



## IMA Commission on New Minerals, Nomenclature and Classification (CNMNC) NEWSLETTER 51

### NEW MINERALS AND NOMENCLATURE MODIFICATIONS APPROVED IN 2019

RITSURO MIYAWAKI<sup>1</sup> (Chairman, CNMNC), FRÉDÉRIC HATERT<sup>2</sup> (Vice-Chairman, CNMNC),  
MARCO PASERO<sup>3</sup> (Vice-Chairman, CNMNC) and STUART J. MILLS<sup>4</sup> (Secretary CNMNC)

<sup>1</sup> Department of Geology, National Museum of Nature and Science, 4-1-1 Amakubo, Tsukuba 305-0005,  
Japan – [miyawaki@kahaku.go.jp](mailto:miyawaki@kahaku.go.jp)

<sup>2</sup> Laboratoire de Minéralogie, Université de Liège, Bâtiment B18, Sart Tilman, 4000 Liège, Belgium – [fhater@uliege.be](mailto:fhater@uliege.be)

<sup>3</sup> Dipartimento di Scienze della Terra, Università di Pisa, Via Santa Maria 53, 56126 Pisa, Italy – [marco.pasero@unipi.it](mailto:marco.pasero@unipi.it)

<sup>4</sup> Geosciences, Museum Victoria, PO Box 666, Melbourne, Victoria 3001, Australia – [smills@museum.vic.gov.au](mailto: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 *European Journal of Mineralogy* on a routine basis, as well as being added month by month to the Commission's website.**

**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 AUGUST 2019

IMA No. **2018-134**

Kodamaite

$\text{Na}_3(\text{Ca}_5\text{Na})\text{Si}_{16}\text{O}_{36}(\text{OH})_4\text{F}_2 \cdot (14-x)\text{H}_2\text{O}$  ( $x \approx 5$ )

Poudrette Quarry, Mont Saint-Hilaire, La Vallée-du-Richelieu, Montérégie, Québec, Canada (45°33'46"N, 73°8'30"W)

Andrew M. McDonald\* and George Y. Chao

\*E-mail: [amcdonald@laurentian.ca](mailto:amcdonald@laurentian.ca)

Reyerite group

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

$a = 9.609(2)$ ,  $b = 9.630(2)$ ,  $c = 15.739(3)$  Å,

$\alpha = 75.21(3)$ ,  $\beta = 85.22(3)$ ,  $\gamma = 60.12(3)^\circ$

15.148(100), 4.191(5), 3.833(7), 3.139(5), 3.068(7),  
2.996(18), 2.780(14), 1.831(9)

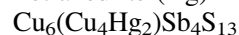
Type material is deposited in the mineralogical collections of the Canadian Museum of Nature,

P.O. Box 3443, Station D, Ottawa, Ontario K1P 6P4, Canada, catalogue number CMNMC 87262.

How to cite: McDonald, A.M. and Chao, G.Y. (2019) Kodamaite, IMA 2018-134. CNMNC Newsletter No. 51; *European Journal of Mineralogy*, **31**, <https://doi.org/10.1127/ejm/2019/0031-2894>

#### IMA No. 2019-003

Tetrahedrite-(Hg)



Buca della Vena mine, Stazzema (LU), Apuan Alps, Tuscany, Italy (43°59'55"N, 10°18'37"E – holotype); Jedová hora deposit, Neřežín, Hořovice, Beroun District, Central Bohemian Region, Czech Republic (49°47'27"N, 13°53'17"E – cotype); Rožňava deposit, Košice Region, Slovakia (cotype) Cristian Biagioni\*, Jiří Sejkora, Silvia Musetti, Dalibor Velebil and Marco Pasero

\*E-mail: [cristian.biagioni@unipi.it](mailto:cristian.biagioni@unipi.it)

Tetrahedrite group

Cubic:  $\bar{I}43m$ ; structure determined

$a = 10.5057(8) \text{ \AA}$

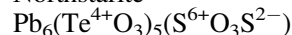
4.29(w), 3.716(w), 3.035(vs), 2.806(w), 2.626(w), 2.476(w), 1.860(m), 1.584(mw)

Type material is deposited in the mineralogical collections of the Museo di Storia Naturale, Università di Pisa, Via Roma 79, Calci (PI), Italy, catalogue number 19895 (Buca della Vena), and the Department of Mineralogy and Petrology, National Museum, Prague, Czech Republic, catalogue numbers PIN9961 (Jedová hora) and PIN33538 (Rožňava).

How to cite: Biagioni, C., Sejkora, J., Musetti, S., Velebil, D. and Pasero, M. (2019) Tetrahedrite-(Hg), IMA 2019-003. CNMNC Newsletter No. 51; *European Journal of Mineralogy*, **31**, <https://doi.org/10.1127/ejm/2019/0031-2894>

#### IMA No. 2019-031

Northstarite



North Star mine, Mammoth, Tintic district, Juab Co., Utah, USA (39°55'14"N, 112°06'24"W)

Anthony R. Kampf\*, Robert M. Housley and George R. Rossman

\*E-mail: [akampf@nhm.org](mailto:akampf@nhm.org)

New structure type

Hexagonal:  $P6_3$ ; structure determined

$a = 10.253(1)$ ,  $c = 11.6747(8) \text{ \AA}$

5.12(21), 3.098(100), 2.957(74), 2.140(44), 1.940(13), 1.733(41), 1.706(18), 1.626(31)

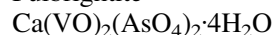
Type material is deposited in the mineralogical collections of the Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, CA 90007, USA, catalogue number 67291.

How to cite: Kampf, A.R., Housley, R.M. and Rossman, G.R. (2019) Northstarite, IMA 2019-031. CNMNC Newsletter No. 51; *European Journal*

*of Mineralogy*, **31**, <https://doi.org/10.1127/ejm/2019/0031-2894>

#### IMA No. 2019-032

Fulbrightite



Packrat mine, near Gateway, Mesa Co., Colorado, USA (38°38'51.28"N, 109°02'49.77"W)

Anthony R. Kampf\*, Mark A. Cooper, Barbara P. Nash, Joe Marty and Paul M. Adams

\*E-mail: [akampf@nhm.org](mailto:akampf@nhm.org)

The arsenate analogue of sincosite

Triclinic:  $P1$ ; structure determined

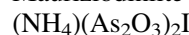
$a = 6.434(8)$ ,  $b = 6.480(8)$ ,  $c = 6.718(8) \text{ \AA}$ ,  
 $\alpha = 107.90(6)$ ,  $\beta = 94.06(4)$ ,  $\gamma = 90.06(3)^\circ$   
6.51(52), 3.221(100), 3.085(16), 2.893(15),  
2.823(12), 2.277(23), 1.619(20), 1.450(21)

Cotype 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 64513, 65555 and 65559.

How to cite: Kampf, A.R., Cooper, M.A., Nash, B.P., Marty, J. and Adams, P.M. (2019) Fulbrightite, IMA 2019-032. CNMNC Newsletter No. 51; *European Journal of Mineralogy*, **31**, <https://doi.org/10.1127/ejm/2019/0031-2894>

#### IMA No. 2019-036

Mauriziodiniite



Torrecillas mine, Salar Grande, Iquique Province, Tarapacá Region, Chile (20°58'13"S, 70°8'17"W)

Anthony R. Kampf\*, Barbara P. Nash and Arturo A. Molina Donoso

\*E-mail: [akampf@nhm.org](mailto:akampf@nhm.org)

Chemically and structurally related to lucabindiite

Hexagonal:  $P6/mmm$ ; structure determined

$a = 5.289(2)$ ,  $c = 9.317(2) \text{ \AA}$

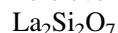
9.35(29), 4.644(19), 3.269(100), 2.644(71),  
2.554(42), 1.846(20), 1.623(27), 1.524(36)

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 67365

How to cite: Kampf, A.R., Nash, B.P. and Molina Donoso, A.A. (2019) Mauriziodiniite, IMA 2019-036. CNMNC Newsletter No. 51; *European Journal of Mineralogy*, **31**, <https://doi.org/10.1127/ejm/2019/0031-2894>

#### IMA No. 2019-037

Percleveite-(La)



Mochalin Log REE deposit, 14 km N of the city of Kyshtym, Chelyabinsk Oblast', South Urals, Russia (55°48'42"N, 60°33'46"E)

Anatoly V. Kasatkin\*, Natalia V. Zubkova, Igor V. Pekov, Nikita V. Chukanov, Radek Škoda, Atali A. Agakhanov, Dmitriy I. Belakovskiy, Jakub Plášil and Aleksey M. Kuznetsov

\*E-mail: [anatoly.kasatkin@gmail.com](mailto:anatoly.kasatkin@gmail.com)

The La-dominant analogue of percleveite-(Ce)

Tetragonal:  $P4_1$ ; structure determined

$a = 6.8482(3)$ ,  $c = 24.855(1)$  Å  
4.194(18), 3.564(16), 3.349(16), 3.157(100),  
3.043(22), 2.934(39), 2.893(29), 2.864(21)

Type material is deposited in the collections of the Fersman Mineralogical Museum, Russian Academy of Sciences, Leninskiy Prospekt 18-2, Moscow 119071, Russia, registration number 5362/1

How to cite: Kasatkin, A.V., Zubkova, N.V., Pekov, I.V., Chukanov, N.V., Škoda, R., Agakhanov, A.A., Belakovskiy, D.I., Plášil, J. and Kuznetsov, A.M. (2019) Percleveite-(La), IMA 2019-037. CNMNC Newsletter No. 51; *European Journal of Mineralogy*, **31**, <https://doi.org/10.1127/ejm/2019/0031-2894>

#### IMA No. 2019-038

Fluorcarletonite

$\text{KNa}_4\text{Ca}_4\text{Si}_8\text{O}_{18}(\text{CO}_3)_4\text{F}\cdot\text{H}_2\text{O}$

Severny district, Maly Murun syenite massif, NW Aldan Shield, Siberia, Russia ( $58^\circ 20' 15''\text{N}$ ,  $119^\circ 04' 44''\text{E}$ )

Ekaterina V. Kaneva\*, Tatiana A. Radomskaya, Ludmila F. Suvorova and Mikhail A. Mitichkin

\*E-mail: [kev604@mail.ru](mailto:kev604@mail.ru)

The F-dominant analogue of carletonite

Tetragonal:  $P4/mbn$ ; structure determined

$a = 13.219(1)$ ,  $c = 16.707(2)$  Å  
16.92(22), 8.417(76), 4.190(100), 3.358(20),  
2.917(28), 2.790(27), 2.758(20), 2.393(22)

Type material is deposited in the collections of the Sidorov State Mineralogical Museum, 83 Lermontov str., Irkutsk 664074, Russia, catalogue number 12/1764

How to cite: Kaneva, E.V., Radomskaya, T.A., Suvorova, L.F. and Mitichkin, M.A. (2019) Fluorcarletonite, IMA 2019-038. CNMNC Newsletter No. 51; *European Journal of Mineralogy*, **31**, <https://doi.org/10.1127/ejm/2019/0031-2894>

#### IMA No. 2019-039

[undisclosed name]

$\text{Ni}_2\text{P}$

Daba-Siwaqa metamorphic complex, Transjordan Plateau, Jordan ( $31^\circ 21' 52''\text{N}$ ,  $36^\circ 10' 55''\text{E}$ )

Sergey N. Britvin\*, Mikhail N. Murashko, Yevgeny Vapnik, Anatoly N. Zaitsev, Vladimir V. Shilovskikh, Evgeny A. Vasiliev, Maria G. Krzhizhanovskaya and Natalia S. Vlasenko

\*E-mail: [sbritvin@gmail.com](mailto:sbritvin@gmail.com)

A dimorph with transjordanite

Orthorhombic:  $Pnma$ ; structure determined

$a = 5.8020(7)$ ,  $b = 3.5933(4)$ ,  $c = 6.7558(8)$  Å

2.265(100), 2.201(16), 2.142(55), 2.100(35),  
1.909(21), 1.860(15), 1.811(19), 1.796(31)

Type material is deposited in the collections of the Fersman Mineralogical Museum, Russian Academy of Sciences, Leninskiy Prospekt 18-2, Moscow 119071, Russia, registration number 5408/1.

How to cite: Britvin, S.N., Murashko, M.N., Vapnik, Y., Zaitsev, A.N., Shilovskikh, V.V., Vasiliev, E.A., Krzhizhanovskaya, M.G. and Vlasenko, N.S. (2019) IMA 2019-039. CNMNC Newsletter No. 51; *European Journal of Mineralogy*, **31**, <https://doi.org/10.1127/ejm/2019/0031-2894>

#### IMA No. 2019-040

Viteite

$\text{Pd}_5\text{InAs}$

Borehole 1818 (depth 36.1 m), Monchetundra layered intrusion, Kola Peninsula, Russia ( $67^\circ 52' 24''\text{N}$ ,  $32^\circ 47' 10''\text{E}$ )

Anna Vymazalová\*, František Laufek, Tatiana L. Grokhovskaya and Chris J. Stanley

\*E-mail: [anna.vymazalova@geology.cz](mailto:anna.vymazalova@geology.cz)

Known synthetic analogue

Tetragonal:  $P4/mmm$

$a = 3.99$ ,  $c = 6.98$  Å

2.614(15), 2.328(45), 2.193(100), 1.993(33),  
1.409(15), 1.313(14), 1.251(17), 1.186(25)

Type material is deposited in the mineralogical collections of the Department of Earth Sciences, Natural History Museum, London SW7 5BD, UK, catalogue number BM 2019,4

How to cite: Vymazalová, A., Laufek, F., Grokhovskaya, T.L. and Stanley, C.J. (2019) Viteite, IMA 2019-040. CNMNC Newsletter No. 51; *European Journal of Mineralogy*, **31**, <https://doi.org/10.1127/ejm/2019/0031-2894>

#### IMA No. 2019-042

Radekškodaite-(Ce)

$(\text{CaCe}_5)(\text{Al}_4\text{Fe}^{2+})[\text{Si}_2\text{O}_7][\text{SiO}_4]_5\text{O}(\text{OH})_3$

Mochalin Log REE deposit, 14 km N of the city of Kyshtym, Chelyabinsk Oblast', South Urals, Russia ( $55^\circ 48' 42''\text{N}$ ,  $60^\circ 33' 46''\text{E}$ )

Anatoly V. Kasatkin\*, Natalia V. Zubkova, Igor V. Pekov, Nikita V. Chukanov, Radek Škoda, Fabrizio Nestola, Atali A. Agakhanov, Dmitriy I. Belakovskiy and Aleksey M. Kuznetsov

\*E-mail: [anatoly.kasatkin@gmail.com](mailto:anatoly.kasatkin@gmail.com)

The Ce analogue of radekškodaite-(La)

Monoclinic:  $P2_1/m$ ; structure determined

$a = 8.9702(4)$ ,  $b = 5.7044(2)$ ,  $c = 25.164(1)$  Å,  
 $\beta = 116.766(6)^\circ$

22.5(38), 8.08(42), 4.640(76), 3.528(99),  
3.031(100), 2.844(46), 2.654(87), 2.073(37)

Type material is deposited in the collections of the Fersman Mineralogical Museum, Russian Academy of Sciences, Leninskiy Prospekt 18-2, Moscow 119071, Russia, registration number 5363/1

How to cite: Kasatkin, A.V., Zubkova, N.V., Pekov, I.V., Chukanov, N.V., Škoda, R., Nestola, F., Agakhanov, A.A., Belakovskiy, D.I. and Kuznetsov, A.M. (2019) Radekškodaite-(Ce), IMA 2019-042. CNMNC Newsletter No. 51; *European Journal of Mineralogy*, **31**, <https://doi.org/10.1127/ejm/2019/0031-2894>

#### IMA No. 2019-043

Roterbärite  
PdCuBiSe<sub>3</sub>  
Roter Bär mine, NE part of the St. Andreasberg polymetallic vein district, Harz Mountains, Germany  
Anna Vymazalová\*, Alexandre Raphael Cabral, František Laufek, Wilfried Ließmann, Chris J. Stanley and Bernd Lehmann

\*E-mail: [anna.vymazalova@geology.cz](mailto:anna.vymazalova@geology.cz)

Known synthetic analogue

Orthorhombic:  $P2_12_12_1$

$a = 5.00$ ,  $b = 7.99$ ,  $c = 13.59$  Å

6.795(38), 3.359(97), 3.123(100), 3.043(75), 2.812(73), 2.389(39), 2.248(37), 1.921(70)

Type material is deposited in the mineralogical collections of the Geosammlung, Technische Universität Clausthal, Adolph-Roemer-Straße 2A, 38678 Clausthal-Zellerfeld, Germany

How to cite: Vymazalová, A., Cabral, A.R., Laufek, F., Ließmann, W., Stanley, C.J. and Lehmann, B. (2019) Roterbärite, IMA 2019-043. CNMNC Newsletter No. 51; *European Journal of Mineralogy*, **31**, <https://doi.org/10.1127/ejm/2019/0031-2894>

#### IMA No. 2019-044

Liudongshengite  
 $Zn_4Cr_2(OH)_{12}(CO_3) \cdot 3H_2O$   
79 mine, Chilito, Hayden area, Banner District, Dripping Spring Mountains, Gila Co., Arizona, USA (33°3'50"N, 110°48'54"W)

Hexiong Yang\*, Ronald B. Gibbs, Cody Schwenk, Xiande Xie, Xiangping Gu, Robert T. Downs, Stanley H. Evans and Zak Jibrin

\*E-mail: [hyang@email.arizona.edu](mailto:hyang@email.arizona.edu)

The Cr analogue of zaccagnaite

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

$a = 3.1111(4)$ ,  $c = 22.682(3)$  Å

7.53(46), 3.77(64), 2.68(19), 2.62(100), 2.31(83), 1.952(48), 1.555(42), 1.523(32)

Type material is deposited in the collections of the University of Arizona Mineral Museum, 601 E University Blvd, Tucson, AZ 85719, USA, catalogue # 22043 (holotype), and the RRUFF Project, deposition # R180016 (cotype)

How to cite: Yang, H., Gibbs, R.B., Schwenk, C., Xie, X., Gu, X., Downs, R.T., Evans, S.H. and Jibrin, Z. (2019) Liudongshengite, IMA 2019-044. CNMNC Newsletter No. 51; *European Journal of Mineralogy*, **31**, <https://doi.org/10.1127/ejm/2019/0031-2894>

#### IMA No. 2017-082a

Vittinkiiite

$MnMn_3MnSi_5O_{15}$

Vittinki iron mines, Isokyrö, Ostrobothnia region (Pohjanmaa), Finland

Nadezhda V. Shchipalkina\*, Igor V. Pekov, Nikita V. Chukanov, Natalia V. Zubkova, Dmitry I. Belakovskiy, Sergey N. Britvin and Natalia N. Koshlyakova

\*E-mail: [estel58@yandex.ru](mailto:estel58@yandex.ru)

Rhodonite group

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

$a = 6.6980(3)$ ,  $b = 7.6203(3)$ ,  $c = 11.8473(5)$  Å,  
 $\alpha = 105.663(3)$ ,  $\beta = 92.400(3)$ ,  $\gamma = 94.309(3)^\circ$   
3.332(42), 3.138(61), 3.077(28), 2.987(29), 2.958(79), 2.935(95), 2.749(100), 2.655(28)

Type material is deposited in the collections of the Fersman Mineralogical Museum, Russian Academy of Sciences, Leninskiy Prospekt 18-2, Moscow 119071, Russia, registration number 15061

How to cite: Shchipalkina, N.V., Pekov, I.V., Chukanov, N.V., Zubkova, N.V., Belakovskiy, D.I., Britvin, S.N. and Koshlyakova, N.N. (2019) Vittinkiiite, IMA 2017-082a. CNMNC Newsletter No. 51; *European Journal of Mineralogy*, **31**, <https://doi.org/10.1127/ejm/2019/0031-2894>

#### IMA No. 2018-130a

Windmountainite

$\square Fe_2^{3+}Mg_2Si_8O_{20}(OH)_2 \cdot 8H_2O$

Wind Mountain, Otero Co., New Mexico, USA (32°1'31"N, 105°30'55"W)

Derek D. Leung\* and Andrew M. McDonald

\*E-mail: [dleung@laurentian.ca](mailto:dleung@laurentian.ca)

Palygorskite group

Monoclinic:  $C2/m$ ; structure determined

$a = 13.759(3)$ ,  $b = 17.911(4)$ ,  $c = 5.274(1)$  Å,  
 $\beta = 106.44(3)^\circ$

10.592(100), 5.453(16), 4.484(19), 4.173(28), 3.319(53), 3.271(13), 2.652(30), 2.530(27)

Type material is deposited in the mineralogical collections of the Canadian Museum of Nature, P.O. Box 3443, Station D, Ottawa, Ontario K1P 6P4, Canada, catalogue number CMNMC 87260

How to cite: Leung, D.D. and McDonald, A.M. (2019) Windmountainite, IMA 2018-130a. CNMNC Newsletter No. 51; *European Journal of Mineralogy*, **31**, <https://doi.org/10.1127/ejm/2019/0031-2894>

### NEW MINERAL PROPOSALS APPROVED IN SEPTEMBER 2019

#### IMA No. 2019-041

Kreiterite

$CsLi_2Fe^{3+}Si_4O_{10}F_2$

Moraine of the Darai-Pioz glacier, Alai mountain range, Tien-Shan, Rashtskiy district, Tajikistan (39°30'N, 70°40'E)

Atali A. Agakhanov\*, Leonid A. Pautov, Igor V. Pekov, Vladimir Y. Karpenko, Oleg I. Siidra, Elena Sokolova, Frank C. Hawthorne, Abdulhak R. Faiziev, Anatoly V. Kasatkin, Inna M. Kulikova and Vyacheslav A. Muftakhov

\*E-mail: [atali99@mail.ru](mailto:atali99@mail.ru)

Mica group

Monoclinic:  $C2/m$ ,  $C2$  or  $Cm$

$a = 5.240(2)$ ,  $b = 9.054(4)$ ,  $c = 10.761(4)$  Å,  
 $\beta = 99.58(4)^\circ$

4.49(31), 3.70(47), 3.45(36), 3.00(34), 2.610(72),  
2.583(100), 2.241(38), 2.190(67)

Type material is deposited in the collections of the Fersman Mineralogical Museum, Russian Academy of Sciences, Leninskiy Prospekt 18-2, Moscow 119071, Russia, registration number 4935/1

How to cite: Agakhanov, A.A., Pautov, L.A., Pekov, I.V., Karpenko, V.Y., Siidra, O.I., Sokolova, E., Hawthorne, F.C., Faiziev, A.R., Kasatkin, A.V., Kulikova, I.M. and Muftakhov, V.A. (2019) Kreiterite, IMA 2019-041. CNMNC Newsletter No. 51; *European Journal of Mineralogy*, **31**, <https://doi.org/10.1127/ejm/2019/0031-2894>

#### IMA No. 2019-046

Johnkoivulaite

$Cs[Be_2B]Mg_2Si_6O_{18}$

Pein Pyit area, Mogok region, Myanmar (22°58'33.92"N, 96°33'41.75"E)

Aaron C. Palke\*, Lawrence M. Henling, Chi Ma, George R. Rossman, Ziyin Sun, Nathan Renfro, Kyaw Thu, Nay Myo, Patcharee Wongrawang and Vararut Weeramonkhonlert

\*E-mail: [apalke@gia.edu](mailto:apalke@gia.edu)

Beryl group

Hexagonal:  $P6/mcc$ ; structure determined

$a = 9.469(2)$ ,  $c = 9.033(2)$  Å  
3.268(100), 3.099(19), 3.036(43), 2.932(41), 2.733(14),  
1.789(14), 1.741(14), 1.664(12)

Type material is deposited in the mineralogical collections of the Gemological Museum, Gemological Institute of America, 5355 Armada Drive, Carlsbad, CA 92008, USA, catalogue number 41653

How to cite: Palke, A.C., Henling, L.M., Ma, C., Rossman, G.R., Sun, Z., Renfro, N., Thu, K., Myo, N., Wongrawang, P. and Weeramonkhonlert, V. (2019) Johnkoivulaite, IMA 2019-046. CNMNC Newsletter No. 51; *European Journal of Mineralogy*, **31**, <https://doi.org/10.1127/ejm/2019/0031-2894>

#### IMA No. 2019-047

Oxybismutomicrolite

$(Bi_{1.33}\square_{0.67})_{\Sigma 2}Ta_2O_6O$

Solnechnaya ("Sunny") pegmatite vein, Malkhan pegmatite field, Krasnochikoyskiy District, Zabaykalskiy

Kray, Central Transbaikalia, Russia (50°38'50"N, 109°55'07"E)

Anatoly V. Kasatkin\*, Sergey N. Britvin, Igor S. Peretyazhko, Nikita V. Chukanov, Radek Škoda and Atali A. Agakhanov

\*E-mail: [anatoly.kasatkin@gmail.com](mailto:anatoly.kasatkin@gmail.com)

Pyrochlore supergroup

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

$a = 10.475(1)$  Å  
6.051(12), 3.160(10), 3.026(100), 2.621(32), 1.854(33),  
1.581(27), 1.514(7), 1.203(7)

Type material is deposited in the collections of the Fersman Mineralogical Museum, Russian Academy of Sciences, Leninskiy Prospekt 18-2, Moscow 119071, Russia, registration number 5409/1

How to cite: Kasatkin, A.V., Britvin, S.N., Peretyazhko, I.S., Chukanov, N.V., Škoda, R. and Agakhanov, A.A. (2019) Oxybismutomicrolite, IMA 2019-047. CNMNC Newsletter No. 51; *European Journal of Mineralogy*, **31**, <https://doi.org/10.1127/ejm/2019/0031-2894>

#### IMA No. 2019-048

Kingsgateite

$ZrMo_2^{6+}O_7(OH)_2 \cdot 2H_2O$

Dumps of the Old 25 Pipe, Kingsgate, Gough Co., New South Wales, Australia (29°48'50"S, 51°58'26"E)

Peter Elliott\* and Anthony R. Kampf

\*E-mail: [peter.elliott@adelaide.edu.au](mailto:peter.elliott@adelaide.edu.au)

Known synthetic analogue

Tetragonal:  $I4_1cd$ ; structure determined

$a = 11.463(2)$ ,  $c = 12.584(3)$  Å  
5.734(70), 4.227(52), 3.626(44), 3.134(100), 2.606(19),  
2.481(17), 1.911(25), 1.810(18)

Type material is deposited in the mineralogical collections of the South Australian Museum, North Terrace, Adelaide, South Australia 5000, Australia, registration number G34800

How to cite: Elliott, P. and Kampf, A.R. (2019) Kingsgateite, IMA 2019-048. CNMNC Newsletter No. 51; *European Journal of Mineralogy*, **31**, <https://doi.org/10.1127/ejm/2019/0031-2894>

#### IMA No. 2019-049

Lauraniite

$Cu_6Cd_2(SO_4)_2(OH)_{12} \cdot 5H_2O$

Laurani Mine, Laurani District, Aroma Province, La Paz Department, Bolivia (17°22'51"S, 67°46'30"W)

Peter Elliott\* and Anthony R. Kampf

\*E-mail: [peter.elliott@adelaide.edu.au](mailto:peter.elliott@adelaide.edu.au)

New structure type

Monoclinic:  $P2_1/c$ ; structure determined

$a = 7.320(1)$ ,  $b = 25.424(5)$ ,  $c = 11.283(2)$  Å,  
 $\beta = 91.62(3)^\circ$   
7.34(100), 7.04(35), 3.626(52), 2.819(25), 2.774(34),  
2.648(30), 2.581(37), 2.255(24)

Type material is deposited in the mineralogical collections of the South Australian Museum, North Terrace, Adelaide, South Australia 5000, Australia, registration number G34801

How to cite: Elliott, P. and Kampf, A.R. (2019) Lauraniite, IMA 2019-049. CNMNC Newsletter No. 51; *European Journal of Mineralogy*, **31**, <https://doi.org/10.1127/ejm/2019/0031-2894>

## NOMENCLATURE/CLASSIFICATION PROPOSALS APPROVED IN JULY 2019

### **Voting proposal 19-D: Discreditation of oboyerite**

Proposal 19-D is accepted, and the mineral oboyerite, first described in 1979, is discredited. This substance is formed by at least two distinct phases, including the lead-tellurium oxysalt minerals ottoite and plumbotellurite.