

# Publications

## Book reviews

**Bailey's Industrial Oil and Fat Products, Vol. 2, 4th Edn.**, edited by Daniel Swern (John Wiley & Sons Inc., 605 Third Ave., New York, NY 10158, 1982, 603 pp., \$60).

The second volume of Bailey's Industrial Oil and Fat Products edited by Daniel Swern includes chapters by six contributing authors — R.R. Allen, M.M. Formo, R.G. Krishnamurthy, G.N. McDermott, F.A. Norris and N.O.V. Sonntag—all experts in their fields. Perusal of the table of contents, however, reveals that deodorization, one of the most important operations in the processing of an oil, has been omitted. This process is of utmost importance in the preparing of high quality oils and should have been addressed. Since all of the other operations used to process oil are described, this omission greatly reduces the impact and utility of the volume. However, the book does include a wealth of useful information. The chapter on hydrogenation contains material of both practical and theoretical nature. Other topics covered are fat splitting, esterification and interesterification; extraction of fats and oils; refining and bleaching; cooking oils, salad oils and salad dressings; miscellaneous oil and fat products; analytical methods; and environmental aspects of animal and vegetable oil processing.

The index appears comprehensive and the individual chapters are heavily documented with references which allow further entry into the literature. Regrettably, there are relatively few citations to work with within the last few years. This volume is too costly for use by students and by those interested in the subject. However, it should be on the bookshelf of chemists, processors, engineers and professionals dealing with fats, oils and their products. It should also be used by academics to assist them in presenting such material in courses dealing with the topic of fats and oils and related materials.

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**Prostaglandins: Organ- and Tissue-Specific Actions**, edited by Stan Greenberg, Philip J. Kadowitz and Thomas F. Burks (Modern Pharmacology — Toxicology Series, Vol. 21, Marcel Dekker, Inc., 270 Madison Avenue, New York, NY 10016, 1982, 454 pp., \$59.50).

The introduction to this volume consists of three chapters on adrenergic neurotransmission in blood vessels, capillary filtration, and prostaglandins and vascular smooth muscle in hypertension. The second part is devoted to prostaglandins and the circulation. It includes chapters on prostaglandins and the cutaneous vasculature, prostaglandins and uterine

blood flow, on renal function, and on the renin-angiotensin-aldosterone system. These are followed by contributions on prostaglandins and cardiac muscle and on the pulmonary vascular bed. This section concludes with chapters on prostaglandins and platelet prostanoid compounds and effects of prostaglandins on erythropoiesis.

Part 3 concentrates on the prostaglandins and nonvascular functions and contains chapters on the actions of prostaglandins on uterine and gastrointestinal smooth muscle. The final section consists of two chapters on prostaglandins and pathophysiological processes. These are on cerebral vasospasm and cerebral nervous system function.

The quality of chapters in this volume is high. They are well written, informative, and well documented. The format of the reference lists is not consistent, which can be a little irritating. One chapter has references in alphabetical order, another citations by number, and still another uses number and alphabetical order. I recommend it as a useful addition to institutional libraries. I cannot, at a cost of \$59.50, recommend it to individuals. This is a rapidly moving field and such books are quickly out-of-date.

**Handbook of Neurochemistry, 2nd Edn., Vol. 1 Chemical and Cellular Architecture**, edited by Abel Laytha (Plenum Publishing Co., 233 Spring St., New York, NY 10013, 1982, 496 pp., \$65).

I believe that most neurochemists would agree that the first edition of this handbook proved a valuable addition to their personal or institutional library. If this volume is typical of the second edition it will be of the same high standard. There are 16 chapters. The first two deal with cation and anion transport in the nervous system, and the third and fourth with calcium and ammonia. Chapter 5 is on water spaces and chapter 6 on cerebral amino acid pools. These are followed by an overview of neuropeptides and chapters on brain trace amines and on polyamines. Chapters 10 and 11 discuss the cyclic nucleotides in the nervous system and the bipterins. The next chapters deal with individual cell types in the nervous system, neurons, astrocytes, oligodendrocytes and, the Schwann cell. The final chapter is on the physiological neurochemistry of the cerebrospinal fluid.

The authors are all experienced, respected researchers in their fields. They appear to have made a great effort to keep their chapters as up-to-date as possible. In spite of the cost, those working in the field of neurochemistry will find it worthwhile owning at least those volumes of specific interest to their research.

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**Lipidforum—Fats in Feeds and Feeding, and Lipidforum—11th Scandinavian Symposium on Lipids**, edited by R. Mar-

cuse (Scandinavian Forum for Lipid Research and Technology, Goteborg, Sweden, 1982, 140 pp. and 246 pp., \$20 and \$19, respectively, [plus postage]).

These two paperback volumes are the proceedings of meetings in Goteborg, Sweden (March 1981) and Bergen, Norway (June 1981). The first volume contains 20 brief papers on fats in feed for domestic animals including fish in culture, furbearing animals, and cats and dogs. The second volume contains 41 short papers divided into five areas: biochemistry, physical chemistry, food chemistry, synthesis and technical chemistry, and analytical chemistry. Technical chemistry turns out to be equivalent to processing, with papers on hydrogenation, interesterification, filtration, and bleaching. As has been noted in reviews of previous volumes in this series, there is a distinct emphasis on marine lipids. Hydrogenated fish oils are still a significant though decreasing factor in total fat utilization in the Scandinavian countries.

In general, the papers appear to be on the same level as papers published in *JAOCS* and will be of interest to the same audience as this journal.

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## New publications

**1982-1983 Yearbook & Trading Rules**, National Soybean Processors Association, Suite 1030N, 1800 M Street, NW, Washington, DC 20036, 1982, 120 pp., \$5 NSPA members, \$15 nonmembers.

**Environmental Problem Solving Using Gas and Liquid Chromatography**, by R.L. Grob and M.A. Kaiser, Elsevier Scientific Publishing Company, PO Box 211, Amsterdam, The Netherlands, or 52 Vanderbilt Ave., New York, NY 10017, 1982, 240 pp., \$59 (US) or Dfl. 127.

**Handbook of Carcinogenics and Hazardous Substances, Chemical and Trace Analysis**, edited by Malcolm C. man, Marcel Dekker Inc., 270 Madison Ave., New York, NY 10016, 1982, 750 pp., \$99.50 (20% higher outside US and Canada).

**Advances in Chromatography, Vol. 20**, edited by J. Calvin Giddings, Eli Grushka, Jack Cazes and Phyllis R. Brown, Marcel Dekker Inc., 270 Madison Ave., New York, NY 10016, 1982, 320 pp., \$45 (20% higher outside US and Canada).

**Solids and Liquids Conveying Systems (Process Equipment Series, Vol. 4)**, edited by Mahesh V. Bhatia, Technomic Publishing Company Inc., 265 Post Rd. West, PO Box 913, Westport, CT 06881, 1982, 254 pp., \$35.

**Sitosterol (Monographs on Atherosclerosis, Vol. 10)**, by O.J. Pollak and David Kritchevsky, S. Karger AG, Basel, PO Box CH-4009 Basel, Switzerland, 1981, 219 pp., \$88.75.

**Compilation of ASTM Standards on Chromatography, 1st Edn.**, ASTM, 1916 Race St., Philadelphia, PA 19103, 1982, 764 pp., soft cover, \$40 (20% discount for ASTM members).

**Selected Topics on Computer-Aided Process Design and Analysis (AIChE Symposium Series Vol. 78, No. 214)**, edited by Richard S.H. Mah and Gintaras V. Reklaitis, American Institute of Chemical Engineers, 345 East 47 St., New York, NY 10017, 1982, 144 pp., paperbound, \$35 (\$17.50 AIChE members).

**STP 746—Permeability and Groundwater Contaminant Transport**, edited by T.F. Zimmie and C.O. Riggs, ASTM, 1916 Race St., Philadelphia, PA 19103, 1981, 245 pp. \$28 (20% discount for ASTM members).

**Physical Methods of Analysis for Infant Formulas (manual)**, Infant Formula Council, PO Box 76841, Atlanta, GA 30358, 1982, 10 pp., \$1.

**Hazardous Waste Management Directory, Third Edition**, Pennsylvania Environmental Council Inc., 225 South 15th St., Philadelphia, PA 19102, 1982, \$35 plus \$2.50 postage and handling. Quantity discounts available. For information call 215-735-0966.

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