

**Effect of albumin on the aggregation of deuteroporphyrin in aqueous organic medium**

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**Table S1** Spectral changes in solutions of deuteroporphyrin ( $1.2 \cdot 10^{-6}$  M) with a change in the concentration of DMF.

DMF concentration in H <sub>2</sub> O, mol/l	Changes in UV-Vis spectra of H2DP		Changes in fluorescence spectra of H2DP	Note
	Soret band region	Far wave region (optical density)		
Pure DMF	Absorption maximum 396 nm (A=0.192)	493 nm (A=0.018) 527 nm (A=0.011) 564 nm (A=0.009) 620 nm (A=0.006)	Fluorescence intensity at 617 nm almost twice as much as in the region 683 nm	Clearly resolved, typical spectrum of etiomeric monomeric porphyrin
11.20- 6.03	Decrease in absorption intensity	The position of all bands is remains the same, the absorption decreases insignificantly	Decrease in fluorescence intensity while maintaining the position of the maxima and band ratio	
4.31	The Soret band is undergoing a slight blue shift. The absorption intensity decreases. 397 (A=0.150) 394 (A=0.157)	The resolution of the bands decreases, the absorption intensity of especially the I band in the region of 620 nm decreases	Decrease in fluorescence intensity while maintaining the position of the maxima and band ratio	
2.58 -1.72	Absorption becomes broadband with an almost constant intensity from 340 nm (A=0.073) to 417 nm (A=0.071)	Two absorption bands registered 525 nm (A=0.047) 587 nm (A=0.032)	An inversion of the absorption intensity is recorded, the fluorescence intensity decreases in the region of 618 nm and increases in the region of 685 nm. A shoulder of 715 nm appears.	The reflection sharply increases, i.e. rather large aggregates appear in the solution. Other types of aggregates appear

1.46-0.69	The absorption sharply decreases in the region of 350 nm and increases in the region of 450 nm, the isosbestic point at 415 nm	Decrease in absorption intensity while maintaining the position of the maxima of 525 nm (A=0.029– 0.023) 587 nm (A=0.017– 0.014)	The fluorescence intensity decreases at 618 and 685 nm. The intensity in the region of 715 nm remains almost unchanged.	Reflection continues to increase, i.e. particle growth occurs.
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