

# New Books

J. F. Gerecht, Book Review Editor

*Methods of Aflatoxin Analysis*, Edited by B.D. Jones (Report C-70, Tropical Products Institute, 56/52 Grays Inn Rd., London WC1x8LU, April 1972, 58 p., available at no cost from TPI).

This well organized report, which replaces TPI Report G13, comprises an introduction to the aflatoxin problem, eight sections covering sampling methods, extraction of aflatoxins, extract cleanup techniques, thin layer chromatography (TLC) estimation of aflatoxins on TLC plates, confirmatory methods for aflatoxin B<sub>1</sub>, and calculation of aflatoxin content. Fine appendices cover apparatus and chemicals required, sources of supply, calibration of aflatoxin standards, and bulk sampling methods for oilseeds.

The report reviews selected methods available for determining aflatoxins in foods and feedstuffs, but not mixed feeds, with emphasis on methods suitable for use in laboratories in developing countries. The coverage of methods is thorough; most current methods in use in Europe and the U.S. are detailed. Section G outlines recommended and alternative extraction methods and extract cleanup steps for a variety of cereals, edible nuts and oilseeds. It is obviously based on considerable experience by TPI, and should be of great help to laboratories without experience in aflatoxin analysis.

Appendix 4 comprises bulk sampling methods of oilseeds for aflatoxin analysis, as recommended by the International Association of Oilseed Crushers, and the Canadian Food and Drug Laboratories. Needless to say, such information is extremely important. The appendix might have been even more useful had it included the sampling plan of the U.S. Peanut Administrative Committee (PAC) for sampling shelled and unshelled peanuts.

In the reviewer's opinion, this compilation of analytical methods of aflatoxin analysis should find much use as a working tool and as background material for laboratories engaged in aflatoxin analysis.

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*Tenside - Textilhilfsmittel - Waschrohstoffe (Surfactants - Textile Auxiliaries - Raw Materials)*, Vol. III, Kurt Lindner and contributors (Wissenschaftliche Verlagsgesellschaft mbH, Stuttgart, W. Germany, 1971, 1006 p., DM 285).

Volume III of this series is intended to be an update and extension of Volumes I and II, published some 7 years earlier. Thirty-eight contributors provide an encyclopedic overview of the field of detergents, their production, properties and applications. The overview includes an extensive discussion of petrochemical processes leading to surfactant precursors; preparation and properties of a wide variety of surfactant types; a discussion of physico-chemical phenomena underlying their action; production and applications of other detergent components such as phosphates, silicates, optical brighteners and silicones; a review of textile and fiber technology and the role of surfactants; some special fields of surfactant applications; and finally, a discussion of techniques for evaluation and analysis of surfactants. Special chapters on enzymes and enzyme detergents, on spray-mixing and on the biodegradation

problem bring the text well up to the state of affairs in the late 60's.

The editor of an encyclopedic reference work faces a number of difficult challenges which, in the present volume, have been met with variable success. It is axiomatic that with 38 contributors, the quality of individual chapter is likely to vary. This reviewer found the chapters on petrochemical processes and on the sulfonation of olefins particularly good. The discussion of cationic surfactant types, too, stood out—both in scope as well as in its technical details. On the other hand, the discussion of enzyme detergents (very much an emerging field when the volume was written) is sparse. More seriously, the review of evaluation of detergent effectiveness proved to be below the utility of the work as a whole.

Beyond assuring the quality of individual chapters, the editor faces the additional task of subordinating the particular interests of his contributors to the overall point of view of the work. If he fails here, the measure of detail may well outrun the importance of certain subjects, particularly when these reflect the specialization of the contributor. With a few exceptions, this challenge has been well met here. The exceptions include a review of leather technology, which is inordinately detailed, and the chapter on urethanes derived from sugar alcohols which seems somewhat out of proportion with their importance in the detergent field.

For the U.S. reader, the utility of the present volume lies principally in its value as a reference work, particularly in areas which are not usually treated primarily from the viewpoint of the roles of surfactants. In addition to the discussion of petrochemical intermediates singled out earlier, the chapters on textile processing and those of the involvement of surfactants in the paper, building, printing, flotation and the petroleum exploration industry are of special value.

In recent years the detergent field has proved to be most dynamic. A compendium such as this volume must suffer from a measure of "cultural lag." Biodegradability, a burning issue in the early 60's, can be and is discussed in admirable detail, with primary emphasis on the situation in Germany. Other problems, however, have since emerged. Eutrophication, the safety of germicidal and sanitizing agents, the maintenance of flame retardancy of cotton fabrics, and others, have had a most profound effect on the field in recent years and will continue to do so in the foreseeable future. By its very nature, a compendium cannot hope to do justice to such rapidly moving and continuing developments.

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## George Lowry joins staff of Mona Industries



Mona Industries, Inc., Paterson, N.J., based surfactant and specialty chemicals manufacturer, has announced that George W. Lowry joined the company as assistant technical director on February 1, 1973.

Before joining Mona Industries, Inc., Lowry was technical director of Campwood Associates, Inc., and previously has been associated with GAF Corp., Nopco, Fels & Co., and Curley Co., Inc.; all in the area of technical service, applied research and new product development of surfactant chemistry.

Lowry, an AOCS member since 1966, is a graduate of the University of Pennsylvania. ■



## Hunter promoted by Amway

Robert T. Hunter, former general manager of Research and Development, has been named director of that division. Hunter, who joined AOCS in 1958, has been an Amway employee since June 1970. Prior to that time he was with the Colgate Palmolive Co. He joined that corporation in 1958 as a research chemist and was section head, Laundry Detergent Formulations, immediately prior to joining Amway.

In his new position, Hunter is responsible for Amway's technical effort in the development of all products, production processes, packaging, and quality control. Ancillary areas under his jurisdiction include poison control and technical support for registration of products with governmental agencies. ■

### JAOCS News deadlines

Information to be published in *JAOCS News* is due no later than the first day of the month *preceding* the month of issue. May deadline: April

1. June deadline: May

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## ACS introduces new executive director to scientific community

R.W. Cairns, recently Deputy Assistant Secretary of Commerce and previously a vice-president at Hercules Inc., has joined the staff of the American Chemical Society as its chief executive officer. The Society, founded in 1876, now has 110,000 members and is the world's largest association devoted to a single scientific discipline. In recognition of its contributions to the public welfare, the Society was granted a National Charter by the 75th Congress in 1937.

Executive Director Cairns was introduced to the scientific and government community at a reception given by the Society, February 6, at ACS national headquarters in Washington, D.C. ■

### E.A. Day succumbs to heart attack

E.A. Day, an AOCS member since 1959, died of a heart attack on January 11. Day was recently appointed president of International Flavors & Fragrances' European operations. ■

