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""Determination of surfactant adsorption densities""""Industrial Report: Soil microstructure, permeability and interparticle forces""; ""Sample problems""; ""Experiment 3.1: Adsorption of acetic acid on to activated charcoal""; ""4 Surfactants and Self-assembly""; ""Introduction to surfactants""; ""Common properties of surfactant solutions""; ""Thermodynamics of surfactant self-assembly""; ""Self-assembled surfactant structures""; ""Surfactants and detergency""; ""Industrial Report: Colloid science in detergency""; ""Sample problems""; ""Experiment 4.1: Determination of micelle ionization"" ""5 Emulsions and Microemulsions""""The conditions required to form emulsions and microemulsions""; ""Emulsion polymerization and the production of latex paints""; ""Photographic emulsions""; ""Emulsions in food science""; ""Industrial Report: Colloid science in foods""; ""Experiment 5.1: Determination of the phase behaviour of microemulsions""; ""Experiment 5.2: Determination of the phase behaviour of concentrated surfactant solutions""; ""6 Charged Colloids""; ""The formation of charged colloids in water""; ""The theory of the diffuse electrical double-layer""; ""The Debye length"" ""Retarded forces""

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### Sommario/riassunto

Applied Colloid and Surface Chemistry is a broad introduction to this interdisciplinary field. Taking a genuinely applied approach, with applications drawn from a wide range of industries, this book will meet the demands of the student and professional currently working in the field. The text includes keynote sections written by practicing industrial research scientists, bringing to the reader a wealth of real industrial examples. These examples range from water treatment through to soil management as well as examples taken from the coatings and photographic industries. To aid accessibility,

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