



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

### Newsletter 69

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

<sup>1</sup>Department of Geology, 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, 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 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 AUGUST 2022

##### IMA No. 2022-023

Changesite-(Y)

$(\text{Ca}_8\text{Y})\square\text{Fe}^{2+}(\text{PO}_4)_7$

Cgs-Y

Northeastern Oceanus Procellarum, The Moon (retrieved from the Chang'E-5 mission)

Ting Li, Ziyang Li, Zhixin Huang, Jun Zhong, Guang Fan, Dongfa Guo, Mingkuan Qin, Jieli Zhang, Junjie Li, Hanbin Liu, Linfei Qiu, Fenggang Wang, Sheng He, Apeng Yu, Ruiping Liu, Yong Wu, Liumin Deng, Zongyao Tai, Yongzhi He and Yan Lin

\*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. (2022) Newsletter 69. *Mineralogical Magazine* 86, 988–992. <https://doi.org/10.1180/mgm.2022.115>

\*E-mail: [liting\\_c@126.com](mailto:liting_c@126.com)

Cerite supergroup

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

$a = 10.3957(4)$ ,  $c = 37.207(2)$  Å

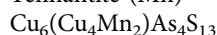
8.104(17), 6.469(23), 5.198(32), 4.794(24), 3.196(37), 2.868(83), 2.599(100), 1.719(19)

Type material is deposited in the mineralogical collections of the National Astronomical Observatories, Chinese Academy of Sciences, 20A Datun Road, Chaoyang District, Beijing 100101, People's Republic of China. catalogue number CE5C0600YJFM002GP

How to cite: Li, T., Li, Z., Huang, Z., Zhong, J., Fan, G., Guo, D., Qin, M., Zhang, J., Li, J., Liu, H., Qiu, L., Wang, F., He, S., Yu, A., Liu, R., Wu, Y., Deng, L., Tai, Z., He, Y. and Lin, Y. (2022) Changesite-(Y), IMA 2022-023. CNMNC Newsletter 69; *Mineralogical Magazine*, 86, <https://doi.org/10.1180/mgm.2022.115>.

## IMA No. 2022-040

Tennantite-(Mn)



Tnt-Mn

Choquelimpie mine, Ticnamar area, Parinacota Province, Arica y Parinacota, Chile (18°19'25" S, 69°16'38" W)

Frank Keutsch\*, Uwe Kolitsch, Dan Topa and Chris Stanley

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

Tetrahedrite group

Cubic:  $I\bar{4}3m$ ; structure determined $a = 10.285(1) \text{ \AA}$ 

4.199(4), 3.636(4), 2.969(100), 2.749(4), 2.571(17), 1.878(6), 1.818(45), 1.550(23)

Type material is deposited in the collections of the Naturhistorisches Museum Wien, Burgring 7, 1010 Wien, Austria, catalogue number O 2509

How to cite: Keutsch, F., Kolitsch, U., Topa, F. and Stanley, C. (2022) Tennantite-(Mn), IMA 2022-040. CNMNC Newsletter 69; *Mineralogical Magazine*, **86**, <https://doi.org/10.1180/mgm.2022.115>.

## IMA No. 2022-041

Hanswilkeite



Hsw

In abandoned open pit at the Nahal Gorer (wadi Gorer), Hatrurim basin, Negev desert, Israel (31°12'22" N, 35°14'37" E) Mikhail N. Murashko, Sergey N. Britvin\*, Maria G. Krzhizhanovskaya, Oleg S. Vereshchagin, Yevgeny Vapnik, Natalia S. Vlasenko, Yulia S. Shelukhina and Vladimir N. Bocharov

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

Known synthetic analogue

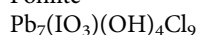
Monoclinic:  $C2/c$ ; structure determined $a = 7.0914(5)$ ,  $b = 11.3154(5)$ ,  $c = 5.3992(3) \text{ \AA}$ ,  $\beta = 113.244(7)^\circ$   
5.68(100), 3.270(31), 3.227(29), 2.921(45), 2.830(6), 2.510(12), 2.198(12), 1.880(10)

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 5862/1

How to cite: Murashko, M.N., Britvin, S.N., Krzhizhanovskaya, M.G., Vereshchagin, O.S., Vapnik, Y., Vlasenko, N.S., Shelukhina, Y.S. and Bocharov, V.N. (2022) Hanswilkeite, IMA 2022-041. CNMNC Newsletter 69; *Mineralogical Magazine*, **86**, <https://doi.org/10.1180/mgm.2022.115>.

## IMA No. 2022-043

Pohlite



Poh

La Compania mine, Sierra Gorda, Antofagasta Province, Antofagasta, Chile (22°56'27" S, 69°20'37" W)

Anthony R. Kampf\*, George E. Harlow and Chi Ma

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

New structure type

Triclinic:  $P\bar{1}$ ; structure determined $a = 7.3366(5)$ ,  $b = 9.5130(9)$ ,  $c = 16.243(1) \text{ \AA}$ ,  $\alpha = 81.592(7)^\circ$   
 $\beta = 84.955(7)^\circ$ ,  $\gamma = 89.565(6)^\circ$ 

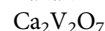
5.77(34), 3.818(91), 3.674(85), 3.399(47), 3.321(38), 1.994(45), 2.486(40), 2.378(100)

Cotype material is deposited in the collections of the American Museum of Natural History, 200 Central Park West, New York, NY 10024, USA, catalogue number 115471, and the Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, CA 90007, USA, catalogue numbers 76251 and 76252

How to cite: Kampf, A.R., Harlow, G.E. and Ma, C. (2022) Pohlite, IMA 2022-043. CNMNC Newsletter 69; *Mineralogical Magazine*, **86**, <https://doi.org/10.1180/mgm.2022.115>.

## IMA No. 2022-046

Bakakinite



Bkkn

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)

Igor V. Pekov\*, Atali A. Agakhanov, Natalia N. Koshlyakova, Natalia V. Zubkova, Vasilij O. Yapaskurt, Sergey N. Britvin, Marina F. Vigasina, Anna G. Turchkova and Maria A. Nazarova

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

Known synthetic analogue

Triclinic:  $P\bar{1}$  $a = 6.6241(4)$ ,  $b = 6.9231(5)$ ,  $c = 7.0050(4) \text{ \AA}$ ,  $\alpha = 86.885(7)^\circ$   
 $\beta = 63.696(6)^\circ$ ,  $\gamma = 83.300(7)^\circ$ 

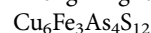
4.643(34), 3.261(18), 3.135(84), 3.106(100), 3.024(25), 2.959(77), 1.793(19), 1.683(23)

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 5872/1

How to cite: Pekov, I.V., Agakhanov, A.A., Koshlyakova, N.N., Zubkova, N.V., Yapaskurt, V.O., Britvin, S.N., Vigasina, M.F., Turchkova, A.G. and Nazarova, M.A. (2022) Bakakinite, IMA 2022-046. CNMNC Newsletter 69; *Mineralogical Magazine*, **86**, <https://doi.org/10.1180/mgm.2022.115>.

## IMA No. 2022-047

Zhengminghuaite



Zmh

Zimudang gold deposit, Guizhou Province, China (25°34'33.6" N, 105°28'53.4" E)

Xuexiang Gu\*, Yongmei Zhang, Guang Fan, Ting Li, Shuyi Dong, Yiwei Peng, Yingshuai Zhang and Ling Li

\*E-mail: [xuexiang\\_gu@163.com](mailto:xuexiang_gu@163.com)

Nowackiite isotypic series

Trigonal:  $R\bar{3}$ ; structure determined $a = 13.5373(2)$ ,  $c = 9.235(1) \text{ \AA}$ 

3.079(67), 3.067(100), 2.659(90), 1.882(99), 1.877(84), 1.606(93), 1.603(83), 1.601(85)

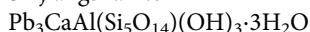
Type material is deposited in the collections of the Geological Museum of China, No. 16, Yangrou Hutong, Xisi, Beijing 100031, People's Republic of China, catalogue number M16136

How to cite: Gu, X., Zhang, Y., Fan, G., Li, T., Dong, S., Peng, Y., Zhang, Y. and Li, L. (2022) Zhengminghuaite, IMA 2022-047. CNMNC Newsletter 69; *Mineralogical Magazine*, **86**, <https://doi.org/10.1180/mgm.2022.115>.

## NEW MINERAL PROPOSALS APPROVED IN SEPTEMBER 2022

## IMA No. 2022-029

Shijiangshanite



Sjs

Shijiangshan mine, Linxi County, Chifeng, Inner Mongolia, China (43°46'37" N, 118°06'49" E)

Ningyue Sun, Guowu Li\*, Chang Li, Hongtao Shen, Yuan Xue and Jinhua Hao

\*E-mail: [liguowu@cugb.edu.cn](mailto:liguowu@cugb.edu.cn)

Chemically and structurally related to wickenburgite

Trigonal:  $R3c$ ; structure determined

$$a = 8.7257(3), c = 39.189(3) \text{ \AA}$$

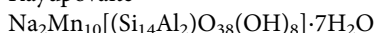
$$6.587(88), 4.160(96), 3.098(100), 2.859(57), 2.547(24), 2.244(39), 2.082(28), 1.706(25)$$

Type material is deposited in the mineralogical collections of the Geological Museum of China, Xisi, Yangrou Hutong No. 15, Xicheng District, Beijing, People's Republic of China, catalogue number M16135 (holotype), and the Crystal Structure Laboratory, China University of Geosciences, Beijing 100083, People's Republic of China, catalogue number SJS-1 (cotype)

How to cite: Sun, N., Li, G., Li, C., Shen, H., Xue, Y. and Hao, J. (2022) Shijiangshanite, IMA 2022-029. CNMNC Newsletter 69; *Mineralogical Magazine*, **86**, <https://doi.org/10.1180/mgm.2022.115>.

## IMA No. 2022-045

Kayupovaite



Kyp

Ushkatyn-III Mn-Fe deposit, near Zhairam town, Karagandy Province, Kazakhstan (48°16'06" N, 70°10'43" E)

Oleg S. Vereshchagin\*, Sergey N. Britvin, Aleksey I. Brusnitsyn, Anastasia K. Shagova, Elena N. Perova, Igor V. Pekov, Vladimir V. Shilovskikh, Natalia S. Vlasenko, Evgeniya Y. Avdontseva, Natalia V. Platonova and Vladimir N. Bocharov

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

The Na-dominant analogue of bannisterite

Monoclinic:  $C2/c$ ; structure determined

$$a = 24.9149(9), b = 16.4343(5), c = 22.3974(7) \text{ \AA}, \beta = 94.408(3)^\circ$$

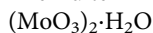
$$12.34(100), 3.45(8), 3.09(8), 2.85(12), 2.642(11), 2.614(7), 2.414(7), 2.393(6)$$

Type material is deposited in the collections of the Mineralogical Museum of the Department of Mineralogy, St. Petersburg State University, Universitetskaya Emb. 7/9, 199034 St. Petersburg, Russia, catalogue number ML OF 458

How to cite: Vereshchagin, O.S., Britvin, S.N., Brusnitsyn, A.I., Shagova, A.K., Perova, E.N., Pekov, I.V., Shilovskikh, V.V., Vlasenko, N.S., Avdontseva, E.Y., Platonova, N.V. and Bocharov, V.N. (2022) Kayupovaite, IMA 2022-045. CNMNC Newsletter 69; *Mineralogical Magazine*, **86**, <https://doi.org/10.1180/mgm.2022.115>.

## IMA No. 2022-050

Zhenrute



Zhr

Freedom #2 mine, Central Mining Area, Marysvale volcanic field, Piute Co., Utah, USA (38°29'43" N, 112°12'55" W)

Xiangping Gu\*, Hexiong Yang and Michael M. Scott

\*E-mail: [guxp2004@163.com](mailto:guxp2004@163.com)

Known synthetic analogue

Monoclinic:  $P2_1/m$ ; structure determined

$$a = 9.6790(6), b = 3.7065(2), c = 7.1029(4) \text{ \AA}, \beta = 102.391(5)^\circ$$

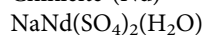
$$6.93(68), 4.73(47), 3.565(24), 3.183(100), 3.139(43), 3.003(31), 2.281(20), 2.107(20)$$

Type material is deposited in the collections of the University of Arizona Alfie Norville Gem and Mineral Museum, 15 N Church Ave, Tucson, AZ 85701, USA, catalogue no. 22720 (holotype), and the RRUFF Project, deposition no. R220010 (cotype)

How to cite: Gu, X., Yang, H. and Scott, M.M. (2022) Zhenrute, IMA 2022-050. CNMNC Newsletter 69; *Mineralogical Magazine*, **86**, <https://doi.org/10.1180/mgm.2022.115>.

## IMA No. 2022-051

Chinleite-(Nd)



Chi-Nd

Markey mine, Red Canyon, White Canyon District, San Juan Co., Utah, USA (37°32'57" N, 110°18'08" W)

Anthony R. Kampf\*, Chi Ma and Joe Marty

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

The Nd analogue of chinleite-(Y)

Trigonal:  $P3_221$ ; structure determined

$$a = 6.9540(7), c = 12.8590(9) \text{ \AA}$$

$$6.02(50), 5.46(70), 3.479(44), 3.014(84), 2.837(100), 2.148(38), 1.859(55), 1.706(27)$$

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 76253 and 76254

How to cite: Kampf, A.R., Ma, C. and Marty, J. (2022) Chinleite-(Nd), IMA 2022-051. CNMNC Newsletter 69; *Mineralogical Magazine*, **86**, <https://doi.org/10.1180/mgm.2022.115>.

## IMA No. 2022-052

Auroselenide

AuSe

Ause

Gaching ore occurrence, Maletoyvayam deposit, Koryak Highland, Kamchatka, Far East, Russia (60°19'51.87" N, 164°46'25.65" E)

Nadezhda Tolstykh, Anatoly Kasatkin\*, Fabrizio Nestola, Anna Vymazalová, Atali Agakhanov, Galina Palyanova and Vladimir Korolyuk

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

Known synthetic analogue

Monoclinic:  $C2/m$

$$a = 8.319(1), b = 3.616(1), c = 6.276(2) \text{ \AA}, \beta = 104.54(2)^\circ$$

$$4.015(54), 3.033(25), 2.780(100), 2.172(20), 1.911(16), 1.811(25), 1.653(13), 1.513(14)$$

Type material is deposited in the collections of Sobolev Institute of Geology and Mineralogy, Siberian Branch of the Russian Academy of Sciences, Central Siberian Geological Museum, Akademika Koptyuga 3, 630090 Novosibirsk, Russia, catalogue number IV-6/1

How to cite: Tolstykh, N., Kasatkin, A., Nestola, F., Vymazalová, A., Agakhanov, A., Palyanova, G. and Korolyuk, V. (2022) Auroselenide, IMA 2022-052. CNMNC Newsletter 69;

*Mineralogical Magazine*, **86**, <https://doi.org/10.1180/mgm.2022.115>.

IMA No. **2022-053**

Argentotetrahedrite-(Cd)

$\text{Ag}_6(\text{Cu}_4\text{Cd}_2)\text{Sb}_4\text{S}_{13}$

Attr-Cd

Au-Ag epithermal deposit Rudno nad Hronom, Žarnovica Co., Banská Bystrica Region, Slovakia (48°23'47" N, 18°40'57" E)

Tomáš Mikuš\*, Juraj Majzlan, Jiří Sejkora, Jozef Vlasáč, Gwladys Steciuk, Jakub Plášil, Christiane Rößler and Christian Matthes

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

Tetrahedrite group

Cubic:  $I43m$ ; structure determined

$a = 10.65(2) \text{ \AA}$

3.074(100), 2.846(6), 2.663(26), 2.510(6), 1.944(6), 1.883(48), 1.728(5), 1.606(30)

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 8/2022

How to cite: Mikuš, T., Majzlan, J., Sejkora, J., Vlasáč, J., Steciuk, G., Plášil, J., Rößler, C. and Matthes, C. (2022) Argentotetrahedrite-(Cd), IMA 2022-053. CNMNC Newsletter 69; *Mineralogical Magazine*, **86**, <https://doi.org/10.1180/mgm.2022.115>.

IMA No. **2022-054**

Pendevilleite-(Y)

$\text{Mg}_2\text{Y}_3\text{Al}(\text{UO}_2)_2(\text{CO}_3)_7(\text{OH})_6(\text{H}_2\text{O})_{16}$

Pnv-Y

Kamoto East Cu-Co deposit, Kolwezi mining district, Lualaba, Democratic Republic of the Congo (10°43'08.8" S, 25°25'04.7" E)

Jakub Plášil\*, Gwladys Steciuk, Radek Škoda, Simon Philippo and Mael Guennou

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

New structure type

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

$a = 11.9534(6)$ ,  $b = 13.499(2)$ ,  $c = 16.239(1) \text{ \AA}$ ,  $\alpha = 107.183(5)$ ,  $\beta = 92.532(5)$ ,  $\gamma = 110.127(5)^\circ$

15.3(100), 11.44(23), 10.26(33), 8.35(32), 8.04(28), 7.16(21), 6.84(17), 6.35(28)

Type material is deposited in the collections of the Musée d'Histoire Naturelle, Rue Münster 25, Luxembourg 2160, Luxembourg, catalogue number VP230

How to cite: Plášil, J., Steciuk, G., Škoda, R., Philippo, S. and Guennou, M. (2022) Pendevilleite-(Y), IMA 2022-054. CNMNC Newsletter 69; *Mineralogical Magazine*, **86**, <https://doi.org/10.1180/mgm.2022.115>.

IMA No. **2019-067b**

Deltanitrogen

N

$\delta\text{N}$

As inclusion within diamonds from the São Luis river alluvial deposits, Juína, Mato Grosso, Brazil (11°29'35" S, 58°58'14" W)

Oliver Tschauner\*, Oded Navon and Christian Schmidt

\*E-mail: [oliver.tschauner@unlv.edu](mailto:oliver.tschauner@unlv.edu)

Known synthetic analogue

Orthorhombic:  $Pccn$ ; structure determined

$a = 8.442(10)$ ,  $b = 8.136(9)$ ,  $c = 5.974(10) \text{ \AA}$

2.661(100), 2.655(40), 2.630 (53), 2.582(47), 2.438(31), 2.426 (55), 2.406(35), 2.369(42)

Type material is deposited in the mineralogical collections of the Royal Ontario Museum, 100 Queens Park, Toronto, ON M5S 2C6, Canada, accession number M59805

How to cite: Tschauner, O., Navon, O. and Schmidt, C. (2022) Deltanitrogen, IMA 2019-067b. CNMNC Newsletter 69; *Mineralogical Magazine*, **86**, <https://doi.org/10.1180/mgm.2022.115>.

**NOMENCLATURE/CLASSIFICATION PROPOSALS APPROVED IN AUGUST 2022**

*Nomenclature of polymorphs and polysomes*

New guidelines for the nomenclature of polymorphs and polysomes have been approved by the CNMNC:

– *Polymorphs with different crystal systems* are distinguished by the prefixes cubo- (cubic), hexa- (hexagonal), tetra- (tetragonal), trigo- (trigonal), ortho- (orthorhombic), clino- (monoclinic), and anortho- (triclinic).

– *Polymorphs with different crystal systems but showing a pseudosymmetry* should show the prefix “pseudo-”.

– *Polymorphs with the same crystal system but different space groups* are distinguished by the prefix “para-”. If three or more polymorphs show the same crystal system but different space groups, the space group notation may be added as a suffix, but such a nomenclature should be avoided if possible.

– *Polymorphs with the same space group* are distinguished by the prefix “para-”.

– *Minerals with polymorph suffixes but with different chemical compositions* cannot be considered as true polymorphs, so we recommend using the prefix “meta-”, which indicates a close but significantly different chemical composition.

– *Polysomatic symbols* have to be placed as a suffix, which indicates the number and types of modules which alternate in the structure as in the hōgbomite supergroup, or as prefixes as in the sartorite homologous series.

These recommendations have to be applied for future new mineral proposals, but the modifications of historical and well-established names have to pass through the CNMNC for approval. In order to be consistent with the new guidelines, 25 mineral names were modified: domeykite- $\beta$  becomes trigodomeykite, fergusonite-(Y)- $\beta$  becomes clinofergusonite-(Y), fergusonite-(Ce)- $\beta$  becomes clinofergusonite-(Ce), fergusonite-(Nd)- $\beta$  becomes clinofergusonite-(Nd), ice-VII becomes cubo-ice, roselite- $\beta$  becomes anorthoroselite, sulfur- $\beta$  becomes clinosulphur, mertieite-II becomes mertieite, mertieite-I becomes pseudomertieite, uranophane- $\alpha$  becomes uranophane, uranophane- $\beta$  becomes parauranophane, gersdorffite- $P2_13$  becomes gersdorffite, gersdorffite- $Pa3$  becomes paragersdorffite, gersdorffite- $Pca2_1$  becomes orthogersdorffite, betalomonosovite becomes paralomonosovite, lammerite- $\beta$  becomes paralammerite, nováčekite-I becomes hydronováčekite, nováčekite-II becomes nováčekite, halloysite-7 $\text{Å}$  becomes halloysite, halloysite-10 $\text{Å}$  becomes hydrohalloysite, metauranocircite-I becomes metauranocircite, taimyrite-I becomes taimyrite, uranocircite-II becomes uranocircite, andorite IV becomes quatrandorite, and andorite VI becomes senandorite.

**NOMENCLATURE/CLASSIFICATION PROPOSALS APPROVED  
IN SEPTEMBER 2022*****Voting proposal 22-E: Redefinition of braggite and vysotskite***

The proposal 22-E is accepted. The ideal formula for braggite is redefined as PdPt<sub>3</sub>S<sub>4</sub>. The ideal formula for vysotskite is redefined as PdS. The ideal formula of cooperite (PtS) remains as currently given in the IMA List of Minerals.

***Uranotungstite: revised formula***

Recently, a paper has been published [*Am. Mineral.*, **107**, 1709–1716 (2022)], in which the chemical formula of uranotungstite

is revised based on its crystal structure determination. From these data, collected on the type material, it is shown that the species is not Fe<sup>2+</sup>-dominant, as in the original description [*Tschermaks Mineral. Petrogr. Mitt.*, **34**, 25–34 (1985)], but Ba-dominant. Consequently, in agreement with the new chemical and structural data obtained on this mineral and with the dominant constituent rule, the formula of uranotungstite is modified from (Fe<sup>2+</sup>,Ba,Pb)(UO<sub>2</sub>)<sub>2</sub>(WO<sub>4</sub>)(OH)<sub>4</sub>·12H<sub>2</sub>O to Ba(UO<sub>2</sub>)<sub>2</sub>W<sub>2</sub>O<sub>8</sub>(OH)<sub>2</sub>·H<sub>2</sub>O. This is an executive decision taken by the CNMNC officers.