

**Study on Intramolecular Charge Transfer Processes, Solvation Dynamics and Rotational
Relaxation of Coumarin 490 in Reverse Micelles of Cationic Gemini Surfactant**

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Supplementary material

Gemini surfactant	¹ H NMR (500 MHz, CDCl ₃)
1,4-bis(dodecyl-N,N-dimethylammoniumbromide)butane (12-4-12)	δ 3.99 – 3.84 (m, 4H), 3.51 – 3.36 (m, 4H), 3.31 (s, 12H), 2.73 – 2.58 (m, 4H), 2.16 – 2.08 (m, 4H), 1.84 – 1.69 (m, 4H), 1.42 – 1.21 (m, 32H), 0.89 (t, <i>J</i> = 6.8 Hz, 6H).

Table S1. ^1H NMR data for the synthesized gemini surfactant (12-4-12).

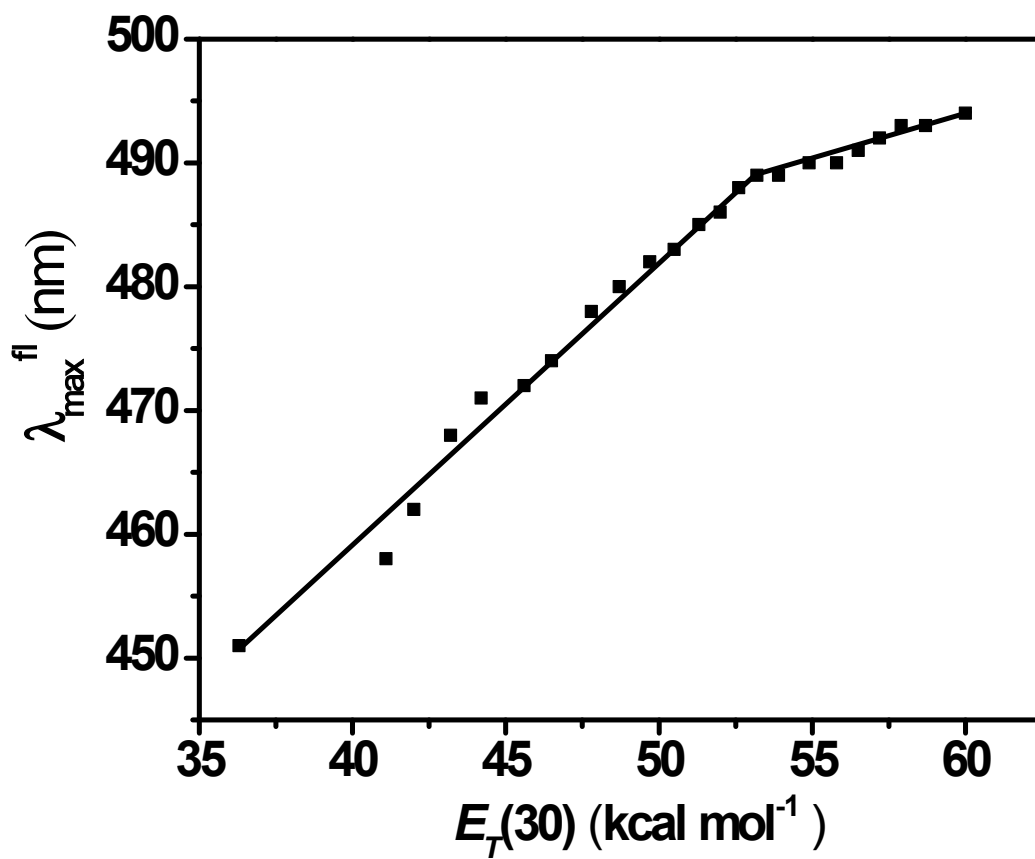


Figure S1. Plot of fluorescence peak maxima of C-490 in different percentage of dioxane-water mixture versus $E_T(30)$. $\lambda_{\text{exc}} = 412$ nm.