

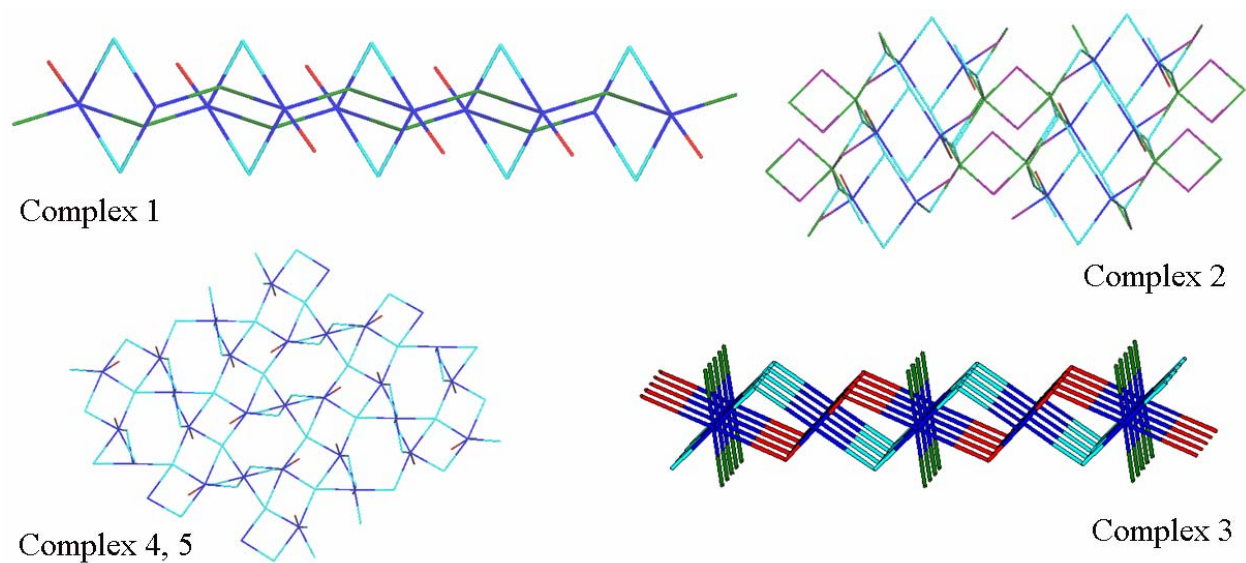
**A series of transition metal-azido extended complexes with various anionic and neutral co-ligands: synthesis, structure and their distinct magnetic behavior**

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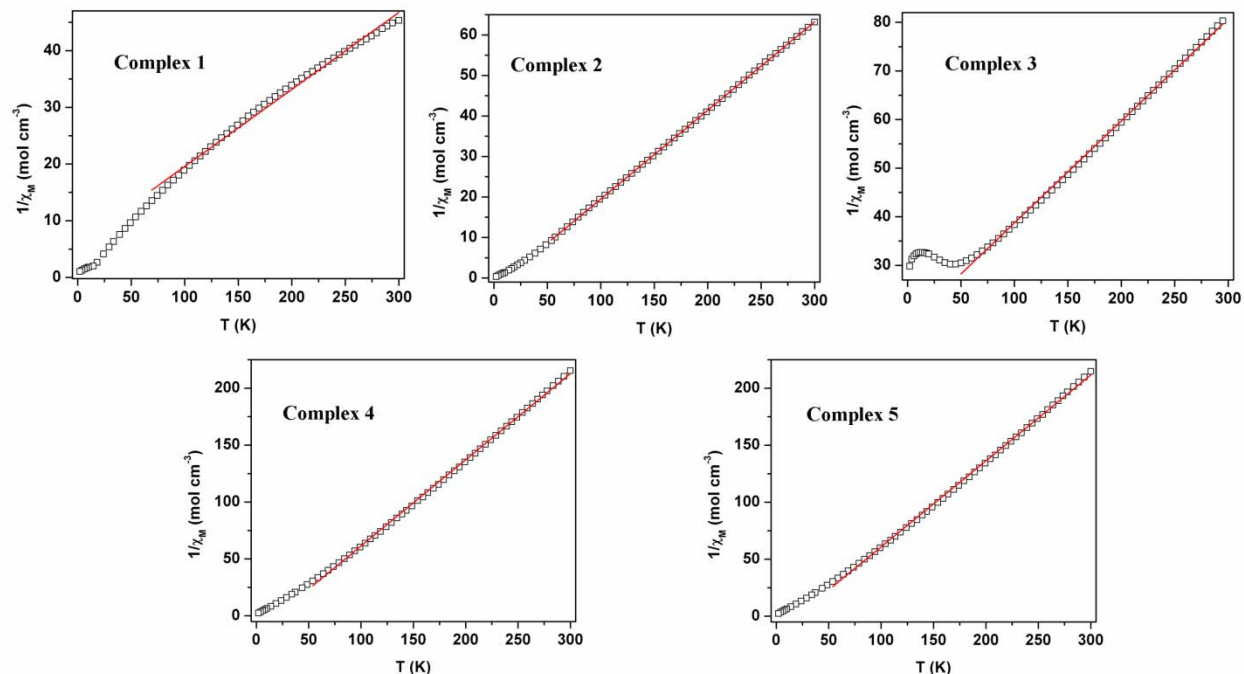
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**Fig. S1** Views of the network topologies of the complexes **1-5**.



**Fig. S2** Curie-Weiss plots for complex **1-5**. The red lines indicate the fitting.

**Table S1.** Results of the Curie-Weiss Plots for **1-5**

Complex	T range (K)	$\theta$ (K)	$C$ (cm <sup>3</sup> K mol <sup>-1</sup> )	Overall Magnetic Behavior
1	70-300	-44.36	7.36	canted antiferromagnetic
2	20-300	10.71	4.57	ferromagnetic
3	50-300	-84.59	4.77	antiferromagnetic
4	25-300	18.89	1.32	ferromagnetic
5	25-300	19.31	1.33	ferromagnetic

**Table S2.** Spin density value for all Cu(II) atoms and bridging nitrogen atoms for the complexes **4** and **5**.

Atoms	<b>4</b>		<b>5</b>	
	Quartet	Doublet	Quartet	Doublet
Cu(1)	0.5458	-0.5451	0.5561	0.5480
Cu(2)	0.5692	0.5776	0.5706	-0.0286

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Cu(3)	0.5343	0.5443	0.5491	-0.0881
N(1)	0.0901	-0.0038	0.0901	0.0469
N(2)	0.1334	0.0017	0.1289	0.0421
N(3)	0.0887	0.0919	0.0907	0.0257
N(4)	0.1319	0.1351	0.1306	-0.0866

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