Adulteration of pumpkin seed oil was detected by paper chromatography of the fatty acids (Grobach and Weber, *Fette Seifen Anstrichmittel 65,* 989). Rapeseed oil could be detected by its erucic acid, soybean oil and linseed by their linolenic acid, and safflower by its lignoceric acid. The combination of zones from several papers for rechromatography increased the sensitivity.

Industrial-grade vegetable oils denatured with tricresylphosphate can be detected by a new rapid method (Armandola, *Ind. Aliment, 3,* 33).

Gas chromatography of the triglycerides could detect adulteration of milk fat with 5 to 10% lard or vegetable fats (Kuksis and McCarthy, *JAOCS 41,* 17). A certain mixture of coconut oil and lard escaped detection. Two branched chain fatty acids are present in tallow which are absent from lard (Grieco, *Riv. Ital. Sostanze Grasse, Sympos. Issue 1962,* 200). This allows 5–10% adulteration of lard with tallow to be detected by gas chromatography. By a combination of dilatometry, Bohmer index, and fatty acid composition, 10% tallow in lard was detectable (Jacini et al., *Ibid. 40,* 584). The ratio of saturated to linoleic acid determined by gas chromatography and the Bohmer index can be used to detect 10% tallow in lard (Pascucci and Paolini, *Ibid. Sympos. Issue 1962,* 194). The ratios of certain fatty acids determined by gas chromatography may be used to distinguish the following fats: tallow, calf, mutton, bone tallow, horse, and lard (Wolff and Audiau, *Rev. Franç. Corps Gras 11,* 77).

Evidence was presented that the two toxic compounds isolated from fats capable of producing hydropericardium in chicks were isomers of hexachlorohexahydrophenanthrenes (Wootton and Courchene, *J. Agr. Food Chem. 12,* 94). Endosulfan (Thiodan) in beef fat was detected by a color reaction between the residue and methanolic alkali and aqueous pyridine (Maitlen et al., *Ibid. 11,* 416). Captan, chlordan, and heptachlor interfered. A purely physical procedure was presented for the cleanup of butterfat for analysis for chlorinated insecticides (Ott and Gunther, *Ibid. 12,* 239). About 0.5 ppm of insecticide in 2 g of sample can be detected in an hour. Methoxychlor is detectable at 10 ppm. Heptachlor residues were found in milk fat from cows that had grazed 57 days on a pasture treated with 0.25 lb/acre of heptachlor (Rusoff et al., *Ibid. 10,* 377). The animals continued to excrete the residue for 40 days after removal from pasture. Dieldren was found in the body fat of the general population of the United States at a mean value of 0.15 to 0.02 ppm (Dale, *Science 142,* 593). This agrees with values from England. The mean concentration of benzene hexachloride was 0.20 to 0.04 ppm which is lower than comparable data from France. DDT determinations by colorimetric methods give incorrectly high values in human fat.

The Annual Review of Literature Will Be Concluded in December

• *New Literature*

CELANESE CORPORATION OF AMERICA, New York, N.Y., announces the U. S. Food and Drug Administration regulation prescribing conditions for safe use of 1,3-butylene glycol (1,3-BG) in food flavorings. The four-carbon diol has significant potential use in food processing, artificial flavoring, extracts and food colors, as well as in pharmaceuticals and cosmetics.

• *New Members*

Active

Graeme Levo Baker, Professor, Montana State University, Bozeman, Montana.

Robert Adam Blatz, Head Chemist, Swift Canadian Co., Ltd., St. Boniface, Manitoba, Canada.

William J. Carnes, Analytical Chemist, The Procter & Gamble Co., Cincinnati, Ohio.

John Gordon Erdman, Manager, Geochemical Branch Research & Development, Phillips Petroleum Co., Bartlesville, Oklahoma.

Albert James Fenton, Jr., Research Chemist, Procter & Gamble Co., Wyoming, Ohio.

Jerry Gagliardi, Production Superintendent, Cargill Inc., Kenosha, Wis.

Ignacio Garibay, Superintendent, Aceitera "La Gloria" S.A., Guadalajara, Mexico.

Cecil Barry Johnson, Research Fellow, The Hormel Institute, Austin, Minn.

Frederick C. Kast, Chemist, Eastern Industrial Oil Products, Stoughton, Mass.

Morris Kates, Senior Research Officer, National Research Council, Ottawa, Ontario, Canada.

Marius E. LePage, Research Scientist, Canada Department of Agriculture, Pte-Garineau, Canada.

Douglas John McIntosh, Laboratory Technician, University of California, Berkeley, California.

Raymond E. Meyer, Research Plant Physiologist, USDA, State College, Miss.

Martin John Moran, Chemist, Armour & Co., Oakbrook, Ill.

David William Newman, Assistant Professor, Miami University, Oxford, Ohio.

Rosemarie Ostwald, Assistant Professor, University of California, Berkeley, California.

Oscar Petersen, General Director, Aceitera "La Gloria" S.A., Guadalajara, Mexico.

William K. Rohwedder, Principal Chemist, Northern Regional Research Laboratory, Peoria, Illinois.

Donald N. Wright, Research Assistant, Naval Biological Laboratory, Richmond, California.

Robert L. Zipf, Plant Manager, Werner G. Smith, Inc., Cleveland, Ohio.

Individual Associate

Stanley T. Gibrowski, Eastern Division Manager, The DeLaval Separator Co., Westfield, N.J.