New Mineral Names*†

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This New Mineral Names has entries for nine new minerals, including andychristyite, crimsonite, ferro-ferri-
hornblende, kunnerite, kuratite, oscarkempffite, oxo-mangani-leakeite, pauladamsite, and penberthycroftite.

ANDYCHRISTYITE*


Andychristyite (IMA 2015-024), ideally PbCu+Te6+O6(H2O), is a new mineral found on the small dump outside the entrance to the Aga mine Otto Mountain near Baker, San Bernardino County, California, USA. The new mineral was found as a few crystals in a small vug in quartz in association with timroseite. Andychristyite is a secondary oxidation-zone mineral presumed to have formed by oxidation of primary sulfides and tellurides during or following brecciation of quartz veins. It occurs as tablets flattened on {001}, with up to ~50 μm in size, in sub-parallel aggregates. Crystals are bluish-green with very pale bluish-green streak, are transparent with adamantine luster, are brittle with irregular fracture, show perfect cleavage on {001}, and no twinning. Mohs hardness was not measured, but is estimated to be 2–3. The density was not measured; Dcalc = 6.304 g/cm³. Andychristyite does not fluoresce under UV light. It decomposes rapidly in dilute HCl at room temperature. The mineral is monoclinic, b = 6.71 (16; 010), a = 4.76 (17; 110), 3.274 (100; 120, 102, 012), 2.641 (27; 102, 211, 112), 2.434 (23; 200, 103, 022), 1.763 (17; 040, 214, 132, 142), 1.5882 (21; multiple). The unit-cell parameters derived from powder-diffraction data are: a = 5.323(2), b = 7.099(2), c = 7.521(2) Å, α = 83.611(6), β = 76.262(7), γ = 70.669(8)°, and V = 260.34 Å³. Single-crystal X-ray diffraction data collected on a crystal of size 15 × 10 × 5 μm refined to R1 = 0.0165 for 1511 unique reflections with I ≥ 4σ(I) shows andychristyite is triclinic, space group Pn̅T, with unit-cell dimensions a = 5.322(3), b = 7.098(4), c = 7.511(4) Å, α = 83.486(7), β = 76.279(5), γ = 70.742(5)°, V = 260.0 Å³, and Z = 2. The structure consists of stair-step-like hcp layers of Te6+O6 and Cu2+O6 octahedra parallel to {001} and linked in the [001] direction to interlayer Pb atoms. A split H2O site in the interlayer region coordinates to Pb atoms and forms hydrogen bonds to O atoms. Andychristyite is named after Andrew (Andy) Gregor Christy (b. 1963), a Welsh-Australian mineralogist, petrologist, geochemist and solid-state chemist, for his contributions to mineralogy and, in particular, for the descriptions of new minerals. The holotype specimen is deposited in the Natural History Museum of Los Angeles County, CA, U.S.A. O.C.G.

CRIMSONITE*

A.R. Kampf, P.M. Adams, S.J. Mills and B.P. Nash (2016) Crimsonite, PbFe3+((PO4)3(OH)), the phosphate analogue of carminite from the Silver Coin mine, Valmy, Nevada, USA. Mineralogical Magazine, 80(6), 925–935.

Crimsonite, (IMA 2014-095), ideally PbFe3+((PO4)3(OH))2, the phosphate analogue of carminite, is a new mineral from the Silver Coin mine, Valmy, Iron Point district, Humboldt County, Nevada, U.S.A. (40°55′44″N, 117°19′26″W), where it occurs as a low-temperature secondary mineral growing on plumbo- goommitte that, in turn, is coating quartz. Crimsonite is found associated with fluorowavellite, goethite, hematite, hentschelite, plumbogummite, and variscite on quartz. Crimsonite occurs in subparallel aggregates of blades or plates up to 0.1 mm in maximum dimension. The blades are flattened on {100}, somewhat elongated on {101} and exhibit the forms {100}, {101}, and {011}. No twinning was observed. Crystals are transparent, with adamantine luster. The color is deep red with a slight purplish cast and it has a light purplish-orange streak. Mohs hardness is 3½ by analogy with carminite. Tenacity is brittle with irregular to splintery fracture and an imperfect cleavage (likely on {101}). The density was not measured; Dcalc = 5.180 g/cm³. Crimsonite is insoluble in room temperature in concentrated HCl and 70% HNO3. It is optically biaxial (+), 2V ≈ 85.5(5)°, (not reported). The birefringence measured using a Berek compensator is 0.011. The calculated refractive indices are α = 2.021, β = 2.026, and γ = 2.032. The optical orientation is X = b; Y = a; Z = c and the pleochroism is X light orange, Y light yellow, Z red brown; Y < X < Z. The average of 22 points (on 9 crystals) electron probe WDS analyses [wt% (range)] is: PbO 40.69 (37.56–44.56), CaO 0.60 (0.21–0.83), ZnO 0.72 (0.51–0.71), CuO 0.13 (0–0.27), Fe2O3 23.36 (20.29–25.37), Al2O3 0.34 (0.22–0.76), V2O5 0.70 (0.21–1.20), As2O3 12.05 (8.31–17.03), P2O5 16.03 (11.56–19.09), SO3 0.33 (0.17–0.65), H2O (based on struct-

* All minerals marked with an asterisk have been approved by the IMA CNMMC.
† For a complete listing of all IMA-validated unnamed minerals and their codes, see http://pubsites.uws.edu.au/ima-cnmmc/.

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3.64, total 98.59. The empirical formula (based on 10 O apfu) is (Pb_{0.16}Ca_{0.90}Fe_{0.04}^{2+})_{2+}(Fe_{0.17}Ti_{0.10}Al_{0.41}Fe_{0.41}^{3+}Al_{0.08}V_{0.02}Si_{0.02}O_{22})(OH)_{0.6}H_{0.06}O_{3.22}. The eight strongest lines in the X-ray powder diffraction pattern are: \( d = 4.49(41.11), 4.53(112), 3.845(64); 113; 3.190(100; 022), 3.026(40; 004), 2.902(54; 511), 2.502(77; 422), 2.268(54; 224). \)

The unit-cell parameters refined from the powder data are: \( a = 16.2573(16), b = 7.4692(7), c = 12.1406(12) \) Å, \( V = 1474.2 \) Å³. After a difficult selection, due to intimate intergrowth, a small crystal (0.040 × 0.030 × 0.011 mm) was used for collecting X-ray diffraction intensity data. The single-crystal unit-cell parameters for the powder data are:

- \( a = 16.2533(15), b = 7.4724(4), c = 12.1533(9) \) Å, \( V = 1746.04(17) \) Å³, orthorhombic, space group C2cn, Z = 8. The crystal structure of crimsonite was refined to \( R = 0.0357 \) for 740 observed \( F_{o} > 4 \sigma F_{c} \) reflections. It contains FeO tetrahedra that share edges to form dimers, which are then linked to other dimers by corner sharing to form chains along [010]. These chains are linked by PO₄ tetrahedra yielding sheets parallel to [001]. The sheets are linked to one another via bonds to eightfold-coordinated Pb²⁺ atoms with non-stereotactic 6s⁰ lone-electron pairs. The mineral is named based upon the mineral’s deep red (crimson) color and the fact that it is the phosphate analogue of carminite, a mineral with a very similar deep red color and whose name is also based upon its color (carmine). The holotype specimen is housed in the Mineral Sciences Department, Natural History Museum of Los Angeles County, CA, U.S.A., catalogue number 65558. F.C.

**Ferro-Ferrit-Hornblende**


Ferro-ferrit-hornblende (IMA 2015-054), a new member of the amphibole supergroup, was discovered in a specimen from the historical collection of the Regional Science Museum of Turin (MUSCR), which was collected at the skarns of the Travessera iron mine (exploited since the Early Cretaceous). The mineral has a reddish-brown (crimson) color with the characteristic pleochroism of carminite. The holotype specimen is housed in the Mineral Sciences Department, Natural History Museum of Los Angeles County, CA, U.S.A., catalogue number 65558. F.C.

References cited


**Kummerite**


Kummerite (IMA 2015-036), ideally Mn⁺²Fe⁺²Al₂PO₄(OH): 8H₂O, is a new secondary phosphate mineral of the laueite group. It was discovered in a few specimens at 57 ± 2 m level of the Cornelia Mine Open Cut of the Hagendorf Süd pegmatite, Hagendorf, Oberpfalz, Bavaria, Germany (49°39′1″N, 12°27′35″E). Kummerite occurs in small cavities in altered zeuselite closely associated with green needles of Zn- and Al-bearing beraunite, and with Al-bearing frondelite and jahnsite-(Ca,Mn). Aggregates of kummerite laths are generally surrounded by a core of laueite composition. The new mineral formation is related to reaction of laueite with hydrothermal Al-bearing fluids. Kummerite forms small rounded aggregates up to 100–500 μm of very thin, typically deformed, amber yellow laths of a few micrometers thick. The morphology and color of kummerite is similar to other laueite-related polymorphs and jahnite-(Ca,Mn).
KURATITE*


Kuratite (IMA 2013-109), Ca₃Fe(Fe³⁺Ti)₂O₉(Si₃AlO₁₀), the Fe³⁺-analogue of rhönite, is a new mineral of the sapphirine group identified in D’Orbigny, a 16.5 kg angrite meteorite found in July 1979 in Argentina. Previously Fe²⁺-dominant rhönite was mentioned or partially described in a number of terrestrial and extraterrestrial occurrences under the names rhönite, Fe-rich rhönite, Fe-Al Ti-silicate, etc.: in melaphonolite of Puy de St-Sandoux, Avumerge, France (Grünhagen and Seck 1972), in the unusual fassaitic-mellite-rhönite paragenesis from an alkaline basalt contaminated by Ca from coral, Saint-Leu, Réunion Island (Havette et al. 1982), in the Mesozoic basanites from Scania, Sweden (Olsson 1983), in glass from kaersutite-bearing spinel-wehrlite xenoliths from Foster Crater (Gamble and Kyle 1987), in phreatitic glass and limburgite of basaltic rocks from the Kaiserstuhl volcanic complex, Germany (Grapes and Keller 2010), in volcanic angrite SAHARA 99555 (Jambon and Bou debitou 2011). D’Orbigny meteorite consists of the following silicate phase assemblage: tabular crystals of nearly pure anorthite, euchedral to anhedral augite crystals with Mg-free and Al-Ti-bearing hedenbergite rims, euhedral to anhedral olivine crystals with Mg-rich cores (Mg ~64 mol%) and complex Ca-rich fayalite + kirschsteinite overgrowth toward the rims. Kuratite occurs in multiple phase pockets, which sit mainly in olivine-augite triple junctions. Kuratite crystals are typically euhedral to anhedral, <20 μm in size, and occur, together with whitlockite, Fe sulfide, and ulvospinel, within a rim of olivine of Ca-rich fayalite composition (Ca ~ 20 mol%) and kirschsteinite (Ca ~ 40 mol%) intergrowths at the contact between Fe-sulfide spheres and Al-Ti-bearing hedenbergite filling vesicles. Whitlockite inclusions in kuratite are common. Polyvohthetic (011) twinning is common. D₄₄µ = 3.906 g/cm³. Other physical properties were not obtained due to the minute size of the kuratite crystals. Optical data for Fe-rich rhönite (Xₘ = 0.49) from Puy de St-Sandoux are α = 1.805(7), β = 1.845(7), γ = 2V = 50(3°), Z = e ~ 38–43° for Kaiserstuhl rhönite (Xₘ = 0.41); Z = e ~ 58° (Xₘ = 0.02) for Luna 24 rhönite (Grapes and Keller, 2010; Grünhagen and Seck 1972; Olsson 1983; Treiman 2008).

HR confocal micro-Raman spectrometry (Ar⁺ laser with 514.5 nm) shows four main scattering peaks near 563–571, 697–699 (strongest), 852–856, and 986–996 cm⁻¹. The weak shoulder on the strongest peak at 720 cm⁻¹ recognized in lunar rhönite was not present in kuratite. The average of 8 electron probe WDS analysis [wt% (ranges)] is: SiO₂ 8.7(5.8–9.7), Al₂O₃ 9.8 (8.86–10.32), Cr₂O₃ 0.01 (0–0.11), Y₂O₃ 0.03 (0–0.08), La₂O₃ 0.04 (0–0.23), Pr₂O₃ 0.09 (0–0.22), Nd₂O₃ 0.07 (0–0.21), FeO 40.0 (40.98–42.01), MnO 0.11 (0.02–0.24), NiO 0.07 (0–0.19), SrO 0.05 (0–0.08), ZnO 0.04 (0–0.22), MgO 0.01 (0–0.06), CaO 11.86 (11.56–12.1), Na₂O 0.04 (0–0.13), K₂O 0.02 (0–0.01), P₂O₅ 0.02 (0–0.27), F 0.01 (0–0.03), Cl 0.02 (0–0.04), SO₃ 0.08 (0–0.13), Total 98.38. The empirical formula based on 28 cations and 40 O atoms is: Ca₉Al₈Mg₆REE₄Mn₂Mg₆Zn₁₀Fe₄O₉(OH)₁₀.8H₂O, but differs in having Al and Fe³⁺ ordered into alternate octahedral sites M₂ and M₃ in the 7.1 Å trans-connected octahedral chains. The mineral is named in honor of Rudolf Kummer (1924–1982), mining director of the Cornelia mine at Hagendorf Süd from 1964–1982 who had a great knowledge of the mineral occurrences at the mine and great support for researchers and collectors that came to study and collect samples from the mine. The type specimen is deposited in the mineralogical collections of Museum Victoria, Melbourne, Victoria, Australia. D.B.

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OSCAR KEMPFFITE*


Oscarkempffite (IMA 2011-029), ideally Ag$_2$Pb$_2$(Sb$_2$B$_4$)$_3$S$_8$Na, is a new mineral found in two specimens collected in 1929–1930 from the Colorado vein, Animas mine, Chacoa Province, Department of Potosi, Bolivia (66°33’W; 21°S). The specimens were originally part of the famous Philadelphia Academy of Natural Science collection which contained a lot of historically important materials and which was sold to a mineral dealer. The specimens were provided for study by R. Lavinsky (Arkensonite).

The deposit is a typical one of the vein type Ag-Sn formation of Bolivia and located in strongly altered volcanic rocks. In the vein cassiterite associated with freibergite and members of the stannite–kèsterite formation. Textures indicated an open space filling with very distinct banding, crustification and cockade. Oscarkempffite is associated with aragramyite, stannite, murraygite, pyrrargyrite and tetradehrite. It forms amehdal grains up to several millimeters in size and grain aggregates up to 10 mm in size. Oscarkempffite is grayish black, opaque with metallic luster and dark gray streak. The mineral is brittle with irregular fracture and shows no cleavage, parting or twinning. Mohs hardness is 3–3½.

The unit-cell formula Cu$_{28.72(16)}$Bi$_{24.56(17)}$S$_{20.87(5)}$, total 100.05. This gives the empirical formula (Ag$_{10}$Bi$_{10}$)$_{26}$S$_{86}$O$_{34}$I$_{2}$, with cation ratio of Ag:Bi = 2. This is the member of lillianite homologous series with N = 4. The mineral is isotropic in reflected light. The mineral is rapidly soluble and oxidized assemblages, commonly foliated and laminated, in association with clinoopyroxenes ranging from namansilite to aegirine, manganoan pectolite-serandite, braunite, norrisinite, calcium and barium carbonates, quartz, albite, potassium feldspar, Mn-bearing sulfite, and barite. The new mineral has a prismatic habit. Crystals are red-orange, transparent with vitreous luster, brittle, and show perfect cleavage on {110}. Mohs hardness and density were not measured; D$_{calc}$ = 3.25 g/cm$^3$. The mineral does not fluoresce in ultraviolet light. Oscamangi-leakeite is biaxial (-), α = 1.681(2), β = 1.712(2), γ = 1.738(2), 2V$_{meas}$ = 81.0(4)°, 2V$_{calc}$ = 83.5°. It is pleochroic with X = red brown > Y = orange red; X’ = e = 51.5° (β acute), Z / b, Y’ = a = 66.3° (β obtuse). The average of an electron probe WDS analyses is [wt% (range)]; SO$_4$ 53.53 (52.88–53.96), TiO$_2$ 0.28 (0.20–0.32), Al$_2$O$_3$ 0.29 (0.21–0.35), FeO$_2$ (calc.) 3.91, MnO$_x$ (calc.) 20.46, MgO 7.20 (7.02–7.43), ZnO 0.13 (0.05–0.19), NiO 0.06 (0.00–0.11), Li$_2$O (measured by SIMS) 0.96, CaO 0.36 (0.22–0.46), Na$_2$O 8.96 (8.72–9.07, K$_2$O 1.90 (1.79–2.03), H$_2$O (calc.) 0.64, total 98.68. This gives the empirical formula (Na$_{3.53(10)}$K$_{0.30(10)}$)${}_{21}$($	ext{[Na}_{10.68(26)}$Ca$_{0.32(26)}$)S$_{86}$O$_{34}$I$_{2}$, with space group C2/c. The holotype specimen was deposited in the Naturhistorisches Museum Wien, Wien, Austria; cotype material is deposited in the Natural History Museum of London.

The holotype specimen was deposited in the Canadian Museum of Nature, Ottawa, Canada. O.C.G.

Reference cited


PAULADAM SITE*


Pauladamite (IMA 2015-005), ideally Cu$_2$(SeO$_4$)(OH)$_2$, is a new mineral from the Santa Rosa mine, Darwin district, Inyo County, California, U.S.A. (36°25’7”N, 117°43’26”W), where it occurs as a secondary oxidation-zone mineral in association with brochantite, chalcophanite, gypsum, ktenasite, mimetite, schulenbergite, and smithsonite on limonitic gossan. Other secondary minerals identified in the general assemblage are antlerite, boyelite, brianjouyite, devilline, hydrozincite, lathensteinite, osakaite, and posnjakite. Pauladamite forms green blades up to 0.5 mm long elongated on {100} and flattened on {010}, which are grouped in radial sprays. Multiple twinning is ubiquitous, probably by rotation on {100}. Crystals are transparent and have vitreous to silky luster with a pale green streak. The mineral does not fluoresce in long- or short-wave UV light. The Mohs hardness is ~2. It is brittle with irregular fracture and perfect cleavage [001] eauage. D$_{calc}$ = 3.535 g/cm$^3$. The mineral is rapidly soluble in room-temperature, dilute HCl. Pauladamite is optically biaxial (-), α$_{calc}$ = 1.667, β = 1.723(2), γ = 1.743(2) (white light), 2V$_{max}$ = 60(2)°, X’ = e, Y’ = b, Z = a. The dispersion of an optical axis is strong r > v. The pleochroism is X’ = light yellow green, Y’ = bluish green, Z = nearly colorless.
Y > X > Z. Raman spectroscopy (514 nm laser) shows a number of SO$_4$ bands at 1166 ($v_1$, antisymmetric stretch), 1076 ($v_2$, antisymmetric stretch), and 989 ($v_3$, symmetric stretch) cm$^{-1}$, and SeO$_2$ bands at 839 ($v_1$, symmetric stretch), 745 ($v_2$, antisymmetric stretch), 487 ($v_1$, bending mode), and 396 ($v_2$, bending mode) cm$^{-1}$. FTIR spectroscopy of pauladamsite shows bands at 1633 and 3341 cm$^{-1}$, which confirm the presence of H$_2$O and OH within the structure. Additional bands in the region 1167–980 cm$^{-1}$ are due to the SO$_4$; while bands between 873 and 690 are due to SeO$_2$. The average of 5 electron probe WDS analysis [wt% (range)] is: Al$_{31.3}$, Fe$_{0.42}$ (0–0.82), As$_{0.04}$ (0–0.82), As$_{31.1}$ (0.38–4.39), SO$_4$ (3.562 (6; 5.44–7.8)), H$_2$O 9 (sub-micrometer) rectangular laths, with lateral dimensions generally <20 μm. Sometimes sprays of laths found. The laths are flattened on {010} and elongated on {100}. Penberthycroftite is translucent with a white streak and a vitreous to pearly luster. The mineral is non-fluorescent under both short- and long-wavelength ultraviolet radiation. The cleavage is perfect on {010}. The crystals are flexible, with irregular fracture. The density is not reported; $D_{calc}$ = 2.18 g/cm$^3$. The mineral is non-pleochroic. The laths have parallel extinction and negative elongation. Orientation was not determined. Only lower 1.520 and upper 1.532 refractive indices were measured based more upon relief than Becke line observations. Thermogravimetric analysis show two endotherms corresponding to water evolution at 94 and 180 °C, and an endotherm due to SO$_3$ evolution at 481 °C. No AsO$_4$ gaseous species were detected. The total mass loss corrected for admixed quartz and for evolved SO$_3$ gave 32.1 wt% of H$_2$O. The IR spectrum of penberthycroftite is very similar to that of bettonitote and shows a broad band ~3600–2500 cm$^{-1}$, with a number of weak sharp peaks superimposed on the hump, corresponds to O–H stretching vibrations from strongly H-bonded water and hydroxyl. The band at 1630 cm$^{-1}$ is due to H–O–H bending vibration. A peak at 1070 cm$^{-1}$ assigned to the triply degenerate $v_1$ asymmetric stretching vibration of (SO$_3$)$_2^-$ while peak at 690 cm$^{-1}$ is assigned to $v_3$ bending vibration of (SO$_3$)$_2^-$: Two doublets with main peaks at 855 and 795 and shoulders at 884 and 775 cm$^{-1}$ are assigned to As–O symmetric stretching and $v_1$ antisymmetric stretching vibrations respectively. The average of 14 electron probe WDS analysis [wt% (range)] is: Al$_{30.6}$, Fe$_{0.42}$ (0–0.82), As$_{0.04}$ (0–0.82), As$_{30.6}$ (38.0–43.9), SO$_4$ (2.15 (83.3–32.2), H$_2$O (by TGA) 32.1, total 113.7. The high total is due to depletion of the mineral during analysis. The element contents normalized to 100–32.1 wt% of H$_2$O are: Al$_{31.3}$, Fe$_{0.35}$, As$_{34.1}$, SO$_4$ 2.15. The empirical formula, based on 9 metal apfu and 26 framework anions is [Al$_{31.3}$Fe$_{0.35}$As$_{34.1}$OH$_{31.3}$]$_{4+}$, [SiO$_4$]$_{6+}$, [SO$_4$]$_{12+}$, [OH]$_{11+}$, [H]$_{1+}$. The strongest lines in the powder X-ray diffraction pattern are [d Å (P from hkl)] 13.264 (46; 011), 12.402 (16; 020), 9.732 (100; 021), 7.420 (28; 110), 5.670 (8; 130), 5.423 (6; 131), 3.598 (6; 202), 3.562 (6; 212). The unit-cell parameters refined from the powder X-ray data are: $a = 7.789(2)$, $b = 24.777(4)$, $c = 15.7373(3)$ Å, $β = 93.960(1)^{\circ}$, V = 3029.7(1.0) Å$^3$. The structure of penberthycroftite was solved on the rectangular lat $<$ 0.03 mm $\times$ 0.01 mm $\times$ 0.001 mm in size using synchrotron single-crystal diffraction data and refined to R = 0.068 for 1639 observed (I $> 3\sigma$(I)) reflections. Penberthycroftite is monoclinic, space group $P2_1/c$ with unit-cell dimensions measured at 100 K: $a = 7.753(2)$, $b = 24.679(5)$, $c = 15.679(3)$ Å, $β = 94.19(3)^{\circ}$, V = 2991.9(12) Å$^3$, Z = 4. Penberthycroftite has a heteropolyhedral layer structure, with the crankshaft-like stepped parallel to {010}. The layers comprise hexagonal rings of edge-shared Al-centered octahedra that are interconnected by corner-sharing with AsO$_4$ tetrahedra. The layers are strongly undulating and their stacking produces large channels along [010] that are filled with water molecules. The layers are identical to those in bettonitote [Al$_{31.3}$Fe$_{0.35}$As$_{34.1}$OH$_{31.3}$] H$_2$O, but they are displaced relative to one another along [001] and [010] such that the interlayer volume is decreased (by ~10%) relative to bettonitote, with a corresponding reduction of the interlayer water content to 8 H$_2$O pfu compared to 11 H$_2$O pfu in bettonitote. The interlayer region also contains a partially occupied SO$_4$ anion site that coordinates to a terminal anion of one of the Al-centered octahedra. Bettonitote has almost the same SO$_4$ content as penberthycroftite but in the refinement of bettonitote the sulfate molecules could not be located. The mineral is named for the location where it was found. Co-type specimens were deposited in the Museum Victoria, Melbourne, Victoria, Australia, and in the National History Museum, London, U.K. D.B.
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Please note that you can put a co-author’s email into the field and press “Find Person” and if they are in our system, it will autofill. (In fact, at the top of that screen, you see a box where you can put in everyone’s email as the directions explain and it will find all that are in our system at once.) Do the best you can with our basic format for addresses and other contact data and put in “none” if some required field does not apply to your situation. Do NOT duplicate the corresponding author as a contributing author. Note that the order of authors in the database has nothing to do with the published order—the published order will follow the manuscript file and the eventual proof. Formatting can be plain in the abstract box or you can use the tools for symbols and formatting.

- **The 3rd section is Validate:** Any remaining error messages will show up here. Approve files as indicated.

- **4th and final section: click Submit!**

So 4 sections, each with tabs, and you are guided by a “next” button once the files are uploaded? Is it really that easy?

Yes! At least we hope so, and we’re here to help at peer_review@minsocam.org if you do have questions or a special situation. Instructions with more detail are available on the web site!