



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

### NEWSLETTER 47

#### NEW MINERALS AND NOMENCLATURE MODIFICATIONS APPROVED IN 2018 AND 2019

RITSURO MIYAWAKI<sup>1</sup> (CHAIRMAN, CNMNC – incoming), ULF HÅLENIUS<sup>2</sup> (CHAIRMAN, CNMNC – outgoing), FRÉDÉRIC HATERT<sup>3</sup> (VICE-CHAIRMAN, CNMNC), MARCO PASERO<sup>4</sup> (VICE-CHAIRMAN, CNMNC) and STUART J. MILLS<sup>5</sup> (SECRETARY, CNMNC)

<sup>1</sup> Department of Geology and Paleontology, 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> Department of Geosciences, Naturhistoriska Riksmuseet, Box 50007, 104 05 Stockholm, Sweden – [ulf.halenius@nrm.se](mailto:ulf.halenius@nrm.se)

<sup>3</sup> Laboratoire de Minéralogie, Université de Liège, 4000 Liège, Belgium – [fhatert@ulg.ac.be](mailto:fhatert@ulg.ac.be)

<sup>4</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>5</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 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 2018

IMA No. 2018-109

Avdeevite

(Na, Cs)(Be<sub>2</sub>Li)Al<sub>2</sub>(Si<sub>6</sub>O<sub>18</sub>)

Khat Chey (Kat Chay) mine, near the Khetchel village, Molo quarter, Momeik township, Kyaukme

district, Shan State, Myanmar (23°18'42"N, 96°51'54"E)

Atali A. Agakhanov\*, Dmitry A. Stepanenko, Natalia V. Zubkova, Igor V. Pekov, Leonid A. Pautov, Anatoly V. Kasatkin, Vladimir Y. Karpenko, Vitaliya A. Agakhanova, Radek Škoda and Sergey N. Britvin

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

Beryl group

Hexagonal: *P*6/*mmc*; structure determined

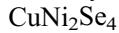
$a = 9.2287(4)$ ,  $c = 9.2610(3)$  Å  
 $7.96(82)$ ,  $4.60(31)$ ,  $3.99(20)$ ,  $3.26(100)$ ,  $3.02(37)$ ,  
 $2.866(84)$ ,  $2.524(13)$ ,  $1.742(19)$

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 5279/1

How to cite: Agakhanov, A.A., Stepanenko, D.A., Zubkova, N.V., Pekov, I.V., Pautov, L.A., Kasatkin, A.V., Karpenko, V.Y., Agakhanova, V.A., Škoda, R. and Britvin, S.N. (2019) Avdeevite, IMA 2018-109. CNMNC Newsletter No. 47, February 2019, page 197; *European Journal of Mineralogy*, **31**, 197–202.

#### IMA No. 2018-110

Nickeltyrrellite



El Dragón mine, 30 km SW of Potosí, Quijarro province, Bolivia ( $19^{\circ}49'23.90''\text{S}$ ,  $65^{\circ}55'00.60''\text{W}$ , 4160 m a.s.l.)

Hans-Jürgen Förster\*, Chi Ma, Günter Grundmann, Luca Bindi and Christopher J. Stanley

\*E-mail: [forhj@gfz-potsdam.de](mailto:forhj@gfz-potsdam.de)

Spinel supergroup

Cubic:  $Fd\bar{3}m$

$$a = 9.99 \text{ \AA}$$

X-ray powder diffraction pattern not available

Type material is deposited in the mineralogical collections of the Natural History Museum, London, catalogue number BM2018,19 (holotype), and the Mineralogical State Collection Munich – Museum Reich der Kristalle, inventory number MSM 73587 (cotype)

How to cite: Förster, H.-J., Ma, C., Grundmann, G., Bindi, L. and Stanley, C.J. (2019) Nickeltyrrellite, IMA 2018-110. CNMNC Newsletter No. 47, February 2019, page 198; *European Journal of Mineralogy*, **31**, 197–202.

#### IMA No. 2018-114

Pseudomarkeyite



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, Peter C. Burns and Joe Marty

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

Closely related to markeyite

Monoclinic:  $P2_1/m$ ; structure determined

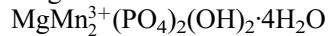
$a = 17.531(3)$ ,  $b = 18.555(3)$ ,  $c = 9.130(3)$  Å,  
 $\beta = 103.95(3)^\circ$   
 $8.73(86)$ ,  $6.28(100)$ ,  $5.70(72)$ ,  $4.65(80)$ ,  $4.293(55)$ ,  
 $4.082(47)$ ,  $3.973(25)$ ,  $2.811(59)$

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 67091  
How to cite: Kampf, A.R., Olds, T.A., Plášil, J., Burns, P.C. and Marty, J. (2019) Pseudomarkeyite, IMA 2018-114. CNMNC Newsletter No. 47, February 2019, page 198; *European Journal of Mineralogy*, **31**, 197–202.

#### IMA No. 2018-115

Magnesiobermanite



White Rock No. 2 quarry, Bimbawrie Conservation Park, 24 km N of Olary, South Australia, Australia ( $32^{\circ}4'51''\text{S}$ ,  $140^{\circ}19'45''\text{E}$ )

Peter Elliott\*

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

The Mg analogue of bermanite

Monoclinic:  $P2_1$ ; structure determined

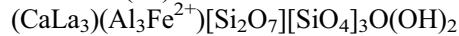
$a = 5.421(1)$ ,  $b = 19.072(4)$ ,  $c = 5.389(1)$  Å,  
 $\beta = 110.21(3)^\circ$   
 $9.533(100)$ ,  $5.089(8)$ ,  $4.878(3)$ ,  $4.772(21)$ ,  $3.634(3)$ ,  
 $3.246(3)$ ,  $3.046(2)$ ,  $2.892(6)$

Type material is deposited in the mineralogical collections of the South Australian Museum, North Terrace, Adelaide, South Australia, Australia, registration number G34762

How to cite: Elliott, P. (2019) Magnesiobermanite, IMA 2018-115. CNMNC Newsletter No. 47, February 2019, page 198; *European Journal of Mineralogy*, **31**, 197–202.

#### IMA No. 2018-116

Perbøeite-(La)



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\*, Igor V. Pekov, Natalia V. Zubkova, Nikita V. Chukanov, Radek Škoda, Yury S. Polekhovsky, Dmitriy I. Belakovskiy, Atali A. Agakhanov, Aleksey M. Kuznetsov and Dmitry Y. Pushcharovsky

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

Gatelite supergroup

Monoclinic:  $P2_1/m$ ; structure determined

$a = 8.9652(4)$ ,  $b = 5.7306(2)$ ,  $c = 17.6770(9)$  Å,  
 $\beta = 116.053(6)^\circ$

$15.85(83)$ ,  $8.03(41)$ ,  $4.665(68)$ ,  $3.523(99)$ ,  
 $3.116(56)$ ,  $3.009(100)$ ,  $2.874(55)$ ,  $2.640(54)$

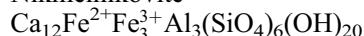
Type material is deposited in the collections of the Fersman Mineralogical Museum, Russian Academy of Sciences, Leninskiy Prospekt 18-2, Moscow 119071, Russia, registration number 5253/1

How to cite: Kasatkin, A.V., Pekov, I.V., Zubkova, N.V., Chukanov, N.V., Škoda, R., Polekhovsky, Y.S., Belakovskiy, D.I., Agakhanov, A.A., Kuznetsov,

A.M. and Pushcharovsky, D.Y. (2019) Perbœite-(La), IMA 2018-116. CNMNC Newsletter No. 47, February 2019, page 198; *European Journal of Mineralogy*, **31**, 197–202.

#### IMA No. 2018-043

Nikmelnikovite



Kovdor massif, Kola peninsula, Murmansk Region, Russia (67°35'21"N, 30°27'33"E)

Sergey V. Krivovichev\*, Victor N. Yakovenchuk, Taras L. Panikorovskii, Eugeny E. Savchenko, Yakov A. Pakhomovsky, Julia A. Mikhailova, Ekaterina A. Selivanova, Galijabani I. Kadyrova and Gregory Y. Ivanyuk

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

Garnet supergroup

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

$a = 17.2072(6)$ ,  $c = 10.5689(4)$  Å  
 $8.57(65)$ ,  $3.042(58)$ ,  $2.720(100)$ ,  $2.483(27)$ ,  
 $2.223(28)$ ,  $1.975(30)$ ,  $1.687(31)$ ,  $1.626(32)$

Type material is deposited in the collections of the Mineralogical Museum, St. Petersburg State University, Russia, catalogue No. 1/19691

How to cite: Krivovichev, S.V., Yakovenchuk, V.N., Panikorovskii, T.L., Savchenko, E.E., Pakhomovsky, Y.A., Mikhailova, J.A., Selivanova, E.A., Kadyrova, G.I. and Ivanyuk, G.Y. (2019) Nikmelnikovite, IMA 2018-043. CNMNC Newsletter No. 47, February 2019, page 199; *European Journal of Mineralogy*, **31**, 197–202.

#### IMA No. 2018-103

Carmeltazite



In pockets of trapped melt interstitial to, or included in, corundum crystals, Mt. Carmel volcanics, Israel  
William L. Griffin, Sarah E.M. Gain, Luca Bindi\*, Verez Toledo, Fernando Cámara, Martin Saunders and Suzanne Y. O'Reilly

\*E-mail: [luca.bindi@unifi.it](mailto:luca.bindi@unifi.it)

New structure type

Orthorhombic:  $Pnma$ ; structure determined

$a = 14.0951(9)$ ,  $b = 5.8123(4)$ ,  $c = 10.0848(7)$  Å  
 $5.04(65)$ ,  $4.09(60)$ ,  $2.961(100)$ ,  $2.885(40)$ ,  
 $2.732(30)$ ,  $2.051(25)$ ,  $2.047(60)$ ,  $1.456(30)$

Type material is deposited in the mineralogical collections of the Museo di Storia Naturale, Universita di Firenze, Via La Pira 4, I-50121, Firenze, Italy, catalogue number 3293/I

How to cite: Griffin, W.L., Gain, S.E.M., Bindi, L., Toledo, V., Cámara, F., Saunders, M. and O'Reilly, S.Y. (2019) Carmeltazite, IMA 2018-103. CNMNC Newsletter No. 47, February 2019, page 199; *European Journal of Mineralogy*, **31**, 197–202.

## NEW MINERAL PROPOSALS APPROVED IN JANUARY 2019

#### IMA No. 2018-111

Llantenesite



Mina San Pedro, Cuesta de Los Llantenes mining district, NW Jagüé, Vinchina Department, La Rioja Province, Argentina (28°20'40"S, 68°30'45"W)

Christian L. Lengauer\*, Martin Ende, Dan Topa, Raúl Lira and Werner H. Paar

\*E-mail: [christian.lengauer@univie.ac.at](mailto:christian.lengauer@univie.ac.at)

The Se analogue of spangolite

Trigonal:  $P31c$ ; structure determined

$a = 8.2603(3)$ ,  $c = 14.5953(4)$  Å  
 $7.297(100)$ ,  $3.650(40)$ ,  $3.254(5)$ ,  $2.535(6)$ ,  $2.363(4)$ ,  
 $1.984(2)$ ,  $1.824(3)$ ,  $1.552(2)$

Type material is deposited in the mineralogical collections of the Naturhistorisches Museum Wien, Burgring 7, 1010 Wien, Austria, catalogue No. O574

How to cite: Lengauer, C.L., Ende, M., Topa, D., Lira, R. and Paar, W.H. (2019) Llantenesite, IMA 2018-111. CNMNC Newsletter No. 47, February 2019, page 199; *European Journal of Mineralogy*, **31**, 197–202.

#### IMA No. 2018-113

Donwilhelmsite



In the lunar meteorite Oued Awlitis 001, found on January 15, 2014 in the Boujdour Province, Laâyoune-Sakia El Hamra Region, Western Sahara (25.954°N, 12.493°W)

Jörg Fritz\*, Ansgar Greshake, Mariana Klementova, Richard Wirth, Lukas Palatinus, Vera Assis Fernandes, Ute Böttger and Ludovic Ferrière

\*E-mail: [joerg.fritz@kino-heppenheim.de](mailto:joerg.fritz@kino-heppenheim.de)

Structurally related to zagamiite

Hexagonal:  $P6_3/mmc$ ; structure determined

$a = 5.44(1)$ ,  $c = 12.76(3)$  Å

X-ray powder diffraction pattern not available

Type material is deposited in the mineralogical collections of the Naturhistorisches Museum Wien, Burgring 7, 1010 Wien, Austria, catalogue no. NHMW-O104

How to cite: Fritz, J., Greshake, A., Klementova, M., Wirth, R., Palatinus, L., Assis Fernandes, V., Böttger, U. and Ferrière, L. (2019) Donwilhelmsite, IMA 2018-113. CNMNC Newsletter No. 47, February 2019, page 199; *European Journal of Mineralogy*, **31**, 197–202.

**IMA No. 2018-119**

Glikinite



Arsenatnaya fumarole, Second scoria cone of the Northern Breakthrough of the Great Tolbachik Fissure Eruption, Tolbachik volcano, Kamchatka peninsula, Far-Eastern Region, Russia (55°41'N, 160°14'E, 1200 m asl)

Evgeniy V. Nazarchuk, Oleg I. Siidra\*, Diana O. Nekrasova, Artem S. Borisov and Vladimir V. Shilovskikh

\*E-mail: [o.siidra@spbu.ru](mailto:o.siidra@spbu.ru)

Known synthetic analogue

Monoclinic:  $P2_1/m$ ; structure determined

$a = 7.30(2)$ ,  $b = 6.59(1)$ ,  $c = 7.84(1)$  Å,  
 $\beta = 117.14(3)^\circ$

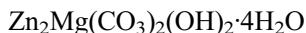
6.968(56), 3.942(52), 3.483(100), 3.294(49),  
2.936(43), 2.533(63), 2.507(63), 2.394(86)

Type material is deposited in the collections of the Mineralogical Museum, Department of Mineralogy, St Petersburg State University, St Petersburg, Russia, specimen number 1/19695

How to cite: Nazarchuk, E.V., Siidra, O.I., Nekrasova, D.O., Borisov, A.S. and Shilovskikh, V.V. (2019) Glikinite, IMA 2018-119. CNMNC Newsletter No. 47, February 2019, page 200; *European Journal of Mineralogy*, **31**, 197–202.

**IMA No. 2018-120**

Šlikite



Vladimír mine (II. level), Plavno, Jáchymov ore district, Western Bohemia, Czech Republic

Jiří Sejkora\*, Ian E. Grey, Anthony R. Kampf, W. Gus Mumme, Bohuslav Bureš and Jiří Čejka

\*E-mail: [jiri\\_sejkora@nm.cz](mailto:jiri_sejkora@nm.cz)

New structure type

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

$a = 6.335(4)$ ,  $b = 6.340(1)$ ,  $c = 13.923(4)$  Å,  
 $\alpha = 99.985(7)$ ,  $\beta = 92.74(1)$ ,  $\gamma = 114.93(2)^\circ$   
13.57(100), 4.525(31), 3.573(2), 3.406(5), 3.394(5),  
3.326(1), 2.996(3), 2.773(3)

Type material is deposited in the mineralogical collection of the National Museum, Prague, Czech Republic, catalogue number P1P 46/2018, and the Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, CA 90007, USA, catalogue number 67057

How to cite: Sejkora, J., Grey, I.E., Kampf, A.R., Mumme, W.G., Bureš, B. and Čejka, J. (2019) Šlikite, IMA 2018-120. CNMNC Newsletter No. 47, February 2019, page 200; *European Journal of Mineralogy*, **31**, 197–202.

**IMA No. 2018-124**

Orthocuproplatinum



Lubero region, Democratic Republic of the Congo

Alexandre Raphael Cabral\*, Roman Skála, Anna Vymazalová, Jaroslav Maixner, Chris J. Stanley, Bernd Lehmann and Jacques Jedwab

\*E-mail: [arcab@ufmg.br](mailto:arcab@ufmg.br)

Known synthetic analogue

Orthorhombic:  $Cmmm$ ; structure determined

$a = 7.681(1)$ ,  $b = 5.4318(8)$ ,  $c = 2.7502(4)$  Å  
2.337(11), 2.236(100), 2.217(97), 1.932(61),  
1.920(30), 1.362(36), 1.169(24), 1.161(23)

Type material is deposited in the mineralogical collection of “Geosammlung”, Technische Universität Clausthal, Adolph-Roemer-Strasse 2A, D-38678 Clausthal-Zellerfeld, Germany, catalogue number 11331

How to cite: Cabral, A.R., Skála, R., Vymazalová, A., Maixner, J., Stanley, C.J., Lehmann, B. and Jedwab, J. (2019) Orthocuproplatinum, IMA 2018-124. CNMNC Newsletter No. 47, February 2019, page 200; *European Journal of Mineralogy*, **31**, 197–202.

**IMA No. 2018-126**

Nickolayite



Daba-Siwaqa complex, Transjordan Plateau, Hatrurim Formation, Jordan (31°21'52"N, 36°10'55"E)

Mikhail N. Murashko, Yevgeny Vapnik, Yury S. Polekhovsky, Vladimir V. Shilovskikh, Anatoly N. Zaitsev, Oleg S. Vereshchagin and Sergey N. Britvin\*

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

New structure type

Orthorhombic:  $Pnma$ ; structure determined

$a = 5.9519(5)$ ,  $b = 3.7070(3)$ ,  $c = 6.8465(6)$  Å  
3.238(21), 2.298(100), 2.226(9), 2.181(89),  
2.113(26), 1.927(14), 1.838(18), 1.388(13)

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 5290/1

How to cite: Murashko, M.N., Vapnik, Y., Polekhovsky, Y.P., Shilovskikh, V.V., Zaitsev, A.M., Vereshchagin, O.S. and Britvin, S.N. (2019) Nickolayite, IMA 2018-126. CNMNC Newsletter No. 47, February 2019, page 200; *European Journal of Mineralogy*, **31**, 197–202.

**IMA No. 2018-128**

Reaphookhillite



Reaphook Hill, Martins Well, Flinders Ranges, South Australia, Australia (31°23'39"S, 139°17'54"E)

Peter Elliott\*

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

The Mg analogue of parahopeite

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

$a = 5.759(1)$ ,  $b = 7.534(1)$ ,  $c = 5.279(1)$  Å,  
 $\alpha = 93.44(3)$ ,  $\beta = 91.27(3)$ ,  $\gamma = 91.30(3)^\circ$   
 $7.577(100)$ ,  $4.461(24)$ ,  $3.771(14)$ ,  $3.158(13)$ ,  
 $2.982(32)$ ,  $2.880(27)$ ,  $2.775(14)$ ,  $2.668(13)$

Type material is deposited in the mineralogical collection of the South Australian Museum, North Terrace, Adelaide, South Australia, Australia, registration number G34798

How to cite: Elliott, P. (2019) Reaphookhillite, IMA 2018-128. CNMNC Newsletter No. 47, February 2019, page 200; *European Journal of Mineralogy*, **31**, 197–202.

#### IMA No. 2018-129

Davidbrownite-(NH<sub>4</sub>)  
 $(\text{NH}_4)_5(\text{V}^{4+}\text{O})_2(\text{C}_2\text{O}_4)[\text{PO}_{2.75}(\text{OH})_{1.25}]_4 \cdot 3\text{H}_2\text{O}$   
Rowley mine (125-foot level), ca. 20 km NW of Theba, Maricopa Co., Arizona, USA ( $33^\circ 2' 57''\text{N}$ ,  $113^\circ 1' 59''\text{W}$ )

Anthony R. Kampf\*, Mark A. Cooper, George R. Rossman, Barbara P. Nash, Frank C. Hawthorne and Joe Marty

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

New structure type

Monoclinic:  $P2_1/c$ ; structure determined

$a = 10.356(6)$ ,  $b = 8.923(5)$ ,  $c = 13.486(7)$  Å,  
 $\beta = 92.618(9)^\circ$

$10.39(100)$ ,  $6.73(50)$ ,  $5.97(34)$ ,  $3.789(35)$ ,  
 $3.160(47)$ ,  $3.104(42)$ ,  $3.043(35)$ ,  $2.977(44)$

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 66951, 66955 and 66959

How to cite: Kampf, A.R., Cooper, M.A., Rossman, G.R., Nash, B.P., Hawthorne, F.C. and Marty, J. (2019) Davidbrownite, IMA 2018-129. CNMNC Newsletter No. 47, February 2019, page 201; *European Journal of Mineralogy*, **31**, 197–202.

#### IMA No. 2018-006a

Ognitite

NiBiTe

Ognit (or Medek) dunite-wehrlite complex, southern margin of the Siberian Craton, Irkutskaya oblast, Eastern Sayans, Russia

Andrei Y. Barkov\*, Luca Bindi, Björn Winkler, Wolfgang Morgenroth, Gennadiy I. Shvedov, Robert F. Martin, Federica Zaccarini, Camelia V. Stan, Nobumichi Tamura and Christopher J. Stanley

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

Structurally related to melonite

Trigonal:  $P3m1$ ; structure determined

$a = 3.9332(4)$ ,  $c = 5.3920(6)$  Å  
 $5.39(10)$ ,  $3.39(15)$ ,  $2.880(100)$ ,  $2.697(10)$ ,  
 $2.110(30)$ ,  $1.968(30)$ ,  $1.625(15)$ ,  $1.589(20)$

Type material is deposited in the mineralogical collections of the Museo di Storia Naturale, Sezione di Mineralogia e Litologia, Università di Firenze, Via La Pira 4, I-50121, Firenze, Italy, catalogue number 3292/I

How to cite: Barkov, A.Y., Bindi, L., Winkler, B., Morgenroth, W., Shvedov, G.I., Martin, R.F., Zaccarini, F., Stan, C.V., Tamura, N. and Stanley, C.J. (2019) Ognitite, IMA 2018-006a. CNMNC Newsletter No. 47, February 2019, page 201; *European Journal of Mineralogy*, **31**, 197–202.

#### IMA No. 2018-051a

$\text{CaZn}_2(\text{AsO}_4)_2 \cdot 4\text{H}_2\text{O}$

Plaka Mine No. 80, Lavrion District Mines, Attikí Prefecture, Greece ( $37^\circ 45' 18''\text{N}$ ,  $24^\circ 1' 54''\text{E}$ )  
Branko Rieck\*, Gerald Giester, Christian Lengauer and Dan Topa

\*E-mail: [rieckb49@univie.ac.at](mailto:rieckb49@univie.ac.at)

Structurally related to phosphophyllite

Monoclinic:  $Pc$ ; structure determined

$a = 9.4160(3)$ ,  $b = 5.3000(2)$ ,  $c = 10.8931(4)$  Å,  
 $\beta = 91.767(1)^\circ$

$9.406(100)$ ,  $4.619(80)$ ,  $3.612(35)$ ,  $3.494(35)$ ,  
 $2.984(60)$ ,  $2.922(50)$ ,  $2.720(20)$ ,  $2.647(25)$

Type material is deposited in the mineralogical collections of the Natural History Museum-Vienna, Burgring 7, 1010 Vienna, Austria, inventory number O342

How to cite: Rieck, B., Giester, G., Lengauer, C. and Topa, D. (2019) IMA 2018-051a. CNMNC Newsletter No. 47, February 2019, page 201; *European Journal of Mineralogy*, **31**, 197–202.

#### IMA No. 2018-055a

Bouškaite

$(\text{MoO}_2)_2\text{O}(\text{SO}_3\text{OH})_2(\text{H}_2\text{O})_4$

On the mine dump of the shaft Lill (total depth 454.4 m), close to Příbram, central Bohemia, Czech Republic ( $49^\circ 41' 49''\text{N}$ ,  $14^\circ 0' 1''\text{E}$ )

Jiri Sejkora\*, Ian E. Grey, Anthony R. Kampf, Jakub Plášil and Pavel Škácha

\*E-mail: [jiri\\_sejkora@nm.cz](mailto:jiri_sejkora@nm.cz)

New structure type

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

$a = 5.581(3)$ ,  $b = 9.572(1)$ ,  $c = 14.425(4)$  Å,  
 $\alpha = 97.43(1)$ ,  $\beta = 100.05(2)$ ,  $\gamma = 89.96(1)^\circ$   
 $14.15(35)$ ,  $7.078(100)$ ,  $5.483(6)$ ,  $5.440(9)$ ,  $4.838(7)$ ,  
 $4.720(56)$ ,  $4.010(7)$ ,  $3.240(10)$

Type material is deposited in the collections of the Department of Mineralogy and Petrology, National Museum Prague, Cirkusová 1740, CZ-193 00 Praha 9, Czech Republic, catalogue number P1P 24/2018 (holotype), and the Natural History Museum of Los Angeles County, 900 Exposition Boulevard,

Los Angeles, CA 90007, USA, catalogue number 66776 (cotype)  
 How to cite: Sejkora, J., Grey, I.E., Kampf, A.R., Plášil, J. and Škácha, P. (2019) Bouškaite, IMA 2018-055a. CNMNC Newsletter No. 47, February 2019, page 201; *European Journal of Mineralogy*, **31**, 197–202.

#### IMA No. 2018-063a

Kenngottite  
 $Mn_3^{2+}Fe_4^{3+}(PO_4)_4(OH)_6(H_2O)_2$   
 Stannum mine, 5th level of the Huber shaft, Krásno ore district, near Horní Slavkov, western Bohemia, Czech Republic ( $50^{\circ}07'22''N$ ,  $12^{\circ}48'2''E$ )  
 Jiří Sejkora\*, Ian E. Grey and Anthony R. Kampf  
 \*E-mail: [jiri\\_sejkora@nm.cz](mailto:jiri_sejkora@nm.cz)  
 Structurally related to souzalite and gormanite  
 Monoclinic:  $P2/a$ ; structure determined  
 $a = 13.909(10)$ ,  $b = 5.186(4)$ ,  $c = 12.159(9)$  Å,  
 $\beta = 98.88(1)^\circ$   
 $4.87(47)$ ,  $3.458(89)$ ,  $3.209(100)$ ,  $3.023(31)$ ,  
 $2.623(46)$ ,  $2.429(49)$ ,  $1.951(28)$ ,  $1.577(34)$   
 Type material is deposited in the collections of the Department of Mineralogy and Petrology, National Museum Prague, Cirkusová 1740, CZ-193 00 Praha 9, Czech Republic, catalogue number P1P 26/2018 (holotype), and the Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, CA 90007, USA, catalogue number 66795 (cotype)  
 How to cite: Sejkora, J., Grey, J.E. and Kampf, A.R. (2019) Kenngottite, IMA 2018-063a. CNMNC Newsletter No. 47, February 2019, page 202; *European Journal of Mineralogy*, **31**, 197–202.

#### IMA No. 2018-086a

Edscottite  
 $Fe_5C_2$   
 Wedderburn meteorite, found 4.5 km NE of Wedderburn, Victoria, Australia ( $36^{\circ}26'S$ ,  $143^{\circ}38'E$ )  
 Chi Ma and Alan Rubin

\*E-mail: [chi@gps.caltech.edu](mailto:chi@gps.caltech.edu)

Known synthetic analogue

Monoclinic:  $C2/c$

$a = 11.57$ ,  $b = 4.57$ ,  $c = 5.06$  Å,  $\beta = 97.7^\circ$   
 $2.207(31)$ ,  $2.192(26)$ ,  $2.079(68)$ ,  $2.050(100)$ ,  
 $2.027(27)$ ,  $2.010(36)$ ,  $1.921(26)$ ,  $1.816(22)$

Type material is deposited in the meteorite collections of the Department of Earth, Planetary and Space Sciences, University of California, Los Angeles, CA 90095-1567, USA, polished thick section ULCA 143

How to cite: Ma, C. and Rubin, A. (2019) Edscottite, IMA 2018-086a. CNMNC Newsletter No. 47, February 2019, page 202; *European Journal of Mineralogy*, **31**, 197–202.

### REVISED CHEMICAL FORMULAE

A paper on the mineral satimolite has been recently published [*Mineralogical Magazine*, **82** (2018), 1033–1047] in which the ideal chemical formula of the mineral is given as  $KNa_2(Al_5Mg_2)[B_{12}O_{18}(OH)_{12}](OH)_6Cl_4 \cdot 4H_2O$ , with magnesium as an essential constituent. These data were examined carefully by the CNMNC officers and were considered reliable. Accordingly it was agreed to modify the formula of satimolite in the official IMA List of Minerals.