

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

## NEWSLETTER 2

### New minerals and nomenclature modifications approved in 2010

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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

**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

### Proposals approved in March 2010

IMA No. **2009-092**

Mendeleevite-(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*3; structure determined

$a = 21.9148(4) \text{ \AA}$

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) Mendeleevite-(Ce), IMA 2009-092, CNMNC Newsletter, April 2010, page 375; *Mineralogical Magazine*, **74**, 375–377.

**IMA No. 2009-094**

Kirchhoffite

CsBSi<sub>2</sub>O<sub>6</sub>

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: *I*4<sub>1</sub>*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, April 2010, page 376; *Mineralogical Magazine*, **74**, 375–377.**IMA No. 2009-095**

Aluminocoquimbite

AlFe(SO<sub>4</sub>)<sub>3</sub>·9H<sub>2</sub>O

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

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

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Structurally related to coquimbite

Trigonal: *P*3̄1*c*; 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, April 2010, page 376; *Mineralogical Magazine*, **74**, 375–377.**IMA No. 2009-097**FeCe(MoO<sub>4</sub>)<sub>3</sub>·3H<sub>2</sub>O

Su Senargiu, Sarroch, Sardinia, Italy

Paolo Orlandi\* and Elena Bonaccorsi

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

New structure type

Trigonal: *R*3̄; 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, April 2010, page 376; *Mineralogical Magazine*, **74**, 375–377.**Proposals approved in April 2010****IMA No. 2010-001**

Fluorokinoshitalite

BaMg<sub>3</sub>Al<sub>2</sub>Si<sub>2</sub>O<sub>10</sub>F<sub>2</sub>

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: *C*2/*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, April 2010, page 376; *Mineralogical Magazine*, **74**, 375–377.**IMA No. 2010-002**

Fluorotetraferriphlogopite

KMg<sub>3</sub>Fe<sup>3+</sup>Si<sub>3</sub>O<sub>10</sub>F<sub>2</sub>

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: *C*2/*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, April 2010, page 377; *Mineralogical Magazine*, **74**, 375–377.

**IMA No. 2010-003**

Murchisite

$\text{Cr}_5\text{S}_6$

Murchison meteorite

Chi Ma

E-mail: chi@gps.caltech.edu

Structure of synthetic phase is known

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

$a = 5.982$ ,  $c = 11.509 \text{ \AA}$

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

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

**IMA No. 2010-004**

Klajite

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

Lejtakna (“inclined adit”) area, Reck, Lahca Hill, Mátra Mountains, North Hungary

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

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

Lindackerite group

Triclinic:  $P\bar{1}$

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

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 Ott

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, April 2010, page 377; *Mineralogical Magazine*, **74**, 375–377.

**IMA No. 2000-030a**

Uvite

$\text{CaMg}_3(\text{Al}_5\text{Mg})(\text{Si}_6\text{O}_{18})(\text{BO}_3)_3(\text{OH})_4$

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

$a = 15.954(1)$ ,  $c = 7.214(1) \text{ \AA}$

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, April 2010, page 377; *Mineralogical Magazine*, **74**, 375–377.

**Nomenclature proposals approved in April 2010**

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.

