

**NEW MINERALS APPROVED IN 2010
NOMENCLATURE MODIFICATIONS APPROVED IN 2010
BY THE
COMMISSION ON NEW MINERALS, NOMENCLATURE AND CLASSIFICATION
INTERNATIONAL MINERALOGICAL ASSOCIATION**

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The information given here is provided by the Commission on New Minerals and Mineral Names, I.M.A., for comparative purposes and as a service to mineralogists working on new species.

Formerly, each mineral was described in the following format:

- IMA number
- Type locality
- Corresponding author
- Chemical formula
- 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

The name of the approved species was considered confidential information until the authors have published their descriptions or released information themselves.

Early in 2010 the Commission completed voting on proposal 09-D (The Early Publication of New Mineral Names). This has resulted in a change to the release of information concerning recently approved minerals. The change is as follows.

- 1. Authors may elect to the release of the following list of data, with the exception of the mineral name, which will remain confidential until publication.**
- 2. Authors may elect to permit the release of the mineral name upon approval and the other data given in the list below.**

- IMA number
- Mineral name, optional**

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.

NO OTHER INFORMATION WILL BE RELEASED BY THE COMMISSION

2009 PROPOSALS

IMA No. 2009-076

Sebastião Cristino pegmatite, near Mendes Pimentel and Linópolis, Minas Gerais, Brazil
(18°42'S 41°27'W)

Frédéric Hatert



Wyllieite group

Monoclinic: $P2_1/n$; structure determined

a 11.910(2), b 12.383(3), c 5.1798(1) Å, β 114.43(3)°

3.468(35), 3.047(100), 2.849(80), 2.810(35), 2.711(40), 2.688(90), 2.500(40), 2.074(30)

IMA No. 2009-077

Maria Catalina mine, Tierra Amarilla, Chile (22°3'S 68°30' W)

Hexiong Yang



Roselite group

Monoclinic: $P2_1/c$; structure determined

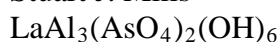
a 5.8618(2), b 12.7854(5), c 5.7025(2) Å, β 109.425(2)°

5.087(42), 4.177(59), 3.800(41), 3.377(92), 3.190(56), 2.983(89), 2.827(100), 2.114(49)

IMA No. 2009-078

Grubependity Lake cirque (кар озера Грубепендиты), Grubependity Lake, Maldynyrd range, Kozhim River basin, Prepolar Ural, Komi Republic, Russia, several kilometres from the Chudnoe Pd–Au–Cr deposit

Stuart J. Mills



Alunite supergroup

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

a 7.0316(3), c 16.5151(8) Å

5.755(27), 3.538(55), 2.982(100), 2.211(28), 2.179(19), 1.914(38), 1.767(24), 1.298(18)

IMA No. 2009-080

Prasolovskoe gold deposit, Kunashir Island, Kurile Islands, Russian Federation (44°23'N 146°01'E)

Vladimir A. Kovalenker

Ag₈Te₃Se

New structure type

Trigonal: $R\bar{3}$ or $R\bar{3}$

$a = 15.812(2)$, $c = 19.622(4)$ Å

3.727(20), 2.996(50), 2.510(30), 2.201(100), 2.152(20), 2.079(30), 2.046(20), 1.817(20)

IMA No. **2009-081**

Giftkiesstollen adit, Jáchymov, Czech Republic

Roman Skála

K₄(UO₂)(CO₃)₃

Known structure type

Monoclinic: $C2/c$; structure determined

$a = 10.2380(2)$, $b = 9.1930(2)$, $c = 12.2110(3)$ Å, $\beta = 95.108(2)^\circ$

6.061(55), 5.793(30), 5.087(57), 3.740(100), 3.393(44), 2.408(33), 2.281(52), 1.873(40)

IMA No. **2009-082**

Shiti barium deposit, Dabashan region, Shanxi Province, China (32°43'45" to 32°45'06"N 109°08'22" to 109°10'20"E)

Jiajun Liu

Ba₂(Ca,Mg)(V³⁺,Al)₂(Si₄O₁₀)(OH,F)₂O(CO₃)₂

New structure type

Monoclinic: Cc ; structure determined

$a = 5.2050(12)$, $b = 9.033(2)$, $c = 32.077(8)$ Å, $\beta = 93.49(8)^\circ$

15.87(7), 5.340(91), 4.010(10), 3.209(23), 2.676(100), 2.294(29), 2.008(11), 1.607(4)

IMA No. **2009-083**

Jeffrey Mine, Asbestos, Shipton Township, Richmond County, Quebec, Canada

Ralph Rowe

Ni₃Sn

Isostructural with auricupride

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

$a = 3.7344(7)$ Å

3.728(27), 2.639(22), 2.155(100), 1.867(45), 1.671(10), 1.525(6), 1.320(25), 1.127(22)

IMA No. **2009-084**

Sabatini volcanic complex, Valle Biachella, Sacrofano community, Rome Province, Latium, Italy

Fabio Bellatreccia

[Na₅Ca₂K](Si₆Al₆O₂₄)(SO₄)₂·0.33H₂O

Cancrinite group

Trigonal: $R\bar{3}2$; structure determined

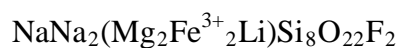
$a = 12.8770(7)$, $c = 95.244(6)$ Å

3.80(52), 3.72(100), 3.60(53), 3.58(60), 3.55(24), 3.23(65), 3.22(38), 2.65(100)

IMA No. **2009-085**

Verkhnee Espe deposit, Akjailyautas Mountains, Kazakhstan (48°03'-48°10'N 81°26'-81°29'E)

Frank C. Hawthorne



Amphibole group

Monoclinic: $C2/m$; structure determined

$a = 9.8297(3)$, $b = 17.9257(6)$, $c = 5.2969(2)$ Å, $\beta = 103.990(1)^\circ$

8.434(40), 4.464(30), 3.405(30), 3.137(20), 2.718(100), 2.541(20), 2.325(15), 2.166(20)

IMA No. **2009-086**

Vico volcanic complex, Capranica, Viterbo Province, Latium, Italy

Athos Maria Callegari



New structure type

Monoclinic: $P2_1/n$; structure determined

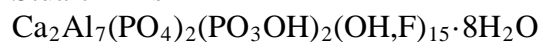
$a = 4.8507(2)$, $b = 16.6156(6)$, $c = 20.5445(7)$ Å, $\beta = 90.245(1)^\circ$

4.104(90), 3.424(83), 3.234(100), 3.119(32), 2.425(31), 2.405(37), 2.184(38), 1.564(30)

IMA No. **2009-087**

Silver Coin mine, Valmy, Humboldt County, Nevada, USA (40°55'44"N 117°19'26"W) and
Huber open pit, Krásno, Czech Republic (50°06'N 12°48'E) (cotype localities)

Stuart Mills



New structure type

Trigonal: $P321$; structure determined

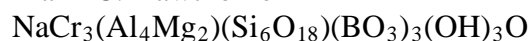
$a = 6.988(1)$, $c = 16.707(3)$ Å

16.739(100), 6.054(18), 5.687(13), 3.488(9), 2.967(45), 2.219(19), 1.896(13), 1.744(17)

IMA No. **2009-088**

The chromite deposits of Nausahi, Keonjhar District, Orissa, India

Frank C. Hawthorne



Tourmaline group

Trigonal: $R3m$; structure determined

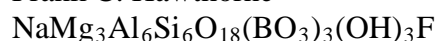
$a = 16.036(1)$, $c = 7.319(1)$ Å

6.487(60), 5.033(20), 4.642(20), 4.262(30), 4.010(50), 3.545(30), 3.013(35), 2.598(100)

IMA No. **2009-089**

Crabtree Emerald mine, Mitchell County, North Carolina, USA

Frank C. Hawthorne



Tourmaline group

Trigonal: $R3m$; structure determined

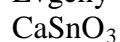
$a = 15.955(3)$, $c = 7.153(2)$ Å

6.375(19), 3.998(22), 3.475(100), 2.961(60), 2.583(67), 2.392(14), 2.123(14), 2.043(19)

IMA No. **2009-090**

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

Evgeny V. Galuskin



Perovskite group

Orthorhombic: $Pbnm$; structure of synthetic analogue known

$a = 5.56(3)$, $b = 5.71(3)$, $c = 7.943(3)$ Å
3.984(52), 3.970(19), 2.855(43), 2.812(100), 2.780(19), 1.992(13), 1.985(13), 1.640(13)

IMA No. **2009-091**

Tranomaro area, Fort Dauphine region, Madagascar

Roberta Oberti

$\text{KCa}_2(\text{Mg}_4\text{Al})\text{Si}_6\text{Al}_2\text{O}_{22}\text{F}_2$

Amphibole group

Monoclinic: $C2/m$; structure determined

$a = 9.9104(2)$, $b = 17.9739(4)$, $c = 5.3205(1)$ Å, $\beta = 105.534(2)^\circ$

8.413(45), 3.374(31), 3.270(55), 3.133(100), 2.934(29), 2.809(47), 2.698(39), 1.647(29)

IMA No. **2009-092**

Mendelevite-(Ce)

$\text{Cs}_6(\text{REE}_{22}\text{Ca}_6)(\text{Si}_{70}\text{O}_{175})(\text{OH},\text{F})_{14}(\text{H}_2\text{O})_{21}$

Darai-Pioz alkaline massif, Darai-Pioz River, Tadjikistan (39°27'N 70°43'E)

Leonid A. Pautov*, Atali A. Agakhanov, Elena Sokolova, Frank C. Hawthorne and Vladimir Yu. Karpenko

*E-mail: labfmm@rambler.ru

New structure type

Cubic: $Pm\bar{3}$; structure determined

$a = 21.9148(4)$ Å

15.53(3), 12.62(3), 10.95(10), 7.76(3), 4.08(3), 3.46(4), 3.097(5), 3.068(4)

Type material is deposited in the Fersman Mineralogical Museum, Moscow, Russia, registration number 3921/1.

How to cite: Pautov, L.A., Agakhanov, A.A., Sokolova, E., Hawthorne, F.C. and Karpenko, V.Yu. (2010) Mendelevite-(Ce), IMA 2009-092, CNMNC Newsletter 2, April 2010, page 375; *Mineralogical Magazine*, **74**, 375-377.

IMA No. **2009-094**

Kirchhoffite

CsBSi_2O_6

Darai-Pioz alkaline massif, Darai-Pioz River, Tadjikistan (39°27'N 70°43'E)

Atali A. Agakhanov*, Leonid A. Pautov, Elena Sokolova, Frank C. Hawthorne and Vladimir Yu. Karpenko

*E-mail: labfmm@rambler.ru

Boron analogue of tetragonal pollucite

Tetragonal: $I4_1/acd$; structure determined

$a = 13.019(2)$, $c = 12.900(2)$ Å

5.32(32), 3.48(82), 3.26(100), 2.770(67), 2.373(21), 2.294(41), 2.109(34), 1.768(22)

Type material is deposited in the Fersman Mineralogical Museum, Moscow, Russia, registration number 3923/1.

How to cite: Agakhanov, A.A., Pautov, L.A., Sokolova, E., Hawthorne, F.C. and Karpenko, V.Yu. (2010) Kirchhoffite, IMA 2009-094, CNMNC Newsletter 2, April 2010, page 376; *Mineralogical Magazine*, **74**, 375-377.

IMA No. **2009-095**

Aluminocoquimbite

$\text{AlFe}(\text{SO}_4)_3 \cdot 9\text{H}_2\text{O}$

“Grotta dell’allume”, Vulcano, Aeolian Islands, Italy

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

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

Structurally related to coquimbite

Trigonal: $P\bar{3}1c$; structure determined

$a = 10.7065(7)$, $c = 17.3077(11)$ Å

9.251(100), 8.710(13), 5.310(83), 4.087(33), 3.365(13), 3.152(43), 2.112(17), 1.765(20)

Type material is deposited in the reference collection of the Dipartimento di Chimica

Strutturale e Stereochimica Inorganica, University of Milan, specimen number 2009-03

How to cite: Demartin, F., Castellano, C., Gramaccioli, C.M. and Campostrini, I. (2010)

Aluminocoquimbite, IMA 2009-095. CNMNC Newsletter 2, April 2010, page 376;

Mineralogical Magazine, **74**, 375-377.

IMA No. **2009-097**

FeCe(MoO₄)₃·3H₂O

Su Senargiu, Sarroch, Sardinia, Italy

Paolo Orlandi* and Elena Bonaccorsi

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

New structure type

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

$a = 19.290(1)$, $c = 47.251(5)$ Å

4.84(45), 4.12(8), 3.93(75), 3.42(100), 2.785(10), 1.825(15), 1.610(10), 1.340(12)

Type material is deposited in the reference collection of the Museo di Storia Naturale e del

Territorio, University of Pisa, registration number 18911.

How to cite: Orlandi, P. and Elena Bonaccorsi, E. (2010), IMA 2009-097. CNMNC

Newsletter 2, April 2010, page 376; *Mineralogical Magazine*, **74**, 375-377.

2010 PROPOSALS

IMA No. **2010-001**

Fluorokinoshitalite

BaMg₃Al₂Si₂O₁₀F₂

East Mine, Bayan Obo, Inner Mongolia, China (41°46'N 109°57'E)

Ritsuro Miyawaki*, Hidehiko Shimazaki, Masako Shigeoka, Kazumi Yokoyama, Satoshi

Matsubara and Zhuming Yang

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

Mica group

Monoclinic: $C2/m$

$a = 5.316(1)$, $b = 9.208(2)$, $c = 10.044(2)$ Å, $\beta = 100.16(2)^\circ$

3.64(79), 3.37(100), 3.12(90), 2.89(82), 2.62(48), 2.16(60), 1.979(45), 1.656(48)

Type material is deposited in the National Museum of Nature and Science, Tokyo,

registration number NSM-MF15354.

How to cite: Miyawaki, R., Shimazaki, H., Shigeoka, M., Yokoyama, K., Matsubara, S. and

Yang, Z. (2010) Fluorokinoshitalite, IMA 2010-001. CNMNC Newsletter 2, April 2010, page 376; *Mineralogical Magazine*, **74**, 375-376.

IMA No. **2010-002**

Fluorotetraferriphlogopite

KMg₃Fe³⁺Si₃O₁₀F₂

East Mine, Bayan Obo, Inner Mongolia, China (41°46'N 109°57'E)

Ritsuro Miyawaki*, Hidehiko Shimazaki, Masako Shigeoka, Kazumi Yokoyama, Satoshi Matsubara, Hisayoshi Yurimoto and Zhuming Yang

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

Mica group

Monoclinic: $C2/m$

$a = 5.325(3)$, $b = 9.217(5)$, $c = 10.192(7)$ Å, $\beta = 100.03(5)^\circ$

10.0(73), 3.39(58), 3.35(82), 3.15(64), 2.65(41), 2.62(100), 2.43(48), 1.536(52)

Type material is deposited in the National Museum of Nature and Science, Tokyo, registration number NSM-MF15361.

How to cite: Miyawaki, R., Shimazaki, H., Shigeoka, M., Yokoyama, K., Matsubara, S. and Yang, Z. (2010) Fluorotetraferriphlogopite, IMA 2010-002. CNMNC Newsletter 2, April 2010, page 376; *Mineralogical Magazine*, **74**, 375–376.

IMA No. **2010-003**

Murchisite

Cr_5S_6

Murchison meteorite

Chi Ma

E-mail: chi@gps.caltech.edu

Structure of synthetic phase is known

Trigonal: $P\bar{3}1c$

$a = 5.982$, $c = 11.509$ Å

4.724(27), 3.083(16), 2.991(62), 2.877(32), 2.654(77), 2.074(77), 1.727(82), 1.327(20)

Type material is deposited in the Smithsonian Institution's National Museum of Natural History, Washington, specimen number USNM 7507.

How to cite: Ma, C. (2010) Murchisite, IMA 2010-003. CNMNC Newsletter 2, April 2010, page 377; *Mineralogical Magazine*, **74**, 375–376.

IMA No. **2010-004**

Klajite

$\text{MnCu}_4(\text{AsO}_4)_2(\text{AsO}_3\text{OH})_2 \cdot 9\text{-}10\text{H}_2\text{O}$

Lejtakna (“inclined adit”) area, Recsk, Lahóca Hill, Mátra Mountains, North Hungary

Sándor Szakáll*, Béla Fehér, Simona Bigi and Ferenc Mádai

*E-mail: askszs@uni-miskolc.hu

Lindackerite group

Triclinic: $P\bar{1}$

$a = 6.441(3)$, $b = 7.983(4)$, $c = 10.562(3)$ Å, $\alpha = 85.28(4)$, $\beta = 80.63(5)$, $\gamma = 84.80(4)^\circ$

10.39(100), 7.95(22), 3.956(27), 3.616(28), 3.110(24), 3.050(28), 2.916(64), 2.708(29)

Type material is deposited in the Herman Ottó Museum, Miskolc, catalogue number 2010.1, and the Hungarian Natural History Museum, Budapest, specimen number Gyn./1842

How to cite: Szakáll, S., Fehér, B., Bigi, S. and Mádai, F. (2010) Klajite, IMA 2010-004. CNMNC Newsletter 2, April 2010, page 377; *Mineralogical Magazine*, **74**, 375–376.

IMA No. **2010-005**

$\text{Fe}_4(\text{SO}_4)\text{O}_2(\text{OH})_6 \cdot 2\text{H}_2\text{O}$

Cava del Ferro-Trimpello, Fornovolasco, Vergemoli, Apuan Alps, Tuscany, Italy

Cristian Biagioni*, Elena Bonaccorsi and Paolo Orlandi

E-mail: biagioni@dst.unipi.it

New structure type; known synthetic phase

Monoclinic: $C2/m$; structure determined

$a = 16.085(2)$, $b = 3.054(1)$, $c = 10.929(2)$ Å, $\beta = 93.78(1)^\circ$
8.03(s), 4.37(m), 3.989(m), 3.343(mw), 2.633(mw)

Type material is deposited in the Museo di Storia Naturale e del Territorio, University of Pisa,
Via Roma 79, Calci (PI), Italy, catalogue number 19300

How to cite: Biagioni, C., Bonaccorsi, E. and Orlandi, P. (2010) IMA 2010-005. CNMNC
Newsletter 3, June 2010, page 577; *Mineralogical Magazine*, **74**, 577-579.

IMA No. 2010-006

Hermannroseite

$\text{CaCu}(\text{PO}_4)(\text{OH})$

Tsumeb mine, Tsumeb, Namibia

Jochen Schlüter* and Dieter Pohl

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

Phosphate analogue of conichalcite

Orthorhombic: $P2_12_12_1$; structure determined

$a = 7.328(7)$, $b = 5.769(6)$, $c = 9.123(7)$ Å

5.710(56), 4.057(37), 3.663(21), 3.092(63), 2.854(29), 2.808(100), 2.571(73), 2.525(36)

Type material is deposited in the Mineralogical Museum of the University of Hamburg,
Hamburg, specimen number TS 637

How to cite: Schlüter, J. and Pohl, D. (2010) Hermannroseite, IMA 2010-006. CNMNC
Newsletter 3, June 2010, page 578; *Mineralogical Magazine*, **74**, 577-579.

IMA No. 2010-007

Greenwoodite

$(\text{Ba}, \text{V}^{3+}\text{O})_2\text{V}^{3+}_9(\text{Fe}^{3+}, \text{Fe}^{2+})_2\text{Si}_2\text{O}_{22}$

Wigwam deposit, Akolkolex River area British Columbia, Canada (50°52'48"N 117°58'04"W)

Paul R. Bartholomew*, Franco Mancini, George E. Harlow, Christopher Cahill, Nicholas

Deifel and Heinz-Jürgen Bernhardt

*E-mail: pbartholomew@newhaven.edu

New structure type

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

$a = 5.7500(6)$, $c = 14.4590(9)$ Å

2.925(100), 2.875(38), 2.672(23), 2.469(35), 2.354(28), 2.212(28), 1.669(26), 1.438(35)

Type material is deposited in the American Museum of Natural History, New York, catalogue
number 109839

How to cite: Bartholomew, P.R., Mancini, F., Harlow, G.E., Cahill, C., Deifel, N. and
Bernhardt, H.-Z. (2010) Greenwoodite, IMA 2010-007. CNMNC Newsletter 3, June
2010, page 578; *Mineralogical Magazine*, **74**, 577-579.

IMA No. 2010-008

Cuprokalinitite

CuCr_2S_4

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

L.Z. Reznitsky, E.V. Sklyarov, Z.F. Ushchapovskaya, L.F. Suvorova, Yu.S. Polekhovsky,

P. Dzierzanowski and Igor G. Barash*

*E-mail: garry@crust.irk.ru

Thiospinel

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

$a = 9.814(2)$ Å

3.44(6), 2.94(10), 2.44(6), 1.884(9), 1.731(10), 1.133(6), 1.098(6), 1.030(6), 1.002(10)

Type material is deposited in the Fersman Mineralogical Museum of the Russian Academy of Sciences, specimen number 3886/1-3

How to cite: Reznitsky, L.Z., Sklyarov, E.V., Ushchapovskaya, Z.F., Suvorova, L.F., Polekhovskiy, Yu.S., Dzierzanowski, P. and Barash, I.G. (2010) Cuprokalinitite, IMA 2010-008. CNMNC Newsletter 33, June 2010, page 578; *Mineralogical Magazine*, **74**, 577-579.

IMA No. 2010-009

Natropharmacoalumite

$\text{NaAl}_4(\text{AsO}_4)_3(\text{OH})_4 \cdot 4\text{H}_2\text{O}$

Maria Josefa mine, near Rodalquilar, Andalusia region, Spain (36°51'30N 2°5'2W)

Mike S. Rumsey*, Stuart J. Mills and John Spratt

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

Pharmacosiderite group

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

$a = 7.7280(3) \text{ \AA}$

7.759(100), 4.473(40), 3.870(50), 3.459(6), 3.158(6), 2.736(6), 2.446(9), 2.331(12)

Type material is deposited in the Natural History Museum in London, specimen number BM 2009,161

How to cite: Mike S. Rumsey, M.S., Mills, S.J. and Spratt, J. (2010) Natropharmacoalumite, IMA 2010-009. CNMNC Newsletter 3, June 2010, page 578; *Mineralogical Magazine*, **74**, 577-579.

IMA No. 2010-010

Naquite

FeSi

Orebody 31, Luobusa mining district, Qusong County, Tibet (29°5'N 92°5'E)

Shi Ni-cheng*, Li Guo-wu, Bai Wen-ji, Xiong Ming, Yang Jing-su, Fang Qing-son, Ma Zhe-sheng and Rong He

*E-mail: shinicheng@vip.sina.com

Known structure type

Cubic: $P2_13$

$a = 4.486(4) \text{ \AA}$

3.174(43), 2.592(46), 2.249(25), 2.008(100), 1.831(69), 1.353(28), 1.199(38)

Type material is deposited in the Institute of Geology, Chinese Academy of Geological Sciences, Beijing, People's Republic of China, catalogue number 97-8-2

How to cite: Shi, N.-C., Li, G.-W., Bai, W.-J., Xiong, M., Yang, J.-S., Fang, Q.-S., Ma, Z.-S. and Rong, H. (2010) Naquite, IMA 2010-010. CNMNC Newsletter 3, June 2010, page 578; *Mineralogical Magazine*, **74**, 577-579.

IMA No. 2010-011

Linzhiite

FeSi_2

Orebody 31, Luobusa mining district, Qusong County, Tibet (29°5'N 92°5'E)

Li Guo-wu¹*, Shi Ni-cheng¹, Bai Wen-ji², Xiong Ming¹, Fang Qing-son² and Ma Zhe-sheng¹

*E-mail: liguowu@126.com

Known synthetic compound

Tetragonal: $P4/mmm$; structure determined

$a = 2.725(3), c = 5.202(10) \text{ \AA}$

5.150(95), 2.373(66), 1.895(61), 1.848(100), 1.776(11), 1.704(13), 1.340(15), 1.086(19)

Type material is deposited in the Institute of Geology, Chinese Academy of Geological Sciences, Beijing, People's Republic of China, catalogue number 97-6

How to cite: Li, G.-W., Shi, N.-C., Bai, W.-J., Xiong, M., Fang, Q.-S. and Ma, Z.-S. (2010) Linzhiite, IMA 2010-011. CNMNC Newsletter 3, June 2010, page 579; *Mineralogical Magazine*, **74**, 577-579.

IMA No. **2010-012**

Coralloite



Monte Nero mine, Rocchetta Vara, La Spezia, Liguria, Italy

Athos Maria Callegari*, Massimo Boiocchi, Marco E. Ciriotti and Corrado Balestra

*E-mail: athosmaria.callegari@unipv.it

Related to arthurite and whitmoreite

Triclinic: *P*1

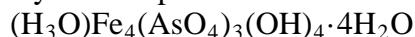
$a = 5.5828(7)$, $b = 9.7660(13)$, $c = 5.5455(7)$ Å, $\alpha = 94.467(3)$, $\beta = 111.348(2)$, $\gamma = 93.85(2)^\circ$
9.710(100), 5.166(77), 5.136(80), 3.342(65), 3.324(34), 2.873(22), 2.631(23), 2.565(22)

Type material is deposited in the Mineralogical Museum of the University of Pavia, catalogue number 2010/001

How to cite: Callegari, A.M., Boiocchi, M., Ciriotti, M.E. and Balestra, C. (2010) Coralloite, IMA 2010-012. CNMNC Newsletter 3, June 2010, page 579; *Mineralogical Magazine*, **74**, 577-579.

IMA No. **2010-014**

Hydroniumpharmacosiderite



Cornwall, United Kingdom, probably from a mine in the St Day mines, Wheal Gorland group

Stuart J. Mills*, Anthony R. Kampf, Peter A. Williams, Peter Leverett, Glenn Poirier, Mati

Raudsepp and Carl A. Francis

*E-mail: smills@eos.ubc.ca

Pharmacosiderite group

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

$a = 7.9587(2)$ Å

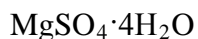
8.050(100), 4.628(22), 4.005(14), 3.265(35), 2.830(23), 2.528(19), 2.412(30), 1.787(14)

Type material is deposited in the Harvard Mineralogical Museum, catalogue number 142784

How to cite: Mills, S.J., Kampf, A.R., Williams, P.A., Leverett, P., Poirier, G., Raudsepp, M. and Francis, C.A. (2010) Hydroniumpharmacosiderite, IMA 2010-014. CNMNC Newsletter 3, June 2010, page 579; *Mineralogical Magazine*, **74**, 577-579.

IMA No. **2010-016**

Cranswickite



Small workings 1 km ESE of Calingasta, Argentina (31°20.351'S 69 23.546'W)

Ronald C. Peterson

*E-mail: peterson@geol.queensu.ca

New structure type; dimorphous with starkeyite; unnamed mineral UM1999-28-SO:HMg

Monoclinic: *Cc*; structure determined

$a = 11.9172(4)$, $b = 5.1704(1)$, $c = 12.1880(3)$ Å, $\beta = 117.538(2)^\circ$

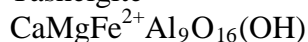
5.284(100), 4.621(33), 3.983(25), 3.940(49), 3.176(50), 3.127(24), 2.575(26), 1.952(22)

Type material is deposited in the Royal Ontario Museum, Toronto, accession number 55368

How to cite: Peterson, R.C. (2010) Cranswickite, IMA 2010-016. CNMNC Newsletter 4, August 2010, page 773; *Mineralogical Magazine*, **74**, 773-776.

IMA No. **2010-017**

Tashelgite



Tashelginskoe formation, Tashelga River, Gornaya Shoriya, Kemerovskaya Oblast, Russia
(53°22'60.3"N 88°17'7.1"E)

Nikita V. Chukanov

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

New structure type

Monoclinic: *Pc*; structure determined

$a = 5.6973(1)$, $b = 17.1823(4)$, $c = 23.5718(5)$ Å, $\beta = 90.046(3)^\circ$

11.79(48), 2.845(43), 2.616(100), 2.584(81), 2.501(39), 2.437(44), 2.406(61), 2.202(72)

Type material is deposited in the Fersman Mineralogical Museum of the Russian Academy of Sciences, registration number 3983/1

How to cite: Ananyev, S.A., Konovalenko, S.I., Rastsvetaeva, R.K., Aksenov, S.M., Chukanov, N.V., Sapozhnikov, A.N. and Zagorskii, V.E. (2010) Tashelgite, IMA 2010-017. CNMNC Newsletter 4, August 2010, page 774; *Mineralogical Magazine*, **74**, 773-776.

IMA No. **2010-018**

Laurentianite



Poudrette Quarry, Mont Saint-Hilaire, Rouville County, Quebec, Canada

Monika M. Haring*, Andrew M. McDonald, Glenn Poirier and Mark A. Cooper

*E-mail: mx_haring@laurentian.ca

New structure type

Trigonal: *P3*; structure determined

$a = 9.9440(1)$, $c = 7.0010(1)$ Å

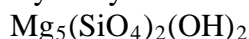
8.608(100), 7.005(19), 4.312(25), 4.062(13), 3.675(25), 3.260(31), 2.870(20), 1.836(14)

The holotype is deposited in the collections of the Royal Ontario Museum, Toronto, Canada, catalogue number M55369

How to cite: Haring, M.M., McDonald, A.M., Poirier, G. and Cooper, M.A. (2010) Laurentianite, IMA 2010-018. CNMNC Newsletter 4, August 2010, page 774; *Mineralogical Magazine*, **74**, 773-776.

IMA No. **2010-019**

Hydroxylchondrodite



Perovskitovaya Kop', Chuvashskie Mountains, Zlatoust district, South Urals, Russia

Igor V. Pekov*, Ekaterina I. Gerasimova, Nikita V. Chukanov, Yuriy K. Kabalov, Natalia V.

Zubkova, Aleksandr E. Zadov, Vasilii O. Yapaskurt, Viktor M. Gekimyants and Dmitry

Yu. Pushcharovsky

*E-mail: igorpekov@mail.ru

Hydroxyl analogue of chondrodite

Monoclinic: *P2₁/c*; structure determined

$a = 7.8847(12)$, $b = 4.7235(8)$, $c = 10.2869(15)$ Å, $\beta = 109.19(1)^\circ$

3.023(36), 2.763(37), 2.673(37), 2.621(44), 2.518(59), 2.260(74), 1.740(100), 1.489(46)

Type material is deposited in the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 3986/1

How to cite: Pekov, I.V., Gerasimova, E.I., Chukanov, N.V., Kabalov, Y.K., Zubkova, N.V., Zadov, A.E., Yapaskurt, V.O., Gekimiyants, V.M. and Pushcharovsky, D.Y. (2010) Hydroxylchondrodite, IMA 2010-019. CNMNC Newsletter 4, August 2010, page 774; *Mineralogical Magazine*, **74**, 773-776.

IMA No. 2010-020

Barlowite

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

Great Australia mine, Cloncurry, Queensland, Australia

Peter Elliott* and Mark A. Cooper

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

Isostuctural with claringbullite

Hexagonal: $P6_3/mmc$; structure determined

$a = 6.6786(2)$, $c = 9.2744(3)$ Å

5.790(100), 3.338(15), 2.889(40), 2.759(15), 2.707(55), 2.452(40), 1.778(20), 1.668(30)

Type material is deposited in the South Australian Museum, Adelaide, South Australia, registration number G17449

How to cite: Elliott, P. and Cooper, M.A. (2010) Barlowite, IMA 2010-020. CNMNC Newsletter 4, August 2010, page 774; *Mineralogical Magazine*, **74**, 773-776.

IMA No. 2010-021

Argandite

$\text{Mn}_7(\text{VO}_4)_2(\text{OH})_8$

Pipjittälli, Turtmantal, Western Swiss Alps, Switzerland

Peter Elliott*, Joël Brugger, Nicolas Meisser, Stefan Ansermet and Tom Caradoc-Davies

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

V analogue of allactite

Monoclinic: $P2_1/n$; structure determined

$a = 5.498(2)$, $b = 12.265(3)$, $c = 10.092(2)$ Å, $\beta = 95.594(3)^\circ$

3.708(50), 3.395(60), 3.074(100), 2.945(50), 2.687(70), 2.522(50), 2.324(40), 1.791(40)

Type material is deposited in the Geological Museum, Lausanne, Switzerland, registration number MGL90369

How to cite: Elliott, P., Brugger, J., Meisser, N., Ansermet, S. and Caradoc-Davies, T. (2010) Argandite, IMA 2010-021. CNMNC Newsletter 4, August 2010, page 774; *Mineralogical Magazine*, **74**, 773-776.

IMA No. 2010-022

Clinometaborite

HBO_2

La Fossa crater, Vulcano, Aeolian Islands, Italy

Italo Campostrini*, Francesco Demartin and Carlo Maria Gramaccioli

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

Dimorphous with metaborite; known synthetic phase and structure

Monoclinic: $P2_1/a$

$a = 7.1215(3)$, $b = 8.8448(4)$, $c = 6.7665(3)$ Å, $\beta = 93.233(4)^\circ$

6.752(165), 3.552(60), 3.219(57), 3.179(144), 3.074(1000), 1.848(42), 1.818(23), 1.695(35)

Type material is deposited in the reference collection of the DCSSI, University of Milan, sample number 2010-01

How to cite: Campostrini, I., Demartin, F. and Gramaccioli, C.M. (2010) Clinometaborite, IMA 2010-022. CNMNC Newsletter 4, August 2010, page 775; *Mineralogical Magazine*, **74**, 773-776.

IMA No. **2010-023**

Fluorocronite

PbF₂

Kupol'noe Ag–Sn deposit, Sarychev Range, Saha Republic, Russian Federation

Stuart J. Mills*, Pavel M. Kartashov, Gennadii N. Gamyranin, Pamela S. Whitfield, Arnt

Kern, Hugues Guerault and Mati Raudsepp

*E-mail: smills@eos.ubc.ca

Pb analogue of fluorite

Cubic: $Fm\bar{3}m$

$a = 5.947(3) \text{ \AA}$

3.437(100), 2.976(46), 2.103(44), 1.794(42), 1.717(21), 1.366(20), 1.329(20), 1.214(19)

Type material is deposited in the collections of the Fersman Mineralogical Museum, Moscow, Russia, registration number 3987/1

How to cite: Mills, S.J., Kartashov, P.M., Gamyranin, G.N., Whitfield, P.S., Kern, A.,

Guerault, H. and Raudsepp, M. (2010) Fluorocronite, IMA 2010-023. CNMNC

Newsletter 4, August 2010, page 775; *Mineralogical Magazine*, **74**, 773-776.

IMA No. **2010-025**

Ferroericssonite

BaFe²⁺₂Fe³⁺O(Si₂O₇)(OH)

Esquire #7 and #8 claims, Big Creek, Fresno County, California, USA

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

*E-mail: akampf@nhm.org

Fe²⁺ analogue of ericssonite

Monoclinic: $C2/m$; structure determined

$a = 20.3459(10)$, $b = 7.0119(3)$, $c = 5.3879(4) \text{ \AA}$, $\beta = 94.874(7)^\circ$

3.708(43), 3.506(81), 3.027(38), 2.880(42), 2.788(100), 2.663(83), 2.126(55), 1.641(43)

Type material is deposited in the collections of the Natural History Museum of Los Angeles County, catalogue numbers 63206 (Esquire #7) and 63207 (Esquire #8)

How to cite: Kampf, A.R., Roberts, A.C., Venance, K.E., Dunning, G.E. and Walstrom, R.E.

(2010) Ferroericssonite, IMA 2010-025. CNMNC Newsletter 4, August 2010, page 775; *Mineralogical Magazine*, **74**, 773-776.

IMA No. **2010-026**

Bohseite

Ca₄Be₃AlSi₉O₂₅(OH)₃

Ilímaussaq Alkaline Complex, Kangerdluarssuk fjord, Greenland

Henrik Friis*, Emil Makovicky, Mark T. Weller and Marie-Hélène Lemée-Cailleau

*E-mail: geofriis@yahoo.com

Forms a series with bavenite

Orthorhombic: $Cmcm$; structure determined

$a = 23.183(1)$, $b = 4.9709(3)$, $c = 19.424(1) \text{ \AA}$

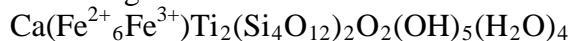
4.189(28), 3.727(93), 3.396(34), 3.347(100), 3.239(79), 3.120(51), 3.039(28), 2.561(25)

Type material is deposited in the collections of the Natural History Museum of Denmark, catalogue number 1995.32

How to cite: Friis, H., Makovicky, E., Weller, M.T. and Lemée-Cailleau, M.-H. (2010) Bohseite, IMA 2010-026. CNMNC Newsletter 4, August 2010, page 775; *Mineralogical Magazine*, **74**, 773-776.

IMA No. **2010-027**

Sveinbergeite



Buer, Vestern Island, Sandefjord, Vestfold County, Norway

A.P. Khomyakov*, F. Cámara, E. Sokolova and F.C. Hawthorne

*E-mail: noomin@mail.ru

Astrophyllite group

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

$a = 5.33(1)$, $b = 11.82(2)$, $c = 11.85(2)$ Å, $\alpha = 101.2(1)$, $\beta = 98.2(1)$, $\gamma = 102.5(2)^\circ$

11.148(20), 5.683(5), 3.799(43), 2.853(100), 2.633(7), 2.489(5), 2.267(5), 1.643(5)

Type material is deposited in the collections of the Fersman Mineralogical Museum, Moscow, Russia, catalogue number 3966

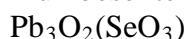
How to cite: Khomyakov, A.P., Cámara, F., Sokolova, E. and Hawthorne, F.C. (2010)

Sveinbergeite, IMA 2010-027. CNMNC Newsletter 5, October 2010, page 899;

Mineralogical Magazine, **74**, 899-902.

IMA No. **2010-028**

Plumboselite



Tsumeb mine, Tsumeb, Namibia

Anthony R. Kampf* Stuart J. Mills and William W. Pinch

*E-mail: akampf@nhm.org

New structure type

Orthorhombic: $Cmc2_1$; structure determined

$a = 10.5384(11)$, $b = 10.7452(13)$, $c = 5.7577(7)$ Å

3.155(100), 2.886(22), 2.691(17), 2.197(12), 1.956(26), 1.886(13), 1.713(21), 1.271(17)

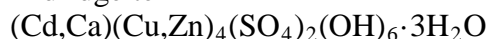
Type material is deposited in the collections of the Natural History Museum of Los Angeles County, California, USA, catalogue number 63264

How to cite: Kampf, A.R., Mills, S.J. and Pinch, W.W. (2010) Plumboselite, IMA 2010-028.

CNMNC Newsletter 4, August 2010, page 776; *Mineralogical Magazine*, **74**, 773-776.

IMA No. **2010-029**

Aldridgeite



Block 14 opencut, Broken Hill, New South Wales, Australia

Peter Elliott* and Allan Pring

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

Cd analogue of serpierite

Monoclinic: $C2/c$

$a = 22.049(2)$, $b = 6.212(2)$, $c = 21.839(2)$ Å, $\beta = 113.19(3)^\circ$

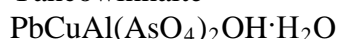
10.167(100), 5.076(55), 3.380(35), 2.704(30), 2.645(60), 2.612(30), 2.439(50), 2.167(35)

Type material is deposited in the collections of the South Australian Museum, Adelaide, South Australia, registration number G33030

How to cite: Elliott, P. and Pring, A. (2010) Aldridgeite, IMA 2010-029. CNMNC Newsletter 4, August 2010, page 776; *Mineralogical Magazine*, **74**, 773-776.

IMA No. **2010-030**

Yancowinnaite



No. 3 lens, Kintore opencut, Broken Hill, New South Wales, Australia

Peter Elliott* and Allan Pring

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

Tsumcorite group

Triclinic: $P\bar{1}$

$a = 5.444(2)$, $b = 5.640(2)$, $c = 7.518(2)$ Å, $\alpha = 67.89(2)$, $\beta = 69.48(2)$, $\gamma = 70.18(2)^\circ$
4.590(35), 3.286(65), 2.949(100), 2.891(40), 2.850(45), 2.501(30), 2.492(80), 1.110(50)

Type material is deposited in the collections of the South Australian Museum, Adelaide, South Australia, registration number G33029

How to cite: Elliott, P. and Pring, A. (2010) Yancowinnaite, IMA 2010-030. CNMNC Newsletter 4, August 2010, page 776; *Mineralogical Magazine*, **74**, 773-776.

IMA No. **2010-031**

Eliseevite



Mount Alluaiv and Mount Punkaruaiiv, Lovozero massif, Kola Peninsula, Russia

Victor N. Yakovenchuk*, Gregory Yu. Ivanyuk, Sergey V. Krivovichev, Yakov A.

Pakhomovsky, Ekaterina A. Selivanova, Julia A. Korchak, Yuri P. Men'shikov and Svetlana V. Drogobuzhskaya

*E-mail: yakovenchuk@geoksc.apatity.ru

Closely related to lintisite and punkaruaiivite

Monoclinic: $C2/c$; structure determined

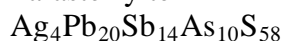
$a = 27.48(1)$, $b = 8.669(4)$, $c = 5.246(2)$ Å, $\beta = 90.782(8)^\circ$
13.76(10), 6.296(6), 4.642(4), 4.334(4), 3.577(8), 3.005(7), 2.881(7), 2.710(5)

Type material is deposited in the collections of the Mineralogical Museum of St Petersburg State University, Russia, and the Geological and the Mineralogical Museum of the Geological Institute of the Kola Science Centre, Apatity, Russia, catalogue number 6516

How to cite: Yakovenchuk, V.N., Ivanyuk, G.Y., Krivovichev, S.V., Pakhomovsky, Y.A., Selivanova, E.A., Korchak, J.A., Men'shikov, Y.P. and Drogobuzhskaya, S.V. (2010) Eliseevite, IMA 2010-031. CNMNC Newsletter 5, October 2010, page 900; *Mineralogical Magazine*, **74**, 899-902.

IMA No. **2010-033**

Parasterrite



Pollone mine, Valdicastello Carducci, Pietrasanta, Apuan Alps, Tuscany (43°57'N 10°16'E)

Yves Moëlo*, Paolo Orlandi, Catherine Guillot-Deudon, Cristian Biagioni, Werner H. Paar and Michel Evain

*E-mail: Yves.Moelo@cnr-immn.fr

Expanded homologue of owyheeite

Monoclinic: $P2_1/c$; structure determined

$a = 8.3965(5)$, $b = 27.9540(7)$, $c = 43.8840(13)$ Å, $\beta = 90.061(12)^\circ$
3.62(100), 3.42(45), 3.35(95), 3.23(65), 3.01(45), 2.945(85), 2.885(80), 1.916(45)

Type material is deposited in the collections of the Museo di Storia Naturale e del Territorio, Università di Pisa, Italy, catalogue number 19347

How to cite: Moëlo, Y., Orlandi, P., Guillot-Deudon, C., Biagioni, C., Paar, W.H. and Evain, M. (2010) Parasterryite, IMA 2010-033. CNMNC Newsletter 5, October 2010, page 900; *Mineralogical Magazine*, **74**, 899-902.

IMA No. **2010-034**

Rickturnerite



Torr Works (Merehead) Quarry, Somerset County, UK

Mike S. Rumsey, Sergey V. Krivovichev*, Oleg I. Siidra, Caroline A. Kirk, Chris J. Stanley and John Spratt

*E-mail: skrivovi@mail.ru

New structure type

Orthorhombic: *Pnma*; structure determined

$a = 25.879(3)$, $b = 5.8024(6)$, $c = 22.717(2)$ Å

6.474(100), 5.636(44), 3.254(28), 3.233(73), 3.112(31), 2.867(57), 2.635(25), 1.683(26)

Type material is deposited in the collections of the Natural History Museum, London, UK, registration number BM 2008,100

How to cite: Rumsey, M.S., Krivovichev, S.V., Siidra, O.I., Kirk, C.A., Stanley, C.J. and Spratt, J. (2010) Rickturnerite, IMA 2010-034. CNMNC Newsletter 5, October 2010, page 900; *Mineralogical Magazine*, **74**, 899-902.

IMA No. **2010-035**

Schüllerite



Löhley, Üdersdorf, near Daun, Eifel Mountains, Rhineland-Palatinate, Germany

Nikita V. Chukanov*, Ramiza K. Rastsvetaeva, Sergey N. Britvin, Alla A. Virus, Dmitriy I. Belakovsky, Igor V. Pekov, Sergey M. Aksenov and Bernd Ternes

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

New structure type

Triclinic: *P1*; structure determined

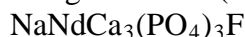
$a = 5.4027(2)$, $b = 7.0656(2)$, $c = 10.2178(3)$ Å, $\alpha = 99.816(2)$, $\beta = 99.624(2)$, $\gamma = 90.084(2)^\circ$
9.96(29), 3.308(45), 2.867(29), 2.791(100), 2.664(46), 2.609(36), 2.144(52), 2.110(31)

Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration numbers 3995/2 (holotype) and 3995/1

How to cite: Chukanov, N.V., Rastsvetaeva, R.K., Britvin, S.N., Virus, A.A., Belakovsky, D.I., Pekov, I.V., Aksenov S.M. and Ternes, B. (2010) Schüllerite, IMA 2010-035. CNMNC Newsletter 5, October 2010, page 900; *Mineralogical Magazine*, **74**, 899-902.

IMA No. **2010-036**

Carlgieseckeite-(Nd)



Kuannersuit (formerly Kvanefjeld) Plateau, northern section of the Ilímaussaq alkaline complex, South Greenland, Denmark

Igor V. Pekov*, Natalia V. Zubkova, Tomas A. Husdal, Atali A. Agakhanov, Aleksandr E. Zadov and Dmitry Yu. Pushcharovsky

*E-mail: igorpekov@mail.ru

Apatite supergroup

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

$a = 9.4553(1)$, $c = 6.9825(1)$ Å

7.02(22), 5.33(18), 3.923(27), 3.463(23), 3.095(19), 2.815(100), 2.727(42), 2.255(17)

Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, registration number 3996/1

How to cite: Pekov, I.V., Zubkova, N.V., Husdal, T.A., Agakhanov, A.A., Zadov, A.E. and Pushcharovsky, D.Y. (2010) Carlgieseckeite-(Nd), IMA 2010-036. CNMNC Newsletter 5, October 2010, page 901; *Mineralogical Magazine*, **74**, 899-902.

IMA No. **2010-037**

Rauchite

$\text{Ni}(\text{UO}_2)_2(\text{AsO}_4)_2 \cdot 10\text{H}_2\text{O}$

Belorechenskoye deposit, Adygea Republic, Northern Caucasus, Russia

Igor V. Pekov*, Viktor V. Levitskiy, Sergey V. Krivovichev, Andrey A. Zolotarev, Igor A. Bryzgalov, Aleksandr E. Zadov and Nikita V. Chukanov

*E-mail: igorpekov@mail.ru

Autunite group

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

$a = 7.100(3)$, $b = 7.125(3)$, $c = 10.751(4)$ Å, $\alpha = 106.855(7)$, $\beta = 104.366(7)$, $\gamma = 90.420(6)^\circ$
9.97(100), 4.936(64), 4.533(41), 3.539(93), 3.388(43), 2.488(27), 2.233(27), 1.581(16)

Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, registration number 3997/1

How to cite: Pekov, I.V., Levitskiy, V.V., Krivovichev, S.V., Zolotarev, A.A., Bryzgalov, I.A., Zadov, A.E. and Chukanov, N.V. (2010) Rauchite, IMA 2010-037. CNMNC Newsletter 5, October 2010, page 901; *Mineralogical Magazine*, **74**, 899-902.

IMA No. **2010-038**

Krotite

CaAl_2O_4

NWA 1934 carbonaceous chondrite

Chi Ma*, Anthony R. Kampf, Harold C. Connolly, Jr, John R. Beckett, George R. Rossman, Stuart A. Sweeney Smith and Devin L. Schrader

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

Low-pressure CaAl_2O_4 dimorph

Monoclinic: $P2_1/n$; structure determined

$a = 8.6996(3)$, $b = 8.0994(3)$, $c = 15.2170(11)$ Å, $\beta = 90.188(6)^\circ$
4.694(28), 2.977(100), 2.527(35), 2.410(40), 1.927(22), 1.583(23), 1.528(31), 1.459(33)

Type material is deposited in the collections of the Natural History Museum of Los Angeles County, California, USA, catalogue number 63275

How to cite: Ma, C., Kampf, A.R., Connolly, Jr, H.C., Beckett, J.R., Rossman, G.R., Sweeney Smith, S.A. and Schrader, D.L. (2010) Krotite, IMA 2010-038. CNMNC Newsletter 5, October 2010, page 901; *Mineralogical Magazine*, **74**, 899-902.

IMA No. **2010-039**

Yttriaite-(Y)

Y_2O_3

Bol'shaya Pol'ya River, Prepolar Urals, Russia

Stuart J. Mills*, Pavel M. Kartashov, Ma, C., George R. Rossman, Margarita I. Novgorodova, Anthony R. Kampf and Mati Raudsepp

*E-mail: smills@eos.ubc.ca

Known structure type

Cubic: $Ia\bar{3}$

$a = 10.6018(7) \text{ \AA}$

4.328(12), 3.060(100), 2.650(25), 2.499(5), 2.260(5), 2.079(4), 1.874(41), 1.598(26)

Type material is deposited in the collections of the Mineral Sciences Department, Natural History Museum of Los Angeles County, registration number 63272

How to cite: Mills, S.J., Kartashov, P.M., Chi Ma, Rossman, G.R., Novgorodova, M.I., Kampf, A.R. and Raudsepp, M. (2010) Yttriaite-(Y), IMA 2010-039. CNMNC Newsletter 5, October 2010, page 901; *Mineralogical Magazine*, **74**, 899-902.

IMA No. **2010-040**

Nordgauite

$\text{MnAl}_2(\text{PO}_4)_2(\text{F},\text{OH})_2 \cdot 5.5\text{H}_2\text{O}$

Hagendorf South pegmatite (Hagendorf-Süd), Hagendorf, Oberpfalz, Bavaria, Germany

William D. Birch*, Ian E. Grey, Stuart J. Mills, Allan Pring and Erich Keck

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

New structure type

Triclinic: $P\bar{1}$

$a = 9.920(4)$, $b = 9.933(3)$, $c = 6.087(2) \text{ \AA}$, $\alpha = 92.19(3)$, $\beta = 100.04(3)$, $\gamma = 97.61(3)^\circ$

9.806(100), 7.432(40), 4.596(12), 4.119(20), 3.225(12), 3.215(12), 2.976(12), 2.951(16)

Type material is deposited in the collections of Museum Victoria (PO Box 666, Melbourne, Victoria, Australia), registered number M51231

How to cite: Birch, W.D., Grey, I.E., Mills, S.J., Pring, A. and Keck, E. (2010) Nordgauite, IMA 2010-040. CNMNC Newsletter 5, October 2010, page 901; *Mineralogical Magazine*, **74**, 899-902.

IMA No. **2010-041**

Bariopharmacoalumite

$\text{Ba}_{0.5}\text{Al}_4[(\text{AsO}_4)_3(\text{OH})_4] \cdot 4\text{H}_2\text{O}$

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

Stuart J. Mills*, Mike S. Rumsey, Georges Favreau, John Spratt and Maurizio Dini

*E-mail: smills@eos.ubc.ca

Pharmacosiderite group

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

$a = 7.772(2) \text{ \AA}$

7.759(100), 5.485(27), 4.454(18), 3.878(27), 3.456(14), 3.159(16), 2.738(16), 2.452(12)

Type material is deposited in the collections of the Natural History Museum, London, UK, registration number BM 2010,82

How to cite: Mills, S.J., Rumsey, M.S., Favreau, G., Spratt, J. and Dini, M. (2010) Bariopharmacoalumite, IMA 2010-041. CNMNC Newsletter 6, December 2010, page 941; *Mineralogical Magazine*, **74**, 941-942

IMA No. **2010-042**

Icosahedrite

$\text{Al}_{63}\text{Cu}_{24}\text{Fe}_{13}$

Iomrautvaam Massif, Listvenitovyi River, Khatyrka ultrabasic zone, Koryak Upland, Chukhotka Oblast, Russia

Luca Bindi*, Paul J. Steinhardt, Nan Yao and Peter J. Lu

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

Known quasicrystal

Icosahedral: $Fm\bar{3}5$

$a_{6D} = 12.64 \text{ \AA}$ (six-dimensional notation)
3.75(20), 3.41(25), 3.24(20), 2.451(10), 2.108(90), 2.006(100), 1.452(15), 1.238(30); note
that grains do not diffract as single crystals

Type material is deposited in the Mineralogical Collection of the Museo di Storia Naturale,
Università di Firenze, Firenze. Italy, catalogue number 46407/G

How to cite: Bindi, L., Steinhardt, P.J., Yao, N. and Lu, P.J. (2010) Icosahedrite, IMA 2010-
042. CNMNC Newsletter 6, December 2010, page 942; *Mineralogical Magazine*, **74**,
941-942

IMA No. **2010-043**

Törnroosite

$\text{Pd}_{11}\text{As}_2\text{Te}_2$

Inari commune, Lemmenjoki area, Miessijoki River, Finland (68°42'30"N 25°42'24"E)

Kari Kojonen*, Andrew M. McDonald, Chris J. Stanley and Bo Johanson

*E-mail: kari.kojonen@gtk.fi

Isostructural with isomertieite

Cubic: $Fd\bar{3}m$

$a = 12.3530(4) \text{ \AA}$

2.519(11), 2.376(90), 2.182(100), 1.862(13), 1.608(11), 1.544(14), 1.261(13), 0.825(11)

Type material is deposited in in the collections of the Natural History Museum, London, UK,
registration number BM 2010,100

How to cite: Kojonen, K., McDonald, A.M., Stanley, C.J. and Johanson, B. (2010)

Törnroosite, IMA 2010-043. CNMNC Newsletter 6, December 2010, page 942;
Mineralogical Magazine, **74**, 941-942

IMA No. **2010-044**

Titanium

Ti

Orebody 31, Luobusa mining district, in Qusong County, Tibet (29°5'N 92°5'E)

Fang Qing-Song, Shi Ni-Cheng, Li Guo-Wu*, Bai Wen-Ji, Yang Jing-Sui, Xiong Ming, Rong
He and Ma Zhe-Sheng

*E-mail: liguowu@126.com

Known structure type

Hexagonal: $P6_3/mmc$

$a = 2.950(2)$, $c = 4.686(1) \text{ \AA}$

2.569(32), 2.254(100), 1.730(16), 1.478(21), 0.989(5), 0.9464(8), 0.9172(4), 0.8214(4)

Type material is deposited in the collections of the Institute of Geology, Chinese Academy of
Geological Sciences, Beijing, P.R. Republic of China catalogue number 74-3

How to cite: Fang, Q.-S., Shi, N.-C., Li, G.-W., Bai, W.-J., Yang, J.-S., Xiong, M., Rong, H.
and Ma, Z.-S. (2011) Titanium, IMA 2010-044. CNMNC Newsletter 7, February 2011,
page 27; *Mineralogical Magazine*, **75**, 27-31

IMA No. **2010-045**

Hezuolinite

$(\text{Sr}, \text{REE})_4\text{Zr}(\text{Ti}, \text{Fe})_4\text{Si}_4\text{O}_{22}$

Saima alkaline intrusion, Liaoning Province, China (124°12'E 41°00'N)

Zhuming Yang*, Kuishou Ding, Gerald Giester and Ekkehart Tillmanns

*E-mail: yangzhm@mail.igcas.ac.cn

Perrierite - chevkinite group

Monoclinic: $C2/m$; structure determined

$a = 13.973(3)$, $b = 5.6984(11)$, $c = 11.988(2)$ Å, $\beta = 114.10(3)^\circ$

3.47(40), 3.02(90), 2.98(100), 2.84(70), 2.72(50), 2.51(50), 2.18(80), 1.96(90)

Type material is deposited in the collections of the Museum of Institute of Geology and Geophysics, Chinese Academy of Sciences, registration number KDX016

How to cite: Yang, Z., Ding, K., Giester, G. and Tillmanns, E. (2011) Hezuolinite, IMA 2010-045. CNMNC Newsletter No. 8, April 2011, page 289; *Mineralogical Magazine*, **75**, 289-294.

IMA No. **2010-046**

Běhounekite

$U(SO_4)_2(H_2O)_4$

Geschieber vein, Jáchymov, Czech Republic

Jakub Plášil*, Karla Fejfarová, Milan Novák, Michal Dušek, Jiří Sejkora, Radek Škoda, Jan Hloušek and Juraj Majzlan

*E-mail: jakub_plasil@nm.cz

Known structure type

Orthorhombic: *Pnma*; structure determined

$a = 14.6464(3)$, $b = 11.0786(3)$, $c = 5.6910(1)$ Å

7.330(100), 6.112(54), 5.538(21), 4.787(42), 3.663(17), 3.478(20), 3.080(41), 2.495(17)

Type material is deposited in the collections of the Department of Mineralogy and Petrology of the National Museum in Prague, catalogue number P1P 2/2010

How to cite: Plášil, J., Fejfarová, K., Novák, M., Dušek, M., Sejkora, J., Škoda, R., Hloušek, J. and Majzlan, J. (2011) Běhounekite, IMA 2010-046. CNMNC Newsletter 7, February 2011, page 28; *Mineralogical Magazine*, **75**, 27-31

IMA No. **2010-047**

Carlosbarbosaite

$(Ca_{0.5}\square_{0.5})(UO_2)_2(Nb^{5+}Si)O_6(OH)_2 \cdot 2H_2O$

Jaguaraçu pegmatite, Jaguaraçu municipality, Minas Gerais, Brazil (19°38'57"S 42°44'59"W)

Daniel Atencio*, Andrew C. Roberts, Mark A. Cooper, Luiz A.D. Menezes Filho, José M.V. Coutinho, John A.R. Stirling, Neil A. Ball, Elizabeth Moffatt, Mário L.S.C. Chaves,

Paulo R.G. Brandão and Antônio W. Romano

*E-mail: datencio@usp.br

New structure type

Orthorhombic: *Cmcm*; structure determined

$a = 14.150(6)$, $b = 10.395(4)$, $c = 7.529(3)$ Å

8.405(80), 7.081(100), 4.201(90), 3.333(60), 3.053(80), 2.931(70), 2.803(60), 2.589(50)

Type material is deposited in the collections of the Museu de Geociências, Instituto de Geociências, Universidade de São Paulo, São Paulo, Brazil, registration number DR707

How to cite: Atencio, D., Roberts, A.C., Cooper, M.A., Menezes Filho, L.A.D., Coutinho, J.M.V., Stirling, J.A.R., Ball, N.A., Moffatt, E., Chaves, M.L.S.C., Brandão, P.R.G. and Romano, A.W. (2011) Carlosbarbosaite, IMA 2010-047. CNMNC Newsletter 7, February 2011, page 28; *Mineralogical Magazine*, **75**, 27-31

IMA No. **2010-048**

Tarbagataite

$(K\square)Ca(Fe^{2+}, Mn)_7Ti_2(Si_4O_{12})_2O_2(OH)_5$

Verkhnee Espe deposit, Akjailyautas mountains, Kazakhstan (N 48°03'-48°10' E 81°26'-81°29')

A.V. Stepanov, G.K. Bekenova, V.L. Levin, E. Sokolova*, and F.C. Hawthorn

*E-mail: elena_sokolova@umanitoba.ca

Astrophyllite group

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

$a = 5.3868(3)$, $b = 11.9141(6)$, $c = 11.7171(6)$ Å, $\alpha = 112.978(2)$, $\beta = 94.641(2)$, $\gamma = 103.189(2)^\circ$

4.095(80), 3.735(30), 3.497(50), 3.258(100), 2.858(80), 2.761(70), 2.646(30), 2.560(50)

Type material is deposited in the collections of the Geological Scientific Museum of the Satpaev Institute of Geological Sciences, Almaty, Kazakhstan, registration number 3009/2010

How to cite: Stepanov, A.V., Bekenova, G.K., Levin, V.L., Sokolova, E. and Hawthorn, F.C. (2011) Tarbagataite, IMA 2010-048. CNMNC Newsletter 7, February 2011, page 28; *Mineralogical Magazine*, **75**, 27-31

IMA No. **2010-049**

Steedeite

$\text{Na}_2\text{ZrSi}_3\text{O}_9 \cdot 2\text{H}_2\text{O}$

Poudrette Quarry, Mont Saint-Hilaire, Quebec, Canada

Monika M. Haring, Andrew M. McDonald*, Glenn Poirier and Mark A. Cooper

*E-mail: amcdonald@laurentian.ca

Catapleiite group

Trigonal: $P\bar{3}1c$; structure determined

$a = 7.414(1)$, $c = 10.096(2)$ Å

6.422(100), 5.414(65), 3.969(73), 3.065(69), 2.990(60), 2.713(41), 1.975(26), 1.856(27)

Type material is deposited in the collections of the Department of Natural History, Royal Ontario Museum, Toronto, Canada, catalogue number M55371

How to cite: Haring, M.M., McDonald, A.M., Poirier, G. and Cooper, M.A. (2011) Steedeite, IMA 2010-049. CNMNC Newsletter 7, February 2011, page 28; *Mineralogical Magazine*, **75**, 27-31

IMA No. **2010-050**

Veblenite

$\text{KNa}(\text{Fe}^{2+}_5\text{Fe}^{3+}_4\text{Mn}_7)\text{Nb}_4(\text{Si}_2\text{O}_7)_2(\text{Si}_8\text{O}_{22})_2\text{O}_6(\text{OH})_{10}(\text{H}_2\text{O})_3$

Ten Mile Lake, Seal Lake area, Labrador, Newfoundland, Canada

Fernando Cámara*, Elena Sokolova, Frank C. Hawthorne, Ralph Rowe, Joel Grice and Kim Tait

*E-mail: fernando.camaraartigas@unito.it

New structure type

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

$a = 5.3761(3)$, $b = 27.5062(11)$, $c = 18.6972(9)$ Å, $\alpha = 140.301(3)$, $\beta = 93.033(3)$, $\gamma = 95.664(3)^\circ$

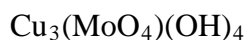
18.204(22), 16.894(100), 11.661(8), 4.404(3), 4.271(9), 4.056(3), 3.891(2), 2.721(3)

The mineral is present in a holotype sample of niobophyllite housed in the collections of the Royal Ontario Museum, Toronto, Canada, catalogue number M26148

How to cite: Cámara, F., Sokolova, E., Hawthorne, F.C., Rowe, R., Grice, J. and Tait, K. (2011) Veblenite, IMA 2010-050. CNMNC Newsletter 7, February 2011, page 29; *Mineralogical Magazine*, **75**, 27-31

IMA No. **2010-051**

Markascherite



Childs Aldwinkle mine, Bunker Hill District, Pinal County, Arizona, USA (32°45'07" N
110°28'55")

Hexiong Yang*, Robert A. Jenkins, Robert T. Downs, Stanley H. Evans and Elias M. Bloch

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

Dimorph of szenicsite

Monoclinic: $P2_1/m$; structure determined

$a = 5.5203(5)$, $b = 5.9900(5)$, $c = 9.9832(11)$ Å, $\beta = 97.586(2)^\circ$

5.124(65), 4.948(100), 3.450(54), 3.299(51), 3.006(53), 2.736(55), 2.580(88), 2.122(60)

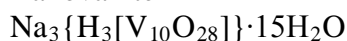
Type material is deposited in the collections of the University of Arizona Mineral Museum,
Tucson, Arizona, USA, catalogue number 19291

How to cite: Yang, H., Jenkins, R.A., Downs, R.T., Evans, S.H. and Bloch, E.M. (2011)

Markascherite, IMA 2010-051. CNMNC Newsletter 7, February 2011, pages 28-29;
Mineralogical Magazine, **75**, 27-31

IMA No. **2010-052**

Rakovanite



Sunday and the West Sunday mines, Slick Rock District, San Miguel County, Colorado, USA

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

*E-mail: jmhughes@uvm.edu

New structure type

Monoclinic: $P2_1/n$; structure determined

$a = 12.0248(17)$, $b = 17.121(3)$, $c = 18.140(3)$ Å, $\beta = 106.242(8)^\circ$

11.270(100), 8.709(78), 7.696(81), 6.892(63), 3.445(24), 2.935(42), 2.798(31), 2.433(24)

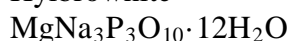
Type material is deposited in the collections of the Natural History Museum of Los Angeles
County, Los Angeles, California, USA, catalogue numbers 63357 and 63358

How to cite: Kampf, A.R., Hughes, J.M., Marty, J., Gunter, M. and Nash, B. (2011)

Rakovanite, IMA 2010-052. CNMNC Newsletter 7, February 2011, page 29;
Mineralogical Magazine, **75**, 27-31

IMA No. **2010-054**

Hylbrownite



Dome Rock mine, 470 km northeast of Adelaide, South Australia, Australia (148°24'E
31°52'S)

Peter Elliott*, Joël Brugger and Tom Caradoc-Davies

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

Mg analogue of kanonerovite

Monoclinic: $P2_1/n$; structure determined

$a = 14.722(3)$, $b = 9.240(2)$, $c = 15.052(3)$ Å, $\beta = 90.01(3)^\circ$

10.530(60), 7.357(80), 6.949(100), 5.835(30), 4.754(35), 3.934(40), 3.510(45), 3.336(35)

Type material is deposited in the collections of the South Australian Museum, Adelaide,
South Australia, Australia, registration number G33088

How to cite: Elliott, P., Brugger, J. and Caradoc-Davies, T. (2011) Hylbrownite, IMA 2010-

054. CNMNC Newsletter 7, February 2011, page 29; *Mineralogical Magazine*, **75**, 27-31

IMA No. **2010-055**

Rongibbsite



Unnamed prospect, Big Horn Mountains, Maricopa County, Arizona, USA (33°69' N
113°22'W)

Hexiong Yang*, Robert A. Jenkins, Robert T. Downs, Stanley H. Evans, Elias M. Bloch, and
Alex J. Halpern

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

New structure type

Monoclinic: $C2/m$; structure determined

$a = 12.6018(10)$, $b = 13.9132(11)$, $c = 7.8356(6)$ Å, β 125.463(4)°

6.821(78), 6.075(100), 3.990(99), 3.481(81), 3.478(82), 3.322(76), 2.842(91), 2.753(87)

Type material is deposited in the collections of the Mineral Museum of the University of
Arizona, Tucson, Arizona, USA, catalogue number 19292

How to cite: Yang, H., Jenkins, R.A., Downs, R.T., Evans, S.H., Bloch, E.M. and Halpern,
A.J. (2011) Rongibbsite, IMA 2010-055. CNMNC Newsletter 7, February 2011, pages
29-30; *Mineralogical Magazine*, **75**, 27-31

IMA No. **2010-056**

Agardite-(Nd)

$\text{NdCu}_6(\text{AsO}_4)_3(\text{OH})_6 \cdot 3\text{H}_2\text{O}$

Hilarion Mine, Agios Konstantinos (Kamariza), Lavrion District, Greece

Igor V. Pekov*, Nikita V. Chukanov, Aleksandr E. Zadov, Panagiotis Voudouris, Andreas
Magganas and Athanassios Katerinopoulos

*E-mail: igorpekov@mail.ru

Mixite group

Hexagonal: $P6_3/m$;

$a = 13.548(8)$, $c = 5.894(6)$ Å

11.70(100), 4.443(22), 3.545(18), 3.255(8), 2.935(18), 2.695(13), 2.559(10), 2.453(30)

Type material is deposited in the collections of the Fersman Mineralogical Museum of the
Russian Academy of Sciences, Moscow, Russia, registration number 4020/1

How to cite: Pekov, I.V., Chukanov, N.V., Zadov, A.E., Voudouris, P., Magganas, A. and
Katerinopoulos, A. (2011) Agardite-(Nd), IMA 2010-056. CNMNC Newsletter 7,
February 2011, page 30; *Mineralogical Magazine*, **75**, 27-31

IMA No. **2010-057**

Panguite

$(\text{Ti,Al,Sc,Mg,Zr,Ca})_{1.8}\text{O}_3$

Allende meteorite

Chi Ma*, Oliver Tschauner, George R. Rossman and Wenjun Liu

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

New structure type

Orthorhombic: $Pbca$

$a = 9.781(1)$, $b = 9.778(2)$, $c = 9.815(1)$ Å

4.002(6), 3.995(7), 2.827(100), 1.732(18), 1.732(19), 1.729(19), 1.479(8), 1.475(9)

Type material is deposited in the collections of the Smithsonian Institution's National
Museum of Natural History, Washington DC, USA, catalogue number 7602

How to cite: Ma, C., Tschauner, O., Rossman, G.R. and Liu, W. (2011) Panguite, IMA 2010-
057. CNMNC Newsletter 7, February 2011, page 30; *Mineralogical Magazine*, **75**, 27-31

IMA No. **2010-058**

Cordylite-(La)

$\text{NaBaLa}_2(\text{CO}_3)_4\text{F}$

Biraya deposit, Vitim Plateau, Irkutsk district, Russia

Stuart J. Mills*, Pavel M. Kartashov, Anthony R. Kampf, Aleksei A. Konev, Anna A. Koneva and Mati Raudsepp

*E-mail: smills@eos.ubc.ca

Isomorphous with cordylite-(Ce)

Hexagonal: $P6_3/mmc$; structure determined

$a = 5.1182(5)$, $c = 23.1785(16)$ Å

4.371(65), 4.148(54), 3.532(100), 3.209(95), 2.562(89), 2.213(52), 2.051(44), 1.921(52)

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 63360, and the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration numbers 4028/1 and 4029/1

How to cite: Mills, S.J., Kartashov, P.M., Kampf, A.R., Konev, A.A., Koneva, A.A. and Raudsepp, M. (2011) Cordylite-(La), IMA 2010-058. CNMNC Newsletter 7, February 2011, page 30; *Mineralogical Magazine*, **75**, 27-31

IMA No. **2010-060**

Allanite-(Nd)

$\text{CaNdAl}_2\text{Fe}^{2+}(\text{SiO}_4)(\text{Si}_2\text{O}_7)\text{O}(\text{OH})$

NYF granite pegmatite near Åskagen, Värmland, Sweden

Radek Škoda*, Jan Cempírek, Jan Filip and Milan Novák

*E-mail: rskoda@sci.muni.cz

Epidote group

Monoclinic: $P2_1/m$; structure determined

$a = 8.8897(5)$, $b = 5.7308(2)$, $c = 10.1010(6)$ Å, $\beta = 115.166(7)^\circ$

3.508(46), 2.893(100), 2.865(45), 2.698(60), 2.607(60), 2.164(35), 2.117(38), 1.659(43)

Type material is deposited in the collections of the Department of Mineralogy and Petrology of the National Museum in Prague, Czech Republic, catalogue number P1P 1/2010

How to cite: Škoda, R., Cempírek, J., Filip, J. and Novák, M. (2011) Allanite-(Nd), IMA 2010-060. CNMNC Newsletter No. 8, April 2011, page 290; *Mineralogical Magazine*, **75**, 289-294.

IMA No. **2010-061**

Ferrisepiolite

$(\text{Fe}^{3+}, \text{Fe}^{2+}, \text{Mg})_4[(\text{Si}, \text{Fe}^{3+})_6\text{O}_{15}](\text{O}, \text{OH})_2 \cdot 6\text{H}_2\text{O}$

Saishitang skarn copper deposit, Xinghai County, Qinghai Province, China (35°17'15"N 99°47'15"E)

Gu Xiangping*, Xie Xiande, Wu Xiangbin, Lai Jianqing, Kenich Hoshino and Zhu Guchang

*E-mail: guxp2004@163.com

Fe(III)-dominant analogue of sepiolite

Orthorhombic: $Pnca$

$a = 13.467(16)$, $b = 26.953(41)$, $c = 5.226(17)$ Å

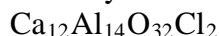
12.034(100), 4.468(5), 3.742(6), 3.378(31), 3.184(4), 2.704(6), 2.552(5), 2.060(4)

Type material is deposited in the collections of the Geological Museum of China, People's Republic of China, catalogue number M11786

How to cite: Gu, X., Xie, X., Wu, X., Lai, J., Hoshino, K. and Zhu, G. (2011) Ferrisepiolite, IMA 2010-061. CNMNC Newsletter 7, February 2011, page 30; *Mineralogical Magazine*, **75**, 27-31

IMA No. **2010-062**

Brearlite



NWA 1934 CV3 carbonaceous chondrite

Chi Ma*, Harold C. Connolly, Jr., John R. Beckett, George R. Rossman, Anthony R. Kampf,
Thomas J. Zega, Oliver Tschauner, Stuart A. Sweeney Smith and Devin L. Schrader

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

Derivative of mayenite

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

$$a = 11.9794(5) \text{ \AA}$$

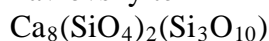
3.001(41), 2.685(100), 2.451(55), 2.192(33), 1.947(24), 1.665(42), 1.604(61), 1.310(22)

Type material is deposited in the collections of the Smithsonian Institution's National
Museum of Natural History, Washington DC, USA, catalogue number USNM 7590

How to cite: Ma, C., Connolly, Jr., H.C., Beckett, J.R., Rossman, G.R., Kampf, A.R., Zega,
T.J., Tschauner, O., Sweeney Smith, S.A. and Schrader, D.L. (2011) Brearlite, IMA
2010-062. CNMNC Newsletter 7, February 2011, page 31; *Mineralogical Magazine*, **75**,
27-31

IMA No. **2010-063**

Pavlovskyite



Birkhin gabbro massif, Baikal Lake, Eastern Siberia, Russia (52°42'N 106°30'E) and xenolith
number 3, Upper Chegem caldera, Lakargi, Kabardino-Balkaria, North Caucasus, Russia
(43°17'N 43°6'E)

E.V. Galuskin*, B. Lazic, V.B. Savelyeva, T. Armbruster, I.O. Galuskina, A.E. Zadov, P.
Dzierzanowski, N.N. Pertsev and V.M. Gazeev

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

Known synthetic phase

Orthorhombic: *Pbcn*; structure determined

$$a = 5.0849(1), b = 11.4116(2), c = 28.6304(8) \text{ \AA}$$

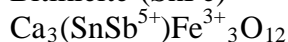
3.607(39), 3.046(67), 2.835(100), 2.689(70), 2.438(18), 1.948(38), 1.898(18), 1.805(14)

The holotype (Birkhin) is deposited in the collections of the Fersman Mineralogical Museum
of the Russian Academy of Science, catalogue number 4023/1. A co-type specimen
(Lakargi) is deposited under catalogue number 4024/1

How to cite: Galuskin, E.V., Lazic, B., Savelyeva, V.B., Armbruster, T., Galuskina, I.O.,
Zadov, A.E., Dzierzanowski, P., Pertsev, N.N. and Gazeev, V.M. (2011) Pavlovskyite,
IMA 2010-063. CNMNC Newsletter No. 8, April 2011, page 290; *Mineralogical
Magazine*, **75**, 289-294.

IMA No. **2010-064**

Bitikleite-(SnFe)



Xenolith number 1, Upper Chegem caldera, Lakargi, Kabardino-Balkaria, North Caucasus,
Russia (43°17'N 43°6'E)

I.O. Galuskina*, E.V. Galuskin, J. Kusz, P. Dzierzanowski, K. Prusik, V.M. Gazeev, N.N.
Pertsev and L. Dubrovinsky

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

Garnet group

Cubic: $Ia\bar{3}d$

$$a = 12.536(3) \text{ \AA}$$

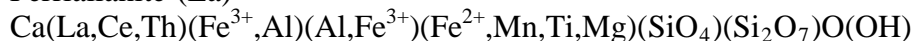
4.432(87), 3.134(84), 2.803(47), 2.559(95), 1.982(27), 1.675(100), 1.402(35), 1.336(29)

Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, catalogue number 4025/1

How to cite: Galuskina, I.O., Galuskin, E.V., Kusz, J., Dzierzanowski, P., Prusik, K., Gazeev, V.M., Pertsev, N.N. and Dubrovinsky, L. (2011) Bitikleite-(SnFe), IMA 2010-064. CNMNC Newsletter No. 8, April 2011, page 290; *Mineralogical Magazine*, **75**, 289-294.

IMA No. **2010-066**

Ferriallanite-(La)



In den Dellen pumice quarries, Niedermendig, Mendig, Laach Lake volcanic complex, Eifel Mountainss, Rhineland-Palatinate, Germany

Uwe Kolitsch*, Stuart J. Mills, Ritsuro Miyawaki and Günter Blaß

*E-mail: uwe.kolitsch@nhm-wien.ac.at

Epidote group

Monoclinic: $P2_1/m$; structure determined

$$a = 8.938(2), b = 5.789(1), c = 10.153(2) \text{ \AA}, \beta = 114.54(3)^\circ$$

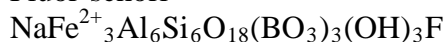
$$9.22(19), 7.96(34), 3.53(38), 2.92(100), 2.72(50), 2.63(36), 2.16(17), 1.639(34)$$

The holotype is deposited in the collections of the Naturhistorisches Museum, Wien (Natural History Museum, Vienna), registered number N 8164, and the co-type (probe mount) is preserved in the collections of Museum Victoria, registered number M49750

How to cite: Kolitsch, U., Mills, S.J., Miyawaki, R. and Blaß, G. (2011) Ferriallanite-(La), IMA 2010-066. CNMNC Newsletter No. 8, April 2011, page 290; *Mineralogical Magazine*, **75**, 289-294.

IMA No. **2010-067**

Fluor-schorl



Alluvial tin deposits near Steinberg, Zschorlau, Erzgebirge, Saxony, Germany and in pegmatites near Grastein, Trentino, South Tyrol, Italy

Andreas Ertl*, Uwe Kolitsch, M. Darby Dyar, Hans-Peter Meyer, Darrell J. Henry, George R. Rossman, Markus Prem, Thomas Ludwig, Lutz Nasdala, Christian L. Lengauer and Ekkehart Tillmanns

*E-mail: andreas.ertl@al.net

Tourmaline group

Trigonal: $R3m$; structure determined

$$a = 16.005(2), c = 7.176(1) \text{ \AA}$$

$$6.361(84), 4.225(39), 3.995(100), 3.470(67), 2.959(51), 2.584(76), 2.045(24), 1.454(26)$$

Holotype material (no. 8165: fluor-schorl from Zschorlau; no. 8166: fluor-schorl from Grastein) is deposited in the collections of the Naturhistorisches Museum, Austria

How to cite: Ertl, A., Kolitsch, U., Darby Dyar, M., Meyer, H.-P., Henry, D.J., Rossman, G.R., Prem, M., Ludwig, T., Nasdala, L., Lengauer, C.L. and Tillmanns, E. (2011) Fluor-schorl, IMA 2010-067. CNMNC Newsletter No. 8, April 2011, page 291; *Mineralogical Magazine*, **75**, 289-294.

IMA No. **2010-068**

Mejillonesite



Cerro Mejillones (23°05'44.56"S 70°30'53.78"W), Mejillones Peninsula, Mejillones, Antofagasta Region, Chile

Daniel Atencio*, Nikita V. Chukanov, Fabrizio Nestola, Thomas Witzke, José M.V. Coutinho, Aleksandr E. Zadov, Reynaldo R. Contreira Filho and Gunnar Färber

*E-mail: datencio@usp.br

New structure type

Orthorhombic: *Pbca*; structure determined

$a = 16.295(1)$, $b = 13.001(2)$, $c = 8.434(1)$ Å

8.095(100), 6.846(9), 6.470(8), 3.317(5), 2.959(5), 2.706(12), 2.157(19), 2.153(9)

Type material is deposited in the Museu de Geociências, Instituto de Geociências, Universidade de São Paulo, São Paulo, Brazil, catalogue number DR712, and in the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4043/1

How to cite: Atencio, D., Chukanov, N.V., Nestola, F., Witzke, T., M.V. Coutinho, J.M.V., Zadov, A.E., Contreira Filho, R.R. and Färber, G. (2011) Mejillonesite, IMA 2010-068. CNMNC Newsletter No. 8, April 2011, page 291; *Mineralogical Magazine*, **75**, 289-294.

IMA No. **2010-069**

Arsenohopeite

$Zn_3(AsO_4)_2 \cdot 4H_2O$

Tsumeb mine, Namibia

Franz Neuhold*, Uwe Kolitsch, Heinz-Jürgen Bernhardt and Christian L. Lengauer

*E-mail: franzneuhold@gmx.net

Arsenate analogue of hopeite

Orthorhombic: *Pnma*; structure determined

$a = 10.804(2)$, $b = 19.003(4)$, $c = 5.112(1)$ Å

9.502(100), 5.196(31), 4.937(50), 4.490(28), 4.110(48), 3.978(28), 3.567(31), 2.926(95)

Type material is deposited in the collections of the Natural History Museum Vienna, Vienna, Austria, catalogue number N 8167

How to cite: Neuhold, F., Kolitsch, U., Bernhardt, H.-J. and Lengauer, C.L. (2011) Arsenohopeite, IMA 2010-069. CNMNC Newsletter No. 8, April 2011, page 291; *Mineralogical Magazine*, **75**, 289-294.

IMA No. **2010-070**

Vladimirivanovite

$Na_6Ca_2[Al_6Si_6O_{24}](SO_4,S_3,S_2,Cl)_2 \cdot H_2O$

Tultuy (or Tultui) deposit, Tultuy River, Irkutsk Region, Russia (51°40'68"N 103°26'24"E), and the Luadzhvardarite deposit, Luadzhvardara River, southwestern Pamirs, Republic of Tajikistan (37°5'24"N 71°45'E)

A.N. Sapozhnikov*, E.V. Kaneva, D.I. Cherepanov, L.F. Suvorova, V.I. Levitsky, L.A. Ivanova and L.Z. Reznitsky

*E-mail: sapozh@igc.irk.ru

Sodalite group

Orthorhombic: *Pnaa*; structure determined

$a = 9.066(3)$, $b = 12.851(3)$, $c = 38.558(10)$ Å

6.61(5), 6.43(11), 3.710(100), 2.623(30), 2.273(6), 2.141(14), 1.783(9), 1.606(6)

Type material is deposited in the collections of the Mineralogical Museum of Saint-Petersburg State University, Saint Petersburg, Russia, catalogue number 1/19366

How to cite: Sapozhnikov, A.N., Kaneva, E.V., Cherepanov, D.I., Suvorova, L.F., Levitsky, V.I., Ivanova, L.A. and Reznitsky, L.Z. (2011) Vladimirivanovite, IMA 2010-070. CNMNC Newsletter No. 8, April 2011, page 291; *Mineralogical Magazine*, **75**, 289-294.

IMA No. **2010-071**

Långbanshyttanite



Långban mine, Sweden

Nikita V. Chukanov*, Igor V. Pekov, Erik Jonsson, Natalia V. Zubkova, Yaroslav E. Filinchuk, Dmitriy I. Belakovsky and Dmitriy Yu. Pushcharovsky

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

New structure type

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

$a = 5.0528(10)$, $b = 5.7671(6)$, $c = 14.617(3)$ Å, $\alpha = 85.656(14)$, $\beta = 82.029(17)$, $\gamma = 88.728(13)^\circ$

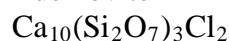
14.48(100), 7.21(43), 4.969(34), 4.798(28), 3.792(20), 3.571(54), 2.857(45), 2.800(34)

Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4032/1, and the Swedish Museum of Natural History, Stockholm, Sweden, catalogue number NRM 20100076

How to cite: Chukanov, N.V., Pekov, I.V., Jonsson, E., Zubkova, N.V., Filinchuk, Y.E., Belakovsky, D.I. and Pushcharovsky, D.Y. (2011) Långbanshyttanite, IMA 2010-071. CNMNC Newsletter No. 8, April 2011, page 292; *Mineralogical Magazine*, **75**, 289-294.

IMA No. **2010-072**

Rusinovite



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

E.V. Galuskin*, I.O. Galuskina, B. Lazic, T. Armbruster, A.E. Zadov, T. Krzykawski, K. Banasik, V.M. Gazeev and N.N. Pertsev

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

New structure type

Orthorhombic: $Cmcm$; structure determined

$a = 3.7617(2)$, $b = 16.9385(8)$, $c = 17.3196(9)$ Å

8.471(39), 3.209(33), 3.134(25), 3.082(100), 3.030(79), 2.946(43), 2.889(74), 2.537(74)

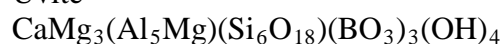
Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4022/1

How to cite: Galuskin, E.V., Galuskina, I.O., Lazic, B., Armbruster, T., Zadov, A.E., Krzykawski, T., Banasik, K., Gazeev, V.M. and Pertsev, N.N. (2011) Rusinovite, IMA 2010-072. CNMNC Newsletter No. 8, April 2011, page 291; *Mineralogical Magazine*, **75**, 289-294.

OLDER PROPOSALS

IMA No. **2000-030a**

Uvite



Brumado mine, Bahia, Brazil

Christine M. Clark, Frank C. Hawthorne* and Joel D. Grice

*E-mail: frank_hawthorne@umanitoba.ca

Tourmaline group

Trigonal: $R3m$; structure determined

$a = 15.954(1)$, $c = 7.214(1)$ Å

10.0(73), 3.39(58), 3.35(82), 3.15(64), 2.65(41), 2.62(100), 2.43(48), 1.536(52)

Type material is deposited in the Royal Ontario Museum (Toronto, Canada), specimen number M55101

How to cite: Clark, C.M., Hawthorne, F.C. and Grice, J.D. (2010) Uvite, IMA 2000-030a. CNMNC Newsletter 2, April 2010, page 377; *Mineralogical Magazine*, **74**, 375–377

IMA No. **2005-025a**

Afmite



Fumade, Castelnau-de-Brassac, Tarn, France (43°39'30"N, 2°29'58"E)

Anthony R. Kampf*, Georges Favreau, Ian M. Steele, Stuart J. Mills, George R. Rossman and Joseph J. Pluth

*Email: akampf@nhm.org

Related to planerite and kobokoboite

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

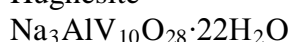
$a = 7.386(3)$, $b = 7.716(3)$, $c = 11.345(4)$ Å, $\alpha = 99.773(5)$, $\beta = 91.141(6)$, $\gamma = 115.58(5)^\circ$
11.130(100), 6.813(30), 5.499(62), 4.029(24), 3.532(65), 3.087(41), 2.918(43), 2.466(21)

Type material is deposited in the Natural History Museum of Los Angeles County, Los Angeles, catalogue number 55425

How to cite: Kampf, A.R., Favreau, G., Steele, I.M., Mills, S.J., Rossman, G.R. and Pluth, J.J. (2010) Afmite, IMA 2005-025a. CNMNC Newsletter 4, July 2010, page 797; *Mineralogical Magazine*, **74**, 797-800

IMA No. **2009-035a**

Hughesite



Sunday mine, Slick Rock district, San Miguel County, Colorado, USA

John Rakovan*, Mickey Gunter, Joe Marty, Barbara Nash, Gregory R. Schmidt and William Wise

*Email: rakovajf@muohio.edu

Decavanadate salt

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

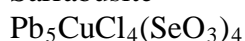
$a = 8.668(4)$, $b = 10.295(4)$, $c = 12.908(5)$ Å, $\alpha = 105.826(9)$, $\beta = 97.899(9)$, $\gamma = 103.385(9)^\circ$
12.130(100), 9.502(25), 8.984(28), 8.237(36), 7.615(9), 6.428(9), 3.352(6), 2.761(8)

Type material is deposited in the Smithsonian Institute, specimen number NMNH 174253

How to cite: Rakovan, J., Gunter, M., Marty, J., Nash, B., Schmidt, G.R. and Wise, W. (2011) Hughesite, IMA 2009-035a. CNMNC Newsletter No. 8, Month 2011, page X; *Mineralogical Magazine*, **XX**, XXX-XXX

IMA No. **1997-046a**

Sarrabusite



Baccu Locci Mine, 15 km north of Villaputzu, Sardinia, Italy

Italo Campostrini, Francesco Demartin*, Mauro Gemmi, Tatiana Gorelik and Carlo Maria Gramaccioli

*Email: francesco.demartin@unimi.it

New structure type salt

Monoclinic: $C2/c$; structure determined

$a = 24.917(3)$, $b = 5.506(1)$, $c = 14.242(2)$ Å, $\beta = 101.77(1)^\circ$
3.685(60), 3.314(20), 3.034(100), 2.728(38), 2.418(12), 2.106(15), 2.079(18), 2.043(28)

Type material is deposited in the Reference Collection of the Dipartimento di Chimica Strutturale e Stereochimica Inorganica, University of Milan, sample number 2010-02
How to cite: Campostrini, I., Demartin, F., Gemmi, M., Gorelik, T. and Gramaccioli, C.M. (2011) Sarrabusite, IMA 1997-046a. CNMNC Newsletter No. 8, Month 2011, page X; *Mineralogical Magazine*, **XX**, XXX-XXX

APPROVAL WITHDRAWN IN FEBRUARY 2010

IMA No. **2009-079**

About 25 km southwest from Monte Metocha, Xixano region, north-eastern Mozambique

Roberta Oberti

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

Amphibole group

Monoclinic: $C2/m$; structure determined

$a = 9.9591(4)$, $b = 17.9529(6)$, $c = 5.2867(2)$ Å, $\beta = 103.340(1)^\circ$

8.499(58), 3.394(81), 3.286(43), 3.166(60), 2.746(43), 2.707(100), 2.583(45), 2.537(70)

1.873(40)

Approval has been **withdrawn** for the above mineral IMA 2009-079. The previous Chairman of CNMNC, Dr Ernst Burke, has noted that the same mineral was approved as IMA 85-023. At the same time that the mineral was approved, voting on the proposed name was suspended because of an imminent report on the nomenclature of the amphibole group. Subsequently, Hogarth *et al.* (1987) published definitive data for the mineral without noting that it had been approved by IMA, describing it as "potassium fluor-magnesian-arfvedsonite". As a result of later enquiries, and in light of the currently accepted amphibole nomenclature, Hogarth (2006) published a note in which the mineral approval was reported and named it fluoro-potassic-magnesian-arfvedsonite. This is the correct name for the mineral, renamed with IMA approval.

Hogarth, D.D. (2006) Fluoro-potassic-magnesian-arfvedsonite, $\text{KNa}_2\text{Mg}_5\text{Si}_8\text{O}_{22}\text{F}_2$, from the Outaouais region, Quebec, Canada. *Canadian Mineralogist*, **44**, 289.

Hogarth, D.D., Chao, G.Y. and Townsend, M.G. (1987) Potassium- and fluorine-rich amphiboles from the Gatineau area, Quebec. *Canadian Mineralogist*, **25**, 739-753.

GENERAL NOMENCLATURE PROPOSALS

IMA 09-D: The early publication of new mineral names

The Commission has determined to change the way preliminary data for newly approved minerals will be reported. Five additional items on the new minerals will be released every month by the CNMNC as follows:

- the mineral name (**unless the authors explicitly ask to keep it confidential until a full description is published**);
- the full authorship;
- the email contact of the corresponding author;
- the place of preservation and the catalogue number of the type material;
- how to cite the new mineral.

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

This change will come into effect in March 2010.

IMA 09-E Discreditation of “orthobrochantite” (IMA 78–064) as the MDO1 polytype of brochantite

Orthobrochantite is discredited. It corresponds to the MDO1 polytype of brochantite.

IMA 10-A: Proposal to rename alumopharmacosiderite to pharmacoalumite and establish a formal group nomenclature system for mineral species structurally related to pharmacosiderite

Alumopharmacosiderite is renamed pharmacoalumite. A new nomenclature system for mineral species structurally related to pharmacosiderite is adopted. CNMNC Newsletter, April 2010, page 377; *Mineralogical Magazine*, **74**, 375–377

Nomenclature of the pyrochlore supergroup minerals

Re-examination and redefinition of pyrochlore end-members and potential new end-members and species has been undertaken, including a classification guide for naming future species.