Supporting Information:

Cobalt Complexes with "Click"-Derived Functional Tripodal Ligands: Spin Crossover and Coordination Ambivalence

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Figure Captions:

Figure S1: View of the crystal structure for **1**. View of the heptacoordinate Co(II) centre of **1**. The coordination polyhedron is highlighted.

Figure S2: Views of the molecular structure for **2**. View of the hexacoordinate Co(II) centre of **2**. The coordination polyhedron is highlighted.

Figure S3: Magnetic characterization of **2**. Temperature dependence of the High-spin molar fraction for compound **2**.

Figure S4: Scaling plot of the logarithm of the low-spin over the high spin molar fraction of compound **2** against the high spin molar fraction, used for the graphical assessment of the entropy contribution and the fitting of the data. Every dot is taken at a different temperature, as in the previous graph. The line is a fit to the data.

Figure S5: X-band EPR spectrum of **4** in the polycrystalline state at 110 K.

Figure S6: Room temperature chemical switching between **1** and **2**: Reversible switching of the magnetic behaviour and corresponding colour changes of the solutions, as evidenced in

the photos. The magnetic measurements were corrected for the increasing concentration by considering the molar magnetization, calculated from the concentration for each solution.

Figure S1:

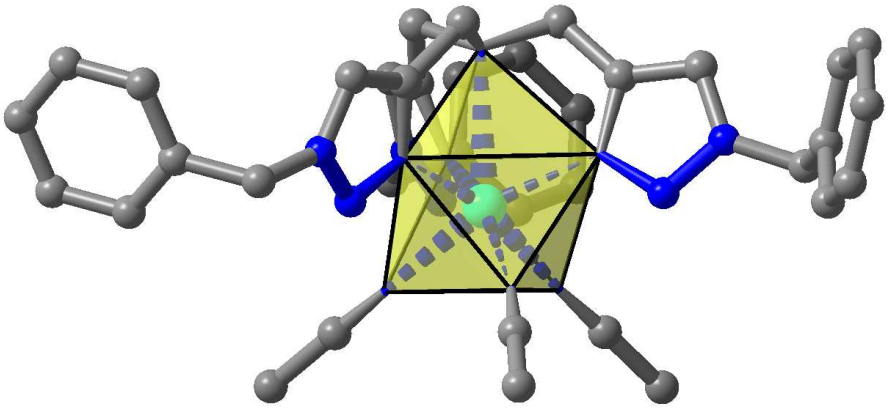


Figure S2:

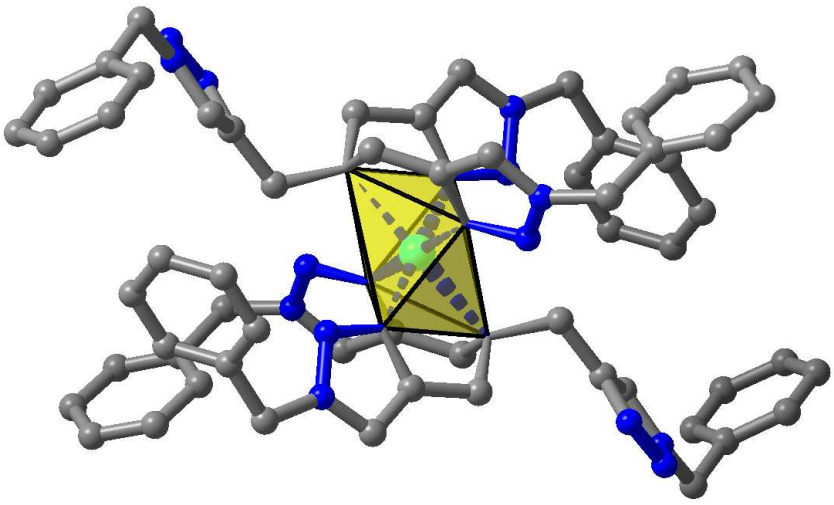


Figure S3:

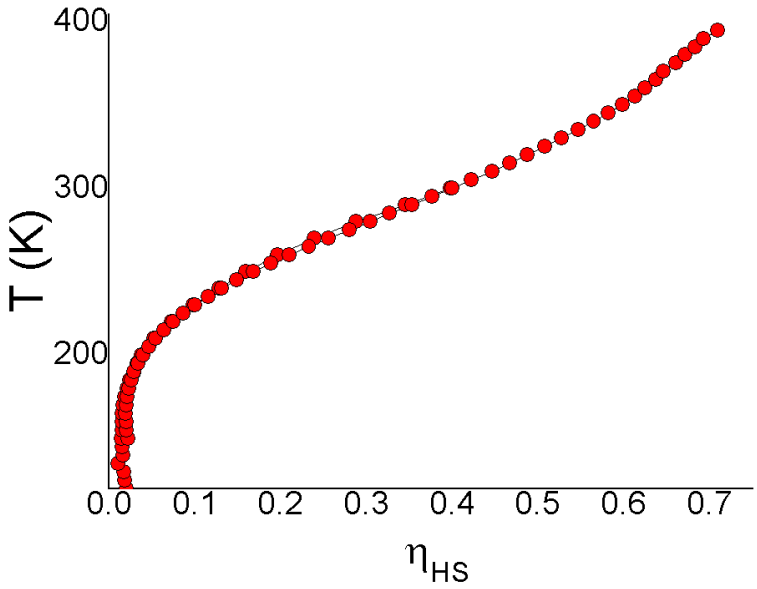


Figure S4:

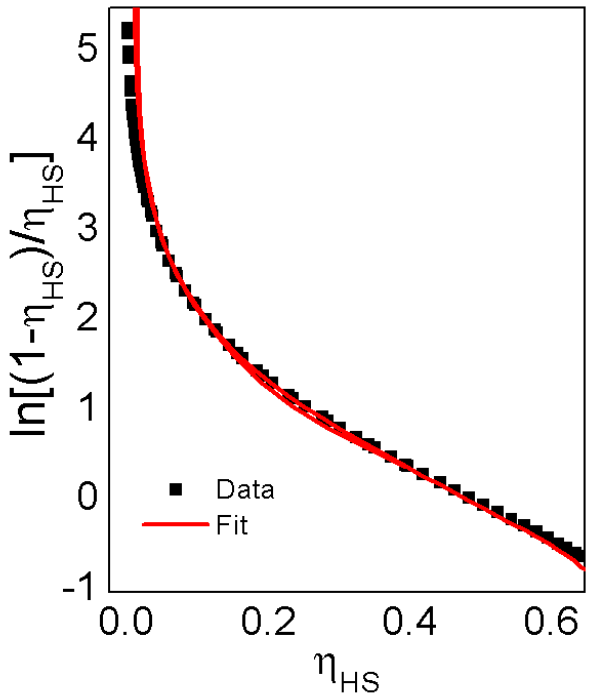


Figure S5:

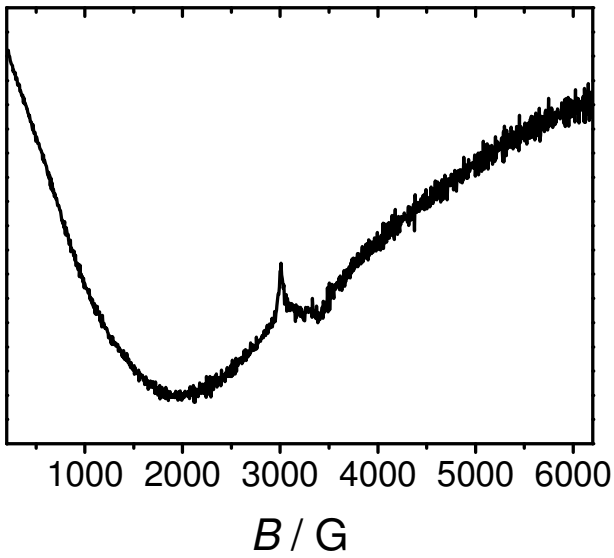
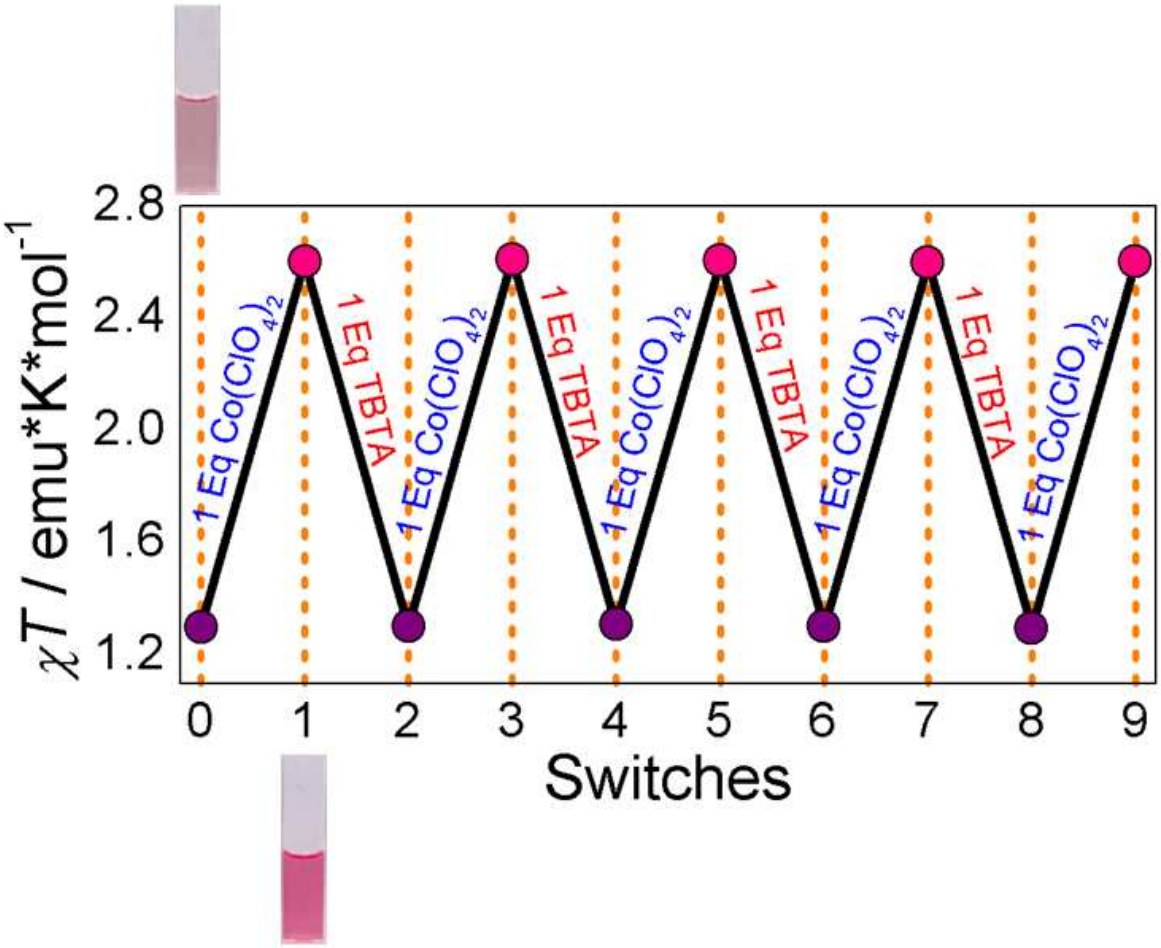


Figure S6:


2.8
2.4
2.0
1.6
1.2
χT / emu*K*mol-1
0
1
2
3
4
5
6
7
8
9
Switches
1 Eq Co(ClO4)2
1 Eq TBTA
1 Eq Co(ClO4)2
1 Eq TBTA
1 Eq Co(ClO4)2
1 Eq TBTA
1 Eq Co(ClO4)2
1 Eq TBTA
1 Eq Co(ClO4)2