

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

## NEWSLETTER 13

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### New minerals and nomenclature modifications approved in 2012

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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 2012

### IMA No. 2011-091

Rumseyite

Pb<sub>2</sub>OCIF

Torr Works (Merehead) Quarry, East Cranmore, Somerset, England

R.W. Turner\*, O.I. Siidra, S.V. Krivovichev, C.J. Stanley, and J. Spratt

\*E-mail: rturner@imbuia-holdings.com

Aurivillius structure type

Tetragonal:  $I4/mmm$ ; structure determined

$a = 4.065(1)$ ,  $c = 12.631(7)$  Å

6.306(17), 3.848(41), 2.923(100), 2.875(68), 2.110(12), 2.049(10), 1.719(9), 1.680(14)

Type material is deposited in the collections of the Natural History Museum, London, UK, catalogue number BM1970,110

How to cite: Turner, R.W., Siidra, O.I., Krivovichev, S.V., Stanley, C.J. and Spratt, J. (2012) Rumseyite, IMA 2011-091. CNMNC Newsletter No. 13, June 2012, page 808; *Mineralogical Magazine*, **76**, 807–817.

### IMA No. 2011-096

Fuxiaotuite

Ca<sub>2</sub>Cu<sub>9</sub>(AsO<sub>4</sub>)<sub>4</sub>(SO<sub>4</sub>)<sub>0.5</sub>(OH)<sub>9</sub>·9H<sub>2</sub>O

Tangdan and Nanniping mines, Dongchuan copper mining district, Yao'an County, Cuxiong Autonomous Prefecture, Yunnan Province, People's Republic of China (26°11'N 103°51'E)

Jeffrey de Fourestier\*, Li Guowu, Glenn Poirier, Nikita V. Chukanov and Ma Zhesheng

\*E-mail: jeffrey.defourestier@forces.gc.ca

Closely related to tyrolite

Monoclinic:  $C2/c$ ; structure determined

$a = 54.490(9)$ ,  $b = 5.5685(9)$ ,  $c = 10.4690(17)$  Å,  $\beta = 96.294(3)^\circ$

5.263(54), 4.782(100), 4.333(71), 3.949(47), 2.976(46), 2.631(41), 2.368(29), 1.744(24)

Type material is deposited in the collections of the Crystal Structure Laboratory, China University of Geosciences, Beijing 100083, People's Republic of China, catalogue number TD1

How to cite: de Fourestier, J., Li, G., Poirier, G., Chukanov, N.V. and Ma, Z. (2012) Fuxiaotuite, IMA 2011-096. CNMNC Newsletter No. 13, June 2012, page 808; *Mineralogical Magazine*, **76**, 807–817.

### IMA No. 2011-097

Oxy-chromium-dravite

NaCr<sub>3</sub>(Cr<sub>4</sub>Mg<sub>2</sub>)(Si<sub>6</sub>O<sub>18</sub>)(BO<sub>3</sub>)<sub>3</sub>(OH)<sub>3</sub>O

Pereval marble quarry, Sludyanka, Irkutsk region, Siberia, Russia (51°37'N 103°38'E)

Ferdinando Bosi\*, Leonid Rezeniskii and Henrik Skogby

\*E-mail: ferdinando.bosi@uniroma1.it

Tourmaline supergroup

Trigonal:  $R3m$ ; structure determined

$a = 16.0539(7)$ ,  $c = 7.3247(5)$  Å

6.480(62), 4.634(24), 4.270(44), 4.014(63), 3.542(50), 3.005(60), 2.600(100), 2.063(47)

Type material is deposited in the collections of the Museum of Mineralogy, Earth Sciences Department, Sapienza University of Rome, Rome, Italy, catalogue number 33064

How to cite: Bosi, F., Rezeniskii, L. and Skogby, H. (2012) Oxy-chromium-dravite, IMA 2011-097. CNMNC Newsletter No. 13, June 2012, page 808; *Mineralogical Magazine*, **76**, 807–817.

### IMA No. 2011-098

Debattistiite

Ag<sub>9</sub>Hg<sub>0.5</sub>As<sub>6</sub>S<sub>12</sub>Te<sub>2</sub>

Lengenbach quarry, Binn Valley, Valais, Switzerland

Alessandro Guastoni\*, Luca Bindi and Fabrizio Nestola

\*E-mail: alessandro.guastoni@unipd.it

New structure type

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

$a = 7.832(5)$ ,  $b = 8.606(4)$ ,  $c = 10.755(5)$  Å,  $\alpha = 95.563(9)$ ,  $\beta = 95.880(5)$ ,  $\gamma = 116.79(4)^\circ$

10.56(100), 7.582(4), 5.736(3), 4.038(3), 3.367(3), 3.301(4), 2.742(7), 2.733(7)

Type material is deposited in the collections of the Museum of Mineralogy of the Department of Geosciences at the University of Padova, Italy, catalogue number MMP M10680

How to cite: Guastoni, A., Bindi, L. and Nestola, F. (2012) Debattistiite, IMA 2011-098. CNMNC Newsletter No. 13, June 2012, page 808; *Mineralogical Magazine*, **76**, 807–817.

### IMA No. 2011-099

Takanawaite-(Y)

YTaO<sub>4</sub>

Takanawa Mountain, Matsuyama City, Ehime Prefecture, Shikoku, Japan (33°56'N 132°51'E)

Daisuke Nishio-Hamane\*, Tetsuo Minakawa

and Yukikazu Ohgoshi

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

Polymorph of iwashiroite-(Y), formanite-(Y) and yttrantalite-(Y)

Monoclinic:  $I2/a$ ; structure determined

$a = 5.3182(7)$ ,  $b = 10.957(1)$ ,  $c = 5.0597(7)$  Å,  $\beta = 94.99(1)^\circ$

3.133(100), 2.953(85), 2.739(29), 2.649(21), 1.912(24), 1.905(39), 1.855(26), 1.573(18)

Type material is deposited in the collections of the National Museum of Nature and Science, Tokyo, Japan, specimen number NSM M-43517

How to cite: Nishio-Hamane, D., Minakawa, T. and Ohgoshi, Y. (2012) Takanawaite-(Y), IMA 2011-099. CNMNC Newsletter No. 13, June 2012, page 808; *Mineralogical Magazine*, **76**, 807–817.

#### IMA No. 2011-100

Forêtite

$\text{Cu}_2\text{Al}_2(\text{AsO}_4)(\text{OH},\text{O},\text{H}_2\text{O})_6$

Cap Garonne mine, Var, Provence-Alpes-Côte d'Azur, France

Stuart J. Mills\*, Anthony R. Kampf, Andrew M. McDonald, Georges Favreau and Pierre-Jacques Chiappero

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

New structure type

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

$a = 6.969(9)$ ,  $b = 7.676(9)$ ,  $c = 8.591(11)$  Å,  $\alpha = 82.01(9)$ ,  $\beta = 71.68(8)$ ,  $\gamma = 102.68(8)^\circ$

7.307(100), 4.519(23), 4.277(18), 3.455(17), 3.141(24), 2.818(24), 2.719(20), 2.343(22)

Type material is deposited in the collections of the Natural History Museum of Los Angeles County, Los Angeles, USA, catalogue numbers 63573, 63574, 63575, 63576 and 63577, Museum Victoria, Melbourne, Australia, registration number M51746, and the Muséum National d'Histoire Naturelle, Paris, France, catalogue number 211.58

How to cite: Mills, S.J., Kampf, A.R., McDonald, A.M., Favreau, G. and Chiappero, P.-J. (2012) Forêtite, IMA 2011-100. CNMNC Newsletter No. 13, June 2012, page 809; *Mineralogical Magazine*, **76**, 807–817.

#### IMA No. 2011-101

Phosphovanadylite-Ca

$\text{Ca}[\text{V}_4^{4+}\text{P}_2\text{O}_{10}(\text{OH})_6] \cdot 12\text{H}_2\text{O}$

South Rasmussen Ridge phosphate mine, Soda Springs, Caribou County, Idaho, USA (42°51'N, 111°21'W)

Anthony R. Kampf\*, Barbara P. Nash and Thomas A. Loomis

\*E-mail: akampf@nhm.org

Ca analogue of phosphovanadylite

Cubic:  $I\bar{4}3m$ ; structure determined

$a = 15.441(11)$  Å

11.04(97), 7.788(100), 4.487(14), 3.171(46), 2.749(32), 2.458(14), 2.343(15), 1.830(16)

Type material is deposited in the collections of the Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, CA 90007, USA, catalogue numbers 63578, 63579, 63580, 63581 and 63582

How to cite: Kampf, A.R., Nash, B.P. and Loomis, T.A. (2012) Phosphovanadylite-Ca, IMA 2011-101. CNMNC Newsletter No. 13, June 2012, page 809; *Mineralogical Magazine*, **76**, 807–817.

#### IMA No. 2011-103

Hydrokenomicrolite

$(\square, \text{H}_2\text{O})_2\text{Ta}_2(\text{O}, \text{OH})_6(\text{H}_2\text{O})$

Volta Grande pegmatite, Nazareno, Minas Gerais, Brazil

Marcelo B. Andrade, Daniel Atencio\*, Nikita V. Chukanov and Javier Ellena

\*E-mail: datencio@usp.br

Pyrochlore supergroup

Cubic:  $Fd\bar{3}m$ ; structure determined

$a = 10.5733(9)$  Å

6.112(86), 3.191(52), 3.052(100), 2.642(28), 2.035(11), 1.869(29), 1.788(10), 1.594(24)

Type material is deposited in the collections of the Museu de Geociências, Instituto de Geociências, Universidade de São Paulo, São Paulo, Brazil, registration number DR725

How to cite: Andrade, M.B., Atencio, D., Chukanov, N.V. and Ellena, J. (2012) Hydrokenomicrolite, IMA 2011-103. CNMNC Newsletter No. 13, June 2012, page 809; *Mineralogical Magazine*, **76**, 807–817.

#### IMA No. 2011-104

Saltonseaite

$\text{K}_3\text{NaMnCl}_6$

Salton Sea, Imperial County, California, USA (33°07'N 115°41'W)

Anthony R. Kampf\*, Stuart J. Mills, Fabrizio Nestola and Anatoly Kasatkin

\*E-mail: akampf@nhm.org

Mn analogue of rinneite

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

$a = 12.0966(5)$ ,  $c = 13.9555(10)$  Å

5.831(61), 3.498(25), 2.851(68), 2.689(32), 2.625(62), 2.542(100), 1.983(32), 1.384(22)

Type material is deposited in the collections of the Natural History Museum of Los Angeles County, Los Angeles, California, USA, catalogue number 23604, and Museum Victoria, Melbourne, Australia, catalogue number M51615

How to cite: Kampf, A.R., Mills, S.J., Nestola, F. and Kasatkin, A. (2012) Saltonseaite, IMA 2011-104. CNMNC Newsletter No. 13, June 2012, page 809; *Mineralogical Magazine*, **76**, 807–817.

#### IMA No. 2011-105

Nashite



Little Eva mine, Yellow Cat District, Grand County, Utah, USA, and the St Jude mine, Slick Rock district, San Miguel County, Colorado, USA

Anthony R. Kampf\*, John M. Hughes, Joe Marty and Francis Brown

\*E-mail: akampf@nhm.org

New structure type

Monoclinic:  $P2_1/n$ ; structure determined

$a = 10.0099(3)$ ,  $b = 21.8472(7)$ ,  $c = 11.1504(7)$  Å,  $\beta = 116.584(8)^\circ$   
10.995(46), 9.044(100), 8.350(64), 6.962(15), 5.526(17), 3.501(15), 2.994(13), 2.652(15)

Type material is deposited in the collections of the Natural History Museum of Los Angeles County, Los Angeles, California, USA, catalogue numbers 63583 (holotype) and 63584 (Little Eva mine), and 63585, 63586 and 63587 (St Jude mine)

How to cite: Kampf, A.R., Hughes, J.M., Marty, J. and Brown, F. (2012) Nashite, IMA 2011-105. CNMNC Newsletter No. 13, June 2012, page 810; *Mineralogical Magazine*, **76**, 807–817.

#### New mineral proposals approved in March 2012

##### IMA No. 2011-102

Luanshiweiite-2M<sub>1</sub>



#309 pegmatite vein, Guangpo, Lushi County, Henan Province, China (33°52.480'N 110°42.760'E)

Fan Guang\*, Li Guowu, Shen Ganfu, Xu Jinsha and Dai Jie

\*E-mail: fanguang2008@163.com

Mica group

Monoclinic:  $C2/c$ ; structure determined

$a = 5.1861(7)$ ,  $b = 8.9857(13)$ ,  $c = 19.970(3)$  Å,  
 $\beta = 95.420(3)^\circ$

9.891(35), 4.451(31), 3.468(42), 3.314(36), 2.973(34), 2.565(100), 2.378(31), 1.986(30)

Type material is deposited in the collections of the Geological Museum of China, Beijing, China, registration number M11797

How to cite: Fan, G., Li, G., Shen, G., Xu, J. and Dai, J. (2012) Luanshiweiite-2M<sub>1</sub>, IMA 2011-102. CNMNC Newsletter No. 13, June 2012, page 810; *Mineralogical Magazine*, **76**, 807–817.

##### IMA No. 2011-106

Putnisite



Polar Bear peninsula, Lake Cowan, Norseman, Western Australia, Australia (121°49'E 31°56'S)

Peter Elliott\*, Gerald Giester, Ralph Rowe and Allan Pring

\*E-mail: peter.elliott@adelaide.edu.au

New structure type

Orthorhombic:  $Pnma$ ; structure determined

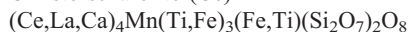
$a = 15.351(3)$ ,  $b = 20.421(4)$ ,  $c = 18.270(4)$  Å  
13.577(100), 7.659(80), 7.095(10), 5.084(19), 4.901(13), 3.385(7), 3.689(16), 3.594(7)

Type material is deposited in the collections of the South Australian Museum, Adelaide, South Australia, Australia, registration number G33429, and the Canadian Museum of Nature, Ottawa, Canada, catalogue number CMNMC 86133

How to cite: Elliott, P., Giester, G., Rowe, R. and Pring, A. (2012) Putnisite, IMA 2011-106. CNMNC Newsletter No. 13, June 2012, page 810; *Mineralogical Magazine*, **76**, 807–817.

##### IMA No. 2011-107

Christofschäferite-(Ce)



Wingertsberg, near Mendig, Laacher See area, Eifel Mountains, Rhineland-Palatinate, Germany

Nikita V. Chukanov\*, Sergey M. Aksenov, Ramiza K. Rastsvetaeva, Dmitriy I. Belakovskiy, Jörg Göttlicher, Sergey N. Britvin and Konstantin V. Van

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

Mn<sup>2+</sup>-dominant member of the chevkinite group

Monoclinic:  $P2_1/m$ ; structure determined

$a = 13.3722(4)$ ,  $b = 5.7434(1)$ ,  $c = 11.0862(2)$  Å,  
 $\beta = 100.580(2)^\circ$

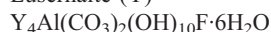
4.90(39), 4.64(65), 3.480(78), 3.169(81),  
3.095(43), 2.730(100), 2.169(46), 1.737(46)

Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4227/1

How to cite: Chukanov, N.V., Aksenov, S.M., Rastsvetaeva, R.K., Belakovskiy, D.I., Göttlicher, J., Britvin, S.N. and Van, K.V. (2012) Christofschäferite-(Ce), IMA 2011-107. CNMNC Newsletter No. 13, June 2012, page 810; *Mineralogical Magazine*, **76**, 807–817.

#### IMA No. 2011-108

Lusernaite-(Y)



Seccarezze quarries, Luserna Valley, Luserna San Giovanni, Torino, Piedmont, Italy (44°45'80"N 7°12'08"E)

Cristian Biagioni\*, Elena Bonaccorsi, Fernando Cámara, Marcella Cadoni, Marco E. Ciriotti, Danilo Bersani and Uwe Kolitsch

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

New structure type

Orthorhombic: *Pmna*; structure determined

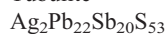
$a = 7.839(2)$ ,  $b = 11.023(2)$ ,  $c = 11.383(2)$  Å  
11.02(100), 7.90(49), 6.41(15), 5.66(25),  
5.06(24), 4.258(33), 3.195(27), 3.095(21)

Type material is deposited in the collections of the Museo di Storia Naturale e del Territorio, Università di Pisa, Calci (Pisa), Italy, catalogue number 19445, and the Museo Regionale di Scienze Naturali, Turin, Italy, catalogue number 15901

How to cite: Biagioni, C., Bonaccorsi, E., Cámara, F., Cadoni, M., Ciriotti, M.E., Bersani, D. and Kolitsch, U. (2012) Lusernaite-(Y), IMA 2011-108. CNMNC Newsletter No. 13, June 2012, page 811; *Mineralogical Magazine*, **76**, 807–817.

#### IMA No. 2011-109

Tubulite



Rivet quarry, Peyrebrune ore field, Réalmont, Tarn Department, France (43°45'42"N 02°14'16"E), and in the Veneziana and Torinese galleries, Borgofranco mines complex, Biò, Borgofranco d'Ivrea ore district, Torino, Piedmont, Italy (45°31'07"N 7°51'53"E)  
Y. Moëlo\*, R. Pecorini, M. E. Ciriotti, N. Meisser, M. Caldes-Rouillon, P. Orlandi, P.E. Petit, B. Martini and A. Salvetti

\*E-mail: Yves.Moëlo@cnrs-irn.fr

Zinkenite group

Monoclinic: *Pc*, *P2/c* or *P2<sub>1</sub>/c*

$a = 4.132(2)$ ,  $b = 43.1(2)$ ,  $c = 27.4(1)$  Å,  $\beta = 93.2(3)^\circ$

5.32(45), 3.99(35), 3.69(60), 3.36(100),  
3.28(55), 2.99(55), 2.912(55), 2.063(75)

Type material is deposited in the collections of the Museum of Mineralogy of the Ecole Nationale Supérieure des Mines de Paris, Paris, France, catalogue number M 82939, the Museo Regionale di Scienze Naturali, Torino, Italy, catalogue number 15905, the Museo di Storia Naturale e del Territorio, Università di Pisa, Calci (Pisa), Italy, catalogue number 19630, and the Musée Cantonal de Géologie, Université-Anthropole, Lausanne, Switzerland, catalogue number MGL#92635

How to cite: Moëlo, Y., Pecorini, R., Ciriotti, M.E., Meisser, N., Caldes-Rouillon, M., Orlandi, P., Petit, P.E., Martini, B. and Salvetti, A. (2012) Tubulite, IMA 2011-109. CNMNC Newsletter No. 13, June 2012, page 811; *Mineralogical Magazine*, **76**, 807–817.

#### IMA No. 2011-111

Fuettererite



NE2 vein, Otto Mountain, Baker, San Bernardino County, California, USA (35.27776°N, 116.09331°W)

Anthony R. Kampf\*, Stuart J. Mills, Robert M. Housley and Joseph Marty

\*E-mail: akampf@nhm.org

New structure type

Hexagonal: *R* $\bar{3}$

$a = 8.4035(12)$ ,  $c = 44.681(4)$  Å  
6.106(44), 3.733(100), 2.749(53), 2.669(49),  
2.529(41), 1.964(87), 1.900(48), 1.584(44)

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 numbers 63588 and 63589

How to cite: Kampf, A.R., Mills, S.J., Housley, R.M. and Marty, J. (2012) Fuettererite, IMA 2011-111. CNMNC Newsletter No. 13, June 2012, page 811; *Mineralogical Magazine*, **76**, 807–817.

## IMA No. 2011-112

## Fluorchegemite



Upper Chegem volcanic caldera, Kabardino-Balkaria, North Caucasus, Russia (43°17'N 43°6'E)

I.O. Galuskina\*, B. Lazic, E.V. Galuskin, T. Armbruster, V.M. Gazeev, R. Włodyka, A.E. Zadov, M. Dulski and P. Dzierżanowski

\*E-mail: irina.galuskina@us.edu.pl

F-dominant analogue of chegemite

Orthorhombic: *Pbnm*; structure determined

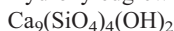
$a = 5.0620(1)$ ,  $b = 11.3917(2)$ ,  $c = 23.5180(3)$  Å  
3.636(52), 3.013(57), 2.991 (56), 2.832(51),  
2.718(63), 2.699(46), 2.531(100), 1.905(95)

Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, catalogue number 4163/1

How to cite: Galuskina, I.O., Lazic, B., Galuskin, E.V., Armbruster, T., Gazeev, V.M., Włodyka, R., Zadov, A.E., Dulski, M. and Dzierżanowski, P. (2012) Fluorchegemite, IMA 2011-112. CNMNC Newsletter No. 13, June 2012, page 812; *Mineralogical Magazine*, **76**, 807–817.

## IMA No. 2011-113

## Hydroxyledgrewite



Upper Chegem volcanic caldera, Kabardino-Balkaria, North Caucasus, Russia (43°17'N 43°6'E)

E.V. Galuskin\*, T. Armbruster, N.N. Pertsev, I.O. Galuskina, B. Lazic, V.M. Gazeev, R. Włodyka, M. Dulski, P. Dzierżanowski, A.E. Zadov and L. Dubrovinsky

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

OH-dominant analogue of edgrewite

Monoclinic: *P2<sub>1</sub>/b*; structure determined

$a = 5.0672(1)$ ,  $b = 11.3545(1)$ ,  $c = 15.3941(2)$  Å,  
 $\alpha = 100.587(1)^\circ$   
3.813(41), 3.028(100), 2.822(78), 2.764(65),  
2.624(55), 1.906(52), 1.906(53), 1.890(55)

Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, catalogue number 4164/1

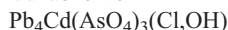
How to cite: Galuskin, E.V., Armbruster, T., Pertsev, N.N., Galuskina, I.O., Lazic, B., Gazeev, V.M., Włodyka, R., Dulski, M., Dzierżanowski, P., Zadov, A.E. and Dubrovinsky, L. (2012) Hydroxyledgrewite,

IMA 2011-113. CNMNC Newsletter No. 13, June 2012, page 812; *Mineralogical Magazine*, **76**, 807–817.

## New mineral proposals approved in April 2012

## IMA No. 2011-114

## Vanackerite



Tsumeb ore deposit, Tsumeb, Namibia

Jochen Schlüter\*, Thomas Malcherek and Georg Gebhard

\*E-mail: Jochen.Schlueter@uni-hamburg.de

Related to apatite group structures

Trigonal: *P3*; structure determined

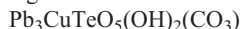
$a = 10.032(1)$ ,  $c = 7.300(1)$  Å  
4.140(10), 3.290(34), 2.982(100), 2.067(16),  
1.944(11), 1.875(8), 1.635(10), 1.523(10)

Type material is deposited in the collections of the Mineralogical Museum of the University of Hamburg, Hamburg, Germany, registration number TS 706

How to cite: Schlüter, J., Malcherek, T. and Gebhard, G. (2012) Vanackerite, IMA 2011-114. CNMNC Newsletter No. 13, June 2012, page 812; *Mineralogical Magazine*, **76**, 807–817.

## IMA No. 2011-115

## Agaite



Aga mine, Otto Mountain, Baker, San Bernardino County, California, USA (35.27215°N 116.09487°W)

Anthony R. Kampf\*, Stuart J. Mills, Robert M. Housley and Joseph Marty

\*E-mail: akampf@nhm.org

New structure type

Orthorhombic: *Pca2<sub>1</sub>*; structure determined

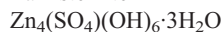
$a = 10.6522(7)$ ,  $b = 9.1630(5)$ ,  $c = 9.6011(7)$  Å  
4.26(28), 4.165(14), 3.303(100), 2.747(68),  
2.571(14), 2.081(21), 2.031(17), 1.747(40)

Type material is deposited in the collections of the Mineral Sciences Department, Natural History Museum of Los Angeles County, Los Angeles, California, USA, catalogue number 63590

How to cite: Kampf, A.R., Mills, S.J., Housley, R.M. and Marty, J. (2012) Agaite, IMA 2011-115. CNMNC Newsletter No. 13, June 2012, page 812; *Mineralogical Magazine*, **76**, 807–817.

## IMA No. 2012-002

Lahnsteinite



Friedrichssegen mine, Lahnstein, Lahn valley, Rhineland-Palatinate, Germany (50°18'11"N 7°40'17"E)

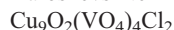
Nikita V. Chukanov\*, Ramiza K. Rastsvetaeva, Sergey M. Aksenov, Igor V. Pekov, Dmitriy I. Belakovskiy, Günter Blaß and Gerhard Möhn  
\*E-mail: nikchukanov@yandex.ruChemically related to namuwite and osakaite  
Triclinic:  $P\bar{1}$ ; structure determined $a = 8.3125(6)$ ,  $b = 14.545(1)$ ,  $c = 18.504(2)$  Å,  
 $\alpha = 89.71(1)$ ,  $\beta = 90.05(1)$ ,  $\gamma = 90.13(1)^\circ$   
9.30(100), 4.175(18), 3.476(19), 3.290(19),  
2.723(57), 2.624(36), 2.503(35), 1.574(25)

Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4252/1

How to cite: Chukanov, N.V., Rastsvetaeva, R.K., Aksenov, S.M., Pekov, I.V., Belakovskiy, D.I., Blaß, G. and Möhn, G. (2012) Lahnsteinite, IMA 2012-002. CNMNC Newsletter No. 13, June 2012, page 813; *Mineralogical Magazine*, **76**, 807–817.

## IMA No. 2012-003

Yaroshevskite



Yadovitaya fumarole, Second scoria cone, Tolbachik volcano, Kamchatka peninsula, Kamchatka Oblast', Far-Eastern Region, Russia (55°41'N 160°14'E)

Igor V. Pekov\*, Michael E. Zelenski, Natalia V. Zubkova, Vasiliy O. Yapaskurt, Yury S. Polekhovskiy and Dmitry Y. Pushcharovskiy

\*E-mail: igorpekov@mail.ru

New structure type

Triclinic:  $P\bar{1}$ ; structure determined $a = 6.4344(11)$ ,  $b = 8.3232(13)$ ,  $c = 9.1726(16)$  Å,  
 $\alpha = 105.38(1)$ ,  $\beta = 96.113(14)$ ,  $\gamma = 107.642(1)^\circ$   
8.65(100), 6.84(83), 6.01(75), 5.52(62),  
4.965(55), 4.198(67), 4.055(65), 2.896(60)

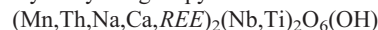
Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4240/1

How to cite: Pekov, I.V., Zelenski, M.E., Zubkova, N.V., Yapaskurt, V.O., Polekhovskiy, Y.S. and Pushcharovskiy, D.Y. (2012) Yaroshevskite, IMA 2012-003. CNMNC

Newsletter No. 13, June 2012, page 813; *Mineralogical Magazine*, **76**, 807–817.

## IMA No. 2012-005

Hydroxymanganopyrochlore



Dellen (Ziegłowski) quarry, Mendig, Laacher See area, Eifel region, Rheinland-Pfalz, Germany

Nikita V. Chukanov\*, Günter Blaß, Natalia V. Zubkova, Igor V. Pekov, Dmitry Y. Pushcharovskiy and Herbert Prinz

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

Pyrochlore supergroup

Cubic:  $Fd\bar{3}m$ ; structure determined $a = 10.2523(2)$  Å2.969(100), 2.569(40), 2.358(12), 1.816(47),  
1.548(40), 1.481(14), 1.284(10), 1.178(14)

Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4226/1

How to cite: Chukanov, N.V., Blaß, G., Zubkova, N.V., Pekov, I.V., Pushcharovskiy, D.Y. and Prinz, H. (2012) Hydroxymanganopyrochlore, IMA 2012-005. CNMNC Newsletter No. 13, June 2012, page 813; *Mineralogical Magazine*, **76**, 807–817.

## IMA No. 2012-006

Štěpíte



Geschieber vein, Svornost shaft, Jáchymov ore district, western Bohemia, Czech Republic

Jakub Plášil\*, Karla Fejfarová, Jan Hloušek, Radek Škoda, Milan Novák, Jiří Sejkora, Jiří Čejka, František Veselovský, Petr Ondruš, Juraj Majzlan and Zdeněk Mrázek

\*E-mail: jakub.horrak@gmail.com

New structure type

Tetragonal:  $I4_1/acd$ ; structure determined $a = 10.9894(1)$ ,  $c = 32.9109(6)$  Å8.190(100), 7.008(43), 5.475(18), 4.111(16),  
3.934(12), 3.395(20), 2.933(18), 2.154(25)

Type material is deposited in the collections of the Department of Mineralogy and Petrology of the National Museum in Prague, Prague, Czech Republic, catalogue number PIP 7/2011

How to cite: Plášil, J., Fejfarová, K., Hloušek, J., Škoda, R., Novák, M., Sejkora, J., Čejka, J., Veselovský, F., Ondruš, P., Majzlan J. and Mrázek, Z. (2012) Štěpíte, IMA 2012-006. CNMNC Newsletter No. 13, June 2012,

page 813; *Mineralogical Magazine*, **76**, 807–817.

IMA No. **2012-007**

Babánekite



Geister vein, Rovnost mine, Jáchymov ore

district, western Bohemia, Czech Republic

Jakub Plášil\*, Karla Fejfarová, Radek Škoda,

Pavel Škácha, Jiří Sejkora, František

Veselovský, Jan Hloušek and Milan Novák

\*E-mail: jakub.horak@gmail.com

Monoclinic:  $C2/m$ ; structure determined

$a = 10.1742(2)$ ,  $b = 13.5104(3)$ ,  $c = 4.7489(1)$  Å,

$\beta = 105.416(2)^\circ$

$7.936(10)$ ,  $6.743(100)$ ,  $3.231(14)$ ,  $2.999(5)$ ,

$2.980(5)$ ,  $2.725(5)$ ,  $2.715(11)$ ,  $2.333(10)$

Type material is deposited in the collections of

the Department of Mineralogy and Petrology of

the National Museum in Prague, Prague, Czech

Republic, catalogue number P1P 8/2011

How to cite: Plášil, J., Fejfarová, K., Škoda, R.,

Škácha, P., Sejkora, J., Veselovský, F., Hloušek,

J. and Novák, M. (2012) Babánekite, IMA

2012-007. CNMNC Newsletter No. 13, June

2012, page 814; *Mineralogical Magazine*, **76**,

807–817.

IMA No. **2012-008**

Browneite

MnS

Zakłodzie meteorite, Zamosc, Poland

Chi Ma

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

Sphalerite group

Cubic:  $F\bar{4}3m$

$a = 5.601$  Å

$3.234(100)$ ,  $1.980(63)$ ,  $1.689(39)$ ,  $1.400(9)$ ,

$1.285(14)$ ,  $1.143(19)$ ,  $0.947(14)$ ,  $0.886(14)$

Type material is deposited in the collections of

the Smithsonian Institution's National Museum

of Natural History, Washington DC, USA,

registration number USNM 7607

How to cite: Ma, C. (2012) Browneite, IMA

2012-008. CNMNC Newsletter No. 13, June

2012, page 814; *Mineralogical Magazine*, **76**,

807–817.

**New mineral proposals approved in May 2012**

IMA No. **2011-094**

Cayalsite-(Y)



Øvre Lapplægeret granite pegmatite, Tysfjord, Nordland, Norway (68°2'43.26''N 16°00'14.98''E)

Thomas Malcherek, Jochen Schlüter\*, Tomas

A. Husdal and Mark A. Cooper

\*E-mail: Jochen.Schlueter@uni-hamburg.de

New structure type

1O Polytype:

Orthorhombic:  $Pbn$ ; structure determined

$a = 15.993(1)$ ,  $b = 5.5306(3)$ ,  $c = 9.6590(7)$  Å

$5.222(22)$ ,  $4.584(15)$ ,  $4.094(17)$ ,  $3.997(16)$ ,

$3.547(58)$ ,  $2.992(100)$ ,  $2.776(15)$ ,  $2.727(15)$

1M Polytype:

Monoclinic:  $P2/c$ ; structure determined

$a = 11.050(3)$ ,  $b = 5.5236(3)$ ,  $c = 16.003(3)$  Å,

$\beta = 118.89(1)^\circ$

$5.221(43)$ ,  $5.133(51)$ ,  $4.914(53)$ ,  $3.873(33)$ ,

$3.562(67)$ ,  $3.002(100)$ ,  $2.756(41)$

Type material is deposited in the collections of

the Mineralogical Museum of the University of

Hamburg, Grindelallee 48, D-20146 Hamburg,

Germany, catalogue numbers NO-002B/08 (1O

polytype) and NO-002/08 (1M polytype)

How to cite: Malcherek, T., Schlüter, J., Husdal,

T.A. and Cooper, M.A. (2012) Cayalsite-(Y),

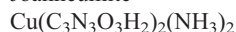
IMA 2011-094. CNMNC Newsletter No. 13,

June 2012, page 814; *Mineralogical Magazine*,

**76**, 807–817.

IMA No. **2012-001**

Joanneumite



Caleta Pabellon de Pica, Tarapaca, Chile

(20°55'S 70°08'W)

Hans-Peter Bojar\* and Franz Walter

\*E-mail: hans-peter.bojar@museum-joanneum.at

New structure type

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

$a = 5.042(1)$ ,  $b = 6.997(1)$ ,  $c = 9.099(2)$  Å,

$\alpha = 90.05(3)$ ,  $\beta = 98.11(2)$ ,  $\gamma = 110.95(3)^\circ$

$6.528(34)$ ,  $5.151(26)$ ,  $4.665(12)$ ,  $4.346(6)$ ,

$3.288(4)$ ,  $3.217(7)$ ,  $3.139(100)$ ,  $3.015(5)$

Type material is deposited in the collections of

the Universalmuseum Joanneum,

Weinzöttlstraße 16, A-8045 Graz, Austria,

catalogue number 85.011

How to cite: Bojar, H.-P. and Walter, F. (2012)

Joanneumite, IMA 2012-001. CNMNC

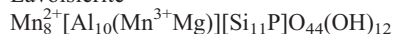
Newsletter No. 13, June 2012, page 814;

*Mineralogical Magazine*, **76**, 807–817.



## IMA No. 2012-009

Lavoisierite



Punta Gensane, Vi (TO), Piedmont, Italy

Paolo Orlandi\*, Cristian Biagioni, Marco Pasero and Marcello Mellini

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

Related to sursassite and 'ardennite'

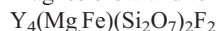
Orthorhombic:  $Pnmm$ ; structure determined  
 $a = 8.689(1)$ ,  $b = 5.7755(3)$ ,  $c = 36.950(2)$  Å  
 4.62(m), 4.23(m), 3.167(m), 2.931(vs), 2.765(s),  
 2.598(s), 2.448(ms), 2.318(m)

Type material is deposited in the collections of the Museo di Storia Naturale e del Territorio, Università di Pisa, Calci (Pisa), Italy, catalogue number 19637, and the Museo Regionale di Scienze Naturali, Torino, Italy, catalogue number M/U16359

How to cite: Orlandi, P., Biagioni, C., Pasero, M. and Mellini, M. (2012) Lavoisierite, IMA 2012-009. CNMNC Newsletter No. 13, June 2012, page 815; *Mineralogical Magazine*, **76**, 807–817.

## IMA No. 2012-010

Magnesiorowlandite-(Y)



Komono, Mie Prefecture, Japan (35°0'35"N 136°27'33"E)

Satoshi Matsubara\*, Ritsuro Miyawaki, Kazumi Yokoyama, Masako Shigeoka, Koichi Momma and Sadaoki Yamamoto

\*E-mail: matubara@kahaku.go.jp

Mg analogue of rowlandite-(Y)

Triclinic:  $P\bar{1}$ ; structure determined  
 $a = 6.555(12)$ ,  $b = 8.65(2)$ ,  $c = 5.530(14)$  Å,  
 $\alpha = 99.3(3)$ ,  $\beta = 104.14(19)$ ,  $\gamma = 91.4(2)^\circ$   
 4.95(33), 3.64(37), 3.54(38), 3.08(100),  
 2.92(26), 2.68(32), 2.63(28), 2.09(35)

Type material is deposited in the collections of the National Museum of Nature and Science, Tokyo, registered number NSM-M43624

How to cite: Matsubara, S., Miyawaki, R., Yokoyama, K., Shigeoka, M., Momma, K. and Yamamoto, S. (2012) Magnesiorowlandite-(Y), IMA 2012-010. CNMNC Newsletter No. 13, June 2012, page 815; *Mineralogical Magazine*, **76**, 807–817.

## IMA No. 2012-011

Cerchiaraitite-(Al)



Esquire #1 claim, Rush Creek, Fresno County,

California, USA (37°05'N, 119°16'20"W) and Esquire #7 and #8 claims, Big Creek, Fresno County, California, USA (Esquire #7: 36°56'40"N 119°14'28"W; Esquire #8: 36°56'42"N 119°14'12"W)

Anthony R. Kampf\*, Andrew C. Roberts, Katherine E. Venance, Gail E. Dunning, and Robert E. Walstrom

\*E-mail: akampf@nhm.org

Al analogue of cerchiaraitite

Tetragonal:  $I4/mmm$ ; structure determined  
 $a = 14.317(4)$ ,  $c = 6.0037(18)$  Å

10.15(39), 4.407(39), 3.316(74), 3.009(100),  
 2.580(93), 2.029(43), 1.880(68), 1.403(54)

Type material is deposited in the collections of the Natural History Museum of Los Angeles County, Los Angeles, California, USA, catalogue numbers 63519, 63517 and 63518

How to cite: Kampf, A.R., Roberts, A.C., Venance, K.E., Dunning, G.E. and Walstrom, R.E. (2012) Cerchiaraitite-(Al), IMA 2012-011. CNMNC Newsletter No. 13, June 2012, page 815; *Mineralogical Magazine*, **76**, 807–817.

## IMA No. 2012-012

Cerchiaraitite-(Fe)



Cerchiaraitite mine, Borghetto Vara, Vara Valley, La Spezia Province, Liguria, Italy, and the Esquire #7 and #8 claims, Big Creek, Fresno County, California, USA (Esquire #7: 36°56'40"N 119°14'28"W; Esquire #8: 36°56'42"N 119°14'12"W)

Anthony R. Kampf\*, Andrew C. Roberts, Katherine E. Venance, Cristina Carbone, Gail E. Dunning, and Robert E. Walstrom

\*E-mail: akampf@nhm.org

Fe analogue of cerchiaraitite

Tetragonal:  $I4/mmm$ ; structure determined  
 $a = 14.3354(19)$ ,  $c = 6.0151(8)$  Å

4.403(26), 3.327(48), 3.016(70), 2.595(100),  
 2.258(29), 1.812(39), 1.411(43), 1.298(29)

Type material is deposited in the collections of the Natural History Museum of Los Angeles County, Los Angeles, California, USA, catalogue numbers 63515, 63516, 63517 and 63518

How to cite: Kampf, A.R., Roberts, A.C., Venance, K.E., Carbone, C., Dunning, G.E. and Walstrom, R.E. (2012) Cerchiaraitite-(Fe), IMA 2012-012. CNMNC Newsletter No. 13, June 2012, page 815; *Mineralogical Magazine*, **76**, 807–817.

**IMA No. 2012-013**

Tellurocanfieldite

 $\text{Ag}_8\text{SnTe}_2\text{S}_4$ 

Bajiazi lead-zinc deposit, Jianchang County, Liaoning Province, China (40°35'30"N 120°02'16"E)

Gu Xiangping\*, Xie Xiande, Lu Anhuai, Kenich Hoshino, Huang Jiwu and Li Jielan

\*E-mail: guxp2004@163.com

Argyrodite-canfieldite series

Orthorhombic:  $Pna2_1$  $a = 15.615(4)$ ,  $b = 7.803(3)$ ,  $c = 11.043(7)$  Å  
6.373(21), 3.330(28), 3.186(85), 2.759(49),  
2.253(100), 2.124(71), 1.951(51), 1.865(27)

Type material is deposited in the collections of the Geological Museum of China, Beijing People's Republic of China, catalogue number M11801

How to cite: Gu, X., Xie, X., Lu, A., Hoshino, H., Huang, J. and Li, J. (2012) Tellurocanfieldite, IMA 2012-013. CNMNC Newsletter No. 13, June 2012, page 816; *Mineralogical Magazine*, **76**, 807–817.**IMA No. 2012-015**

Schlüterite-(Y)

 $\text{Cu}_4\text{ClF}(\text{OH})_6$ 

Stetind pegmatite, Tysfjord, Nordland, Norway (68°10'15.20"N 16°33'10.65"E)

Mark A. Cooper, Tomas Husdal, Neil Ball, Frank C. Hawthorne\* and Yassir Abdu

\*E-mail: frank\_hawthorne@umanitoba.ca

Related to members of the epidote group

Monoclinic:  $P2_1/c$ ; structure determined  
 $a = 7.0722(2)$ ,  $b = 5.6198(1)$ ,  $c = 21.4390(4)$  Å,  
 $\beta = 122.7756(3)^\circ$ 4.788(100), 4.522(40), 3.297(48), 2.982(57),  
2.813(39), 2.731(42), 2.634(42), 2.180(36)

Type material is deposited in the collections of the Department of Natural History, Royal Ontario Museum, Toronto, Ontario, Canada, catalogue number M56409, and the Naturhistorisk Museum, Blindern, Oslo, Norway, catalogue numbers 42428 and 42429

How to cite: Cooper, M.A., Husdal, T., Ball, N., Hawthorne, F.C. and Abdu, Y. (2012) Schlüterite-(Y), IMA 2012-015. CNMNC Newsletter No. 13, June 2012, page 816; *Mineralogical Magazine*, **76**, 807–817.**IMA No. 2012-016**

Fluorowardite

 $\text{NaAl}_3(\text{PO}_4)_2\text{F}_2(\text{OH})_2(\text{H}_2\text{O})_2$ 

Silver Coin mine, Valmy, Iron Point district, Humboldt County, Nevada, USA (40°55'44"N 117°19'26"W)

Anthony R. Kampf\*, Paul M. Adams and Robert M. Housley

\*E-mail: akampf@nhm.org

Fluorine analogue of wardite

Tetragonal:  $P4_12_12$ ; structure determined $a = 7.077(2)$ ,  $c = 19.227(3)$  Å  
4.766(100), 3.099(75), 3.008(62), 2.834(28),  
2.597(56), 1.763(32), 1.659(29), 1.523(49)

Type material is deposited in the collections of the Mineral Sciences Department, Natural History Museum of Los Angeles County, Los Angeles, California, USA, catalogue numbers 57659 and 63810

How to cite: Kampf, A.R., Adams, P.M. and Housley, R.M. (2012) Fluorowardite, IMA 2012-016. CNMNC Newsletter No. 13, June 2012, page 816; *Mineralogical Magazine*, **76**, 807–817.**IMA No. 2012-017**

Raberite

 $\text{Tl}_5\text{Ag}_4\text{As}_6\text{SbS}_{15}$ 

Lengenbach quarry, Binn Valley, Valais, Switzerland

Luca Bindi\*, Fabrizio Nestola, Alessandro Guastoni, Luca Peruzzo, Markus Ecker and Raul Carampin

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

New structure type

Triclinic:  $P\bar{1}$ ; structure determined $a = 8.920(1)$ ,  $b = 9.429(1)$ ,  $c = 20.062(3)$  Å,  $\alpha = 79.66(1)^\circ$ ,  
 $\beta = 88.84(1)^\circ$ ,  $\gamma = 62.72(1)^\circ$   
3.580(100), 3.506(58), 3.281(73), 3.017(54),  
3.001(98), 2.657(51), 2.636(46), 2.591(57)

Type material is deposited in the collections of the Museum of Mineralogy of the Department of Geosciences, University of Padova, Italy, catalogue number MMP M11420

How to cite: Bindi, L., Nestola, F., Guastoni, A., Peruzzo, L., Ecker, M. and Carampin, R. (2012) Raberite, IMA 2012-017. CNMNC Newsletter No. 13, June 2012, page 816; *Mineralogical Magazine*, **76**, 807–817.**Nomenclature proposals approved in November 2011****IMA 11-C:** The proposal to redefine matulaite has been approved. The ideal formula of matulaite becomes  $\text{Fe}^{3+}\text{Al}_7(\text{PO}_4)_4(\text{PO}_3\text{OH})_2(\text{OH})_8(\text{H}_2\text{O})_8 \cdot 8\text{H}_2\text{O}$ . Specimens NHMLAC

#28323 and #28324 are designated as the neotypes for the species, and are deposited in collections of the Natural History Museum of Los Angeles County, Los Angeles, USA.

**IMA 11-E:** The proposal to redefine vanadium-dravite has been approved. Vanadium-dravite is renamed oxy-vanadium-dravite, since the mineral belongs to the alkali group, oxy-subgroup 3 of the tourmaline supergroup nomenclature. The ideal formula of the mineral becomes  $\text{NaV}_3(\text{V}_4\text{Mg}_2)\text{Si}_6\text{O}_{18}(\text{BO}_3)_3(\text{OH})_3\text{O}$ .

**IMA 11-F:** The proposal to modify the nomenclature of the hollandite supergroup has been approved. Hollandite is redefined as the  $\text{Ba}^{2+}\text{-Mn}^{3+}$  endmember of the coronadite group, with an ideal formula  $\text{Ba}(\text{Mn}_6^{4+}\text{Mn}_2^{3+})\text{O}_{16}$ , and the name ferrihollandite is introduced to designate the  $\text{Ba}^{2+}\text{-Fe}^{3+}$  endmember of this group, with an ideal formula  $\text{Ba}(\text{Mn}_6^{4+}\text{Fe}_2^{3+})\text{O}_{16}$ . The mineral ankangite is

discredited, since it corresponds to mannardite. Moreover, the ideal endmember formulae of six potentially new species in the hollandite supergroup are defined.

### Nomenclature proposals approved in April 2012

**AMPHIBOLE SUPERGROUP:** A new nomenclature scheme for the amphibole supergroup was approved by CNMNC on the 3rd of April 2012.

**GARNET SUPERGROUP:** A new nomenclature scheme for the garnet supergroup was approved by the CNMNC on the 3rd of April, 2012. The garnet supergroup includes at present 32 valid species, for which endmember formulae are given. There are 4 potential new mineral species which need further study in order to be approved. Some changes among existing mineral names were also approved.

