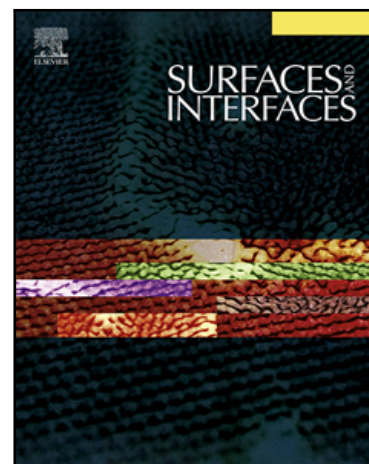


Effect of ionic and nonionic surfactants on the phase behaviour and physicochemical characteristics of pseudoternary systems involving polyoxyethylene(20)sorbitan monooleate

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Highlights

- The microemulsion formed from Tween-80 alone and its mixture with Tween-20, CTAB or SDS were investigated.
- Significant changes in physicochemical properties of the mixed microemulsion were observed in comparison to the single surfactant microemulsion.
- In mixed systems the increase in compatibility of hydrocarbon chains and the decrease in residual surface charge were envisaged.
- The DLS studies revealed the decrease in size and increase of the surface charge of microdroplet on using surfactant mixture.
- The pyrene experienced a more nonpolar environment in the mixed microemulsion than aqueous micelles as divulged from fluorescence studies.

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