

CONTENTS OF VOLUME 2

PART IV: REACTIONS IN MICELLES AND MICELLAR CATALYSIS
IN AQUEOUS MEDIA

The Kinetic Theory and the Mechanisms of Micellar Effects on Chemical Reactions K. Martinek, A. K. Yatsimirski, A. V. Levashov and I. V. Berezin	
A General Kinetic Theory of Rate Enhancements for Reactions between Organic Substrates and Hydrophilic Ions in Micellar Systems L. S. Romsted	
Laser Photolysis Studies of Photo Redox Processes in Micellar Solutions M. Grätzel.	
Radiation-Induced Redox Reactions in Micellar Solutions A.J. Frank.	549
Radiation-Induced Processes in Nonionic Micelles K. Kalyanasundaram and J. K. Thomas	569
Radiation-Induced Peroxidation in Fatty Acid Soap Micelles L. K. Patterson and J. L. Redpath	589
Bifunctional Micellar Catalysis R. A. Moss, R. C. Nahas, and S. Ramaswami	603
The Use of Phase Transfer Catalysts with Emulsion and Micelle Systems in Electro-Organic Synthesis T. C. Franklin and T. Honda	617
The Catalytic Role of Micelle-Bisulfite Complexation in Vinyl Polymerization O.-K. Kim	627
Discussion	645

PART V: REACTIONS IN MICELLES AND MICELLAR CATALYSIS
IN NONAQUEOUS MEDIA

Some Kinetic Studies in the Reversed Micellar System- Aerosol OT (Diisooctyl Sulfosuccinate)/H ₂ O/ Heptane Solution M. Wong and J. K. Thomas.	647
Catalysis by Cations in Cores of Non-Aqueous Micelles F. M. Fowkes, D. Z. Becher, M. Marmo, C. Silebi and C. C. Chao.	
Solubilization and Catalysis of Polar Substances in Nonaqueous Constant Solutions A. Kit and K. Kan-no	
Ligand Exchange Reactions of Hemin and Vitamin B _{12a} in the Presence of Surfactants in Water and in Nonpolar Solvents J. H. Fendler	
Discuss:	

PART VI: MICROEMULSIONS

Theory for the Phase Behavior of Microemulsions M. L. Robbins	
Stability, Phase Equilibria, and Interfacial Free Energy in Microemulsions I. Ruckenstein.	
Light Scattering of a Concentrated W/O Micro Emulsion; Application of Modern Fluid Theories A. J. Caljé, W. G. M. Agterof and A. Vrij	
Microemulsions Containing Ionic Surfactants S. Friberg and I. Buraczewska	791
Interactions and Reactions in Microemulsions R. A. Mackay, K. Letts, and C. Jones.	807
Discussion	817

PART VII. GENERAL PAPERS

Mixed Micelles of Methyl Orange Dye and Cationic Surfactants R. L. Reeves and S. A. Harkaway.	819
Anionic Surfactant Complexes with Charged and Uncharged Cellulose Ethers E. D. Goddard and R. B. Hannan	835
Proposal for a New Theory of Molecular Transport across Membranes: Implications for Lung Gas Transference B. Ecanow, B. H. Gold, R. Balagot, and R. S. Levinson.	847
Interfacial Tension Minima in Two-Phase Micellar Systems E. Franses, M. S. Bidner and L. E. Scriven	855
Equilibrium Bicontinuous Structures L. E. Scriven.	877
Intramacromolecular Micelles U. P. Strauss.	
Solubilization by Nonionic Surfactants in the HLB- Temperature Range S. Friberg, I. Buraczewska, and J. C. Ravey.	901
The Effect of Lysoplasmalogen on Some Physical Properties of Dipalmitoyllecithin Bilayers: A Fluorescent Probe Study D. A. N. Morris and J. K. Thomas	913
Concluding Remarks.	
About the Contributors.	931
Subject Index	

CONTENTS OF VOLUME 1

PART I: GENERAL PAPERS

The Wide World of Micelles K. L. Mittal and P. Mukerjee	
Micelles - Retrospect and Prospect G. S. Hartley	23
Micellization, Solubilization, and Microemulsions L. M. Prince.	45
Biological Implications of Micelle Formation A. T. Florence.	55
Fluorescent Probes for Micellar Systems N. J. Turro, M. W. Geiger, R. R. Hautala and N. E. Schore.	75
Micellar Solutions for Improved Oil Recovery V. K. Bansal and D. O. Shah	87
Discussion . .	

PART II. THERMODYNAMICS AND KINETICS OF MICELLIZATION
IN AQUEOUS MEDIA

Thermodynamics of Micellization of Simple Amphiphiles in Aqueous Media C. Tanford	
Thermodynamics of Amphiphilar Aggregation into Micelles and Vesicles E. Ruckenstein and R. Nagarajan	
Thermodynamics of Micelle Formation K. S. Birdi	151

Size Distribution of Micelles: Monomer-Micelle Equilibrium, Treatment of Experimental Molecular Weight Data, the Sphere-to-Rod Transition and a General Association Model P. Mukerjee	171
Ionic Interactions in Amphiphilic Systems Studied by NMR B. Lindman, G. Lindblom, H. Wennerström and H. Gustavsson	195
Errors in Micellization Enthalpies from Temperature Dependence of Critical Micelle Concentrations N. Muller	
The Nature of the Local Microenvironments in Aqueous Micellar Systems P. Mukerjee, J. R. Cardinal, and N. R. Desai. .	
The Influence of Hydrophobic Counterions on the Thermodynamics and Kinetics of Ionic Micelles H. Hoffmann, H. Nüsslein and W. Ulbricht.	263
On the Use of Chemical Relaxation Methods to Distinguish between True Micellization and Continuous Association R. Zana, J. Lang, S. H. Yiv, A. Djavanbakt and C. Abad	291
Kinetic Study on Micellization of Ionic Surfactants by Means of Relaxation Methods K. Takeda, T. Yasunaga and H. Uehara.	305
On the Kinetics of Redistribution of Micellar Sizes M. Almgren, E. A. G. Aniansson, S. N. Wall and K. Holmäter	329
Ultrasonic Relaxation Studies Associated with Monomer-Micelle Exchange Processes W. J. Gettins, J. E. Rassing and E. Wyn-Jones	347
The Size, Shape and Thermodynamics of Sodium Dodecyl Sulfate (SDS) Micelles using Quasielastic Light Scattering Spectroscopy N. A. Mazer, M. C. Carey and G. B. Benedek.	359
Quasielastic Light Scattering Spectroscopic Studies of Aqueous Bile Salt, Bile Salt-Lecithin and Bile Salt-Lecithin-Cholesterol Solutions N. A. Mazer, R. F. Kwasnick, M. C. Carey and G. B. Benedek	

CONTENTS OF VOLUME

Quasielastic Laser Spectrometry Studies of Pure Bile Salt
and Bile Salt-Mixed Lipid Micellar Systems
R. T. Holzbach, S. Y. Oh, M. E. McDonnell, and
A. M. Jamieson. 403

Discussion 419

PART III. MICELLES IN NONAQUEOUS MEDIA

Micelles in Apolar Media
H. F. Eicke

Aggregation of Surfactants in Hydrocarbons. Incompatibility
of the Critical Micelle Concentration Concept with Experi-
mental Data
A. S. Kertes. 445

Mixed Non-Ionic Detergent Systems in Aqueous and Non-Aqueous
Solvents
I. Lo, F. Madsen, A. T. Florence, J.-P. Treguier,
M. Seiller and F. Puisieux.

Calorimetric Studies of the Micelle Formation in Solutions
of Sodium Octanoate and Water in Aliphatic Alcohols
J. B. Rosenholm, P. J. Stenius and M.-R. Hakala

Discussion 479

Concluding Remarks

About the Contributors xvii

Subject Index. xxv