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

NEWSLETTER II

New minerals and nomenclature modifications approved in 2011

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

DOI: 10.1180/minmag.2011.075.6.2887
NEW MINERAL PROPOSALS APPROVED IN SEPTEMBER 2011

IMA No. 2011-054
Protochabournite
Tl₅₊ₓPb₂₋ₓ(Sb,As)₂₋ₓS₃₋ₓ(C₀ₓ₋₁₅)₄
Sant’Olga tunnel, Monte Arsiccio mine, Stazzema, Apuan Alps, Tuscany, Italy (43°58’N 10°17’E)
Paolo Orlandi*, Cristian Biagioni, Elena Bonaccorsi, Yves Moeïlo and Werner H. Paar
*E-mail: orlandi@dst.unipi.it
Homeotype of chabournéite
Triclinic: P1; structure determined
a = 8.150(2), b = 8.716(2), c = 21.579(4) Å,
α = 85.18(1), β = 96.94(1), γ = 88.60(1)°
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

IMA No. 2011-055
(CaCe₃)(Al₃Fe²⁺)(Si₂O₇)(SiO₄)₃O(OH)₂
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 endmembers
Orthorhombic: Pnma; structure determined
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 Department of Natural History, Royal Ontario Museum, Toronto, Ontario, Canada, catalogue number M56117

IMA No. 2011-056
Aspedamite
□₁₂(Fe³⁺Fe²⁺²⁺)Nb₄(ThNb₉Fe²⁺Ti⁴⁺O₄₂)(H₂O)₅(OH)₃
Herrebokasa 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: Im³; 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

IMA No. 2011-057
Mariinskite
BeCr₂O₄
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

IMA No. 2011-058
Edgewrite
Ca₉(SiO₄)₄F₂
Upper Chegem volcanic caldera, Kabardino-Balkaria, North Caucasus, Russia (43°17′N 43°6′E)
*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,
a = 100.598(1)°
Type material is deposited in the collections of the Museum of Natural History, Bern, Switzerland, catalogue number NMBE 41086

IMA No. 2011-061
Falsterite
\( \text{Ca}_2\text{MgMn}^{2+}_2\left(\text{Fe}^{2+}_{0.5}\text{Fe}^{3+}_{0.5}\right)_4\text{Zn}_4(\text{PO}_4)_6(\text{OH})_4(\text{H}_2\text{O})_{14} \)
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,
β = 90.564(6)°
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

IMA No. 2011-060
Postite
\( \text{Mg(H}_2\text{O})_6\text{Al}_2(\text{OH})_2(\text{H}_2\text{O})_8(\text{V}_{10}\text{O}_{28})·13\text{H}_2\text{O} \)
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,
a = 12.19(90), b = 8.937(100), 4.834(12), 4.043(18), 3.771(24), 3.335(13), 2.983(19), 1.596(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)

NEW MINERAL PROPOSALS APPROVED IN OCTOBER 2011

IMA No. 2011-059
Leonardsenite
\( \text{MgAlF}_5·2\text{H}_2\text{O} \)
Eldfell and Hekla volcanoes, Iceland
Donatella Mitolo, Anna Garavelli, Tonči Balic´-Žunić*, Pasquale Acquafredda and Sveinn Peter Jakobsson
*E-mail: toncib@snm.ku.dk
Inverse weberite structure
Orthorhombic: Imma; structure determined
a = 16.3357(6), b = 24.2434(17), c = 11.7343(4) Å,
a = 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)
IMA No. 2011-062
Bastnaesite-(Nd)
NdCO₃F
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
Bastnaesite group
Hexagonal: P62c
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

IMA No. 2011-064
D’ansite-(Mn)
Na₂₁Mn²⁺(SO₄)₁₀Cl₃
Somma-Vesuvius complex, Napoli, Italy
Italo Campostrini*, Francesco Demartin, Carlo Castellano, Carlo Maria Gramaccioli and Massimo Russo
*E-mail: italo.campostrini@unimi.it
Mn²⁺-dominant analogue of d’ansite
Cubic: I4̅3d; 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 Reference Collection of the DCSSI, University of Milan, sample number 2011-02

IMA No. 2011-065
D’ansite-(Fe)
Na₂₁Fe²⁺(SO₄)₁₀Cl₃
La Fossa crater, Vulcano, Aeolian Islands, Italy
Italo Campostrini*, Francesco Demartin, Carlo Castellano and Carlo Maria Gramaccioli
*E-mail: italo.campostrini@unimi.it
Fe²⁺-dominant analogue of d’ansite
Cubic: I4̅3d; 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

IMA No. 2011-066
Kobyashevite
Cu₃(SO₄)₂(OH)₆·4H₂O
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: P1; structure determined
a = 6.0731(6), b = 11.0597(13), c = 5.5904(6) Å,
α = 102.883(9), β = 92.348(8), γ = 92.597(9)°
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

IMA No. 2011-067
Calciolangbeinite
K₂Ca₂(SO₄)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, Vasily O. Yapaskurt, Nikita V.
Chukanov, Dmitriy I. Belakovskiy and Dmitry Y. Pushcharovsky

*E-mail: igorpekov@mail.ru

Langbeinite group
Cubic: $P2_13$; structure determined
$a = 10.1887(2) \text{ Å}$
$5.84(8), 4.54(9), 4.15(27), 3.218(100), 2.838(8), 2.736(37), 2.006(11), 1.658(8)$
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


IMA No. 2011-068
Ferrovalleriite
$2(\text{Fe}, \text{Cu})\text{S} \cdot 1.5\text{Fe(OH)}_2$

Oktyabr’sky mine, Talnakh, Talnakh, Krasnoyarsk Krai, Siberia, Russia

Igor V. Pekov*, Evgeny V. Sereda, Vasily O. Yapaskurt, Yuri S. Polekhovsky, Sergey N. Britvin and Nikita V. Chukanov

*E-mail: igorpekov@mail.ru

$\text{Fe}^{2+}$-dominant analogue of valleriite
Trigonal: $R3m$, $R3m$ or $R32$
$a = 3.792(2), c = 34.06(3) \text{ Å}$
$11.42(18), 5.69(100), 3.784(17), 3.268(58), 2.370(9), 1.894(34), 1.871(45), 1.593(13)$
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


IMA No. 2011-069
Paseroite
$\text{PbMn}^{2+}(\text{Fe}^{3+}, \square)_2(\text{V}^{5+}, \text{Ti}, \square)_{18}\text{O}_{38}$

Molinello mine, Val Graveglia, Ne, Genova, eastern Liguria, northern Apennines, Italy ($44^\circ20'43''\text{N} 9^\circ27'32''$)

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: $R3$; structure determined
$a = 10.3894(5), c = 20.8709(8) \text{ Å}$
$3.417(100), 3.150(62), 2.938(90), 2.286(36), 1.918(76), 1.775(76), 1.638(48), 1.078(28)$
The type specimen is deposited in the mineralogical collections of the Museo di Storia Naturale, Sezione di Mineralogia e Litologia, Università di Firenze, Firenze, Italy, catalogue number 3111/1, and in the mineralogical collections of the Museo Regionale di Scienze Naturali, Torino, Italy, catalogue number 15900


IMA No. 2011-070
Buseckite
$(\text{Fe}, \text{Zn}, \text{Mn})\text{S}$

Zaklodzie meteorite, Zamosć, Lubelskie, Poland

Chi Ma

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

Wurtzite group
Hexagonal: $P6_3mc$
$a = 3.8357, c = 6.3002 \text{ Å}$
$3.322(100), 3.150(62), 2.938(90), 2.286(36), 1.918(76), 1.775(76), 1.638(48), 1.078(28)$
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


IMA No. 2011-071
Fluor-elbaite
$\text{Na(Li}_{1.5}\text{Al}_{1.5})\text{Al}_6(\text{Si}_{6}\text{O}_{18})(\text{BO}_3)_3(\text{OH})_3\text{F}$

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
$a = 15.8720(2), c = 7.1103(1) \text{ Å}$ (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


IMA No. 2011-072
Artesite
(NH₄)₇Bi₃Cl₁₆
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: R3c; 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


IMA No. 2011-073
Vigrishinite
Zn₂Ti₄₋₄Si₄O₁₄(OH,H₂O,□)ₖ (κ < 1)
Pegmatite number 71, Malyi Punkaruiaiv 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: igorpakov@mail.ru
Heterophyllosilicate of the bafertisite mero-plesiotype series
Triclinic: P1; structure determined
a = 8.743(9), b = 8.698(9), c = 11.581(11) Å,
α = 91.54(8), β = 98.29(8), γ = 105.65(8)°
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 4157/1


IMA No. 2011-074
Umbrianite
K₃Na₅Ca₂[Al₃Si₁₀O₂₉]F₂Cl₂
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

numbers 63570 and 63571


IMA No. 2011-079
Obradovicite-NaCu

Na$_2$(H$_2$O)$_{17}$Cu(H$_2$O)$_6$][Mo$_8$As$_2$Fe$_3^{3+}$O$_{34}$(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(45), 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


IMA No. 2007-018a

Fengchengite

Na$_{12}$(Ca,Sr)$_6$Fe$_3^{3+}$Zr$_3$Si(Si$_2$O$_{73}$)(H$_2$O,OH)$_3$

(OH,Cl)$_2$

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: R3m; 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


Erratum

IMA No. 2011-029

In CNMNC Newsletter No. 10 (Mineralogical Magazine, 75, 2549–2561), the formula for IMA No. 2011-029, oscarkempffite, was given incorrectly as Ag$_{10}$Pb$_4$(Sb$_{17}$Bi$_9$)$_{26}$S$_{48}$. The correct formula is Ag$_{10}$Pb$_4$(Sb$_{17}$Bi$_9$)$_{26}$S$_{48}$, or more simply, Ag$_{10}$Pb$_4$(Sb$_{17}$Bi$_9$)$_{26}$S$_{48}$.

APPROVALS WITHDRAWN IN OCTOBER 2011

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.