

Air-water interface interaction of anionic, cationic, and non-ionic surfactants with a coagulant protein extracted from *Moringa oleifera* seeds studied using surface tension probe

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Abstract

The interaction of coagulating protein extracted from *Moringa oleifera* seeds with the anionic surfactant sodium bis (2-ethyl-1-hexylsulfosuccinate (AOT), the cationic surfactant hexadecylpyridinium chloride (HDPC) and non-ionic surfactant Triton X-100 (TX-100) were investigated by surface tension measurement. The protein extract interacts strongly with anionic surfactant AOT suggesting that the former is cationic under conditions studied. HDPC exhibits mild interaction with protein extract whereas the interaction with Triton X-100, if any, could not be detected by this technique.

Keywords: coagulant protein, critical aggregation concentration, critical micelle concentration, protein-surfactant interaction, surface activity, surface tension