

**NEW MINERALS APPROVED IN 2011
NOMENCLATURE MODIFICATIONS APPROVED IN 2011
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, 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

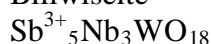
Citation details concern the fact that this information will be published in the *Mineralogical Magazine* on a routine basis, as well as being added month by month to the Commission's web site.

NO OTHER INFORMATION WILL BE RELEASED BY THE COMMISSION

2010 PROPOSALS

IMA No. 2010-053

Billwiseite



Nanga Parbat-Haramosh massif at Stak Nala, Pakistan (35°44'37"N 75°02'35"E)

Frank C. Hawthorne*, Fernando Cámara, Mark A. Cooper, Neil A. Ball, Petr Černý and Brendan M. Laurs

*E-mail: frank_hawthorne@umanitoba.ca

New structure type

Monoclinic: $C2/c$; structure determined

$a = 54.206(6)$, $b = 4.9163(5)$, $c = 5.5540(6)$ Å, $\beta = 90.396(2)^\circ$

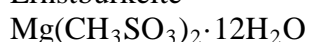
3.500(51), 3.154(90), 3.017(100), 2.462(23), 1.906(47), 1.828(30), 1.735(30), 1.662(53)

Type material is deposited in the collections of the Department of Natural History, Royal Ontario Museum, Toronto, Canada, catalogue number M55951

How to cite: Hawthorne, F.C., Cámara, F., Cooper, M.A., Ball, N.A., Černý, P. and Laurs, B.M. (2011) Billwiseite, IMA 2010-053. CNMNC Newsletter No. 9, August 2011, page 2537; *Mineralogical Magazine*, **75**, 2537-2542.

IMA No. 2010-059

Ernstburkeite



In an ice core from the Dome Fuji station, East Antarctica (77°19'S 39°42'E)

Toshimitsu Sakurai, Fatma Elif Genceli Güner* and Takeo Hondoh

*E-mail: f.e.genceli@tudelft.nl

Known synthetic compound

Trigonal: $R\bar{3}$

$a = 9.2715(1)$, $c = 21.1298(4)$ Å

7.04(42), 6.39(39), 4.64(100), 4.41(44), 3.87(89), 3.75(31), 3.74(35)

Type material is deposited at the Institute of Low Temperature Science at Hokkaido University, Sapporo, Japan, catalogue number 81616

How to cite: Sakurai, T., Genceli Güner, F.E.C. and Hondoh, T. (2011) Ernstburkeite, IMA 2010-059. CNMNC Newsletter 8, April 2011, page 292; *Mineralogical Magazine*, **75**, 289-294.

IMA No. **2010-065**

Atelisite-(Y)



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

Thomas Malcherek, Boriana Mihailova, Jochen Schlüter* and Tomas A. Husdal

*E-mail: jochen.schlueter@uni-hamburg.de

Known structure type

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

$a = 6.947(4)$, $c = 6.133(3)$ Å

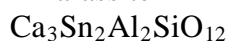
4.581(45), 3.465(100), 2.766(31), 2.596(58), 2.453(20), 2.161(26), 1.841(23), 1.780(52)

Type material is deposited in the collections of the Mineralogical Museum of the University of Hamburg, Hamburg, Germany, catalogue number NO-004

How to cite: Malcherek, T., Mihailova, B., Schlüter, J. and Husdal, T.A. (2011) Atelisite-(Y), IMA 2010-065. CNMNC Newsletter No. 9, August 2011, page 2538; *Mineralogical Magazine*, **75**, 2537-2542.

IMA No. **2010-073**

Irinarassite



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

I.O. Galuskina*, E.V. Galuskin, K. Prusik, V.M. Gazeev, N.N. Pertsev and P.

Dzierżanowski

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

Garnet group

Cubic: $Ia\bar{3}d$

$a = 12.50(3)$ Å

4.419(65), 3.125(60), 2.795(47), 2.552(88), 1.976(27), 1.670(100), 1.563(22), 1.333(26)

Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4026/1

How to cite: Galuskina, I.O., Galuskin, E.V., Prusik, K., Gazeev, V.M., Pertsev, N.N. and Dzierżanowski, P. (2011) Irinarassite, IMA 2010-073. CNMNC Newsletter 8, April 2011, page 292; *Mineralogical Magazine*, **75**, 289-294.

IMA No. **2010-074**

Wassonite

TiS

Yamato 691 enstatite chondrite

Keiko Nakamura-Messenger*, Simon. J. Clemett, Alan Rubin, Byeon-Gak Choi, Lindsay P. Keller, Shouliang Zhang, Zia Rahman and Katsunari Oikawa

*E-mail: keiko.nakamura-1@nasa.gov

Known structure type

Rhombohedral: $R\bar{3}m$

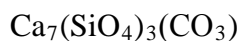
$a = 3.42 \pm 0.07$, $c = 26.50 \pm 0.53$ Å

8.833(10), 2.944(5), 2.944(36), 2.891(4), 2.704(10), 2.586 (45), 2.333(28), 2.208(100)

Type material is deposited in the collections of the Astromaterials Curation Facility, Antarctic Meteorite Curatorial Laboratory, National Aeronautics and Space Administration Johnson Space Center, Houston, Houston Texas, USA, registered number Y 691,79-1
How to cite: Nakamura-Messenger, K., Clemett, S.J., Rubin, A., Choi, B.-G., Keller, L.P., Zhang, S., Rahman, Z. and Oikawa, K. (2011) Wassonite, IMA 2010-074. CNMNC Newsletter 8, April 2011, page 293; *Mineralogical Magazine*, **75**, 289-294.

IMA No. 2010-075

Galuskinite



Birkhin gabbro massif, Eastern Siberia, Russia (52.7°N 106.5°E)

B. Lazic, T. Armbruster*, V.B. Savelyeva, A.E. Zadov, N.N. Pertsev and P. Dzierżanowski

*E-mail: Ambruster@krist.unibe.ch

New structure type

Monoclinic: $P2_1/c$; structure determined

$a = 18.7872(5)$, $b = 6.7244(2)$, $c = 10.4673(2)$ Å, $\beta = 90.788(1)^\circ$

18.785(56), 2.7338(98), 2.7141(78), 2.7032(100), 2.7030(85), 2.6706(100), 2.6166(82), 1.9251(53)

Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, catalogue number 4050/1 and in the collections of the Natural History Museum, Bern, catalogue number NMBE-40811

How to cite: Lazic, B., Armbruster, T., Savelyeva, V.B., Zadov, A.E., Pertsev, N.N. and Dzierżanowski, P. (2011) Galuskinite, IMA 2010-075. CNMNC Newsletter 8, April 2011, page 293; *Mineralogical Magazine*, **75**, 289-294.

IMA No. 2010-076

Heisenbergite



Menzenschwand uranium deposit, Southern Black Forest, Baden-Württemberg, Germany

Kurt Walenta and Thomas Theye*

*E-mail: thomas.theye@imi.uni-stuttgart.de

Unknown structure type

Orthorhombic: $P2_12_12_1$, $Pna2_1$ or $Pnma$

$a = 13.10(1)$, $b = 13.76(1)$, $c = 14.50(1)$ Å

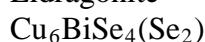
7.92(10), 7.25(9), 5.96(4), 4.02(3), 3.57(7), 3.27(9), 2.95(3), 1.992(4)

Type material is deposited in the collections of the Staatliches Museum für Naturkunde Stuttgart, Germany, under catalogue name heisenbergite

How to cite: Walenta, K. and Theye, T. (2011) Heisenbergite, IMA 2010-076. CNMNC Newsletter No. 9, August 2011, page 2538; *Mineralogical Magazine*, **75**, 2537-2542.

IMA No. 2010-077

Eldragónite



El Dragón mine, Quijarro Province, Department of Potosi, Bolivia (19°49.15'S 65°55'W)

Mark A. Cooper, Yves Moëlo, Werner H. Paar*, Johann G. Raith, Ralph Rowe, Andrew C. Roberts, J. Stirling and Chris J. Stanley

*E-mail: paarwerner@aon.at

New structure type

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

$a = 4.0341(4)$, $b = 27.056(3)$, $c = 9.5559(9)$ Å

6.547(58), 3.579(100), 3.180(77), 3.165(56), 3.075(84), 2.011(53), 1.920(76), 1.846(52)
Type material is deposited in the collections of the Canadian Museum of Nature, Ottawa, Canada (holotype; crystal used for investigation of the crystal structure), registration number CMNMC 86154, and in the collections of the Department of Materials Engineering and Physics, University of Salzburg, Austria (cotypes), registration numbers M 17.001, M 17.002 and M 17.003

How to cite: Cooper, M.A., Moëlo, Y., Paar, W.H., Raith, J.G., Rowe, R., Roberts, A.C., Stirling, J. and Stanley, C.J. (2011) Eldragónite, IMA 2010-077. CNMNC Newsletter 8, April 2011, page 293; *Mineralogical Magazine*, **75**, 289-294.

IMA No. **2010-078**

Jacutingaite

Pt₂HgSe₃

Cauê iron-ore deposit, Itabira district, Minas Gerais, Brazil

Anna Vymazalová*, František Laufek, Milan Drábek, Alexandre Raphael Cabral, Jakub Haloda, Tamara Sidorinová, Bernd Lehmann, Henry Francisco Galbiatti and Jan Drahokoupil

*E-mail: anna.vymazalova@geology.cz

Known structure type

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

$a = 7.3477(2)$, $c = 5.2955(1)$ Å

5.292(100), 2.727(16), 2.444(10), 2.035(18), 1.765(37), 1.324(11), 1.045(11)

Type material is deposited in the collections of GeoMuseum "Geosammlung" at the Technical University of Clausthal, Adolph Roemer Strasse 2A, D-38678 Clausthal-Zellerfeld, Germany, catalogue number 26580

How to cite: Vymazalová, A., Laufek, F., Drábek, M., Cabral, A.R., Haloda, J., Sidorinová, T., Lehmann, B., Galbiatti, H.F. and Drahokoupil, J. (2011) Jacutingaite, IMA 2010-078. CNMNC Newsletter 8, April 2011, page 293; *Mineralogical Magazine*, **75**, 289-294.

IMA No. **2010-079**

Boscardinite

Ag_{0.3}Tl_{1.2}Pb₃(Sb_{7.8}As_{1.7})S₁₈

Sant'Olga tunnel, Monte Arsiccio mine, Stazzema, Apuan Alps, Tuscany, Italy (43°58' 10°17'E)

Paolo Orlandi*, Cristian Biagioni, Elena Bonaccorsi, Yves Moëlo and Werner H. Paar

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

Tl-Sb analogue (homeotype) of baumhauerite

Triclinic: $P1$; structure determined

$a = 8.0929(4)$, $b = 8.7610(5)$, $c = 22.4971(11)$ Å, $\alpha = 90.868(4)$, $\beta = 97.247(4)$, $\gamma = 90.793(4)^\circ$

3.704(m), 3.542(s), 2.832(ms), 2.723(m), 2.337(m)

Type material is deposited in the collections of the Museo di Storia Naturale e del Territorio, Università di Pisa, Calci (PI), Italy, catalogue number 19349

How to cite: Orlandi, P., Biagioni, C., Bonaccorsi, E., Moëlo, Y. and Paar, W.H. (2011) Boscardinite, IMA 2010-079. CNMNC Newsletter No. 9, August 2011, page 2538; *Mineralogical Magazine*, **75**, 2537-2542.

IMA No. **2010-080**

Ferrotchilinite

6FeS·5Fe(OH)₂

No. 1 Shaft, Oktyabr'sky mine, Talnakh, Norilsk area, Krasnoyarsk Krai, Siberia, Russia
Igor V. Pekov*, Evgeny V. Sereda, Yury S. Polekhovskiy, Sergey N. Britvin, Nikita V. Chukanov, Vasily O. Yapaskurt and Igor A. Bryzgalov

*E-mail: igorpekov@mail.ru

Fe(II) analogue of tochilinite

Monoclinic: $C2/m$, Cm or $C2$

$a = 5.463(5)$, $b = 15.865(17)$, $c = 10.825(12)$ Å, $\beta = 93.7(1)^\circ$

10.83(13), 5.392(100), 3.281(7), 2.777(7), 2.696 (12), 2.524(12), 2.152(8), 1.837(11)

Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4058/1

How to cite: Pekov, I.V., Sereda, E.V., Polekhovskiy, Y.S., Britvin, S.N., Chukanov, N.V., Yapaskurt, V.O. and Bryzgalov, I.A. (2011) Ferrotochilinite, IMA 2010-080. CNMNC Newsletter 8, April 2011, page 294; *Mineralogical Magazine*, **75**, 289-294.

IMA No. **2010-081**

Chukhrovite-(Ca)

$Ca_{4.5}Al_2(SO_4)F_{13} \cdot 12H_2O$

Val Cavallizza Pb-Zn(Ag) mine, SW of Cavagnano, Cuasso al Monte, Varese province, Lombardy, Italy (45°54'01"N 8°51'41"E)

Pietro Vignola*, Frédéric Hatert, Olaf Medenbach, Danilo Bersani, Valeria Diella, Paolo Gentile and Andrea Risplendente

*E-mail: pietro.vignola@idpa.cnr.it

Chukhrovite group

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

$a = 16.749(1)$ Å

9.665(100), 5.921(31), 5.053(16), 4.190(10), 3.226(15), 2.556(10), 2.182(12), 1.915(17)

Type material is deposited in the collections of the Museo Civico di Storia Naturale, Milano, Italy, catalogue number M37901, and the Laboratory of Mineralogy, University of Liège, Belgium, catalogue number 20383

How to cite: Vignola, P., Hatert, F., Medenbach, O., Bersani, D., Diella, V., Gentile, P. and Risplendente, A. (2011) Chukhrovite-(Ca), IMA 2010-081. CNMNC Newsletter 8, April 2011, page 294; *Mineralogical Magazine*, **75**, 289-294.

IMA No. **2010-082**

Angarfite

$NaFe^{3+}_5(PO_4)_4(OH)_4 \cdot 4H_2O$

Angarf-South pegmatite, Tazenakht, Ouarzazate Province, Souss-Massa-Draâ Region, Morocco (43°39'30"N 2°29'58"E)

Anthony R. Kampf*, Stuart J. Mills, Robert M. Housley and Georges Favreau

*E-mail: akampf@nhm.org

New structure type

Orthorhombic: $C222_1$; structure determined

$a = 12.7997(3)$, $b = 17.9081(4)$, $c = 8.2112(6)$ Å

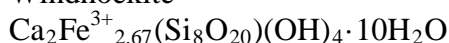
10.463(43), 9.016(100), 6.459(42), 3.731(27), 3.355(51), 3.026(29), 1.926(33), 1.463(36)

Type material is deposited in the collections of the Natural History Museum of Los Angeles County, Los Angeles, USA, catalogue numbers 63428 and 63429

How to cite: Kampf, A.R., Mills, S.J., Housley, R.M. and Favreau, G. (2011) Angarfite, IMA 2010-082. CNMNC Newsletter 8, April 2011, page 294; *Mineralogical Magazine*, **75**, 289-294.

IMA No. **2010-083**

Windhoekite



Ariskop Quarry, Aris, near Windhoek, Windhoek district, Khomas Region, Namibia

Nikita V. Chukanov*, Sergey N. Britvin, Günter Bläß, Dmitriy I. Belakovsky and

Konstantin V. Van

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

Palygorskite group

Monoclinic: $C2/m$; structure determined

$a = 14.319(5)$, $b = 17.825(4)$, $c = 5.242(1)$ Å, $\beta = 103.5(2)^\circ$

11.04(100), 4.432(10), 4.134(6), 3.749(4), 3.486(11), 2.636(8), 2.550(4), 2.507(6)

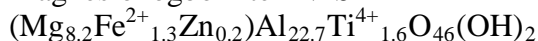
Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4070/1

How to cite: Chukanov, N.V., Britvin, S.N., Bläß, G., Belakovsky, D.I. and Van, K.V.

(2011) Windhoekite, IMA 2010-083. CNMNC Newsletter No. 9, August 2011, page 2538; *Mineralogical Magazine*, **75**, 2537-2542.

IMA No. **2010-084**

Magnesiohögbomite-2N4S



Koyubi Ridge, Sør Rondane Mountains, East Antarctica (71°54.381'S 24°13.197'E)

Toshiaki Shimura*, Junji Akai, Biljana Lazic, Thomas Armbruster, Masaaki Shimizu,

Atsushi Kamei, Kazuhiro Tsukada, Masaaki Owada and Masaki Yuhara

*E-mail: smr@gs.niigata-u.ac.jp

Högbomite group

Hexagonal: $P6_3mc$; structure determined

$a = 5.7105(1)$, $c = 27.6760(4)$ Å,

2.856(37), 2.612(39), 2.428(100), 2.416(39), 2.097(30), 2.012(50), 1.549(35), 1.428(57)

Type material is deposited in the collections of the National Museum of Nature and Science, Tokyo, Japan, registration number NSM-MF15438

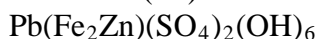
How to cite: Shimura, T., Akai, J., Lazic, B., Armbruster, T., Shimizu, M., Kamei, A.,

Tsukada, K., Owada, M. and Yuhara, M. (2011) Magnesiohögbomite-2N4S, IMA 2010-084.

CNMNC Newsletter No. 9, August 2011, page 2539; *Mineralogical Magazine*, **75**, 2537-2542.

IMA No. **2010-086**

Beaverite-(Zn)



Mikawa mine, Niigata Prefecture, Japan (37.47°N E 139.27°E)

Eriko Sato*, Izumi Nakai, Yasuko Terada, Yasuyuki Tsutsumi, Kazumi Yokoyama, Ritsuro

Miyawaki and Satoshi Matsubara

*E-mail: j1306650@ed.kagu.tus.ac.jp

Alunite supergroup

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

$a = 7.3078(7)$, $c = 17.066(1)$ Å

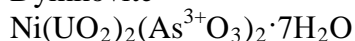
5.88(30), 5.74(100), 3.06(22), 3.00(94), 2.87(27), 2.28(39), 1.92(22), 1.50(21)

Type material is deposited in the collections of the National Science Museum, Tokyo, Japan, registered number NSM-M28910

How to cite: Sato, E., Nakai, I., Terada, Y., Tsutsumi, Y., Yokoyama, K., Miyawaki and R., Matsubara, S. (2011) Beaverite-(Zn), IMA 2010-086. CNMNC Newsletter No. 9, August 2011, page 2539; *Mineralogical Magazine*, **75**, 2537-2542.

IMA No. 2010-087

Dymkovite



Belorechenskoye deposit, Adygea Republic, Northern Caucasus, Russia

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

*E-mail: igorpekov@mail.ru

Structurally related to seelite

Monoclinic: $C2/m$; structure determined

$a = 17.99(3)$, $b = 7.033(7)$, $c = 6.633(9)$ Å, $\beta = 99.62(11)^\circ$

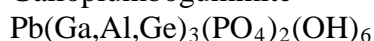
8.93(100), 4.883(17), 4.463(34), 3.984(16), 3.523(23), 3.276(21), 3.008(26), 2.846(27)

Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registered number 4071/1

How to cite: Pekov, I.V., Levitskiy, V.V., Krivovichev, S.V., Zolotarev, A.A., Chukanov, N.V., Bryzgalov, I.A. and Zadov, A.E. (2011) Dymkovite, IMA 2010-087. CNMNC Newsletter No. 9, August 2011, page 2539; *Mineralogical Magazine*, **75**, 2537-2542.

IMA No. 2010-088

Galloplumbogummite



Second oxidation zone, Tsumeb ore deposit, Tsumeb, Namibia

Jochen Schlüter* and Thomas Malcherek

*E-mail: jochen.schlueter@uni-hamburg.de

Alunite supergroup

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

$a = 7.083(5)$, $c = 16.742(3)$ Å

5.730(100), 3.528(24), 2.983(78), 2.466(12), 2.288(7), 2.225(19), 1.912(17), 1.768(15)

Type material is deposited in the collections of the Mineralogical Museum of the University of Hamburg, Hamburg, Germany, catalogue number TS 315

How to cite: Schlüter, J. and Malcherek, T. (2011) Galloplumbogummite, IMA 2010-088. CNMNC Newsletter No. 9, August 2011, page 2539; *Mineralogical Magazine*, **75**, 2537-2542.

IMA No. 2010-089

Perrierite-(La)



Mendig, Laacher See area, Eifel Mountains, Rhineland-Palatinate (Rheinland-Pfalz), Germany

Nikita V. Chukanov*, Günter Blaß, Igor V. Pekov, Dmitriy I. Belakovsky, Konstantin V. Van, Ramiza K. Rastsvetaeva and Sergey M. Aksenov

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

Isostructural with perrierite-(Ce)

Monoclinic: $P2_1/a$; structure determined

$a = 13.668(1)$, $b = 5.6601(6)$, $c = 11.743(1)$ Å, $\beta = 113.64(1)^\circ$

5.19(40), 3.53(40), 2.96(100), 2.80(50), 2.14(50), 1.947(50), 1.657(40)

Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4059/1
How to cite: Chukanov, N.V., Blaß, G., Pekov, I.V., Belakovsky, D.I., Van, K.V., Rastsvetaeva, R.K. and Aksenov, S.M. (2011) Perrierite-(La), IMA 2010-089. CNMNC Newsletter No. 9, August 2011, page 2539; *Mineralogical Magazine*, **75**, 2537-2542.

IMA No. 2010-090

Erikapohlite



Level 44, Tsumeb deposit, Tsumeb, Namibia

Jochen Schlueter*, Thomas Malcherek and Georg Gebhard

*E-mail: jochen.schlueter@uni-hamburg.de

Ca-dominant analogue of keyite

Monoclinic: $C2/c$

$a = 12.6562(8)$, $b = 12.727(1)$, $c = 6.9146(4)$ Å, $\beta = 113.923(5)^\circ$

3.304(49), 3.160(32), 2.892(100), 2.788(40), 2.764(14), 1.728(10), 1.650(10), 1.485(10)

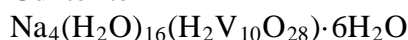
Type material is deposited in the collections of the Mineralogical Museum of the University of Hamburg, Hamburg, Germany, catalogue number TS 117c

How to cite: Schlueter, J., Malcherek, T. and Georg Gebhard, G. (2011) Erikapohlite, IMA 2010-090. CNMNC Newsletter No. 9, August 2011, page 2540; *Mineralogical Magazine*, **75**, 2537-2542.

2011 PROPOSALS

IMA No. 2011-001

Gunterite



West Sunday mine, Slick Rock District, San Miguel County, Colorado, USA

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

*E-mail: jmhughes@uvm.edu

New structure type

Monoclinic: $C2/m$; structure determined

$a = 19.848(2)$, $b = 10.1889(11)$, $c = 13.1184(15)$ Å, $\beta = 130.187(9)^\circ$

10.01(100), 8.44(72), 8.09(46), 2.997(29), 2.795(21), 2.144(18), 2.024(15), 1.971(18)

Type material is deposited in the collections of the Natural History Museum of Los Angeles County, Los Angeles, CA 90007, USA, catalogue numbers 63506 and 63507

How to cite: Kampf, A.R., Hughes, J.M., Marty, J. and Nash, B. (2011) Gunterite, IMA 2011-001. CNMNC Newsletter No. 9, August 2011, page 2540; *Mineralogical Magazine*, **75**, 2537-2542.

IMA No. 2011-002

Whiteite-(CaMnMn)



Hagendorf Süd granitic pegmatite, Germany

Victor N. Yakovenchuk*, Erich Keck, Sergey V. Krivovichev, Yakov A. Pakhomovsky, Ekaterina A. Selivanova, Julia A. Korchak, Anastasiya P. Chernyatieva and Gregory Yu.

Ivanyuk

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

Whiteite group

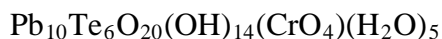
Monoclinic: $P2/a$; structure determined

$a = 15.02(2)$, $b = 6.95(1)$, $c = 10.13(3)$ Å, $\beta = 111.6(1)^\circ$

9.443(65), 5.596(25), 4.929(80), 4.719(47), 3.494(46), 2.796(100), 1.979(24), 1.951(24)
Type material is deposited in the collections of the Mineralogical Museum of St Petersburg State University, Russia, catalogue number 1/19470
How to cite: Yakovenchuk, V.N., Keck, E., Krivovichev, S.V., Pakhomovsky, Y.A., Selivanova, E.A., Korchak, J.A., Chernyatjeva, A.P. and Ivanyuk, G.Y. (2011) Whiteite-(CaMnMn), IMA 2011-002. CNMNC Newsletter No. 9, August 2011, page 2540; *Mineralogical Magazine*, **75**, 2537-2542.

IMA No. 2011-003

Chromschieffelinite



Bird Nest drift, Otto Mountain, San Bernadino County, California, USA (35°16.606'N 116°05.956'W)

Anthony R. Kampf*, Stuart J. Mills, Robert M. Housley and Mike S. Rumsey

*E-mail: akampf@nhm.org

Chromate analogue of schieffelinite

Orthorhombic: $C222_1$; structure determined

$a = 9.6646(3)$, $b = 19.4962(8)$, $c = 10.5101(7)$ Å

9.814(100), 3.575(41), 3.347(44), 3.262(53), 3.052(45), 2.946(55), 2.040(33), 1.650(33)

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 63511

How to cite: Anthony R. Kampf, A.R., Mills, S.J., Housley, R.M. and Rumsey, M.S.

(2011) Chromschieffelinite, IMA 2011-003. CNMNC Newsletter No. 9, August 2011, page 2540; *Mineralogical Magazine*, **75**, 2537-2542.

IMA No. 2011-004

Tungsten

W

Bol'shaya Pol'ya River, Prepolar Urals, Russia (64°24'11"N 69°29'13"E) and in quartz vein 91, Dodo mine, Ust-Puiva, Tyumenskaya Oblast', Russia (64°35'N 59°43'E)

Stuart J. Mills*, Pavel M. Kartashov, Anthony R. Kampf, Mike S. Rumsey, Chi Ma, John Spratt, George R. Rossman and Margarita I. Novgorodova

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

Native element

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

$a = 3.1648(4)$ Å

2.242(100), 1.584(25), 1.293(48), 1.119(16), 1.001(23), 0.914(6), 0.846(24)

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 63271 (Dodo) and 63272 (Bol'shaya Pol'ya River), and the Mineralogy Department, Natural History Museum, London, UK, catalogue number BM2010,122

How to cite: Mills, S.J., Kartashov, P.M., Kampf, A.R., Rumsey, M.S., Ma, C., Spratt, J., Rossman, G.R. and Novgorodova, M.I. (2011) Tungsten, IMA 2011-004. CNMNC Newsletter No. 9, August 2011, page 2541; *Mineralogical Magazine*, **75**, 2537-2542.

IMA No. 2011-005

Cupromolybdate



Yadovitaya fumaroles (second scoria cone), Tolbachik volcano, Kamchatka peninsula, Kamchatka Oblast', Far-Eastern Region, Russia (55°41'N, 160°14'E)
Michael E. Zelenski, Natalia V. Zubkova, Igor V. Pekov*, Yury S. Polekhovsky and Dmitry Yu. Pushcharovsky

*E-mail: igorpekov@mail.ru

Molybdate-dominant analogue of vergasovaite

Orthorhombic: *Pnma*; structure determined

$a = 7.6638(1)$, $b = 6.8670(1)$, $c = 14.5554(2)$ Å

7.312(67), 3.701(38), 3.518(55), 3.436(100), 3.301(99), 3.065(79), 2.556(62), 2.506(66)

Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4072/1

How to cite: Zelenski, M.E., Zubkova, N.V., Igor V. Pekov, I.V., Polekhovsky, Y.S. and Pushcharovsky, D.Y. (2011) Cupromolybdate, IMA 2011-005. CNMNC Newsletter No. 9, August 2011, page 2541; *Mineralogical Magazine*, **75**, 2537-2542.

IMA No. 2011-006

Adranosite-(Fe)

$(\text{NH}_4)_4\text{NaFe}^{3+}_2(\text{SO}_4)_4\text{Cl}(\text{OH})_2$

La Fossa crater, Vulcano, Aeolian Islands, Italy

Francesco Demartin*, Anna Garavelli, Italo Campostrini, Carlo Maria Gramaccioli, Uwe Kolitsch, Donatella Mitolo and Daniela Pinto

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

Fe³⁺ analogue of adranosite

Tetragonal: *I4₁/acd*; structure determined

$a = 18.261(2)$, $c = 11.562(1)$ Å

9.134(100), 6.462(36), 4.569(83), 3.232(29), 3.047(79), 2.891(11), 2.156(7), 1.697(7)

Type material is deposited in the collections of the Dipartimento di Chimica Strutturale e Stereochimica Inorganica, Università degli Studi di Milano, sample number 2010-02) and the C.L. Garavelli Museum, Dipartimento Geomineralogico Università di Bari, Bari, Italy, catalogue number 10/nm-V28

How to cite: Demartin, F., Garavelli, A., Campostrini, I., Gramaccioli, C.M., Kolitsch, U., Mitolo, D. and Pinto, D. (2011) Adranosite-(Fe), IMA 2011-006. CNMNC Newsletter No. 9, August 2011, page 2541; *Mineralogical Magazine*, **75**, 2537-2542.

IMA No. 2011-007

Kazanskyite

$\text{BaNa}_3\text{Ti}_2\text{Nb}(\text{Si}_2\text{O}_7)_2\text{O}_2(\text{OH})_2(\text{H}_2\text{O})_4$

Kirovskii mine, Mount Kukisvumchorr, Khibiny alkaline massif, Kola Peninsula, Russia

Fernando Cámara*, Elena Sokolova and Frank C. Hawthorne

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

New structure type

Triclinic: *P1̄*; structure determined

$a = 5.4260(9)$, $b = 7.135(1)$, $c = 25.514(4)$ Å, $\alpha = 98.172(4)$, $\beta = 90.916(4)$, $\gamma = 89.964(3)^\circ$

4.288(44), 3.938(70), 3.127(39), 2.955(32), 2.895(33), 2.813(100), 2.149(82), 2.128(44)

Type material is deposited in the collections of the Fersman Mineralogical Museum, Russian Academy of Sciences, Moscow, Russia, catalogue number 4103/1

How to cite: Cámara, F., Sokolova, E. and Hawthorne, F.C. (2011) Kazanskyite, IMA 2011-007. CNMNC Newsletter No. 10, October 2011, page 2601; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-008

Manganoquadratite

AgMnAsS_3

Uchucchacua polymetallic deposit, Oyon district, Catajambo, Lima Department, Peru

Paola Bonazzi, Luca Bindi* and Frank N. Keutsch

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

Mn-dominant analogue of quadratite

Tetragonal: $P4_322$; structure determined

$a = 5.4496(5)$, $c = 32.949(1)$ Å

3.154(77), 2.746(52), 2.725(100), 2.716(13), 1.934(53), 1.927(27), 1.644(28), 1.577(21)

Type material is deposited in the collections of the Museo di Storia Naturale, Sezione di Mineralogia e Litologia, Università di Firenze, Firenze, Italy, catalogue number 3108/I

How to cite: Bonazzi, P., Bindi, L. and Keutsch, F.N. (2011) Manganoquadratite, IMA 2011-008. CNMNC Newsletter No. 10, October 2011, page 2602; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-009

Menchettiite

$\text{Pb}_5\text{Mn}_3\text{Ag}_2\text{Sb}_6\text{As}_4\text{S}_{24}$

Uchucchacua polymetallic deposit, Oyon district, Catajambo, Lima Department, Peru

Luca Bindi*, Paola Bonazzi and Frank N. Keutsch

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

Member of the ramdohrite-lillianite series

Monoclinic: $P2_1/n$; structure determined

$a = 19.233(2)$, $b = 12.633(3)$, $c = 8.476(2)$ Å, $\beta = 90.08(2)^\circ$

3.407(39), 3.403(39), 3.285(100), 2.859(26), 2.854(49), 2.852(47), 2.707(24), 2.119(33)

Type material is deposited in the collections of the Museo di Storia Naturale, Sezione di Mineralogia e Litologia, Università di Firenze, Firenze, Italy, catalogue number 3109/I

How to cite: Bindi, L., Bonazzi, P. and Keutsch, F.N. (2011) Menchettiite, IMA 2011-009. CNMNC Newsletter No. 10, October 2011, page 2602; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-010

Lucabindiite

$(\text{K},\text{NH}_4)\text{As}_4\text{O}_6(\text{Cl},\text{Br})$

La Fossa crater, Vulcano, Aeolian archipelago, Italy

Anna Garavelli*, Donatella Mitolo, Daniela Pinto and Filippo Vurro

*E-mail: a.garavelli@geomun.uniba.it

Natural analogue of known synthetic phases

Hexagonal: $P6/mmm$; structure determined

$a = 5.2386(7)$, $c = 9.014(2)$ Å

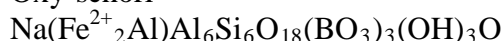
4.537(30), 4.507(52), 3.197(100), 2.619(67), 2.265(19), 1.974(28), 1.603(20), 1.485(21)

Type material is deposited in the collections of the Museum "C.L. Garavelli" in the Dipartimento Geomineralogico, Università degli Studi di Bari "Aldo Moro", Italy, sample number 11/nm-V28

How to cite: Garavelli, A., Mitolo, D., Pinto, D. and Vurro, F. (2011) Lucabindiite, IMA 2011-010. CNMNC Newsletter No. 10, October 2011, page 2602; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-011

Oxy-schorl



Přibyslavice, near Kutná Hora, Central Bohemia Region, Czech Republic, and the Marianna adit, Zlatá Idka, Košice, Slovakia

Peter Bačík*, Jan Cempírek, Pavel Uher, Daniel Ozdín, Jan Filip, Milan Novák, Radek Škoda, Karel Breiter, Mariana Klementová and Rudolf Ďud'a

*E-mail: bacikp@fns.uniba.sk

Tourmaline group

Trigonal: $R3m$; structure determined

$a = 15.9853(12)$, $c = 7.1538(6)$ Å

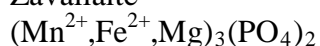
6.364(74), 4.978(28), 4.225(48), 4.000(52), 3.466(100), 2.955(79), 2.583(65), 2.042(31)

Type material is deposited in the collections of the Department of Mineralogy and Petrography, Moravian Museum, Brno, Czech Republic, specimen numbers B10521 and B10522, the East-Slovak Museum, Natural History Division, Košice, Slovakia, specimen number G-12760, and the Department of Mineralogy and Petrology, Faculty of Natural Sciences, Comenius University, Bratislava, Slovakia, specimen number 7279

How to cite: Bačík, P., Cempírek, J., Uher, P., Ozdín, D., Filip, J., Novák, M., Škoda, R., Breiter, K., Klementová, M. and Ďud'a, R. (2011) Oxy-schorl, IMA 2011-011. CNMNC Newsletter No. 10, October 2011, page 2602; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-012

Zavalíaite



La Empleada, a granitic pegmatite in the Pringles Department, San Luis Province, Argentina (32°53'38"S 65°55'50"W)

Frédéric Hatert*, Encarnación Roda-Robles, Philippe de Parseval and Johan Wouters

*E-mail: fhatert@ulg.ac.be

Sarcopsid group

Monoclinic: $P2_1/c$; structure determined

$a = 6.088(1)$, $b = 4.814(1)$, $c = 10.484(2)$ Å, $\beta = 89.42(3)^\circ$

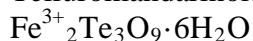
6.75(58), 3.54(100), 2.964(38), 2.816(81), 2.537(20), 1.894(6), 1.848(20), 1.652(27)

Type material is deposited in the collections of the Laboratory of Mineralogy, University of Liège, catalogue number 20384

How to cite: Hatert, F., Roda-Robles, E., de Parseval, P. and Wouters, J. (2011) Zavalíaite, IMA 2011-012. CNMNC Newsletter No. 10, October 2011, page 2603; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-013

Telluromandarinoite



Wendy open pit, Tambo mine, El Indio-Tambo mining property, Coquimbo Province, Chile
Malcolm E. Back*, Joel D. Grice, B. Darko Sturman, Mark A. Cooper, Robert A. Gault and Phillip C. Walford

*E-mail: malcolmb@rom.on.ca

Te analogue of mandarinoite

Monoclinic: $P2_1/c$; structure determined

$a = 16.9356(5)$, $b = 7.8955(3)$, $c = 10.1678(3)$ Å, $\beta = 98.006(1)^\circ$

8.431(44), 7.153(100), 5.034(11), 3.575(41), 3.463(21), 2.996(34), 2.826(19), 2.624(11)

Type material is deposited in the collections of the Royal Ontario Museum, Toronto, Ontario, Canada, catalogue number M56017

How to cite: Back, M.E., Grice, J.D., Darko Sturman, B., Cooper, M.A., Gault, R.A. and Walford, P.C. (2011) Telluromandarinoite, IMA 2011-013. CNMNC Newsletter No. 10, October 2011, page 2603; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-014

Anorpiment

As₂S₃

Palomo mine, Castrovirreyna Province, Huancavelica Department, Peru

Anthony R. Kampf*, Robert T. Downs, Robert M. Housley, Robert A. Jenkins, Jaroslav Hyršl and Gerald V. Gibbs

*E-mail: akampf@nhm.org

Dimorph of orpiment

Triclinic: *P1*; structure determined

$a = 5.7577(2)$, $b = 8.7169(3)$, $c = 10.2682(7)$ Å, $\alpha = 78.152(7)$, $\beta = 75.817(7)$, $\gamma = 89.861(6)^\circ$
4.867(97), 4.519(77), 3.702(46), 3.609(82), 2.880(75), 2.552(100), 2.469(96), 1.817(42)

Type material is deposited in the collections of the Natural History Museum of Los Angeles County, catalogue numbers 63514 and 63544n and the Mineral Museum of the University of Arizona, catalogue number 19326

How to cite: Kampf, A.R., Downs, R.T., Housley, R.M., Jenkins, R.A., Hyršl, J. and Gibbs, G.V. (2011) Anorpiment, IMA 2011-014. CNMNC Newsletter No. 10, October 2011, page 2603; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-015

Karenwebberite

Na(Fe²⁺, Mn²⁺)PO₄

Malpensata dike, Piona pegmatite swarm, Colico, Lecco Province, Lombardy, Italy
(46°07'20"N 9°19'33"E)

Pietro Vignola, Frédéric Hatert*, André-Mathieu Fransolet, Olaf Medenbach, Valeria Diella and Sergio Ando'

*E-mail: fhatert@ulg.ac.be

Triphylite group

Orthorhombic: *Pbnm*; structure determined

$a = 4.882(1)$, $b = 10.387(2)$, $c = 6.091(1)$ Å
4.867(97), 4.519(77), 3.702(46), 3.609(82), 2.880(75), 2.552(100), 2.469(96), 1.817(42)

Type material is deposited in the collections of the Laboratory of Mineralogy, University of Liège, Belgium, catalogue number 20385

How to cite: Vignola, P., Hatert, F., Fransolet, A.-M., Medenbach, O., Diella, V. and Ando', S. (2011) Karenwebberite, IMA 2011-015. CNMNC Newsletter No. 10, October 2011, page 2603; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-016

Shulamitite

Ca₃TiFe³⁺AlO₈

Negev Desert, Hatrurim Basin, Israel (31°12'45"N 35°14'43"E)

V.V. Sharygin*, B. Lazic, T. Armbruster, M.N. Murashko, R. Wirth, I.O. Galuskina, E.V. Galuskin and Y. Vapnik

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

Intermediate member of the pseudobinary perovskite-brownmillerite series

Orthorhombic: *Pmma*; structure determined

$a = 5.4200(6)$, $b = 11.064(1)$, $c = 5.5383(7)$ Å

2.71(50), 2.68(100), 1.940(80), 1.842(50), 1.582(50), 1.559(50), 1.337(50), 1.170(60)

Type material is deposited in the collections of the Mineralogical Museum of St Petersburg State University, St Petersburg, Russia, catalogue number 1/19465, and the Central Siberian Geological Museum of the V.S. Sobolev Institute of Geology and Mineralogy, Novosibirsk, Russia, catalogue number VII-87/1

How to cite: Sharygin, V.V., Lazic, B., Armbruster, T., Murashko, M.N., Wirth, R.,

Galuskina, I.O., Galuskin, E.V. and Vapnik, Y. (2011) Shulamitite, IMA 2011-016.

CNMNC Newsletter No. 10, October 2011, page 2604; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-017

Terrywallaceite

$\text{AgPb}(\text{Sb,Bi})_3\text{S}_6$

Level 390, Vein 14, Mina Herminia, Julcani Mining District, Huancavelica, Peru

Hexiong Yang*, William W. Pinch, Robert T. Downs and Stanley H. Evans

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

Isostructural with gustavite

Monoclinic: $P2_1/c$; structure determined

$a = 6.9764(4)$, $b = 19.3507(10)$, $c = 8.3870(4)$ Å, $\beta = 107.519(2)^\circ$

3.939(18), 3.680(23), 3.369(100), 3.010(33), 2.911(58), 2.080(26), 2.043(20), 1.950(22)

Type material is deposited in the collections of the Mineral Museum of the University of Arizona, catalogue number 19304, and the RRUFF project, deposition number R100007

How to cite: Yang, H., Pinch, W.W., Downs, R.T. and Evans, S.H. (2011) Terrywallaceite,

IMA 2011-017. CNMNC Newsletter No. 10, October 2011, page 2604; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-018

Tazzoliite

$\text{Ba}_{4-x}\text{Na}_x\text{Ti}_2\text{Nb}_3\text{SiO}_{17}[\text{PO}_2(\text{OH})_2]_x(\text{OH})_{(1-2x)}$ ($0 \leq x \leq 0.5$)

Monte delle Basse, Euganei Hills, Galzignano Terme, Padova, Veneto, Italy

F. Cámara*, F. Nestola, A. Guastoni, F. Zorzi, L. Bindi and D. Pedron

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

New structure type related to pyrochlore

Orthorhombic: $Fmmm$; structure determined

$a = 7.4116(3)$, $b = 20.0632(8)$, $c = 21.4402(8)$ Å

3.66(60), 3.16(30), 3.05(100), 2.979(25), 2.835(50), 1.854(25), 1.822(25)

Type material is deposited in the collections of the Museo di Mineralogia di Padova, Padova, Italy, registration number 9426

How to cite: Cámara, F., Nestola, F., Guastoni, A., Zorzi, F., Bindi, L. and Pedron, D.

(2011) Tazzoliite, IMA 2011-018. CNMNC Newsletter No. 10, October 2011, page 2604; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-019

Davinciite

$\text{Na}_{12}\text{K}_3\text{Ca}_6\text{Fe}^{2+}_3\text{Zr}_3(\text{Si}_{26}\text{O}_{73}\text{OH})\text{Cl}_2$

Khibiny alkaline massif, Mount Rasvumchorr, Kola Peninsula, Russia

A.P. Khomyakov*, G.N. Nechelyustov, R.K. Rastsvetaeva and K.A. Rozenberg

*E-mail: noomineral@gmail.com

Eudialyte group

Trigonal: $R3m$; structure determined

$a = 14.292(1)$, $c = 30.027(5)$ Å
6.415(54), 5.720(36), 4.309(66), 3.207(63), 3.162(43), 2.981(100), 2.860(96), 2.595(37)
Type material is deposited in the collections of the Fersman Mineralogical Museum, Russian Academy of Sciences, Moscow, Russia, catalogue number 3846
How to cite: Khomyakov, A.P., Nechelyustov, G.N., Rastsvetaeva, R.K. and Rozenberg, K.A. (2011) Davinciite, IMA 2011-019. CNMNC Newsletter No. 10, October 2011, page 2604; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. **2011-020**

Vladkrivovichevite
[Pb₃₂O₁₈][Pb₄Mn₂O]Cl₁₄(BO₃)₈·2H₂O
Kombat mine, Kombat, Grootfontein, Namibia
Oleg I. Siidra*, Rick W. Turner, Sergey V. Krivovichev, Mike S. Rumsey, Chris J. Stanley and John Spratt
*E-mail: siidra@mail.ru
New structure type
Orthorhombic: *Pmmn*; structure determined
 $a = 12.759(1)$, $b = 27.169(4)$, $c = 11.515(1)$ Å
3.707(49), 2.860(100), 2.733(84), 2.075(32), 1.677(20), 1.648(23), 1.601(32), 1.595(28)
Type material is deposited in the collections of the Natural History Museum in London, catalogue number BM2010, 101
How to cite: Siidra, O.I., Turner, R.W., Krivovichev, S.V., Rumsey, M.S., Stanley, C.J. and Spratt, J. (2011) Vladkrivovichevite, IMA 2011-020. CNMNC Newsletter No. 10, October 2011, page 2605; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. **2011-021**

Lileyite
Ba₂(Na,Fe,Ca)₃MgTi₂(Si₂O₇)₂O₂F₂
Löhhley, Üdersdorf, Eifel Mountains, Rhineland-Palatinate, Germany
Nikita V. Chukanov*, Ramiza K. Rastsvetaeva, Igor V. Pekov, Sergey M. Aksenov, Aleksandr E. Zadov, Günter Blaß, Willi Schüller and Bernd Ternes
*E-mail: chukanov@icp.ac.ru
Lamprophyllite group
Monoclinic: *C2/m*; structure determined
 $a = 19.905(1)$, $b = 7.0976(3)$, $c = 5.4051(3)$ Å, $\beta = 96.349(5)^\circ$
3.749(45), 3.464(76), 3.045(37), 2.884(36), 2.792(100), 2.672(54), 2.624(43), 2.140(55)
Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4106/1
How to cite: Chukanov, N.V., Rastsvetaeva, R.K., Pekov, I.V., Aksenov, S.M., Zadov, A.E., Blaß, G., Schüller, W. and Ternes, B. (2011) Lileyite, IMA 2011-021. CNMNC Newsletter No. 10, October 2011, page 2605; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. **2011-022**

Eltyubyuite
Ca₁₂Fe³⁺₁₀Si₄O₃₂Cl₆
Upper Chegem volcanic caldera, Kabardino-Balkaria, North Caucasus, Russia (43°17'N 43°6'E)
E.V. Galuskin*, R. Bailau, I.O. Galuskina, A.K. Prusik, V.M. Gazeev, A.E. Zadov, N.N. Pertsev, L. Ježak, A.G. Gurbanov and L. Dubrovinsky
*E-mail: evgeny.galuskin@us.edu.pl

Related to wadalite

Cubic: $I\bar{4}3d$

$a = 12.20(3) \text{ \AA}$

4.981(30), 3.261(13), 3.050(49), 2.728(100), 2.490(62), 2.227(13), 1.692(28), 1.630(40)

Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, catalogue numbers 4027/1 and 4027/2

How to cite: Galuskin, E.V., Bailau, R., Galuskina, I.O., Prusik, A.K., Gazeev, V.M., Zadov, A.E., Pertsev, N.N., Ježak, L., Gurbanov, A.G. and Dubrovinsky, L. (2011) Eltyubyuite, IMA 2011-022. CNMNC Newsletter No. 10, October 2011, page 2605; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-023

Ehimeite

$\text{NaCa}_2\text{Mg}_4(\text{Cr,Al})\text{Si}_6\text{Al}_2\text{O}_{22}(\text{OH})_2$

Mount Higashi-Akaishiyama, Besshiyama, Niihama City, Ehime Prefecture, Japan
(33°52'30N 133°22'30"E)

Daisuke Nishio-Hamane*, Masayuki Ohnishi, Tetsuo Minakawa, Junichi Yamaura, Shohei Saito and Ryo Kadota

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

Amphibole group

Monoclinic: $C2/m$; structure determined

$a = 9.9176(1)$, $b = 18.0057(2)$, $c = 5.2865(1) \text{ \AA}$, $\beta = 105.395(1)^\circ$

3.369(58), 2.932(43), 2.697(81), 2.585(50), 2.546(100), 2.346(42), 2.156(35), 1.514(55)

Type material is deposited in the collections of the National Museum of Nature and Science, Tokyo, Japan, specimen number NSM M-41160

How to cite: Nishio-Hamane, D., Ohnishi, M., Minakawa, T., Yamaura, J., Saito, S. and Kadota, R. (2011) Ehimeite, IMA 2011-023. CNMNC Newsletter No. 10, October 2011, page 2605; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-024

Alcaparrosaite

$\text{K}_3\text{Ti}^{4+}\text{Fe}^{3+}(\text{SO}_4)_4\text{O}(\text{H}_2\text{O})_2$

Alcaparrosa mine, Cerro Alcaparrosa, Antofagasta, Chile (approximately 22°39'S 69°10'W)

Anthony R. Kampf*, Stuart J. Mills, Robert M. Housley and Maurizio Dini

*E-mail: akampf@nhm.org

New structure type

Monoclinic: $C2/c$; structure determined

$a = 7.5594(1)$, $b = 16.7923(3)$, $c = 12.1783(9) \text{ \AA}$, $\beta = 94.076(7)^\circ$

6.907(41), 3.628(34), 3.320(32), 3.096(100), 3.000(40), 2.704(38), 1.928(30), 1.841(31)

Type material is deposited in the collections of the Natural History Museum of Los Angeles County, Los Angeles, California, USA, catalogue numbers 63519 63520 and 63521

How to cite: Kampf, A.R., Mills, S.J., Housley, R.M. and Dini, M. (2011) Alcaparrosaite, IMA 2011-024. CNMNC Newsletter No. 10, October 2011, page 2605; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-025

Ferrotaffeite- $2N'2S$

$\text{Be}(\text{Fe,Mg,Zn})_3\text{Al}_8\text{O}_{16}$

Xianghualing ore field, Linwu County, Hunan Province, China (112°34'E 25°28'N)

Zhuming Yang*, Kuishou Ding, Jeffrey de Fourestier, Qian Mao and He Li

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

Taaffeite group

Hexagonal: $P6_3mc$

$a = 5.706(8)$, $c = 18.352(3)$ Å

2.86(80), 2.60(90), 2.43(100), 2.05(70), 1.595(70), 1.473(80), 1.425(90)

Type material is deposited in the collections of the Museum of the Institute of Geology and Geophysics, Chinese Academy of Sciences, Beijing, registration number KDX017

How to cite: Zhuming, Y., Kuishou, D., de Fourestier, J., Qian, M. and He, L. (2011)

Ferrotaafeite-2*N*'2*S*, IMA 2011-025. CNMNC Newsletter No. 10, October 2011, page 2606; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-026

Hydroxycalciopyrochlore

$(Ca,Na,U,\square)_2(Nb,Ti)_2O_6(OH)$

Maoniuping rare earth deposit, Mianning County, Sichuan Province, China

Yang Guangming, Li Guowu*, Xiong Ming, Pan Baoming and Yan Chenjie

*E-mail: liguowu@126.com

Pyrochlore group

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

$a = 10.381(4)$ Å

2.966(100), 2.569(18), 1.814(34), 1.546(21), 1.480(5), 1.282(5), 1.178(5), 1.148(4)

Type material is deposited in the collections of the China University of Geosciences, Beijing, China, catalogue number M595-22

How to cite: Yang, G., Li, G., Xiong, M., Pan, B. and Yan, C. (2011)

Hydroxycalciopyrochlore, IMA 2011-026. CNMNC Newsletter No. 10, October 2011, page 2606; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-027

Hereroite

$[Pb_{32}(O,\square)_{21}](AsO_4)_2[(Si,As,V,Mo]O_4)_2Cl_{10}$

Kombat mine, Kombat, Grootfontein, Namibia

Rick W. Turner*, Oleg I. Siidra, Mike S. Rumsey, Sergey V. Krivovichev, Chris J. Stanley and John Spratt

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

New structure type

Monoclinic: $C2/c$; structure determined

$a = 23.139(4)$, $b = 22.684(4)$, $c = 12.389(2)$ Å, $\beta = 102.090(3)^\circ$

3.901(21), 3.516(23), 2.982(100), 2.837(47), 1.986(24), 1.758(14), 1.641(24), 1.598(12)

Type material is deposited in the collections of the Natural History Museum in London, catalogue number BM2010,101

How to cite: Turner, R.W., Siidra, O.I., Rumsey, M.S., Krivovichev, S.V., Stanley, C.J. and Spratt, J. (2011) Hereroite, IMA 2011-027. CNMNC Newsletter No. 10, October 2011, page 2606; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-028

Bassoite

$SrV_3O_7 \cdot 4H_2O$

Molinello mine, Val Graveglia, eastern Liguria, northern Apennines, Italy

Luca Bindi, Cristina Carbone*, Roberto Cabella and Gabriella Lucchetti

*E-mail: carbone@dipteris.unige.it

New structure type

Monoclinic: $P2_1/m$; structure determined

$a = 5.313(3)$, $b = 10.495(3)$, $c = 8.568(4)$ Å, $\beta = 91.14(5)^\circ$

8.566(100), 6.636(14), 4.475(26), 3.440(14), 3.405(17), 2.834(15), 2.656(15), 1.867(16)

Type material is deposited in the collections of the Dipartimento per lo Studio del Territorio e delle sue Risorse, Università di Genova, Italy, catalogue number M0480

How to cite: Bindi, L., Carbone, C., Cabella, R. and Lucchetti, G. (2011) Bassoite, IMA 2011-028. CNMNC Newsletter No. 10, October 2011, page 2606; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-029

Oscarkempffite

$\text{Ag}_{10}\text{Pb}_4(\text{Sb}_{17}\text{Bi}_9)_{\Sigma 26}\text{S}_{48}$

264 level, Colorada vein, Animas mine, Chocaya Province, Department of Potosi, Sur Chichas, Bolivia

Dan Topa*, Emil Makovicky, Werner H. Paar, Chris J. Stanley and Andy C. Roberts

*E-mail: dan.topa@sbg.ac.at

Lillianite homologue $N = 4$

Orthorhombic: $Pnca$; structure determined

$a = 13.199(2)$, $b = 19.332(3)$, $c = 8.294(1)$ Å

3.354(100), 2.988(40), 2.889(80), 2.263(40), 2.066(60), 1.766(50)

Type material is deposited in the collections of the Department of Materials Engineering and Physics, University of Salzburg, Salzburg, Austria, specimen number 15000, and the Natural History Museum, London, United Kingdom, specimen number BM 20, 3

How to cite: Topa, D., Makovicky, E., Paar, W.H., Stanley, C.J. and Roberts, A.C. (2011) Oscarkempffite, IMA 2011-029. CNMNC Newsletter No. 10, October 2011, page 2607; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-030

Hizenite-(Y)

$\text{Ca}_2\text{Y}_6(\text{CO}_3)_{11} \cdot 14\text{H}_2\text{O}$

Higashimatsuura basalt, Mitsukoshi, Karatsu, Saga Prefecture, Japan (33°24'N, 129°51'E)

Yasuhiro Takai* and Seiichiro Uehara

*E-mail: takai@kyudai.jp

Tengerite group

Orthorhombic: space group unknown

$a = 6.295(1)$, $b = 9.089(2)$, $c = 63.49(1)$ Å

15.57(20), 10.63(100), 6.384(77), 3.962(51), 3.821(27), 2.946(9), 2.445(16), 2.060(23)

Type material is deposited in the collections of the Kitakyushu Museum of Natural History and Human History, Kitakyushu, Japan, registration number KMNHM000001

How to cite: Takai, Y. and Uehara, S. (2011) Hizenite-(Y), IMA 2011-030. CNMNC Newsletter No. 10, October 2011, page 2607; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-031

Rhabdophane-(Y)

$\text{YPO}_4 \cdot \text{H}_2\text{O}$

Genkai, Higashi-Matsuura, Saga Prefecture, Japan (33°28'N 129° 54'E)

Yasuhiro Takai* and Seiichiro Uehara

*E-mail: takai@kyudai.jp

Rhabdophane group

Hexagonal: $P6_222$

$a = 6.959(2)$, $c = 6.384(2)$ Å

6.026(76), 4.385(47), 3.480(44), 3.013(77), 2.821(100), 2.144(19), 2.127(28), 1.854(26)

Type material is deposited in the collections of the Kitakyushu Museum of Natural History and Human History, Kitakyushu, Japan, registered number KMNHM000002

How to cite: Takai, Y. and Uehara, S. (2011) Rhabdophane-(Y), IMA 2011-031. CNMNC Newsletter No. 10, October 2011, page 2607; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-032

Günterblässite

$(K,Ca,Ba,Na,\square)_3Fe[(Si,Al)_{13}O_{25}(OH,O)_4] \cdot 7H_2O$

Mount Rother Kopf, Roth, Eifel Mountains, Rheinland-Pfalz, Germany

Nikita V. Chukanov*, Ramiza K. Rastsvetaeva, Sergey M. Aksenov, Igor V. Pekov, Natalia V. Zubkova, Sergey N. Britvin, Dmitriy I. Belakovskiy, Willi Schüller and Bernd Ternes

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

New structure type

Orthorhombic: $Pnm2_1$; structure determined

$a = 6.528(1)$, $b = 6.970(1)$, $c = 37.216(5)$ Å

6.523(100), 6.263(67), 3.244(49), 3.062(91), 2.996(66), 2.955(63), 2.853(51), 2.763(60)

Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4107/1

How to cite: Nikita V. Chukanov, N.V., Rastsvetaeva, R.K., Aksenov, S.M., Pekov, I.V., Zubkova, N.V., Britvin, S.N., Belakovskiy, D.I., Schüller, W. and Ternes, B. (2011)

Günterblässite, IMA 2011-032. CNMNC Newsletter No. 10, October 2011, page 2607; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-033

Natrotitanite

$[Na(Y,REE)]Ti(SiO_4)O$

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

A.V. Stepanov, G.K. Bekenova, V.L. Levin and F.C. Hawthorne*

*E-mail: frank_hawthorne@umanitoba.ca

Titanite group

Monoclinic: $C2/c$; structure determined

$a = 6.5691(2)$, $b = 8.6869(3)$, $c = 7.0924(2)$ Å, $\beta = 114.1269(4)^\circ$

4.941(30), 3.248(80), 2.994(60), 2.597(100), 2.273(30), 2.067(20), 1.641(40), 1.498(30)

Type material is deposited in the collections of the Geological Scientific Museum of the Satpaev Institute of Geological Sciences, registration number 3010

How to cite: Stepanov, A.V., Bekenova, G.K., Levin, V.L. and Hawthorne, F.C. (2011) Natrotitanite, IMA 2011-033. CNMNC Newsletter No. 10, October 2011, page 2607;

Mineralogical Magazine, **75**, 2601-2613.

IMA No. 2011-034

Betpakdalite-CaMg

$[Ca_2(H_2O)_{17}Mg(H_2O)_6][Mo_8As_2Fe^{3+}_3O_{36}(OH)]$

Tsumeb mine, Tsumeb, Namibia

Anthony R. Kampf* and Stuart J. Mills

*E-mail: akampf@nhm.org

Betpakdalite group

Monoclinic: $C2/m$; structure determined

$a = 19.5336(7)$, $b = 11.0637(4)$, $c = 15.2559(11)$ Å, $\beta = 131.528(9)^\circ$

11.568(25), 8.971(100), 7.341(34), 3.656(33), 3.143(26), 2.965(44), 2.817(35), 2.662(31)

Type material is deposited in the collections of the Natural History Museum of Los Angeles County, Los Angeles, California, USA, catalogue numbers 63327 and 63328

How to cite: Kampf, A.R. and Mills, S.J. (2011) Betpakdalite-CaMg, IMA 2011-034.

CNMNC Newsletter No. 10, October 2011, page 2608; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-035

Ferrikaersutite

$\text{NaCa}_2(\text{Mg}_3\text{Fe}^{3+}\text{Ti})(\text{Al}_2\text{Si}_6\text{O}_{22})\text{O}_2$

Deeti volcanic cone, Gregory rift, Tanzania

Anatoly N. Zaitsev*, Evgeniya Y. Avdontseva, Sergey N. Britvin, Attila Demény, Zoltán Homonnay, Teresa Jeffries, Jörg Keller, Vladimir G. Krivovichev, Gregor Markl, Natalia V. Platonova, Oleg I. Siidra and John Spratt

*E-mail: burbankite@gmail.com

Amphibole group

Monoclinic: $C2/m$; structure determined

$a = 9.8837(3)$, $b = 18.0662(6)$, $c = 5.3107(2)$ Å, $\beta = 105.278(1)^\circ$

3.383(62), 3.281(30), 2.708(97), 2.596(75), 2.555(100), 2.162(36), 1.585(39), 1.521(48)

Type material is deposited in the collections of the Mineralogical Museum, Department of Mineralogy, St Petersburg State University, St Petersburg, Russia, catalogue number 1/19465

How to cite: Zaitsev, A.N., Avdontseva, E.Y., Britvin, S.N., Demény, A., Homonnay, Z., Jeffries, T., Keller, J., Krivovichev, V.G., Markl, G., Platonova, N.V., Siidra, O.I. and Spratt, J. (2011) Ferrikaersutite, IMA 2011-035. CNMNC Newsletter No. 10, October 2011, page 2608; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-036

Jakobssonite

CaAlF_5

Eldfell volcano, Heimaey island, Vestmannaeyjar archipelago, Iceland; also from Hekla Tonči Balić-Žunić*, Anna Garavelli, Donatella Mitolo, Pasquale Acquafredda and Erik Leonardsen

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

Known synthetic compound

Monoclinic: $C2/c$; structure determined

$a = 8.601(1)$, $b = 6.2903(6)$, $c = 7.2190(7)$ Å, $\beta = 114.61(1)^\circ$

4.91(18), 3.92(76), 3.15(68), 3.13(100), 2.270(22), 1.957(21), 1.814(20), 1.805(22)

Type material is deposited in the collections of the Icelandic Institute of Natural History, Reykjavík, Iceland, sample number NI 12256 (Eldfell). A cotype sample has the number NI 15511 (Hekla)

How to cite: Balić-Žunić, T., Garavelli, A., Mitolo, D., Acquafredda, P. and Leonardsen, E. (2011) Jakobssonite, IMA 2011-036. CNMNC Newsletter No. 10, October 2011, page 2608; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-037

Hielscherite

$\text{Ca}_3\text{Si}(\text{SO}_4)(\text{SO}_3)(\text{OH})_6 \cdot 11\text{H}_2\text{O}$

Graulay, Hillesheim, Eifel Mountains, Rheinland-Pfalz, Germany
Igor V. Pekov*, Nikita V. Chukanov, Yuriy K. Kabalov, Sergey N. Britvin, Jörg Göttlicher, Vasily O. Yapaskurt, Aleksandr E. Zadov, Sergey V. Krivovichev, Willi Schüller and Bernd Ternes

*E-mail: igorpekov@mail.ru

Ettringite group

Hexagonal: $P6_3$

$a = 11.1178(2)$, $c = 10.5381(2)$ Å

9.62(100), 5.551(50), 4.616(37), 3.823(64), 3.436(25), 2.742(38), 2.528(37), 2.180(35)

Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4093/1

How to cite: Pekov, I.V., Chukanov, N.V., Kabalov, Y.K., Britvin, S.N., Göttlicher, J., Yapaskurt, V.O., Zadov, A.E., Krivovichev, S.V., Schüller, W. and Ternes, B. (2011)

Hielscherite, IMA 2011-037. CNMNC Newsletter No. 10, October 2011, page 2608;

Mineralogical Magazine, **75**, 2601-2613.

IMA No. **2011-038**

Kottenheimite

$\text{Ca}_3\text{Si}(\text{SO}_4)_2(\text{OH})_6 \cdot 12\text{H}_2\text{O}$

Ettringer Bellerberg, Mayen, Laacher See region, Eastern Eifel area, Rheinland-Pfalz, Germany

Nikita V. Chukanov*, Sergey N. Britvin, Aleksandr E. Zadov, and Konstantin V. Van

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

Ettringite group

Hexagonal: $P6_3/m$

$a = 11.1548(3)$, $c = 10.5702(3)$ Å

9.72(100), 5.590(69), 4.645(26), 3.840(54), 3.455(21), 2.751(34), 2.536(27), 2.185(30)

Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4102/1

How to cite: Chukanov, N.V., Britvin, S.N., Zadov, A.E. and Van, K.V. (2011)

Kottenheimite, IMA 2011-038. CNMNC Newsletter No. 10, October 2011, page 2609;

Mineralogical Magazine, **75**, 2601-2613.

IMA No. **2011-039**

Mendozavilite-NaCu

$[\text{Na}_2(\text{H}_2\text{O})_{15}\text{Cu}(\text{H}_2\text{O})_6][\text{Mo}_8\text{P}_2\text{Fe}^{3+}_3\text{O}_{34}(\text{OH})_3]$

Lomas Bayas mine, 93 km ENE of Antofagasta, Antofagasta Province, Chile (23°25'40"S 69°30'41"W)

Anthony R. Kampf*, Stuart J. Mills, Joseph J. Pluth, Ian M. Steele and Robert A. Jenkins

*E-mail: akampf@nhm.org

Betpakdalite group

Monoclinic: $C2/m$; structure determined

$a = 18.9984(16)$, $b = 10.9296(7)$, $c = 15.0818(12)$ Å, $\beta = 129.906(2)^\circ$

8.841(100), 7.330(37), 3.676(17), 3.132(19), 3.007(25), 2.932(21), 2.743(20), 1.769(22)

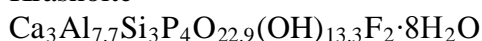
Type material is deposited in the collections of the Natural History Museum of Los Angeles County, catalogue numbers 60483, 60484, 60485 and 60486

How to cite: Kampf, A.R., Mills, S.J., Pluth, J.J., Steele, I.M. and Jenkins, R.A. (2011)

Mendozavilite-NaCu, IMA 2011-039. CNMNC Newsletter No. 10, October 2011, page 2609; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-040

Krásnoite



Huber open pit, Krásno ore district, Horní Slavkov, Slavkovský Les Mountains, Czech Republic (50°07'22"N 12°48'2"E), and the Silver Coin mine, Iron Point district, Humboldt County, Nevada, USA (40°55'44"N 117°19'26"W)

Stuart J. Mills*, Jiří Sejkora, Anthony R. Kampf, Ian E. Grey, Timothy J. Bastow, Neil A. Ball, Paul M. Adams, Mati Raudsepp and Mark A. Cooper

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

F-analogue of perhamite

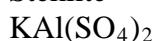
Trigonal: $P\bar{3}m1$
 $a = 6.9956(4), c = 20.200(2) \text{ \AA}$
 $20.186(97), 6.736(100), 5.800(67), 3.496(60), 2.873(87), 2.763(73), 2.104(75), 1.748(64)$

Type material is deposited in the collections of the Mineral Sciences Department, Natural History Museum of Los Angeles County, Los Angeles, California, USA, catalogue numbers 62372 and 62373 (Silver Coin), and the Department of Mineralogy and Petrology, National Museum Prague, Praha, Czech Republic, catalogue number P1P 2/2011 (Krásno)

How to cite: Mills, S.J., Sejkora, J., Kampf, A.R., Grey, I.E., Bastow, T.J., Ball, N.A., Adams, P.M., Raudsepp, M. and Cooper, M.A. (2011) Krásnoite, IMA 2011-040. CNMNC Newsletter No. 10, October 2011, page 2609; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-041

Steklite



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

Mikhail N. Murashko, Igor V. Pekov*, Sergey V. Krivovichev, Anastasiya P. Chernyatueva, Vasilij O. Yapaskurt and Aleksandr E. Zadov

*E-mail: igorpekov@mail.ru

K-analogue of godovikovite

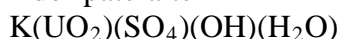
Trigonal: $P321$; structure determined
 $a = 4.7281(3), c = 7.9936(5) \text{ \AA}$
 $8.02(34), 4.085(11), 3.649(100), 2.861(51), 2.660(19), 2.364(25), 2.267(14), 1.822(12)$

Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, registration number 4109/1

How to cite: Murashko, M.N., Pekov, I.V., Krivovichev, S.V., Chernyatueva, A.P., Yapaskurt, V.O. and Zadov, A.E. (2011) Steklite, IMA 2011-041. CNMNC Newsletter No. 10, October 2011, page 2610; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-042

Adolfpateraite



Geschieber vein, 5th level of the Svornost (Einigkeit) shaft, Jáchymov (St Joachimsthal) ore district, western Bohemia, Czech Republic

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

*E-mail: jakub.plasil@krist.unibe.ch

New structure type

Monoclinic: $P2_1/c$; structure determined
 $a = 8.0462(1), b = 7.9256(1), c = 11.3206(2) \text{ \AA}, \beta = 107.726(2)^\circ$

7.658(76), 6.381(91), 5.386(100), 5.218(85), 3.718(46), 3.700(37), 3.489(27), 2.747(17)

Type material is deposited in the collections of the Department of Mineralogy and Petrology of the National Museum in Prague, Prague, Czech Republic, catalogue number: PIP 3/2011

How to cite: Plášil, J., Fejfarová, K., Veselovský, F., Hloušek, J., Škoda, R., Novák, M., Čejka, J., Sejkora, J. and Ondruš, P. (2011) Adolfpateraite, IMA 2011-042. CNMNC Newsletter No. 10, October 2011, page 2610; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-043

Miyahisaite

$(\text{Sr,Ca})_2\text{Ba}_3(\text{PO}_4)_3\text{F}$

Shitaharai mine, Saiki City, Ohita Prefecture, Kyushu, Japan

Daisuke Nishio-Hamane*, Yukikazu Ogoshi and Tetsuo Minakawa

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

Apatite group

Hexagonal: $P6_3/m$

$a = 9.921(2)$, $c = 7.469(3)$ Å

3.427(16), 3.248(22), 2.981(100), 2.865(21), 1.976(23), 1.874(16), 1.870(15), 1.864(17)

Type material is deposited in the collections of the National Museum of Nature and Science, Tokyo, Japan, specimen number NSM M-41299

How to cite: Nishio-Hamane, D., Ogoshi, Y. and Minakawa, T. (2011) Miyahisaite, IMA 2011-043. CNMNC Newsletter No. 10, October 2011, page 2610; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-044

Krashennikovite

$\text{KNa}_2\text{CaMg}(\text{SO}_4)_3\text{F}$

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, Dmitry A. Ksenofontov, Yuriy K. Kabalov, Nikita V. Chukanov, Vasilij O. Yapaskurt, Aleksandr E. Zadov and Dmitry Y. Pushcharovsky

*E-mail: igorpekov@mail.ru

New structure type

Hexagonal: $P6_3/mcm$; structure determined

$a = 16.630(2)$, $c = 6.882(1)$ Å

4.284(23), 3.610(23), 3.566(17), 3.459(41), 3.153(100), 3.117(21), 2.660(39), 2.085(19)

Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4112/1

How to cite: Pekov, I.V., Zelenski, M.E., Zubkova, N.V., Ksenofontov, D.A., Kabalov, Y.K., Chukanov, N.V., Yapaskurt, V.O., Zadov, A.E. and Pushcharovsky, D.Y. (2011) Krashennikovite, IMA 2011-044. CNMNC Newsletter No. 10, October 2011, page 2611; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-045

Kasatkinite

$\text{Ba}_2\text{Ca}_8\text{B}_5\text{Si}_8\text{O}_{32}(\text{OH})_3 \cdot 6\text{H}_2\text{O}$

Bazhenovskoe chrysotile asbestos deposit, Asbest, Central Urals, Russia

Igor V. Pekov*, Nikita V. Chukanov, Yaroslav E. Filinchuk, Aleksandr E. Zadov, Natalia N. Kononkova, Sergey G. Epanchintsev, Peter Kaden, Andrea Kutzer and Jörg Göttlicher

*E-mail: igorpekov@mail.ru

New structure type

Monoclinic: $P2_1/c$, $P2/c$ or Pc

$a = 5.74(2)$, $b = 7.234(8)$, $c = 20.81(2)$ Å, $\beta = 90.70(12)^\circ$

5.89(24), 3.48(23), 3.36(24), 3.009(100), 2.925(65), 2.633(33), 2.116(29)

Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4129/1

How to cite: Pekov, I.V., Chukanov, N.V., Filinchuk, Y.E., Zadov, A.E., Kononkova, N.N., Epanchintsev, S.G., Kaden, P., Kutzer, A. and Göttlicher, J. (2011) Kasatkinite, IMA 2011-045. CNMNC Newsletter No. 10, October 2011, page 2611; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-046

Obradovicite-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*, Stuart J. Mills, William D. Birch and Maurizio Dini

*E-mail: akampf@nhm.org

Betpakdalite group

Orthorhombic: $Pnmb$; structure determined

$a = 14.8866(11)$, $b = 11.0880(2)$, $c = 15.0560(3)$ Å

10.641(43), 8.954(100), 7.487(21), 3.716(15), 2.987(18), 2.906(29), 2.602(16)

Type material is deposited in the collections of the Natural History Museum of Los Angeles County, catalogue numbers 63313 and 63314

How to cite: Kampf, A.R., Mills, S.J., Birch, W.D. and Dini, M. (2011) Obradovicite-NaNa, IMA 2011-046. CNMNC Newsletter No. 10, October 2011, page 2611; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-047

Tsilaisite

$\text{NaMn}^{2+}_3\text{Al}_6(\text{Si}_6\text{O}_{18})(\text{BO}_3)_3(\text{OH})_3\text{OH}$

Grotta d'Oggi, San Pietro in Campo, Elba, Italy

Ferdinando Bosi*, Henrik Skogby, Eugenio Scandale and Giovanna Agrosi

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

Tourmaline supergroup

Trigonal: $R3m$; structure determined

$a = 15.9461(5)$, $c = 7.1380(3)$ Å

6.329(22), 4.205(41), 3.974(100), 3.452(71), 2.942(94), 2.570(79), 2.377(21), 2.034(49)

Type material is deposited in the collections of the Museo di Scienze della Terra, settore Mineralogico Pertografico "Carlo Lorenzo Garavelli", Campus Universitario, Bari, Italy, catalogue number 12/nm

How to cite: Bosi, F., Skogby, H., Scandale, E. and Agrosi, G. (2011) Tsilaisite, IMA 2011-047. CNMNC Newsletter No. 10, October 2011, page 2611; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-048

Fassinaite

$\text{Pb}_2(\text{CO}_3)(\text{S}_2\text{O}_3)$

Trentini mine, Mount Naro, Torrebelticino, Vicenza, Italy

Luca Bindi*, Fabrizio Nestola, Alessandro Guastoni, Federico Zorzi and Lutz Nasdala

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

New structure type

Orthorhombic: *Pnma*; structure determined

$a = 16.320(2)$, $b = 8.7616(6)$, $c = 4.5809(7)$ Å

4.410(39), 4.381(59), 4.080(64), 3.504(75), 3.108(100), 2.986(82), 2.952(49), 2.736(60)

Type material is deposited in the collections of the Museum of Mineralogy of the Department of Geosciences at the University of Padova, Padova, Italy, catalogue number MMP M10008

How to cite: Bindi, L., Nestola, F., Guastoni, A., Zorzi, F. and Nasdala, L. (2011) Fassinaite, IMA 2011-048. CNMNC Newsletter No. 10, October 2011, page 2611; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-049

Ianbruceite

$Zn_2O[AsO_3(OH)](H_2O)_{3.53}$

Tsumeb mine, Otjikoto Region, Namibia

Mark A. Cooper, Yassir Abdu, Neil Ball, Malcolm Back, Frank C. Hawthorne* and Kim Tait

*E-mail: frank_hawthorne@umanitoba.ca

New structure type

Monoclinic: *P2₁/c*; structure determined

$a = 11.793(2)$, $b = 9.1138(14)$, $c = 6.8265(10)$ Å, $\beta = 103.859(9)^\circ$

11.28(100), 3.755(9), 3.186(14), 3.120(12), 2.947(16), 2.845(5), 2.819(8), 2.682(8)

Type material is deposited in the collections of the Department of Natural History, Royal Ontario Museum, Toronto, Ontario, Canada, catalogue number M53150

How to cite: Cooper, M.A., Abdu, Y., Ball, N., Back, M., Hawthorne, F.C. and Tait, K. (2011) Fassinaite, IMA 2011-049. CNMNC Newsletter No. 10, October 2011, page 2612; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-050

Aklimaite

$Ca_4[Si_2O_5(OH)_2](OH)_4 \cdot 5H_2O$

Mount Lakargi, Kabardino-Balkaria, North Caucasus, Russia (43°17'N 43°6.42'E)

Aleksandr E. Zadov, Igor V. Pekov*, Viktor M. Gazeev, Natalia V. Zubkova, Vasiliy O.

Yapaskurt, Nikita V. Chukanov, Pavel M. Kartashov, Evgeny V. Galuskin, Irina O.

Galuskina, Nikolay N. Pertsev, Anatoly G. Gurbanov and Dmitry Y. Pushcharovsky

*E-mail: igorpekov@mail.ru

New structure type

Monoclinic: *C2/m*; structure determined

$a = 16.907(5)$, $b = 3.6528(8)$, $c = 13.068(4)$ Å, $\beta = 117.25(4)^\circ$

11.64(100), 8.30(10), 4.349(9), 3.073(20), 2.948(32), 2.901(11), 2.576(10), 2.320(12)

Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, registration number 4113/1

How to cite: Zadov, A.E., Pekov*, I.V., Gazeev, V.M., Zubkova, N.V., Yapaskurt, V.O., Chukanov, N.V., Kartashov, P.M., Galuskin, E.V., Galuskina, I.O., Pertsev, N.N., Gurbanov, A.G. and Pushcharovsky, D.Y. (2011) Aklimaite, IMA 2011-050. CNMNC Newsletter No. 10, October 2011, page 2612; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-051

Reynoldsite

$Pb_2Mn^{4+}_2O_5(CrO_4)$

Blue Bell claims, San Bernardino County, California, USA (35°14'31"N 116°12'17"W), and the Red Lead mine, Dundas, Tasmania, Australia (41°53'22"S 145°25'51"E)

Anthony R. Kampf*, Stuart J. Mills, Robert M. Housley, Ralph S. Bottrill and Uwe Kolitsch

*E-mail: akampf@nhm.org

New structure type

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

$a = 5.0278(7)$, $b = 7.5865(11)$, $c = 10.2808(15)$ Å, $\alpha = 91.968(12)$, $\beta = 99.405(12)$, $\gamma = 109.159(10)^\circ$

3.427(52), 3.254(85), 3.052(100), 2.923(40), 2.502(47), 1.982(42), 1.769(36), 1.637(36)

Type material is deposited in the collections of the Natural History Museum of Los Angeles County, Los Angeles, California, USA, catalogue numbers 63559, 63560 and 63561 (Blue Bell claims) and 63562 (Red Lead mine)

How to cite: Kampf, A.R., Mills, S.J., Housley, R.M., Bottrill, R.S. and Kolitsch, U. (2011) Reynoldsite, IMA 2011-051. CNMNC Newsletter No. 10, October 2011, page 2612; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-052

Vladykinite

$\text{Na}_3\text{Sr}_4(\text{Fe}^{2+}\text{Fe}^{3+})\text{Si}_8\text{O}_{24}$

Murun alkaline complex, Mount Maly Murun, southwestern Yakutia, eastern Siberia, Russia (58°22'48"N 119°03'44"E)

Anton R. Chakhmouradian*, Mark A. Cooper, Neil Ball, Luca Medici, Yassir Abdu and Anton A. Antonov

*E-mail: chakhmou@cc.umanitoba.ca

Structurally related to members of the nordite group

Monoclinic: $P2_1/c$; structure determined

$a = 5.2138(1)$, $b = 7.9143(2)$, $c = 26.0888(7)$ Å, $\beta = 90.3556(7)^\circ$

4.290(30), 3.612(58), 3.339(30), 3.146(37), 2.957(100), 2.826(100), 2.604(28), 2.470(32)

Type material is deposited in the collections of the Robert B. Ferguson Museum of Mineralogy, University of Manitoba, Winnipeg, Manitoba, catalogue number M7853

How to cite: Chakhmouradian, A.R., Cooper, M.A., Ball, N., Medici, L., Abdu, Y. and Antonov, A.A. (2011) Vladykinite, IMA 2011-052. CNMNC Newsletter No. 10, October 2011, page 2613; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2011-053

Davidlloydite

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

Tsumeb mine, Otjikoto Region, Namibia

Mark A. Cooper, Neil Ball, Yassir Abdu, Malcolm Back, Kim Tait and Frank C.

Hawthorne*

*E-mail: frank_hawthorne@umanitoba.ca

As analogue of parahopeite

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

$a = 5.9756(4)$, $b = 7.6002(5)$, $c = 5.4471(4)$ Å, $\alpha = 84.2892(9)$, $\beta = 90.4920(9)$, $\gamma = 87.9958(9)^\circ$

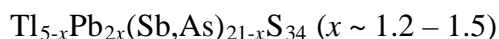
7.526(71), 5.409(37), 4.620(100), 3.635(30), 3.253(40), 2.974(49), 2.810(37), 2.701(39)

Type material is deposited in the collections of the Department of Natural History, Royal Ontario Museum, Toronto, Ontario, Canada, catalogue number M56120

How to cite: Cooper, M.A., Ball, N., Abdu, Y., Back, M., Tait, K. and Hawthorne, F.C. (2011) Davidlloydite, IMA 2011-053. CNMNC Newsletter No. 10, October 2011, page 2613; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. **2011-054**

Protochabournéite



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

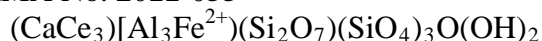
$a = 8.150(2)$, $b = 8.716(2)$, $c = 21.579(4)$ Å, $\alpha = 85.18(1)$, $\beta = 96.94(1)$, $\gamma = 88.60(1)^\circ$
4.23(51), 3.959(54), 3.928(60), 3.673(63), 3.608(100), 2.824(77), 2.790(61)

Type material is deposited in the collections of the Museo di Storia Naturale e del Territorio, Università di Pisa, Italy, catalogue number 19413

How 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**



In the Hundholmen pegmatite, and the Stetind and Nedre Eivollen pegmatite outcrops of the Tysfjord granite, Northern Norway

Paola 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 end-members

Monoclinic: $P2_1/m$; 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/I

How 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



Herrebøkasa 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

$a = 12.9078(6)$ Å
9.107(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 M56117

How 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



Mariinskoye 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: labfmm@rambler.ru

Chromium-dominant analogue of chrysoberyl

Orthorhombic: *Pnma*

$a = 9.709(2)$, $b = 5.612(1)$, $c = 4.492(1)$ Å

4.85(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 4159/1

How 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



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

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

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

Humite group

Monoclinic: *P2₁/b*; structure determined

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

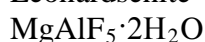
3.542(51), 3.029(100), 2.863(42), 2.823(79), 2.765(64), 2.657(44), 2.625(55), 1.907(59)

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., Dzierżanowski, 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. 2011-059

Leonardsenite



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 have 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. **2011-060**

Postite
 $\text{Mg}(\text{H}_2\text{O})_6\text{Al}_2(\text{OH})_2(\text{H}_2\text{O})_8(\text{V}_{10}\text{O}_{28}) \cdot 13\text{H}_2\text{O}$
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
 $\text{Ca}_2\text{MgMn}^{2+}_2\text{Fe}^{2+}_2\text{Fe}^{3+}_2\text{Zn}_4(\text{PO}_4)_8(\text{OH})_4(\text{H}_2\text{O})_{14}$
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: *P2₁/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.

IMA No. **2011-062**

Bastnäsite-(Nd)
 NdCO_3F
Stetind 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

Bastnäsite group

Hexagonal: $P\bar{6}2c$

$a = 7.079(1)$, $c = 9.721(2)$ Å

4.86(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, registration number NSM-MF15494

How to cite: Miyawaki, R., Yokoyama, K. and Husdal, T. (2011) Bastnäsite-(Nd), IMA 2011-062. CNMNC Newsletter No. 11, December 2011, page 2890; *Mineralogical Magazine*, **75**, 2887-2893.

IMA No. **2011-064**

D'ansite-(Mn)

$\text{Na}_{21}\text{Mn}^{2+}(\text{SO}_4)_{10}\text{Cl}_3$

Somma-Vesuvius complex, Napoli, Italy

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

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

Mn^{2+} -dominant analogue of d'ansite

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

$a = 15.9291(9)$ Å

6.503(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 2011-03

How 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)

$\text{Na}_{21}\text{Fe}^{2+}(\text{SO}_4)_{10}\text{Cl}_3$

La Fossa crater, Vulcano, Aeolian Islands, Italy

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

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

Fe^{2+} -dominant analogue of d'ansite

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

$a = 15.882(3)$ Å

3.384(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 2011-02

How 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**

Kobayashevite

$\text{Cu}_5(\text{SO}_4)_2(\text{OH})_6 \cdot 4\text{H}_2\text{O}$

Kapital'naya mine, Vishnevye Mountains, Chelyabinsk Oblast, South Urals, Russia

Igor V. Pekov*, Natalia V. Zubkova, Vasiliy 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: $P\bar{1}$; 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 collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4152/1

How to cite: Pekov, I.V., Zubkova, N.V., Yapaskurt, V.O., Belakovskiy, D.I., Chukanov, N.V., Kasatkin, A.V., Kuznetsov, A.M. and Pushcharovsky, D.Y. (2011) Kobyrashite, IMA 2011-066. CNMNC Newsletter No. 11, December 2011, page 2890; *Mineralogical Magazine*, **75**, 2887-2893.

IMA No. 2011-067

Calciolangbeinite

$K_2Ca_2(SO_4)_3$

Yadovitaya (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, Vasiliy O. Yapaskurt, Nikita V. Chukanov, Dmitriy I. Belakovskiy and Dmitry Y. Pushcharovsky

*E-mail: igorpekov@mail.ru

Langbeinite group

Cubic: $P2_13$; structure determined

$a = 10.1887(2)$ Å

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

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

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

Fe²⁺-dominant analogue of valleriite

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

$a = 3.792(2)$, $c = 34.06(3)$ Å

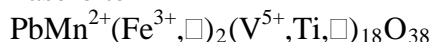
11.42(18), 5.69(100), 3.784(17), 3.268(58), 2.370(9), 1.894(34), 1.871(45), 1.593(13)

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



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

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

$a = 10.3894(5)$, $c = 20.8709(8)$ Å

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

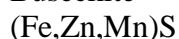
How to cite: Mills, S.J., Bindi, L., Cadoni, M., Ciriotti, M.E. and Kampf, A.R. (2011)

Paseroite, IMA 2011-069. CNMNC Newsletter No. 11, December 2011, page 2891;

Mineralogical Magazine, **75**, 2887-2893.

IMA No. **2011-070**

Buseckite



Zaklodzie meteorite, Zamosc, Lubelskie, Poland

Chi Ma

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

Wurtzite group

Hexagonal: $P6_3mc$

$a = 3.8357$, $c = 6.3002$ Å

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

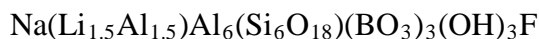
The type specimen is deposited in the collections of the Smithsonian Institution's National Museum of Natural History, Washington DC, USA, specimen number USNM 7607

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



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

$a = 15.8720(2)$, $c = 7.1103(1)$ Å (Cruzeiro mine)

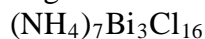
4.200(57), 3.974(66), 3.447(99), 2.938(100), 2.568(93), 2.032(42), 1.649(29), 1.445(29)

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



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

Vigrishinite



Pegmatite number 71, Malyi Punkaruai 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 bafertisite mero-plesiotype 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) Vigrishinite, IMA 2011-073. CNMNC Newsletter No. 11, December 2011, page 2892; *Mineralogical Magazine*, **75**, 2887-2893.

IMA No. 2011-074

Umbrianite



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: $Pmmn$; 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. 2011-076

Disulfodadsonite

$\text{Pb}_{11}\text{Sb}_{13}\text{S}_{30}(\text{S}_2)_{0.5}$

Ceragiola area of the Seravezza marble quarries, Apuan Alps, Tuscany, Italy

Paolo Orlandi*, Yves Moëlo, Cristian Biagioni and Elena Bonaccorsi

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

Cl-free homeotype of dadsonite, stabilized by S_2^{2-} ions

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

$a = 4.1227(2)$, $b = 17.4274(12)$, $c = 19.1704(13)$ Å, $\alpha = 96.196(6)$, $\beta = 89.960(4)$, $\gamma = 91.405(5)^\circ$

3.820(vs), 3.649(s), 3.416(s), 3.381(vs), 2.857(ms), 2.814(ms), 1.897(ms)

Type material is deposited in the collections of the Museo di Storia Naturale e del Territorio, Università di Pisa, Calci, Italy, catalogue number 19442

How to cite: Orlandi, P., Moëlo, Y., Biagioni, C. and Bonaccorsi, E. (2012)

Disulfodadsonite, IMA 2011-076. CNMNC Newsletter No. 12, February 2012, page 152; *Mineralogical Magazine*, **76**, 151-155.

IMA No. 2011-077

Thermessaite-(NH_4)

$(\text{NH}_4)_2\text{AlF}_3(\text{SO}_4)$

“La Fossa” crater, Vulcano island, Italy

Anna Garavelli*, Donatella Mitolo, Daniela Pinto

*E-mail: a.garavelli@geomun.uniba.it

(NH_4) -analogue of thermessaite

Orthorhombic: $Pbcn$; structure determined

$a = 11.3005(3)$, $b = 8.6125(3)$, $c = 6.8501(2)$ Å

6.850(74), 5.650(100), 4.844(89), 3.082(47), 3.063(56), 2.782(26), 2.681(28)

Type material is deposited in the collections of the C.L. Garavelli Museum in the Dipartimento di Scienze della Terra e Geoambientali, Università degli Studi di Bari “Aldo Moro”, Italy, sample number 15/nm-V28

How to cite: Garavelli, A., Mitolo, D. and Pinto, D. (2012) Thermessaite-(NH_4), IMA 2011-077. CNMNC Newsletter No. 12, February 2012, page 152; *Mineralogical Magazine*, **76**, 151-155.

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 2892; *Mineralogical Magazine*, **75**, 2887-2893.

IMA No. 2011-080

Hillesheimite

$(\text{K,Ca,Ba},\square)_2(\text{Mg,Fe,Ca},\square)_2[(\text{Si,Al})_{13}\text{O}_{23}(\text{OH})_6](\text{OH})\cdot 8\text{H}_2\text{O}$

Graulay, Hillesheim, Eifel Mountains, Rheinland-Pfalz, Germany

Nikita V. Chukanov*, Natalia V. Zubkova, Igor V. Pekov, Dmitriy I. Belakovskiy, Willi Schüller, Bernd Ternes, Günter Blaß and Dmitriy Y. Pushcharovskiy

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

Structurally related to günterblässite and umbrianite

Orthorhombic: *Pmnm*; structure determined

$a = 6.979(11)$, $b = 37.1815(18)$, $c = 6.5296(15)$ Å

6.857(58), 6.545(100), 6.284(53), 4.787(96), 4.499(59), 3.065(86), 2.958(62), 2.767(62)

Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4174/1

How to cite: Chukanov, N.V., Zubkova, N.V., Pekov, I.V., Belakovskiy, D.I., Schüller, W., Ternes, B., Blaß, G. and Pushcharovskiy, D.Y. (2012) Hillesheimite, IMA 2011-080.

CNMNC Newsletter No. 12, February 2012, page 152; *Mineralogical Magazine*, **76**, 151-155.

IMA No. 2011-081

Laptevite-(Ce)

$\text{Ca}_6(\text{Fe}^{2+},\text{Mn}^{2+})\text{Y}_3\text{REE}_7(\text{SiO}_4)_3(\text{PO}_4)(\text{B}_3\text{Si}_3\text{O}_{18})(\text{BO}_3)\text{F}_{11}$

Dara-i-Pioz glacier moraine, Alai mountain range, Tien-Shan, Garmskii district, North Tajikistan (39°30'N 70°40'E)

A.A. Agakhanov*, L.A. Pautov, Y. Uvarova, V.Y. Karpenko, E.V. Sokolova and F.C. Hawthorne

*E-mail: pla@fmm.ru

Structurally related to structurally related to the okanoganite – vicanite group

Hexagonal: $R3m$; structure determined

$a = 10.804(2)$, $c = 27.726(6)$ Å

4.41(29), 3.13(26), 3.03(100), 2.982(85), 2.954(60), 2.689(40), 1.797(31), 1.770(21)

Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4195/1

How to cite: Agakhanov, A.A., Pautov, L.A., Uvarova, Y., Karpenko, V.Y., Sokolova, E.V. and Hawthorne, F.C. (2012) Laptevite-(Ce), IMA 2011-081. CNMNC Newsletter No. 12, February 2012, page 153; *Mineralogical Magazine*, **76**, 151-155.

IMA No. **2011-082**

Ekplexite

$(\text{Nb,Mo,W})\text{S}_2 \cdot (\text{Mg}_{1-x}\text{Al}_x)(\text{OH})_{2+x}$

Mount Kaskasnyunchorr, Khibiny alkaline complex, Kola Peninsula, Russia

Igor V. Pekov*, Vasily O. Yapaskurt and Yury S. Polekhovsky

*E-mail: igorpekov@mail.ru

Valleriite group

Trigonal: $P321$, $P3m1$ or $P\bar{3}m1$

$a = 3.791(3)$, $c = 11.30(1)$ Å

11.37(100), 5.65(55), 3.155(4), 2.809(20), 1.623(11)

Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4155/1

How to cite: Pekov, I.V., Yapaskurt, V.O. and Polekhovsky, Y.S. (2012) Ekplexite, IMA 2011-082. CNMNC Newsletter No. 12, February 2012, page 152; *Mineralogical Magazine*, **76**, 151-155.

IMA No. **2011-083**

Osumilite-(Mg)

$\text{KMg}_2\text{Al}_3(\text{Al}_2\text{Si}_{10})\text{O}_{30}$

Bellerberg, Eastern Eifel area, Rheinland-Pfalz, Germany

Nikita V. Chukanov*, Igor V. Pekov, Ramiza K. Rastsvetaeva, Sergey M. Aksenov, Dmitriy I. Belakovskiy, Willi Schüller and Bernd Ternes

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

Mg analogue of osumilite

Hexagonal: $P6/mcc$; structure determined

$a = 10.0959(1)$, $c = 14.3282(2)$ Å

7.21(37), 5.538(36), 5.064(85), 4.137(45), 3.736(43), 3.234(100), 2.932(42), 2.767(51)

Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4174/1

How to cite: Chukanov, N.V., Pekov, I.V., Rastsvetaeva, R.K., Aksenov, S.M., Belakovskiy, D.I., Schüller, W. and Ternes, B. (2012) Osumilite-(Mg), IMA 2011-083. CNMNC Newsletter No. 12, February 2012, page 153; *Mineralogical Magazine*, **76**, 151-155.

IMA No. **2011-084**

Witzkeite

$\text{Na}_4\text{K}_4\text{Ca}(\text{NO}_3)_2(\text{SO}_4)_4 \cdot 2\text{H}_2\text{O}$

Punta de Lobos, Tarapacá region, Chile (21°12'S 70°05'W)

Fabrizio Nestola*, Fernando Cámara, Nikita V. Chukanov, Daniel Atencio⁴, José M.V. Coutinho, Reynaldo R. Contreira Filho and Gunnar Färber

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

New structure type

Monoclinic: *Cc*; structure determined

$a = 24.902(2)$, $b = 5.3323(4)$, $c = 17.246(1)$ Å, $\beta = 94.281(7)^\circ$

12.377(100), 4.134(19), 3.100(24), 2.989(7), 2.851(6), 2.689(9), 2.482(12), 2.068(54)

Type material is deposited in the collections of the Mineralogical Museum of the University of Padova, Padova, Italy, catalogue number MMP M10009

How to cite: Nestola, F., Cámara, F., Chukanov, N.V., Atencio, D., Coutinho, J.M.V., Contreira Filho, R.R. and Färber, G. (2012) Witzkeite, IMA 2011-084. CNMNC Newsletter No. 12, February 2012, page 153; *Mineralogical Magazine*, **76**, 151-155.

IMA No. 2011-085

Starovaite

$\text{KCu}_5\text{O}(\text{VO}_4)_3$

Yadovitaya fumarole, Tolbachik volcano, Kamchatka Peninsula, Kamchatka Oblast', Far-Eastern Region, Russia ($55^\circ 41' \text{N}$ $160^\circ 14' \text{E}$)

Igor V. Pekov*, Michael E. Zelenski, Vasiliy O. Yapaskurt, Yury S. Polekhovskiy and Mikhail N. Murashko

*E-mail: igorpekov@mail.ru

Known structure type

Triclinic: $P\bar{1}$

$a = 6.08(4)$, $b = 8.26(5)$, $c = 10.71(6)$ Å, $\alpha = 97.8(1)$, $\beta = 92.4(1)$, $\gamma = 90.4(1)^\circ$

10.65(32), 8.18(46), 3.047(41), 2.745(47), 2.526(100), 2.322(98), 1.867(25), 1.410(23)

Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4196/1

How to cite: Pekov, I.V., Zelenski, M.E., Yapaskurt, V.O., Polekhovskiy, Y.S. and Murashko, M.N. (2012) Starovaite, IMA 2011-085. CNMNC Newsletter No. 12, February 2012, page 153; *Mineralogical Magazine*, **76**, 151-155.

IMA No. 2011-086

Zaccariniite

RhNiAs

Loma Peguera, Dominican Republic ($18.9900523^\circ \text{N}$ 70.322982°W)

Anna Vymazalová*, František Laufek, Milan Drábek, Chris J. Stanley, Ronald J. Bakker, Raul Bermejo, Giorgio Garuti, Oscar Thalhammer, Joaquin A. Proenza and Francisco Longo

*E-mail: anna.vymazalova@geology.cz

Known structure type

Tetragonal: $P4/nmm$

$a = 3.5496(1)$, $c = 6.1578(2)$ Å

2.326(97), 2.053(56), 1.945(100), 1.776(58), 1.775(83), 1.256(86), 1.164(60), 0.973(69)

Type material is deposited in the collections of the Mineralogical Museum of Leoben, Peter Tunner Strasse 5, Leoben, Austria, catalogue number 8241

How to cite: Vymazalová, A., Laufek, F., Drábek, M., Stanley, C.J., Bakker, R.J., Bermejo, R., Garuti, G., Thalhammer, O., Proenza, J.A. and Longo, F. (2012) Zaccariniite, IMA 2011-086. CNMNC Newsletter No. 12, February 2012, page 154; *Mineralogical Magazine*, **76**, 151-155.

IMA No. 2011-087

Piemontite-(Pb)

$\text{CaPbAl}_2\text{Mn}^{3+}[\text{Si}_2\text{O}_7][\text{SiO}_4]\text{O}(\text{OH})$

“Mixed Series” formation, Babuna valley, 40 km SW of Veles, Nežilovo village, Jacupica Mountains, Macedonia

Nikita V. Chukanov*, Dmitriy A. Varlamov, Fabrizio Nestola, Dmitriy Belakovskiy, Jörg Goettlicher, Sergey Britvin, Arianna Lanza and Simeon Jancev

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

Epidote group

Monoclinic: $P2_1/m$; structure determined

$a = 8.938(1)$, $b = 5.6810(6)$, $c = 10.289(1)$ Å, $\beta = 114.17(1)^\circ$

8.12(68), 4.67(53), 3.518(77), 2.931(100), 2.843(51), 2.736(57), 2.619(66), 2.122(46)

Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4193/1

How to cite: Chukanov, N.V., Varlamov, D.A., Nestola, F., Belakovskiy, D., Goettlicher, J., Britvin, S., Lanza, A. and Jancev, S. (2012) Piemontite-(Pb), IMA 2011-087. CNMNC Newsletter No. 12, February 2012, page 154; *Mineralogical Magazine*, **76**, 151-155.

IMA No. 2011-088

Mendozavilite-KCa

$[K_2(H_2O)_{15}Ca(H_2O)_6][Mo_8P_2Fe^{3+}_3O_{34}(OH)_3]$

Chuquicamata mine, Antofagasta, Chile

Anthony R. Kampf*, Stuart J. Mills, Michael S. Rumsey, John Spratt and Maurizio Dini

*E-mail: akampf@nhm.org

Betpakdalite group

Monoclinic: $C2/m$

$a = 18.909(5)$, $b = 10.897(2)$, $c = 14.958(4)$ Å, $\beta = 129.780(9)^\circ$

11.643(16), 8.850(100), 7.369(34), 3.675(16), 3.125(26), 2.998(25), 2.846(16), 2.018(21)

Type material is deposited in the collections of the Natural History Museum of Los Angeles County, Los Angeles, California, USA, catalogue numbers 63315 and 63572

How to cite: Kampf, A.R., Mills, S.J., Rumsey, M.S., Spratt, J. and Dini, M. (2012) Mendozavilite-KCa, IMA 2011-088. CNMNC Newsletter No. 12, February 2012, page 154; *Mineralogical Magazine*, **76**, 151-155.

IMA No. 2011-089

Hilarionite

$Fe^{3+}_2(SO_4)(AsO_4)(OH) \cdot 6H_2O$

Hilarion mine, Agios Konstantinos (Kamariza), Lavrion District, Attikí Prefecture, Greece

Igor V. Pekov*, Nikita V. Chukanov, Vasily O. Yapaskurt, Vyacheslav S. Rusakov,

Dmitriy I. Belakovskiy, Anna G. Turchkova, Panagiotis Voudouris, Athanassios

Katerinopoulos and Andreas Magganas

*E-mail: igorpekov@mail.ru

Related to kaňkite

Monoclinic: $C2$, Cm or $C2/m$

$a = 18.53(4)$, $b = 17.43(3)$, $c = 7.56(1)$ Å, $\beta = 94.06(15)^\circ$

12.66(100), 7.60(6), 5.00(10), 4.70(10), 4.33(7), 3.215(4), 3.151(4), 2.887(5)

Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, catalogue number 92988

How to cite: Pekov, I.V., Chukanov, N.V., Yapaskurt, V.O., Rusakov, V.S., Belakovskiy, D.I., Turchkova, A.G., Voudouris, P., Katerinopoulos, A. and Magganas, A. (2012) Hilarionite, IMA 2011-089. CNMNC Newsletter No. 12, February 2012, page 154; *Mineralogical Magazine*, **76**, 151-155.

IMA No. 2011-092

Kangite

(Sc,Ti,Al,Zr,Mg,Ca,□)₂O₃

Allende meteorite

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

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

Bixbyite group

Cubic: *Ia3*; structure determined

$a = 9.842(1) \text{ \AA}$

4.019(16), 2.842(100), 2.461(10), 2.099(15), 1.931(75), 1.740(51), 1.519(29), 1.484(23)

Holotype material in section USNM 7555 is housed in the collections of the Smithsonian Institution's National Museum of Natural History, Washington DC, USA

How to cite: Ma, C., Tschauner, O., Rossman, G. and Liu, W. (2012) Kangite, IMA 2011-092. CNMNC Newsletter No. 12, February 2012, page 155; *Mineralogical Magazine*, **76**, 151-155.

IMA No. 2011-093

Wopmayite

Ca₆Na₃□Mn(PO₄)₃(PO₃OH)₄

Tanco Mine, Bernic Lake, Manitoba, Canada

Mark A. Cooper, Robert Ramik, Frank C. Hawthorne*, Neil A. Ball, Yassir A. Abdu and Kimberly T. Tait

*E-mail: frank_hawthorne@umanitoba.ca

Structurally related to whitlockite

Rhombohedral: *R3c*; structure determined

$a = 10.3926(2)$, $c = 37.1694(9) \text{ \AA}$

8.017(31), 6.421(32), 5.166(33), 3.425(29), 3.186(88), 2.858(100), 2.736(27), 2.589(68)

Type material is deposited in the collections of the Department of Natural History, Royal Ontario Museum, Toronto, Ontario, Canada, catalogue number M54948

How to cite: Cooper, M.A., Ramik, R., Hawthorne, F.C., Ball, N.A., Abdu, Y.A. and Tait, K.T. (2012) Wopmayite, IMA 2011-093. CNMNC Newsletter No. 12, February 2012, page 155; *Mineralogical Magazine*, **76**, 151-155.

OLDER PROPOSALS

IMA No. 2010-085a

Shimazakiite

Ca₂B_{2-x}O_{5-3x}(OH)_{3x} (x = 0 – 0.06)

Fuka, Okayama Prefecture, Japan (43°46'N 133°26'E)

Isao Kusachi*, Shoichi Kobayashi, Yasushi Takechi, Yoshihiro Nakamuta, Toshiro Nagase, Kazumi Yokoyama, Ritsuro Miyawaki, Masako Shigeoka and Satoshi Matsubara

*E-mail: michikusa509@image.ocn.ne.jp

New structure type

Monoclinic: *P2*, *P2/m*, *Pm*, *P2*₁ or *P2*₁/*m*

$a = 3.532(3)$, $b = 6.354(2)$, $c = 19.275(9) \text{ \AA}$, $\beta = 91.30(8)^\circ$

6.03(27), 3.84(30), 3.02(84), 2.92(100), 2.84(27), 2.81(56), 2.76(32), 1.880(32)

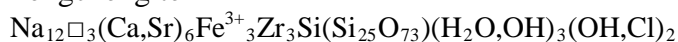
Type material is deposited in the collections of the National Museum of Nature and Science, Tokyo, Japan, registered number NSM-M41025

How to cite: Kusachi, I., Kobayashi, S., Takechi, Y., Nakamuta, Y., Nagase, T., Yokoyama, K., Miyawaki, R., Shigeoka M. and Matsubara, S. (2011) Shimazakiite, IMA 2010-085a.

CNMNC Newsletter No. 10, October 2011, page 2610; *Mineralogical Magazine*, **75**, 2601-2613.

IMA No. 2007-018a

Fengchengite



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 2892; *Mineralogical Magazine*, **75**, 2887-2893.

APPROVALS WITHDRAWN

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.

GENERAL NOMENCLATURE PROPOSALS

IMA 11-A

The proposal on the correction of the brunogeierite formula and change of its classification is accepted. The ideal end-member formula of brunogeierite becomes $(\text{Fe}^{2+})_2\text{Ge}^{4+}\text{O}_4$. The mineral should be classified as a nesogermanate, a member of the ringwoodite group.