

Inside AOCS

World War II to the present

The American Oil Chemists' Society is now in its 75th year, having been formed in 1909. In this article, the second in a series on the history of AOCS, JAOCS assistant news editor Barbara Haumann reviews major events for AOCS from World War II to the present.

World War II brought many changes in the oils and fats industry.

Lamar Kishlar, in his 1944 president's report, said of the war, "In recent years, there have been tremendous increases in the production of certain fats and oils. There has been relatively great curtailment in others. The emergency has caused much dislocation of normal trade channels and has caused marked replacement and substitution in many fields. Changes in distribution have caused new methods of analysis, new production techniques, new methods of trading. All of these changes will leave their mark on the science, industry and commerce of the fats and oils field in the post war world."

To meet this transition, Kishlar proposed "that a Post War Planning Committee of ten be appointed by your incoming president with the advice and consent of your governing board to make an overall study of the aims and objectives of our society and to formulate an overall plan to be used as the blueprint from which we will build a larger, more effective society for the next decade."

World War II altered the United States' position in the world oils and fats market from an importer to an exporter. The U.S. began exporting soy oil in 1938 and had large exports between 1943 and 1945. In 1944, soybean oil surpassed cottonseed oil to become America's leading vegetable oil.

In a paper "Economic Position of Oils and Fats in the War and Post-War Periods" given at the May 1944 meeting, Robert M. Walsh of USDA said, "In war time, oils and fats are commodities of critical importance. Europe, normally an importer, today is suffering from a serious lack of fats for both food and technical uses. The loss of the Far East as a source of supply of coconut oil, palm oil and tung oil has resulted in serious inconvenience in our own country, and in Canada, Mexico, Central America, the Caribbean countries, and the United Kingdom. In addition, the German occupation of fertile portions of western and southern Russia created an urgent need for imports in a country normally self-sufficient in oils and fats.

"Before the war, exports from the Far East amounted to more than 3 billion pounds of oils

and fats annually. Another billion pounds of oil has been lost temporarily as a result of cessation of whaling activities. These losses in total supplies, as far as the United Kingdom and the Western Hemisphere are concerned, have been largely offset by the blockage of most of continental Europe and by increased production of fats on this continent and in South America."

Walsh said U.S. fat production from domestic materials rose from 8.2 billion pounds in 1939 to 11 billion pounds in 1944. "The gain in output of vegetable oils has been relatively large, with a 75% increase in production since 1939 as compared with an increase of about 25% in animal fats," he said. "The most striking gains have been in output of soybean oil, linseed oil, lard, grease, and tallow. On the other hand, fairly sizable reductions in output of butter, cottonseed oil, and marine animal oils have occurred. In contrast. . . imports of oils, fats, and oil-bearing materials have declined about 50% since 1939."

The war also was a time of great growth for the society.

"More than one-third of the membership of the society has joined within the past 24 months," Kishlar said at the opening of the 35th annual convention in 1944.

The 1,000th member joined the society on April 10, 1945. "In five years, the growth of the society has equalled that which occurred over the previous 30 years," Klare Markley said in 1945.

Meanwhile, the society was making important administrative changes. In November 1941, the society had set up an office to serve as journal headquarters in J.P. Harris' office at 35 E. Wacker Drive, Chicago, Illinois. In 1942, AOCS assumed complete editorial and financial responsibility for *Oil & Soap* under the editorship of H.L. Roschen. The governing board at its fall 1944 meeting created the position of executive secretary and appointed Lucy R. Hawkins, associate editor of the journal, as acting executive secretary. It also authorized hiring a full-time clerk stenographer. In March 1945, the society set up its first national headquarters, at 1414 Pure Oil Building, 35 E. Wacker Drive, Chicago.

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Because of a nationwide ban on conferences, the 1945 spring meeting set for New Orleans was canceled. However, the officers and governing board met in Memphis to transact business and election of officers was conducted by mail.

A sub-committee on Standard Samples and Supplies recommended in 1945 that Central Scientific Company of Chicago handle the sale and distribution of supplies for the AOCS Official Methods of Analysis. A formal contract between AOCS and the Central Scientific Company was signed March 29, 1945. Soon after, AOCS shipped its complete stock of reagents and supplies from New Orleans to Central Scientific.

Meanwhile, an effort was under way to change the society journal's name from *Oil & Soap* to the *Journal of the American Oil Chemists' Society*. This was formally proposed in 1944 by the journal committee to the governing board, then presented at a business session at the 1944 fall convention where it was approved, effective January 1946. That action later was postponed, with the name change going into effect with the January 1947 issue.

Robert R. King, in his 1946 president's report, pointed out that three new fields were opening up: the development of analytical methods for soybean product trade as well as for the oil-soluble vitamin industry and the highly specialized field of spectroscopy. King also reported that society membership had grown from 600 members in 1942 to nearly 1,200 in 1946. In 1951, the society accepted its 2,000th member.

In May 1947, the society moved to larger quarters in the Pure Oil Building and made Hawkins its executive secretary (no longer "acting"). She also served as managing editor for the journal. In 1948, Roschen resigned as journal editor and chairman of the Journal Committee after 11 years of service. Reid T. Milner filled in as interim editor for a year, until A. Richard Baldwin took over in May 1949.

In 1948, AOCS President Reid Milner announced that the society's Methods of Analysis were being translated into Portuguese to be used in Brazil. It was also the year of AOCS' first short course, "Production, Processing and Uses of Vegetable Oils," held on the University of Illinois campus. In the years since then, AOCS has sponsored approximately 40 short courses in addition to its national meetings.

Meanwhile, AOCS was gaining worldwide attention. R.J. VanderWal, in a 1951 commentary, wrote, "Large industries and small ones, corporations and individuals, food manufacturers, cosmetic and soap manufacturers, rendering works, packing-houses, academicians and the Army of the United States all write to the American Oil Chemists' Society for advice or information on a variety of subjects." Explaining that many inquiries were from foreign sources, he added, "The scope of the

technical correspondent's mail shows clearly that our society is known and respected all over the world."

During the 1950s, dietary patterns in the U.S. changed, with rising consumption of meat, poultry and fats. This was accompanied by a growing concern over the effect of fats in the diet, particularly of heated fats. By the early 1950s, food technology had developed as a separate science.

It was about this time that AOCS local sections were created. At the 1953 spring meeting, AOCS members, by an 864 to 49 vote, approved a proposal allowing local sections. The first charter was granted Nov. 5, 1953, to the Northeast Section. AOCS granted the Northern California Section its charter at the 1954 spring meeting, and a year later recognized the North Central Section. The fourth geographic section — Southwest Section — was granted a charter in October 1955.

Another effort to expand membership was undertaken by the society in 1957 with the creation of the junior membership category for students.

The society celebrated its 50th anniversary in 1959. A June 1959 account of the meeting reported, "The golden anniversary meeting of the American Oil Chemists' Society in New Orleans was a smash success in every way . . . the Roosevelt even re-did its chairs in gilt for the banquet hall."

During the late 1950s and early 1960s, lipid chemistry gained much attention. Responding to this new focus, the society sponsored a short course on biochemistry's emerging microanalytical methods in 1961 and began publishing a new bi-monthly journal, *Lipids*, in January 1966.

Lucy Hawkins retired May 31, 1961, as executive secretary and managing editor of the journal after 17 years of service. She now lives in Minneapolis. AOCS member T.L. Rettger then stepped in as executive secretary for a year. Also retired, Rettger lives in Florida. On March 15, 1962, Carl H. Hauber was hired as AOCS executive director. Hauber now heads a national medical professional society in Chicago.

The 1962 fall meeting, in Toronto, Canada, was the first AOCS national meeting to be held outside the U.S.

In 1963, the society officially launched its honored student program geared for students studying fats and oils technology or related topics. The first recipients were Randall Wood, a Texas A&M student, and Leamon D. Williams, a Michigan State University student. This program was originally named the MacGee Award, in honor of AOCS' 1961-62 president, A.E. MacGee.

A fire Oct. 7, 1963, swept through the Evanston, Illinois, distribution center of Scientific Products Division, American Hospital Supply Corporation, the sole distributor of AOCS official supplies. Fortunately, these supplies were housed in an auxiliary stocking area. Representative samples of the stocks

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were submitted to laboratories for testing to make sure they were undamaged. They were.

AOCs membership by Sept. 30, 1964, totaled 3,150 people. J.C. Harris, chairman of the membership committee, pointed out that membership drives at the annual convention, at short courses, and by members had increased membership considerably in two years, chiefly in the biochemical fields.

Hauber, in his April, 1965 report, noted a sharp increase in active junior memberships. He attributed this in part to the 1964 short course, which offered free admittance to students, and to the MacGee Honored Student Program.

In his 1965 president's report, R.C. Stillman said, "The vigor of the society in the field of lipid chemistry is well marked by the many new biochemical and medical members and by the large number of lipid papers. Along with the increase in lipid chemists had come an increase in foreign memberships, and a close alliance with such men as Professor Kaufmann in Germany, Professor Hilditch in England, and Professor Baer in Canada."

The first AOCs Award in Lipid Chemistry was presented at the symposium, "Quantitative Methodology in Lipid Research," Aug. 3-7, 1964, at Pennsylvania State University. The first recipient was Erich Baer, for his work on the chemical synthesis of glycerol phospholipids. The award, created to recognize and encourage outstanding achievement in the field of lipids, was sponsored by Applied Science Laboratories which gave a yearly honorarium of \$2,500, through 1981. In 1982, it was renamed the Supelco AOCs Research Award, with \$3,000 honorarium, funded by Supelco Inc.

In 1967, AOCs members elected the first woman to serve on the governing board. She was Lois Crauer, elected a member-at-large for 1967-68 and 1968-69. In 1969, she was the first woman elected AOCs secretary. Meanwhile, W.O. Lundberg of The Hormel Institute, University of Minnesota, was named editor of *Lipids*, beginning with the January 1967 issue.

AOCs began cooperating with other organizations by sponsoring joint meetings. In 1969, the society held a joint meeting with the American Association of Cereal Chemists in Washington. This was followed by a meeting with the International Society for Fat Research (ISF) Sept. 28-Oct. 1, 1970, in Chicago. Over 200 scientists from 22 nations exchanged research ideas with more than 1,000 U.S. scientists at this meeting. Topics included protein from petroleum and from the seas, the reformulation of soaps and detergents, and the process of aging. In 1972, AOCs held a joint meeting with the Japanese Oil Chemists' Society in Los Angeles.

Extensive revisions to the AOCs constitution and bylaws were adopted in 1968. Included was a provision for specialty sections. It was not until

1982, however, that the first specialty section — the Protein and Coproducts Section — was formed.

In 1970, AOCs purchased two attached buildings at 508 S. Sixth St., Champaign, Illinois, for its national headquarters. The move to Champaign was completed by July 1971. Carl Hauber, who had served as executive secretary-director since 1962, stepped down and the present executive director, Jim Lyon, was hired.

AOCs published its first monograph, *Tumor Lipids: Biochemistry and Metabolism*, in 1973. Since then, it has printed nine other monographs and has a number of others planned. In 1974, Lundberg ended his term as editor of *Lipids* and R.T. Holman, also of The Hormel Institute, took over.

In his installation speech in 1974 as AOCs president, Holman said, "The unifying interest among us is our interest in lipids, the oily, greasy, water-insoluble substances found in the membranes and particles of all cells, and on whose surfaces the chemistry of life really takes place. Lipids are necessary to life, they are essential components of the machinery for living, and they are fuel for the machine. The biochemists tinker with the machinery, the industry sells the fuel. Our knowledge of these substances is very new and very meager, and the science of lipids, fats and oils is really a frontier science. This is where the action is, and where the action will be, and our society has a golden opportunity for leadership in the coming decade."

But, Holman pointed out, this new emphasis and influx of biochemists into the society were seen as threatening to members representing more traditional segments of the industry, while the biochemists themselves did not yet feel comfortable. Holman did not see this as necessarily bad: "I look upon the present discontent as an encouraging opportunity, for feelings are being made known. If we are communicating, we are still together. Unity despite diversity is really strength. We must remember that we need not be made uniform to enjoy unity."

Meanwhile, the society debated whether to continue the tradition of fall meetings, begun in 1927. In 1974, the governing board approved an ad hoc committee recommendation for one national meeting a year, eliminating the fall meetings beginning in 1977.

The society achieved another milestone in 1976, with its first world conference. This conference, focusing on oilseed and vegetable oil processing technology, was held in Amsterdam and attracted more than 1,000 participants.

The success of this venture prompted the society to continue sponsoring world conferences. Others held have been the 1977 conference on soaps and detergents in Montreux, Switzerland; the 1978 conference on vegetable food proteins in Amsterdam; the 1980 conference on soybean pro-

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cessing and utilization in Acapulco, Mexico; the 1981 dietary fats and health conference in Chicago, Illinois, U.S.A.; the 1982 edible oil processing conference in The Hague, The Netherlands. Another, on oleochemicals, is slated for this month in Montreux, Switzerland.

During the 1970s and leading into the 1980s, much research was under way on the effect of oils and fats in the diet. One concern being studied was that high consumption of lipids might be implicated with coronary heart disease, stroke, high blood pressure, and cancers of the bowel and breast. In conjunction with this, AOCS's world conference in 1981 focused on dietary fats and health.

Reflecting on the 1970s, Frank C. Naughton, in his 1981 president's report, said, "Society members are derived from governmental laboratories, industrial organizations, research institutes, academia and other diverse work areas. When viewed from the president's position, it becomes rather amazing that a complex heterogeneous group of people representing research, management, sales, technical,

manufacturing, engineering, educational and many other specific disciplines can blend into a homogeneous group and function in unison to supply the effort required for excellence and success. During the past 10 years, this blend of society members has shown a continuous growth pattern despite noticeable shifting patterns in which members change their job affiliations and do not remain members of the society. Membership has grown to 3,893 in 1980 from 2,725 in 1971 — an increase of 38%."

In 1981, the governing board approved hiring a director of methods development, the first technical person on staff. The duties of this position are to expand and improve the AOCS methods book, a project to be financed through efforts by the AOCS Foundation.

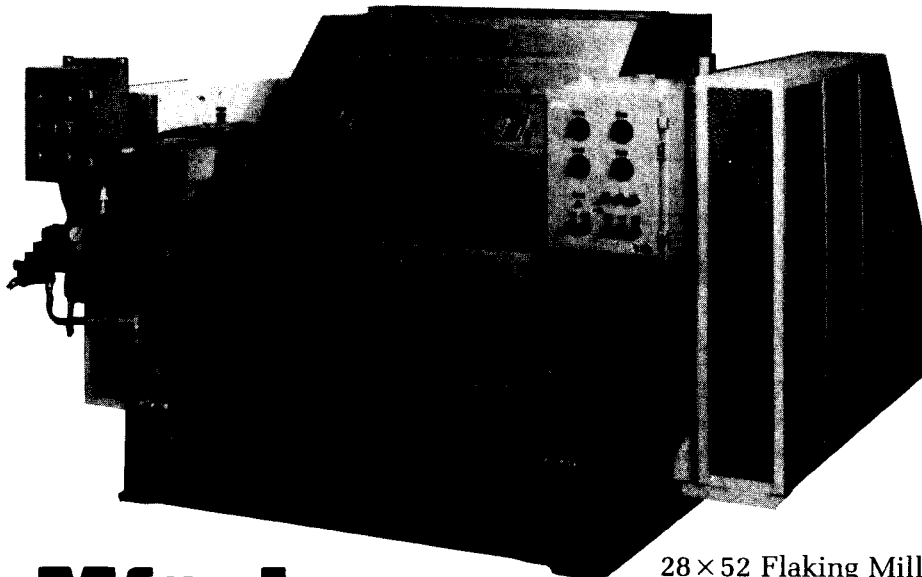
And so, after nearly 75 years, AOCS is still concerned with many of the same aims that prompted it to form back in 1909 — to continue to develop analytical methods, encourage research and promote a feeling of support and fellowship for those involved in the oils and fats industry.

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Uniform Methods report

(The following is the annual report to the AOCS Governing Board by the chairman of the Uniform Methods Committee. Current chairman is William E. Link of Sherex Chemical Co., Dublin, Ohio.)

The 1982 Revisions and Additions to the Official Methods included two new methods: Recommended Practice Ba 2a-82, Moisture and Volatile Matter (vacuum oven method applicable to oilseed protein) and Method M 3-82, Surplus Status of Methods. Several revisions and a number of editorial changes were also made in 1982.

Method M 2-65 was revised to simplify the categories of methods and add definitions. The UMC decided that all methods, subjected to collaborative study, should be considered Official and that there should be no distinction between a referee method and an official method. The only other category was "Recommended Practices," and these will be elevated to official status after their capabilities and precisions are validated.

Method M 3-82 establishes a procedure for declaring superceded or little used methods to be "surplus." These methods would no longer be published in the official book, but would be available from AOCS headquarters.

The more important technical committee projects can be summarized:

1. *Flavor Nomenclature and Standards* (Waltking)

The first draft of a procedure for the training and operation of vegetable oil flavor panels has been completed and circulated to the UMC for approval. A draft of a correlation of GLC procedures for flavor volatiles with flavor panels is also out for approval. These methods, culminating a ten-year program, will become recommended practices. H. Jackson will take over as chairman of the committee.

2. *NMR* (Mellema)

The committee has been working on a calibration procedure and a collaborative study to gain approval for inclusion of the IBM PC 20 pulsed NMR as an alternative instrument in the Recommended Practice Cd 16-81, Determination of Solids Content of Fats. Plans for 1983 call for work on parallel measurement techniques for uses of the Praxis instrument and studying conditions for the determination of the solids content of cocoa butters and extenders.

3. *Atomic Absorption* (Robinson)

The first collaborative study of a method for sodium in edible oils failed, because of scattered results, and the study is being repeated with new samples. Methods for P as well as Si in fats and oils are under consideration.

4. *Seed and Meal Analysis* (Johnson)

Several methods were revised; several other methods were nominated for surplus. The crude fiber method is being revised to allow for the use of asbestos, ceramic fiber or glass wool as filter media. A new subcommittee on rapeseed and safflower has been activated, under Dr.

James K. Daun, to adapt sunflower methods to these seeds. The Mycotoxin Subcommittee is making a major effort to adapt AACC and AOAC methods to AOCS format and recommends that its status be changed to a full committee. A chairman for the Gossypol Subcommittee is needed for a study of low levels of gossypol in glandless cottonseed.

5. *Soap and Detergent Analysis* (Battaglini)

The objective of the UMC in this area is to redraft all methods in Section D of the Official Methods, to bring them into specifications with the respective ASTM methods and include new methods which are in current use and can be written in AOCS format.

6. *Commercial Fats and Oils Analysis* (Payne)

The new chairman, replacing J. McEwan, will reorganize the committee, hopefully to include younger active AOCS members.

7. *Chromatography* (Doeden)

Collaborators are interested in fatty acid distribution by capillary GLC, triglyceride analysis by GLC, polymers in fats and antioxidants in fat, by HPLC. The first two will be undertaken jointly with AOAC.

Activity in technical committees is steady, but spotty. Recent elevation of the subcommittees on NMR, AA, and Chromatography (the MS committee has been disbanded) to full committees will encourage new activity and lead to more collaborative studies and eventually to new methods. This is the process whereby Official Methods are promulgated. The volunteer members who screen methods, provide samples, perform analyses, and subject the results to statistical analysis are the ones who keep the methodology program alive. Without their efforts, methods compilation would soon cease.

The Governing Board believes that the volunteer system must be retained and had decided that the quality of the Official Methods must be assured and improved. To facilitate this, a professional coordinator has been added to the Champaign staff. This new staff member will be responsible for establishing programs to keep the Official Methods current and for maintaining communications with other groups interested in methods development and with the technical committees. He also will assist the UMC in coordinating the activities of the technical committees. The new Director of Methods, acting in an administrative capacity and working with the UMC, will have the same objectives as the UMC, that of developing, improving and publishing methods which are current with state-of-the-art technology and which satisfy user needs. The director and the UMC are jointly formulating a plan of action to accomplish these objectives.

The Editor of the Official Methods will retire this year, and a new editor must be appointed. An option which is available to the Governing Board is to assign this responsibility to the Director of Methods since the activity can be carried out as a staff function in Champaign. R.O. Walker has served in this capacity for five years and should be commended for his work.

William E. Link
Chairman, Uniform
Methods Committee

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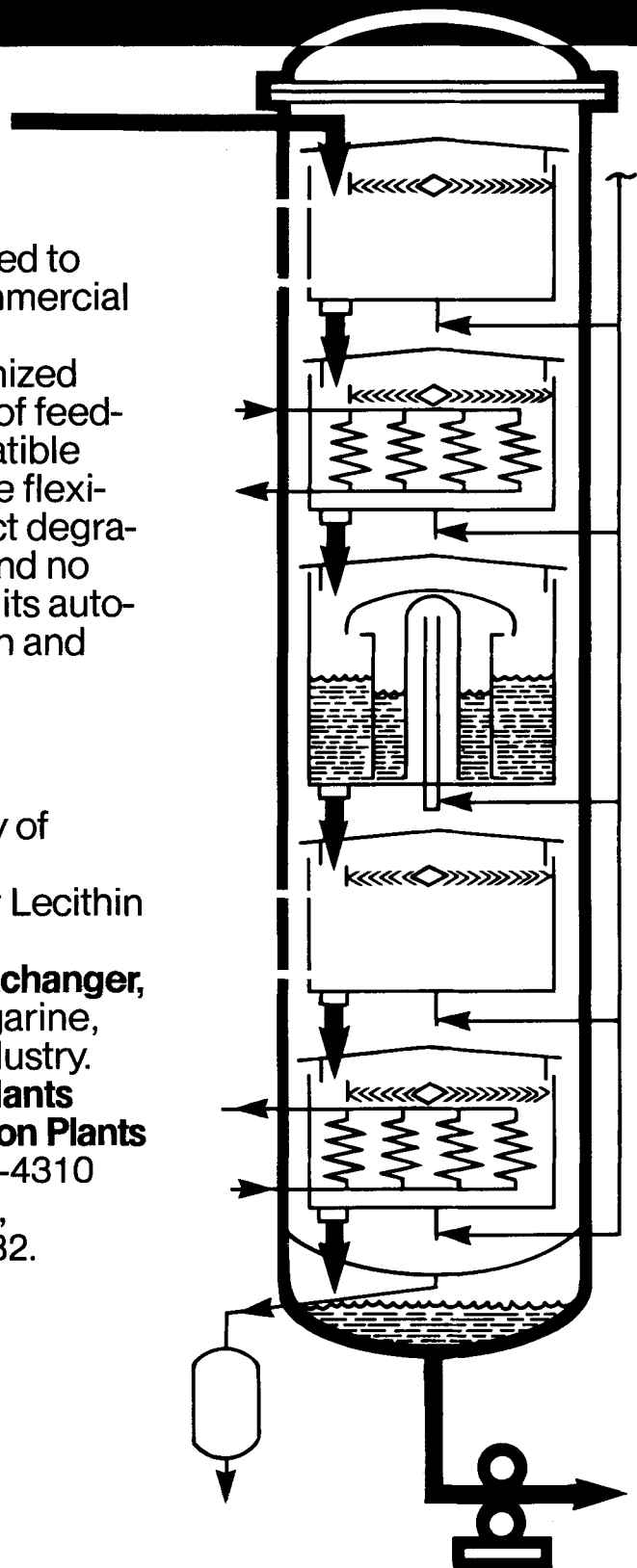
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Dr. Thomas A. Smouse, second from right, was guest of honor at a dinner during the 1983 AOCS meeting in Chicago that was hosted by Dr. Stephen S. Chang, left, chairman of the Department of Food Science at Rutgers University. Smouse received his master's and doctorate degrees from Rutgers. Others at the dinner in the picture include (from left): Dr. Chang; Rutgers alum R.G. Krishnamurthy; Lucy Chang; Rutgers alum David Min; Elizabeth Smouse; Smouse; and Henry Salomon. Other participants included Lars Lindmark and T.J. Pelura of KabiVitrum AB, Dr. and Mrs. A.R. Baldwin, and Dr. Chi-Tang Ho of the Rutgers faculty.

Two become corporate members

Two more firms have joined AOCS as corporate members. Equipment Engineering Inc. of Indianapolis, Indiana, will be represented by Robert J. Kriz. Bangkok Edible Oil Co. Ltd. of Bangkok, Thailand, will be represented by Tajchai Thadoemchit. The two firms were recruited by AOCS members Stan Loft and Alan McCabe, respectively.

66 papers cited

Sixty-six papers presented during the annual meeting of the American Oil Chemists' Society this past May have been designated "outstanding papers."

Session chairmen nominated speakers for the award on the basis of the technical quality, delivery and visual aids of each paper. Each speaker selected will receive a certificate. The new award replaces the former AOCS Bond Award which was presented to one speaker from each meeting. The new award provides recognition to all outstanding speakers, rather than identifying just one presentation as the best paper.

Speakers selected in Chicago, and their papers:

H.V. Ammon, VA Medical Center, Milwaukee, "Effects of Fatty Acids on Intestinal Transport."

M.P. Aronsen, Union Carbide Corp., Tarrytown, NY, "Behavior of Surfactant Mixtures in Oily Soil: Detergency Studies."

G. Battaglini, Stepan Chemical Co., Northfield, IL, "Analytical Methods of Alpha Sulfo Methyl Tallowates."

H.L. Benson, Shell Development Co., Houston, TX, "Efficacy of Low Mole Ethoxylates in Solvent-Based Prespotters."

W.E. Berdel, Technical University, Munich, West Germany, "Antitumor and Antileukemic Properties of Synthetic Alkyllysophospholipids (ALP) in vitro."

G.A. Bonner, Ethyl Corporation, Baton Rouge, LA, "Sulfonated Methyl Esters, Their Synthesis, Composition and Application."

J. Bramhall, UCLA Medical School, Los Angeles, CA, "Permeation of Amphiphilic Solutes Across Lipid Bilayers."

L.G. Butler, Purdue University, West Lafayette, IN, "Interaction of Proteins with Sorghum Tannins: Mechanism, Specificity and Significance."

E.J. Campbell, Archer Daniels Midland Co., Decatur, IL, "Sunflower Oil."

A.B. Caragay, Arthur D. Little Inc., Cambridge, MA, "The Pacing Technologies in the Fats and Oils Industry."

G.C. Cavanagh, Ranchers Cotton Oil, Fresno, CA, "Cottonseed Oil."

A.H. Chen, Anderson Clayton, Richardson, TX, "Prediction of Viscosity Values as a Function of Iodine Value and Temperature."

J. Chipley, Michigan State University, "Effects of Fatty Acid Derivatives Upon Release of Extracellular Enzymes from Bacteria."

O.K. Chung, USDA/ARS Grain Marketing Lab., Manhattan, KS, "The Recent Trends in Usage of Fats and Oils as Functional Ingredients in the Baking Industry."

D.P. Cistola, Boston University School of Medicine, Boston, MA, "Acid Soaps: The Phase Behavior of Anhydrous and Hydrated 1:1 Potassium Hydrogen Dioleate" (Honored Student Presentation).

H.W. Cook, Dalhousie University, Halifax, Canada, "Concerted Stimulation and Inhibition of Desaturation, Chain Elongation and Esterification of Essential Fatty Acids by Cultured Neuroblastoma Cells."

M.M. Cook, Theiokol/Ventron Division, Danvers, MA, "Improved Quality Triglyceride Oils via Sodium Borohydride Purification."

M.S. Cox, Conoco, Ponca City, OK, "Optimization of Nonionic Surfactant for Hard Surface Cleaning."

S.F.C. Cunnane, Efamol Research Institute, Nova Scotia, Canada, "Essential Fatty Acids Protect Against Carbon Tetrachloride-Induced Liver Damage in the Rat."

D.A. Diersen-Schade, Iowa State University, Ames, IA, "Effects of Beef, Soy, and Conventional Diets on CO₂, Fatty Acid, and Glycerol Synthesis in Young Pigs" (Honored Student Presentation).

A.M. Duffy, "The Effects of Dietary Proteins on Serum and Biliary Constituents and Gallstone Formation in the Hamster."

J.W. Erdman Jr., University of Illinois, Urbana, IL, "Future Prospects for the Use of Winged Bean Protein Sources."

D.R. Erickson, American Soybean Association, St. Louis, MO, "Soybean Oil."

E.H. Fairchild, Sherex Chemical Co., Dublin, OH, "NMR Methods for the Profiling of Fatty Amine Reactions."

L.L. Gershbein, Northwest Institute Medical Research and Northwest Hospital, Chicago, IL, "Total Fatty Acids of Adult Human Brain."

A.H. Gilbert, Lever Brothers Research, Edgewater, NJ, "Consumer Testing—Force or Farce?"

E.H. Goh, Indiana University School of Medicine, Bloomington, IN, "Effect of Cholesterol on Oleate-Induced Increase in Cholesterogenesis in Hepatocytes."

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T. Hymowitz, University of Illinois, Urbana, IL, "Variation in and Genetics of Certain Biologically Active Components of Soybean Seed."

R.M. Izatt, Brigham Young University, Provo, UT, "Calorimetric Determination of Heats of Mixing of Supercritical CO₂ with Several Organic Liquids."

S.A. Jabarin, Owens-Illinois Inc., Toledo, OH, "Plastic Containers for Edible Oil Products."

T.J. Jacks, USDA Southern Regional Research Center, New Orleans, LA, "Native and Inducted Conformational Modes in Oilseed Storage Proteins."

P.V. Johnston, University of Illinois, Urbana, IL, "Alpha Linolenic Acid Metabolites and Immunocompetent Cells."

J.J. Kabara, Michigan State University, East Lansing, MI, "The Contamination of Bar Soap Under In-Use Conditions."

J.W. King, Crystal Lake, IL, "Generalized Extraction Conditions for the Critical Fluid Processing of Oils and Oleophilic Compounds."

H.W. Kircher, University of Arizona, Tucson, AZ, "Cholesterol Side Chain Manipulations: Synthesis of 20-*iso*-Cholesterol and (25R)- and (25S)-26-Hydroxycholesterol."

J. Kloeze, Unilever Research, Vlaardingen, The Netherlands, "Consequences of Feeding N-3 Polyunsaturated Fatty Acids Containing Diets to Rats and Rabbits."

D.R. Kodall, Boston University School of Medicine, Boston, MA, "Synthesis and Polymorphism of 3-Acyl-*sn*-Glycerols."

H. Kohasi, USDA Eastern Regional Research Center, Philadelphia, PA, "Addition of Aromatic Compounds to Oleic Acid Catalyzed by Heterogeneous Acid Catalysts."

L. Kravetz, Shell Development Company, Houston, TX, "Primary and Ultimate Biodegradation of an Alcohol Ethoxylate and a Nonylphenol Ethoxylate Under Average Winter Conditions in the U.S."

W.E.M. Lands, University of Illinois, Chicago, IL, "Possible Beneficial Effects of the Linoleate Class (N-3) of Fatty Acids."

N.M. LeBard, EMI Corporation, Des Plaines, IL, "Plant Production of Hydrowinterized Soybean Oil."

R. Llenado, Procter and Gamble Co., Cincinnati, OH, "Chemical Studies of Zeolite-Containing Detergents."

R.G. Luttrell, Mississippi State University, Mississippi State, MS, "Current Use and Efficacy of Vegetable Oil as a Carrier for Applications of Insecticides."

L.J. Magrum, University of Illinois, Urbana, IL, "Modulation of Prostaglandin Synthesis in Rat Peritoneal Macrophages through Dietary Means" (Honored Student Presentation).

T.P. Matson, Conoco, Ponca City, OK, "An Approach to Formulating Cold Water Laundry Products."

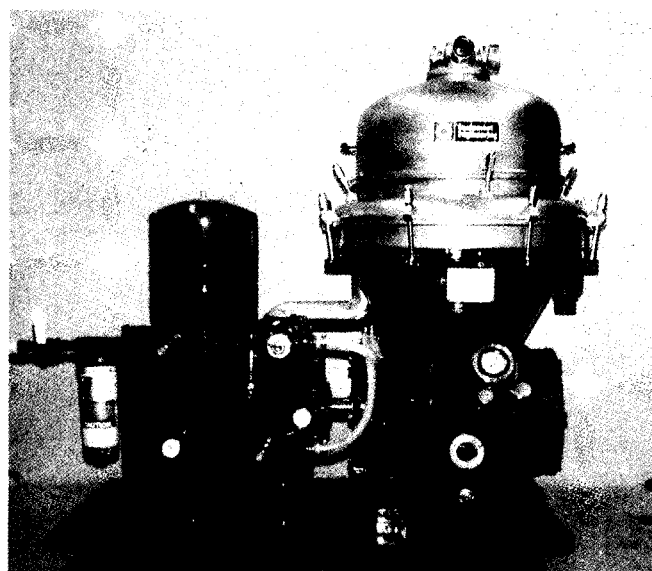
N.K. Menon, University of California, Los Angeles, CA, "Restriction of Maternal Food Intake and the Beta-Oxidation of Fatty Acids by Developing Rat Hearts."

H.S. Mickel, Children's Hospital Medical Center, Boston, MA, "Biological Effects of Peroxidized Polyunsaturated Fatty Acids."

D.B. Min, Ohio State University, Columbus, OH, "Effects of Phosphatidylcholine on the Flavor Stability of Oil During Storage."

R.G. Moore, Anderson Clayton Foods, Richardson, TX, "Packaging Considerations and Tests for Edible Oil Products."

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CALL FOR NOMINATIONS

ALTON E. BAILEY AWARD

The North Central Section of AOCS is requesting written nominations from Society members for the 1984 Alton E. Bailey Award. The purpose of the Bailey Award is to recognize research and/or service in the field of fats and oils. The nomination should contain at least five pertinent references or contributions in the field of oils, fats, waxes, etc. Some of the past Bailey Award winners are: V.C. Mehlenbacher, 1959; R.H. Potts, 1960; J.C. Cowan, 1961; A.R. Baldwin, 1963; T.P. Hilditch, 1965; D.Swern, 1966; W.O. Lundberg, 1967; H.J. Dutton, 1968; H.S. Olcott, 1969; H.E. Carter, 1970; J.F. Mead, 1971; R.T. Holman, 1972; C.M. Gooding, 1973; S.S. Chang, 1974; W.M.

Cochran, 1975; Raymond Reiser, 1976; L.A. Goldblatt, 1977; O.S. Privett, 1978; R.O. Feuge, 1979; Frank Norris, 1980; Hans Kautz, 1981; Thomas Applewhite, 1982; and Robert R. Allen, 1983. Please send nominations to:

Neil Widlak
Bailey Award Chairman
Kraft Inc. R&D
801 Waukegan Rd.
Glenview, IL 60025

The deadline for nominations is **November 15, 1983**, and notification of the selection will appear in this journal. The presentation of the Bailey Award is scheduled for early 1984.

RALPH H. POTTS MEMORIAL FELLOWSHIP

AOCS is seeking nominations for the Ralph H. Potts Memorial Fellowship Award, sponsored by Armak. The third annual award is to be presented at the 1984 AOCS annual meeting in Dallas. The 1984 recipient should be prepared to deliver a technical paper during the Dallas meeting. The award consists of a \$1,000 honorarium, a scroll and a travel allowance. A nominee must be a graduate student in a North American University (USA, Canada or Mexico). The type of research that will qualify for the award should involve fatty acids or their derivatives, such as long chain alcohols, amines, and other nitrogen compounds. The research should fall within one of the following categories: synthesis, processing, utilization or characterization. A nomination may be made by any individual; however, it is expected most nominations will be by the student's major

professor. The nomination must include: a biographical sketch; a list of patents and publications; specific identification and evaluation of the work on which the nomination is based; the name of the school and the major professor. Nomination forms are available from and inquiries concerning the award should be directed to:

Ralph H. Potts Memorial
Fellowship Award Committee
AOCS
508 South Sixth Street
Champaign, IL 61820

Five copies of the complete nomination document, including reprints and supplementary material, must reach the award committee at AOCS Headquarters by **November 15, 1983**.

1984 HONORED STUDENT AWARDS

Nominations are now being solicited for the 1984 AOCS Honored Student Awards. Graduate students at any North American institution of higher learning, in any area of science dealing with fats and lipids, who are doing research toward an advanced degree, and who are interested in the areas of science and technology fostered by this Society, are eligible. To receive the award, he/she must remain registered as a graduate student and must not have received his/her degree or begun career employment prior to the AOCS meeting he/she is to attend. Selection of awardees is based upon

educational qualifications and research performance. The awards provide funds equal to travel costs, plus an additional stipend to permit attendance at the AOCS annual meeting to be held in Dallas, April 29 – May 3, 1984. Nomination forms may be obtained from:

American Oil Chemists' Society
508 South Sixth Street
Champaign, IL 61820

The application forms must reach the AOCS Headquarters by **October 1, 1983**.

GLYCERINE

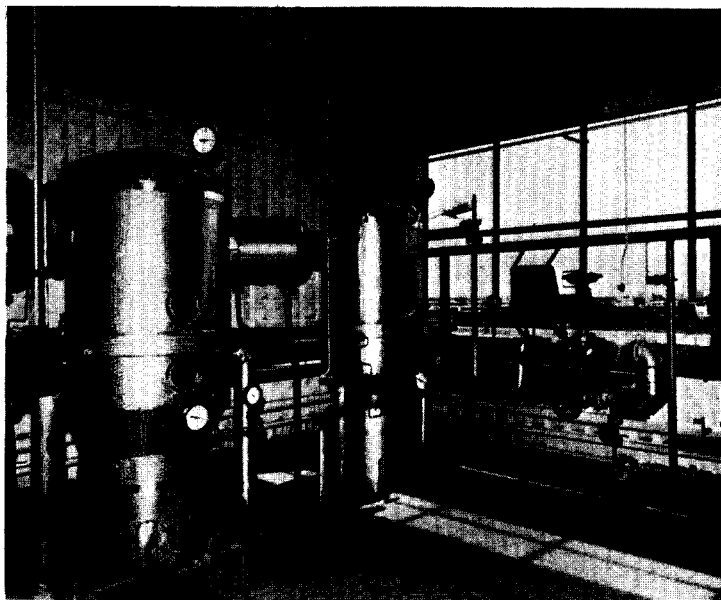
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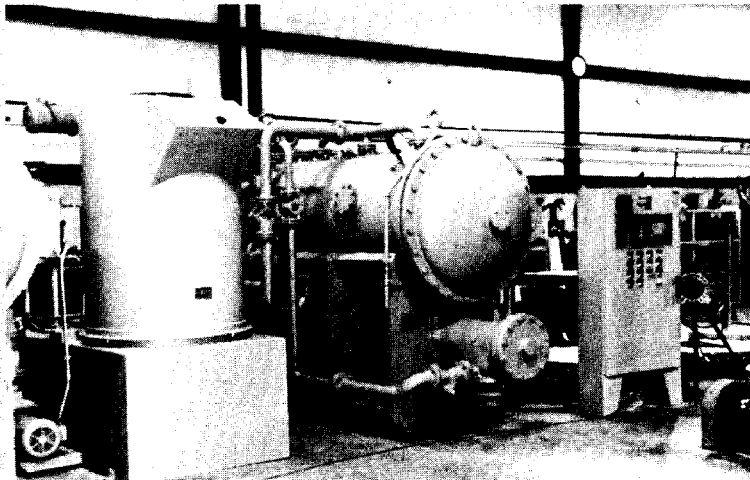


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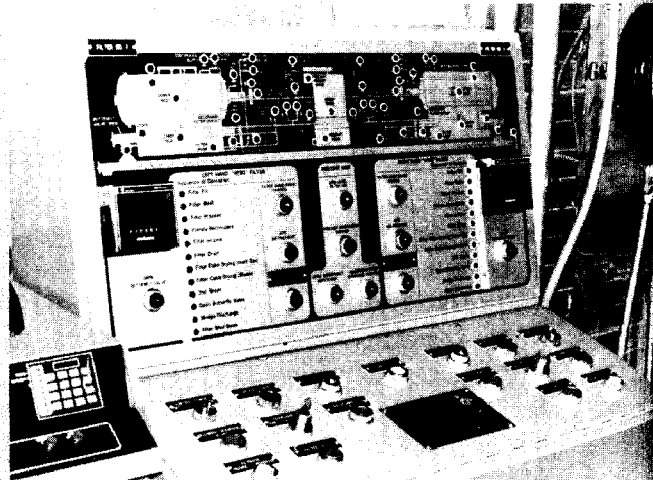
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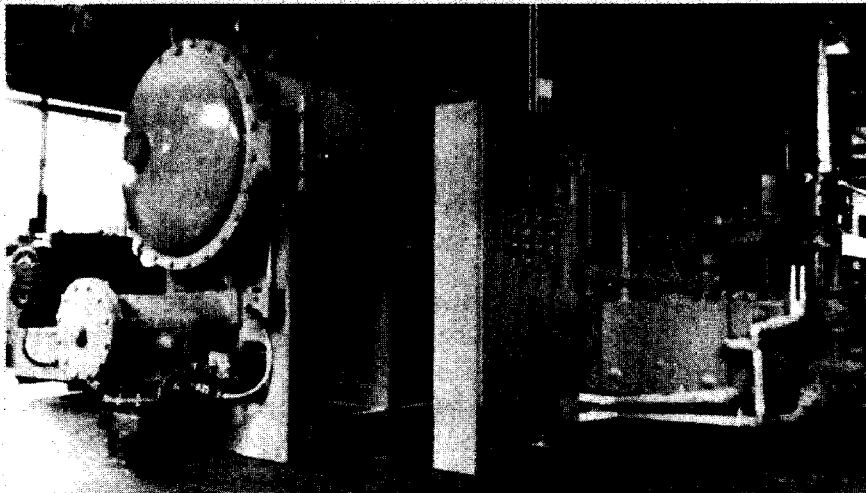
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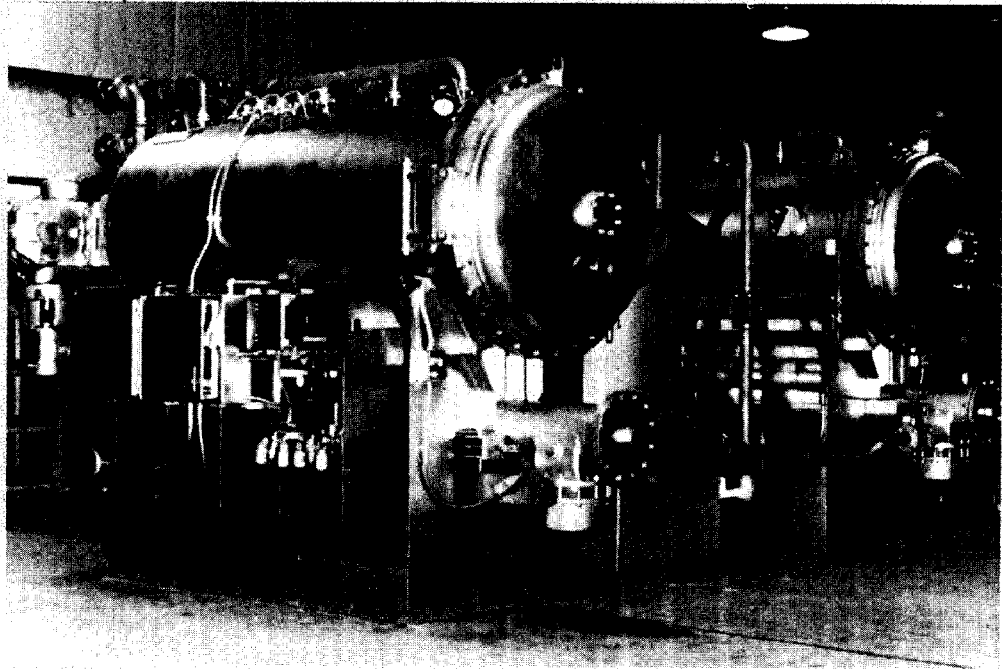
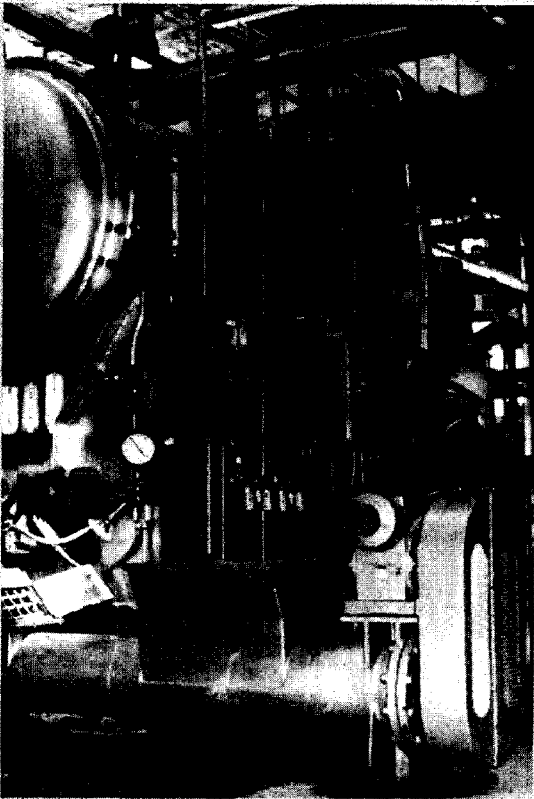
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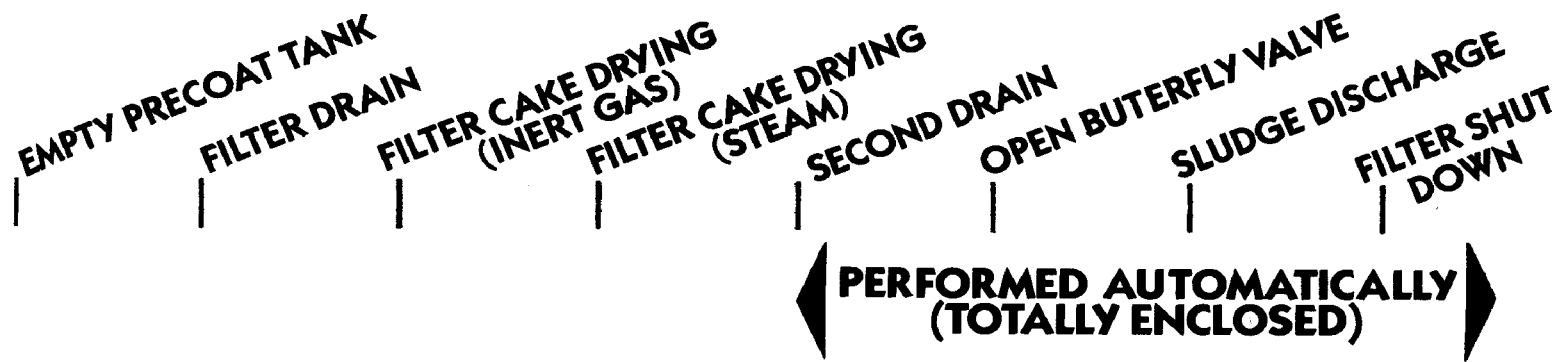


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Inside AOCS

M.G. Murphy, Dalhousie University, Halifax, Canada, "Dopamine Receptor Function in NIE-115 Neuroblastoma: Effects of Manipulating Membrane Fatty Acids."

D.E. O'Connor, Procter and Gamble Co., Cincinnati, OH, "Stereochemistry of Bicycloendoperoxides Derived from Methyl Q-Linolenate."

C. Parrish, Canadian Institute of Fisheries Technology, Nova Scotia, Canada, "Fish Acids of Geometrical Fatty Acid Isomers When Analyzed by AgNO₃ Thin-Layer Chromatography (Iatroscan-Chromarod) and by GLC."

H. Rakoff, USDA Northern Regional Research Center, Peoria, IL, "Synthesis of Deuterium Labeled Methyl 6,9, 12-Octadecatrienoates."

A. Richmond, Texas Woman's University, Denton, TX, "The Effect of Dietary Vegetable and Animal Protein on the Etiology of Cholesterol Gallstone Formation in the Hamster."

T.W. Ryan III, Southwest Research Institute, San Antonio, TX, "Characterization of Composition, Spray and Engine Combustion of Fourteen Vegetable Oils."

I.R. Schmolka, BASF Wyandotte Corp., Wyandotte, MI, "Preparation and Properties of 1,2 Butylene Oxide and Ethylene Oxide Block Copolymer Surfactants."

O.L. Shotwell, USDA Northern Regional Research Center, Peoria, IL, "Effect of Propionic Acid on Aflatoxin Analysis of Stored Georgia Dent Corn Samples."

M.A. Sullivan, Texas Woman's University, Denton, TX, "Effects of Dietary Animal and Vegetable Proteins on Serum and Biliary Lipids, and Gallstone Formation in the Hamster."

C.A. Taylor, Colorado State University, Fort Collins, CO, "Effects of Dietary Linoleate on Eicosanoid Synthesis in Rat Platelets" (Honored Student Presentation).

M. Trautman, Hoeschst AG, Frankfurt, Germany, "Secondary Alkene Benzene Sulfonate—An Ecological and Economical Alternative."

K.P. Vatsis, Northwestern University, Illinois, "Prostaglandin Hydroxylation by Isozymes of Cytochrome P-450."

J.R. Wechsler, Stepan Chemical Co., Northfield, IL, "Primary Alkane Sulfonate."

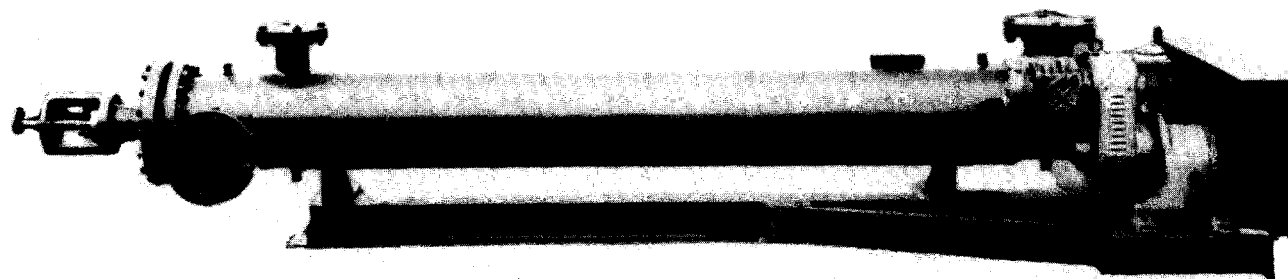
J.A. Wingrave, Conoco, Ponca City, OK, "The Detergency Mechanism of Roll-Up, Solubilization and Emulsification of Liquid Soils."

B.J. Wisnieski, University of California, Los Angeles, CA, "Photolabeling from Inside the Bilayers Reveals Factors Affecting Protein Insertion."

J.B. Woerfel, Clarksdale, MS, "Alternatives in Soapstock Utilization."

D. Zakim, VA Medical Center, San Francisco, CA, "Membrane-Bound Proteins and Probes of Their Phospholipid Environments."

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CALL FOR NOMINATIONS

SUPELCO AOCS RESEARCH AWARD

In April 1964, the Governing Board of the American Oil Chemists' Society established an Award in Lipid Chemistry. In 1982, Sponsorship of the award was assumed by Supelco Inc. of Bellefonte, Pennsylvania, and the award was renamed the Supelco AOCS Research Award. Previous awards have been presented to : Erich Baer, 1964; Ernest Klenk, 1965; H.E. Carter, 1966; Sune Bergström, 1967; Daniel Swern, 1968; H.J. Dutton, 1969; E.P. Kennedy, 1970; E.S. Lutton, 1971; A.T. James, 1972; F.D. Gunstone, 1973; P.K. Stumpf, 1974; W.O. Lundberg, 1975; George Popjak, 1977; Ralph Holman, 1978; Stephen S. Chang, 1979; James F. Mead, 1980; Laurens van Deenen, 1981; R.M.C. Dawson, 1982; and David van Dorp, 1983.

The award consists of \$3,000 plus a travel and expense allowance accompanied by an appropriate certificate. It is planned that the 20th award will be presented during the AOCS Annual Meeting in Dallas, April 29 – May 3, 1984.

Canvassing Committee Appointees

Policies and procedures governing the selection of award winners have been set by the AOCS Governing Board. An Award Nomination Canvassing Committee is appointed; the chairman is William H. Tallent. The function of this committee is to solicit nominations for the award. Selection of the winner will be made by the Award Committee, whose

membership will remain anonymous.

Rules

A nominee must have been responsible for the accomplishment of outstanding original research on fats, oils, lipid chemistry and biochemistry, and must have presented the results thereof through the publication of technical papers of high quality. Preference shall be given to individuals who are actively associated with research, and who have made discoveries that have influenced his or her field of endeavor. The award shall be made without regard for national origin, race, color, creed or sex.

Nominations should consist of a letter of nomination, supporting letters from at least three other scientists and biographical information concerning the nominee. The biographical information must include a summary of the nominee's research accomplishments, a list of publications, degrees held with the names of the granting institutions, and positions held during the nominee's professional career. Letters of nomination and supporting documents shall be submitted in octuplicate before Nov. 4, 1983, to William H. Tallent, Regional Administrator, USDA-ARS, Room 333, Bldg. 003, BARC-WEST, Beltsville, MD 20705, USA.

Deadline: Nov. 4, 1983