concentrates, additives and compounds for USI.

Engelhard has begun producing specialty zeolites catalysts at its facilities in Seneca, South Carolina.

Wayne R. Salkeld has been appointed director of the specialty chemicals department of Sandoz Chemicals Corp.

DeSoto Inc. has sold its Orange, California, consumer paint and household detergent manufacturing facility to Akzo Coatings America, a subsidiary of Akzo Chemie. The transaction took place June 25, 1987. Meanwhile, DeSoto's Chemical Specialties Division has announced it will install a Chemithon sulfur-burning unit at its Santa Fe Springs, California, facility. The \$1.5 million unit is scheduled to be

in operation in early 1988. The division supplies surfactants and chemical formulations to industrial, institutional and agricultural markets.

A.H.L. Alberts has joined Emery Chemicals' European sales division as manager of marketing and distribution.

A new soap plant will be established in Papua, New Guinea as a joint venture between Colgate-Palmolive Co. and a local soap manufacturer, Melanesian Soap Ltd. According to a report in *The Cocomunity* newsletter, the new company, called Colgate Palmolive Pty., will market the soap locally.

Crosfield Chemicals Inc., a member of the Unilever group of companies and a wholly-owned subsidiary of Unilever United States Inc., has acquired the assets of Stauffer Chemical Co.'s metasilicate business, including facilities in Joliet, Illinois, and Pittsburgh, California.

The West German chemicals and detergents group, Henkel, has announced it would buy the French detergents company Lesieur-Cotelle, according to a report in *Chemistry and Industry* published in London, England, in July.



Meanwhile, Donald Buchanan has been named vice-president and general ex-

ecutive of Akzo Chemie. He will continue as general manager of Armak's Canadian fatty amines operations.

### Surfactants & Detergents Publications

### **Book reviews**

Cosmetic Safety, A Primer for Cosmetic Scientists (Cosmetic Science and Technology Series, Vol. 5), edited by James H. Whittam (Marcel Dekker Inc., 270 Madison Ave., New York, NY 10016, 1987, 368 pp., US and Canada \$99.75, elsewhere \$119.50).

This book provides an overview of cosmetic product safety for product developers. It is divided into two sections, Part I: General Safety Issues, and Part II: Safety Considerations in Specific Product Categories.

The chapters in Part I include Cosmetic Safety, Eye Irritation, Teratogenic Risk Assessment: A Managerial Viewpoint, Laboratory Safety, and Statistics and Experimental Design. This section elucidates the types of adverse reactions consumers have experienced as a result of the use of cosmetics as well as methods for evaluating skin sensitization (allergy) and eye irritations in preclinical (animal) and clinical (human) sample populations. The concepts of relevance of animal experimental models to human

response and adequate margin of safety are discussed. The longest chapter in the book describes techniques which can be used to design and statistically evaluate safety studies and to perform postmarketing surveillance of products once they have reached consumers'

The chapters in Part II include Skin Care Products. Eve Products. Antiperspirants, Nail Products, Hair Dye Safety and Toxicology, and Hair Care Safety. Since many cosmetics are designed to remain on the skin or have incidental contact with skin, methods for assessing skin and eye irritation, contact sensitization, photodermatitis, percutaneous toxicity, comedogenicity, and sting potential are described. The subject of subchronic and chronic safety testing is raised in the chapter on antiperspirants since these products, among many others, are designed for long-term daily use. The final three chapters address safety concerns associated with nail and hair care products, i.e., nail polishes and extenders and contact dermatitis; hair sprays and inhalation hazard; hair colorants and carcinogenicity in animals.

Throughout the book, several

authors mention a developing area of methodology which may be of interest to cosmetic scientists: alternative test systems utilizing invertebrates or cell cultures rather than live mammals. The book devotes considerable space to descriptions of preclinical and clinical safety substantiation methods which would not likely be used by someone untrained in toxicology. Since safety evaluation is a complex process that depends on the judgment of experts, it is hoped that cosmetic product formulators would read this book with a view toward raising their awareness of the extensive testing that may be necessary if they develop a new formula and of the need to consult regularly with their company safety experts regarding necessary safety testing.

Helen North-Root Director Product Safety & Regulatory Affairs The Dial Corp. Scottsdale, Arizona

Nonionic Surfactants: Chemical Analysis, edited by John Cross (Marcel Dekker Inc., 270 Madison Ave., New York, NY 10016, 1987, 417 pp., \$82.75 US and Canada, \$99.25 elsewhere).

This book, Volume 19 in the Surfactant Science series, complements the established texts on the analysis of surfactants by taking a single-minded approach to the analysis of nonionic surfactants. Beginning with a well-written introduction to nonionic surfactants from a structural point of view, the authors enlarge on both specific and general methods of analysis.

Specific methods refer to analytical procedures useful for the determination of ethoxylates, by far the most predominant nonionic type. An excellent chapter on metal ion complexes of alkoxylate chains describes the basis for a series of standard titrimetric procedures which are based on the formation of colored complexes. In addition, the chapter provides specific directions for using the individual procedures.

Trace analysis, an important aspect in environmental monitoring, is presented in a separate chapter which treats the essential preconcentration step in commendable detail. Chapters on potentiometry and fission techniques complete the section on specific alkoxylate methods.

The second part of the volume is devoted to general separational and instrumental methods, including GLC, HPLC, TLC, NMR, IR and MS. The discussions generally are good, with some superior treatment of specific topics. Particularly, the fundamentals underlying the various instrumental methods are summarized succinctly. Anyone looking for a well-written introduction to the fundamentals of NMR spectroscopy will find it in this volume. This chapter, too, provides a good overview of the application of NMR to the study of interfacial parameters such as hydration of alkoxylates as well as micelle formation and structure.

Throughout the volume, the reader is provided not only with descriptions of the individual methods but also—and at times, this is even more important—with the problems and pitfalls.

The final chapter deals with the "simpler" methods useful in quality control operations: hydroxyl values, refractive indices, cloud points and related phenomena.

This book has been carefully edited, with less than a dozen errors and typos. Two minor objections could be raised: the discussion of TLC might have been more extensive and the HPLC chapter would

have benefitted from a more timely update of the literature. Overall, however, this is an excellent addition to the Surfactant Science series and will prove beneficial not only to analytical chemists but also to less specialized readers.

Arno Cahn Arno Cahn Consulting Services Inc. Pearl River, NY 10965

# **New books**

Nonionic Surfactants: Physical Chemistry, Surfactant Science Series 23, edited by Martin J. Schick, Marcel Dekker Inc., 270 Madison Ave., New York, NY 10016, 1987, 1,160 pp., US \$195, elsewhere \$234.

Surfactants in Emerging Technologies, Surfactant Science Series 26, edited by Milton J. Rosen, Marcel Dekker Inc., 270 Madison Ave., New York NY 10016, 1987, 232 pp., US \$65, elsewhere \$78.

Industrial Applications of Surfactants, Special Publication No. 59, Royal Society of Chemistry, 30 Russell Square, London WC1B 5DT England, 1987, 360 pp., \$37.50 or US \$65.

# Surfactants & Detergents Calendar

#### 1987

#### October

1987 Annual Meeting and Paint Industries' Show, Federation of Societies for Coatings Technology, Oct. 5-7, 1987, Convention Center, Dallas, Texas. Details: Federation of Societies for Coatings Technology, 1315 Walnut St., Philadelphia, PA 19107.

Society of Cosmetic Chemists New York Chapter, Oct. 7, 1987, Robin Hood Inn, Clifton, New Jersey. Topics: Photochemistry—Historical Development, and Liaison Between Product Development and Marketing. Contact: Herman Brown, Chapter Chairman, Finetex Inc., 418 Falmouth Ave., Elmwood Park, NJ 07407, telephone 201-797-4686.

Escape Weekend, Society of Cosmetic Chemists New York Chapter, Oct. 16-18, 1987, Great Gorge's Mountain View Resort. Technical session on creams and lotions development. Contact: Stu Feldman, Givaudan Corp., 100 Delawanna Ave., Clifton, NJ 07015-5034, telephone 201-365-8295.

15th Introductory Short Course on Paint Formulation, Oct. 19-23, 1987, University of Missouri-Rolla, Rolla, Missouri. Contact: Coatings Continuing Education, Department of Chemistry, University of Missouri-Rolla, 142 Schrenk Hall, Rolla, MO 65401-0249. All-Day Seminar, Hair—Let's Get to the Root of It, Oct. 21, 1987, Governor Morris Inn, Morristown, New Jersey, sponsored by the Society of Cosmetic Chemists New York Chapter. Contact: Harvey S. Schnur, Seminar Chairman, Felton Worldwide Inc., 599 Johnson Ave., Brooklyn, NY 11237, telephone 718-497-4664.

#### November

Steel Structures Painting Council annual meeting and technical symposium, Nov. 2-5, 1987, Sheraton World, Orlando, Florida. Technical symposium will be "Improving Field Reliability of Protective Coating Systems."