

**Electronic Supplementary Information (ESI)**

**Physicochemical perspectives (aggregation, structure and dynamics) of interaction between  
pluronic (L31) and surfactant (SDS)**

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### Electronic Supplementary Information (ESI)

Fig. S1:  $^1\text{H}$  chemical shifts of SDS for SDS (97 mM) / L31/  $\text{D}_2\text{O}$  relative to SDS (97 mM)/  $\text{D}_2\text{O}$

i.e.  $\Delta\delta (= \delta_{L31+SDS} - \delta_{\text{SDS}})$  as a function of L31 concentration.

Fig. S2: The EPR experimental (solid line) and simulated (dotted) spectra of the spin probe 5-DSA for the systems-a and b.

Microwave frequency = 9.692 GHz; field sweep width = 100 Gauss; center field = 3433.00

Gauss; field modulation frequency = 100 kHz; microwave power = 3.2 mW for all measurements.

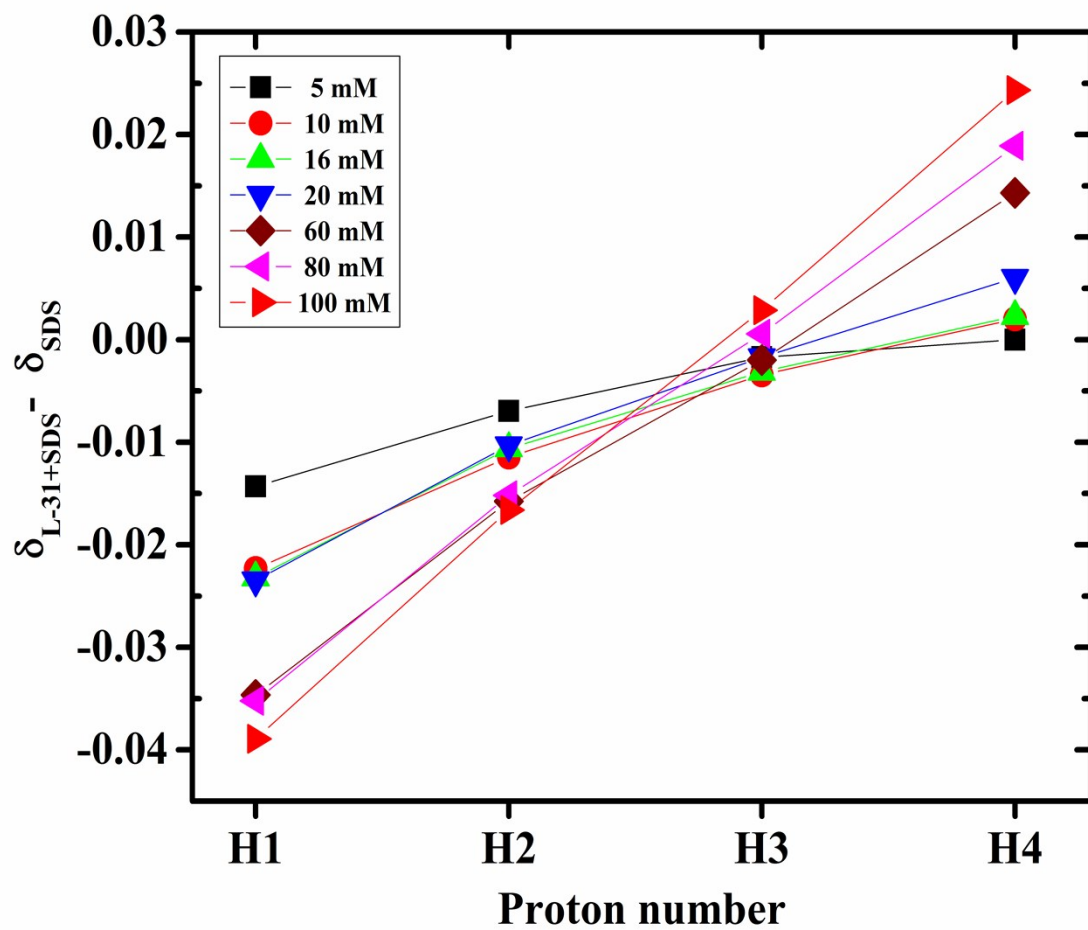
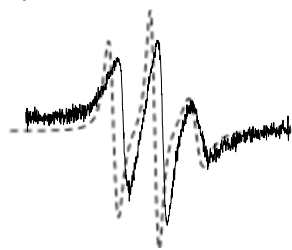
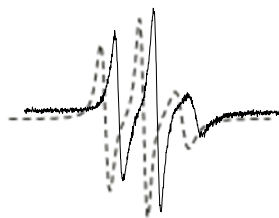


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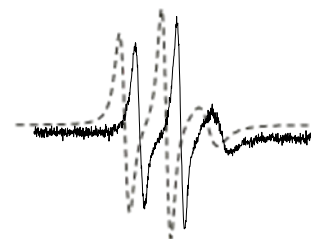
System a:



6mM SDS/H<sub>2</sub>O

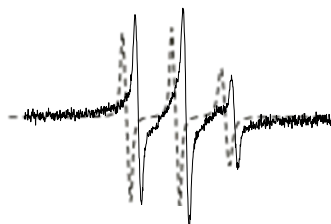


8mM SDS/H<sub>2</sub>O

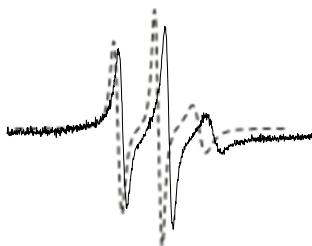


20mM SDS/H<sub>2</sub>O

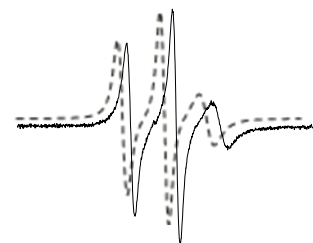
System b:



10mM L31/1mM SDS



10mM L31/2mM SDS



10mM L31/40mM SDS

Fig. S2: The EPR experimental (solid line) and simulated (dotted) spectra of the spin probe 5-DSA for the systems a and b.