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New Mineral Names

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ABSTRACT

This issue of New Mineral Names provides selected information for the newly approved and published minerals, nomenclature, and classification changes from the period June to September 2025. All minerals presented have been approved by the International Mineralogical Association Commission on New Minerals, Nomenclature, and Classification (IMA-CNMNC).

RECENTLY APPROVED

This section features just a few of the 25 minerals approved by the IMA-CNMNC in the period June to September of 2025; see Table 1 for the list and cursory details of all 25 minerals (Bosi et al. 2025a, 2025b). Only three of the newly approved minerals reuse root names. Of these, two belong to systems of established nomenclature—fluorbritholite-(La) and liddicoatite—and the third mineral was published without approval under the same name that was used for the CNMNC proposal four decades later.

Babunaite-(Nd), $Nd(AsO_4)$

Babunaite-(Nd) was found on a footpath near a spring along the Babuna River, 5 km north of the village of Nežilovo in North Macedonia, and is named for the locality. It is the first rare earth element (REE)-bearing mineral and arsenate in the scheelite group, and has a known synthetic analog.

Clinochalcomenite, $CuSeO_3(H_2O)_2$

A monoclinic dimorph of chalcomenite was first published as "clinochalcomenite" without IMA-CNMNC approval by Luo et al. (1980), with the type locality given only as the province of Gansu, the seventh largest province in China, with an area of ~453 700 km^2. None of the authors of Luo et al. (1980) submitted the mineral for IMA-CNMNC approval. In the following years, material corresponding to "clinochalcomenite" was reported from other localities worldwide, including the El Dragón Mine in Bolivia (Yang et al. 2023), the Lichtenberg Mine in Germany (Witzke and Rüger 1998), and the Burro Mine in the U.S.A., among others. After the original Chinese type material was located and additional data from specimens of the Burro Mine and the Suncup no. 2 Mine (both in Colorado, U.S.A.) were obtained, the mineral was finally submitted to the CNMNC for approval as a valid species. While chalcomenite has a characteristic deep blue color, most clinochalcomenite is distinctly greener, corresponding to slight differences in the Cu^{2+} bonding environments—frequently related to Jahn-Teller distortion—between the two minerals.

Grahampearsonite, $Ca_2P_2O_7$

Grahampearsonite is a new anhydrous calcium pyrophosphate mineral encountered as inclusions within diamond from Mato Grosso, Brazil. The mineral is named after the well-known British geologist D. Graham Pearson, presently at the University of Alberta. Dr. Pearson has made enormous contributions to mantle geology and mineralogy and is an expert on diamonds and the information they carry from the deep Earth. Grahampearsonite was first known as a synthetic material, designated "β-$Ca_2P_2O_7$" (Webb 1966). This substance has been the target of change to materials science properties and applications research, including heavy metal uptake (Griesiute et al. 2021) and dielectricity (Bian et al. 2003). By analogy to synthetic β-$Ca_2P_2O_7$, grahampearsonite has a tetragonal chiral structure (space group $P4_1$) built from a grated framework of CaO_{6-7} polyhedra supported by pyrophosphate (P_2O_7) dimers (Boudin et al. 1993).

Hinokageite, $MnMg(SiO_4)$

Hinokageite is a new Mn-Mg olivine group mineral described from the Shimozuru mine within Japan's Miyazaki Prefecture and the first new addition to the olivine group since the description of laihunite in 1976. The Shimozuru mine is located near the town of Hinokage, which inspired the new mineral's name. This material had already been synthesized for studies of the structural and materials sciences properties of olivine-type phases (e.g., Akamatsu et al. 1988).

Jonlarsenite, Al_4Cu_9

Jonlarsenite was found in a micrometeorite collected from the roof of an industrial building near the village of Skedsmokorset, Norway. The name honors amateur micrometeorite hunter Jon Larsen. The new mineral has a synthetic analog (γ-Al_4Cu_9), which adopts a cubic γ-brass structure. It is the first new mineral identified in a micrometeorite. According to information published on Larsen's website, micro-meteorites.com, Earth is bombarded by ~30 000 tons of micrometeorites per year, with most originating from comets.

Thionasilite, $Na_2Si_2S_2O_3$

Thionasilite is an unusual new mineral found in the Raja chondrite meteorite, which landed in Oman on December 23, 2023. The mineral was named for its composition as a sodium sulfide silicate. The given ideal formula implies the presence of $Si_2S_2O_3$ with the topology of Si_2O_5. The proposal's authors state that thionasilite has structural similarity to hydroxyapophyllite-(K), implying that it has a phyllosilicate topology in which Na is an interlayer cation. Silicate sulfides are uncommon in nature, although a few notable examples include some feldspathoids [e.g., bystrite, $Na_7Ca(Al_6Si_6O_{24})(S_5)^{2-}Cl^-$] and most helvine group minerals [e.g., genthelvite, $Be_3Zn_4(SiO_4)_3S$]. However, sulfur in these minerals does not coordinate with silicon, as it presumably does in thionasilite.

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[*] All minerals have been approved by the IMA CNMMC. For a complete listing of all IMA-validated unnamed minerals and their codes, see http://cnmnc.units.it/. Corresponding author E-mail: oldst@carnegiemnh.org

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TABLE 1. New minerals approved by the IMA-CNMNC from June–September 2025[a]

Mineral	Formula	IMA #	Warr	Space Group	Type Locality Area	Country	New RN
Grahampearsonite	$Ca_2P_2O_7$	2025-017	Gps	$P4_1$	Chapadão plateau	Brazil	Y
Qiumingite	$Pb_3(Zn_2Fe^{3+})Sb^{5+}P_2O_{14}$	2025-008	Qmg	$P321$	Dongchuan District	China	Y
Fluorbritholite-(La)	$Ca_2La_3(SiO_4)_3F$	2025-027	Fbri-La	$P6_3/m$	Gejiu intrusion	China	N
Sunshuite	$FeBi_2S_4$	2025-013	Suu	$C2/m$	Jiawula-Chaganbulagen ore field	China	Y
Guixiangite	NiBiS	2025-019	Gx	$P2_13$	Longhua deposit	China	Y
Wangxibinite	TiFe	2023-081c	Wxb	$Im\bar{3}m$	Luobusa Ophiolite	China	Y
Clinochalcomenite	$CuSeO_3(H_2O)_2$	2025-037	Cccm	$P2_1/n$	Wangba	China, U.S.A.	N
Liddicoatite	$Ca(Li_2Al)Al_6(Si_6O_{18})(BO_3)_3(OH)_3(OH)$	2025-047	Ld	$R3m$	Dolní Rožínka pegmatite	Czech Rep.	N
Hopmannite	$Ba_2(Ti_5Fe^{2+})O_{13}$	2025-034	Hpn	$C2/m$	Bellerberg volcano	Germany	Y
Bonaccorsiite	$KK_2Na_3(Al_6Si_{36})O_{84}$	2025-028	Bcs	$P6/mmc$	Pfaffenberg	Germany	Y
Katanite	$Ba_3NbFe_3Si_2O_{14}$	2025-022	Kta	$P321$	Hatrurim Complex	Israel	Y
Shojiite	$Na(NaMg)Mg_5Si_8O_{22}(OH)_2$	2024-023a	Shj	$C2/m$	Horokanai ophiolite	Japan	Y
Hinokageite	$MnMg(SiO_4)$	2024-093a	Hkg	$Pbnm$	Shimozuru mine	Japan	Y
Horiite	$Ba_2Mn_2Mn_4Ti_2(Si_2O_7)_2(PO_4)_2O_2(OH)_2$	2025-029	Hrt	$P\bar{1}$	Taguchi Mine	Japan	Y
Babunaite-(Nd)	$Nd(AsO_4)$	2025-032	Bbu-Nd	$I\bar{4}_1/a$	Babuna River	N. Macedonia	Y
Jonlarsenite	Al_4Cu_9	2024-078a	Jlr	$P\bar{4}3m$	Skedsmokorset (meteorite)	Norway	Y
Thionasilite	$Na_2Si_2S_2O_3$	2025-021	Thio	$Aba2$	Raja chondrite meteorite	Oman	Y
Abelloemringerite	$Cu_2Pb_2Mn^{3+}Mn^{4+}_3O_{11}(OH)(H_2O)_2{\cdot}H_2O$	2025-036	Abem	$Imma$	Renéville	Rep. Congo	Y
Vakhrushevaite	$Mg_5Cr(AlSi_3O_{10})(OH)_8$	2025-024	Vkr	$C\bar{1}$	Glavnoe Saranovskoe deposit	Russia	Y
Zoyashlyukovaite	MoC	2025-026	Zsh	$P\bar{6}m2$	Khibiny complex	Russia	Y
Leybovite-K	$KCuNa(MgFe^{3+})(AsO_4)_3$	2025-007	Leb-K	$C2/c$	Tolbachik Volcano	Russia	Y
Almagreraite	$CuZnMn^{4+}_3O_8$	2025-025	Alma	$Pmn2_1$	República Romana mine	Spain	Y
Yunhaoite	$K_2(MoO_4)$	2025-040	Yun	$C2/m$	Freedom No. 2 Mine	U.S.A.	Y
Hubbardite	$Mg(H_2O)_6[(UO_2)_2O(OH)(SO_4)]_2{\cdot}8H_2O$	2025-041	Hbb	$Fddd$	Hubbard Homestead Mine	U.S.A.	Y
Puschridgeite	$Mn(C_2H_3O_3)_2(H_2O)_2$	2025-030	Phd	$P2_1/c$	Pusch Ridge	U.S.A.	Y

Notes: The type locality names have been simplified for readability and are organized by type locality country of origin. The "New RN" column conveys which mineral names introduce a new root name. [a] All minerals have been approved by the IMA-CNMNC. For a complete listing of all IMA-validated unnamed minerals and their codes, see http://cnmnc.units.it/ (click on "IMA list of minerals"). The data contained within this chart were derived from Newsletters 86 and 87 (Bosi et al. 2025a, 2025b); individual references for each mineral can be found therein.

Vakhrushevaite, $Mg_5Cr(AlSi_3O_{10})(OH)_8$

A chromium analog of clinochlore was recently approved under the name vakhrushevaite, marking the first member of the chlorite group with essential chromium. Chlorite group minerals, particularly clinochlore, are well-known for bearing minor amounts of chromium in weathered ultramafic rocks. The most famous of these occurrences is doubtlessly the Turkish occurrences, where material is referred to by the varietal term "kammererite" among mineral collectors. Vakhrushevaite was discovered at the Saranovskii Mine in Perm Krai, Russia, which is a well-known source of uncommon chromium minerals including uvarovite, shuiskite-(Mg)/-(Cr), stichtite, and redledgeite, as well as examples of titanite and amesite that exhibit attractive colors due to small amounts of chromium. The new mineral is named in honor of the Russian geologist Nadezhda V. Vakhrusheva, who authored a number of research works on the mineralogy and geology of chromium.

Zoyashlyukovaite, MoC

Natural MoC was discovered within a xenolith entrained in a nepheline syenite at Mount Partomchorr in the Kola Peninsula. Synthetic molybdenum carbide is a well-known industrial material utilized for its high hardness (absolute hardness ~1800 kg/mm^2, corresponding to a Mohs hardness of ~8). The new mineral was named in honor of Zoya V. Shlyukova, a mineralogist at the Russian Academy of Sciences who studied the minerals of the alkaline rocks of the Kola Peninsula. Zoyashlyukovaite is the molybdenum analog of qusongite, natural tungsten carbide.

Minerals Belonging to Established Nomenclature Systems

The new mineral fluorbritholite-(La) was named in accordance with the nomenclature rules of the apatite supergroup. After the type material for the tourmaline group mineral liddicoatite was found to be F-dominant and instead corresponded to the species fluor-liddicoatite (see Henry et al. 2011), the species name was revalidated based on analyses of material from the Czech Republic. Shojiite is a new Na-Mg member of the amphibole supergroup and was given a new root name.

RECENTLY PUBLISHED

This section includes some of the recently approved minerals that have been published (or entered press) since June 2025. Other recently published minerals include argentopearceite (Sejkora et al. 2025a), barronite (Plášil et al. 2025a), blueridgeite (Emproto et al. 2025), brunovskyite (Panikorovskii et al. 2025b), ferro-bosiite (Bosi et al. 2025c), oboniobite (She et al. 2025), pendevilleite-(Y) (Plášil et al. 2025b), pfaffenbergite (Ferrero et al. 2026), rasmussenite (Yang et al. 2025), scandio-fluoro-eckermannite (Liu et al. 2026), and stibiosegnitite (Kasatkin et al. 2025a).

Amaterasuite, $Sr_4Ti_6Si_4O_{23}(OH)Cl$

Amaterasuite is a new strontium titanosilicate discovered in jadeitite outcrops in the Osayama mountain area, Okayama Prefecture, Japan (Nishio-Hamane et al. 2025). The new mineral was named for the sun goddess Amaterasu Omikami of Japanese mythology. Nishio-Hamane et al. (2025) draw comparisons between the duality of Amaterasu's wild and gentle spirits with the disordering of the new mineral's structure between strontium- and barium-dominant configurations superimposed in the diffraction data. Jadeitite outcrops ~450 km to the northeast in Niigata Prefecture have produced other new and extremely rare strontium(-titanium) silicates, including itoigawaite, rengeite, and matsubaraite. Matsubaraite is closely associated with amaterasuite and shares compositional and structural elements with it (Nishio-Hamane et al. 2025). Both minerals occur in close association with rutile and are spatially associated with rims in titanite formed from the breakdown of rutile.

Anningite-(Ce), $(Ca_{0.5}Ce^{4+}_{0.5})(VO_4)$

Anningite-(Ce) is a new member of the xenotime group named for famed English paleontologist and fossil collector Mary Anning (1799–1847), best known for her discoveries of Jurassic marine fossils in beachside exposures along the southern coast of England. Among her contributions to the scientific descriptions of several marine reptiles, Mary Anning also deduced that specimens now known as coprolites represented fossilized feces. It is this latter contribution that is specifically venerated with the naming of anningite-(Ce), which was discovered in cavities within a phosphate-rich coprolite from the Gara Samani formation in Algeria (Środek et al. 2025). Anningite-(Ce) is very closely related to wakefieldite-(Ce), $Ce^{3+}(VO_4)$, also of the xenotime group. However, anningite-(Ce) is unusual in that it is one of the few minerals containing essential tetravalent cerium; other notable examples include stetindite-(Ce), $Ce^{4+}SiO_4$, and cerianite-(Ce), $Ce^{4+}O_2$. Anningite-(Ce) charge balances with a coupled substitution of Ca^{2+} and Ce^{4+} for two trivalent cations.

Arsenoveszelyite, $Cu_2Zn(AsO_4)(OH)_3{\cdot}2H_2O$

The arsenate analog of the rare copper-zinc phosphate mineral veszelyite was discovered in the Dongchuan ore field and described by Sun et al. (2025). Arsenoveszelyite is one of a number of new secondary minerals discovered here, the others being dongchuanite, cuprodongchuanite, zheshengite, cuprozheshengite, and the just-approved mineral qiumingite (IMA 2025-008), $Pb_3(Zn_2Fe^{3+})Sb^{5+}P_2O_{14}$. Mineralization is hosted within a stratiform copper deposit and its secondary assemblage, apart from its unique new additions to the mineral kingdom, is remarkably similar to that found at the Palabanda quarry in the Republic of the Congo.

Boevskite, $Pb_4(TeO_3)_2(SO_4)(S_2O_3)$

The new mineral boevskite represents the first mineral to contain essential sulfate and thiosulfate in distinct structural sites (Kasatkin et al. 2025b). Coincidentally, the second-ever sulfate-thiosulfate mineral, blueridgeite, $[Pb_8Zn_3Cu^{2+}(OH)_{16}](SO_4)_2(S_2O_3)_2{\cdot}2H_2O$, was submitted for CNMNC approval the same month that boevskite was announced. Boevskite was found as minute grains at the interfaces of galena and pyrite from the Boevskoe deposit in the Southern Urals, Russia. It exhibits a novel layered structure built from $Pb_2(TeO_3)$ sheets stacked along **b** and linked by rows of interlayer sulfate and thiosulfate tetrahedra.

Brunovskyite, $NaZrSi_2O_6(OH)$

Brunovskyite honors Bruno Karlovich Brunovksky (1900–1938), the first Soviet crystallographer to determine a crystal structure (Panikorovskii et al. 2025b). He solved the structure of catapleiite, $Na_2Zr(Si_3O_9){\cdot}2H_2O$, a dimorph of gaidonnayite with closely related chemistry but differing stoichiometry. The new mineral occurred as white powdery aggregates rimming parakeldyshite in albitized pegmatite at Takhtarvumchorr Mountain, Khibiny alkaline massif, Kola Peninsula, Russia. The structure is novel among zirconosilicates, featuring a microporous octatetrahedral framework with Na occupying the pores. The ideal formula for the related mineral keldyshite was revised by the CNMNC from $Na_3HZr_2(Si_2O_7)_2$ to $Na_2ZrSi_2O_7$, the same as parakeldyshite. However, keldyshite is distinct from parakeldyshite because it contains less Na and additional H. Panikorovskii et al. (2025a) re-refined the crystal structure of keldyshite and re-defined its ideal formula as $NaZrSi_2O_6(OH)$; therefore, brunovskyite and keldyshite are polymorphs.

Kantorite, $K_2NaMg(SO_4)_2F$; Magganasite, $CuFe^{3+}_3O(AsO_4)_3$; Natromolybdite, $Na_2MoO_4{\cdot}2H_2O$

The descriptions of several new minerals from the Arsenatnaya fumarole in the Tolbachik volcanic field recently entered press: kantorite (Pekov et al. 2025a), magganasite (Pekov et al 2025b), natromolybdite (Pekov et al. 2025c). Kantorite, ideally $K_2NaMg(SO_4)_2F$, exhibits a novel structure type constructed from MgO_4F_2 octahedra linked by sharing fluorine with adjacent octahedra and further reinforced by sharing apical oxygen atoms with sulfate groups that bridge the octahedra to form robust infinite chains that are laterally joined into a weak "quasi" framework by potassium and sodium (Pekov et al. 2025a). Kantorite is named for the Russian mineralogist and mineral collector Boris Z. Kantor (1930–2022). Magganasite, $CuFe^{3+}_3O(AsO_4)_3$, also exhibits a unique structure—this time constructed of complex heteropolyhedral sheets of zig-zag chains of FeO_6 octahedra joined laterally by pairs of distorted, edge-sharing CuO_5 tetragonal pyramids to build a grated framework (Pekov et al. 2025b). Magganasite is named for the Greek mineralogist and petrologist Andreas Magganas (b. 1954) of the University of Athens, Greece. Natural sodium molybdate dihydrate was discovered in material collected in July 2022 and approved under the name "natromolybdite" the following year. While the natural material was not conducive to the full range of physical property and structure determination, sodium molybdate dihydrate is already known as a synthetic material with a structure consisting of layers of molybdate tetrahedra coordinated to sodium and intercalated by interlayer water molecules forming hydrogen bonding webs that hold the sodium molybdate sheets to each other (Pekov et al. 2025c). The new mineral leybovite-K (IMA 2025-007), $KCuNa(MgFe^{3+})(AsO_4)_3$, is the latest addition to the already impressive list of new minerals found at the Arsenatnaya fumarole. According to Pekov et al. (2018), the diversity of structure types in the Tolbachik fumaroles is partly rooted in the low concentrations of H_2O and high oxygen fugacity in the vapor, resulting in unusual metal vapor complexes as the available building blocks for mineral formation.

Lepersonnite-(Nd), $[Nd(H_2O)_{18}(OH)_2][Nd(UO_2)_{12}(SiO_3OH)_2(CO_3)_4(OH)_{10}O_2(H_2O)_5]$

A neodymium analog of the unusual uranyl mineral lepersonnite-(Gd) was recently published by Plášil et al. (2025c). Until the recent descriptions of monazite-(Gd) and xenotime-(Gd), lepersonnite-(Gd) was the only approved gadolinium-dominant mineral. Very few uranyl minerals contain essential rare earth elements, all of which are very rare in nature. The lepersonnite structure has a complex uranyl-silicate-REE sheet topology and takes its root name from Jacques Lepersonne (1909–1997), honorary head of the Department of Geology and Mineralogy at the Royal Belgian Museum for Central Africa. The -(Gd) analog was shown to contain significant calcium, but Plášil et al. (2025c) report no appreciable calcium in the new neodymium-dominant species. New data and redetermination of the structure of the -(Gd) species indicated the ideal formula is better given as $[Ca_{0.5}Gd_{0.5}(H_2O)_{18}(OH)_{1.5}][Gd(UO_2)_{12}(SiO_3OH)_2(CO_3)_4(OH)_{10}O_2(H_2O)_5]$.

Selenodantopaite, $Ag_5Bi_{13}Se_{22}$

A new member of the pavonite homologous series, the selenide analog of the very rare sulfide mineral dantopaite, was recently published by Sejkora et al. (2025b). Minerals of the pavonite homologous series are constructed of two slab types, the first type always being one polyhedron thick, whereas the second slab type varies in thickness and defines the homologous series. Dantopaite and selenodantopaite are $N = 6$ members of the homologous series. Dantopaite is named in honor of the prolific Romanian mineralogist Dan Topa of the University of Salzburg, Austria, best known for his extensive studies of sulfides and sulfosalts.

Tarutinoite, $Ag_3Pb_7Bi_7S_{19}$

Tarutinoite is the first known $^{7,8}L$ homolog of the lillianite homologous series, and being Bi-rich, belongs to the lillianite branch (Kasatkin et al. 2025c). The structure has two types of PbS-derived slabs, each seven or eight octahedral units wide, stacked parallel to **c**. **{{auth: sentence revised, is it OK?}}** It is named after the type locality, the Tarutinskoe (Tarutino) copper-skarn deposit, Chesmensk District, Chelyabinsk Oblast, Southern Urals, Russia.

Tennantite-(In), $Cu_6(Cu_5In)As_4S_{13}$

The description of tennantite-(In) has broadened the already diverse tetrahedrite group with its first indium-bearing end-member (Voudouris et al. 2025). The new sulfosalt mineral was found at the Pefka deposit in Western Thrace, Greece, in sulfide-bearing quartz gangue alongside roquesite, galena, and Fe-dominant tennantite. Other end-members of the tennantite subgroup have species-defining divalent cadmium, copper, iron, mercury, manganese, nickel, and zinc. With the exception of indium, all of these tennantite end-members have tetrahedrite (Sb) analogs. Speciating members of this family of minerals can be challenging due to uncertainties about the oxidation states of elements such as iron and copper. Indium occurs in tennantite-(In) in the 3+ oxidation state as part of a charge-coupled substitution.

Wiperamingaite, $NaCaFe^{3+}Al(PO_4)F_5(OH)\cdot H_2O$

Wiperaminga Hill in South Australia has produced a number of chemically complex secondary phosphate minerals recently: jahnsite-(NaMnMn), $\{Na\}\{Mn^{2+}\}\{(Mn^{2+},Fe^{3+})_2\}\{Fe^{3+}_2\}(PO_4)_4(OH)_2\cdot 8H_2O$ (Elliott and Kampf 2023), plumboperloffite, $PbMn^{2+}_2Fe^{3+}_2(PO_4)_3(OH)_3$ (Elliott and Kampf 2024), and wiperamingaite (Elliott and Kampf 2025). It has a novel structure and the first phosphate-bearing sheet built only from *cis*-corner-connected octahedral chains.

Zavyalovite, Ag_2TeS_3

Zavyalovite was named for Russian mineralogist and crystallographer Dr. Evgeniy Nikolaevich Zavyalov (b. 1944), recognizing his many contributions to telluride and sulfotelluride mineralogy and crystal chemistry. Dr. Zavyalov authored or co-authored 11 new mineral descriptions, including rucklidgeite $PbBi_2Te_4$, aleksite $PbBi_2Te_2S_2$, ingodite Bi_2TeS, sulphotsumoite Bi_3Te_2S, and baksanite $Bi_6Te_2S_3$. Polycrystallinity prevented a structure determination, but there is a matching synthetic structure containing isolated TeS_3 trigonal pyramids and irregular AgS_4 polyhedra. As pointed out by the authors (Kasatkin et al. 2025d), it is one of the few occurrences of Te^{4+} coordinated by sulfide, in most other non-oxygen-bearing minerals, tellurium is anionic Te^{2-}. Te^{4+} occurs as trigonal pyramids bound to sulfide in the tellurium-rich tetrahedrite group minerals, where replacement of Te^{4+} by $(As/Sb/Bi)^{3+}$ is a coupled substitution of Cu^+ for $(Fe,Zn)^{2+}$.

Recent Nomenclature and Classification Changes

The recent approval of hopmannite permitted the establishment of the jeppeite group, comprising jeppeite $K_2Ti_6O_{13}$, nixonite $Na_2Ti_6O_{13}$, and hopmannite $Ba_2(Ti_5Fe^{2+})O_{13}$. Additionally, a proposal to formally establish the babingtonite group was approved; presently, the group includes babingtonite $Ca_2Fe^{2+}Fe^{3+}[Si_5O_{14}(OH)]$, manganbabingtonite $Ca_2Mn^{2+}Fe^{3+}[Si_5O_{14}(OH)]$, and scandiobabingtonite $Ca_2Fe^{2+}Sc[Si_5O_{14}(OH)]$. The most significant recent nomenclature change was the definition of the beryl supergroup, leading to the discreditation of two minerals (avdeevite and beryllocordierite-Na) and the renaming of three other minerals (pezzottaite is now pezzottaite-(Cs); johnkoivulaite changed to johnkoivulaite-(Cs); and beryllosachanbińskiite-Na is now sachanbińskiite). The beryl supergroup includes the beryl group and the cordierite group.

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