New Minerals and Nomenclature Modifications Approved in 2017 and 2018

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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 European Journal of Mineralogy 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

New Mineral Proposals Approved in December 2017

IMA No. 2017-085
Thorasphite
Th₂H(PO₄,AsO₄)₁₋₆H₂O
Elsmore Tin Mine, Elsmore, New South Wales, Australia (151°17′E, 29°48′S)
Peter Elliott*

*E-mail: peter.elliott@adelaide.edu.au
New structure type
Orthorhombic: Pbcn; structure determined
a = 13.673(3), b = 9.925(2), c = 10.222(2) Å
8.007(100), 5.127(57), 4.934(71), 4.320(24), 4.251(38), 3.225(22), 3.189(27), 2.926(27),
Type material is deposited in the mineralogical collections of the South Australian Museum, North Terrace, Adelaide, South Australia 5000, Australia, registration number G34702

https://doi.org/10.1127/ejm/2018/0030-2736

IMA No. 2017-086
Straßmannite
Al(UO2)(SO4)2F·16H2O
Green Lizard mine, White Canyon mining district, San Juan Co., Utah, USA (37°34′37.10″N, 110°17′52.80″W); Markey mine, White Canyon mining district, San Juan Co., Utah, USA (37°32′57″N, 110°18′08″W)
Anthony R. Kampf*, Jakub Plášil, Barbara P. Nash and Joe Marty
*E-mail: akampf@nhm.org
Structurally related to leydetite, magnesioleydite and wetherillite
Monoclinic: C2/c; structure determined
a = 11.0187(5), b = 8.3284(3), c = 26.6732(2) Å, β = 97.426(7)°
13.24(100), 6.61(53), 6.11(26), 5.74(35), 4.494(22), 3.324(38), 3.265(20), 3.138(23)
Type material is deposited in the mineralogical collections of the National History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, CA 90007, USA, catalogue numbers 67264 (GL), 67265 (GL), 67266 (M), and 67267 (M)

IMA No. 2017-088
Tsygankoite
Mn9Tl3Hg(H2Sb2Pb2Ti)S48
Vorontsovskoe deposit, 0.5 km W of the settlement of Vorontsovka, ca. 13 km S of Krasnotur’insk, Sverdlovskaya Oblast’, Northern Urals, Russia (59°39′5″N, 60°12′56″E)
Anatoly V. Kasatkin*, Emil Makovicky, Jakub Plášil, Radek Škoda, Atali A. Agakhanov and Vladimir Y. Karpenko
*E-mail: anatoly.kasatkin@gmail.com
New structure type
Monoclinic: C2/c; structure determined
a = 21.362(4), b = 3.858(1), c = 27.135(4) Å, β = 106.94(1)°
5.387(100), 3.391(68), 3.353(70), 3.204(88), 2.858(64), 2.841(72), 2.805(60), 2.786(99)
Type material is deposited in the mineralogical collections of the Fersman Mineralogical Museum, Russian Academy of Sciences, Moscow, Russia, registration number 5018/1

IMA No. 2017-089
Petersite-(La)
Cu4La(PO4)3(OH)6·3H2O
Detani River, Ohgurusu, Kiwa, Kumano, Mic Prefecture, Japan (33°52′57″N, 135°55′46″E)
Daisuke Nishio-Hamane*, Masayuki Ohnishi, Norimasa Shimobayashi, Koichi Momma, Ritsuro Miyawaki and Sachio Inaba
*E-mail: hamane@issp.u-tokyo.ac.jp
Mixite group
Hexagonal: P63/m; structure determined
a = 13.410(5), c = 5.881(4) Å
11.621(100), 4.393(36), 3.519(29), 3.344(15), 2.907(21), 2.693(14), 2.534(14), 2.444(73)
Type material is deposited in the mineralogical collections of the National Museum of Nature and Science, Tsukuba, Ibaraki 305-0005, Japan, specimen number NSM-M45621

IMA No. 2017-090
Ramazzozite
[MsCu12(PO4)(CO3)4(OH)24(H2O)20]
[(H2SO4)3(H2O)36]
Monte Ramazzo mine, Genova, Liguria, Italy (44°28′5″N, 8°51′33″E)
Anthony R. Kampf*, George R. Rossman, Chi Ma, Donato Belmonte, Cristian Biagoni, Fabrizio Castellaro and Luigi Chiappino
*E-mail: akampf@nhm.org
New structure type
Cubic: P43m; structure determined
a = 13.389(1) Å
13.37(10), 9.43(24), 4.224(8), 4.043(11), 3.252(9), 2.857(9), 2.730(5), 2.668(5)
Type material is deposited in the mineralogical collections of the Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, CA 90007, USA, catalogue numbers 66691 and 66692

NEW MINERAL PROPOSALS APPROVED IN JANUARY 2018

IMA No. 2017-092
Siudaite
Na3Mn3+/2Ca3(Fe3+/2,Mn2+)/3Zr3NbSi24(Si,□,Ti)O72(O,OH)3Cl·4H2O
Downloaded from https://pubs.geoscienceworld.org/eurjmin/article-pdf/30/1/183/4207041/ejm_30_1_0183_0186_halenius_2736_online.pdf by guest
*E-mail: nikchukanov@yandex.ru
Eudialyte group
Trigonal: R3m; structure determined
a = 14.188(3), c = 29.831(7) Å
6.38(60), 5.68(47), 4.29(55), 3.389(47), 3.191(63), 2.963(100), 2.843(99), 2.577(49)
Type material is deposited in the collections of the Mineralogical and Petrographical Section, Museum of Earth PAS (Muzeum Ziemi Polskiej Akademii Nauk), aleja Na Skarpie 20/26, PL-00-488 Warsaw, Poland, catalogue no. MZI III/1/541

IMA No. 2017-095
Tantalowodginite
(Mn□Ta5Ta3O8)
Emmons pegmatite dike, exposed on Uncle Tom Mountain, Greenwood, Oxford Co., Maine, USA (44°19′24″N, 70°41′41″)
Sarah L. Hanson, Alexander U. Falster, William B. Simmons, Raymond Sprague, Pietro Vignola*, Nicola Rotiroti, Sergio Andó and Frédéric Hatert
*E-mail: pietro.vignola@idpa.cnr.it
Wodginite group
Monoclinic: C2/c; structure determined
a = 9.542(1), b = 11.488(2), c = 29.831(7) Å, β = 91.13 (1°)
7.332(20), 4.741(20), 3.838(30), 3.667(100), 3.000(100), 2.957(100), 2.883(30), 1.778(30)
Type material is deposited in the mineralogical collections of the Maine Mineral and Gem Museum, 99 Main Street, Bethel, Maine, USA, catalogue number MMGM-MP2-12-10-2016

IMA No. 2017-096
Pampaloite
Au5SbTe
Pampalo mine (drill core 315, depth 71.50 m), 65 km E of Joensuu, 46 km N of Iломantsi, Finland (62°59′11″N, 31°15′53″)
Anna Vymazalová*, Kari Koijonen, František Laufek, Bo Johanson, Chris J. Stanley, Jakub Plášil and Patricie Halodová
*E-mail: anna.vymazalova@geology.cz
New structure type
Monoclinic: C2/c; structure determined
a = 11.947(3), b = 4.481(1), c = 12.335(3) Å, β = 105.83(2°)
4.846(24), 3.825(18), 2.978(100), 2.968(50), 2.242(25), 2.144(55), 2.063(33), 1.789(18)
Type material is deposited in the mineralogical collections of the Natural History Museum, Cromwell Road, SW7 5BD London, U.K., catalogue No. BM 2017,16

IMA No. 2017-097
Sbacchiite
Ca2AlF7
In a fossil fumarole (1944 eruption, T ≈ 80°C), Vesuvius volcano crater, Napoli, Italy
Italo Campostrini, Francesco Demartin* and Massimo Russo
*E-mail: francesco.demartin@unimi.it
Chemically related to carlhintzeite
Orthorhombic: Pnma; structure determined
a = 7.665(2), b = 6.993(1), c = 9.566(2) Å
3.840(45), 3.563(85), 3.499(100), 2.899(55), 2.750(30), 2.281(20), 2.255(52), 2.173(36)
Type material is deposited in the reference collection of the Department of Chemistry, University of Milan, Via Golgi 19, I-20133 Milano, Italy, sample no. 2017-01

IMA No. 2017-098
Paddlewheelite
MgCa5Cu2(UO2)4(CO3)12(H2O)33
Klement vein, Svornost mine (5th level), Jáchymov District, Bohemia, Czech Republic (50°22′21″N, 12°54′42″E)
Travis A. Olds*, Jakub Plášil, Anthony R. Kampf, Fabrice Dal Bo and Peter C. Burns
*E-mail: tolds@nd.edu
New structure type
Monoclinic: P21; structure determined
a = 22.052(4), b = 17.118(3), c = 19.354(3) Å, β = 90.474(2°)
11.12(100), 7.33(46), 6.42(30), 5.54(37), 4.823(33), 4.642(38), 4.215(34), 3.717(33)
Type material is deposited in the mineralogical collections of the Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, CA 90007, USA, catalogue number 66696
**NOMENCLATURE PROPOSALS APPROVED IN DECEMBER 2017**

**IMA 17-E — Bobdownsite discredited (and krásnoite redefined)**

Proposal 17-E is accepted, and bobdownsite is discredited because it does not contain fluorine, which was its distinguishing characteristic as a new mineral. F-free bobdownsite is equivalent to the mineral whitlockite, although the phase probably lies along the whitlockite-merrillite join. Krásnoite is a valid mineral species, but it does not contain monofluorophosphate anions \((\text{PO}_3\text{F})^2-\). Instead, fluorine substitutes for hydroxyl groups that are bonded to aluminium, as shown by vibrational and \(^{19}\text{F}\) NMR spectroscopic data.

**IMA 17-F — Redefinition of montbrayite**

Proposal 17-F is accepted, and montbrayite is redefined. Its crystal-chemical formula becomes \((\text{Au}, \text{Ag}, \text{Sb}, \text{Bi}, \text{Pb})_{23}(\text{Te}, \text{Sb}, \text{Bi}, \text{Pb})_{38}\), instead of \((\text{Au}, \text{Sb})_2\text{Te}_3\) as previously reported.

**IMA 17-G — Redefinition of gabrielsonite**

Proposal 17-G is accepted, and gabrielsonite is redefined as \(\text{PbFe}^{3+} (\text{As}^{3+} \text{O}_3)\text{O}\), instead of \(\text{PbFe}^{2+} (\text{As}^{5+} \text{O}_4)(\text{OH})\), previously reported. Indeed, the mineral is anhydrous, and contains iron almost exclusively in the trivalent state. Consequently, gabrielsonite does not belong to the descloizite supergroup.

**Rockbridgeite group**

A new classification and nomenclature scheme has been approved for the minerals of the rockbridgeite group. Currently the group includes three mineral species: rockbridgeite, frondelite, and plimerite, plus a number of potentially new mineral species.

**MINERAL APPROVAL WITHDRAWN**

IMA No. 2000-030a Uvite

Approval for this mineral, which occurred in 2010 (see CNMNC Newsletter 2), has been withdrawn. Subsequent analytical work undertaken by the authors shows this material to be a potentially new oxy-tourmaline.