

**SUPPLEMENTARY INFORMATION**

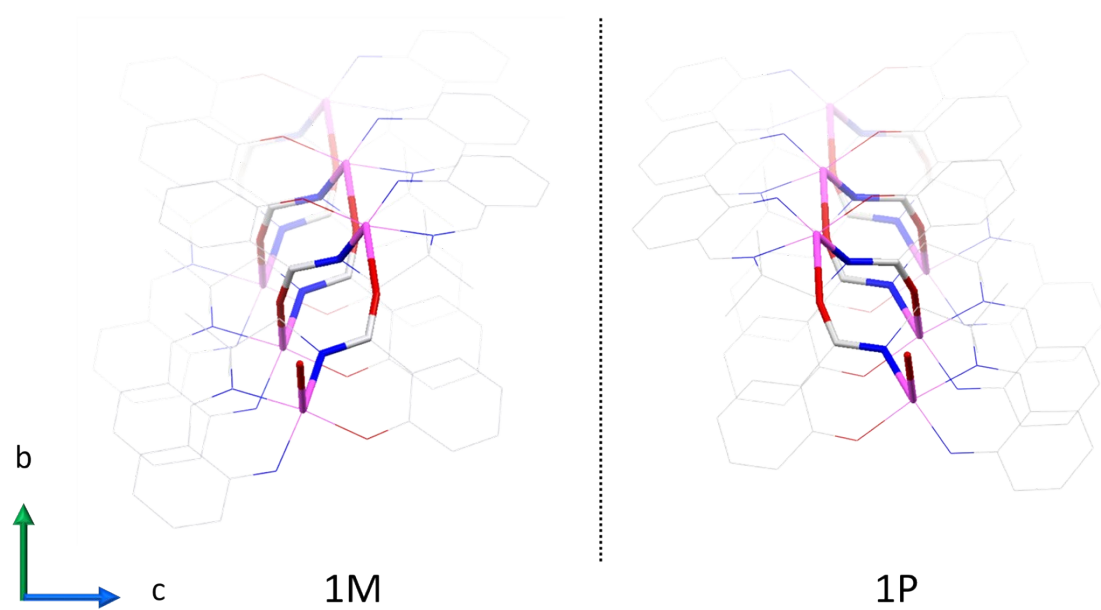
**Weak Ferromagnetism Derived from Spin Canting in an Amido-Bridged Homochiral Mn(III) 1-D Coordination Polymer**

Sotaro Kusumoto, Atsushi Koga, Fumiya Kobayashi, Ryo Ohtani, Yang Kim, Leonard F. Lindoy, Shinya

Hayami\* and Masaaki Nakamura\*

- I. Crystal structure**
- II. CD spectra**
- III. Powder X-ray Diffraction**
- IV. Magnetic properties**
- V. TG analysis**

## I. Crystal structure



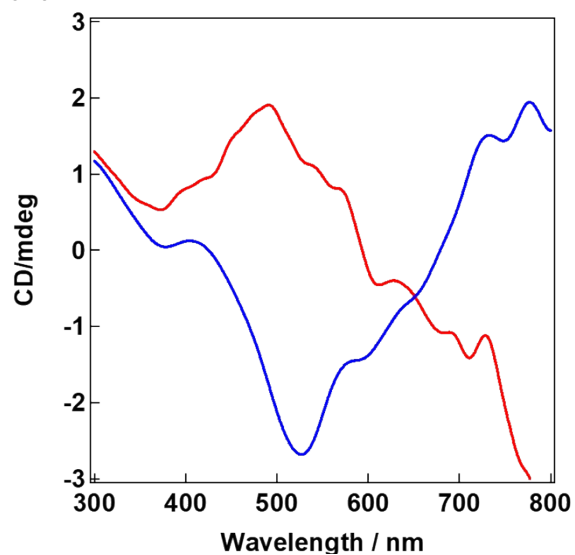
**Figure S1** One dimensional chains run helically along the a axis. Hydrogen atoms are omitted for clarity.

## II. CD spectra

(a)

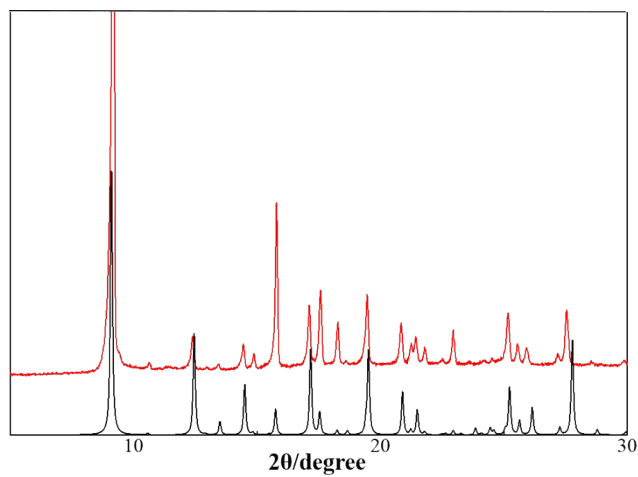


(b)



**Figure S2** (a) Needle crystals were present in each colony at the bottom of the beaker. (b) Solid-state circular dichroism (CD) spectra of two selected colonies, each dispersed in a KBr pellet.

## III. Powder X-ray Diffraction



**Figure S3** PXRD results for  $[\text{MnL}]_n$  (red line: experimental value, black line: simulation).

#### IV. Magnetic properties

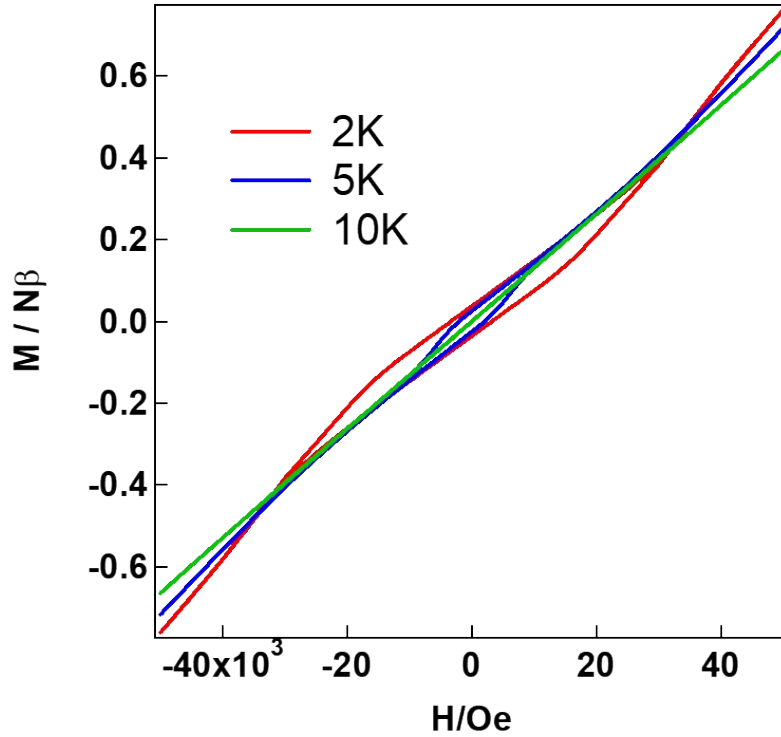


Figure S4  $M$  vs  $H$  plots at 10 K (green), 5K (blue), and 2K (red).

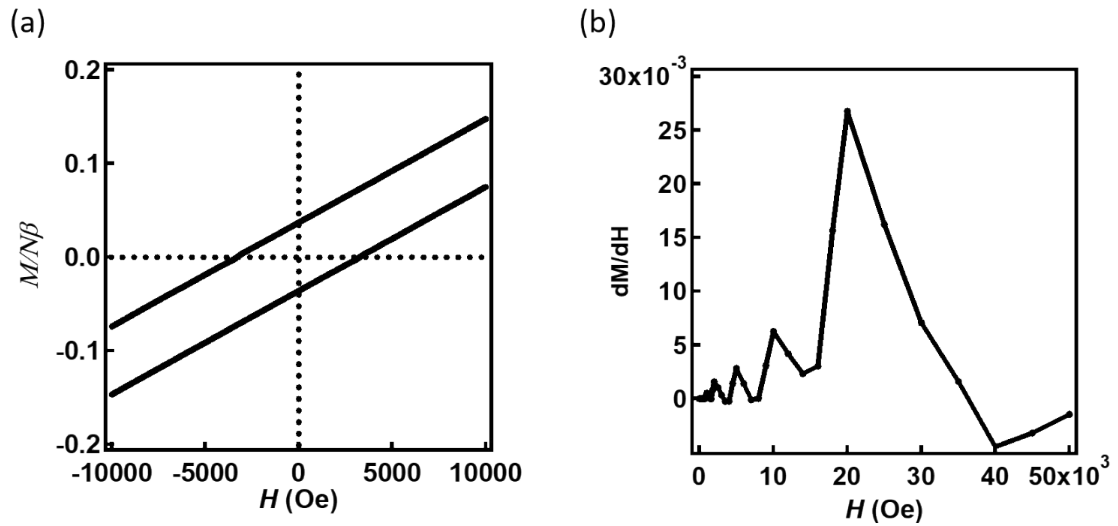


Figure S5 (a) An enlarged figure of the hysteresis loop and (b)  $dM/dH$  plots.

V. TG analysis

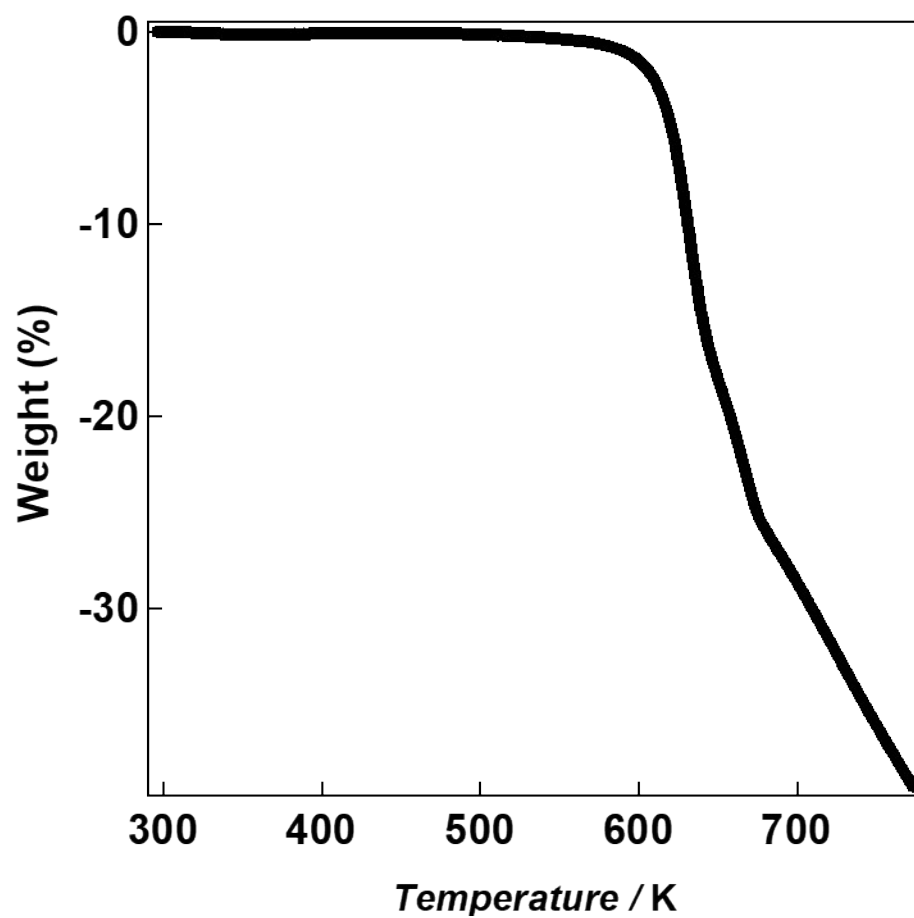


Figure S6 TG analysis of 1.