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• New Books

ADVANCED ORGANIC CHEMISTRY, by Louis F. Fieser and Mary Fieser (Reinhold Publishing Co., New York, 1157 pp., 1961, \$14.00). This attractively bound volume is divided into thirty-one chapters. The organization and treatment of the subject is somewhat novel in that the first three chapters (The Nature of Organic Compounds, Structural Types, and Stereochemistry) deal with general concepts of organic chemistry and lay the foundation for clear comprehension of the chemistry of the classes of organic compounds presented in subsequent chapters. Chapters 4 through 6 deal with Alkanes, Alkenes and Acetylenic and Related Compounds. This is followed, logically, by a chapter on Petroleum. The remaining chapters (8 through 31) are entitled: Alcohols, Displacement Reactions, Halides, Carboxylic Acids, Aldehydes and Ketones, Condensations, Amines, Ring Formation and Stability, History of the Benzene Problem, Aromatic Substitutions, Aromatic Hydrocarbons, Nitro Compounds, Sulfonic Acids, Aryl Amines, Phenols, Aryl Halides, Aromatic Carboxylic Acids, Aromatic Aldehydes and Ketones, Quinones and Arenones, Naphthalene, Nonbenzenoid Aromatics and Pseudoaromatics, Carbohydrates, Lipids and finally Proteins.

A second novel and important feature of this book is that substantial coverage is made of current literature to July, 1961. References are cited to 126 papers published in 1960 and 91 papers of 1961. For purposes of brevity, guidance to the original literature is provided by name and date references and by biographies rather than by full references. It is regrettable that, for reference purposes, industrial chemists are generally identified by Company while academic chemists are named. There can be no acceptable explanation for this discriminatory treatment.

The insertion, at appropriate places, of chapters dealing with general aspects of organic chemistry is a useful and commendable feature of this excellent volume. In addition, the inclusion of problems at the end of each chapter is useful to those who wish to test their grasp of the subject matter. Answers to the problems are given at the rear of book.

Although entitled "Advanced Organic Chemistry," the book is certainly not advanced in the sense of being difficult. Adequate general background material is included and each subject is treated logically and fully, leading to easy comprehension. Reaction mechanisms, details of experimentation and historical episodes are included in dealing with each subject.

The volume is essentially free from typographical errors and is well-illustrated throughout. The entire format is pleasing and does much to enhance this valuable work.

It is a pleasure to recommend this book to all "fat and oil" chemists for reference use or for general reading for interest.

F. L. JACKSON, Procter & Gamble Company, Cincinnati, Ohio

PROGRESS IN INDUSTRIAL GAS CHROMATOGRAPHY, Vol. 1, edited by H. A. Szymanski, (Plenum Press, Inc., 227 W. 17th St., New York 11, 12/27/61, 235 pp., \$8.50, \$10 foreign).

This volume publishes the Proceedings of Advanced Sessions of the Third Annual Gas Chromatography Institute, held April 4-6, 1961, at Canisius College, Buffalo, New York. The table of contents lists 12 papers and a panel discussion.

Since gas chromatography is an instrumental technique which is both new and rapidly expanding, good collections of basic information are needed. This collection of papers fills that requirement. There are introductions to two of the available programmed temperature chromatographs and to a preparative scale chromatograph. There is a review of detectors and a discussion of the effects of several operating parameters. There are, also, discussions of several specific applications.

This book will be a valuable aid to those who are beginning to use gas chromatography as well as those who desire a basic reference work.

J. G. KAROHL, Procter & Gamble Company, Cincinnati, Ohio

APPLIED CLAY MINERALOGY, by Ralph E. Grim (McGraw-Hill Book Co., Inc., New York, N. Y., 422 pp., 1962, \$12.50). Here is an authoritative, thorough, and well-written book on the structure and properties of clay and its uses in ceramics, foundry molding sands, oil well drilling, organic reaction catalysis and some miscellaneous areas. Unfortunately, the glyceride oil industries are relegated to the miscellaneous with six pages on oil bleaching, four on paint and two on soaps and cleaning and polishing compounds. This text, therefore, has only a limited usefulness and appeal to the fat and oil industry.

T. J. WEISS, Swift & Company,
Chicago, Illinois

• Predicting Quality of Stored Cottonseed Oils

Marketing Research report No. 523 shows that some refined cottonseed oils which did not meet market specifications before storage did meet them after storage.

A study by the Agricultural Marketing Service showed that changes in the character of oils after storage were related to a time-temperature factor. Given the initial characteristics of both refined and crude oils, and using the methods and formulas given in the report, it is possible to predict changes in the oils during storage. While some refined oils were upgraded during storage, crude-oil storage is not practical, according to the report.

Standard shortenings made from oils stored up to 4 years were judged choice in flavor and good in odor, when compared with a shortening made from fresh oil, the report shows.

The study on which this report is based is part of a marketing research project on quality evaluation and development of objective measurements of quality factors to improve efficiency in the marketing of agricultural products.

Predicting Quality of Stored Cottonseed Oils, Marketing Research Report No. 523. This 56 page book may be obtained from the Office of Information, U. S. Department of Agriculture, Washington 25, D. C.

Lewis A. Baumann, of the Field Crops and Animal Products Branch of the Agricultural Service, presented a summary of this study at the A.O.C.S. St. Louis meeting May 3, 1961.

Milan University Offers Chromatography Course

The International Course on Chromatographic Methods in Lipid Research will be held in Milan, Italy, next September 17-29.

The Institute of Pharmacology and Therapy of the University of Milan, and the Italian Society for the Study of Oils and Fats, have thereby answered the recognized need for institution of a post-graduate course for research workers in the chemistry and metabolism of lipids. One definite objective is to encourage the establishment of a common methodological basis for scientists in the various fields.

The use of column and gas chromatography for the quantitative separation of fatty acids and steroids offers means for quicker and more detailed study of lipids than was formerly possible. The new methods were quickly disseminated throughout the United States, but in Europe, the diversity of methods followed had the effect of rendering most results difficult to compare and to interpret.

This series of seminars will cover paper, column, gas, and thin layer chromatography. In addition, various radio-chromatographic methods will be studied.

The course, lasting two weeks, will be limited to an audience of 30 graduates in medicine, chemistry, biology, and related fields, selected by a special committee. The lecturers will be European and American specialists.

The secretary for the course is R. Paoletti, University of Milan, Via Andrea del Sarto, 21 Milan, Italy.

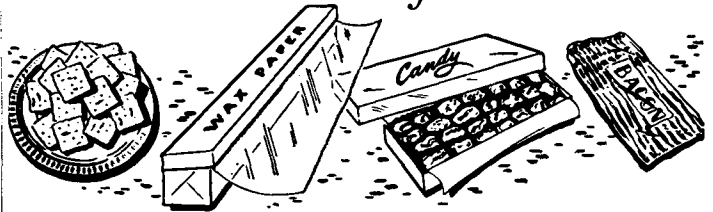
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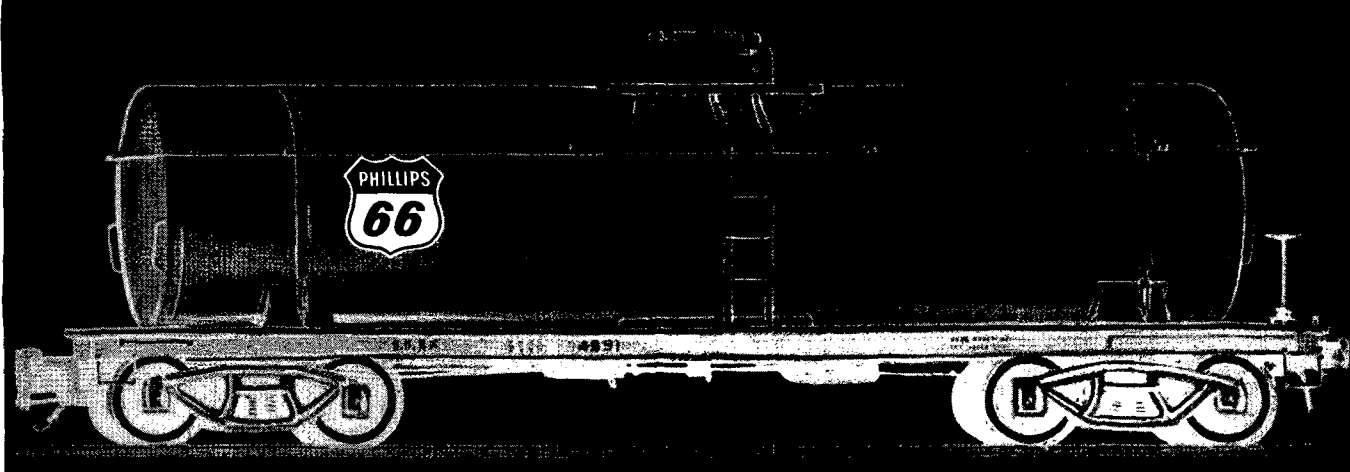
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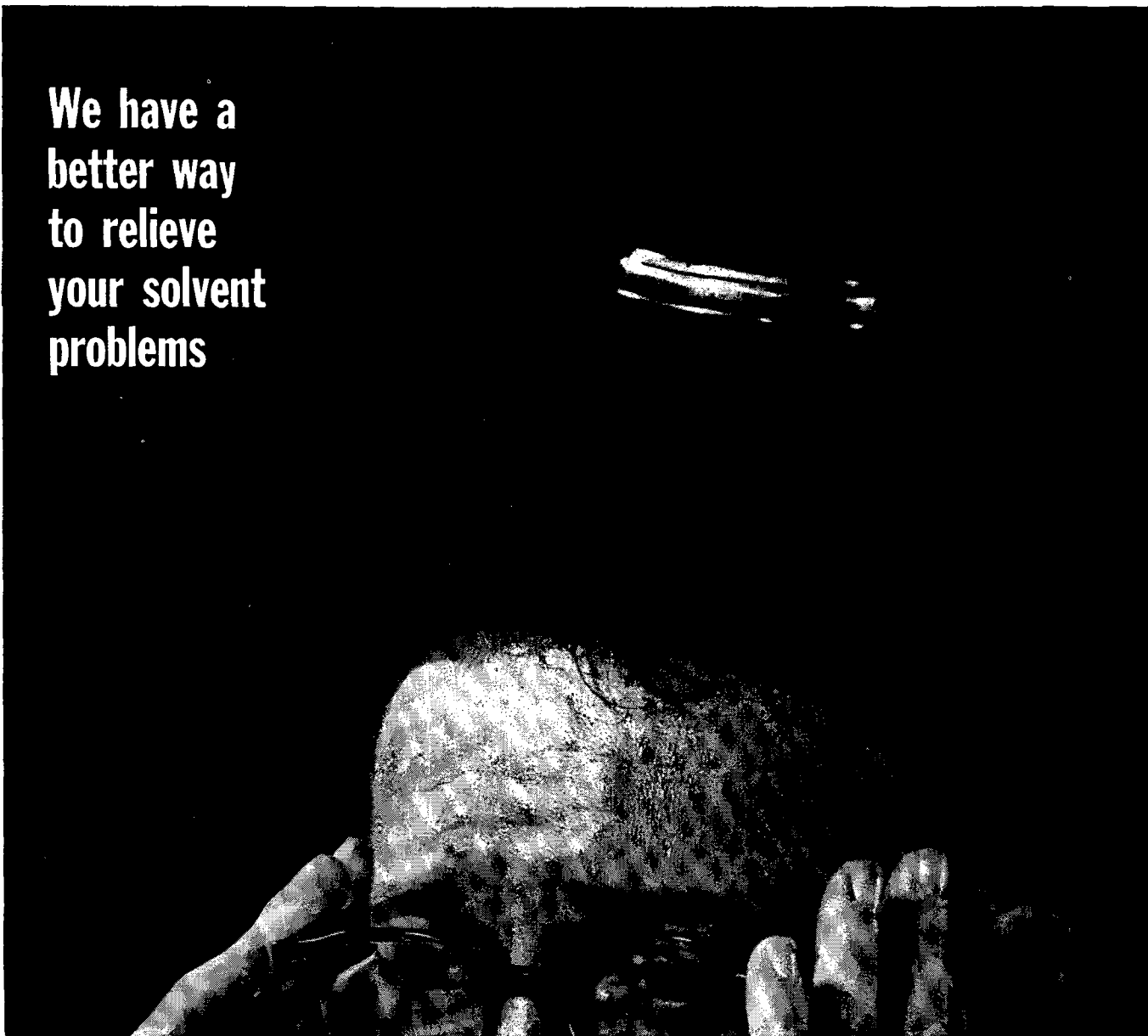
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