



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

### Newsletter 73

Ferdinando Bosi (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>Dipartimento di Scienze della Terra, Sapienza Università di Roma, Piazzale Aldo Moro 5, 00185 Roma, Italy – [ferdinando.bosi@uniroma1.it](mailto:ferdinando.bosi@uniroma1.it); <sup>2</sup>Laboratoire de Minéralogie et de Cristallographie, Université de Liège, Bâtiment B18, Sart Tilman, 4000 Liège, Belgium – [fhatert@uliege.be](mailto:fhatert@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); 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 (ideal formula)

Mineral symbol

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 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 APRIL 2023

##### IMA No. 2022-098a

Maurogemmiite

Ti<sub>10</sub>Fe<sub>3</sub>O<sub>3</sub>

Mmi

Chromite deposit #31, Luobusa ophiolite, Yarlung Zangbu suture, southern Tibet, China (29°13'52" N, 92°11'25" E)

Enrico Mugnaioli, Fahui Xiong, Xiangzhen Xu, Jingsui Yang and Edward S. Grew\*

\*E-mail: [esgrew@maine.edu](mailto:esgrew@maine.edu)

Known synthetic analogue

Hexagonal: *P*<sub>6</sub>/*mmc*; structure determined

*a* = 8.065(1), *c* = 8.015(3) Å

2.495(36), 2.328(25), 2.236(100), 2.205(99), 2.122(54), 2.016(22), 1.374(22), 1.320(25)

Type material is deposited in the collections of the Geological Museum of China, 15 Yangrou Hutong, Xisi, West District, Beijing 100034, People's Republic of China, catalogue number M11843

How to cite: Mugnaioli, E., Xiong, F., Xu, X., Yang, J. and Grew, E.S. (2023) Maurogemmiite, IMA 2022-098a. CNMNC Newsletter 73; *Mineralogical Magazine*, 87, <https://doi.org/10.1180/mgm.2023.44>

##### IMA No. 2022-099a

Paulrobinsonite

Ti<sub>8</sub>Fe<sub>4</sub>O<sub>2</sub>

Prbs

Chromite deposit #31, Luobusa ophiolite, Yarlung Zangbu suture, southern Tibet, China (29°13'52" N, 92°11'25" E)

Fahui Xiong, Enrico Mugnaioli, Xiangzhen Xu, Jingsui Yang and Edward S. Grew\*

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

**Cite this article:** Bosi F., Hatert F., Pasero M. and Mills S.J. (2023) Newsletter 73. *Mineralogical Magazine* 87, 639–643. <https://doi.org/10.1180/mgm.2023.44>

\*E-mail: [esgrew@maine.edu](mailto:esgrew@maine.edu)

Known synthetic analogue

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

$a = 11.388(4)$  Å

6.575(11), 2.325(41), 2.192(100), 2.013(43), 1.898(17), 1.717(8), 1.342(21), 1.145(12)

Type material is deposited in the collections of the Geological Museum of China, 15 Yangrou Hutong, Xisi, West District, Beijing 100034, People's Republic of China, catalogue number M11843

How to cite: Xiong, F., Mugnaioli, E., Xu, X., Yang, J. and Grew, E.S. (2023) Paulrobinsonite, IMA 2022-099a. CNMNC Newsletter 73; *Mineralogical Magazine*, **87**, <https://doi.org/10.1180/mgm.2023.44>

#### IMA No. 2022-131

Kristjánite

$\text{KNa}_2\text{H}(\text{SO}_4)_2$

Kjn

In the central part of crater Magni, Fimmvörðuháls, Iceland (63°37'53" N, 19°26'49" W)

Tonči Balić-Žunić\*, Fabrizio Nestola and Martha Pamato

\*E-mail: [toncib@ign.ku.dk](mailto:toncib@ign.ku.dk)

Chemically related to ivsite

Monoclinic:  $P2_1/n$ ; structure determined

$a = 6.9625(1)$ ,  $b = 9.9953(1)$ ,  $c = 11.0928(2)$  Å,  $\beta = 105.637(2)^\circ$   
4.37(59), 3.65(32), 3.48(78), 3.36(100), 3.18(76), 2.85(28), 2.83(43), 2.73(38)

Type material is deposited in the collections of the Icelandic Institute of Natural History, Urriðaholtsstræti 6-8, 210 Garðabær, Iceland, catalogue number 24468

How to cite: Balić-Žunić, T., Nestola, F. and Pamato, M. (2023) Kristjánite, IMA 2022-131. CNMNC Newsletter 73; *Mineralogical Magazine*, **87**, <https://doi.org/10.1180/mgm.2023.44>

#### IMA No. 2023-001

Fluorbritholite-(Nd)

$\text{Ca}_2\text{Nd}_3(\text{SiO}_4)_3\text{F}$

Fbri-Nd

Malmkärna mine, close to the tarn Stora Malmtjärnen, Norberg District, Västmanland County, Sweden (60°03'34" N, 15°50'45" E, 200 m a.s.l.)

Dan Holtstam\*, Patrick Casey, Luca Bindi, Hans-Jürgen Förster and Andreas Karlsson

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

Apatite supergroup

Hexagonal:  $P6_3/m$ ; structure determined

$a = 9.5994(3)$ ,  $c = 6.9892(4)$  Å

3.223(30), 3.144(30), 2.866(100), 2.823(55), 2.769(35), 1.977(40), 1.869(25), 1.785(25)

Type material is deposited in the collections of the Department of Geosciences, Swedish Museum of Natural History, Box 50007, SE-10405 Stockholm, Sweden, collection number GEO-NRM #20220221

How to cite: Holtstam, D., Casey, P., Bindi, L., Förster, H.-J. and Karlsson, A. (2023) Fluorbritholite-(Nd), IMA 2023-001. CNMNC Newsletter 73; *Mineralogical Magazine*, **87**, <https://doi.org/10.1180/mgm.2023.44>

#### IMA No. 2023-004

Mangani-eckermannite

$\text{NaNa}_2(\text{Mg}_4\text{Mn}^{3+})\text{Si}_8\text{O}_{22}(\text{OH})_2$

Meck

Tanohata Mine, No. 3 orebody (also known as Matsumaezawa pit), Shimohei District, Iwate Prefecture, Japan (39°55' N, 141° 54' E)

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

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

Amphibole supergroup

Monoclinic:  $C2/m$ ; structure determined

$a = 9.9533(4)$ ,  $b = 18.1440(7)$ ,  $c = 5.2970(2)$  Å,  $\beta = 103.948(4)^\circ$   
8.52(100), 4.54(25), 3.41(29), 3.30(12), 3.16(23), 2.721(37), 2.599(13), 2.533(26)

Type material is deposited in the collections of the Fersman Mineralogical Museum, Russian Academy of Sciences, Leninsky Prospekt 18-2, Moscow 119071, Russia, registration number 5774/1

How to cite: Kasatkin, A.V., Zubkova, N.V., Agakhanov, A.A., Chukanov, N.V., Škoda, R., Nestola, F., Belakovskiy, D.I. and Pekov, I.V. (2023) Mangani-eckermannite, IMA 2023-004. CNMNC Newsletter 73; *Mineralogical Magazine*, **87**, <https://doi.org/10.1180/mgm.2023.44>

#### IMA No. 2023-005

Rewitzerite

$[\text{K}(\text{H}_2\text{O})]\text{Mn}_2\text{Al}_3(\text{PO}_4)_4(\text{OH})_2 \cdot 14\text{H}_2\text{O}$

Rwz

Hagendorf Süd pegmatite mine quarry (47 m level), Oberpfalz, northeast Bavaria, Germany (49°39'01" N, 12°27'35" E)

Ian E. Grey\*, Rupert Hochleitner, Anthony R. Kampf, Stephanie Boer, Colin M. MacRae, William G. Mumme and Erich Keck

\*E-mail: [ian.grey@csiro.au](mailto:ian.grey@csiro.au)

Chemically, the hydroxyl analogue of pleysteinitite

Monoclinic:  $P2_1/c$ ; structure determined

$a = 10.444(2)$ ,  $b = 20.445(2)$ ,  $c = 12.269(1)$  Å,  $\beta = 90.17(3)^\circ$   
10.26(53), 7.44(55), 6.16(92), 5.19(40), 3.703(57), 3.111(97), 2.862(100), 2.600(46)

Type material is deposited in the collections of the Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, CA 90007, USA, catalogue numbers 76280 (holotype), and the Mineralogical State Collection, Theresienstraße 39, 80333 München, Germany, catalogue number MSM38037 (cotype)

How to cite: Grey, I.E., Hochleitner, R., Kampf, A.R., Boer, S., MacRae, C.M., Mumme, W.G. and Keck, E. (2023) Rewitzerite, IMA 2023-005. CNMNC Newsletter 73; *Mineralogical Magazine*, **87**, <https://doi.org/10.1180/mgm.2023.44>

#### IMA No. 2023-006

Virgilluethite

$\text{MoO}_3 \cdot \text{H}_2\text{O}$

Vlh

Summit group of claims, near Cookes Peak, southern end of the Cookes Range, Luna Co., New Mexico, USA (32°33'47" N, 107° 43'48" W)

Hexiong Yang\*, Xiangping Gu, Ronald B. Gibbs and Robert T. Downs

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

A dimorph of raydemarkite

Monoclinic:  $P2_1/c$ ; structure determined

$a = 7.2834(3)$ ,  $b = 10.6949(6)$ ,  $c = 7.4861(3)$  Å,  $\beta = 91.084(4)^\circ$

5.346(62), 3.531(90), 3.445(100), 2.938(8), 2.654(26), 2.587(19), 2.379(8), 1.865(11)

Type material is deposited in the collections of the University of Arizona Alfie Norville Gem & Mineral Museum, 115 N Church Ave Ste 121, Tucson, AZ 85701, USA, catalogue no. 22723 (holotype), and the RRUFF Project, deposition no. R220017 (cotype)

How to cite: Yang, H., Gu, X., Gibbs, R.B. and Downs, R.T. (2023) Virgilluethite, IMA 2023-006. CNMNC Newsletter 73; *Mineralogical Magazine*, **87**, <https://doi.org/10.1180/mgm.2023.44>

#### IMA No. 2023-007

Pilanesbergite

$\text{Na}_2\text{Ca}_2\text{Fe}_2\text{Ti}_2(\text{Si}_2\text{O}_7)_2\text{O}_2\text{F}_2$

Pbt

Pilanesberg alkaline complex, North West Province, South Africa (25°20'47" S, 27°03'57" E)

Fabrice Dal Bo\*, Henrik Friis, Marlina A. Elburg, Frédéric Hatert and Tom Andersen

\*E-mail: [fdalbo@uliege.be](mailto:fdalbo@uliege.be)

Wöhlerite group

Monoclinic:  $P2_1/a$ ; structure determined

$a = 10.7811(2)$ ,  $b = 9.7836(1)$ ,  $c = 7.0348(1)$  Å,  $\beta = 108.072(2)^\circ$   
3.928(17), 3.219(60), 2.851(100), 2.802(51), 2.743(27), 2.423(19), 2.366(18), 1.723(19)

Cotype material is deposited in the collections of the Natural History Museum, University of Oslo, NHM Økern, Kabelgata 38-40, 0580 Oslo, Norway, catalogue number KNR 44406, and the Laboratoire de Minéralogie, University of Liege, Bâtiment B18, Sart Tilman, 4000 Liège, Belgium, catalogue number 21980

How to cite: Dal Bo, F., Friis, H., Elburg, M.A., Hatert, F. and Andersen, T. (2023) Pilanesbergite, IMA 2023-007. CNMNC Newsletter 73; *Mineralogical Magazine*, **87**, <https://doi.org/10.1180/mgm.2023.44>

#### IMA No. 2023-008

Batoniite

$\text{Al}_8(\text{SO}_4)_5(\text{OH})_{14}(\text{H}_2\text{O})_{18} \cdot 5\text{H}_2\text{O}$

Bato

Cetine di Cotorniano mine, Chiusdino, Siena, Tuscany, Italy (43°13' N, 11°09' E)

Daniela Mauro\*, Cristian Biagioni, Jiří Sejkora and Zdeněk Dolníček

\*E-mail: [daniela.mauro@unipi.it](mailto:daniela.mauro@unipi.it)

New structure type

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

$a = 9.174(1)$ ,  $b = 12.083(2)$ ,  $c = 20.912(3)$  Å,  $\alpha = 82.949(4)$ ,  $\beta = 87.389(5)$ ,  $\gamma = 87.137(5)^\circ$   
11.1(s), 8.5(s), 7.5(s), 5.20(ms), 4.87(ms), 4.08(vs), 3.793(ms), 3.563(s)

Type material is deposited in the collections of the Museo di Storia Naturale, Università di Pisa, Via Roma 79, Calci (PI), Italy, catalogue number 20028

How to cite: Mauro, D., Biagioni, C., Sejkora, J. and Dolníček, Z. (2023) Batoniite, IMA 2023-008. CNMNC Newsletter 73; *Mineralogical Magazine*, **87**, <https://doi.org/10.1180/mgm.2023.44>

#### IMA No. 2023-009

Theuerdankite

$\text{Ag}_3(\text{AsO}_4)$

Td

Alter Theuerdank Mine, Beerberg, St. Andreasberg, Braunlage, Goslar District, Lower Saxony, Germany (51°42'29" N, 10°31'41" E)

Jakub Plášil\*, Jiří Sejkora, Zdeněk Dolníček, Joy Désor, Manfred Gross and Gerhard Möhn

\*E-mail: [plasil@fzu.cz](mailto:plasil@fzu.cz)

New structure type

Cubic:  $P\bar{4}3n$ ; structure determined

$a = 6.144(2)$  Å

3.077(14), 2.735(100), 2.502(51), 1.778(8), 1.707(18), 1.640(30), 1.537(6), 1.341(10)

Type material is deposited in the collections of the Department of Mineralogy and Petrology, National Museum, Cirkusová 1740,

193 00 Prague 9, Czech Republic, catalogue number P1P 59/2022

How to cite: Plášil, J., Sejkora, J., Dolníček, Z., Désor, J., Gross, M. and Möhn, G. (2023) Theuerdankite, IMA 2023-009. CNMNC Newsletter 73; *Mineralogical Magazine*, **87**, <https://doi.org/10.1180/mgm.2023.44>

### NEW MINERAL PROPOSALS APPROVED IN MAY 2023

#### IMA No. 2022-126

Aluminotaipingite-(CeCa)

$(\text{Ce}_6\text{Ca}_3)\square\text{Al}(\text{SiO}_4)_3[\text{SiO}_3(\text{OH})]_4\text{F}_3$

Atpg-CeCa

In cavities of a leucogranitic orthogneiss locally named "Pietra di Luserna", Casette quarry, Montoso, Bagnolo Piemonte, Cuneo Province, Piedmont, Italy (44°44'56" N, 7°13'54" E)

Italo Campostrini\*, Francesco Demartin, Giuseppe Finello and Pietro Vignola

\*E-mail: [italo.campostrini@unimi.it](mailto:italo.campostrini@unimi.it)

Cerite supergroup

Trigonal:  $R3c$ ; structure determined

$a = 10.658(1)$ ,  $c = 37.865(9)$  Å

8.38(29), 4.499(28), 2.936(100), 2.816(51), 2.772(31), 2.669(37), 2.207(29), 1.935(35)

Type material is deposited in the collections of the Museo Civico di Storia Naturale, Corso Venezia 55, 20121 Milano, Italy, sample number M39755

How to cite: Campostrini, I., Demartin, F., Finello, G. and Vignola, P. (2023) Aluminotaipingite-(CeCa), IMA 2022-126. CNMNC Newsletter 73; *Mineralogical Magazine*, **87**, <https://doi.org/10.1180/mgm.2023.44>

#### IMA No. 2023-011

Tennantite-(In)

$\text{Cu}_6(\text{Cu}_5\text{In})\text{As}_4\text{S}_{13}$

Tnt-In

Pefka ore deposit, Alexandroupoli, Evros, Western Thrace, Greece (40°54'32" N, 26°02'27" E)

Panagiotis Voudouris, Cristian Biagioni\*, Jiří Sejkora and Silvia Musetti

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

Tetrahedrite group

Cubic:  $I\bar{4}3m$ ; structure determined

$a = 10.285(2)$  Å

4.199(4), 2.969(100), 2.749(4), 2.571(20), 2.018(4), 1.878(7), 1.818(42), 1.551(21)

Type material is deposited in the collections of the Museo di Storia Naturale, Università di Pisa, Via Roma 79, Calci (PI), Italy, catalogue number 20029

How to cite: Voudouris, P., Biagioni, C., Sejkora, J. and Musetti, S. (2023) Tennantite-(In), IMA 2023-011. CNMNC Newsletter 73; *Mineralogical Magazine*, **87**, <https://doi.org/10.1180/mgm.2023.44>

#### IMA No. 2023-013

Perchiazziite

$\text{Co}_2(\text{CO}_3)(\text{OH})_2$

Pcz

Monte Ramazzo mine, Genova, Genova Province, Liguria, Italy (44°28'05" N, 8°51'33" E)

Anna Barbaro, Anatoly V. Kasatkin, Matteo Ardit, Fabrizio Nestola\*, Nicola Rotiroti, Radek Škoda, Atali A. Agakhanov, Maria Chiara Dalconi and Fabrizio Castellaro

\*E-mail: [fabrizio.nestola@uinpd.it](mailto:fabrizio.nestola@uinpd.it)

Rosasite–malachite group

Monoclinic:  $P2_1/a$ ; structure determined

$a = 12.183(2)$ ,  $b = 9.319(2)$ ,  $c = 3.1570(3)$  Å,  $\beta = 97.16(1)^\circ$   
6.040(22), 5.073(38), 3.694(53), 2.599(100), 2.535(26), 2.480(27), 2.140(26), 1.561(25)

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 5944/1

How to cite: Barbaro, A., Kasatkin, A.V., Ardit, M., Nestola, F., Rotiroti, N., Škoda, R., Agakhanov, A.A., Dalconi, M.C. and Castellaro, F. (2023) Perchiazziite, IMA 2023-013. CNMNC Newsletter 73; *Mineralogical Magazine*, **87**, <https://doi.org/10.1180/mgm.2023.44>

#### IMA No. 2023-014

Kanatzidisite

$(\text{SbBiS}_3)_2\text{Te}_2$

Ktz

Nagybörzsöny deposit, Alsó-Rózsa, Hungary (47°56'27" N, 18°53'40" E)

Luca Bindi\* and Xiuquan Zhou

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

New structure type

Monoclinic:  $P2_1/m$ ; structure determined

$a = 4.0021(5)$ ,  $b = 3.9963(5)$ ,  $c = 21.1009(10)$  Å,  $\beta = 95.392(3)^\circ$   
3.850(55), 3.740(75), 3.498(100), 3.178(45), 2.824(85), 2.770(80), 2.270(50), 2.197(30)

Type material is deposited in the collections of the Museo di Storia Naturale, Università di Firenze, Via La Pira 4, I-50121, Firenze, Italy, catalogue number 3237/I

How to cite: Bindi, L. and Zhou, X. (2023) Kanatzidisite, IMA 2023-014. CNMNC Newsletter 73; *Mineralogical Magazine*, **87**, <https://doi.org/10.1180/mgm.2023.44>

#### IMA No. 2023-016

Lianbinitite

$(\text{NH}_4)(\text{C}_2\text{H}_3\text{O}_3)(\text{C}_2\text{H}_4\text{O}_3)$

Lian

Pusch Ridge, Santa Catalina Mountains, north of Tucson, Pima Co., Arizona, USA (32°21'42" N, 110°57'30" W, 975 m a.s.l.)

Hexiong Yang\*, Xiangping Gu, Warren Lazar, Ronald B. Gibbs and Robert T. Downs

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

Chemically related to lazarskeite, stanevansite and jimkrieghite

Monoclinic:  $P2_1/c$ ; structure determined

$a = 3.9130(1)$ ,  $b = 18.7499(4)$ ,  $c = 10.7214(2)$  Å,  $\beta = 107.444(2)^\circ$   
5.108(45), 4.262(18), 3.821(82), 3.629(94), 3.489(39), 3.312(70), 3.040(37), 2.531(44)

Type material is deposited in the collections of the University of Arizona Alfie Norville Gem & Mineral Museum, 115 N Church Ave Ste 121, Tucson, AZ 85701, USA, catalogue no. 22730 (holotype), and the RRUFF Project, deposition no. R220025 (cotype)

How to cite: Yang, H., Gu, X., Lazar, W., Gibbs, R.B. and Downs, R.T. (2023) Lianbinitite, IMA 2023-016. CNMNC Newsletter 73; *Mineralogical Magazine*, **87**, <https://doi.org/10.1180/mgm.2023.44>

### NOMENCLATURE/CLASSIFICATION PROPOSALS APPROVED IN APRIL 2023

#### 22-L: Establishment of the palmierite supergroup

(Rafał Juroszek, Irina O. Galuskina, Biljana Krüger and Hannes Krüger)

Proposal 22-L is accepted, and the palmierite supergroup is defined. This supergroup contains two groups of minerals: the palmierite group, including palmierite,  $\text{K}_2\text{Pb}(\text{SO}_4)_2$  and kalistrontite,  $\text{K}_2\text{Sr}(\text{SO}_4)_2$ , and the tuite group, including tuite,  $\text{Ca}_3(\text{PO}_4)_2$ , gurimite,  $\text{Ba}_3(\text{VO}_4)_2$  and mazorite,  $\text{Ba}_3(\text{PO}_4)_2$ .

#### 23-C: Establishment of the minium group

(Jörgen Langhof, Henrik Friis, Dan Holtstam, Andreas Karlsson and Muriel Erambert)

Proposal 23-C is accepted and the minium group is defined. The group consists of five valid members: minimum,  $\text{Pb}^{4+}\text{Pb}_2^{2+}\text{O}_4$ , trippkeite,  $\text{Cu}^{2+}\text{As}_2^{3+}\text{O}_4$ , schafarzikite,  $\text{Fe}^{2+}\text{Sb}_2^{3+}\text{O}_4$ , igelströmite,  $\text{Fe}^{3+}(\text{SbPb})\text{O}_4$ , and the newly approved species mangano-schafarzikite,  $\text{Mn}^{2+}\text{Sb}_2^{3+}\text{O}_4$  IMA 2022-129; see CNMNC Newsletter 72). Existing mineral names are recommended to be used as root names in the future, and prefixes should be added to indicate substitutions at the octahedrally coordinated sites of the crystal structure.

#### 23-D: Redefinition of the formula for benyacarite

(Ian E. Grey and Ferdinando Bosi)

Proposal 23-D is accepted, and the ideal formula of benyacarite is revised as  $(\text{H}_2\text{O})_2\text{Mn}_2\text{Ti}_2\text{Fe}^{3+}(\text{PO}_4)_4(\text{OF})(\text{H}_2\text{O})_{10}\cdot 4\text{H}_2\text{O}$ .

#### 23-E: Redefinition of avdeevite

(Adam Pieczka)

Proposal 23-E is accepted, and the ideal formula of avdeevite is revised as  $\text{NaAl}_4(\text{Be}_5\text{Li})(\text{Si}_6\text{O}_{18})_2(\text{H}_2\text{O})_{1-2}$ .

#### 23-F: Discreditation of minasgeraisite-(Y)

(Daniel Atencio)

Proposal 23-F is accepted, and minasgeraisite-(Y) is discredited, as an ordered intermediate member between datolite and hingganite-(Y).

## NOMENCLATURE/CLASSIFICATION PROPOSALS APPROVED IN MAY 2023

### *Changes in the cerite-group nomenclature*

(Daniel Atencio, Andrezza A. Azzi, Kai Qu, Ritsuro Miyawaki, Ferdinando Bosi and Koichi Momma)

The cerite group belongs to the cerite supergroup, together with the merrillite group. Whereas the latter remains unchanged, some nomenclature/classification changes have been made to the cerite group. Minerals of the cerite group have the general formula  $A_9XM[T_7O_{24}O_4]Z_3$ . The group is

divided into the cerite subgroup ( $Z = OH$ ) and the taipingite subgroup ( $Z = F$ ). Cerite-(Ce) has been renamed cerite-(CeCa)  $[(Ce_7Ca_2)\square Mg(SiO_4)_3(SiO_3OH)_4(OH)_3]$ , aluminocerite-(Ce) has been renamed aluminocerite-(CeCa)  $[(Ce_6Ca_3)\square Al(SiO_4)_3(SiO_3OH)_4(OH)_3]$ , ferricerite-(La) has been renamed ferricerite-(LaCa)  $[(La_6Ca_3)\square Fe^{3+}(SiO_4)_3(SiO_3OH)_4(OH)_3]$ , taipingite-(Ce) has been renamed taipingite-(CeCa)  $[(Ce_7Ca_2)\square Mg(SiO_4)_3(SiO_3(OH))_4F_3]$ . The newly approved mineral aluminotaipingite-(CeCa)  $[(Ce_6Ca_3)\square Al(SiO_4)_3(SiO_3(OH))_4F_3]$  (see this newsletter) also belongs to the taipingite subgroup.