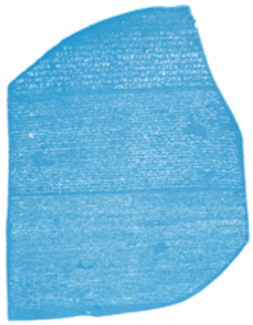

NEW BOOKS

edited by f w quackenbush

THE ENCYCLOPEDIA OF BASIC MATERIALS FOR PLASTICS, edited by Herbert R. Simonds and James M. Church (Reinhold Publishing Corporation, New York, 512 p., 1967, $25).

This volume, as its title indicates, is an encyclopedia of basic materials for plastics. It consists of a series of alphabetically arranged articles. Approximately 1000 chemicals employed in today's plastics technology are discussed in this work. Besides specialized chemicals, the book describes the functions of plasticizers, catalysts, and other additives which together with the basic polymer materials compose most plastics.

The stated aim of the editors was to cover in one book everything about plastics except the products themselves. However, a good many of the products are covered although generally condensed. Some applications and end uses of products are also given.

Although the articles have been condensed many are cross-referenced providing additional data.

The index is not adequate considering the number of chemicals and subjects which are covered.

This book should be quite useful as a reference textbook for anyone associated with plastics and the basic materials employed as ingredients or constituents of plastics.

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CHEMICAL MARKETING RESEARCH, edited by N. H. Giragosian (Reinhold Publishing Corp., New York, 375 p., 1967, $12).

The Table of Contents presents a readable breakdown of the chapters and applicable subheadings, leading to a more rapid utilization of the information presented. The 15 chapters proceed from an updated assessment of the basics of the chemical industry through a survey of how the research is performed, the interrelationship between marketing research and corporate planning, and finally is concerned with changes in the nature of the research, computerization, and application of this research in forward integration.

This valuable reference is sponsored by the Chemical Marketing Research Association to update trends in marketing research previously described in an Association-sponsored book published in 1954. Assessed in the current volume are present and projected future trends in this research area: fully meeting the needs of the research specialist in this area.

The chapter headings are descriptive and are supplemented by page-referenced subsections. Chapter 1 concerns Basic Characteristics of the Chemical Industry; Chapter 2, The Nature and Scope of Marketing Research; Chapter 3, the Changing Nature of Marketing Research; Chapter 4, Information Sources; Chapter 5, Methodology, Tools and Techniques; Chapter 6, Communicating Marketing Research Results; Chapter 7, Managing the Marketing Research Department; Chapter 8, Chemical Economics and Price Forecasting; Chapter 9, Mergers and Acquisitions; Chapter 10, Marketing Planning in the Chemical Industry; Chapter 11, International Marketing Research; Chapter 12, Participation in Planning and Decision Making; Chapter 13, The Impact of Vertical Integration; Chapter 14, Chemical Marketing Research and the Computer; and Chapter 15, New Horizons for Marketing Research. A good Bibliography is included along with two appendixes. An effective index assists in selecting specific subject matter. Appendix A is concerned with report writing and the selected portions of this technique, if followed, cannot help but improve any written presentation. Appendix B provides statistical data useful in general presentations, showing chemicals in relation to all manufacturing.

In general the presentations are fortified by pertinent literature references without unnecessary cluttering of the text. One pertinent literature reference noted as missing was that on PERT (Program Evaluation Review Technique) since insufficient information was furnished for its use. The book contains many references to sources for information in addition to the full chapter on this subject. Quite pertinent to current events is the chapter concerning marketing research and the international market.

Almost without exception, any member of the American Oil Chemists' Society could benefit by studying the contents of this how-to-do-it marketing research reference. An attempt at classifying the chemical industry immediately is faced with the fact that it consists of as many as 40 different businesses, into one or more of which very many of our membership fits. The casual or background reader can readily find application to related use, while the marketing researcher either can use the presentation as a checklist, or if new to the field, can apply the essentially step-wise presentation for needed background. The importance of marketing research to corporate growth is well documented.

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PROGRESS IN INFRARED SPECTROSCOPY VOL. III, edited by Herman A. Szymanski (Plenum Publishing Corp., 159 p., 1967, $12.50).

This third volume of a continuing series is based on the lectures given at the 1966 Canisius College Infrared Spectroscopy Institute. It comprises a review of recent advances in sampling techniques and group frequencies, which will be of value to the researcher using infrared spectroscopy in analytical and organic chemistry, as well as biochemistry.

One chapter gives many useful pointers on techniques of pellet preparation, using not only potassium bromide but also other matrix materials. In addition, there is a sobering review of changes that can occur in a sample when pelleted. It is essential that everyone using this technique become familiar with these possible changes, particularly when dealing with biological compounds. Another chapter is a brief review of attenuated total reflection (ATR) and multiple-ATR techniques. This includes the basic physics of the ATR phenomenon and a discussion of effects of

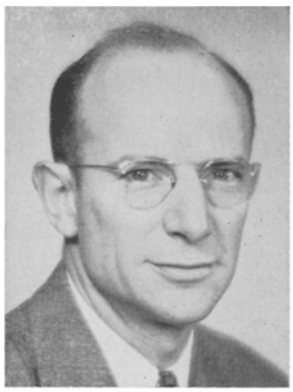
(Continued on page 398A)

• *A.O.C.S. Past President Series*

HOWARD C. BLACK, 1957

Howard C. Black was born near Warsaw, Indiana, September 20, 1912 and was the first Hoosier to become the Chief Executive Officer of the Society.

He received his Bachelor's Degree from DePauw University, Greencastle, Indiana, in 1934. He took his Master's Degree at the University of Illinois in 1935 and the Ph.D. at the same institution in 1937. He started with Swift & Co. shortly after and has been there ever since. He started as a research chemist and is now Director of Research.



Howard C. Black

Howard's Society activities have been extensive, viz.: Chicago Convention, 10 years, Public Relations, three years, Oil Seed Analysis, six years, Editorial Advisory Board, three years, Membership, Local Sections, National Program, Fatty Acid Award Committee, Nominating and Election.

Several significant changes were made during his administration. The services of the Advertising Manager, Mr. Harley Ward, were terminated which resulted in the AOCS Office handling the advertising. This move proved to be a fortuitous one later. Also, during Howard's administration smooth plans were laid for the retirement of Mrs. Lucy Hawkins who had served the Society faithfully for a number of years and her ultimate replacement by Mr. Carl Hauber.

Howard and his wife Mary Ellen were boating enthusiasts until recently and vacations found them in the wilds of Canada or other remote and interesting places. However, with Swift's new R & D Center in the western suburb of Chicago, they have moved away from Lake Michigan to be near the new laboratory and plan to take up golf and bridge.

Second Annual Particle Characteristics Conferences Scheduled

The second annual Particle Characteristics Conferences sponsored by Coulter Electronics and Micrometrics Instrument Company will be held in Schiller Park, Ill., adjacent to O'Hare Airport, Sept. 9–11, 1968, and in Union, N. J., near Newark Airport, Sept. 16–18, 1968. As during last year's conferences, meetings will be conducted by leading lecturers of the Chemical Engineering Department of Loughborough University of Technology in Great Britain. In addition, Clyde Orr of Georgia Tech and C. N. Davies of the London School of Tropical Medicine and Hygiene will also be participating lecturers.

The site of the first lecture series will be Schiller Park, Ill., and the second is scheduled for Union, N. J. Fees are $92 per person, which includes lunches for all three days.

The conferences will be similar to the Particle Characteristics short courses held in England by Loughborough over the last three years but will incorporate a change in emphasis from last year's Coulter Conferences in the United States. The emphasis will be on pure measurements, aerosols and applications.

To permit sufficient time for discussion, each course has been limited to 150 participants. For complete information, including specific locations, programs, fees and application blanks, write: Coulter Electronics, Industrial Division, 2601 Mannheim Road, Franklin Park, Ill. 60131. Phone: 312–455–7712.

• *New Books . . .*

(Continued from page 380A)

prism material, angle of incidence, and polarization. A set of general rules for use of ATR and MATR is given. The overall impression given by this chapter is that ATR and MATR may be useful techniques for certain samples but that it appears not to be a tool for routine use. For this reason, anyone who wishes to use this technique regularly would be well advised to keep a copy of this book within easy reach. A brief chapter describes what can be done with polymers by pyrolyzing them and using infrared spectra to identify the pyrolysis products. One chapter reviews several schemes for recovering micro samples from gas chromatography and from thin-layer chromatography. There is also a review of published work on the use of water as a solvent in infrared spectroscopy, with emphasis on compounds of biochemical interest. The section on dipeptides in aqueous solutions presents several infrared curves which form an excellent demonstration of the importance of knowing the ionic state of any amino acid derivative when examining its spectra.

Group frequency assignments are re-examined for typical compounds containing C–O, O–O, and O–H. For example, it is the author's opinion that frequencies of peroxides and hydroperoxides do not differ from those of the related alcohol, ether, acid, ester, etc., except for modification by resonance and inductive effects. The book concludes with a brief chapter on the value of routinely using Raman spectra along with infrared spectra, as a result of the advent of laser Raman spectroscopy.

The book is liberally illustrated, and contains numerous literature references. It is useful to have all this information available between one pair of covers, summarizing in one place a quantity of material that would require a great deal of time to gather from the literature if each researcher had to do it for himself.

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Microbial Technology, Henry J. Peppler, (Reinhold Publishing Company, 454, 1967, $14.00).

This book deals with the technological aspects of the following major areas; mass production of microbial cells, production of organic acids and solvents, and microbial production of pharmaceuticals. The area of mass cultivation of microorganisms is included in several chapters dealing with the technology of production of yeast, *Rhizobium* cultures, bacterial starter cultures, mushrooms and *Lactobacillus acidophilus* concentrates. Production of organic acids (citric, itaconic, gluconic, lactic, acetic and amino acids) as well as organic solvents (dihydroxyacetone, ethyl alcohol and acetone—butyl alcohols) are covered in several chapters. The industrial processes of production of pharmaceuticals (antibiotics, steroids and vitamins) are included in chapters 10 and 11. Other chapters deal with interesting and relatively novel fermentations. Chapter 7 covers microbial insecticides, chapter 15, microbial enzymes and chapter 16, biosynthesis of microbial polysaccharides. At the end of each chapter, references are cited. In some cases, many of these references are of historical value. Perhaps, the only chapter which is basically theoretical is the discussion on theory and design of aerobic fermentations. In general, the book is well-written. The articles on microbial insecticides, production of amino acids and therapeutic compounds are of high quality and written by experienced and well qualified scientists.

In summary, the book is mainly intended to the industrial microbiologists. The readers of JAOCS may be interested in the articles on steroids, pigments and vitamins.

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Purdue University

• *New Products*

Glass particles with precisely controlled pore diameters for liquid chromatography have been introduced by the Laboratory Products Department of CORNING GLASS WORKS. Made of 96% silica glass, the new chromatographic material offers pore diameters controlled to within 15% tolerances.

Medical and biological laboratories now can take advantage of a new method of concentrating biological fluids for analysis developed by the GELMAN INSTRUMENT COMPANY, Ann Arbor, Mich. The development of Lyphogel, a polyacrylamide hydrogel, enables easy and rapid concentration of macromolecules in solution for quantitative and qualitative analysis. This new product speeds concentration of proteins in such substances as spinal fluid and urine, allowing simpler analysis of these fluids for diagnosis of disease or abnormality.

THE MILLIPORE CORPORATION, Bedford, Mass., has available the AeroChek Sampler, a disposable aerosol filter holder. Assembled in a clean room to minimize background counts, AeroChek monitors open areas for contaminants like particles, air pollution or aeroallergens. With covers in place the filter is protected from incidental contamination and can be stored in a slide case or fitted onto a mechanical stage for microscopic examination.

CHAS. PFIZER & CO., INC., New York, and Royal Netherlands Fermentation Industries, Ltd., Delft, Holland, jointly announced today that the two companies have entered into an agreement whereby Pfizer will manufacture and sell a proteolytic enzyme, maxatase, developed by the Dutch firm and used in detergent products. When Maxatase is added to laundry formulations, it aids in the removal of tenacious stains such as blood, milk, gravy, chocolate and other troublesome soilings that have always plagued the housewife, as well as commercial laundries.

• *Industry Items*

CALBIOCHEM, producer and distributor of biochemicals for research, announced recently that it has agreed to purchase a major tract of land in San Diego and will relocate its operations in a new $2 million building it plans to erect there. The company has also obtained a five-year option to purchase adjoining acreage to permit future expansion. Calbiochem plans to build a 70,000-square-foot building as international headquarters, scheduled for occupancy in 1970. The structure will also include extensive pharmaceutical research and development facilities.

HCL SCIENTIFIC, INC., has been started by P. D. Hercz, P. J. Cobert and C. D. Lantz to manufacture and market gas chromatography products. As an initial step on providing a good basic chromatograph, HCL has acquired the Warner-Chilctott (Research Specialties) line of gas chromatography instrumentation from America Optical Instrument Company, effective March 1, 1968. HCL Scientific will now handle all service and future sales of this equipment. They will also offer a complete line of accessories and column materials.

As of April 5, 1968, the JARRELL-ASH COMPANY has become a division of Fisher Scientific Company, Pittsburgh. Jarrell-Ash, of Waltham, Mass., is a producer of optical instrumentation for scientific research and production control (including spectrographs, research spectrometers, atomic absorption spectrophotometers, diffraction gratings, and laser microprobes).

The company will continue to operate under its present management, with its research-and-development and manufacturing strengths complemented by the marketing capabilities of Fisher.

(Continued on page 403A)

Third International Congress on Food Science and Technology

The Third International Congress on Food Science and Technology will be held at the Sheraton Park Hotel, Washington, D. C., Aug. 9–14, 1970.

About 3,000 U.S. and foreign food scientists and technologists are expeted to attend this Third International Congress. Since the inauguration of the First Congress (London–1962), the International Committee voted to hold these Congresses every four years. Following the close of the Second Congress in Warsaw, Poland, in 1966, the Committee accepted the invitation of the Institute of Food Technologists to host the 1970 Congress in the United States. Following the tradition established by previous hosts, Washington, D.C., our nation's capital, was selected as the site of this meeting. More than fifty countries will be represented by scientists, technologists, engineers, nutritionists, educators and executives who are concerned with the preservation, processing and development of appealing and nutritious foods. Many representatives of the food industry, including government scientists and officials, and educators will participate in the meeting. In addition to the plenary and technical sessions, it is planned to present an educational, interesting, and relatively noncommercial series of exhibits.

The plenary sessions will be devoted to general lectures by outstanding speakers on topics of world-wide importance. The technical program is to consist of symposia and specialized sessions such as: World Food Challenges (protein foods—food safety—food resources—village processing—emergency feeding—nutritional problems); Quality Evaluation (sensory evaluation—nutritional quality); Food Processing and Preservation (engineering—packaging); Food Laws and Regulation (national policies—standards of identity and quality—food safety); Transportation, Storage and Distribution of Food (artificial barriers to trade); Information Exchange and Documentation of Food Science Literature and Education and Training in Food Science and Technology.

R. L. Hall, Director of Research and Development, McCormick & Co., Baltimore, Md., is the Chairman of the Congress III Executive Board that has assumed the responsibility for organizing and planning the Congress. D. J. Tilgner, Politechnia Gdanska, Gdanska, Poland, is the Chairman of the International Committee and G. F. Stewart, Director, Food Protection and Toxicology Center, is Secretary General of the International Committee and President, Institute of Food Technologists.

For further information, contact C. L. Willey, Executive Director, Institute of Food Technologists, 221 N. LaSalle St., Chicago, Ill. 60601.

Aid Signs Nutrition Agreement With AOCS and Five Other Societies

William S. Gaud, Administrator of the Agency for International Development, signed an agreement with a consortium of scientific organizations which will provide information and assist in solving technical problems in nutrition and child feeding programs overseas.

Nutritionists and food technologists, who will comprise a talent pool for this phase of the War on Hunger in less developed countries, represent six societies: the American Oil Chemists' Society, the American Association of Cereal Cnemists, the Institute of Food Technologists, the American Chemical Society, the American Institute of Nutrition, and the Volunteers for International Technical Assistance.

The consortium, incorporated as the League for International Food Education (LIFE), will act as a clearing house for advice and information on food technology—food formulation, processing, packaging, marketing, distribution, and storage—nutritional aspects of public health, clinical evaluation, education, and the use of mass communications. Through its members in the six societies, LIFE will be able to call on skills from among more than 100,000 scientific specialists.

LIFE was established as a consortium following discussions between AID's Nutrition and Child Feeding Service, Office of the War on Hunger, and representatives of the organizations, to respond to requests for technical advice and information needed in carrying out nutrition and child feeding programs in the developing areas of the world. AID's Nutrition and Child Feeding Service will respond to informational requests from AID missions overseas, the Peace Corps, voluntary foreign aid agencies, international organizations, and foreign governments. Information will be provided by the consortium of all technical levels, and experts will be provided for short- and long-term assignments in overseas feeding programs.

According to Administrator Gaud, AID is planning to fund the first 2 years of operation by LIFE at an estimated cost of $65,000 per year.

The Board of Directors of LIFE who attended the signing ceremony are: R. C. Stillman, Procter & Gamble, Ivorydale Technical Center, Cincinnati, Ohio, representing the American Oil Chemists' Society; Raymond J. Tarleton, American Association of Cereal Chemists, Inc., 1955 University Avenue, St. Paul, Minn.; Arthur N. Prater, Institute of Food Technologists, 17400 Weddington Street, Encino, Calif.; Louis Lykken, Division of Entomology, University of California, Berkeley, Calif., representing the American Chemical Society; O. L. Kline, American Institute for Nutrition, 9560 Rockville Pike, Bethesda, Md.; and Albert L. Elder, Volunteers for International Technical Assistance, Inc., 612 South Stone Avenue, La Grange, Ill.

• *Industry Items*

(Continued from page 399A)

BECKMAN INSTRUMENTS, INC., Fullerton, Calif., has a new variable temperature (−185 to 250C.) IR unit for the study of materials used in spectroscopic investigation of polymerization, phase transition, reaction mechanisms, and crystallinity. The units consist of a stainless steel outer jacket, a cell holder and refrigerant vessel, and sample cell with thermocouple.

SADTLER RESEARCH LABORATORIES, INC., today announced completion of its 115,000th spectrogram, making the company's spectra collection more than twice as large as the combined total of all other spectra collections in the world, according to company spokesmen.

Divisional Program Chairmen Named For Federation's 1968 Annual Meeting

Divisional Program Chairmen for the 1968 Annual Meeting of the Federation of Societies for Paint Technology—at the Coliseum in New York—Oct. 23–26, 1968, have been announced by F. M. O'Dea, General Chairman of the Program Committee.

They are as follows: Research and Development—R. V. Rosensteel, of Hanna Paint Mfg. Co., Columbus, Ohio; Management and Communications—J. F. Vozzella, of E. I. du Pont de Nemours & Co., Inc., Wilmington, Del.; Product Planning and Control—R. R. Pfohl, of Armstrong Paint & Varnish Works, Chicago, Ill.; Engineering and Design—F. W. Whittam, of Canadian Industries, Ltd., Toronto, Ont.; Testing and Quality Control—H. S. Philipp, of Sherwin-Williams Co. of Canada, Ltd., Montreal, Que.; Product Performance—Edward Leon, of Hooker Chemical Corp., Niagara Falls, N. Y.; Society Papers—H. W. Lowrey, of Indurall Coatings, Inc., Birmingham, Ala.; Workshops—Hy Kredentser, of Sherwin-Williams Co. of Canada, Ltd., Montreal, Que.

Mr. O'Dea of Swing Paints, Ltd., Montreal, Que., stated that although divisional programming will be employed, the number of concurrent sessions is expected to be limited to two.

• *Referee Applications*

SECOND NOTICE: Minoru Saito of Japan Oil and Vitamin Inspection Institute, No. 9–15, Akasaka 1-chome, Minato-ku, Tokyo, Japan has applied for a Referee Certificate on Soybeans and Tallow and Grease. Interested parties wishing to comment on this certification should communicate with the Chairman of the Examination Board. Please write to Edward R. Hahn, P. O. Box 1177, Columbia, South Carolina 29202.