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CNMNC Newsletter

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

NEWSLETTER 18

New minerals and nomenclature modifications approved in 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 OCTOBER 2013

IMA No. **2013-059**
Grandaite
$Sr_2Al(AsO_4)_2(OH)$
La Valletta mine, Vallone della Valletta, Piedmont, Italy (44º23′542′ N 7º542′ E)
Fernando Cámara*, Marco E. Ciriotti, Erica Bittarello, Fabrizio Nestola, Fabio Bellatreccia, Federico Massimi, Francesco Radica, Emanuele Costa, Piera Benna and Gian Carlo Piccoli
*E-mail: fernando.camaraartigas@unito.it
Brackebuschite supergroup
Monoclinic: $P2_1/m$; structure determined
a = 7.5764(5), b = 5.9507(4), c = 8.8050(6) Å, β = 112.551(2)º
3.194(100), 2.981(51), 2.922(40), 2.743(31), 2.705(65), 2.087(52), 1.685(25), 1.663(13)
Type material is deposited in the collections of the Museo Regionale di Scienze Naturali di Torino, Sezione di Mineralogia, Petrografia e Geologia, Torino, Italy, catalogue number M/15999, and Museo Civico Archeologico e di Scienze Naturali "Federico Eusebio", Alba, Cuneo, Italy, catalogue number G. 1723 prog. 505
How to cite: Cámara, F., Ciriotti, M.E., Bittarello, E., Nestola, F., Bellatreccia, F., Massimi, F., Radica, F., Costa, E., Benna, P. and Piccoli, G.C. (2013) Grandaite, IMA 2013-059. CNMNC Newsletter No. 18, December 2013, page 3250; *Mineralogical Magazine*, **77**, 3249–3258.

IMA No. **2013-062**
Bluelizardite
$Na_7(UO_2)(SO_4)_4Cl(H_2O)_2$
Blue Lizard Mine, Red Canyon, White Canyon District, San Juan County, Utah, USA (37º33′26"N 110º17′44"W)
Jakub Plášil*, Anthony R. Kampf, Anatoly V. Kasatkin and Joe Marty
*E-mail: plasil@fzu.cz
New structure type
Monoclinic: $C2/c$; structure determined
a = 21.1822(6), b = 5.3544(1), c = 34.730(3) Å, β = 104.879(7)º
17.08(52), 10.31(60), 5.16(100), 3.484(27), 3.353(28), 3.186(36), 2.007(24), 1.716(28)
Type material is deposited in the collections of the Natural History Museum of Los Angeles County, Los Angeles, California, USA, catalogue numbers 64060, 64061, 64062 and 64063
How to cite: Plášil, J., Kampf, A.R., Kasatkin, A.V. and Marty, J. (2013) Bluelizardite, IMA 2013-062. CNMNC Newsletter No. 18, December 2013, page 3250; *Mineralogical Magazine*, **77**, 3249–3258.

IMA No. **2013-066**
Philrothite
$TlAs_3S_5$
Lengenbach quarry, Binn Valley, Valais, Switzerland
Luca Bindi*, Fabrizio Nestola, Emil Makovicky, Alessandro Guastoni and Luca Debattisti
*E-mail: luca.bindi@unifi.it
New structure type
Monoclinic: $P2_1/c$; structure determined
a = 8.013(2), b = 24.829(4), c = 11.762(3) Å, β = 132.84(2)º
12.415(52), 3.677(100), 3.454(45), 3.015(46), 2.894(52), 2.769(76), 2.764(77), 2.324(52)
Type material is deposited in the collections of the Museum of Mineralogy of the Department of Geosciences at the University of Padova, Italy, catalogue number MMP M1260
How to cite: Bindi, L., Nestola, F., Makovicky, E., Guastoni, A. and Debattisti, L. (2013) Philrothite, IMA 2013-066. CNMNC Newsletter No. 18, December 2013, page 3250; *Mineralogical Magazine*, **77**, 3249–3258.

IMA No. **2013-068**
Acmonidesite
$(NH_4,K,Pb)_8NaFe_4^{2+}(SO_4)_5Cl_8$
La Fossa crater, Vulcano, Aeolian Islands, Italy
Francesco Demartin*, Italo Campostrini and Carlo Castellano
*E-mail: francesco.demartin@unimi.it
New structure type
Orthorhombic: $C222_1$; structure determined
a = 9.841(1), b = 19.448(3), c = 17.847(3) Å
9.049(37), 8.766(100), 5.178(45), 4.250(42), 3.203(29), 2.926(42), 2.684(32), 1.805(88)
Type material is deposited in the Reference Collection of the Dipartimento di Chimica, University of Milan, Milan, Italy, sample number 2013-02
How to cite: Demartin, F., Campostrini, I. and Castellano, C. (2013) Acmonidesite, IMA 2013-068. CNMNC Newsletter No. 18, December 2013, page 3250; *Mineralogical Magazine*, **77**, 3249–3258.

IMA No. **2013-069**

Imayoshiite

$Ca_3Al(CO_3)[B(OH)_4](OH)_6{\cdot}12H_2O$

Suisho-dani, Ise City, Mie Prefecture, Japan (34º46′23N 136º73′27″E)

Daisuke Nishio-Hamane*, Masayuki Ohnishi, Koichi Momma, Norimasa Shimobayashi, Ritsuro Miyawaki, Tetsuo Minakawa and Sachio Inaba

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

Ettringite group

Hexagonal: $P6_3$; structure determined

a = 11.0264(11), c = 10.6052(16) Å

9.543(100), 4.636(40), 3.822(33), 2.729(31), 2.525(69), 2.174(30), 2.120(23), 1.768(28)

Type material is deposited in the collections of the National Museum of Nature and Science, Tsukuba, Japan, specimen numbers NSM M-43749 and NSM M-43750

How to cite: Nishio-Hamane, D., Ohnishi, M., Momma, K., Shimobayashi, N., Miyawaki, R., Minakawa, T. and Inaba, S. (2013) Imayoshiite, IMA 2013-069. CNMNC Newsletter No. 18, December 2013, page 3251; *Mineralogical Magazine*, **77**, 3249–3258.

IMA No. **2013-070**

Canutite

$NaMn_3[AsO_4]_2[AsO_2(OH)_2]$

Torrecillas mine, Salar Grande, Iquique Province, Chile (20º58′13″S 70º8′17″W)

Anthony R. Kampf*, Stuart J. Mills, Frédéric Hatert, Barbara Nash and Maurizio Dini

*E-mail: akampf@nhm.org

Alluaudite group

Monoclinic: $C2/c$; structure determined

a = 12.3132(5), b = 12.6042(6), c = 6.8717(5) Å, β = 113.500(8)º

6.34(36), 3.296(68), 3.151(41), 2.818(52), 2.750(100), 2.653(36), 1.697(44), 1.511(49)

Type material is deposited in the collections of the Natural History Museum of Los Angeles County, Los Angeles, California, USA, catalogue number 64065

How to cite: Kampf, A.R., Mills, S.J., Hatert, F., Nash, B. and Dini, M. (2013) Canutite, IMA 2013-070. CNMNC Newsletter No. 18, December 2013, page 3251; *Mineralogical Magazine*, **77**, 3249–3258.

IMA No. **2013-071**

Zvyaginite

$NaZnNb_2Ti[Si_2O_7]_2O(OH,F)_3(H_2O)_{4+x}$ (x < 1)

No. 71 Pegmatite, Malyi Punkaruaiv Mountain, Lovozero Alkaline Complex, Kola Peninsula, Russia

Igor V. Pekov*, Inna S. Lykova, Nikita V. Chukanov, Vasiliy O. Yapaskurt, Dmitriy I. Belakovskiy, Andrey A. Zolotarev and Natalia V. Zubkova

*E-mail: igorpekov@mail.ru

Epistolite group

Triclinic: $P\bar{1}$; structure determined

a = 8.975(3), b = 8.979(3), c = 12.135(4) Å, α = 74.328(9), β = 80.651(8), γ = 73.959(8)º

11.72(100), 5.83(40), 5.28(53), 4.289(86), 3.896(36), 2.916(57), 2.862(72), 1.782(24)

Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4416/1

How to cite: Pekov, I.V., Lykova, I.S., Chukanov, N.V., Yapaskurt, V.O., Belakovskiy, D.I., Zolotarev, A.A. and Zubkova, N.V. (2013) Zvyaginite, IMA 2013-071. CNMNC Newsletter No. 18, December 2013, page 3251; *Mineralogical Magazine*, **77**, 3249–3258.

IMA No. **2013-072**

Ferro-ferri-nybøite

$NaNa_2(Fe^{2+}_3\ Fe^{3+}_2)(Si_7Al)O_{22}(OH)_2$

Poudrette quarry, Mont Saint-Hilaire, Rouville RMC, Montérégie, Québec, Canada

A.J. Lussier, F.C. Hawthorne*, Y. Abdu, N.A. Ball, K.T. Tait, M.E. Back, A.H. Steede, R. Taylor and A.M. MacDonald

*E-mail: frank_hawthorne@umanitoba.ca

Amphibole supergroup

Monoclinic: $C2/m$; structure determined

a = 9.9190(5), b = 18.0885(8), c = 5.3440(3) Å, β = 103.813(1)º

8.520(100), 3.298(7), 3.162(55), 2.834(24), 2.732(10), 2.552(10), 2.344(9), 1.671(19)

Type material is deposited in the collections of the Department of Natural History, Royal Ontario Museum, Toronto, Ontario, Canada, catalogue number M55980

How to cite: Lussier, A.J., Hawthorne, F.C., Abdu, Y., Ball, N.A., Tait, K.T., Back, M.E., Steede, A.H., Taylor, R. and MacDonald, A.M. (2013) Ferro-ferri-nybøite, IMA 2013-072. CNMNC Newsletter No. 18, December 2013, page 3251; *Mineralogical Magazine*, **77**, 3249–3258.

IMA No. **2013-073**

Hydroxycalciomicrolite

$Ca_{1.5}Ta_2O_6(OH)$

Volta Grande pegmatite, Nazareno, Minas Gerais, Brazil (21º10′08.6″S 44º36′01.3″W)

Marcelo B. Andrade*, Hexiong Yang, Daniel Atencio, Robert T. Downs, Nikita V. Chukanov, Marie-Hélène Lemée-Cailleau, Aba I.C. Persiano, Andres E. Goeta and Javier Ellena

*E-mail: mabadean@terra.com.br

Pyrochlore supergroup

Cubic: $P4_332$; structure determined

a = 10.4211(8) Å

6.025(100), 3.145(15), 3.010(73), 2.606(7), 2.006(7), 1.843(8), 1.572(5), 1.505(4)

Type material is deposited in the collections of the Museu de Geociências, Instituto de Geociências, Universidade de São Paulo, São Paulo, Brazil, sample number DR917, and at the RRUFF Project, deposition number R130269

How to cite: Andrade, M.B., Yang, H., Atencio, D., Downs, R.T., Chukanov, N.V., Lemée-Cailleau, M.-H., Persiano, A.I.C., Goeta, A.E. and Ellena, J. (2013) Hydroxycalciomicrolite, IMA 2013-073. CNMNC Newsletter No. 18, December 2013, page 3252; *Mineralogical Magazine*, **77**, 3249–3258.

IMA No. **2013-074**

Nestolaite

$CaSeO_3{\cdot}H_2O$

Little Eva mine, Yellow Cat District, Grand County, Utah, USA (38º 50′17″ N, 109º 31′35″W)

Anatoly V. Kasatkin*, Jakub Plášil, Joe Marty, Dmitriy I. Belakovskiy, Atali A. Agakhanov and Inna S. Lykova

*E-mail: anatoly.kasatkin@gmail.com

Known synthetic compound

Monoclinic: $P2_1/c$; structure determined

a = 7.6500(8), b = 6.7472(9), c = 7.9357(10) Å, β = 108.542 (11)º

7.277(100), 4.949(37), 3.767(29), 3.630(58), 3.371(24), 3.163(74), 2.978(74), 2.723(31)

Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4417/1

How to cite: Kasatkin, A.V., Plášil, J., Marty, J., Belakovskiy, D.I., Agakhanov, A.A. and Lykova, I.S. (2013) Nestolaite, IMA 2013-074. CNMNC Newsletter No. 18, December 2013, page 3252; *Mineralogical Magazine*, **77**, 3249–3258.

IMA No. **2013-075**

Belakovskiite

$Na_7(UO_2)(SO_4)_4(SO_3OH)(H_2O)_3$

Blue Lizard Mine, Red Canyon, White Canyon District, San Juan County, Utah, USA (37º33′26″N 110º17′44″W)

Anthony R. Kampf*, Jakub Plášil, Anatoly V. Kasatkin and Joe Marty

*E-mail: akampf@nhm.org

New structure type

Triclinic: $P\bar{1}$; structure determined

a = 5.4581(3), b = 11.3288(6), c = 18.4163(13) Å, α = 104.786(7), β = 90.092(6), γ = 96.767(7)º

8.96(35), 8.46(29), 5.19(100), 4.66(58), 3.568(37), 3.057(59), 2.930(27), 1.832(29)

Type material is deposited in the collections of the Natural History Museum of Los Angeles County, Los Angeles, California, USA, catalogue number 64055, and the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4410/1

How to cite: Kampf, A.R., Plášil, J., Kasatkin, A.V. and Marty, J. (2013) Belakovskiite, IMA 2013-075. CNMNC Newsletter No. 18, December 2013, page 3252; *Mineralogical Magazine*, **77**, 3249–3258.

IMA No. **2013-076**

Graţianite

$MnBi_2S_4$

Antoniu ore pipe, Biţa Bihor, Romania, Bihor County, Romania

Joël Brugger*, Cristiana L. Ciobanu, Stuart J. Mills, Nigel J. Cook, Gheorghe Damian, Floarea Damian and Peter Elliott

*E-mail: joel.brugger@adelaide.edu.au

Monoclinic analogue of berthierite, garavellite and clerite

Monoclinic: $C2/m$; structure determined

a = 12.677(3), b = 3.9140(8), c = 14.758(3) Å, β = 115.31(3)º

5.73(43), 3.644(54), 3.637(55), 3.448(100), 3.335(43), 3.062(52), 2.855(64), 2.731(77)

Type material is deposited in the collections of the South Australian Museum, Adelaide, Australia, catalogue number G33937

How to cite: Brugger, J., Ciobanu, C.L., Mills, S.J., Cook, N.J., Damian, G., Damian, F. and Elliott, P. (2013) Graţianite, IMA 2013-076. CNMNC Newsletter No. 18, December 2013, page 3252; *Mineralogical Magazine*, **77**, 3249–3258.

IMA No. **2013-077**
Tondiite
$Cu_3MgCl_2(OH)_6$
Vesuvius volcano, Vesuvius, Italy
Manuela Rossi, Fabrizio Nestola*, Luca Bindi and Maria Rosaria Ghiara
*E-mail: fabrizio.nestola@unipd.it
Mg analogue of herbertsmithite, gillardite and leverettite
Trigonal: $R\bar{3}m$; structure determined
a = 6.8377(7), c = 14.088(2) Å
5.459(88), 3.419(22), 2.898(15), 2.764(100), 2.266(54), 1.820(19), 1.709(26), 1.382(13)
Type material is deposited in the collections of the Real Museo Mineralogico di Napoli (Italy) Università di Napoli, Napoli, Italy, catalogue number 1178R
How to cite: Rossi, M., Nestola, F., Bindi, L. and Ghiara, M.R. (2013) Tondiite, IMA 2013-077. CNMNC Newsletter No. 18, December 2013, page 3253; *Mineralogical Magazine*, **77**, 3249–3258.

IMA No. **2013-078**
Shchurovskyite
$K_2CaCu_6O_2(AsO_4)_4$
Arsenatnaya fumarole, Second scoria cone of the Northern Breakthrough of the Great Tolbachik Fissure Eruption, Tolbachik volcano, Kamchatka Peninsula, Far-Eastern Region, Russia (55º41′N 160º14′E)
Igor V. Pekov*, Natalia V. Zubkova, Dmitriy I. Belakovskiy, Vasiliy O. Yapaskurt, Marina F. Vigasina, Evgeny G. Sidorov and Dmitry Y. Pushcharovsky
*E-mail: igorpekov@mail.ru
New structure type
Monoclinic: $C2$; structure determined
a = 17.2856(9), b = 5.6705(4), c = 8.5734(6) Å, β = 92.953(6)º
8.61(100), 5.400(32), 3.759(28), 2.974(32), 2.842(47), 2.757(63), 2.373(36), 2.297(31)
Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4421/1
How to cite: Pekov, I.V., Zubkova, N.V., Belakovskiy, D.I., Yapaskurt, V.O., Vigasina, M.F., Sidorov, E.G. and Pushcharovsky, D.Y. (2013) Shchurovskyite, IMA 2013-078. CNMNC Newsletter No. 18, December 2013, page 3253; *Mineralogical Magazine*, **77**, 3249–3258.

IMA No. **2013-079**
Dmisokolovite
$K_3Cu_5AlO_2(AsO_4)_4$
Arsenatnaya fumarole, Second scoria cone of the Northern Breakthrough of the Great Tolbachik Fissure Eruption, Tolbachik volcano, Kamchatka Peninsula, Far-Eastern Region, Russia (55º41′N 160º14′E)
Igor V. Pekov*, Natalia V. Zubkova, Dmitriy I. Belakovskiy, Vasiliy O. Yapaskurt, Marina F. Vigasina, Evgeny G. Sidorov and Dmitry Y. Pushcharovsky
*E-mail: igorpekov@mail.ru
New structure type
Monoclinic: $C2/c$; structure determined
a = 17.0848(12), b = 5.7188(4), c = 16.5332(12) Å, β = 91.716(6)º
8.34(95), 5.433(84), 3.274(45), 2.921(66), 2.853(58), 2.733(100), 2.451(47), 2.366(45)
Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4412/1
How to cite: Pekov, I.V., Zubkova, N.V., Belakovskiy, D.I., Yapaskurt, V.O., Vigasina, M.F., Sidorov, E.G. and Pushcharovsky, D.Y. (2013) Dmisokolovite, IMA 2013-079. CNMNC Newsletter No. 18, December 2013, page 3253; *Mineralogical Magazine*, **77**, 3249–3258.

IMA No. **2013-080**
Balestraite
$KLi_2V^{5+}Si_4O_{12}$
Cerchiara mine, Faggiona, Val di Vara, La Spezia, northern Apennines, eastern Liguria, Italy (44º11′58″N 9º42′1″E)
Giovanni O. Lepore*, Luca Bindi, Paola Bonazzi, Alberto Zanetti, Marco E. Ciriotti and Olaf Medenbach
*E-mail: giovanniorazio.lepore@unifi.it
Mica group
Monoclinic: $C2$; structure determined
a = 5.2024(5), b = 8.9782(7), c = 9.997(2) Å, β = 100.40(2)º
9.9(50), 4.51(100), 4.34(40), 3.60(40), 3.08(35), 2.592(70), 2.574(70), 2.385(70)
Type material is deposited in the collections of the Museo di Storia Naturale, Università degli Studi di Firenze, Firenze, Italy, catalogue number 3133/I
How to cite: Lepore, G.O., Bindi, L., Bonazzi, P., Zanetti, A., Ciriotti, M.E. and Medenbach, O. (2013) Balestraite, IMA 2013-080. CNMNC

Newsletter No. 18, December 2013, page 3253; *Mineralogical Magazine*, **77**, 3249–3258.

IMA No. **2013-081**
Calcinaksite
$KNaCa(Si_4O_{10})\cdot H_2O$
Bellerberg volcano, between Mayen and Kottenheim, Laacher See area, Eastern Eifel region, Rhineland-Palatinate, Germany
Nikita V. Chukanov*, Sergey M. Aksenov, Ramiza K. Rastsvetaeva, Günter Blass, Dmitry A. Varlamov, Igor V. Pekov, Dmitriy I. Belakovskiy and Vladislav V. Gurzhiy
*E-mail: chukanov@icp.ac.ru
Lithidionite group
Triclinic: $P\bar{1}$; structure determined
a = 7.021(2), b = 8.250(3), c = 10.145(2) Å, α = 102.23(2), β = 100.34(2) , γ = 115.09(3)º
3.431(70), 3.300(67), 3.173(95), 3.060(100), 2.851(83), 2.664(62), 2.493(52), 1.749(45)
Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4419/1
How to cite: Chukanov, N.V., Aksenov, S.M., Rastsvetaeva, R.K., Blass, G., Varlamov, D.A., Pekov, I.V., Belakovskiy, D.I. and Gurzhiy, V.V. (2013) Calcinaksite, IMA 2013-081. CNMNC Newsletter No. 18, December 2013, page 3254; *Mineralogical Magazine*, **77**, 3249–3258.

IMA No. **2013-082**
Vapnikite
Ca_3UO_6
Jabel Harmun, Nabi Musa, Judea Desert, West Bank, Palestinian Autonomy, Israel (31º46′N 35º26′E)
Evgeny V. Galuskin*, Irina O. Galuskina, Joachim Kusz, Thomas Armbruster, Katarzyna Marzec Piotr Dzierżanowski and Mikhail Murashko
*E-mail: evgeny.galuskin@us.edu.pl
Perovskite group
Monoclinic: $P2_1/n$; structure determined
a = 5.739(1), b = 5.951(1), c = 8.312(1) Å, β = 90.4(1)º
4.838(78), 4.706(39), 4.131(79), 2.975(47), 2.938(100), 2.922(99), 2.870(43), 2.065(47)
Type material is deposited in the collections of the Museum of Natural History in Bern, Bern, Switzerland, catalogue number NMBE 42401
How to cite: Galuskin, E.V., Galuskina, I.O., Kusz, J., Armbruster, T., Marzec, K., Dzierżanowski, P. and Murashko, M. (2013) Vapnikite, IMA 2013-082. CNMNC Newsletter No. 18, December 2013, page 3254; *Mineralogical Magazine*, **77**, 3249–3258.

IMA No. **2013-083**
Saamite
$Ba\square Na_3Ti_2Nb(Si_2O_7)_2O_2(OH)F(H_2O)_2$
Kirovskii mine, Mountt Kukisvumchorr, Khibiny alkaline massif, Kola Peninsula, Russia
Fernando Cámara*, Elena Sokolova and Frank C. Hawthorne
*E-mail: fernando.camaraartigas@unito.it
Chemically and topologically related to kazanskyite, nechelyustovite and bornemanite
Triclinic: $P\bar{1}$; structure determined
a = 5.437(2), b = 7.141(3), c = 21.69(1) Å, α = 92.97(1), β = 96.07(1), γ = 90.01(1)º
21.539(100), 7.180(11), 3.077(13), 2.887(9), 2.865(11), 2.790(15), 2.692(14), 1.785(9)
Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, catalogue numbers 4432/1 and 4432/2
How to cite: Cámara, F., Sokolova, E. and Hawthorne, F.C. (2013) Saamite, IMA 2013-083. CNMNC Newsletter No. 18, December 2013, page 3254; *Mineralogical Magazine*, **77**, 3249–3258.

IMA No. **2013-084**
Moraskoite
$Na_2Mg(PO_4)F$
Morasko iron meteorite
Łukasz Karwowski, Joachim Kusz, Andrzej Muszyński, Ryszard Kryza*, Maciej Sitarz and Evgeny V. Galuskin
*E-mail: ryszard.kryza@ing.uni.wroc.pl
Known synthetic phase
Orthorhombic: *Pbcn*; structure determined
a = 5.2117(10), b = 13.711(3), c = 11.665(2) Å
3.909(75), 3.382(52), 2.955(90), 2.606(100), 2.571(96), 2.545(68), 1.955(83), 1.691(67)
Type material is deposited in the collections of the Mineralogical Museum of the University of Wrocław, Wrocław, Poland, catalogue number MMUWr IV-7766
How to cite: Karwowski, Ł., Kusz, J., Muszyński, A., Kryza, R., Sitarz, M. and Galuskin, E.V. (2013) Moraskoite, IMA 2013-084. CNMNC Newsletter No. 18, December 2013, page 3254; *Mineralogical Magazine*, **77**, 3249–3258.

IMA No. **2013-085**
Itsiite
$Ba_2Ca(BSi_2O_7)_2$
Trench 1, Gun claim, Wilson Lake, Itsi Range, Yukon Territory, Canada (62º50′45′′N 130º0′20′′W)
Anthony R. Kampf*, Ronald C. Peterson and Brian R. Joy
*E-mail: akampf@nhm.org
Structurally related to hyalotekite and kapitsaite-(Y)
Tetragonal: $I\bar{4}2m$; structure determined
a = 10.9515(5), c = 10.3038(7) Å
5.50(42), 3.764(100), 3.446(60), 3.100(51), 2.899(96), 2.279(44), 2.145(69), 1.758(43)
Type material is deposited in the collections of the Natural History Museum of Los Angeles County, Los Angeles, California, USA, catalogue number 64072
How to cite: Kampf, A.R., Peterson, R.C. and Joy, B.R. (2013) Itsiite, IMA 2013-085. CNMNC Newsletter No. 18, December 2013, page 3255; *Mineralogical Magazine*, **77**, 3249–3258.

IMA No. **2013-086**
Campostriniite
$(Bi,Na)_3(Na,K)_4(SO_4)_6{\cdot}H_2O$
La Fossa crater, Vulcano, Aeolian Islands, Italy
Francesco Demartin*, Carlo Maria Gramaccioli and Carlo Castellano
*E-mail: francesco.demartin@unimi.it
New structure type
Monoclinic: $C2/c$; structure determined
a = 17.748(3), b = 6.982(1), c = 18.221(3) Å, β = 113.97(1)º
7.507(75), 6.396(100), 5.677(55), 4.410(47), 3.380(57), 3.166(50), 3.048(75), 2.766(60)
Type material is deposited in the Reference Collection of the Dipartimento di Chimica, University of Milan, Milan, Italy, sample number 2013-03
How to cite: Demartin, F., Gramaccioli, C.M. and Castellano, C. (2013) Campostriniite, IMA 2013-086. CNMNC Newsletter No. 18, December 2013, page 3255; *Mineralogical Magazine*, **77**, 3249–3258.

IMA No. **2013-087**
Ichnusaite
$Th(MoO_4)_2{\cdot}3H_2O$
Su Senargiu, Sarroch, Cagliari, Sardinia, Italy
Paolo Orlandi*, Cristian Biagioni, Luca Bindi and Fabrizio Nestola
*E-mail: paoloorlandi.pisa@gmail.com
New structure type
Monoclinic: $P2_1/c$; structure determined
a = 9.6797(12), b = 10.3771(13), c = 9.3782(12) Å, β = 90.00(1)º
9.7(mw), 5.66(m), 5.19(mw), 4.69(mw), 3.930(m), 3.479(s), 3.257(s), 3.074(m)
Type material is deposited in the collections of the Museo di Storia Naturale, Università di Pisa, Calci (Pisa), Italy, catalogue number 19679
How to cite: Orlandi, P., Biagioni, C., Bindi, L. and Nestola, F. (2013) Ichnusaite, IMA 2013-087. CNMNC Newsletter No. 18, December 2013, page 3255; *Mineralogical Magazine*, **77**, 3249–3258.

IMA No. **2013-088**
Nuragheite
$Th(MoO_4)_2{\cdot}H_2O$
Su Senargiu, Sarroch, Cagliari, Sardinia, Italy
Paolo Orlandi*, Cristian Biagioni and Luca Bindi
*E-mail: paoloorlandi.pisa@gmail.com
New structure type
Monoclinic: $P2_1/c$; structure determined
a = 7.358(2), b = 10.544(3), c = 9.489(2) Å, β = 91.88(2)º
5.28(m), 5.20(m), 5.04(m), 4.756(m), 3.688(m), 3.546(vs), 3.177(s), 3.024(m)
Type material is deposited in the collections of the Museo di Storia Naturale, Università di Pisa, Calci (Pisa), Italy, catalogue number 19680
How to cite: Orlandi, P., Biagioni, C. and Bindi, L. (2013) Nuragheite, IMA 2013-088. CNMNC Newsletter No. 18, December 2013, page 3255; *Mineralogical Magazine*, **77**, 3249–3258.

IMA No. **2013-089**
Chromo-alumino-povondraite
$NaCr_3(Al_4Mg_2)(Si_6O_{18})(BO_3)_3(OH)_3O$
Pereval marble quarry, Irkutsk region, Southern Lake Baikal, Siberia, Russia (51º37′N, 103º38′E)
Christine M. Clark, Frank C. Hawthorne*, Joel D. Grice, Ferdinando Bosi, Henrik Skogby, Leonid Reznitskii and Ulf Hålenius
*E-mail: frank_hawthorne@umanitoba.ca
Tourmaline supergroup
Trigonal: $R3m$; structure determined
a = 16.0277(2), c = 7.3085(1) Å
6.496(47), 5.058(24), 4.279(42), 4.019(55), 3.548(44), 3.010(51), 2.601(100), 2.006(46)

Type material is deposited in the collections of the Museum of Mineralogy, Earth Sciences Department, Sapienza University of Rome, Italy, catalogue number 33069/1
How to cite: Clark, C.M., Hawthorne, F.C., Grice, J.D., Bosi, F., Skogby, H., Reznitskii, L. and Hålenius, U. (2013) Chromo-alumino-povondraite, IMA 2013-089. CNMNC Newsletter No. 18, December 2013, page 3255; *Mineralogical Magazine*, **77**, 3249–3258.

IMA No. **2013-090**
Agakhanovite-(Y)
$YCaKBe_3Si_{12}O_{30}{\cdot}H_2O$
Heftetjern pegmatite, between Høydalen and Skarsfjell, Tørdal, Norway (59°8.6′N 8°45.4′E)
Frank C. Hawthorne*, Neil A. Ball, Petr Černý and Roy Kristiansen
*E-mail: frank_hawthorne@umanitoba.ca
Milarite group
Hexagonal: *P*6/*mcc*; structure determined
a = 10.3476(2), c = 13.7610(3) Å
6.877(56), 4.479(38), 4.134(84), 3.287(96), 3.214(27), 2.986(43), 2.865(100), 2.728(36)
Type material is deposited in the collections of the Royal Ontario Museum, Toronto, Ontario, Canada, catalogue number M43863
How to cite: Hawthorne, F.C., Ball, N.A., Černý, P. and Kristiansen, R. (2013) Agakhanovite-(Y), IMA 2013-090. CNMNC Newsletter No. 18, December 2013, page 3256; *Mineralogical Magazine*, **77**, 3249–3258.

IMA No. **2013-091**
Gatedalite
$ZrMn_2^{2+}Mn_4^{3+}SiO_{12}$
Långban, Filipstad, Värmland, Sweden
Ulf Hålenius* and Ferdinando Bosi
*E-mail: ulf.halenius@nrm.se
Braunite group
Tetragonal: $I4_1/acd$; structure determined
a = 9.4668(6), c = 18.8701(14) Å
5.460(6), 2.730(100), 2.367(12), 2.359(6), 1.6735(12), 1.671(29), 1.427(16), 1.423(10)
Type material is deposited in the collections of the Swedish Museum of Natural History, Stockholm, Sweden, registration number 20130001
How to cite: Hålenius, U. and Bosi, F. (2013) Gatedalite, IMA 2013-091. CNMNC Newsletter No. 18, December 2013, page 3256; *Mineralogical Magazine*, **77**, 3249–3258.

IMA No. **2013-092**
Parascandolaite
$KMgF_3$
Fumarole B5, Vesuvius, Naples, Italy
Italo Campostrini*, Francesco Demartin, Carlo Castellano and Massimo Russo
*E-mail: italo.campostrini@unimi.it
Perovskite group
Cubic: $Pm\bar{3}m$; structure determined
a = 4.0032(9) Å
2.831(83), 2.311(78), 2.001(100), 1.633(35), 1.415(56), 1.267(16), 1.206(22)
Type material is deposited in the Reference Collection of the Dipartimento di Chimica, University of Milan, Milan, Italy, sample number 2013-04
How to cite: Campostrini, I., Demartin, F., Castellano, C. and Russo, M. (2013) Parascandolaite, IMA 2013-092. CNMNC Newsletter No. 18, December 2013, page 3256; *Mineralogical Magazine*, **77**, 3249–3258.

NEW MINERAL PROPOSALS APPROVED IN NOVEMBER 2013

IMA No. **2013-067**
Marshallsussmanite
$NaCaMnSi_3O_8(OH)$
Wessels mine, Kalahari Manganese Field, Northern Cape Province, South Africa
Marcus J. Origlieri*, Robert T. Downs and Hexiong Yang
*E-mail: moriglie@email.arizona.edu
Pectolite group
Triclinic: $P\bar{1}$; structure determined
a = 7.7834(4), b = 6.9373(4), c = 6.8496(3) Å, α = 90.680 (3), β = 94.329(3), γ = 102.854(3)°
3.227(45), 3.104(15), 3.041(100), 2.868(20), 2.657(15), 2.534(20), 2.202(25), 1.715(15)
Type material is deposited in the collections of the University of Arizona Mineral Museum, Tucson, Arizona, USA, catalogue number 19348 and the RRUFF Project, deposition number R120109
How to cite: Origlieri, M.J., Downs, R.T and Yang, H. (2013) Marshallsussmanite, IMA 2013-067. CNMNC Newsletter No. 18, December 2013, page 3256; *Mineralogical Magazine*, **77**, 3249–3258.

IMA No. **2013-093**
Braccoite
$NaMn_5^{2+}[Si_5O_{14}(OH)](AsO_3)(OH)$

La Valletta mine, Vallone della Valletta, Maira Valley, Cuneo Province, Piedmont, Italy (44º23′542″N 7º542″E, 2536 m asl)
Fernando Cámara*, Erica Bittarello, Marco E. Ciriotti, Fabrizio Nestola, Francesco Radica and Marco Marchesini
*E-mail: fernando.camaraartigas@unito.it
As analogue of saneroite
Triclinic: $P\bar{1}$; structure determined
a = 9.740(6), b = 9.900(7), c = 9.085(6) Å,
α = 92.06(5), β = 117.41(5), γ = 105.27(5)º
3.514(29), 3.042(57), 3.005(61), 2.973(82), 2.821(100), 2.696(87), 2.614(29), 1.673(30)
Type material is deposited in the mineralogical collections of the Museo Regionale di Scienze Naturali di Torino, Sezione di Mineralogia, Petrografia e Geologia, Torino, Italy, catalogue number M/15939
How to cite: Cámara, F., Bittarello, E., Ciriotti, M.E., Nestola, F., Radica, F. and Marchesini, M. (2013) Braccoite, IMA 2013-093. CNMNC Newsletter No. 18, December 2013, page 3256; *Mineralogical Magazine*, **77**, 3249–3258.

IMA No. **2013-096**
Caesiumpharmacosiderite
$CsFe_4[(AsO_4)_3(OH)_4]\cdot 4H_2O$
Wendy pit, Tambo mine, Elqui Province, Coquimbo Region, Chile (29º46′50″S 69º56′58″W) and Puna Plateau, Tuzgle volcano, Susques Department, Jujuy, Argentina (24º00′S 66º30′W)
Stuart J. Mills*, Elisa Petrini, Fabio Bellatreccia, Jochen Schlüter, Anthony R. Kampf, Mike S. Rumsey, Maurizio Dini and John Spratt
*E-mail: smills@museum.vic.gov.au
Pharmacosiderite group
Cubic: $P\bar{4}3m$; structure determined
a = 7.9637(11) Å
8.04(100), 4.627(23), 4.009(17), 3.270(40), 2.831(31), 2.532(22), 2.415(22), 1.790(14)
Type material is deposited in the mineralogical collections of the Natural History Museum of Los Angeles County, Los Angeles, California, USA, catalogue number 63205, and Museum Victoria, Melbourne, Victoria, Australia, catalogue numbers M52762 and M52763
How to cite: Mills, S.J., Petrini, E., Bellatreccia, F., Schlüter, J., Kampf, A.R., Rumsey, M.S., Dini, M. and Spratt, J. (2013) Caesiumpharmacosiderite, IMA 2013-096. CNMNC Newsletter No. 18, December 2013, page 3257; *Mineralogical Magazine*, **77**, 3249–3258.

IMA No. **2013-097**
Okruschite
$Ca_2Mn_5^{2+}Be_4(AsO_4)_6(OH)_4\cdot 6H_2O$
Fuchs quarry, Hartkoppe Hill, Sailauf, Bavaria, Germany
Nikita V. Chukanov*, Gerhard Möhn, Igor V. Pekov, Dmitriy I. Belakovskiy, Yana V. Bychkova, Joachim A. Lorenz and Vladislav V. Gurzhiy
*E-mail: nikchukanov@yandex.ru
Roscherite group
Monoclinic: $C2/c$
a = 16.32(3), b = 12.04(2), c = 6.92(1) Å,
β = 94.8(1)º
9.68(39), 4.95(34), 4.17(34), 3.25(100), 3.11(32), 2.841(27), 2.711(26), 1.726(26)
Type material is deposited in the collections of the Fersman Mineralogical Museum of the Russian Academy of Sciences, Moscow, Russia, registration number 4434/1
How to cite: Chukanov, N.V., Möhn, G., Pekov, I.V., Belakovskiy, D.I., Bychkova, Y.V., Lorenz, J.A. and Gurzhiy, V.V. (2013) Okruschite, IMA 2013-097. CNMNC Newsletter No. 18, December 2013, page 3257; *Mineralogical Magazine*, **77**, 3249–3258.

IMA No. **2013-098**
Mambertiite
$BiMo_{2.80}^{5+}O_8(OH)$
Su Senargiu, Sarroch, Cagliari, Sardinia, Italy
Paolo Orlandi*, Cristian Biagioni, Marco Pasero, Francesco Demartin and Italo Campostrini
*E-mail: paoloorlandi.pisa@gmail.com
Structurally related to gelosaite
Triclinic: $P\bar{1}$; structure determined
a = 5.854(2), b = 7.637(3), c = 9.050(3) Å,
α = 112.85(1), β = 90.04(1), γ = 102.58(1)º
8.3(ms), 4.92(s), 3.417(vs), 3.136(ms), 2.850(ms)
Type material is deposited in the collections of the Museo di Storia Naturale, Università di Pisa, Calci (Pisa), Italy, catalogue number 19682
How to cite: Orlandi, P., Biagioni, C., Pasero, M., Demartin, F. and Campostrini, I. (2013) Mambertiite, IMA 2013-098. CNMNC Newsletter No. 18, December 2013, page 3257; *Mineralogical Magazine*, **77**, 3249–3258.

IMA No. **2013-099**
Kokinosite
$Na_2Ca_2(V_{10}O_{28})\cdot 24H_2O$
St Jude mine, Gypsum Valley, San Miguel County, Colorado, USA
Anthony R. Kampf*, John M. Hughes, Joe Marty and Barbara Nash
*E-mail: akampf@nhm.org
New structure type
Triclinic: $P\bar{1}$; structure determined
a = 8.7490(2), b = 10.9746(3), c = 12.8216(9) Å, α = 114.492(8), β = 105.093(7) , γ = 91.111(6)º
11.24(30), 9.88(100), 8.42(33), 7.92(35), 6.01(31), 2.814(28), 2.189(22), 1.961(26)
Type material is deposited in the collections of the Natural History Museum of Los Angeles County, Los Angeles, California, USA, catalogue numbers 64004, 64074, 64075, 64076, 64077 and 64078
How to cite: Kampf, A.R., Hughes, J.M., Marty, J. and Nash, B. (2013) Kokinosite, IMA 2013-099. CNMNC Newsletter No. 18, December 2013, page 3258; *Mineralogical Magazine*, **77**, 3249–3258.

ERRATA

IMA No. **2013-041** Evdokimovite
In CNMNC Newsletter 17, the formula was given incorrectly. The correct formula is $Tl_4(VO)_3(SO_4)_5(H_2O)_5$.

IMA No. **2013-038** Innsbruckite
In CNMNC Newsletter 17, the formula was given incorrectly. The correct formula is $Mn_{33}(Si_2O_5)_{14}(OH)_{38}$.

IMA No. **2013-037**
Kaliochalcite
In CNMNC Newsletter 17, the formula was given incorrectly. The correct formula is $KCu_2(SO_4)_2[(OH)(H_2O)]$.

In CNMNC Newsletter 17, the data summary for IMA No. **2013-056**, Fluornatropyrochlore, contained an incorrect mineral name. The correct summary is given below.

IMA No. **2013-056**
Fluornatropyrochlore
$(Na,Pb,Ca,REE,U)_2Nb_2O_6F$
Maoniuping rare earth deposit, Mianning County, Sichuan Province, China (28º27′29.89″N 101º58′46.93″E)
Yin Jingwu, Li Guowu*, Yang Guangming, Xiong Ming, Ge Xiangkun and Pan Baoming
*E-mail: liguowu@126.com
Pyrochlore supergroup
Cubic: $Fd\bar{3}m$; structure determined
a = 10.5053(10) Å
6.074(3), 3.042(100), 2.628(38), 1.857(34), 1.582(15), 1.515(4), 1.314(2), 1.205(3)
Type material is deposited in the collections of the Laboratory of Crystal Structure, Scientific Research Institute, China University of Geosciences, Beijing, 100083, China, catalogue number MNP-X-2
How to cite: Yin Jingwu, Li Guowu*, Yang Guangming, Xiong Ming, Ge Xiangkun and Pan Baoming (2013) Fluornatropyrochlore, IMA 2013-056. CNMNC Newsletter No. 17, October 2013, page 3003; *Mineralogical Magazine*, **77**, 2997–3005.