

Surface Tension and Beyond: Physics of Liquid Interfaces

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Abstract: *Surface tension is a fundamental property of liquids, arising from the differences in intermolecular forces acting on surface molecules compared to those in the liquid's interior. This research explores the significance of surface tension, various measurement techniques, methods for reducing surface tension, and the adsorption of particles at surfaces to stabilize emulsions. It also examines the influence of Gibbs free energy on surface tension and the relationship between density gradient theory and interfacial tension.*

Keywords: Gibbs free energy, Density gradients, surfactant and Meniscus.

