

Supplementary Information

Tuning of physico-chemical characteristics of charged micelles by controlling head group interactions via hydrophobically and sterically modified counter ions.

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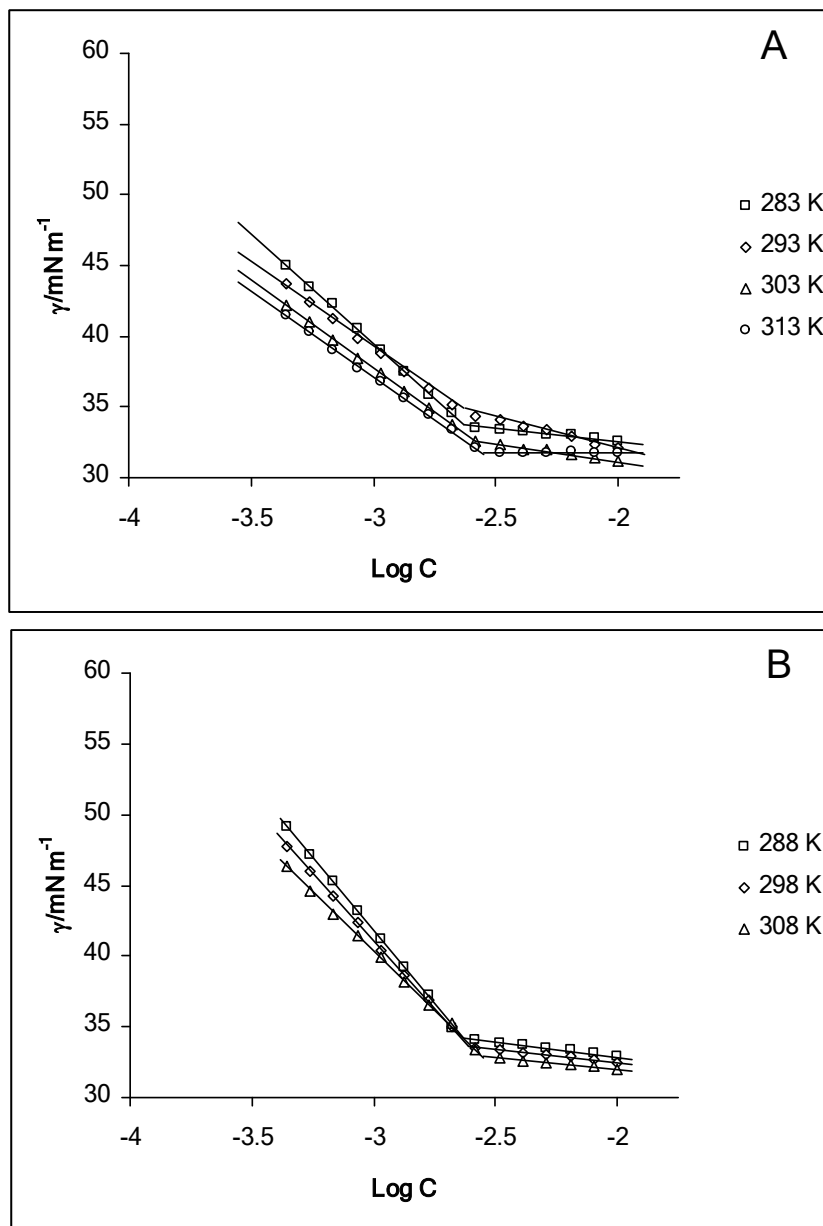


Figure 3.4: Surface tension, γ , of Ammonium dodecyl benzene sulfonate (ADBS) in aqueous solution as a function of the logarithm of the surfactant concentration at different temperatures (A: temperature 283K, 293K, 303K, 313K), (B: temperature 288K, 298K, 308K).

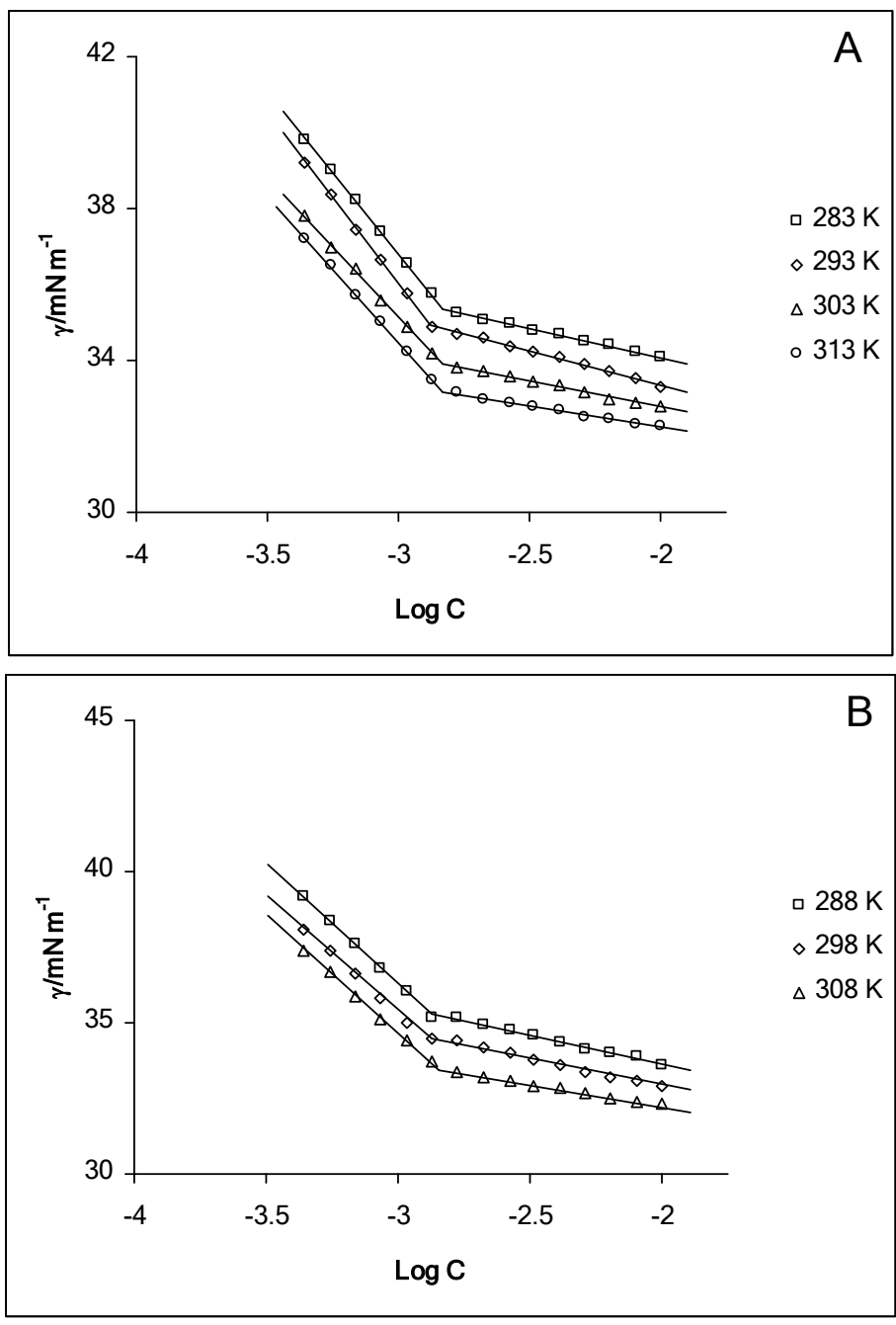


Figure 3.6: Surface tension, γ , of Tetraethylammonium dodecyl benzene sulfonate (TEADBS) in aqueous solution as a function of the logarithm of the surfactant concentration at different temperatures (A: temperature 283K, 293K, 303K, 313K), (B: temperature 288K, 298K, 308K).

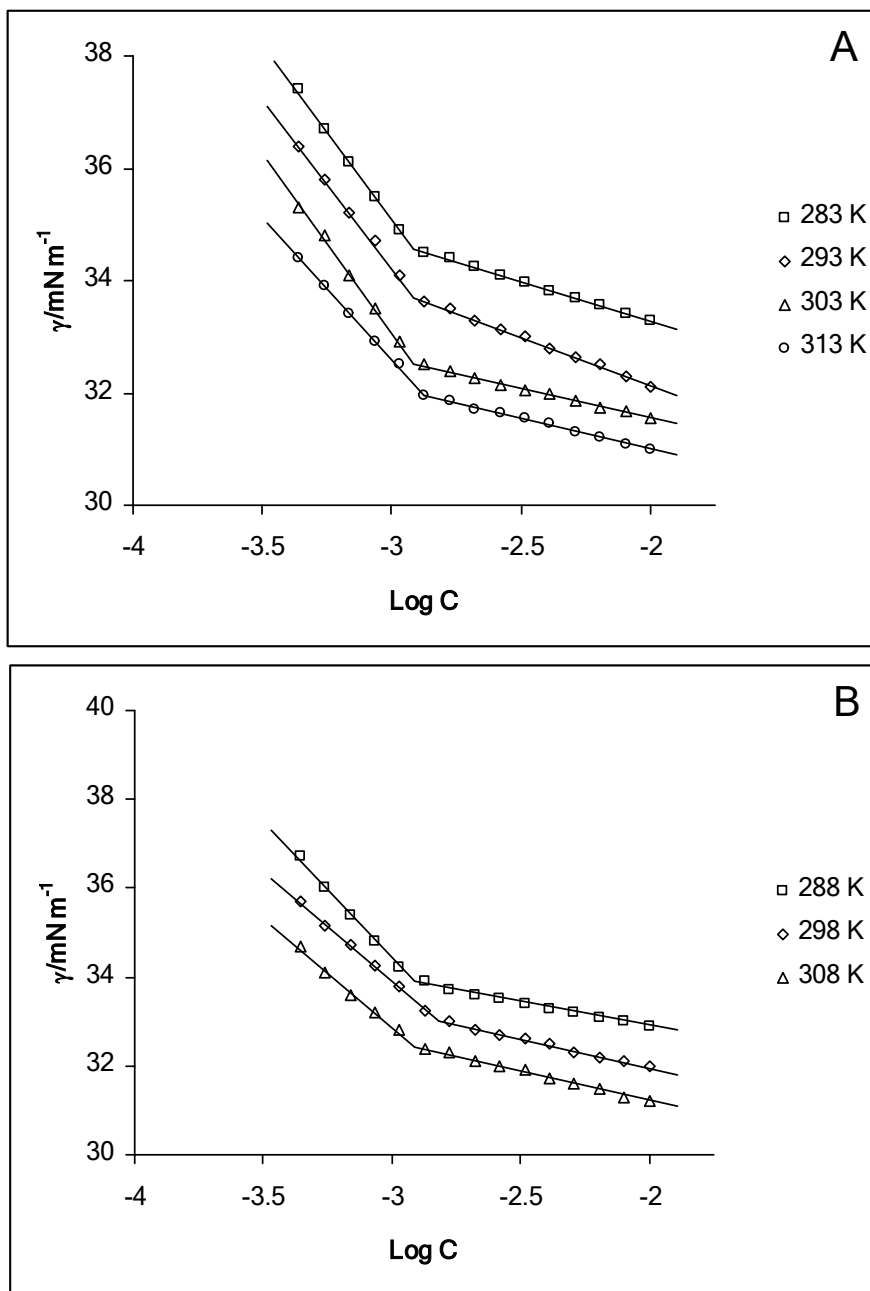


Figure 3.7: Surface tension, γ , of Tetrapropylammonium dodecyl benzene sulfonate (TPADBS) in aqueous solution as a function of the logarithm of the surfactant concentration at different temperatures (A: temperature 283K, 293K, 303K, 313K), (B: temperature 288K, 298K, 308K).

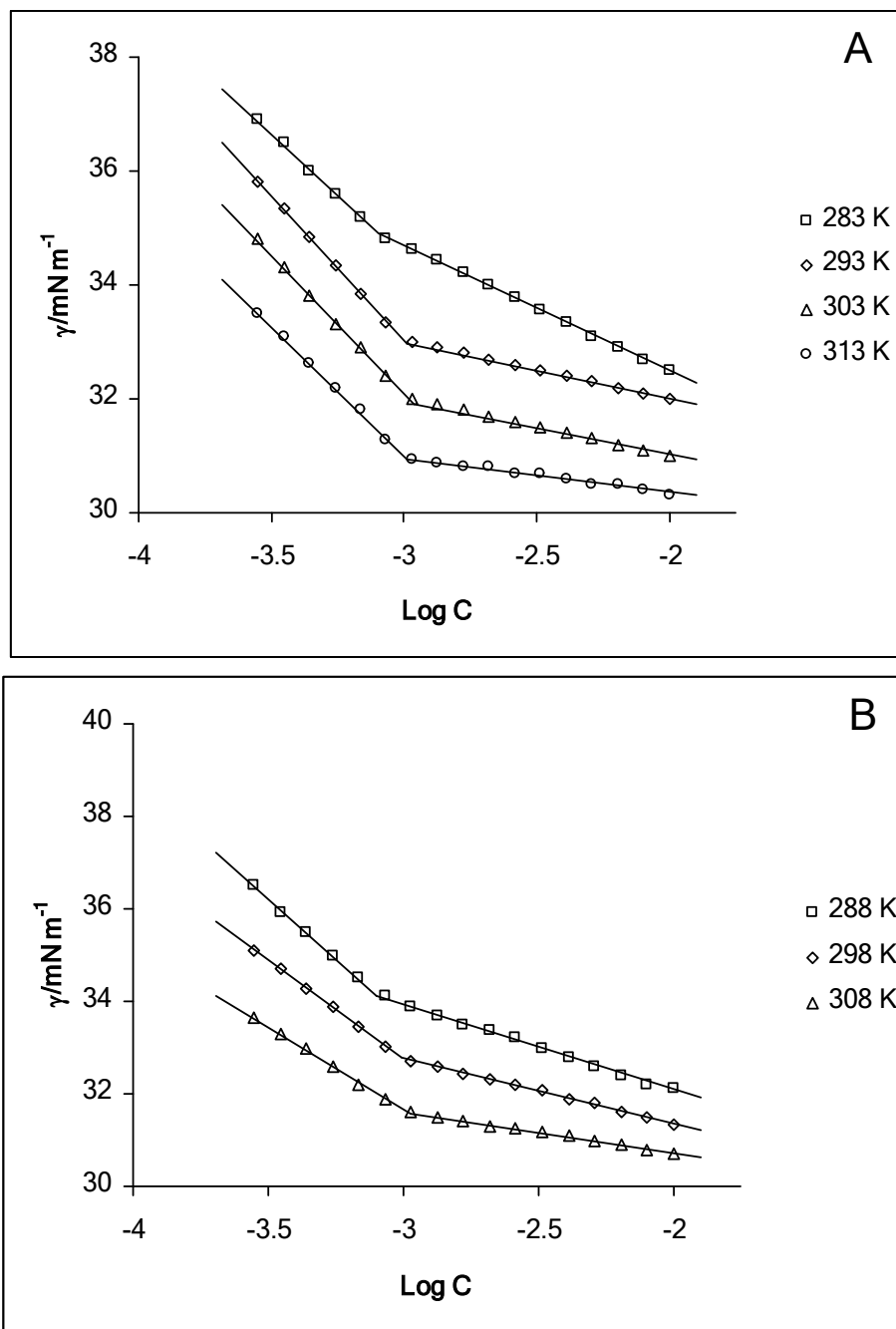


Figure 3.8: Surface tension, γ , of Tetrabutylammonium dodecyl benzene sulfonate (TBADBS) in aqueous solution as a function of the logarithm of the surfactant concentration at different temperatures (A: temperature 283K, 293K, 303K, 313K), (B: temperature 288K, 298K, 308K).

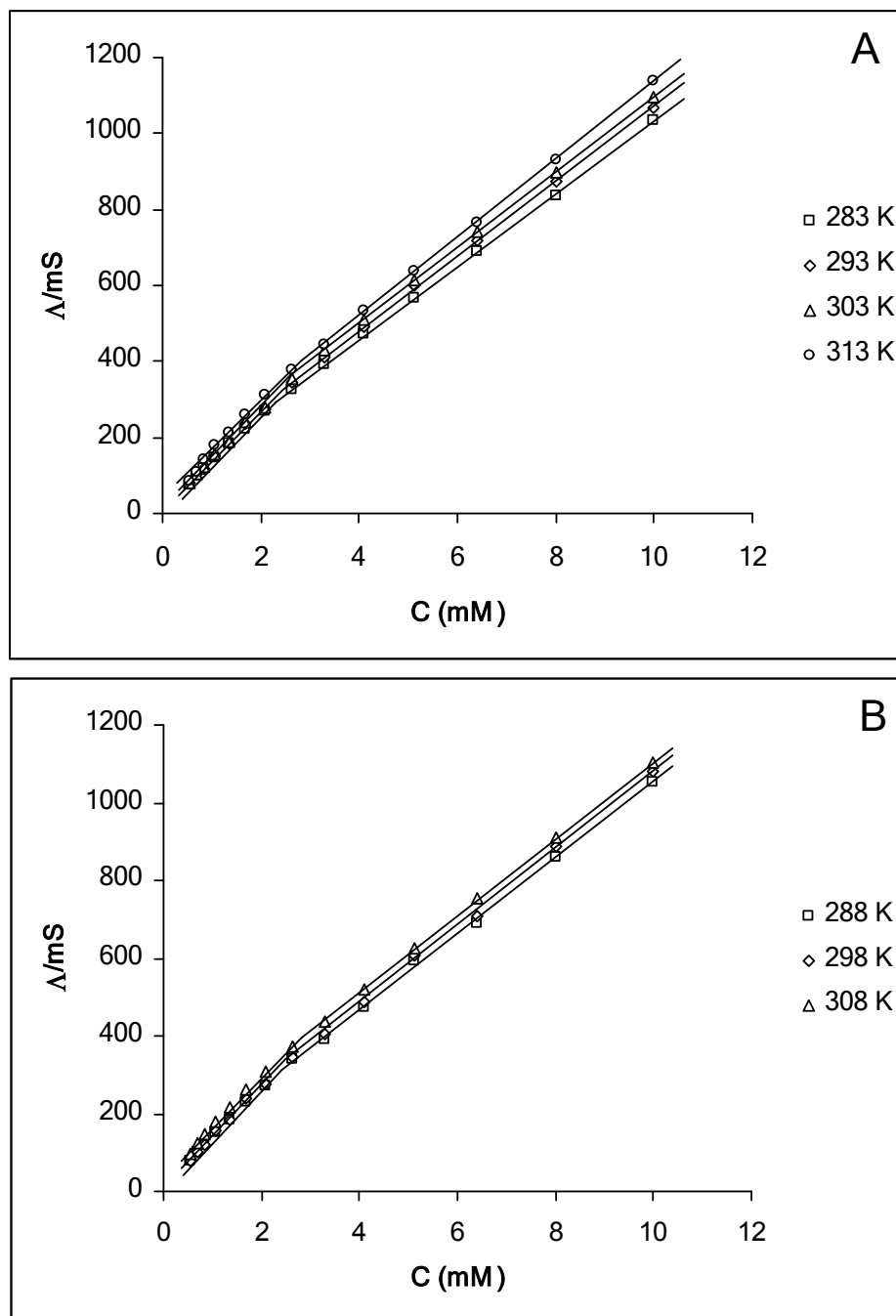


Figure 3.12: Conductance, Λ , of Ammonium dodecyl benzene sulfonate (ADBS) in aqueous solution as a function of the surfactant concentration at different temperatures (A: temperature 283K, 293K, 303K, 313K), (B: temperature 288K, 298K, 308K).

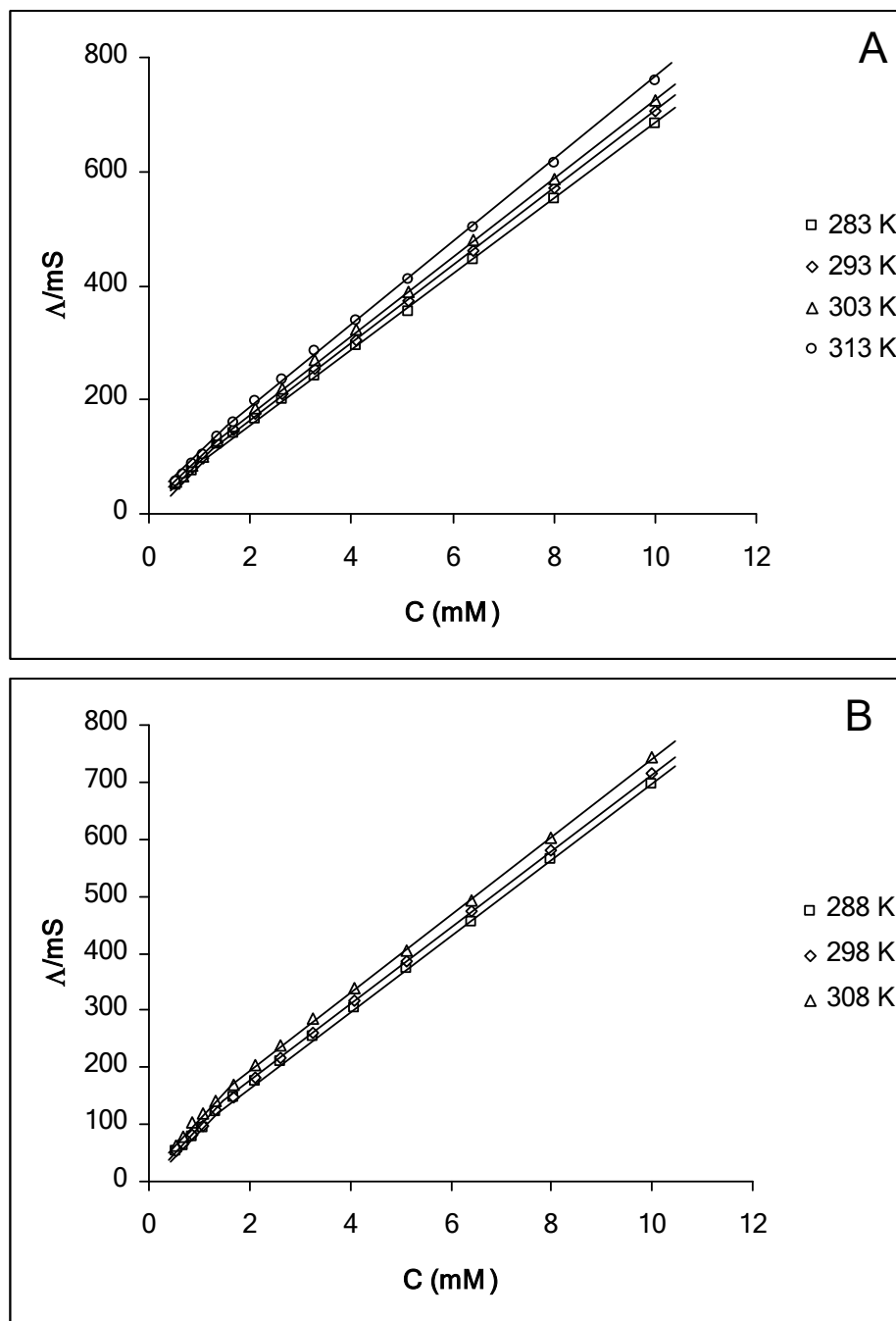


Figure 3.13: Conductance, Λ , of Tetramethylammonium dodecyl benzene sulfonate (TMADBS) in aqueous solution as a function of the surfactant concentration at different temperatures (A: temperature 283K, 293K, 303K, 313K), (B: temperature 288K, 298K, 308K).

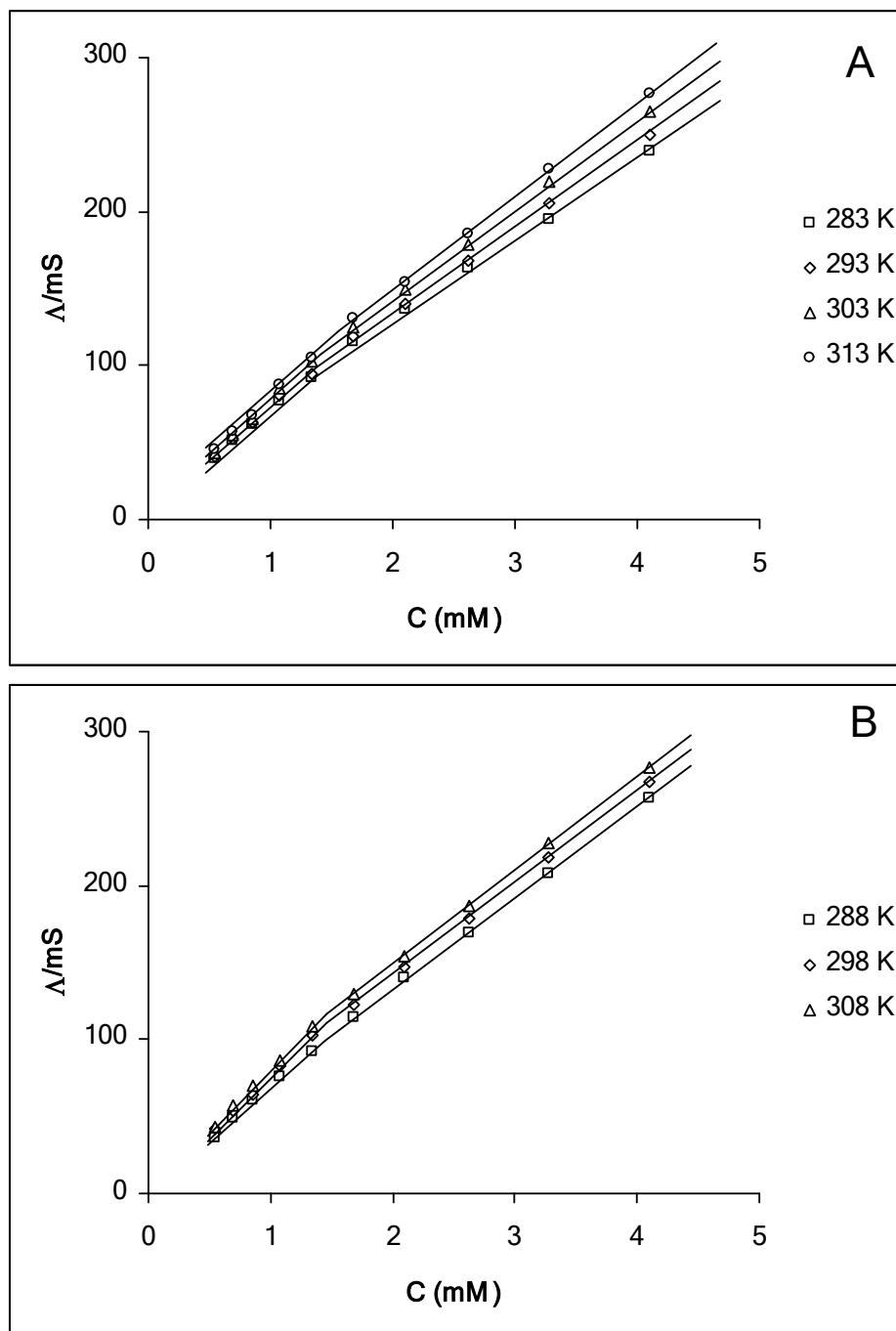


Figure 3.14: Conductance, Λ , of Tetraethylammonium dodecyl benzene sulfonate (TEADBS) in aqueous solution as a function of the surfactant concentration at different temperatures (A: temperature 283K, 293K, 303K, 313K), (B: temperature 288K, 298K, 308K).

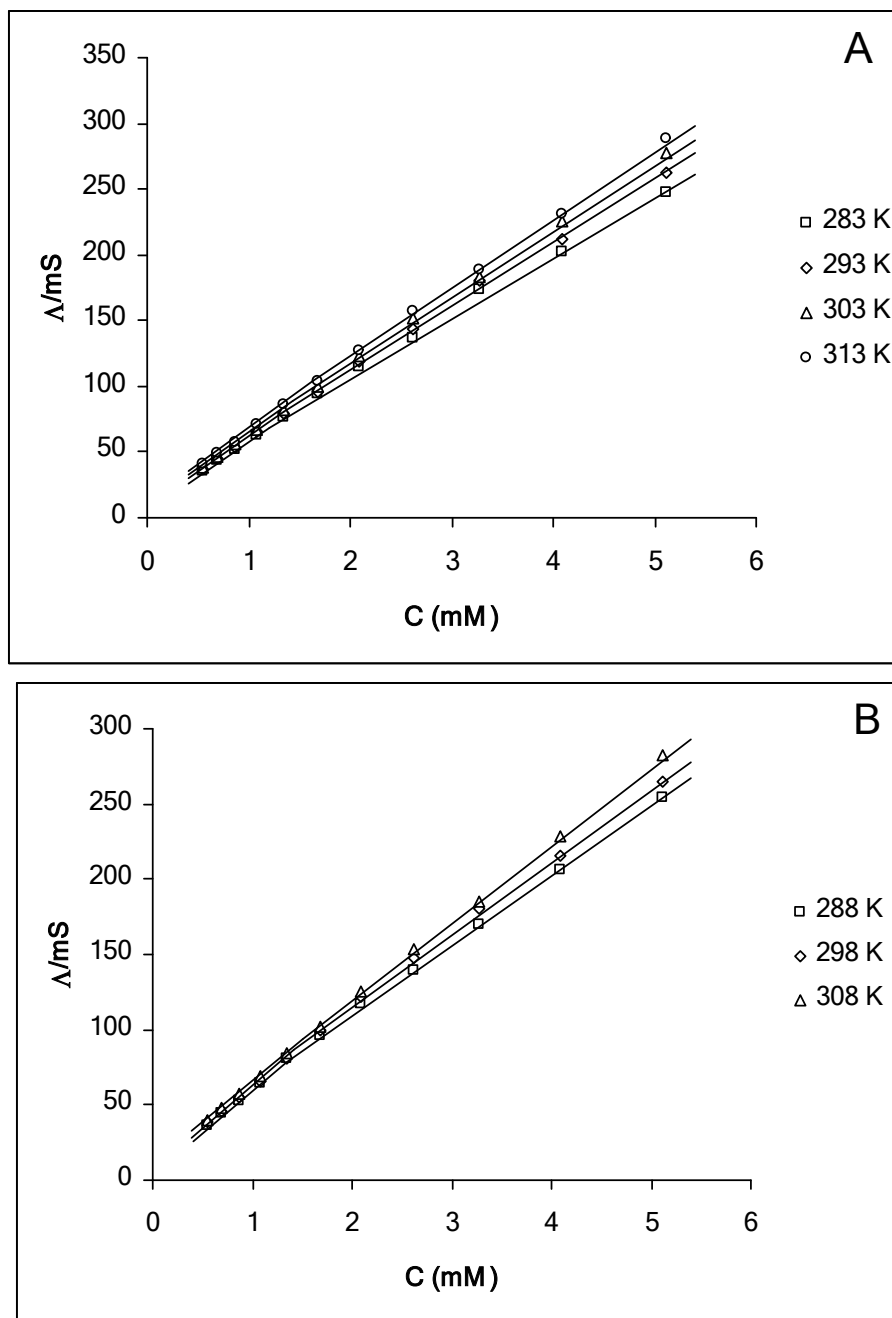


Figure 3.15: Conductance, Δ , of Tetrapropylammonium dodecyl benzene sulfonate (TPADBS) in aqueous solution as a function of the surfactant concentration at different temperatures (A: temperature 283K, 293K, 303K, 313K), (B: temperature 288K, 298K, 308K).

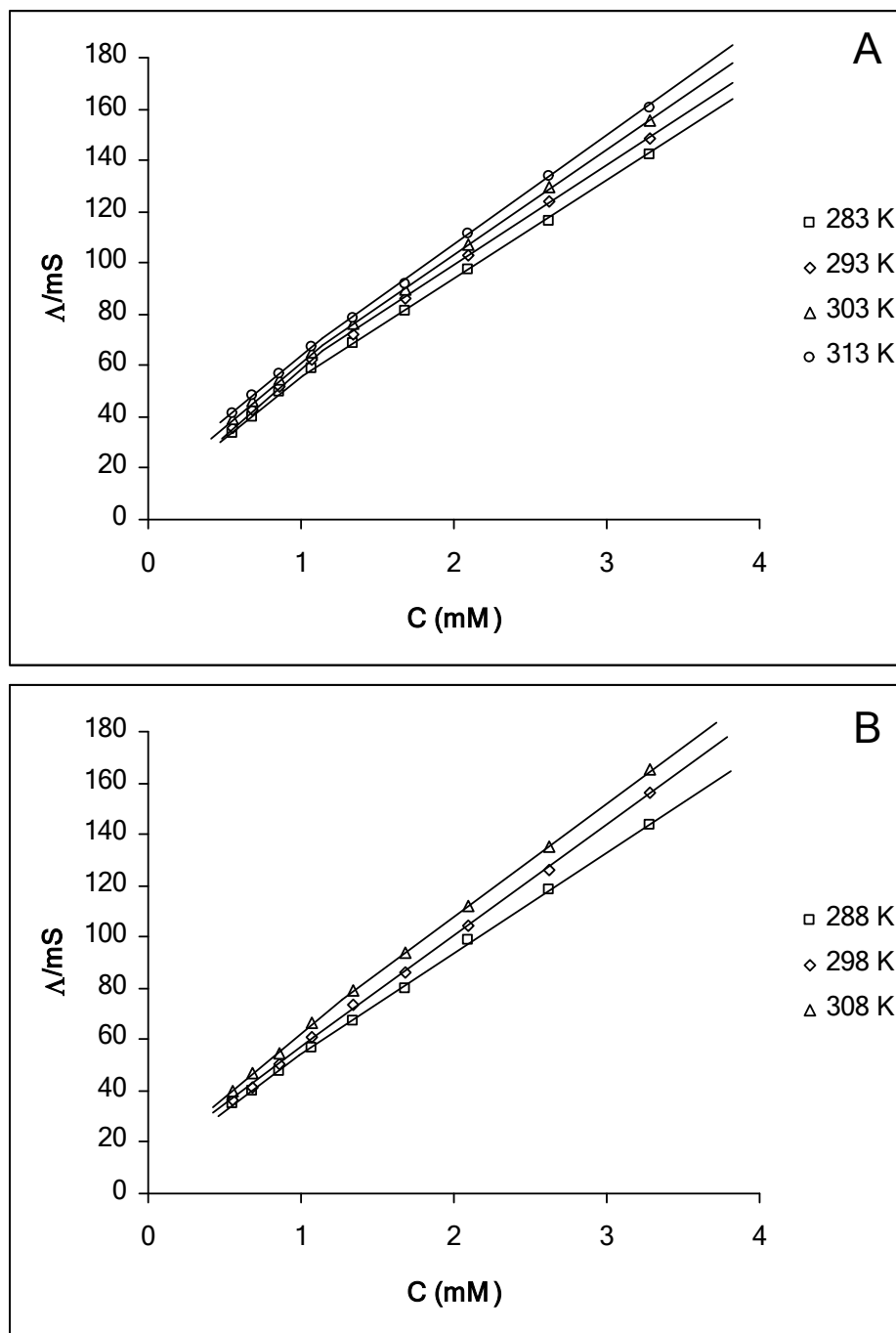


Figure 3.16: Conductance, Λ , of Tetrabutylammonium dodecyl benzene sulfonate (TBADBS) in aqueous solution as a function of the surfactant concentration at different temperatures (A: temperature 283K, 293K, 303K, 313K), (B: temperature 288K, 298K, 308K).

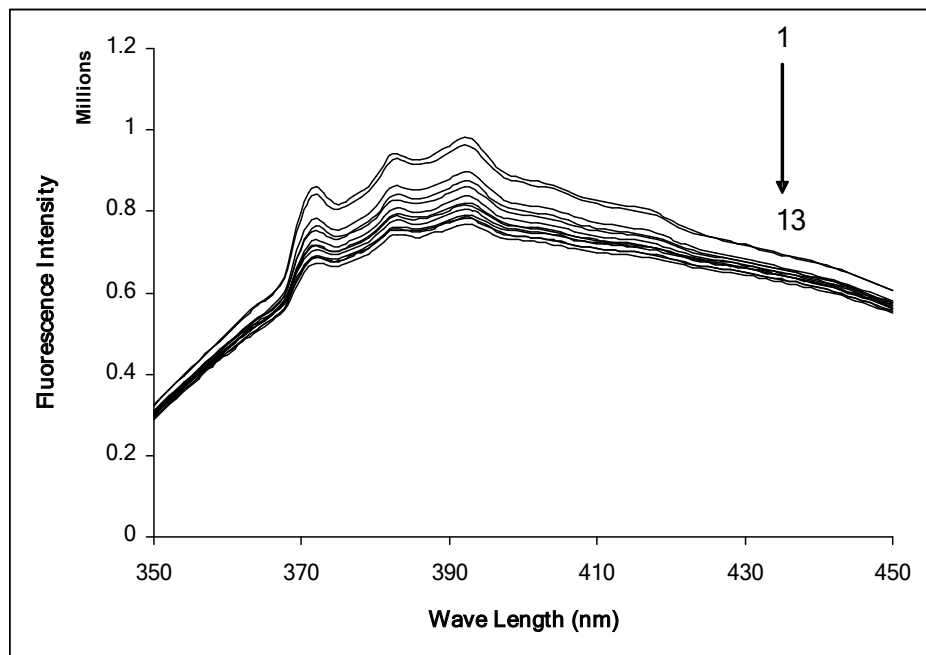


Figure: Fluorescence Spectra of Ammonium dodecyl benzene sulfonate with different concentration of CPC in mM (1) 0.0 mM (2) 0.0054 mM (3) 0.105 mM (4) 0.152 mM (5) 0.196 mM (6) 0.237 mM (7) 0.276 mM (8) 0.312 mM (9) 0.346 mM (10) 0.379 mM (11) 0.409 mM (12) 0.438 mM (13) 0.466 mM

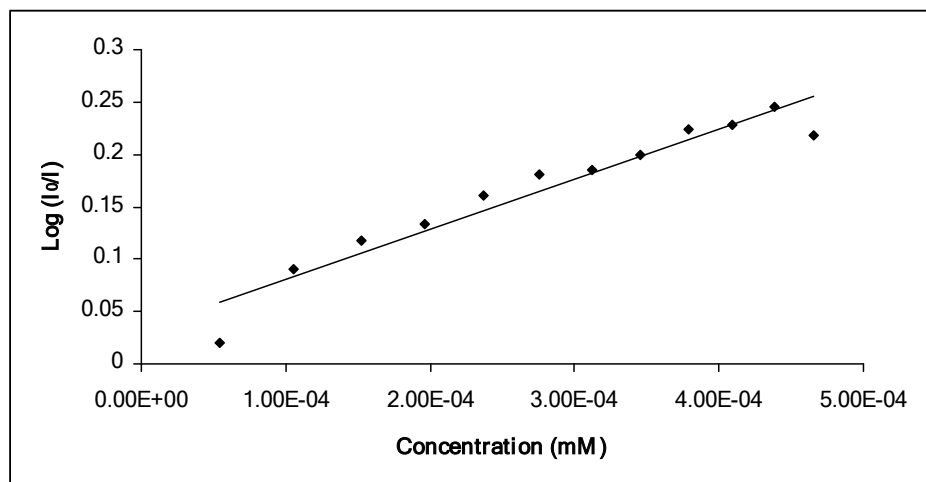


Figure: $\text{Log}(I_0/I)$ Vs Concentration (mM) plot of Ammonium dodecyl benzene sulfonate.

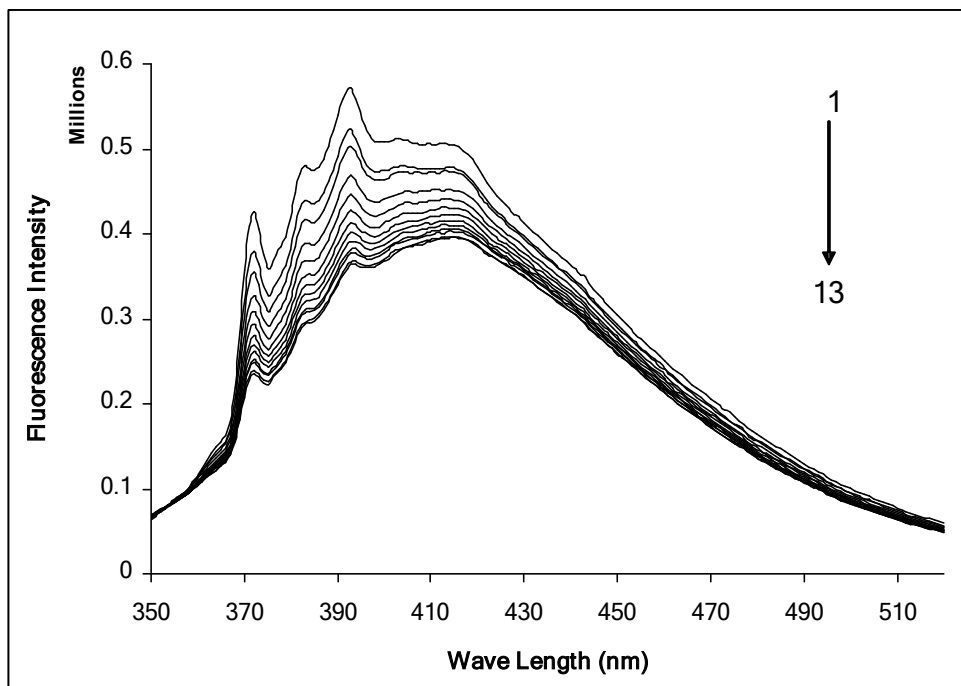


Figure: Fluorescence Spectra of Tetramethyl ammonium dodecyl benzene sulfonate with different concentration of CPC in mM (1) 0.0 mM (2) 0.0054 mM (3) 0.105 mM (4) 0.152 mM (5) 0.196 mM (6) 0.237 mM (7) 0.276 mM (8) 0.312 mM (9) 0.346 mM (10) 0.379 mM (11) 0.409 mM (12) 0.438 mM (13) 0.466 mM

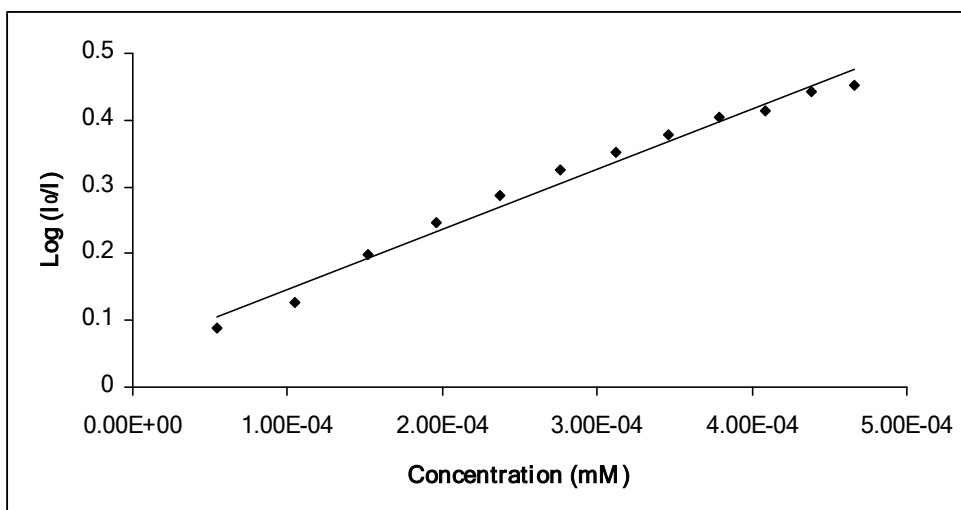


Figure: Log (I_0/I) Vs Concentration (mM) plot of Tetramethyl ammonium dodecyl benzene sulfonate.

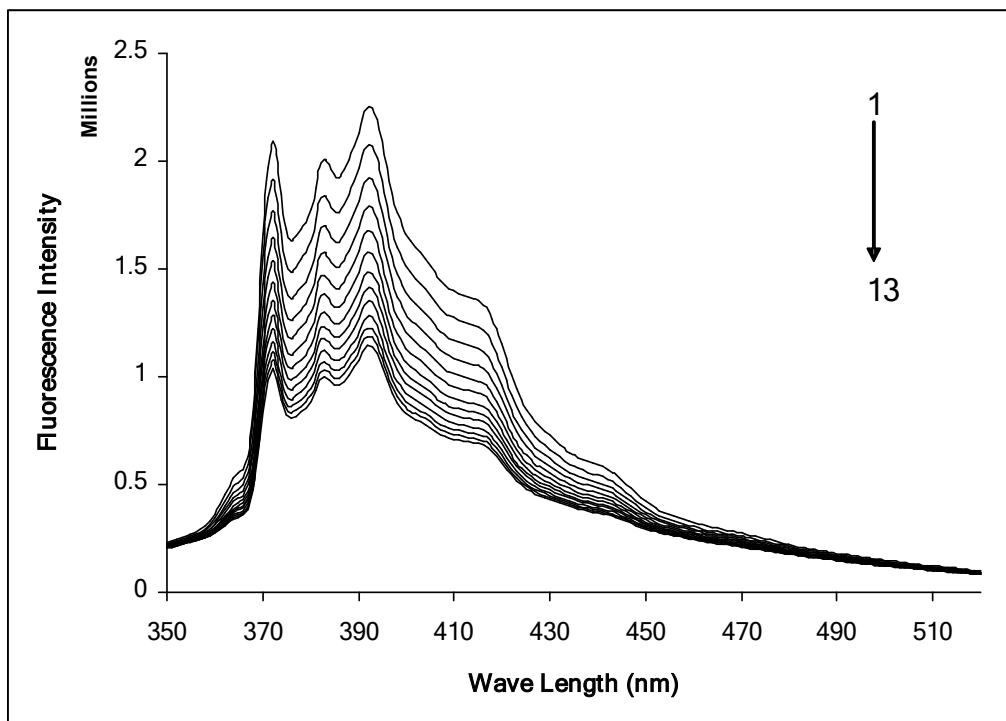


Figure: Fluorescence Spectra of Tetrapropyl ammonium dodecyl benzene sulfonate with different concentration of CPC in mM (1) 0.0 mM (2) 0.0054 mM (3) 0.105 mM (4) 0.152 mM (5) 0.196 mM (6) 0.237 mM (7) 0.276 mM (8) 0.312 mM (9) 0.346 mM (10) 0.379 mM (11) 0.409 mM (12) 0.438 mM (13) 0.466 mM

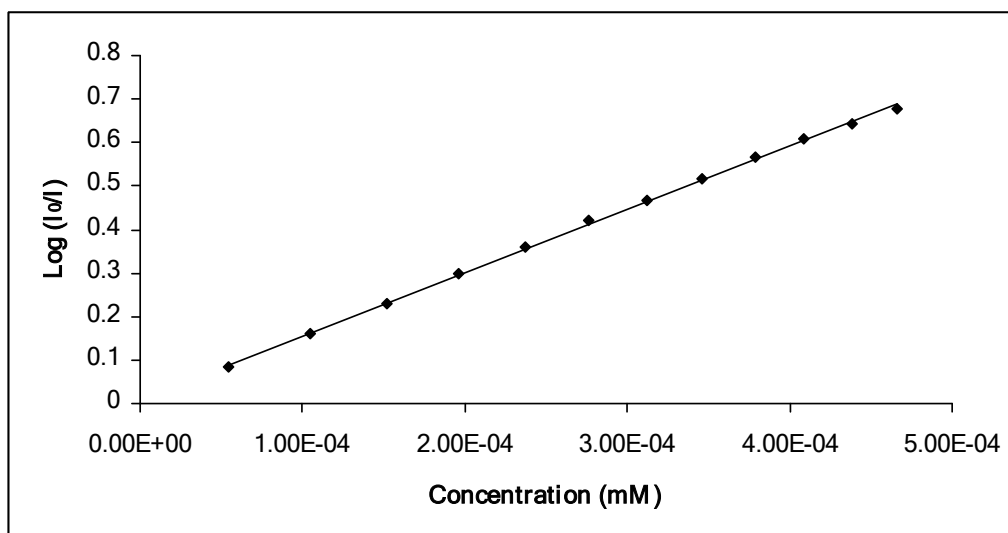


Figure: $\text{Log}(I_0/I)$ Vs Concentration (mM) plot of Tetrapropylammonium dodecyl benzene sulfonate.

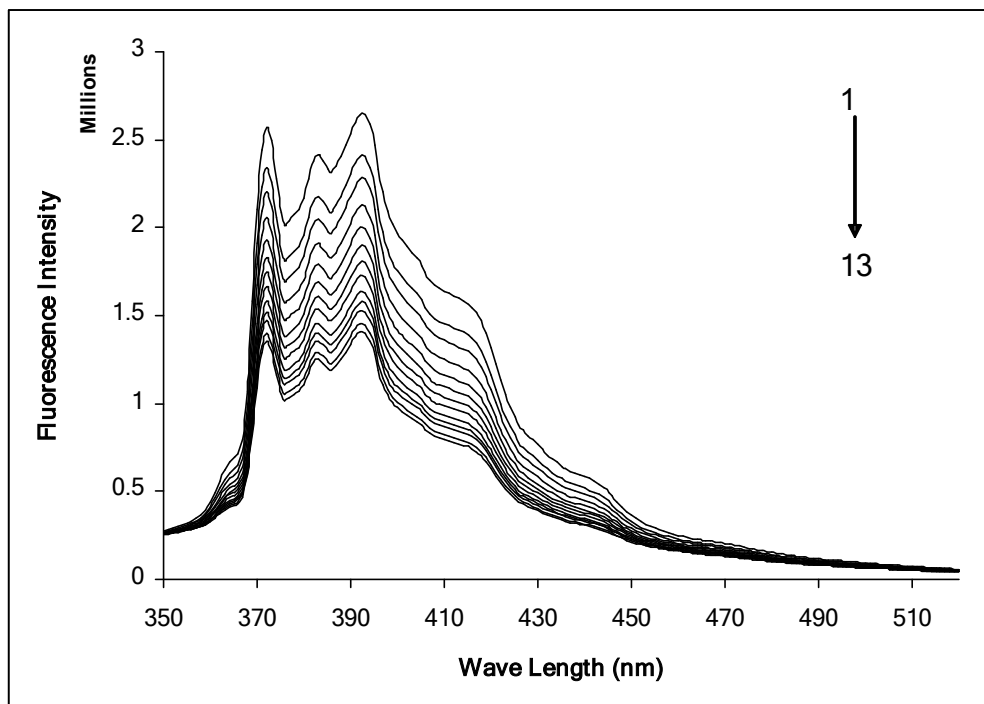


Figure: Fluorescence Spectra of Tetrabutyl ammonium dodecyl benzene sulfonate with different concentration of CPC in mM (1) 0.0 mM (2) 0.0054 mM (3) 0.105 mM (4) 0.152 mM (5) 0.196 mM (6) 0.237 mM (7) 0.276 mM (8) 0.312 mM (9) 0.346 mM (10) 0.379 mM (11) 0.409 (12) 0.438 mM (13) 0.466 mM

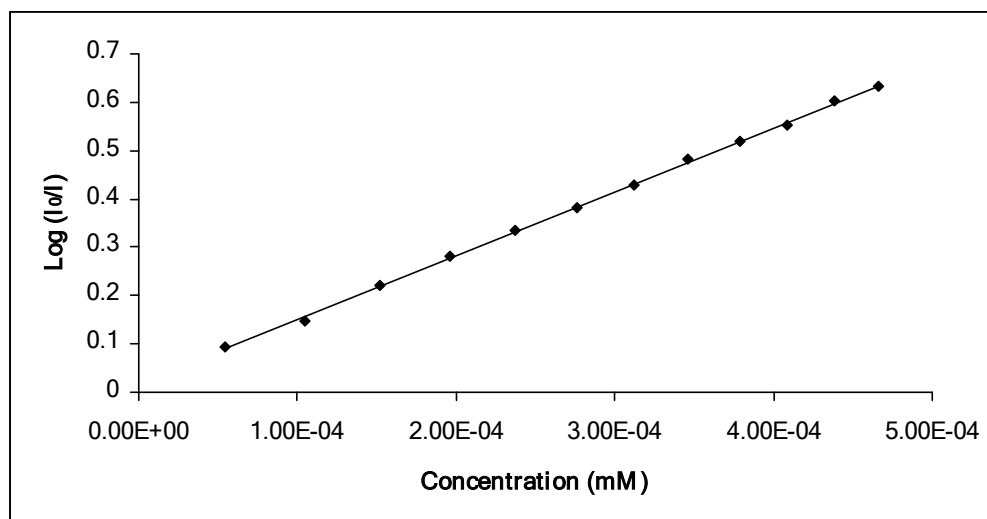


Figure: Log (I_0/I) Vs Concentration (mM) plot of Tetrabutyl ammonium dodecyl benzene sulfonate.