



## IMA Commission on New Minerals, Nomenclature and Classification (CNMNC) NEWSLETTER 48

### NEW MINERALS AND NOMENCLATURE MODIFICATIONS APPROVED IN 2019

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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 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 FEBRUARY 2019

IMA No. 2018-131

Kollerite

$(\text{NH}_4)_2\text{Fe}^{3+}(\text{SO}_3)_2(\text{OH})\cdot\text{H}_2\text{O}$

In a coal open pit near Köves Hill, Pécs-Vasas,  
Mecsek Mts., Hungary (46.16°N, 18.32°E)

Béla Fehér\*, István Sajó, László Kótai, Sándor  
Szakáll, Martin Ende, Herta Effenberger, Judith  
Mihály and Dávid Szabó

\*E-mail: [feherbela@upcmail.hu](mailto:feherbela@upcmail.hu)

New structure type

Orthorhombic: *Cmcm*; structure determined

$a = 17.803(7)$ ,  $b = 7.395(4)$ ,  $c = 7.096(3)$  Å  
8.905(100), 6.830(61), 3.887(8), 3.417(17),  
3.283(8), 2.973(15), 2.847(16), 2.643(9)

Type material is deposited in the mineralogical  
collections of the Herman Ottó Museum, Kossuth  
u. 13, H-3525 Miskolc, Hungary, catalogue number  
2018.201 (holotype), and the Hungarian Natural  
History Museum, Ludovika tér 2-6, H-1083 Buda-  
pest, Hungary, catalogue number Gyn/3591 (cotype)

How to cite: Fehér, B., Sajó, I., Kótai, L., Szakáll, S., Ende, M., Effenberger, H., Mihály, J. and Szabó, D. (2019) Kollerite, IMA 2018-131. CNMNC Newsletter No. 48, April 2019, page 399; *European Journal of Mineralogy*, **31**, 399–402.

#### IMA No. 2018-133

Nixonite  
 $\text{Na}_2\text{Ti}_6\text{O}_{13}$   
 Darby kimberlite field, beneath the west central Rae Craton, ca. 200 km SW of the community of Kugaaruk, Nunavut, Canada (67°23'56.6"N, 93°21'13.9"W)  
 Chiara Anzolini\*, Fei Wang, Garrett A. Harris, Andrew J. Locock, Dongzhou Zhang, Steven D. Jacobsen and D. Graham Pearson  
 \*E-mail: [anzolini@ualberta.ca](mailto:anzolini@ualberta.ca)  
 The Na analogue of jeppeite  
 Monoclinic:  $C2/m$   
 $a = 15.363(3)$ ,  $b = 3.7782(7)$ ,  $c = 9.127(1)$  Å,  
 $\beta = 99.3(1)^\circ$   
 7.57(73), 6.31(68), 3.66(75), 3.02(100), 2.96(63), 2.71(62), 2.09(51), 1.89(48)  
 Type material is deposited in the mineralogical collections of the Royal Ontario Museum, 100 Queen's Park, Toronto, Ontario M5S 2C6, Canada, catalogue number M59224  
 How to cite: Anzolini, C., Wang, F., Harris, G.A., Locock, A.J., Zhang, D., Jacobsen, S.D. and Pearson, D.G. (2018) Nixonite, IMA 2018-133. CNMNC Newsletter No. 48, April 2019, page 400; *European Journal of Mineralogy*, **31**, 399–402.

### NEW MINERAL PROPOSALS APPROVED IN MARCH 2019

#### IMA No. 2018-136

Spiridonovite  
 $(\text{Cu}_{1-x}\text{Ag}_x)_2\text{Te}$  ( $x \approx 0.4$ )  
 Good Hope mine, Vulcan, Gunnison Co., Colorado, USA (38°20'35"N, 107°0'26"W)  
 Luca Bindi\* and Marta Morana  
 \*E-mail: [luca.bindi@unifi.it](mailto:luca.bindi@unifi.it)  
 Chemically related to weissite  
 Trigonal:  $P\bar{3}c1$ ; structure determined  
 $a = 4.630(2)$ ,  $c = 22.551(9)$  Å  
 3.78(60), 3.76(20), 2.317(100), 2.035(85), 1.973(15), 1.635(30), 1.338(10), 1.333(25)  
 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 3295/I

How to cite: Bindi, L. and Morana, M. (2019) Spiridonovite, IMA 2018-136. CNMNC Newsletter No. 48, April 2019, page 400; *European Journal of Mineralogy*, **31**, 399–402.

#### IMA No. 2018-137

Lazaraskeite  
 $\text{Cu}(\text{C}_2\text{H}_3\text{O}_3)_2$   
 Western end of Pusch Ridge, Santa Catalina Mountains, Pima Co., Arizona, USA (32°21'42"N, 110°57'30"W)  
 Hexiong Yang\*, Ronald B. Gibbs, Xiangping Gu, Stanley H. Evans, Robert T. Downs and Zak Jabrin  
 \*E-mail: [hyang@email.arizona.edu](mailto:hyang@email.arizona.edu)  
 Known synthetic analogue  
 Monoclinic:  $P2_1/n$ ; structure determined  
 $a = 5.1049(2)$ ,  $b = 8.6742(4)$ ,  $c = 7.7566(3)$  Å,  
 $\beta = 106.834(2)^\circ$   
 5.64(100), 4.77(52), 4.25(21), 3.34(63), 3.23(25), 2.50(22), 2.22(25), 2.09(22)  
 Type material is deposited in the collections of the University of Arizona Mineral Museum, 1601 E University Blvd, Tucson, AZ 85719, USA, catalogue # 22052 (holotype), and the RRUFF Project, deposition # R180026 (cotype)  
 How to cite: Yang, H., Gibbs, R.B., Gu, X., Evans, S.H., Downs, R.T. and Jabrin, Z. (2019) Lazaraskeite, IMA 2018-137. CNMNC Newsletter No. 48, April 2019, page 400; *European Journal of Mineralogy*, **31**, 399–402.

#### IMA No. 2018-139

Isselite  
 $\text{Cu}_6(\text{SO}_4)(\text{OH})_{10} \cdot 5\text{H}_2\text{O}$   
 Lagoscuro mine, Ceranesi, Genoa Province, Liguria, Italy (44°28'35"N, 8°51'35"E)  
 Cristian Biagioni\*, Donato Belmonte, Cristina Carbone, Roberto Cabella, Nicola Demitri, Natale Perchiazzi, Anthony R. Kampf and Ferdinando Bosi  
 \*E-mail: [cristian.biagioni@unipi.it](mailto:cristian.biagioni@unipi.it)  
 Chemically, the Cu analogue of guarinoite  
 Orthorhombic:  $Pmn2_1$ ; structure determined  
 $a = 6.807(1)$ ,  $b = 5.897(1)$ ,  $c = 20.653(4)$  Å  
 10.3(s), 6.4(m), 5.67(mw), 4.84(vs), 3.400(mw), 2.708(s), 2.225(m), 2.179(mw)  
 Type material is deposited in the mineralogical collections of the Museo di Storia Naturale, Università di Pisa, Via Roma 79, Calci (Pisa, Italy), catalogue number 19904 (holotype), the Dipartimento di Scienze della Terra, dell'Ambiente e della Vita (DISTAV), Università di Genova, Corso Europa 26, Genova, Italy, catalogue number MO484 (holotype), and the Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, CA 90007, USA, catalogue number 67195 (cotype)

How to cite: Biagioni, C., Belmonte, D., Carbone, C., Cabella, R., Demitri, N., Perchiazzi, N., Kampf, A.R. and Bosi, F. (2019) Isselite, IMA 2018-139. CNMNC Newsletter No. 48, April 2019, page 400; *European Journal of Mineralogy*, **31**, 399–402.

**IMA No. 2018-140**

Khurayyimite  
 $\text{Ca}_7\text{Zn}_4(\text{Si}_2\text{O}_7)_2(\text{OH})_{10}\cdot 4\text{H}_2\text{O}$   
 Northern part of the Daba-Siwaqa pyrometamorphic rock area, Hatrurim Complex, ca. 80 km S of Amman, Jordan (31°24'23"N, 36°15'06"E)  
 Irina O. Galuskina\*, Biljana Krüger, Evgeny V. Galuskin, Yevgeny Vapnik and Mikhail Murashko  
 \*E-mail: [irina.galuskina@us.edu.pl](mailto:irina.galuskina@us.edu.pl)  
 New structure type  
 Monoclinic:  $P2_1/c$ ; structure determined  
 $a = 11.2450(8)$ ,  $b = 9.0963(5)$ ,  $c = 14.068(1)$  Å,  
 $\beta = 113.237(8)^\circ$   
 $10.311(81)$ ,  $5.455(59)$ ,  $3.833(100)$ ,  $3.408(42)$ ,  
 $3.215(34)$ ,  $2.952(67)$ ,  $2.908(55)$ ,  $2.661(57)$   
 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 5298/1  
 How to cite: Galuskina, I.O., Krüger, B., Galuskin, E.V., Vapnik, Y. and Murashko, M. (2019) Khurayyimite, IMA 2018-140. CNMNC Newsletter No. 48, April 2019, page 401; *European Journal of Mineralogy*, **31**, 399–402.

**IMA No. 2018-147**

Polekhovskiyite  
 $\text{MoNiP}_2$   
 Halamish wadi, southern part of the Hatrurim Formation, Negev Desert, Israel (31°09'47"N, 35°17'57"E)  
 Sergey N. Britvin\*, Mikhail N. Murashko, Oleg S. Vereshchagin, Yevgeny Vapnik, Vladimir V. Shilovskikh and Natalia S. Vlasenko  
 \*E-mail: [sbritvin@gmail.com](mailto:sbritvin@gmail.com)  
 Known synthetic analogue  
 Hexagonal:  $P6_3/mmc$ ; structure determined  
 $a = 3.330(1)$ ,  $c = 11.227(4)$  Å  
 $5.614(4)$ ,  $2.884(71)$ ,  $2.807(14)$ ,  $2.793(9)$ ,  $2.565(8)$ ,  
 $2.011(100)$ ,  $1.665(35)$ ,  $1.432(9)$   
 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 5287/1  
 How to cite: Britvin, S.N., Murashko, M.N., Vereshchagin, O.S., Vapnik, Y., Shilovskikh, V.V. and Vlasenko, N.S. (2019) Polekhovskiyite, IMA 2018-147. CNMNC Newsletter No. 48, April 2019, page 401; *European Journal of Mineralogy*, **31**, 399–402.

**IMA No. 2018-150**

Siwaqaite  
 $\text{Ca}_6\text{Al}_2(\text{CrO}_4)_3(\text{OH})_{12}\cdot 26\text{H}_2\text{O}$   
 North Siwaqa complex, Lisdan-Siwaqa Fault, Hatrurim Complex, ca. 60 km S of Amman, Jordan (31°24'15"N, 36°14'34"E)  
 Rafał Juroszek\*, Biljana Krüger, Irina O. Galuskina, Hannes Krüger, Yevgeny Vapnik and Evgeny V. Galuskin  
 \*E-mail: [rjuroszek@us.edu.pl](mailto:rjuroszek@us.edu.pl)  
 The Cr analogue of ettringite  
 Trigonal:  $P31c$ ; structure determined  
 $a = 11.3640(2)$ ,  $c = 21.4485(2)$  Å  
 $9.841(100)$ ,  $5.682(65)$ ,  $5.021(16)$ ,  $4.709(38)$ ,  
 $3.900(29)$ ,  $3.280(17)$ ,  $2.798(33)$ ,  $2.224(16)$   
 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 5277/1  
 How to cite: Juroszek, R., Krüger, B., Galuskina, I.O., Krüger, H., Vapnik, Y. and Galuskin, E.V. (2019) Siwaqaite, IMA 2018-150. CNMNC Newsletter No. 48, April 2019, page 401; *European Journal of Mineralogy*, **31**, 399–402.

**IMA No. 2018-151**

Mangani-pargasite  
 $\text{NaCa}_2(\text{Mg}_4\text{Mn}^{3+})(\text{Si}_6\text{Al}_2)\text{O}_{22}(\text{OH})_2$   
 Långban deposit, Filipstad district, Värmland, Bergslagen ore province, Sweden (59.86°N, 14.26°E)  
 Ulf Hålenius\*, Ferdinando Bosi and Erik Jonsson  
 E-mail: [ulf.halenius@nrm.se](mailto:ulf.halenius@nrm.se)  
 Amphibole supergroup  
 Monoclinic:  $C2/m$ ; structure determined  
 $a = 9.9448(5)$ ,  $b = 18.0171(9)$ ,  $c = 5.2829(3)$  Å,  
 $\beta = 105.445(2)^\circ$   
 $8.42(29)$ ,  $3.28(49)$ ,  $3.14(100)$ ,  $2.82(44)$ ,  $2.70(21)$ ,  
 $1.904(29)$ ,  $1.650(22)$ ,  $1.448(46)$   
 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 NRM20100001  
 How to cite: Hålenius, U., Bosi, F. and Jonsson, E. (2019) Mangani-pargasite, IMA 2018-151. CNMNC Newsletter No. 48, April 2019, page 401; *European Journal of Mineralogy*, **31**, 399–402.

**IMA No. 2018-152**

Natromarkeyite  
 $\text{Na}_2\text{Ca}_8(\text{UO}_2)_4(\text{CO}_3)_{13}\cdot 27\text{H}_2\text{O}$   
 Markey Mine, Red Canyon, White Canyon District, San Juan Co., Utah, USA (37°32'57"N, 110°18'08"W)  
 Anthony R. Kampf\*, Travis A. Olds, Jakub Plášil, Joe Marty and Peter C. Burns

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

Chemically and structurally related to markeyite  
Orthorhombic: *Pmmn*; structure determined  
 $a = 17.882(1)$ ,  $b = 18.3030(4)$ ,  $c = 10.2249(3)$  Å  
10.21(88), 6.40(92), 5.43(100), 5.07(42), 4.141(55),  
4.009(42), 2.975(36), 2.726(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 numbers  
67487 (holotype) and 67488 (cotype)

How to cite: Kampf, A.R., Olds, T.A., Plášil, J.,  
Marty, J. and Burns, P.C. (2019) Natromarkeyite,  
IMA 2018-152. CNMNC Newsletter No. 48, April  
2019, page 401; *European Journal of Mineralogy*,  
**31**, 399–402.

#### IMA No. 2018-074a

Bohuslavite

$\text{Fe}_4^{3+}(\text{PO}_4)_3(\text{SO}_4)(\text{OH}) \cdot n\text{H}_2\text{O}$  ( $15 \leq n \leq 24$ )

Buca della Vena mine, Stazzema, Apuan Alps,  
Lucca Province, Tuscany, Italy (43°59'55"N,  
10°18'37"E – type locality); Horní Město deposit,  
near Rýmařov, northern Moravia, Czech Republic  
(cotype locality)

Daniela Mauro, Cristian Biagioni\*, Elena  
Bonaccorsi, Ulf Hålenius, Marco Pasero, Henrik  
Skogby, Federica Zaccarini, Jiří Sejkora, Jakub  
Plášil, Anthony R. Kampf, Jan Filip, Pavel Novotný  
and Radek Škoda

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

New structure type

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

$a = 13.376(3)$ ,  $b = 13.338(3)$ ,  $c = 10.863(4)$  Å,  
 $\alpha = 92.80(2)$ ,  $\beta = 91.03(2)$ ,  $\gamma = 119.92(2)^\circ$   
11.34(100), 8.01(13), 5.71(14), 5.14(10), 4.359(16),  
4.210(9), 4.094(7), 3.210(8)

Type material is deposited in the mineralogical  
collections of the Museo di Storia Naturale, Univer-  
sità di Pisa, Via Roma 79, Calci (Pisa), Italy, cata-  
logue number 19899 (Buca della Vena), the  
Department of Mineralogy and Petrology, National  
Museum Prague, Cirkusová 1740, CZ-193 00 Praha  
9, Czech Republic, catalogue number P1P 1/2018  
(Horní Město), and the Natural History Museum of  
Los Angeles County, 900 Exposition Boulevard,  
Los Angeles, CA 90007, USA, catalogue number  
66768 (Horní Město)

How to cite: Mauro, D., Biagioni, C., Bonaccorsi, E.,  
Hålenius, U., Pasero, M., Skogby, H., Zaccarini, F.,  
Sejkora, J., Plášil, J., Kampf, A.R., Filip, J.,  
Novotný, P. and Škoda, R. (2019) Bohuslavite,  
IMA 2018-074a. CNMNC Newsletter No. 48, April  
2019, page 402; *European Journal of Mineralogy*,  
**31**, 399–402.

## NOMENCLATURE PROPOSALS APPROVED IN JANUARY 2019

### IMA 18-J: Redefinition of samarskite-(Y)

The proposal 18-J is accepted. According to new structural  
data, samarskite-(Y) shows a cation ordering, leading to  
the end-member formula  $\text{YFe}^{3+}\text{Nb}_2\text{O}_8$ .