Mineralogical Magazine (2024), **88**, 345–349
doi:10.1180/mgm.2024.23

CAMBRIDGE UNIVERSITY PRESS

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

Newsletter 78

Ferdinando Bosi (Chairman, CNMNC)[1], Frédéric Hatert (Vice-Chairman, CNMNC)[2], Marco Pasero (Vice-Chairman, CNMNC)[3] and Stuart J. Mills (Secretary, CNMNC)[4]

[1] Dipartimento di Scienze della Terra, Sapienza Università di Roma, Piazzale Aldo Moro 5, 00185 Roma, Italy – ferdinando.bosi@uniroma1.it; [2] Laboratoire de Minéralogie et de Cristallochimie, Université de Liège, Bâtiment B18, Sart Tilman, 4000 Liège, Belgium – fhatert@uliege.be; [3] Dipartimento di Scienze della Terra, Università di Pisa, Via Santa Maria 53, 56126 Pisa, Italy – marco.pasero@unipi.it; and [4] Gallery of Natural Art, PO Box 830460, Richardson, TX 75083, USA – stuart@irocks.com

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 FEBRUARY 2024

IMA No. **2023-043**
Rundqvistite-(Ce)
$Na_3(Sr_3Ce)[Zn_2Si_8O_{24}]$
Run-Ce
Darai-i-Pioz alkaline massif, upper reaches of the Darai-i-Pioz River, Tajikistan (39°30' N, 70°40' E)
Atali A. Agakhanov*, Maxwell C. Day, Elena Sokolova, Vladimir Y. Karpenko, Frank C. Hawthorne, Leonid A. Pautov, Anatoly V. Kasatkin, Igor V. Pekov and Vitaliya A. Agakhanova

Author for correspondence: Marco Pasero, Email: marco.pasero@unipi.it
Cite this article: Bosi F., Hatert F., Pasero M. and Mills S.J. (2024) . *Mineralogical Magazine* **88**, 345–349. https://doi.org/10.1180/mgm.2024.23

*E-mail: atali99@mail.ru
Isostructural with vladykinite
Monoclinic: $P2_1/c$; structure determined
$a = 5.1934(1)$, $b = 7.893(1)$, $c = 26.011(5)$ Å, $\beta = 90.02(3)°$
4.28(50), 3.616(33), 3.598(60), 3.336(42), 3.140(46), 2.952(100), 2.830(80), 2.821(60)
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 5999/1
How to cite: Agakhanov, A.A., Day, M.C., Sokolova, E., Karpenko, V.Y., Hawthorne, F.C., Pautov, L.A., Kasatkin, A.V., Pekov, I.V. and Agakhanova, V.A. (2023) Rundqvistite-(Ce), IMA 2023-043. CNMNC Newsletter 78; *Mineralogical Magazine*, **88**, https://doi.org/10.1180/mgm.2024.23

© The Author(s), 2024. Published by Cambridge University Press on behalf of The Mineralogical Society of the United Kingdom and Ireland

https://doi.org/10.1180/mgm.2024.23 Published online by Cambridge University Press

IMA No. **2023-058**
Tantalaeschynite-(Ce)
$Ce(TiTa)O_6$
Taes-Ce
Huangshan pegmatite dike, about 35 km northeast of Hengfeng County, southeast Jiangxi Province, China (28°36'02" N, 117° 41'49" E)
Zeying Zhu*, Hong Yu, Zhenyu Chen, Bin Wu, Rucheng Wang, Yike Li and Denghong Wang
*E-mail: zhuzeying_nju@163.com
Columbite supergroup
Orthorhombic: *Pnma*
$a = 10.9694(3)$, $b = 7.5519(2)$, $c = 5.4217(1)$ Å
3.104(24), 3.025(76), 2.970(100), 2.691(26), 2.033(15), 1.882 (18), 1.711(19), 1.598(22),
Type material is deposited in the collections of the Geological Museum of China, No. 16, Yangrou Hutong, Xisi, Beijing 100031, People's Republic of China, catalogue number M16122
How to cite: Zhu, Z., Yu, H., Chen, Z., Wu, B., Wang, R., Li, Y. and Wang, D. (2024) Tantalaeschynite-(Ce), IMA 2023-058. CNMNC Newsletter 78; *Mineralogical Magazine*, **88**, https://doi.org/10.1180/mgm.2024.23

IMA No. **2023-102**
Karlleuite
Ca_2MnO_4
Kll
Caspar quarry, Bellerberg volcano, Eifel, Germany (50°21'06" N, 7°14'02" E)
Rafał Juroszek*, Biljana Krüger, Georgia Cametti, Bernd Ternes and Günter Blaß
*E-mail: rafal.juroszek@us.edu.pl
Known synthetic analogue
Tetragonal: *I*4/*mmm*; structure determined
$a = 3.7683(2)$, $c = 11.9893(8)$ Å
5.995(43), 2.742(100), 2.665(91), 2.023(25), 1.998(28), 1.884 (61), 1.553(38), 1.371(24)
Type material is deposited in the collections of the Natural History Museum Mainz / State Collection for Natural History Rhineland-Palatinate, Reichklarastrasse 10, 55116 Mainz, Germany, catalogue number NHMMZ M 2023/2-LS
How to cite: Juroszek, R., Krüger, B., Cametti, G., Ternes, B. and Blaß, G. (2024) Karlleuite, IMA 2023-102. CNMNC Newsletter 78; *Mineralogical Magazine*, **88**, https://doi.org/10.1180/mgm.2024.23

IMA No. **2023-103**
Yamhamelachite
$KCrP_2O_7$
Ymm
Hatrurim Complex, at the roadside Arad-Dead Sea, wadi Zohar, Negev Desert, Israel (31°11'25" N, 35°17'00" E)
Evgeny V. Galuskin*, Joachim Kusz, Irina O. Galuskina, Yevgeny Vapnik and Grzegorz Zieliński
*E-mail: evgeny.galuskin@us.edu.pl
Known synthetic analogue
Monoclinic: $P2_1/c$; structure determined
$a = 7.3574(3)$, $b = 9.9336(4)$, $c = 8.1540(4)$ Å, $\beta = 106.712(5)°$
5.747(96), 5.255(23), 3.905(82), 3.380(33), 2.997(68), 2.956(28), 2.929(100), 2.926(61)
Type material is deposited in the collections of the Fersman Mineralogical Museum, Russian Academy of Sciences, Leninskiy Prospekt 18-2, Moscow 115162, Russia, registration number 6074/1
How to cite: Galuskin, E.V., Kusz, J., Galuskina, I.O., Vapnik, Y. and Zieliński, G. (2024) Yamhamelachite, IMA 2023-103. CNMNC Newsletter 78; *Mineralogical Magazine*, **88**, https://doi.org/10.1180/mgm.2024.23

IMA No. **2023-104**
Pabellóndepicaite
$Cu_2^{2+}(N_3C_2H_2)_2(NH_3)_2(NO_3)Cl{\cdot}2H_2O$
Pdp
In a guano deposit at Pabellón de Pica, 1.5 km south of Chanabaya village, Iquique Province, Tarapacá Region, Chile (20°54'32" S, 70°08'17" W)
Anthony R. Kampf*, Gerhard Möhn, Chi Ma and Joy Désor
*E-mail: akampf@nhm.org
Related to bojarite, chanabayaite and triazolite, all containing the 1,2,4-triazole ring
Orthorhombic: *Pnna*; structure determined
$a = 7.212(1)$, $b = 9.098(1)$, $c = 11.128(3)$ Å
11.182(39), 7.057(100), 6.039(30), 4.753(48), 4.564(28), 3.350 (50), 2.511(47), 2.273(38)
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 number 76305
How to cite: Kampf, A.R., Möhn, G., Ma, C. and Désor, J. (2024) Pabellóndepicaite, IMA 2023-104. CNMNC Newsletter 78; *Mineralogical Magazine*, **88**, https://doi.org/10.1180/mgm.2024.23

IMA No. **2023-105**
Pfaffenbergite
$KNa_3(Al_4Si_{12})O_{32}$
Pfg
Pfaffenberg, in the town of Waldheim, Saxony, Germany (51°04'07" N, 13°00'55" E)
Silvio Ferrero, Sofia Lorenzon, Roberto Borriello, Enrico Mugnaioli*, Alessia Borghini, Rico Fuchs, Richard Wirth, Anja Schreiber and Edward S. Grew
*E-mail: enrico.mugnaioli@unipi.it
Isostructural with wodegongjieite and kokchetavite
Hexagonal: *P*6/*mmc*; structure determined
$a = 10.258(3)$, $c = 14.775(5)$ Å
4.442(100), 3.807(53), 3.694(75), 3.274(43), 2.840(72), 2.564 (56), 2.127(17), 1.847(14)
Type material is deposited in the collections of the Museum of Mineralogy "Leonard De Prunner", University of Cagliari, Via Trentino, 51, 09127 Cagliari, Italy, FIB foil #6461.
How to cite: Ferrero, S., Lorenzon, S., Borriello, R., Mugnaioli, E., Borghini, A., Fuchs, R., Wirth, R., Schreiber, A. and Grew, E.S. (2024) Pfaffenbergite, IMA 2023-105. CNMNC Newsletter 78; *Mineralogical Magazine*, **88**, https://doi.org/10.1180/mgm.2024.23

IMA No. **2023-106**
Vladkuzminite
$K_4CuZn_3(AsO_4)_4$
Vkz
Arsenatnaya fumarole, Second scoria cone of the Northern Breakthrough of the Great Tolbachik Fissure Eruption,

https://doi.org/10.1180/mgm.2024.23 Published online by Cambridge University Press

Tolbachik volcano, Kamchatka peninsula, Far-Eastern Region, Russia (55°41' N, 160°14' E, 1200 m a.s.l.)
Natalia N. Koshlyakova*, Igor V. Pekov, Atali A. Agakhanov, Peter C. Burns, Natalia V. Zubkova, Marina F. Vigasina, Sergey N. Britvin, Robert M. Hazen and Elena S. Zhitova
*E-mail: nkoshlyakova@gmail.com
New structure type
Monoclinic: $P2_1/n$; structure determined
$a = 8.5920(7)$, $b = 8.9064(5)$, $c = 22.309(2)$ Å, $\beta = 90.136(7)°$
6.19(63), 4.725(35), 4.302(36), 3.211(100), 3.099(37), 2.786(46), 2.732(38), 2.626(36)
Type material is deposited in the collections of the Fersman Mineralogical Museum, Russian Academy of Sciences, Leninskiy Prospekt 18-2, Moscow 115162, Russia, registration number 6075/1
How to cite: Koshlyakova, N.N., Pekov, I.V., Agakhanov, A.A., Burns, P.C., Zubkova, N.V., Vigasina, M.F., Britvin, S.N., Hazen, R.M. and Zhitova, E.S. (2024) Vladkuzminite, IMA 2023-106. CNMNC Newsletter 78; *Mineralogical Magazine*, **88**, https://doi.org/10.1180/mgm.2024.23

IMA No. **2023-107**
Rinmanite-(Zn)
$Zn_2Sb_2(Fe_4^{3+}Zn_2)O_{14}(OH)_2$
Rnm-Zn
4.5 km north-west of the village of Nežilovo, and 25 km west-south-west of the city of Veles, North Macedonia (41° 41' N, 21°25' E)
Nikita V. Chukanov*, Vasilisa M. Gridchina, Ramiza K. Rastsvetaeva, Dmitry A. Varlamov, Anatoly V. Kasatkin, Igor V. Pekov, Marina F. Vigasina, Alla A. Virus, Simeon Jančev and Sergey N. Britvin
*E-mail: nikchukanov@yandex.ru
The Zn analogue of rinmanite
Hexagonal: $P6_3mc$; structure determined
$a = 5.9720(1)$, $c = 9.3578(1)$ Å
5.176(46), 4.530(42), 3.473(77), 2.989(46), 2.674(86), 2.520 (100), 1.658(38), 1.518(33)
Type material is deposited in the collections of the Fersman Mineralogical Museum, Russian Academy of Sciences, Leninskiy Prospekt 18-2, Moscow 115162, Russia, registration number 6059/1
How to cite: Chukanov, N.V., Gridchina, V.M., Rastsvetaeva, R.K., Varlamov, D.A., Kasatkin, A.V., Pekov, I.V., Vigasina, M.F., Virus, A.A., Jančev, S. and Britvin, S.N. (2024) Rinmanite-(Zn), IMA 2023-107. CNMNC Newsletter 78; *Mineralogical Magazine*, **88**, https://doi.org/10.1180/mgm.2024.23

IMA No. **2023-109**
Bacaferrite
$BaCaFe_4O_8$
Bcf
Hatrurim Complex, Negev Desert, near Arad city, Israel (31°14'22" N, 35°16'55" E)
Evgeny V. Galuskin*, Yevgeny Vapnik, Maria Książek, Joachim Kusz, Grzegorz Zieliński and Irina O. Galuskina
*E-mail: evgeny.galuskin@us.edu.pl
New structure type
Trigonal: $P\bar{3}1m$; structure determined
$a = 5.3839(4)$, $c = 7.6693(6)$ Å
7.669(23), 2.962(100), 2.692(77), 2.540(24), 1.992(29), 1.601 (13), 1.562(18), 1.554(20)
Type material is deposited in the collections of the Fersman Mineralogical Museum, Russian Academy of Sciences, Leninskiy Prospekt 18-2, Moscow 115162, Russia, registration number 6086/1
How to cite: Galuskin, E.V., Vapnik, Y., Książek, M., Kusz, J., Zieliński, G. and Galuskina, I.O. (2024) Bacaferrite, IMA 2023-109. CNMNC Newsletter 78; *Mineralogical Magazine*, **88**, https://doi.org/10.1180/mgm.2024.23

IMA No. **2023-110**
Midbarite
$Ca_3Mg_2(V_2Si)O_{12}$
Mid
Hatrurim Basin, near Ye'elim Mount, Negev Desert, Israel (31°14'21.9" N, 35°16'54.8" E)
Irina Galuskina*, Evgeny Galuskin, Joachim Kusz, Maria Książek, Yevgeny Vapnik and Beata Marciniak-Maliszewska
*E-mail: irina.galuskina@us.edu.pl
Garnet supergroup
Cubic: $Ia\bar{3}d$; structure determined
$a = 12.3539(4)$ Å
3.088(46), 2.762(100), 2.633(13), 2.521(45), 2.422(11), 1.713 (27), 1.651(48), 1.348(13)
Type material is deposited in the collections of the Fersman Mineralogical Museum, Russian Academy of Sciences, Leninskiy Prospekt 18-2, Moscow 115162, Russia, registration number 6085/1
How to cite: Galuskina, I., Galuskin, E., Kusz, J., Książek, M., Vapnik, Y. and Marciniak-Maliszewska. B. (2024) Midbarite, IMA 2023-110. CNMNC Newsletter 78; *Mineralogical Magazine*, **88**, https://doi.org/10.1180/mgm.2024.23

IMA No. **2023-111**
Fluor-rossmanite
$\square(Al_2Li)Al_6(Si_6O_{18})(BO_3)_3(OH)_3F$
Frsm
Krutaya pegmatite vein, Malkhan pegmatite field, Krasnochikoyskiy District, Zabaykalskiy Krai, Western Siberia, Russia (50°39'52" N, 109°55'35" E)
Anatoly V. Kasatkin, Fabrizio Nestola*, Maxwell C. Day, Liudmila A. Gorelova, Radek Škoda, Oleg S. Vereshchagin, Atali A. Agakhanov and Dmitry I. Belakovskiy
*E-mail: fabrizio.nestola@unipd.it
Tourmaline supergroup
Trigonal: $R\bar{3}m$; structure determined
$a = 15.7951(3)$, $c = 7.0865(2)$ Å
4.181(22), 3.941(100), 2.930(39), 2.552(25), 2.017(16), 1.894 (15), 1.640(18), 1.580(15)
Type material is deposited in the collections of the Fersman Mineralogical Museum, Russian Academy of Sciences, Leninskiy Prospekt 18-2, Moscow 115162, Russia, registration number 6049/1
How to cite: Kasatkin, A.V., Nestola, F., Day, M.C., Gorelova, L.A., Škoda, R., Vereshchagin, O.S., Agakhanov, A.A. and Belakovskiy, D.I. (2024) Fluor-rossmanite, IMA 2023-111. CNMNC Newsletter 78; *Mineralogical Magazine*, **88**, https://doi.org/10.1180/mgm.2024.23

https://doi.org/10.1180/mgm.2024.23 Published online by Cambridge University Press

NEW MINERAL PROPOSALS APPROVED IN MARCH 2024

IMA No. **2023-072a**
Shiranuiite
$Cu^{+}(Rh^{3+}Rh^{4+})S_4$
Sir
Haraigawa, Misato-machi, Kumamoto Prefecture, Kyushu, Japan (32°34'50" N, 130°47'59" E)
Daisuke Nishio-Hamane*, Takahiro Tanaka and Tadashi Shinmachi
*E-mail: hamane@issp.u-tokyo.ac.jp
Spinel supergroup
Cubic: $Fd\bar{3}m$
$a = 9.757(2)$ Å
2.95(55), 2.44(36), 1.879(61), 1.725(100), 1.487(29), 1.409(18), 1.270(46), 1.220(44)
Type material is deposited in the collections of the National Museum of Nature and Science, Amakubo, Tsukuba, Ibaraki 305-0005, Japan, specimen number NSM-M50086
How to cite: Nishio-Hamane, D., Tanaka, T. and Shinmachi, T. (2024) Shiranuiite, IMA 2023-072a. CNMNC Newsletter 78; *Mineralogical Magazine*, **88**, https://doi.org/10.1180/mgm.2024.23

IMA No. **2023-112**
Fanguangite
$(MoO_2)(PO_3OH)\cdot 4H_2O$
Fgu
Freedom #2 mine, about 5.6 km north-north-east of the town of Marysvale, central part of the Marysvale volcanic field, Piute Co., Utah, USA (38°29'43" N, 112°12'55" W)
Xiangping Gu, Ting Li, Hexiong Yang*, Anthony R. Kampf and Joe Marty
*E-mail: hyang@arizona.edu
New structure type
Triclinic: $P\bar{1}$; structure determined
$a = 6.3156(4)$, $b = 7.7199(9)$, $c = 9.456(1)$ Å, $\alpha = 75.247(10)$, $\beta = 82.106(8)$, $\gamma = 71.706(8)$°
9.153(15), 7.158(100), 5.192(47), 4.557(26), 4.309(33), 3.579(28), 3.500(25), 3.103(40)
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. 22734 (holotype), and the RRUFF Project, deposition no. R220031 (cotype)
How to cite: Gu, X., Li, T., Yang, H., Kampf, A.R. and Marty, J. (2024) Fanguangite, IMA 2023-112. CNMNC Newsletter 78; *Mineralogical Magazine*, **88**, https://doi.org/10.1180/mgm.2024.23

IMA No. **2023-113**
Nigelcookite
$PbFe_2^{2+}V_2^{3+}(PO_4)_3(OH)_3$
Nck
Yushui Cu-polymetallic deposit, about 16 km northeast of Meizhou City, Guangdong Province, China (24°25'18" N, 116°11'48" E)
Wei Yao, Peng Liu*, Guowu Li, Ningyue Sun, Wenqiang Yang, Wenlei Song and Chao Zhang
*E-mail: pengliu@nwu.edu.cn
Bjarebyite group
Monoclinic: $P2_1/m$; structure determined
$a = 9.1159(5)$, $b = 12.2328(7)$, $c = 5.0092(3)$ Å, $\beta = 100.708(6)$°
9.091(73), 6.179(30), 5.079(80), 4.590(33), 3.148(82), 2.892(63), 2.726(100), 2.178(39)
Type material is deposited in the collections of the Geological Museum of China, Yangrou Hutong No. 16, Xisi, Beijing 100031, People's Republic of China, catalogue number GMCTM2023010
How to cite: Yao, W., Liu, P., Li, G., Sun, N., Yang, W., Song, W. and Zhang, C. (2024) Nigelcookite, IMA 2023-113. CNMNC Newsletter 78; *Mineralogical Magazine*, **88**, https://doi.org/10.1180/mgm.2024.23

IMA No. **2023-114**
Allanite-(Sm)
$CaSm(Al_2Fe^{2+})(Si_2O_7)(SiO_4)O(OH)$
Aln-Sm
In a serpentinite quarry, about 1 km west of the Jordanów Śląski village, 30 km south of Wrocław, Lower Silesia, Poland (50°52'16" N, 16°50'18" E)
Adam Pieczka*, Bożena Gołębiowska, Adam Włodek, Marcin Stachowicz, Petras Jokubauskas, Jakub Kotowski, Krzysztof Nejbert, Adam Szuszkiewicz and Krzysztof Woźniak
*E-mail: pieczka@agh.edu.pl
Epidote supergroup
Monoclinic: $P2_1/m$; structure determined
$a = 8.8923(6)$, $b = 5.7005(3)$, $c = 10.1280(8)$ Å, $\beta = 115.445(9)$°
9.146(21), 3.506(47), 2.902(100), 2.850(44), 2.688(36), 2.686(28), 2.606(48), 2.120(23)
Type material is deposited in the collections of the Mineralogical Museum, University of Wrocław, Cybulskiego 30, 50-205 Wrocław, Poland, catalogue number MMUWr IV8151
How to cite: Pieczka, A., Gołębiowska, B., Włodek, A., Stachowicz, M., Jokubauskas, P., Kotowski, J., Nejbert, K., Szuszkiewicz, A. and Woźniak, K. (2024) Allanite-(Sm), IMA 2023-114. CNMNC Newsletter 78; *Mineralogical Magazine*, **88**, https://doi.org/10.1180/mgm.2024.23

IMA No. **2023-115**
Fluor-rewitzerite
$[(H_2O)K]Mn_2(Al_2Ti)(PO_4)_4(OF)(H_2O)_{10}\cdot 4H_2O$
Frwz
Hagendorf Süd pegmatite mine quarry (67 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 Nicholas C. Wilson
*E-mail: ian.grey@csiro.au
The fluorine analogue of rewitzerite
Monoclinic: $P2_1/c$; structure determined
$a = 10.407(1)$, $b = 20.514(2)$, $c = 12.193(1)$ Å, $\beta = 90.49(2)$°
10.256(46), 7.414(62), 6.149(100), 5.190(41), 3.704(64), 3.119(74), 2.866(80), 2.603(45)
Type material is deposited in the collections of the Bavarian State Mineral Collection, Theresienstrasse 41, 80333, München, Germany, registration number MSM 80824 (holotype), and the Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, CA 90007, USA, catalogue number 76305 (cotype)
How to cite: Grey, I.E., Hochleitner, R., Kampf, A.R., Boer, S., MacRae, C.M., Mumme, W.G. and Wilson, N.C. (2024) Fluor-rewitzerite, IMA 2023-115. CNMNC Newsletter 78; *Mineralogical Magazine*, **88**, https://doi.org/10.1180/mgm.2024.23

https://doi.org/10.1180/mgm.2024.23 Published online by Cambridge University Press

IMA No. **2023-117**
Siligiite
$[Pb(H_2O)_5(SO_4)][Zn_9(OH)_{18}]$
Sigi
Redmond mine, Haywood Co., North Carolina, USA (35°40'55" N, 83°00'56" W)
Anthony R. Kampf*, Jason B. Smith, John M. Hughes, Chi Ma and Christopher Emproto
*E-mail: akampf@nhm.org
New structure type
Monoclinic: $P2_1/n$; structure determined
a = 13.658(3), b = 9.488(3), c = 19.209(4) Å, β = 102.577(6)°
9.452(100), 6.751(40), 4.334(43), 3.078(42), 2.635(53), 2.577 (61), 2.275(41), 1.575(52)
Cotype 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 76308 and 76309
How to cite: Kampf, A.R., Smith, J.B., Hughes, J.M., Ma, C. and Emproto, C. (2024) Siligiite, IMA 2023-117. CNMNC Newsletter 78; *Mineralogical Magazine*, **88**, https://doi.org/10.1180/mgm.2024.23

IMA No. **2023-119**
Plumbojohntomaite
$PbFe^{2+}_2Fe^{3+}_2(PO_4)_3(OH)_3$
Pjtm
Yushui polymetallic deposit, about 16 km northeast of Meizhou City, Guangdong Province, China (24°25'18" N, 116°11'48" E)
Wei Yao, Peng Liu*, Guowu Li, Ningyue Sun, Rongxi Li, Wenqiang Yang, Wenlei Song and Chao Zhang
*E-mail: pengliu@nwu.edu.cn
Bjarebyite group
Monoclinic: $P2_1/m$; structure determined
a = 9.0999(4), b = 12.1911(6), c = 5.0176(2) Å, β = 100.671(4)°
9.102(80), 3.532(36), 3.156(76), 3.085(44), 2.971(45), 2.878(61), 2.734(100), 2.683(35)
Type material is deposited in the collections of the Geological Museum of China, No. 16, Yangrou Hutong, Xisi, Beijing 100031, People's Republic of China, catalogue number GMCTM2023011
How to cite: Yao, Y., Liu, P., Li, G., Sun, N., Li, R., Yang, W., Song, W. and Zhang, C. (2024) Plumbojohntomaite, IMA 2023-119. CNMNC Newsletter 78; *Mineralogical Magazine*, **88**, https://doi.org/10.1180/mgm.2024.23

IMA No. **2023-120**
Sperlingite
$(H_2O)K(Mn^{2+}Fe^{3+})(Al_2Ti)(PO_4)_4[O(OH)][(H_2O)_9(OH)]\cdot 4H_2O$
Sper
On the dump of the Hagendorf Süd mine, Oberpfalz, northeast Bavaria, Germany (49°39'01" N, 12°27'35" E)
Christian Rewitzer, Rupert Hochleitner, Ian E. Grey*, Anthony R. Kampf, Stephanie Boer, Colin M. MacRae, William G. Mumme, Nicholas C. Wilson and Cameron Davidson
*E-mail: ian.grey@csiro.au
Closely related to rewitzerite
Monoclinic: $P2_1/c$; structure determined
a = 10.428(2), b = 20.281(4), c =12.223(2) Å, β = 90.10(3)°
10.236(37), 7.447(52), 6.176(100), 5.191(35), 3.727(41), 3.101 (86), 2.979(35), 2.839(43)
Type material is deposited in the collections of the Bavarian State Mineral Collection, Theresienstrasse 41, 80333, München, Germany, registration number MSM38185 (holotype), and the Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, CA 90007, USA, catalogue number 76310 (cotype)
How to cite: Rewitzer, C., Hochleitner, R., Grey, I.E., Kampf, A.R., Boer, S., MacRae, C.M., Mumme, W.G., Wilson, N.C. and Davidson, C. (2024) Sperlingite, IMA 2023-120. CNMNC Newsletter 78; *Mineralogical Magazine*, **88**, https://doi.org/10.1180/mgm.2024.23

NOMENCLATURE/CLASSIFICATION PROPOSALS APPROVED IN FEBRUARY 2024

Nomenclature of the ancylite supergroup

(Yanjuan Wang, Fabrizio Nestola, Zengqian Hou, Ritsuro Miyawaki, Igor V. Pekov, Xiangping Gu, Guochen Dong and Kai Qu)

The ancylite supergroup is established. Minerals of the ancylite supergroup have the general crystal chemical formula $(M^{3+}_xM^{2+}_{2-x})(CO_3)_2[(OH)_x\cdot(2-x)H_2O]$. The supergroup is divided into the ancylite group ($1 \le x \le 1.5$), including eight valid species [ancylite-(La), ancylite-(Ce), calcioancylite-(La), calcioancylite-(Ce), calcioancylite-(Nd), gysinite-(La), gysinite-(Ce), gysinite-(Nd)], and the kozoite group ($1.5 < x \le 2$), including two valid species [kozoite-(La), kozoite-(Nd)].

OTHER ISSUES

Ideal formula for mackinawite

Five years ago, several chemical formulae of minerals were simplified by removing subordinate constituents, specifically minor chemical elements that were listed in parentheses after the dominating, species-defining constituent; more information on the changes to the formulae can be found in CNMNC Newsletter 50 [*Mineralogical Magazine*, **83**, 615–620 (2019)]. The recent publication of a paper [*American Mineralogist*, **109**, 401–407 (2024)] prompted us to modify the ideal formula of mackinawite. That mineral has been revised from $(Fe,Ni)_{1+x}S$ [x = 0–0.07] to FeS as the above paper showed that the composition of mackinawite corresponds to end-member FeS, with Ni, Co, and Cu present as subordinate constituents that are not included in the ideal formula. The formula of mackinawite in the IMA List of Minerals has been updated accordingly. This is an executive decision taken by the CNMNC officers.

Ideal formula for oftedalite

The chemical formula of oftedalite was reported in the 2009 Nickel–Nichols list as $KSc_2Be_3AlSi_{11}O_{30}$. Since the SCXRD study indicates that the $T1$ site is fully occupied by Si and that Al partially substitutes for Be at the $T2$ site, the formula was given as $KSc_2(Be,Al)_3Si_{12}O_{30}$ in the first release (September 2012) of the IMA List of Minerals. In December 2014 the formula of oftedalite was improperly changed to $KSc_2\square_2Be_3Si_{12}O_{30}$, which is not charge balanced. To rectify this error, the formula must be revised to $K(ScCa)\square_2Be_3Si_{12}O_{30}$. This latter formula better matches the electron microprobe data of oftedalite from the Heftetjern pegmatite, Tørdal, Norway – the only known occurrence – which shows $[Sc_{0.96}Ca_{0.79}Mn^{2+}_{0.18}Fe^{2+}_{0.04}Y_{0.03}]_{\Sigma 2.00}$ at the A site and $[Be_{2.91}Al_{0.09}]_{\Sigma 3.00}$ at the $T2$ site [*Canadian Mineralogist*, **44**, 943–949 (2006)]. This is an executive decision taken by the CNMNC officers.

https://doi.org/10.1180/mgm.2024.23 Published online by Cambridge University Press