



Methods development update

The AOCS Book of Methods has been a standard of the fats and oils industry since it was first published by the Society in 1925. While the methods manual has expanded considerably since that time, it was recognized about 1977 that many of the methods based on older technology needed to be updated. It was evident also that to meet the needs of current technology, totally new methods—ones not previously published in the manual—were required.

To facilitate the achievement of these two main goals, the AOCS Foundation, headed by Nick Pelick, began in 1978 to formulate plans for soliciting funds to underwrite a "methods development project." Thanks to contributors and the foundation's successful program, a full-time AOCS Director of Methods Development (now called the AOCS Technical Director) was appointed to the AOCS staff in early 1982, to coordinate the activities of the various AOCS technical committees in developing new methods and updating existing ones.

At the Uniform Methods Committee (UMC) meeting in Arlington, Virginia, in December 1983, an action plan was developed for improving the level of productivity of the UMC. The essential elements were (a) to rewrite the scope of the UMC to establish a structure directly reflecting the responsibility of each technical committee, (b) to determine what methods are needed by industry and (c) to establish better communication between the UMC, the technical committees and the AOCS staff. In addition, a number of methods of particular interest to industry were proposed for study. Also, each UMC member was asked to list one or two new methods of interest to industry and to identify five current methods in need of review. A selection of methods for development and revision was to be made at the 1984 Dallas annual meeting from the total list of proposed methods. At the 1983 UMC meeting in Arlington, the title of the AOCS methodology book was changed to *Official Methods and Recommended Practices of the American Oil Chemists' Society*.

At the May 1984 UMC meeting in Dallas, the review and discussion of the proposed methods resulted in the establishment of a list of five priority methods:

- Calculated Iodine Value by GC
- Phosphorus in Oils
- Color and Chlorophyll in Oils
- cis, cis* Polyunsaturated Fatty Acids by GC, and
- Quality Control of Residual Hexane in Meals

During the 1985 AOCS meeting in Philadelphia, a sixth priority method was added to this list, Tocopherols in Oils.

These methods were designated as priorities because of their concern and significance to the industry. Other methods selected for development/revision at the Dallas meeting include: Solid Fat Content by NMR (updating Cd16-81 to include the IBMPC-20); Replacement of Mer-

cury Catalyst in the TKN Analysis; Elimination of Asbestos in the Crude Fiber Analysis; Triglyceride Analysis by Carbon Number (IUPAC Method); Aflatoxin in Corn and Soybeans (AOAC and AACC Methods); Aflatoxin M₁ in Milk and Dairy Products (AOAC Methods); *trans* Fatty Acids in Margarine by GC; Tempering Temperatures of Cocoa Butter Extenders for Solid Fat Content by NMR, and Composition of Polymerized Fatty Acids (Dimer Acids).

Shortly after the 1984 Dallas meeting, a three-year plan was developed that set goals for the coming years and emphasized increased cooperation with other national and international organizations such as AOAC, IUPAC, ISO, CESIO, FEDIOL, AIS and FOSFA. These contacts are being maintained.

Reports given by the technical committee chairmen at the May 1985 UMC meeting in Philadelphia indicate that progress is being made, not only in methods development/revision, but in other areas as well. The GC Committee has been regrouped under the chairmanship of John Callahan, and is actively reviewing new methods and rewriting the *trans* unsaturated fatty acid procedure into AOCS format. A Lecithin and Co-products Committee has been formed under the direction of Bernard Szuhaj. The Fatty Nitrogen Subcommittee was organized under Gerald Szajer. As noted above, Tocopherols in Oils was designated a priority method, to be developed by a committee headed by Lewis Jacobs. This committee is about to initiate a collaborative study using an HPLC method.

The 1985 Additions and Revisions to Methods will include the Calculated Iodine Value by GC Method (a priority method) and the Crude Fiber Method, revised to eliminate asbestos. A collaborative study using AA to determine phosphorus in oils is currently in progress. Serious consideration is being given to initiating a study of a rapid (five-minute), low-cost phospholipid in oils procedure, based on a procedure described in a paper given by Roger Sinram of A. E. Staley at the Philadelphia meeting. Progress has been made on other projects selected for study at the Dallas meeting; these will be covered in the next report. Six new or revised methods should appear in the 1986 Methods Additions and Revisions. Currently there are 11 AOCS Technical Committees, with approximately 70 methods in various stages of review, formatting, revision or development. A list of technical committees appears in the current AOCS directory.

Anyone with ideas, suggestions or concerns, or who would like to participate in a collaborative study, is urged to contact either the AOCS Technical Director or the appropriate technical committee chairman. The GC Committee, in particular, is looking for members and collaborators.

Dave Berner
AOCS Technical Director

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President's Club and Honor Roll

The AOCS members listed here have qualified for the 1985-86 AOCS President's Club or Honor Roll. Members who recruit at least one new member qualify for the President's Club; those recruiting three or more qualify for the Honor Roll. President's Club and Honor Roll members receive recognition at AOCS annual meetings. Forms for use in recruiting new members are available from AOCS Headquarters, 508 S. Sixth St., Champaign, IL 61820 USA.

Eleven	F.C. Naughton	N.M. DiMarco	D.T. Munsey
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		W.E. Farr	D.A. Okiy
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	A.B. Herrick	J.M. Gonzalez	R.H. Purdy
Five	D.M. Holcomb	L.S. Gray Jr.	K.C. Rhee
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	L.J. Monty	T.A. Hamme	E.F. Sanders
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J.B.M. Rattray	K.T. Zilch	B.J. Holub	P.J. Stern
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	R.W. Delashmit	R. Maxwell	P.D. Vail
		S.L. Melton	P.J. White

New Members

The following persons had applied for membership in the American Oil Chemists' Society through mid-September 1985. If an applicant was invited to join AOCS by a current member, that member's name appears in parentheses at the end of the listing. The new members' listing is published bimonthly.

Casimir C. Akoh, Washington State University, Pullman, Washington
 Leon G. Bergeron, SGS Supervision Services Inc., Montreal, Quebec, Canada (Sizer)
 Valdis Berzins, Haldor Topsoe Inc., Houston, Texas (Farr)
 Nelson F. Borys, A.E. Staley Manufacturing Co., Decatur, Illinois (Plummer)
 Catherine D. Brady, Akzo Chemie America, McCook, Illinois (Gray)
 Liew Chee Ping, F.S. Oils Sdn. Bhd., Pasir Gudang, Malaysia
 Martin Costello, Avonmore Creameries Ltd., Kilkenny City, Ireland (Schmadeke)
 Kenneth M. Donnelly, Standard Biological Laboratories, Mississauga, Ontario, Canada
 Nicki J. Engeseth, University of Illinois, Urbana, Illinois (Frankel)
 Bricini Faith C. Gepielago, University of the Philippines in the Visayas, Iloilo City, The Philippines
 Caleb L. Gilchrist, Texas A&M University, College Station, Texas (Rhee)

Burt G. Greenstein, Cherry Burrell Corp., Votator Division, Louisville, Kentucky
 Steven P. Greiner, Kraft Operations and Technology, Glenview, Illinois (Krishnamurthy)
 John O. Hudson, Armour-Dial, Scottsdale, Arizona (Herrick)
 Edward Hugick, Wise Foods, Division of Borden Inc., Berwick, Pennsylvania (Hoover)
 Douglas M. Hunt, Columbia Inspection Inc., Portland, Oregon (Delashmit)
 Samuel A. Ibiyemi, University of Ilorin, Ilorin, Nigeria
 Raymond M. Jacobs, Cargill Inc., Hartsville, South Carolina (Elder)
 Timothy Jones, Procter & Gamble, Cincinnati, Ohio
 Sandra Cassina Kea, University of Nebraska, Lincoln, Nebraska
 Martin Kind, Stork Amsterdam B.V., Amsterdam, The Netherlands
 Park Kyung Tae, Shinyang Rice & Oil Co. Ltd., Jeongju City, Korea
 Stiven S.H. Laiho, Öljynpuristamo Oy, Helsinki, Finland
 Bruce E. MacDonald, CSP Foods Ltd., Russell, Manitoba, Canada (Pickard)
 Miguel Machuca-Lopez, Instituto Mexicano de Aceites, Grasas y Proteinas A.C., Mexico City, Mexico
 Stephen A. Mackay, Seprod Ltd., Kingston, Jamaica (Thompson)
 Vhundi G. Mahadevappa, University of Guelph, Guelph, Ontario, Canada (Holub)

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Barbara M. Malewicz, University of Minnesota, The Hormel Institute, Austin, Minnesota (Baumann)
 Juarez Mayer, Olivebra S/A—Indústria e Comércio de Óleos Vegetais, Porto Alegre, Brazil
 William E. McCullough, Sci-Tek Laboratories, Northbrook, Illinois
 Richard E. McDonald, Food and Drug Administration, Cincinnati, Ohio (Mai)
 Lynne A. Miller, Iowa State University, Ames, Iowa (White)
 Thomas C. Miller, Henkel Corp., Minneapolis, Minnesota
 Makoto Mino, Osaka Medical College, Takatsuki, Japan
 Anthony O. Oboh, Nigerian Institute for Oil Palm Research, Benin City, Bendel State, Nigeria (Okiy)
 Dere A. Okiy, Nigerian Institute for Oil Palm Research, Benin City, Bendel State, Nigeria
 David W. Roberts, Chemby Chemicals Ltd., Takapuna, New Zealand (Hall)
 Renato N. Salinas, San Pablo Manufacturing Corp., San Pablo City, Laguna, The Philippines
 Ronald B. Schulten, Kappa Products Corp., Chicago, Illinois (Stern)
 Zouhair F. Stephan, Brandeis University, Waltham, Massachusetts (Hayes)

Neville C. Stephenson, Bioenergy Pty. Ltd., Kirrawee, Australia (Lusas)
 Thomas G. Swift, A.E. Staley Manufacturing Co., Decatur, Illinois
 Thomas J. Szczeblowski, Stepan Co., Anaheim, California
 Barrie Tan, University of Massachusetts, Amherst, Massachusetts
 Charles A. Thomas Jr., Helicon Foundation, San Diego, California
 Phyllis Vining, Fish Management Inc., Inverness, Mississippi
 Ramakant D. Wagle, Indian Organic Chemicals Ltd., Madras, Tamilnadu, India
 Stanley Wiener, Super Tech Lab Inc., Ronkonkoma, New York
 Robert J. Zilli, Manville Corp., Denver, Colorado

New Corporate Member

Dimas Capitanio, Rohco Industria Química Ltd., São Bernardo do Campo, São Paulo, Brazil (Hastert)

Polyunsaturated Fatty Acids

A monograph edited by Wolf-H. Kunau and Ralph T. Holman, 258 p.
 Hardbound—\$20 for AOCS members and students, \$30 for nonmembers.

This monograph records the contributions of twenty noted researchers who contributed to the 1975 AOCS symposium on unsaturated fatty acids. The symposium was premised on the increasing need to combine separate disciplines in lipid research. Speakers thus were invited who specialized in chemical, physical and biochemical properties of lipids. Topics included biosynthesis, oxidation and regulation of metabolism, analysis, chemistry/physicochemistry, and experimental and clinical data. Illustrations and references enhance this collection.

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