Publications

Book reviews

Encyclopedia of Emulsion Technology, Vol. 1, Basic Theory, edited by Paul Becher (Marcel Dekker Inc., 270 Madison Ave., New York, NY 10016, 1983, 744 pp., $95).

This book is not, strictly speaking, an encyclopedia, but is encyclopedic in the wealth of information it contains. It is divided into nine chapters written by experts in the field: (1) Liquid/liquid interfaces by T. F. Tadros and B. Vincent; (2) Formation of emulsions by P. Walstra; (3) Emulsion stability by T. F. Tadros and B. Vincent; (4) Microemulsions by S. E. Friberg and R. V. Venable; (5) Phase properties of emulsions, PIT and HLB by K. Shinoda and H. Kunieda; (6) Emulsion droplet size data by C. Orr; (7) Rheological properties of emulsions by P. Sherman; (8) Optical properties of emulsions by R. S. Farinato and R. L. Rowell; (9) Dielectric properties of emulsions and related systems by M. Clausse. The book includes numerous illustrations, tables, etc., and the material is thoroughly referenced. A subject index is supplied but no author index. This volume fills an important gap in the chemical reference literature since it has been 16 years since the publication of the second edition of Paul Becher's "Emulsions, Theory and Practice."

As the editor points out in the preface, he has made a concerted effort to eliminate unnecessary duplications, and, indeed, this reviewer found none. The reader will welcome the chapters on microemulsions and optical properties, which had not been compiled previously. However, there is a wealth of new material found in all nine chapters. The chapters are clearly written and well documented by references, and as mentioned above, carefully reviewed and edited as one might expect of Dr. Becher. The work is an invaluable tool for anyone working in the emulsion technology field as well as for research workers in colloid and surface chemistry. The book contains over 1,500 references apparently through 1980, but the cutoff date may not be uniform for all nine chapters. The work is remarkably free of typographical error. It undoubtedly will be the outstanding reference work in the emulsion field for years to come, and the publication of Volume 2, entitled "Applications of Emulsions," is eagerly awaited.

Detergent Analysis: A Handbook for Cost-Effective Quality Control, by B. M. Milwidsky and D. M. Gabriel (Halsted Press, John Wiley & Sons Inc., 605 Third Ave., New York, NY 10158, 1982, 291 pp., $57.95).

This volume includes chapters with the following headings: introduction, laboratory apparatus, standard solutions and reagents, routine control analysis-rationale and background theory, scheme for routine control analysis, plant control procedures, new materials-development, evaluation and performance tests, raw materials, ecological and environmental considerations, analysis of unknowns. As the authors point out, this book was primarily written for use in quality control and analytical laboratories of small industrial firms. The text serves this purpose and is clearly written to be readily understood by technicians.

The major shortcoming is that the wet chemistry methodology described, for the most part, was developed a generation ago, and any person having worked in the surfactant field for a few years will find little up-to-date information. While the senior author cites much of his own work or that of his former coworkers at Zohar, the authors virtually ignore the Marcel Dekker, Inc., Surfactant Science Series, the Rosen and Goldsmith text on *Systematic Analysis of Surface Active Agents,* the Stache *Tensid Taschenbach,* or the *ASTM D-12* and *AOCS Official Methods.* Major classes of surfactants were not included, e.g., fatty acid alkanolamides, ether alcohol sulfates and α-olefin sulfonates. Instrumental methods of analysis were not discussed, even though most small laboratories possess IR and GLC instrumentation.

This book would be of use primarily to a beginner just entering the surfactant field and for laboratory technicians having had little or no training in chemistry. Although such a text would be of value to Third World industrial laboratories, its high price will probably be a deterrent.

Warner M. Linfield
USDA
Eastern Regional Research Center
Philadelphia, PA 19118

Calendar

AOCS NATIONAL MEETINGS

Annual Meeting, April 29-May 3, 1984, Fairmont Hotel, Dallas, TX.

Annual Meeting, May 5-9, 1985, Franklin Plaza Hotel, Philadelphia, PA.

Annual Meeting, May 11-15, 1986, Hilton Hawaiian Village, Honolulu, Hawaii.

AOCS SHORT COURSES

AOCS Short Course on Fatty Acids, Sept. 23-26, 1984, Kings Island, OH. Contact: Meetings Coordinator, AOCS, 508 S. Sixth St., Champaign, IL 61820.

1984

XVth Meeting of the Spanish Committee on Surface Active Agents, March 21-23, 1984, Botanic Hotel, Puerto de la Cruz, Tenerife. Contact: Secretaria de la Asociactión de Investigación de Detergentes (A.I.D.), Jorge Girona Salgado, s/n, Edificio Juan de la Cierva, Barcelona-34, Spain.

"Surfactants in Our World – Today and Tomorrow," CESIO Surfactant World Conference, May 6-10, 1984, Munich, Germany, Contact: CESIO, Avenue Louise 250, Boite 102, 1050 Brussels, Belgium.