

AWARD—C. W. Hoerr (left), convention chairman, congratulates T. H. Hopper, retiring editor of the Methods of Analysis, for his years of service since 1950. Mr. Hopper is chief, Industrial Crops Laboratory, Southern Utilization Research and Development Division, New Orleans.



MEXICAN VISITORS—From Monterrey are Ignacio Garibay-Madrigal (left) and Hector Gil y Anaya (center). With them is G. M. Kreutzer of Houston. All are with Anderson, Clayton and Company. Senor Gil was winner in the R. J. Brown Company drawing.



SILVER SERVICE—For his 24 years of service as chairman of the Annual Review of Literature Committee M. M. Piskur, Swift and Company, Chicago, was presented with a fine array of tea table accessories by C. W. Hoerr (left) on behalf of the Journal of the A.O.C.S.

Technical Papers Cover Many Subjects of Interest

EVENTY-TWO PAPERS were presented in three symposia and six technical sessions at the 32nd annual fall meeting of the American Oil Chemists' Society, October 20–22, 1958, at the Hotel Sherman, Chicago, Ill. The three symposia were composed of 31 papers on foods and nutrition, plant safety, and syndets. Topics of great interest to oil chemists, such as autoxidation and flavor stability, triglyceride structure, oil processing, chemistry of lipides, epoxidation of oils, gas-liquid chromatography, and analytical aspects were enthusiastically discussed in the six technical sessions.

The technical papers were contributions of two foreign laboratories, eight universities, five government laboratories, and 31 companies. The speakers came from India, Canada, and 14 states of the U.S.A. This excellent technical program was organized by A. V. Graci Jr., and the sessions were presided over by R. J. Buswell, W. C. Pritchett, T. W. Findley, R. H. Rogers Jr., A. E. MacGee, N. W. Ziels, S. G. Sourelis, and F. A. Kummerow, respectively.

New Continuous Processes Yield Better Products More Economically

F. P. Downing of The Sharples Corporation reported that bland, high-quality fat products have been produced by the use of mechanical disintegration and by rapid twostage centrifugal separation of fatty animal tissues. The defatted tissues of both beef and pork produced by this process were reported as of edible quality and could be used as meat by-products for sausage, etc. A fully continuous process for mayonnaise and oil-dressing production was described by F. H. Smith of the Torresdale Company. With the use of colloid mills, mayonnaise made of 70% oil by this continuous process showed excellent quality and satisfactory stiffness. F. E. Sullivan of the DeLaval Separator Company reported a new continuous process for the manufacture of soap which reduces the time involved in carrying out the three main operations in soapmaking, that is, saponification, washing, and fitting from at least one week to about $1\frac{1}{2}$ hrs. In the new process all operations involved in the production of soap are carried out in a hermetically closed system. The amounts of lye necessary for the saponification as well as of the brine for the washing and fitting operations are regulated by the automatic, "constant composition" control system. All types of soap can be produced by this process, which is characterized by high flexibility, low operation costs, and a high quality of the finished product.

A pilot-plant study of fractionation of fatty acids derived from safflower oil by liquid-liquid extraction was reported by R. E. Beal of the Northern Utilization Research and Development Division, U.S.D.A. Furfural was employed as the selective solvent and hexane as a secondary

solvent to produce a two-phase system. Under optimum conditions a product containing about 95% linoleic acid was obtained at a solvent-solute ratio of 15. O. S. Privett of the Hormel Institute reported the fractionation of hog liver fatty acids by a combination of low-temperature fractional crystallization, urea-inclusion-compounds formation, and fractional distillation. Concentrates of arachidonic acid of about 90% purity were obtained in yields of 80 to 90%. The purity of these concentrates may be increased to about 99% by further fractionation with urea. Purification beyond this point may be made by chromatographic methods. E. G. Hammond of Iowa State College reported the use of the thermal-gradient-chromatography apparatus for the fractionation of glycerides. Abner Eisner of the Eastern Utilization Research and Development Division, U.S.D.A., obtained an urea adduct by contacting lanolin with urea in the presence of methyl alcohol. A fluid fraction, amounting to about 71% of the original lanolin, was obtained. This viscous liquid has practically the same composition as lanolin but better solubility than the unmodified material.

Methods for Determination of Glyceride Structure of Fats May Involve Errors

Gollamudi Lakshminarayana of the University of Bombay and Ohio State University critically studied both the acetone-permanganate and the acetone-acetic acid-permanganate oxidation methods for the determination of the glyceride type of compositions of fats by using concentrations of glyceride types of known compositions. He reported that both Hilditch's and Kartha's methods give inaccurate results. C. G. Youngs of the National Research Council, Canada, presented a possible explanation of the apparent anomaly now existing in the work on the glyceride structure of fats. A great deal of evidence has been compiled to show that the amounts of the glyceride types S₃, S₂U, SU₂, and U₃ in natural fats are that predicted by a "random" or "restricted random" distribution, assuming all



OPENER—Facing A. V. Graci Jr., program chairman, are (left to right) A. S. Henick, N. V. Lovegren, and L. O. Leenerts, all Monday morning speakers.