AOCS Education Committee Report

Present at the Chicago meeting of the Education Committee, Oct. 12, 1964, were L. R. Dugan, Jr., R. O. Feuge, J. R. Harrison, W. O. Lundberg, F. W. Quackenbush, G. Rouser, R. J. Vander Wal, N. Pelick, R. C. Stillman, C. Hauber, J. Harris, E. Jungermann, and N. H. Kuhrt.

Old Business

MacGee Award. It was reported the AOCS Governing Board had ruled that the MacGee Award be called "The MacGee Honor Student Program." The Board also ruled that another $2,000 be made available over a two-year period to finance the program.

Subcommittee Chairman, S. S. Chang, and members N. Kuhrt, K. F. Mattil, L. R. Dugan, and F. W. Quackenbush have revised the rules and application form in keeping with the new name and the experience gained in the past two years.

1964 Symposium, "Quantitative Methodology in Lipid Research." A total of 169 participants, including 69 new AOCS members, were present at The Pennsylvania State University meeting, held Aug. 3–7. Program Chairman for the event was George Rouser; Local Chairman, Nicholas Pelick. The net revenue for the event, not including publication costs, was approximately $6,442.29.

The special feature of the Symposium was the presentation of the first AOCS Award in Lipid Chemistry to Eric Baer.

New Business

1965 Short Course. The proposed subject for this meeting is a Symposium on Current Lipid Methodology. Local Program Chairman is C. F. Allen, Pomona College, Claremont, Calif. Second Local Program Chairman is Rodolfo Paoletti, University of Milan, Milan, Italy. The meeting will be in joint sponsorship with the Biochemical Methods Committee, George Rouser, Chairman.

Chairman Allen has selected the tentative date of Sept. 5–12, 1965. This date was selected to permit many of the speakers to fly to Milan to participate in the meeting there, which is scheduled for Sept. 16–24. Dr. Allen proposes the attendance number limited to 60–65 to permit laboratory experience for each attendee. To minimize expenses, he has requested funds from the Department of Health, Education, and Welfare, as well as the National Science Foundation. The following speakers have agreed to participate: Allen, Fleischer, Benson, Privett, Rouser, and Vandenheuvel. Other speakers sought are Horning, Mangold, de Vries, Ryhage, Heinber, and Sweeley.

Chairman Paoletti of the Second International Course on "Methods for Lipid Research" is under the sponsorship of NATO Advanced Study Institutes and the AOCS. His speakers will include many from Pomona as well as Ahrens, Hofmann, Bergstrom, Haahti, Jacini, Kritchevsky, Mead, Pascaud, Steinberg, and Carlson.

An all-out effort is being made by Chairman LeRoy Dugan to schedule a Short Course for 1965 on the subject, "Oil, Fat and Lipid Processing and Related Analytical Procedures."

We are all well familiar with the fact that science and technology have been growing at an exponential rate for the last 50 years, and the end is nowhere in sight. Just where this is going to lead is impossible to predict. One thing is becoming apparent—namely, that we are witnessing far more than a change of pace. Robert Oppenhemier expressed it this way:

"This world of ours is a new world, in which the unity of knowledge, the nature of human communities, the order of society, the order of ideas, the very notions of society and culture have changed, and will not return to what they have been in the past. What is new is new not because it has never been there before, but because it has changed in quality. One thing that is new is the prevalence of newness, the changing scale and scope of change itself so that the world alters as we walk in it, so that the years of man's life measure not some small growth or rearrangement or moderation of what he learned in childhood, but a great upheaval."

NOEL KUHRT
Chairman, Education Committee

Pressure Leaf Filters . . . .

(Continued from page 44A)

Clarity, cycle lengths, and cake dryness are all improved on a well-laid-out station.

Physical damage to the filters has also been minimized by keeping the filter closed and performing the cleaning duties with vibrators, cutting wires, or scraper blades. Eighty-five per cent of our maintenance problems could be traced to operators' abuse of the filters.

Proper sizing of the filter with components, automated or not, will show a much better performance from the filters and operators. If the filter station is easy to operate, then maintenance will be minimized.

Maintenance-Free Operation

Besides automation, maintenance costs have been further decreased by improving on the design of the various weak points in the filter. Some of these are as follows:

1) Leaf design has been improved. With the use of expanded plate, heavy multiple wire mesh leaves and perforated plate, the industry has increased the strength of the leaves considerably. This change has reduced the bending, curling and warpage of filter leaves; however, if the leaves are bridged with cake, nothing will prevent leaf damage. This heavier leaf has also shown less failure when it is vibrated.

2) Outer closure on the leaf has also been improved with the welded closure versus the riveted or bolted.

3) Improved vibrator design has also cut down on maintenance. The type of vibrator, as well as the vibrator linkage, has been improved.

4) The use of a bellows seal on the vibrator has cut down on the shaft seal packing problems with older vibrators. The bellows offers a good seal without a deadening effect as is obtained with a standard packing seal.

5) A heavier connection between vibrator and leaves has also helped to reduce maintenance. Everything is vibrated simultaneously instead of being shaken apart, as was the problem in the past.

New Designs and Ideas

Antibridging bars have been installed. From the beginning of filtration, bridging the leaves with cake has always been greatly feared. To prevent this, many stations are operated at 50% of their capacity so the leaves are not overloaded.

Many attempts at cake-thickness detectors have been tried, but none until now have been foolproof.

With the antibridging bar design, the leaf is rotated continuously with a heavy rod mounted between each leaf. One or more rods are connected to a limit switch. When the cake builds up to this rod it causes the rod to lift. The moving rod triggers the limit switch and stops the cycle. Where more than one switch is installed, the cycle is stopped when *all* rods lift. With a rod between each leaf we are assured of a uniform cake on each leaf.

This design offers a great potential with regard to using a filter as a thickener.

Conclusion

The filter industry still has a long way to go before it can offer a filter that meets all the requirements outlined at the beginning of this paper. True, we have made progress, but our progress is too slow; we need more cooperation if we are to speed up. When you next filter project arises, discuss the application in detail with your filter vendors and inform them of all the various abnormal properties of the application. Do not let them think that what you are using is the best product available if it really does not work properly.

We in the filtration industry can be of great service to you if we are allowed to correctly engineer the job and not just price it to meet a hardware specification.

[Received May 6, 1964—Accepted September 10, 1964]

NRS Elects Officers

At their recent annual convention in New Orleans, La., more than 400 delegate-members of the National Renderers Association elected W. R. Malloy as President; Nelson Morris II, first Vice-President; Stanley Frank, second Vice-President; and D. A. Specht, Executive Director.

Mr. Malloy has served the Association in many capacities, representing the NRA in Europe on several occasions. He is Secretary-Treasurer of Lynchburg Rendering Company, Lynchburg, Va.

New officers of the NRA. Left to right: D. A. Specht, Stanley Frank, W. R. Malloy, and Nelson Morris II.

• *Industry Items*

TEXACO TRINIDAD, INC., has under construction a multimillion dollar petrochemical plant at its refinery at Pointe-a-Pierre, Trinidad. The plant will manufacture more than 150 million lb per year of normal paraffins for use in biodegradable detergents and for other chemical uses. Since 1956, capacity has been enlarged from 135,000 barrels a day to its present level, and facilities for manufacturing benzene, toluene, xylene, cyclohexane, and lubricating oils have been added.

F & M SCIENTIFIC CORPORATION, Avondale, Pa., has announced the formation of a Commercial Analytical Services Group to provide consultant and analytical services on a fee basis, utilizing gas chromatography, infrared, atomic absorption, and ultraviolet spectrophotometry as well as the more common laboratory techniques.

NOPCO CHEMICAL COMPANY, Newark, N. J., has approved plans for the expansion of ethoxylation facilities at Cedartown, Ga. The expansion includes new facilities for the manufacture of products involving propylene oxide. Nopco has supplementary manufacturing sources of ethylene oxide adducts in the New York Metropolitan and Chicago areas.

THE CUDAHY PACKING COMPANY is considering the construction of a fresh sausage processing plant at Clay Center, Kan. Approximately 750,000 lb of fresh sausage could be manufactured there weekly.

FOOD TECHNOLOGY, INC., Chicago, Ill., has completed installation of a New-Aire Regulator, Series 400 Constant Temperature Humidity Cabinets for the Moffett Technical Center of Corn Products Company, Argo, Ill. It enables running of tests of three different conditions simultaneously.

FOSTER D. SNELL, INC., a 45-year-old independent company of chemists, engineers, and biologists, has been acquired by Booz, Allen Applied Research, Inc. The firm will continue to operate under its present name, and will retain both its current staff and services.