

## Supporting Information

Figure S1. Translational quadruple phenyl embrace (TQPE) for **1**.

Figure S2. A view of the packing of **1** in the *bc* plane illustrating the alternating arrangement of the hydrophilic anions and the hydrophobic cations (the broken lines corresponds to the hydrogen bonds between the uncoordinated water molecule and terminal cyanide groups).

Figure S3. Parallel quadruple phenyl embrace (PQPE) for **2**.

Figure S4. A view of the packing of **2** in the *bc* plane illustrating the alternating arrangement of the hydrophilic anions and the hydrophobic cations (the broken lines corresponds to the hydrogen bonds between the methanol molecule, uncoordinated water molecule and terminal cyanide groups).

Figure S5.  $\chi_M T$  versus  $T$  plot for complex **1**: (o) experimental data; (—) best-fit through eqn. (1).

Figure S6. Hysteresis loop of **4** at 2.0 K.

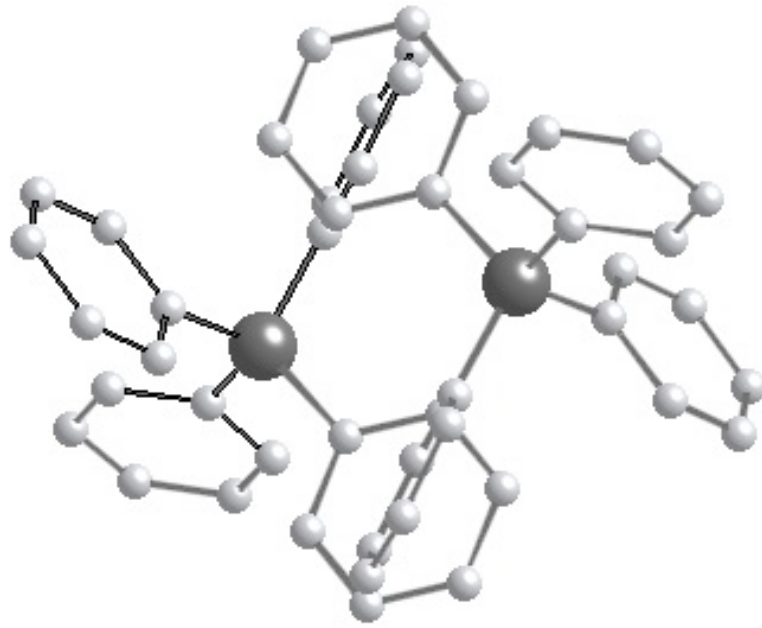


Figure S1

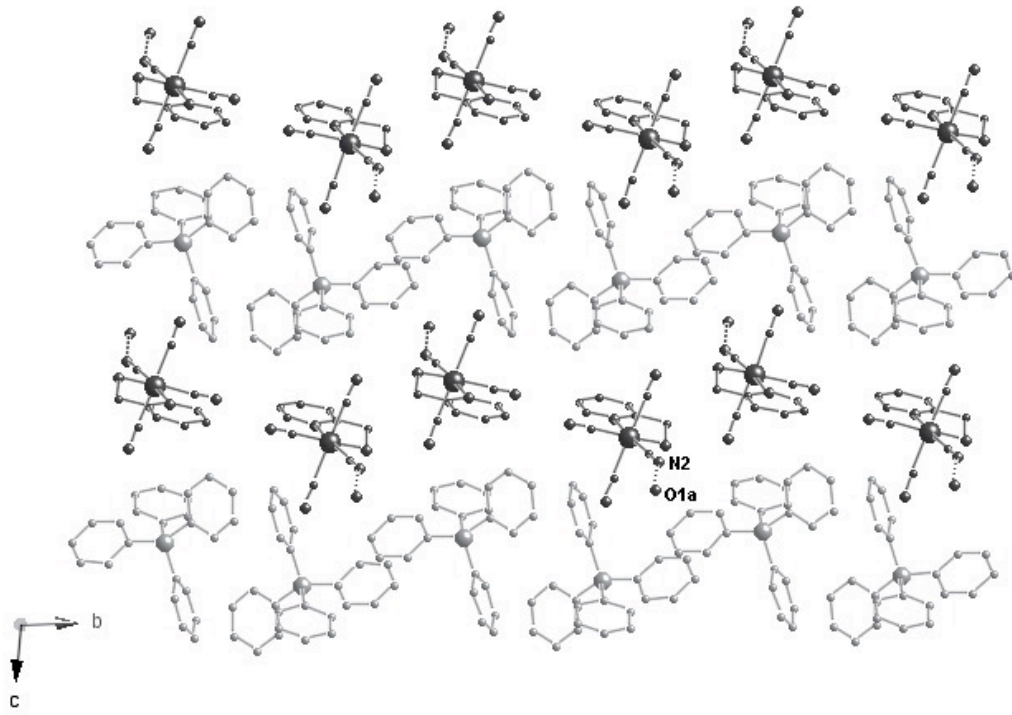


Figure S2

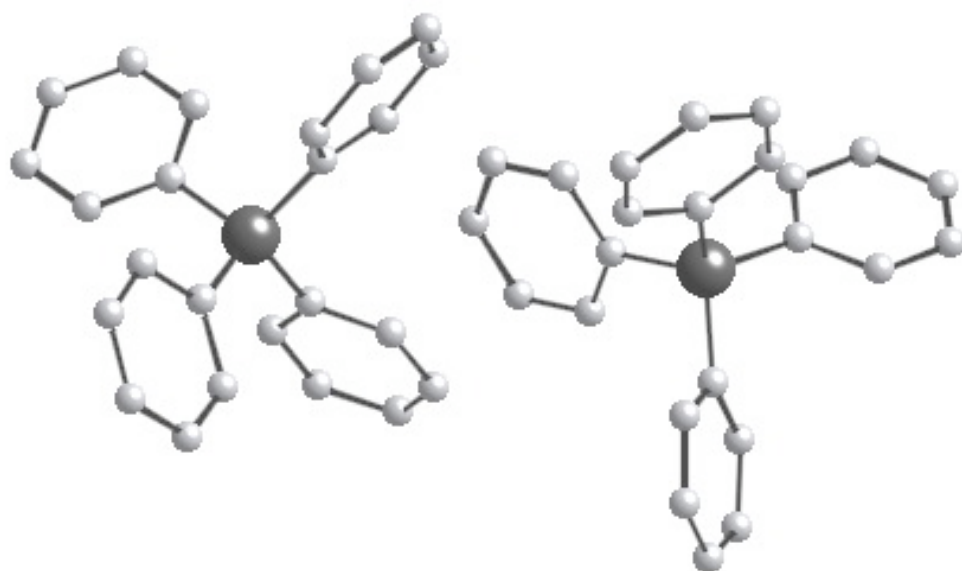


Figure S3

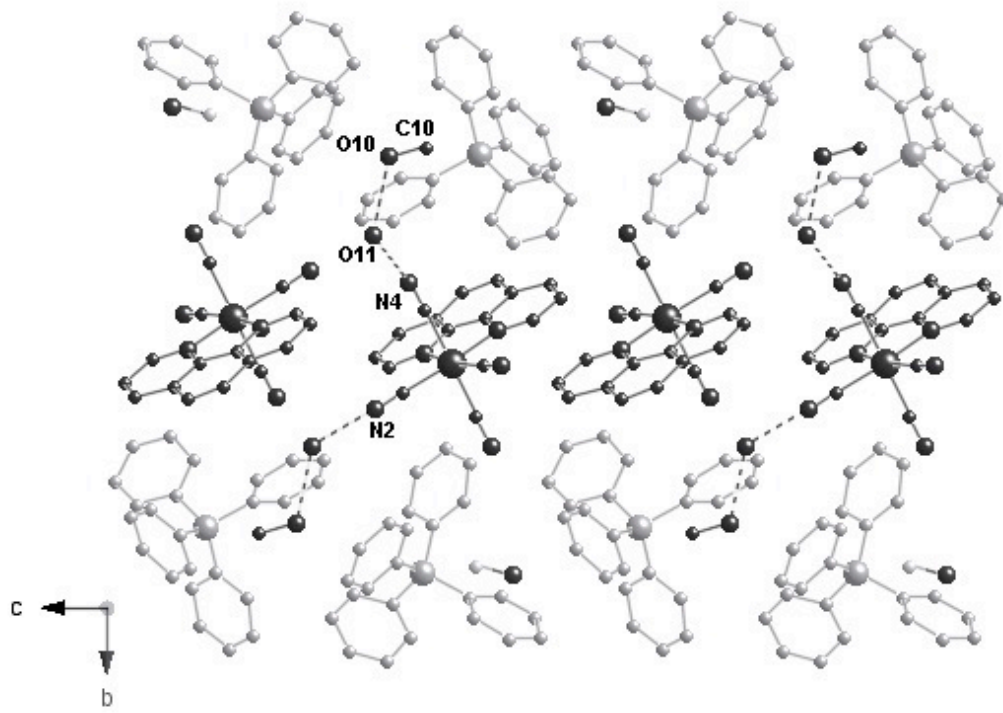


Figure S4

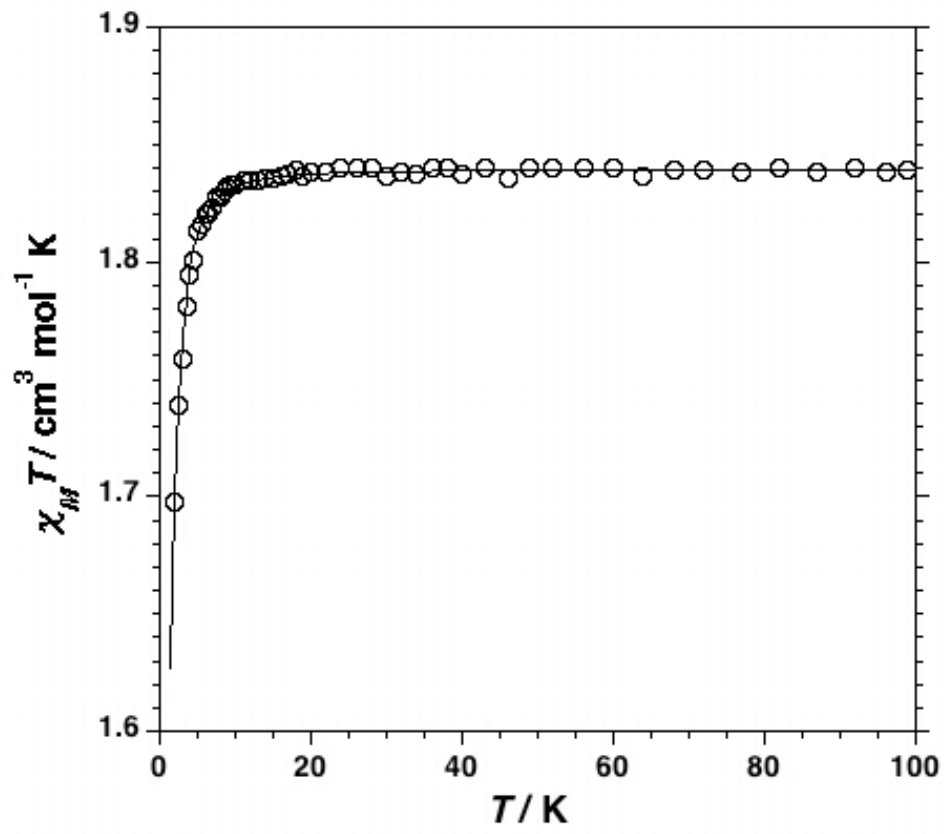


Fig S5

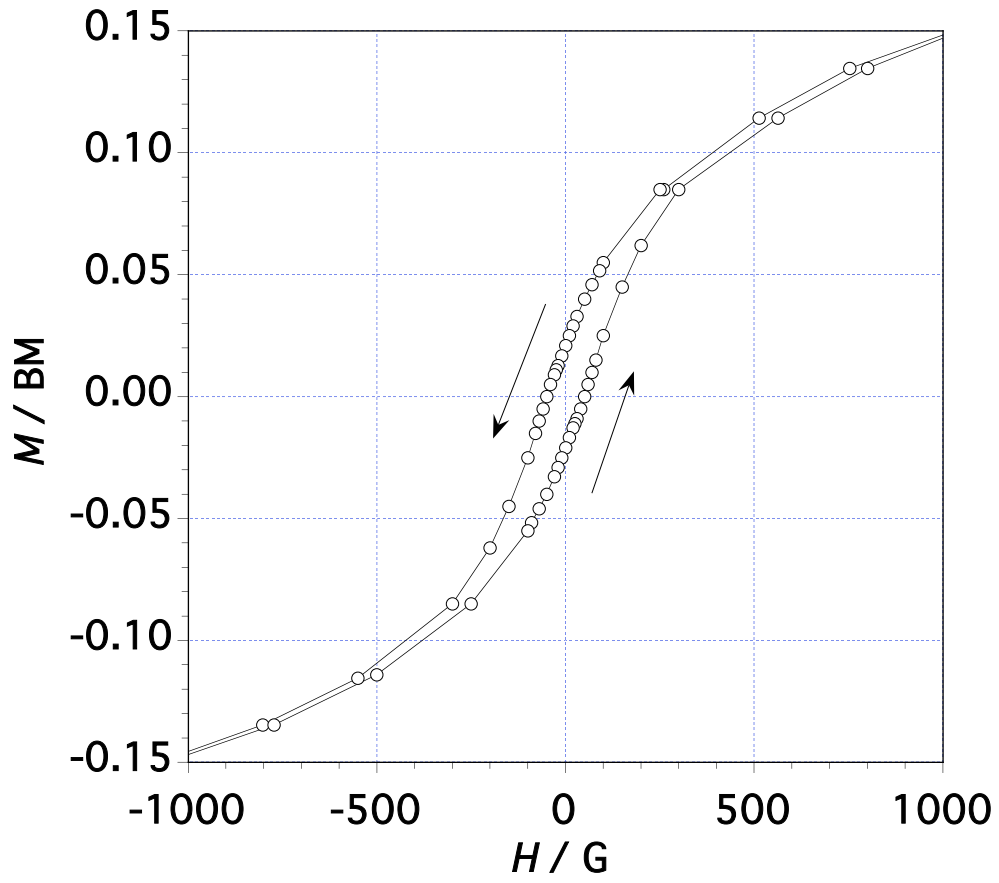


Figure S6