Electronic Supplementary Material (ESI) for Dalton Transaction
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Supporting Information

4-Substituent Pyridines Directed Cobalt(II) Azides: Solvothermal Synthesis, Structure, and Magnetic Properties

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Additional Figures

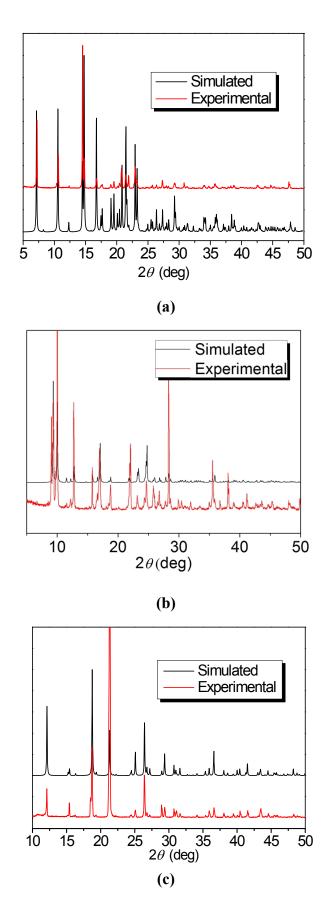
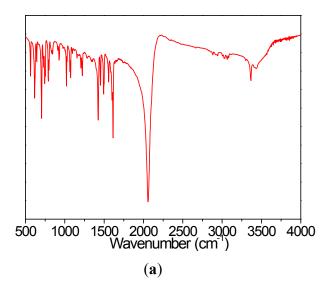
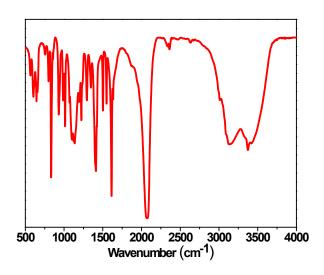


Fig. S1. XRPD patterns for 1 (a), 2 (b), and 3 (c).

1





Marka Lable Marka Lable

1000 1500 2000 2500 3000 3500 4000 Wavenumber (cm⁻¹)

(b)

Fig. S2. FT-IR spectra of 1 (a), 2 (b), and 3 (c).

(c)

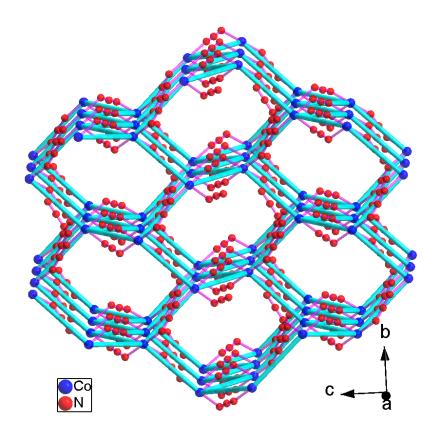


Fig. S3. 3D azide-bridged diamondoid framework in 3 viewed along the a direction showing the 4-connected topology and two kinds of single helixes (generated by 2_1 axis) in this direction.

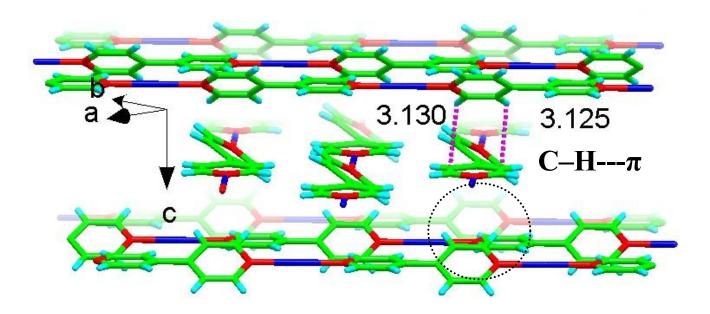


Fig. S4. Packing of Co(II)-bipy chains in **3** showing perpendicular array and C–H--- π interactions.

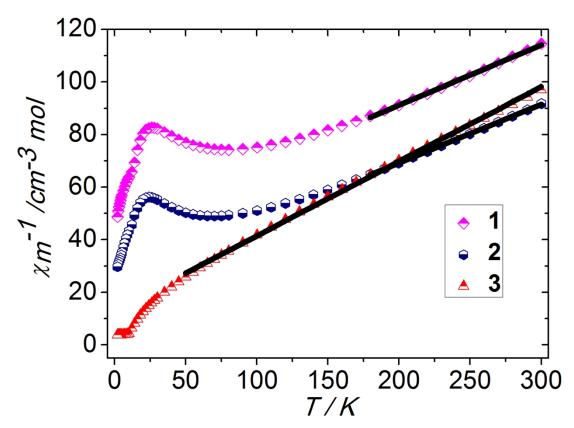


Fig. S5. Temperature dependence of $1/\chi_M$ for 1, 2, and 3.

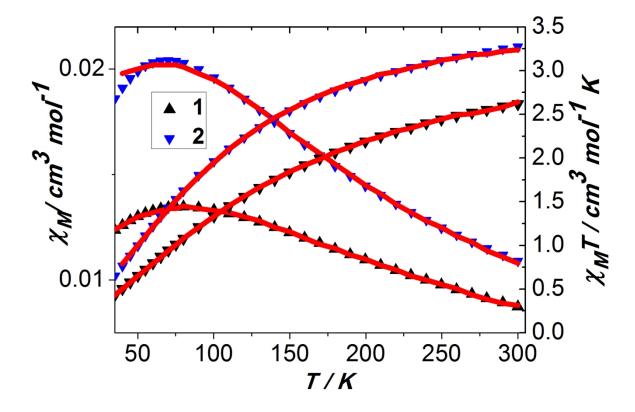


Fig. S6. The χ_M and $\chi_M T$ vs. T plot for 1 and 2 in $40\sim300$ K. The red solid line is the best fitting of it.

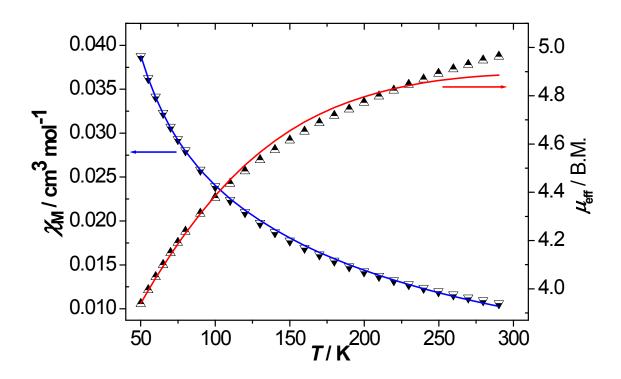


Fig. S7. Fitting of the susceptibility data of 3.