Electronic Supplementary Material (ESI) for Dalton Transactions

Supplementary materials

Slow Magnetic Relaxation in a 4,2-Ribbon like $Fe^{III}_2Co^{II}$ Heterobimetallic Chain

Soonchul Kang, Shinji Kanegawa and Osamu Sato

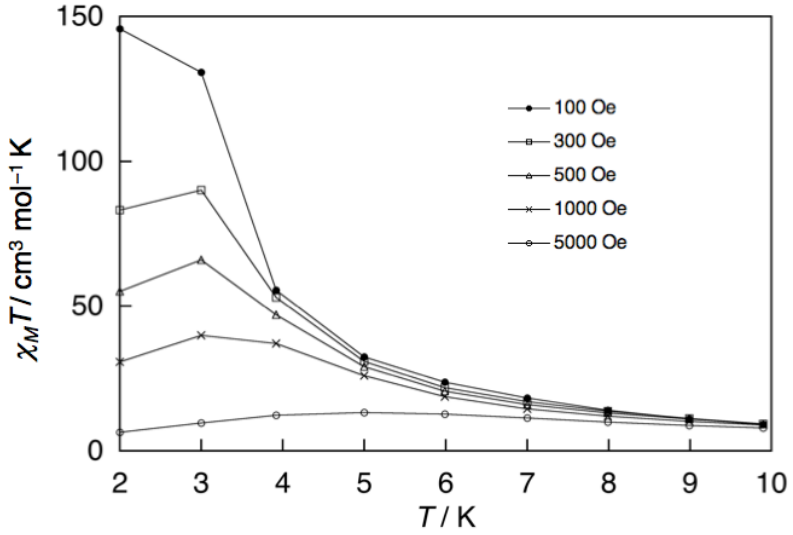

Fig. S1 Field dependence of magnetic susceptibility in the form of $\chi_M T$ versus T for **1** .

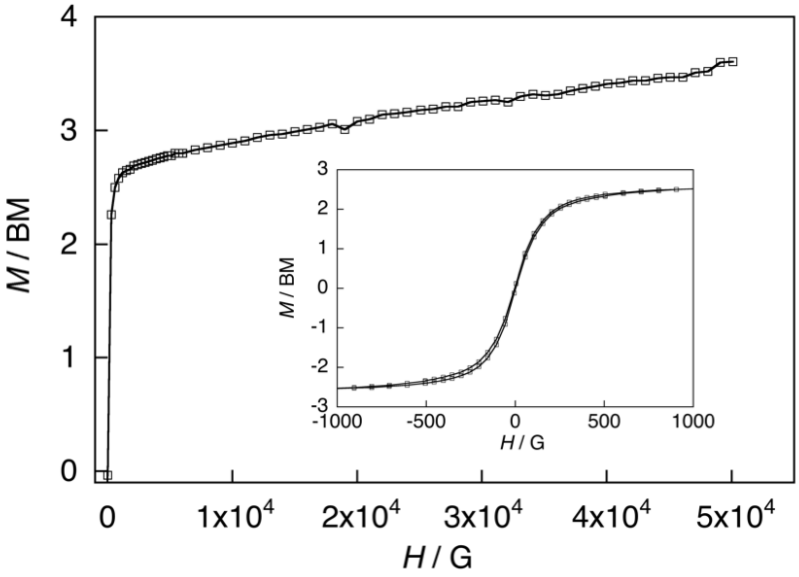

Fig. S2 Field dependence of M for **1** at 2.0 K.

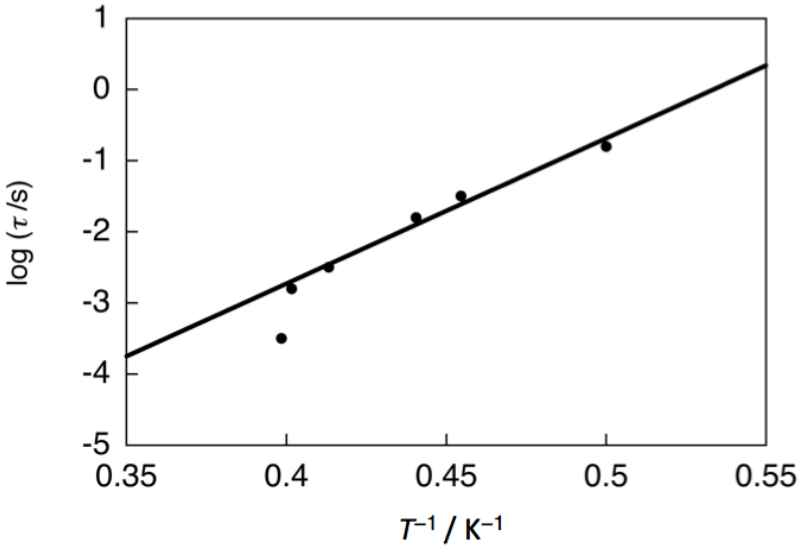

Fig. S3 Arrhenius plots for **1**.

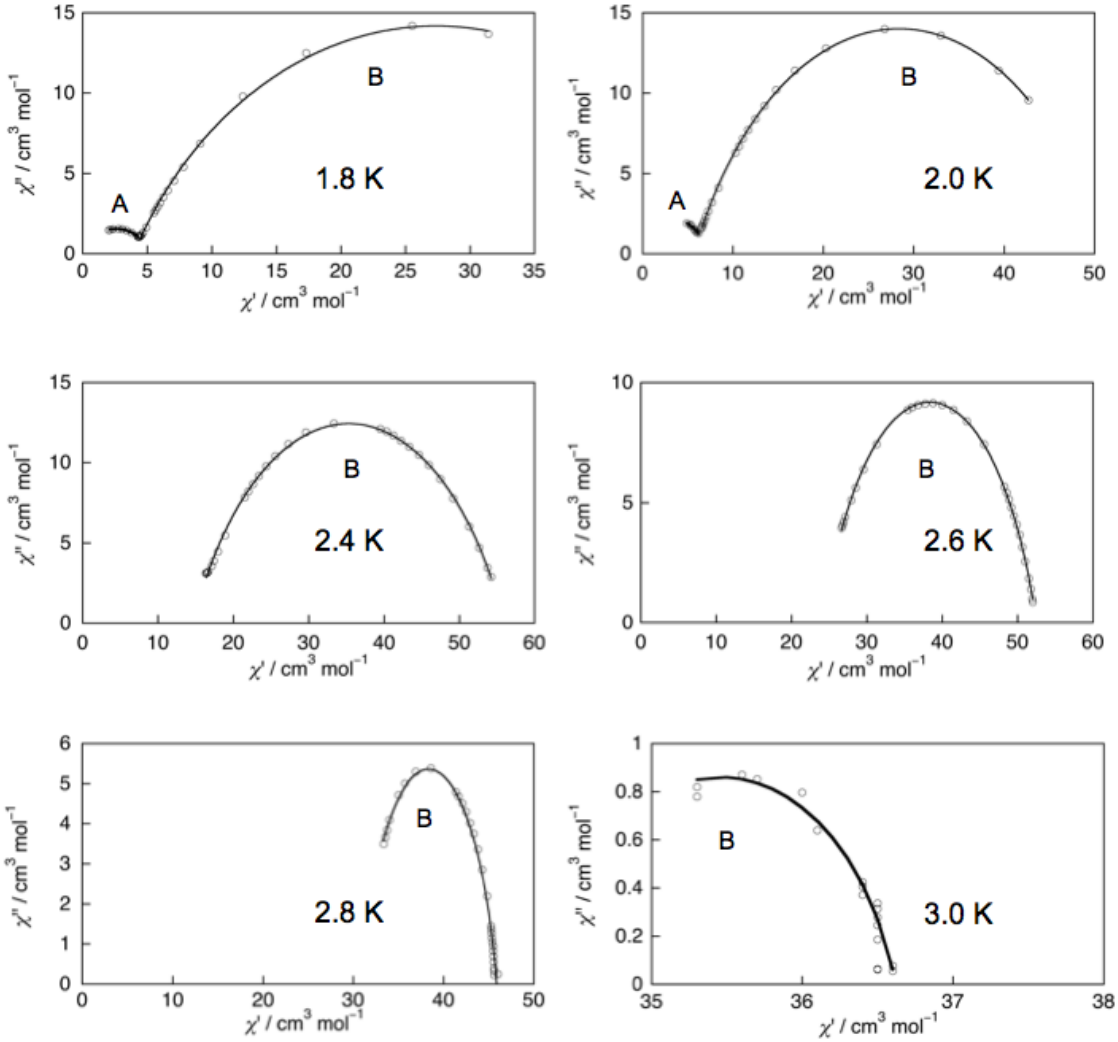

Fig. S4 Cole–Cole plots for **1** at different temperature. The solid line represents the best-fit curve.

Table S1 Selected ac magnetic data for **1**

	$\chi_{S(A)}/\chi_{S(B)}$	$\chi_{T(A)}/\chi_{T(B)}$	$\alpha_{(A)}/\alpha_{(B)}$
1.8 K	0.00 / 3.94	5.27 / 50.73	0.33 / 0.31
2.0 K	0.00 / 5.72	7.29/ 51.01	0.33 / 0.29
2.4 K	- / 14.63	- / 55.94	- / 0.31
2.6 K	- / 24.17	- / 52.47	- / 0.27
2.8 K	- / 30.80	- / 45.90	- / 0.21
3.0 K	- / 34.30	- / 36. 62	- / 0.19

(a) Adiabatic and (b) isothermal susceptibilities and (c) Cole-Cole parameter in the following equation :

$$\chi''(\chi) = \frac{\chi_T - \chi_s}{2\tan[(1+\alpha)\pi/2]}\left\{(\chi' - \chi_s)(\chi_T - \chi') + \frac{(\chi_T - \chi_s)^2}{4\tan^2[(1-\alpha)\pi/2]}\right\}^{1/2}$$