Methodology

Methods development update

The *1986 Additions and Revisions to Methods* are in the final production stage and should be available for distribution about Dec. 15, 1986.

The 1986 additions will include 12 new methods. These include four that are chromatography-related for phospholipids, erucic acid, triglycerides and antioxidants. There are four aflatoxin methods, covering the analysis of aflatoxins in corn, dairy products and the TLC confirmation of aflatoxins B_1 and G_1. The chromatography methods were prepared and submitted by the Chromatography Committee, chaired by John Callahan of Colgate-Palmolive, and the Lecithin and Co-Products Committee, chaired by Bernie Szuhaj of Central Soya. The aflatoxin methods were drafted by the Mycotoxin Committee, chaired by Art Waltking of Best Foods. A rapid method for the estimation of phospholipids in vegetable oils, based on nephelometry, has been adopted as a Recommended Practice. This method, developed and submitted by Roger Sinram of A.E. Staley, should be useful in the quality control of vegetable oil processing.

There are 16 revised methods for 1986. For six methods, the revisions are minor, including such things as new addresses for suppliers and numerical corrections. To 10 methods (including iodine value, peroxide value, glycerol and monoglycerides) requiring the use of toxic solvents (chloroform and carbon tetrachloride), recommendations were added for the use of alternate solvents. It is noted in these methods that the recommendations are not official because they have not been studied collaboratively within AOCS. The recommendations are based on reported, successful experience at laboratories using the alternate solvents in these methods.

Future considerations

The format of the *AOCS Official Book of Methods and Recommended Practices* is under review. The review will include both the manner in which the methods are written and the form in which they would be distributed (bound volume, current binder style, etc.). Suggestions for the new format are under consideration. Anyone wishing to contribute ideas about the format should submit them to the AOCS Technical Director. When the new format is adopted, it will be used for the fourth edition of the methods book. A projected date for printing the fourth edition is 1989. The critical factor controlling the printing of the fourth edition is the completion of the update and revision of the 340 existing official methods and recommended practices.

As a means of improving the methods review process, it has been proposed that "Associate Methods Editors" be appointed for each section of AOCS methods. It would be the task of the Associate Methods Editors to review (with the help of a committee and industrial surveys) the various sections in Methods and make recommendations for new, revised and surplus methodology. The required action would be taken by technical committees.

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Publications

Book review

Analysis of Oils and Fats, edited by R.J. Hamilton and J.B. Rossell (Elsevier Scientific Publishing Co., 52 Vanderbilt Ave., New York, NY 10017, 1986, 441 pp., $86).

This book tends to emphasize the methods endorsed by the Federation of Oils, Seeds & Fats Association Ltd. (FOSFA) for international trade in these commodities. The book is composed of contributions in the following areas: classical analysis of oils and fats; national and international standardization of analytical methods; packed column gas chromatography; WCOT (capillary) gas liquid chromatography; GC-MS of triglycerides; TLC and HPLC; positional distribution of fatty acids in triglycerides; applications of wide-line NMR in the oils and fats industry; and high resolution NMR.

Several chapters lack in-depth coverage of the intended material. The chapters on packed column chromatography and mass spectrometry are two such examples. Greater depth would have made the volume more useful to the practicing analyst. The excellent chapter reviewing capillary gas chromatography is written in sufficient depth to assure fairly complete coverage of the lipids area. In general, the volume is a good overview of the methods that it addresses, and can be recommended for this type of reading. The index is adequate and easy to read.

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New books

Handbook of Aqueous Electrolyte Thermodynamics, by the Design Institute for Physical Property Data, American Institute of Chemical Engineers, 345 East 47th St., New York, NY 10017, 1986, 852 pp., $45 for DIPPR sponsors, $65 for members of AIChE, $90 all others.