Supporting Information

Synthesis and characterization of nona- and trideca-nuclear manganese phosphonate clusters

Mei Wang, Chengbing Ma and Changneng Chen*

Fig. S1 The TG curves of complexes 1 and 2.

Fig. S2 The structure of compound 1. The Jahn-Teller elongated axes of the nine Mn(III) ions are highlighted in black. Color code: green, Mn; purple, P; red, O; gray, C. Hydrogen atoms and carbon atoms except those attached to the oxygen atoms have been omitted for clarity.
**Fig. S3** The structure of compound 2. The Jahn-Teller elongated axes of the thirteen Mn(III) ions are highlighted in black. Color code: green, Mn; purple, P; red, O; gray, C. Hydrogen atoms and carbon atoms except those attached to the oxygen atoms have been omitted for clarity.

**Fig. S4** In-phase ($\chi'_M T$) AC susceptibility versus $T$ for complex 1 measured in a 3.0 G AC field oscillating at the indicated frequencies and in the temperature range of 2-15 K.
**Fig. S5** In-phase ($\chi'_M T$) AC susceptibility versus $T$ for complex 2 measured in a 3.0 G AC field oscillating at the indicated frequencies and in the temperature range of 2-15 K.