NEW BOOKS

CHROMATOGRAPHIC STEROL ANALYSIS AS APPLIED TO THE INVESTIGATION OF MILK FAT AND OTHER OILS AND FATS, by J. W. C. Peereboom (Centrum Voor Landbouwpublicates En Landbouwdocumentatie, 157 pp., 1963). As might be deduced from the title, this book deals with the application of analytical chemistry to purity control of commercial fat products. A brief survey of methods which have been used to detect adulteration of fat products is presented in the first chapter, but the bulk of the text is concerned with a specialized, i.e. chromatographic, version of one of these methods, that of employing characteristic sterols as indicators of the presence of a particular type of fat. An introductory description of various chromatographic techniques is included, followed by a chapter exploring reversed-phase paper chromatography in detail; another chapter describes the application of this technique to the analysis of various fat mixtures. In addition, there is a short chapter on thin layer chromatography. The author is primarily interested in the adulteration of animal with plant fats, and therefore the separation and quantitation of cholesterol and various phytosterols receives emphasis.

Analytical data, both chromatographic and by physical characteristics, is given for the component sterols of a large number of plant fats and oils. Experimental procedures are present, and in sufficient detail to allow easy duplication. Also included is an interesting presentation on the correlation between sterol structure and chromatographic behavior which could be of value in the preliminary identification of unknown sterols. However, the subject of sterol chromatography has been presented in greater detail and with wider scope elsewhere; therefore, this book will be of primary interest to those with purposes very closely related to those of the author.

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THE CHEMISTRY AND PHYSICS OF RUBBER-LIKE SUBSTANCES, edited by L. Bateman (John Wiley & Sons, New York, 784 pp., 1963, $25.00). This book is a collection of review articles written by members of the scientific staff of the Natural Rubber Producers Research Assn., Welwyn Garden City, England. The articles cover a wide variety of subject matter related to rubber, ranging from basic areas such as the chemistry of the rubber hydrocarbon and theory of rubber-like elasticity, to such technological areas as abrasion and tire wear. Adequate introductions prepare the reader for even the most specialized articles in almost every instance. In the subject matter itself, the authors confine themselves almost exclusively to the studies carried out by the N.R.P.R.A. and associated organizations.

There are at least five articles, Natural Rubber Hydrocarbon, *Cis-Trans* Isomerism in Natural Polyisoprenes, Chemistry of Vulcanization, Raridation Chemistry and Oxidation of Olefins and Sulphides, which should be of interest to organic chemists. Polymer chemists should find the following four articles, Graft Copolymers from Natural Rubber, Theory of Rubber Solutions, Crystallization in Natural Rubber and Mastication and Mechanochemical Reactions of Polymers, of interest. Two articles Theory of Rubber-Like Elasticity and Viscoelastic Behaviour deal with the physics of rubber-like substances. There are two articles on latex, Structure, Composition and Biochemistry of Heva Latex and Colloidal Properties of Latex. The remaining six articles deal with some of the more technological aspects of rubber.

As may be expected in a collection of highly specialized articles there is a lack of continuity from one article to another. Moreover, it appears that the entire collection may be read with benefit only by one whose interests are intimately associated with rubber.

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• *New Products*

WILKENS INSTRUMENT AND RESEARCH, INC., Walnut Creek, Calif., has announced a new device for introducing a truly representative sample into a gas chromatograph—the InDUCTOR. Samples such as liquids, LPG and natural gas distillates are encapsulated in indium and placed in the InDUCTOR. Indium is melted and the sample is flashed and swept into the gas chromatograph.

OLIN MATHIESON CHEMICAL CORP., New York, N.Y., now has available two new products—*o*-Fluoroaniline and *p*-Fluoroaniline. They are relatively stable and do not enter into many condensation-type reactions such as are common for the corresponding chlorine, bromine and iodine groups with the expulsion of HX.

RELIAB®, Div. of Tenny Engineering, Inc., Union, N.J., announces a new, precision high-low temp chamber, compact and self-contained to sit on a laboratory bench or cart and be easily moved. It is mechanically refrigerated, reducing operating costs.

PHOENIX PRECISION INSTRUMENT CO., Philadelphia, Pa., now has available a variable gradient pump for liquid chromatography—Model 4000. A new approach has been utilized for producing variable gradients of pH or ionic strength over virtually any desired length of time.

FILTERITE CORP., Timonium, Md., announces improvements to their FS series of high flow filters for fluid clarification, designed to substantially reduce filter tube reloading time, while improving general operation.

HASTINGS-RAYDIST, INC., Hampton, Va., announces the addition of ten new ranges to their LF-Series Mass Flowmeters for air and other gases. A choice of 15 ranges is now available—from 0 up to 20,000 stand. cc/min.

LAPINE SCIENTIFIC CO., Chicago, Ill., announces their new Marco-Vac Evaporator, a vacuum distillation pilot plant suitable for continuous operation in research and production applications. It operates on the flash evaporation principle.

EMERY INDUSTRIES, Cincinnati, O., has developed a new dimer acid, Empol 1016, featuring improved color and high purity. Its 7 max Gardner color specification is a full unit lower than that of any previously available commercial grade.

BECKMAN INSTRUMENTS, INC., Fullerton, Calif., has introduced a new reflectance accessory, enabling their DB UV Spectrophotometer to be used for the complete measurement of color.

CAHN INSTRUMENT CO., Paramount, Calif., has developed a new type integrating detector for use with gas chromatographs—the 2130 Gravimetric Vapor Detector. The heart of the detector is a recording ultramicrobalance which has been adapted to collect the effluent from a chromatograph on an adsorber and record the wt changes.

TECHNICON CHROMATOGRAPHY CORP., Chauncey, N.Y., announces a new peptide analyzer that automatically separates, hydrolyzes, detects, measures and records peptides obtained from enzyme-hydrolyzed proteins.

WM. AINSWORTH & SONS, INC., Denver, Colo., has added another new balance (Milli-Grad Type 23) in its line of one-pan units. It was developed to meet the requirements of speed and convenience on the many weighings where max sensitivity is not essential.

NUMINCO® INSTRUMENTS AND CONTROLS CORP., Apollo, Pa., now has available its new Automatic Controlled Potential Coulometric Titrator, Model 6000. It is applicable to 0.10100 mg of such organic ions as cobalt, nickel, copper, halides, arsenic, lead, thallium, as well as uranium; also a range of pharmaceutical compounds.

THE WELSBACH CORP., Philadelphia, Pa., announces a new ozone meter, Model H-81, to measure ozone concentrations in carrier gas from 0–80 mg/liter. It operates independently, requires no chemicals.

HAYES G. SHIMP, INC., Albertson, N.Y., now has available permanent glass color standards for both F.A.C. and Gardner Color Scales—with "Lovibond" 3 Aperture Color Grading Comparator, as a hand-held or complete unit.

New Literature . . .

(Continued from page 26)

space, filter, mesh, extra fine wire and gasket wire cloth. (351 Verona Ave., Newark 4, N.J.)

DREW CHEMICAL CO. offers an 8-page Chemicals & Industrial Products brochure, listing cover products for the cosmetic and pharmaceutical industries; textile, marine and industrial water treatment; paper and catalytic chemical industries. (522 Fifth Ave., New York, N.Y. 10036)

ADDISON-WESLEY PUBLISHING CO., INC., has issued a 92-page catalog, describing technical books in the field of chemistry, earth science, engineering, life science, mathematics, modern foreign language, nuclear science and engineering, operational research and programming, physics, social sciences and programmed texts. (Reading, Mass.)

PERKIN-ELMER CORP. describes their complete line of gas chromatographs in a new brochure. Twenty-six models are listed—plus accessory items. (Instrument Marketing Div., Main Ave., Norwalk, Conn.)

FISHER SCIENTIFIC CO. has issued a new bulletin, TD-169, of technical data on Fluorolube® Inert Lubricants in laboratory quantities (less than 1 lb) Fluorolube Oil LG-160 and Grease GR-382. (717 Forbes Av., Pittsburgh, 19, Pa.)

ALLIED CHEMICAL CORP. has revised their Chemical Catalog to describe the 108 inorganic chemicals they offer. 32-pages—it gives the chemical name, trade name, code no., chemical structure, specifications and suggested uses. (National Aniline Div., 40 Rector St., New York, N.Y. 10006)

BUSS LTD. now has available a review and photographs of some plants and processes of their Oils and Fats Div., which were exhibited at the ACHEMA 64 trade show, held recently in Germany (Basle, Switzerland).

CIIA-BIPCA Congress Date Changed

Page 24 of our April 1964 Journal reported the 1st International Congress of Agricultural and Food Industries in Tropical and Sub-Tropical Regions, scheduled for November of this year. Meeting dates have now been definitely scheduled for Dec. 13–19, 1964 at Abidjan, Ivory Coast, Africa.

Fats and Oils Summer School Held in India

The Summer School in Chemistry and Technology of Oils and Fats was held at the Regional Research Laboratory, Hyderabad, India, June 15–17, 1964.

It encompassed demonstrations and lectures in such subjects as: separation of fatty acid mixtures, countercurrent distribution, GLC, pilot plant operation, analytical techniques, estimating phosphorus in organic compounds, UV absorption spectrophotometry, and many others.

Forty-five scientists participated in the three-day sessions.

OTA of India Co-Sponsors Oils and Fats Symposium

The 20th Annual Convention and Symposium on Oils and Fats—1964 will be held at New Delhi, India, Dec. 18–21, 1964, under the joint sponsorship of the Oil Technologists' Assoc. of India, the Soybean Council of America, Inc., and Vanaspati Manufacturers' Assoc. of India.

It will consist of two technical sessions (Augmentation of Oil and Fat Resources, and Utilization of Some Lesser Seed Oils) and a group discussion on subjects of economic importance to the development of the industry. Papers containing results of original investigations, plant studies and reviews on subjects falling within the broad scope of the Symposium are invited by Sept. 30, 1964.

Address correspondence to The Convener, Symposium on Oils & Fats, 1964, Oil Technologists' Assoc. of India, Ganesh Flour Mills Co. Ltd., P. O. Box No. 1025, Delhi-6, India.