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3.1 Thermodynamics of Micellisation3.1.1 Kinetic Aspects; 3.1.2 Equilibrium Aspects: Thermodynamics of Micellisation; 3.2 Enthalpy and Entropy of Micellisation; 3.2.1 Driving Force for Micelle Formation; 3.2.2 Micellisation in Surfactant Mixtures (Mixed Micelles); References; Chapter 4 Dispersants and Polymeric Surfactants; 4.1 Solution Properties of Polymeric Surfactants; 4.2 General Classification of Polymeric Surfactants; 4.3 Polyelectrolytes; References; Chapter 5 Adsorption of Surfactants at the Air/Liquid, Liquid/Liquid, and Solid/Liquid Interfaces; 5.1 Introduction
5.2 Adsorption of Surfactants at the Air/Liquid (A/L) and Liquid/Liquid (L/L) Interfaces5.3 The Gibbs Adsorption Isotherm; 5.4 Equation of State Approach; 5.5 The Langmuir, Szyszkowski, and Frumkin Equations; 5.6 Interfacial Tension Measurements; 5.6.1 The Wilhelmy Plate Method; 5.6.2 The Pendant Drop Method; 5.6.3 The Du Nouy's Ring Method; 5.6.4 The Drop Volume (Weight) Method; 5.6.5 The Spinning Drop Method; 5.7 Adsorption of Surfactants at the Solid/Liquid (S/L) Interface; 5.7.1 Adsorption of Ionic Surfactants on Hydrophobic Surfaces
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6.4.2 Kinetics of Polymer Adsorption

Sommario/riassunto

This book presents comprehensively the science and technology behind the formulation of disperse systems like emulsions, suspensions, foams and others. Starting with a general introduction, the book covers a broad range of topics like the role of different classes of surfactants, stability of disperse systems, formulation of different dispersions, evaluation of formulations and many more. Many examples are included, too. Written by the experienced author and editor Tharwart Tadros, this book is indispensable for every scientist working in the field.