



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

### Newsletter 53

Ritsuro Miyawaki (Chairman CNMNC)<sup>1</sup>, Frédéric Hatert (Vice-Chairman CNMNC)<sup>2</sup>, Marco Pasero (Vice-Chairman CNMNC)<sup>3\*</sup> and Stuart J. Mills (Secretary CNMNC)<sup>4</sup>

<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> Laboratoire de Minéralogie, Université de Liège, B-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, I-56126 Pisa, Italy – [marco.pasero@unipi.it](mailto:marco.pasero@unipi.it); and <sup>4</sup> Geosciences, Museums 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 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 DECEMBER 2019

##### IMA No. 2019-082

Dutrowite



Fornovolasco metarhyolite formation, close to the Boscaccio locality, Fornovolasco, Fabbriche di Vergemoli (LU), Apuan Alps, Tuscany, Italy (44°01'53"N, 10°22'11"E)

Cristian Biagioni\*, Ferdinando Bosi, Daniela Mauro, Henrik Skogby, Andrea Dini and Federica Zaccarini

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

Tourmaline supergroup

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

$a = 15.9864(8)$ ,  $c = 7.2187(4)$  Å

6.40(42), 4.61(18), 4.24(52), 4.00(60), 2.971(61), 2.585(100), 2.048(41), 1.925(24)

\*Author for correspondence: Marco Pasero, Email: [marco.pasero@unipi.it](mailto:marco.pasero@unipi.it)

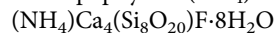
Cite this article: Miyawaki R., Hatert F., Pasero M. and Mills S.J. (2020) IMA Commission on New Minerals, Nomenclature and Classification (CNMNC) – Newsletter 53. *Mineralogical Magazine* 84, 159–163. <https://doi.org/10.1180/mgm.2020.5>

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 19890

How to cite: Biagioni, C., Bosi, F., Mauro, D., Skogby, H., Dini, A. and Zaccarini, F. (2020) Dutrowite, IMA 2019-082. CNMNC Newsletter No. 53; *Mineralogical Magazine*, 84, <https://doi.org/10.1180/mgm.2020.5>

##### IMA No. 2019-083

Fluorapophyllite-(NH<sub>4</sub>)



Vehec andesite quarry, 2.8 km SW of the Vehec village, Vranov nad Topľou Co., Prešov Region, Slovakia (48° 51'09.58"N, 21°36'12.10"E)

Martin Števkó\*, Jiří Sejkora, Jakub Plášil, Zdeněk Dolníček and Radek Škoda

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

Apophyllite group

Tetragonal:  $P4/mnc$ ; structure determined

$a = 8.99336(9)$ ,  $c = 15.7910(3)$  Å

7.897(31), 7.812(13), 4.547(14), 3.946(100), 2.985(39), 2.484(11), 2.010(10), 1.579(12)

Type material is deposited in the collections of the Department of Mineralogy and Petrology, National Museum in Prague, Cirkusová 1740, 19300 Praha 9, Czech Republic, catalogue number P1P 44/2019

How to cite: Števkó, M., Sejkora, J., Plášil, J., Dolníček, Z. and Škoda, R. (2020) Fluorapophyllite-(NH<sub>4</sub>), IMA 2019-083. CNMNC Newsletter No. 53; *Mineralogical Magazine*, **84**, <https://doi.org/10.1180/mgm.2020.5>

#### IMA No. 2019-085

Liraite

NaCa<sub>2</sub>Mn<sub>2</sub><sup>2+</sup>[Fe<sup>3+</sup>Fe<sup>2+</sup>]Mn<sub>2</sub><sup>2+</sup>(PO<sub>4</sub>)<sub>6</sub>(H<sub>2</sub>O)<sub>2</sub>

Ceferino Namuncurá pegmatite, Pocho Department, Córdoba Province, Argentina (31°37'45" N, 65°15'03" W)

Marco E. Biglia\*, Mark A. Cooper, Edward S. Grew, Jorge A. Sfragulla, María F. Márquez-Zavalía, Alina B. Guereschi, Martin G. Yates and Miguel A. Galliski

\*E-mail: [marcobiglia2002@gmail.com](mailto:marcobiglia2002@gmail.com)

Wicksite group

Orthorhombic: *Pcab*; structure determined

*a* = 12.608(6), *b* = 12.918(6), *c* = 11.737(4) Å

3.170(22), 2.927(49), 2.856(65), 2.821(25), 2.769(26), 2.745(100), 2.706(30), 2.097(29)

Type material is deposited in the collections of the Mineralogy and Geology "Dr. A. Stelzner" Museum, Av. Vélez Sársfield 249, X5000JJC Córdoba, Argentina, catalogue n. MS003457

How to cite: Biglia, M.E., Cooper, M.A., Grew, E.S., Sfragulla, J.A., Márquez-Zavalía, M.F., Guereschi, A.B., Yates, M.G. and Galliski, M.A. (2020) Liraite, IMA 2019-085. CNMNC Newsletter No. 53; *Mineralogical Magazine*, **84**, <https://doi.org/10.1180/mgm.2020.5>

#### IMA No. 2019-086

Arrheniusite-(Ce)

CaMg[(Ce<sub>7</sub>Y<sub>3</sub>)Ca<sub>5</sub>](SiO<sub>4</sub>)<sub>4</sub>(Si<sub>2</sub>B<sub>3</sub>AsO<sub>18</sub>)(BO<sub>3</sub>)F<sub>11</sub>

Östanmossa mine, Norberg Municipality, Västmanland County, Sweden (60°05'N, 15°56'E, 130 m asl)

Dan Holtstam\*, Luca Bindi, Hans-Jürgen Förster, Paola Bonazzi and Ulf B. Andersson

\*E-mail: [dan.holtstam@nrm.se](mailto:dan.holtstam@nrm.se)

The Mg-As analogue of hundholmenite-(Y)

Trigonal: *R3m*; structure determined

*a* = 10.8082(3), *c* = 27.5196(9) Å

7.739(24), 4.431(43), 3.146(51), 3.010(100), 2.976(70), 2.954(32), 2.702(46), 1.848(24)

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 GEO-NRM #19540155

How to cite: Holtstam, D., Bindi, L., Förster, H.-J., Bonazzi, P. and Andersson, U.B. (2020) Arrheniusite-(Ce), IMA 2019-086. CNMNC Newsletter No. 53; *Mineralogical Magazine*, **84**, <https://doi.org/10.1180/mgm.2020.5>

#### IMA No. 2019-087

Seaborgite

LiK<sub>2</sub>Na<sub>6</sub>(UO<sub>2</sub>)(SO<sub>4</sub>)<sub>5</sub>(SO<sub>3</sub>OH)(H<sub>2</sub>O)

Blue Lizard mine, Red Canyon, White Canyon District, San Juan Co., Utah, USA (37°33'26"N, 110°17'44"W)

Anthony R. Kampf\*, Travis A. Olds, Jakub Plášil, Joe Marty, Samuel N. Perry, Loretta Corcoran and Peter C. Burns

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

New structure type

Triclinic: *P1̄*; structure determined

*a* = 5.4511(4), *b* = 14.487(1), *c* = 15.873(1) Å, *α* = 76.295(5),

*β* = 81.439(6), *γ* = 85.511(6)°

14.67(97), 5.320(100), 5.093(67), 4.733(75), 3.489(65), 3.331(61), 3.078(61), 2.954(98)

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 74163

How to cite: Kampf, A.R., Olds, T.A., Plášil, J., Marty, J., Perry, S.N., Corcoran, L. and Burns, P.C. (2020) Seaborgite, IMA 2019-087. CNMNC Newsletter No. 53; *Mineralogical Magazine*, **84**, <https://doi.org/10.1180/mgm.2020.5>

#### IMA No. 2019-088

Adanite

Pb<sub>2</sub>(Te<sup>4+</sup>O<sub>3</sub>)(SO<sub>4</sub>)

North Star mine, Mammoth, Tintic district, Juab Co., Utah, USA (39°55'14"N, 112°06'24"W – holotype); Tombstone, Cochise Co., Arizona, USA (cotype)

Anthony R. Kampf\*, Robert M. Housley, George R. Rossman, Hexiong Yang and Robert T. Downs

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

Known synthetic analogue

Monoclinic: *P2<sub>1</sub>/m*; structure determined

*a* = 7.3830(3), *b* = 10.7545(5), *c* = 9.3517(7) Å, *β* = 111.500(8)°

6.744(47), 3.454(80), 3.301(100), 3.114(42), 3.048(73), 2.803(41), 2.745(44), 1.752(45)

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 67505 (holotype), and the RRUFF Project, University of Arizona, USA, deposition number R190033 (cotype)

How to cite: Kampf, A.R., Housley, R.M., Rossman, G.R., Yang, H. and Downs, R.T. (2020) Adanite, IMA 2019-088. CNMNC Newsletter No. 53; *Mineralogical Magazine*, **84**, <https://doi.org/10.1180/mgm.2020.5>

#### IMA No. 2019-089

Celleriite

□(Mn<sub>2</sub><sup>+</sup>Al)Al<sub>6</sub>(Si<sub>6</sub>O<sub>18</sub>)(BO<sub>3</sub>)<sub>3</sub>(OH)<sub>3</sub>(OH)

Rosina pegmatite, San Piero in Campo, Campo nell'Elba (LI), Elba Island, Tuscany, Italy

Ferdinando Bosi\*, Federico Pezzotta, Alessandra Altieri, Giovanni B. Andreozzi, Paolo Ballirano and Gioacchino Tempesta

\*E-mail: [ferdinando.bosi@uniroma1.it](mailto:ferdinando.bosi@uniroma1.it)

Tourmaline supergroup

Trigonal: *R3m*; structure determined

*a* = 15.9518(4), *c* = 7.1579(2) Å

6.345(45), 4.210(60), 3.983(88), 3.453(55), 2.942(55), 2.573(100), 2.036(38), 1.913(26)

Type material is deposited in the mineralogical collections of the Museo Universitario di Scienze della Terra, Sapienza Università di Roma, P.le Aldo Moro, 5, 00185 Roma, Italy, catalogue number 33287/403 (holotype), and the Museo Civico di Storia Naturale, Corso Venezia 55, 20121 Milano, Italy, catalogue number M38847 (cotype)

How to cite: Bosi, F., Pezzotta, F., Altieri, A., Andreozzi, G.B., Ballirano, P. and Tempesta, G. (2020) Celleriite, IMA 2019-089. CNMNC Newsletter No. 53; *Mineralogical Magazine*, **84**, <https://doi.org/10.1180/mgm.2020.5>

#### IMA No. 2019-090

Grammatikopouloisite

NiVP

Agios Stefanos mine, ca. 10 km S of the Domokos village, Othrys ophiolite, Greece (39°04'59"N, 22°25'59"E)

Luca Bindi\*, Federica Zaccarini, Elena Ifandi, Basilios Tsikouras, Chris J. Stanley, Giorgio Garuti and Daniela Mauro

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

Structurally related to florenskyite

Orthorhombic: *Pnma*; structure determined

$a = 5.8893(8)$ ,  $b = 3.5723(4)$ ,  $c = 6.8146(9)$  Å

2.950(20), 2.785(25), 2.273(60), 2.157(100), 2.118(25), 1.915(15), 1.824(15), 1.784(20)

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 19911

How to cite: Bindi, L., Zaccarini, F., Ifandi, E., Tsikouras, B., Stanley, C.J., Garuti, G. and Mauro, D. (2020)

Grammatikopouloisite, IMA 2019-090. CNMNC Newsletter No. 53; *Mineralogical Magazine*, **84**, <https://doi.org/10.1180/mgm.2020.5>

#### IMA No. 2019-091

Ellinaite

CaCr<sub>2</sub>O<sub>4</sub>

In paralavas in the Halamish and Zohar wadi, southern part of the Hatrurim Basin, Israel (31°09'47"N, 35°17'57"E – holotype); as mineral phase of an inclusion within diamond, collected from gravels of the Sorriso Creek, a tributary of Rio Aripuanã, Mato Grosso State, Brazil (11°20'S, 59°11'W – cotype).

Victor V. Sharygin\*, Sergey N. Britvin, Felix V. Kaminsky, Richard Wirth, Elena N. Nigmatulina, Grigory A. Yakovlev, Konstantin A. Novoselov and Mikhail N. Murashko

\*E-mail: [sharygin@igm.nsc.ru](mailto:sharygin@igm.nsc.ru)

The Cr analogue of harmunite

Orthorhombic: *Pnma*; structure determined

$a = 8.868(9)$ ,  $b = 2.885(3)$ ,  $c = 10.355(11)$  Å

4.434(23), 2.589(54), 2.567(100), 2.424(69), 2.418(62), 2.148(34), 1.767(35), 1.758(22)

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 5439/1 (holotype), the Central Siberian Geological Museum, V.S.Sobolev Institute of Geology and Mineralogy, Siberian Branch of the RAS, prospekt Akademika Koptyuga 3, Novosibirsk 630090, Russia, catalogue number VII-102/1 (holotype), and the Vernadsky Institute of Geochemistry and Analytical Chemistry, Kosygin St. 19, Moscow 119334, Russia, F.V. Kaminsky collection, catalogue number 8/108 (cotype)

How to cite: Sharygin, V.V., Britvin, S.N., Kaminsky, F.V., Wirth, R., Nigmatulina, E.N., Yakovlev, G.A., Novoselov, K.A. and Murashko, M.N. (2020) Ellinaite, IMA 2019-091. CNMNC Newsletter No. 53; *Mineralogical Magazine*, **84**, <https://doi.org/10.1180/mgm.2020.5>

#### IMA No. 2019-029a

Michitoshiite-(Cu)

Rh(Cu<sub>1-x</sub>Ge<sub>x</sub>)  $0 < x \leq 0.5$

Haraigawa, Misato machi, Kumamoto Prefecture, Kyushu, Japan

Takahiro Tanaka\*, Tadashi Shinmachi, Kota Kataoka and Daisuke Nishio-Hamane

\*E-mail: [penta@kuh.biglobe.ne.jp](mailto:penta@kuh.biglobe.ne.jp)

CsCl-type structure

Cubic: *Pm $\bar{3}m$*

$a = 2.977(1)$  Å

2.103(100), 1.717(3), 1.487(15), 1.332(6), 1.216(70)

Type material is deposited in the mineralogical collections of the National Museum of Nature and Science, Tsukuba, Japan, specimen number NSM-46298 (holotype) and NSM-16299 (cotype)

How to cite: Tanaka, T., Shinmachi, T., Kataoka, K. and Nishio-Hamane, D. (2020) Michitoshiite-(Cu), IMA 2019-029a. CNMNC Newsletter No. 53; *Mineralogical Magazine*, **84**, <https://doi.org/10.1180/mgm.2020.5>

### NEW MINERAL PROPOSALS APPROVED IN JANUARY 2020

#### IMA No. 2019-093

Hagstromite

Pb<sub>8</sub>Cu<sup>2+</sup>(Te<sup>6+</sup>O<sub>6</sub>)<sub>2</sub>(CO<sub>3</sub>)Cl<sub>4</sub>

SW Cut (35°16'20"N, 116°06'04"W – holotype) and Bird Nest drift (35°16'36"N, 116°06'01"W – cotype), Otto Mountain, 2.5 km WNW of Baker, San Bernardino Co., California, USA

Anthony R. Kampf\*, Robert M. Housley, Stuart J. Mills, George R. Rossman and Joe Marty

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

New structure type

Orthorhombic: *Ibam*; structure determined

$a = 23.688(17)$ ,  $b = 9.026(8)$ ,  $c = 10.461(8)$  Å

3.927(80), 3.423(26), 3.286(44), 2.967(100), 2.601(70), 2.230(23), 1.964(66), 1.846(19)

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 73596 (holotype) and 73597 (cotype)

How to cite: Kampf, A.R., Housley, R.M., Mills, S.J., Rossman, G.R. and Marty, J. (2020) Hagstromite, IMA 2019-093. CNMNC Newsletter No. 53; *Mineralogical Magazine*, **84**, <https://doi.org/10.1180/mgm.2020.5>

#### IMA No. 2019-095

Waipouaite

Ca<sub>3</sub>V<sub>5</sub><sup>4+</sup>O<sub>9</sub>[Si<sub>2</sub>O<sub>5</sub>(OH)<sub>2</sub>][Si<sub>3</sub>O<sub>7</sub>(OH)<sub>2</sub>].11H<sub>2</sub>O

Aranga Quarry, Aranga, Kaipara District, Northland Region, New Zealand (35°44'06"S, 173°34'47"E)

Peter Elliott\* and Anthony R. Kampf

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

New structure type

Monoclinic: *P2<sub>1</sub>/c*; structure determined

$a = 12.843(3)$ ,  $b = 23.589(5)$ ,  $c = 11.560(2)$  Å,  $\beta = 115.54(3)^\circ$

11.78(100), 9.54(16), 7.85(19), 6.29(32), 5.92(31), 5.22(21), 3.140(18), 2.850(17)

Type material is deposited in the mineralogical collections of the South Australian Museum, North Terrace, Adelaide, South Australia 5000, Australia, registration number G34802

How to cite: Elliott, P. and Kampf, A.R. (2020) Waipouaité, IMA 2019-095. CNMNC Newsletter No. 53; *Mineralogical Magazine*, **84**, <https://doi.org/10.1180/mgm.2020.5>

#### IMA No. 2019-096

Eliopoulosite

$V_7S_8$

Agios Stefanos mine, ca. 10 km S of the Domokos village, Othrys ophiolite, Greece (39°04'59"N, 22°25'59"E)

Luca Bindi\*, Federica Zaccarini, Paola Bonazzi, Tassos Grammatikopoulos, Basilios Tsikouras, Chris J. Stanley and Giorgio Garuti

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

Known synthetic analogue

Trigonal:  $P3_21$ ; structure determined

$a = 6.689(3)$ ,  $c = 17.403(6)$  Å

2.896(29), 2.591(45), 2.049(100), 1.672(40), 1.608(10), 1.296(20), 1.096(15), 1.024(12)

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 19911

How to cite: Bindi, L., Zaccarini, F., Bonazzi, P., Grammatikopoulos, T., Tsikouras, B., Stanley, C.J. and Garuti, G. (2020) Eliopoulosite, IMA 2019-096. CNMNC Newsletter No. 53; *Mineralogical Magazine*, **84**, <https://doi.org/10.1180/mgm.2020.5>

#### IMA No. 2019-097

Kesebolite-(Ce)

$CeCa_2Mn(AsO_4)(SiO_3)_3$

Kesebol Mn-(Fe-Cu) deposit, Åmål municipality, Västra Götaland, Sweden (58°59'04"N, 12°31'47"E, 130 m asl)

Dan Holtstam\*, Luca Bindi, Andreas Karlsson, Jörgen Langhof, Thomas Zack, Paola Bonazzi and Anders Persson

\*E-mail: [dan.holtstam@nrm.se](mailto:dan.holtstam@nrm.se)

New structure type

Monoclinic:  $P2_1/c$ ; structure determined

$a = 6.7382(3)$ ,  $b = 13.0368(6)$ ,  $c = 12.0958(6)$  Å,  $\beta = 98.578(2)^\circ$   
6.50(22), 5.96(54), 5.70(42), 3.228(58), 3.138(84), 3.114(100), 2.924(84), 2.908(63)

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 GEO-NRM #20100343

How to cite: Holtstam, D., Bindi, L., Karlsson, A., Langhof, J., Zack, T., Bonazzi, P. and Persson, A. (2020) Kesebolite-(Ce), IMA 2019-097. CNMNC Newsletter No. 53; *Mineralogical Magazine*, **84**, <https://doi.org/10.1180/mgm.2020.5>

#### IMA No. 2019-099

Ramosite

$Pb_{25.7}Sn_{8.3}Mn_{3.4}Sb_{6.4}S_{56.2}$

Uchucchacua polymetallic deposit, Oyon district, Catajumbo, Lima Department, Peru (10°37'23"S, 76°41'17"W)

Frank N. Keutsch\*, Shao-Liang Zheng, Dan Topa and Chris Stanley

\*E-mail: [keutsch@seas.harvard.edu](mailto:keutsch@seas.harvard.edu)

The Mn analogue of franckeite

Monoclinic:  $C2/m$  (Q-slab),  $P2_1$  (H-slab)

$a = 5.82$ ,  $b = 5.92$ ,  $c = 17.65$  Å,  $\beta = 99.1^\circ$  (Q-slab)

$a = 6.23$ ,  $b = 3.69$ ,  $c = 17.59$  Å,  $\beta = 93.3^\circ$  (H-slab)

3.48–3.59(58), 3.23–3.32(13), 3.13–3.20(4), 2.86–3.09(100), 2.54–2.59(7), 2.36–2.42(14), 2.18–2.25(73), 1.96–2.07(43)

Type material is deposited in the mineralogical collections of the Naturhistorisches Museum, Burgring 7, 1010 Wien, Austria, catalogue number O1798, and the Mineralogical & Geological Museum, Harvard University, Cambridge, MA 02138, USA, specimen numbers 2019.18.1 and 2019.18.2

How to cite: Keutsch, F.N., Zheng, S.-L., Topa, D. and Stanley, C. (2020) Ramosite, IMA 2019-099. CNMNC Newsletter No. 53; *Mineralogical Magazine*, **84**, <https://doi.org/10.1180/mgm.2020.5>

### NOMENCLATURE/CLASSIFICATION PROPOSALS APPROVED IN DECEMBER 2019

#### IMA 19-G: discreditation of ferrotellurite

Proposal 19-G is accepted, and the ill-defined mineral ferrotellurite is discredited. Indeed, this species has been shown to be equivalent to keystoneite,  $Mg_{0.5}NiFe^{3+}(Te^{4+}O_3)_3 \cdot 4.5H_2O$ .

#### IMA 19-H: discreditation of heliophyllite

Proposal 19-H is accepted, and heliophyllite is discredited. This species is identical to ecdemite,  $Pb_6As_2O_7Cl_4$ .

### REVISED CHEMICAL FORMULA

A paper on the mineral ilmajokite has been recently published [*IUCr*], 7 (2020), 121–128] in which the ideal chemical formula of the mineral is given as  $Na_{11}KBaCe_2Ti_{12}Si_{37.5}O_{94}(OH)_{31} \cdot 29H_2O$ . With respect to the previously accepted formula, there is a new chemical element (K); moreover Ba and Ce, which were previously put together with Na as subordinate cations, now acquire the status of species-forming constituents, as the structural study clearly indicates that they are partitioned at specific crystallographic sites. These data were examined carefully by the CNMNC officers and were considered reliable. Accordingly it was agreed to modify the formula of the mineral in the official IMA List of Minerals. Moreover, the occurrence of a REE as a species-forming element implies the renaming of ilmajokite to ilmajokite-(Ce).

### ERRATUM

The file on the new mineral petrovite in CNMNC Newsletter 52 was wrong in the following details: IMA No.; chemical formula; full authorship of proposal; unit-cell parameters; strongest lines in the X-ray powder diffraction pattern; citation details for the mineral prior to publication of full description. Here is the correct version.

#### IMA No. 2018-149b

Petrovite

$Na_6Cu(SO_4)_4$

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

Stanislav K. Filatov\*, Andrey P. Shablinskii, Lidiya P. Vergasova, Sergey V. Krivovichev and Svetlana V. Moskaleva

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

Chemically similar to sarachinaite

Monoclinic:  $P2_1/c$ ; structure determined

$a = 12.6346(8)$ ,  $b = 9.0760(6)$ ,  $c = 12.7560(8)$  Å,  $\beta = 108.75(9)^\circ$   
7.24(100), 6.25(38), 4.47(31), 3.70(36), 3.65(34), 2.837(28), 2.600(48), 2.571(37)

Type material is deposited in the collections of the Mineralogical Museum of Saint-Petersburg State University, University Emb. 7/9, St. Petersburg 199034, Russia, catalogue number 1/19696

How to cite: Filatov, S.K., Shablinskii, A.P., Vergasova, L.P., Krivovichev, S.V. and Moskaleva, S.V. (2020) Petrovite, IMA 2018-149b. CNMNC Newsletter No. 53; *Mineralogical Magazine*, **84**, <https://doi.org/10.1180/mgm.2020.5>