

Supplementary Material

Metal-exchange experiments were performed by immersing the as-synthesized crystals of **1** in ethanol/DMA (1:1) solutions of hydrated copper(II) nitrate, zinc(II) nitrate, manganese(II) nitrate or nickel(II) nitrate, each having a concentration of 0.1 mM. The crystals were retained in these solutions at room temperature and allowed to equilibrate for one week. During this time they were monitored visually for colour changes.

ICP-AES analyses were performed on an Agilent Technologies 4100 MP-AES. Standards were prepared from purchased 1000 ppm stock solutions while the samples were prepared using a 5 % nitric acid.

The table below indicates that metal exchange occurs only when crystals of **1** are soaked in copper(II) nitrate.

Samples	Elements / Metal molar ratio (%)				
	Co	Cu	Zn	Ni	Mn
1 crystals in ethanol /DMA solution of Cu(NO ₃) ₂ .3H ₂ O	66	34	/	/	/
1 crystals in ethanol/DMA solution of Zn(NO ₃) ₂ .6H ₂ O	99	/	1	/	/
1 crystals in ethanol /DMA solution of Ni(NO ₃) ₂ .6H ₂ O	100	/	/	0	/
1 crystals in ethanol /DMA solution of Mn(NO ₃) ₂ .4H ₂ O	99	/	/	/	1