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**PUBLICATIONS**


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## Book reviews

**The Lipids of Human Milk**, by Robert G. Jensen (CRC Press Inc., 2000 Corporate Blvd. NW, Boca Raton, FL 33431, 1988, 213 pp., \$120).

In this book, Professor Jensen has gathered, organized and reviewed the scattered information on human milk lipids. The book covers the following topics: collection, preparation and storage of samples; determination of lipid content; factors affecting the total lipid content of human milk; lipid classes; fatty acids and related compounds; milk fat globule membrane; fat-soluble vitamins in human milk; and nutritional aspects. There are numerous tables and figures. The literature coverage is comprehensive and involves an average of 80 references per chapter, with the exception of the final chapter which is a brief summary. The text is highly readable. It is given authority by the author's lifelong interest in and research experience with milk lipids, both human and bovine.

Although there has been a large research effort over the last century to develop information on bovine milk lipids, the attention given human milk lipids is no more than one investigation in many areas and nonexistent in a few. This is rather remarkable considering the important roles these substances play in the growth and well-being of the human infant.

With this book, Professor Jensen has performed a valuable service to nutritionists, lipid biochemists, pediatricians, infant formula specialists and teacher-researchers in the field of human lactation.

Stuart Patton  
School of Medicine  
University of California—  
San Diego  
La Jolla, California

**Surfactant Science and Technology**, by Drew Myers (VCH Publishers Inc., 220 East 23rd St., New York, NY 10010-4606, 1988, 351 pp., \$45).

This attractively designed hardcover book (6.25" × 9.5") contains eight chapters. The first two chapters provide an overview of the history of surfactants, the principles of their mode of action, economics and the organic chemistry of surfactants. The last six chapters are concerned with the physical chemistry of surfactants and the theories underlying their properties. The book includes chapters on surfactants in solution; micellation and related association phenomena; solubilization, microemulsions and micellar catalysis; surface activity and the liquid-vapor interface; emulsions; foams; and surfactants at the solid-liquid interface.

The first two chapters cover the broad aspects of surfactant history, "surfactant personality" and consumption patterns, and also provide a comprehensive surfactant glossary, a look at "the shape of things to come" and the chemistry of surfactants. Although this section is correct from a factual point of view,

one gets the impression that it was based more on a search of the literature—probably computer-assisted—than on actual experience in the soap and detergent industry. The discussion of the organic chemistry of surfactants is somewhat pedantic particularly in its classification of surfactant types. This section contains two tables showing U.S. production of synthetic detergents by type. Both are based on 1982 figures in a book published in 1988. The second chapter has small sections discussing applications of surfactants, less than this reviewer would have expected in a book that included "technology" as 50% of the title.

The remaining six chapters all cover theoretical physical-chemical aspects of surfactant science. The data is well presented and in considerable detail, with good illustrations and thorough mathematical treatment. These chapters cover the published literature in a noncritical fashion.

At the end of the book is a bibliography and references. The bibliography, which lists many of the standard texts, will be useful to the serious student and worker in this field. The references are listed by chapter. Altogether there are 476 references cited, although it must be noted that only 28 (6%) are dated after 1980.

This book is probably best suited for the graduate student in physical chemistry who has an interest in surfactant science. It is less useful for chemists working in an industrial environment who would probably be better served with a more focused book.

Eric Jungermann  
Jungermann Associates  
Phoenix, Arizona

**Liquid-Liquid Extraction**, by Ruth Blumberg (Academic Press Inc., 1250 Sixth Ave., San Diego, CA 92101, 1988, 192 pp., \$25).

This little monograph is not a teaching manual, nor is it a review of liquid-liquid extraction (LLX). Instead, it is the author's integrated view of a process and its development. Using LLX as the central theme, the author describes her thought processes in the development of a new process.

The book is divided into three main sections: the integrated approach to developing a process; modes of studying LLX systems with several specific approaches; and a section describing how to test proposed separation schemes to obtain an acceptable degree of certainty for implementation.

This book contains no literature references, but does have an acceptable index and a short list of recommended readings. It will have very limited value to AOCs readers.

J.G. Endres  
Central Soya Co. Inc.  
Fort Wayne, Indiana

**Proceedings of the Nara (Japan) Workshop on Functional Fats and Lipids, Oct. 4-6, 1988**, by the Organizing Committee of the Joint Meeting of the Soci-

## PUBLICATIONS

ety of Fats and Lipids Research and the Japan Oil Chemists' Society (1988, 5,000 yen). For information about the proceedings, contact Kiyotaka Sato, Hiroshima University, Faculty of Applied Biological Science, Shitami, Saijo-Cho, Higashi-Hiroshima 724, Japan).

This is a softcover binding of camera-ready copy from a meeting organized by the Society of Fats and Lipids Research and the Japan Oil Chemists' Society and held Oct. 4-6, 1988. A revised version of the proceedings will be published at a later date by Marcel Dekker. Rather surprisingly, only some of the chapters deal with crystallography and related topics. Included in this subject area is a chapter on the analysis of bloom, "Physical-Chemical Behavior of Confectionary Fats," by Given, Wheeler, Noll and Finley of Nabisco Brands. Other topics include HPLC of lipids (by Shukla), liposomes, skin lipids and lipids in pharmaceutical lipids. Another interesting chapter by Yamado, Shimzu, Shinmen, Kawashima and Akimoto considers production of functional lipids in biotechnology. The authors have screened fungi for practical sources of gamma-linolenic acid, arachidonic acid, dihomo-gamma-linolenic acid and eicosapentaenoic acid. This work includes studies using a 2,000-liter fermentor.

Volumes of this type from local symposia or workshops tend to be mixed bags and the present one is no exception. In general, the mix of chapters and topics is reasonable and interesting. Copy quality is excellent and the minor lapses in English grammar and usage are tolerable. The price appears reasonable, but supplies are limited. It will be interesting to compare this version with the promised commercial printing. In its present form, this is a worthwhile book which can be recommended to both academic and industrial lipid chemists. More groups should be encouraged to attempt such rapid softcover production of proceedings which tend to be of ephemeral value.

Lloyd Witting  
Supelco Inc.  
Bellefonte, Pennsylvania

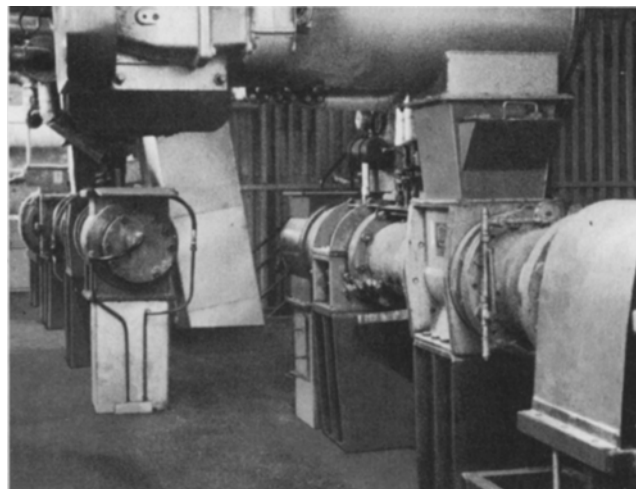
## New books

**Microbial Lipids, Vol. 1**, edited by C. Ratledge and S.G. Wilkinson, Academic Press Ltd., 24/28 Oval Rd., London NW1 7DX, England, and Academic Press Inc., 6277 Sea Harbor Dr., Orlando, FL 32887, 1988, 963 pp., \$110.

**Soya Bluebook, 41st Edition**, published by Soyatech Inc., PO Box 84, Bar Harbor, ME 04609, 1988, 320 pp., \$35 US and Canada, \$40 elsewhere.

**Methods for Protein Analysis**, edited by John P. Cherry, American Oil Chemists' Society, 1608 Broad-

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moor Dr., PO Box 3489, Champaign, IL 61826-3489, 1988, 272 pp., \$55 for AOCS members, \$70 nonmembers.

**Low-Calorie Products**, edited by G.G. Birch and M.G. Lindley, Elsevier Science Publishing Co. Inc., PO Box 1663, Grand Central Station, New York, NY 10163, 1988, 288 pp., \$72.

The following books are available from Marcel Dekker Inc., 270 Madison Ave., New York, NY 10016:

**Preparative-Scale Chromatography (Chromatographic Science Series, Vol. 46)**, edited by Eli Grushka, 1989, 344 pp., \$99.75 US and Canada, \$119.50 elsewhere.

**Thin Liquid Films: Fundamentals and Applications (Surfactant Science Series/29)**, edited by I.B. Ivanov, 1988, 1160 pp., \$195 US and Canada, \$234 elsewhere.

**Encyclopedia of Pharmaceutical Technology, Vol. 1**, edited by James Swarbrick and James C. Boylan, 1988, 494 pp., \$180.

**Fatty Acids in Industry: Processes, Properties, Derivatives, Applications**, edited by Robert W. Johnson and Earle Fritz, 1989, 688 pp., \$150 US and Canada, \$180 elsewhere.

The following books are available from John Wiley & Sons Inc., 1 Wiley Dr., Somerset, NJ 08875-1272:

**An Introduction to Zeolite Molecular Sieves**, by Alan Dyer, 1988, 149 pp., \$64.95.

**Single Cell Oil**, edited by R.S. Moreton, 1988, 165 pp., \$61.95.

**Chemical Information: A Practical Guide to Utilization, 2nd Edition**, by Yecheskel Wolman, 1988, 291 pp., \$44.95.

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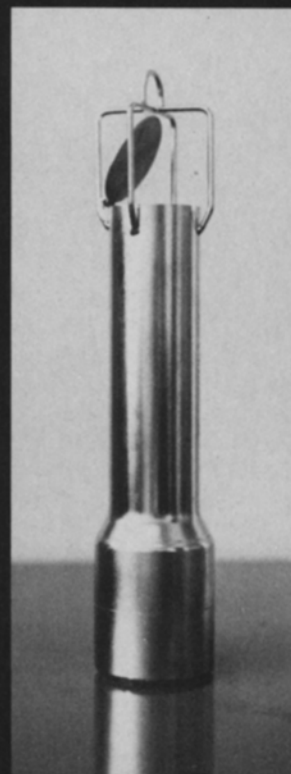
## Other publications

**The Asian and Pacific Coconut Community's 1987 Statistical Yearbook**, a 233-page report, is available from the Asian and Pacific Coconut Community, PO Box 343, Jakarta 10002, Indonesia.

**The Nutrient Data Bank Directory (7th Edition, 1988)** is available for \$15 from the Department of Human Nutrition, Foods and Food Systems Management, College of Home Economics, 217 Gwynn Hall, University of Missouri, Columbia, MO 65211. Checks should be payable to the University of Missouri.

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