

Supplementary Information

Table S1 Selected bond distances (Å) and angles (°) for complexes **1-9**

Complex **1**

C(1)-Mo(1)	2.141(9)	N(4)-Pr(1)	2.625(7)
C(2)-Mo(1)	2.166(10)	O(1)-Pr(1)	2.415(7)
C(3)-Mo(1)	2.174(13)	O(2)-Pr(1)	2.379(7)
C(4)-Mo(1)	2.162(7)	O(3)-Pr(1)	2.432(7)
C(5)-Mo(1)	2.187(14)	O(4)-Pr(1)	2.440(7)
C(6)-Mo(1)	2.173(10)	O(5)-Pr(1)	2.484(9)
C(7)-Mo(1)	2.150(10)	O(6)-Pr(1)	2.428(8)
C(8)-Mo(1)	2.178(9)	Pr(1)-N(1)#2	2.608(7)
		N(1)-Pr(1)#1	2.608(7)
N(1)-C(1)-Mo(1)	177.1(8)	C(1)-N(1)-Pr(1)#1	170.5(7)
N(2)-C(2)-Mo(1)	178.0(10)	C(4)-N(4)-Pr(1)	171.7(9)
N(3)-C(3)-Mo(1)	174.0(14)	C(22)-O(1)-Pr(1)	137.2(7)
N(4)-C(4)-Mo(1)	178.1(9)	C(9)-O(2)-Pr(1)	158.2(8)
N(5)-C(5)-Mo(1)	178.6(10)	C(12)-O(3)-Pr(1)	126.5(9)
N(6)-C(6)-Mo(1)	178.0(10)	C(13)-O(4)-Pr(1)	134.7(8)
N(7)-C(7)-Mo(1)	178.0(12)	C(16)-O(5)-Pr(1)	142.3(8)
N(8)-C(8)-Mo(1)	176.6(8)	C(19)-O(6)-Pr(1)	144.2(9)
C(1)-Mo(1)-C(7)	74.2(4)	O(2)-Pr(1)-O(1)	82.3(3)
C(1)-Mo(1)-C(4)	142.6(3)	O(2)-Pr(1)-O(6)	143.5(3)
C(7)-Mo(1)-C(4)	140.8(3)	O(1)-Pr(1)-O(6)	74.6(3)
C(1)-Mo(1)-C(2)	76.2(3)	O(2)-Pr(1)-O(3)	77.1(3)
C(7)-Mo(1)-C(2)	78.6(4)	O(1)-Pr(1)-O(3)	73.5(3)
C(4)-Mo(1)-C(2)	116.2(4)	O(6)-Pr(1)-O(3)	121.1(3)
C(1)-Mo(1)-C(6)	117.2(4)	O(2)-Pr(1)-O(4)	75.0(3)
C(7)-Mo(1)-C(6)	72.2(4)	O(1)-Pr(1)-O(4)	144.0(3)
C(4)-Mo(1)-C(6)	76.0(4)	O(6)-Pr(1)-O(4)	137.6(3)
C(2)-Mo(1)-C(6)	141.8(4)	O(3)-Pr(1)-O(4)	74.4(3)
C(1)-Mo(1)-C(3)	77.7(4)	O(2)-Pr(1)-O(5)	107.6(3)
C(7)-Mo(1)-C(3)	144.2(4)	O(1)-Pr(1)-O(5)	142.9(3)
C(4)-Mo(1)-C(3)	73.2(4)	O(6)-Pr(1)-O(5)	77.4(3)
C(2)-Mo(1)-C(3)	73.6(4)	O(3)-Pr(1)-O(5)	143.1(3)
C(6)-Mo(1)-C(3)	141.9(4)	O(4)-Pr(1)-O(5)	71.8(3)
C(1)-Mo(1)-C(8)	143.7(3)	O(2)-Pr(1)-N(1)#2	143.2(2)
C(7)-Mo(1)-C(8)	79.7(4)	O(1)-Pr(1)-N(1)#2	111.3(3)
C(4)-Mo(1)-C(8)	71.1(3)	O(6)-Pr(1)-N(1)#2	72.7(3)
C(2)-Mo(1)-C(8)	74.2(4)	O(3)-Pr(1)-N(1)#2	74.7(3)
C(6)-Mo(1)-C(8)	76.8(4)	O(4)-Pr(1)-N(1)#2	74.9(3)
C(3)-Mo(1)-C(8)	112.9(4)	O(5)-Pr(1)-N(1)#2	82.4(3)
C(1)-Mo(1)-C(5)	72.8(4)	O(2)-Pr(1)-N(4)	73.1(2)

C(7)-Mo(1)-C(5)	111.1(5)	O(1)-Pr(1)-N(4)	75.1(3)
C(4)-Mo(1)-C(5)	79.5(4)	O(6)-Pr(1)-N(4)	73.8(3)
C(2)-Mo(1)-C(5)	143.0(4)	O(3)-Pr(1)-N(4)	138.9(3)
C(6)-Mo(1)-C(5)	72.3(5)	O(4)-Pr(1)-N(4)	122.6(3)
C(3)-Mo(1)-C(5)	80.4(4)	O(5)-Pr(1)-N(4)	74.1(3)
C(8)-Mo(1)-C(5)	141.5(4)	N(1)#2-Pr(1)-N(4)	142.5(2)

Symmetry transformations used to generate equivalent atoms: #1 x, y, z+1; #2 x, y, z-1.

Complex 2

C(1)-Mo(1)	2.178(7)	N(7)-Nd(1)#1	2.579(7)
C(2)-Mo(1)	2.159(8)	Nd(1)-O(5)	2.356(6)
C(3)-Mo(1)	2.178(10)	Nd(1)-O(3)	2.397(7)
C(4)-Mo(1)	2.158(9)	Nd(1)-O(4)	2.398(6)
C(5)-Mo(1)	2.175(7)	Nd(1)-O(6)	2.414(7)
C(6)-Mo(1)	2.139(13)	Nd(1)-O(1)	2.417(6)
C(7)-Mo(1)	2.189(14)	Nd(1)-O(2)	2.444(8)
C(8)-Mo(1)	2.184(9)	Nd(1)-N(7)#2	2.579(7)
		N(1)-Nd(1)	2.622(6)
N(1)-C(1)-Mo(1)	178.5(7)	C(5)-N(7)-Nd(1)#1	172.1(6)
N(4)-C(2)-Mo(1)	175.2(10)	O(5)-Nd(1)-O(3)	143.1(3)
N(3)-C(3)-Mo(1)	178.9(9)	O(5)-Nd(1)-O(4)	82.1(3)
N(8)-C(4)-Mo(1)	176.7(10)	O(3)-Nd(1)-O(4)	74.7(3)
N(7)-C(5)-Mo(1)	177.8(7)	O(5)-Nd(1)-O(6)	77.5(2)
N(5)-C(6)-Mo(1)	177.1(11)	O(3)-Nd(1)-O(6)	121.0(3)
N(2)-C(7)-Mo(1)	179.0(13)	O(4)-Nd(1)-O(6)	73.4(2)
C(6)-Mo(1)-C(4)	110.7(4)	O(5)-Nd(1)-O(1)	75.3(2)
C(6)-Mo(1)-C(2)	141.0(4)	O(3)-Nd(1)-O(1)	137.9(3)
C(4)-Mo(1)-C(2)	79.5(4)	O(4)-Nd(1)-O(1)	143.3(2)
C(6)-Mo(1)-C(5)	73.5(4)	O(6)-Nd(1)-O(1)	73.7(2)
C(4)-Mo(1)-C(5)	73.3(3)	O(5)-Nd(1)-O(2)	107.4(3)
C(2)-Mo(1)-C(5)	143.0(3)	O(3)-Nd(1)-O(2)	77.8(3)
C(6)-Mo(1)-C(1)	79.7(4)	O(4)-Nd(1)-O(2)	143.5(3)
C(4)-Mo(1)-C(1)	141.4(3)	O(6)-Nd(1)-O(2)	142.5(3)
C(2)-Mo(1)-C(1)	71.4(3)	O(1)-Nd(1)-O(2)	72.0(3)
C(5)-Mo(1)-C(1)	143.0(3)	O(5)-Nd(1)-N(7)#2	142.9(2)
C(6)-Mo(1)-C(3)	142.5(4)	O(3)-Nd(1)-N(7)#2	73.4(2)
C(4)-Mo(1)-C(3)	78.6(4)	O(4)-Nd(1)-N(7)#2	111.3(2)
C(2)-Mo(1)-C(3)	75.4(4)	O(6)-Nd(1)-N(7)#2	74.0(2)
C(5)-Mo(1)-C(3)	74.9(3)	O(1)-Nd(1)-N(7)#2	74.3(2)
C(1)-Mo(1)-C(3)	116.4(3)	O(2)-Nd(1)-N(7)#2	82.6(3)
C(6)-Mo(1)-C(8)	72.4(4)	O(5)-Nd(1)-N(1)	72.4(2)
C(4)-Mo(1)-C(8)	72.1(3)	O(3)-Nd(1)-N(1)	74.3(3)
C(2)-Mo(1)-C(8)	75.7(4)	O(4)-Nd(1)-N(1)	75.9(2)
C(5)-Mo(1)-C(8)	117.6(3)	O(6)-Nd(1)-N(1)	139.3(2)

C(1)-Mo(1)-C(8)	76.4(3)	O(1)-Nd(1)-N(1)	122.4(3)
C(3)-Mo(1)-C(8)	141.9(3)	O(2)-Nd(1)-N(1)	74.0(3)
C(6)-Mo(1)-C(7)	79.7(4)	N(7)#2-Nd(1)-N(1)	143.3(2)
C(4)-Mo(1)-C(7)	144.1(4)	C(17)-O(1)-Nd(1)	134.9(7)
C(2)-Mo(1)-C(7)	114.6(4)	C(22)-O(2)-Nd(1)	140.9(7)
C(5)-Mo(1)-C(7)	77.4(3)	C(23)-O(3)-Nd(1)	145.5(9)
C(1)-Mo(1)-C(7)	73.1(4)	C(26)-O(4)-Nd(1)	136.0(6)
C(3)-Mo(1)-C(7)	74.0(4)	C(11)-O(5)-Nd(1)	159.4(7)
C(8)-Mo(1)-C(7)	141.7(4)	C(14)-O(6)-Nd(1)	127.3(8)
C(1)-N(1)-Nd(1)	169.8(8)		

Symmetry transformations used to generate equivalent atoms: #1 x, y, z-1; #2 x, y, z+1.

Complex 3

C(1)-Mo(1)	2.184(11)	N(6)-Sm(1)#1	2.562(9)
C(2)-Mo(1)	2.178(14)	O(1)-Sm(1)	2.408(8)
C(3)-Mo(1)	2.154(15)	O(2)-Sm(1)	2.372(8)
C(4)-Mo(1)	2.181(13)	O(3)-Sm(1)	2.325(9)
C(5)-Mo(1)	2.173(15)	O(4)-Sm(1)	2.328(10)
C(6)-Mo(1)	2.204(10)	O(5)-Sm(1)	2.340(10)
C(7)-Mo(1)	2.158(13)	O(6)-Sm(1)	2.367(8)
C(8)-Mo(1)	2.207(13)	Sm(1)-N(6)#2	2.562(9)
		N(1)-Sm(1)	2.515(9)
N(1)-C(1)-Mo(1)	179.2(11)	C(1)-N(1)-Sm(1)	172.7(9)
N(3)-C(2)-Mo(1)	175.9(15)	C(6)-N(6)-Sm(1)#1	173.8(9)
N(2)-C(3)-Mo(1)	175.0(16)	C(10)-O(1)-Sm(1)	132.2(8)
N(4)-C(4)-Mo(1)	178.3(15)	C(9)-O(2)-Sm(1)	134.8(10)
N(5)-C(5)-Mo(1)	177.6(15)	C(16)-O(3)-Sm(1)	138.1(10)
N(6)-C(6)-Mo(1)	176.6(10)	C(21)-O(4)-Sm(1)	143.1(14)
N(8)-C(7)-Mo(1)	178.9(12)	C(23)-O(5)-Sm(1)	150.3(15)
N(7)-C(8)-Mo(1)	176.3(13)	C(11)-O(6)-Sm(1)	137.5(9)
C(3)-Mo(1)-C(7)	112.0(6)	O(3)-Sm(1)-O(4)	77.2(5)
C(3)-Mo(1)-C(5)	71.5(6)	O(3)-Sm(1)-O(5)	140.1(4)
C(7)-Mo(1)-C(5)	74.7(6)	O(4)-Sm(1)-O(5)	73.2(5)
C(3)-Mo(1)-C(2)	79.4(7)	O(3)-Sm(1)-O(6)	109.6(4)
C(7)-Mo(1)-C(2)	141.2(6)	O(4)-Sm(1)-O(6)	145.8(4)
C(5)-Mo(1)-C(2)	141.6(6)	O(5)-Sm(1)-O(6)	82.6(4)
C(3)-Mo(1)-C(4)	81.1(5)	O(3)-Sm(1)-O(2)	79.3(4)
C(7)-Mo(1)-C(4)	144.1(5)	O(4)-Sm(1)-O(2)	73.4(4)
C(5)-Mo(1)-C(4)	78.7(6)	O(5)-Sm(1)-O(2)	115.9(4)
C(2)-Mo(1)-C(4)	72.4(6)	O(6)-Sm(1)-O(2)	140.2(3)
C(3)-Mo(1)-C(1)	72.3(5)	O(3)-Sm(1)-O(1)	74.6(3)
C(7)-Mo(1)-C(1)	74.1(4)	O(4)-Sm(1)-O(1)	139.6(4)
C(5)-Mo(1)-C(1)	117.4(5)	O(5)-Sm(1)-O(1)	143.6(4)

C(2)-Mo(1)-C(1)	74.9(5)	O(6)-Sm(1)-O(1)	72.1(3)
C(4)-Mo(1)-C(1)	140.9(5)	O(2)-Sm(1)-O(1)	73.5(3)
C(3)-Mo(1)-C(6)	140.9(5)	O(3)-Sm(1)-N(1)	144.4(3)
C(7)-Mo(1)-C(6)	78.1(4)	O(4)-Sm(1)-N(1)	114.3(4)
C(5)-Mo(1)-C(6)	75.6(5)	O(5)-Sm(1)-N(1)	73.7(3)
C(2)-Mo(1)-C(6)	117.2(5)	O(6)-Sm(1)-N(1)	80.2(3)
C(4)-Mo(1)-C(6)	72.1(4)	O(2)-Sm(1)-N(1)	72.9(3)
C(1)-Mo(1)-C(6)	144.0(4)	O(1)-Sm(1)-N(1)	76.5(3)
C(3)-Mo(1)-C(8)	144.2(5)	O(3)-Sm(1)-N(6)#2	70.3(3)
C(7)-Mo(1)-C(8)	77.7(6)	O(4)-Sm(1)-N(6)#2	75.7(4)
C(5)-Mo(1)-C(8)	142.2(5)	O(5)-Sm(1)-N(6)#2	76.8(4)
C(2)-Mo(1)-C(8)	73.7(6)	O(6)-Sm(1)-N(6)#2	75.5(3)
C(4)-Mo(1)-C(8)	111.9(5)	O(2)-Sm(1)-N(6)#2	140.6(3)
C(1)-Mo(1)-C(8)	78.2(5)	O(1)-Sm(1)-N(6)#2	119.6(3)
C(6)-Mo(1)-C(8)	73.9(4)	N(1)-Sm(1)-N(6)#2	143.8(3)

Symmetry transformations used to generate equivalent atoms: #1 x, y-1, z; #2 x, y+1, z.

Complex 4

C(1)-Mo(1)	2.136(12)	Eu(1)-O(4)	2.341(8)
C(2)-Mo(1)	2.160(12)	Eu(1)-O(2)	2.351(9)
C(3)-Mo(1)	2.174(13)	Eu(1)-O(5)	2.366(8)
C(4)-Mo(1)	2.188(11)	Eu(1)-O(6)	2.390(6)
C(5)-Mo(1)	2.136(13)	Eu(1)-O(1)	2.395(7)
C(6)-Mo(1)	2.157(12)	Eu(1)-N(4)#1	2.503(8)
C(7)-Mo(1)	2.203(12)	Eu(1)-N(1)	2.562(8)
C(8)-Mo(1)	2.158(10)	N(4)-Eu(1)#2	2.503(8)
		Eu(1)-O(3)	2.340(8)
N(8)-C(1)-Mo(1)	179.0(14)	C(1)-Mo(1)-C(5)	141.8(5)
N(3)-C(2)-Mo(1)	177.2(13)	C(1)-Mo(1)-C(6)	140.9(4)
N(5)-C(3)-Mo(1)	177.1(12)	C(5)-Mo(1)-C(6)	74.7(5)
N(4)-C(4)-Mo(1)	178.4(9)	C(1)-Mo(1)-C(8)	74.7(4)
N(6)-C(5)-Mo(1)	176.2(12)	C(5)-Mo(1)-C(8)	117.1(4)
N(2)-C(6)-Mo(1)	178.3(11)	C(6)-Mo(1)-C(8)	73.9(4)
N(7)-C(7)-Mo(1)	175.8(13)	C(1)-Mo(1)-C(2)	73.7(5)
N(1)-C(8)-Mo(1)	178.0(9)	C(5)-Mo(1)-C(2)	141.9(4)
O(3)-Eu(1)-O(4)	77.5(4)	C(6)-Mo(1)-C(2)	77.9(5)
O(3)-Eu(1)-O(2)	74.6(4)	C(8)-Mo(1)-C(2)	79.0(4)
O(4)-Eu(1)-O(2)	140.9(3)	C(1)-Mo(1)-C(3)	71.3(5)
O(3)-Eu(1)-O(5)	73.2(3)	C(5)-Mo(1)-C(3)	80.2(5)
O(4)-Eu(1)-O(5)	78.6(3)	C(6)-Mo(1)-C(3)	145.4(4)
O(2)-Eu(1)-O(5)	117.8(3)	C(8)-Mo(1)-C(3)	139.9(4)
O(3)-Eu(1)-O(6)	140.6(3)	C(2)-Mo(1)-C(3)	110.5(5)
O(4)-Eu(1)-O(6)	74.1(3)	C(1)-Mo(1)-C(4)	117.8(4)
O(2)-Eu(1)-O(6)	142.3(3)	C(5)-Mo(1)-C(4)	75.4(4)

O(5)-Eu(1)-O(6)	74.9(3)	C(6)-Mo(1)-C(4)	77.9(4)
O(3)-Eu(1)-O(1)	144.8(3)	C(8)-Mo(1)-C(4)	143.9(3)
O(4)-Eu(1)-O(1)	109.7(3)	C(2)-Mo(1)-C(4)	73.4(4)
O(2)-Eu(1)-O(1)	80.2(3)	C(3)-Mo(1)-C(4)	73.0(4)
O(5)-Eu(1)-O(1)	141.4(2)	C(1)-Mo(1)-C(7)	78.5(5)
O(6)-Eu(1)-O(1)	71.8(3)	C(5)-Mo(1)-C(7)	72.0(5)
O(3)-Eu(1)-N(4)#1	115.0(3)	C(6)-Mo(1)-C(7)	113.0(5)
O(4)-Eu(1)-N(4)#1	144.3(3)	C(8)-Mo(1)-C(7)	72.5(4)
O(2)-Eu(1)-N(4)#1	73.6(3)	C(2)-Mo(1)-C(7)	144.4(4)
O(5)-Eu(1)-N(4)#1	74.2(3)	C(3)-Mo(1)-C(7)	80.3(4)
O(6)-Eu(1)-N(4)#1	76.8(2)	C(4)-Mo(1)-C(7)	140.7(4)
O(1)-Eu(1)-N(4)#1	79.8(2)	C(8)-N(1)-Eu(1)	171.7(7)
O(3)-Eu(1)-N(1)	76.3(3)	C(4)-N(4)-Eu(1)#2	172.6(8)
O(4)-Eu(1)-N(1)	70.8(3)	C(9)-O(1)-Eu(1)	139.2(7)
O(2)-Eu(1)-N(1)	76.3(3)	C(12)-O(2)-Eu(1)	149.1(11)
O(5)-Eu(1)-N(1)	140.5(3)	C(15)-O(3)-Eu(1)	144.2(11)
O(6)-Eu(1)-N(1)	117.9(3)	C(18)-O(4)-Eu(1)	142.6(11)
O(1)-Eu(1)-N(1)	74.2(2)	C(22)-O(5)-Eu(1)	131.9(11)
N(4)#1-Eu(1)-N(1)	143.0(3)	C(26)-O(6)-Eu(1)	131.6(7)

Symmetry transformations used to generate equivalent atoms: #1 x, y+1, z; #2 x, y-1, z.

Complex 5

C(1)-Mo(1)	2.151(9)	Gd(1)-O(1)	2.308(6)
C(2)-Mo(1)	2.149(10)	Gd(1)-O(3)	2.329(7)
C(3)-Mo(1)	2.160(10)	Gd(1)-O(6)	2.340(6)
C(4)-Mo(1)	2.160(8)	Gd(1)-O(2)	2.354(6)
C(5)-Mo(1)	2.162(10)	Gd(1)-O(5)	2.363(6)
C(6)-Mo(1)	2.152(9)	Gd(1)-O(4)	2.376(5)
C(7)-Mo(1)	2.159(9)	Gd(1)-N(3)#1	2.522(7)
C(8)-Mo(1)	2.155(9)	Gd(1)-N(8)	2.535(7)
		N(3)-Gd(1)#2	2.522(7)
N(3)-C(1)-Mo(1)	178.6(7)	C(2)-Mo(1)-C(1)	74.2(3)
N(2)-C(2)-Mo(1)	177.1(10)	C(2)-Mo(1)-C(6)	143.4(4)
N(7)-C(3)-Mo(1)	179.9(12)	C(1)-Mo(1)-C(6)	141.2(3)
N(8)-C(4)-Mo(1)	176.7(6)	C(2)-Mo(1)-C(8)	111.2(4)
N(1)-C(5)-Mo(1)	179.0(9)	C(1)-Mo(1)-C(8)	72.8(3)
N(6)-C(6)-Mo(1)	179.3(9)	C(6)-Mo(1)-C(8)	81.0(4)
N(5)-C(7)-Mo(1)	176.5(10)	C(2)-Mo(1)-C(7)	141.8(4)
N(4)-C(8)-Mo(1)	175.6(11)	C(1)-Mo(1)-C(7)	74.3(3)
O(1)-Gd(1)-O(3)	74.1(3)	C(6)-Mo(1)-C(7)	73.0(4)
O(1)-Gd(1)-O(6)	78.1(3)	C(8)-Mo(1)-C(7)	79.1(4)
O(3)-Gd(1)-O(6)	141.1(3)	C(2)-Mo(1)-C(3)	73.2(4)
O(1)-Gd(1)-O(2)	73.1(2)	C(1)-Mo(1)-C(3)	117.2(3)
O(3)-Gd(1)-O(2)	117.1(3)	C(6)-Mo(1)-C(3)	78.9(4)

O(6)-Gd(1)-O(2)	78.9(2)	C(8)-Mo(1)-C(3)	71.3(4)
O(1)-Gd(1)-O(5)	144.9(2)	C(7)-Mo(1)-C(3)	141.9(4)
O(3)-Gd(1)-O(5)	80.7(3)	C(2)-Mo(1)-C(4)	78.3(3)
O(6)-Gd(1)-O(5)	109.4(2)	C(1)-Mo(1)-C(4)	143.8(3)
O(2)-Gd(1)-O(5)	141.4(2)	C(6)-Mo(1)-C(4)	72.0(3)
O(1)-Gd(1)-O(4)	140.9(3)	C(8)-Mo(1)-C(4)	140.4(3)
O(3)-Gd(1)-O(4)	142.0(3)	C(7)-Mo(1)-C(4)	118.0(3)
O(6)-Gd(1)-O(4)	74.5(2)	C(3)-Mo(1)-C(4)	75.4(3)
O(2)-Gd(1)-O(4)	74.7(2)	C(2)-Mo(1)-C(5)	77.2(4)
O(5)-Gd(1)-O(4)	71.9(2)	C(1)-Mo(1)-C(5)	77.6(3)
O(1)-Gd(1)-N(3)#1	114.8(3)	C(6)-Mo(1)-C(5)	113.2(4)
O(3)-Gd(1)-N(3)#1	73.4(2)	C(8)-Mo(1)-C(5)	145.1(3)
O(6)-Gd(1)-N(3)#1	144.3(2)	C(7)-Mo(1)-C(5)	75.4(4)
O(2)-Gd(1)-N(3)#1	74.0(2)	C(3)-Mo(1)-C(5)	140.7(3)
O(5)-Gd(1)-N(3)#1	79.8(2)	C(4)-Mo(1)-C(5)	73.7(3)
O(4)-Gd(1)-N(3)#1	76.2(2)	C(1)-N(3)-Gd(1)#2	173.6(6)
O(1)-Gd(1)-N(8)	76.4(2)	C(4)-N(8)-Gd(1)	172.4(6)
O(3)-Gd(1)-N(8)	76.7(2)	C(14)-O(1)-Gd(1)	145.5(9)
O(6)-Gd(1)-N(8)	70.6(2)	C(21)-O(2)-Gd(1)	134.0(9)
O(2)-Gd(1)-N(8)	140.5(2)	C(9)-O(3)-Gd(1)	169.2(14)
O(5)-Gd(1)-N(8)	74.3(2)	C(18)-O(4)-Gd(1)	132.6(6)
O(4)-Gd(1)-N(8)	118.6(2)	C(15)-O(5)-Gd(1)	140.5(6)
N(3)#1-Gd(1)-N(8)	143.1(2)	C(26)-O(6)-Gd(1)	142.0(8)

Symmetry transformations used to generate equivalent atoms: #1 x, y+1, z; #2 x, y-1, z.

Complex 6

C(1)-Mo(1)	2.170(10)	Ho(1)-O(6)	2.281(7)
C(2)-Mo(1)	2.163(10)	Ho(1)-O(5)	2.300(6)
C(3)-Mo(1)	2.157(8)	Ho(1)-O(1)	2.305(7)
C(4)-Mo(1)	2.166(10)	Ho(1)-O(4)	2.339(6)
C(5)-Mo(1)	2.151(10)	Ho(1)-O(3)	2.341(6)
C(6)-Mo(1)	2.156(9)	Ho(1)-O(2)	2.346(6)
C(7)-Mo(1)	2.166(9)	Ho(1)-N(5)#1	2.471(6)
C(8)-Mo(1)	2.167(10)	Ho(1)-N(1)	2.501(7)
		N(5)-Ho(1)#2	2.471(6)
N(7)-C(1)-Mo(1)	176.9(10)	C(5)-Mo(1)-C(6)	78.8(4)
N(3)-C(2)-Mo(1)	176.6(10)	C(5)-Mo(1)-C(3)	116.5(3)
N(5)-C(3)-Mo(1)	177.1(7)	C(6)-Mo(1)-C(3)	141.4(3)
N(4)-C(4)-Mo(1)	178.4(12)	C(5)-Mo(1)-C(2)	141.4(4)
N(8)-C(5)-Mo(1)	179.3(11)	C(6)-Mo(1)-C(2)	72.7(4)
N(2)-C(6)-Mo(1)	179.2(9)	C(3)-Mo(1)-C(2)	75.2(3)
N(1)-C(7)-Mo(1)	178.1(7)	C(5)-Mo(1)-C(4)	71.4(4)
N(6)-C(8)-Mo(1)	177.0(10)	C(6)-Mo(1)-C(4)	80.7(4)

O(6)-Ho(1)-O(5)	78.2(3)	C(3)-Mo(1)-C(4)	72.5(3)
O(6)-Ho(1)-O(1)	74.4(3)	C(2)-Mo(1)-C(4)	78.7(4)
O(5)-Ho(1)-O(1)	140.6(3)	C(5)-Mo(1)-C(7)	75.6(3)
O(6)-Ho(1)-O(4)	72.7(3)	C(6)-Mo(1)-C(7)	71.4(3)
O(5)-Ho(1)-O(4)	78.7(2)	C(3)-Mo(1)-C(7)	144.5(3)
O(1)-Ho(1)-O(4)	118.3(3)	C(2)-Mo(1)-C(7)	117.5(3)
O(6)-Ho(1)-O(3)	140.1(3)	C(4)-Mo(1)-C(7)	140.1(3)
O(5)-Ho(1)-O(3)	74.2(2)	C(5)-Mo(1)-C(8)	73.8(4)
O(1)-Ho(1)-O(3)	142.5(3)	C(6)-Mo(1)-C(8)	143.5(3)
O(4)-Ho(1)-O(3)	74.1(2)	C(3)-Mo(1)-C(8)	73.8(3)
O(6)-Ho(1)-O(2)	145.7(3)	C(2)-Mo(1)-C(8)	141.9(3)
O(5)-Ho(1)-O(2)	110.0(2)	C(4)-Mo(1)-C(8)	111.8(4)
O(1)-Ho(1)-O(2)	79.9(3)	C(7)-Mo(1)-C(8)	78.7(3)
O(4)-Ho(1)-O(2)	140.9(2)	C(5)-Mo(1)-C(1)	141.3(3)
O(3)-Ho(1)-O(2)	72.2(2)	C(6)-Mo(1)-C(1)	112.7(4)
O(6)-Ho(1)-N(5)#1	114.1(3)	C(3)-Mo(1)-C(1)	78.3(3)
O(5)-Ho(1)-N(5)#1	144.6(2)	C(2)-Mo(1)-C(1)	75.2(4)
O(1)-Ho(1)-N(5)#1	73.7(2)	C(4)-Mo(1)-C(1)	144.9(4)
O(4)-Ho(1)-N(5)#1	74.4(2)	C(7)-Mo(1)-C(1)	74.0(3)
O(3)-Ho(1)-N(5)#1	76.7(2)	C(8)-Mo(1)-C(1)	77.3(4)
O(2)-Ho(1)-N(5)#1	79.1(2)	C(7)-N(1)-Ho(1)	172.5(6)
O(6)-Ho(1)-N(1)	77.2(2)	C(3)-N(5)-Ho(1)#2	174.2(6)
O(5)-Ho(1)-N(1)	70.4(2)	C(26)-O(1)-Ho(1)	158.1(12)
O(1)-Ho(1)-N(1)	76.2(3)	C(21)-O(2)-Ho(1)	138.9(6)
O(4)-Ho(1)-N(1)	140.4(2)	C(18)-O(3)-Ho(1)	131.5(6)
O(3)-Ho(1)-N(1)	118.4(2)	C(17)-O(4)-Ho(1)	132.9(7)
O(2)-Ho(1)-N(1)	74.8(2)	C(11)-O(5)-Ho(1)	140.6(8)
N(5)#1-Ho(1)-N(1)	143.0(2)	C(14)-O(6)-Ho(1)	146.1(10)

Symmetry transformations used to generate equivalent atoms: #1 x, y+1, z; #2 x, y-1, z.

Complex 7

C(1)-Mo(1)	2.153(15)	Er(1)-O(3)	2.265(12)
C(2)-Mo(1)	2.12(3)	Er(1)-O(4)	2.275(15)
C(3)-Mo(1)	2.15(2)	Er(1)-O(2)	2.309(11)
C(4)-Mo(1)	2.171(17)	Er(1)-O(5)	2.312(14)
C(5)-Mo(1)	2.16(2)	Er(1)-O(1)	2.328(12)
C(6)-Mo(1)	2.195(17)	Er(1)-O(6)	2.353(13)
C(7)-Mo(1)	2.172(18)	Er(1)-N(10)#1	2.467(10)
C(8)-Mo(1)	2.172(14)	Er(1)-N(5)	2.483(10)
		N(10)-Er(1)#2	2.467(10)
N(10)-C(1)-Mo(1)	176.4(13)	C(2)-Mo(1)-C(3)	72.5(10)
N(9)-C(2)-Mo(1)	176(3)	C(2)-Mo(1)-C(1)	72.5(8)
N(11)-C(3)-Mo(1)	176(2)	C(3)-Mo(1)-C(1)	117.8(7)
N(7)-C(4)-Mo(1)	178(2)	C(2)-Mo(1)-C(5)	77.9(10)

N(8)-C(5)-Mo(1)	175(2)	C(3)-Mo(1)-C(5)	141.0(9)
N(6)-C(6)-Mo(1)	174.9(15)	C(1)-Mo(1)-C(5)	75.1(7)
N(12)-C(7)-Mo(1)	179.0(19)	C(2)-Mo(1)-C(4)	80.9(9)
N(5)-C(8)-Mo(1)	178.2(14)	C(3)-Mo(1)-C(4)	78.8(9)
O(3)-Er(1)-O(4)	71.8(7)	C(1)-Mo(1)-C(4)	141.0(6)
O(3)-Er(1)-O(2)	82.5(6)	C(5)-Mo(1)-C(4)	71.8(8)
O(4)-Er(1)-O(2)	145.0(5)	C(2)-Mo(1)-C(8)	140.4(8)
O(3)-Er(1)-O(5)	139.5(5)	C(3)-Mo(1)-C(8)	74.3(6)
O(4)-Er(1)-O(5)	76.7(7)	C(1)-Mo(1)-C(8)	144.2(5)
O(2)-Er(1)-O(5)	111.8(6)	C(5)-Mo(1)-C(8)	118.2(7)
O(3)-Er(1)-O(1)	145.2(5)	C(4)-Mo(1)-C(8)	72.0(6)
O(4)-Er(1)-O(1)	138.6(6)	C(2)-Mo(1)-C(7)	112.0(9)
O(2)-Er(1)-O(1)	74.5(5)	C(3)-Mo(1)-C(7)	74.1(8)
O(5)-Er(1)-O(1)	74.4(5)	C(1)-Mo(1)-C(7)	73.8(5)
O(3)-Er(1)-O(6)	114.6(5)	C(5)-Mo(1)-C(7)	142.2(8)
O(4)-Er(1)-O(6)	71.9(5)	C(4)-Mo(1)-C(7)	144.2(7)
O(2)-Er(1)-O(6)	142.3(4)	C(8)-Mo(1)-C(7)	78.3(5)
O(5)-Er(1)-O(6)	77.8(5)	C(2)-Mo(1)-C(6)	144.5(9)
O(1)-Er(1)-O(6)	73.4(5)	C(3)-Mo(1)-C(6)	140.6(7)
O(3)-Er(1)-N(10)#1	74.0(4)	C(1)-Mo(1)-C(6)	77.9(5)
O(4)-Er(1)-N(10)#1	115.4(5)	C(5)-Mo(1)-C(6)	75.9(8)
O(2)-Er(1)-N(10)#1	78.2(4)	C(4)-Mo(1)-C(6)	112.5(7)
O(5)-Er(1)-N(10)#1	144.4(4)	C(8)-Mo(1)-C(6)	74.2(5)
O(1)-Er(1)-N(10)#1	75.9(4)	C(7)-Mo(1)-C(6)	77.0(7)
O(6)-Er(1)-N(10)#1	75.2(4)	C(8)-N(5)-Er(1)	175.3(13)
O(3)-Er(1)-N(5)	77.1(5)	C(1)-N(10)-Er(1)#2	174.3(11)
O(4)-Er(1)-N(5)	75.7(5)	C(12)-O(1)-Er(1)	132.2(12)
O(2)-Er(1)-N(5)	75.6(4)	C(9)-O(2)-Er(1)	140.9(11)
O(5)-Er(1)-N(5)	70.8(5)	C(24)-O(3)-Er(1)	153.3(18)
O(1)-Er(1)-N(5)	120.4(5)	C(23)-O(4)-Er(1)	145(2)
O(6)-Er(1)-N(5)	139.1(4)	C(20)-O(5)-Er(1)	141.2(17)
N(10)#1-Er(1)-N(5)	143.0(4)	C(17)-O(6)-Er(1)	130.3(15)

Symmetry transformations used to generate equivalent atoms: #1 x, y-1, z; #2 x, y+1, z.

Complex 8

C(1)-Mo(1)	2.166(13)	N(4)-Tm(1)#1	2.492(9)
C(2)-Mo(1)	2.173(13)	N(8)-Tm(1)	2.452(8)
C(3)-Mo(1)	2.163(11)	O(1)-Tm(1)	2.333(7)
C(4)-Mo(1)	2.170(12)	O(2)-Tm(1)	2.326(7)
C(5)-Mo(1)	2.164(13)	O(3)-Tm(1)	2.286(8)
C(6)-Mo(1)	2.175(12)	O(4)-Tm(1)	2.335(7)
C(7)-Mo(1)	2.152(13)	O(5)-Tm(1)	2.286(8)
C(8)-Mo(1)	2.166(10)	O(6)-Tm(1)	2.302(9)
		Tm(1)-N(4)#2	2.493(9)

N(2)-C(1)-Mo(1)	176.4(12)	C(8)-N(4)-Tm(1)#1	173.2(8)
N(6)-C(2)-Mo(1)	176.1(12)	C(3)-N(8)-Tm(1)	173.1(8)
N(8)-C(3)-Mo(1)	178.4(9)	C(12)-O(1)-Tm(1)	131.0(7)
N(7)-C(4)-Mo(1)	175.9(12)	C(11)-O(2)-Tm(1)	140.0(7)
N(1)-C(5)-Mo(1)	179.0(14)	C(10)-O(3)-Tm(1)	140.7(9)
N(5)-C(6)-Mo(1)	179.6(13)	C(9)-O(4)-Tm(1)	132.5(9)
N(3)-C(7)-Mo(1)	177.5(14)	C(26)-O(5)-Tm(1)	144.6(11)
N(4)-C(8)-Mo(1)	176.2(9)	C(21)-O(6)-Tm(1)	154.6(15)
C(7)-Mo(1)-C(3)	116.5(4)	O(5)-Tm(1)-O(3)	78.1(4)
C(7)-Mo(1)-C(5)	71.1(5)	O(5)-Tm(1)-O(6)	74.2(4)
C(3)-Mo(1)-C(5)	72.7(4)	O(3)-Tm(1)-O(6)	140.3(3)
C(7)-Mo(1)-C(8)	76.2(4)	O(5)-Tm(1)-O(2)	145.4(3)
C(3)-Mo(1)-C(8)	144.0(4)	O(3)-Tm(1)-O(2)	110.5(3)
C(5)-Mo(1)-C(8)	140.5(4)	O(6)-Tm(1)-O(2)	79.6(4)
C(7)-Mo(1)-C(1)	74.2(5)	O(5)-Tm(1)-O(1)	139.8(3)
C(3)-Mo(1)-C(1)	74.1(4)	O(3)-Tm(1)-O(1)	73.9(3)
C(5)-Mo(1)-C(1)	112.6(5)	O(6)-Tm(1)-O(1)	143.0(3)
C(8)-Mo(1)-C(1)	78.1(4)	O(2)-Tm(1)-O(1)	72.8(3)
C(7)-Mo(1)-C(4)	141.2(5)	O(5)-Tm(1)-O(4)	72.6(3)
C(3)-Mo(1)-C(4)	75.3(4)	O(3)-Tm(1)-O(4)	78.0(3)
C(5)-Mo(1)-C(4)	78.8(5)	O(6)-Tm(1)-O(4)	118.8(4)
C(8)-Mo(1)-C(4)	117.1(4)	O(2)-Tm(1)-O(4)	141.2(3)
C(1)-Mo(1)-C(4)	141.9(5)	O(1)-Tm(1)-O(4)	73.7(3)
C(7)-Mo(1)-C(2)	141.8(4)	O(5)-Tm(1)-N(8)	113.5(3)
C(3)-Mo(1)-C(2)	78.0(4)	O(3)-Tm(1)-N(8)	144.8(3)
C(5)-Mo(1)-C(2)	144.6(4)	O(6)-Tm(1)-N(8)	73.7(3)
C(8)-Mo(1)-C(2)	73.8(4)	O(2)-Tm(1)-N(8)	79.4(3)
C(1)-Mo(1)-C(2)	76.9(5)	O(1)-Tm(1)-N(8)	77.4(3)
C(4)-Mo(1)-C(2)	74.9(5)	O(4)-Tm(1)-N(8)	74.7(3)
C(7)-Mo(1)-C(6)	78.6(5)	O(5)-Tm(1)-N(4)#2	77.2(3)
C(3)-Mo(1)-C(6)	141.0(4)	O(3)-Tm(1)-N(4)#2	71.0(3)
C(5)-Mo(1)-C(6)	80.0(5)	O(6)-Tm(1)-N(4)#2	75.4(3)
C(8)-Mo(1)-C(6)	72.2(4)	O(2)-Tm(1)-N(4)#2	74.6(3)
C(1)-Mo(1)-C(6)	143.6(4)	O(1)-Tm(1)-N(4)#2	118.7(3)
C(4)-Mo(1)-C(6)	72.4(5)	O(4)-Tm(1)-N(4)#2	140.3(3)
C(2)-Mo(1)-C(6)	113.3(5)	N(8)-Tm(1)-N(4)#2	142.5(3)

Symmetry transformations used to generate equivalent atoms: #1 x, y-1, z; #2 x, y+1, z.

Complex 9

C(1)-Mo(1)	2.146(14)	N(1)-Yb(1)#1	2.422(9)
C(2)-Mo(1)	2.172(15)	N(8)-Yb(1)	2.505(10)
C(3)-Mo(1)	2.169(11)	O(1)-Yb(1)	2.324(8)
C(4)-Mo(1)	2.169(14)	O(2)-Yb(1)	2.256(9)
C(5)-Mo(1)	2.152(15)	O(3)-Yb(1)	2.255(9)

C(6)-Mo(1)	2.154(12)	O(4)-Yb(1)	2.252(10)
C(7)-Mo(1)	2.121(15)	O(5)-Yb(1)	2.302(8)
C(8)-Mo(1)	2.158(14)	O(6)-Yb(1)	2.323(8)
		Yb(1)-N(1)#2	2.422(9)
N(3)-C(1)-Mo(1)	175.6(15)	C(3)-N(1)-Yb(1)#1	172.4(8)
N(4)-C(2)-Mo(1)	177.6(12)	C(6)-N(8)-Yb(1)	174.3(9)
N(1)-C(3)-Mo(1)	178.5(10)	C(15)-O(1)-Yb(1)	133.8(9)
N(6)-C(4)-Mo(1)	179.4(12)	C(24)-O(2)-Yb(1)	140.3(9)
N(2)-C(5)-Mo(1)	177.9(12)	C(21)-O(3)-Yb(1)	144.6(12)
N(8)-C(6)-Mo(1)	175.4(11)	C(18)-O(4)-Yb(1)	151.9(18)
N(7)-C(7)-Mo(1)	179.1(15)	C(11)-O(5)-Yb(1)	140.3(8)
N(5)-C(8)-Mo(1)	178.2(12)	C(14)-O(6)-Yb(1)	131.1(8)
C(7)-Mo(1)-C(1)	72.0(5)	O(4)-Yb(1)-O(3)	73.0(4)
C(7)-Mo(1)-C(5)	73.9(5)	O(4)-Yb(1)-O(2)	139.3(4)
C(1)-Mo(1)-C(5)	114.1(6)	O(3)-Yb(1)-O(2)	78.3(4)
C(7)-Mo(1)-C(6)	77.2(5)	O(4)-Yb(1)-O(5)	81.4(4)
C(1)-Mo(1)-C(6)	141.3(5)	O(3)-Yb(1)-O(5)	146.2(3)
C(5)-Mo(1)-C(6)	78.1(5)	O(2)-Yb(1)-O(5)	110.0(3)
C(7)-Mo(1)-C(8)	79.6(6)	O(4)-Yb(1)-O(6)	144.9(4)
C(1)-Mo(1)-C(8)	79.2(5)	O(3)-Yb(1)-O(6)	138.9(4)
C(5)-Mo(1)-C(8)	144.1(5)	O(2)-Yb(1)-O(6)	73.5(3)
C(6)-Mo(1)-C(8)	72.6(4)	O(5)-Yb(1)-O(6)	73.0(3)
C(7)-Mo(1)-C(4)	142.1(5)	O(4)-Yb(1)-O(1)	117.6(4)
C(1)-Mo(1)-C(4)	143.2(5)	O(3)-Yb(1)-O(1)	72.0(3)
C(5)-Mo(1)-C(4)	76.4(5)	O(2)-Yb(1)-O(1)	78.5(3)
C(6)-Mo(1)-C(4)	74.0(4)	O(5)-Yb(1)-O(1)	141.1(3)
C(8)-Mo(1)-C(4)	113.7(5)	O(6)-Yb(1)-O(1)	73.5(3)
C(7)-Mo(1)-C(3)	115.6(5)	O(4)-Yb(1)-N(1)#2	74.2(3)
C(1)-Mo(1)-C(3)	72.7(4)	O(3)-Yb(1)-N(1)#2	112.8(3)
C(5)-Mo(1)-C(3)	74.1(4)	O(2)-Yb(1)-N(1)#2	144.9(3)
C(6)-Mo(1)-C(3)	143.8(4)	O(5)-Yb(1)-N(1)#2	79.8(3)
C(8)-Mo(1)-C(3)	140.7(4)	O(6)-Yb(1)-N(1)#2	77.8(3)
C(4)-Mo(1)-C(3)	77.4(4)	O(1)-Yb(1)-N(1)#2	74.3(3)
C(7)-Mo(1)-C(2)	142.2(6)	O(4)-Yb(1)-N(8)	75.6(3)
C(1)-Mo(1)-C(2)	78.1(6)	O(3)-Yb(1)-N(8)	77.5(3)
C(5)-Mo(1)-C(2)	141.2(5)	O(2)-Yb(1)-N(8)	70.5(3)
C(6)-Mo(1)-C(2)	116.3(5)	O(5)-Yb(1)-N(8)	75.0(3)
C(8)-Mo(1)-C(2)	72.3(5)	O(6)-Yb(1)-N(8)	118.7(3)
C(4)-Mo(1)-C(2)	74.1(5)	O(1)-Yb(1)-N(8)	140.1(3)
C(3)-Mo(1)-C(2)	75.4(4)	N(1)#2-Yb(1)-N(8)	143.0(3)

Symmetry transformations used to generate equivalent atoms: #1 x, y-1, z; #2 x, y+1, z.

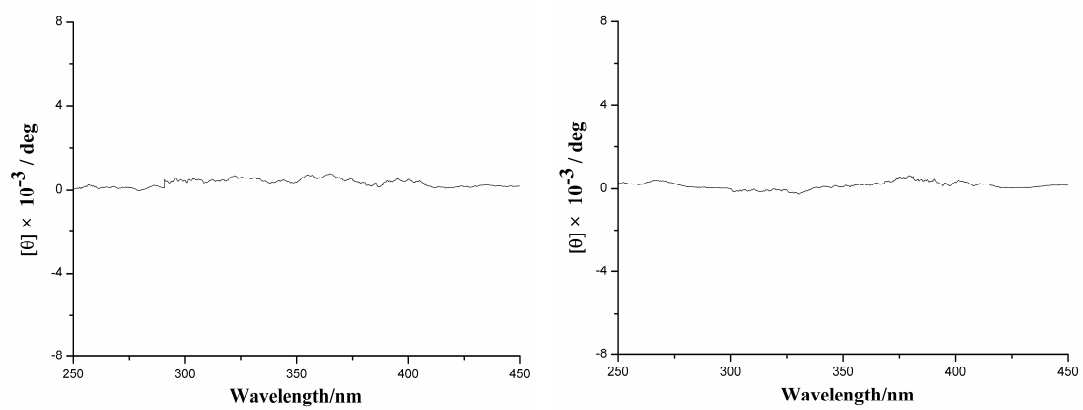


Fig. S1. CD spectra of powder samples of compounds **1** (left) and **2** (right).