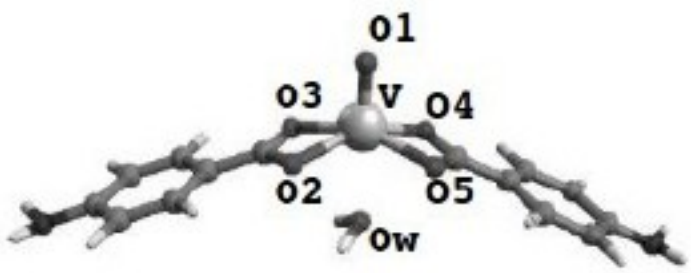
Electronic Supplementary Material (ESI) for New Journal of Chemistry.

Supplementary Information Available

Figure S1. Structure and selected bond lengths (Å) and angles (°) for *trans*-[VOL_2H_2O] complex



***trans*-[VOL_2H_2O] complex**			
Bond lengths (Å)		**angles (°)**	
V-O1	1.593	O1VO2	104.8
V-O2	2.030	O1VO3	104.8
V-O3	2.030	O1VO4	104.3
V-O4	2.038	O1VO5	104.4
V-O5	2.038	O1VOw	179.1
V-Ow	2.488	O2VO3	64.9
		O2VO4	150.9
		O2VO5	107.5
		O2VOw	74.5
		O3VO4	107.5
		O3VO5	150.8
		O3VOw	74.4
		O4VO5	64.6
		O4VOw	76.4

Figure S2. FTIR spectra of 4-aminobenzoic acid, sodium aminobenzoate, $[VOL_2H_2O]$ and $[VO(O_2)LH_2O].H_2O$ (from top to bottom) (L=.4-aminobenzoate ligand).

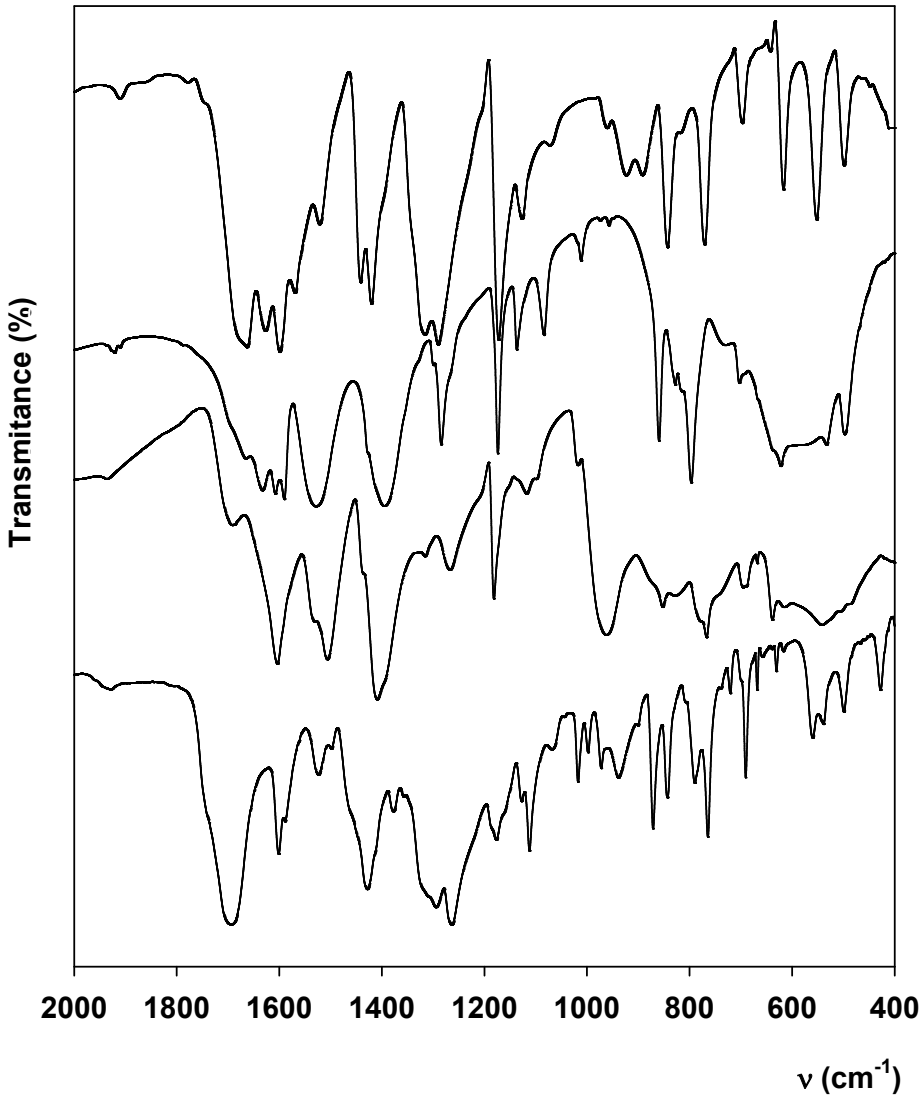
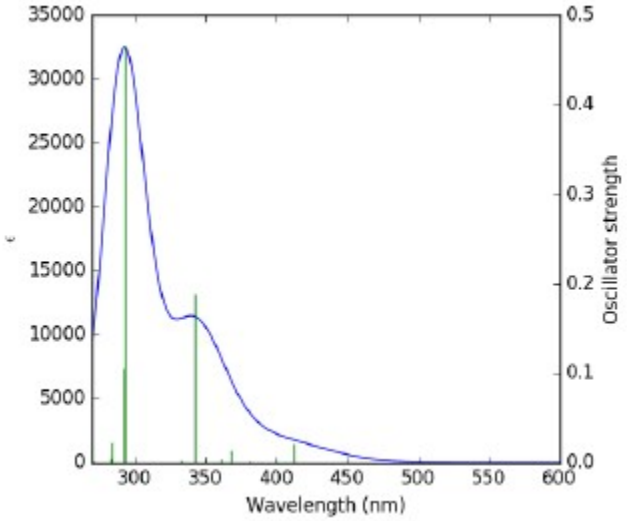


Figure S3. Calculated bands in the UV-vis spectra of $[VO(O_2)LH_2O].H_2O$ (L=aminobenzoate ligand).



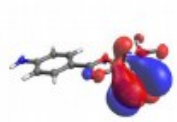
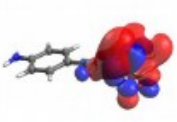
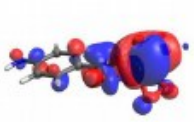
			
H-1	HOMO	LUMO	L+1
412 nm (0.022) HOMO → LUMO (54%) H-1 → LUMO (39%) 400 nm (0.0044) H-1 → LUMO (49%) HOMO → LUMO (43%) 381 nm (0.0017) H-1 → L+1 (62%)			
368 nm (0.0139) H-1 → L+2 (54%) 342 nm (0.1891) H-1 → L+2 (75%)			
293 nm (0.4657) HOMO → L+3 (78) 292 nm (0.1049) HOMO → L+4 (85)			

Figure S4. Calculated bands in the UV-vis spectra of *cis*-$[VOL_2H_2O]$ complex: (L=aminobenzoate ligand).

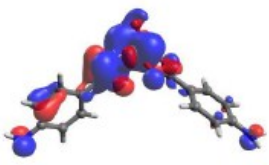
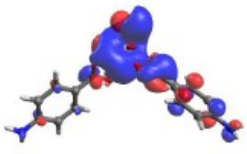
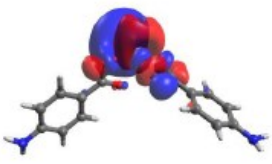
		
H-2	LUMO	L+4
733 nm (0.0008) H-2 → L (67%)		
548 nm (0.0001) H-2 → L+4 (75%)		

Figure S5. Contour spectra and three-dimensional fluorescence spectra of 6 μM BSA

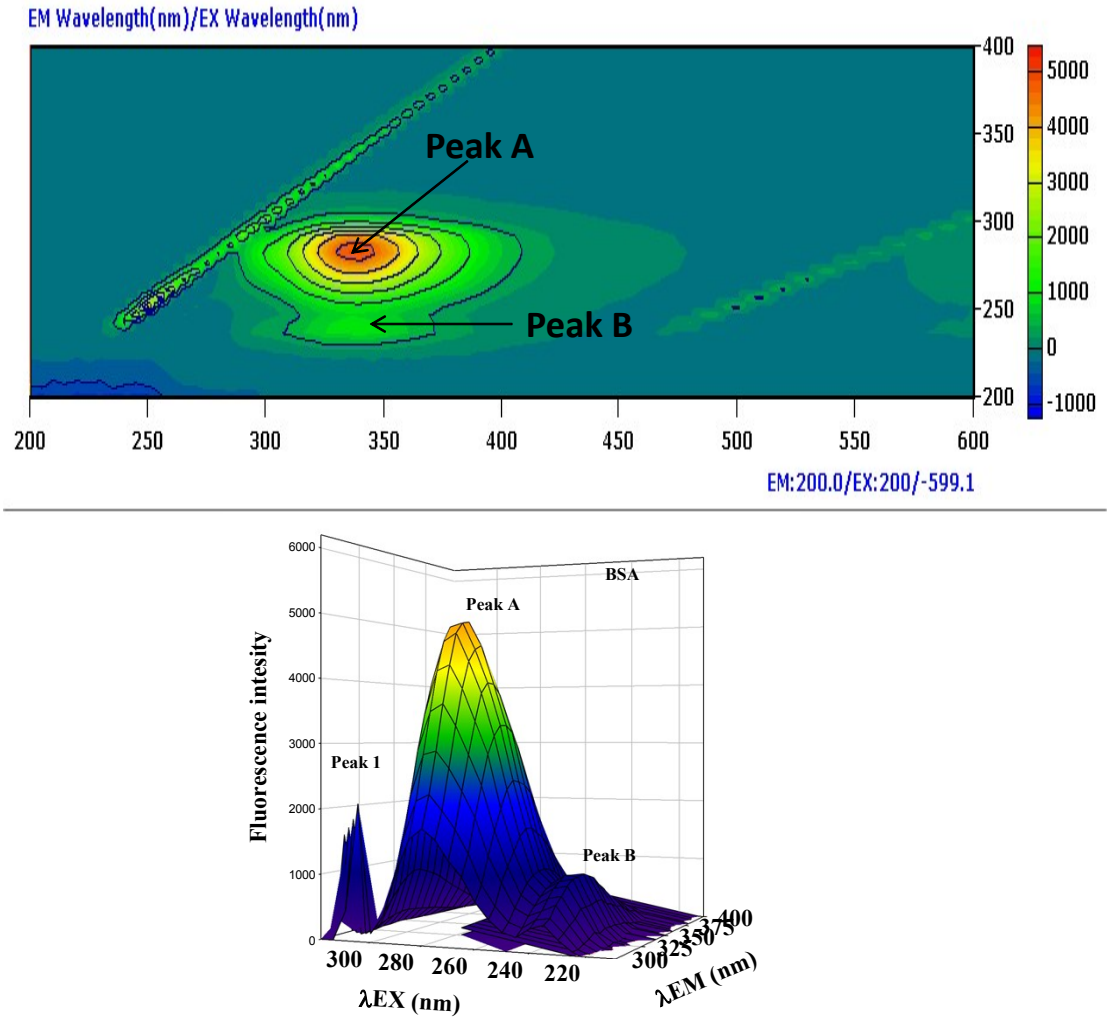
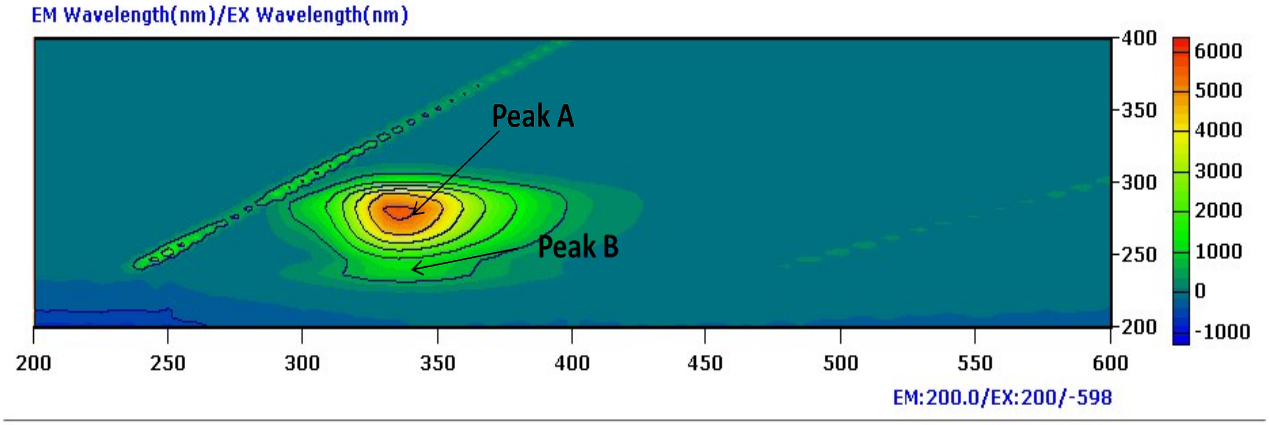


Figure S6. Contour spectra and three-dimensional fluorescence spectra of 6 μM BSA-20 μM aminobenzoic acid.



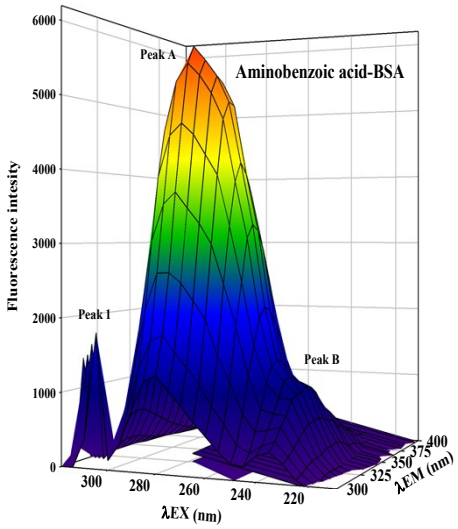


Figure S7. Contour spectra and three-dimensional fluorescence spectra of 6 μM BSA-20 μM [VOL_2H_2O].