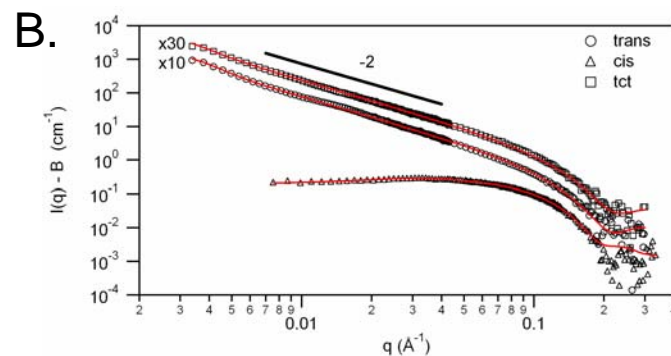
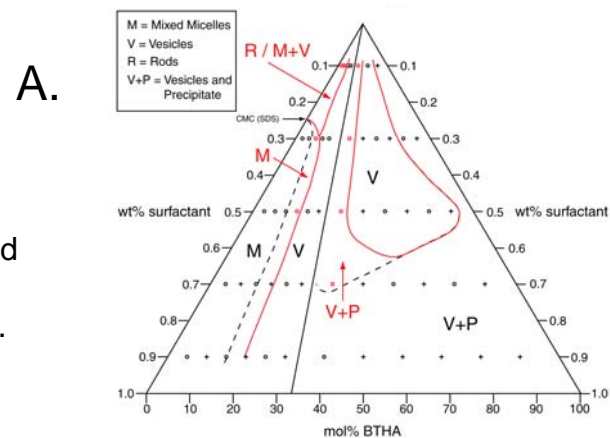
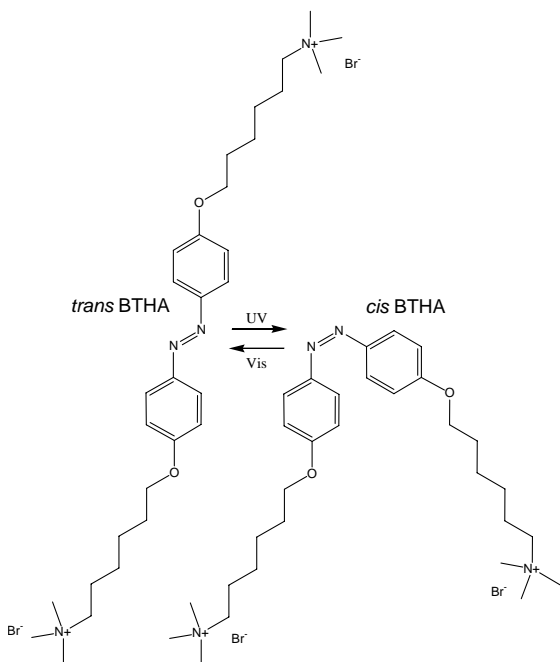


Equilibrium and Dynamic Properties of a Photosensitive Surfactant System

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This research is focused on the light-sensitive surfactant BTHA (below), and investigations of the nanostructure and phase diagram of this surfactant when mixed with anionic surfactants such as sodium dodecylsulfate (SDS).



(A) Phase diagram of BTHA/SDS mixtures with *trans*-BTHA (black) or *cis*-BTHA (red). (B) SANS data for solutions containing 0.3wt% total surfactant and 15mol% BTHA / 85mol% SDS, before (*trans*, indicating presence of vesicles) and after isomerization with UV light (*cis*, indicating presence of micelles), and after isomerization with UV and then visible light (tct, indicating recovery of vesicles). The solid lines represent form factor fits.