By modified programmed temperature gas chromatographic techniques, it is possible to detect trace amounts of the short and long chain fatty acids. Accurate identifications are assured by the correlation of fatty acid structures with the preferential order in which they form complexes and retention times before and after hydrogenation. Cod liver oil was found to contain 130 fatty acids. Most of the esters present in trace amounts are predominately  $C_{20}$  to  $C_{34}$  acids which had not been previously reported.

RAPID INSTRUMENTAL FAT DETERMINATION. A. J. Malanoski and E. L. Greenfield (Consumer Protection Programs, Consumer & Mkt. Serv., USDA, Beltsville, Md. 20705). J. Assn. Off. Anal. Chem. 53, 1080-1 (1970). The Digital Fat Controller was evaluated for use in plant control and as a screening tool. The determination of fat by the Digital Fat Controller utilizes specific gravity with automatic computation and a "nixie" tube readout. No sample preparation is required and an analysis can be completed in 30-60 seconds. Fifty-six samples were analyzed by both the automated method and the official AOAC method.

DETERMINATION OF SMALL QUANTITIES OF BUTYRIC ACID IN FATTY FOODS: APPLICATION TO DETERMINATION OF FATTY MATERIAL OF BUTTER. A. Karleskind, G. Valmalle and J. P. Wolff (Laboratories Wolff, 182, Faubourg Saint-Denis, Paris X, France). J. Assn. Off. Anal. Chem. 53, 1082-4 (1970). A gas chromatographic method is described for the determination of small quantities of butyric acid in fatty foods. After saponification of the fat in the sample and acid decomposition of the soaps formed, the fatty acids are steam distilled and butyric acid and other volatile acids are collected in dilute NaOH solution. The sodium salts formed are dried and then transformed directly into methyl esters. Methyl butyrate is determined by gas chromatography with an internal standard (methyl valerate).

METHODS OF DETERMINING EXTENT OF STINKBUG DAMAGE IN SOYBEANS. II. FLOTATION METHOD. J. R. Hart (Mkt. Quality Res. Div., ARS, USDA, Beltsville, Md. 20705). Cereal Chem. 47, 369-72 (1970). Decrease in soybean density resulting from stinkbug punctures causes a greater number of soybeans in a stinkbug-damaged sample to float on a saturated NaCl solution. The percent of soybeans in a sample containing stinkbug damage that will float on a saturated salt solution is determined. The percent of undamaged beans, picked by hand from a separate portion of the same sample, that will float is also determined. The differences between these two percentages for different samples have been found to be proportional to the extent of stinkbug damage present. On the basis of these measurements, a linear scale of values representing relative amounts of damage can be prepared.

III. RELATION OF STINKBUG DAMAGE TO QUALITY IN SOYBEANS. Ibid., 545-8. Changes in oil content, percent of free fatty acids and protein content, resulting from stinkbug damage, were determined for 27 samples of soybeans. Determinations were first made on undamaged soybeans picked by hand from a sample, and the results were compared with the same determinations made on an unpicked portion of the sample. Results indicate that stinkbug damage causes lower oil content, higher percent of free fatty acids, and, in most samples, higher protein content. Longer storage time appeared to produce no further quality deterioration in stinkbug-damaged beans.

TRACE HYDROGENATION OF BUTTEROIL AT LOW TEMPERATURES. A. K. Vasishtha, J. G. Leeder, and S. S. Chang (Dept. of Food Sci., Rutgers Univ., New Brunswick, N.J.). J. Food Sci. 35, 395-7 (1970). Butteroil was selectively trace hydrogenated using palladium catalyst at low temperatures, some temperatures being below the melting point of butteroil. The hydrogenated product had a remarkable flavor stability with only slight increase in trans-isomers and melting point. The hydrogenated butteroil also retained most of its desirable flavor and color.

(Continued on page 269A)

## POPE TESTING LABORATORIES, INC. Analytical Chemists

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## • Names in the News . . .

L.N. APPLE has been elected executive vice president of Pacific Vegetable Oil Corporation. Mr. Apple has been with the company since February 1969 as Vice President, Finance. He also served as treasurer until last year.

GILBERT STORK, Professor of Chemistry at Columbia University, New York City, has been awarded the 1971 SOCMA (Synthetic Organic Chemical Manufacturers Association) Medal for Creative Research in Organic Chemistry. Dr. Stork is well known for his work in developing new and efficient methods for alkylating ketones and aldehydes, and for his many natural product syntheses and structure elucidations. Born in Brussels, Belgium, Dr. Stork received his Ph.D. at the University of Wisconsin in 1945. He then joined the faculty at Harvard where he taught until moving to Columbia in 1953.

J.B. STOTHERS, professor of chemistry, University of Western Ontario, London, has been named as the 1971 winner of the Merck Sharp & Dohme Lecture Award of the 10,000-member The Chemical Institute of Canada. In his pioneering work on carbon-13 NMR spectroscopy as applied to finding out the detailed structure of organic molecules, Stothers has opened up a new field. His approach is now being followed up by many researchers and this technique is showing great promise in sugar chemistry, in natural product biogenetic studies, and in biochemistry. Stothers has published over 50 scientific papers. A new book he has written on carbon-13 spectroscopy could be the "bible" in its field when published later this year. He also serves on the editorial board of the Journal of Magnetic Resonance.

I.E. PUDDINGTON, director of the Division of Chemistry, National Research Council, Ottawa, has been named winner of the Montreal Medal of the 10,000-member The Chemical Institute of Canada, for his outstanding leadership to the chemical profession. Puddington has published over 40 technical papers and is the inventor or coinventor of 17 patents and 24 patent applications. His basic work in colloids lead to a new approach for separating liquids from solids called spherical agglomeration. He has served the chemical profession both nationally as President of The Chemical Institute of Canada in Canada's Centennial Year, and internationally, as Secretary of the Applied Chemistry Division of the International Union of Pure and Applied Chemistry since 1967.

R.B. SEMPLE was elected chairman of the board of BASF Wyandotte Corporation on April 20, 1971. He had been the company's president since the turn of the year when Wyandotte Chemicals Corporation and BASF Corporation were merged. He joined Wyandotte Chemicals in 1949 as president and chief executive officer. Prior to that he had been director of general development at Monsanto Chemical Company.

D.H. AMBROS was elected president of BASF Wyandotte Corporation on April 20, 1971. He had served the company as executive vice president in charge of the Colors and Chemicals Group since the turn of the year when BASF Corporation and Wyandotte Chemicals Corporation were merged. Prior to the merger he had been president of BASF Corporation from mid-1970. In the preceding two years he was president of BASF Systems Inc., Bedford, Mass. He still serves the company as chairman of its board of directors. From 1966 to 1968 Mr. Ambros was vice president of chemical operations for Dow Badische Company in Freeport, Texas. Since joining BASF AG, Uudwigshafen (Rhine), West Germany, in 1958 Mr. Ambros served in France, India and Brazil.

## • Obituary

Word has been received of the death of Joseph Lederer ('67) Research Chemist at Witco Chemical Co., Chicago, Ill.