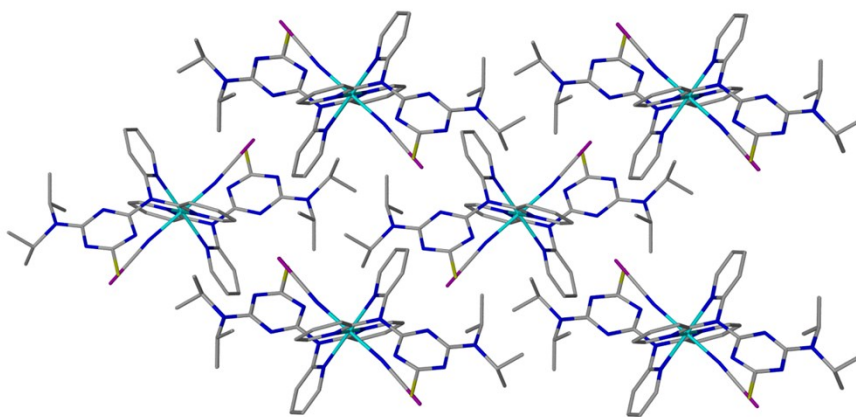


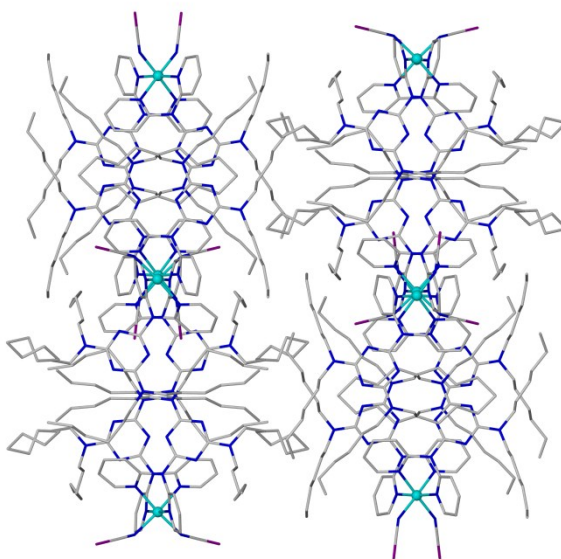
## 2,2'-dipyridylamino-based ligands with substituted alkyl chain groups and their mononuclear M(II) spin crossover complexes

Hayley S. Scott, Boujemaa Moubaraki, Guillaume Chastanet, Jean-François Létard, Stuart R. Batten, and Keith S. Murray,\*

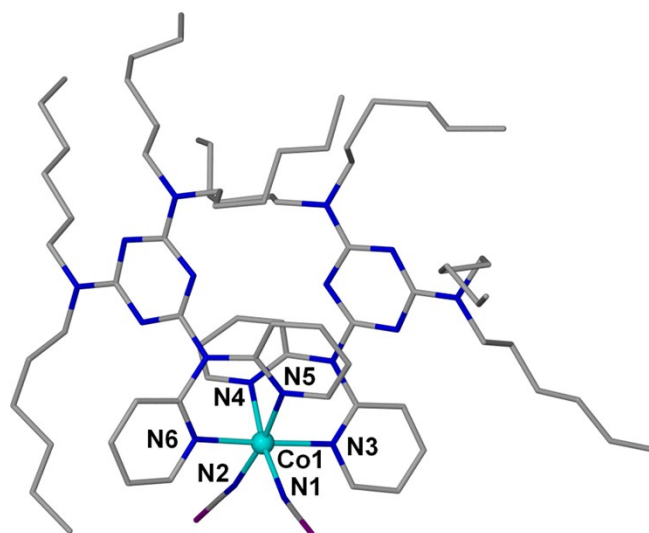
### Supplementary Information (ESI)



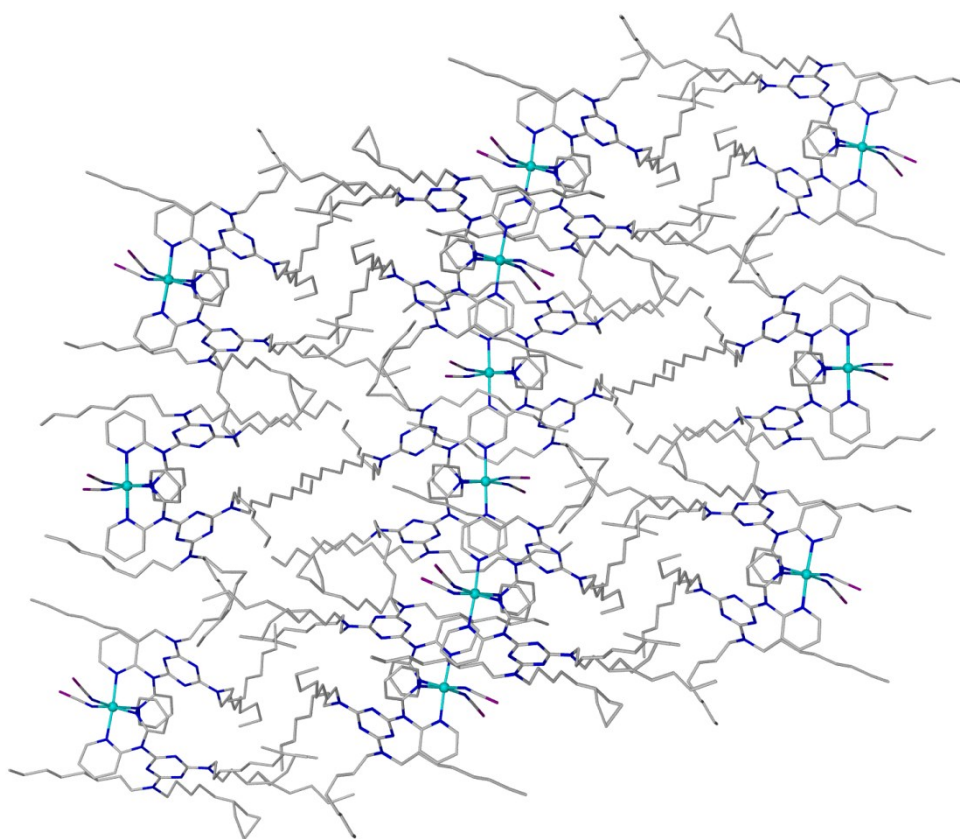
**Figure S1.** Packing diagram of **1** along *c*-axis.



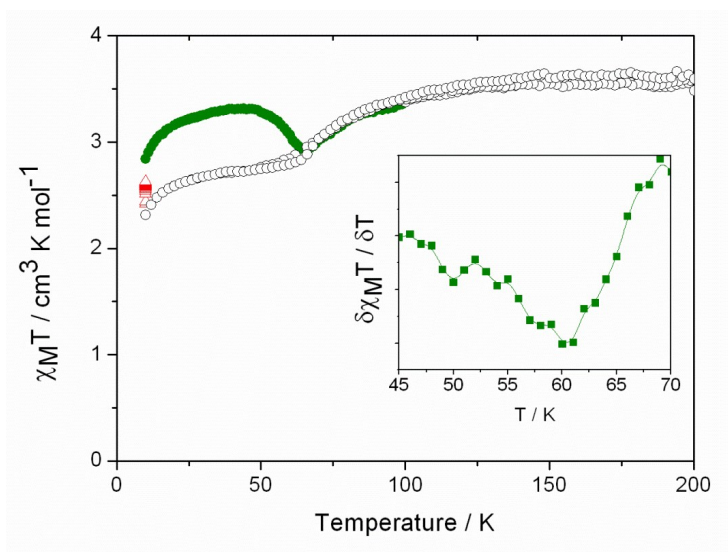
**Figure S2.** Complex **5**, packing along the *c*-axis.



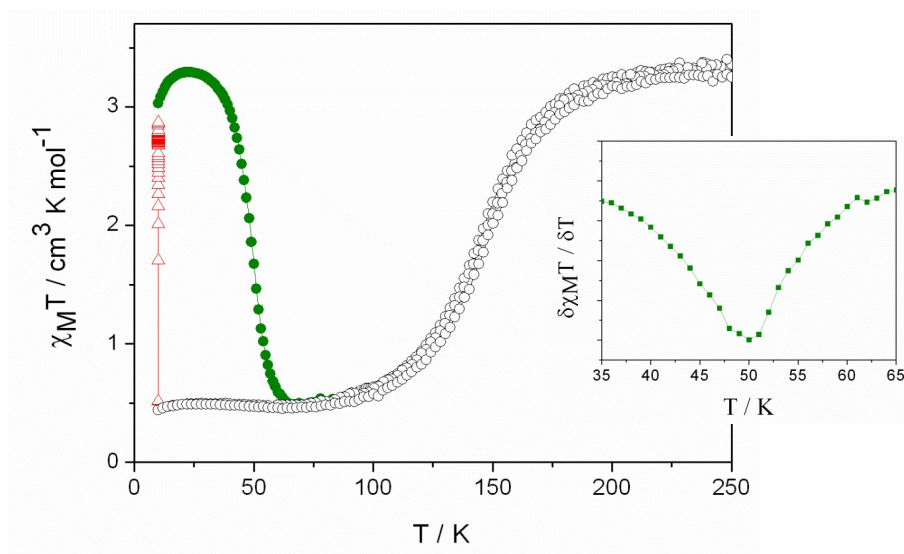
**Figure S3.** The asymmetric unit of **6**.



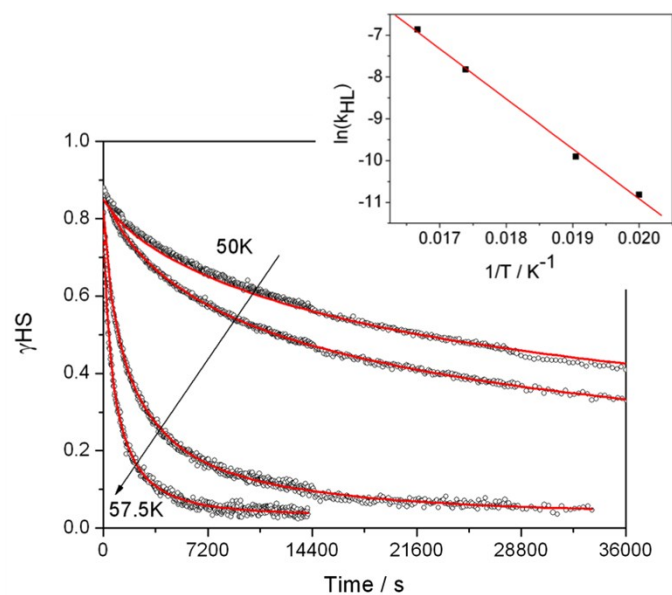
**Figure S4.** Packing of **7**, along the *a*-axis.



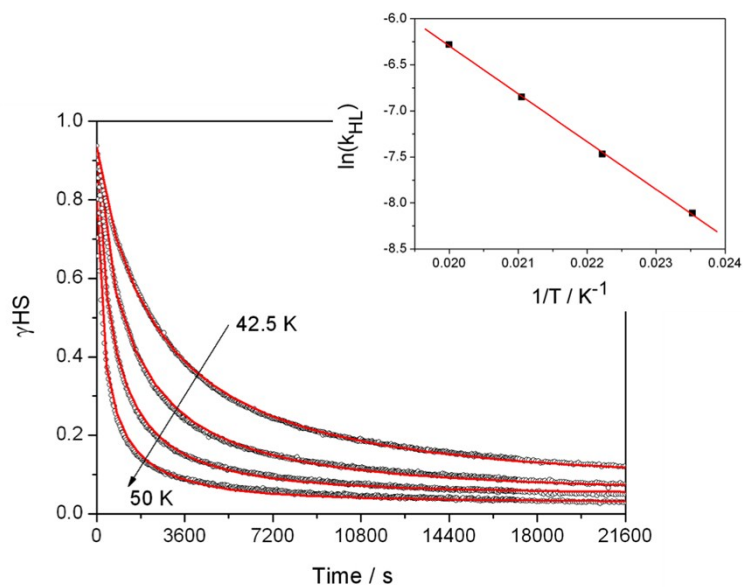
**Figure S5.** Thermal behaviour of the  $\chi_M T$  product of **1** before irradiation (o), during irradiation ( $\Delta$ ) and in the dark after irradiation ( $\blacksquare$ ). The insert presents the derivative of the thermal behaviour in the dark after irradiation whose minimum allows the determination of the  $T(\text{LIESST})$  value.



**Figure S6.** Thermal behaviour of the  $\chi_M T$  product of **2** before irradiation showing reproducibility on cycling (o), during irradiation ( $\Delta$ ) and in the dark after irradiation ( $\bullet$ ). The insert presents the derivative of the thermal behaviour in the dark after irradiation, the minimum of which allows the determination of the  $T(\text{LIESST})$  value.



**Figure S7.** Plot of the different relaxation kinetics recorded as function of the temperature for **1**.



**Figure S8.** Plot of the different relaxation kinetics recorded as function of the temperature for **2**. The red lines are the fits discussed in the text.