Electronic Supplementary Material (ESI) for New Journal of Chemistry
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Supporting Information

A Novel Polythiophene Derivative as a Sensitive Colorimetric and Fluorescent Sensor for Anionic Surfactants in Water

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Figure S1. Normalized Absorption and Fluorescence spectra of PTCA-Cl in water

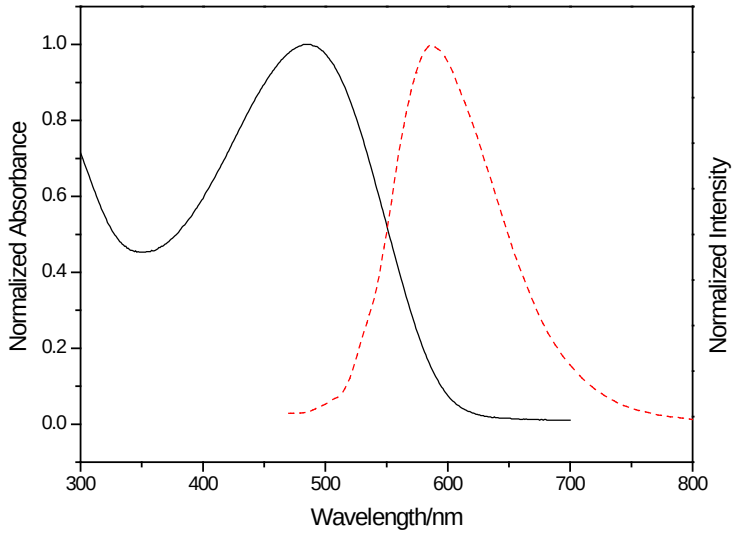

Figure. S2 Colorimetric response of PTCA-Cl (0.2 mM) in water induced by the addition of different amounts of anionic surfactants as indicated.

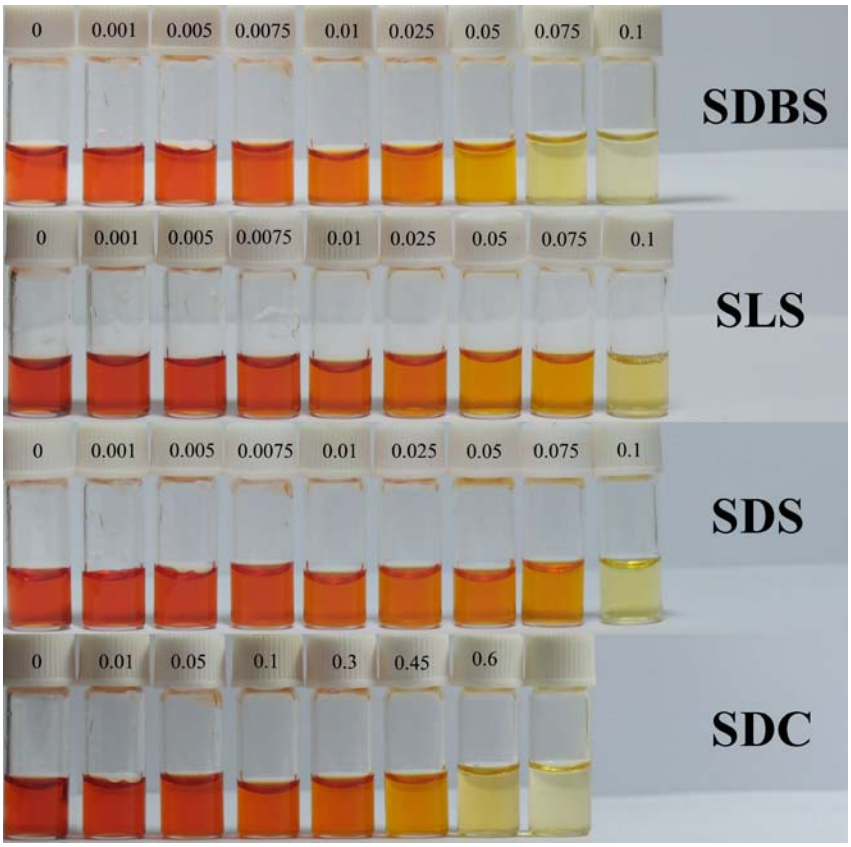

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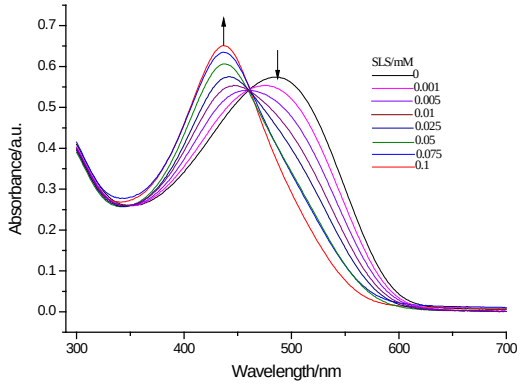
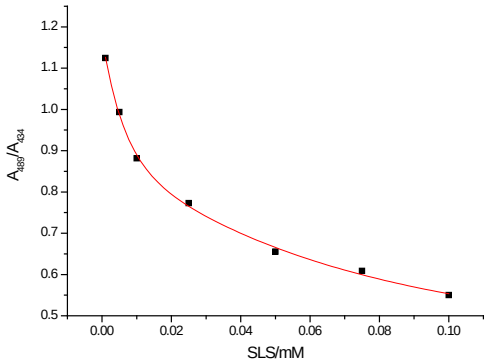
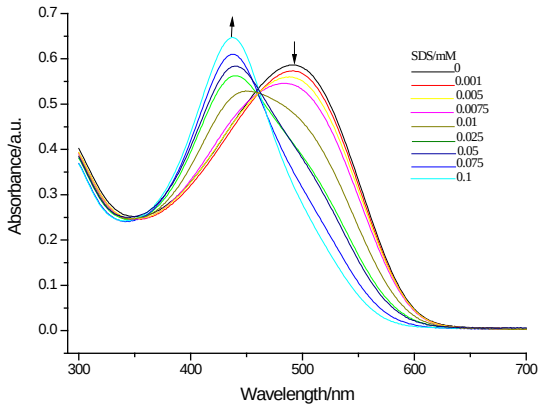
Figure. S3 Variation in the absorption spectra of PTCA-Cl (0.2mM) in water with increasing concentrations of SDS, SLS and SDC and the relationship between (A_{489}/A_{434}) and various concentrations of SDS, SLS and SDC.







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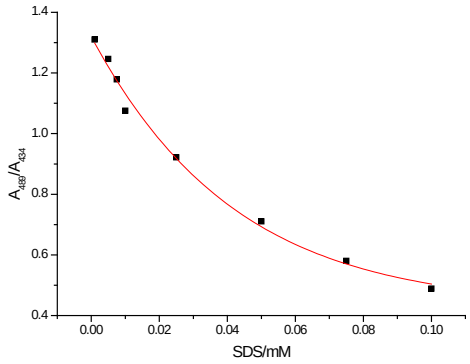

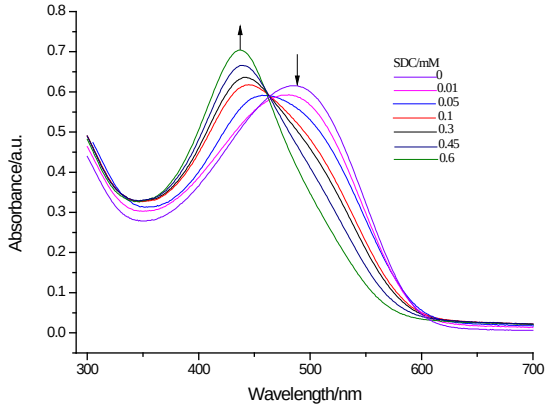

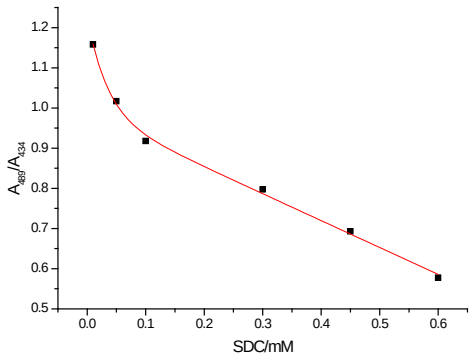

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Figure S4. Temperature-dependent absorption spectra of PTCA-Cl (0.2 mM) in water.

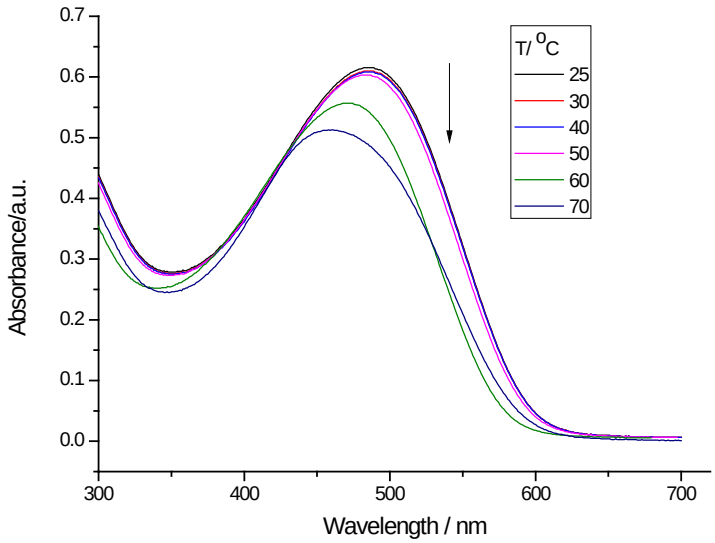
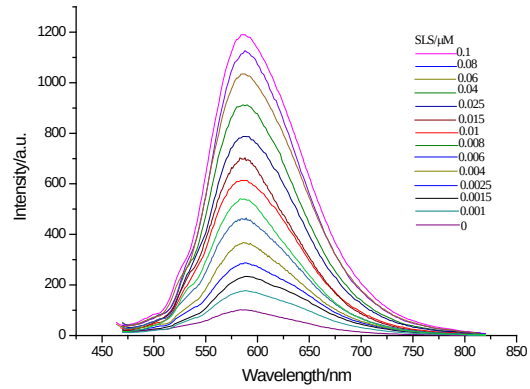


Figure. S5 Emission spectra of PTCA-Cl in the absence and the presence of increasing amounts of SLS and SDS. Excitation wavelength: 450 nm.



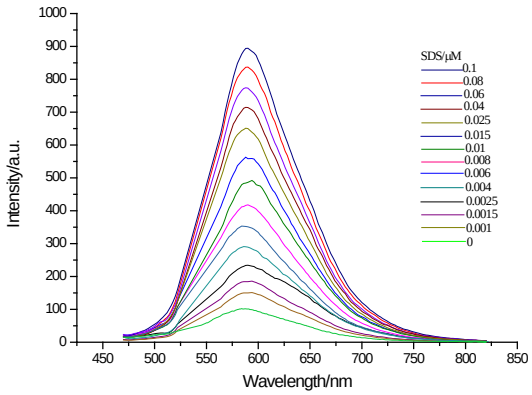


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Figure S6 Variation in the absorption spectra of PTCA-Cl (0.2mM) in water with increasing concentrations of $BF4^-$