
Publications

Book reviews

Solid Supports in Gas Chromatography, by V.G. Berezkin, V.P. Pakhomov and K.I. Sakodinsky (Supelco Inc., Bellefonte, PA, 1980, 134 pp., \$13).

In real life, gas liquid chromatography is not just a matter of some mobile gas and some stationary liquid: the solid support often influences the shape and the position of peaks, as well.

As the three Russian authors discuss at length in this inexpensive booklet, the solid support can influence chromatographic retention and efficiency, and it can reversibly or even irreversibly adsorb solute molecules. Further chapters deal with physical and chemical characteristics of inorganic and organic supports, and with methods for modifying and coating these.

While the authors' intent is laudable, its execution leaves something to be desired. Most noticeably lacking are the services of an editor familiar with the chromatographic technique and the English tongue. Sometimes this lack is merely amusing—for instance, when image spirit peaks appear or when supports undergo electrolysis. It would not take the reader long to identify these strange happenings as ghost peaks and the acquisition of electrostatic charge. But let him try his talent on this quote: "Naturally, the classical case occurs more frequently when the slow stage is diffused into liquid phase film, and the concentrations of the support's internal pores in the gas phase even out rapidly." By the way, the identity of the "classical case" remains a mystery; my own speculation is that the authors refer to the mass transfer resistance term of the Van Deemter equation.

There are matters of content, as well, which may be questioned. The authors place heavy emphasis on classifications and equations (98 equations in Chapter Four alone!) but are less forthcoming with practical help to the analyst. Given the subject and the origin of the book, one expects, of course, that references should cover mostly the work of Soviet scientists prior to 1970. However, quite a few passages—for instance, the remarks about capillary columns—are hopelessly out of date. That could have been avoided.

Who should buy this booklet then? In my opinion, it would mainly be of value to the researcher interested in GLC support, as a handy reference to Eastern-block literature.

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Current Topics in Nutrition and Disease, Vol. 3, Nutrition for the Elderly, by Anthony A. Albanese (Alan R. Liss, Inc., New York, 1980, 342 pp., \$38).

The purpose of this volume is to review the normal and exceptional nutritional requirements of the elderly in health and disease.

The first chapter deals with the psychological factors,

clinical impediments, and nutritional characteristics of the aged in society, and the second with physiological and clinical factors in the aging process. After discussions of water requirements and nutrient needs, the author considers carbohydrates and diabetes, and fats and cardiovascular disease. The next chapter on calories and body weight contains much sound advice on weight reduction. The eighth chapter deals with the vitamins and includes a discussion of the essential fatty acids. While the sections on vitamins appear sound, readers of the *JAOCS* will be quick to note that, in this chapter as well as in Chapter 3, the author gives incorrect information on essential fatty acids. We are told in Chapter 3 that linolenic and arachidonic acids constitute the essential fatty acids and that while the body cannot synthesize linolenic acid it can produce it from arachidonic acid. Then, in Chapter 8, we are informed that arachidonic acid is not really essential since it can be produced in the body from linolenic acid. The author has clearly confused the common dietary α -linolenic acid, and putative dietary essential, with γ -linolenic acid, the desaturated product of linoleic acid. This repeated erroneous information does not inspire confidence in the reliability of information in areas where one lacks expertise.

In the next chapter, the author considers phosphorus, magnesium, calcium and bone health, an area in which he enjoys a sound reputation. The final chapter deals with electrolyte and fluid balance; iron needs and anemia; trace minerals; and drug-nutrient interactions. An appendix supplies the recommended daily dietary allowances, nutritive value of common foods, common sources of several nutrients, and several dietary plans for weight reduction and cholesterol control.

This book is well-illustrated but it contains more than an acceptable number of typographical errors. It is of interest primarily to nutritionists and gerontologists.

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Determination of Fatty Acid Composition via Chemical
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COMMUNICATIONS

The Lipids of Kangaroo Meat
Biosynthesis of Fatty Acids by *Trypanosoma cruzi*

New publications

McCutcheon's Emulsifiers and Detergents, North American
Edition, 1981, 332 pp., \$30, International Edition, 272
pp., \$25, and Functional Materials, 1981, 224 pp., \$25,
published by McCutcheon Division, M.C. Publishing Co.,
175 Rock Rd., Glen Rock, NJ 07452.

Annual information publication from the Universidade
Estadual de Campinas Faculdade De Engenharia De Alimen-
tos e Agricola, Numero VIII, 1980, with English transla-
tion, from the Universidad Estadual de Campinas, Cidade
Universitaria, Barao Geraldo, Campinas, Sao Paulo, Brazil.

Maintaining and Troubleshooting HPLC Systems, a User's
Guide, by Dennis J. Runser, John Wiley and Sons, 605 3rd
Ave., New York, NY 10016; 1981, 163 pp., \$27.50.

Lipid Biochemistry of Fungi and Other Organisms, by
John D. Weete, Plenum Press, 227 W. 17th St., New York,
NY 10011; 1980, 388 pp., \$45.

Flow Injection Analysis, by Jaromir Ruzicka and Elo
Harald Hansen, John Wiley and Sons, 605 3rd Ave., New
York, NY 10016, 1981, pp. 207, \$32.50.

Literature on Fats and Oils, Cosmetic Chemicals and
Coatings will be added in July to the current-awareness
publications, CA Selects, published by Chemical Abstracts
Service, 2540 Olent Angy River Rd., PO Box 3012, Colum-
bus, OH 43210. Subscriptions to the series are \$75.