presentations by the roundtable panelists and the ensuing discussions,

The first technical session encompassed a review of instrumental methods for beef texture evaluation, a summary of research conducted at Kansas State University on reflectance measurement of color deterioration in frozen beef, a discussion of the military procurement concerns in buying frozen entrees, a discussion on available objective means for determining some of these attributes and a review of objective quality assessment methods for eggs, egg products and poultry meats. Much of this information is available in other sources and the respective authors contributed very little that is new. Most emphasized the need for objective measurements to reflect the sensory attributes. However, there was no paper addressing itself specifically to sensory qualities and principles of correlating sensory with instrumental measurements.

The second technical session included reviews on composition of fish oils, methods to determine seafood quality, objective measurement of fat stability alone and in prepared foods, and texture of fats and emulsified foods. The quality of these papers varied from good, with some new approaches to objective measurement, to rather poor. Again, most of the information given is available from other sources. But the collected papers are valuable as a reference to the current state of our knowledge. It is apparent that the development of objective methods to predict storage stability is incomplete. Much needs yet to be done before methods are available which can be applied to a wide variety of food products.

The four roundtable discussions dealt with texture, appearance, flavor and prediction of fat stability. With the exception of the texture session, where the report consists of the chairman's summary, the book contains the texts of the remarks made by each panel member. The respective chairmen attempted to fill the void left by most speakers in offering remarks addressed to a critical appraisal of the current state of knowledge against the stated meeting objectives and specific recommendations regarding implementation or needs for future research.

In general, this book contains little beyond a historical, documentary value. The symposium must have been a disappointment to the organizers in that most of the speakers did not address themselves directly to the stated objectives of the meeting, but, instead, chose the easy and noncontroversial ground of merely reviewing the state-of-the-art or reporting on their own research projects. In this respect, the remarks on the roundtable discussion chairmen are of greatest value. Against the question of whether objective methodology now exists for quantifying sensory attributes and stability of meat, their answers ranged from "no" for flavor and color to a qualified "yes" for fat stability and texture measurements. It is to be hoped that this symposium will soon be followed by another more streamlined meeting designed to really tackle the aspects of the problem so important to the military.

> ALINA S. SZCZESNIAK REX SIMS General Foods Corp. White Plains, NY

Organic Functional Group Analysis by Gas Chromatography, T.S. Ma and A.S. Ladas (Academic Press, 1976, 173 p. \$16.75).

Throughout this text the term monograph is used, the definition being "a scholarly book on a specific and usually limited subject." This is an accurate description of this book as it pertains to a limited area of gas chromatography and its use in an analytical laboratory.

The title of this book is somewhat misleading since most

of the topics may be classified as reaction chromatography, i.e. nonvolatile compounds are converted before or during chromatography to volatile components. The introduction (24 pages) covers a basic explanation of the principles of gas chromatography. This section seems superficial since it is not detailed enough for the beginner and not necessary for anyone working in the field. The second chapter is titled, "Coupling of Functional Group Reactions with Gas Chromatography," and is followed by chapters on oxygen, nitrogen, sulfur, unsaturated and miscellaneous functions. Each chapter contains detailed descriptions of methods with complete diagrams as well as references to many other methods. It should be noted that no limitations or opinions are given by the authors on these procedures.

This monograph is a worthwhile addition to the library of any university or industrial laboratory. It would be most valuable in laboratories where only gas chromatographs are available since in many cases the identification and quantitation can be done more readily by other instruments.

L. GILDENBERG
Colgate-Plamolive Company
Piscataway, NJ

•

## the latest in Lipids \_\_FEBRUARY 1977

Lipid Metabolism in Development Lipid Metabolism in Obese Rats Plasma Membrane Phospholipid Synthesis Plasma Cholesterol in Young Animals Absorption of Phosphatidylcholines Tumor-Induced Hyperlipidemia in Mice Acyl and Alkenyl Changes Capillary Endothelia of Rat Brain NMID Acids in Marine Food Chains Rat Heart Acyl-CoA Dehydrogenase Egg Wax Lipids of the Cattle Tick Ether Lipids in Human Brain Tumors Lipids and Taurocholate Absorption Hydrocarbons in Rabbit Tissues Rumen Isoprenoid Hydrocarbons Lipid Metabolism in Nephrotic Rats Studies on Rapeseed Oils in the Rat Fatty Acids of Cholesteryl Ester GC Separation of Cholesteryl Esters Triterpenes of Ouricuri Wax Eicosatrienoic Acid in Sheep Lipase Activity in Teeth Pulp TLC of Plant Neutral Lipids Fucosterol from Giant Kelp Cholesteryl Ester Synthesis