



International Mineralogical Association
COMMISSION ON NEW MINERALS, NOMENCLATURE AND CLASSIFICATION

2022-2026 IMA-CNMNC REPORT

Rome, 6 July, 2026

The Commission on New Minerals, Nomenclature and Classification (CNMNC) of the International Mineralogical Association (IMA) was formed in July 2006 by a merger between the Commission on New Minerals and Mineral Names (established in 1959) and the Commission on Classification of Minerals.

1. MISSION

The mission of the CNMNC is to provide a rigorous, consistent, and internationally accepted framework for mineral systematics. The Commission establishes and applies procedures for the approval of new mineral species, redefinitions, discreditations, nomenclature changes, and the classification of minerals, mineral groups, and supergroups.

2. ORGANISATION

2.1. Officers

Chairman: Ferdinando Bosi (Rome, Italy)
Vice-Chairmen: 1st - Frédéric Hatert (Liège, Belgium) and 2nd - Marco Pasero (Pisa, Italy)
Secretary: Stuart Mills (Richardson, USA)

2.2. Voting members

The full membership of CNMNC is given in §5 (below).

New members representing *Austria*, *Canada*, and *Greece*, as well as one member (from China) appointed under Art. 12(d) of the IMA Constitution, joined the CNMNC between July 2025 and July 2026.

2.3. Voting participation and representation

The representative from *Ukraine* has not participated in CNMNC voting since appointment in 2022. The representative from *India* has not taken part in the voting process during the past two years.

The representative from *New Zealand* stepped down in June 2026. *Denmark*, *New Zealand*, *Norway*, and *Uzbekistan* currently have no appointed representative to the CNMNC.

2.4 Website

To provide increasingly comprehensive information, the CNMNC website (<http://cnmnc.units.it>) is continuously updated with CNMNC-newsletters, CNMNC contributions to Elements, and various news items. The CNMNC expresses its gratitude to the webmaster, Cristiano Landucci, and to the University of Trieste, which hosts the website.

3. ACTIVITIES (2022-2026)

The CNMNC distributes its workload among four officers. The Chairman coordinates the evaluation of new mineral proposals; the 1st Vice-Chairman is responsible for proposed changes to existing nomenclature (discreditations and redefinitions) and new nomenclatures; and the 2nd Vice-Chairman oversees the IMA List of Mineral Species and the CNMNC Newsletter. The Secretary oversees proposals concerning classifications/nomenclatures. The voting members of the CNMNC evaluate all proposals (new minerals, changes in existing minerals, mineral

groups) and cast their votes monthly on new-mineral proposals and, when required, on other types of proposals. The distribution of proposals and the subsequent rounds of comments and voting are carried out electronically. CNMNC members are informed monthly about the results of proposal voting through memoranda.

During the 2022-2026 term, the CNMNC handled a substantial number of proposals, reflecting both the continuing vitality of mineral discovery and the increasing complexity of mineral nomenclature and classification.

New Minerals

1. In 2022, 163 proposals for new minerals were handled, of which 120 were approved
2. In 2023, 143 proposals for new minerals were handled, of which 113 were approved
3. In 2024, 110 proposals for new minerals were handled, of which 89 were approved
4. In 2025, 114 proposals for new minerals were handled, of which 77 were approved
5. In 2026, as of 6 July 2026, 50 new-mineral proposals have been distributed to the CNMNC members. Of these, 16 have been approved, while 7 were rejected and the remaining are still under evaluation.

Redefinitions, discreditations, revalidations, renamings, and type material redefinitions

1. 21-I: Redefinition of rouvilleite (Jan. 2022).
2. 21-J: Redefinition of angastonite as an amorphous mineral (Jan. 2022).
3. 21-K: Redefinition of grandviewite (Jan. 2022).
4. 21-L: Discreditation of luinaite-(OH) (Jan. 2022).
5. 22-A: Redefinition of montanite.
6. 22-B: Redefinition of moxuanxuenite.
7. 22-C: Arrojadite-(BaFe) renamed sigismundite.
8. 22-D: Discreditation of borishanskiite as identical to polarite.
9. 22-E: Redefinition of braggite and vysotskite.
10. 22-F: Holotype redefinition for donnayite-(Y).
11. 22-H: Redefinition of bystrite.
12. 23-A: Discreditation of platarsite as a S-rich variety of sperrylite.
13. 23-B: Revalidation of borishanskiite.
14. 23-D: Redefinition of benyacarite.
15. 23-E: Redefinition of avdeevite.
16. 23-F: Discreditation of minasgeraisite-(Y).
17. 23-G: Redefinition of amorphous georgeite as $[\text{Cu}(\text{OH})_{2-x}(\text{H}_2\text{O})_x][\text{CO}_3]_{x/2}$.
18. 23-H: Redefinition of testibiopalladite, PdSbTe .
19. 24-A: Definition of a neotype material for elbaite.
20. 24-C: Definition of a neotype material for chukhrovite-(Ce).
21. 24-D: Definition of neotype material for kaolinite.
22. 24-E: Redefinition of metaschoderite, back to $\text{Al}_2(\text{PO}_4)(\text{VO}_4) \cdot 6\text{H}_2\text{O}$.
23. 24-F: Definition of neotype material for simonellite, $\text{C}_{19}\text{H}_{24}$.
24. 25-A: Approval of ferropseudobrookite, redefinition of armalcolite, definition of neotype material for pseudobrookite, and establishment of the pseudobrookite group.
25. 25-B: Stilpnomelane group nomenclature, including redefinition of the composition range, redefinition of lennilenapeite, and discreditation of franklinphilite and ekmanite.
26. 25-C: Discreditation of the obsolete terms “eosite” and “colleite”.
27. 25-E: Redefinition of halloysite and discreditation of hydrohalloysite.
28. 25-F: Redefinition of natrodufrénite.
29. 25-G: Discreditation of shubnikovite.

30. 26-A: Definition of neotype material for gadolinite-(Y).

Classification and nomenclature of mineral groups and supergroups

1. Triphylite group (2022).
2. Akrochordite group (2022).
3. Columbite supergroup (2022).
4. Kristiansenite group (2022).
5. Magnetoplumbite supergroup (2022).
6. Mckelveyite group (2022).
7. Palmierite supergroup (2023).
8. Minium group (2023).
9. Paulkerrite group (2023).
10. Changes to the cerite-group nomenclature (2023).
11. Dongchuanite group (2023).
12. Nolanite supergroup (2024).
13. Kröhnkite supergroup (2024).
14. Ancykite supergroup (2024).
15. Revised nolanite supergroup (2024).
16. Svornostite group and renaming of svornostite and oldsite (2025).
17. Aeschynite group (2025).
18. Monazite supergroup (2025).
19. Jappeite group (2025).
20. Babingtonite group (2025).
21. Beryl supergroup (2025).
22. Milarite supergroup (2026).
23. Kassite group (2026).
24. Amendment to the paulkerrite group nomenclature (2026).

Other nomenclature-related CNMNC executive decisions and clarifications

1. Revised formula for haxonite.
2. Correct space group for wangxibinite.
3. Polish-up of the IMA List of Minerals, second round.
4. Clarification concerning Proposal 04-A and the triplite–triploidite supergroup.

Nomenclatures currently under evaluation

1. Revised pyrochlore supergroup.
2. Vesuvianite supergroup.
3. Wumuite supergroup.
4. Kahlenbergite group.
5. Nambulite group.
6. Discreditation of the name phosphoinnelite.

Mineral symbols

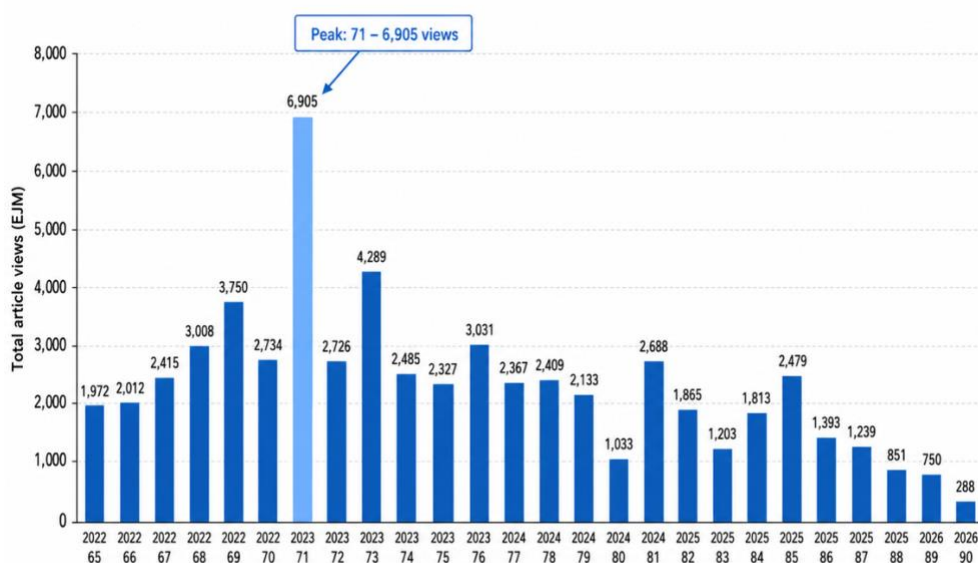
The updated list of IMA–CNMNC mineral symbols (June 2025) is available on the CNMNC website. A mineral symbol is required for all newly approved minerals. The Commission extends its sincere gratitude to Prof. Laurence Warr for his valuable assistance to the CNMNC in this work.

IMA–CNMNC Newsletter

The IMA–CNMNC Newsletter continues to be published jointly in the European Journal of

Mineralogy (EJM) and Mineralogical Magazine, with six issues per year. It remains an important channel for making CNMNC activities and decisions visible to the scientific community and continues to serve as a valuable reference for both professional and amateur mineralogists. According to EJM metrics (figure below), IMA–CNMNC newsletters (65–90) published between 2022 and April 2026 received, on average, about 2,300 views each. According to EJM metrics, Newsletter 71 is particularly noteworthy: with 6,905 views, it is the second most-viewed article of all time in EJM.

IMA-CNMNC Newsletter: total article views on EJM (2022–2026)



Guidelines approved during the term

August 2022: CNMNC guidelines for the nomenclature of polymorphs and polysomes (*Mineral Mag*, 2023, 87, 225–232).

2024: Voting majority for CNMNC proposals on new minerals, nomenclature changes, and mineral groups: The CNMNC has established a 75% positive vote threshold for the approval of new minerals, changes in nomenclature, and the formation of mineral groups/supergroups, with the Chair (or the officer in charge) retaining the right to suspend voting based on member feedback (CNMNC – Newsletter 83).

2025: IMA-CNMNC guidelines for assessing the natural geological origin of minerals have been revised following the 2024 report of the IMA Mediation Committee, and the related paper published (*Eur J Mineral*, 2025, 37, 871–876).

Moreover, the CNMNC has published two short contributions entitled 1) “Minerals and IMA–CNMNC: The contribution of volunteer scientists to the community” (*Elements*, April 2024, p. 141); 2) “Expanding the vocabulary of minerals: homogeneity, origin, and validation” (*Elements*, December 2025, p. 441).

IMA list of minerals

The official IMA-CNMNC List of Minerals continues to be updated every two months and is available at the IMA-CNMNC website (<http://cnmnc.units.it>).

The CNMNC (Marco Pasero) is currently working on updating the representation of water molecules in mineral chemical formulae in the IMA-CNMNC List of Minerals. Water will be



expressed as “(H₂O)_n” when the oxygen atoms are part of a coordination polyhedron (i.e., bonded to another constituent in addition to hydrogen), and as “·n(H₂O)” in all other cases. All newly approved proposals involving water will follow this representation.

IMA List of Unnamed Minerals

The official updated lists of unnamed minerals (January 2023) are available at the IMA-CNMNC website (<http://cnmnc.units.it>).

Mineral of the year

The CNMNC annually recommends a candidate for Mineral of the Year to the IMA..

Business meetings

The CNMNC meeting was held during the European Mineralogical Conference (EMC) in Dublin, Ireland (18-23 August 2024).

A CNMNC meeting will be held during IMA2026, in Nanjing, China (20-24 August 2026).

4. WORKPLAN FOR 2026-2030

During the 2026-2030 term, the CNMNC is expected to continue handling a high number of submissions, including new-mineral proposals, nomenclature revisions, redefinitions, discreditations, and proposals concerning mineral groups and supergroups. Based on recent activity, the overall workload is expected to remain at approximately 150 items per year.

A major priority will be to maintain rigorous, transparent, and timely evaluation procedures, while ensuring consistency in the application of IMA-CNMNC rules, guidelines, and recommendations. Particular attention will be given to improving the quality and completeness of submitted proposals, especially regarding mineral characterization, nomenclature, type material, crystal-chemical justification, and consistency between analytical data, formulae, and structural information.

The Commission will continue to review and update its procedures and guidelines, when necessary, in response to developments in mineralogical research and to issues emerging from the evaluation of proposals. This will include continued attention to the nomenclature of mineral groups and supergroups, the treatment of complex or borderline cases, and the consistent use of chemical formulae in the IMA-CNMNC List of Minerals.

Another important objective will be to improve coordination within the Commission, including communication among officers, voting members, national representatives, and IMA Council. The CNMNC will also continue to encourage active participation by its members and to address cases of long-term non-participation or vacant national representation in a constructive manner.

The CNMNC will maintain and further develop its communication with the mineralogical community through the regular publication of the IMA-CNMNC Newsletter, the continuous updating of the IMA-CNMNC website, and the dissemination of approved decisions, recommendations, and guidelines. The IMA-CNMNC List of Minerals and the list of mineral symbols will continue to be updated regularly.

Following the CNMNC session “New Minerals, Nomenclature and Classification”, held at the European Mineralogical Conference in Dublin, Ireland, on 18-23 August 2024, a new CNMNC session entitled “Advances in Crystal Chemistry and Mineral Systematics” will be held at the IMA 2026 meeting in Nanjing, China, on 20-24 August 2026. During the 2026-2030 term, the Commission will continue to promote CNMNC-related sessions at major international congresses, with the aim of encouraging discussion on mineral nomenclature, classification, crystal chemistry, and mineral systematics.

5. COMMISSION MEMBERS (as of 6 July 2026)

Officers

Ferdinando Bosi, Chairman – Department of Earth Sciences, Sapienza University of Rome, Italy
 Frédéric Hatert, 1st Vice-Chairman – Laboratoire de Minéralogie, Université de Liège, Belgium
 Marco Pasero, 2nd Vice-Chairman – Dipartimento di Scienze della Terra, Università di Pisa, Italy
 Stuart J. Mills, Secretary – Gallery of Natural Art, Richardson, TX 75083, USA

Former Chairmen

Ritsuro Miyawaki – Chairman (2018–2022), Department of Geology and Paleontology, National Museum of Nature and Science, Tsukuba, Japan
 Ulf Hålenius – Chairman (2014–2018), Department of Geosciences, Naturhistoriska Riksmuseet, Stockholm, Sweden
 Peter (Pete) A. Williams – Chairman (2008–2014), School of Science and Health, University of Western Sydney, Penrith, NSW, Australia
 Ernst A.J. Burke – Chairman (2003–2008), Haelen, Netherlands
 Joel D. Grice – Chairman (1995–2002), Mineral Science Division, Canadian Museum of Nature, Ottawa, Ontario, Canada
 Akira Kato – Chairman (1975–1982), Division of Mineralogy, National Museum of Nature and Science, Tsukuba, Japan

Members: National rep

Argentina: Fernando Colombo – Universidad Nacional de Córdoba, Córdoba, Argentina
Australia: Andrew Christy – Christy Mineral. Consulting, Hamilton, Queensland, Australia
Austria: Branko Rieck – Naturhistorisches Museum, Wien, Austria
Belgium: Fabrice Dal Bo – Université de Liège, Belgium
Brazil: Daniel Atencio – Universidade de São Paulo, São Paulo, Brazil
Bulgaria: Ruslan Kostov – University of Mining and Geology "St. Ivan Rilski", Sofia, Bulgaria
Canada: Aaron Lussier – Canadian Museum of Nature, Ottawa, Canada.
China: Zhenyu Chen – Chinese Academy of Geological Sciences, Beijing, China
Croatia: Andrea Čobić – University of Zagreb, Croatia
Czech Republic: Jiří Sejkora – National Museum Prague, Czech Republic
Egypt: Mohamed A. El-Sharkawy – Cairo University, Egypt
Finland: Ragnar Törnroos – University of Helsinki, Finland
France: Cristiano Ferraris – Muséum National d'Histoire Naturelle, Paris, France
Germany: Thomas Witzke – PANalytical B.V., Almelo, Netherlands
Greece: Stefanos Karampelas – Aristotle University of Thessaloniki, Greece
Hungary: Ildikó Cora – Centre for Energy Research, Budapest, Hungary
India: Pranesh Sengupta – Bhabha Atomic Research Centre, Mumbai, India
Italy: Fernando Cámara – Università degli Studi di Milano, Italy
Japan: Koichi Momma – National Museum of Nature and Science, Tsukuba, Japan
Poland: Adam Pieczka – AGH University of Science and Technology, Kraków, Poland
Republic of South Africa: Maria T. Atanasova – University of Pretoria, South Africa
Romania: Gheorghe Ilinca – University of Bucharest, Romania
Russia: Andrey Zolotarev – St. Petersburg State University, Russia
Slovakia: Martin Stevko – Slovak Academy of Sciences, Bratislava, Slovakia
Spain: Juan Jiménez Millán – University of Jaén, Spain
Sweden: Andreas Karlsson – Naturhistoriska Riksmuseet, Stockholm, Sweden
Switzerland: Nicolas Meisser – University of Lausanne, Switzerland
Ukraine: Dariia Chernysh – M.P. Semenenko Institute of Geochemistry, Kyiv, Ukraine
United Kingdom: Mike Rumsey & Jens Najorka (as two reps sharing one vote) – Natural History Museum, London, UK



USA: Anthony Kampf – Natural History Museum of Los Angeles County, USA

National mineralogical societies or groups currently without an appointed representative:
Denmark, New Zealand, Norway, and Uzbekistan.

Members: Art. 12(d) IMA const.

Peter Bačík – Comenius University in Bratislava, Slovakia

Georgia Cametti – University of Bern, Switzerland

Travis Olds – Carnegie Museum of Natural History, Pittsburgh, USA

Yanjuan Wang – Chinese Academy of Geological Sciences, Beijing, China

Submitted by

Ferdinando Bosi

Chairman, CNMNC