

THE INTERACTION BETWEEN ANIONIC SURFACTANTS AND GELATIN IN AQUEOUS SOLUTIONS

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The interaction between certain pairs of synthetic polymers and surfactants in aqueous solution has been studied widely. These systems are of inherent scientific interest since useful properties are imparted from both the polymer (rheological control, stability enhancement) and surfactant (surface tension lowering, wetting). Our interest has focused on the natural polymer, gelatin. Gelatin is a proteinacious material and over a wide range of pH, it behaves a polyampholyte. The presence of charges of both types gives rise to strong attractive and repulsive interactions between the gelatin and anionic surfactants. Gelatin also has both hydrophilic and hydrophobic, uncharged residues. Recent viscosity, fluorescence, NMR and EPR studies on the interaction between gelatin and anionic surfactants, principally sodium dodecylsulphate will be presented. Some preliminary data on polymer / mixed surfactant systems will also be shown.

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