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Synthesis, Structure and Magnetic Properties of Two New Azido-Co$^{II}$ Coordination Architectures: from Ferromagnetic Coupling to Single-Chain-Magnets

Bo-Wen Hu,$^a$ Jiong-Peng Zhao,$^a$ Qian Yang,$^a$ Xiao-Feng Zhang,$^a$ M. Evangelisti,$^c$ E. C. Sañudo* $^b$ and Xian-He Bu* $^a$

Fig. 1S The coordination environment of the Co$^{II}$ center in 1 (symmetry code: A -x+1,-y+1,-z+1; B x-1,y,z).
Fig. 2S The coordination environment of Co$^{ll}$ and Na$^+$ centers in 2 (symmetry code: A x,-y+1,z+1/2).
Fig. 3S XRPD patterns for 1 (a) and 2 (b).
**Fig. 4S** Plot of ln(χ'T) vs. 1/T for 2 (10 Hz oscillating frequency, 3 G ac field and zero dc field)
Fig. 5S ZFC/FC measurement for 2 at 50 G applied field.
**Fig. 6S** Arrhenius plot for the two frequency dependent relaxation processes (T1 centred at 11.8 K and T2 centred at 9.5 K) observed for complex 2. The solid lines are the best fit to the Arrhenius law. See text for fitting parameters.
**Fig. 7S** Experimental heat capacity for complex 2 collected for several applied magnetic fields (B), as labelled.