Supplementary

A tetranuclear dysprosium Schiff base complex showing slow relaxation of magnetization

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Table S1. Selected bond lengths (Å) and bond angles (°) in **1.**

Dy1--Cl1	2.7535(11)
Dy2---O1	2.379(28)
Dy1--O1	2.295(3)
Dy1--O1*	2.374(3)
Dy1--O4	2.330(3)
Dy1--O5	2.495(3)
Dy1--O2	2.317(3)
Dy1--N1	2.408(3)
Dy1--N2	2.493(4)
Dy2--Cl2	2.6726(11)
Dy2--Cl1*	2.8132(11)
Dy2--O1*	2.380(3)
Dy2--O4	2.270(3)
Dy2--O2*	2.373(3)
Dy2--O3*	2.548(3)
Dy2--N3	2.466(4)
Dy2--N4	2.500(4)
Dy2--Cl1--Dy1*	80.12(3)
Dy2--O2--Dy1*	99.6(1)
Dy2--O1--Dy1*	100.0(1)
Dy2--O1--Dy1	107.3(1)

Dy2--O4--Dy1	112.6(1)
Dy1--O2--Dy1*	108.9(1)
Dy1—Dy2	3.582(4)
Dy1—Dy2*	3.827(4)
Dy1—Dy1*	3.798(4)
Dy1*-- Dy2*	3.582(4)

* Represents symmetry generated atom.

Table S2. Crystal data and structure refinement for **1**.

Empirical formula	$C_{56}H_{54}Cl_6Dy_4N_8O_{10}$
Formula weight	1861.77
Temperature/K	160.00
Crystal system	triclinic
Space group	P-1
a/Å	10.2003(4)
b/Å	13.8602(5)
c/Å	14.9542(6)
α/°	94.523(3)
β/°	109.362(4)
γ/°	99.861(3)
Volume/Å^3	1944.12(14)
Z	1
ϱ_{calc}g/cm^3	1.590
μ/mm^{-1}	4.055
F(000)	892
Crystal size/mm^3	0.207 × 0.158 × 0.118
Radiation	Mo Kα (λ = 0.71073)
2Θ range for data collection/°	3.88 to 56.56
Index ranges	-13 ≤ h ≤ 13, -17 ≤ k ≤ 18, -19 ≤ l ≤ 19
Reflections collected	22207
Independent reflections	9643 [R_{int} = 0.0390, R_{sigma} = 0.0439]
Data/restraints/parameters	9643/0/385
Goodness-of-fit on F^2	1.102
Final R indexes [I>=2σ (I)]	R_1 = 0.0353, wR_2 = 0.0865
Final R indexes [all data]	R_1 = 0.0430, wR_2 = 0.0899
Largest diff. peak/hole / e Å^{-3}	2.20/-1.53

Table S3. Results of the Continuous Shape measures calculations for **Dy1** and **Dy2.**

Dy1											
OP-8	HPY-8	HBPY-8	CU-8	SAPR-8	TDD-8	JGBF-8	JETBPY-8	JBTPR-8	BTPR-8	JSD-8	TT-8 ETBPY-8
30.751	23.238	14.382	9.772	2.196	2.190	14.909	26.905	2.983	1.887	4.508	10.401 24.060
Table S3 (continuation) **Dy2**											
OP-8	HPY-8	HBPY-8	CU-8	SAPR-8	TDD-8	JGBF-8	JETBPY-8	JBTPR-8	BTPR-8	JSD-8	TT-8 ETBPY-8
30.751	23.238	14.382	9.772	2.196	2.190	14.909	26.905	2.983	1.887	4.508	10.401 24.060

OP-8OctagonD$_8$h, HPY-8Heptagonalpyramid(C$_7$v), HBPY-8 Hexagonalbipyramid(D$_6$h), CU-8 Cube (O$_h$)SAPR-8 Square antiprism (D$_4$d), TDD-8 Triangulardodecahedron(D$_2$d), JGBF-8 Johnson gyrobifastigium J26 (D$_2$d) , JETBPY-8 Johnson elongated triangular bipyramid J14 (D$_3$h), JBTPR-8 Biaugmented trigonal prism J50(C$_2$v), BTPR-8 Biaugmented trigonal prism(C$_2$v), JSD-8 Snub diphenoid J84 (D$_2$d) , TT-8Triakis tetrahedron (T$_d$),ETBPY-8 Elongated trigonal bipyramid(D$_3$h).

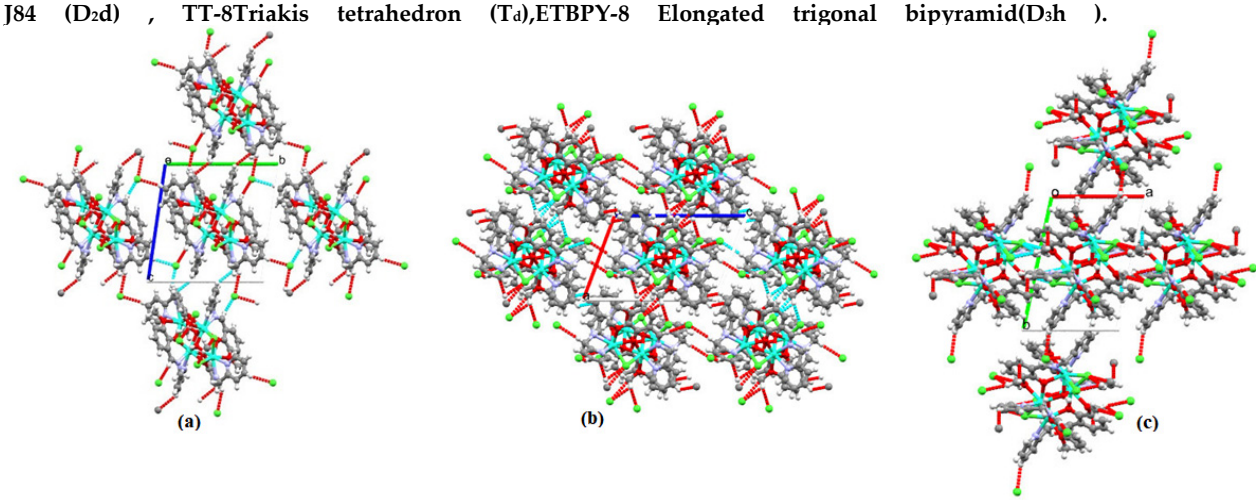

Figure S1. View on intermolecular contacts formed in complex 1 through the building of extended networks in the three crystallographic directions (along a, along b and along c).