

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

NEWSLETTER II

New minerals and nomenclature modifications approved in 2011

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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
SEPTEMBER 2011****IMA No. 2011-054**

Protochabournéite

Tl_{5-x}Pb_{2x}(Sb,As)_{21-x}S₃₄ ($x \sim 1.2-1.5$)Sant'Olga tunnel, Monte Arsiccio mine,
Stazzema, Apuan Alps, Tuscany, Italy
(43°58'N 10°17'E)Paolo Orlandi*, Cristian Biagioni, Elena
Bonaccorsi, Yves Moëlo and Werner H. Paar
*E-mail: orlandi@dst.unipi.it

Homeotype of chabournéite

Triclinic: $P\bar{1}$; structure determined $a = 8.150(2)$, $b = 8.716(2)$, $c = 21.579(4)$ Å, $\alpha = 85.18(1)$, $\beta = 96.94(1)$, $\gamma = 88.60(1)^\circ$ 4.23(51), 3.959(54), 3.928(60), 3.673(63),
3.608(100), 2.824(77), 2.790(61)Type material is deposited in the collections of
the Museo di Storia Naturale e del Territorio,
Università di Pisa, Italy, catalogue number
19413How to cite: Orlandi, P., Biagioni, C.,
Bonaccorsi, E., Moëlo, Y. and Paar, W.H.
(2011) Protochabournéite, IMA 2011-054.
CNMNC Newsletter No. 11, December 2011,
page 2888; *Mineralogical Magazine*, **75**,
2887–2893.**IMA No. 2011-055**(CaCe₃)(Al₃Fe²⁺)(Si₂O₇)(SiO₄)₃O(OH)₂In the Hundholmen pegmatite, and the Stetind
and Nedre Eivollen pegmatite outcrops of the
Tysfjord granite, northern NorwayPaola Bonazzi*, Luca Bindi, Christian Chopin,
Tomas A. Husdal and Giovanni O. Lepore

*E-mail: paola.bonazzi@unifi.it

Part of a polysomatic series having epidote and
törnebohmite as endmembersMonoclinic: $P2_1/m$; structure determined $a = 8.9110(4)$, $b = 5.6866(2)$, $c = 17.5252(7)$ Å,
 $\beta = 116.300(5)^\circ$ 15.7(75), 4.62(30), 3.489(40), 2.971(100),
2.828(50), 2.739(30), 2.619(60), 2.140(25)Type material is deposited in the collections of
the Museo di Storia Naturale, Università degli
Studi di Firenze, Firenze, Italy, catalogue
number 3110/IHow to cite: Bonazzi, P., Bindi, L., Chopin, C.,
Husdal, T.A. and Lepore, G.O. (2011) IMA
2011-055. CNMNC Newsletter No. 11,
December 2011, page 2888; *Mineralogical
Magazine*, **75**, 2887–2893.**IMA No. 2011-056**

Aspedamite

 $\square_{12}(\text{Fe}_2^{3+}\text{Fe}^{2+})\text{Nb}_4(\text{ThNb}_9\text{Fe}_2^{3+}\text{Ti}^{4+}\text{O}_{42})$
(H₂O)₉(OH)₃Herrebøkasa quarry, Aspedammen, Østfold,
Norway (59°04'30"N 11°28'35"E)Mark A. Cooper, N.A. Ball, Yassir Abdu, F.C.
Hawthorne*, P. Černý and R. Kristiansen
*E-mail: frank_hawthorne@umanitoba.ca

Isostructural with menezesite

Cubic: $Im\bar{3}$; structure determined $a = 12.9078(6)$ Å9.107(100), 4.567(15), 4.083(15), 3.454(18),
3.233(28), 2.889(33), 2.635(36), 1.726(29)Type material is deposited in the collections of
the Department of Natural History, Royal
Ontario Museum, Toronto, Ontario, Canada,
catalogue number M56117How to cite: Cooper, M.A., Ball, N.A., Abdu,
Y., Hawthorne, F.C., Černý, P. and Kristiansen,
R. (2011) Aspedamite, IMA 2011-056. CNMNC
Newsletter No. 11, December 2011, page 2888;
Mineralogical Magazine, **75**, 2887–2893.**IMA No. 2011-057**

Mariinskite

BeCr₂O₄Mariinskoye emerald deposit, Malysheva,
Sverdlovskaya Oblast', Russia (57.11842°N
61.40097°E)Leonid A. Pautov*, Michail P. Popov, Yuriy V.
Erokhin, Vera V. Khiller and Vladimir Y.
Karpenko

*E-mail: labfimm@rambler.ru

Chromium-dominant analogue of chrysoberyl
Orthorhombic: $Pnma$ $a = 9.709(2)$, $b = 5.612(1)$, $c = 4.492(1)$ Å4.85(3), 4.08(4), 3.31(9), 2.629(5), 2.434(5),
2.381(4), 2.139(6), 1.651(10)Type material is deposited in the collections of
the Fersman Mineralogical Museum, Russian
Academy of Science, Leninsky Prospect,
Moscow, Russia, registration number 4159/1How to cite: Pautov, L.A., Popov, M.P.,
Erokhin, Y.V., Khiller, V.V. and Karpenko,
V.Y. (2011) Mariinskite, IMA 2011-057.
CNMNC Newsletter No. 11, December 2011,
page 2888; *Mineralogical Magazine*, **75**,
2887–2893.**IMA No. 2011-058**

Edgrewite

Ca₉(SiO₄)₄F₂

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. Dzierzanowski, A.E. Zadov and L. Dubrovinsky

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

Humite group

Monoclinic: $P2_1/b$; structure determined

$a = 5.0687(1)$, $b = 11.3579(1)$, $c = 15.4004(2)$ Å,
 $\alpha = 100.598(1)^\circ$

3.542(51), 3.029(100), 2.863(42), 2.823(79),
2.765(64), 2.657(44), 2.625(55), 1.907(59)

Type material is deposited in the collections of the Museum of Natural History, Bern, Switzerland, catalogue number NMBE 41086

How to cite: Galuskin, E.V., Armbruster, T., Pertsev, N.N., Galuskina, I.O., Lazic, B., Gazeev, V.M., Włodyka, R., Dulski, M., Dzierzanowski, P., Zadov, A.E. and Dubrovinsky, L. (2011) Edgrewite, IMA 2011-058. CNMNC Newsletter No. 11, December 2011, page 2888; *Mineralogical Magazine*, **75**, 2887–2893.

IMA No. 2011-060

Postite

$Mg(H_2O)_6Al_2(OH)_2(H_2O)_8(V_{10}O_{28}) \cdot 13H_2O$
Vanadium Queen mine, La Sal Creek Canyon, and the Blue Cap mine, Lyon Canyon Creek, San Juan County, Utah, USA

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

*E-mail: jmhughes@uvm.edu

New structure type

Orthorhombic: $Pccn$; structure determined

$a = 16.3357(6)$, $b = 24.2434(17)$, $c = 11.7343(4)$ Å
12.19(90), 8.937(100), 8.248(22), 6.801(14),
3.771(24), 3.335(13), 2.983(19), 1.991(17)

Two cotype specimens are deposited in the collections of the Natural History Museum of Los Angeles County, Los Angeles, California, USA, catalogue numbers 63564 (Vanadium Queen mine) and 63563 (Blue Cap mine)

How to cite: Kampf, A.R., Hughes, J.M., Marty, J. and Nash, B. (2011) Postite, IMA 2011-060. CNMNC Newsletter No. 11, December 2011, page 2889; *Mineralogical Magazine*, **75**, 2887–2893.

IMA No. 2011-061

Falsterite

$Ca_2MgMn_2^{2+}(Fe_{0.5}^{2+}Fe_{0.5}^{3+})_4Zn_4(PO_4)_8(OH)_4(H_2O)_{14}$
Palermo No. 1 pegmatite, North Groton, Grafton County, New Hampshire, USA

Anthony R. Kampf*, Stuart J. Mills, William B. Simmons and James W. Nizamoff

*E-mail: akampf@nhm.org

New structure type

Monoclinic: $P2_1/c$; structure determined

$a = 6.3868(18)$, $b = 21.260(7)$, $c = 15.365(5)$ Å,
 $\beta = 90.564(6)^\circ$

12.865(34), 10.675(100), 4.834(12), 4.043(18),
3.220(25), 3.107(14), 2.846(19), 1.596(14)

Four cotype specimens are deposited in the collections of the Natural History Museum of Los Angeles County, Los Angeles, California, USA, catalogue numbers 63565, 63566, 63567 and 63568

How to cite: Kampf, A.R., Mills, S.J., Simmons, W.B. and Nizamoff, J.W. (2011) Falsterite, IMA 2011-061. CNMNC Newsletter No. 11, December 2011, page 2889; *Mineralogical Magazine*, **75**, 2887–2893.

NEW MINERAL PROPOSALS APPROVED IN OCTOBER 2011

IMA No. 2011-059

Leonardsenite

$MgAlF_5 \cdot 2H_2O$

Eldfell and Hekla volcanoes, Iceland

Donatella Mitolo, Anna Garavelli, Tonči Balić-Žunić*, Pasquale Acquafredda and Sveinn Peter Jakobsson

*E-mail: toncib@snm.ku.dk

Inverse weberite structure

Orthorhombic: $Imma$

$a = 7.055(1)$, $b = 10.117(2)$, $c = 6.813(1)$ Å
5.66(100), 4.92(29), 3.53(27), 3.03(31),
3.00(38), 2.297(16), 1.766(19), 1.762(24)

Holotype material (Eldfell) is deposited in the collections of the Icelandic Institute of Natural History, Reykjavík, Iceland, sample number NI 12256; other deposited material has the numbers 20630 (Eldfell), and NI 17067, NI 17073 and NI 17074 (Hekla)

How to cite: Mitolo, D., Garavelli, A., Balić-Žunić, T., Acquafredda, P. and Jakobsson, S.P. (2011) Leonardsenite, IMA 2011-059. CNMNC Newsletter No. 11, December 2011, page 2889; *Mineralogical Magazine*, **75**, 2887–2893.

IMA No. 2011-062

Bastnäsité-(Nd)

NdCO₃FStetind pegmatite, Tysfjord, Nordland, Norway
(68°10'15.20"N 16°33'10.65"E)Ritsuro Miyawaki*, Kazumi Yokoyama and
Tomas Husdal

*E-mail: miyawaki@kahaku.go.jp

Bastnäsité group

Hexagonal: *P6̄2c* $a = 7.079(1)$, $c = 9.721(2)$ Å4.86(71), 3.54(70), 2.86(100), 2.43(22),
2.04(31), 2.00(48), 1.883(29), 1.662(16)Type material is deposited in the collections of
the National Science Museum, Tokyo, registra-
tion number NSM-MF15494How to cite: Miyawaki, R., Yokoyama, K. and
Husdal, T. (2011) Bastnäsité-(Nd), IMA 2011-
062. CNMNC Newsletter No. 11, December
2011, page 2890; *Mineralogical Magazine*, **75**,
2887–2893.

IMA No. 2011-064

D'ansite-(Mn)

Na₂Mn²⁺(SO₄)₁₀Cl₃

Somma-Vesuvius complex, Napoli, Italy

Italo Campostrini*, Francesco Demartin, Carlo
Castellano, Carlo Maria Gramaccioli and
Massimo Russo

*E-mail: italo.campostrini@unimi.it

Mn²⁺-dominant analogue of d'ansiteCubic: *I4̄3d*; structure determined $a = 15.9291(9)$ Å6.503(100), 5.632(27), 5.037(73), 4.257(80),
3.252(46), 3.124(64), 2.584(27), 2.458(22)Holotype material is deposited in the mineral
collections of Osservatorio Vesuviano - Napoli
(Catalogue number OV128); a fragment of the
holotype is housed in in the Reference
Collection of the DCSSI, University of Milan,
sample number 2011-03How to cite: Campostrini, I., Demartin, F.,
Castellano, C., Gramaccioli, C.M. and Russo,
M. (2011) D'ansite-(Mn), IMA 2011-064.
CNMNC Newsletter No. 11, December 2011,
page 2890; *Mineralogical Magazine*, **75**,
2887–2893.

IMA No. 2011-065

D'ansite-(Fe)

Na₂Fe²⁺(SO₄)₁₀Cl₃La Fossa crater, Vulcano, Aeolian Islands, Italy
Italo Campostrini*, Francesco Demartin, Carlo

Castellano and Carlo Maria Gramaccioli

*E-mail: italo.campostrini@unimi.it

Fe²⁺-dominant analogue of d'ansiteCubic: *I4̄3d*; structure determined $a = 15.882(3)$ Å3.384(27), 3.113(26), 2.900(14), 2.807(100),
2.570(37), 2.161(15), 2.018(15), 1.714(29)Holotype material is deposited in the Reference
Collection of the DCSSI, University of Milan,
sample number 2011-02How to cite: Campostrini, I., Demartin, F.,
Castellano, C. and Gramaccioli, C.M. (2011)
D'ansite-(Fe), IMA 2011-065. CNMNC
Newsletter No. 11, December 2011, page
2890; *Mineralogical Magazine*, **75**, 2887–2893.

IMA No. 2011-066

Kobylashevite

Cu₅(SO₄)₂(OH)₆·4H₂OKapital'naya mine, Vishnevye Mountains,
Chelyabinsk Oblast', South Urals, RussiaIgor V. Pekov*, Natalia V. Zubkova, Vasilii O.
Yapaskurt, Dmitriy I. Belakovskiy, Nikita V.
Chukanov, Anatoly V. Kasatkin, Aleksey M.
Kuznetsov and Dmitry Y. Pushcharovsky

*E-mail: igorpekov@mail.ru

Known synthetic phase

Triclinic: *P1̄*; structure determined $a = 6.0731(6)$, $b = 11.0597(13)$, $c = 5.5094(6)$ Å,
 $\alpha = 102.883(9)$, $\beta = 92.348(8)$, $\gamma = 92.597(9)^\circ$ 10.84(100), 5.399(40), 5.178(12), 3.590(16),
2.691(16), 2.653(12), 2.583(12), 2.425(12)The type specimen is deposited in the collec-
tions of the Fersman Mineralogical Museum of
the Russian Academy of Sciences, Moscow,
Russia, registration number 4152/1How to cite: Pekov, I.V., Zubkova, N.V.,
Yapaskurt, V.O., Belakovskiy, D.L., Chukanov,
N.V., Kasatkin, A.V., Kuznetsov, A.M. and
Pushcharovsky, D.Y. (2011) Kobylashevite,
IMA 2011-066. CNMNC Newsletter No. 11,
December 2011, page 2890; *Mineralogical
Magazine*, **75**, 2887–2893.

IMA No. 2011-067

Calciolangbeinite

K₂Ca₂(SO₄)₃Yadovitaya (Poisonous) 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, Vasilii O. Yapaskurt, Nikita V.

Chukanov, Dmitriy I. Belakovskiy and Dmitry Y. Pushcharovsky

*E-mail: igorpekov@mail.ru

Langbeinite group

Cubic: $P2_13$; structure determined

$a = 10.1887(2) \text{ \AA}$

5.84(8), 4.54(9), 4.15(27), 3.218(100), 2.838(8), 2.736(37), 2.006(11), 1.658(8)

The type specimen is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4153/1

How to cite: Pekov, I.V., Zelenski, M.E., Zubkova, N.V., Yapaskurt, V.O., Chukanov, N.V., Belakovskiy, D.I. and Pushcharovsky, D.Y. (2011) Calciolangbeinite, IMA 2011-067. CNMNC Newsletter No. 11, December 2011, page 2890; *Mineralogical Magazine*, **75**, 2887–2893.

IMA No. 2011-068

Ferrovalleriite

$2(\text{Fe,Cu})\text{S}\cdot 1.5\text{Fe}(\text{OH})_2$

Oktyabr'sky mine, Talnakh, Norilsk area, Krasnoyarsk Krai, Siberia, Russia

Igor V. Pekov*, Evgeny V. Sereda, Vasily O. Yapaskurt, Yury S. Polekhovskiy, Sergey N. Britvin and Nikita V. Chukanov

*E-mail: igorpekov@mail.ru

Fe^{2+} -dominant analogue of valleriite

Trigonal: $R\bar{3}m$, $R3m$ or $R32$

$a = 3.792(2)$, $c = 34.06(3) \text{ \AA}$

11.42(18), 5.69(100), 3.784(17), 3.268(58), 2.370(9), 1.894(34), 1.871(45), 1.593(13)

The type specimen is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4108/1

How to cite: Pekov, I.V., Sereda, E.V., Yapaskurt, V.O., Polekhovskiy, Y.S., Britvin, S.N. and Chukanov, N.V. (2011) Ferrovalleriite, IMA 2011-068. CNMNC Newsletter No. 11, December 2011, page 2891; *Mineralogical Magazine*, **75**, 2887–2893.

IMA No. 2011-069

Paseroite

$\text{PbMn}^{2+}(\text{Fe}^{3+}, \square)_2(\text{V}^{5+}, \text{Ti}, \square)_{18}\text{O}_{38}$

Molinello mine, Val Graveglia, Ne, Genova, eastern Liguria, northern Apennines, Italy (44°20'43"N 9°27'32")

Stuart J. Mills*, Luca Bindi, Marcella Cadoni, Marco E. Ciriotti and Anthony R. Kampf

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

Vanadium analogue of senaite

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

$a = 10.3894(5)$, $c = 20.8709(8) \text{ \AA}$

3.417(100), 3.012(21), 2.896(61), 2.858(36), 2.765(27), 2.260(85), 2.149(65), 1.809(57)

Cotype material is deposited in the mineralogical collections of the Museo di Storia Naturale, Sezione di Mineralogia e Litologia, Università di Firenze, Firenze, Italy, catalogue number 3111/I, and in the mineralogical collections of the Museo Regionale di Scienze Naturali, Torino, Italy, catalogue number 15900

How to cite: Mills, S.J., Bindi, L., Cadoni, M., Ciriotti, M.E. and Kampf, A.R. (2011) Paseroite, IMA 2011-069. CNMNC Newsletter No. 11, December 2011, page 2891; *Mineralogical Magazine*, **75**, 2887–2893.

IMA No. 2011-070

Buseckite

$(\text{Fe,Zn,Mn})\text{S}$

Zakłodzie meteorite, Zamość, Lubelskie, Poland

Chi Ma

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

Wurtzite group

Hexagonal: $P6_3mc$

$a = 3.8357$, $c = 6.3002 \text{ \AA}$

3.322(100), 3.150(62), 2.938(90), 2.286(36), 1.918(76), 1.775(76), 1.638(48), 1.078(28)

The type specimen is deposited in the collections of the Smithsonian Institution's National Museum of Natural History, Washington DC, USA, specimen number USNM 7607

How to cite: Ma, C. (2011) Buseckite, IMA 2011-070. CNMNC Newsletter No. 11, December 2011, page 2891; *Mineralogical Magazine*, **75**, 2887–2893.

IMA No. 2011-071

Fluor-elbaite

$\text{Na}(\text{Li}_{1.5}\text{Al}_{1.5})\text{Al}_6(\text{Si}_6\text{O}_{18})(\text{BO}_3)_3(\text{OH})_3\text{F}$

Cruzeiro mine, Minas Gerais, Brazil, and the Aqueana pegmatite (Uruba pegmatite), Aracuai, Minas Gerais, Brazil

Ferdinando Bosi*, Giovanni B. Andreozzi, Henrik Skogby, Aaron Lussier, Neil A. Ball and Frank C. Hawthorne*

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

frank_hawthorne@umanitoba.ca

Tourmaline supergroup

Trigonal: $R3m$; structure determined

$a = 15.8720(2)$, $c = 7.1103(1) \text{ \AA}$ (Cruzeiro mine)

4.200(57), 3.974(66), 3.447(99), 2.938(100), 2.568(93), 2.032(42), 1.649(29), 1.445(29)

The holotype specimen from the Cruzeiro mine is deposited in the collections of the Museum of Mineralogy, Earth Sciences Department, Sapienza University of Rome, Piazzale Aldo Moro 5, 00185 Rome, Italy, catalogue number 33045

How to cite: Bosi, F., Andreozzi, G.B., Skogby, H., Lussier, A., Ball, N.A. and Hawthorne, F.C. (2011) Fluor-elbaite, IMA 2011-071. CNMNC Newsletter No. 11, December 2011, page 2891; *Mineralogical Magazine*, **75**, 2887–2893.

IMA No. 2011-072

Argesite

$(\text{NH}_4)_7\text{Bi}_3\text{Cl}_{16}$

La Fossa crater, Vulcano, Aeolian Islands, Italy
Francesco Demartin*, Italo Campostrini, Carlo Castellano, Carlo Maria Gramaccioli

*E-mail: francesco.demartin@unimi.it

New structure type

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

$a = 13.093(1)$, $c = 102.682(9)$ Å

6.46(11), 6.14(16), 5.71(11), 3.808(44), 3.164(100), 2.742(24), 1.906(16), 1.686(13)

Type material is deposited in the Reference Collection of the DCSSI, University of Milan, Milan, Italy, sample number 2011-04

How to cite: Demartin, F., Campostrini, I., Castellano, C. and Gramaccioli, C.M. (2011) Argesite, IMA 2011-072. CNMNC Newsletter No. 11, December 2011, page 2892; *Mineralogical Magazine*, **75**, 2887–2893.

IMA No. 2011-073

Vigriushinite

$\text{Zn}_2\text{Ti}_{4-x}\text{Si}_4\text{O}_{14}(\text{OH},\text{H}_2\text{O},\square)_8$ ($x < 1$)

Pegmatite number 71, Malyi Punkaruiv Mountain, Lovozero alkaline complex, Kola Peninsula, Russia

Igor V. Pekov*, Sergey N. Britvin, Natalia V. Zubkova, Nikita V. Chukanov, Igor A. Bryzgalov, Inna S. Lykova, Dmitriy I. Belakovskiy and Dmitry Y. Pushcharovsky

*E-mail: igorpekov@mail.ru

Heterophyllosilicate of the bafertsite meropelite series

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

$a = 8.743(9)$, $b = 8.698(9)$, $c = 11.581(11)$ Å,

$\alpha = 91.54(8)$, $\beta = 98.29(8)$, $\gamma = 105.65(8)^\circ$

11.7(67), 8.27(50), 7.37(27), 6.94(43), 5.73(54), 4.17(65), 2.861(100), 2.609(30)

Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4156/1

How to cite: Pekov, I.V., Britvin, S.N., Zubkova, N.V., Chukanov, N.V., Bryzgalov, A.A., Lykova, I.S., Belakovskiy, D.I. and Pushcharovsky, D.Y. (2011) Vigriushinite, IMA 2011-073. CNMNC Newsletter No. 11, December 2011, page 2892; *Mineralogical Magazine*, **75**, 2887–2893.

IMA No. 2011-074

Umbrianite

$\text{K}_7\text{Na}_2\text{Ca}_2[\text{Al}_3\text{Si}_{10}\text{O}_{29}]\text{F}_2\text{Cl}_2$

Vispi quarry, Pian di Celle volcano, San Venanzo, Terni Province, Umbria, Italy
(42°51'49.71"N 12°16'3.03"E)

Victor V. Sharygin*, Igor V. Pekov, Natalia V. Zubkova, Alexander P. Khomyakov, Francesco Stoppa and Dmitry Y. Pushcharovsky

*E-mail: sharygin@igm.nsc.ru

New structure type

Orthorhombic: $Pm\bar{m}n$; structure determined

$a = 7.0618(5)$, $b = 38.420(2)$, $c = 6.5734(4)$ Å

9.65(100), 6.91(43), 6.59(97), 3.884(25), 3.293(77), 3.118(70), 2.903(52), 2.819(53)

Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4157/1

How to cite: Sharygin, V.V., Pekov, I.V., Zubkova, N.V., Khomyakov, A.P., Stoppa, F. and Pushcharovsky, D.Y. (2011) Umbrianite, IMA 2011-074. CNMNC Newsletter No. 11, December 2011, page 2892; *Mineralogical Magazine*, **75**, 2887–2893.

IMA No. 2011-078

Betpakdalite-NaNa

$[\text{Na}_2(\text{H}_2\text{O})_{16}\text{Na}(\text{H}_2\text{O})_6][\text{Mo}_8\text{As}_2\text{Fe}_3^{3+}\text{O}_{33}(\text{OH})_4]$

Chuquicamata mine, Antofagasta, Chile

Anthony R. Kampf* and Stuart J. Mills

*E-mail: akampf@nhm.org

Betpakdalite group

Monoclinic: $C2/m$; structure determined

$a = 19.2370(12)$, $b = 11.0945(7)$, $c = 15.1459(9)$ Å,

$\beta = 130.342(1)^\circ$

11.586(27), 9.640(30), 8.930(100), 7.389(33),

3.697(25), 3.168(25), 2.980(24), 2.862(27)

Type material is deposited in the collections of the Natural History Museum of Los Angeles County, Los Angeles, California, USA, catalogue

numbers 63570 and 63571

How to cite: Kampf, A.R. and Mills, S.J. (2011) Betpakdalite-NaNa, IMA 2011-078. CNMNC Newsletter No. 11, December 2011, page 2892; *Mineralogical Magazine*, **75**, 2887–2893.

IMA No. 2011-079

Obradovicite-NaCu

$\text{Na}_2(\text{H}_2\text{O})_{17}\text{Cu}(\text{H}_2\text{O})_6][\text{Mo}_8\text{As}_2\text{Fe}_3^{3+}\text{O}_{34}(\text{OH})_3]$

Chuquicamata mine, Antofagasta, Chile

Anthony R. Kampf* and Stuart J. Mills

*E-mail: akampf@nhm.org

Obradovicite group

Orthorhombic: *Pnmb*; structure determined

$a = 14.872(4)$, $b = 11.091(3)$, $c = 15.032(4)$ Å
10.483(43), 8.936(100), 7.452(21), 3.226(25),
2.980(25), 2.898(29), 2.773(22), 2.598(23)

Type material is deposited in the collections of the Colorado School of Mines Geology Museum, Golden, Colorado, USA, catalogue number 86.496

How to cite: Kampf, A.R. and Mills, S.J. (2011) Obradovicite-NaCu, IMA 2011-079. CNMNC Newsletter No. 11, December 2011, page 2893; *Mineralogical Magazine*, **75**, 2887–2893.

IMA No. 2007-018a

Fengchengite

$\text{Na}_{12}\square_3(\text{Ca},\text{Sr})_6\text{Fe}_3^{3+}\text{Zr}_3\text{Si}(\text{Si}_{25}\text{O}_{73})(\text{H}_2\text{O},\text{OH})_3(\text{OH},\text{Cl})_2$

Saima Town, situated about 60 km NNE of Fengcheng City, Liaoning Province, China
Shen Ganfu*, Xu Jinsha, Yao Peng, and Li

Guowu

*E-mail: sgf829@yahoo.com.cn

Eudialyte group

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

$a = 14.2467(6)$, $c = 30.033(2)$ Å
7.186(55), 5.761(44), 4.187(53), 3.201(47),
2.978(61), 2.857(100), 2.146(29), 1.771(36)

Type material is deposited in the collections of the Geological Museum of China, Beijing, China, registered number M11632

How to cite: Shen, G., Xu, J., Yao, P., and Li, G. (2011) Fengchengite, IMA 2007-018a. CNMNC Newsletter No. 11, December 2011, page 2893; *Mineralogical Magazine*, **75**, 2887–2893.

Erratum

IMA No. 2011-029

In CNMNC Newsletter No. 10 (*Mineralogical Magazine*, **75**, 2549–2561), the formula for IMA No. 2011-029, oscarkeppffite, was given incorrectly as $\text{Ag}_{10}\text{Pb}_4(\text{Sb}_{17}\text{Bi}_9)_{26}\text{S}_{48}$. The correct formula is $\text{Ag}_{10}\text{Pb}_4(\text{Sb}_{17}\text{Bi}_9)_{\Sigma 26}\text{S}_{48}$, or more simply, $\text{Ag}_{10}\text{Pb}_4(\text{Sb}_{17}\text{Bi}_9)\text{S}_{48}$.

APPROVALS WITHDRAWN IN OCTOBER 2011

IMA No. 2010-049

Approval for the mineral IMA 2010-049 (“steedeite”) has been withdrawn. Further investigations have shown that the mineral is identical to catapleiite.