density of a solution of the fat contained in a sample dissolved in a constant volume of heptane is presented. The apparatus and method are described in detail and comparative results by this method and by the A.O.A.C. method are presented. The effect of various factors on results is established. The application of another solvent, less hazardous than heptane, is also described.

CONSTITUENTS OF OLIBANUM OIL: SESQUITERPENE HYDROCAR-BONS. R. L. Yates and J. A. Wenninger (Div. of Colors & Cosmetics, FDA, Washington, D.C. 20204). J. Assn. Off. Anal. Chems. 53, 941-8 (1970). The sesquiterpene hydrocarbons of a commercial sample of olibanum oil (widely used in cosmetics) were isolated and purified by a combination of techniques, including column chromatography, silver nitrate adduction, distillation and preparative GLC. Most components were identified by their IR spectra. In some cases NMR spectra were used for identification. A total of 27 sesquiterpene hydrocarbons were identified and 2 others were tentatively identified by this method.

NOTE ON THE EXTRACTION OF <sup>14</sup>C-DDT BESIDUES FROM SOY-BEANS. R. G. Nash and M. L. Beall, Jr. (Crops Res. Div., Agr. Res. Service, U.S. Dept. of Agr., Beltsville, Md. 20705). J. Assn. Off. Anal. Chems. 53, 1058-9 (1970). Residues of <sup>14</sup>C-DDT were not completely removed from fresh or wetted dried soybean plants when hexane-acetone-methanol was used for Soxhlet extraction. The nonextractable <sup>14</sup>C presumably was contained in degraded residues of DDT.

FATTY ACID COMPOSITION OF COD LIVER OIL DETERMINED BY UREA FRACTIONATION AND MODIFIED PROGRAMMED TEMPERATURE GAS CHROMATOGRAPHY. J. L. IVERSON (Div. of Food Chem. & Technol., FDA, Washington, D.C. 20204). J. Assn. Off. Anal. Chem. 53, 1074–9 (1970). Esters of fatty acids in marine oils, with similar GLC retention times, are concentrated in separate fractions by this proposed urea fractionation procedure. Esters which are present at the ppm level and are normally hidden under major peaks can then be detected.



## ANNOUNCEMENT

## 1971-1972

## SMALLEY CHECK SAMPLE PROGRAM

The Smalley Committee annually offers a number of Check Samples Series in various analytical categories. Interested analysts should write to Smalley Committee, AOCS, 508 S. Sixth St., Champaign, III. 61820, prior to July 15, 1971 for order forms and complete information, which will be distributed before each series begins.

The following Check Sample Series (the number of samples being shown in parenthesis) are offered:

Cottonseed (10) Soybeans (10) Peanuts (7) Safflower Seed (7) Oilseed Meals (15) Edible Fats (5) Drying Oils (6) Tallow & Grease (5) Cottonseed Oil (4) Soybean Oil (4) Copra (4) N.I.O.P. Fats & Oils (5)

Gas Chromatography (fatty acid composition) (6) Cellulose Yield (cotton linters) (10)

Additional series will be offered should sufficient interest be indicated. Please advise the Smalley Committee of series you feel would be of value.

R. T. Doughtie, Jr., Chairman Smalley Committee