Electronic Supplementary Information (ESI)

Ferromagnetic coupling and spin canting behaviour in heterobimetallic $Re^{IV}M^{II/III}$ (M = $Co^{II/III}$, Ni^{II}) species

José Martínez-Lillo,*[a,b] Donatella Armentano,*[b] Giovanni De Munno,[b] Miguel Julve,[a] Francesc Lloret[a] and Juan Faus[a]

a) Departament de Química Inorgànica/Instituto de Ciencia Molecular, Facultat de Química de la Universitat de València, Dr. Moliner 50, 46100, Burjassot, Valencia, Spain. E-mail: lillo@uv.es
b) Centro di Eccellenza CEMIF.CAL, Dipartimento di Chimica, Università degli Studi della Calabria, via P. Bucci 14/c, 87030 Arcavacata di Rende, Cosenza, Italy. E-mail: donatella.armentano@unical.it.

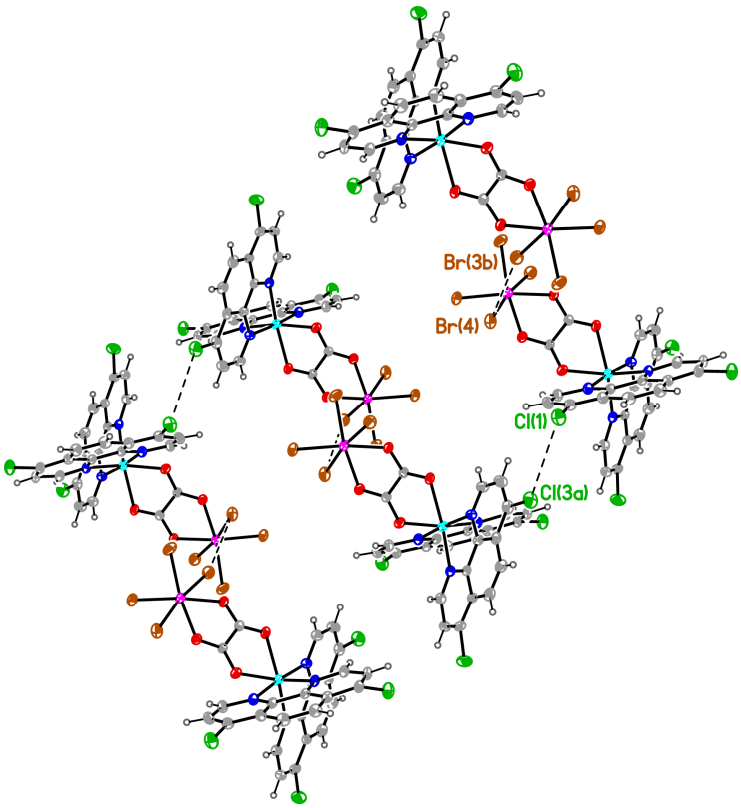

Figure S1. View of the shortest Cl···Cl and Br···Br intermolecular distances in **1** [3.685(1) and 5.623(1) Å, respectively].

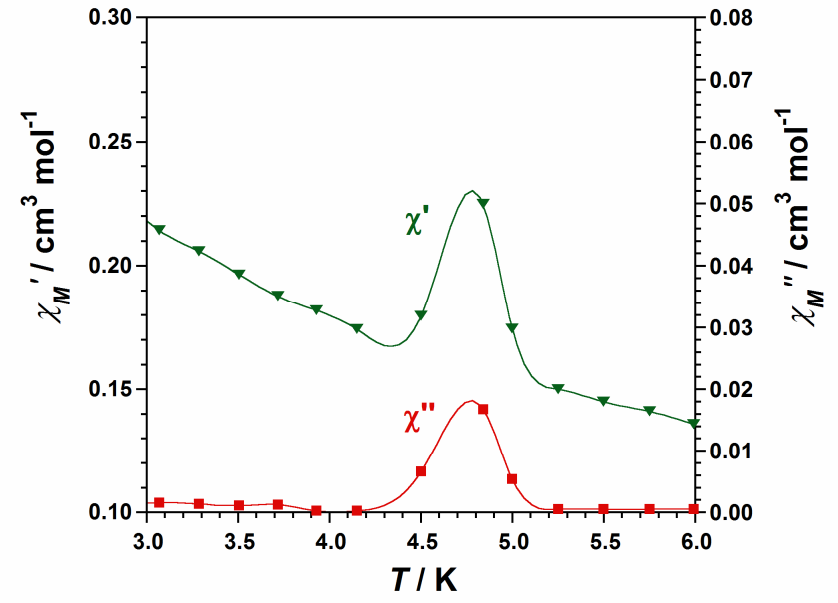

Figure S2. Thermal dependence of the in-phase (χ_M') and out-of-phase (χ_M'') ac susceptibility signals for **3** under an oscillating magnetic field of ± 1 G and a frequency of 330 Hz.

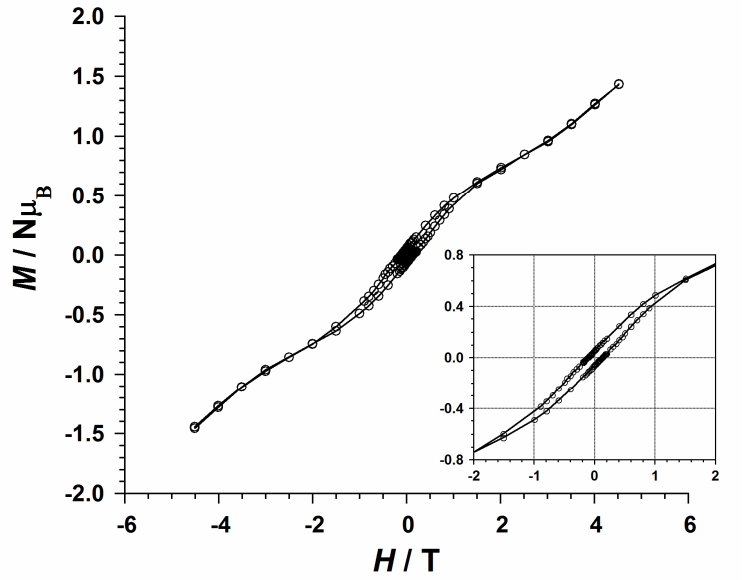

Figure S3. Variable-field magnetization data for **3** at 2.0 K. The solid line is an eye guide. The inset shows a detail of the hysteresis loop.

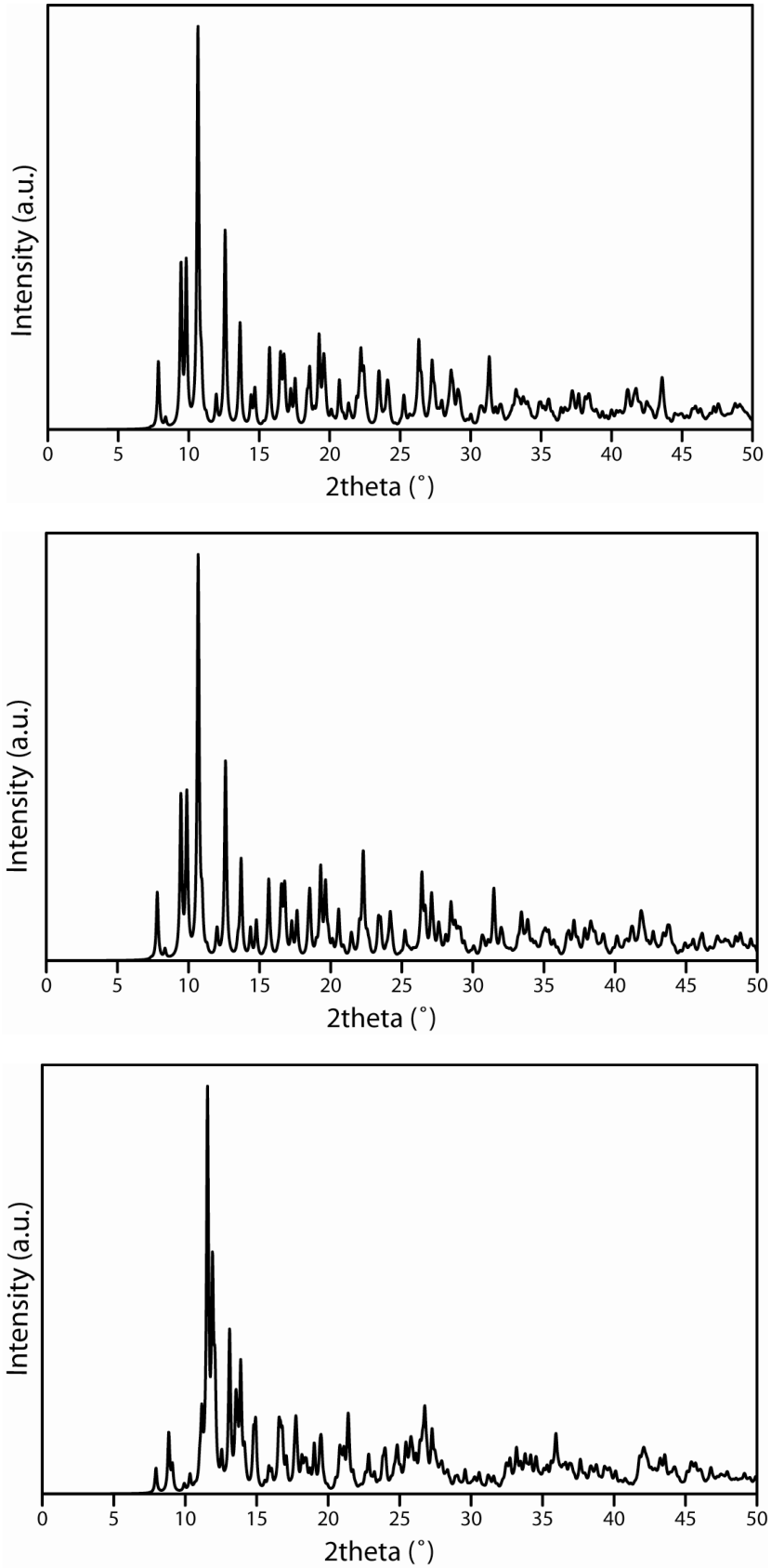

Figure S4. PXRD plots for samples of compounds **1** (top), **2** (middle) and **3** (bottom).