(100), 3.246(9),  
2.953(9), 2.866(14), 2.810(17), 2.758(9)

Co-type material is deposited in the collections of the Natural History Museum of Los Angeles County, Los Angeles, California, USA, catalogue numbers 64513, 64514, 65555 and 65559

How to cite: Kampf, A.R., Hughes, J.M., Marty, J. and Nash, B.P. (2015) Gatewayite, IMA 2014-096. CNMNC Newsletter No. 24, April 2015, page 250; *Mineralogical Magazine*, **79**, 247–251.

#### IMA No. 2014-097

Jeffbenite



As inclusions inside the so called “super deep diamonds” found at São Luiz, Brazil

Fabrizio Nestola\*, Antony Burnham, Luca Peruzzo, Leonardo Tauro, Matteo Alvaro, Michael J. Walter and Mickey Gunter

\*E-mail: fabrizio.nestola@unipd.it

New structure type

Tetragonal:  $I\bar{4}2d$ ; structure determined

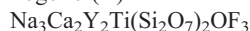
$a = 6.5231(1)$ ,  $c = 18.1756(3)$  Å  
3.069(11), 2.881(24), 2.647(100), 2.220(19),  
2.056(11), 1.625(44), 1.390(13), 1.372(11)

Type material is deposited in the collections of the Museum of Mineralogy of the University of Padova, Padova, Italy, catalogue number MMP M12660

How to cite: Nestola, F., Burnham, A., Peruzzo, L., Tauro, L., Alvaro, M., Walter, M.J. and Gunter, M. (2015) Jeffbenite, IMA 2014-097. CNMNC Newsletter No. 24, April 2015, page 250; *Mineralogical Magazine*, **79**, 247–251.

#### IMA No. 2014-098

Fogoite-(Y)



Near the ruins of Lombadas, close to Lagoa do Fogo (Lake of fire), São Miguel Island, Azores, Portugal (37°46'26"N, 25°27'29"W)

Fernando Cámara\*, Elena Sokolova, Yassir A. Abdu, Frank C. Hawthorne, Thierry Charrier, Vincent Dorcet and Jean-François Carpentier  
\*E-mail: fernando.camaraartigas@unito.it

Rosenbuschite group

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

$a = 9.575(6)$ ,  $b = 5.685(4)$ ,  $c = 7.279(5)$  Å,  $\alpha = 89.985(6)$ ,  $\beta = 100.933(4)$ ,  $\gamma = 101.300(5)^\circ$   
3.960(23), 3.069(42), 2.954(100), 2.626(21),  
2.486(24), 2.195(17), 1.893(23), 1.820(20)

Cotype material is deposited in the collections of the Museo Regionale di Scienze Naturali di Torino, Torino, Italy, catalogue numbers M/U 16800 and M/U 16801, the Royal Ontario Museum, Toronto, Ontario, Canada, catalogue number M56826, and the Muséum National d'Histoire Naturelle de Paris, catalogue number MNHN-215.001

How to cite: Cámara, F., Sokolova, E., Abdu, Y.A., Hawthorne, F.C., Charrier, T., Dorcet, V. and Carpentier, J.-F. (2015) Fogoite-(Y), IMA 2014-098. CNMNC Newsletter No. 24, April 2015, page 250; *Mineralogical Magazine*, **79**, 247–251.

#### IMA No. 2014-099

Tavagnascoite



Esperance superiore tunnel, Tavagnasco mine, Tavagnasco (TO), Piedmont, Italy (45.5416°N, 7.8134°E)

Luca Bindi\*, Bruno Martini, Adrio Salvetti, Giovanni Dalla Fontana, Massimo Taronna, Cristian Biagioni and Marco E. Ciriotti

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

The Bi analogue of klebelsbergite

Orthorhombic:  $Pca2_1$ ; structure determined

$a = 5.831(1)$ ,  $b = 11.925(2)$ ,  $c = 15.123(1)$  Å  
6.39(28), 5.24(16), 4.95(19), 4.019(32),  
3.604(28), 3.213(100), 2.981(17), 2.469(17)

Type material is deposited in the mineralogical

collection of the Museo di Storia Naturale, Università di Firenze, Florence, Italy, catalogue number 3149/I

How to cite: Bindi, L., Martini, B., Salvetti, A., Dalla Fontana, G., Taronna, M., Biagioni, C. and Ciriotti, M.E. (2015) Tavagnascoite, IMA 2014-099. CNMNC Newsletter No. 24, April 2015, page 250; *Mineralogical Magazine*, **79**, 247–251.

#### IMA No. 2014-100

Arsenowagnerite

$\text{Mg}_2(\text{AsO}_4)\text{F}$

Arsenatnaya 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, Atali A. Agakhanov, Vasilij O. Yapaskurt, Nikita V. Chukanov, Dmitry I. Belakovskiy, Evgeny G. Sidorov and Dmitry Y. Pushcharovsky

\*E-mail: igorpekov@mail.ru

The As analogue of wagnerite

Monoclinic:  $P2_1/c$ ; structure determined

$a = 9.8638(3)$ ,  $b = 12.9830(3)$ ,  $c = 12.3284(3)$  Å,

$\beta = 109.291(3)^\circ$

5.80(41), 5.31(35), 3.916(37), 3.339(98),

3.155(65), 3.043(100), 2.940(72), 2.787(51)

Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4673/1

How to cite: Pekov, I.V., Zubkova, N.V., Agakhanov, A.A., Yapaskurt, V.O., Chukanov, N.V., Belakovskiy, D.I., Sidorov, E.G. and Pushcharovsky, D.Y. (2015) Arsenowagnerite, IMA 2014-100. CNMNC Newsletter No. 24, April 2015, page 251; *Mineralogical Magazine*, **79**, 247–251.

#### IMA No. 2014-101

Möhnite

$(\text{NH}_4)\text{K}_2\text{Na}(\text{SO}_4)_2$

Pabellón de Pica mountain, 1.5 km south of Chanabaya, Iquique Province, Tarapacá Region, Chile (20°55'S, 70°08'W)

Nikita V. Chukanov\*, Sergey M. Aksenov,

Ramiza K. Rastsvetaeva, Igor V. Pekov, Dmitry I. Belakovskiy and Sergey N. Britvin

\*E-mail: nikchukanov@yandex.ru

Related to apththitalite

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

$a = 5.7402(3)$ ,  $c = 7.435(1)$  Å

4.955(27), 4.122(37), 3.708(29), 2.969(74),

2.861(100), 2.474(20), 2.060(33), 1.433(11)

Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4638/1

How to cite: Chukanov, N.V., Aksenov, S.M., Rastsvetaeva, R.K., Pekov, I.V., Belakovskiy, D.I. and Britvin, S.N. (2015) Möhnite, IMA 2014-101. CNMNC Newsletter No. 24, April 2015, page 251; *Mineralogical Magazine*, **79**, 247–251.

### NOMENCLATURE PROPOSALS APPROVED IN FEBRUARY 2015

#### IMA 14-H: Bohseite

Proposal 14-H is accepted, and bohseite is officially redefined as

$\text{Ca}_4\text{Be}_{3+x}\text{Al}_{1-x}\text{Si}_9\text{O}_{25-x}(\text{OH})_{3+x}$  (with  $x = 0$  to 1). Its composition is different from that of

bavenite, which extends from

$\text{Ca}_4\text{Be}_2\text{Al}_2\text{Si}_9\text{O}_{26}(\text{OH})_2$  to

$\text{Ca}_4\text{Be}_3\text{AlSi}_9\text{O}_{25}(\text{OH})_3$ . Bohseite extends from

$\text{Ca}_4\text{Be}_3\text{AlSi}_9\text{O}_{25}(\text{OH})_3$ , the boundary between bavenite and bohseite, to  $\text{Ca}_4\text{Be}_4\text{Si}_9\text{O}_{24}(\text{OH})_4$ .

#### IMA 14-J: Betalomonosovite

Proposal 14-J is accepted, and betalomonosovite is officially re-approved as  $\text{Na}_6\text{Ti}_4(\text{Si}_2\text{O}_7)_2[\text{PO}_3(\text{OH})][\text{PO}_2(\text{OH})_2]\text{O}_2(\text{OF})$ .

### NOMENCLATURE PROPOSALS APPROVED IN MARCH 2015

#### IMA 15-C: Churchite-(Nd) (discredited)

Proposal 15-C is accepted, and churchite-(Nd) is officially discredited.

#### IMA 15-D: Iodine (discredited)

Proposal 15-D is accepted, and iodine is officially discredited.

