

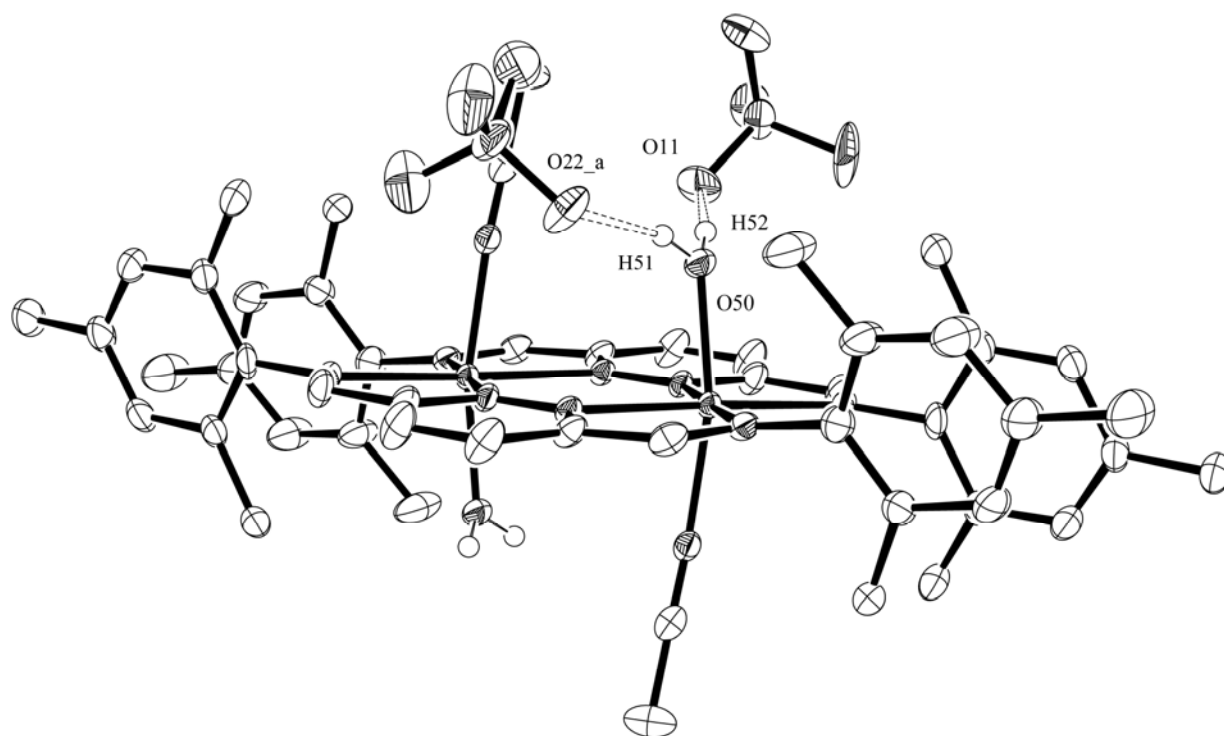
# Doubly pyridazine-bridged dicobalt(II) and dinickel(II) side-by-side complexes of variously substituted conjugated bis-bidentate ligands

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## SUPPORTING INFORMATION



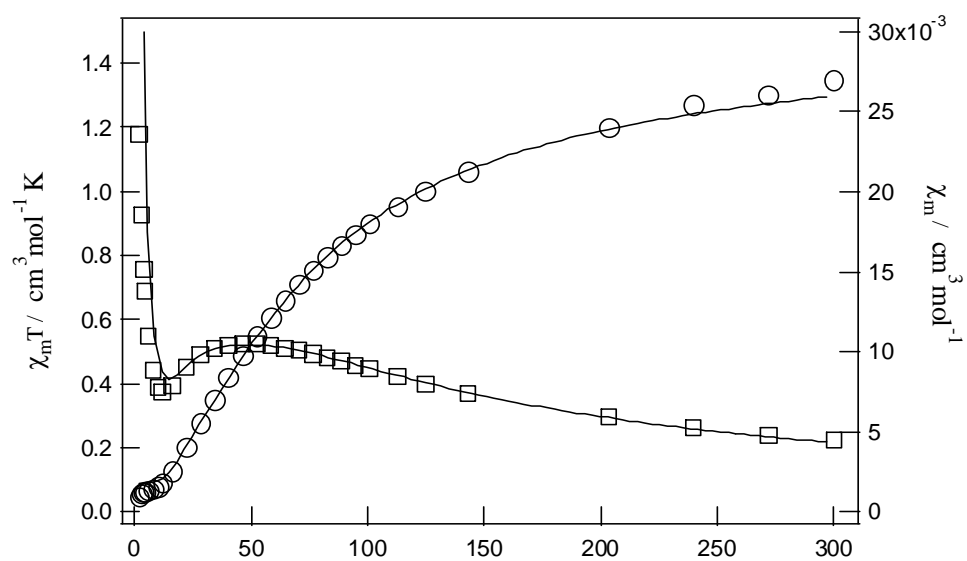
**Figure S1.** Two of the three hydrogen-bonding interactions present in  $[\text{Co}^{\text{II}}_2(\text{L}^{o,o,p\text{-Me}})_2(\text{H}_2\text{O})_2(\text{CH}_3\text{CN})_2](\text{ClO}_4)_4 \cdot \text{CH}_3\text{CN}$ . The third hydrogen-bond, listed in the Table T1 below, involves O25\_b which is in the other part of the 50:50 disordered perchlorate anion to O22\_a (shown above).

**Table T1.** Hydrogen bonding interactions in  $[\text{Co}_2(\text{L}^{o,o,p\text{-Me}})_2](\text{ClO}_4)_4 \cdot 3\text{CH}_3\text{CN} \cdot 2\text{H}_2\text{O}$ :

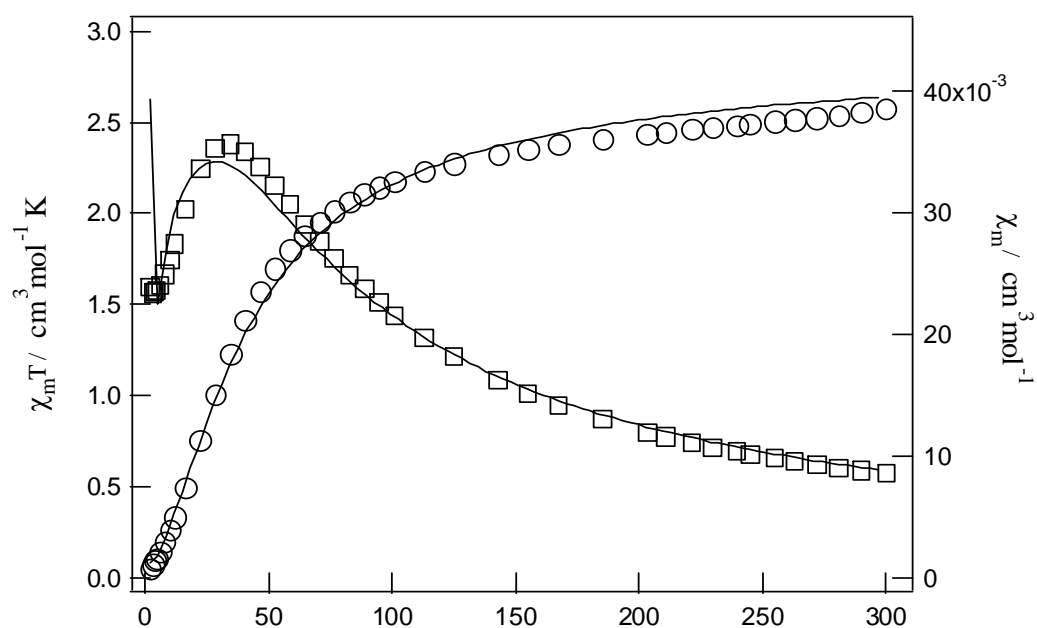
D-H	H...A	D...A	<(DHA)	
0.79(4)	1.84(4)	2.618(12)	170(4)	O50-H51...O25_b
0.79(4)	1.99(4)	2.736(4)	158(3)	O50-H51...O22_a
0.82(4)	1.91(4)	2.712(4)	165(4)	O50-H52...O11

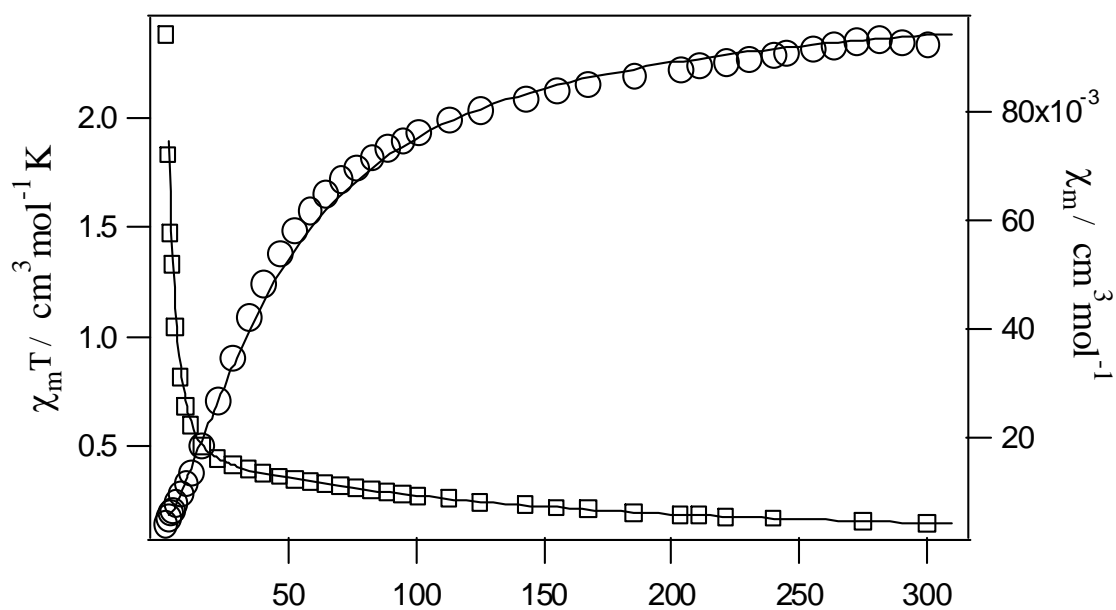
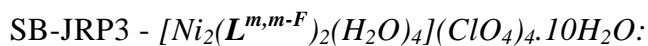
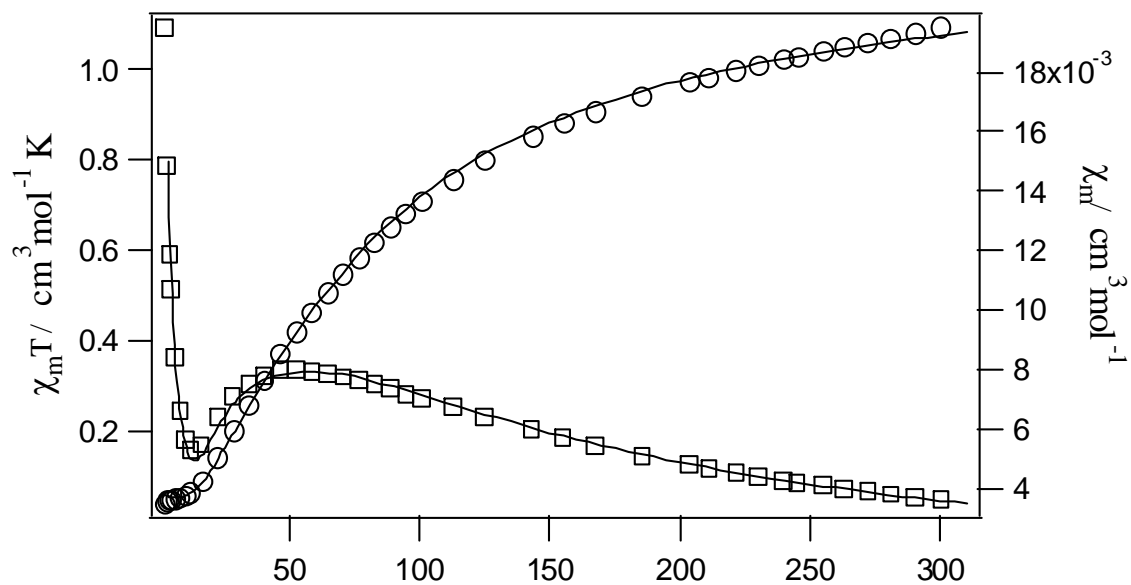
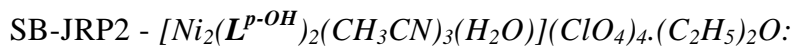
Symmetry transformations used to generate equivalent atoms: A = -x+1,-y+1,-z

SB-JRP1-Fig3 -  $[Ni_2(L^{o,p-Me})_2(CH_3CN)_2(H_2O)_2](ClO_4)_4 \cdot 5H_2O$ :

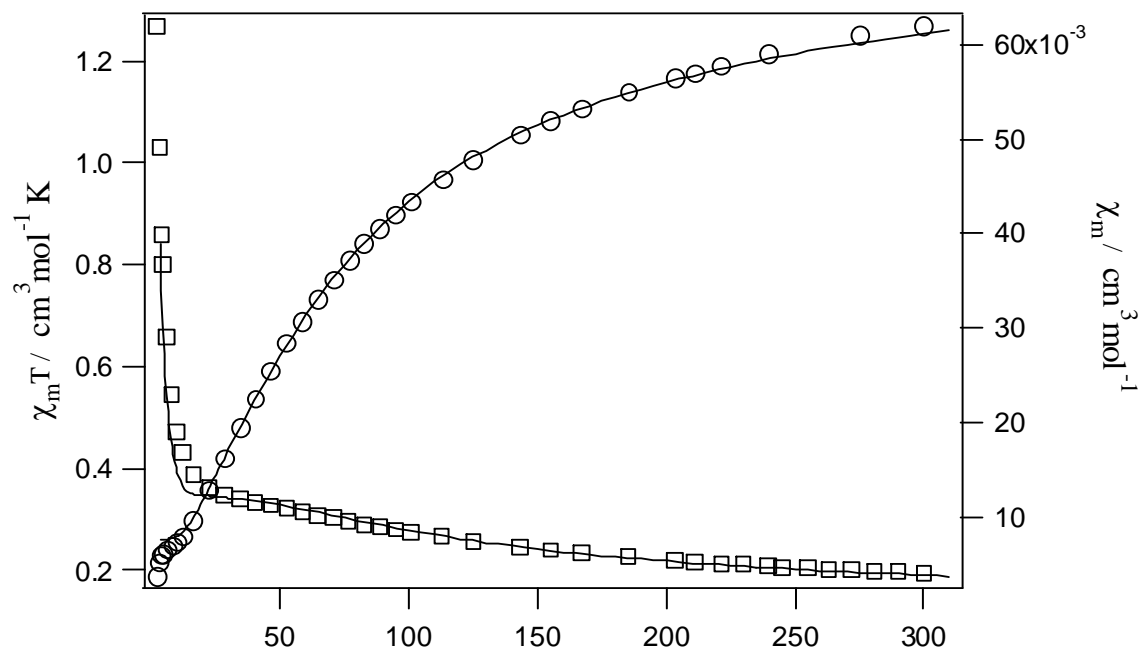


SB-JRP7-Fig4 -  $[Co_2(L^{o,o,p-Me})_2(CH_3CN)_2(H_2O)_2](ClO_4)_4$ :

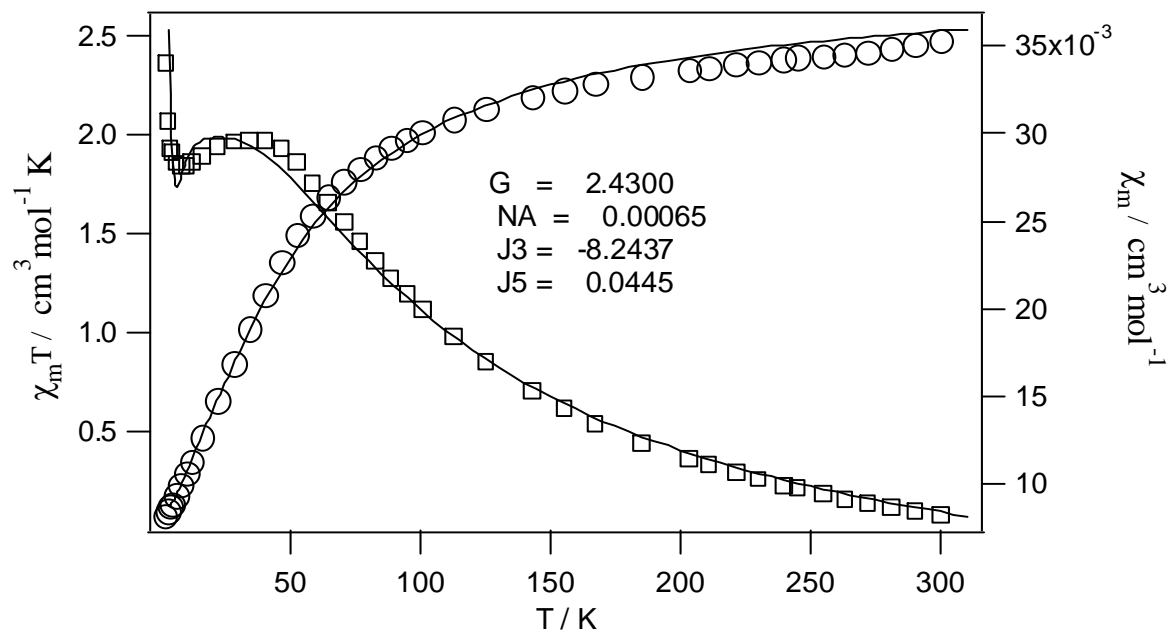




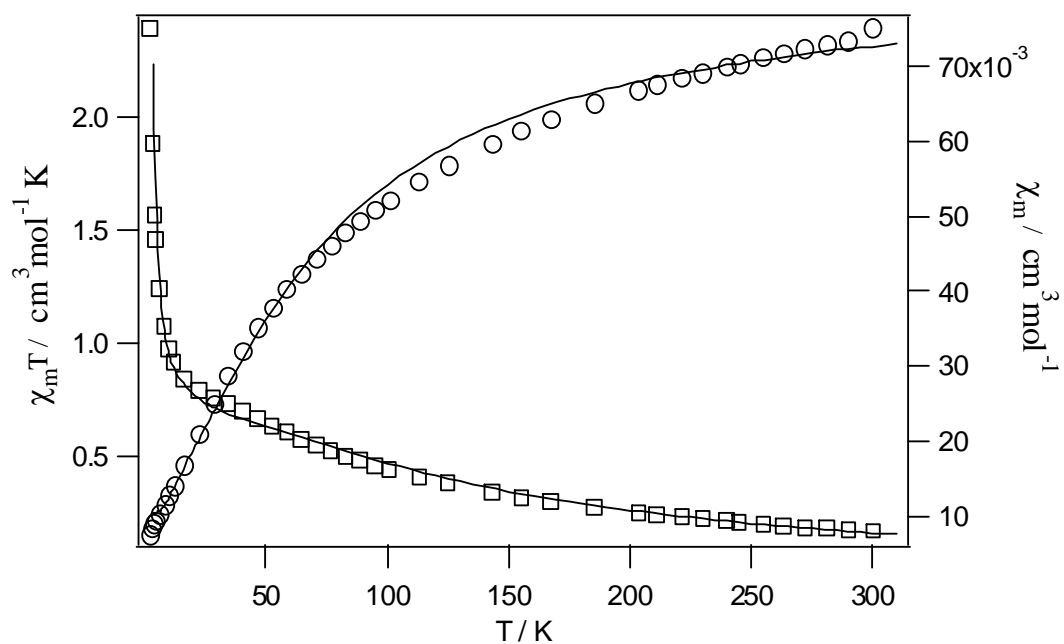
SB-JRP4 -  $[Ni_2(L^{o,o,p-Me})_2(H_2O)_4](BF_4)_4$ :



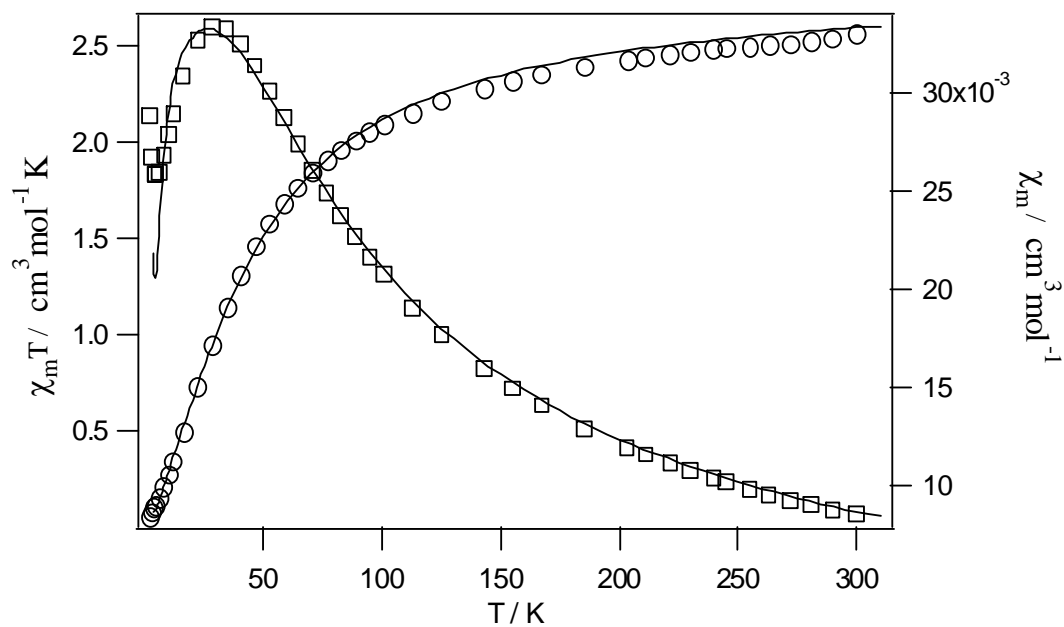
SB-JRP6-  $[Co_2(L^{p-Me})_2(H_2O)_4](ClO_4)_4$ :



SB-JRP8 -  $[Co_2(L^{p-OH})_2(CH_3CN)_2(H_2O)_2](CH_3CN)(C_2H_5)_2O(ClO_4)_4$ :



SB-JRP9 -  $[Co_2(L^{o,p-Me})_2(CH_3CN)_2(H_2O)_2](ClO_4)_4 \cdot 2H_2O$ :



SB-JRP10 -  $[Co_2(L^{m,m-Cl})_2(H_2O)_4](ClO_4)_4 \cdot 2H_2O$ :

