



## Editorial

# A new layout and update for *Mineralogical Magazine* in 2019

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### Introduction

The Mineralogical Society of Great Britain and Ireland has been proud to produce *Mineralogical Magazine* since the first issue was published in August 1876. The contents then included an article on a new form of blowpipe lamp, especially suitable for travelling mineralogists (Le Neve Foster, 1876) and thoughts on some basalt dredged up from the Atlantic by a telegraph cable-laying boat (Hall, 1876). Now with issue 544 we are discussing transmission electron microscopy (Nzogang *et al.*, 2019) and testing the rocks on Mars (Larre *et al.*, 2019).

In 2017, we successfully transferred the journal from print and on-line, to an on-line only publication, although printed versions are available on demand. In 2018 we commenced a publishing partnership with Cambridge University Press and as a consequence have increased the audience size for our periodical. The collaboration with CUP has also resulted in the release of our journal archive back to the first issue of the journal on Cambridge Core at <https://www.cambridge.org/core/journals/mineralogical-magazine>.

The submission process for authors has been significantly improved by the use of the manuscript-tracking system *Editorial Manager*, at <https://www.editorialmanager.com/minmag/default.aspx>.

For 2019, we are pleased to announce some changes to the journal and to update some of our policies with respect to the data needed for submission of a manuscript to the journal.

### Changes in appearance

- From 2019 we will have a new cover design (Fig. 1), and are changing size to A4 in order to better accommodate data tables;
- The journal will use British English as standard;
- References have a new format with no commas after surnames e.g. Mills S.J., Mitchell R.H. and Kerbey H.C. (2018);
- All crystal structures submitted must include a CIF and checkCIF report (<https://checkcif.iucr.org/>);
- Crystallographic tables should be submitted in a standardised format (see Tables 1–4);

### Changes to policy

- *Mineralogical Magazine* strongly advises that representative specimens used in research are registered, if possible, and are housed in a suitable repository such as a geoscience collection in a museum. Registration numbers must be cited in the publication.



Fig. 1. The old and new covers for 2018 and 2019, respectively.

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Table 1. Data and experimental details for the crystal selected.\*

Crystal data	
Ideal formula	Cu <sub>16</sub> Fe <sub>8</sub> Hg <sub>25</sub> S <sub>2</sub>
Crystal dimensions (mm)	0.020 × 0.030 × 0.060
Crystal system, space group	Triclinic, P $\bar{1}$
Temperature (K)	293(3)
$a$ , $b$ , $c$ (Å)	9.677(4), 9.865(5), 11.992(5)
$\alpha$ , $\beta$ , $\gamma$ (°)	77.85(4), 79.42(3), 76.30(4)
$V$ (Å <sup>3</sup> )	1076.5(8)
$Z$	1
Calculated density (g cm <sup>-3</sup> )	5.035
$\mu$ (mm <sup>-1</sup> )	14.637
Data collection	
Crystal description	Green partial hexagonal plate
Instrument	Oxford Diffraction Xcalibur PX Ultra
Radiation type, wavelength (Å)	CuK $\alpha$ , 1.54184
Number of frames	1905
$\theta$ range (°)	3.093 to 23.241
Absorption correction	Multi-scan (ABSPACK; Oxford Diffraction, 2006)
$T_{\min}$ , $T_{\max}$	0.4323, 0.7464
No. of measured, independent and observed [ $I > 2\sigma(I)$ ] reflections	4092, 832, 786
$R_{\text{int}}$	0.0750
Data completeness to 23.241° ( $\theta$ ) (%)	99.4
Indices range of $h$ , $k$ , $l$	$-10 \leq h \leq 11$ , $-11 \leq k \leq 11$ , $-12 \leq l \leq 13$
Refinement	
Refinement	Full-matrix least squares on $F^2$
Number of reflections, parameters, restraints	832, 102, 1
$R_1$ [ $I > 2\sigma(I)$ ], $R_w$ (all)	0.0296, 0.0329
$wR_2$ [ $I > 2\sigma(I)$ ], $wR_2$ (all)	0.0608, 0.0625
GoF	1.07
No. of refined parameters	143
$\Delta\rho_{\text{max}}$ , $\Delta\rho_{\text{min}}$ (e <sup>-</sup> Å <sup>-3</sup> )	1.34, -1.22

\*Various miscellaneous entries, placed on the same line where possible, and using the same notation as above.

**Table 2.** Atom coordinates and displacement parameters.\*

	$x/a$	$y/b$	$z/c$	$U_{eq}$	$U^{11}$	$U^{13}$	$U^{23}$	$U^{22}$	$U^{33}$	$U^{12}$
Na1	0.7160(12)	-0.0931(9)	0.3631(5)	0.035(3)	0.036(5)	0.0002(3)	0.0005(3)	0.022(5)	0.047(6)	0.007(3)
Na2	¼	0.8584(10)	¼	0.027(3)	0.017(4)	0.0002(3)	0.0005(3)	0.031(5)	0.033(5)	0
U	0.74439(4)	0.40606(4)	0.36948(2)	0.01707(11)	-0.01353(16)	0.0004(3)	0.0005(3)	0.02393(18)	0.01374(16)	0.00003(12)
S	0.2468(3)	0.5059(3)	0.41111(11)	0.0210(4)	-0.0131(9)	0.0002(3)	0.0005(3)	0.0384(13)	0.0115(8)	0.0003(8)

\*Ideally combined in a single table, will be aligned on the decimal point.

**Table 3.** Powder X-ray data.\*

$l_{obs}$	$l_{calc}$	$d_{obs}$	$d_{calc}$	$hkl$
41	24	5.80	5.818	002
14	14	5.65	5.669	021
35	21	5.31	5.325	120
7	2	4.65	4.655	200
27	14	4.42	4.415	202
37	27	3.916	3.920	221
4	3	3.584	3.604	122
<b>98</b>	<b>57, 27</b>	<b>3.339</b>	<b>3.343, 3.330</b>	<b>221, 023</b>
65	58	3.155	3.161	202
<b>100</b>	<b>100</b>	<b>3.043</b>	<b>3.046</b>	<b>141</b>
72	68	2.940	2.942	204
34	22	2.879	2.881	322
51	21, 22	2.787	2.800, 2.784	320, 124

\*  $d_{obs}$  and  $d_{calc}$  data adjacent to each other, multiple peaks on the same line and the strongest lines (max 8) in bold

- Type specimens **must** have registration numbers. Where a new crystal structure is reported or a species is redefined, registration numbers **must** be given.
- It is advisable to identify all samples (images and data) with specimen numbers.

We hope that you enjoy the new format and we look forward to publishing your best research in *Mineralogical Magazine*!

**Table 4.** Selected interatomic distances (Å).\*

Al1-O1	1.908(4) ×2	Pb3-OH2	2.23(1)
Al1-O2	1.913(3) ×2	Pb3-O3	2.688(2) ×6
Al1-O3	1.999(3) ×2	Pb3-O1	3.229(8) ×3
<Al1-O>	1.940	<Pb3-O>	2.500(2)
Al2-O1	1.950(4) ×6	Na-OW(2)	2.10(2)
<Al2-O>	1.950	Na-O(4)	2.484(8) ×2
		Na-O(4)	2.779(11) ×2
		<Na-O>	2.488(3)

\*Full atom details, empty lines between each group.

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