Exemplary Relationship between the Extent of Cofacial Aggregation and Fluorescence Quantum Yield as Exhibited by Quaternized Amphiphilic Phthalocyanines

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Supporting information



Figure S1: Lambert-Beer plot of compound 7 in methanol (absorbance at 674 nm).



Figure S2: (a) UV-vis absorption spectrum of **1** in several water/methanol mixtures; (b) plot of the absorbance values of the 660 nm (black) and 628 nm (red) bands in function of the methanol ratio in solution.



Figure S3: (a) UV-vis absorption spectrum of **2** in several water/methanol mixtures; (b) plot of the absorbance values of the 669 nm (black) and 629 nm (red) bands in function of the methanol ratio in solution.



Figure S4: (a) UV-vis absorption spectrum of **3** in several water/methanol mixtures; (b) plot of the absorbance values of the 669 nm (black) and 633 nm (red) bands in function of the methanol ratio in solution.



Figure S5: (a) UV-vis absorption spectrum of **8** in several water/methanol mixtures; (b) plot of the absorbance values of the 677 nm (black) and 637 nm (red) bands in function of the methanol ratio in solution.



Figure S6: (a) UV-vis absorption spectrum of **9** in several water/methanol mixtures; (b) plot of the absorbance values of the 675 nm (black) and 641 nm (red) bands in function of the methanol ratio in solution.



Figure S7: (a) UV-vis absorption spectrum of **10** in several water/methanol mixtures; (b) plot of the absorbance values of the 675 nm (black) and 637 nm (red) bands in function of the methanol ratio in solution.



Figure S8: a) Absorption (black), fluorescence emission excited at 600 nm (green) and excitation spectra at 760 nm (red) of compound **1** in methanol solution; b) Relationship between the absorbance at 685 nm and fluorescence quantum yield of **1** upon aggregation in water/methanol mixtures.



Figure S9: a) Absorption (black), fluorescence emission excited at 600 nm (green) and excitation spectra at 760 nm (red) of compound **3** in methanol solution; b) Relationship between the absorbance at 669 nm and fluorescence quantum yield of **3** upon aggregation in water/methanol mixtures.



Figure S10: a) Absorption (black), fluorescence emission excited at 600 nm (green) and excitation spectra at 760 nm (red) of compound **8** in methanol solution; b) Relationship between the absorbance at 676 nm and fluorescence quantum yield of **8** upon aggregation in water/methanol mixtures.



Figure S11: a) Absorption (black), fluorescence emission excited at 600 nm (green) and excitation spectra at 760 nm (red) of compound **9** in methanol solution; b) Relationship between the absorbance at 674 nm and fluorescence quantum yield of **9** upon aggregation in water/methanol mixtures.



Figure S12: a) Absorption (black), fluorescence emission excited at 600 nm (green) and excitation spectra at 760 nm (red) of compound **10** in methanol solution; b) Relationship between the absorbance at 675 nm and fluorescence quantum yield of **10** upon aggregation in water/methanol mixtures.