

Inside AOCS

Bailey medal to Allen



Neil Widlak presents Bailey medal to Robert R. Allen with Barbara Allen



1983 Bailey Award recipient Robert R. Allen (center) was joined at the award dinner by four previous recipients, A.R. Baldwin (seated left), Herbert J. Dutton (seated right) and (standing, from left) Thomas Applewhite and Frank Norris.

“Research is done because of an anomaly—because something doesn’t agree, or somehow seems different—and man has an innate desire to want to know how and why,” Dr. Robert R. Allen told the North Central Section of the AOCS in accepting the 1983 Alton E. Bailey Award.

Allen, internationally known for his work on hydrogenation, spoke about that process in his acceptance address at the Feb. 8, 1983, meeting of the section.

Allen noted he had met Bailey twice and heard him give three papers. Allen said he became even more impressed later when he and his coworkers began using computers to evolve equations for determining selectivity ratios, and then discovered that Bailey had done much the same work by hand in 1949.

For the future, Allen said he believes a process and catalysts need to be developed to provide infinite selectivity so that no stearic is produced in modifying linolenic and linoleic fatty acid components of oils. Catalysts need to be developed that do not result in formation of *trans* isomers, he said. And some modification in hydrogenation may come from biotechnologists’ efforts to produce vegetable oils lower in linolenic fatty acid content.

Allen noted that while Normann is considered the father of modern commercial hydrogenations, there was at least one patent in Germany for liquid hydrogenation before Normann. It was Normann’s process, however, that was commercialized by the English firm of Crossfield’s, and was brought to the United States in 1909 by the Procter & Gamble Company, Allen said. P&G introduced its Crisco shortening in 1911, made with hydrogenated and liquid cottonseed oil.

What was not realized at that time, he pointed out, was that the hydrogenation process would foster the United States’ vast soybean industry. The fact that hydrogenation

permits soybean oil to be used in edible food products made low-cost soybean meal readily available to America’s meat industry, thus altering the American diet for all time.

Allen stressed the importance of research to the future, noting that the president of a futurists’ group says the members do not try to predict the future, but work to create the future, which is shaped by what is done, or is not done, in the present. And he cited science fiction author Isaac Assimov’s comments that the important thing is not to predict what future technology will be, but how it will affect the world’s people.

Allen said he is still puzzling over why catalysts with a wide range of selectivity ratios produce approximately the same percentage of *trans* isomers. He noted that while hydrogenation is a widely used process, researchers still don’t know precisely what reactions are occurring on the surface of a catalyst during hydrogenation.

“As I’ve said before, we really do know more about the surface of Saturn than what it’s like on the surface of the catalyst during hydrogenation,” he said.

The Bailey Award was presented to Allen by North Central Section president Neil R. Widlak. Allen was introduced by his long-time coworker Jesse Covey, who had nominated Allen for the award. The Bailey Award is presented annually by the North Central section to recognize outstanding research and exceptional service. It is named for Alton E. Bailey, who was not only a noted researcher but also a prolific author on fats and oils topics.

The Bailey Award Fund for 1983 was supported by the following organizations:

Anderson Clayton Foods, Archer Daniels Midland, Bunge Edible Oil Corporation, EMI Corporation, Groen Division of Dover Corporation, Harshaw Chemical Com-

pany, Hewlett Packard Company, Hoffmann-La Roche Inc., Hunt-Wesson Foods Inc., Kraft Inc., The Pillsbury Company, Procter & Gamble Corporation, Sargent-Welch Scientific Company, Supelco Inc., United Catalysts Inc. and Wurster & Sanger Inc.

Persons wishing to make nominations for the 1984 A.E. Bailey Award should write to Widlak at Kraft Inc. R&D, 801 Waukegan Rd., Glenview, IL 60025.

Clark joins AOCS staff

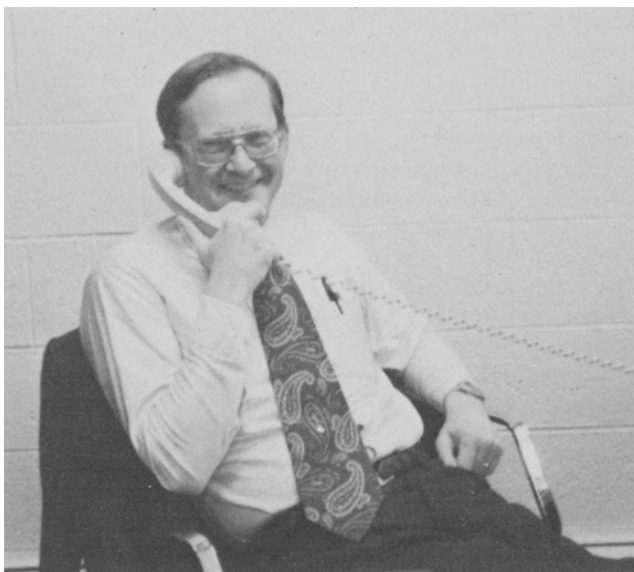
Robert W. Clark has been named Director of Methods Development for the American Oil Chemists' Society, responsible for helping the society continuously update its internationally recognized book of Official and Tentative Methods.

Clark will direct a program of collecting and evaluating analytical methods in the field of animal and vegetable fats and oils for publication in the methods book.

Clark received his bachelor's degree in chemistry from Michigan State University and his master's in analytical chemistry from the University of Wisconsin. He has worked for the past 19 years in analytical research, product development, quality control and personnel administration. Before joining AOCS, Clark was with S.C. Johnson & Co. in Racine, Wisconsin.

Clark is the second AOCS Director of Methods Development, succeeding James "Scotty" Miller, who resigned in 1982.

The AOCS is a professional society of approximately 4,000 members who work in the chemistry, biochemistry, nutrition or processing of animal and vegetable fats and oils and their co-products.



Why a dues increase?

(AOCS dues will rise to \$50 from \$34 annually in 1984. Members will begin receiving their 1984 dues notices this summer. In the following article, AOCS Executive Director James Lyon answers questions posed by JAOCS regarding the dues increase.)

1. AOCS raised dues in 1979. Why is another increase being implemented now?

Increased costs are the primary reason, but it should be emphasized, too, that better long-range financial planning by the Governing Board also is reflected in the decision to raise dues. For example, the AOCS holds a long-term lease on its present headquarters and the real value of that lease declines each year. Depreciation in this case is not just a paper entry on our books, because unlike a fully owned building, the AOCS headquarters will have no value to the Society when the lease expires. So, the Governing Board is establishing a contingency fund for future housing. Also, to protect the Society from future unnecessary drains on reserves for conferences which are not financially self-sufficient, the Board is creating a contingency fund to support future educational activities.

It should be noted very clearly, I think, that AOCS is currently in a strong financial position. The raising of dues is a prudent action designed to keep it that way.

2. How do you assess the value of AOCS to a member?

That's a question that must be answered by each person. I believe that everyone gains from his membership in the Society to the extent that he becomes directly involved. The member who does not become active really only receives *JAOCS* (and maybe *Lipids* at a reduced rate); but this brings up an interesting point.

If one determines the cost of providing *JAOCS* to members and subscription (that is, if one divides the cost of producing and distributing *JAOCS* alone by the average monthly print order), the cost per one year's membership for the subscription alone is a measure of value.

The cost of a year's subscription to *JAOCS* just to print and mail is over \$31 per year. If one includes the cost of typesetting, copy editing, layout and paste-up and publication department overhead attributable to the Journal, that cost increases to over \$50. These figures alone would provide some strong evidence of the need for a dues increase.

These figures point out that other AOCS programs—meetings, conferences, short courses, advertising, and monographs—are more than self-supporting. They support the entire AOCS activity. This has been an operating philosophy of the Governing Board for a number of years.

3. Are other ways being sought to increase revenue? How?

The Governing Board is looking carefully at all AOCS

activities to try to make each support itself. Of course there are some important programs, such as the Methods Development Project, that require an investment now that will provide later financial—and professional—returns. There are no other new programs in the immediate planning stages. We will continue to do what we do best—publish, hold meetings and conferences, dispense information of interest to scientists, technicians and other key people in the fields of science and industry which we serve.

4. *What efforts are being made to hold down expenses?*

The Executive Committee recently reviewed the 1983 operating budget to bring it into balance. In a long meeting in Chicago, they came close and instructed me to find ways to develop a budget in which revenues and expenditures would be equal while providing for the future financial planning the Governing Board has proposed. It was not a task that was taken lightly, nor was it easy. The net result is a total turnaround of about \$115,000 for 1983. The dues increase will take care of 1984 and then some.

5. *What is AOCS' annual budget? How much of that comes from dues? What was the budget five years ago? Is the share of revenue increase, decreasing or holding steady?*

The Society's annual budget fluctuates, depending on the number and scope of education programs in a given year. In an entire year, the Society generates a total budget of as much as \$1,500,000 or more. Some of these funds are actually handled by local committees. Payments by members, which include the cost of subscription and a dues allocation, are made as a book entry, and account for about \$130,000 of this budget. Five years ago, before the last dues increase, the budget was just over \$1,000,000. Until now, the dues shown as revenue has obviously been decreasing. We have continued to add to our reserve despite increasing costs (basic printing costs are up about 30% in that time), through income generated by other activities.

6. *How are other professional societies coping with the problem of rising costs?*

At least two organizations—the American Chemical Society and the American Association of Cereal Chemists—have a dues system scaled to the national cost of living index. The AACC dues, for example, have risen \$2 to \$5 per year in the past few years and now are \$54 per year. The Institute of Food Technologists dues are \$35 per year (raised to that level from \$25 in 1977). The American Dietetic Association dues have been \$60 for the past five or six years and an increase is being considered for 1984. The Society of Cosmetic Chemists dues have been \$40 annually since 1975; a dues increase may be considered for 1984.

7. *How long before another dues increase can be expected?*

That depends on two factors. The major problem we will face is increased costs of service at the basic levels we now provide. Those will come as sure as death and taxes and the Board will evaluate the cost-benefit ratios of programs as these costs rise. The second will be the cost of any new program the Board may decide to institute, and the Board reacts very much to the pulse of the membership. If the members want or need programs, the Board will provide them if the Society can afford them. The Board's goal is to keep dues as low as possible for as long as possible while being fiscally responsible.

8. *Any last words?*

Only to emphasize that compared to many professional societies, AOCS is strong financially. It has been for quite some time, primarily because the Board and officers of the Society have taken a longer range, reasonable approach to the organization and because the members have supported the Board in its efforts. I believe those attributes will continue.

1983 - 1984 Smalley series announced

The 1983-84 Smalley Check Sample Program will offer the same 22 series as in the preceeding year. The program is provided by the AOCS as a means for laboratories to check the proficiency of their analytical procedures.

A subscriber to a specific series receives a sample of uniform quality to that distributed to other subscribers. Each participant analyzes the sample using AOCS methods and notifies AOCS of the results. A final compilation of results of all participants indicates to a participant whether his/her analysis was accurate.

Information as to prices and schedules are available from the Smalley Committee, AOCS, 508 S. Sixth St., Champaign, IL 61820, USA.

The following check sample series are scheduled to be offered during 1983-84 (the number of samples in each series is shown in parentheses):

Cottonseed (10)
Peanuts (7)
Fish meal (8)

Edible fats (5)
Tallow and grease (5)
Sunflower (8)
Soybean oil (4)
NIOP fats and oils (5)
Gas chromatography (fatty acid composition) (6)
Cellulose yield (cotton linters) (10)
Aflatoxin in cottonseed meal (7)
Soybeans (10)
Vegetable oil for color (6)
Oilseed meals (10)
Drying oils (6)
Condensed fish solubles (8)
Cottonseed oil (4)
Safflower and rape (8)
Fish oil (8)
Aflatoxin in peanut meal (7)
Aflatoxin in corn meal (7)
Aflatoxin in milk (7)

Deadline for enrollment is June 30, 1983.