

Methods development update

UMC report

William Link reported on the Uniform Methods Committee (UMC) activities for the past year to the Governing Board at the national meeting in Hawaii. Key issues were that 20 methods are scheduled for release in 1986, computer spread sheets are being used to track methods development progress, several new committees (Bleaching Methods, AOM, Automated Color in Oils) have been formed and the AOCS technical director has renewed contacts with other organizations involved in standardization of methods.

Link noted that some major concerns of the last year have been resolved: a new technical director has been appointed, retiring UMC members have been replaced, tracking of technical committee activities has been computerized and in some committees, the inertia in the methods development system has been overcome. Link called attention to the fact that a new issue has emerged: that of the Society's tendency to adopt existing methods of other organizations, rather than to use the grassroots approach of collaborative study within the technical committees.

Link's tenure as chairman of the

UMC has expired. The Governing Board extended its sincere thanks to Link for his efforts in making the UMC a more viable committee.

UMC meeting in Hawaii

The UMC met on May 15, 1986, during the national meeting in Hawaii. Highlights of this meeting included (a) the appointment of David Firestone of the U.S. Food and Drug Administration as chairman of the UMC; (b) the appointment of three new members to the committee—Bryan Madison of Procter & Gamble, Ron Sleeter of Archer Daniels Midland Co. and Thomas Smouse of Ralston Purina, who replace Ronnie Fox, George Payne and Marion Whitten; (c) reports of those technical committee chairmen who were in attendance; and (d) approval of 10 out of the 20 methods projected for the 1986 additions to methods.

Proposed for consideration were the following questions: should there be an official method for fish oils (eicosanoid fatty acids)?; should there be a biochemical methods section in the methods book, *Official Methods and Recommended Practices*?; and should there be methods for aflatoxins in oils and oilseeds?

Approval was given to formulate a project for the electronic transcription of the book of methods. This will facilitate future corrections and will be essential for the publication of a new methods edition.

The UMC expressed its sincere appreciation to retiring members George Payne and Marion Whitten.

Methods reviewers

To facilitate methods revision, it has been suggested that "methods reviewers" be appointed to review the various sections of the book of methods and make recommendations on methods to be updated or discarded and on new methods to be adopted. There would be one reviewer assigned to each section of the methods book. Anyone with comments on this suggestion or wishing to volunteer as a reviewer should contact the AOCS Technical Director, AOCS, PO Box 5037, Station A, Champaign, IL 61820, or David Firestone, U.S. Food & Drug Administration, Bureau of Foods HFF-426, 200 C St. SW, Washington, DC 20204.

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Publications

Book reviews

Bailey's Industrial Oil and Fat Products, Vol. 3, edited by Thomas H. Applewhite (John Wiley & Sons Inc., 605 Third Ave., New York, NY 10158, 1985, 353 pp., \$55).

The previous two volumes of the Bailey work filled the need to update this classic work in the fats and oils area. However, many topics of importance were not included. This last volume, Volume 3, corrects these omissions and completes the updating of the original Bailey work, thus making this set the first reference work to be consulted when faced with a

question dealing with edible fats and oils.

Seven major areas are thoroughly covered in this volume by experts in the following fields: fractionation and winterization; table spreads and shortenings; deodorization; instrumental analysis for quality control and quality assessment; oil flavor quality assessment; storage, handling and stabilization of edible fats and oils; and packaging of fats and oils.

Each chapter contains a wealth of information, generally available scattered throughout the literature. The references cited appear to be up to date, and some from 1984 are cited; the lists are an

adequate entry for further detailed information. The discussion of deodorization is excellent. The theoretical treatment given to this area was a pleasant surprise.

The editor is to be commended for his choice of authors for the various chapters. This volume should be valuable for everyone involved in research and development in the area of edible oils.

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Fish and Human Health, by William E. Lands (Academic Press

Inc., 6277 Sea Harbor Dr., Orlando, FL 32821, 1986, paperback, 170 pp., \$24.95).

It is not unusual for highly respected scientists in retirement to allow their more fanciful and controversial thoughts to be put into print. However, it is unusual for a scientist with a reputation for methodological rigor to do this at the height of his scientific respectability.

Perhaps it is not a bad thing that we get Bill Lands' gut feelings about n-3 fatty acids and human health while he is still an active researcher in the field. He does us a favor by bringing together a lot of information about marine and plant sources of n-3 fatty acids, fish oil technology, the impact of n-3 fatty acids on eicosanoid synthesis and possible effects on health. As another active researcher in the n-3 fatty acid field, I cannot share Lands' enthusiasm for the possible favorable effect of n-3 fatty acids in prevention of many disease states, but that, too, is a personal view; I lack evidence to the contrary.

Lands' approach is to present his personal views and follow them, in many chapters, with a technical section in which he presents some key studies and citations. While these technical sections are not exhaustive, they appear fair. By judicious use of frequent notes of caution and use of the rhetorical question, Lands avoids the label of food faddist.

The intended audience for the book is unclear. It is a little too technical for the nonscientist and lacks depth for the specialist. This leaves it open to the self-taught nutrition experts, to retrieve from the book what they need to promote n-3 concentrates. The book will be of interest to many who can handle the science. Currently, there are many lay reports on the possible efficacy of fish oils in heart disease prevention, rheumatoid arthritis and other disorders. Lands' book elaborates on the background for these reports. Overall, it is a provocative document worth reading.

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Sterols and Bile Acids, New Comprehensive Biochemistry, Vol. 12, edited by H. Danielsson and J. Sjovald (Elsevier Science Publishing Co. Inc., 52 Vanderbilt Ave., New York, NY 10017, 1985, 447 pp., \$70).

This volume contains eight chapters on sterols and six on bile acids. Included are "Biosynthesis of Cholesterol," by Rilling and Chayet; "Control Mechanisms in Sterol Uptake and Biosynthesis," by Gill, Kennelly and Rodwell; "Participation of Sterol Carrier Protein in Cholesterol Biosynthesis, Utilization and Intracellular Transfer," by Scallen and Vahouny; "Biosynthesis, Function and Metabolism of Cholesterol Esters," by Jones and Glomset; "Cholesterol Absorption and Metabolism by the Intestinal Epithelium," by Stange and Dietrich; "Cholesterol and Membrane Structure," by Chapman, Kramers and Restall; "Biosynthesis of Plant Sterols," by Goodwin; "Structure, Biosynthesis and Functions of Sterols in Invertebrates," by Ikekawa; "Mechanisms of Bile Acid Biosynthesis in Mammalian Liver," by Bjorkhen; "Bile Alcohols and Primitive Bile Acids," by Hoshita; "Metabolism of Bile Acids in Liver and Extra Hepatic Tissues," by Elliot; "Metabolism of Bile Acids in Intestinal Microflora," by Hylemom; "Physical-Chemical Properties of Bile Acids and Their Salts," by Carey; and "Role of Bile Acids in Intestinal Lipid Digestional Absorption," by Borgstrom, Banowman and Lindstrom.

Steroid hormones are covered in a separate volume. The editors note that space considerations have resulted in certain gaps, such as compartmentation of sterols and their metabolism, and dynamics of cholesterol balance. Volume 10 in this series—*Glycolipids*, edited by Herbert Wiegand—was recently reviewed in this column. The information explosion in biochemistry continues and even multivolume series such as this apparently must sometimes apologize for omissions based on space limitations.

This series fills a niche between the general textbook and individual reviews of specific topics. Topics are

obviously covered in much greater detail in such a series than is possible in a general textbook, but over the life of the series may sometimes lack the currency of individual reviews. The constraints of publishing multivolume series require that particular topics be covered in specific volumes and that volumes be produced more or less sequentially, often over some lengthy period of time. Chapters in this volume routinely cite literature into 1983 and occasionally into 1984.

The presence of a series of coordinated chapters restricted to specific topics in a single volume greatly facilitates retrieval of information. Individual volumes such as this are suitable for specialized advanced graduate level courses or for personal use by those working in the area covered. The total series comprises a reference work beyond the interests or purchasing power of the individual reader. This is a high quality, well-written and well-produced series, certain volumes of which are of particular interest to lipid chemists.

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New books

Cacao Biotechnology, edited by Paul S. Dimick, Pennsylvania State University, 1986, soft cover, 154 pp., \$25. Contact P.S. Dimick, 116 Borland Laboratory, Food Science Department, Pennsylvania State University, University Park, PA 16802.

The Surface Coating & Raw Material Directory—1986, Oil & Colour Chemists' Association, Priory House, 967, Harrow Rd., Wembley HA0 2SF, United Kingdom, 1986, £30.00 plus postage.

Water-borne Coatings, by J.W. Nicholson, Oil & Colour Chemists' Association, Priory House, 967, Harrow Rd., Wembley HA0 2SF, United Kingdom, 1986, \$18.

Basic Programs for Chemical Engineers, by Dennis Wright, Van