

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

NEWSLETTER 35

New minerals and nomenclature modifications approved in 2016 and 2017

U. HÅLENIUS¹ (CHAIRMAN CNMNC), F. HATERT² (VICE-CHAIRMAN CNMNC), M. PASERO³ (VICE-CHAIRMAN CNMNC) AND S. J. MILLS⁴ (SECRETARY CNMNC)

¹ Department of Geosciences, Naturhistoriska Riksmuseet, Box 50007, SE-104 05 Stockholm, Sweden – ulf.halenius@nrm.se

² Laboratoire de Minéralogie, Université de Liège, B-4000 Liège, Belgium – fhatert@ulg.ac.be

³ Dipartimento di Scienze della Terra, Università di Pisa, Via Santa Maria 53, I-56126 Pisa, Italy – marco.pasero@unipi.it

⁴ Geosciences, Museum Victoria, PO Box 666, Melbourne, Victoria 3001, 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 powder X-ray 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.

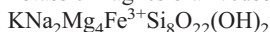
NO OTHER INFORMATION WILL BE RELEASED BY THE COMMISSION

<https://doi.org/10.1180/minmag.2017.081.004>

NEW MINERAL PROPOSALS APPROVED IN DECEMBER 2016

IMA No. 2016-083

Potassic-magnesian-arfvedsonite



Buhovo-Seslavtsi pluton, Sofia district,
Bulgaria (42°47'N, 23°34'E)

Momchil Dyulgerov*, Bernard Platevoet,
Roberta Oberti, Milen Kadiyski and
Ventsislav Rusanov

*E-mail: momchil@gea.uni-sofia.bg

Amphibole supergroup

Monoclinic: $C2/m$; structure determined

$a = 9.986(2)$, $b = 18.022(3)$, $c = 5.3151(12)$ Å,
 $\beta = 104.44(2)^\circ$

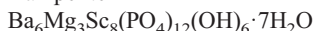
8.519(87), 3.406(82), 3.172(72), 2.755(59),
2.716(100), 2.594(52), 2.551(68), 2.175(57)

Type material is deposited in the collections of
the Museum of Mineralogy, Petrology and
Economic Geology, Sofia University
'St. Kliment Ohridski', 15 Tsar Osvoboditel
Blvd, Sofia 1504, Bulgaria, catalogue number
M 7661

How to cite: Dyulgerov, M., Platevoet, B., Oberti,
R., Kadiyski, M. and Rusanov, V. (2017) Potassic-
magnesian-arfvedsonite, IMA 2016-083.
CNMNC Newsletter No. 35, February 2017,
page 210; *Mineralogical Magazine*, **81**, 209–213.

IMA No. 2016-084

Kampelite



Iron open pit, Kovdor massif, Murmansk
Region, Russia (67°33'N, 30°30'E)

Victor N. Yakovenchuk, Gregory Y. Ivanyuk,
Yakov A. Pakhomovsky, Taras L. Panikorovskii,
Sergei N. Britvin, Sergey V. Krivovichev*,
Vladimir V. Shilovskikh and Vladimir
N. Bocharov

*E-mail: s.krivovichev@spbu.ru

New structure type

Orthorhombic: $Pnma$; structure determined

$a = 11.2261(9)$, $b = 8.5039(6)$, $c = 27.699(2)$ Å
15.80(100), 13.86(45), 3.292(11), 3.184(18),
3.129(19), 3.022(14), 2.756(16), 2.688(24)

Type material is deposited in the collections of
the Mineralogical museum, St. Petersburg State
University, Russia, catalogue No. 1/19660

How to cite: Yakovenchuk, V.N., Ivanyuk, G.Y.,
Pakhomovsky, Y.A., Panikorovskii, T.L.,

Britvin, S.N., Krivovichev, S.K., Shilovskikh,
V.V. and Bocharov, V.N. (2017) Kampelite,
IMA 2016-084. CNMNC Newsletter No. 35,
February 2017, page 210; *Mineralogical
Magazine*, **81**, 209–213.

IMA No. 2016-085

Hemleyite



Suizhou (L6 chondrite) meteorite, Suizhou Co.,
Hubei, China (31°43'N, 113°23'E)

Luca Bindi*, Ming Chen and Xiande Xie

*E-mail: luca.bindi@unifi.it

Ilmenite group

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

$a = 4.7483(5)$, $c = 13.665(1)$ Å
3.520(35), 2.625(100), 2.376(50), 2.105(50),
1.762(25), 1.645(50), 1.415(10), 1.372(20)

Type material is deposited in the mineralogical
collections of the Museo di Storia Naturale,
Università di Firenze, Via La Pira 4, I-50121,
Firenze, Italy, catalogue number 3238/I

How to cite: Bindi, L., Chen, M. and Xie,
X. (2017) Hemleyite, IMA 2016-085. CNMNC
Newsletter No. 35, February 2017, page 210;
Mineralogical Magazine, **81**, 209–213.

NEW MINERAL PROPOSALS APPROVED IN JANUARY 2017

IMA No. 2016-086

Palladogermanite



Marathon deposit, Coldwell Complex, Ontario,
Canada (48°48'7"N, 86°18'35"W)

Andrew M. McDonald*, William Zhe, Doreen
E. Ames, Kirk C. Ross, Ingrid M. Kjarsgaard
and David J. Good

*E-mail: amcdonald@laurentian.ca

Related to marathonite (IMA 2016-080)

Hexagonal: $P\bar{6}2m$

$a = 6.712(1)$, $c = 3.408(1)$ Å
2.392(100), 2.211(58), 2.197(43), 1.937(34),
1.846(16), 1.704(16), 1.280(13), 1.242(18)

Type material is deposited in the mineralogical
collections of the Canadian Museum of Nature,
Gatineau, Quebec, Canada, catalogue number
CMNMC 87179

How to cite: McDonald, A.M., Zhe, W., Ames,
D.E., Ross, K.C., Kjarsgaard, I.M. and Good,

D.J. (2017) Palladogermanide, IMA 2016-086. CNMNC Newsletter No. 35, February 2017, page 210; *Mineralogical Magazine*, **81**, 209–213.

IMA No. 2016-087

Fupingqiuite



Nancy pegmatite, Chacabuco Department, San Luis Province, Argentina (32°28'48"S, 65°16'42"W)

Hexiong Yang*, Robert T. Downs, Xiangping Gu, Xiande Xie and Anaïs Kobsch

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

Wyllieite group

Monoclinic: $P2_1/n$; structure determined

$a = 11.9951(3)$, $b = 12.5217(3)$, $c = 6.4260(2)$ Å,
 $\beta = 114.640(1)^\circ$

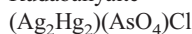
3.488(28), 3.070(98), 2.919(34), 2.873(83),
2.834(55), 2.713(100), 2.517(87), 2.088(79)

Cotype material is deposited in the collections of the Mineral Museum, University of Arizona, Tucson, USA, catalogue # 21322, and the RRUFF Project, deposition # R160052

How to cite: Yang, H., Downs, R.T., Gu, X., Xie, X. and Kobsch, A. (2017) Fupingqiuite, IMA 2016-087. CNMNC Newsletter No. 35, February 2017, page 211; *Mineralogical Magazine*, **81**, 209–213.

IMA No. 2016-088

Rudabányaite



Adolf mine, Rudabánya ore deposit, Borsod-Abaúj-Zemplén Co., Hungary

Sándor Szakáll*, Herta Effenberger, Béla Fehér and Norbert Zajzon

*E-mail: askszs@uni-miskolc.hu

New structure type

Cubic: $F\bar{4}3c$; structure determined

$a = 17.360(3)$ Å

5.00(m), 4.33(mw), 2.931(s), 2.882(w), 2.611(s), 2.255(mw), 2.001(m), 1.734(mw)

Type material is deposited in the mineralogical collections of the Herman Ottó Museum, Kossuth u. 13, H-3525 Miskolc, Hungary, catalogue number 2016.351

How to cite: Szakáll, S., Effenberger, H., Fehér, B. and Zajzon, N. (2017) Rudabányaite, IMA 2016-088. CNMNC Newsletter No. 35, February 2017, page 211; *Mineralogical Magazine*, **81**, 209–213.

IMA No. 2016-089

Fluorbarytolamprophyllite

$(\text{Ba}, \text{Sr})_2[(\text{Na}, \text{Fe}^{2+})_3(\text{Ti}, \text{Mg})\text{F}_2][\text{Ti}_2(\text{Si}_2\text{O}_7)_2\text{O}_2]$
Niva alkaline intrusion, Kola Alkaline Province, Murmansk Region, Russia (67°15' N, 32°17'E)

Maria I. Filina*, Sergey M. Aksenov, Nikita V. Chukanov, Natalia V. Sorokhtina, Natalia N. Kononkova, Dmitriy I. Belakovskiy, Sergey N. Britvin, Lia N. Kogarko, Ramiza K. Rastsvetaeva, Ivan G. Bystrov and Alexandr D. Chervonnyi

*E-mail: makimm@mail.ru

Lamprophyllite group

Monoclinic: $C2/m$; structure determined

$a = 19.538(1)$, $b = 7.092(1)$, $c = 5.391(2)$ Å,
 $\beta = 96.704(8)^\circ$

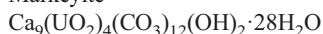
9.692(40), 3.726(59), 3.414(67), 3.230(96),
3.013(53), 2.780(100), 2.662(52), 2.135(44)

Type material is deposited in the collections of the Fersman Mineralogical Museum, Russian Academy of Sciences, Moscow, Russia, registration numbers 4916/1 and 4916/2

How to cite: Filina, M.I., Aksenov, S.M., Chukanov, N.V., Sorokhtina, N.V., Kononkova, N.N., Belakovskiy, D.I., Britvin, S.N., Kogarko, L.N., Rastsvetaeva, R.K., Bystrov, I.G. and Chervonnyi, A.D. (2017) Fluorbarytolamprophyllite, IMA 2016-089. CNMNC Newsletter No. 35, February 2017, page 211; *Mineralogical Magazine*, **81**, 209–213.

IMA No. 2016-090

Markeyite



Markey mine, Red Canyon, White Canyon District, San Juan Co., Utah, USA (37°32'57" N, 110°18'08"W)

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

*E-mail: akampf@nhm.org

New structure type

Orthorhombic: $Pmmm$; structure determined

$a = 17.969(1)$, $b = 18.4705(6)$, $c = 10.1136(4)$ Å
10.12(69), 6.41(91), 5.43(100), 5.07(33), 4.618(25), 4.104(37), 3.984(34), 2.732(25)

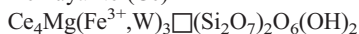
Cotype material is deposited in the collections of the Natural History Museum, Los Angeles County, 900 Exposition Boulevard, Los Angeles, CA 90007, USA, catalogue numbers 67091 (holotype), 67092, 67093, 67094 and

69095 (cotype), and the Fersman Mineralogical Museum, Russian Academy of Sciences, Moscow, Russia, registration number 4932/1 (cotype)

How to cite: Kampf, A.R., Plášil, J., Kasatkin, A.V., Marty, J. and Čejka, J. (2017) Markeyite, IMA 2016-090. CNMNC Newsletter No. 35, February 2017, page 211; *Mineralogical Magazine*, **81**, 209–213.

IMA No. 2016-091

Delhuyarite-(Ce)



Nya Bastnäs Fe-Cu-REE mine field, Skinnskatteberg, Västmanland, Sweden (59° 50'47"N, 15°35'15"E)

Dan Holtstam*, Luca Bindi, Ulf Hälenius and Ulf B. Andersson

*E-mail: dan.holtstam@vr.se

Chevkinite subgroup

Monoclinic: *C2/m*; structure determined

$a = 13.6020(6)$, $b = 5.7445(3)$, $c = 10.9996(5)$ Å,
 $\beta = 100.721(4)^\circ$

10.808(99), 4.611(71), 3.211(100), 3.170(66), 3.037(71), 2.726(91), 2.702(83), 2.187(56)

Type material is deposited in the mineralogical collections of the Department of Geosciences, Swedish Museum of Natural History, Box 50007, SE-10405 Stockholm, Sweden, collection number no. NRM 19060375

How to cite: Holtstam, D., Bindi, L., Hälenius, U. and Andersson, U.B. (2017) Delhuyarite-(Ce), IMA 2016-091. CNMNC Newsletter No. 35, February 2017, page 212; *Mineralogical Magazine*, **81**, 209–213.

IMA No. 2016-092

Kravtsovite



Komsomolsky mine, Talnakh deposit, Noril'sk deposits, Russia (69°30'20"N, 88°27'17"E)

Anna Vymazalová*, František Laufek, Sergei F. Sluzhenikin, Chris J. Stanley, Vladimir V. Kozlov, Dmitry A. Chareev and Maria L. Lukashova

*E-mail: anna.vymazalova@geology.cz

New structure type

Orthorhombic: *Cmcm*; structure determined

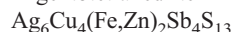
$a = 7.9835(1)$, $b = 5.9265(1)$, $c = 5.7451(1)$ Å
2.632(51), 2.458(65), 2.426(71), 2.378(36), 2.330(60), 2.235(100), 2.197(48), 2.061(42)

Type material is deposited in the mineralogical collections of the Department of Earth Sciences, Natural History Museum, London, UK, catalogue number BM 2016,150

How to cite: Vymazalová, A., Laufek, F., Sluzhenikin, S.F., Stanley, C.J., Kozlov, V.V., Chareev, D.A. and Lukashova, M.L. (2017) Kravtsovite, IMA 2016-092. CNMNC Newsletter No. 35, February 2017, page 212; *Mineralogical Magazine*, **81**, 209–213.

IMA No. 2016-093

Argentotetrahedrite



Keno Hill Ag-Pb-Zn deposit, Yukon Territory, Canada (63°54'29"N, 135°18'14"W)

Mark D. Welch*, Chris J. Stanley, John Spratt and Stuart J. Mills

*E-mail: mdw@nhm.ac.uk

The Sb analogue of argentotennantite

Cubic: $I\bar{4}3m$; structure determined

$a = 10.6116(1)$ Å

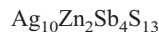
4.331(6), 3.063(100), 2.652(28), 2.501(8), 2.081(19), 1.937(12), 1.876(35), 1.599(25)

Cotype material is deposited in the mineralogical collections of Queen's University (Miller collection), Ontario, Canada, catalogue number M8224 (holotype) and M7138 (cotype), and the Natural History Museum London, specimen number BM2016,101 (cotype)

How to cite: Welch, M.D., Stanley, C.J., Spratt, J. and Mills, S.J. (2017) Argentotetrahedrite, IMA 2016-093. CNMNC Newsletter No. 35, February 2017, page 212; *Mineralogical Magazine*, **81**, 209–213.

IMA No. 2016-094

Rozhdestvenskayaite



Bambolla mine, Moctezuma, Sonora, Mexico (29°41'N, 109°43'W)

Mark D. Welch*, Chris J. Stanley, John Spratt and Stuart J. Mills

*E-mail: mdw@nhm.ac.uk

Chemically related to argentotetrahedrite (IMA 2016-093)

Cubic: $I\bar{4}3m$; structure determined

$a = 10.9845(7)$ Å

3.161(100), 2.927(8), 2.738(35), 2.581(8), 2.148(18), 1.999(10), 1.936(24), 1.651(19)

Type material is deposited in the mineralogical collections of the Natural History Museum London, specimen number BM2016,102

How to cite: Welch, M.D., Stanley, C.J., Spratt, J. and Mills, S.J. (2017) Rozhdestvenskayaite, IMA 2016-094. CNMNC Newsletter No. 35, February 2017, page 212; *Mineralogical Magazine*, **81**, 209–213.

IMA No. 2015-110a

Riesite

TiO₂

Nördlinger Ries Crater, Swabia, Bavaria, Germany (48°48'32"N, 10°35'20"E)

Oliver Tschauner* and Chi Ma

*E-mail: olivert@physics.unlv.edu

The fifth polymorph of TiO₂

Monoclinic: *P2/c*; structure determined

$a = 4.519(3)$, $b = 5.503(8)$, $c = 4.888(2)$ Å, $\beta = 90.59(8)^\circ$

3.490(88), 2.852(100), 2.833(70), 2.359(33), 2.094(22), 1.682(23), 1.671(26), 1.647(27)

Type material is deposited in the collections of the Institut für Geowissenschaften, Ruprecht-Karls Universität Heidelberg, Germany, thin section ZLN114c

How to cite: Tschauner, O. and Ma, C. (2017) Riesite, IMA 2015-110a. CNMNC Newsletter No. 35, February 2017, page 213; *Mineralogical Magazine*, **81**, 209–213.

ADDENDUM

Potassicmendeleevite-(Ce) (not a valid species)

Although erroneously marked as “A” (= Approved) in the IMA List of Minerals for some years, only recently we became aware that actually the mineral has not yet been approved (only the name was approved). Accordingly potassicmendeleevite-(Ce) has been omitted from the list of valid species.

REVISED CHEMICAL FORMULA

A paper on the mineral nickelskutterudite has been published recently [*American Mineralogist*, **102**, 205-209 (2017)] in which the ideal chemical formula of the mineral is given as (Ni,Co,Fe)As₃. In this formula, based on new EPMA and SCXRD data, and on crystal-chemical arguments, both Co and Fe must be present as subordinate yet essential components, and no As deficiencies were observed (the previously accepted formula of nickelskutterudite was NiAs_{3-x}). These data were examined carefully by the CNMNC officers and were considered reliable. Accordingly it was agreed to modify the formula of nickelskutterudite in the official IMA List of Minerals. Similarly, the formula of skutterudite becomes now CoAs₃ (it was CoAs_{3-x}).