

Study of structure of water nanodroplets of AOT reverse microemulsions via molecular probe

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The microenvironment of reverse microemulsions prepared on the basis of anionic sodium bis (2-ethylhexyl) sulfosuccinate has been studied by ultraviolet-visible spectroscopy using o-nitroaniline as an optical probe. The influence of lithium salts additives on the absorption electronic spectra of the molecular probe in the conditions of water/surfactant molar ratio ($W=2$) and n-octane as an oil phase has been investigated. The binding constants of the molecular probe to the reverse micelles have been determined.