

**Effect of Combining 1-Naphthoate and Pentafluorobenzoate Anions in Eu(III)
Compounds on Their Structure and Photoluminescent Properties**

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Supplementary Information

- I. Supplementary PXRD data**
- II. Supplementary structural data**
- III. Supplementary photoluminescent data**
- IV. Supplementary DFT calculations**

I. Supplementary PXRD data

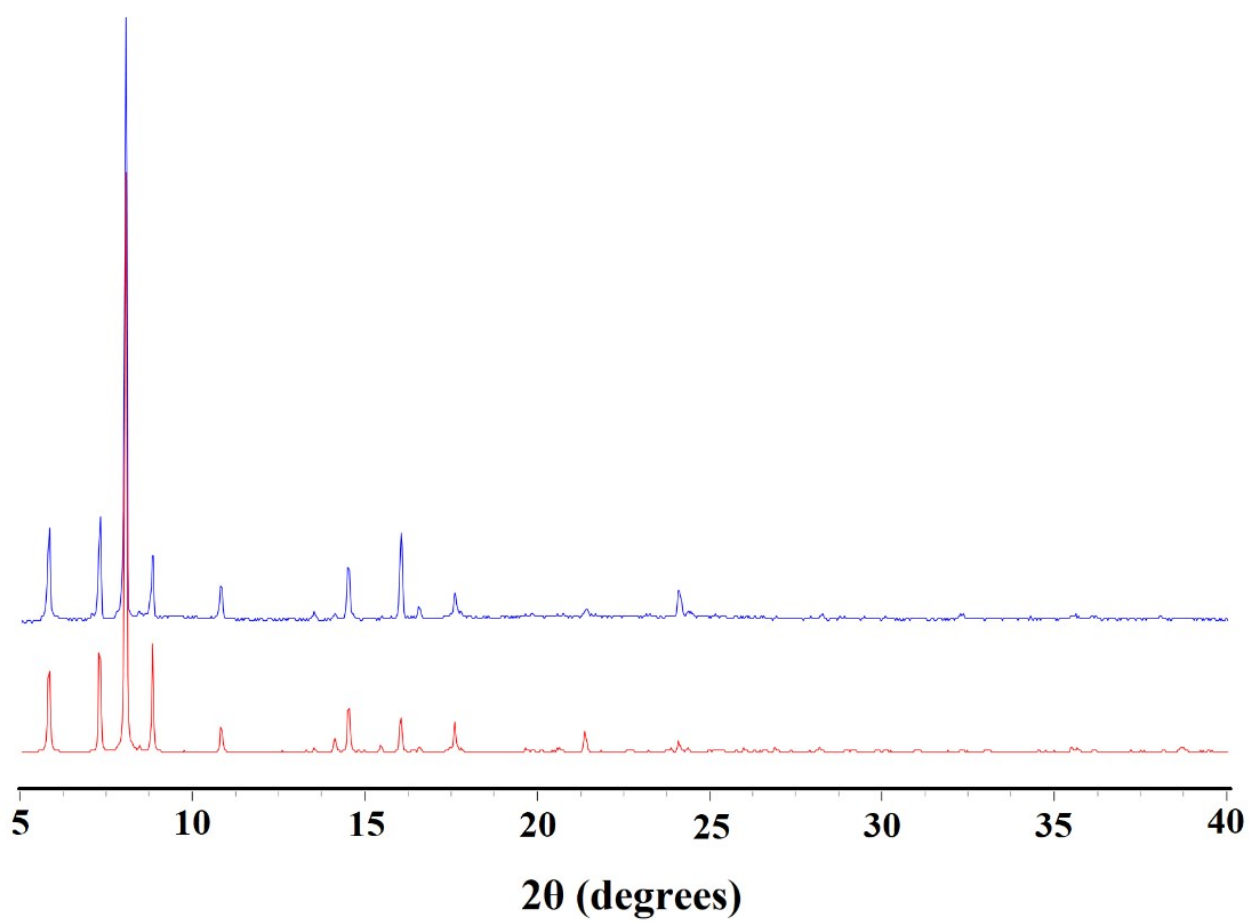


Figure S1. Theoretical (red line) and experimental (blue line) powder patterns of the compound 1.

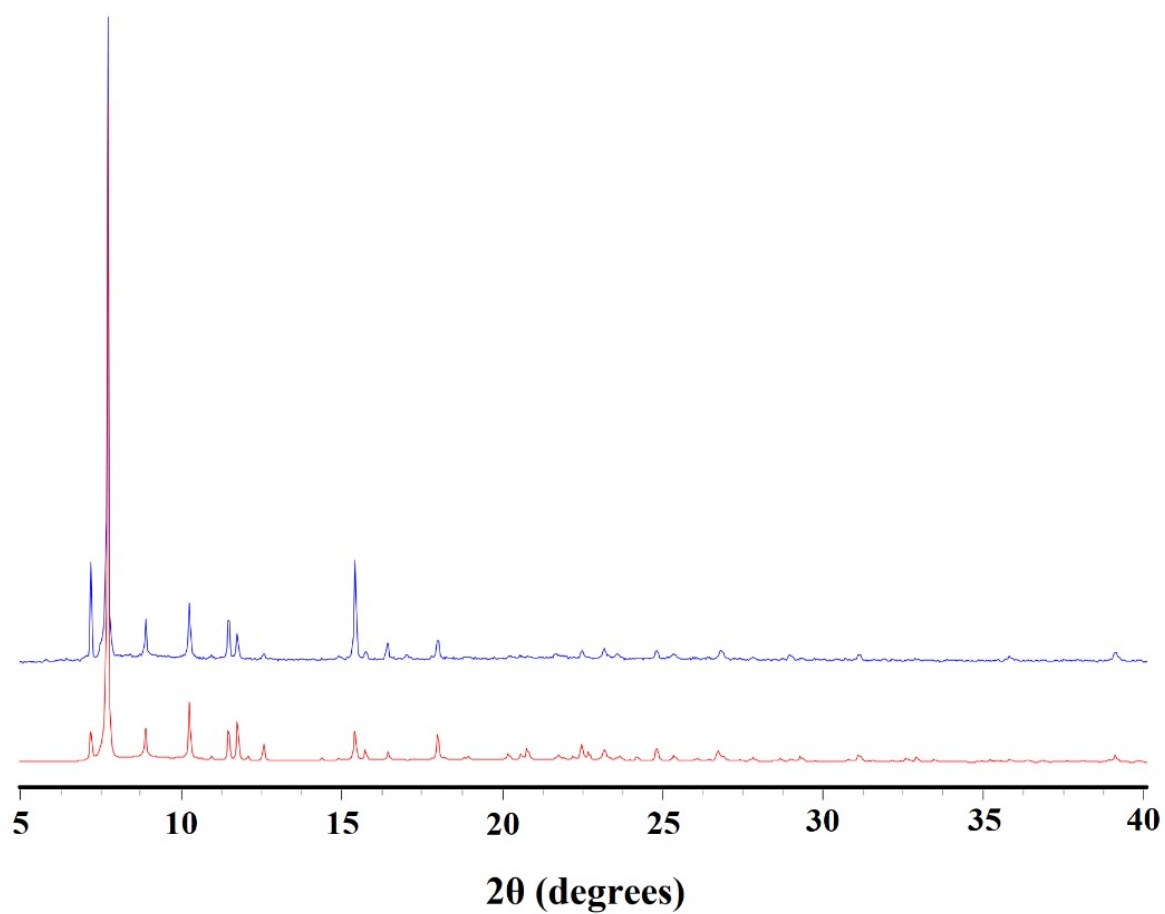


Figure S2. Theoretical (red line) and experimental (blue line) powder patterns of the compound 3.

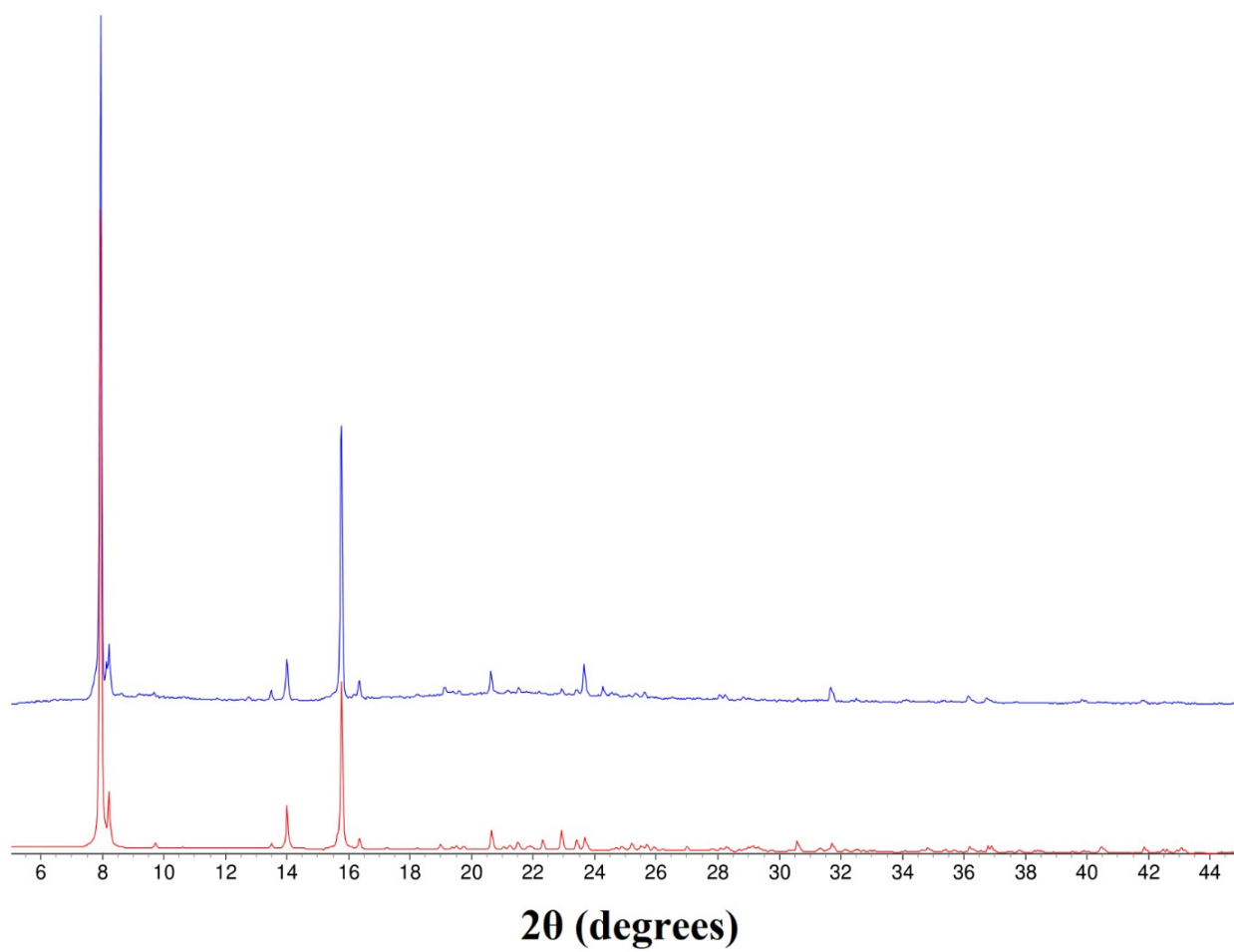


Figure S3. Theoretical (red line) and experimental (blue line) powder patterns of the compound **5**.

II. Supplementary structural data

Table S1. Crystallographic parameters and details of structures refinement of **1-5**.

Parameter	Value				
	1	2	3	4	5
<i>M</i> , g/mol	1853.24	1969.08	1885.01	1842.70	1959.11
<i>T</i> , K	150	150	150	150	150
Crystal system	Orthorhombic	Monoclinic	Monoclinic	Triclinic	Monoclinic
Space group	<i>Pbca</i>	<i>P2₁</i>	<i>P2₁/c</i>	<i>P</i> $\bar{1}$	<i>P2₁/n</i>
<i>a</i> , Å	13.7337(6)	10.8897(6)	13.4490(8)	12.7439(9)	12.8451(5)
<i>b</i> , Å	22.2044(7)	21.7447(12)	17.2769(10)	13.5698(18)	13.0931(5)
<i>c</i> , Å	24.4039(11)	15.3415(8)	16.4477(11)	14.4841(14)	21.8306(9)
α , deg	90	90	90	98.464(5)	90
β , deg	90	90.933(2)	112.573(3)	109.966(2)	90.082(2)
γ , deg	90	90	90	108.891(4)	90
<i>V</i> , Å ³	7441.9(5)	3632.3(3)	3529.0(4)	2131.8(4)	3671.5(3)
<i>Z</i>	4	2	2	1	2
ρ (calc.), g cm ⁻³	1.654	1.800	1.774	1.435	1.772
μ , mm ⁻¹	1.765	1.835	13.677	1.548	13.166
$\theta_{\min}$ – $\theta_{\max}$, deg	2.233–26.015	1.873–30.546	3.559 – 68.239	1.865–26.000	3.995–65.073
<i>F</i> (000)	3680	1936	1848	909	1928
<i>T</i> _{min} / <i>T</i> _{max}	0.627/0.745	0.065/0.099	0.010/0.114	0.479/0.746	0.076/0.325
Total reflections	38520	38071	36270	19095	26257
Independent reflections	7289	20697	6440	8300	6048
<i>R</i> _{int}	0.0622	0.0566	0.1258	0.0485	0.1061
Reflections with <i>I</i> > 2 σ (<i>I</i>)	5791	17609	5423	6714	4914
GOOF	1.074	0.845	1.050	1.042	1.037
<i>R</i> -factors <i>F</i> ² > 2 σ (<i>F</i> ²)	<i>R</i> ₁ = 0.0388; <i>wR</i> ₂ = 0.0741	<i>R</i> ₁ = 0.0567; <i>wR</i> ₂ = 0.1343	<i>R</i> ₁ = 0.0668; <i>wR</i> ₂ = 0.1857	<i>R</i> ₁ = 0.0527; <i>wR</i> ₂ = 0.1135	<i>R</i> ₁ = 0.0590; <i>wR</i> ₂ = 0.1419
<i>R</i> - factors for all reflections	<i>R</i> ₁ = 0.0543; <i>wR</i> ₂ = 0.0808	<i>R</i> ₁ = 0.0703; <i>wR</i> ₂ = 0.1486	<i>R</i> ₁ = 0.0750; <i>wR</i> ₂ = 0.1939	<i>R</i> ₁ = 0.0712; <i>wR</i> ₂ = 0.1286	<i>R</i> ₁ = 0.0710; <i>wR</i> ₂ = 0.1490
$\Delta\rho_{\min}/\Delta\rho_{\max}$, e/Å ³	-0.778/0.698	-1.749/1.200	-1.670/1.005	-1.143/1.439	-1.425/1.412

^[a] $R_I = \Sigma ||F_o| - |F_c|| / \Sigma |F_o|$. ^[b] $wR_2 = [\Sigma w(F_o^2 - F_c^2)^2 / \Sigma w(F_o^2)^2]^{1/2}$

Table S2. Crystallographic parameters and details of structures refinement of **6-8**.

Parameter	Value			
	6	7·MeCN	7·MeOH	8
<i>M</i> , g/mol	5644.59	2012.85	2058.91	1878.99
<i>T</i> , K	150	150	150	150
Crystal system	Triclinic	Orthorhombic	Monoclinic	Triclinic
Space group	$P\bar{1}$	Pbca	$P2_1/n$	$P\bar{1}$
<i>a</i> , Å	14.4475(5)	19.3888(10)	16.377(6)	11.5040(19)
<i>b</i> , Å	18.6209(7)	25.7800(15)	9.987(4)	12.882(2)
<i>c</i> , Å	19.3610(7)	27.3266(15)	21.598(8)	13.126(2)
α , deg	87.4980(10)	90	90	107.538(4)
β , deg	85.7890(10)	90	100.764(11)	102.836(4)
γ , deg	87.2280(10)	90	90	103.898(5)
<i>V</i> , Å ³	5184.3(3)	13659.0(13)	3470(2)	1706.9(5)
<i>Z</i>	1	8	2	1
ρ (calc.), g cm ⁻³	1.808	1.958	1.970	1.828
μ , mm ⁻³	1.929	1.972	1.946	1.945
$\theta_{\min}$ – $\theta_{\max}$, deg	1.828–30.696	1.823– 26.130	2.254 – 25.998	1.757– 24.711
<i>F</i> (000)	2744	7808	2008	920
<i>T</i> _{min} / <i>T</i> _{max}	0.632 / 0.746	0.199/ 0.260	0.036/0.100	0.0375/ 0.0998
Total reflections	59066	106205	24928	12079
Independent reflections	31332	13535	6782	5763
<i>R</i> _{int}	0.0476	0.1612	0.1002	0.1071
Reflections with <i>I</i> > 2σ(<i>I</i>)	21425	7818	4951	3797
GOOF	1.026	1.008	1.056	1.009
<i>R</i> -factors <i>F</i> ² > 2σ(<i>F</i> ²)	<i>R</i> ₁ = 0.0550; <i>wR</i> ₂ = 0.0876	<i>R</i> ₁ = 0.0559; <i>wR</i> ₂ = 0.1197	<i>R</i> ₁ = 0.0669 <i>wR</i> ₂ = 0.0957	<i>R</i> ₁ = 0.0811; <i>wR</i> ₂ = 0.1868
<i>R</i> - factors for all reflections	<i>R</i> ₁ = 0.1013; <i>wR</i> ₂ = 0.1150	<i>R</i> ₁ = 0.1185; <i>wR</i> ₂ = 0.1472	<i>R</i> ₁ = 0.1514; <i>wR</i> ₂ = 0.1764	<i>R</i> ₁ = 0.1211; <i>wR</i> ₂ = 0.2187
$\Delta\rho_{\min}/\Delta\rho_{\max}$, e/Å ³	-1.049/ 1.019	-1.252/2.568	-1.251/ 1.856	-1.482/ 2.182

^[a] $R_I = \Sigma||F_o| - |F_c||/\Sigma|F_o|$. ^[b] $wR_2 = [\Sigma w(F_o^2 - F_c^2)^2/\Sigma w(F_o^2)^2]^{1/2}$

Table S3. Continuous Shape Measures (CShM) values for the potential coordination polyhedron of Eu atoms in **1-8**.

Complex	Polyhedron of Eu
1	Muffin, Cs (1.307) Spherical capped square antiprism, C4v (1.491) Capped square antiprism J10, C4v (2.605)
2	Eu(1) Muffin, Cs (1.468) Spherical capped square antiprism, C4v (1.779) Spherical tricapped trigonal prism, D3h (1.848) Eu(2) Muffin, Cs (1.377) Spherical capped square antiprism, C4v (1.870) Capped square antiprism J10, C4v (1.939)
3	Muffin, Cs (1.305) Spherical capped square antiprism, C4v (1.561) Capped square antiprism J10, C4v (2.582)
4	Muffin, Cs (1.533) Spherical capped square antiprism, C4v (1.772) Capped square antiprism J10, C4v (2.358)
5	Muffin, Cs (1.443) Spherical capped square antiprism, C4v (1.785) Capped square antiprism J10, C4v (2.342)
6	Eu(1) Square antiprism, D4d (0.582) Biaugmented trigonal prism, C2v (2.456) Triangular dodecahedron, D2d (2.593) Eu(2) Square antiprism, D4d (0.443) Biaugmented trigonal prism, C2v (2.111) Triangular dodecahedron, D2d (2.598) Eu(3) Muffin, Cs (1.518) Spherical capped square antiprism, C4v (1.734) Capped square antiprism J10, C4v (2.143)
7·MeCN	Eu(1) Square antiprism, D4d (0.299) Biaugmented trigonal prism, C2v (2.014) Triangular dodecahedron, D2d (2.593) Eu(2) Square antiprism, D4d (0.381) Biaugmented trigonal prism, C2v (1.728) Triangular dodecahedron, D2d (2.633)
7·MeOH	Square antiprism, D4d (0.480) Biaugmented trigonal prism, C2v (1.841) Triangular dodecahedron, D2d (2.318)
8	Muffin, Cs (1.586) Spherical capped square antiprism, C4v (1.732) Capped square antiprism J10, C4v (2.266)

Table S4. Hydrogen bonds in the crystal packing of complexes **1-8**.

Interaction	Distance, Å				D – H⋯A, °
	D–H	Symmetry code	H⋯A	D⋯A	
Complex 1					
C(3)–H(3)⋯O(2)	0.95		2.37	2.715(6)	101
C(8)–H(8)⋯O(1)	0.95		2.22	2.869(6)	125
C(16)–H(16)⋯O(6)	0.95	3/2-x,-1/2+y,z	2.49	3.292(5)	142
C(19)–H(19)⋯O(3)	0.95		2.30	2.862(5)	117
C(20)–H(20)⋯F(27)	0.95	-x,-y,1-z	2.52	3.227(6)	131
C(30)–H(30)⋯O(3)	0.95		2.30	2.960(6)	126
C(32)–H(32)⋯ F(26)	0.95	1+x,y,z	2.50	3.144(8)	125
C(41)–H(41)⋯O(2)	0.95	1-x,-y,1-z	2.58	3.078(6)	113
Complex 2					
O(1)–H(1B)⋯O(10)	0.85	1+x,y,z	1.98	2.748(11)	148
O(1)–H(1A)⋯O(4)	0.85	-1+x,y,z	1.79	2.636(10)	180
O(2)–H(2B)⋯O(4)	0.85	1+x,y,z	2.00	2.757(11)	148
O(2)–H(2A)⋯ O(10)	0.85	-1+x,y,z	1.77	2.616(11)	180
C(4S)–H(4SC)⋯O(7)	0.96		2.51	3.35(2)	146
C(22)–H(22)⋯O(7)	0.93		2.45	2.994(14)	118
C(43)–H(43)⋯O(13)	0.93		2.55	3.029(13)	112
C(51)–H(51)⋯O(3)	0.93		2.53	3.025(14)	114
C(52)–H(52)⋯O(13)	0.93	1-x,-1/2+y,1-z	2.58	3.163(14)	121
C(53)–H(53)⋯O(13)	0.93	1-x,-1/2+y,1-z	2.57	3.176(13)	123
C(59)–H(59)⋯F(5)	0.93	x,y,1+z	2.49	3.006(12)	115
C(60)–H(60)⋯F(14)	0.93		2.51	3.303(14)	144
C(63)–H(63)⋯O(6)	0.93		2.51	3.045(13)	116
C(65)–H(65)⋯O(4)	0.93	1-x,1/2+y,1-z	2.48	3.276(14)	144
C(71)–H(71)⋯F(30)	0.93	x,y,-1+z	2.51	3.082(13)	120
C(72)–H(72)⋯F(35)	0.93		2.49	3.291(14)	145
Complex 3					
C(2S)–H(2SA)⋯O(4)	0.95		2.43	3.402(16)	176
C(18)–H(18)⋯O(6)	0.95		2.19	2.839(10)	124
C(25)–H(25)⋯O(5)	0.95		2.38	2.721(10)	100
C(26)–H(26)⋯O(1)	0.95		2.33	3.024(9)	129
C(27)–H(27)⋯N(1S)	0.95	x,3/2-y,-1/2+z	2.60	3.271(19)	128
C(34)–H(34)⋯F(13)	0.95	x,1/2-y,-1/2+z	2.49	3.110(11)	123
C(35)–H(35)⋯O(6)	0.95		2.60	3.040(9)	109
Complex 4					
C(22)–H(22)⋯O(5)	0.93		2.22	2.823(9)	122
C(24)–H(24)⋯F(5)	0.93	x,-1+y,-1+z	2.43	3.359(11)	176
C(29)–H(29)⋯O(6)	0.93		2.40	2.746(9)	102
C(30)–H(30)⋯O(4)	0.93	1-x,1-y,1-z	2.44	3.021(11)	121
C(32)–H(32)⋯N(1S)	0.93	1+x,1+y,z	2.61	3.387(15)	141
C(38)–H(38)⋯F(17)	0.93	1-x,-y,1-z	2.45	3.250(14)	144
C(39)–H(39)⋯O(3)	0.93		2.42	3.004(11)	121
Complex 5					
C(14)–H(14)⋯O(4)	0.95		2.36	2.725(8)	102

C(18)–H(18)⋯O(3)	0.95		2.19	2.854(8)	126
C(26)–H(26)⋯O(2)	0.95	1-x,1-y,1-z	2.44	3.081(9)	124
C(33)–H(33)⋯F(23)	0.95	$1/2+x, 3/2-y, -1/2+z$	2.53	3.284(9)	136
C(35)–H(35)⋯O(1)	0.95		2.42	2.998(9)	119
Complex 6					
C(40A)–H(40A)⋯O(11A)	0.95		2.54	3.14(3)	121
C(42A)–H(42A)⋯F(35)	0.95	-1+x,y,z	2.49	3.119(9)	124
C(45A)–H(45A)⋯F(72)	0.95	x,y,-1+z	2.39	3.286(9)	157
C(58)–H(58)⋯O(13)	0.95		2.25	2.897(8)	124
C(78A)–H(78A)⋯F(4B)	0.95	1-x,1-y,-z	2.24	3.102(18)	151
C(86A)–H(86A)⋯F(28B)	0.95		2.41	3.237(9)	145
C(88)–H(88)⋯O(11B)	0.95		2.49	3.10(2)	122
C(88A)–H(88A)⋯F(13)	0.95	-1+x,y,z	2.32	3.255(14)	169
C(90)–H(90)⋯F(25A)	0.95	-1+x,y,z	2.41	3.341(13)	166
C(97)–H(97)⋯O(12B)	0.95	2-x,-y,-z	2.49	3.163(19)	127
C(100)–H(100)⋯O(15)	0.95		2.39	3.056(7)	129
C(101)–H(101)⋯O(10)	0.95	2-x,-y,-z	2.42	3.243(7)	145
C(105)–H(105)⋯F(36)	0.95	-1+x,y,z	2.38	3.231(7)	150
C(111)–H(111)⋯O(16)	0.95	1-x,-y,1-z	2.36	3.016(7)	126
Complex 7·MeCN					
C(2S)–H(2SB)⋯O(12)	0.98		2.59	3.374(12)	137
C(2S)–H(2SC)⋯F(35)	0.98		2.43	3.237(11)	140
C(50)–H(50)⋯N(1S)	0.95	1-x,1-y,1-z	2.53	3.408(12)	155
C(51)–H(51)⋯F(4)	0.95	$1/2-x, 1/2+y, z$	2.51	3.156(9)	125
C(55)–H(55)⋯F(17)	0.95		2.46	3.358(10)	158
C(57)–H(57)⋯F(20)	0.95	$x, 1/2-y, -1/2+z$	2.39	3.322(12)	167
C(63)–H(63)⋯F(41)	0.95	1-x,1-y,1-z	2.51	3.194(11)	129
C(64)–H(64)⋯F(24)	0.95		2.50	3.428(9)	164
C(66)–H(66)⋯F(19)	0.95	$x, 1/2-y, -1/2+z$	2.53	3.294(12)	137
Complex 7·MeOH					
C(O1S)–H(1S)⋯O(2S)	0.82		2.00	2.809(11)	168
C(O2S)–H(2S)⋯O(2)	1.02	x,-1+y,z	2.31	3.052(9)	128
C(22)–H(22)⋯O(4)	0.93	1-x,1-y,1-z	2.54	3.105(12)	119
C(29)–H(29)⋯O(2S)	0.93	$3/2-x, 1/2+y, 3/2-z$	2.41	3.172(12)	139
C(31)–H(31)⋯O(3)	0.93		2.53	3.075(12)	118
Complex 8					
C(20)–H(20)⋯F(14B)	0.95	-x,2-y,1-z	2.46	3.28(3)	144
C(27)–H(27)⋯F(3)	0.95		2.52	3.336(18)	144
C(29)–H(29)⋯F(10B)	0.95	1-x,1-y,-z	2.51	3.28(5)	138
C(36)–H(36)⋯O(2)	0.95	1-x,2-y,1-z	2.35	3.011(17)	126
C(37)–H(37)⋯O(6)	0.95	x,y,-1+z	2.56	3.40(2)	148
C(38)–H(38)⋯F(7)	0.95	x,y,-1+z	2.40	3.18(2)	139

Table S5. C-F $\cdots\pi$ and C-N $\cdots\pi$ interactions in the crystal packing of complexes **1-8**.

Interaction	F $\cdots$ Cg, Å	Symmetry code	F $\cdots$ Perp, Å	C-F $\cdots$ Cg, ^o
Complex 1				
C(26)–F(26) $\cdots\pi$ (1-nap)	3.556(5)	3/2-x,1-y,1/2+z	3.496	74.8(3)
C(27)–F(27) $\cdots\pi$ (1-nap)	3.590(4)	1-x,1-y,1-z	3.243	66.5(3)
C(28)–F(28) $\cdots\pi$ (1-nap)	3.334(3)	1-x,1-y,1-z	3.333	89.8(2)
Complex 2				
C(6)–F(6) $\cdots\pi$ (1-nap)	3.523(10)		3.221	71.6(6)
C(11)–F(11) $\cdots\pi$ (pfb)	3.287(11)	1-x,1/2+y,1-z	2.975	122.0(8)
C(38)–F(38) $\cdots\pi$ (phen)	3.277(10)	-x,-1/2+y,1-z	3.211	86.0(6)
Complex 3				
C(6)–F(6) $\cdots\pi$ (phen)	3.460(8)	x,3/2-y,1/2+z	3.158	118.4(6)
Complex 4				
C(6)–F(6) $\cdots\pi$ (pfb)	3.515(14)	1-x,-y,1-z	3.380	77.8(6)
C(1S)–N(1S) $\cdots\pi$ (pfb)	3.484(13)		3.370	85.7(9)
Complex 5				
C(4)–F(4) $\cdots\pi$ (C ₆ H ₆)	3.597(8)		3.474	76.0(5)
C(22)–F(23) $\cdots\pi$ (1-nap)	3.119(5)		3.039	101.4(3)
C(23)–F(23) $\cdots\pi$ (1-nap)	3.561(5)		3.337	72.5(3)
Complex 6				
C(3A)–F(3A) $\cdots\pi$ (phen)	3.164(7)		3.106	89.3(5)
C(73)–F(73) $\cdots\pi$ (1-nap)	3.330(5)		3.283	84.7(3)
C(14)–F(14) $\cdots\pi$ (pfb)	3.470(8)		3.103	90.7(4)
C(17A)–F(17A) $\cdots\pi$ (pfb)	3.243(9)		3.018	151.1(5)
C(34)–F(34) $\cdots\pi$ (pfb)	3.466(4)	1+x,y,-1+z	3.431	135.8(3)
C(63A)–F(63A) $\cdots\pi$ (1-nap)	3.199(8)	2-x,-y,1-z	3.389	91.9(6)
C(64A)–F(64A) $\cdots\pi$ (pfb)	3.599(8)	2-x,-y,1-z	3.506	84.6(5)
C(3B)–F(3B) $\cdots\pi$ (phen)	3.504(19)		3.497	87.3(12)
C(7B)–F(7B) $\cdots\pi$ (phen)	3.570(17)		3.559	85.0(13)
C(27A)–F(27A) $\cdots\pi$ (pfb)	3.488(13)		3.396	88.2(8)
Complex 7·MeCN				
C(5)–F(5) $\cdots\pi$ (pfb)	3.344(7)	1/2-x,-1/2+y,z	2.940	99.2(4)
C(10)–F(10) $\cdots\pi$ (pfb)	3.166(7)	-1/2+x,y,3/2-z	2.923	117.7(5)
C(14)–F(14) $\cdots\pi$ (pfb)	3.143(7)	-1/2+x,y,3/2-z	2.937	121.8(5)
C(33)–F(33) $\cdots\pi$ (pfb)	3.020(7)	1-x,1/2+y,3/2-z	2.943	100.9(4)
C(42)–F(42) $\cdots\pi$ (phen)	3.334(5)		2.901	144.1(4)
Complex 7·MeOH				
C(3)–F(3) $\cdots\pi$ (pfb)	2.989(6)	1-x,2-y,1-z	2.664	105.1(4)
C(4)–F(4) $\cdots\pi$ (pfb)	3.419(6)	1-x,1-y,1-z	3.304	95.9(5)
C(21)–F(21) $\cdots\pi$ (phen)	3.080(6)		3.059	101.6(4)
Complex 8				
C(4)–F(4) $\cdots\pi$ (napac)	3.574(14)	1+x,y,z	3.217	77.8(9)
C(6)–F(6) $\cdots\pi$ (pfb)	3.440(15)	1-x,1-y,1-z	3.381	96.4(10)
C(12A)–F(12A) $\cdots\pi$ (phen)	3.11(3)	-x,1-y,-z	3.100	96.4(10)
C(12B)–F(12B) $\cdots\pi$ (phen)	3.03(3)	-x,1-y,-z	2.810	157.5(18)

Note. Cg is the centroid of aromatic rings, Perp is perpendicular to the plane of the ring, α is the angle between the planes of aromatic fragments.

III. Supplementary ph

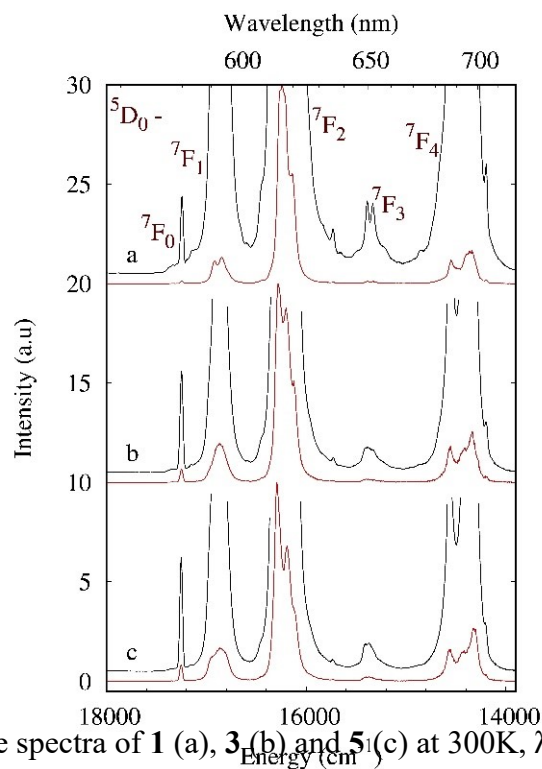


Figure S4. Luminescence spectra of **1** (a), **3** (b) and **5** (c) at 300K, $\lambda_{\text{ex}}=320$ nm. The black line indicates the spectra at an enlarged scale.

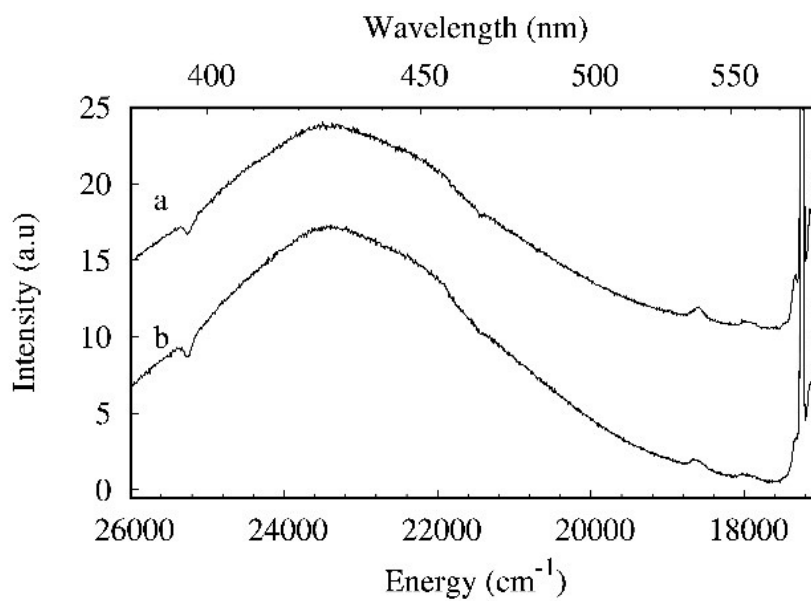


Figure S5. Luminescence spectra of **3** (a) and **5** (b) at 300K, $\lambda_{\text{ex}}=320$ nm.

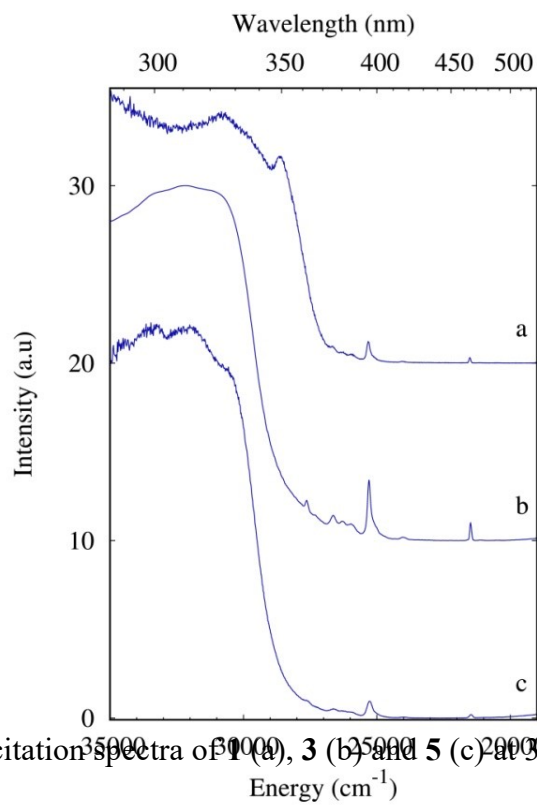


Figure S6. Excitation spectra of **1** (a), **3** (b) and **5** (c) at 300K, $\lambda_{em}=615$ nm.

IV. Supplementary DFT calculations

Table S6. Selected bondlengths experimental and calculated, Å.

Bond, Å \ Compound		1	2	3	4	5	8
Eu-N	exp.	2.570(4) - 2.623(4)	2.567(9) - 2.637(8)	2.566(5) - 2.607(5)	2.569(5), 2.575(4)	2.582(6), 2.584(5)	2.546(11), 2.581(9)
	calc.	2.590 - 2.617	2.593 - 2.685	2.566 - 2.616	2.572 - 2.601	2.595 - 2.599	2.543 - 2.630
Eu-O (1-nap)	exp.	2.351(3)- 2.441(3)	2.294(7) - 2.798(8)	2.416(5)- 2.457(5)	2.423(4), 2.451(4)	2.415(4), 2.424(5)	-
	calc.	2.345 - 2.478	2.458 - 2.700	2.379 - 2.453	2.390 - 2.458	2.395 - 2.443	
Eu-O (pfb)	exp.	2.390(3) - 2.605(3)	2.383(7) - 2.434(7)	2.380(5) - 2.576(5)	2.372(4) - 2.586(4)	2.367(4)- 2.624(4)	2.361(9) - 2.437(11)
	calc.	2.376 - 2.640	2.388 - 2.410	2.384 - 2.617	2.373 - 2.684	2.367 - 2.619	2.381 - 2.486
Eu···Eu	exp.	4.015(1)	4.094	3.995(1)	4.029(1)	4.037(1)	3.943(1)
	calc.	3.990	4.018	4.024	4.036	3.999	3.929

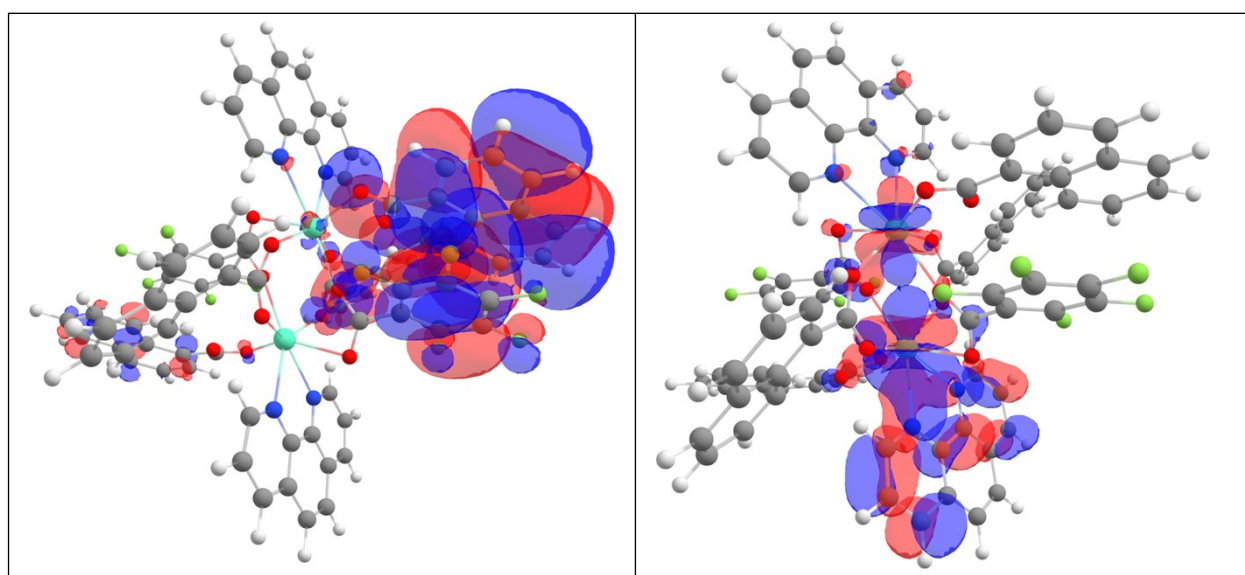


Figure S7. HOMO and LUMO of **1**

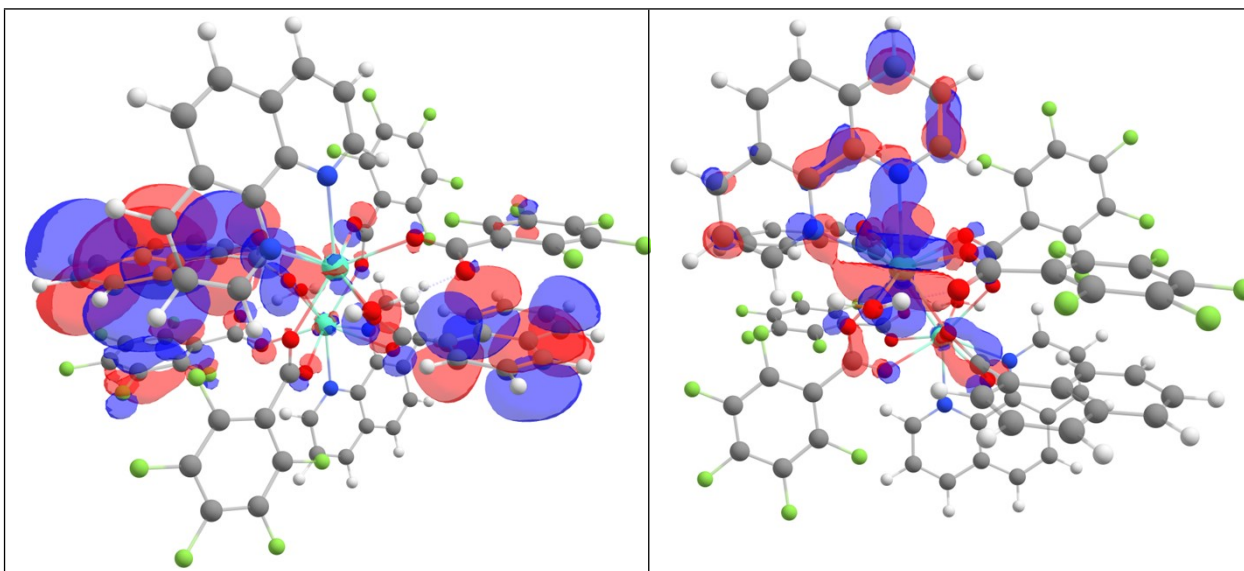


Figure S8. HOMO and LUMO of **2**

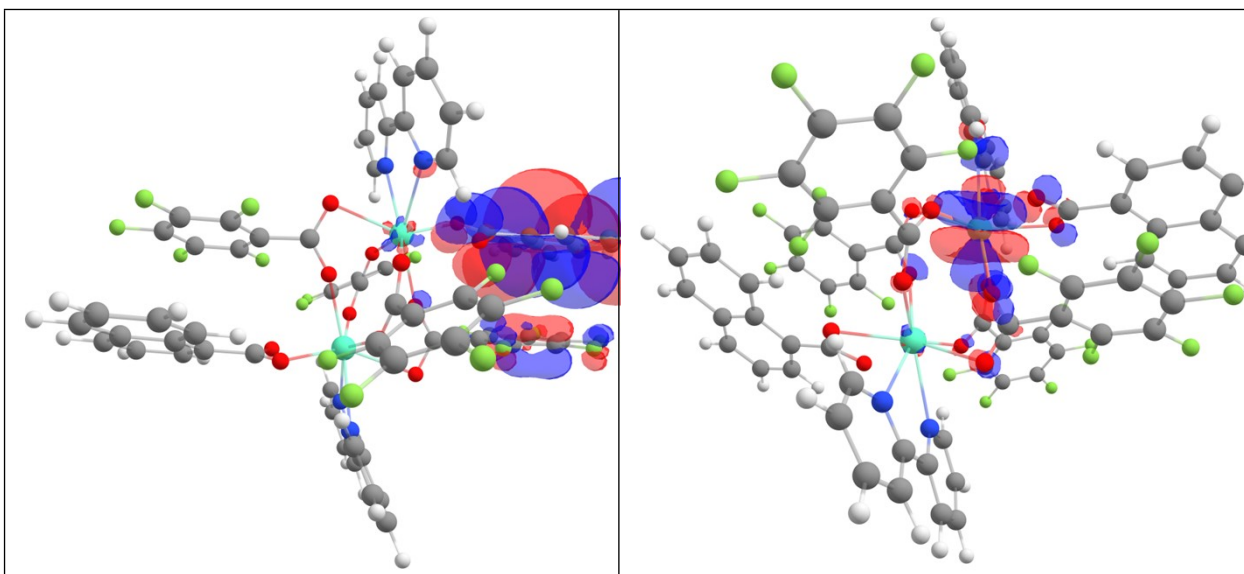


Figure S9. HOMO and LUMO of **3**

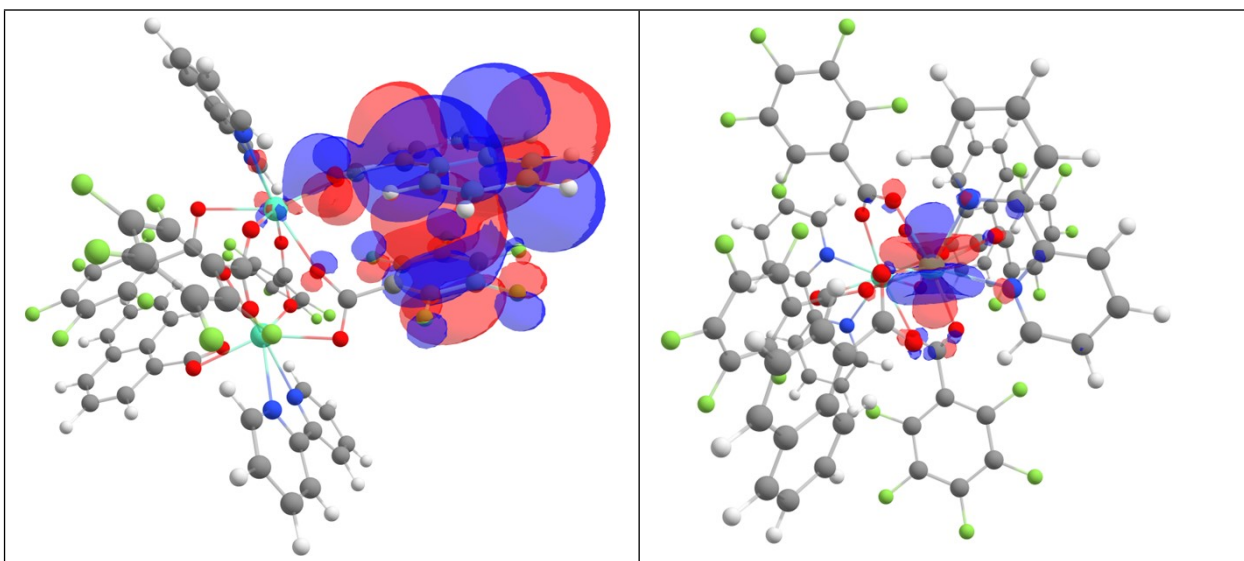


Figure S10. HOMO and LUMO of **4**

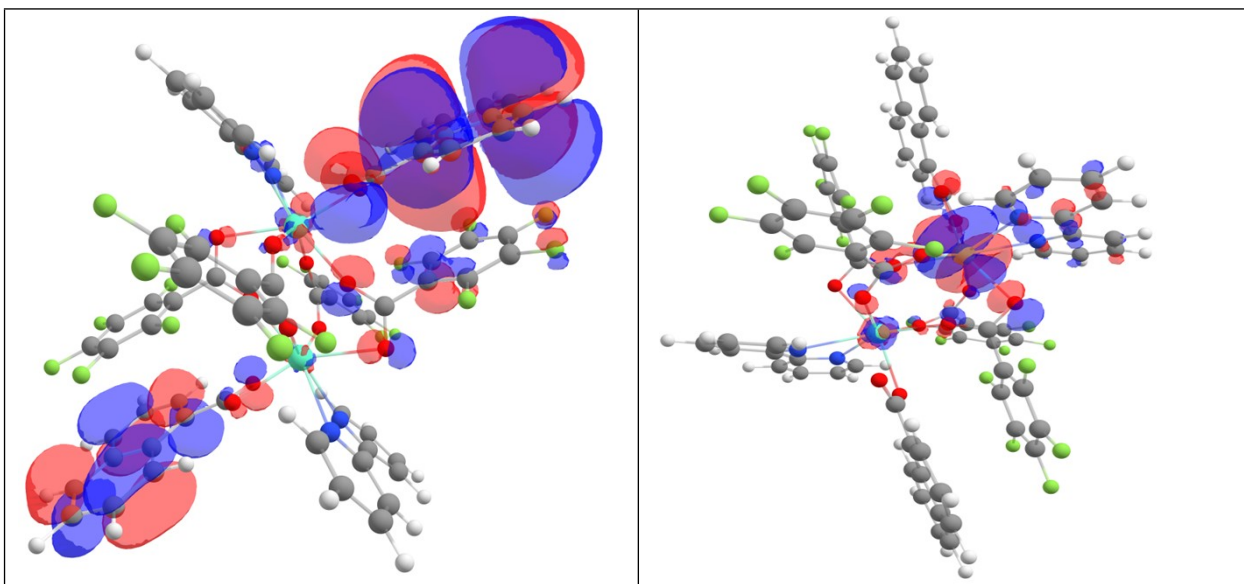


Figure S11. HOMO and LUMO of 5

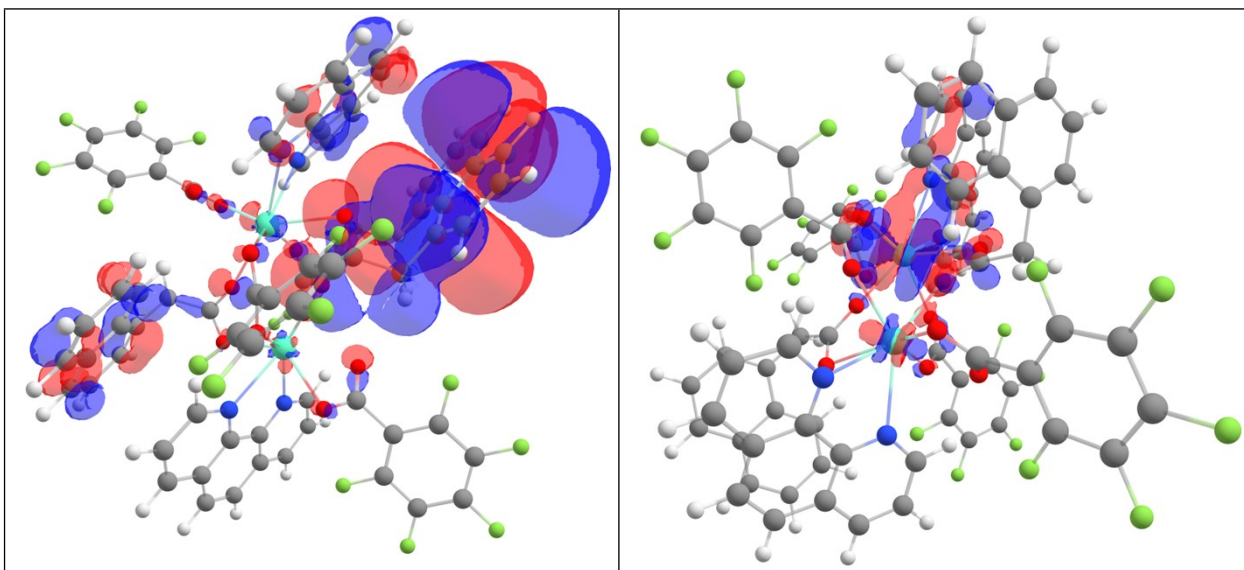


Figure S12. HOMO and LUMO of 8

Calculated XYZ coordinates

1

Eu	8.77685	11.39443	11.77358
O	6.85655	11.67313	13.56321
O	6.20062	8.95062	13.12233
O	8.40476	9.37613	13.00787
O	9.48209	11.54053	9.48880
O	8.87863	12.42470	14.03949
F	7.85663	14.71142	15.63116
F	6.67843	10.15908	16.10001

N	11.12742	10.92666	12.77312
O	9.73590	9.56033	10.42831
F	7.22512	15.13591	18.22233
N	10.49268	13.36457	11.72342
C	7.69967	12.16798	14.36947
F	6.01488	10.59936	18.67877
C	9.77380	10.30064	9.39882
F	6.28756	13.08911	19.74840
C	8.73848	6.46278	13.52008
C	7.27521	12.42581	15.78857
C	12.04642	11.91681	12.84120
C	7.68771	7.32505	13.95594
C	7.41725	8.64910	13.30202
C	11.43865	9.73236	13.25936
H	10.66722	8.97070	13.19044
C	10.57006	10.68892	7.11560
H	10.57362	11.73663	7.39841
C	6.78770	11.39829	16.58969
C	10.11286	8.37325	7.71137
C	7.41925	13.68363	16.36508
C	7.08856	13.91847	17.69191
C	8.96823	5.24838	14.24524
C	10.75765	4.66268	12.71473
H	11.54053	3.98025	12.39599
C	11.71021	13.20391	12.29108
C	10.51338	5.84284	11.98189
H	11.10175	6.06220	11.09483
C	10.16136	9.76192	8.05678
C	13.32372	11.72362	13.42270
C	10.50996	7.99206	6.38542
C	9.52824	6.71934	12.37040
H	9.35504	7.62093	11.79466

C	6.89994	6.96894	15.03136
H	6.10044	7.63700	15.33900
C	9.63642	7.35321	8.57466
H	9.30423	7.62539	9.56642
C	13.93537	14.02250	12.95763
H	14.64641	14.84350	12.99584
C	9.99599	4.37187	13.81895
H	10.16384	3.45590	14.38046
C	8.16089	4.94270	15.36653
H	8.35575	4.02518	15.91690
C	12.67967	9.44857	13.84750
H	12.87192	8.45004	14.22596
C	7.14407	5.78246	15.74784
H	6.52684	5.54080	16.60826
C	10.96411	10.30393	5.82442
H	11.28130	11.05905	5.11146
C	13.62143	10.44609	13.93273
H	14.59303	10.26500	14.38581
C	6.60389	12.87434	18.47096
C	11.06197	15.63996	11.22210
H	10.74716	16.58249	10.78649
C	14.25409	12.80593	13.47152
H	15.22528	12.63432	13.92800
C	10.18389	14.54638	11.20596
H	9.18947	14.63048	10.77531
C	10.93813	8.97889	5.46801
H	11.23185	8.66846	4.46807
C	9.58390	6.04283	8.16450
H	9.20531	5.28860	8.84913
C	12.66240	14.25136	12.35174
C	10.44855	6.63024	6.00031
H	10.75333	6.36399	4.99127

C	6.45764	11.60696	17.92209
C	10.00058	5.67057	6.87081
H	9.94876	4.63070	6.56149
C	12.30159	15.49303	11.79692
H	13.00775	16.31895	11.83045
Eu	4.90235	10.80916	12.52377
O	6.80859	10.50451	10.77108
O	7.46942	13.24972	11.17521
O	5.26375	12.82865	11.29847
O	3.90562	10.59722	14.71001
O	4.78634	9.79327	10.23857
F	6.13859	7.44247	8.77748
F	6.76216	12.08070	8.15954
N	2.52322	11.37614	11.67140
O	4.09171	12.66108	13.95657
F	6.93659	6.99999	6.22645
N	3.18138	8.83878	12.45799
C	5.97515	10.03110	9.94045
F	7.59608	11.63149	5.62353
C	3.85246	11.85657	14.90750
F	7.66584	9.08953	4.64883
C	4.99231	15.77558	10.88088
C	6.44652	9.77125	8.53552
C	1.57280	10.41427	11.62064
C	5.97869	14.88394	10.36483
C	6.25359	13.55328	11.00367
C	2.20365	12.61150	11.30825
H	3.00090	13.34724	11.35800
C	3.05272	11.39975	17.17805
H	2.93117	10.38227	16.82181
C	6.82860	10.82283	7.71125
C	3.72836	13.69523	16.72581

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C	6.89067	8.24372	6.70829
C	4.74342	16.99882	10.17844
C	3.09746	17.62759	11.84692
H	2.36261	18.33098	12.22824
C	1.92131	9.07731	12.02871
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C	3.42831	14.01168	18.09433
C	4.28821	15.53448	12.08787
H	4.48017	14.62440	12.64494
C	6.69201	15.21816	9.23278
H	7.44279	14.52684	8.86045
C	4.25237	14.73466	15.91361
H	4.50658	14.51055	14.88789
C	-0.38295	8.36870	11.51884
H	-1.11888	7.56980	11.48355
C	3.77798	17.90207	10.68668
H	3.59252	18.82539	10.14299
C	5.47065	17.28381	8.99821
H	5.26226	18.20858	8.46527
C	0.92097	12.96966	10.87018
H	0.72373	13.99875	10.58856
C	6.42852	16.41432	8.53871
H	6.98342	16.63986	7.63259
C	2.75105	11.72449	18.50985
H	2.38259	10.95440	19.18099
C	-0.05512	12.00399	10.80701
H	-1.06086	12.24249	10.46974
C	7.27051	9.31102	5.90324

C	2.59687	6.53824	12.80133
H	2.92447	5.55279	13.11565
C	-0.71325	9.63154	11.14331
H	-1.71884	9.86367	10.80273
C	3.50407	7.60771	12.83010
H	4.53049	7.46461	13.15972
C	2.93753	13.00701	18.95980
H	2.72151	13.26921	19.99282
C	4.44767	15.99994	16.41400
H	4.85755	16.76855	15.76414
C	0.93609	8.05997	11.97101
C	3.64306	15.32668	18.57491
H	3.41423	15.53993	19.61610
C	7.23758	10.60694	6.40295
C	4.13944	16.30618	17.75384
H	4.30920	17.30865	18.13589
C	1.31099	6.76478	12.37284
H	0.57934	5.96141	12.33781

2

Eu	2.09248	12.08419	8.69598
Eu	5.21512	9.78830	9.75449
F	9.96414	9.84913	5.61568
O	2.60590	10.32692	10.14912
F	9.96117	9.83061	2.97224
O	2.34675	10.18495	7.23518
F	2.56487	9.58930	4.52423
F	5.29455	8.84759	5.55921
F	4.94673	15.55975	10.45692
F	1.98146	4.41417	6.08272
F	5.36695	8.79366	2.92384
F	-0.39344	12.66926	16.82704

F	2.47285	6.28382	7.93563
O	8.60007	9.92911	7.83772
O	3.74118	8.70293	8.19975
F	7.68324	9.30731	1.58596
F	2.07805	7.69856	2.70099
O	3.65705	8.87933	11.43257
N	1.04460	12.88664	6.37891
O	6.49043	9.17960	7.82492
O	4.70855	11.53834	8.31049
O	-1.29690	11.97120	10.58171
F	2.00298	13.07818	12.85242
F	4.71059	12.32789	13.92813
O	3.57177	13.17245	10.25294
F	1.78658	5.09829	3.45618
O	3.68408	13.06251	7.09845
O	-0.17094	11.13734	8.46194
H	-0.74471	11.48395	9.23734
H	-0.67821	11.26897	7.65601
N	1.59026	14.61976	8.41527
O	0.79866	12.75864	10.58597
F	5.47669	17.45216	12.28058
O	4.97668	11.68971	11.21135
F	-2.66844	12.08645	12.79942
F	-2.67013	12.13412	15.44302
F	5.61791	16.81367	14.92209
C	0.78990	12.04166	5.38893
H	0.77678	10.98700	5.65289
C	1.10941	14.20907	6.10056
C	0.59374	12.44991	4.06189
H	0.40327	11.70601	3.29518
F	5.23506	14.23896	15.72354
C	1.40666	9.41829	12.00480

N	6.31719	9.04313	12.08640
C	2.90522	9.06048	7.34052
C	1.64932	17.37816	7.99850
H	1.68459	18.45150	7.82969
C	8.30090	12.88126	6.33498
H	9.25077	13.01299	6.84289
C	5.81545	12.47767	5.05794
C	2.16763	7.36390	3.99138
O	7.46652	10.75445	9.95300
H	8.04762	10.41327	9.18145
H	7.97226	10.64716	10.76347
F	1.92619	13.16146	15.48771
C	8.80163	9.58948	5.02057
C	6.47966	9.08560	4.99094
C	2.62774	9.54679	11.16103
C	4.69970	12.36198	7.33522
C	1.79936	15.45867	9.42049
H	1.96062	15.00277	10.39334
C	0.66080	13.79062	3.76389
H	0.52086	14.14696	2.74645
C	1.41109	16.51423	6.91319
C	1.38171	15.12388	7.17794
C	4.60894	12.19910	4.36939
H	3.70203	12.03617	4.94020
C	5.65178	5.05051	9.21770
H	5.48109	4.40683	8.36122
C	2.41047	8.33188	4.95628
C	0.91498	14.71677	4.79252
C	5.91334	12.50149	6.48143
C	2.53701	8.01597	6.30847
C	7.62752	9.35262	5.75107
C	1.83325	16.85090	9.25449

H	2.01654	17.48783	10.11349
C	8.82563	9.57140	3.63169
C	2.39091	6.67338	6.65906
C	6.31005	4.93646	12.88698
H	6.30988	3.86495	13.06790
C	7.13394	12.67704	7.09520
H	7.19184	12.65567	8.17976
C	7.01134	12.66462	4.29362
C	6.48869	9.05680	3.60368
C	0.97789	16.12449	4.55934
H	0.83144	16.48980	3.54650
N	5.83445	7.28844	10.05347
C	-0.33115	12.57753	12.66319
C	-0.28379	12.43044	11.15674
C	5.86465	4.53135	10.47284
H	5.86682	3.45754	10.64239
C	0.19278	9.24388	11.37599
H	0.14963	9.25572	10.29055
C	7.66616	9.31026	2.91846
C	5.64134	6.44262	9.04984
H	5.46028	6.89291	8.07736
C	1.48492	9.45354	13.42969
C	6.94542	12.59291	2.88115
H	7.85961	12.73627	2.30931
C	2.02521	6.03642	4.37232
C	-0.37408	12.65093	15.49481
C	8.23975	12.88027	4.96462
H	9.14097	13.02171	4.37205
C	6.06411	6.79345	11.29089
C	-1.50662	12.34986	13.39430
C	1.21004	16.98917	5.58106
H	1.24941	18.06020	5.40134

C	6.75292	8.15477	14.69993
H	6.91297	7.80469	15.71657
C	6.54521	9.89710	13.07472
H	6.51559	10.95093	12.80948
C	5.00085	15.19596	11.74270
C	7.57959	9.49074	7.25903
C	1.49841	9.63640	16.24329
H	1.51550	9.71839	17.32622
C	0.27660	9.28028	14.17793
C	2.13204	5.69042	5.71328
C	2.68219	9.73230	14.13419
H	3.59885	9.88210	13.57585
C	4.58554	12.11884	2.99795
H	3.65449	11.88114	2.49090
C	0.81651	12.85035	13.42177
C	6.30716	7.71951	12.36608
C	6.51881	5.81012	13.90619
H	6.68593	5.45082	14.91801
C	4.80707	13.86678	12.11791
C	5.75900	12.32462	2.24366
H	5.72555	12.25439	1.16027
C	6.08271	5.40308	11.55621
C	0.32079	9.36687	15.59035
H	-0.60311	9.23473	16.14908
C	2.68431	9.82731	15.50493
H	3.60886	10.06512	16.02372
C	6.52813	7.21930	13.67283
C	5.27987	16.18883	12.67240
C	-1.53296	12.38374	14.78276
C	4.41917	12.81380	11.09972
C	6.76580	9.49664	14.40069
H	6.93215	10.24791	15.16589

C	-0.94317	9.06405	13.49165
H	-1.85318	8.93234	14.07292
C	4.90789	13.57285	13.47646
C	5.35974	15.86571	14.02107
C	0.80525	12.89386	14.80875
C	5.17044	14.55115	14.42586
C	-0.98555	9.05103	12.12065
H	-1.92871	8.91957	11.60045

3

Eu	5.47026	8.86304	7.44029
O	2.13251	10.44293	8.35177
O	3.77283	8.16107	8.91204
O	4.28449	10.89545	7.86561
F	3.64515	10.19082	11.61185
O	6.27501	9.62743	9.62733
O	1.87081	7.83916	9.98458
O	6.99968	7.68733	8.86079
F	4.13620	5.54116	11.01865
F	0.96908	12.86179	7.44798
F	4.89365	12.55809	10.09022
F	4.94026	10.02564	13.99914
N	7.31613	10.58798	6.99143
N	7.41784	8.16026	5.84083
C	8.28428	9.08671	5.38837
C	3.11280	7.96098	9.97370
F	5.39822	5.36689	13.42435
C	3.13944	11.19083	8.27974
C	8.13935	10.45508	5.93530
C	6.92064	8.54680	9.80052
C	2.94112	12.61665	8.74449
F	5.77306	7.60512	14.92050

C	3.86301	7.86837	11.27526
F	0.61525	15.39156	8.28951
C	1.85266	13.37208	8.31564
C	8.54996	6.48659	4.55394
H	8.61988	5.44460	4.26020
F	4.51531	15.08365	10.92205
C	7.55791	6.89361	5.43689
H	6.83772	6.18911	5.84348
F	2.37972	16.51483	10.02997
C	7.21723	11.77490	7.59855
H	6.55421	11.81185	8.45709
C	7.73494	5.80544	10.90133
H	7.28381	5.84974	9.92014
C	7.57838	8.31087	11.12369
C	8.84292	11.54723	5.42438
H	9.46896	11.44539	4.54598
C	7.95965	7.01675	11.60569
C	4.07760	9.00079	12.04659
C	9.31053	8.75103	4.50267
H	10.01934	9.49789	4.16597
C	7.91090	12.89774	7.16620
H	7.80078	13.83927	7.69374
C	8.67424	4.51661	12.72623
H	8.93855	3.54977	13.14486
C	9.43867	7.43803	4.07535
H	10.23391	7.16247	3.38910
C	8.08090	4.59414	11.45070
H	7.88701	3.68343	10.89057
C	8.72193	12.78146	6.04608
H	9.25964	13.64140	5.65774
C	8.55219	6.93154	12.91085
C	3.83607	13.22616	9.62089

C	2.56081	15.26064	9.61553
C	8.90300	5.66521	13.43902
H	9.34735	5.62300	14.43042
C	1.65788	14.68212	8.73217
C	4.32239	6.64973	11.74954
C	4.96614	6.54623	12.97550
C	7.78234	9.42631	11.91505
H	7.45696	10.38940	11.53440
C	4.72659	8.92622	13.27052
C	8.76211	8.10746	13.66760
H	9.21358	8.01888	14.65300
C	3.65321	14.52974	10.06447
C	8.38345	9.33330	13.18046
H	8.53371	10.23136	13.77210
C	5.16116	7.69119	13.73854
Eu	1.48873	8.29273	7.54959
O	4.88217	6.63611	6.79316
O	3.25223	8.88074	6.05231
O	2.67941	6.24926	7.09926
F	2.79608	7.17680	3.67832
O	0.36274	7.67629	5.50795
O	5.05907	9.77324	5.14218
O	0.25618	9.78218	6.16342
F	3.48193	11.85191	3.68355
F	5.96187	4.47647	8.20301
F	2.27609	4.16739	5.23859
F	1.59835	7.35837	1.26209
N	-0.12450	6.38525	8.29900
N	-0.58776	8.93915	8.92860
C	-1.21598	8.01969	9.68304
C	3.86947	9.39765	5.06784
F	2.31540	12.02010	1.24989

C	3.86426	5.90280	6.88464
C	-1.03095	6.60952	9.26965
C	0.04220	8.88799	5.27995
C	4.10443	4.41681	6.72940
F	1.36942	9.77938	0.03767
C	3.15216	9.51278	3.75440
F	6.35438	1.82679	7.97247
C	5.14823	3.78349	7.40251
C	-1.62680	10.68767	10.18416
H	-1.77344	11.75191	10.33470
F	2.69602	1.51973	5.01489
C	-0.80100	10.23715	9.16222
H	-0.28158	10.92807	8.50515
F	4.73010	0.33749	6.37852
C	-0.00247	5.15198	7.79915
H	0.72888	5.03465	7.00600
C	-0.07223	11.70894	4.08829
H	0.37300	11.58757	5.06600
C	-0.56467	9.23666	3.95987
C	-1.81024	5.57391	9.78877
H	-2.54309	5.76351	10.56383
C	-0.60825	10.56873	3.43345
C	2.65268	8.38058	3.11744
C	-2.03499	8.39679	10.74805
H	-2.50827	7.65405	11.37911
C	-0.74914	4.07433	8.25869
H	-0.61380	3.09328	7.81569
C	-0.68486	13.12816	2.22114
H	-0.70132	14.11458	1.76679
C	-2.23525	9.74607	11.00242
H	-2.86662	10.05570	11.83002
C	-0.11196	12.94837	3.49549

H	0.31331	13.80009	4.01911
C	-1.65879	4.29093	9.28365
H	-2.25927	3.47588	9.67674
C	-1.17871	10.75575	2.12893
C	3.28188	3.62323	5.93238
C	4.52934	1.65032	6.49148
C	-1.20516	12.04980	1.55363
H	-1.63781	12.16703	0.56321
C	5.36158	2.41478	7.29920
C	3.03326	10.73515	3.10163
C	2.43240	10.83688	1.85565
C	-1.06701	8.18390	3.21683
H	-0.99567	7.18467	3.63389
C	2.05408	8.45807	1.86689
C	-1.69258	9.64691	1.41776
H	-2.11894	9.81387	0.43141
C	3.48687	2.25626	5.80092
C	-1.63867	8.38342	1.95093
H	-2.02412	7.53432	1.39469
C	1.94187	9.69186	1.23833

4

Eu	3.75437	4.63691	6.40398
O	1.52393	4.61768	7.84452
F	0.80253	2.52490	9.88673
O	0.99587	1.98243	6.89195
O	3.19780	2.41480	7.11052
O	4.90223	5.45992	4.47543
O	3.44937	4.96817	8.86866
F	2.20506	6.96111	10.70869
C	2.21643	4.78419	8.89866
N	5.89364	3.87428	7.63905

F	0.87802	6.93727	13.06781
F	-0.50416	4.72330	13.82607
F	-0.55355	2.52360	12.22746
O	4.99892	3.28479	4.84123
C	1.50704	4.75697	10.22094
C	5.16936	4.28038	4.06864
C	6.26980	6.16395	8.25971
C	2.16937	1.71328	7.25352
N	5.32744	6.47912	7.35116
C	5.64743	4.10559	2.66230
C	1.53972	5.85946	11.06793
C	6.52275	4.71972	8.47615
C	7.00720	7.15456	8.91067
H	7.77350	6.89626	9.63138
C	5.00557	1.67340	2.46950
H	4.66144	1.66705	3.49507
C	7.39483	4.24657	9.45816
H	7.87278	4.92417	10.15533
C	5.99248	2.85814	0.57390
C	6.15386	2.56622	7.71251
H	5.62892	1.93976	6.99768
C	5.55732	2.87042	1.94236
C	7.02804	2.02519	8.64587
H	7.20639	0.95541	8.66905
C	0.12312	3.60982	11.84569
C	0.15039	4.73175	12.66525
C	6.76283	8.48804	8.61727
H	7.32606	9.26870	9.11989
C	0.80170	3.63277	10.63670
C	5.11149	7.76439	7.05771
H	4.34297	7.95526	6.31424
C	6.15000	5.23240	2.03844

H	6.17964	6.15851	2.60290
C	5.87408	1.67139	-0.18945
H	6.20334	1.68749	-1.22539
C	6.51459	4.03484	-0.01164
H	6.83746	4.00063	-1.04942
C	0.86096	5.86161	12.27840
C	7.64228	2.88434	9.54591
H	8.31304	2.50130	10.30924
C	5.80308	8.80359	7.66681
H	5.58590	9.83160	7.39702
C	6.59531	5.20030	0.70766
H	6.98625	6.10372	0.24933
C	5.34196	0.53222	0.35737
H	5.24428	-0.36924	-0.24049
C	4.90376	0.54117	1.69603
H	4.46712	-0.35721	2.12340
F	3.68842	1.40076	9.65367
F	4.04241	-0.94333	10.91222
F	1.06980	-0.78925	6.35977
F	2.92543	-3.21665	9.91634
F	1.44081	-3.12378	7.63864
C	3.13338	0.30826	9.12072
C	3.31921	-0.89430	9.78964
C	2.74427	-2.05536	9.28798
C	1.98138	-2.00372	8.12820
C	1.79694	-0.78783	7.48346
C	2.36903	0.39043	7.95730
Eu	-0.22576	3.96508	6.38456
O	2.01903	3.91586	4.91474
F	2.40326	6.02036	2.81284
O	2.50241	6.62983	5.99637
O	0.38354	6.09603	5.44953

O	-1.44967	3.72820	8.43015
O	0.07511	3.35907	4.01638
F	1.39204	1.45890	2.11480
C	1.29006	3.65195	3.91471
N	-2.35547	4.53182	5.05916
F	2.33826	1.63997	-0.41164
F	3.35198	3.99714	-1.31702
F	3.37610	6.18709	0.29867
O	-1.29858	5.78503	7.64169
C	1.88830	3.72946	2.53807
C	-1.59519	4.98961	8.58179
C	-2.87791	2.19118	5.01975
C	1.30321	6.89809	5.72959
N	-1.89914	2.04193	5.93309
C	-2.11195	5.49618	9.88925
C	1.86823	2.63209	1.68421
C	-3.05765	3.55128	4.46221
C	-3.71758	1.12939	4.67806
H	-4.51352	1.25957	3.95462
C	-0.93047	7.71473	9.75969
H	-0.48729	7.43803	8.81168
C	-3.92998	3.82584	3.40807
H	-4.46323	3.02921	2.90337
C	-2.36478	7.17468	11.66481
C	-2.53858	5.79739	4.67134
H	-1.95067	6.54139	5.19978
C	-1.81047	6.79996	10.39509
C	-3.40730	6.14966	3.64656
H	-3.51753	7.19104	3.36360
C	2.90037	5.02613	0.75560
C	2.87921	3.91159	-0.07310
C	-3.54132	-0.10167	5.29229

H	-4.18565	-0.93681	5.03406
C	2.41055	4.92361	2.05117
C	-1.75084	0.85957	6.53742
H	-0.95221	0.80175	7.27020
C	-2.90145	4.63387	10.62605
H	-3.08756	3.64090	10.22869
C	-2.05418	8.44173	12.21647
H	-2.48578	8.70789	13.17817
C	-3.19401	6.26767	12.36469
H	-3.60738	6.57282	13.32308
C	2.35800	2.70861	0.38868
C	-4.09999	5.13943	2.99445
H	-4.76931	5.36799	2.17031
C	-2.54600	-0.24149	6.24850
H	-2.37922	-1.18110	6.76427
C	-3.45437	5.01842	11.85835
H	-4.07892	4.32142	12.40902
C	-1.20799	9.30345	11.56782
H	-0.96362	10.26648	12.00646
C	-0.63597	8.92676	10.33586
H	0.05938	9.59853	9.84024
F	-0.26277	8.22070	3.71847
F	-1.02596	10.79427	3.87310
F	2.01521	8.67400	7.85336
F	-0.28816	12.31588	6.00405
F	1.23269	11.24016	7.98915
C	0.12076	8.93375	4.78356
C	-0.28105	10.26108	4.84603
C	0.09835	11.04263	5.93050
C	0.88144	10.49261	6.93693
C	1.28587	9.16732	6.84486
C	0.91523	8.35857	5.77266

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Eu	8.37309	6.37966	11.23566
F	5.27922	8.62488	15.37736
O	8.84229	6.58997	13.62393
O	6.47655	7.57785	11.99215
O	5.68717	8.41655	9.44792
F	8.75093	12.21254	13.21703
O	7.89829	7.99441	9.54844
F	7.58267	10.35968	11.63389
O	9.58207	8.16845	12.27289
O	4.49418	8.43965	12.44877
F	8.16943	12.29555	15.87253
F	6.45217	10.48545	16.95391
N	10.18845	4.59471	11.75557
F	8.78893	8.81642	7.04239
F	5.54290	11.16926	9.59015
C	9.81063	8.51081	14.65400
N	10.61501	6.51258	9.93393
C	6.40153	9.44097	13.46584
C	10.68727	9.64387	14.60731
C	9.40956	7.71185	13.45303
F	9.25806	11.03891	5.62150
C	10.90517	10.37702	15.82232
F	6.03888	13.37244	8.15597
C	5.73515	8.41976	12.58682
C	7.30425	10.36035	12.94221
C	6.11932	9.50742	14.82476
C	9.22995	8.14072	15.85289
H	8.57074	7.27857	15.85397
C	11.15606	4.35573	10.84974
C	7.15619	9.90521	8.38234
F	7.89636	13.33118	6.16676

C	6.88951	8.66055	9.19803
C	11.44608	5.45394	9.89799
C	7.90220	11.32653	13.73974
C	7.60402	11.37182	15.09609
C	10.26832	9.96760	17.01727
H	10.43634	10.54745	17.92173
C	11.75196	11.51151	15.81408
H	11.89292	12.05958	16.74233
C	11.37014	10.07936	13.44202
H	11.22014	9.53713	12.51834
C	6.71634	10.45434	15.64446
C	11.86781	3.15538	10.85215
H	12.61819	2.94882	10.09850
C	9.45238	8.86494	17.03564
H	8.96421	8.55678	17.95538
C	12.38296	11.91117	14.66416
H	13.02945	12.78398	14.66795
C	11.96009	7.62720	8.29821
H	12.12289	8.50871	7.68740
C	10.63738	2.48678	12.79298
H	10.40565	1.78193	13.58427
C	12.55754	5.43710	9.05338
H	13.23213	4.58963	9.03554
C	10.87589	7.57278	9.16426
H	10.17341	8.39685	9.24322
C	6.46068	11.09102	8.62201
C	8.10447	9.92150	7.36040
C	9.95038	3.69119	12.71018
H	9.16964	3.95126	13.41843
C	12.19225	11.18026	13.47534
H	12.69953	11.49376	12.56705
C	12.80896	6.53142	8.23861

H	13.66743	6.52917	7.57350
C	6.70690	12.24580	7.89077
C	11.59835	2.21002	11.83138
H	12.13907	1.26825	11.84220
C	8.35635	11.06086	6.60798
C	7.65704	12.22993	6.87792
Eu	4.44177	6.71511	10.58638
F	7.53000	4.45637	6.45101
O	3.96550	6.50608	8.20013
O	6.33945	5.51910	9.82754
O	7.12774	4.67805	12.37404
F	4.05978	0.87611	8.62587
O	4.91730	5.10325	12.27448
F	5.23184	2.73259	10.20248
O	3.23831	4.92108	9.55068
O	8.31882	4.64391	9.38329
F	4.63763	0.78520	5.96999
F	6.35498	2.59129	4.88118
N	2.62717	8.50449	10.07631
F	4.02272	4.29718	14.78143
F	7.27141	1.92539	12.25439
C	3.00535	4.58097	7.17015
N	2.19804	6.57392	11.88325
C	6.41025	3.64561	8.36617
C	2.12892	3.44787	7.21718
C	3.40496	5.38079	8.37090
F	3.54877	2.08443	16.21501
C	1.91275	2.71306	6.00291
F	6.77039	-0.26828	13.70151
C	7.07846	4.66925	9.24126
C	5.50822	2.72800	8.89369
C	6.69025	3.57552	7.00707

C	3.58743	4.94992	5.97162
H	4.24629	5.81234	5.97022
C	1.65938	8.73789	10.98349
C	5.65725	3.19871	13.45125
F	4.90952	-0.21269	15.68675
C	5.92547	4.43770	12.62762
C	1.36870	7.63346	11.92790
C	4.90845	1.76012	8.09962
C	5.20465	1.71091	6.74294
C	2.55135	3.12092	4.80835
H	2.38490	2.53973	3.90445
C	1.06596	1.57858	6.01167
H	0.92641	1.02904	5.08407
C	1.44417	3.01442	8.38210
H	1.59275	3.55808	9.30520
C	6.09209	2.62634	6.19079
C	0.94776	9.93828	10.98830
H	0.19699	10.14010	11.74286
C	3.36693	4.22384	4.78960
H	3.85637	4.53079	3.87013
C	0.43325	1.18074	7.16128
H	-0.21317	0.30788	7.15790
C	0.85311	5.44914	13.51195
H	0.68959	4.56334	14.11631
C	2.17864	10.61894	9.05195
H	2.41070	11.32861	8.26507
C	0.25822	7.64585	12.77390
H	-0.41494	8.49427	12.79891
C	1.93643	5.50837	12.64516
H	2.63725	4.68356	12.55867
C	6.35210	2.01078	13.22035
C	4.70686	3.18975	14.47152

C	2.86546	9.41395	9.12745
H	3.64625	9.15823	8.41762
C	0.62209	1.91350	8.34928
H	0.11322	1.60152	9.25720
C	0.00611	6.54587	13.58081
H	-0.85156	6.54456	14.24695
C	6.10334	0.86088	13.95848
C	1.21753	10.88976	10.01508
H	0.67676	11.83155	10.01004
C	4.45252	2.05536	15.23057
C	5.15129	0.88397	14.96932

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Eu	0.94316	9.50192	4.11329
O	0.05842	8.00793	8.20528
O	2.86007	8.71234	7.39853
F	5.45439	7.83205	4.59295
O	0.03893	8.80190	6.15510
O	2.75403	8.33099	5.17616
N	0.66138	10.84366	1.86949
O	0.49286	7.10197	3.64547
N	2.46376	8.82170	2.13375
O	-1.08110	8.57524	3.10142
F	3.16943	6.13228	8.38468
F	7.29504	5.89419	4.84878
F	0.46617	5.45012	1.34112
F	5.01863	4.19984	8.61607
C	-0.61484	7.39883	3.12429
C	1.76863	10.86504	1.09084
F	7.09104	4.06748	6.85918
F	-3.41841	7.01779	3.55760
C	-2.74932	7.35259	7.42361

C	2.72170	9.79707	1.23108
C	-0.24892	11.79141	1.70432
H	-1.11957	11.73607	2.35293
C	-0.38084	7.96772	7.03654
C	3.19073	8.13182	6.33636
C	3.29763	7.79540	2.22197
H	3.04146	7.03689	2.95676
C	-1.48644	6.99200	6.67443
H	-1.64225	6.99434	5.59350
H	-1.15710	5.99369	6.97830
C	-3.54133	8.47159	7.02349
C	5.30656	6.94574	5.58705
C	-3.21472	9.28388	5.90875
H	-2.34602	9.05904	5.30114
C	2.01458	11.89183	0.14939
C	-0.10415	12.83598	0.77954
H	-0.88117	13.58850	0.69348
C	3.88030	9.79032	0.42152
C	1.03844	12.89677	0.01686
H	1.19749	13.70714	-0.69009
C	4.24198	7.05245	6.47801
C	-3.11270	6.62901	8.53771
H	-2.49612	5.79048	8.84997
C	4.11832	10.86744	-0.48554
H	5.03419	10.85929	-1.06987
C	6.17426	5.02671	6.73558
C	-4.70723	8.80294	7.78848
C	3.21989	11.87822	-0.61734
H	3.40191	12.69391	-1.31184
C	-3.98618	10.37147	5.57847
H	-3.71038	10.97771	4.71971
C	-4.26355	6.95436	9.28283

H	-4.52468	6.35486	10.15021
C	6.27154	5.95556	5.70707
C	-5.04814	8.01696	8.91432
H	-5.93851	8.27349	9.48399
C	4.45622	7.68929	1.43923
H	5.10652	6.82924	1.55927
C	4.75834	8.69878	0.55612
H	5.66513	8.66748	-0.04248
C	5.11963	5.10273	7.63666
C	-5.48127	9.92779	7.41415
H	-6.36730	10.16797	7.99786
C	-2.79513	6.17941	2.72448
C	4.17495	6.11284	7.50612
C	-5.12694	10.70209	6.33713
H	-5.72613	11.56650	6.06545
F	-3.65017	3.29484	0.71489
Eu	1.12447	10.24039	7.96782
O	2.67857	11.19575	3.80932
O	-0.57651	11.25344	4.70562
F	-3.02312	13.15560	7.02692
O	1.98269	11.05312	5.89012
O	-0.57050	11.58954	6.93623
N	1.70456	9.34110	10.27502
O	1.32410	12.24271	9.37880
N	-0.82390	10.23892	9.67660
O	3.22839	11.38382	8.62436
F	0.60338	13.75651	4.03965
F	-3.78158	15.70536	6.60100
F	2.22245	12.10310	12.18025
F	-0.15898	16.30777	3.64088
C	2.58278	12.17267	9.36622
C	0.75568	9.31206	11.23932

F	-2.35650	17.29148	4.91233
F	4.58352	14.04217	8.57010
C	4.49669	13.21071	4.26140
C	-0.57159	9.77218	10.92312
C	2.92932	8.91763	10.55749
H	3.64778	8.95966	9.74272
C	2.76612	11.54959	5.00817
C	-0.74979	11.93822	5.74443
F	5.98769	15.56132	10.31326
C	-2.05412	10.63888	9.38357
H	-2.21826	11.00315	8.37342
C	3.80328	12.57011	5.43167
H	4.49395	12.06170	6.11796
H	3.29656	13.32208	6.04626
F	3.64104	13.61556	13.91314
C	5.42445	12.47996	3.45990
C	-2.30007	13.90490	6.18769
C	5.79986	11.14337	3.74453
H	5.36664	10.63090	4.59696
C	1.03550	8.84180	12.54647
C	3.29433	8.44228	11.82395
H	4.31191	8.11025	12.00011
C	-1.57223	9.72068	11.92430
C	2.34538	8.40681	12.81839
H	2.59058	8.04516	13.81383
C	-1.20224	13.36447	5.52602
C	4.18369	14.50658	3.91665
H	3.47236	15.06011	4.52478
C	-1.25317	9.23833	13.22994
H	-2.03959	9.21623	13.97967
C	-1.98298	16.02775	5.11190
C	5.99949	13.11347	2.31171

C	0.00291	8.81948	13.53185
H	0.24321	8.45692	14.52762
C	6.69658	10.47228	2.94912
H	6.96856	9.44902	3.18958
C	4.75171	15.12897	2.78711
H	4.47970	16.15304	2.54819
C	-2.70518	15.21705	5.97931
C	5.63969	14.44547	1.99699
H	6.08346	14.91719	1.12348
C	-3.10770	10.61195	10.30874
H	-4.09140	10.94586	9.99770
C	-2.86538	10.15714	11.58103
H	-3.65552	10.12500	12.32692
C	-0.86809	15.52017	4.45548
C	6.91748	12.39233	1.51010
H	7.35121	12.88726	0.64403
C	4.33856	13.91731	9.87998
C	5.06557	14.70576	10.76179
C	4.82430	14.60287	12.12700
C	3.85654	13.72358	12.59853
C	3.12995	12.96068	11.69451
C	3.35696	13.04019	10.32507
C	-0.49599	14.19931	4.66367
C	7.26210	11.10055	1.82036
H	7.97602	10.56148	1.20312
F	5.52378	15.34662	12.98461
F	-4.85484	5.05714	2.40089
F	-0.99185	3.50131	0.19201
C	-3.54940	5.16884	2.14311
C	-2.93488	4.26241	1.28806
C	-1.57354	4.36511	1.02920
C	-0.83487	5.37157	1.63652

C	-1.42682	6.30077	2.48986
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1_H

Eu	8.77307	11.35102	11.79427
O	6.90358	11.66799	13.66187
O	6.24034	8.92845	13.30968
O	8.43197	9.32580	13.00429
O	9.75903	11.60360	9.56862
O	8.98900	12.29488	14.03624
H	8.91765	14.02387	15.95936
H	5.97177	10.91166	16.03763
N	11.20394	10.93396	12.56233
O	9.75877	9.56087	10.41269
H	8.31239	14.65511	18.29175
N	10.42721	13.44816	11.80787
C	7.80929	12.11830	14.44305
H	5.40529	11.49447	18.37527
C	9.99233	10.35650	9.45397
H	6.55705	13.38388	19.49756
C	8.74751	6.38599	13.35336
C	7.46888	12.44524	15.85462
C	12.08759	11.94916	12.68693
C	7.77339	7.25101	13.93646
C	7.46339	8.60354	13.36192
C	11.57604	9.70989	12.91187
H	10.83103	8.92760	12.79307
C	11.35343	10.72368	7.44566
H	11.49143	11.72846	7.83300
C	6.48923	11.72449	16.53722
C	10.33078	8.52679	7.67635
C	8.14424	13.48521	16.49867
C	7.80810	13.82707	17.80167

C	9.02627	5.13933	14.00292
C	10.61826	4.57948	12.25964
H	11.34362	3.89472	11.82919
C	11.68026	13.27234	12.28547
C	10.32345	5.79302	11.60351
H	10.81058	6.03738	10.66324
C	10.56751	9.84863	8.16816
C	13.40049	11.74611	13.18012
C	10.94368	8.14674	6.43704
C	9.41065	6.67363	12.13300
H	9.20124	7.60085	11.61287
C	7.10383	6.86935	15.08067
H	6.35970	7.54057	15.50090
C	9.46373	7.59549	8.30251
H	8.96425	7.88162	9.21832
C	13.91970	14.09691	12.90298
H	14.60889	14.93397	12.97873
C	9.97820	4.26003	13.43122
H	10.18625	3.31946	13.93592
C	8.34262	4.80619	15.19652
H	8.57560	3.86362	15.68647
C	12.85171	9.41778	13.41483
H	13.09596	8.39609	13.68611
C	7.39717	5.65139	15.72202
H	6.87549	5.38843	16.63777
C	11.96819	10.33396	6.24289
H	12.59668	11.03912	5.70657
C	13.76381	10.43749	13.54914
H	14.76342	10.24985	13.93351
C	6.82357	13.11130	18.48026
C	10.91095	15.77603	11.48713
H	10.54924	16.74378	11.15521

C	14.30123	12.84963	13.28247
H	15.30125	12.66866	13.66775
C	10.06101	14.66133	11.41927
H	9.04439	14.75086	11.04285
C	11.77014	9.06806	5.75110
H	12.23694	8.75661	4.81931
C	9.24280	6.35625	7.75302
H	8.56690	5.66660	8.25125
C	12.60790	14.33904	12.39227
C	10.70015	6.85684	5.90533
H	11.17797	6.58293	4.96758
C	6.17673	12.05211	17.85162
C	9.86997	5.97495	6.54978
H	9.68551	4.98997	6.13016
C	12.18467	15.61538	11.97750
H	12.87139	16.45542	12.04815
Eu	4.94239	10.78429	12.65069
O	6.82571	10.45044	10.80090
O	7.46352	13.18656	11.10019
O	5.26632	12.77409	11.35877
O	3.86925	10.68227	14.81478
O	4.77270	9.70743	10.47592
H	4.92054	7.92617	8.58815
H	7.66505	11.21297	8.39931
N	2.53988	11.27896	11.81479
O	4.06987	12.70712	13.95943
H	5.50879	7.30046	6.24946
N	3.22571	8.78011	12.69788
C	5.93609	9.93038	10.04620
H	8.20804	10.63583	6.05290
C	3.74386	11.94962	14.91786
H	7.14973	8.66265	4.98400

C	4.96582	15.71363	10.90841
C	6.27179	9.59197	8.63685
C	1.60075	10.30582	11.80108
C	5.93268	14.81690	10.36394
C	6.23841	13.49118	11.00220
C	2.20639	12.49761	11.41001
H	2.99543	13.24379	11.43736
C	2.33564	11.70276	16.91116
H	2.12900	10.70678	16.53184
C	7.18815	10.36285	7.92160
C	3.51607	13.81877	16.66954
C	5.64696	8.50301	8.02357
C	5.97234	8.16459	6.71690
C	4.68823	16.92852	10.20123
C	3.11447	17.57993	11.92955
H	2.39687	18.28911	12.33263
C	1.96291	8.98942	12.26184
C	3.41015	16.39868	12.64193
H	2.93206	16.20400	13.59836
C	3.18963	12.51181	16.18854
C	0.27538	10.54525	11.35967
C	2.92113	14.25332	17.89987
C	4.31311	15.48836	12.14708
H	4.52274	14.58672	12.71060
C	6.60250	15.14067	9.20237
H	7.34761	14.44977	8.81677
C	4.45094	14.68119	16.04220
H	4.93542	14.35390	15.13214
C	-0.33652	8.23947	11.78664
H	-1.06524	7.43308	11.78577
C	3.74453	17.83856	10.73742
H	3.53624	18.75481	10.18987

C	5.36806	17.20016	8.98988
H	5.13748	18.11859	8.45492
C	0.91954	12.82520	10.95995
H	0.71032	13.84129	10.64218
C	6.31021	16.32763	8.50415
H	6.83144	16.54521	7.57633
C	1.74025	12.14701	18.10449
H	1.05795	11.49420	18.64127
C	-0.04576	11.84712	10.93249
H	-1.05444	12.06199	10.58805
C	6.89264	8.93158	6.00470
C	2.66098	6.49085	13.13971
H	2.99723	5.52253	13.49587
C	-0.67908	9.48303	11.36094
H	-1.68755	9.69214	11.01381
C	3.55903	7.56877	13.12066
H	4.58801	7.44908	13.45195
C	2.02561	13.39987	18.58673
H	1.57458	13.75277	19.51149
C	4.75284	15.90742	16.58274
H	5.47834	16.54420	16.08407
C	0.98617	7.96179	12.24839
C	3.24995	15.52785	18.42232
H	2.78419	15.84328	19.35304
C	7.48772	10.03738	6.60362
C	4.14477	16.34329	17.77705
H	4.39385	17.31724	18.18895
C	1.37258	6.68795	12.70411
H	0.64737	5.87790	12.70490

3_H

Eu	5.49046	9.32412	7.22192
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O	2.10848	10.77062	8.20090
O	3.91941	8.61490	8.85081
O	4.28349	11.23047	7.90171
H	5.37777	9.61349	10.81275
O	7.05726	9.71669	9.02665
O	1.95148	8.11132	9.72292
O	6.77761	7.58829	8.50764
H	2.31152	6.81895	11.88642
H	1.30916	11.14512	10.48087
H	5.32979	12.43163	9.78613
H	6.36742	9.41115	13.06805
N	7.04536	11.35169	6.53485
N	7.67351	8.78664	5.96677
C	8.57361	9.72393	5.62272
C	3.18617	8.31855	9.85605
H	3.33277	6.56664	14.14495
C	3.21618	11.23448	8.59154
C	8.18855	11.13584	5.85765
C	7.23870	8.47675	9.27772
C	3.29428	11.77942	9.98356
H	5.35937	7.87104	14.73336
C	3.79454	8.21312	11.20986
H	1.47392	11.89038	12.85147
C	2.21111	11.62184	10.85201
C	9.14629	7.07429	5.17646
H	9.32277	6.01676	5.01153
H	5.49856	13.20920	12.13965
C	7.95203	7.49785	5.74370
H	7.17775	6.79308	6.03388
H	3.57213	12.92356	13.67508
C	6.66143	12.61128	6.76408
H	5.72505	12.72362	7.30347

C	6.72538	5.98562	10.92309
H	6.09477	6.18403	10.06667
C	8.01030	8.10345	10.50520
C	8.96346	12.19834	5.38314
H	9.86638	12.01849	4.81256
C	7.76494	6.89881	11.23568
C	4.93037	8.94917	11.54423
C	9.80957	9.36969	5.07386
H	10.55000	10.12194	4.83090
C	7.38796	13.71668	6.33949
H	7.02813	14.71742	6.55467
C	7.30615	4.60949	12.82904
H	7.11938	3.72495	13.43158
C	10.09559	8.03185	4.84874
H	11.05254	7.74384	4.42340
C	6.50497	4.87468	11.69991
H	5.69413	4.19844	11.44290
C	8.56066	13.50129	5.63071
H	9.15363	14.33481	5.26572
C	8.55901	6.64119	12.40120
C	4.47882	12.35134	10.45514
C	3.49128	12.61030	12.63784
C	8.31077	5.47855	13.17109
H	8.92652	5.29566	14.04863
C	2.31160	12.03304	12.17496
C	3.20572	7.37158	12.15819
C	3.77485	7.24149	13.41739
C	8.97877	8.98773	10.93565
H	9.11881	9.90782	10.37654
C	5.47926	8.83839	12.81607
C	9.56573	7.56003	12.78089
H	10.16778	7.34087	13.65995

C	4.57330	12.77185	11.77534
C	9.77007	8.71337	12.06500
H	10.53824	9.41898	12.36825
C	4.91277	7.97558	13.74846
Eu	1.57793	8.61226	7.36549
O	4.93174	7.11020	6.46441
O	3.27359	9.27790	5.85194
O	2.75816	6.64152	6.82416
H	2.00676	7.78777	4.06951
O	0.04354	7.82687	5.65647
O	5.15754	9.86992	4.86999
O	0.35043	10.01240	5.76505
H	4.49611	10.94617	2.58535
H	6.24554	5.30128	7.72496
H	2.44366	4.16390	6.11216
H	0.94279	7.56949	1.84479
N	-0.00046	6.73398	8.36415
N	-0.70264	9.34482	8.38884
C	-1.64278	8.45131	8.74505
C	3.94462	9.53226	4.79643
H	3.39607	10.76566	0.35657
C	3.98165	6.32034	6.70270
C	-1.20434	7.04129	8.87423
C	-0.16062	9.00096	5.19856
C	4.31651	4.87053	6.88765
H	1.62172	9.07281	-0.00886
C	3.29823	9.39869	3.46375
H	6.78807	2.90947	8.14592
C	5.54661	4.51673	7.44742
C	-2.31839	11.10459	8.53530
H	-2.53780	12.16269	8.44132
H	2.99886	1.76479	6.47535

C	-1.03468	10.63677	8.28882
H	-0.23405	11.30835	7.99194
H	5.16592	1.14157	7.50855
C	0.45026	5.48241	8.48007
H	1.43648	5.29853	8.06095
C	0.07154	11.25959	3.17357
H	0.74454	11.25042	4.02071
C	-1.02752	9.14978	3.98702
C	-1.98614	6.08327	9.52655
H	-2.93861	6.35038	9.96911
C	-0.90489	10.23673	3.06437
C	2.30763	8.43916	3.25440
C	-2.96425	8.84321	8.97577
H	-3.72724	8.11146	9.21360
C	-0.27516	4.47107	9.09749
H	0.13957	3.47046	9.16310
C	-0.68786	12.26003	1.10162
H	-0.59155	13.04335	0.35490
C	-3.30192	10.18393	8.87068
H	-4.32606	10.50304	9.04096
C	0.17490	12.23855	2.21562
H	0.94175	13.00175	2.31527
C	-1.51711	4.78258	9.63294
H	-2.11100	4.02784	10.14028
C	-1.77169	10.25228	1.92146
C	3.39429	3.87636	6.55298
C	4.92798	2.18735	7.33420
C	-1.64199	11.28481	0.96089
H	-2.30949	11.28237	0.10230
C	5.84188	3.17860	7.68448
C	3.70812	10.21967	2.41044
C	3.09793	10.10795	1.16823

C	-1.96260	8.15813	3.76487
H	-2.01082	7.33287	4.46841
C	1.71914	8.31305	2.00134
C	-2.73575	9.23020	1.75615
H	-3.39346	9.26888	0.89053
C	3.70752	2.53772	6.75993
C	-2.83115	8.20243	2.66077
H	-3.56805	7.41625	2.52356
C	2.10245	9.15492	0.96197

5_H

Eu	8.33428	6.41688	11.20660
H	4.57661	9.31309	14.93945
O	8.83907	6.57582	13.62507
O	6.47993	7.61677	12.03846
O	5.62746	8.48915	9.56087
H	8.80025	11.62557	13.75550
O	7.83038	8.02520	9.53889
H	7.92904	9.81002	12.31597
O	9.68435	8.10194	12.27052
O	4.41988	8.22878	12.55349
H	7.59735	12.24293	15.83549
H	5.48619	11.08555	16.43608
N	10.23495	4.69259	11.70548
H	8.78663	9.03155	7.38559
H	5.35377	10.96704	9.04570
C	9.91017	8.44710	14.64401
N	10.61141	6.65348	9.92291
C	6.20487	9.44813	13.54854
C	10.94399	9.43485	14.60774
C	9.47450	7.65501	13.44923
H	9.16128	10.97272	5.87341

C	11.18133	10.21031	15.79152
H	5.74543	12.93914	7.57576
C	5.66666	8.36911	12.67613
C	7.38780	10.10520	13.20884
C	5.50638	9.82048	14.69986
C	9.19322	8.24431	15.80674
H	8.41304	7.49019	15.79901
C	11.20943	4.49733	10.79861
C	7.05185	9.88793	8.30864
H	7.64477	12.93173	5.98100
C	6.81608	8.70907	9.20660
C	11.48216	5.63051	9.88204
C	7.87495	11.12272	14.02150
C	7.19877	11.46748	15.18719
C	10.39864	9.98387	16.94775
H	10.58459	10.59161	17.83055
C	12.19892	11.19531	15.78952
H	12.36213	11.77439	16.69542
C	11.76915	9.67904	13.47910
H	11.60382	9.09989	12.57986
C	6.01418	10.81470	15.52598
C	11.95280	3.31576	10.77750
H	12.70590	3.14251	10.01777
C	9.42774	9.01441	16.95730
H	8.82850	8.84563	17.84724
C	12.96872	11.41216	14.67501
H	13.74749	12.16953	14.68515
C	11.97845	7.88147	8.39153
H	12.13993	8.79683	7.83166
C	10.74923	2.58612	12.71358
H	10.54604	1.86847	13.50168
C	12.62539	5.68369	9.08062

H	13.33288	4.86318	9.06269
C	10.86211	7.75245	9.20886
H	10.12840	8.54931	9.29977
C	6.18653	10.98289	8.34869
C	8.12998	9.89568	7.42198
C	10.02528	3.77065	12.64905
H	9.23936	3.99986	13.36301
C	12.75105	10.64031	13.51595
H	13.36931	10.80624	12.63781
C	12.86811	6.81809	8.32020
H	13.75337	6.87485	7.69355
C	6.40844	12.07988	7.52467
C	11.71251	2.34866	11.74285
H	12.27962	1.42232	11.73818
C	8.33414	10.98117	6.57791
C	7.47870	12.07875	6.63304
Eu	4.47954	6.68202	10.62814
H	8.23333	3.78256	6.89539
O	3.97564	6.52022	8.20963
O	6.33395	5.48231	9.79683
O	7.18643	4.60907	12.27171
H	4.01353	1.46908	8.09120
O	4.98334	5.07189	12.29487
H	4.88640	3.28745	9.52626
O	3.12957	4.99588	9.56567
O	8.39367	4.87056	9.28022
H	5.21266	0.84946	6.00977
H	7.32196	2.00713	5.40327
N	2.57868	8.40486	10.12624
H	4.02658	4.04373	14.43986
H	7.45891	2.12589	12.75851
C	2.90525	4.64749	7.19254

N	2.20231	6.44694	11.91169
C	6.60788	3.64857	8.28965
C	1.87150	3.65966	7.22955
C	3.34015	5.44120	8.38651
H	3.65123	2.08589	15.93038
C	1.63489	2.88260	6.04669
H	7.06645	0.13740	14.20627
C	7.14690	4.72940	9.15930
C	5.42609	2.99120	8.63277
C	7.30440	3.27488	7.13758
C	3.62282	4.84877	6.02992
H	4.40289	5.60301	6.03703
C	1.60447	8.60186	11.03302
C	5.76112	3.19704	13.50749
H	5.16707	0.12774	15.80096
C	5.99740	4.38513	12.62200
C	1.33204	7.47037	11.95174
C	4.93803	1.97214	7.82265
C	5.61208	1.62611	6.65609
C	2.41815	3.10759	4.89057
H	2.23273	2.49867	4.00846
C	0.61741	1.89748	6.04947
H	0.45479	1.31715	5.14425
C	1.04578	3.41689	8.35808
H	1.21057	3.99722	9.25664
C	6.79562	2.27905	6.31399
C	0.86104	9.78342	11.05199
H	0.10806	9.95811	11.81151
C	3.38893	4.07717	4.88025
H	3.98864	4.24482	3.99039
C	-0.15296	1.68203	7.16385
H	-0.93161	0.92453	7.15435

C	0.83602	5.22198	13.44619
H	0.67454	4.30758	14.00762
C	2.06406	10.50931	9.11416
H	2.26693	11.22540	8.32455
C	0.18951	7.41897	12.75423
H	-0.51756	8.23985	12.77154
C	1.95172	5.34923	12.62772
H	2.68500	4.55195	12.53724
C	6.62610	2.10232	13.45523
C	4.68295	3.17982	14.39396
C	2.78811	9.32496	9.18083
H	3.57384	9.09423	8.46716
C	0.06402	2.45546	8.32199
H	-0.55472	2.29067	9.20000
C	-0.05309	6.28588	13.51663
H	-0.93781	6.23050	14.14416
C	6.40379	0.99629	14.26695
C	1.10102	10.74862	10.08468
H	0.53383	11.67491	10.08764
C	4.47840	2.08506	15.22587
C	5.33350	0.98788	15.15851