

Supplementary Information for

Modulated Photophysics of an Anthracene-based Fluorophore within Bile-salt

Aggregates: Effect of Ionic Strength of the Medium on the Aggregation Behavior

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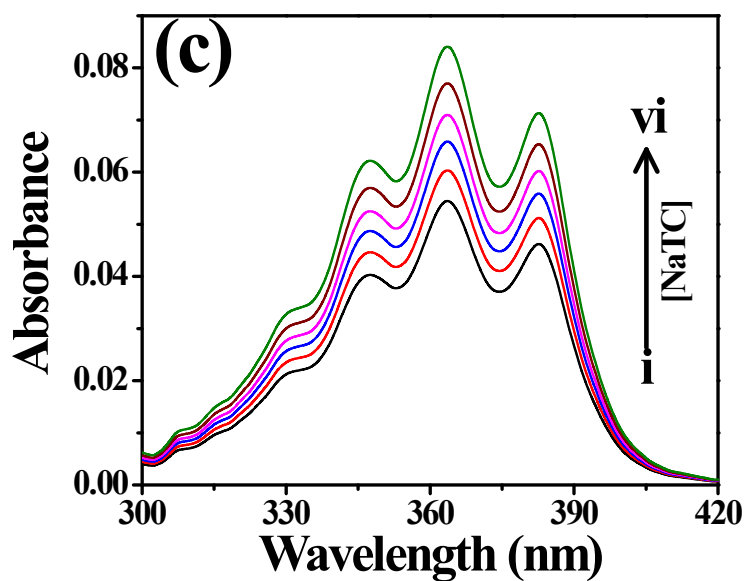
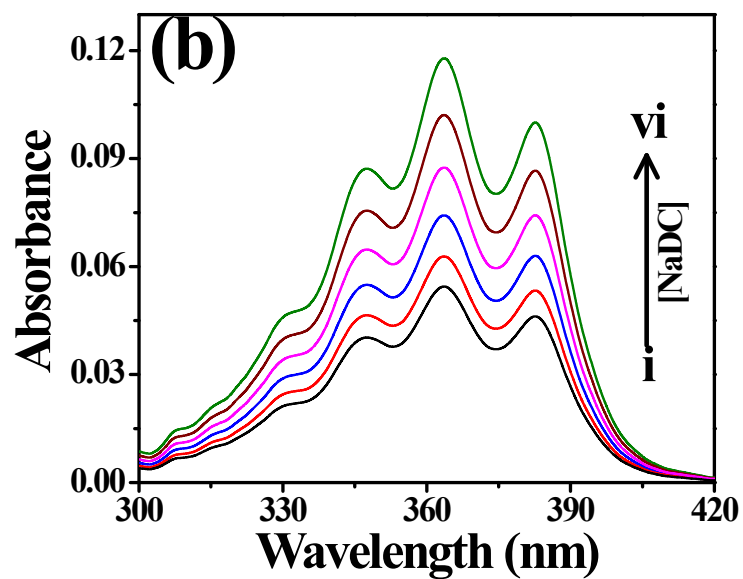
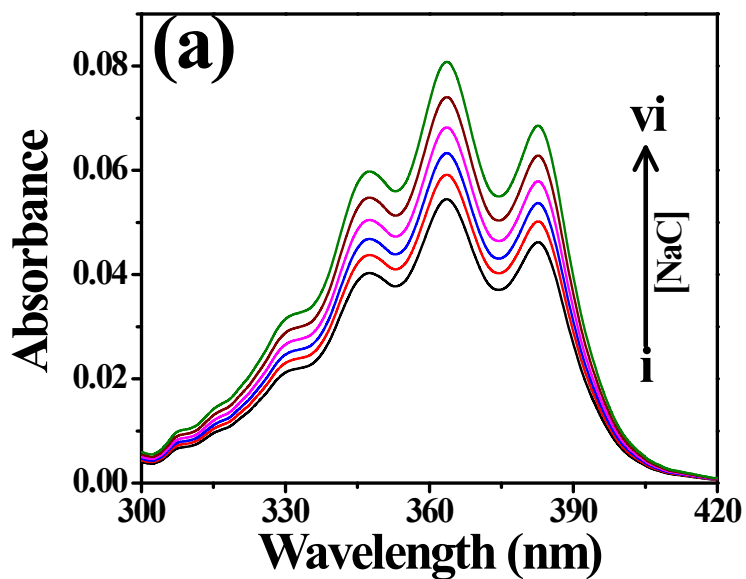


Figure S1: Absorption spectra of 9-MA in the presence of increasing concentration of (a) NaC (Curves i \rightarrow vi correspond to [NaC] = 0, 2, 5, 10, 15 and 20 mM respectively) (b) NaDC (Curves i \rightarrow vi correspond to [NaDC] = 0, 1, 2, 5, 8 and 10 mM respectively) and (c) NaTC (Curves i \rightarrow vi correspond to [NaTC] = 0, 2, 5, 10, 15 and 20 mM respectively) bile salts.

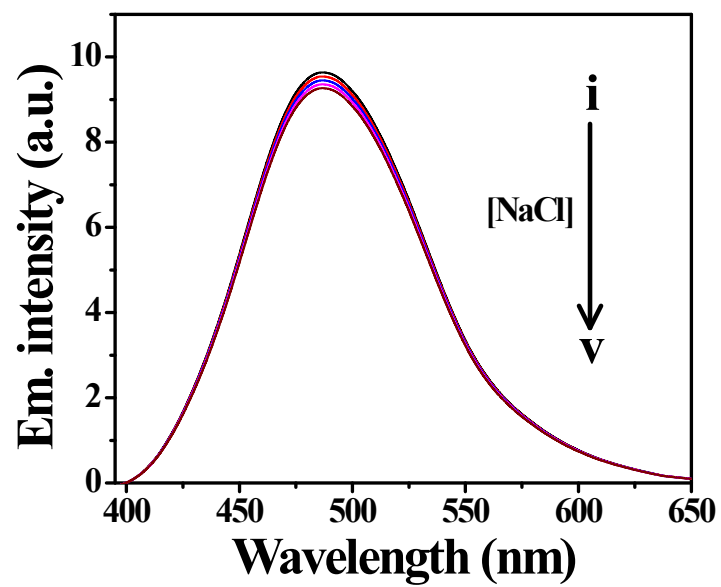


Figure S2: Effect of the addition of NaCl on the emission of 9-MA (curves i \rightarrow v correspond to $[\text{NaCl}] = 0, 50, 100, 200, 500$ and 750 mM respectively).

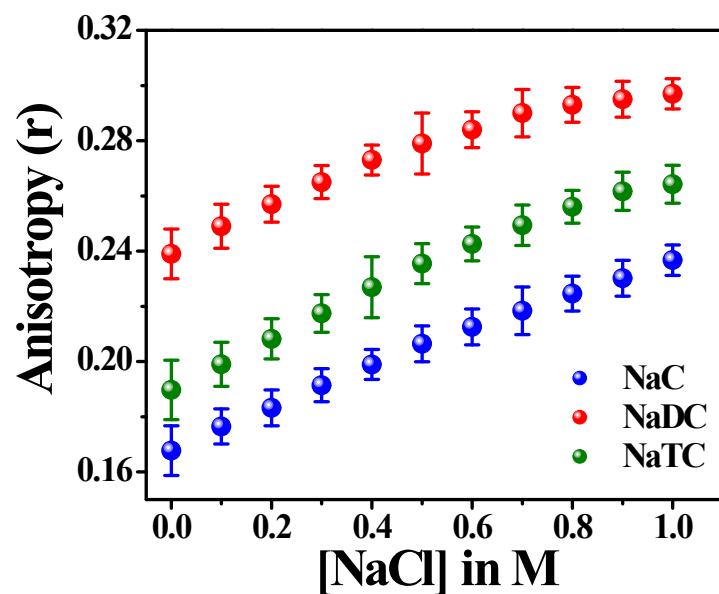


Figure S3: Variation of steady-state fluorescence anisotropy (r) of the probe as a function of NaCl concentration in the presence of the bile salts. Each data point in the diagrams showing anisotropy variation is an average of 10 individual measurements. The error bars are within the marker symbols if not apparent.

Table S1: Comparison of the second rotational relaxation components τ_{2r} with the theoretical rotational relaxation times (τ_L) of the bile-salt aggregates as a whole (using the SED relation)

Environment	τ_{2r}	τ_L
	(ns)	(ns)
NaC	1.52	1.81
NaDC	4.95	4.73
NaTC	1.67	1.72

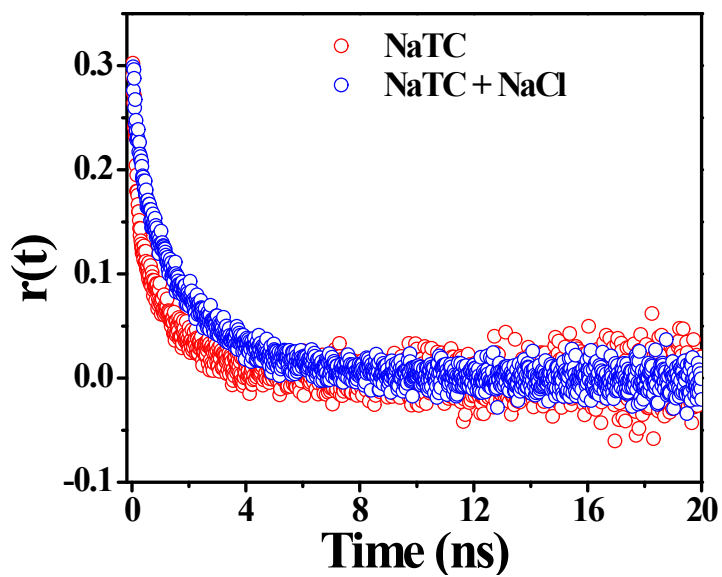
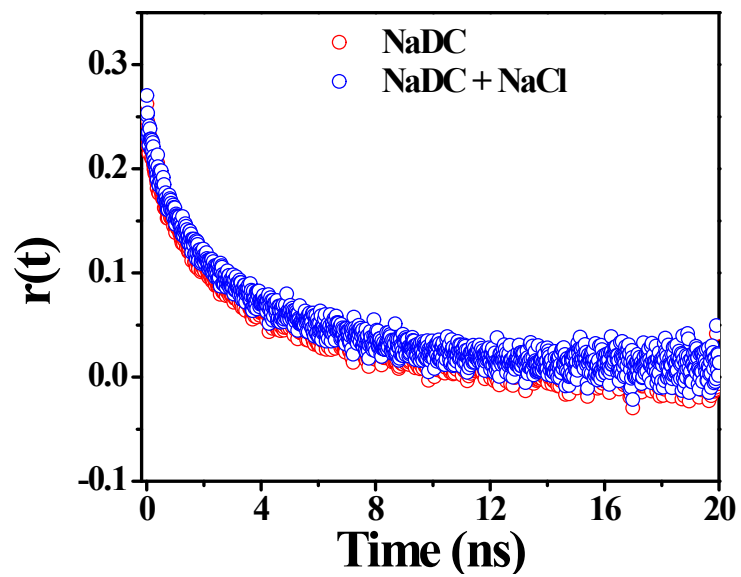
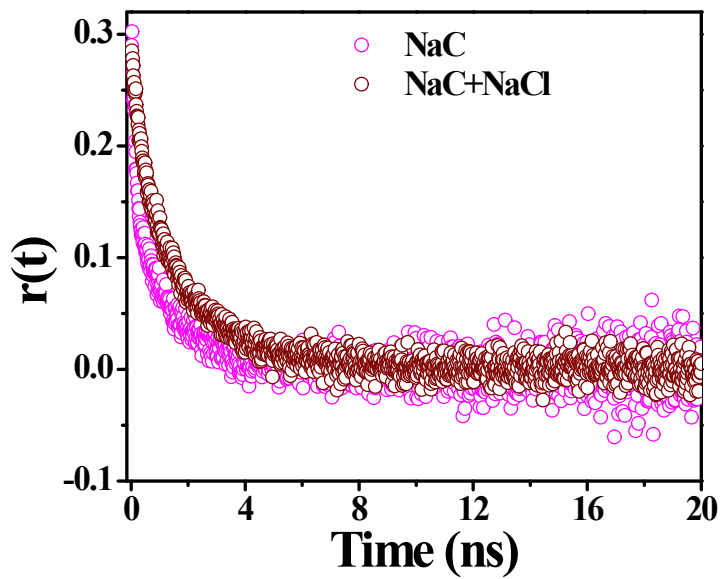


Figure S4: Fluorescence depolarization profile of the probe 9-MA in different bile salt aggregates (as mentioned in the figure legends) in the presence of NaCl.