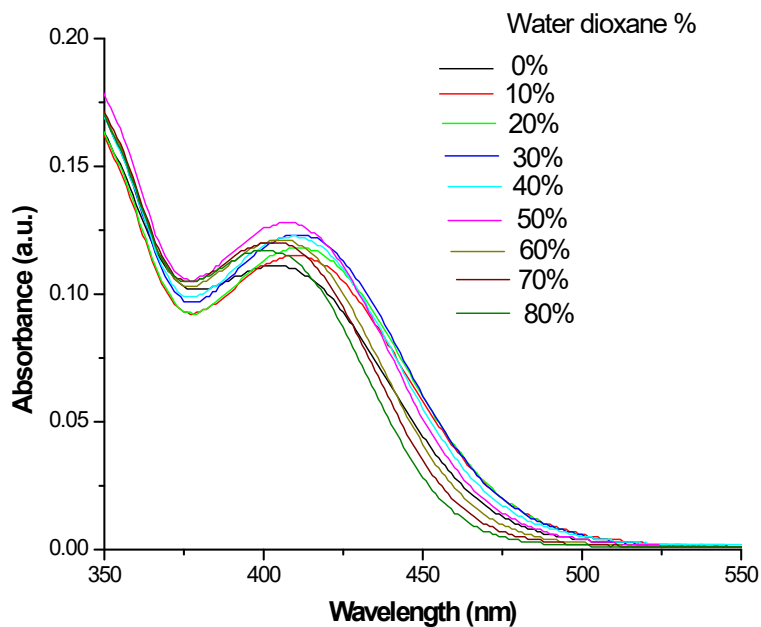
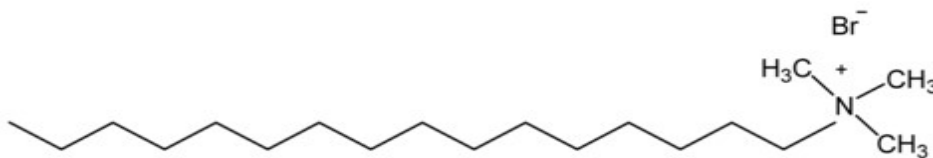


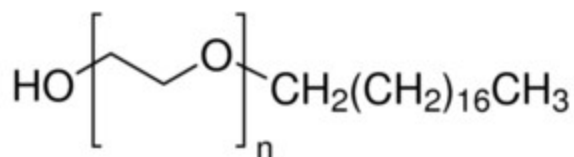
### Supplementary Data



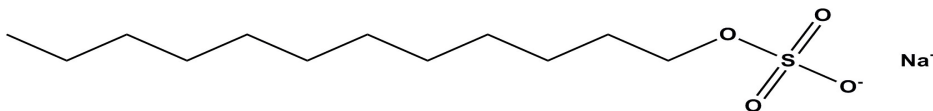
**Fig. S1** Absorption spectra of AICCN indifferent water-dioxane mixtures at fixed probe concentration.



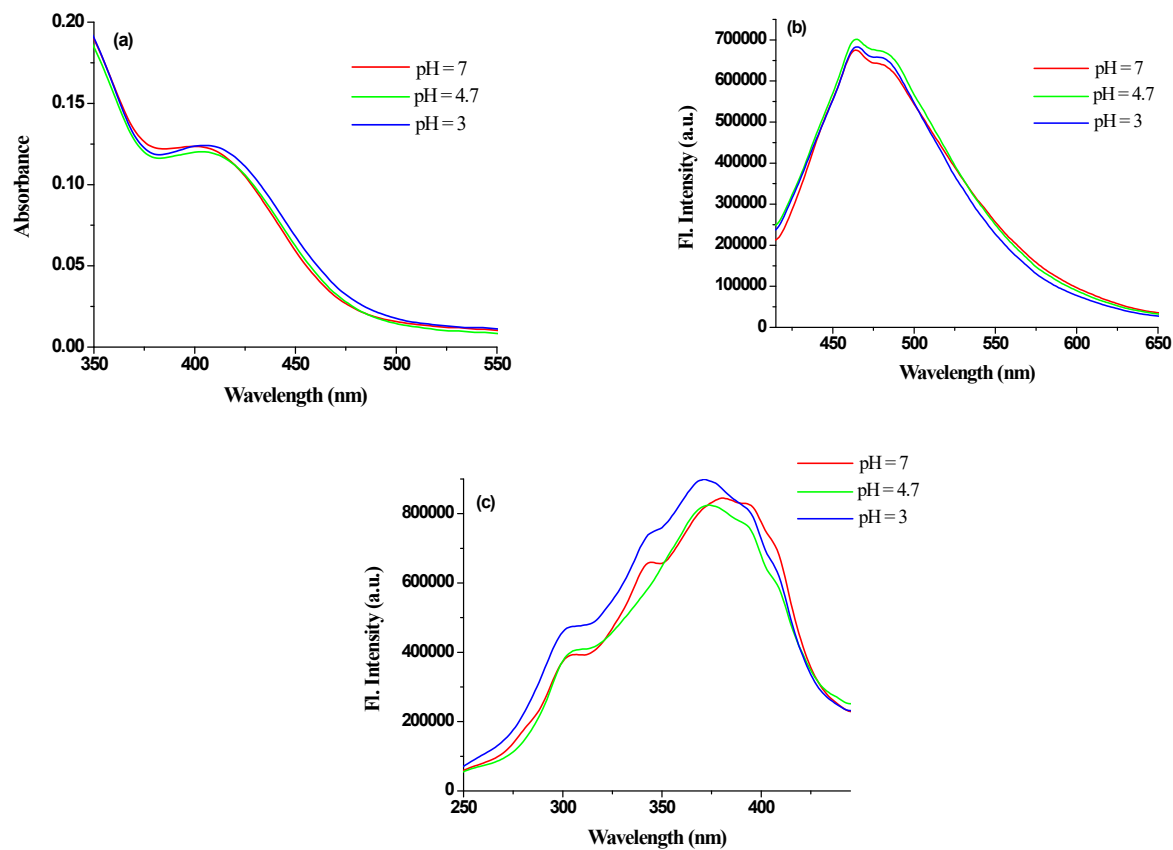
**Scheme S1** The molecular structure of CTAB



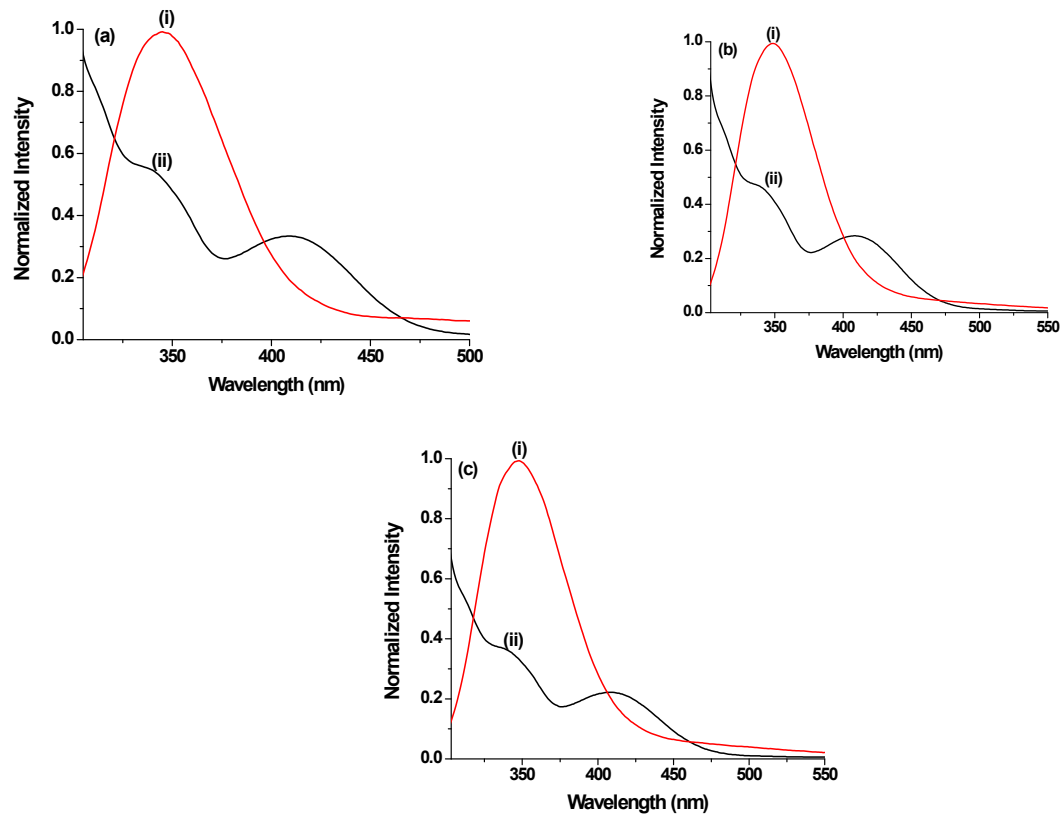
**Scheme S2** The molecular structure of Brij S20.



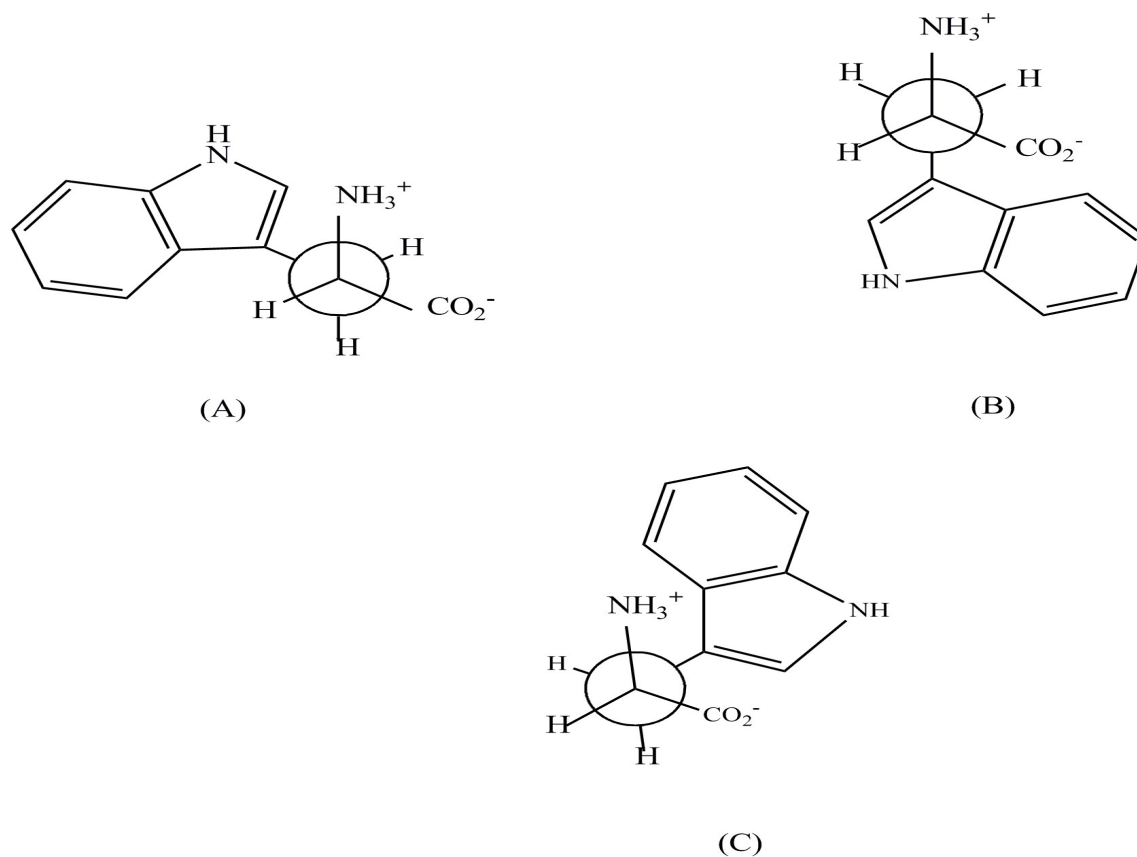
**Scheme S3** The molecular structure of SDS.



**Fig. S2 (a) Absorption spectra of AICCN in Tris buffer at different pH values; (b) Emission spectra of AICCN in Trisbuffer at different pH values,  $\lambda_{ex} = 400$  nm; (c) Excitation spectra of AICCN in Trisbuffer at different pH values,  $\lambda_{em} = 475$  nm.**



**Fig. S3** Overlap of (i) Emission spectrum of BSA and (ii) Absorption spectrum of AICCN at (a) pH = 7; (b) pH = 4.7 and (c) pH = 3.



**Fig. S4 Inter-convertible conformers of Trp in Bovine Serum Albumin (BSA)**

**Table S1**

**Fluorescence emission maxima of AICCN at varying concentrations of CTAB**

Serial No.	Concentration of CTAB (M) $\times 10^{-4}$	Fluorescence Emission Maxima ( nm )
1	0	478
2	1.5	478
3	3	478
4	4.5	479
5	6	480
6	7.5	481
7	9	474
8	10.5	472
9	12	473
10	13.5	472
11	15	472

**Table S2****Fluorescence emission maxima of AICCN at varying concentrations of S 20**

<b>Serial No.</b>	<b>Concentration of S-20 (M) <math>\times 10^{-4}</math></b>	<b>Fluorescence Emission Maxima ( nm )</b>
1	0	482
2	0.5	483
3	1	481
4	1.5	480
5	2	481
6	2.5	478
7	3	483
8	3.5	480
9	4	480
10	4.5	481
11	5	481

**Table S3****Fluorescence emission maxima of AICCN at varying concentrations of SDS**

<b>Serial No.</b>	<b>Concentration of SDS (M) <math>\times 10^{-3}</math></b>	<b>Fluorescence Emission Maxima ( nm )</b>
1	0	481
2	1	482
3	2	481
4	3	482
5	4	481
6	5	479
7	6	476
8	7	475
9	8	480
10	9	474
11	10	478
12	11	475
13	12	479