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Supporting information for article:

A novel two-dimensional layered Cu<sup>2+</sup> complex based on Dawson-like [H3BiW18O60]<sup>6-</sup>: synthesis, structure and magnetic properties

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## Table S1A novel 2D layered $Cu^{2+}$ complex based on Dawson-like $[H_3BiW_{18}O_{60}]^{6-}$ : synthesis,structure and magnetic property

W1-O9	1.704(9)	W6-O19	1.706(9)
W1-07	1.878(9)	W7-O23	1.707(9)
W2-O12	1.702(10)	W8-O15	1.704(9)
W3-O8 .	1.712(9)	W9-O22	1.711(9)
W4-O28	1.711(10)	Bi1-O5-W1	111.8(4)
W5-O27	1.692(10)	N2-Cu1	2.010(14)
Bi1-Bi1	1.8228(19)	Cu1-N3	2.001(13)
Bi1-O5	2.120(8)	Cu1-O23	2.414(10)
N4-Cu1	2.012(13)	N1-Cu1	1.994(13)
Bi1-O6	2.139(9)	O9-W1-O14	99.7(4)
Bi1-O16	2.162(8)	Bi1-O16-W5	138.6(4)
O9-W1 O7	101.4(4)	O7-W1-O14	92.5(4)
O12-W2-O29	99.2(5)	O27-W5-O30	98.6(5)
O12-W2-O24	97.9(4)	O19-W6-O4	100.6(4)
O29-W2-O24	86.4(4)	O23-W7-O25	102.5(4)
O8-W3-O3	101.0(4)	O15-W8-O13	102.1(4)
O8-W3-O11	99.8(4)	O5-Bi1-O6	84.2(3)
O28-W4-O17	101.6(5)	Bil-Bil-O16	128.7(2)
O28-W4-O21	99.6(4)	O5-Bi1-O16	84.0(3)
O6-Bi1-O16	88.0(3)	Bi1-O16-W3	110.4(4)
Bi1-O5-W6	111.3(4)	Bi1-O16-W4	115.2(4)

**Table S1**Selected bond lengths (Å) and angles (°) for (1)



Figure S1 The IR spectrum of (1).



Figure S2 (left) Combined polyhedral/ball-and-stick representation of BiW<sub>18</sub>. Color code: W, red;
Bi, dark yellow. (right) Partial labeling ball-and-stick representation of BiW<sub>18</sub>. Color code: W, teal;
Bi, dark yellow; O, red.



**Figure S3.** The plot of  $\chi$  m versus *T* for (1).