

Burtis Says Foreign Markets Needed For 25% of Fats and Oils

TWENTY-ONE technical papers were presented at the 46th annual meeting of the American Oil Chemists' Society in New Orleans, April 18-20, 1955, at the Roosevelt hotel. T. H. Hopper was program chairman, and those presiding at the respective sessions were W. A. Peterson, Monday afternoon; R. T. O'Connor, Tuesday morning; and E. A. Gastrock, Wednesday morning.

The papers covered a variety of subjects, and notable among these was a discussion of United States surpluses of fats and oils in world markets by E. L. Burtis, Food and Agriculture Organization of the United Nations. According to Mr. Burtis, the fats and oils industries of the United States will be dependent on foreign markets for disposal of nearly 25% of their products in the current year. It appears likely that prices will remain at the current levels except for some reduction in those of cottonseed and soybean oils.

According to Patricia M. Cooney, C. D. Evans, A. W. Schwab, and J. C. Cowan, working at the Northern Utilization Research Branch, Peoria, Ill., vegetable oils respond better to the action of metal inactivators when they are first heated. The reason for this is not yet known.

A modified soda ash process for refining vegetable oils was compared with the caustic refining procedure by F. H. Smith and A. U. Ayres of the Sharples Corporation. A decrease in plant loss of 0.5 to 1% was observed in the refining of cottonseed, soya, and corn oils. The soapstock contained 37% or more of TFA.

E. R. Cousins, R. Prachankadie, and S. Bhodhiprasart of the Southern Utilization Research Branch and the Department of Science, Ministry of Industry, Bangkok, Thailand, reported a great reduction in the refining loss of rice oil upon prior addition of certain hydroxyl-containing substances such as sucrose, blackstrap molasses, and ethanolamine.

Packaged solvent-extraction equipment for cottonseed mills was described by R. P. Hutchins of the French Oil Mill Machinery Company of Piqua, O. The first packaged plants with basket-type extractors, streamlined desolventizing evaporation, and solvent recovery are going into operation this summer.

According to W. C. Whittecar, Plains Cooperative Oil Mill, the gum obtained from cottonseed oil by hydration can be successfully separated by means of a pressure-type centrifuge. The gum, which contains large proportions of phosphatides, can advantageously be incorporated in the meal where it provides, among other things, a practical solution to the dusting problem.

GOSSYPOL can be successfully precipitated from cottonseed oil as an insoluble Schiff base by means of p-aminobenzoic acid, as described by J. M. Dechary and L. E. Brown of the Southern Utilization Research Branch. All other amines tested were ineffective.

An important contribution to the fund of data on the spectral characteristics of long chain aliphatic compounds was



MAN WITH GAVEL—Incoming president, W. A. Peterson, is shown at the rostrum in the ballroom of the Roosevelt hotel, New Orleans, at the Monday afternoon session. At his right are the speakers: (seated) Fred Smith, C. D. Evans, and E. B. Lancaster; (standing) A. J. Stirton, H. E. Huber Jr., C. W. Seelbach, and D. R. Merker.



CAPTIVE LADY—This group of speakers from the Tuesday morning session is as follows: (seated) E. R. Cousins, R. J. Meyer, Joan S. Hoffmann, and Abner Eisner; (standing) Willie Fong, E. L. Burtis, H. A. Schuette, J. M. Dechary, and R. T. O'Connor, chairman. (Burtis spoke Monday.)



BIG SMILE—Man in the middle is the smiling chairman, E. A. Gastrock, for the Wednesday morning technical session. To the left is R. P. Hutchins, and to the right, W. C. Whittecar. Standing are E. L. D'Aquin, P. H. Eaves, Frank Paek, and Joseph Pominski.

reported by R. J. Meyer and H. A. Schuette of the University of Wisconsin. Several homologous series of such compounds were prepared and their infrared spectra recorded. The work required synthesis of more than 300 compounds.

The same investigators also discussed, in another report, the nature of the progression bands in the infrared spectra of the *n*-aliphatic acids.

D. R. Merker and L. C. Brown of Swift and Company, in a discussion of hydrogenation odor in soybean oil and the improvement of the flavor stability, indicated that the characteristic odor is practically eliminated if refined and bleached oil is deodorized and protected from atmospheric oxygen prior to hydrogenation with nickel catalyst. The beneficial effect of predeodorization is lost if the oil is allowed to come into contact with oxygen prior to hydrogenation.

The preparation and properties of synthetic detergents comprising esters from alpha-sulfonated fatty acids and sodium isethionate were described by J. K. Weil, R. G. Bistline Jr., and A. J. Stirton of the Eastern Utilization Research Branch. The esters were good detergents at 0.05% concentration but were considerably improved by the presence of 0.20% of builders, mainly phosphates and sulfates. R. J. VANDER WAL

The 23rd annual short course for oil mill operators will be held July 6-8, 1955, at the A & M College of Texas, in cooperation with the Texas Cottonseed Crushers' Association and the National Oil Mill Superintendents' Association. General meetings will be held in the Student Center each morning, and laboratory work will be conducted in the Cottonseed Products Research Laboratory each afternoon. J. D. Lindsay is in charge of reservations.