



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

### Newsletter 81

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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 AUGUST 2024

##### IMA No. 2019-070a

Králíkite

BaCl<sub>2</sub>·2H<sub>2</sub>O

Kfe

Mining Plant I, ČSA Mine (Jan Karel), crosscut 0930, Karviná, Upper Silesian Basin, Czech Republic (49°50'35" N, 18°29'47" E)

Dalibor Matýšek, Jakub Jirásek\*, Juraj Majzlan, Jan Filip and Michal Osovský

\*E-mail: [jakub.jirasek@upol.cz](mailto:jakub.jirasek@upol.cz)

Known synthetic analogue

Monoclinic: *P*2<sub>1</sub>/*n*

$a = 6.7225(8)$ ,  $b = 10.906(1)$ ,  $c = 7.1301(8)$  Å,  $\beta = 91.101(6)^\circ$   
5.429(80), 4.919(55), 4.474(37), 4.413(100), 3.379(49),  
2.541(73), 2.404(39), 2.083(42)

Type material is deposited in the collections of the Department of Mineralogy and Petrology, National Museum, Cirkusová 1740, Praha 9, Czech Republic, catalogue number P1P 19/2019, and the Department of Mineralogy and Petrology, Moravian Museum, Zelný trh 6, Brno, Czech Republic, catalogue number A11366

How to cite: Matýšek, D., Jirásek, J., Majzlan, J., Filip, J. and Osovský, M. (2024) Králíkite, IMA 2019-070a. CNMNC Newsletter 81, *Mineralogical Magazine*, **88**, <https://doi.org/10.1180/mgm.2024.77>

##### IMA No. 2023-127a

Heimaeyite

Na<sub>3</sub>Al(SO<sub>4</sub>)<sub>3</sub>

Hme

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Cite this article: Bosi F., Hatert F., Pasero M. and Mills S.J. (2024) Newsletter 81, *Mineralogical Magazine* 1–6. <https://doi.org/10.1180/mgm.2024.77>

Fumarolic vent on the northern edge of crater of Eldfell volcano, Heimaey Island, Iceland (63°25'50" N, 20°14'48" W)  
Tonči Balić-Žunić\*, Anna Garavelli, Donatella Mitolo, Fabrizio Nestola, Martha G. Pamato and Maja B. Rasmussen

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

Known synthetic analogue

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

$a = 13.4326(9)$ ,  $c = 8.9818(7)$  Å

6.68(40), 4.16(17), 3.92(32), 3.13(100), 3.02(55), 2.72(10), 2.55(11), 2.026(10)

Type material is deposited in the collections of the Icelandic Institute of Natural History, 6-8, Urriðahóltsstræti 210, Garðabær, Iceland, sample number NI-30218

How to cite: Balić-Žunić, T., Garavelli, A., Mitolo, D., Nestola, F., Pamato, M.G. and Rasmussen, M.B. (2024) Heimaeyite, IMA 2023-127a. CNMNC Newsletter 81, *Mineralogical Magazine*, **88**, <https://doi.org/10.1180/mgm.2024.77>

#### IMA No. 2024-022

Cuprosenandorite

$\text{Ag}_{16}\text{Cu}_8\text{Pb}_{24}\text{Sb}_{72}\text{S}_{144}$

Csado

San José deposit, Oruro, Bolivia (17°57'39" S, 67°07'30" W)

Dan Topa\*, Berthold Stoeger, Frank Keutsch and Chris Stanley

\*E-mail: [dan.topa@nhm-wien.ac.at](mailto:dan.topa@nhm-wien.ac.at)

Chemically and structurally related to senandorite

Orthorhombic:  $Pna2_1$ ; structure determined

$a = 13.0146(2)$ ,  $b = 25.5576(4)$ ,  $c = 19.0936(2)$  Å

3.727(43), 3.416(64), 3.294(100), 3.002(34), 2.896(64), 2.743(38), 2.130(26), 2.056(27)

Type material is deposited in the collections of the Mineralogisch-Petrographische Abteilung, Naturhistorisches Museum, Burgring 7, A-1010 Wien, Austria, catalogue number O 3072

How to cite: Topa, D., Stoeger, B., Keutsch, F. and Stanley, C. (2024) Cuprosenandorite, IMA 2024-022. CNMNC Newsletter 81, *Mineralogical Magazine*, **88**, <https://doi.org/10.1180/mgm.2024.77>

#### IMA No. 2024-024

Zincostottite

$\text{ZnGe}(\text{OH})_6$

Zsto

Tsumeb mine, Tsumeb, Namibia (19°15' S, 17°42' E)

Anthony R. Kampf\*, Joy Désor, Chi Ma, Mark D. Welch and Gerhard Möhn

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

The Zn analogue of stottite

Tetragonal:  $P4_2/n$ ; structure determined

$a = 7.452(2)$ ,  $c = 7.4000(8)$  Å

3.719(100), 2.630(45), 2.146(15), 1.860(20), 1.663(51), 1.518(37), 1.237(12), 1.121(11)

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 76278 (holotype) and 76279 (cotype)

How to cite: Kampf, A.R., Désor, J., Ma, C., Welch, M.D. and Möhn, G. (2024) Zincostottite, IMA 2024-024. CNMNC Newsletter 81, *Mineralogical Magazine*, **88**, <https://doi.org/10.1180/mgm.2024.77>

#### IMA No. 2024-026

Oxyplumbopyrochlore

$\text{Pb}_2\text{Nb}_2\text{O}_6\text{O}$

Oppcl

Bayan Obo mine, Inner Mongolia, China (41°48'50" N, 110°00'41" E)

Li Yang, Haiyang Xian, Jianxi Zhu\*, Yiping Yang, Shan Li, Jiabin Xi, Bo Yang, Wenxiang Meng, Xiaoju Lin, Junfang Yu, Yuhuan Yuan, Yonggang Zhao, Guoying Yan, Jianyong Liu, Zhenyu Chen, Hongping He and Xianhua Li

\*E-mail: [zhujx@gig.ac.cn](mailto:zhujx@gig.ac.cn)

Pyrochlore supergroup

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

$a = 10.607(1)$  Å

3.062(76), 2.656(14), 2.039(8), 1.870(100), 1.594(44), 1.525(8), 1.320(6), 1.178(9)

Type material is deposited in the collections of the Geological Museum, Guangzhou Institute of Geochemistry, Chinese Academy of Sciences, Tianhe, Kehua Street 511, Guangzhou 510640, People's Republic of China, catalogue number Bayan-Obo-W2-OPb-pcl

How to cite: Yang, L., Xian, H., Zhu, J., Yang, Y., Li, S., Xi, J., Yang, B., Meng, W., Lin, X., Yu, J., Yuan, Y., Zhao, Y., Yan, G., Liu, J., Chen, Z., He, H. and Li, X. (2024) Oxyplumbopyrochlore, IMA 2024-005. CNMNC Newsletter 81, *Mineralogical Magazine*, **88**, <https://doi.org/10.1180/mgm.2024.77>

#### IMA No. 2024-028

Moiraitite

$\text{Pb}_{12}\text{Sb}_8\text{As}_8\text{S}_{36}$

Moir

Madoc, Hastings County, Ontario, Canada (43°42'17" N, 79°44'57" W)

Dan Topa\*, Berthold Stoeger, Frank Keutsch and Chris Stanley

\*E-mail: [dan.topa@nhm-wien.ac.at](mailto:dan.topa@nhm-wien.ac.at)

Sartorite homologue series

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

$a = 8.3726(2)$ ,  $b = 15.8995(4)$ ,  $c = 23.2249(6)$  Å,  $\alpha = 96.897(2)$ ,  $\beta = 90.015(2)$ ,  $\gamma = 89.624(2)^\circ$

3.879(75), 3.814(68), 3.294(95), 3.201(63), 3.190(72), 3.088(79), 2.779(64), 2.093(100)

Type material is deposited in the collections of the Canadian Museum of Nature, 240 McLeod Street, Ottawa, Ontario, Canada, catalogue number 12169 (holotype), and the Mineralogisch-Petrographische Abteilung, Naturhistorisches Museum, Burgring 7, A-1010 Wien, Austria, catalogue number O 3111 (cotype)

How to cite: Topa, D., Stoeger, B., Keutsch, F. and Stanley, C. (2024) Moiraitite, IMA 2024-027. CNMNC Newsletter 81, *Mineralogical Magazine*, **88**, <https://doi.org/10.1180/mgm.2024.77>

#### IMA No. 2024-029

Ferroinnelite

$\text{Ba}_4\text{Ti}_2\text{Na}(\text{NaFe}^{2+})\text{Ti}(\text{Si}_2\text{O}_7)_2[(\text{SO}_4)(\text{PO}_4)]\text{O}_2[\text{O}(\text{OH})]$

Finn

Phlogopite deposit, Kovdor massif, Kola Peninsula, Russia (67°35'21" N, 30°28'04" E)

Elena Sokolova\*, Fernando Cámara, Frank C. Hawthorne, Giancarlo Della Ventura and Simone Bernardini

\*E-mail: [elena.sokolova@umanitoba.ca](mailto:elena.sokolova@umanitoba.ca)

Seidozerite supergroup

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

$a = 5.3994(8)$ ,  $b = 7.0924(1)$ ,  $c = 14.7345(4)$  Å,  $\alpha = 98.409(2)$ ,  $\beta = 94.327(2)$ ,  $\gamma = 90.013(1)^\circ$

14.55(38), 3.934(22), 3.353(56), 2.776(19), 2.694(100), 2.250(17), 2.124(46), 2.055(17)

Type material is deposited in the collections of the Department of Natural History, Royal Ontario Museum, 100 Queens Park, Toronto, ON M5S2C6, Canada, catalogue number M61038

How to cite: Sokolova, E., Cámara, F., Hawthorne, F.C., Della Ventura, G. and Bernardini, S. (2024) Ferroinellite, IMA 2024-029. CNMNC Newsletter 81, *Mineralogical Magazine*, **88**, <https://doi.org/10.1180/mgm.2024.77>

#### IMA No. 2024-030

Yellowcatite

$\text{KNaFe}_2^{3+}(\text{Se}^{4+}\text{O}_3)_2(\text{V}_2^{5+}\text{O}_7)\cdot 7\text{H}_2\text{O}$

Yel

School Section #32 mine, Thompson district (aka Yellow Cat district), Grand Co., Utah, USA (38°51'11" N, 109°30'15" W) Anthony R. Kampf\*, Travis A. Olds, Chi Ma and Joe Marty

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

New structure type

Hexagonal:  $P\bar{6}m2$ ; structure determined

$a = 5.4966(7)$ ,  $c = 17.211(2)$  Å

17.15(100), 6.859(61), 5.736(34), 4.167(69), 3.193(82), 2.777(43), 2.730(57), 1.592(32)

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 76356 (holotype), 76357 (cotype) and 76358 (cotype)

How to cite: Kampf, A.R., Olds, T.A., Ma, C. and Marty, J. (2024) Yellowcatite, IMA 2024-030. CNMNC Newsletter 81, *Mineralogical Magazine*, **88**, <https://doi.org/10.1180/mgm.2024.77>

#### IMA No. 2024-031

Shenganfuite

$\text{PbTe}_3^{4+}\text{O}_5(\text{OH})\text{Cl}_3(\text{H}_2\text{O})$

Sgf

Moctezuma mine, Moctezuma, Sonora, Mexico (29°48' N, 109°40' W)

Hexiong Yang\*, Xiangping Gu, Guang Fan, Anthony R. Kampf, Brent Thorne, Ronald B. Gibbs and Robert T. Downs

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

New structure type

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

$a = 7.2243(1)$ ,  $b = 7.4975(2)$ ,  $c = 11.1856(2)$  Å,  $\alpha = 102.349(2)$ ,  $\beta = 93.408(2)$ ,  $\gamma = 106.407(2)^\circ$

9.558(100), 9.230(41), 7.228(27), 6.332(28), 4.896(13), 3.606(20), 3.183(21), 3.108(14)

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. 22737 (holotype), and the RRUFF Project, deposition no. R240002 (cotype)

How to cite: Yang, H., Gu, X., Fan, G., Kampf, A.R., Thorne, B., Gibbs, R.B. and Downs, R.T. (2024) Shenganfuite, IMA

2024-031. CNMNC Newsletter 81, *Mineralogical Magazine*, **88**, <https://doi.org/10.1180/mgm.2024.77>

#### IMA No. 2024-032

Clino-ferro-suenoite

$\square\text{Mn}_2^{2+}\text{Fe}_5^{2+}(\text{Si}_8\text{O}_{22})(\text{OH})_2$

Cfsue

Hilläng mines, 1 km E of Ludvika, Dalarna, Sweden (60°08'49" N, 15°13'10" E, 170 m a.s.l.)

Dan Holtstam\*, Fernando Cámara, Henrik Skogby, Alessandro De Leo and Andreas Karlsson

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

Amphibole supergroup

Monoclinic:  $C2/m$ ; structure determined

$a = 9.598(1)$ ,  $b = 18.3179(2)$ ,  $c = 5.3345(1)$  Å,  $\beta = 102.163(1)^\circ$   
8.33(100), 4.173(15), 3.278(21), 3.084(72), 2.784(18), 2.512(26), 1.526(16), 1.412(19)

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 #19191754

How to cite: Holtstam, D., Cámara, F., Skogby, H., De Leo, A. and Karlsson, A. (2024) Clino-ferro-suenoite, IMA 2024-032. CNMNC Newsletter 81, *Mineralogical Magazine*, **88**, <https://doi.org/10.1180/mgm.2024.77>

#### IMA No. 2024-033

Nancyrossite

$\text{FeGeO}_6\text{H}_5$

Ncy

Tsumeb mine – level 30, Tsumeb, Namibia (19°15'S, 17°42' E) Mark D. Welch\*, Jens Najorka, Annette K. Kleppe, Anthony R. Kampf and John Spratt

\*E-mail: [m.welch@nhm.ac.uk](mailto:m.welch@nhm.ac.uk)

The germanate analogue of jeanbandyite

Tetragonal:  $P4_2/n$ ; structure determined

$a = 7.3738(1)$ ,  $c = 7.2970(2)$  Å  
3.688(100), 3.649(31), 2.594(53), 1.844(29), 1.650(31), 1.646(37), 1.635(38), 1.503(36)

Type material is deposited in the collections of the Natural History Museum, Cromwell Road, London, SW7 5BD UK, catalogue numbers BM2024,1, BM2024,2 and BM2024,3

How to cite: Welch, M.D., Najorka, J., Kleppe, A.K., Kampf, A.R. and Spratt, J. (2024) Nancyrossite, IMA 2024-033. CNMNC Newsletter 81, *Mineralogical Magazine*, **88**, <https://doi.org/10.1180/mgm.2024.77>

### NEW MINERAL PROPOSALS APPROVED IN SEPTEMBER 2024

#### IMA No. 2023-012

Nacareniobsite-(Nd)

$\text{Ca}_2(\text{CaNd})\text{Na}_3\text{Nb}(\text{Si}_2\text{O}_7)_2(\text{OF})\text{F}_2$

Nns-Nd

Darai-Pioz alkaline massif, upper reaches of the Darai-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, Dmitriy I. Belakovskiy, Vitaliya A. Agakhanova and Sergey N. Britvin

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

Seidozerite supergroup

Monoclinic:  $P2_1/c$ ; structure determined

$a = 7.419(1)$ ,  $b = 5.657(1)$ ,  $c = 18.788(4)$  Å,  $\beta = 101.38(3)^\circ$   
9.16(17), 3.558(15), 3.059(100), 2.928(37), 2.782(21), 2.688(27),  
1.847(23), 1.674(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 5998/1

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., Belakovskiy, D.I., Agakhanova, V.A. and Britvin, S.N. (2024) Nacareniobsite-(Nd), IMA 2023-012. CNMNC Newsletter 81, *Mineralogical Magazine*, **88**, <https://doi.org/10.1180/mgm.2024.77>

#### IMA No. 2024-021

Proto-owyheeite

$\text{Ag}_9\text{Pb}_{40}\text{Sb}_{45}\text{S}_{112}$

Powry

Monte Arsiccio Mine (Sant'Olga tunnel), Sant'Anna di Stazzema, Stazzema, Lucca Province, Tuscany, Italy (43°58'N, 10°17' E)

Dan Topa\*, Berthold Stoeger, Frank Keutsch and Chris Stanley

\*E-mail: [dan.topa@nhm-wien.ac.at](mailto:dan.topa@nhm-wien.ac.at)

A homeotype of owyheeite

Monoclinic:  $P2_1/n$ ; structure determined

$a = 8.1696(2)$ ,  $b = 27.3377(4)$ ,  $c = 22.8584(4)$  Å,  $\beta = 90.078(2)^\circ$   
3.911(42), 3.476(100), 3.242(72), 3.224(49), 2.891(46),  
2.887(44), 2.823(38), 2.042(48)

Type material is deposited in the collections of the Mineralogisch-Petrographische Abteilung, Naturhistorisches Museum, Burgring 7, A-1010 Wien, Austria, catalogue number O 3026

How to cite: Topa, D., Stoeger, B., Keutsch, F. and Stanley, C. (2024) Proto-owyheeite, IMA 2024-021. CNMNC Newsletter 81, *Mineralogical Magazine*, **88**, <https://doi.org/10.1180/mgm.2024.77>

#### IMA No. 2024-025

Auropearceite

$[\text{Ag}_9\text{AuS}_4][\text{Ag}_6\text{As}_2\text{S}_7]$

Aupea

Šibeničný vrch epithermal deposit, near Nová Baňa, Žarnovica Co., Banská Bystrica Region, Slovakia (48°24'49" N, 18°38'14" E)

Tomáš Mikuš\*, Jozef Vlasáč, Juraj Majzlan, Jakub Plášil, Jiří Sejkora, Václav Petříček, Martin Števko and Peter Tuček

\*E-mail: [mikus@savbb.sk](mailto:mikus@savbb.sk)

Pearceite-polybasite group

Trigonal:  $P321$ ; structure determined

$a = 14.995(3)$ ,  $c = 12.115(2)$  Å  
12.17(65), 3.141(53), 3.037(100), 2.865(39), 2.536(25),  
2.410(17), 2.220(21), 1.876(23)

Type material is deposited in the collections of the Department of Mineralogy and Petrology, National Museum, Cirkusová 1740, 19300 Praha 9, Czech Republic, catalogue number P1P 17/2024

How to cite: Mikuš, T., Vlasáč, J., Majzlan, J., Plášil, J., Sejkora, J., Petříček, V., Števko, M. and Tuček, P. (2024) Auropearceite, IMA 2024-025. CNMNC Newsletter 81, *Mineralogical Magazine*, **88**, <https://doi.org/10.1180/mgm.2024.77>

#### IMA No. 2024-027

Huntingdonite

$\text{Pb}_{19}\text{Sb}_{16}\text{As}_6\text{S}_{51}\text{Cl}_2$

Hgd

Madoc, Hastings County, Ontario, Canada (43°42'17" N, 79°44'57" W)

Dan Topa\*, Berthold Stoeger, Frank Keutsch and Chris Stanley

\*E-mail: [dan.topa@nhm-wien.ac.at](mailto:dan.topa@nhm-wien.ac.at)

New structure type

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

$a = 8.3103(3)$ ,  $b = 24.2862(8)$ ,  $c = 25.6118(8)$  Å,  $\alpha = 66.945(2)^\circ$ ,  
 $\beta = 81.566(3)^\circ$ ,  $\gamma = 80.135(3)^\circ$   
4.13(49), 3.846(79), 3.517(100), 3.355(48), 3.253(43), 2.816(40),  
2.770(42), 2.077(91)

Type material is deposited in the collections of the Canadian Museum of Nature, 240 McLeod Street, Ottawa, Ontario, Canada, catalogue number 12172 (holotype), and the Mineralogisch-Petrographische Abteilung, Naturhistorisches Museum, Burgring 7, A-1010 Wien, Austria, catalogue number O 3112 (cotype)

How to cite: Topa, D., Stoeger, B., Keutsch, F. and Stanley, C. (2024) Huntingdonite, IMA 2024-027. CNMNC Newsletter 81, *Mineralogical Magazine*, **88**, <https://doi.org/10.1180/mgm.2024.77>

#### IMA No. 2024-034

Proxitwelfoldite

$\text{Pd}_3\text{Ni}_4\text{Te}_8$

Ptw

Museum sample coming from Kalgoorlie, Western Australia, Australia (30°46'30" S, 121°30'18" E)

Luca Bindi\*, Louis J. Cabri, Marek Mihalkovič, Frantisek Laufek and Sergey Krivovichev

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

Chemically related to monchetundraite

Tetragonal:  $P4_2/mnm$ ; structure determined

$a = 10.264(1)$ ,  $c = 5.4015(7)$  Å  
2.701(20), 2.491(100), 2.420(40), 2.388(30), 2.326(80),  
2.262(90), 2.209(45), 1.475(20)

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 17047/G

How to cite: Bindi, L., Cabri, L.J., Mihalkovič, M., Laufek, F. and Krivovichev, S. (2024) Proxitwelfoldite, IMA 2024-034. CNMNC Newsletter 81, *Mineralogical Magazine*, **88**, <https://doi.org/10.1180/mgm.2024.77>

#### IMA No. 2024-037

Zircarsite

$\text{Na}_{18}\text{Cu}_{12}\text{ZrO}_8(\text{AsO}_4)_8\text{Cl}_6$

Zca

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 a.s.l.)

Natalia N. Koshlyakova\*, Igor V. Pekov, Atali A. Agakhanov, Peter C. Burns, Emma Bullock, Vasilij O. Yapaskurt, Natalia V. Zubkova, Sergey N. Britvin, Robert M. Hazen and Elena S. Zhitova

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

Chemically and structurally related to arsmirandite, lehmannite and lebedevite

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

$a = 21.3341(5) \text{ \AA}$

9.51(87), 8.69(74), 5.320(100), 3.766(54), 2.664(71), 2.585(60), 2.430(60), 1.885(51)

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 6143/1

How to cite: Koshlyakova, N.N., Pekov, I.V., Agakhanov, A.A., Burns, P.C., Bullock, E., Yapaskurt, V.O., Zubkova, N.V., Britvin, S.N., Hazen, R.M. and Zhitova, E.S. (2024) Zircarsite, IMA 2024-037. CNMNC Newsletter 81, *Mineralogical Magazine*, **88**, <https://doi.org/10.1180/mgm.2024.77>

#### IMA No. 2024-039

Alexearlite

$\text{Hg}_3(\text{MoO}_4)\text{S}_2$

Alx

Lucky Boy mine, Mount Baldy-Ohio Mining District, Piute Co., Utah, USA (38°23'02" N, 112°16'27" W – holotype); McDermitt mine, Opalite Mining District, Humboldt Co., Nevada, USA (41°55'09" N, 117°48'44" W – cotype)

Travis A. Olds\*, Anthony R. Kampf, Chi Ma and Christopher Emproto

\*E-mail: [oldst@carnegiemnh.org](mailto:oldst@carnegiemnh.org)

New structure type

Orthorhombic:  $Pnma$ ; structure determined

$a = 8.0624(5)$ ,  $b = 6.9185(3)$ ,  $c = 13.0035(6) \text{ \AA}$

4.036(29), 3.461(61), 3.048(100), 2.619(35), 2.435(37), 1.785(42), 1.739(29), 1.538(27)

Type material is deposited in the collections of the Carnegie Museum of Natural History, 4400 Forbes Avenue, Pittsburgh, PA 15213, USA, catalogue numbers CM34754 (holotype) and CM34755 (cotype)

How to cite: Olds, T.A., Kampf, A.R., Ma, C. and Emproto, C. (2024) Alexearlite, IMA 2024-039. CNMNC Newsletter 81, *Mineralogical Magazine*, **88**, <https://doi.org/10.1180/mgm.2024.77>

#### IMA No. 2024-040

Belmonteite

$\text{CaMn}_2(\text{AsO}_4)_2 \cdot 7\text{H}_2\text{O}$

Bmo

Gambatesa mine, Graveglia Valley, Ne, Genoa Province, Liguria, Italy (44°21'34" N, 9°26'59" E)

Cristian Biagioni\*, Jiří Sejkora and Zdeněk Dolníček

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

New structure type

Orthorhombic:  $Cmce$ ; structure determined

$a = 8.8418(9)$ ,  $b = 23.031(2)$ ,  $c = 13.527(1) \text{ \AA}$

11.6(s), 8.9(mw), 7.1(mw), 5.37(mw), 3.51(mw), 3.049(mw), 2.905(mw), 2.684(mw)

Type material is deposited in the collections of the Dipartimento di Scienze della Terra, dell'Ambiente e della Vita, Università di Genova, Corso Europa 26, 16132 Genova, Italy, catalogue number MO720 (holotype), and the Museo di Storia Naturale, Università di Pisa, Via Roma 79, Calci (PI), Italy, catalogue number 20076 (cotype)

How to cite: Biagioni, C., Sejkora, J. and Dolníček, Z. (2024) Belmonteite, IMA 2024-040. CNMNC Newsletter 81, *Mineralogical Magazine*, **88**, <https://doi.org/10.1180/mgm.2024.77>

#### IMA No. 2024-041

Boevskite

$\text{Pb}_4(\text{TeO}_3)_2(\text{SO}_4)(\text{S}_2\text{O}_3)$

Boe

Boevskoe deposit, 35 km SW of the town of Kamensk-Uralskiy, Kaslinskiy District, Chelyabinsk Oblast, Southern Urals, Russia (56°14'44" N, 61°22'26" E)

Anatoly V. Kasatkin\*, Natalia V. Zubkova, Radek Škoda, Vladislav V. Gurzhiy, Fabrizio Nestola, Cristian Biagioni, Atali A. Agakhanov, Sergey N. Britvin, Jakub Plášil and Aleksey M. Kuznetsov

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

New structure type

Orthorhombic:  $Pnma$ ; structure determined

$a = 9.7764(7)$ ,  $b = 13.3622(10)$ ,  $c = 10.7213(9) \text{ \AA}$

6.683(65), 3.355(44), 3.344(52), 3.289(60), 3.230(100), 3.144(92), 3.120(51), 2.787(50)

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 6127/1

How to cite: Kasatkin, A.V., Zubkova, N.V., Škoda, R., Gurzhiy, V.V., Nestola, F., Biagioni, C., Agakhanov, A.A., Britvin, S.N., Plášil, J. and Kuznetsov, A.M. (2024) Boevskite, IMA 2024-041. CNMNC Newsletter 81, *Mineralogical Magazine*, **88**, <https://doi.org/10.1180/mgm.2024.77>

#### IMA No. 2024-042

Kantorite

$\text{K}_2\text{NaMg}(\text{SO}_4)_2\text{F}$

Kao

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 a.s.l.)

Igor V. Pekov\*, Sergey N. Britvin, Maria O. Bulakh, Dmitry I. Belakovskiy, Vasilii O. Yapaskurt, Anna G. Turchkova and Leonid P. Anikin

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

New structure type

Orthorhombic:  $Pna2_1$ ; structure determined

$a = 6.9894(7)$ ,  $b = 7.1378(7)$ ,  $c = 17.925(2) \text{ \AA}$

8.99(91), 4.83(57), 3.588(47), 3.511(74), 2.926(100), 2.805(44), 2.768(53), 2.510(55)

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 6141/1

How to cite: Pekov, I.V., Britvin, S.N., Bulakh, M.O., Belakovskiy, D.I., Yapaskurt, V.O., Turchkova, A.G. and Anikin, L.P. (2024) Kantorite, IMA 2024-042. CNMNC Newsletter 81, *Mineralogical Magazine*, **88**, <https://doi.org/10.1180/mgm.2024.77>

### NOMENCLATURE/CLASSIFICATION PROPOSALS APPROVED IN SEPTEMBER 2024

#### IMA 24-C: Definition of the neotype material for *chukhrovite-(Ce)*

(Daniela Mauro, Cristian Biagioni, Jiří Sejkora and Zdeněk Dolníček)

Proposal 24-C is accepted, and a neotype sample is defined for chukhrovite-(Ce). The type locality is the Pb-Zn ore deposit formerly exploited by the Tripi mine, Ali Terme, Peloritani Mountains, Messina Province, Sicily,

Italy. Neotype material is deposited in the mineralogical collection of the Museo di Storia Naturale, Università di Pisa, Via Roma 79, Calci (PI), Italy, under catalogue number 20075.