



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

New minerals and nomenclature modifications approved in 2019

Ritsuro Miyawaki (Chairman, CNMNC)¹, Frédéric Hatert (Vice-Chairman, CNMNC)²,

Marco Pasero (Vice-Chairman, CNMNC)^{3*} and Stuart J. Mills (Secretary, CNMNC)⁴

¹Department of Geology and Paleontology, National Museum of Nature and Science, 4-1-1 Amakubo, Tsukuba 305-0005, Japan – miyawaki@kahaku.go.jp;

²Laboratoire de Minéralogie, Université de Liège, B-4000 Liège, Belgium – fhatert@ulg.ac.be; ³Dipartimento di Scienze della Terra, Università di Pisa, Via Santa Maria 53, I-56126 Pisa, Italy – marco.pasero@unipi.it; and ⁴Geosciences, 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

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 Kőves 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

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 Budapest, Hungary, catalogue number Gyn/3591 (cototype)

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 315; *Mineralogical Magazine*, 83, 315–317.

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

The Na analogue of jeppeite

*Author for correspondence: Marco Pasero, E-mail: marco.pasero@unipi.it

Cite this article: Miyawaki R., Hatert F., Pasero M. and Mills S.J. (2019) New minerals and nomenclature modifications approved in 2019. *Mineralogical Magazine* 83, 315–317. <https://doi.org/10.1180/mgm.2019.23>

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 315; *Mineralogical Magazine*, **83**, 315–317.

NEW MINERAL PROPOSALS APPROVED IN MARCH 2019

IMA No. 2018-136

Spiridonovite

$(Cu_{1-x}Ag_x)_2Te$ ($x \approx 0.4$)

Good Hope mine, Vulcan, Gunnison Co., Colorado, USA
 $(38^{\circ}20'35''N, 107^{\circ}0'26''W)$

Luca Bindi* and Marta Morana

*E-mail: 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 316; *Mineralogical Magazine*, **83**, 315–317.

IMA No. 2018-137

Lazaraskeite

$Cu(C_2H_3O_3)_2$

Western end of Pusch Ridge, Santa Catalina Mountains, Pima Co., Arizona, USA ($32^{\circ}21'42''N, 110^{\circ}57'30''W$)

Hexiong Yang*, Ronald B. Gibbs, Xiangping Gu, Stanley H. Evans, Robert T. Downs and Zak Jabrin

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

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 316; *Mineralogical Magazine*, **83**, 315–317.

IMA No. 2018-139

Isselite

$Cu_6(SO_4)(OH)_{10}\cdot5H_2O$

Lagoscuro mine, Ceranesi, Genoa Province, Liguria, Italy ($44^{\circ}28'35''N, 8^{\circ}51'35''E$)

Cristian Biagioli*, Donato Belmonte, Cristina Carbone, Roberto Cabella, Nicola Demitri, Natale Perchiazzi, Anthony R. Kampf and Ferdinando Bosi

*E-mail: cristian.biagioli@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: Biagioli, 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 316; *Mineralogical Magazine*, **83**, 315–317.

IMA No. 2018-140

Khurayyimite

$Ca_7Zn_4(Si_2O_7)_2(OH)_{10}\cdot4H_2O$

Northern part of the Daba-Siwaqa pyrometamorphic rock area, Hatrurim Complex, ca. 80 km S of Amman, Jordan ($31^{\circ}24'23''N, 36^{\circ}15'06''E$)

Irina O. Galuskina*, Biljana Krüger, Evgeny V. Galuskin, Yevgeny Vapnik and Mikhail Murashko

*E-mail: 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 316; *Mineralogical Magazine*, **83**, 315–317.

IMA No. 2018-147

Polekhovskyite

$MoNiP_2$

Halamish wadi, southern part of the Hatrurim Formation, Negev Desert, Israel ($31^{\circ}09'47''N, 35^{\circ}17'57''E$)

Sergey N. Britvin*, Mikhail N. Murashko, Oleg S. Vereshchagin, Yevgeny Vapnik, Vladimir V. Shilovskikh and Natalia S. Vlasenko

*E-mail: sbrtvin@gmail.com

Known synthetic analogue

Hexagonal: $P6_3/mmc$; structure determined

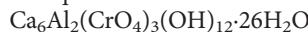
$a = 3.330(1)$, $c = 11.227(4)$ Å
 $5.614(4)$, $2.884(71)$, $2.807(14)$, $2.793(9)$, $2.565(8)$, $2.011(100)$,
 $1.665(35)$, $1.432(9)$

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) Polekhovskyite, IMA 2018-147. CNMNC Newsletter No. 48, April 2019, page 316; *Mineralogical Magazine*, **83**, 315–317.

IMA No. 2018-150

Siwaqaite



North Siwaqa complex, Lisdan-Siwaqa Fault, Hatrurim Complex, ca. 60 km S of Amman, Jordan ($31^{\circ}24'15''\text{N}$, $36^{\circ}14'34''\text{E}$)

Rafał Juroszek*, Biljana Krüger, Irina O. Galuskina, Hannes Krüger, Yevgeny Vapnik and Evgeny V. Galuskin

*E-mail: rjuroszek@us.edu.pl

The Cr analogue of ettringite

Trigonal: $P31c$; structure determined

$$a = 11.3640(2), c = 21.4485(2) \text{ \AA}$$

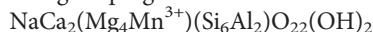
$9.841(100), 5.682(65), 5.021(16), 4.709(38), 3.900(29), 3.280(17), 2.798(33), 2.224(16)$

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 316; *Mineralogical Magazine*, **83**, 315–317.

IMA No. 2018-151

Mangani-pargasite



Långban deposit, Filipstad district, Värmland, Bergslagen ore province, Sweden (59.86°N , 14.26°E)

Ulf Hälenius*, Ferdinando Bosi and Erik Jonsson

E-mail: ulf.halenius@nrm.se

Amphibole supergroup

Monoclinic: $C2/m$; structure determined

$$a = 9.9448(5), b = 18.0171(9), c = 5.2829(3) \text{ \AA}, \beta = 105.445(2)^{\circ}$$

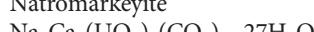
$8.42(29), 3.28(49), 3.14(100), 2.82(44), 2.70(21), 1.904(29), 1.650(22), 1.448(46)$

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: Hälenius, U., Bosi, F. and Jonsson, E. (2019) Mangani-pargasite, IMA 2018-151. CNMNC Newsletter No. 48, April 2019, page 316; *Mineralogical Magazine*, **83**, 315–317.

IMA No. 2018-152

Natromarkeyite



Markey mine, Red Canyon, White Canyon District, San Juan Co., Utah, USA ($37^{\circ}32'57''\text{N}$, $110^{\circ}18'08''\text{W}$)

Anthony R. Kampf*, Travis A. Olds, Jakub Plášil, Joe Marty and Peter C. Burns

E-mail: akampf@nhm.org

Chemically and structurally related to markeyite

Orthorhombic: $Pmmn$; structure determined

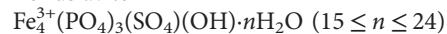
$$a = 17.882(1), b = 18.3030(4), c = 10.2249(3) \text{ \AA} \\ 10.21(88), 6.40(92), 5.43(100), 5.07(42), 4.141(55), 4.009(42), 2.975(36), 2.726(31)$$

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 316; *Mineralogical Magazine*, **83**, 315–317.

IMA No. 2018-074a

Bohuslavite



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

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

*E-mail: cristian.biagioli@unipi.it

New structure type

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

$$a = 13.376(3), b = 13.338(3), c = 10.863(4) \text{ \AA}, \alpha = 92.80(2), \beta = 91.03(2), \gamma = 119.92(2)^{\circ}$$

$11.34(100), 8.01(13), 5.71(14), 5.14(10), 4.359(16), 4.210(9), 4.094(7), 3.210(8)$

Type material is deposited in the mineralogical collections of the Museo di Storia Naturale, Università di Pisa, Via Roma 79, Calci (Pisa), Italy, catalogue 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., Biagioli, C., Bonaccorsi, E., Hälenius, 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 316; *Mineralogical Magazine*, **83**, 315–317.

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 $\text{YFe}^{3+}\text{Nb}_2\text{O}_8$.

