Electronic Supplementary Information for Dalton Transactions

Structural diversity and magnetic properties in 1D and 2D azido-bridged cobalt(II) complexes with 1,2-bis(2-pyridyl)ethylene

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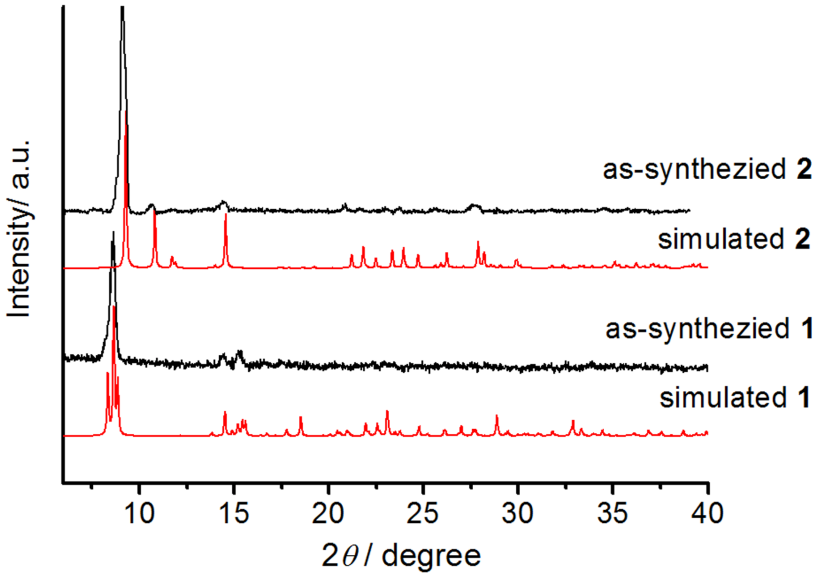

Fig. S1 The simulated and experimental XRPD patterns of **1** and **2**.

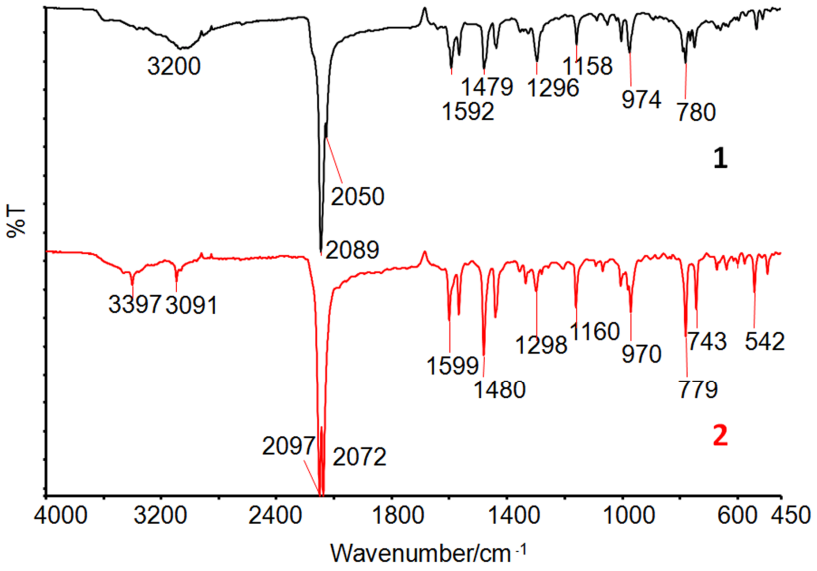

Fig. S2 IR spectra of **1** and **2**.

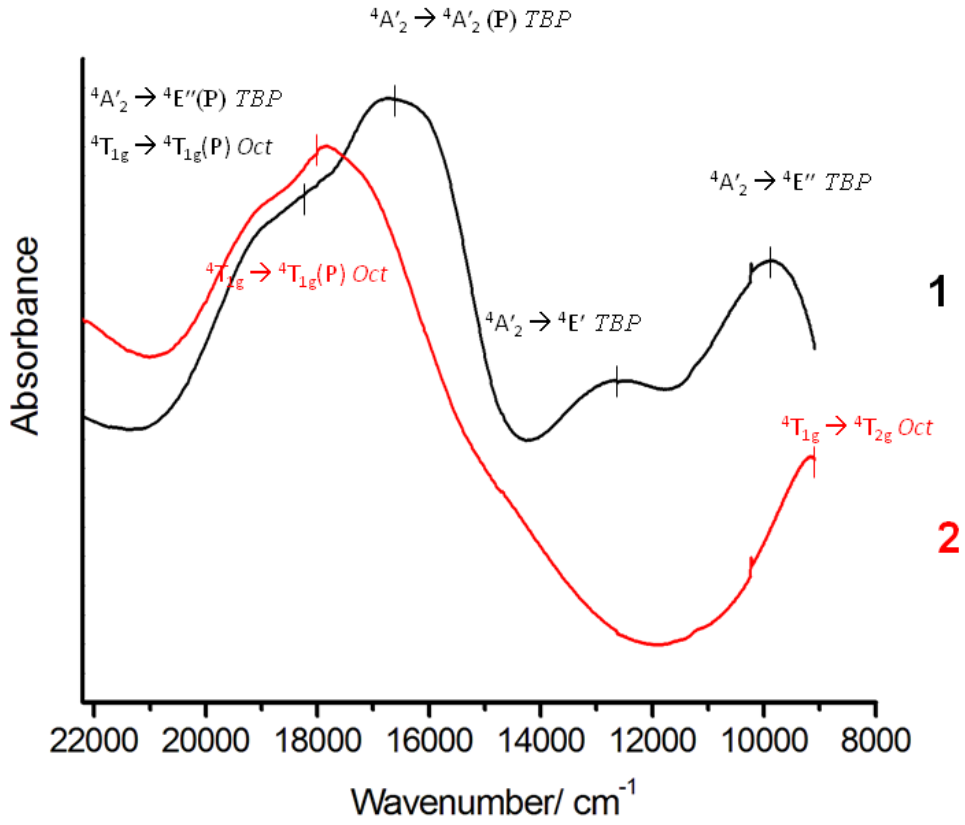

Fig. S3 UV-Vis diffuse reflectance spectra of **1** and **2** with the d-d transitions labeled.[a]

(a) Lever, A. B. P. *Inorganic Electronic Spectroscopy*, 2nd ed., Elsevier, The Netherlands, 1984.

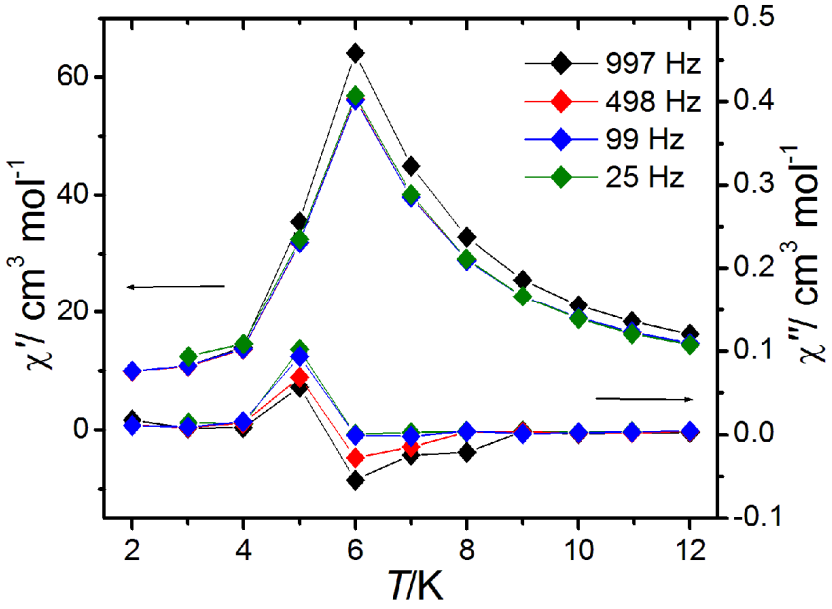

Fig. S4 Temperature dependence of the *ac* susceptibility for **1** at H_{dc} = 0 Oe, H_{ac} = 3 Oe, with frequencies of 25 – 997 Hz.

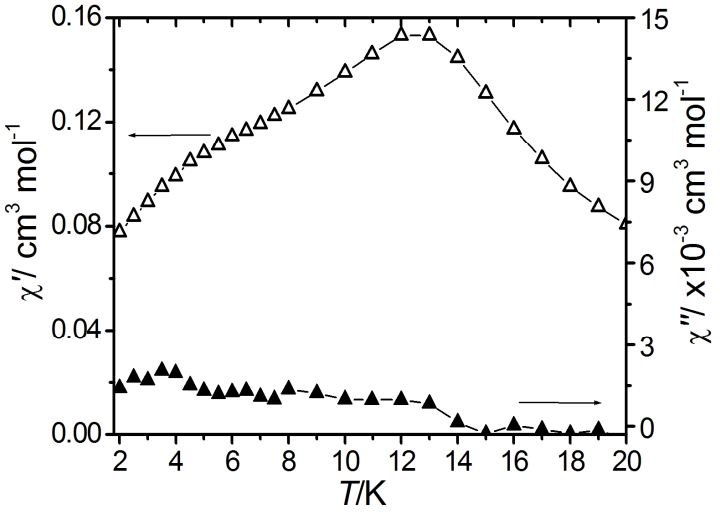

Fig. S5. Temperature dependence of the *ac* susceptibility for **2** at H_{dc} = 0 Oe, H_{ac} = 3 Oe, with frequency of 997 Hz.