der Universität, Frankfurt am Main, W. Germany). *Anal. Chem.* 36, 1428–30 (1964). The detectors are grouped into two families. The characteristic features of these groups are described. The advantages of the mass flow rate sensitive detectors in quantitative analysis are set forth. Use of a scavenger gas in concentration sensitive detectors is discussed.

CHARACTERIZATION AND SEPARATION OF AMINES BY GAS CHROMATOGRAPHY. W. J. A. Vanden Heuvel, W. L. Gardiner and E. C. Horning (Lipid Res. Center, Dept. of Biochemistry, Baylor Univ. College of Med., Houston, Texas). *Anal. Chem.* 36, 1550–60 (1964). The separation, identification and estimation of biologically important amines by gas chromatographic methods presents a number of unresolved problems. The use of appropriate derivatives and selective stationary phases permits a wide choice of conditions which may be used to increase or decrease volatility of the compounds under study and to improve both separation patterns and the quantitative aspects of analytical separations. These experimental variables have been less thoroughly investigated for amines than for many other substances. Accordingly, a study was carried out of several groups of amines as model substances with different kinds of structure (long chain and alicyclic monoamines, aliphatic diamines and aromatic amines) with the aim of obtaining basic information which might be used in biochemical separation problems. At the same time, observations were made with respect to relationships between gas chromatographic behavior and the structures of amines and their derivatives.

MEASUREMENT AND INTERPRETATION OF THE C TERMS OF GAS CHROMATOGRAPHY. J. C. Giddings and P. D. Schettler (Dept. Chemistry, Univ. of Utah, Salt Lake City, Utah). *Anal. Chem.* 36, 1483–9 (1964). This work deals with the significance of the nonequilibrium or C terms in gas chromatography. It is shown, first, that the C terms have an important role in column resolution. Two new methods are then proposed for the experimental isolation of liquid and gas contributions, C_l and C_g. These methods are applied to a conventional GLC column, a glass bead column, a preparative column and a gas solid column. The experimental results are combined with theoretical interpretations to evaluate the changing role of the C terms in different kinds of columns. The experimental characteristics and problems of each of these systems are discussed and compared.

SEPARATION OF LIPIDS BY SILICA GEL G COLUMN CHROMATOGRAPHY. Q. E. Crider, P. Alaupovic, J. Hillsberry, C. Yen and R. H. Bradford (Oklahoma Med. Res. Inst. and Dept. of Biochemistry, Oklahoma Univ. School of Med., Oklahoma, Okla.). *J. Lipid Res.* 5, 479–81 (1964). A column chromatographic procedure utilizing silica gel G is described for separating lipid components of serum and lipoproteins into individual fractions containing hydrocarbons (I), cholesterol esters (II), triglycerides (III), cholesterol (IV), free fatty acids (V) and phospholipids (VI). Silica gel G required no pretreatment except adjustment of moisture content to 10%. The method affords a rapid, complete separation of all major lipid classes except diglycerides. Recoveries of serum and tissue phospholipids were approximately 60–80%, whereas those of the other major lipid classes were essentially quantitative.

A SOURCE OF CONTAMINATION IN THE ULTRAMICRO ANALYSIS OF METHYL ESTERS OF FATTY ACIDS BY GAS-LIQUID CHROMATOGRAPHY. P. V. Johnston and B. I. Roots (Dept. of Anatomy, Univ. College, London, England). *J. Lipid Res.* 5, 477–8 (1964). Contaminants which could be erroneously identified as methyl esters of fatty acids on gas-liquid chromatographic (GLC) analysis were traced to anhydrous methanolic HCl used for methanolysis. Further studies indicated that the artifacts are not esters of carboxylic acids even though they mimic them on GLC analysis.

ISOLATION AND FATTY ACID COMPOSITION OF THE PLANT SULFOLIPID AND GALACTOLIPIDS. J. S. O'Brien and A. A. Benson (Dept. of Marine Biology, Scripps Inst. of Oceanography, Univ. of Calif., La Jolla, Calif.). *J. Lipid Res.* 5, 432–6 (1964). The plant sulfolipid has been isolated from *Chlorella pyrenoidosa* cells and from alfalfa leaves by chromatography on Florisil and DEAE cellulose columns. The galactolipids, galactosyl diglyceride and diaglactosyl diglyceride were isolated by further chromatography on silicic acid columns. The galactolipids from alfalfa leaves were highly unsaturated and contained 87–94% linolenic acid, while the sulfolipid contained approximately equal amounts of palmitic and linolenic acids.

QUANTITATIVE SEMIMICRO ANALYSIS OF TRIGLYCERIDE FATTY ACID DISTRIBUTION IN A CONGO PALM OIL. G. Jurriens, B. De Vries and L. Schouten (Unilever Res. Lab., Vlaardingen, The Netherlands). *J. Lipid Res.* 5, 366–8 (1964). The triglycerides of a

(Continued on page 44)

Room Assignments for Committee Meetings During Fall Meeting

Enthusiastic response from the chairmen of the Administrative and Technical Committees has made it possible to schedule many of the committee sessions which will be held during the Fall Meeting in Chicago.

As the Journal goes to press, the following dates, times and meeting rooms assigned are indicated in the tabulation below. Chairmen who wish to schedule additional meetings of their committees are urged to contact AOCS Fall Meeting Hotel Chairman S. C. Miksta, National Dairy Products Corp., Research and Development Div., Glenview, Ill. 60025, as promptly as possible.

AOCS Committee Room Assignments
Fall Meeting—Chicago
October 11–14, 1964

Sunday, Oct. 11, 1964	Parkview Room	Victorian Room	Columbian Room	Music Room
10:00–12:00 noon		Examination Board		
1:00– 6:00 p.m.	Governing Board			
Monday, Oct. 12, 1964				
8:00– 9:00 a.m.	Literature Review Comm.			
9:00–10:00 a.m.	Literature Review Comm.	Fatty Nitrogen Sub-Comm.	Neutral Oil Loss Sub-Comm.	
10:00–12:00 noon		Fatty Nitrogen Sub-Comm.		
2:00– 3:00 p.m.	Soap & Synthetic Detergent Analysis	Epoxidized Oils Sub-Comm.		Local Section Liaison
3:00– 4:00 p.m.	Soap & Synthetic Detergent Analysis		Dibasic Acids Sub-Comm.	
4:00– 5:00 p.m.		Education Comm.		Uniform Methods Comm.
Tuesday, Oct 13, 1964				
9:00–10:00 a.m.	Journal Advertising Comm.	Hydrog. Oils Sub-Comm.		Standards Comm.
10:00–11:00 a.m.	Journal Advertising Comm.		Commercial Fatty Acids Sub-Comm.	
11:00–12:00 noon		Drying Oils Sub-Comm.		
2:00– 3:00 p.m.	Membership Comm.	Polymerized Acids Sub-Comm.	Instrumental Techniques Comm.	Bleaching Methods Sub-Comm.
3:00– 4:00 p.m.				
4:00– 5:00 p.m.	Commercial Fats & Oils Analysis Comm.	National Program & Planning Comm.		
Wednesday Oct. 14, 1964				
8:00– 9:00 a.m.		Abstracts Comm.	Journal Comm. Breakfast	
9:00–10:00 a.m.	Industrial Oils & Derivatives Comm.	Abstracts Comm.	Journal Comm. Breakfast	Biochemical Methods Comm.
10:00–11:00 a.m.	Industrial Oils & Derivatives Comm.			