

Supplementary Information for

**Slow Magnetic Relaxation in Four Square-Based Pyramid Dysprosium Hydroxy Clusters Ligated by Chiral Amino Acid Anions - A Comparative Study**

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5 Pages

## Magnetic Data

### Compound 1

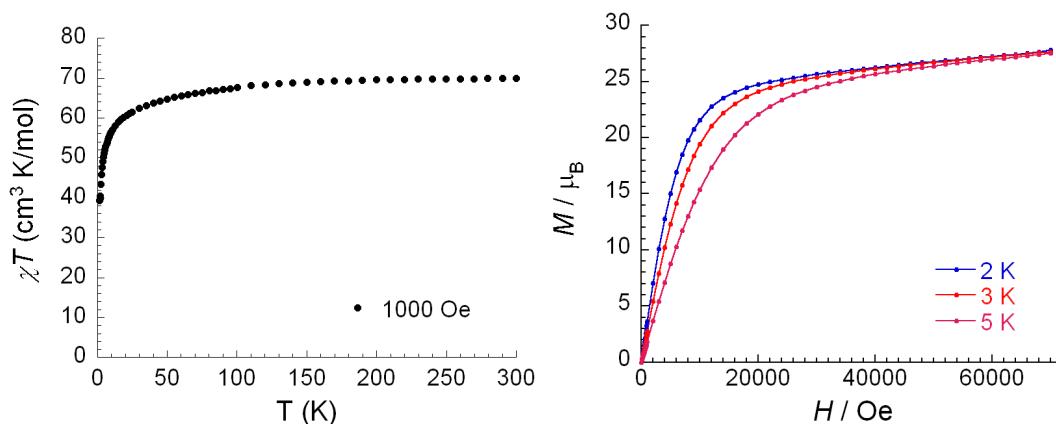


Figure S1. Plots of  $\chi T$  vs  $T$  (left) and  $M$  vs  $H$  (right) for compd. 1.

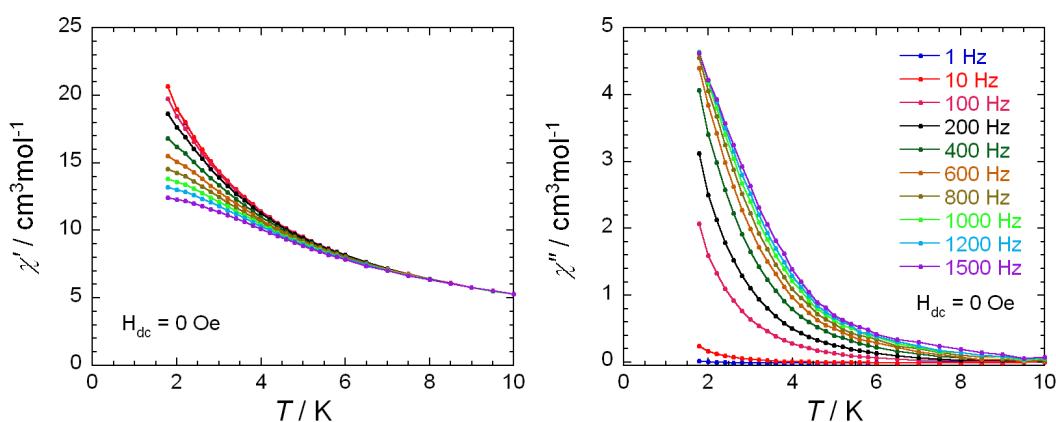


Figure S2. Plots of  $\chi'$  vs  $T$  (left) and  $\chi''$  vs  $T$  (right) at different frequencies under zero dc field for compd. 1.

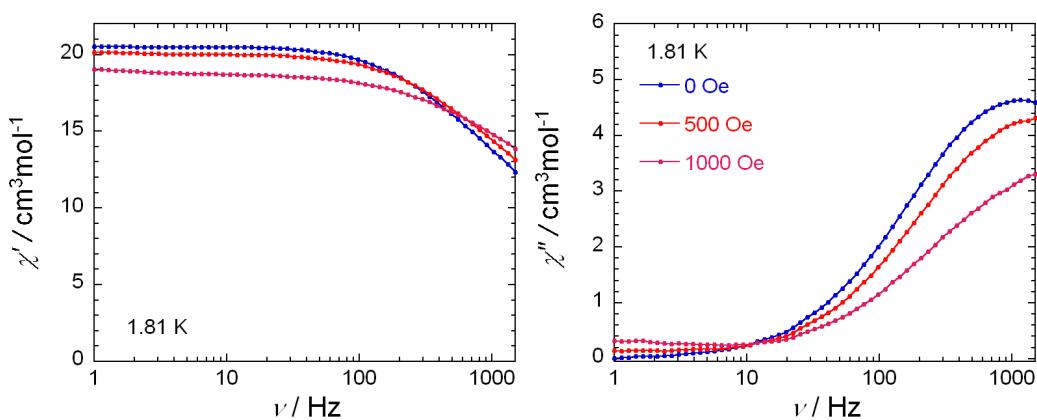


Figure S3. Plots of  $\chi'$  vs  $\nu$  (left) and  $\chi''$  vs  $\nu$  (right) at 1.8 K with different applied dc fields for compd. 1.

Compound 2

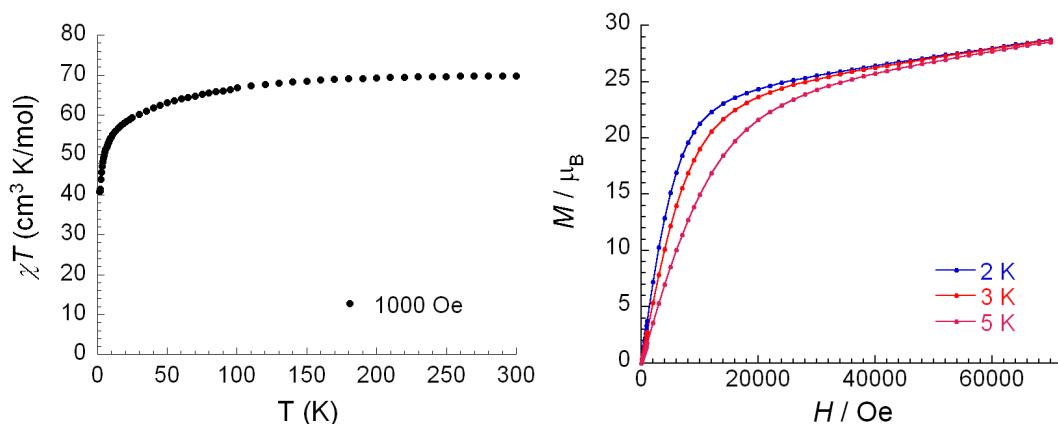


Figure S4. Plots of  $\chi T$  vs  $T$  (left) and  $M$  vs  $H$  (right) for compd. 2.

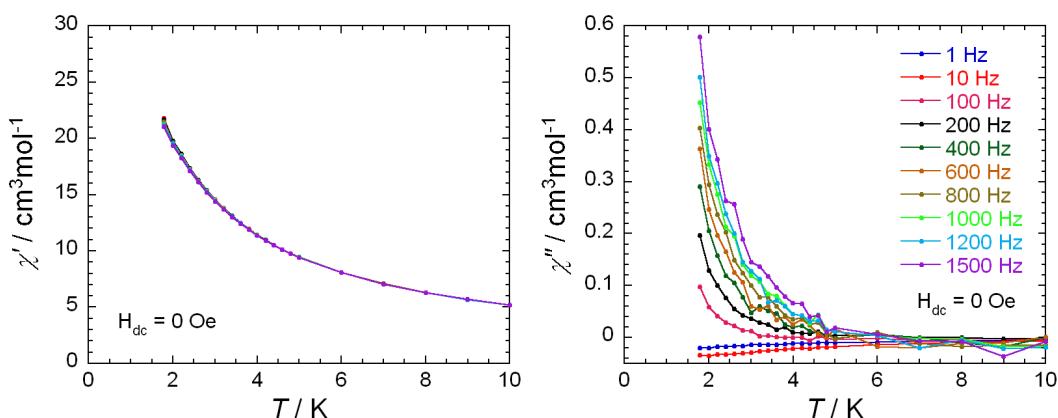


Figure S5. Plots of  $\chi'$  vs  $T$  (left) and  $\chi''$  vs  $T$  (right) at different frequencies under zero dc field for compd. 2.

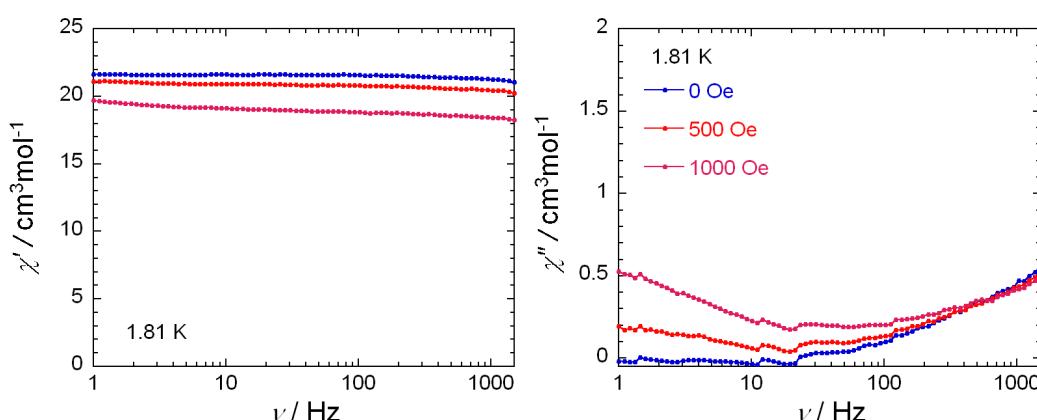


Figure S6. Plots of  $\chi'$  vs  $\nu$  (left) and  $\chi''$  vs  $\nu$  (right) at 1.8 K with different applied dc fields for compd. 2.

Compound 3

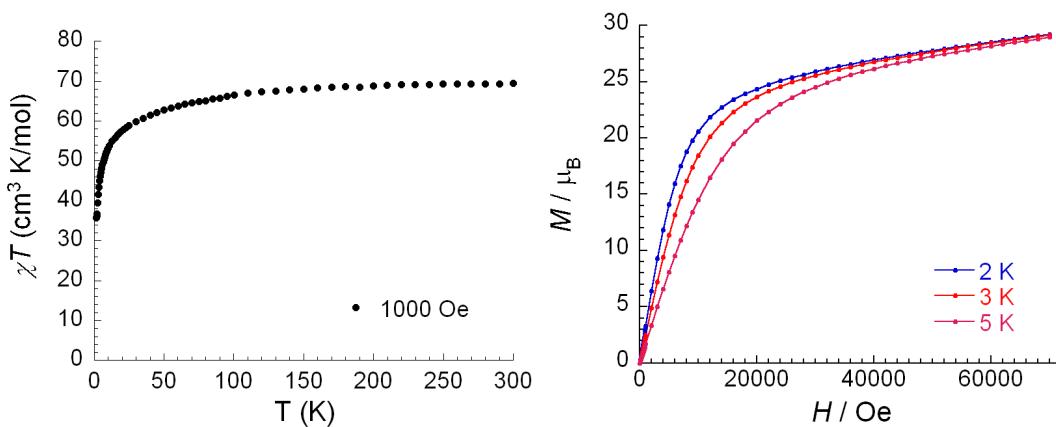


Figure S7. Plots of  $\chi T$  vs  $T$  (left) and  $M$  vs  $H$  (right) for compd. 3.

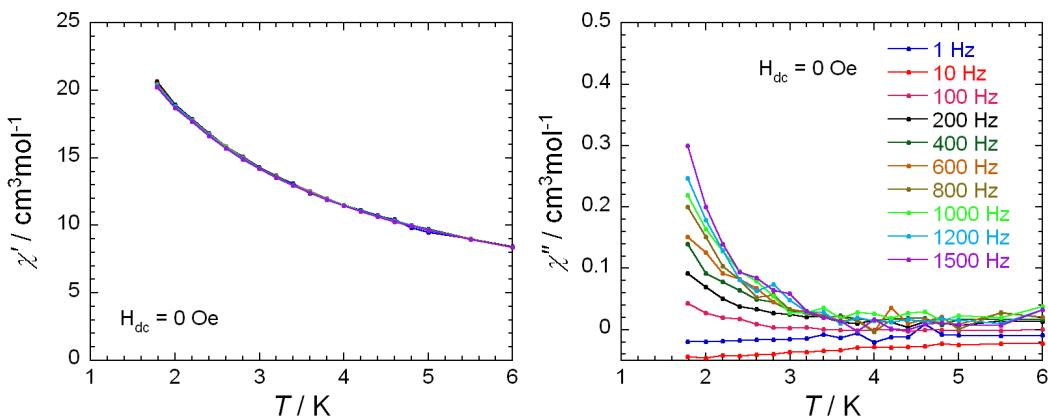


Figure S8. Plots of  $\chi'$  vs  $T$  (left) and  $\chi''$  vs  $T$  (right) at different frequencies under zero dc field for compd. 3.

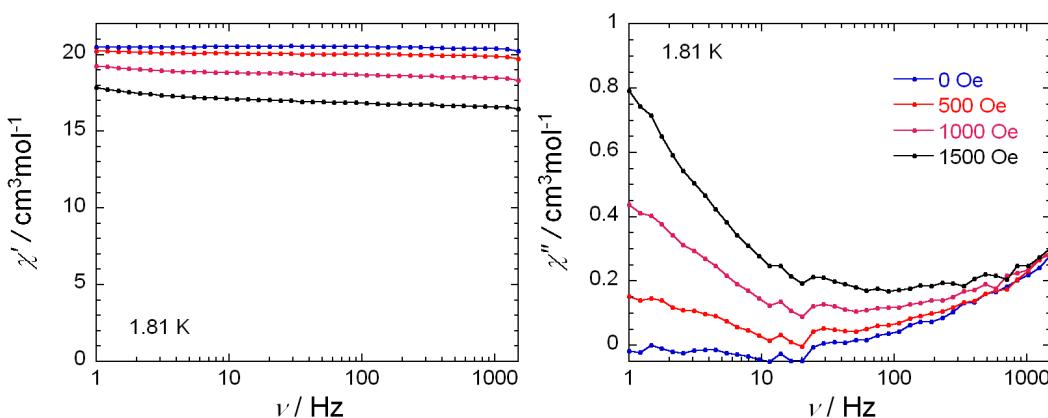


Figure S9. Plots of  $\chi'$  vs  $\nu$  (left) and  $\chi''$  vs  $\nu$  (right) at 1.8 K with different applied dc fields for compd. 3.

Compound 4

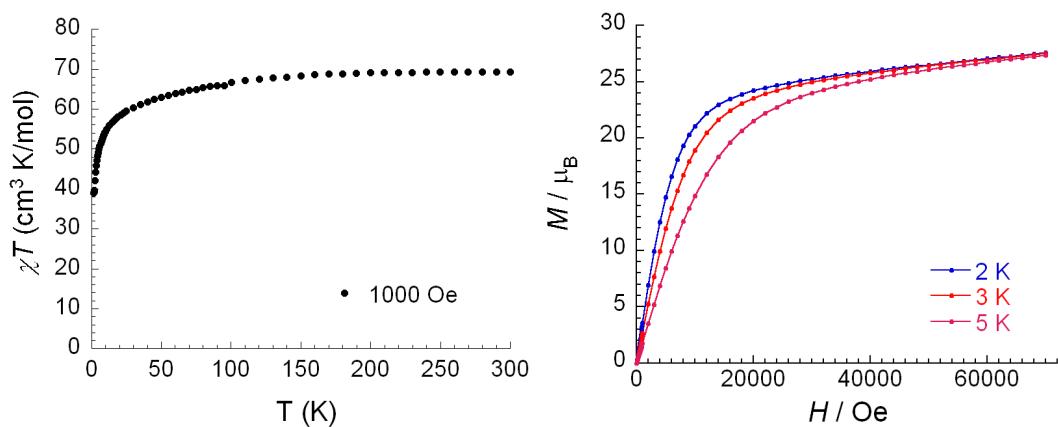


Figure S10. Plots of  $\chi T$  vs  $T$  (left) and  $M$  vs  $H$  (right) for compd. 4.

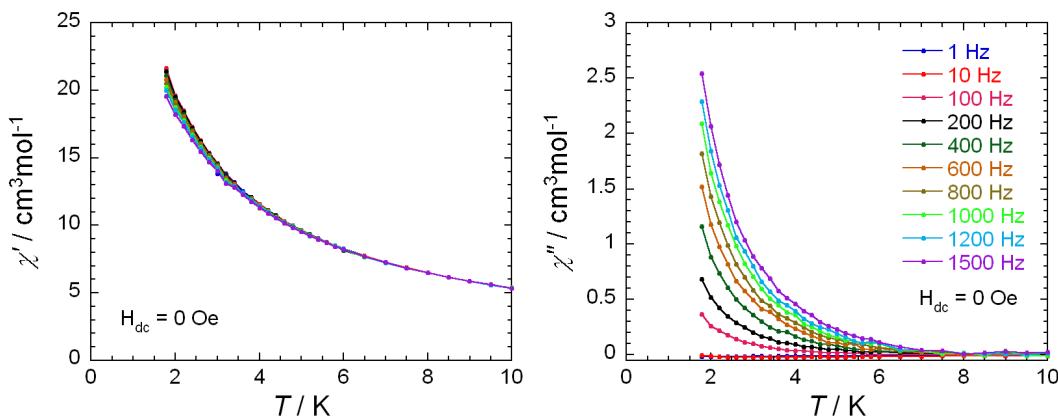


Figure S11. Plots of  $\chi'$  vs  $T$  (left) and  $\chi''$  vs  $T$  (right) at different frequencies under zero dc field for compd. 4.

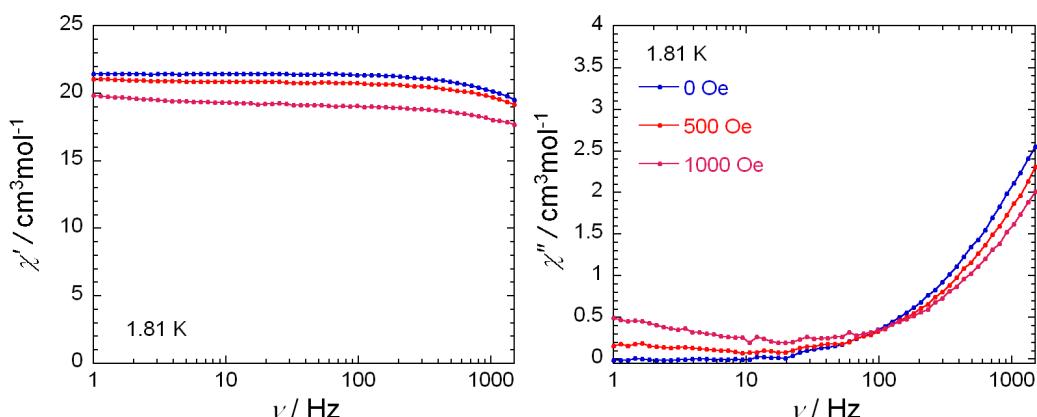


Figure S12. Plots of  $\chi'$  vs  $\nu$  (left) and  $\chi''$  vs  $\nu$  (right) at 1.8 K with different applied dc fields for compd. 4.