AOCS' 4th Edition of Methods

Work on the 4th edition of the AOCS book of methods (*Official Methods and Recommended Practices of the American Oil Chemists' Society*) is nearing completion. Books will be available for purchase and shipment in late December 1989 or early January 1990. The actual publication date will be about two weeks beyond the anticipated Dec. 15, 1989, publication date, due to the complexity of typesetting and proofreading.

The new edition of AOCS Methods will feature a format (8 1/2″ × 11″) and style similar to the technical articles in the *JAOCS*. The larger page size will allow the book to be published in one volume rather than two volumes. Two-column style and larger type size should permit easier reading. The familiar five-ring binder (a strong preference for the ring binder was noted in a survey performed several years ago) will be retained for convenient insertion of future additions and revisions.

New methods, plus additions and revisions, that are traditionally offered each year in December have been incorporated into the 4th edition. The 4th edition also includes existing methods that have been reviewed and updated where necessary by associate methods editors and AOCS technical committees. Where possible, the use of toxic chemicals has either been eliminated from the methods or a recommendation on the best possible alternative (based on continuing studies) has been incorporated into the methods.

The AOCS technical director would like to acknowledge the work of the technical committees, as well as the following specific associate methods editors, for the work and time involved in updating the AOCS Methods:

Methods sections, associate editor
Aa through Ab, John Williams
Ac through Ba, Donald E. Britton
Ad, Fu Kuang Liu
Ae & Bd, Frank Naughton
Af through Ai, James Daun
Ah through Aj, Albert Athnasios
Bc, Lynn A. Hawkins, Jr.
Ca through Cf, Thomas Smouse
Cg, Kathleen Warner
Da through Dd, George Battaglini
Ea, Carlton F. Quitter
H, Alan Held
J, Bernard Szuhaj & committee
M, David Firestone
R, Mike Erickson & exam. board
S through T, Gerald Szajer
Chromatography (GLC), Gary Walker
Trace Metals, Dennis Reynolds

Fatty acid profile program
The Edible Oils Group at Leatherhead Food Research Associates (Leatherhead Food RA) has determined fatty acid composition data on 11 oilseeds and stored this information on floppy disk. The program, known as Vegetable Oil Authenticity Database, is based on the analysis of over 500 oilseed samples, obtained from sources around the world. The fatty acid profiles were determined directly on oil extracted from clean oilseeds, and therefore represent a reasonably accurate picture of the fatty acid composition range. The IBM/PC computer compatible program included within the software package allows the calculation of means, ranges and standard deviations for fatty acid composition, and permits the analysis of data from a single geographical origin or a combination of origins. The software package, available in either 5.25 inch or 3.5 inch disks for use with the spreadsheet package Lotus 123, is menu-driven and user-friendly, and comes with full instructions.

The program is available only from Leatherhead Food RA (contact: M.A. Jordan, Leatherhead Food RA, Randalls Road, Leatherhead, Surrey KT22 7RY, England; FAX 0372-386228) at a price of £150 for Food RA members and £200 for nonmembers. Anyone interested in the program should contact Dr. Jordan directly.

Current IUPAC study program
The current collaborative study program outlined by the IUPAC Commission on Fats and Oils includes the validation of the following methods:

—Determination of the color of lecithins (Lovibond and spectrometry).

—Determination of fatty acid profile (hydrogenated and nonhydrogenated soybean oil, using capillary GLC).

—Determination of benzo-a-pyrene (spiked fish and vegetable oils, using column chromatography and HPLC).

—Determination of triglycerides (animal fats and vegetable oils, using reversed phase HPLC).

—Determination of the cross contamination of edible oils transported in bulk (spiked oils, using MS/capillary GLC).

—Determination of residual chlorinated hydrocarbons in edible oils and fats (spiked oils, using capillary GLC with ECD).

—Determination of iodine value and peroxide value (animal fats, marine and vegetable oils, using cyclohexane substituted in standard methods).

—Assessment of methods for the detection of thermally treated edible oils.

—Determination of phosphorus (vegetable oils, using AAS graphite furnace).

—Review of the methods for the determination of lipid oxidation.

—Determination of Sb, Cd, Se and Hg (spiked oils, using AAS graphite furnace).

—Determination of chlorophyll (vegetable oils, method not defined).

Anyone interested in further information on these studies should contact the Secretary of the Commission, Dennis Pocklington, Laboratory of the Government Chemist, Queens Road, Teddington, Middlesex, TW11 0LY, England.

David Berner
AOCS Technical Director