STRUCTURAL
CHEMISTRY

Volume 74 (2018)

Supporting information for article:

Two new cobalt(II) rhodamine 6G hydrazone complexes: structure, fluorescence and magnetism

Juan Yuan, Xia Wang, Nan Zhang, Mei-Jiao Liu and Hui-Zhong Kou

Table S1 Hydrogen bonds in complexes (1) and (2) (with esds except fixed and riding H).

D−H···A	D−H	H···A	D···A	<(DHA)
complex (1)				
N7−H7···O14	0.86	2.33	2.951(5)	129.0
N8−H8···O6	0.86	2.14	2.913(5)	150.0
N10−H10···O5	0.86	2.08	2.877(5)	153.1
O5−H5···O11^{i}	0.82	2.39	3.103(8)	146.3
O5−H5···O12^{i}	0.82	2.50	3.277(9)	157.5
O6−H6A···O7	0.82	2.30	2.918(7)	132.0
C6−H6···O14^{ii}	0.93	2.54	3.373(5)	148.7
C4−H4···O13^{ii}	0.93	2.49	3.323(6)	149.6
C19−H19 ··· O10^{iii}	0.93	2.58	3.509(6)	178.6
C28−H28A ··· O8^{iii}	0.97	2.54		
C2−H2···O8^{iv}	0.93	2.41	3.107(6)	131.5
C44−H44···O13^{v}	0.93	2.50	3.239(6)	137.0
C12−H12···O3^{vi}	0.93	2.54	3.438(5)	162.1
C67−H67A···N6	0.97	2.36	3.281(7)	159.0
complex (2)				
N8-H8...O6	0.88	2.10	2.900(4)	150.6
N7-H7...F3	0.88	2.25	2.903(4)	130.4
N10−H10···O5	0.88	2.07	2.882(4)	152.7
O5−H5···F1A^{vii}	0.84	1.99	2.762(10)	152.5
O5-H5...F4^{vii}	0.84	2.22	2.897(11)	137.4
O6−H6A···F6	0.84	2.06	2.809(4)	148.7
C2−H2···F7^{viii}	0.95	2.43	3.142(4)	132.0
C4−H4···F2^{ix}	0.95	2.40	3.275(6)	152.9
C6−H6···F3^{ix}	0.95	2.50	3.323(4)	145.6
C12−H12···O3^{x}	0.95	2.46	3.379(4)	161.5
C22−H22···F8^{xi}	0.95	2.52	3.466(4)	179.0
C31−H31B ··· F7^{xi}	0.99	2.43	3.302(4)	147.1
C44−H44···F2^{xii}	0.95	2.46	3.177(6)	132.7
C67−H67B···N6	0.99	2.34	3.277(6)	157.8

Symmetry codes: (i) x, y, z+1; (ii) -x, 1-y, 1-z; (iii) 1-x, -y, 1-z; (iv) x, 1+y, z; (v) 1+x, y, 1+z; (vi) -x, -y, 1-z; (vii) x, y, z-1; (viii) x, y-1, z; (ix) 2-x, 1-y, 1-z; (x) 2-x, 2-y, 1-z; (xi) 1-x, 2-y, 1-z; (xii) -1+x, y, -1+z

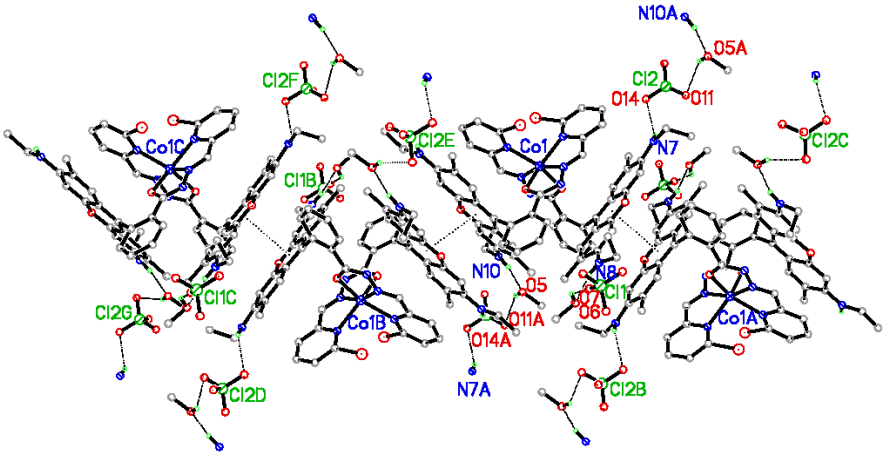

Figure S1 Hydrogen bonding interactions in complex (1).

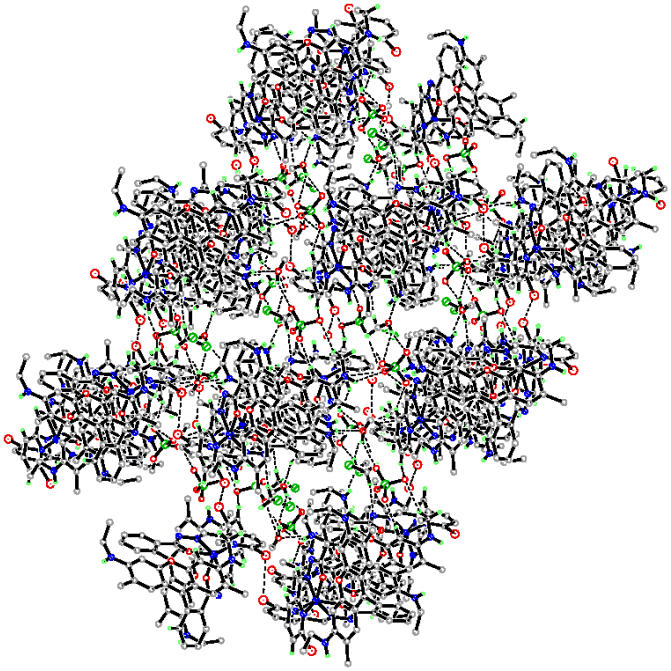

Figure S2 3D supramolecular structure of complex (1).

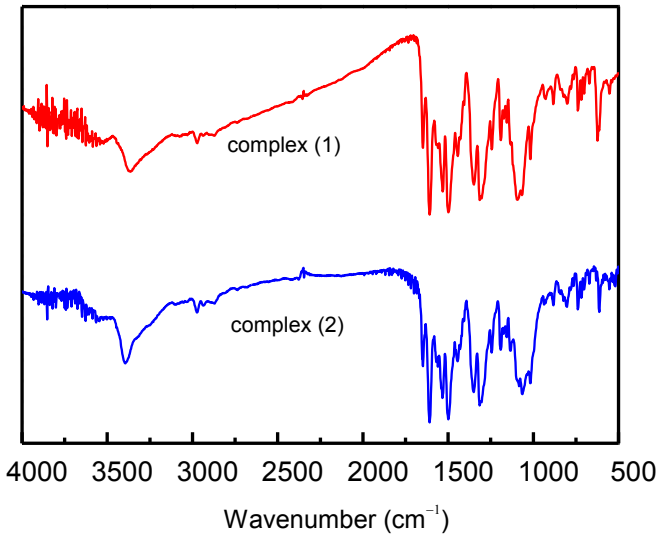

Figure S3 The IR spectra of complexes (1) and (2).

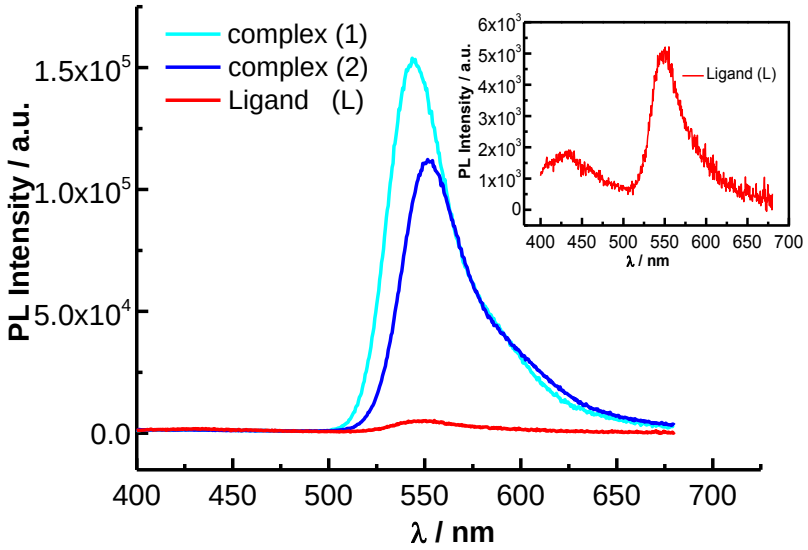

Figure S4 Fluorescence spectra for complexes (1), (2) and Ligand (L) in ethanol (λ_{ex} = 350 nm, [1] = [2] = 10 μmol/L, [L] = 20 μmol/L). Inset: Enlarged view of the spectra for L.