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

NEWSLETTER 15

New minerals and nomenclature modifications approved in 2012 and 2013

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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 September 2012

IMA No. 2012-039
Ca$_{1-2}$Fe$_2$(Si,Al,Be)$_3$Be$_2$O$_{13}$(OH)$_2$·2H$_2$O
In a syenite pegmatite at Langangen, Blåfjell, Norway (59°5′34″N 9°41′38″E) and the A/S Granite Quarry, Tvedalen, Vestfold, Norway. J. Grice*, R. Kristiansen, H. Friis, R. Rowe, R.S. Selbekk, M. Cooper, A.O. Larsen and G. Poirier
*E-mail: jgrice@mus-nature.ca
Interrupted framework zeolite
Monoclinic: $P2_1/n$; structure determined
$\ a = 8.759(5)$, $b = 4.864(2)$, $c = 31.258(7)$ Å, $\beta = 90.31(3)^\circ$
15.555(100), 4.104(29), 3.938(36), 3.909(60), 3.820(30), 3.251(66), 3.186(27), 2.884(64)
Type material is deposited in the collections of the Canadian Museum of Nature, Ottawa, Canada, specimen number CNMMC 86554, and the Natural History Museum, Oslo, Norway, specimen numbers 43434 and 43435


IMA No. 2012-040
Markhininite
TBi(SO$_4$)$_2$
Great Fissure, Tolbachik volcano, Kamchatka Peninsula, Russia
Stanislav K. Filatov, Lidiya P. Vergasova, Oleg I. Siidra*, Sergey V. Krivovich and Yuri L. Kretser
*E-mail: siidra@mail.ru
Related to yavapaite and eldfellite
Triclinic: $P\bar{1}$; structure determined
$\ a = 7.375(9)$, $b = 10.647(16)$, $c = 10.671(12)$ Å, $\alpha = 61.24(9)$, $\beta = 70.77(13)$, $\gamma = 70.85(10)^\circ$
4.264(68), 3.442(100), 3.350(35), 3.125(24), 3.054(23), 2.717(45), 2.217(20), 2.114(34)
Type material is deposited in the collections of the Museum of Nature, Department of Mineralogy, St Petersburg State University, St Petersburg, Russia, specimen number 1/19526


IMA No. 2012-045
Harmunite
CaFe$_2$O$_4$
Jabel Harmun Mountain, Judea Desert, West Bank, Palestinian Autonomy, Israel (31°46′N 35°26′E)
Irina O. Galuskina*, Yevgeny Vapnik, Biljana Lazic, Thomas Armbruster, Mikhail Murashko and Evgeny V. Galuskin
*E-mail: irina.galuskina@us.edu.pl
Post-spinel calcium ferrite
Orthorhombic: $Pnma$; structure determined
$\ a = 9.2183(3)$, $b = 3.0175(1)$, $c = 10.6934(4)$ Å
2.670(52), 2.663(100), 2.524(60), 2.523(35), 2.232(34), 1.834(40), 1.831(27), 1.510(19)
Type material is deposited in the collections of St Petersburg University, Universytetskaya Naberezhnaya 7/9, 190034 St Petersburg, Russia, catalogue number 1/19518


IMA No. 2012-046
Kyuygenite
Ca$_{12}$Al$_{14}$O$_{32}$[(H$_2$O)$_4$Cl$_2$]
Xenolith no.1, Upper Chegem volcanic caldera, Kabardino-Balkaria, North Caucasus, Russia (43°17′N 43°6′E)
*E-mail: evgeny.galuskin@us.edu.pl
H$_2$O analogue of brearleyite
Cubic: $I\bar{4}d$; structure determined
$\ a = 12.0285(1)$ Å
4.911(31), 3.215(15), 3.007(38), 2.690(100), 2.455(46), 2.196(21), 1.668(26), 1.607(30)
Type material is deposited in the collections of the Naturhistorisches Museum, Bern, Switzerland, registration number NMBE 41538

IMA No. 2012-047
Grigorievite
Cu₃Fe⁷⁺Al₂(VO₄)₆
Second scoria cone, Tolbachik volcano, Kamchatka Peninsula, Kamchatka Oblast’, Far-Eastern Region, Russia (55°41'N 160°14'E)
Igor V. Pekov*, Natalia V. Zubkova, Mikhail N. Murashko, Vasily O. Yapaskurt, Yury S. Polekhovskyy, Pavel M. Kartashov and Dmitry Y. Pushcharovskyy
*E-mail: igorpekov@mail.ru
Related to howardevansite
Triclinic: P1; structure determined
a = 8.0217(5), b = 9.6858(10), c = 6.5475(9) Å
α = 103.645(10), β = 102.369(8), γ = 106.281(8)°
7.36(27), 4.718(29), 4.417(24), 3.671(26), 3.426(23), 3.141(20), 3.044(92), 2.811(26)
Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4278/1

IMA No. 2012-048
Hatertite
Na₂(Ca,Na)(Fe³⁺,Cu)₂(AsO₄)₃
North Breach of the Great fissure Tolbachik volcano eruption (1975–1976), Kamchatka Peninsula, Russia (55°41'N 160°14'E)
L.P. Vergasova, S.K. Filatov, D.S. Rybin, S.V. Krivovichev*, S.N. Britvin and V.V. Ananiev
*E-mail: skrivovi@mail.ru
Alluaudite group
Monoclinic: C2/c; structure determined
a = 12.640(2), b = 13.007(2), c = 6.700(1) Å
β = 113.828(2)°
6.493(25), 3.628(25), 3.204(39), 3.065(18), 2.976(28), 2.830(100), 2.632(36), 1.647(19)
Type material is deposited in the collections of the Mineralogical Museum, Department of Mineralogy, St Petersburg University, St Petersburg, Russia, catalogue number 1/19536

IMA No. 2012-049
Mössbauerite
Fe³⁺O₃(OH)₄(CO₃)₀.₅·1.₅H₂O
Mont Saint-Michel Bay, Brittany and Normandy, France
*E-mail: smills@museum.vic.gov.au
Hydrotalcite supergroup
Trigonal: R3
a = 3.079(6), c = 22.253(2) Å
7.372(60), 3.691(20), 2.646(100), 2.588(70), 2.406(40), 1.928(30), 1.855(50)
The holotype is preserved in the collections of Museum Victoria, Melbourne, Australia, registration number M52078

IMA No. 2012-051
Beshtauite
(NH₄)₂(UO₂)(SO₄)₂·2H₂O
Gremuchka ore zone, Beshtau uranium deposit, Mount Beshtau, Stavropol Krai, Northern Caucasus, Russia (44°05'53"N 43°01'20"E)
Igor V. Pekov*, Sergey V. Krivovichev, Vasily O. Yapaskurt, Nikita V. Chukanov and Dmitriy I. Belakovskiy
*E-mail: igorpekov@mail.ru
New structure type
Monoclinic: P2₁/c; structure determined
a = 7.3760(8), b = 7.3712(5), c = 20.856(2) Å
β = 102.123(8)°
6.86(100), 5.997(19), 5.558(15), 5.307(36), 5.005(35), 3.410(38), 3.081(24), 2.881(20)
Type material is preserved in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4280/1
New mineral proposals approved in October 2012

IMA No. 2012-052
Yangite
PhMnSi₃O₈·H₂O
Kombat mine, Otavi Valley, Namibia
William W. Pinch*, Robert T. Downs, Stanley H. Evans, Lauren Megaw and Elias M. Bloch
*E-mail: wwpinch@gmail.com
New chain silicate with the two-connected double chains
Triclinic: P₁; structure determined
a = 7.9833(8), b = 7.2712(7), c = 9.6015(9) Å,
α = 109.938(5), β = 118.229(4), γ = 105.910(4)°
7.379(100), 6.648(48), 3.717(44), 3.517(38),
2.992(38), 2.949(40), 2.917(65), 2.907(55)
Type material is preserved in the collections of the Mineral Museum of the University of Arizona, Tucson, Arizona, USA, catalogue number 19341, and the Smithsonian Institution, Washington DC, USA, catalogue number 175983

IMA No. 2012-053
Nickelpicromerite
K₂Ni(SO₄)₂·6H₂O
Slyudorudnik, Kyshtym District, Chelyabinsk Oblast, South Urals, Russia (55°40’12”N 60°21’17”E)
Elena V. Belogub, Sergey V. Krivovichev, Igor V. Pekov*, Aleksey M. Kuznetsov, Vasilyi A. Kotlyarov, Nikita V. Chukanov and Dmitriy I. Belakovskiy
*E-mail: igorpekov@mail.ru
Member of a polysomatic series having epidote and törnbohmite as endmembers
Monoclinic: P₂₁/m; structure determined
a = 8.9277(6), b = 5.6548(3), c = 17.587(1) Å,
β = 116.475(8)°
15.743(92), 4.616(30), 3.499(42), 2.983(100),
2.827(47), 2.751(32), 2.659(23), 2.619(57)
Type material is preserved in the collections of the Museo di Storia Naturale, Università degli Studi di Firenze, Firenze, Italy, catalogue number 3114/I
Type material is preserved in the collections of the Department of Materials Engineering and Physics, University of Salzburg, Salzburg, Austria, specimen number 15005


IMA No. 2012-056
Rossiantonite
Al_{3}(PO_{4})(SO_{4})(OH)_{2}(H_{2}O)_{14}
Akopan-Dal Cin cave system, Chimantha massif, Venezuela (5º10'52"N 61º57'50"W)
Ermanno Galli, Maria Franca Brigatti*, Daniele Malferrari, Francesco Sauro and Jo De Waele
*E-mail: gallier@unimore.it
New structure type
Triclinic: P1; structure determined
a = 10.3415(3), b = 10.9580(3), c = 11.1445(3) Å, 
α = 86.968(4), β = 65.757(3), γ = 75.055(3)º
10.16(32), 9.12(56), 8.02(40), 7.12(33), 6.10(22), 5.00(29), 4.647(100), 4.006(53), 3.781(28)

Type material is preserved in the collections of the University Museum of Modena and Reggio E. University, Modena, Italy, catalogue number 2/2012


IMA No. 2012-057
Nabimusaite
KCa_{12}(SiO_{4})_{4}(SO_{4})_{2}O_{2}F
Jabel Harmun, Nabi Musa, Judea Desert, West Bank, Palestinian Autonomy, Israel (31º46'N 35º26'E)
Evgeny V. Galuskin*, Frank Gfeller, Thomas Armbruster, Irina O. Galuskina, Yevgeny Vapnik, Mikhail Murashko, Roman Włodyka and Piotr Dzierżanowski
*E-mail: evgeny.galuskin@us.edu.pl
Known synthetic nesosilicate
Trigonal: R3m; structure determined
a = 7.1905(4), c = 41.251(3) Å
3.595(52), 3.105(97), 2.829(71), 2.753(97), 2.750(89), 2.140(50), 1.986(46), 1.798(100)
Type material is preserved in the collections of the Museum of Natural History in Bern, Bern, Switzerland, catalogue number NMBE 41598


IMA No. 2012-058
Jasrouxite
Ag_{16}Pb_{4}(Sb_{24}As_{16})S_{40}S_{72}
Jas Roux mine, La Chapelle en Valgaudemard, Parc National des Ecrins, Hautes-Alpes, France (44º48'45"N 6º19'18"E)
Dan Topa*, Emil Makovicky, Georges Favreau, Vincent Bourgoin, Jean-Claude Boulliard, Georg Zagler and Hubert Putz
*E-mail: dan.topa@sbg.ac.at
Lillianite homologous series
Triclinic: P1; structure determined
a = 8.2917(5), b = 19.101(1), c = 19.487(1) Å, 
α = 99.731(1), β = 83.446(1), γ = 89.944(1)º

Type material is preserved in the collections of the Department of Materials Engineering and Physics, University of Salzburg, Salzburg, Austria, specimen number 15006


IMA No. 2012-059
Cobaltoblödite
Na_{2}Co(SO_{4})_{2}·4H_{2}O
Blue Lizard mine, Red Canyon, White Canyon District, San Juan County, Utah
Anatoly V. Kasatkin*, Fabrizio Nestola, Jakub Plášil, Joe Marty, Dmitriy I. Belakovskiy, Atali A. Agakhanyan, Stuart J. Mills, Arianna Lanza, Monica Favaro and Sara Bianchin
*E-mail: anatoly.kasatkin@gmail.com
Blödite group
Monoclinic: P21/a; structure determined
a = 11.147(1), b = 8.268(1), c = 5.5396(7) Å, 
β = 100.517(11)º
4.551(80), 4.269(50), 3.795(18), 3.339(43), 3.290(100), 3.258(58), 2.644(21), 2.296(22)

Type material is preserved in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4271/1, and
Museum Victoria, Melbourne, Australia, catalogue number M52196

IMA No. 2012-060
Colinowensite
BaCuSi2O6
Central-Eastern orebody, Wessels Mine, Hotazel, Northern Cape Province, South Africa
Branko Rieck*
*E-mail: branko@mineralogie.at
New structure type
Tetragonal: I41/acd; structure determined
a = 9.966(1), c = 22.293(2) Å
5.577(31), 4.997(30), 4.560(31), 2.985(100), 2.499(57), 2.280(23), 1.767(19)
Type material is preserved in the collections of the Institut für Mineralogie und Kristallographie, University of Vienna, Vienna, Austria, catalogue number HS13.097

IMA No. 2012-061
Bairdite
Pb2Cu42+Te6+O10(OH)2(SO4)·H2O
Bird Nest drift, Otto Mountain, San Bernadino County, California, USA (35.27677ºN 116.09927ºW)
Anthony R. Kampf*, Stuart J. Mills, Robert M. Housley, George R. Rossman, Joseph Marty and Brent Thorne
*E-mail: akampf@nhm.org
New structure type
Monoclinic: P21/c; structure determined
a = 14.3126(10), b = 5.2267(3), c = 9.4878(5) Å, β = 106.815(5)º
4.77(50), 4.522(66), 3.480(62), 2.999(97), 2.701(79), 2.614(100), 1.727(65), 1.509(83)
Type material is preserved in the collections of the Mineral Sciences Department, Natural History Museum of Los Angeles County, Los Angeles, California, USA, catalogue numbers 64000 and 64001

IMA No. 2012-063
Schindlerite
{[Na2(H2O)10](H3O)4}{V10O28}
St Jude mine, Gypsum Valley, Slick Rock, San Miguel County, Colorado, USA
Anthony R. Kampf, John M. Hughes*, Joe Marty and Barbara Nash
*E-mail: jm Hughes@uvm.edu
New structure type
Triclinic: P1; structure determined
a = 8.5143(3), b = 10.4283(5), c = 11.2827(8) Å, α = 68.595(5), β = 87.253(6), γ = 67.112(5)º
10.51(94), 8.68(100), 7.70(86), 6.73(61), 3.815(24), 2.993(50), 2.787(24), 2.131(29)
Type material is preserved in the collections of the Natural History Museum of Los Angeles County, Los Angeles, California, USA, catalogue numbers 64005, 64006 and 64007

IMA No. 2012-064
Wernerbaurite
{[Ca(H2O)7]2(H2O)2(H3O)2}{V10O28}
St Jude mine, Gypsum Valley, Slick Rock, San Miguel County, Colorado, USA
Anthony R. Kampf, John M. Hughes*, Joe Marty and Barbara Nash
*E-mail: jm Hughes@uvm.edu
New structure type
Triclinic: P1; structure determined
a = 9.7212(6), b = 10.2598(8), c = 10.5928(8) Å, α = 89.999(6), β = 77.083(7), γ = 69.887(8)º
10.32(100), 9.64(92), 8.88(95), 8.10(58), 6.881(70), 6.031(39), 3.028(29), 2.842(29)
Type material is preserved in the collections of the Natural History Museum of Los Angeles County, Los Angeles, California, USA, catalogue numbers 64002, 64003 and 64004
New mineral proposals approved in November 2012

IMA No. 2012-065
Leydetite
Fe(UO₂)(SO₄)₂·11H₂O
Mas d’Alary uranium deposit, Lodève, Hérault, France (43°42′33″N 03°20′12″E)
Jakub Plášil*, Anatoly V. Kasatkin, Radek Škoda, Milan Novák, Anna Kallistová, Karla Fejfarová and Nicolas Meisser
*E-mail: plasil@fzu.cz

New structure type
Monoclinic: C2/c; structure determined
a = 11.3173(3), b = 7.7258(2), c = 21.8121(7) Å, β = 102.383(3)°
10.625(100), 6.277(1), 5.321(66), 3.549(5), 2.663(4), 2.131(2)
Type material is preserved in the collections of the Musée Cantonal de Géologie, Lausanne, Switzerland, registration number MGL 92661


IMA No. 2012-066
Linekite
K₂Ca₃[(UO₂)(CO₃)₃]₂·7H₂O
Geschieber vein, Svornost mine, Jáchymov ore district, Western Bohemia, Czech Republic (50°22′21.5″N 12°54′2.0″E)
Jakub Plášil*, Karla Fejfarová, Jirí Sejkora, Jirí Čejka, Milan Novák, Radek Škoda, Jan Hloušek, Michal Dušek and Ivana Císařová
*E-mail: plasil@fzu.cz

Known synthetically
Orthorhombic: Pnma; structure determined
a = 4.7001, b = 11.828, c = 20.243 Å
10.213(67), 5.914(40), 5.861(66), 3.458(63), 3.231(100), 3.068(53), 2.931(65), 2.895(64)
Type material is preserved in the collections of the Mineralogical Museum of the University of Wrocław, Wrocław, Poland, catalogue number MMWr IV7615; cotype specimens are deposited in the same Museum, catalogue numbers MMWr IV7616, MMWr IV7617, MMWr IV7618 and MMWr IV7619, and in the collections of the Smithsonian Institution, Washington DC, USA, specimen numbers NMNH 175986, NMNH 175987 and NMNH 175988


IMA No. 2012-069
Titanoholtite
(Ti₀.75₋₀.₂₅)Al₆BSi₃O₁₈
Szklary serpentinite massif, c. 60 km south of Wrocław, Lower Silesia, Poland (50°39.068′N 16°49.932′E)
Adam Pieczka*, R. James Evans, Edward S. Grew, Lee A. Groat, Chi Ma and George R. Rossman
*E-mail: pieczka@agh.edu.pl

Dumortierite supergroup
Orthorhombic: Pnma
a = 4.7001, b = 11.828, c = 20.243 Å
10.213(67), 5.914(40), 5.861(66), 3.458(63), 3.231(100), 3.068(53), 2.931(65), 2.895(64)
Type material is preserved in the collections of the Mineralogical Museum of the University of Wrocław, Wrocław, Poland, catalogue number MMWr IV7617; cotype specimens are also deposited in the same Museum, catalogue numbers MMWr IV7620 and MMWr IV7621,
and in the collections of the Smithsonian Institution, Washington DC, USA, catalogue numbers NMNH 175986, NMNH 175987 and NMNH 175988.


New mineral proposals approved in December 2012

IMA No. 2012-070
Szklaryite
$\square$Al$_6$Ba$_3$$^{3+}$O$_{15}$
Szklary serpentinite massif, c. 60 km south of Wroclaw, Lower Silesia, Poland (50º39.068’N 16º49.932’E)
Adam Pieczka*, R. James Evans, Edward S. Grew, Lee A. Groat, Chi Ma and George R. Rossman
*E-mail: pieczka@agh.edu.pl
Dumortierite supergroup
Orthorhombic: Pnma
$a = 4.7001$, $b = 11.828$, $c = 20.243$ Å
5.914(57), 5.861(100), 3.458(60), 3.444(34), 3.231(95), 3.068(50), 2.931(51), 2.895(59)
The holotype is deposited in the collections of the Mineralogical Museum of University of Wroclaw, Wroclaw, Poland, catalogue number MMWr IV7615

IMA No. 2012-071
Murashkoite
FeP
Halamish wadi, Hatrurim formation, Negev Desert, Israel (31º09’47”N 35º17’57”E)
Sergey N. Britvin*, Yevgeny Vapnik, Yury S. Polekhovsky and Sergey V. Krivovichev
*E-mail: sbritvin@gmail.com
MnP structure type
Orthorhombic: Pmna
$a = 6.3660(5)$, $b = 6.5914(5)$, $c = 8.5568(6)$ Å
$\alpha = 93.504(6)$, $\beta = 97.778(7)$, $\gamma = 110.557(6)^\circ$
6.124(47), 5.874(73), 4.600(88), 3.569(46), 2.939(77), 2.717(88), 2.628(100), 2.204(75)
The holotype is deposited in the collections of the Reale Museo of Napoli, Napoli, Italy, registration number 16986E5525

IMA No. 2012-074
Vanadio-oxy-dravite
NaV$_3$(Al$_4$Mg$_2$)(Si$_6$O$_{18}$)(BO$_3$)$_3$(OH)$_3$O
Pereval quarry, Sludyanka, Irkutsk region, Southern Lake Baikal, Siberia, Russia (51º37’N 103º38’E)
Ferdinando Bosi*, Henrik Skogby, Leonid Reznitskii and Ulf Hälenius
*E-mail: ferdinando.bosi@uniroma1.it
Tourmaline supergroup
Trigonal: R3m; structure determined
$a = 16.0273(3)$, $c = 7.2833(1)$ Å
6.447(37), 4.261(52), 4.004(66), 3.522(47), 2.993(67), 2.596(100), 2.057(43), 1.934(28)
Type material is deposited in the collections of the Museum of Mineralogy, Earth Sciences Department, Sapienza University of Rome, Rome, Italy, catalogue number 33068
How to cite: Bosi, F., Skogby, H., Reznitskii, L. and Hälenius, U. (2013) Vanadio-oxy-dravite,
IMA No. 2012-075
Aluminopyracmonite
(NH₄)₃Al(SO₄)₃
La Fossa crater, Vulcano, Aeolian Islands, Italy
Francesco Demartin*, Italo Campostrini and Carlo Castellano
*E-mail: francesco.demartin@unimi.it
Related to pyracmonite
Trigonal: R̅3; structure determined
a = 15.0324(8), c = 8.8776(5) Å
7.469(67), 4.289(45), 4.187(27), 3.336(100), 3.288(60), 2.824(29), 2.796(26), 2.748(21)
Type material is deposited in the Reference Collection of the Dipartimento di Chimica, University of Milan, Milan, Italy, sample number 2012-01

IMA No. 2012-076
Nizamoffite
Mn⁡²⁺Zn²⁺(PO₄)₄(Η₂O)₄
Palermo No.1 pegmatite, North Grooto, Grafton County, New Hampshire, USA
*E-mail: akampf@nhm.org
Mn analogue of hopeite
Orthorhombic: Pnma; structure determined
a = 10.6530(4), b = 18.4778(13), c = 5.0583(2) Å
9.27(71), 4.62(37), 4.43(24), 3.424(52), 2.873(100), 2.644(36), 2.540(33), 1.953(36)
Type material is deposited in the collections of the Natural History Museum of Los Angeles County, Los Angeles, California, USA, catalogue numbers 64009 and 64010
IMA No. 2012-073
Alburnite
Ag₈GeTe₂S₄
Cărnicei vein, Roşia Montana deposit, Apuseni Mountains, Romania
Călin G. Tamaş*, Bernard Grobety, Laurent Bailly, Heinz-Juergen Bernhardt and Adrian Minuţ
*E-mail: calingtamas@yahoo.fr
Argyrodite–canfieldite series
Cubic: F43m
a = 10.4±0.1 Å
6.004(67), 3.136(48), 3.002(100), 2.600(26), 2.123(33), 2.002(61), 1.838(76), 1.644(12)
Type material is deposited in the collections of the Mineralogical Museum, Department of Geology, Faculty of Biology and Geology, Babeş-Bolyai University, Cluj-Napoca, Romania, registration numbers 71a/1 and 71a/2, and at Zentrale Elektronen-Mikrosonde, Institute of Geology, Mineralogy and Geophysics, Ruhr University, Bochum, Germany, section 1064b

IMA No. 2012-077
Parádsasvárite
Zn₂(CO₃)(OH)₂
Nagy-Lápafo, Parádsasvár, Mátra Mountains, Hungary (47°54'26.50"N 19°57'9.68"E)
Béla Fehér*, Sándor Szakáll, Norbert zajzon and Judith Mihály
*E-mail: feherbela@upcmail.hu
Malachite–rosasite group
Monoclinic: P2₁/a
a = 12.92(1), b = 9.372(7), c = 3.159(4) Å, β = 110.41(1)°
6.054(67), 5.085(100), 3.703(87), 3.021(25), 2.971(25), 2.603(62), 2.539(36), 2.498(23)
Type material is deposited in the collections of the Herman Ottó Museum, Miskolc, Hungary, catalogue number 2012.23

IMA No. 2012-078
Kudryavtsevaite
Na₃(Mg,Fe)(Fe,Ti)₂Ti₃O₁₂
AK-8 pipe, Orapa kimberlite complex, Botswana (21°18'S 25°24'E)
Sergey Anashkin, Anjelica Bovkun, Luca Bindi*, Viktor Garanin and Yuriy Litvin
*E-mail: luca.bindi@unifi.it
New structure type
Orthorhombic: Pnma; structure determined
a = 27.714(1), b = 2.9881(3), c = 11.3564(6) Å
7.17(100), 4.84(70), 2.973(35), 2.841(50), 2.760(50), 2.541(50), 2.450(70), 2.296(45)
Type material is deposited in the collections of the Museo di Storia Naturale, Università degli Studi di Firenze, Firenze, Italy, catalogue number 3115/I

IMA No. 2012-079
Majindeite
Mg₂Mo₃O₈
Allende meteorite
Chi Ma
*E-mail: chi@gps.caltech.edu
Mg analogue of kamiokite
Hexagonal: P6₃mc
a = 5.778, c = 9.904 Å
4.952(100), 3.520(57), 2.495(35), 2.426(67), 2.233(23), 1.994(50), 1.641(24), 1.553(38)
Type material is deposited in the collections of the Smithsonian Institution’s National Museum of Natural History, Washington DC, USA, registration number USNM 7615

IMA No. 2012-080
Fabriesite
Na₃Al₃Si₃O₁₂·2H₂O
Tawmaw, Hpakant-Tawmaw Jade Tract, Hpakant Township, Mohnyin District, Kachin State, Myanmar
C. Ferraris*, S. Pont, G.C. Parodi, B. Rondeau and J.P. Lorand
*E-mail: ferraris@mnhn.fr
Known synthetic compound
Orthorhombic: \( Pna2_1 \)
\[ a = 16.4260(1), \quad b = 15.0140(1), \quad c = 5.2235(5) \, \text{Å} \]
8.21(36), 7.51(32), 4.41(77), 3.41(100), 2.97(70), 2.86(25), 2.61(40), 2.45(29)
Type material is deposited in the collections of the Musée National d’Histoire Naturelle (MNHN) of Paris, France, registration number MNHN 212-001

IMA No. 2012-081
Kihlmanite-(Ce)
\( \text{Ce}_2\text{TiO}_2(\text{SiO}_4)(\text{HCO}_3)(\text{H}_2\text{O}) \)
Mount Kihlman, Khibiny Mountains, Kola Peninsula, Russia
Victor N. Yakovenchuk*, Gregory Y. Ivanyuk, Sergey V. Krivovichev, Elena A. Zhitova, Yakov A. Pakhomovskiy, Ekaterina A. Selivanova, Julia A. Korchak and Galijabanu I. Kadyrova
*E-mail: yakovenchuk@ksc.ru
Closely related to tundrite-(Ce)
Triclinic: \( P\bar{1} \); structure determined
\[ a = 5.009(5), \quad b = 7.533(5), \quad c = 15.407(5) \, \text{Å}, \quad \alpha = 103.061(5), \quad \beta = 91.006(5), \quad \gamma = 109.285(5)^\circ \]
15.11(100), 7.508(20), 6.912(12), 4.993(14), 3.563(15), 3.198(11), 3.065(12), 2.896(15)
Type material is deposited in the collections of the Mineralogical Museum of St Petersburg State University, St Petersburg, Russia, registration number 1/19598, and the Geological and the Mineralogical Museum of the Geological Institute of the Kola Science Centre, Apatity, Russia, registration number GIM 6790

IMA No. 2012-083
Lopatkaite
\( \text{Pb}_5\text{Sb}_3\text{AsS}_{11} \)
Madoc, Ontario, Canada
Dan Topa*, Emil Makovicky, Hubert Putz and Georg Zagler
*E-mail: dan.topa@sbg.ac.at
Homeotype of boulangerite
Monoclinic: \( \text{P2}_1/\text{c} \); structure determined
\[ a = 8.0806(6), \quad b = 23.360(2), \quad c = 21.488(2) \, \text{Å}, \quad \beta = 100.709(1)^\circ \]
3.728(42), 3.722(38), 3.712(100), 3.296(36), 3.207(36), 2.804(42), 2.780(46), 2.779(40)
Type material is deposited in the collections of the Department of Materials Engineering and Physics, University of Salzburg, Salzburg, Austria, specimen number 15008

IMA No. 2012-021a
Vanadium
\( V \)
Colima volcano, Colima and Jalisco States, Mexico (19º30’45”N, 103º37’W)
Mikhail Ostrooumov
*E-mail: ostroum@umich.mx
Iron group
Cubic: \( \text{Im} \bar{3} \text{m} \)
\[ a = 3.022(3) \, \text{Å} \]
2.142(100), 1.513(14), 1.230(28), 1.069(8), 0.957(14), 0.871(4), 0.809(10)
Type material has been deposited in the collections of the Geological Museum,
Nomenclature proposal approved in November 2012

IMA 12-C: Dumortierite supergroup
A report on the nomenclature of the minerals of the dumortierite supergroup has been approved, and the endmember compositions have been defined. The supergroup presently includes six valid species, divided into two groups (and a potential third group).

IMA 12-F: A new root-name for the amphibole composition \( \Box(\text{NaMn}^{2+})(\text{Mg}_4\text{Al})\text{Si}_8\text{O}_{22}(\text{OH})_2 \)

The above composition, mentioned as “root-name11” in the newly-approved amphibole report, has been assigned the name “ghoseite”, in honour of Subrata Ghose (b. 1932), Emeritus Professor at the University of Washington, Seattle, USA. Accordingly, the new mineral IMA 2003-066, whose endmember composition is \( \Box(\text{NaMn}^{2+})(\text{Mg}_4\text{Fe}^{3+})\text{Si}_8\text{O}_{22}(\text{OH})_2 \), is named ferri-ghoseite.