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

NEWSLETTER 14

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

DOI: 10.1180/minmag.2012.076.5.15
ERRATA

IMA No. 2011-111 Fuettererite

IMA No. 2012-015 Schlüterite-(Y)
The given chemical formula for the mineral is incorrect (Cooper, M.A., Husdal, T., Ball, N., Hawthorne, F.C. and Abdu, Y. (2012) Schlüterite-(Y), IMA 2012-015. CNMNC Newsletter No. 13, June 2012, page 816; Mineralogical Magazine, 76, 807–817). The correct formula is (Y, REE)$_2$Al$_2$Si$_2$O$_7$(OH)$_2$F.

2012 MINERAL APPROVAL WITHDRAWN

IMA No. 2012-013 Tellurocanfieldite
Approval for this mineral has been withdrawn (Gu, X., Xie, X., Lu, A., Hoshino, H., Huang, J. and Li, J. (2012) Tellurocanfieldite, IMA 2012-013. CNMNC Newsletter No. 13, June 2012, page 816; Mineralogical Magazine, 76, 807–817). A subsequent single-crystal structural analysis has shown that Te is disordered over the three sulfur sites and thus the material is in fact Te-rich canfieldite.

NEW MINERAL PROPOSALS APPROVED IN JUNE 2012

IMA No. 2012-014 Fejerite
Cu$_4$ClF(OH)$_6$
Mina Ojuela, Mapimí, Durango, Mexico (25º47’37”N 103º47’28”W)
Mike S. Rumsey*, Mark D. Welch, Anthony R. Kampf, Caroline A. Kirk, Gordon Cressey and John Spratt
*E-mail: m.rumsey@nhm.ac.uk
Isotectural with claringbullite and barlowite
Hexagonal: $P6_3/mmc$; structure determined $a = 6.6678(6)$, $c = 9.1728(9)$ Å
5.778(84), 4.881(25), 2.886(21), 2.699(100), 2.444(64), 2.294(18), 1.797(23), 1.668(21)
Type material is deposited in the collections of the Natural History Museum, London, UK, registration number BM 2011,53

IMA No. 2012-018 Arangasite
Al$_2$(SO$_4$)(PO$_4$)F·7.5H$_2$O
Alyaskitove deposit, Indigirka River basin, East Jakutia, Russia (64º39’N 142º70’E)
Gennady N. Gamyanin*, Nadezhda V. Zayakina and Larisa T. Galenchikova
*E-mail: ggn@igem.ru
Chemically related to sanjuanite and mitryaevaite
Monoclinic: $P2_1$
$a = 9.740(5)$, $b = 19.31(1)$, $c = 10.688(5)$ Å
$\beta = 98.65(8)^\circ$
10.57(36), 9.60(100), 7.123(23), 5.295(34), 4.695(17), 4.191(29), 3.218(50), 2.870(20)
Type material is deposited in the collections of the Fersman Museum of the Russian Academy of Science, Moscow, Russia, catalogue number 4254/1

IMA No. 2012-019 Bobmeyerite
Pb$_4$Al$_4$(Si$_4$O$_{12}$)(OH)$_{11}$Cl(H$_2$O)
Mammoth-Saint Anthony mine, Tiger, Pinal County, Arizona, USA (32º42’23”N 110º40’59”W)
*E-mail: akampf@nhm.org
Closely related to cerchiaraite and ashburtonite
Orthorhombic: $Pnnm$; structure determined $a = 13.969(9)$, $b = 14.243(10)$, $c = 5.893(4)$ Å
10.051(35), 5.474(54), 5.011(35), 4.333(43), 3.278(77), 2.966(88), 2.549(100), 1.873(39)
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 63824, 63825 and 63826
How to cite: Kampf, A.R., Pluth, J.J., Chen, Y.-

IMA No. 2012-020

Iseite

Mn₂Mo₃O₈

Shobu area, Ise City, Mie Prefecture, Japan (34°29′N 136°43′E)

Daisuke Nishio-Hamane*, Norimitsu Tomita, Tetsuo Minakawa and Sachio Inaba

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

Mn-dominant analogue of kamiokite

Hexagonal: P6₃mc

a = 5.8080(8), c = 10.212(3) Å

5.107(68), 3.584(95), 2.820(45), 2.525(100), 2.442(95), 2.023(49), 1.659(47), 1.587(72)

Type material is deposited in the collections of the National Museum of Nature and Science, Tsukuba, Japan, specimen number NSM M-43652


IMA No. 2012-022

Oxycalcioromite

Ca₂Sb₂O₇

Buca della Vena mine, Apuan Alps, Tuscany, Italy (43°59′55″N 10°18′37″E)

Cristian Biagioni* and Paolo Orlandi

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

Pyrochlore supergroup

Cubic: Fd3m; structure determined

a = 10.3042(7) Å

5.93(32), 3.105(24), 2.977(100), 2.576(24), 1.984(8), 1.824(45), 1.556(34), 1.489(8)

Type material is deposited in the collections of the Museo di Storia Naturale e del Territorio, Università di Pisa, Calci (Pisa), Italy, catalogue number 19640


IMA No. 2012-023

Kleberite

FeTi₄O₁₁(OH)₅

Alluvial sands in regions of Saxony, close to Roda (51°3′N 12°37′E) and Königshain (50°58′N 12°53′E), and from the Murray Basin, SE Australia and Kalimantan, Indonesia

Ian E. Grey* and Klaus Steinike

*E-mail: ian.grey@csiro.au

Isostructural with tivanite and pseudorutile

Monoclinic: P2₁/c; structure determined

a = 7.5259(6), b = 4.5741(2), c = 9.8541(1) Å, β = 130.784(6)°

3.933(8), 2.764(9), 2.466(27), 2.170(82), 1.676(100), 1.423(22), 1.297(6), 1.085(6)

Type specimens of Murray Basin and Kalimantan kleberite are preserved in the collections of Museum Victoria, Melbourne, Victoria, Australia, registered numbers M52010 and M52011, respectively


IMA No. 2012-024

Trinephelinite

NaAlSiO₄

Tawmaw, Hpakan-Tawmaw jade tract, Hpakant Township, Mohnyin district, Kachin State, Myanmar

G.C. Parodi, S. Pont, C. Ferraris*, B. Rondeau and J.P. Lorand

*E-mail: ferraris@mnhn.fr

Known structure type; known synthetic phase

Hexagonal: P6₃, P6₅

a = 9.995(2), c = 24.797(4) Å

4.328(22), 4.133(49), 3.834(81), 3.272(40), 3.163(100), 2.989(21), 2.403(31), 2.401(22)

Type material is deposited in the collections of the Muséum National d’Histoire naturelle (MNHN), Paris, France, registration number MNHN 212-001


IMA No. 2012-025

Omsite

(Ni,Cu)₂Fe³⁺(OH)₆[Sb(OH)₆]

Correc d’en Llinassos, near the village of Oms, Pyrénées-Orientales Department, France (42°32′60″N 02°42′0″E)
Stuart J. Mills*, Anthony R. Kampf, Robert M. Housley, Georges Favreau, Marco Pasero, Cristian Biagioni, Stefano Merlino, Christian Berbain and Paolo Orlandi

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

Hydrotalcite supergroup

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

$a = 5.3506(8)$, $c = 19.5802(15) \text{ Å}$

$9.84(30)$, $4.901(100)$, $4.781(34)$, $2.685(26)$, $2.354(81)$, $1.808(6)$, $1.476(24)$

Two cotype specimens have been deposited in the collections of the Natural History Museum of Los Angeles County, Los Angeles, California, USA, catalogue numbers 63428 and 63429, and one in the collections of Museum Victoria, Melbourne, Victoria, Australia, registration number M51584


NEW MINERAL PROPOSALS APPROVED IN JULY 2012

IMA No. 2012-027

Scottyite

$\text{BaCu}_2\text{Si}_2\text{O}_7$

Wessels mine, Kalahari Manganese Fields, Northern Cape Province, Republic of South Africa

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

New structure type

Orthorhombic: $Pna2_1$; structure determined

$a = 6.8556(2), b = 13.1725(2), c = 6.8901(2) \text{ Å}$

$6.586(52), 3.911(22), 3.078(17), 3.053(64), 3.041(100), 2.726(52), 2.430(37), 1.955(20)$

Type material has been deposited in the collections of the Mineral Museum of the University of Arizona, Tucson, Arizona, USA, catalogue number 19334


IMA No. 2012-028

Lavinskyite

$K\text{(LiCu)}\text{Cu}_6\text{(Si}_4\text{O}_{11})_2\text{(OH)}_4$

Wessels mine, Kalahari Manganese Fields, Northern Cape Province, Republic of South Africa

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

Isotypic with plancheite

Orthorhombic: $Pcnb$; structure determined

$a = 19.046(3), b = 20.377(2), c = 5.2497(6) \text{ Å}$

$10.189(100), 8.984(74), 4.921(25), 3.973(19), 3.343(32), 2.693(29), 2.522(27), 2.316(22)$

Type material has been deposited in the collections of the Mineral Museum of the University of Arizona, Tucson, Arizona, USA, catalogue number 19335


IMA No. 2012-029

Manganoblödite

$\text{Na}_2\text{Mn(SO}_4)_2\cdot4\text{H}_2\text{O}$

Blue Lizard mine, Red Canyon, White Canyon

How to cite: P. A. WILLIAMS ET AL. CNMNC Newsletter
NEW MINERAL PROPOSALS APPROVED IN AUGUST 2012

IMA No. 2012-032
Strontiohurlbutite
SrBe₂(PO₄)₂
Nanping No. 31 pegmatite, Fujian Province, China (118º06' E 26º40' N)
Rao Can*, Wang Rucheng, Gu Xiangping, Hu Huan and Dong Chuanwan
*E-mail: canrao@zju.edu.cn
Sr-dominant analogue of hurlbutite
Monoclinic: P 21/a;
a = 8.426(5), b = 8.998(5), c = 8.005(4) Å,
β = 90.05(5)°
3.554(100), 3.355(51), 3.073(38), 2.542(67),
2.230(42), 2.215(87), 2.046(54), 1.714(32)
Type material has been deposited in the collections of the Geological Museum of China, Yangrou Hutong, Xisi, Beijing, People’s Republic of China, catalogue number M11803

IMA No. 2012-033
Carlfrancisite
Mn₃⁺(Mn⁺²,Mg,Fe⁺³,Al)₄₂[As⁺³O₃]₂(As⁺⁵O₄)₄
[(Si,As⁺⁵)O₄]₆[(As⁺⁵,Si)O₄]₂(OH)₄
E15-11 south stope, 11 level, Asia West sector of the Kombat mine, Otavi Valley, Namibia
Frank C. Hawthorne* and William W. Pinch
*E-mail: frank_hawthorne@umanitoba.ca
Closely related to mcgovernite and turtmannite
Trigonal: R 3m; structure determined
a = 8.2238(2), c = 205.113(6) Å
4.107(48), 3.243(54), 3.051(43), 2.918(47),
2.826(100), 2.676(63), 2.371(88), 1.552(84)
Type material has been deposited in the collections of the National Museum of Nature and Science, Japan, catalogue numbers NSM-M43670 and NSM-M43671, and the Kyoto University Museum, Japan, catalogue number KUM-M0001

IMA No. 2012-035
Minohlite
(Cu,Zn)₃(SO₄)₂(OH)₁₀·8H₂O
Hirao mine, Onsen-machi, Minoh City, Osaka Prefecture, Japan (34º50' N 135º28' E)
Masayuki Ohnishi*, Norimasa Shimobayashi, Daisuke Nishio-Hamane, Keiji Shinoda, Koichi Momma and Takiji Ikeda
*E-mail: czshh118a@yahoo.co.jp
Chemically related to schulenbergite
Hexagonal (trigonal): P 6, P 6₆/m, P 6₂₂, P 6₃m, P 6₃2m or P 6₃/m (P 3, P 3, P 321, P 3m1, P 3 1m, P 3 12, P 3 1m or P 3 1m)
a = 8.2353(11), c = 8.1352(17) Å
8.138(20), 4.128(24), 2.702(100), 2.564(76), 1.560(43), 1.532(24), 1.351(12), 1.333(11)
Type material has been deposited in the collections of the National Museum of Nature and Science, Japan, catalogue numbers NSM-M43670 and NSM-M43671, and the Kyoto University Museum, Japan, catalogue number KUM-M0001

IMA No. 2012-036
Fluorcalcioomicrolite
(Ca,Na)₂Ta₂(O,OH)₆F
Volta Grande pegmatite, Nazareno, Minas Gerais, Brazil
Marcelo B. Andrade, Daniel Atencio*, Hexiong Yang, Robert T. Downs, Aba I.C. Persiano and Javier Ellena
*E-mail: datencio@usp.br
Pyrochlore supergroup
Cubic: Fd$\overline{3}$m; structure determined
$a = 10.4191(6)$ Å
5.997(59), 3.138(83), 3.005(100), 2.602(29), 2.004(23), 1.841(23), 1.589(25), 1.504(24)

Type material has been deposited in the collections of the Museu de Geociências, Instituto de Geociências, Universidade de São Paulo, São Paulo, Brazil, registration number DR731


IMA No. 2012-037
Cadmoxite
CdO
Lengenbach quarry, Binntal, Ct. Valais, Switzerland
Stefan Graeser*, Francesco Demartin and Walter Gabriel
*E-mail: stefan.graeser@unibas.ch
Dimorph of monteponite
Cubic: F$\overline{4}3$m; structure determined
$a = 5.4830(6)$ Å
3.162(100), 2.738(20), 1.941(30), 1.657(50), 1.259(40), 1.228(30), 1.121(40), 1.055(30)

The holotype material is deposited in the mineralogical collections of the Natural History Museum, Basel, Switzerland, catalogue number S203


IMA No. 2012-042
Voudourisite
CdSO$_4$·H$_2$O
Esperanza Mine, Lavrion, Attiki Prefecture, Greece
Branko Rieck* and Gerald Giester
*E-mail: branko@mineralogie.at
Kieserite group
Monoclinic: P$2_1$/n; structure determined
$a = 7.633(1), b = 7.458(1), c = 7.623(1)$ Å, $\beta = 115.41(1)^\circ$
4.881(65), 3.729(26), 3.574(100), 3.279(14), 3.226(44), 2.531(32), 2.319(16)

Type material is deposited in the collections of the Institut für Mineralogie und Kristallographie, University of Vienna, Vienna, Austria, catalogue number HS13.077


IMA No. 2012-043
Lazaridisite
3CdSO$_4$·8H$_2$O
Esperanza Mine, Lavrion, Attiki Prefecture, Greece
Branko Rieck* and Gerald Giester
*E-mail: branko@mineralogie.at
New structure type
Monoclinic: C2/c; structure determined
$a = 14.813(3), b = 11.902(2), c = 9.466(2)$ Å, $\beta = 97.38$ (3)$^\circ$
6.874(100), 6.338(69), 5.953(75), 4.529(57), 3.745(73), 3.092(75), 3.003(51), 2.895(42)

Type material is deposited in the collections of the Institut für Mineralogie und Kristallographie, University of Vienna, Vienna, Austria, catalogue number HS13.077


IMA No. 2012-044
Fluor-tsilaisite
NaMn$_2^+$Al$_6$(Si$_6$O$_{18}$)(BO$_3$)$_3$(OH)$_3$F
Grotta d’Oggi, San Piero in Campo, Elba, Italy
Ferdinando Bosi*, Giovanni B. Andreozzi, Giovanna Agros and Eugenio Scandale
*E-mail: ferdinando.bosi@uniroma1.it
Tourmaline supergroup
Trigonal: R$3m$; structure determined
$a = 15.9398(6), c = 7.363(3)$ Å
6.339(34), 4.212(57), 3.985(74), 3.455(58), 2.945(57), 2.575(100), 2.036(36), 1.915(29)

Type material is deposited in the collections of the Museo di Scienze della Terra, settore Mineralogico Petrografico “Carlo Lorenzo Garavelli”, Campus Universitario, Bari, Italy, catalogue number NM16

NOMENCLATURE PROPOSAL APPROVED IN JUNE 2012

IMA 11-G: Plumbonacrite is revalidated. Its chemical composition is Pb₃O(OH)₂(CO₃)₃, and the neotype locality is the Torr Works (Merehead) Quarry, East Cranmore, Somerset, United Kingdom.

NOMENCLATURE PROPOSALS APPROVED IN AUGUST 2012

IMA 12-A: Phosphovanadylite is renamed phosphovanadylite-Ba.

IMA 12-B: HYDROTALCITE SUPERGROUP: A report on the nomenclature of the hydrotalcite supergroup has been approved. The chemical formulae and status of minerals of the hydrotalcite supergroup, which presently includes 43 minerals, divided into 8 groups, have been revised. Four minerals (barbertonite, cyanophylite, manasseite and sjögrenite) have been discredited.

OTHER NOMENCLATURE MATTERS

A report, Clarification of status of species in the pyrochlore supergroup, by Andrew G. Christy and Daniel Atencio, will be published in Mineralogical Magazine in the near future, and made available on the CNMNC web site.