

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

NEWSLETTER 12

New minerals and nomenclature modifications approved in 2012

P. A. WILLIAMS¹ (Chairman, CNMNC), F. HATERT² (Vice-Chairman, CNMNC), M. PASERO³ (Vice-Chairman, CNMNC) AND S. J. MILLS⁴ (Secretary, CNMNC)

¹ School of Natural Sciences, University of Western Sydney, Locked Bag 1797, Penrith, NSW 2751, Australia – p.williams@uws.edu.au

² Laboratoire de Minéralogie, Université de Liège, B-4000 Liège, Belgium – fhatert@ulg.ac.be

³ Dipartimento di Scienze della Terra, Università degli Studi di Pisa, Via Santa Maria 53, I-56126 Pisa, Italy – pasero@dst.unipi.it

⁴ Geosciences, Museum Victoria, GPO Box 666, Melbourne 3001, Victoria, Australia – smills@museum.vic.gov.au

The information given here is provided by the IMA Commission on New Minerals, Nomenclature and Classification for comparative purposes and as a service to mineralogists working on new species.

Each mineral is described in the following format:

Mineral name, if the authors agree on its release prior to the full description appearing in press

Chemical formula

Type locality

Full authorship of proposal

E-mail address of corresponding author

Relationship to other minerals

Crystal system, Space group; Structure determined, yes or no

Unit-cell parameters

Strongest lines in the X-ray powder diffraction pattern

Type specimen repository and specimen number

Citation details for the mineral prior to publication of full description

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

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

NO OTHER INFORMATION WILL BE RELEASED BY THE COMMISSION

**New mineral proposals approved in
November 2011****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, ItalyPaolo Orlandi*, Yves Moëlo, Cristian Biagioni
and Elena Bonaccorsi

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

Cl-free homeotype of dadsonite, stabilized by
 S_2^{2-} ionsTriclinic: $P\bar{1}$; 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 19442How 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. 2011-080**

Hillesheimite

 $(\text{K}, \text{Ca}, \text{Ba}, \square)_2(\text{Mg}, \text{Fe}, \text{Ca}, \square)_2[(\text{Si}, \text{Al})_{13}$
 $\text{O}_{23}(\text{OH})_6](\text{OH})\cdot 8\text{H}_2\text{O}$ Graulay, Hillesheim, Eifel Mountains,
Rheinland-Pfalz, GermanyNikita V. Chukanov*, Natalia V. Zubkova, Igor
V. Pekov, Dmitriy I. Belakovsky, Willi
Schüller, Bernd Ternes, Günter Bläß and
Dmitriy Y. Pushcharovsky

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

Structurally related to günterblässite and
umbrianiteOrthorhombic: $Pmmn$; 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 4174/1How to cite: Chukanov, N.V., Zubkova, N.V.,
Pekov, I.V., Belakovsky, D.I., Schüller, W.,
Ternes, B., Bläß, G. and Pushcharovsky, D.Y.(2012) Hillesheimite, IMA 2011-080. CNMNC
Newsletter No. 12, February 2012, page 152;
Mineralogical Magazine, **76**, 151–155.**IMA No. 2011-082**

Ekplexite

 $(\text{Nb}, \text{Mo}, \text{W})\text{S}_2(\text{Mg}_{1-x}\text{Al}_x)(\text{OH})_{2+x}$ Mount Kaskasnyunchorr, Khibiny alkaline
complex, Kola Peninsula, RussiaIgor 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 4155/1How 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.**New mineral proposals approved in
December 2011****IMA No. 2011-077**Thermessaite-(NH_4) $(\text{NH}_4)_2\text{AlF}_3(\text{SO}_4)$

La Fossa crater, Vulcano island, Italy

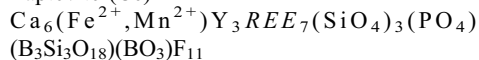
Anna Garavelli*, Donatella Mitolo, Daniela
Pinto

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

 (NH_4) -analogue of thermessaiteOrthorhombic: $Pbcn$; 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-V28How 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. 2011-081

Laptevite-(Ce)



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

$a = 10.804(2)$, $c = 27.726(6)$ Å

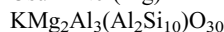
4.41(29), 3.13(26), 3.03(100), 2.982(85), 2.954(60), 2.689(40), 1.797(31), 1.770(21)

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. 2011-083

Osumilite-(Mg)



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

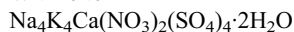
7.21(37), 5.538(36), 5.064(85), 4.137(45), 3.736(43), 3.234(100), 2.932(42), 2.767(51)

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



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

Fabrizio Nestola*, Fernando Cámara, Nikita V. Chukanov, Daniel Atencio, 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),

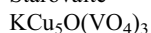
2.851(6), 2.689(9), 2.482(12), 2.068(54)

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



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

Mendozaavilite-KCa

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

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) Mendozaavilite-KCa, IMA 2011-088. CNMNC Newsletter No. 12, February 2012, page 154; *Mineralogical Magazine*, **76**, 151–155.

IMA No. 2011-089

Hilarionite

 $\text{Fe}_2^{3+}(\text{SO}_4)(\text{AsO}_4)(\text{OH})\cdot 6\text{H}_2\text{O}$

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

Igor V. Pekov*, Nikita V. Chukanov, Vasilii 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, \square)₂O₃

Allende meteorite

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

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

Bixbyite group

Cubic: Ia $\bar{3}$; 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, USAHow 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 \square 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 M54948How 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.

