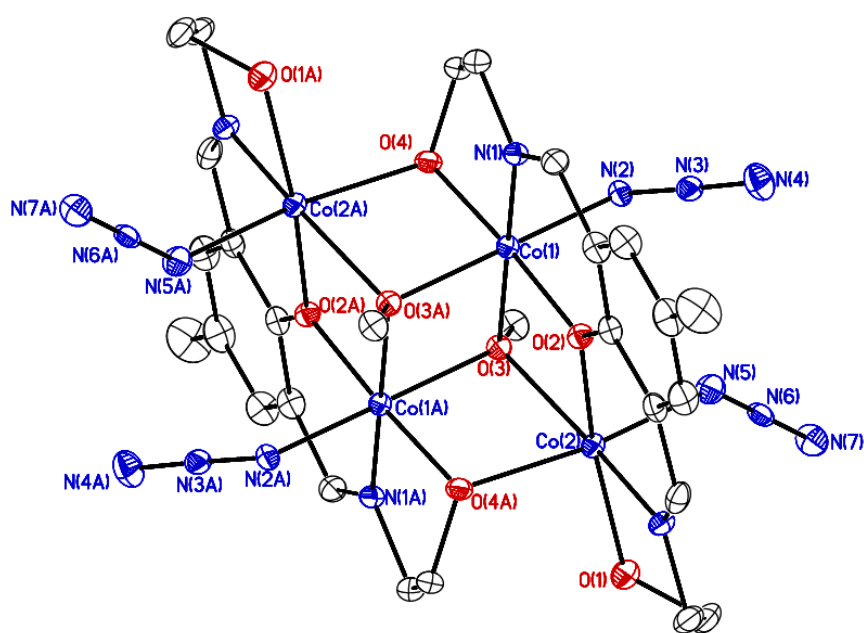


**Self-assembly of mixed-valence cobalt (II, III) and nickel(II) clusters: azide-bridged one-dimensional single chain coordination polymers  $[\text{Co}_2^{\text{II}}\text{Co}_2^{\text{III}}]_n$  comprised of tetranuclear units, tetranuclear cobalt  $[\text{Co}_2^{\text{II}}\text{Co}_2^{\text{III}}]$  complexes, ferromagnetically coupled azide-bridged tetranuclear, and hexanuclear nickel(II) complexes: synthesis, structural, and magnetic properties**

Santokh S. Tandon,<sup>\*a</sup> Scott D. Bunge,<sup>b</sup> Robert Rakosi,<sup>b</sup> Zhiqiang Xu<sup>c</sup> and Laurence K. Thompson<sup>\*d</sup>

**Supplementary Information**  
**Figures S1-S3**



**Fig. S1:** Perspective view of a tetracobalt  $[\text{Co}_2^{\text{II}}\text{Co}_2^{\text{III}}]^+$  cationic unit with relevant numbering in **2**. **Co(1) & Co(1A) are  $\text{Co}^{\text{III}}$ , Co(2) & Co(2A) are  $\text{Co}^{\text{II}}$ .** (H atoms,  $\text{H}_2\text{O}$  & Cl are omitted for clarity).

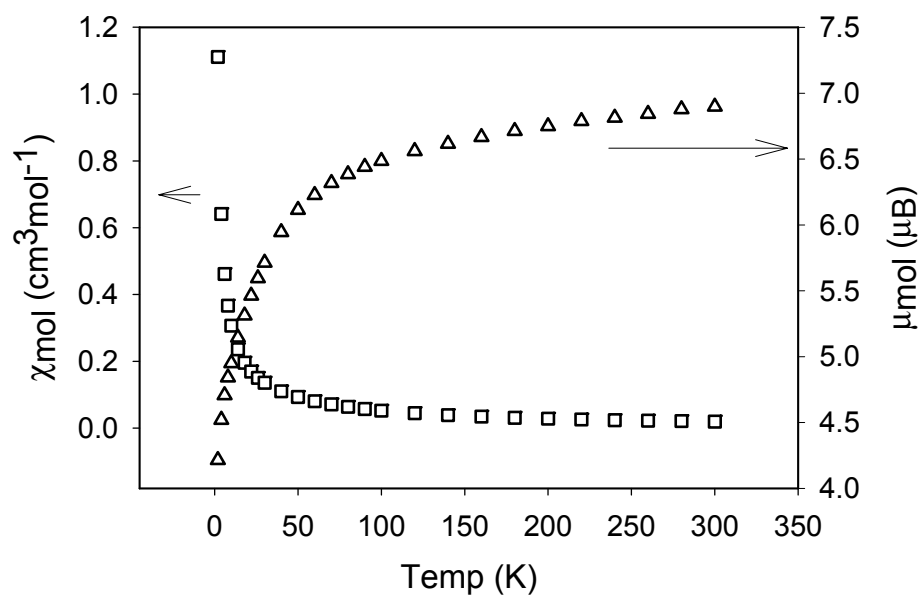


Fig. S2: Plot of  $\mu_{\text{mol}}/T$  and  $\chi_{\text{mol}}/T$  for 1

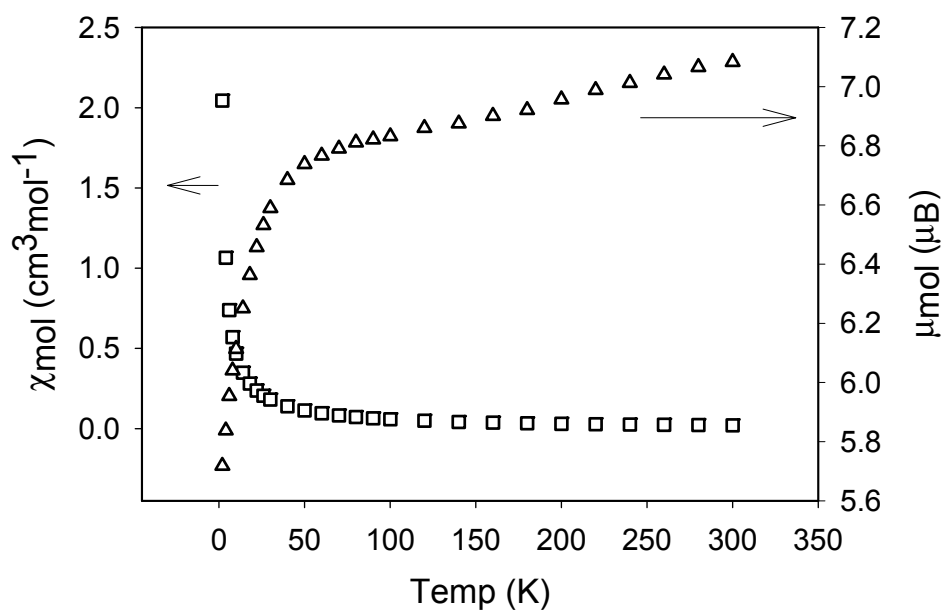


Fig. S3: Plot of  $\mu_{\text{mol}}/T$  and  $\chi_{\text{mol}}/T$  for 4