

<Supporting Information>

Two 3D Coordination Assemblies with Same Cluster Configuration: A Ferromagnetic $\{[\text{W}(\text{CN})_8\text{Co}_2(\text{DMF})_8][\text{NO}_3]\}_n$ and A Paramagnetic $\{\text{W}(\text{CN})_8\text{Cu}_2(\text{py})_8\}_n$

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1. Topological analysis

The topologies of polymers **1** and **2** were both analyzed by programs OLEX^{S1} and TOPOS^{S2} with the cif files. The topological cell of OLEX shows that the short (Schläfli) symbol of the net for W point is 6^6 , which is consistent with the result of TOPOS.

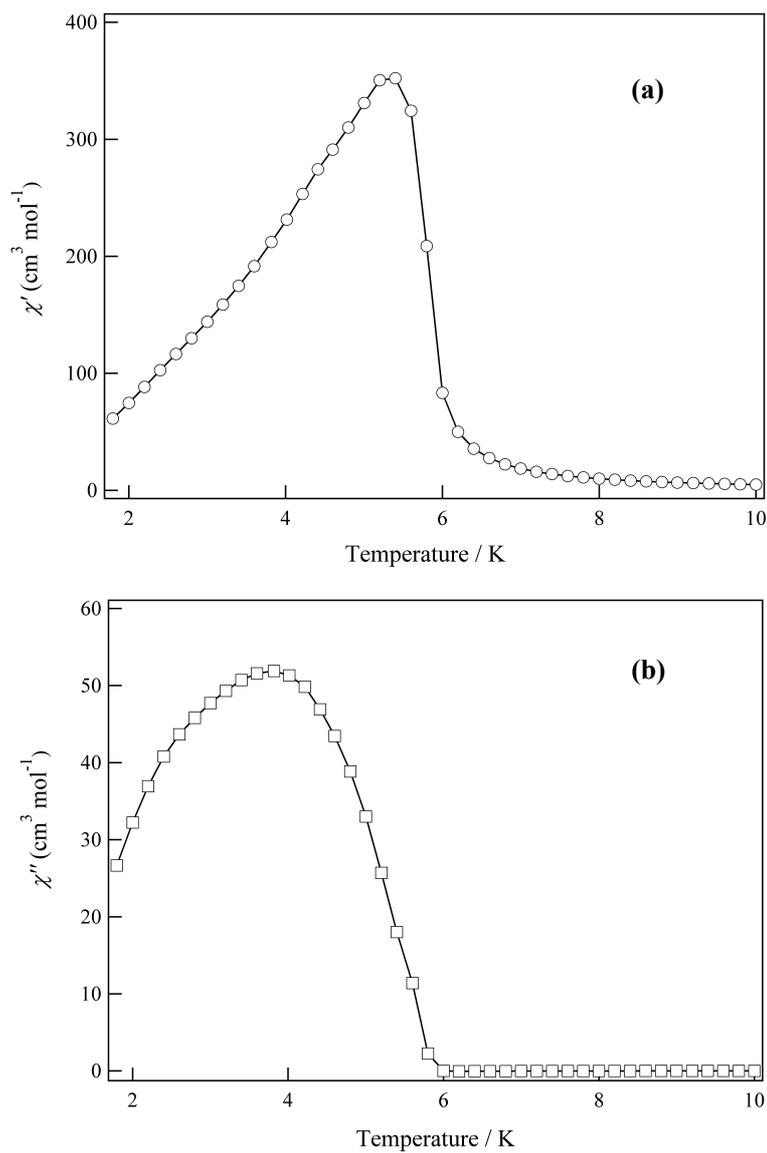


Figure S1. Plots of (a) χ' and (b) χ'' versus Temperature at a frequency of 500Hz and zero dc field.

References:

- S1. O. V. Dolomanov, A. J. Blake, N. R. Champness and M. Schröder, *J. Appl. Cryst.*, 2003, **36**, 1283.
- S2. C. Bonneau, O. Delgado-Friederichs, M. O'Keeffe and O. M. Yaghi, *Acta Cryst. A*, 2004, **60**, 517.