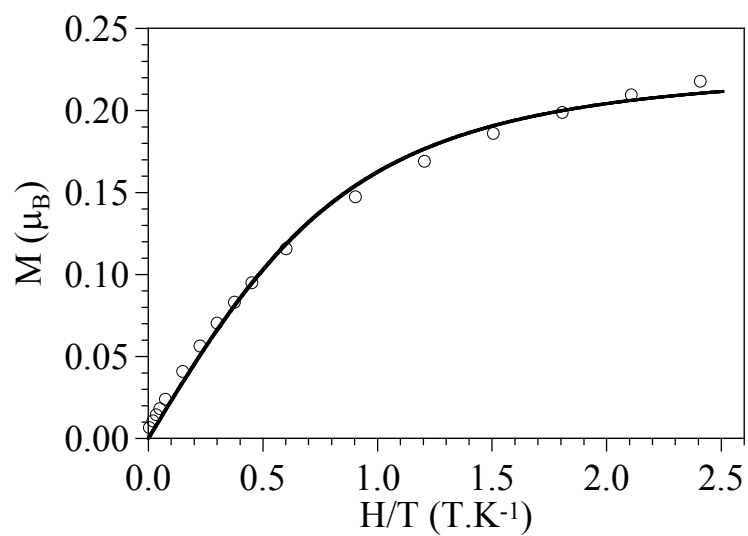


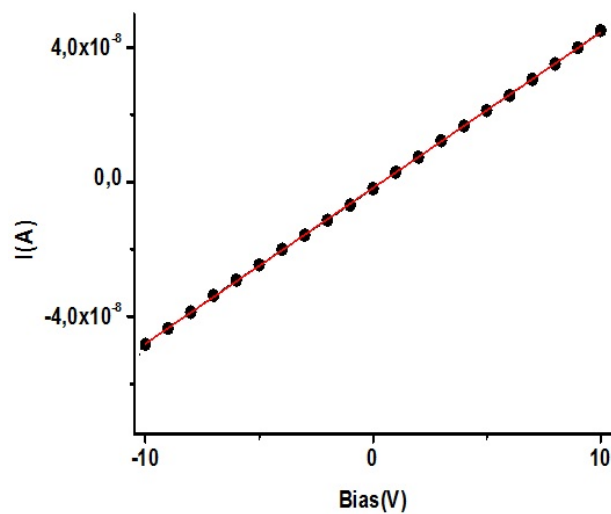
# **Electronic Supplementary Information**

**Electrical bi-stability around room temperature in an unprecedented  
1D coordination magnetic polymer**

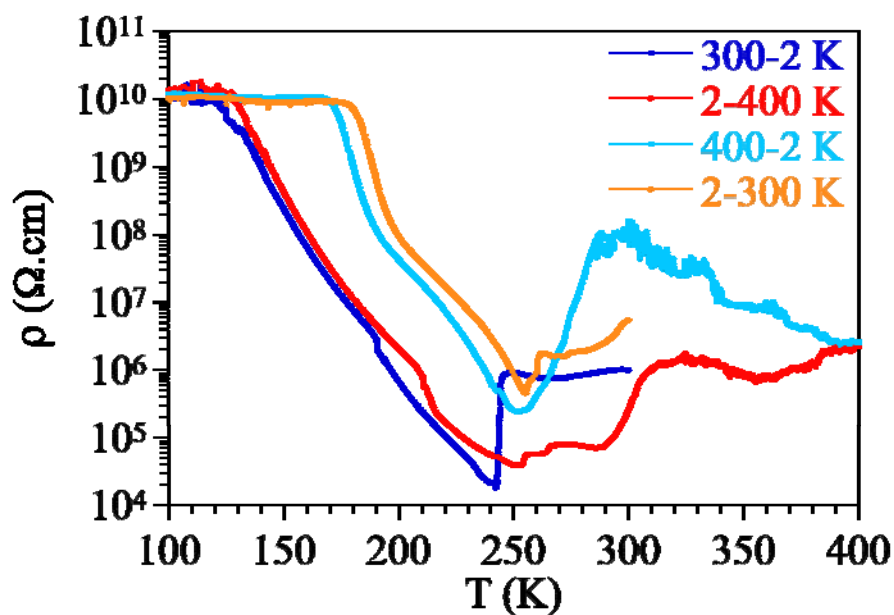
**Pilar Amo-Ochoa, Esther Delgado,<sup>\*</sup> Carlos J. Gómez-García, Diego Hernández,  
Elisa Hernández, Avelino Martin and Félix Zamora<sup>\*</sup>**



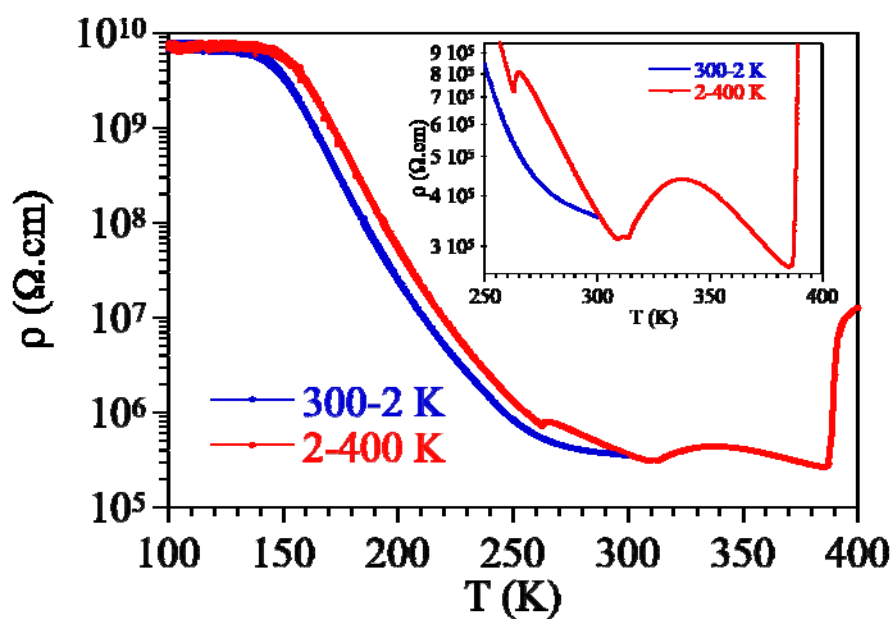
**Figure S1.** Isothermal magnetization of compound **1** at 2 K. Solid line is the best fit to a Brillouin function for a residual paramagnetic contribution of *ca.* 4 % of a monomeric Fe(III) impurity.



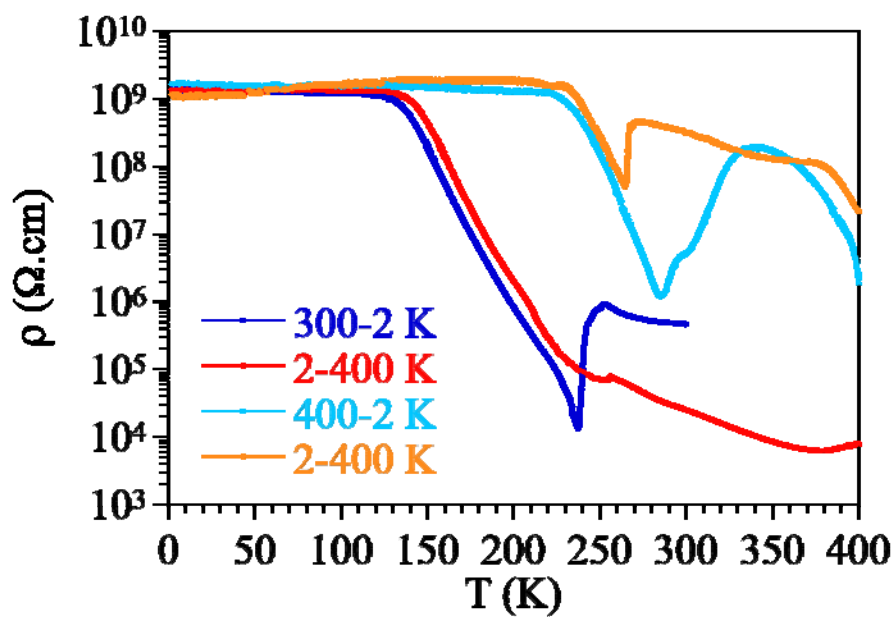
**Figure S2.** Variation of the intensity at different voltages for **1** at 300 K.



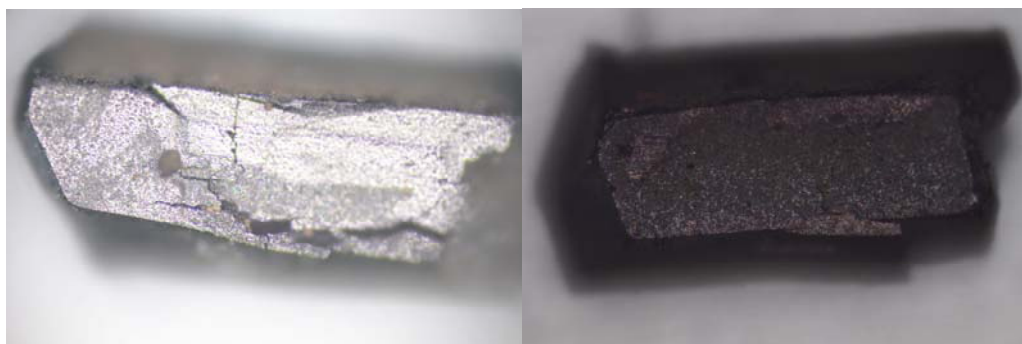
**Figure S3.** Thermal variation of the resistivity (log scale) of a second crystal of compound **1** in two consecutive cooling and warming cycles.



**Figure S4.** Thermal variation of the resistivity of a third crystal (log scale) of compound **1** in a cooling and warming cycle. Inset shows the high temperature region



**Figure S5.** Thermal variation of the resistivity of a fourth crystal (log scale) of compound **1** in two consecutive cooling and warming cycles.



**Figure S6.** Microscope photographs of two different single crystals (length  $\approx$  1 mm) of compound **1** after a thermal cycle, showing the presence of micro-fractures.