

## Surfactants & Detergents News

BV, The Netherlands, has established its U.S. headquarters in Charlotte, North Carolina. IBIS BV, a joint venture between the Royal Dutch Shell Group and Gist-Brocades NV, manufactures industrial enzymes and fine chemicals. IBIS Inc.'s president and chief executive officer is G.W. Pyatt, formerly of Shell Oil Co. Other company executives include Robert Ryan, vice president of administration; James R. Hettenhaus, vice president of technology; James W. Godfrey, controller; and L.J. Norman, director of government and industry affairs. The four previously worked for Gist-Brocades USA Inc.

Ray Wilkins Jr., senior vice president of Ethyl Corp. and president of the company's chemicals group, has been elected to Ethyl's board of directors.

Akzo Chemie America has named Edward Boulas general manager for the company's detergent & personal care chemicals group in North America. In Europe, Peggy Viehweger has been named general manager for detergent chemicals, and

Hans Hogeweg will handle personal-care chemicals.

Croda International Plc has appointed J.G. Raeside regional director of the company's Southeast Asian operations. D.M. Crowley, formerly with the Southeast Asian operations, has been named group corporate development manager at Croda in England. In other developments, Croda has purchased the Dutch toilet soap maker, Hilko.

Celanese Chemical has been re-named Hoechst Celanese Chemical Group.

Vista Chemical Corp. has promoted Jan-Hein Weijers to managing director of its European operations.

Idemitsu Petrochemical Co. has broken ground for a 50,000-metric ton-a-year alpha-olefins plant at its Chiba site in Japan.

Aluminum Co. of America and Coastal Products & Chemicals Inc. have formed a joint venture to produce and market liquid sodium aluminate for the detergent zeolite, catalyst and titanium dioxide manu-

facturing industries. The Alcoa-Coastal venture has begun constructing two facilities, one in Houston, Texas, and one in Tennessee.

Unilever U.S. Inc. has chosen Morris Tabaksblat, a director of Unilever NV and Unilever PLC, to take over as regional director for North America and as chairman of Lever Brothers Co. upon the May retirement of Gordon K.G. Stevens. Tabaksblat will assume responsibility for the five major Unilever companies in North America. Succeeding Tabaksblat as chief executive officer of Chesebrough-Pond's will be Robert M. Phillips, now president and chief operating officer.

Unichema Chemicals Inc. has named Robert Potts technical service representative in its technical service department.

Hythe Chemicals, a subsidiary of BP Chemicals International, has been awarded an exclusive license to manufacture and market a line of nonionic surfactants for the West European market by Nippon Shokubai Kagaku Kogyo.

## Surfactants & Detergents Publications

### Book reviews

**Surfactants in Emerging Technologies**, edited by Milton J. Rosen (Marcel Dekker Inc., 270 Madison Ave., New York, NY 10016, 1987, 215 pp., \$65).

This book is Volume 26 of Marcel Dekker's Surfactant Science Series. It consists of a preface by the editor and nine chapters on the different technologies written by experts in their respective fields. There is a subject index but no author index. Essentially, it represents the proceedings of a 1986 conference, "The Role of Surfactants in New and Emerging Technology," held at Brooklyn College of the City University of New York. Each chapter is followed by summaries of one or two discussion sessions of the

conference.

The chapters and authors are as follows: The Use of Surfactants in Liquid Developers for Electronic Printing, Melvin D. Croucher; Possible Applications of Surfactants in Microelectronics, Melvin Pomerantz; The Role of the Surfactant in Magnetic Recording, Mark S. Chagnon and Robert Donadio; The Use of Surfactants in the Processing of High-Technology Electronic Ceramics, Ellen S. Tormey; Surfactants in Advanced Battery Technology, Patrick G. Grimes; Surfactants and Biotechnology, Saul L. Neidleman; Surfactants in Novel Separation Techniques, Donald B. Wetlaufer; An Overview of Surfactant-Based Separation Processes, John F. Scamehorn and Jeffrey H. Harwell; and Nalco's Hydrocarbon Emission Control Process, William H. Lindenberger.

The book offers an excellent introduction to the technologies cited. There are a number of illustrations in most chapters to make it easier for the reader to visualize the processes described. From the point of view of surfactant chemistry, the book is somewhat disappointing. For the most part, references to specific surfactants are vague and often only refer to trade names. Only Chapters 3 and 6 treat surfactants in greater depth. This, however, should not come as a surprise because, as one author puts it, the use of surfactants is still an intuitive art. Thus, the reader will realize that there are great opportunities for future research in the surfactant field.

The book is obviously printed by copying typed manuscripts, a money-saving method now in common use for scientific books. Un-

fortunately, non-uniform types, some single-spaced, the rest double-spaced, were used by the individual authors. This gives the book an untidy appearance. The subject index is quite inadequate, which makes it hard to find specific subjects, e.g., sugar esters. As mentioned before, there is no author index.

In summary, this book serves as a preview of vast new future technologies. In that context, it should be of interest to many *JAACS* readers.

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**Surfactant Solutions: New Methods of Investigation (Surfactant Science Series, Vol. 22)**, edited by Raoul Zana (Marcel Dekker Inc., 270 Madison Ave., New York, NY 10016, 1987, 496 pp., \$99.75 US and Canada, \$119.50 elsewhere).

This book presents the capabilities of selected new methods useful in the study of surfactant solutions and summarizes the new knowledge resulting from these techniques. Each method is covered in a separate chapter. These include thermodynamic methods, small-angle scattering methods, light scattering, rheology, luminescence probing methods, nuclear magnetic resonance (NMR) studies, spin labels, chemical relaxation methods, and miscellaneous methods.

Raoul Zana has attacked this prodigious task in a systematic way, co-authoring three of the nine chapters and selecting well-known experts to write the other chapters. Each chapter has a similar format, with a discussion of the theoretical foundations of the method, some important results from application of the technique, and future directions. No comparable book on this topic is available.

The emphasis of the book is on scattering and spectroscopic techniques useful in measurements in micellar and microemulsion systems. The number of different properties that now can be measured is amazing. For example, for micelles, methods of measuring the aggregation number, polydispersity, shape, degree of hydration, hydrodynamic radius, dry radius, counterion binding, heat of formation, and kinetics of formation, among many other properties, are outlined. Another advance of importance is the ability of different methods to measure the same property. For example, the long-standing argument as to whether the cloud point phenomena is a manifestation of the growth of giant micelles (as deduced by early light-scattering experiments) or is a simple critical point phenomena is now generally agreed to be the latter explanation due to a number of

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## Surfactants & Detergents Publications

independent means of measuring aggregation number or size of micelles. The necessity of combining several independent experimental techniques (e.g., light scattering, neutron scattering, and rheological measurements) to paint an entire picture of the phenomena of interest is also well-addressed in this book.

For those with any interest in learning about a specific technique for measuring surfactant system properties, this book is a good place to start; each chapter has a thorough list of references.

Despite the strengths of this text, it is not for everyone. For those involved in research of a more practical nature, the esoteric nature of the book will limit its usefulness. It will not give any direct clues on formulating a better detergent or improving oil recovery. However, for those doing fundamental work involving surfactants in solution and interested in any way in such topics as the structure of a micelle, this book is a must.

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## Surfactants & Detergents Calendar

1988

May

Seminar, "Project Management for the Coatings Chemist," May 9-10, 1988, Chicago, Illinois; June 6-7, 1988, San Francisco, California; June 13-14, 1988, Orlando, Florida; June 20-21, 1988, Philadelphia, Pennsylvania, sponsored by the Federation of Societies for Coatings Technology. Contact: Federation of Societies for Coatings Technology, 1315 Walnut St., Suite 832, Philadelphia, PA 19107.

Spring Social Extravaganza, Midwest Chapter, Society of Cosmetic Chemists, May 13, 1988, Spiaggia, 980 N. Michigan Ave., Chicago, Illinois. Contact: Ellen Spira, telephone 312-961-4078, or Jerry Micheels, 312-961-4069.

Physical Testing of Paints and Coatings Short Course, "From Classic Methods to Modern Instrumental Techniques," May 16-20, 1988, University of Missouri-Rolla, Rolla, Missouri. Contact: Coatings and Polymer Science Program, Department of Chemistry, University of Missouri-Rolla, Rolla, MO 65401-0249.

World Surfactants Congress II, "Surfactants in our world—today and tomorrow," May 24-27, 1988, Paris, France. Organized by ASPA, France, and sponsored by the European Committee on Organic Surfactants and Their Intermediates, Avenue Louise 250, Bte. 102, B-1050 Brussels, Belgium.

June

International Symposium on Polymer Analysis and Characterization, June 2-3, 1988, University of Toronto, Canada. Contact: Howard G. Barth, 207 Welwyn Rd., Wilmington, DE 19803.



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