

ANNUAL MEETING REPORT

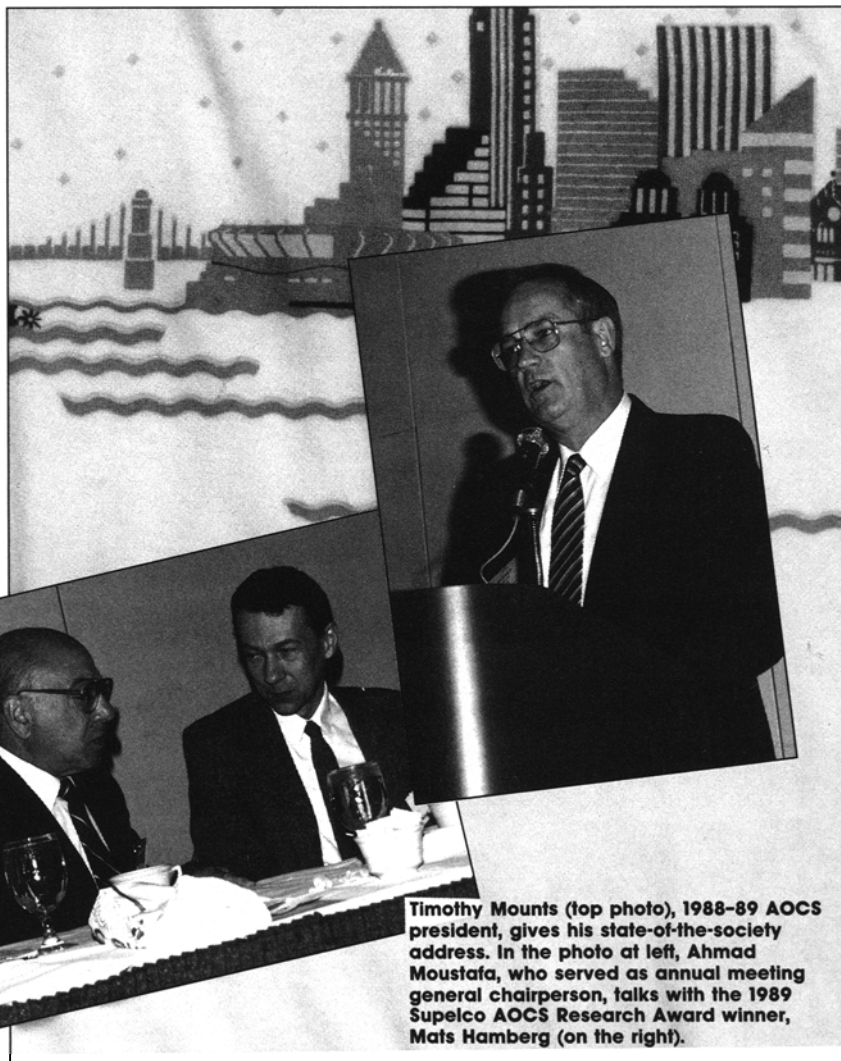
bert B. Sabin Convention Center, easily accessible from downtown hotels via the city's elevated skywalk. The program featured nearly 300 technical papers and approximately 40 poster presentations. Included were symposia on fat substitutes, plant lipids, protein and co-products, mycotoxins and plant biotechnology. Other technical sessions included a well-rounded program on surfactants and detergents which drew approximately 400 attendees.

Preceding the meeting were two short courses—Specialty Fats: Production and Application, and Soap Technology for the 1990s—presented April 30–May 2, 1989, at the Kings Island Inn, Kings Island, Ohio. Approximately 375 persons registered for the soap technology course and over 180 took part in the specialty fats course.

The exhibition held in conjunction with the annual meeting featured 94 booths representing 66 companies (see separate article for highlights from the exhibit). An accompanying book exhibit displayed 63 titles from 21 book publishers. The opening mixer on the evening of May 3 was held in the exhibit area.

1988–89 AOCs President Timothy L. Mounts gave his state of the society address at the annual AOCs business meeting on May 4 (see page 856) during a plenary breakfast. That evening's optional social event was a riverboat dinner cruise on the Ohio River. Despite some pre-departure apprehension due to rain and swollen river levels, participants rated the boat trip a successful evening. Rain again threatened the next evening as participants set off to attend a Cincinnati Reds' baseball game against

Bruce J. Holub of the University of Guelph (left in left-hand photo, page 847) discusses his poster presentation with Mary Enig of the University of Maryland and Thomas Pavlina of Baxter Healthcare Corp. In the center photo, Jerry Maerker (left) and Tom Foglia, both of USDA's Eastern Regional Research Center, enjoy the Saturday afternoon derby party. In the right-hand photo, a registrant looks over information from the meeting portfolio.



Timothy Mounts (top photo), 1988–89 AOCs president, gives his state-of-the-society address. In the photo at left, Ahmad Moustafa, who served as annual meeting general chairperson, talks with the 1989 Supelco AOCs Research Award winner, Mats Hamberg (on the right).

the Philadelphia Phillies at Riverfront Stadium. The rain quit in time to permit the game to be played, but the Reds lost.

At the inaugural and awards breakfast on May 6, awards (see separate article) presented included the Supelco AOCs Research Award, AOCs Merit Award, The Soap and Detergent Association Award for best technical paper on surfactants and detergents published in *JAOCs* during 1988, the Archer Daniels Midland Awards for best technical papers relating to protein and co-products, and the Ralph H. Potts Memorial Fellowship. Also recognized were AOCs Honored Students and the top-ranking Smalley Check Sample Program participants.

Technical interest groups meet-

ing at noon on May 4 included: processing—refining and bleaching; processing—hydrogenation and winterization; nutrition—analysis of lipid classes; surfactants and detergents—detergent testing methodology; surfactants and detergents—surface activity fundamentals; and surfactants and detergents—formulation of liquid detergents.

For the first time, AOCs sections held a combined “section convention” party, with each section handing out campaign buttons of different colors. The Protein and Co-Products and Surfactants and Detergents sections also held independent luncheons. David Kritchevsky, associate director of the Wistar Institute, addressed the Protein and Co-Products Section on “Diet and Cancer: Cancer and

Foodnotes

from Eastman



It's a cat and dog market

Anyone who lives with pets knows how finicky they can be about food. A beagle seems able to raise a protesting eyebrow when presented with an unappetizing dish. For disdain there is nothing so eloquent as a cat covering up its food with movements normally reserved for other matters. Because house pets number in the hundreds of millions today, such reactions can mean a lot to pet food processors.



Energy vs freshness

Increasing fat content in animal rations enhances calories but can have disastrous effects on palatability if antioxidants are not used to prevent development of rancid off-flavors. Eastman offers several Tenox® antioxidants formulated specifically for rendered animal and poultry fats as well as feed grade vegetable fats. We would be happy to send you information on composition, formulation and analysis.

A matter of moisture

Notwithstanding the protection afforded by multiwall bags, moisture can be a severe problem in dry dog rations. If it rises above 8% in the warehouse and the temperature goes over 75° F, you can expect mold development. Astute pet food processors recognize this danger and avoid it by incorporating Eastman® propionic acid. Unlike calcium propionate and the other more expensive sorbic acid, propionic acid functions at low moisture levels (8-10%) and at pH ≥ 7. Used at 3 lb/ton this mold inhibitor will help:

- 1) improve palatability markedly
- 2) economize on drying (to 10% moisture rather than 8%) and what you save on Btu's will just about pay for the propionic acid
- 3) get an automatic 40 lb/ton more production through that extra 2% moisture – safely!

Smoothing things out

If you are making dry cat food in small shapes, Myverol® 18-00 distilled monoglycerides and Myvaplex® concentrated glyceryl monostearate can each help maintain the structural integrity of all those tiny stars, scallops and triangles that cats love to crunch. These valuable additives reduce breakage and dusting but, even better, they function as lubricants in the extruder letting you use less horsepower and increase throughput.

Lordy, how delicious—eatin' goober peas!

That's from a song popular with soldiers of the Confederacy. And even though Johnny Reb sometimes had no more to eat than a handful of peanuts, they remained one of his favorite foods. Today they rank tops with all Americans, but their high fat content makes them particularly susceptible to oxidation. And as most everyone has experienced at one time, rancid peanuts can be pretty awful!

Eastman has introduced many antioxidants. Each is tested routinely on peanuts. To date Tenox® 20A antioxidant takes top honors. In one test it was dissolved in corn oil and sprayed on peanuts to give 200 ppm antioxidant (on weight of nuts). Portions were then coated with Myvacet® acetylated monoglycerides and oven aged at 100° and 145°F.

	Storage stability*	
	100°F	145°F
Control	118	28
Tenox 20A	524	54
Tenox 20A + Myvacet 7-07	529	60
Tenox 20A + Myvacet 5-07	524	58
Tenox 20A + Myvacet 9-45	539	57

* days until rancid odor was detected

Myvacet monoglycerides exerted small effect because coatings were in liquid or near-liquid state at test temperatures. At RT they function as good oxygen and moisture barriers and the 7-07 grade with its high acetyl content should add significant extra oxidative stability to your product.



For more information on these products write to Suzanne Miller at P.O. Box 431, Eastman Chemical Products, Inc., a subsidiary of Eastman Kodak Company, Kingsport, TN 37662

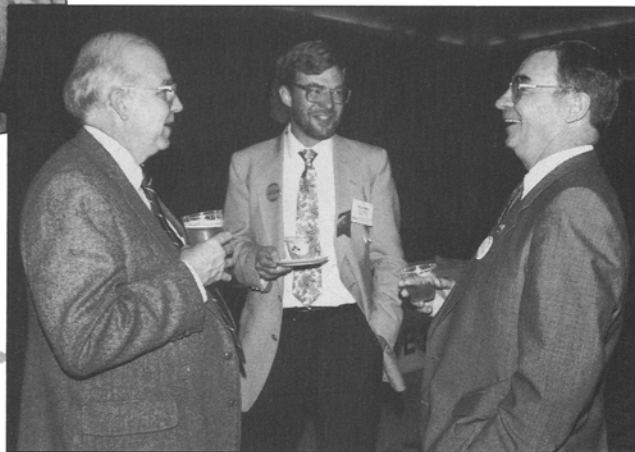
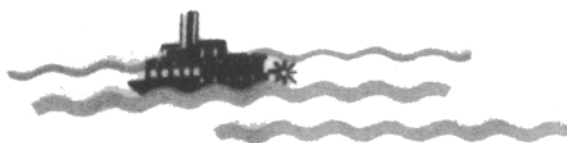
© 1988 Eastman Kodak Company

ECP55A

ANNUAL MEETING REPORT



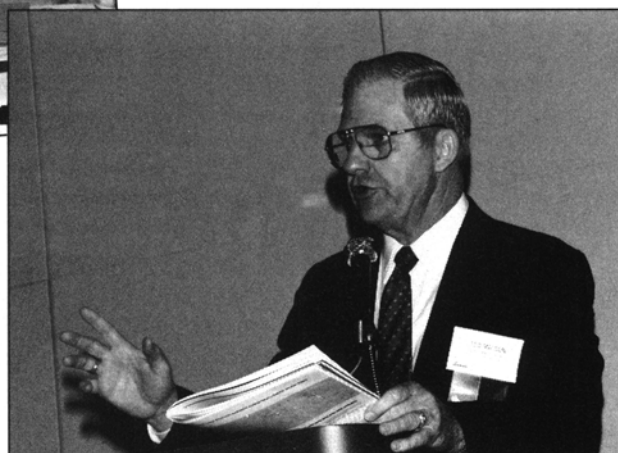
Steve Sykes (left in top photo) of The French Oil Mill Machinery Co. takes meeting registrants on a tour of the company's facilities at Piqua, Ohio. Bryan Madison (left, photo below) and Phillip Bross (center), both of Procter & Gamble Co. and members of the local committee, share a laugh with 1989-90 AOCS President Roy Carr. The meeting exhibit (bottom photo) sets a record by featuring 94 booths representing 66 companies.



ANNUAL MEETING REPORT



Joseph Endres (left, top photo) of Central Soya Co. Inc. and David Erickson of the American Soybean Association talk at the Saturday morning breakfast before they are inaugurated as AOCs treasurer and vice president, respectively. Ted Matson (photo at right) urges meeting registrants to take part in technical-interest discussions held Thursday.



Nutrition" in a technical session prior to the section lunch. The Surfactants & Detergents Section luncheon featured John A. Hockey, vice president of development for Lever Brothers Co., as guest speaker. He spoke on "Detergents Research: Challenges for the Next Decade" (see Surfactants & Detergents News section).

Meanwhile, the newly formed Cincinnati-based Ohio Valley Section gathered for breakfast Friday morning, May 5, and elected officers (see Inside AOCs for separate article).

A total of 144 persons took part in the spouses' program, which included a historical "Highlights of Cincinnati" tour, lunch at the Cincinnati Club, a talk by a local historian on "Life Along the River," a guided tour of the Cincinnati Art Museum and the Krohn Conservatory, lunch on the upper deck of a riverboat restaurant on the Ohio River, and visits to several historic homes in the Riverside District of Covington, Kentucky, just across the Ohio River from Cincinnati.

Four technical tours were held. On May 4, approximately 280 persons took a walking tour of The Procter & Gamble Co.'s Ivorydale

manufacturing plant including the Ivory soap and Crisco processing and packaging operations. Also, approximately 25 participants toured the U.S. Environmental Protection Agency's Water Resources Laboratory. The tour showed the laboratory's extensive chemical analysis facilities as well as pilot plant areas for water testing and computer systems. Activities on May 5 included a tour of The French Oil Mill Machinery Co.'s research and development facilities, engineering area, and manufacturing and assembling operations at Piqua, Ohio. Also, there was a tour of Mike-Sell's Potato Chip Co. in Dayton, Ohio, which showed the company's potato chip manufacturing operation, from raw potatoes to finished product.

Sporting events included a golf tournament at the Vineyard Golf Course and a round-robin tennis tournament at the Queen City Racquet Club, both on May 3. The annual Fat People's Fun Run and Walk in the early morning on May 5 started and ended at the convention center. Sixty-four persons ran or walked the five-kilometer course which was downtown and by the river. The event included a conti-

mental breakfast.

At the conclusion of the technical program on May 6, approximately 800 persons attended the Derby Day party held in the convention center ballrooms. A giant screen television receiver enabled participants to watch the Kentucky Derby being run in Louisville, Kentucky, located on the Ohio River downstream from Cincinnati. Betty Link of Worthington, Ohio, won the grand door prize, a 19-inch color television set (see separate article). She is the wife of 1975-76 AOCs President William E. Link.

That evening, meeting participants took part in an Oktoberfest at the Oldenberg Brewery, site of one of the world's largest brewing memorabilia collections, in Fort Mitchell, Kentucky. At the party, outgoing AOCs President Tim Mounts was summoned on stage to don a grass skirt and blond wig during the entertainment cast's presentation of "Honeybun" from the musical "South Pacific." Approximately 425 persons participated in the evening affair that included virtually continuous musical entertainment, beer and a dinner of German-style sausages, potato pancakes and kraut.

Tim Mounts: State of the Society

The following address was given by outgoing AOCS President Timothy Mounts during the annual meeting.

Five years ago, our society celebrated its 75th anniversary. Now in our 80th year, AOCS is embarked on an ambitious program to plan for the future, to enhance member services, to focus publication efforts, to update technical methods, to preserve fiscal integrity and to broaden the membership base of the society.

A mission statement was developed and by action of the membership will be incorporated into the by-laws. It states, "The mission of the American Oil Chemists' Society is to be a forum for the exchange of ideas, information and experience among those with a professional interest in the science and technology of fats, oils and related substances, in ways that promote personal excellence and provide high standards of quality." This statement does not signal a change in direction for the society, but merely formalizes what the society is and will be to its members.

Shortly after our last annual meeting, the AOCS Governing Board and key staff members completed intensive strategic planning sessions that identified objectives and goals to enhance the society's programs and operations for the 1990s. Action plans were developed to address 41 projects in all committee areas of administration, publications, education, technical, membership and finances. The volunteer committees have enthusiastically accepted the challenges of these plans which will effectively position the society for the 21st century. Recommendations will be considered at this meeting to finalize some of those efforts.

Considered at this year's business meeting will be proposed amendments to the AOCS Articles of Incorporation and By-laws that will open membership in AOCS to anyone with a professional interest in the science and technology



Robert Haster (right) presents Timothy Mounts with a past president's key.

of fats, oils and related substances and will eliminate the individual associate member category. Approval of these amendments will give all members equal status in voting on society matters and hopefully will stimulate an increase in membership from the current level of around 4,000 members.

Two new committees were formed by the AOCS Governing Board and initiated their work during this year.

The Marketing Oversight Committee was established with the objective to assure that AOCS marketing efforts are high quality, productive, efficient and coordinated. This committee oversees the marketing of products and services and works with appropriate staff members to assist in developing marketing programs (including market research) and policies. It encourages and recommends new marketing initiatives and annually reviews with the chairman of each coordinating committee marketing needs, philosophy, program, strategy and studies. This is the first member committee with responsibility for AOCS marketing efforts. At this meeting it will consider the results of a professionally con-

ducted member survey and make recommendations for society action.

The Professional Relations Committee is to establish good working relationships with other professional, technical and trade organizations; to develop a program to make or facilitate formal contacts between AOCS and other trade and professional societies around the world; to promote the use of the AOCS news section as an international news medium; and to identify and recommend to the appropriate action committee activities to be conducted jointly with other organizations or in international settings through meetings, short courses, world conferences, new international sections and promotions. With this committee in place, we can look forward to enhanced interactions on both the domestic and international scene.

A related activity in the publications area is the *International Newsletter on Fats and Oils* which is circulated monthly to approximately 100 organizations and individuals who provide information for the newsletter. Compiled and distributed by AOCS, this has become a valuable vehicle for the rapid dis-

ANNUAL MEETING REPORT

semination of news in our industry. Items in this newsletter appear in the news section of *JAOCs*. Further expansion of our publications program is being considered, specifically in the number of monographs and in news and specialty section journals.

The education program continues to be an important activity of the society, and with our new Education Director Jean Bremer on board, we can expect an increase in the number and quality of educational offerings in response to interests of the members.

Establishment of a rational dues philosophy for governing board decisions will be considered at this meeting. Being recommended is a statement that the motivating beliefs, concepts and principles to determine membership dues are that they should be established to cover the direct production costs of the publication provided as a membership benefit and nonpersonnel administrative overhead costs. Included in this philosophy is the consideration that all activities be self-supporting through user fees and programmed to generate a net yield to the society. Adoption and implementation of this philosophy will assist AOCS in maintaining fiscal integrity.

I express my appreciation to my fellow members of the governing board. Their dedicated service has made this a successful year. Thanks also to those many members who have participated in AOCS committees and local or specialty sections. These committees and sections are the lifeblood of the society, providing the opportunity for member participation and individual growth.

I particularly want to thank my wife, Eileen, for her support.

It has been a privilege to serve as your president for the past year and in closing I'd like to offer you this piece of verse:

*May the road rise to meet you,
May the wind always be at your back,
May the sun shine warm upon your face,
The rains fall soft upon your fields,
And until we meet again
May God hold you in the palm of his hand.*

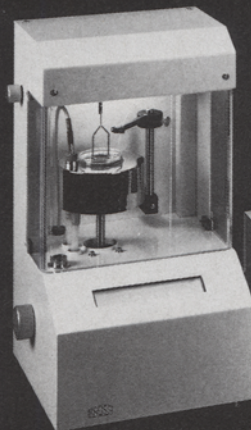
Thank you.

SURFACE CHEMISTRY EQUIPMENT FROM



Tekmar®

A complete line of instruments for surface & interfacial energy studies that employs the ring/plate and spinning drop techniques.



OUTSTANDING FEATURES

- Automatic zeroing and calibration
- Thermostating vessel with integrated magnetic stirrer
- Disperser interface for fully automatic CMC determinations
- Automatic corrections for the ring method
- Automatic calculation of averages and standard deviations
- Optional dosimat provides up to 999 serial measurements

Processor Tensiometer K12 Unites all advantages of extremely high measuring accuracy with all the conveniences of a fully-automatic system.

Digital Tensiometer K10 Easy, automatic operation with precision and high speed makes K10 the professional tensiometer.

Spinning Drop Tensiometer SITE 04 Determines extremely low interfacial tension, with measurements made simply by reading the diameter of a drop.

Contact Anglemeter G1 Permits calculation of surface energies of both solid and (pressed) powder materials.

Film Balance FB1 Based on Langmuir's theory, this completely new design for studying mono- and multilayers offers precision and flexibility at a very reasonable price.

UNIQUE SCIENTIFIC INSTRUMENTATION FROM

Tekmar®

For more specific information, check the reader's service number or call:
(800) 543-4461 / Service (800) 874-2004 / Telefax (513) 761-5183 / Telex 21-4221
Tekmar Company • P.O. Box 371856 • Cincinnati, OH 45222-1856

Roy A. Carr's inaugural address

The following address was given by incoming AOCS President Roy A. Carr during the Saturday morning awards/inaugural breakfast May 6 at the 1989 AOCS annual meeting in Cincinnati, Ohio.

Thank you very much for the honor of being elected to the office of president of The American Oil Chemists' Society. Being here today takes me back in memory to my first AOCS meeting. The first few hours were quite lonely and confusing. However, I soon experienced some of the warm friendship of the society members, who made a definite effort to make a newcomer feel welcome to society activities. I do hope that this tradition continues forever!

During my first annual meeting banquet, I recall that I was terribly impressed by the importance of such an august body of dignitaries functioning as the board of directors. At that moment, I felt a tremendous gulf between my

"The operation of the society can be compared to a giant wheel which draws from its membership..."

status in the organization as compared to the "Mount Olympus" stature of the governing board.

Today, as I stand here before you, I feel and see no such gulf. I now realize that it was all in my imagination. So, to all our newer members in the audience, I would like you to know that the cliff is not as high as it looks from where you are sitting. So, please step over the ant hill and boldly make it known through our various committees that you are interested in helping provide direction and as-



sistance for our various functions.

Last year at this time Tim Mounts mentioned that I was the second Canadian to become the president of this society. Later in the day, I jokingly corrected Tim and mentioned that I was the first dual citizen of both Canada and the U.S. to be elected president of the society. Naturally, that opened the question as to what is a dual citizen? Having worked and lived on both sides of the 49th parallel, my definition is that a dual citizen spends 50% of his time defending the United States of America to Canadians and the other 50% explaining Canada to the Americans. The important fact is that I am extremely proud to be a citizen of both these wonderful countries.

More than any other culture I know of, Canada is a "consensus culture." It has the reputation of having a very quiet and peaceful history. However, its development has been on a multi-cultural basis and actually is a union of relatively free entities, such as regional, provincial and federal authorities. Despite the fact that somewhat bitter rivalries do exist, compromise agreements do tend to hold the system together. Perhaps we all can learn from these experiences.

Overall, our society must serve national and international communities. Because of multi-culturalism

throughout the world, we will need to consider consensus and compromise when we deal with international matters affecting our society. I believe that the establishment of international sections, such as the Canadian and Latin sections, is important for the future development of our society. I will make every effort to encourage the development of new sections with geographic interests.

The operation of the society can be compared to a giant wheel which draws from its membership as a whole, but returns much more to its members than the input received. Perhaps, it can also be compared to the recently publicized nuclear fusion discovery. A platinum core, a palladium coil and deuterium (heavy water) are combined in a vessel. If no energy is applied to get the reaction started, nothing happens. If sufficient energy (dedication) is supplied, deuterium (members) is combined with palladium (staff). Energy is then given off, which is much greater than the energy supplied to the process. In chemistry, this is also called "synergistic," in which the total effect is greater than the sum of the effects taken independently. The more the dedication, the greater the net effect.

Congratulations to our membership for electing a superb group of people to our governing board. Their dedication, capability and experience will keep the wheel turning and energy flowing during the year ahead. I would like to take this opportunity to thank Tim Mounts for all his efforts in stickhandling our society through the past year. On behalf of our incoming board of directors, we accept the torch and gavel from Tim and will make every effort to work in close harmony with our excellent staff and committee members to carry on the very best traditions of the society.

ANNUAL MEETING REPORT

Minutes from the AOCS business meeting

The 1989 AOCS annual business meeting was called to order at 8:20 a.m. on Thursday, May 4, 1989, by AOCS President Timothy L. Mounts. The meeting was held at a breakfast session in the ballroom at the Albert B. Sabin Convention Center, Cincinnati, Ohio.

Ahmad M. Moustafa, general chairperson for the annual meeting, welcomed participants to Cincinnati, the "Queen City," and called attention to the fine technical program organized by technical program chairperson Bryan Madison. He also outlined the social events planned for the meeting. He noted that registration for the meeting was approaching the 2,000 mark, with a pre-registration figure of 1,829 by Wednesday evening, May 3.

Moustafa introduced keynote speaker C. Lukens, mayor of Cincinnati, who talked about the "flavor" of Cincinnati and efforts undertaken during the past three years to improve the city and its environs. He concluded by telling participants, "It is very critical for all of us to be involved in our respective communities."

The next speaker was Ted Matson, who urged meeting registrants to attend the technical interest sessions scheduled for noon that day.

A motion was made and seconded from the membership to bypass reading the minutes from the 1988 business meeting. The motion was carried.

President Mounts explained two constitutional amendments included on proxy ballots earlier in the year and took a voice vote of members present who had not voted by proxy. Mounts announced that 526 proxy ballots had been cast on the question to change AOCS membership requirements; of those, 481 were in favor and 45 were against the proposed change. After a voice vote, Mounts declared that the amendment had been approved. The second concerned extending the treasurer's tenure of office to a two-year term, instead of one year. Proxy ballots cast were 479 in favor to 47 against. After a voice vote in favor, Mounts declared the amendment had been approved.

Two other amendments not on proxy ballots were also voted on

by the membership and adopted unanimously. One concerns indemnification of the officers and the second requires that AOCS have an annual outside financial audit.

AOCS Treasurer Robert M. Burton gave his treasurer's report (see separate article), which he said would be published in the July issue of *JAACS*.

AOCS Executive Director Jim Lyon noted a number of changes had occurred since AOCS held a meeting in Cincinnati in 1974: these included 68 technical papers in 1974, compared with approximately 300 in 1989; 26 exhibit booths (1974), compared with 94 booths (1989); 329 pre-registrants (1974), compared with 1,800 (1989); 24 registrants from 7 countries outside the U.S., versus 391 from 42 countries outside the U.S. in 1989. In addition, two short courses at Kings Island prior to this year's meeting attracted 530 attendees.

Lyon urged nonmembers attending the meeting to sign up for membership. Mounts gave Lyon a note to read which showed 475 nonmembers had registered for the meeting. Lyon also urged registrants to visit the AOCS book sales booth and other booths in the exhibit.

Lyon announced that Sue Heiser was leaving AOCS staff and that Pat Graham had retired as of Dec. 31, 1988. Members applauded each for service to AOCS.

Nicholas Pelick introduced Mats Hamberg and presented him with the 1989 Supelco AOCS Research Award plaque and a \$4,000 honorarium from Supelco Inc.

Mounts, 1988-89 AOCS president, gave his state of the society address (see accompanying text).

Moustafa and Madison made a number of announcements related to the technical and social events.

A motion to adjourn was made, seconded and approved. Mounts declared the meeting adjourned at 9:25 a.m.

Respectfully submitted,
M. Deborah Meiners
1988-89 AOCS Secretary



Despite swollen river levels, the Thursday evening riverboat cruise goes on as scheduled.

ANNUAL MEETING REPORT

Treasurer's report cites deficit

The following financial report was presented by Robert Burton, AOCS 1988-89 treasurer, at the AOCS business meeting Thursday morning, May 4, in Cincinnati.

Last year in May, I reported to you that the American Oil Chemists' Society was solvent and healthy, although I also mentioned that our operating expenses exceeded our operating income and that it was non-operating income that kept us in the black. That report, including data, was subsequently published in the July issue of *JAOCS*. In December 1988, I reported in *JAOCS* that over the last six years (1982-1987), our investments only kept pace with inflation on a constant-dollar basis. Further, our total investment portfolio had been reduced due to the needs of our building program. The society is still healthy, but it does have a bit of a "cold"—a mild infection.

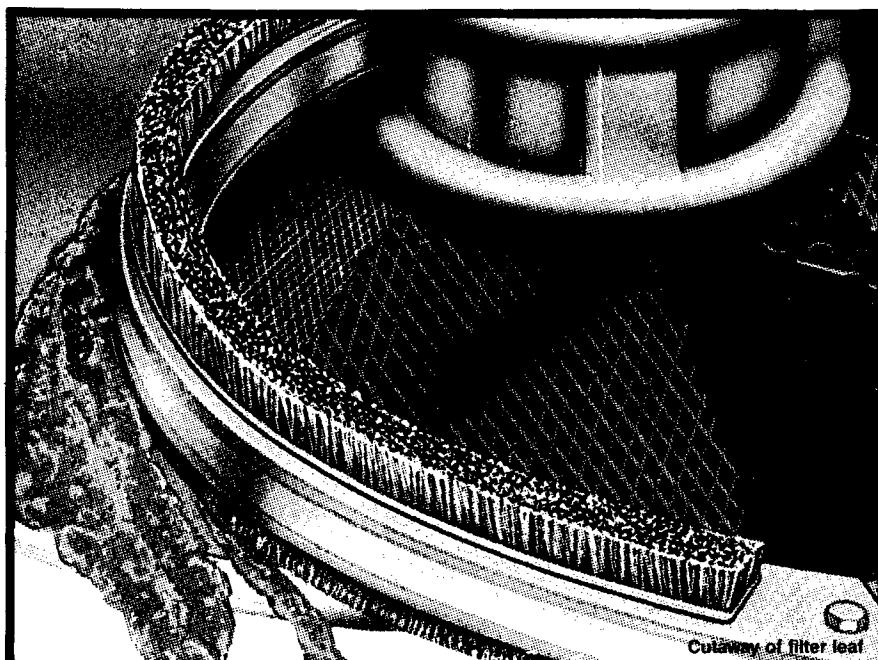
Over the past six years, from 1982 through 1987, our operational expenses exceeded our operational income four times (Table 1). Only in 1984 and 1985 did AOCS have a surplus in its operations. During this six-year period, there was only one year in which the non-operational income failed to meet the operational deficit—that is, non-operational income allowed AOCS to have a surplus in five of the six years. We have become dependent upon the non-operational income.

During the past two years, the AOCS Treasurer, the Financial Activity Coordinating Committee and the Budget Managing Committee have been working with the Executive Director, AOCS staff and an independent auditor to place the accounts on a project or departmental basis, to allocate personnel costs to each project and to provide for the monthly reporting of income/expense statement on a 35-day timely basis.

In the past, the proposed annual budget was prepared by the Executive Director and the AOCS

staff, presented to the Budget Committee for its review and, when satisfactory, was approved by the AOCS Governing Board. The budgeting process has now been given

to the coordinating committees to initiate with AOCS staff advice. The budget from each coordinating committee is then collected and placed in final form by the Budget



Cutaway of filter leaf

IT PAYS TO BRUSH REGULARLY.

No other filter can separate liquid-solid processing from high labor and maintenance costs like Zimpro/Passavant's Idrex® brush-cleaned leaf filters.

Idrex filters eliminate the labor intensive cleaning stage and reduce downtime with patented automatic brush-cleaning technology. Its closed assembly provides safer pro-

cessing of toxic substances because there is no need to open the filter for cake removal or pre-coating.

Idrex automatic filters can also provide dryer spent cakes for easier disposal, and a consistently high quality filtrate product. Plus they can easily be computerized and programmed with your wet process line for increased productivity.

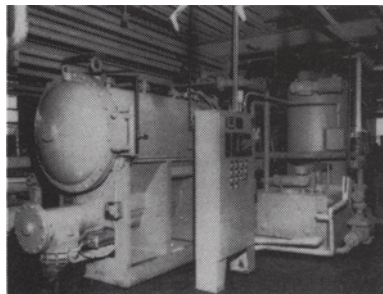
For more information on giving the high costs of liquid-solid separation the brush-off, contact: Zimpro/Passavant, (800) 826-1476, TELEX 29-0495, or FAX (715) 355-3219.

THE CLEAR SOLUTION

**ZIMPRO
PASSAVANT**

A Member of TheVenturesGroup

301 W. Military Road., Rothschild, WI 54474



ANNUAL MEETING REPORT

Committee before submission to the governing board. In this way each coordinating committee and appropriate managing committees have a first-hand knowledge of the costs involved in their programs and the source of income to finance the projects. Of course, not all projects of the society are capable of being self-supporting and those projects must be financed by income from other programs.

I have some good news and I have some bad news for you. The bad news is that in 1988 the society had a deficit in operations of \$268,634 and a deficit in non-operational income of \$91,598, a total deficit of \$360,232 (Table 2). The good news is that the timely monthly income/expense statements allowed us to detect the potential losses early-on and to take steps to minimize them. The coordinating committees cooperated well with the Budget Committee in preparing revised and tightened budgets for the remainder of the year. The Publications Coordinating Committee needs special commendation because it reluctantly took several severe actions. One was to restrict the number of technical pages in *JAOCs* to reduce costs; another was a decision to delay starting our new publication "AOCS News." These should be temporary actions only.

**This publication
is available
in microform.**

**University Microfilms
International**

Please send additional information

Name _____
Institution _____
Street _____
City _____
State _____ Zip _____

300 North Zeeb Road 30-32 Mortimer Street
Dept. P.R. Dept. P.R.
Ann Arbor, Mi. 48106 London W1N 7RA
U.S.A. England

TABLE 1

AOCS Financial Picture, 1982-1987

Year	Net Operating		Net Non-operating		Excess/ (Deficit)
	Gain	Loss	Gain	Loss	
1982		148,736	77,110		(71,626)
1983		23,721	48,974		25,253
1984	41,208		40,646		81,854
1985	91,188		61,557		152,745
1986		109,557	366,900		257,341
1987		138,909	266,746		127,837

TABLE 2

AOCS Financial Comparison, 1988 vs 1987

	1988	1987
Operating revenue	2,185,574	2,082,597
Operating expense	2,454,208	2,159,551
Operating net (deficit)	(268,634)	(76,954)
Non-operating income (deficit)	(91,598)	204,791
Excess/(deficit)	(360,232)	127,837

The AOCS Executive Committee, acting as an ad hoc committee appointed by the AOCS President, has developed a "dues philosophy" for the society that will be presented to the governing board. There are two important elements in the philosophy: dues should pay for all non-personnel operating expenses, excluding the mortgage on the headquarters building, and all other services of the society should be financed by user fees. Eventually, this will involve an increase in dues; currently, our dues are allocated between subscriptions to *JAOCs* and to other costs. With our current dues of \$50, the amount allocated to the *JAOCs* subscription does not pay for the cost of printing and mailing, i.e., \$45. The user fees will be increased as appropriate to pay fully the total cost of the service provided.

AOCS is solvent and financially sound as evidenced in the summary balance sheet (Table 3). The society is still healthy, but we must take therapeutic or corrective action to prevent the "cold" from becoming "pneumonia." I believe the progress the Financial Activities Coordinating Committee has made in terms of accounting and reporting procedures and in the new procedure for developing an annual

budget, beginning with the coordinating committees, will prevent the financial "pneumonia."

I am pleased to have served AOCS for two terms as treasurer. My work was made easier by the Vice Chairperson of the FACC Dave Tandy, and by the chairpersons of the two managing committees—Arnold Gavin of the Investment Committee and Joe Endres of the Budget Committee. If Joe Endres works as hard and as effectively as your newly elected treasurer as he did as chair of the Budget Committee, the Society will be truly healthy by 1990.

TABLE 3

Summary Balance Sheet

Assets	
Current assets	\$ 405,279
Investments	315,966
Capital assets	1,136,964
Deferred expense	112,207
Total assets	1,970,416
Liabilities	
Current liabilities	97,202
Long-term liabilities (mortgage)	385,403
Deferred income	576,841
Restricted funds	25,811
Total liabilities	1,085,257
Fund balance (equity)	885,159
Liabilities + equity	1,970,416

ANNUAL MEETING REPORT

Award recipients

Mats Hamberg of the Department of Chemistry, Karolinska Institute of Stockholm, Sweden, received the 1989 Supelco AOCs Research Award during the annual meeting in Cincinnati.

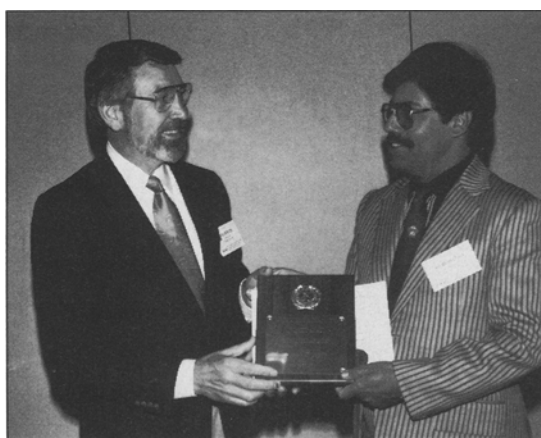
The award consists of a plaque and a \$4,000 honorarium plus an expense allowance up to \$1,500. Hamberg gave his acceptance speech during the plant lipids technical session Thursday, May 4, after receiving his plaque and check from Nicholas Pelick of Supelco



Mats Hamberg (left) of Karolinska Institute of Stockholm, Sweden, receives a \$4,000 honorarium and the 1989 Supelco AOCs Research Award plaque from Nicholas Pelick of Supelco Inc.



Robert M. Sauer Jr. of the University of Illinois at Urbana (center in first photo above) is the recipient of the Ralph H. Potts Memorial Fellowship Award sponsored by Akzo Chemicals Inc. Shown with him are Richard Reck (left) and Lincoln Metcalfe, representatives of Akzo. In the second photo above, Jesse Covey (left) receives the 1989 AOCs Award of Merit from R. G. Krishnamurthy.



Don Morton (left, in first photo above) presents the 1988-89 R. T. Doughtie Jr. Award to Shams Mustafa of Caleb Brett (USA) Inc. In the second photo, Morton presents certificates earned by chemists at Woodson-Tenent Laboratories to Douglas McLemore of Woodson-Tenent.

ANNUAL MEETING REPORT

Inc. earlier that morning at the opening breakfast. Supelco of Bellefonte, Pennsylvania, provides the honorarium and expense funds that are part of the award. Hamberg was recognized for his leadership in eicosanoid research and prostaglandin chemistry. His talk will be published in *JAOCs* later this year.

Other honorees during the annual meeting included Jesse Covey who received the AOCS Award of Merit, recognizing achievements in AOCS activities. Covey, an AOCS member since 1967, served as general chairman for the society's 75th anniversary meeting in 1984 and has been active on numerous technical, administrative and publications committees, as well as an officer in a local section.

Six students from the U.S. and Canada were recognized as AOCS honored students. The awardees were Mun-Yhung Jung of Ohio State University, Harold Aukema of the University of Guelph, Apollo Vaz of the University of Nevada, Ciping Nieh of the University of Arkansas, Dean C. Crick of the University of Western Ontario and Elizabeth Parle of the University of Illinois. Each presented a technical paper during the meeting.

Two other students received complimentary registration for the annual meeting. They were Karmin



Students honored this year, shown with Robert M. Burton who oversaw the program, are (first row, from left) Karmin O, Apollo Vaz and Xi Yuan Hua; (second row) Dean Crick, Ciping Nieh and Harold Aukema, with Burton at far right. Inset is Mun-Yhung Jung. Recipient Elizabeth Parle is not shown.

O of the Department of Biochemistry, University of Manitoba, and Xi Yuan Hua of the Department of Chemistry, Brooklyn College, City University of New York. The Honored Student Committee said their work in graduate school deserved recognition, but their previous academic and work experience made them ineligible for the regular awards.

Robert M. Sauer Jr., a graduate student at the University of Illinois at Urbana, received the

1989 Ralph G. Potts Memorial Fellowship. He presented a paper on the efficacy of supercritical fluid chromatography for the separation of complex mixtures of fatty acid methyl ester hydroperoxide isomers. The award is named for the late Ralph Potts, a pioneer researcher on fatty acids and nitrogen derivatives. The award fund was established by Akzo Chemicals Inc., the successor firm to Potts' original employer, the Armour organization.

Mycotoxin symposium honors Leo Goldblatt

The following article recalling the work of the late Dr. Leo Goldblatt was written by Louise S. Lee of the U.S. Department of Agriculture's (USDA) Southern Regional Research Center, New Orleans, Louisiana.

The Mycotoxin Symposium at the AOCS meeting in Cincinnati was a memorial to Leo Arthur Goldblatt. Dr. Goldblatt died in August 1988 at the age of 85 after a long and distinguished career. He is remembered by his colleagues (who were also his friends) particularly for the research he led on studies of aflatoxin in cottonseed and peanuts.

Dr. Goldblatt headed the first research group at USDA's South-

ern Regional Research Center (SRRC) specifically devoted to research on aflatoxin. The first USDA patent on ammonia detoxification of aflatoxin bears his name. The research team working on ammoniation of aflatoxin received a USDA Superior Service Award. Another small team of SRRC scientists led by Dr. Goldblatt developed the first analytical methods for aflatoxin in cottonseed and cottonseed products. Those methods



are in wide use today and are the official methods of both the Association of Official Analytical Chemists and the American Oil Chemists' Society. That research also brought a USDA Superior Service Award. *(Continued)*

ANNUAL MEETING REPORT

Dr. Goldblatt instituted the preparation and distribution of aflatoxin standards by SRRC long before they were available commercially. Standards enabled researchers the world over to conduct their studies and report reliable results. Thousands were distributed. His leadership in research on the problem of food and feed contamination by aflatoxin made SRRC a mecca for the training of many scientists from both Central and South America, as well as Europe, Africa and various parts of the U.S.

Much of the reputation enjoyed by the mycotoxin group at SRRC today is a result of Dr. Goldblatt's insight. The biosynthesis research continued by young molecular biologists was begun some 20 years ago by a postdoctoral fellow hired by Dr. Goldblatt. That "fellow" is a woman—Dr. Joan Bennett, now

at Tulane University and president-elect of the American Society for Microbiology.

During Dr. Goldblatt's 10 years of active research on aflatoxin, he published many research papers on various aspects of aflatoxin research; his major lasting contribution was his book, "Aflatoxin—Background, Control and Implications," published in 1969. This treatise still serves as a needed and valued reference. Again, recognizing a real need, he organized an AOCS Mycotoxin Committee. This committee represents a strong voice in the mycotoxin community. Under Dr. Goldblatt's leadership, accepted mycotoxin methods of AOAC were rewritten in the AOCS style and are included in the *Official Methods and Recommended Practices of the American Oil Chemists' Society*. He chaired that com-

mittee from its inception in the 1960s until 1988, long after he retired in 1973.

Dr. Goldblatt retired from his official duties at the SRRC, both as head of the Oilseed and Foods Laboratory and research leader of the small mycotoxin research group, but he continued to "come to work" daily for nearly 15 years. His devotion to research remains almost unequaled. He also was devoted to AOCS. Forty-four of his 130 published research articles appear in the journal. Publications covered many facets of fats and oils research as well as research on aflatoxin. "Dr. G," as he was called by friends, served as a journal associate editor for many years before and after retirement. He brought to this task his requirement for perfection and his particular attention to detail. The My-



Equipment Engineering



Equipment Engineering



Equipment Engineering



Equipment Engineering



**Call 1-800-952-6859
extension 310 for
more information
Telex 27-6125 EQPMT ENG**



Equipment Engineering

SINCE 1970
CENTRIFUGE SERVICES

Remanufactured Centrifuges

A wide selection of remanufactured high-speed and decanter centrifuges are available from our stock of over 325 machines and are warranted by the toughest standards in the industry . . . OUR OWN!

Replacement Parts and Accessories

Our parts department stocks over 8,000 different replacement parts for Alfa Laval centrifuge equipment.

In-Shop Repair Services

We specialize in all aspects of centrifuge repair including bowl repair and rebalancing on solid wall, automatic desludging and nozzle bowls. Our specialized decanter shop is equipped for scroll, bowl and gearbox balancing.

Field Services

We have a fully trained staff of experienced technicians who are capable of meeting your high-speed and decanter service needs.

Specialized Engineering

New applications, existing separation problems, packaged systems, sample evaluation and electrical controls built to customer specifications are just a part of our custom engineering services.

757 East Murry Street Indianapolis, Indiana 46227

ANNUAL MEETING REPORT

cotoxin Symposium honored one of the truly greats.

At the symposium, members of the mycotoxin community from government, academia and industry gave reports of their research activities. The afternoon session was chaired by Bob Hron from SRRC who reported on the latest

developments in alcohol extraction of oil and aflatoxin from oilseeds. Louise Lee, also of SRRC, reported on SRRC's progress toward solution of the field problem of aflatoxin in cottonseed.

Remarks about Dr. Goldblatt also were made at the beginning of the symposium by Lee, the only

scientist still at SRRC who was a member of that original Goldblatt research team. Her remarks helped the younger scientists who did not know him appreciate "Dr. G" and kindled memories in those in attendance who were his friends.

Fat substitute research generates interest

The consequences of fat substitute consumption and the effect consumption might have on oil supply and demand were important themes during the fat substitutes sessions at the annual meeting. Researchers from several firms and one research hospital presented preliminary data on a number of fat substitutes.

Researchers at St. Luke's-Roosevelt Hospital Center in New York have asked the question: "Do animals compensate for the loss of fat while consuming a diet containing fat substitutes?" If the answer is yes, one has to ask, "What good are fat substitutes?" Sami Hashim, professor of medicine at Columbia University, said.

He and his colleagues at St. Luke's-Roosevelt are investigating those questions by looking at patterns of weight loss and gain in rats fed diets containing polyphenylmethylsiloxane (PPMS) or polydimethylsiloxane (PDMS). These two fat substitutes are organic derivatives of silica with linear polymeric structures.

Hashim reported findings that obese Zucker rats lost weight when fed an *ad libitum* low-fat diet containing 22% PPMS, although control rats gained weight. This indicated that PPMS-fed animals did not increase intake to compensate for the addition of PPMS, Hashim said. However, Sprague-Dawley rats initially fed a high-fat diet (35%) to induce obesity and then given a diet diluted 10% with PDMS gained weight to the same degree as the controls, indicating the rats on the PDMS diet did compensate for the reduction in fat. Starting with a high-fat diet may

have helped cause the compensation, Hashim said.

Two-week dietary exposure studies by Best Foods on the company's fat substitute trialkoxytricarballoylate (TATCA) show that TATCA functions as a nonabsorbable oil substitute, according to Mark Bieber of Best Foods. Best Food researchers found blood chemistry of control animals to be much the same as that of male weaning rats fed an *ad libitum* chow diet containing 0.15, 0.75, 1.5, 3.0, 6.0 or 9.0% TATCA.

Food intake did increase in the animals fed the two highest dose levels, and there was anal leakage in some animals eating at the 6% level and in most of the animals eating at the 9% level, Bieber said. Anal leakage ceased within one day of the compound's removal from the diet. Researchers also found that TATCA recovery in the four highest dose rates was 97+14%. Bieber considers the results preliminary and said the company would continue studying the compound.

Frito-Lay researchers are continuing functionality, sensory and toxicological studies on dialkyl dihexadecylmalonate (DDM), Frito-Lay's patented fat substitute. The company is particularly interested in DDM's potential in frying applications, according to Marshall Spearman, Frito-Lay's section manager for food safety and analytical services.

In frying studies on potato chips and tortilla chips, Frito-Lay found that consumers considered chips fried in a 60:40 blend of DDM and soybean oil to be as acceptable as chips fried in conventional oils.

Potato chips prepared with DDM-soybean oil differed from controls only in one area: the chips cooked in DDM-soybean oil blend appeared less oily. Using a 60:40 blend results in a one-third reduction in calories, Spearman said, noting that, at this level of use, a one-ounce bag of potato chips would contain six grams of DDM; a similar portion of tortilla chips would have four grams of DDM.

"DDM is attractive for a variety of food purposes, but it is important to consider realistic consumption estimates for establishing potential risks," Spearman said. Frito-Lay estimates mean consumption of DDM in salty snacks for 12- to 17-year-olds to be 1.9 grams per day; for heavy consumers, consumption of DDM may range from 9.6 grams to more than 21 grams per day. In rats, the company found the consumption threshold for anal leakage to be 3.2 grams per day.

Presently, Frito-Lay is looking at the metabolic and toxicological significance of DDM absorption in chronic feeding experiments, Spearman said, noting that prior studies showed that recovery of unabsorbed DDM was 85-95%. In cases where radiocarbon-labelled DDM was used, total carcass radiocarbon was less than 0.1%, he added.

Charles F. Cooper, principal scientist at Arco Chemical Research and Development, and J. Alex Wei, vice president of technical development for Food Ingredients and Innovations, each described work by their companies. Arco is working on esterified propoxylated glycerols which are made from propylene oxide, glycerine and fatty acids. Cooper said the compounds do

ANNUAL MEETING REPORT

not hydrolyze, and short-term toxicity studies indicate the compounds are not acutely toxic. "We next hope to determine that the compound is not metabolized," Cooper said. Wei's work focuses on looking at the least expensive processes to make sucrose polyesters that emulate the physical properties of a model, target fat. He's looking at the use of gum arabic, starch, carboxyl methyl cellulose (CMC) and polydextrose as the carbohydrate source in other low-calorie fats.

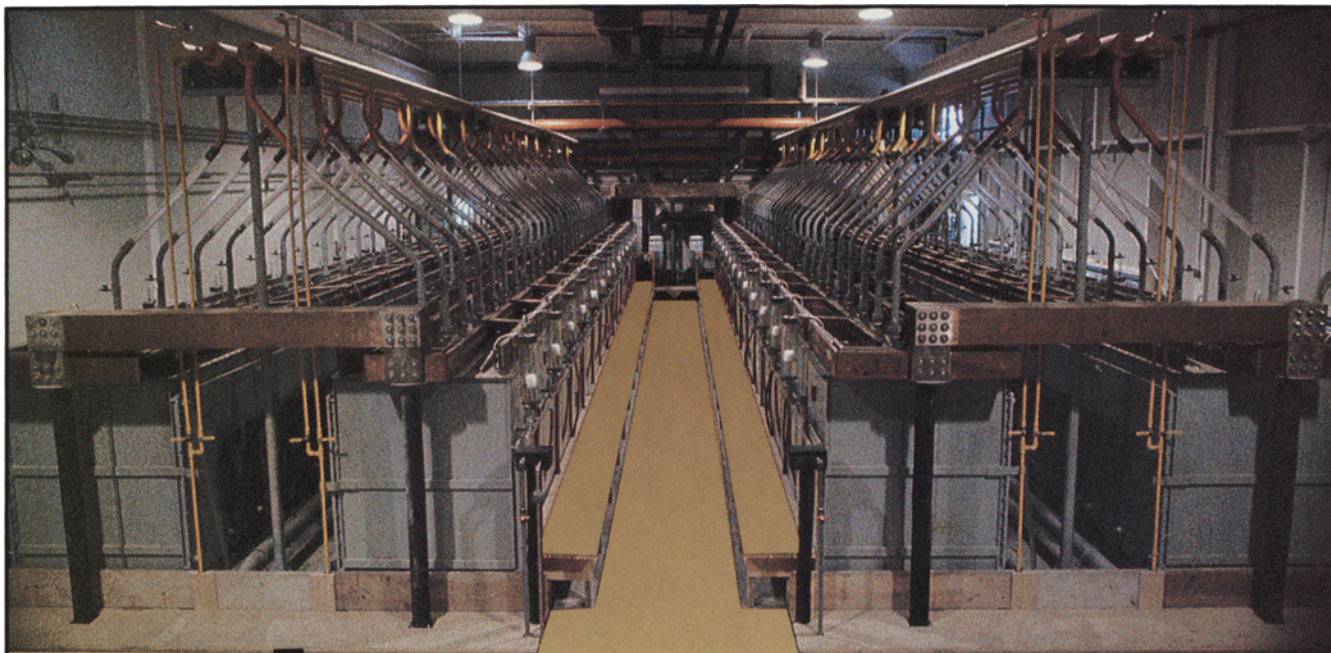
The worldwide impact of fat substitutes on total fat consumption will be negligible, but the substitutes could have a tremendous impact in local situations, particu-

larly in the European Economic Community (EEC) or the U.S., according to James Stanton, a consultant with Experience Inc. Stanton speculated that if people in the U.S. and the EEC lowered fat consumption to the recommended 30% of total calories, there would be a 28% decrease in fats and oils consumption. If countries with rapidly increasing populations, such as Brazil and China, increased their per capita daily caloric intake to 3,000 calories and raised fat content in the diet to 30%, there would be an additional 25 million metric tons (MT) of fats and oils consumed per year.

Stanton does not think either

event is likely. He foresees a total net worldwide increase in consumption of fats and oils and an increase in per capita fat consumption in developing countries. There will be a slight decrease in fats and oils consumption and a lower consumption of invisible fats in the U.S. and the EEC, he said, adding that dextrins, Simplese and olestra might have some impact in these areas.

Experience Inc. estimates that in 1998, visible fat consumption rose in Japan, Brazil and China.



Hydrogen

Custom Built Electrolytic Plants and Generators

With over 760 installations in more than 87 countries, The Electrolyser Corporation is the world's leader in efficiency, reliability and safety.

The unique, patented Stuart Cell ensures virtually maintenance-free operation year after year. Electrolyser

plants enjoy a proven safety record and are fully automated, requiring a minimum of supervision. Electrolyser designs, manufactures and installs throughout the world, custom plants and generators providing output from 50 to 200,000 CFH.

For further information, please contact:

**THE
ELECTROLYSER
CORPORATION
LTD.**

122 The West Mall
Etobicoke, Ontario M9C 1B9
Telephone: (416) 621-9410
Telex: Electrolys 06-967771
Fax: (416) 621-9830

ANNUAL MEETING REPORT

Kritchevsky is protein keynote speaker

Calories, more than fat, are a likely culprit in carcinogenesis, according to David Kritchevsky of the Wistar Institute in Philadelphia. Kritchevsky also said the rate at which weight is gained may be more important than final weight attained.

Kritchevsky, who was the keynote speaker for the protein and co-products sessions at the annual meeting, noted that a 1981 paper in the *Journal of the National Cancer Institute* made diet the villain in tumorigenesis. "The paper created a whole industry that made diet a major risk factor for cancer," Kritchevsky said.

Subsequent studies seemed to indicate that fat definitively was linked to cancer, but Kritchevsky said the connection may be a case of "if you torture the data long enough, they confess."

Fat availability and cancer statistics do not bear out claims that fat is the major factor in tumor development, according to Kritchevsky. "Fat availability data, which are unreliable, have shown that fat consumption has gone up since the 1940s in the U.S., but the incidence of cancer has not risen proportionately," he said. Kritchevsky noted that numerous studies—some done as early as 1909—make a clear connection between caloric consumption and tumor growth.

There is approximately the same level of skin tumorigenesis in rats fed high-calorie, high-fat diets as in rats fed high-calorie, low-fat diets, Kritchevsky said, and other studies involving caloric restriction have shown there is a reduction in tumor size with certain types of cancer. In one experiment where there was a 60% incidence of mammary tumors in rats fed an *ad libitum* diet, Kritchevsky found that a 10% reduction in calories didn't decrease the incidence of tumors, but tumor weight was reduced. With a 20% decrease in calories, the incidence of tumors was reduced by 33%.

Kritchevsky also cited studies

that he said indicate tumorigenesis might be a function of how fast a subject got to a particular weight rather than a function of final weight. In longevity studies on rats, researchers at the Institute of Cancer Research found that rats fed an *ad libitum* diet had a high incidence of tumors and lived for no more than 1,000 days. Rats fed a diet providing 60% of the calories consumed by the *ad libitum*-fed rats had longer life-spans and 90% fewer spontaneous tumors than the first group. The most interesting group, Kritchevsky said, was the group on a restricted diet for the one month following weaning and then fed an *ad libitum* diet. Those rats had similar life-spans as the *ad libitum* group but had 40% fewer tumors. "This has interesting implications for early onset of obesity," he said.

"Experiments have a tendency

to recycle themselves," Kritchevsky said, noting that a connection between exercise and tumorigenesis is being made once again. In 1944, there were experiments showing a lower incidence of tumors in exercised rats. More recent data indicate that sedentary rats fed an *ad libitum* diet had a 75% incidence of chemically induced colon tumors, while exercised rats fed an *ad libitum* diet had a 36% incidence of tumors. When calories were restricted by 25%, the tumor rate dropped to 29% in exercised rats and to 35% in sedentary rats.

"Over time, cancer studies show there is some connection between cancer and being well-fed and indolent," Kritchevsky said. "The only real difference between our experiments today and those of the past is we can modify experimental diets more accurately."



John Cherry (center) presents the 1989 AOCs Protein and Co-Products Section awards sponsored by Archer Daniels Midland Co. Shown with Cherry are (from left) Narong Chamkasem, George Abraham, R. J. Hron Sr. and Lung-Bin Hau (the latter representing colleagues at the National Taiwan University who authored a winning paper).

Protein awards

The Protein and Co-Products' Section Awards, sponsored by the Archer Daniels Midland Co., were presented during the awards breakfast Saturday, May 6. They were given to the authors of selected papers relating to proteins and co-products published during 1988 in *JAOCs*.

The 1989 recipients of the en-

gineering and technology award were G. Abraham, R.J. Hron Sr. and S.P. Koltun of the U.S. Department of Agriculture's Southern Regional Research Center. Their paper, which appeared in the January 1988 issue, was entitled "Modeling the Solvent Extraction of Oilseeds."

Two papers tied for the award of chemistry and nutrition. Recipients were N. Chamkasem of Texas

ANNUAL MEETING REPORT

A&M University for his paper entitled "Gossypol Analysis in Cottonseed Oil by HPLC" (October 1988 issue) and Ching-Jang Huang, Nam-Sang Cheung and Ven-Ron Lu of the Laboratory of Nutritional Chemistry, Department of Agricultural Chemistry, National Taiwan University, Taiwan, for their paper entitled "Effects of Deteriorated Frying Oil and Dietary Protein Levels on Liver Microsomal Enzymes in Rats" (November 1988 issue).

Protein officers

Robert L. Ory, formerly of the U.S. Department of Agriculture's (USDA) Southern Regional Research Center, will serve as chairperson for the AOCS Protein & Co-Products Section during 1989-1990.

The other officers whose election was announced during the section's luncheon meeting in Cincinnati are: George U. Liepa, Texas Woman's University, vice chairperson; S. Sefa Koseoglu, Texas A&M University, secretary/treasurer; Sandra McCurdy, POS Pilot Plant Corp., member-at-large for industry; Edith J. Conkerton, USDA Southern Regional Research Center, member-at-large for government; and Chong M. Lee, University of Rhode Island, member-at-large for university.

Ory, who will serve as the section's technical chairperson for the Baltimore annual meeting, said the section is organizing four protein sessions for the meeting. The major theme is "Proteins in Health and Disease." Session titles and chairpersons are: Processing to Produce High-Quality Oilseed Proteins, Sandra McCurdy and Keith Smith; Effects of Dietary Proteins in Health and Disease, George Liepa; Preparation and Properties of Chemically/Physically Modified Proteins, Clay King; and Protein-Nutrient Interactions, Marilyn Schnepf.

At this year's meeting, members promoted the section by selling attractive t-shirts bearing the image of a sunflower.



The final four to complete the fun run and walk, shown on a downtown Cincinnati Street in the last stretch, are (from left) Peter Doorley of Memphis, Tennessee; David Berner of Champaign, Illinois; Bill McPherson of Des Plaines, Illinois; and Ann Marie Berner, also of Champaign.

Behr wins fun run

Stephen Behr of Ross Laboratories, Columbus, Ohio, defended his 1988 Fat People's Fun Run and Walk first-place showing by finishing this year's five-kilometer event in Cincinnati in 18 minutes, 21 seconds.

J. Edward Hunter of Procter & Gamble Co., who won the fun run the first three years it was held and came in second in 1988, this year defended his second-place title by crossing the finish line six seconds after Behr. Third-place winner was Jim McDonell of 3M Corp., St. Paul, Minnesota, with a time of 18 minutes, 48 seconds.

The top three winners for the women were Alice Hudson of Surface Chemists of Florida, Riviera Beach, Florida, in 23 minutes, 47 seconds; Pam White of Iowa State University, Ames, Iowa, and a member of the AOCS Governing Board, in 24 minutes, 33 seconds; and Eileen McGregor of Canola Council of Canada, Winnipeg, Canada, in 25 minutes, 13 seconds.

This year's fun run organizers gave out prizes not only to the top three men and women finishers, but also to the top two finishers in dif-

ferent age categories, for both men and women. Age categories were 20-29, 30-39, 40-49, 50-59 and 60 and over. Jim Baird, 71, of Artisan Industries Inc. of Waltham, Massachusetts, was the oldest finisher; his time was 33 minutes, 42 seconds.

AOCS Technical Director Dave Berner was the last to cross the finish line; his time was 47 minutes, 18 seconds. His wife, Ann Marie, crossed the line one second earlier.

Participants in this year's event discovered that the 6 a.m. starting time preceded Cincinnati's official sunrise. Appropriately, organizers gave out "glow-in-the-dark" t-shirts to those registering for the event. Those taking part were rewarded with a continental breakfast near the finish line by the convention center.

Hunter and his wife, Marilyn, organized the 1989 fun run. This year's sponsors were Supelco Inc., Nu-Check-Prep Inc., Central Soya Co. Inc., LDC/Milton Roy, Roche Vitamins and Fine Chemicals Division, Miami Margarine Co., United Dairy Farmers and Busken Bakery.

ANNUAL MEETING REPORT

Derby winners

While Sunday Silence beat favorite Easy Goer in the 115th running of the Kentucky Derby on Saturday, May 6, 1989, 12 attendees at the AOCS 1989 annual meeting won the Kentucky Derby Day drawings held in the Cincinnati Convention Center.

Betty Link, whose husband is a past president of AOCS, won the grand prize, a SONY television set. Norm Sonntag, another AOCS past president, won a Pentax camera.

The other winners, and the prizes awarded, included the following:

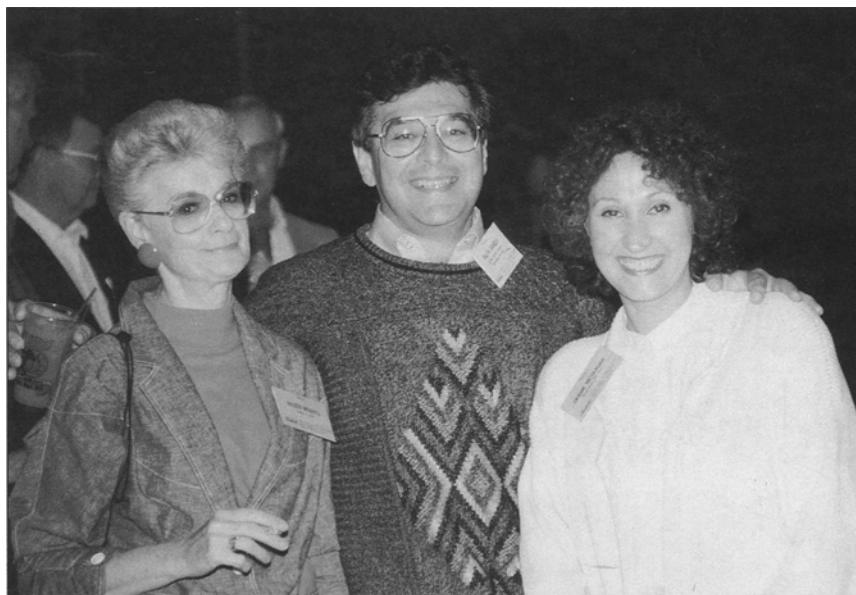
- Sambasivarao Koritala of the U.S. Department of Agriculture's Northern Regional Research Center, Smith-Corona typewriter
- Jackie Kriege of Cincinnati, Ohio, whose husband works for Henkel's Emery Chemical Division, remote control CD player
- Xi Yuan Hua of the Department of Chemistry at Brooklyn College (one of the students honored at the meeting), microwave oven
- Gary S. Cosby of CF Sauer Co., Seiko watch
- Noel Myers of Myers Engineers, telephone answering system
- Mark Bieber of Best Foods Division of CPC International, attaché case
- Fran Carey, whose husband Elton works for Beatrice/Hunt-Wesson Inc., attaché case
- Magda El-Nokaly of Procter & Gamble Co., calculator
- Helen Shipley of Beatrice Foods/Hunt-Wesson, camera
- Klaus Kyrirtz of Prairie Margarine Inc., garment bag.

Contributors

Many firms provided financial support or donations for portions of the AOCS annual meeting in Cincinnati.

Donors to the Honored Student awards program included:

- Akzo Chemicals Inc.
- Bunge Edible Oil Corp.
- Canada Packers Inc.
- Central Soya Co. Inc.



Enjoying the Saturday afternoon derby party are (from left) Eileen Mounts, wife of 1988-89 AOCS President Timothy Mounts; and Ralph Daniels and Deborah McGuigan of Shrewsbury, Massachusetts.

Clintec Nutrition
The French Oil Mill Machinery Co.
Nu-Chek-Prep Inc.
Shell Chemical Co.
Sherex Chemical Co. Inc.
Supelco Inc.
Tekmar Co.
U.S. Borax Research Corp.

Donors for other aspects of the meeting included:

Andrew Jergens Co.
Air Products & Chemicals Inc.
Archer Daniels Midland Co.
Avon Products
Buskins
Calsicat
Central Soya Co. Inc.
Cincinnati Brewery
Dial Corp.
Drackett
EMI Corp.
Engelhard Corp.
The French Oil Mill Machinery Co.
Henkel Corp./Emery Group
Industrial Filter and Pump Manufacturing Co.
Miami Margarine Co.
Milton Roy Co.
Nu-Chek-Prep Inc.
Procter & Gamble Co.
Roche Vitamins & Fine Chemicals Div.
Sherex Chemical Co. Inc.
Supelco Inc.
United Dairy Farmers

Door prizes

Peter Lin of Middletown, Ohio, was the grand prize winner in door prize drawings in the exhibit hall at the 1989 annual meeting in Cincinnati, Ohio. He received a miniature combination television/AM & FM radio. Other door prizes and winners included:

Cordless phones—J. McBain of Johannesburg, South Africa, and Stan Bader of Winnipeg, Canada.

Men's wallets—Bryce Gardner of Ringwood, New Jersey; James Thomas of Woodbridge, New Jersey; and Ken White of Chicago, Illinois.

Lady's wallet—M.K. Pomeroy of Ontario, Canada.

Executive portfolios—John Heilman of Wilton, Connecticut, and Irving Schmolka of Grosse Ile, Michigan.

AOCS t-shirts—David L. Hixson of Eastlake, Ohio; S. Koritala of Peoria, Illinois; Osvaldo Sacchi; Franco Moretti of Milan, Italy; Mary Gormley of Rockaway Turnpike, New Jersey; Frank Lavruella of New York; Jeff Molnar of Fort Wayne, Indiana.

Cross pen and pencil sets—Louise Lee of USDA Southern Regional Research Center; Neil Loeb,

(Continued)

ANNUAL MEETING REPORT

Park Ridge, New Jersey.

Cross pens—Janet Panford of Winnipeg, Canada; Peter Doorley of Bartlett, Tennessee; Rita Parikh of Paramus, New Jersey; G.C. Cavanagh of Fresno, California; Ken Wood of Memphis, Tennessee.

Mr. Coffee Maker—Brian Osborne of Vancouver, British Columbia, Canada.

AOCS coffee mugs—William Harlowe Jr. of San Antonio, Texas; Paul McElroy of West Helena, Arkansas; R.K. Trivedi, Kanpur, India; Susan Dyszel of Washington, D.C.; Janet Panford of Winnipeg, Canada; Mauricio Levembach of Columbus, Ohio; Wayne Cummings of Columbus, Ohio; Robert Lowry of Corvallis, Oregon; T. Moret of Escondido, California; Jerry King of Peoria, Illinois; Basil Kamel of Brantford, Canada.

Exhibit highlights

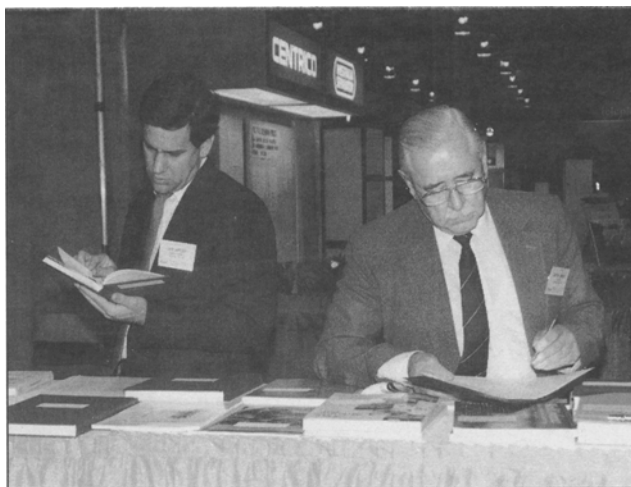
The exhibit held in conjunction with the 1989 AOCS annual meeting featured 94 booths representing 66 companies, a record participation. In addition, the book exhibit displayed 63 titles of books representing 21 publishing companies. The following news was provided from the exhibit.

New ventures and projects

- Mukwano Industries Ltd., the largest oil and soap manufacturer in East Africa, has contracted with Anderson International Corp. for a complete oilseed crushing facility in Uganda. Cottonseed will be the major seed crushed although the facility will be geared to process sunflowerseed and peanuts.

- UOP now is a joint venture company, 50% owned by Allied Signal and 50% owned by Union Carbide. Revenues of the venture total \$600 million, with approximately 5,000 employees.

- Tramco Inc. has opened a mid-west regional office in the Chicago area. Also, the company is supplying the material-handling system for a new oilseed import/export facility at the port of Taichung in Taiwan.



Meeting participants examine books published by AOCS that were on display in the exhibit hall.

- A fully automated cottonseed oil bleaching and deodorizing plant complete with tank farm and loadout facility has been commissioned at the Plains Coop Oil Mill in Lubbock, Texas, according to Johnson-Loft Engineers Inc. and Alfa-Laval Inc.

- Cambrian Engineering Group Ltd. has entered into joint ventures and partnerships for the sales and manufacture of Campro equipment and systems in India, Singapore and Malaysia. Also, the company has provided two deodorizing systems in India and two bleaching and deodorizing systems in China.

- POS Pilot Plant Corp. recently completed a \$2-million expansion to provide three new laboratories, a new pilot plant and receiving/quarantine and storage capabilities.

- Florida Industrial Filters is a licensee of LFC Lochem B.V., The Netherlands. Its main sales and manufacturing point in the U.S. is in Dunedin, Florida.

- Leybold Vacuum Products has expanded its U.S. manufacturing facilities in Export, Pennsylvania, by 12,000 square feet. The company has set up an international sales and service network. Industry trends include the use of oil-sealed vacuum pumps to replace some steam ejector applications.

- Krupp Maschinentechnik said the full-fat toasting of rapeseed was being done in France for a chicken breeder company and a dry fractionation facility had been installed

in Germany to produce special oil fractions.

- Bruker Canada has assumed responsibility for the Minispec NMR market of North America. The instrument previously was sold by IBM Instruments Inc. in the U.S.

- N.V. Extraction De Smet S.A. of Antwerp and the Badger Co. Inc. of Cambridge, Massachusetts, have reached an agreement under which Extraction De Smet offers Badger's technology in oleochemicals outside North America.

New technology, products

- Alfa-Laval Inc. and Johnson-Loft Engineers Inc.'s special degumming SRPX 714 separator, a U.S.-engineered and manufactured microprocessor-based control panel for self-cleaning centrifuges, a kit concept for centrifuge wear parts, and a fully reconditioned and warranted hermetic refining centrifuge.

- American Colloid Co.'s Clarion 470 Super-Flo, billed as a high-efficiency bleaching earth; Clarion 480, designed for superior chlorophyll adsorption; and Clarion C, a trace nickel scavenger.

- Anderson International Corp.'s Hivex-Series-Expander for the preparation of high oil-bearing seeds ahead of solvent extraction.

- Badger Co.'s advanced high technology thermal fat splitter to maximize yield.

- Bruker Spectrospin (Canada) Ltd.'s upgrade kit to increase mi-

ANNUAL MEETING REPORT

croprocessor capabilities for customers with older IBM Minispecs as well as a bidirectional software package for measuring the SFC and absolute amount of moisture and oil in foods.

- Cambrian Engineering Group Ltd.'s Campro vertical semi-continuous model.

- Chemithon Corp.'s improved falling film reactor which yields such sulfonation and sulfated products as 3-mole ethoxy sulfate with 1,4-dioxane levels as low as 10 ppm.

- Eirich Machines' Saponiflex process, used to produce soaps and soap powder, now employs vacuum technology during drying and cooling to reduce the total cycle time.

- Florida Industrial Filters/LFC Lochem's line of pressure leaf-type filter equipment, with repair and replacement offered through their Florida-based workshop.

- Henkel Corp.'s mixed tocopherol natural antioxidants for foods.

- I.I.T. SrL's SO₃ production plant from sulfur, with preheating incorporated into the main process circuit. The company claimed this type of plant is especially useful in combination with sulfonation plants and offers fast and economic preheating, with the plant always ready for the next start-up.

- Krupp Maschinentechnik GmbH's high-pressure extraction with supercritical carbon dioxide for natural organic substances as well as deoiling of crude lecithin

by high-pressure extraction.

- Leybold Vacuum Products' central vacuum systems for lab and production, high sensitivity leak detectors for vacuum systems, vacuum gauges featuring three sensors in one box and high vacuum turbo pumps.

- Mona Industries Inc.'s Phospholipid EFA (an essential fatty acid-derived synthetic phospholipid for use in a variety of personal care applications) and Minkamid 150 (a mink oil-derived product for skin and hair care applications).

- POS Pilot Plant Corp.'s "turn-key" capabilities, from client idea through information search, lab bench research, pilot plant testing, small-scale production, consulting, engineering, equipment selection and installation, start-up coverage and staff training.

- PQ Corp.'s Britesorb C200 totally inert selective adsorbent used to absorb surfactants such as alkaline contaminant materials, polymers and polar compounds which contribute to oxidative degradation of frying oils, and to remove trace metals in frying oils.

- Sverdrup Corp.'s Epex oil extraction process to produce a high quality oil without using hexane or other solvents. The company claimed operating and capital costs are less than that for hexane process.

- Testfabrics' blueberry-stained fabrics, known history dyed/finished cotton fabrics, laundry mark-

ers for lab specimens, cutting tools for lab work and swatchbooks.

- Tintometer's Lovibond Colourscan spectrophotometer, designed to measure transmittance values at 16 specific wavelengths.

- Tramco Inc.'s vapor-tight Model "N" conveyor/elevator for handling hexane-laden flakes.

- UOP's Pristene natural foodgrade stabilizers, which are based on natural mixed tocopherols.

New applications

- Anderson International's Expander-Extruder-Cooker is being used as a continuous cooker for the deallergenation of castor meal, to allow the meal's use as an animal feed.

- The Badger glycerine refining unit is now used to process saponification crude, soap lye crude or methyl ester crude glycerine feed or blends of feed without traditional pretreatment and filtration.

- Eirich Machines' Saponiflex process is adaptable to synthetic soap and detergent powder production.

- Florida Industrial Filters/LFC Lochem offers automated filters and filter installations to meet the industry trend toward automation.

- Henkel Corp.'s natural mixed tocopherols can be used as antioxidants in cereal, noodles, dehydrated potatoes, pork sausage, citrus flavors, poultry, fish, milk fat and vegetable oils.

- Krupp Maschinentechnik said the use of modified dry fractionation to produce specialty fats such as palm mid-fraction, cocoa butter extenders is comparable with solvent treatment.

- Leybold Vacuum Products noted the use of a mass spectrometer with helium to leak-check process vacuum systems.

- Mona Industries' hydrotrope selection guide is a slide rule to illustrate the use of a variety of hydrotropes in alkaline-built detergent systems.

- POS Pilot Plant Corp. offers R&D capabilities to help clients with market development production to prove commercialization of their new product or process.

Albert Hartmann (from left to right) and Herbert Mangold, both of Lurgi, talk with Norman Witte at the Lurgi booth.



ANNUAL MEETING REPORT

• Tramco Inc.'s conveyor systems are being used for handling canola in various states of process.

Expanded services

• Tintometer Co. has expanded its product capabilities to include portable reflectance measurement, on-line in-process color measurement and laboratory instrumentation for portable, bench and on-line determination of turbidity, dissolved oxygen conductivity, pH, chloride and single-ion probes.

• Bruker Canada now offers user training courses at its facility. It will schedule its first user meeting in the fall or winter of 1989.

• Badger Co. offers Hoechst Celanese Corp.'s Celrobic high-rate anaerobic process to treat wastewater and to convert volatile fatty acids and other organics into usable methane.

• Testfabrics Inc. noted it has expanded its application and laboratory services and also serves as export sales and marketing agent for Scientific Services of Oakland, New Jersey.

Appointments

• UOP has named Keith Aspray manager of biological and food products, Amalia Calvo international sales representative, Bobbi Buford national accounts manager, and Juan Alvarez director of specialty products.

• Bill Bell has rejoined Alfa-Laval Inc. as a separation service representative.

• Kenneth B. Hohnstein, formerly director of marketing for the Chemithon Corp., has been promoted to vice president of the company's process equipment division.

• Jed Seybold has been appointed marketing development project manager of the specialty absorbents division of PQ Corp.

• George Harding has been promoted to chemical market segment manager for Leybold Vacuum Products.

• Testfabrics Inc. has named William Carter as its new laboratory director and production coordinator for its soil test cloth line and lab services.

Diaphragm Compressors

SAFE AND SOUND

PPI diaphragm compressors are leak-tight and long-lasting.

When your application involves hazardous, costly, or ultra-pure gases, PPI diaphragm compressors deliver:

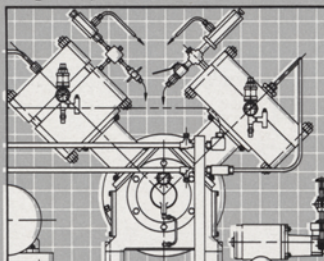
- *Noncontaminating compression:* triple metal diaphragm completely isolates process gas from all lubricated parts.
- *Leak-tight operation:* static "O" ring seals confine process gas within head assembly.
- *Increased life:* designs matched to applications, critical quality assurance standards, and corrosion resistant materials assure extended service life.

There is a standard model for your application:

- Displacements to 110.8 cfm (188 m³/hr).
- Pressures to 30,000 psi (207 MPa).
- Single- and multi-stage models.
- Various head assembly designs maximize efficiency and reduce maintenance costs.
- Complete engineered system packages for laboratory, pilot plant, and production applications.

For a free full-color brochure, call

PPI: (215) 675-1600,
FAX (215) 443-8341.



V-Series, 2-stage compressor for cost-effective delivery of capacities up to 91 cfm (155 m³/hr).



PRESSURE PRODUCTS INDUSTRIES, INC.
900 Louis Drive, Warminster, PA 18974 USA., TELEX: 84-5329

Reliability Under Pressure