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

NEWSLETTER 12

New minerals and nomenclature modifications approved in 2012

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

Each mineral is described in the following format:

Mineral name, if the authors agree on its release prior to the full description appearing in press
Chemical formula
Type locality
Full authorship of proposal
E-mail address of corresponding author
Relationship to other minerals
Crystal system, Space group; Structure determined, yes or no
Unit-cell parameters
Strongest lines in the X-ray powder diffraction pattern
Type specimen repository and specimen number
Citation details for the mineral prior to publication of full description

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

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

NO OTHER INFORMATION WILL BE RELEASED BY THE COMMISSION

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New mineral proposals approved in November 2011

IMA No. 2011-076
Disulfodadsonite
Pb$_{11}$Sb$_{13}$S$_{30}$(S$_2$)$_{0.5}$
Ceragiola area of the Seravezza marble quarries, Apuan Alps, Tuscany, Italy
Paolo Orlandi*, Yves Moeño, Cristian Biagioni and Elena Bonaccorsi
*E-mail: orlandi@dst.unipi.it
Cl-free homeotype of dadsonite, stabilized by S$_2^-$ ions
Triclinic: $P\overline{1}$; 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

IMA No. 2011-080
Hillesheimite
(Κ, Ca, Ba, □)$_2$((Mg, Fe, Ca, □)$_2$(Si, Al)$_{13}$O$_{28}$(OH)$_3$(OH)-8H$_2$O
Graulay, Hillesheim, Eifel Mountains, Rheinland-Pfalz, Germany
Nikita V. Chukanov*, Natalia V. Zubkova, Igor V. Pekov, Dmitriy I. Belakovsky, Willi Schüller, Bernd Ternes, Günter Blaß and Dmitriy Y. Pushcharovsky
*E-mail: chukanov@icp.ac.ru
Structurally related to günterblassite and umbrianite
Orthorhombic: $Pmmn$; structure determined
$a = 6.979(11), b = 57.1815(18), c = 6.5296(15)$ Å
Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4155/1

IMA No. 2011-082
Ekplexite
(Nb, Mo, W)$_2$((Mg$_{1-x}$Al$_x$)$_2$(OH)$_{2+x}$
Mount Kaskasynuchorr, 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 $P31m$
$a = 3.791(3), c = 11.30(1)$ 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

New mineral proposals approved in December 2011

IMA No. 2011-077
Thermessaite-(NH$_4$)
(NH$_4$)$_2$AlF$_3$(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 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
IMA No. 2011-081
Laptevite-(Ce)
Ca₆(Fe²⁺,Mn²⁺)Y₃REE₇(SiO₄)₃(PO₄)(B₃Si₃O₁₈)(BO₃)F₁₁
Dara-i-Pioz glacier moraine, Alai mountain range, Tien-Shan, Garmskii district, North Tajikistan (39º30'N 70º40'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–vicannite 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

IMA No. 2011-083
Osumilite-(Mg)
KMg₂Al₃(Al₂Si₁₀)O₃₀
Bellerberg, Eastern Eifel area, Rheinland-Pfalz, Germany
Nikita V. Chukanov*, Igor V. Pekov, Ramiza K. Rastsvetaeva, Sergey M. Aksenov, Dmitrii 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(2), c = 14.3282(6) Å
7.21(37), 5.538(36), 5.064(85), 4.137(45), 3.736(43), 3.234(100), 2.932(40), 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 4195/1
How to cite: Chukanov, N.V., Pekov, I.V., Rastsvetaeva, Sergey M. Aksenov, Dmitrii I. Belakovskiy, Willi Schüller and Bernd Ternes
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*E-mail: igorpekov@mail.ru
Known structure type
Triclinic: P1
a = 6.08(4), b = 8.26(5), c = 10.71(6) Å, α = 97.8(1), β = 92.4(1), γ = 90.4(1)°
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
IMA No. 2011-086
Zaccariniite
RhNiAs
Loma Peguera, Dominican Republic (18.9900523ºN 70.322982ºW)
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
Type material is deposited in the collections of the Mineralogical Museum of Leoben, Peter Tunner Strasse 5, Leoben, Austria, catalogue number 8241

IMA No. 2011-087
Piemontite-(Pb)
CaPbAl₂Mn³⁺[Si₂O₇][SiO₄]O(OH)
Mixed Series formation, Babuna valley, 40 km SW of Veles, Nežílovo 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: P2₁/m; structure determined
a = 8.938(4), b = 17.43(3), c = 7.56(1) Å, β = 114.17(1)°
Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 5493/1

IMA No. 2011-088
Mendozavilite-KCa
[K₂(H₂O)₁₅Ca(H₂O)₃][Mo₈P₂Fe³⁺O₃₄(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
Betpakdalaite group
Monoclinic: C2/m
a = 18.909(4), b = 10.897(2), c = 14.958(4) Å, β = 129.780(9)°
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

IMA No. 2011-089
Hilarionite
Fe³⁺₂(ASO₄)(AsO₄)(OH)·6H₂O
Hilarion mine, Agios Konstantinos (Kamariza), Lavrin District, Attiki Prefecture, Greece
Igor V. Pekov*, Nikita V. Chukanov, Vasiliy O. Yapaskurt, Vyacheslav S. Rusakov, Dmitriy I. Belakovskiy, Anna G. Turchkova, Panagiotis Voudouris, Athanasios 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, β = 94.06(15)°
Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, catalogue number 92988
IMA No. **2011-092**

Kangite

$(\text{Sc,Ti,Al,Zr,Mg,Ca,□})_2\text{O}_3$

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

$a = 9.842(1)$ Å

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


IMA No. **2011-093**

Wopmayite

$\text{Ca}_6\text{Na}_3\Box\text{Mn(PO}_4)_3\text{(PO}_3\text{OH})_4$

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

$a = 10.3926(2)$, $c = 37.1694(9)$ Å

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
