



## IMA Commission on New Minerals, Nomenclature and Classification (CNMNC) – Newsletter 83

Ferdinando Bosi<sup>1,\*</sup>, Frédéric Hatert<sup>2,\*\*</sup>, Marco Pasero<sup>3,\*\*</sup>, and Stuart J. Mills<sup>4,\*\*\*</sup>

<sup>1</sup>Dipartimento di Scienze della Terra, Sapienza Università di Roma,  
Piazzale Aldo Moro 5, 00185 Rome, Italy

<sup>2</sup>Laboratoire de Minéralogie, Université de Liège, Bâtiment B18,  
Sart Tilman, 4000 Liège, Belgium

<sup>3</sup>Dipartimento di Scienze della Terra, Università di Pisa,  
Via Santa Maria 53, 56126 Pisa, Italy

<sup>4</sup>Gallery of Natural Art, P.O. Box 830460, Richardson, TX 75083, USA

\*Chair, CNMNC

\*\*Vice-Chair, CNMNC

\*\*\*Secretary, CNMNC

**Correspondence:** Marco Pasero (marco.pasero@unipi.it)

Published: 12 February 2025

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 X-ray powder 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 *European Journal of Mineralogy* 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.

### 1 New mineral proposals approved in December 2024

IMA no. 2023-020a

Metaheimite

$\text{PbCu}_2(\text{AsO}_4)(\text{OH})_3$

Mhim

Grosses Chaltal deposit, Mürtshenalp district, Glarus, Switzerland (47°04'09.9" N, 9°11'26.5" E)

Thomas Malcherek\*, Boriana Mihailova, Jochen Schlüter, Philippe Roth, and Nicolas Meisser

\* E-mail: thomas.malcherek@uni-hamburg.de

New structure type

Monoclinic:  $P2_1/n$ ; structure determined

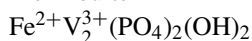
$a = 5.8347(4)$ ,  $b = 7.7528(6)$ ,  $c = 13.8899(9)$  Å,  
 $\beta = 90.018(3)^\circ$   
 7.070(43), 3.863(67), 3.139(100), 2.926(38), 2.778(37),  
 2.673(59), 2.546(41), 1.609(44)

Type material is deposited in the collections of the Mineralogical Museum, Leibniz-Institut zur Analyse des Biodiversitätswandels, Grindelallee 48, 20146 Hamburg, Germany, registration number ro-3702

How to cite: Malcherek, T., Mihailova, B., Schlüter, J., Roth, P., and Meisser, N.: Metaheimitite, IMA 2023-020a, in: CNMNC Newsletter 83, Eur. J. Mineral., 37, <https://doi.org/10.5194/ejm-37-75-2025>, 2025.

#### IMA no. 2024-036

Meizhouite



Mzh

Yushui deposit, about 16 km northeast of Meizhou, Guangdong Province, China (24°25'18" N, 116°11'48" E)

Wei Yao, Peng Liu\*, Guowu Li, Ningyue Sun, Yuan Xue, Changzhi Wu, Wenqiang Yang, Wenlei Song, and Nigel Cook

\* E-mail: pengliu@nwu.edu.cn

Lazulite group

Monoclinic:  $P2_1/c$ ; structure determined

$a = 7.2992(9)$ ,  $b = 7.4560(5)$ ,  $c = 7.475(1)$  Å,  
 $\beta = 120.53(1)^\circ$

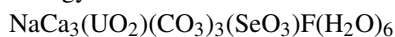
6.383(36), 4.871(58), 3.338(100), 3.244(49), 3.164(39),  
 2.290(28), 2.026(22), 1.614(18)

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 GM-CTM2024006

How to cite: Yao, Q., Liu, P., Li, G., Sun, N., Xue, Y., Wu, C., Yang, W., Song, W., and Cook, N.: Meizhouite, IMA 2024-036, in: CNMNC Newsletter 83, Eur. J. Mineral., 37, <https://doi.org/10.5194/ejm-37-75-2025>, 2025.

#### IMA no. 2024-063

Szilagyite



Szg

Pickett Corral mine, Montrose Co., Colorado, USA (38°11'50.0" N, 108°50'30.0" W)

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

\* E-mail: oldst@carnegiemnh.org

New structure type

Trigonal:  $R3c$ ; structure determined

$a = 9.6542(9)$ ,  $c = 33.465(5)$  Å

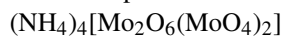
5.916(100), 4.836(58), 3.744(77), 3.125(33), 2.960(60),  
 2.795(62), 1.828(40), 1.744(35)

Type material is deposited in the collections of the Carnegie Museum of Natural History, 4400 Forbes Avenue, Pittsburgh, PA 15213, USA, catalogue number CM34760

How to cite: Olds, T. A., Emproto, C., Kampf, A. R., Ma, C., and Marty, J.: Szilagyite, IMA 2024-063, in: CNMNC Newsletter 83, Eur. J. Mineral., 37, <https://doi.org/10.5194/ejm-37-75-2025>, 2025.

#### IMA no. 2024-064

Stunorthropite



Snp

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, Anthony R. Kampf, Ronald B. Gibbs, John Rakovan, and Robert T. Downs

\* E-mail: hyang@arizona.edu

Known synthetic analogue

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

$a = 7.9503(2)$ ,  $b = 7.2863(1)$ ,  $c = 7.2724(2)$  Å,  
 $\alpha = 94.397(1)$ ,  $\beta = 114.556(1)$ ,  $\gamma = 82.617(1)^\circ$

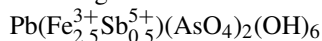
7.202(39), 6.343(100), 5.072(38), 4.831(57), 3.651(73),  
 3.351(53), 3.291(50), 3.194(16)

Type material is deposited in the collections of the New Mexico Bureau of Geology and Mineral Resources, Mineral Museum, 801 Leroy Place, Socorro, NM 87801-4796, USA, catalogue number 19195 (holotype), and the RRUFF Project, deposition number R240001 (cotype)

How to cite: Yang, H., Gu, X., Kampf, A. R., Gibbs, R. B., Rakovan, J., and Downs, R. T.: Stunorthropite, IMA 2024-064, in: CNMNC Newsletter 83, Eur. J. Mineral., 37, <https://doi.org/10.5194/ejm-37-75-2025>, 2025.

#### IMA no. 2024-065

Stibiosegnitite



Ssgt

Phosphatno-Arsenatnaya Vein, 245 m level of the southern open pit of the Murzinskoe deposit, Krasnoshchyokovsky District, Altai Krai, Western Siberia, Russia (51°35'24.1" N, 82°36'41.4" E)

Anatoly V. Kasatkin\*, Natalia V. Zubkova, Radek Škoda, Nikita V. Chukanov, Fabrizio Nestola, Vladislav V. Gurzhiy, Atali A. Agakhanov, Dmitry I. Belakovskiy, and Vladimir S. Lednev

\* E-mail: anatoly.kasatkin@gmail.com

Alunite supergroup

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

$a = 7.3462(7)$ ,  $c = 17.115(2)$  Å  
 5.967(83), 3.674(51), 3.088(100), 2.857(31), 2.554(17),  
 2.284(23), 1.988(22), 1.837(15)

Type material is deposited in the collections of the Fersman Mineralogical Museum, Russian Academy of Sciences, Leninsky Pr. 18-2, 119071 Moscow, Russia, registration number 6154/1

How to cite: Kasatkin, A. V., Zubkova, N. V., Škoda, R., Chukanov, N. V., Nestola, F., Gurzhiy, V. V., Agakhanov, A. A., Belakovskiy, D. I., and Lednev, V. S.: Stibiosegnitite, IMA 2024-065, in: CNMNC Newsletter 83, Eur. J. Mineral., 37, <https://doi.org/10.5194/ejm-37-75-2025>, 2025.

## 2 New mineral proposals approved in January 2025

### IMA no. 2024-060

Anningite-(Ce)  
 $(\text{Ca}_{0.5}\text{Ce}_{0.5}^{4+})(\text{VO}_4)$   
 Aig-Ce

Gara Samani Formation, about 40 km east of the village of Meguidene, 2 km southeast of the RN 51 national road linking the towns of Timimoun and El Menia, Algeria (29°41'31.14" N, 1°56'20.62" E)

Dorota Środek\*, Rafał Juroszek, Georgia Cametti, Madani Benyoucef, Imad Bouchemla, Tomasz Krzykowski, and Marjusz Salamon

\* E-mail: dorota.srodek@us.edu.pl

Xenotime group

Tetragonal:  $I4_1/amd$ ; structure determined

$a = 7.1500(4)$ ,  $c = 6.3343(7)$  Å  
 3.575(100), 2.684(61), 2.528(14), 2.231(12), 1.840(56),  
 1.788(16), 1.599(12), 1.488(17)

Type material is deposited in the collections of the Natural History Museum, Reichklarastrasse 10, 55116 Mainz, Germany, catalogue number NHMMZ M 2024/2 LS

How to cite: Środek, D., Juroszek, R., Cametti, G., Benyoucef, M., Bouchemla, I., Krzykowski, T., and Salamon, S.: Anningite-(Ce), IMA 2024-060, in: CNMNC Newsletter 83, Eur. J. Mineral., 37, <https://doi.org/10.5194/ejm-37-75-2025>, 2025.

### IMA no. 2024-067

Dulanggouite

$\text{Bi}_6\text{Te}_3$

Dlg

Dulanggou gold mine, about 250 km west of Chengdu, China (30°58'50" N, 101°36'30" E)

Shiji Zheng\*, Cuihua Chen, Yuan Xue, Weiguang Zhu, Zhongjie Bai, Guowu Li, Ningyue Sun, and Kaixuan Li

\* E-mail: zhengshiji@mail.gyig.ac.cn

Known synthetic analogue

Trigonal:  $P\bar{3}m1$ ; structure determined

$a = 4.4639(4)$ ,  $c = 17.904(1)$  Å  
 3.252(100), 2.367(24), 2.238(37), 1.993(11), 1.843(11),  
 1.626(9), 1.488(13), 1.423(18)

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 GM-CTM2024009

How to cite: Zheng, S., Chen, C., Xue, Y., Zhu, W., Bai, Z., Li, G., Sun, N., and Li, K.: Dulanggouite, IMA 2024-067, in: CNMNC Newsletter 83, Eur. J. Mineral., 37, <https://doi.org/10.5194/ejm-37-75-2025>, 2025.

### IMA no. 2024-068

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

$(\text{NH}_4)_2\text{Mg}(\text{UO}_2)_2(\text{SO}_4)_4(\text{H}_2\text{O})_8$

Svo-NH<sub>4</sub>

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

Anthony R. Kampf\*, Travis A. Olds, Jakub Plášil, Chi Ma, Aaron J. Celestian, and Joe Marty

\* E-mail: akampf@nhm.org

The ammonium analogue of svornostite

Orthorhombic:  $Pmn2_1$ ; structure determined

$a = 13.0259(9)$ ,  $b = 8.2909(4)$ ,  $c = 11.2589(4)$  Å  
 8.287(28), 6.538(100), 5.118(32), 4.649(47), 3.343(44),  
 3.020(42), 2.112(27), 2.067(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 76445, 76446, 76447, and 76448

How to cite: Kampf, A. R., Olds, T. A., Plášil, J., Ma, C., Celestian, A. J., and Marty, J.: Svornostite-(NH<sub>4</sub>), IMA 2024-068, in: CNMNC Newsletter 83, Eur. J. Mineral., 37, <https://doi.org/10.5194/ejm-37-75-2025>, 2025.

## 3 Nomenclature/classification proposals approved in November 2024

### 3.1 IMA 24-D: kaolinite neotype proposal

(Jeffrey de Fourestier, David L. Bish, Juergen Schieber, Chengdong Liu, and Shanchu Han)

Proposal 24-D is accepted, and neotype samples are defined for kaolinite. The type locality is the village of Gaoling, Jiangxi Province, China. Neotype material is deposited in the mineralogical collection of the Canadian Museum of Nature, Ottawa, Canada, under catalogue numbers CMNMC 91699 [JDZ-K8] and CMNMC 91700 [JDZ-W1].

### 3.2 IMA 24-E: proposal to change the formula of metaschoderite back to $\text{Al}_2(\text{PO}_4)(\text{VO}_4) \cdot 6\text{H}_2\text{O}$

(Erika Kiechle and Thomas Witzke)

Proposal 24-E on metaschoderite is accepted, and the formula of this species is changed back to  $\text{Al}_2(\text{PO}_4)(\text{VO}_4) \cdot 6\text{H}_2\text{O}$ , according to the original description.

## 4 Nomenclature/classification proposals approved in December 2024

### Nolanite supergroup – another round of voting

(Nikita V. Chukanov, Vasilisa M. Gridchina, Ramiza K. Rastsvetaeva, Natalia V. Zubkova, and Igor V. Pekov)

Subsequent to the approval of the nolanite supergroup report (see CNMNC newsletter 80) and during the review of the manuscript, some additional queries arose. Therefore a second round of voting has become necessary on a revised version in which the criticism raised has been addressed. The main update with respect to the previous approval is the following: the nolanite supergroup has been subdivided into three groups (kamiokite group, nolanite group, rinmanite group) not only in accordance with the largest charge of the species-defining octahedral cations (namely, cations at the *M1* and *M2* sites, which are considered as a whole) but also taking into account the dominant *X* species ( $X = \text{O}$  or  $\text{OH}$ ).

## 5 Nomenclature/classification proposals approved in January 2025

### Establishment of the svornostite group and renaming of svornostite and oldsite

(Anthony R. Kampf, Travis A. Olds, Jakub Plášil, Chi Ma, Aaron J. Celestian, and Joe Marty)

Concurrent with the approval of the new mineral svornostite-( $\text{NH}_4$ ) (IMA no. 2024-068; this newsletter), the svornostite group has been established. As part of this, the minerals svornostite and oldsite have been renamed svornostite-(**K**) and oldsite-(**K**), respectively. The svornostite group is divided into the svornostite subgroup, which includes svornostite-(**K**), svornostite-( $\text{NH}_4$ ), and oldsite-(**K**), and the rietveldite subgroup, which includes rietveldite and zincorietveldite.

## 6 Other issues

### Voting majority for CNMNC proposals on new minerals, nomenclature changes, and mineral groups

(Ferdinando Bosi, Frédéric Hatert, Marco Pasero, and Stuart J. Mills)

The officers' proposal, stemming from discussions among members during the CNMNC business meeting on 20 August 2024, at the European Mineralogical Conference (EMC) in Dublin, to increase the voting majority required for proposals submitted to the CNMNC has been approved. As a result, the CNMNC has adopted a new threshold requiring more than 75 % positive votes for the approval of new minerals, nomenclature changes, and the establishment of mineral groups or supergroups. The chair or the officer in charge retains the authority to suspend voting if significant concerns are raised by members.