SUPPLEMENTARY MATERIAL

Table: UV/VIS, IR and Molar conductivities of the metal complexes

Sr. No	Chemical Formula	Colour of Metal Complexes	UV/VIS Data	IR ANALYSIS OF THE COMPLEXES			Λ_M
			Absorption maxima cm^{-1}	$\bar{\upsilon}(M\leftarrow H_2O)$ cm^{-1}	$\bar{\upsilon}(M\leftarrow N)$ cm^{-1}	$\bar{\upsilon}(M\leftarrow O)$ cm^{-1}	$cm^2 mol^{-1}$
1a	$C_{30}H_{28}F_2O_6Zn$	White	29543	3653	----	468	18
2a	$C_{34}H_{44}F_2N_4O_6Zn$	White	30816	3677	580	----	164
3a	$C_{36}H_{48}F_2N_4O_6Zn$	White	30842	3610	514	----	160
1b	$C_{30}H_{28}F_2O_6Cu$	Light Green	15219-15412	3690	----	489	21
2b	$C_{34}H_{44}F_2N_4O_6Cu$	Blue	16749-16810	3553	536	----	158
3b	$C_{36}H_{48}F_2N_4O_6Cu$	Blue	16735-16788	3580	516	----	150

Table: Elemental analysis and magnetic susceptibility data of the complexes

Sr. No	Chemical Formula	Mol. Weight	Yield (%)	M.P(°C)	% (C) Found (Cal)	% (H) Found (Cal)	% (N) Found (Cal)	% (M) Found (Cal)	B.M
1a	$C_{30}H_{28}F_2O_6Zn$	587.92	83	183-185	61.29 61.22	4.80 4.82	---- ----	11.12 11.17	Dia
2a	$C_{34}H_{44}F_2N_4O_6Zn$	708.11	88	222-224	57.67 57.60	6.26 6.29	7.91 7.90	9.23 9.22	Dia
3a	$C_{36}H_{48}F_2N_4O_6Zn$	736.17	80	218-220	58.73 57.64	6.57 6.55	7.61 7.96	8.88 8.95	Dia
1b	$C_{30}H_{28}F_2O_6Cu$	586.08	76	174-176	61.48 61.44	4.82 4.83	---- ----	10.84 10.82	1.7
2b	$C_{34}H_{44}F_2N_4O_6Cu$	706.28	84	215-217	57.82 57.81	6.28 6.24	7.93 7.95	9.00 8.99	1.9
3b	$C_{36}H_{48}F_2N_4O_6Cu$	734.33	82	210-212	58.88 58.80	6.59 6.49	7.63 7.79	8.65 8.60	1.9

X-ray crystallography

Table: Bond lengths [Å] and angles [°] for **2b**

C(1)-O(2)	1.218(7)	C(9)-C(4)-C(2)	122.6(6)
C(1)-O(1)	1.244(7)	C(4)-C(5)-C(6)	120.7(6)
C(1)-C(2)	1.544(7)	C(4)-C(5)-H(5)	119.7
C(2)-C(3)	1.479(9)	C(7)-C(8)-C(9)	120.5(6)
C(2)-C(4)	1.527(8)	C(7)-C(8)-H(8)	119.8

C(2)-H(2)	0.9800	C(9)-C(8)-H(8)	119.8
C(3)-H(3A)	0.9600	C(4)-C(9)-C(8)	121.3(6)
C(3)-H(3B)	0.9600	C(4)-C(9)-H(9)	119.3
C(3)-H(3C)	0.9600	C(8)-C(9)-H(9)	119.3
C(4)-C(5)	1.350(9)	C(11)-C(10)-C(15)	118.4(6)
C(4)-C(9)	1.384(9)	C(11)-C(10)-C(7)	121.6(6)
C(5)-C(6)	1.373(8)	C(15)-C(10)-C(7)	120.0(6)
C(5)-H(5)	0.9300	C(10)-C(11)-C(12)	120.6(7)
C(6)-F(1)	1.322(7)	C(10)-C(11)-H(11)	119.7
C(6)-C(7)	1.364(9)	C(12)-C(11)-H(11)	119.7
C(7)-C(8)	1.400(8)	C(13)-C(12)-C(11)	120.4(8)
C(7)-C(10)	1.482(7)	C(13)-C(12)-H(12)	119.8
C(8)-C(9)	1.409(8)	C(11)-C(12)-H(12)	119.8
C(8)-H(8)	0.9300	C(12)-C(13)-C(14)	120.8(7)
C(9)-H(9)	0.9300	C(12)-C(13)-H(13)	119.6
C(10)-C(11)	1.380(9)	C(14)-C(13)-H(13)	119.6
C(10)-C(15)	1.397(9)	C(13)-C(14)-C(15)	119.7(8)
C(11)-C(12)	1.395(9)	C(13)-C(14)-H(14)	120.2
C(11)-H(11)	0.9300	C(15)-C(14)-H(14)	120.2
C(12)-C(13)	1.347(13)	C(10)-C(15)-C(14)	120.1(8)
C(12)-H(12)	0.9300	C(10)-C(15)-H(15)	119.9
C(13)-C(14)	1.373(13)	C(14)-C(15)-H(15)	119.9
C(13)-H(13)	0.9300	N(1)-C(16)-C(17)	108.2(5)
C(14)-C(15)	1.398(10)	N(1)-C(16)H(16A)	110.1
C(14)-H(14)	0.9300	C(17)C(16)H(16A)	110.1
C(15)-H(15)	0.9300	N(1)-C(16)H(16B)	110.1
C(16)-N(1)	1.466(7)	C(17)C(16)H(16B)	110.1
C(16)-C(17)	1.503(8)	H(16A)-C(16)-H(16B)	108.4
C(16)-H(16A)	0.9700	N(2)-C(17)-C(16)	106.8(4)
C(16)-H(16B)	0.9700	N(2)-C(17)-H(17A)	110.4
C(17)-N(2)	1.475(7)	C(16)-C(17)-H(17A)	110.4
C(17)-H(17A)	0.9700	N(2)-C(17)-H(17B)	110.4
C(17)-H(17B)	0.9700	C(16)-C(17)-H(17B)	110.4
Cu(1)-N(1)	2.000(4)	H(17A)-C(17)-H(17B)	108.6
Cu(1)-N(1)#1	2.000(4)	N(1)-Cu(1)-N(1)#1	180.0

Cu(1)-N(2)#1	2.012(4)	N(1)-Cu(1)-N(2)#1	94.86(17)
Cu(1)-N(2)	2.012(4)	N(1)#1-Cu(1)-N(2)#1	85.14(17)
N(1)-H(1A)	0.8900	N(1)-Cu(1)-N(2)	85.13(17)
N(1)-H(1B)	0.8900	N(1)#1-Cu(1)-N(2)	94.87(18)
N(2)-H(2A)	0.8900	N(2)#1-Cu(1)-N(2)	180.0
N(2)-H(2B)	0.8900	C(16)-N(1)-Cu(1)	107.3(3)
O(3)-H(2A)	0.99(8)	C(16)-N(1)-H(1A)	110.2
O(3)-H(2B)	0.47(11)	Cu(1)-N(1)-H(1A)	110.2
O(2)-C(1)-O(1)	124.8(5)	C(16)-N(1)-H(1B)	110.2
O(2)-C(1)-C(2)	121.2(5)	Cu(1)-N(1)-H(1B)	110.2
O(1)-C(1)-C(2)	114.0(6)	H(1A)-N(1)-H(1B)	108.5
C(3)-C(2)-C(4)	111.9(5)	C(17)-N(2)-Cu(1)	108.0(3)
C(3)-C(2)-C(1)	114.0(5)	C(17)-N(2)-H(2A)	110.1
C(4)-C(2)-C(1)	109.9(4)	Cu(1)-N(2)-H(2A)	110.1
C(3)-C(2)-H(2)	106.9	C(17)-N(2)-H(2B)	110.1
C(4)-C(2)-H(2)	106.9	Cu(1)-N(2)-H(2B)	110.1
C(1)-C(2)-H(2)	106.9	H(2A)-N(2)-H(2B)	108.4
C(2)-C(3)-H(3A)	109.5	H(2A)-O(3)-H(2B)	99(10)
C(2)-C(3)-H(3B)	109.5	C(6)-C(5)-H(5)	119.7
H(3A)-C(3)-H(3B)	109.5	F(1)-C(6)-C(7)	118.1(5)
C(2)-C(3)-H(3C)	109.5	F(1)-C(6)-C(5)	117.2(6)
H(3A)-C(3)-H(3C)	109.5	C(7)-C(6)-C(5)	124.7(6)
H(3B)-C(3)-H(3C)	109.5	C(6)-C(7)-C(8)	115.1(5)
C(5)-C(4)-C(9)	117.7(5)	C(6)-C(7)-C(10)	123.5(5)
C(5)-C(4)-C(2)	119.7(6)	C(8)-C(7)-C(10)	121.4(6)

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

ORTEP DIAGRAME

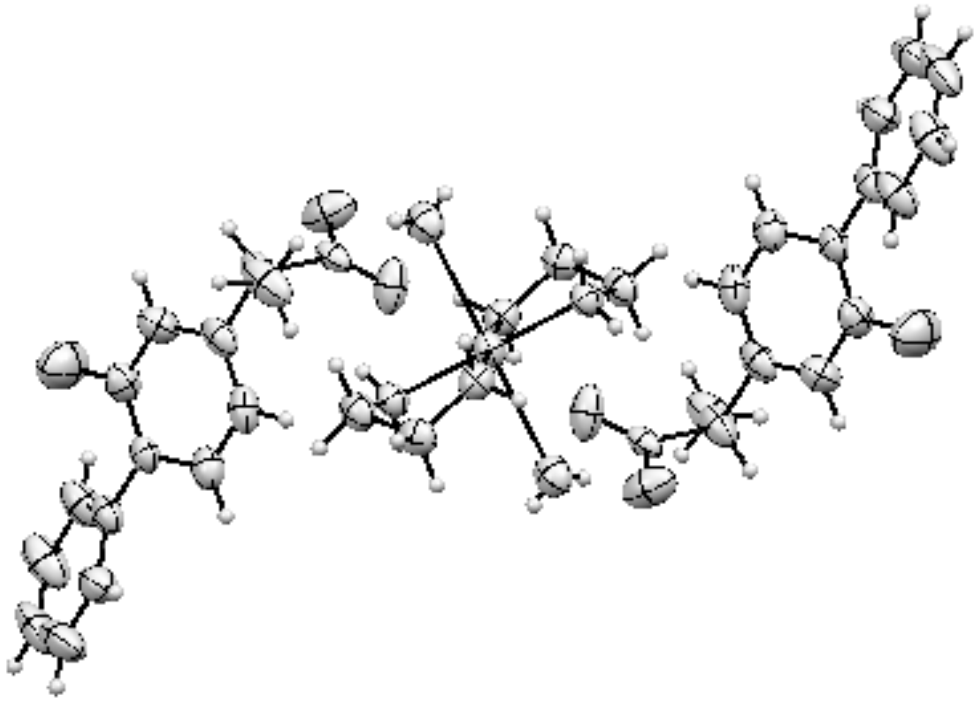

Figure. ORTEP diagram of **2b** with thermal ellipsoids drawn at 100 % probability level. The H-atoms are shown as small circles of arbitrary radii. Symmetry code i = 1 – x, – y, 1 – z.