



Four Corners

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M. BERGEL, J. POKORNY, H.K. MANGOLD,
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ArgentinaM. Bergel

Analgesic Properties of NDGA

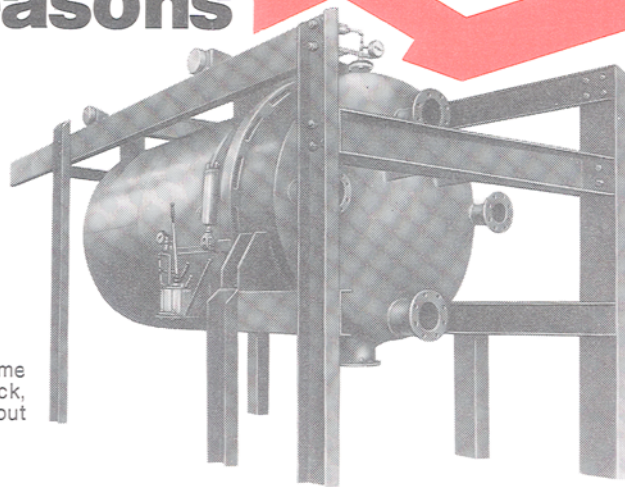
Studies performed by Meny Bergel and Diego Brague from Republica Argentina have shown the powerful analgesic properties of the well known industrial antioxidant nordihydroguariaretic acid, more commonly known as NDGA.

After an extensive test, the above-mentioned authors have been able to show the following pharmacological properties of NDGA being used in human therapy. (A) It increases the pain threshold, and, due to this, the perception of same gets more difficult in patients who are suffering. (B) NDGA acts upon the pain, but does not have cortical action, i.e. it is not an analgesic of the morphinic type. Consequently, it does not depress the sensorium. (C) It produces a sedation of the pain lasting up to 24 hr after its administration. (D) It has larger therapeutic activity upon the

pains provoked by neoplasias, compression by tumors, and also in inflammatory neuritis. Its action is less on other types of pains, such as on trigeminal neuralgia. (E) It gives greater analgesic activity to other minor analgesics, such as aspirin, pirazolons, etc. (F) It is tolerated with ample therapy margin for its use. (G) Its use as a main analgesic, alone or associated with other minor analgesics, such as aspirin or pirazolons, is of extraordinary power, producing deep, prolonged analgesia in patients with tumors which cannot be extirpated and patients with great suffering, such as those who suffer from cancer of apex of the lung with radicular compression. (H) NDGA must be administered by associating it to minor analgesics, such as aspirin or pirazolons, in doses from 1-3 ml in a solution of NDGA at 10% in propylenglicol alcohol-water, intramuscular, in only one dosage every 24 hr. (I) The more remarkable properties of NDGA, as far as the analgesic activities are concerned, are the absence of the cortical depressor activity by which the patient who gets this analgesic keeps his sensorium with lucidity; in second term, the elevation of the threshold upon the pain;

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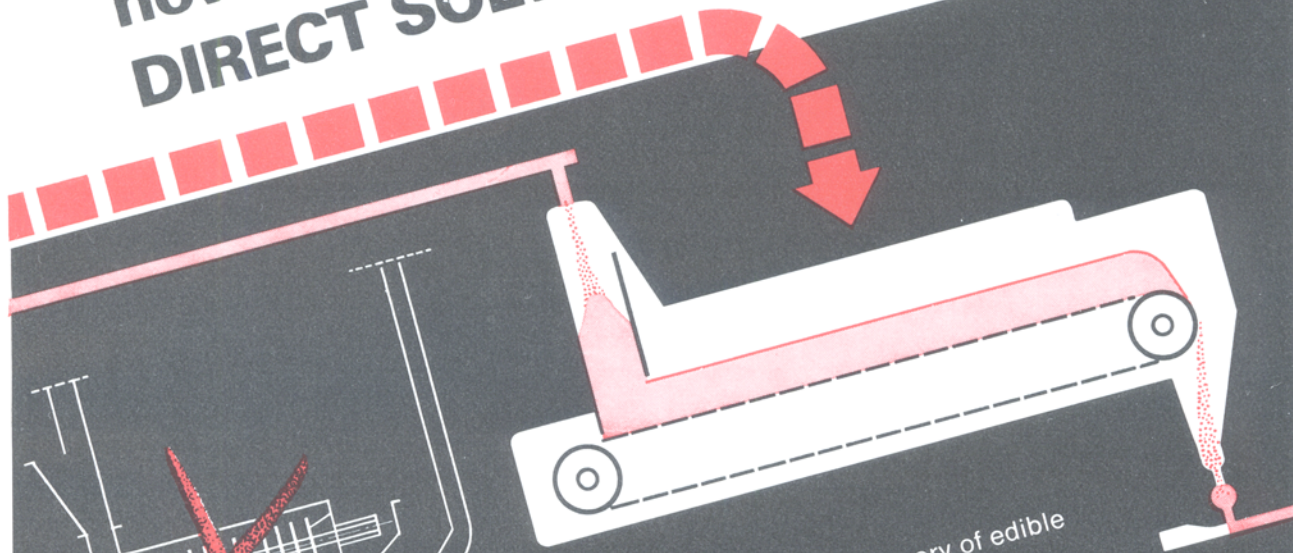
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and, owing to its power, the increases in the analgesic activity on other minor analgesics, such as aspirin and pirazolons.

The clinical experiences carried out have shown that this substance must be used in human therapy as analgesic. However, since exhaustive toxicological, teratological, and cancerological studies are not completed, its use must be kept restricted to those patients who suffer from cancer which cannot be treated either by surgery or by irradiation.

Czechoslovakia J. Pokorny

Meeting on Alkylene Oxide Derivatives

This spring, a meeting of the Czechoslovak Chemical Society took place in Novaky, the location of Czechoslovakia's largest factory of surface-active agents, on the chemistry, analysis, and uses of alkylene oxides and their derivatives.

The most interesting papers dealt with the chemistry of the surface-active substances, e.g. on the effect of alcohol upon the course of oxypropylation (T. Petrus and M. Bleha), on the mechanism of alkali catalyzed reaction of ethylene oxide with fatty acids (M. Bares, et al.), on the polymerization catalyst for ethylene oxide addition (M. Bleha, et al.), and on the manufacture of morpholines as by-products.

In the analytical section, gel chromatographic (J. Coupek, et al.), reversion gas chromatographic (Singliar), and spectrometric (Z. Vavrouch and M. Navratil) methods were discussed. Very good results were obtained with chromatography on cross-linked polystyrene gels. The applications of alkylene oxide derivatives were subjects for several papers.

Meeting on Technology and Analysis of Fats and Oils

This meeting which was sponsored by the Czechoslovak Chemical Society took place in Liblice in May. J. Zajic, with a group of coworkers, presented several papers on the application of computers in fat and oil technology especially in hydrogenation and extraction of oils. E. Mares, et al., discussed rheological and other properties of emulsified interesterified fats in three papers. The subject of another group of papers was the autoxidation of lipids, e.g. methods of evaluation of oxidative stability of lipids (J. Pokorny), destruction of tocopherols during oil processing and storage (N.T. Luan, et al.), changes of heavy metals during refining of oils (M. Karvanek, et al.), mechanism of autoxidation of *cis*-octadec-9-ene derivatives (J. Rzepa), and investigation of oxidation products by IR spectrometry, especially determination of hydroperoxides (H. Parizkova). M. Malenicky, et al., presented a method of refining crude screw pressed oils by centrifugation. In another paper, M. Malenicky reported on the introduction of zero erucic acid rapeseed varieties in Czechoslovakia. How new varieties of flax will lead to linseed oil of improved fatty acid composition was discussed by J. Skalsky. Other papers were presented from various fields of fat technology.

Germany H.K. Mangold

International Rapeseed Conference

More than 350 people from 22 different countries attended the Fourth International Rapeseed Conference held at Giessen in June. The conference was organized by E. von Boguslawski, Giessen, in cooperation with the German Society for Fat Science and the International Council on Rapeseed Research.

The following topics were discussed: breeding and growing of rapeseed; biochemistry of rapeseed oil; nutritional aspects of rapeseed oil, as well as biochemistry and nutritional aspects of rapeseed meal; pests and diseases affecting rape; and marketing of rapeseed and derived products. A total of 85 papers was presented.

In two plenary lectures, K. Loeffler, Bonn, discussed the economic significance of rapeseed for the countries of the European Economic Community, and R.O. Vles, Vlaardingen, gave a thorough, lucid review on the nutritional properties of rapeseed oil.

In recent years, new, superior rapeseed varieties have been introduced both in Europe and in Canada. Rapeseed has become the most important oilseed in the northern temperate zone. This development has led to greater worldwide use of rapeseed oil in foodstuffs containing edible oils. Moreover, rapeseed has continued to contribute substantially to the protein supply of the world both in quantity and quality.

The participants of the congress called upon their governments to sponsor and support further development and production of rapeseed as a vital component of agricultural crop production.

Following the conference, a group of 80 foreign visitors participated in an excursion to northern Germany where a plant breeding station, rape fields, and a food processing plant were inspected.

The conference proceedings will be printed later this year.

Spain E. Vioque

Meeting of Committee on Surface-Active Agents

The fifth meeting of the Spanish Committee on Surface-Active Agents was held in Barcelona in March. Organized by the Comité Espanol de la Detergencia, Tensioactivos y Afines, member of the Comité International des Derives (Continued on page 634A)

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NEW BOOKS

J. F. Gerecht, Book Review Editor

Problems and Their Solution in Organic Chemistry, I.L. Finar (Longman, New York, N.Y., 1973, 359 p., \$7.00)

This is among the best problem books in organic chemistry. The problems are taken from the author's *Textbook of Organic Chemistry*, Vol. I, but it is not essential to have the text to utilize this book. However, if the problems are to be used as a review of organic chemistry, it would be advisable to have a modern organic text available.

The 415 problems follow the classical functional group arrangement of the subject. Only 61 pages are devoted to them but almost 300 pages are devoted to discussions of their solutions. Wherever it serves a useful purpose, alternative solutions to the same problem are given, and the merits of each solution are discussed. Furthermore, in each of the 31 chapters, problems of the same type are grouped together in the "Table of Contents." For example, the chapter on alicyclic chemistry lists problems under the following types: calculations, equations, mechanisms, physical methods, stereochemistry, structure determination, and synthesis.

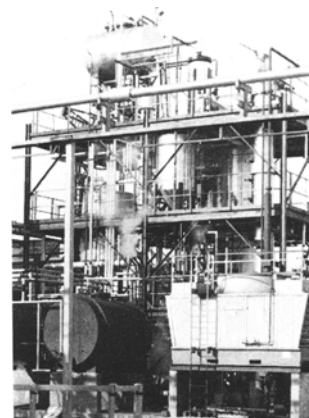
Finally, it should be noted that, although this is an excellent book of its kind, it does carry a high price tag, \$7.00 for a paperback book.

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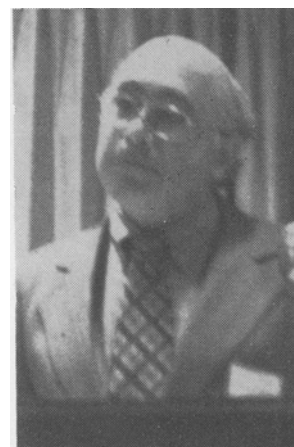


Those attending the special Ladies' Night Meeting included, front row, left to right, Mr. and Mrs. Turiddu Pelloso and Mr. and Mrs. L. Brickman; and back row, left to right, S. Dominik and Mr. and Mrs. J. Marcus.



Dinner at the Ladies' Night Meeting of the AOCS Northeast Section.

Maso addresses Northeast Section meeting



Henry Maso

"Opportunities for Fats and Oils in Cosmetics" was the title of the speech by Henry F. Maso, vice president, technical services and marketing, Amerchol, CPC International, Inc., at the AOCS Northeast Section's Ladies Night.

Maso discussed fats and oils in terms of various aspects of their composition which relate to their utility. Cosmetic vehicles and their performing requirements were reviewed in addition to the marketing opportunities for oily substances in these vehicles. He focused on the most popular types of cosmetics in his address.

Gifts of hair spray provided by Hoffman-La Roche and cologne by Faberge were given to members and guests.

A.M. Rossetto, Jr., L.A. Salomon & Bro., Inc., was chairman of the meeting. ■

**American Chemical Society
offers financial aid
for legal expenses**

A unique program offering financial aid to chemists and chemical engineers to help pay legal expenses in suits involving their careers has been initiated by the American Chemical Society.

Any chemist or chemical engineer who can meet the educational and professional requirements for membership in the ACS and is a litigant or near-litigant in a suit affecting work, employment, or professional status is eligible to apply for a loan to meet legal fees. Nonmembers will be required to pay the ACS a service charge of \$50.

In this legal aid loan program, the ACS generally will lend up to \$2000 at an interest presently set at 6%. With suitable security provided by the applicant, the Society would consider lending up to \$10,000.

Conceived last year by then ACS President Alan C. Nixon, the program was approved in principle by the ACS Board of Directors last fall and was initiated recently following a favorable Internal Revenue Service ruling.

If the loan applicant is an ACS member, he first must have applied to the Council Committee on Professional Relations for help under its member assistance program, and the Committee must have decided that it cannot resolve the problem. Before applying for a loan, a nonmember applicant must provide evidence to the Committee that he or she has pursued the normal avenues of interaction with his or her employer or other party involved in the pending or expected litigation.

Applications must be submitted to the ACS executive director on forms provided by the Society, supplying such information as the nature of the litigation, prior efforts to solve the problem, the need for and the amount of the loan, and proposed arrangements for repaying the loan. Following review and comments, the executive director submits the loan application to the ACS Board. ■

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New treasurer of Soap and Detergent Association named

Frazier M. Hancock, vice president, general manager, Duveen Soap Corporation, was elected treasurer of The Soap and Detergent Association during the Association's recent board of directors meeting in New York. He succeeds Alfred M. Bretschger, FMC Corporation, who recently accepted a new assignment for his company in Belgium. ■

**Society of Cosmetic Chemists
establishes new member class**

The Board of Directors and the membership of the Society of Cosmetic Chemists (SCC) have ratified constitutional changes required to establish a new class of member, "Fellow of the Society." This new membership class is designed to recognize outstanding achievement and leadership.

AOCS member Sol D. Gershon, technical planning director, Lever Brothers, and one of the first SCC members to be elected a "Fellow of the Society," has been named to serve on the Fellow Certification Committee.

The Committee's task is to nominate deserving SCC members to the new membership class. Election is subject to approval by the Board of Directors. ■

Call for Nominations 1975 Honored Student Awards

Nominations are solicited and will be accepted until November 15, 1974, for the 1975 AOCS Honored Student Awards. Graduate students at any North American institution of higher learning, in any area of science dealing with fats and lipids, who are doing research toward an advanced degree and who are interested in the areas of science and technology fostered by this Society, are eligible. The student must be a registered graduate student at the time of application. To receive the award, he must remain a registered graduate student and must not have received his degree or begun career employment prior to the AOCS meeting he is to attend. Selection of awardees is based upon educational qualifications and performance.

The awards provide funds equal to travel costs, plus \$75.00 to permit attendance at a national meeting of the AOCS. In 1975, these meetings will be held April 27-30 in Dallas and September 28-October 2 in Cincinnati. Students will be awarded travel to the nearer meeting to allow as many awards as possible from the available funds.

Nomination forms may be obtained from AOCS Headquarters, 508 S. Sixth St., Champaign, Ill. 61820. Completed nominations should be returned before November 15, 1974, to: James G. Hamilton, HSA Committee Chairman, Department of Biochemistry and Nutrition, Hoffman La Roche, Inc., Nutley, N.J. 07110.

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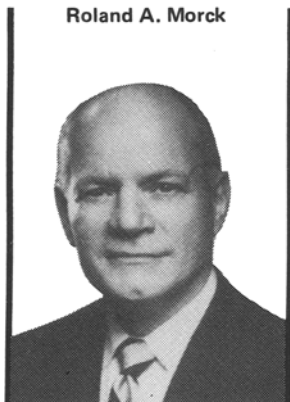
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AOCS members elected officers in Cereal Chemists' Association

AOCS member Roland A. Morck, director of research and development, Nabisco, Inc., Fair Lawn, N.J., has been elected treasurer of the American Association of Cereal Chemists in mail balloting by the Association members.

Morck has been with Nabisco for 19 years and also currently serves as president of Nabisco Astra.

James W. Doty, AOCS member, present of Doty Laboratories, Inc., North Kansas City, Mo., was elected to a 2 year term on the Association's board of directors.

Howard C. Becker, vice president of Flour Research and Technical Services, ConAgra, Inc., Omaha, Neb., was elected president-elect during the balloting.

The newly elected officers will be installed at the Association's 59th Annual Meeting in Montreal, Oct. 20-24. At that time, Francis E. Horan, AOCS member, Archer Daniels Midland Co., Decatur, Ill., will assume the presidency. ■

North Central Section announces 1974-75 program

Recently, the governing board of the North Central Section of the AOCS met to organize the program for 1974-75. The object of the program is to provide the membership, as well as other interested people, with a forum for discussing current topics of interest and to hear technical papers to broaden their background.

The program, in brief, consists of 5 meetings which are scheduled ca. 2 months apart. The five meetings are as follows:

September 11, 1974: Enzymes and Edible Oils, William Allen, Miles Laboratory, Nielsens Restaurant, Mannheim Rd.

November 13, 1974: Double Bonds and Biological Phenomena, Ralph Holman, Hormel Institute, Nielsens Restaurant, North Ave.

January 15, 1975: January Symposium, O'Hare International Hotel, Allen St. Angelo, USDA, Louisiana, Lipid Oxidation in Peanuts and Peanut Products. Winifred Cort, Hoffman La Roche, Cromans, The Novel Antioxidant. James E. Van Meter, Eastman Kodak, Liquid Crystals. Two papers on analytical methods and two papers on processing.

March 19, 1975: Bailey Award, awardee to be announced, Nordic Hills Country Club.

May 21, 1975: Ladies Night, Topic - Cosmetics, Elmhurst Country Club.

Four additional papers are being scheduled for the January Symposium which should cover the areas of fats and oils. The Bailey Award nominations will be requested later this year. The awardee will be announced prior to the fourth meeting. Ladies Night topic will be on the cosmetic industry, and the speaker is to be announced. ■

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Processing services guide published

The *Custom Processing Services Guide* for the chemical processing industries has been published by Roger Williams Technical & Economic Services, Inc., Princeton, N.J.

This compilation, said to be the first in its field, is designed to assist companies in need of any of a variety of processing services in locating qualified processing firms and to prescreen their capabilities with a minimum of time and effort.

The 250-page *Guide* contains detailed profiles of the more than 175 known organizations which regularly offer custom processing services. These profiles include key data such as location, personnel, facilities, unit operations, and processes handled. Separate color-coded indices provide easy cross-references alphabetically, geographically, and by processes.

Copies of the new *Guide* are available at \$150.00 directly from Roger Williams Technical & Economic Services, Inc., 34 Washington Rd., P.O. Box 246, Princeton, N.J. 08540. ■

William Marion named department head

On July 1, 1974, William W. Marion became head of the Department of Food Technology at Iowa State University.

He succeeds Verner H. Nielsen who is relinquishing his administrative duties.

Marion received his masters and Ph.D. degrees from Purdue University and was formerly professor of poultry science in the Animal Science Department at Iowa State University. ■

The Northern California Section of AOCS will hold its fall meeting at the Faculty Club on the University of California, Davis, campus, October 4. The program has been arranged by Lloyd Smith, Department of Food Science and Technology, University of California, Davis.

The day's program will start with registration from 10:30 a.m.—1:30 p.m. with a campus tour via elephant train at 11:00 a.m., followed by a buffet luncheon at 12:30 p.m.

Subjects to be discussed at the technical session from 1:30—4:00 p.m. include: "Lipid Research Programs at University of California, Davis," Bernard Schweigert, chairman, Department of Food Science and Technology; "Nutritional Significance of Food Fortification," Helene Swenerton, extension nutritionist, University of California, Davis; "Fats and Nutritional Labeling," Alan Sheppard, chief, Fats and Energy Section, Food and Drug Administration, Washington, D.C.; and "Oilseed Breeding Programs in California," Bernard Beard, research geneticist, U.S. Department of Agriculture, Davis.

A tour of Sutter's Fort, Sacramento, or shopping in Davis has been arranged for members' spouses not wishing to attend the technical session.

A social hour at 4:00 p.m. and dinner at 5:30 p.m. will complete the day. Marie Feree, extension marketing specialist, University of California, Davis, will discuss "Why the Concerns of the Consumer?"

All AOCS members and other interested persons are invited to attend. A separate mailing of program and reservation forms will be made to members of the Northern California Section. Any others who wish to attend please contact Cameron Lyon, section secretary, Western Regional Research Laboratory, USDA, 800 Buchanan St., Albany, Calif. 94710. ■

Northern California Section to hold fall meeting at Davis

It's Dallas in the Spring



Founded in 1841 on the banks of the Trinity River, Dallas has become the eighth largest city in the U.S. and the center of a six county metropolitan area of over one-and-a-half million people. Dallas is strategically central to the economic region accurately described as the Dallas Southwest—the states of Texas, New Mexico, Oklahoma, Arkansas, and Louisiana. In the southern half of the U.S., east of Los Angeles, Dallas ranks first in manufacturing, employment, wholesale sales, banking, insurance, hotel facilities, postal receipts, and only New York, Chicago, and Los Angeles have more headquarters of million dollar companies.



What promises to be one of the most outstanding spring meetings is taking shape deep in the heart of Texas—Dallas.

The 66th Annual Meeting will be April 27-30, 1975, at the Statler Hilton. Bob Allen is serving as general chairman.

Make your plans to attend.

Thomas H. Smouse, Anderson Clayton & Co., technical program chairman for the 66th Annual Spring Meeting, has announced eight symposia for the Spring Meeting in Dallas.

These symposia and their chairmen are as follows: "Proteins," Carl Cater, Texas A & M University; "Nutrition," Raymond Reiser, Texas A & M University; "HPLC of Lipids and Related Substances," Orville Privett, Hormel Institute; "New Products of Fats and Oils," Francis Luddy, Eastern Regional Research Center; "Lecithin and Other

Emulsifiers," L.D. Williams, Central Soya; "New Processing of Fats and Oils," K.J. Moulton, Northern Regional Research Laboratory; "Analysis and Control of Air and Water Pollutants Related to Fats and Oils"; and "Detection and Determination of Trace Contaminants in Fats and Oils." Chairmen for the last two symposia have not yet been announced.

Symposia papers will be 30 min in length with 20 min being allocated to the general papers. Additional symposia will be announced in the future. ■

Book Exhibits

AOCS 48th Annual Fall Meeting September 29-October 2, 1974 Philadelphia

American Society for Testing and Materials, 1916 Race St., Philadelphia, Pa.

Compilation of Odor and Taste Threshold Values Data-DS 48. This volume contains odor threshold data on 775 compounds and taste threshold data on 435 compounds. It is the first book of its type to be published. Information includes type, modality, media, purity, threshold values, units, molecular weight, Wiswesser Line notation, and literature source.

Bibliography on Liquid Exclusion Chromatography (Gel Permeation Chromatography) AMD 40. This book contains hundreds of references through 1972 and permits systematic access to published works.

AVI Publishing Company, 250 E. State St., P.O. Box 831, Westport, Conn.—Donald K. Tressler

Fish Oils, M.E. Stansby. This book gives comprehensive treatment of fish oils on a world-wide basis. Recent advances in research and new techniques have expanded our knowledge of fish oils greatly, particularly with respect to the chemical and nutritional properties.

Lipids and Their Oxidation, Harold W. Schultz. This review and appraisal of present knowledge of oxidative deterioration of lipids contains 21 papers presented at the second biennial Symposium on Foods arranged by Oregon State University.

Coconuts: Production, Processing, Products, J.G. Woodroof. This book is an attempt to bring together the latest scientific information on coconuts, including varieties, propagation, planting, growing, harvesting, storing, copra manufacture, copra meal in livestock feed, coconut oil recovery, use of coconut oil in toilet soap, etc.

Quality Control for the Food Industry: Fundamentals, Vol. I., A. Kramer and B.A. Twigg. This book covers a section on microbiological methods and includes an entirely new chapter on chromatographic methods. The first part of the book deals with measurements. Methods of measuring sensory attributes of quality are presented.

Quality Control for the Food Industry: Applications, Vol. II, A. Kramer and B.A. Twigg. This book is a reference handbook on analytical and other control procedures that may be used by the practicing quality control analyst or inspector; and it serves as a text for a laboratory course in quality control. It supplements Volume I.

Food Oils and Their Uses, Theodore J. Weiss. This book provides information on fat and oil products and their uses. Processing is stressed, although scientific background is not ignored. All material is presented in a manner which does not require technical training for comprehension.

Cornell University Press, 124 Roberts Place, Ithaca, N.Y.—Michael E. Hamilton

Lipid Biochemistry: An Introduction, M.I. Gurr and A.T. James. This book introduces students to the range of topics related to lipids. The book includes a specific discussion of plant and bacterial fatty acids and complex lipids, as well as proper consideration of current animal lipid biochemistry.

Robert E. Krieger Publishing Co., Inc., P.O. Box 542, Huntington, N.Y.—Robert E. Krieger

Chemical Analysis of Foods and Food Products, Morris B. Jacobs. This standard reference to analytical methods is now thoroughly revised and expanded to include new chapters on radiochemical determination, pesticide residues, and artificial sweetening agents as applied in the development and enforcement of standards of identity, purity, and value.

Surface Chemistry: Theory and Industrial Applications, Lloyd I. Osipow. This first book presents a detailed description of the properties of these agents, both in solutions and as surface films, and contains a thorough discussion of commercial applications of wetting, dispersion and flocculations, emulsions, foams, detergency, ore flotation, lubrication, and corrosion inhibition.

Merck & Co., Inc., Rahway, N.J.—John Lawson

The Merck Index: An Encyclopedia of Chemicals and Drugs, Paul G. Stecher, editor. A complete encyclopedia of virtually all generally known chemical and drug entities is provided. In addition to illustrated chemical descriptions it contains a wealth of reference information for chemists, pharmacists, physicians, biologists, chemical engineers, botanists, veterinary physicians, physicists, students, and others interested in chemical compounds for any reason.

The Pergamon Press, Inc., Maxwell House, Fairview Park, Elmsford, N.Y.—Kathryn A. Muessig

Lipid Analysis, W.W. Christie. This volume surveys the

CALL FOR PAPERS

AOCS 66th Annual Spring Meeting

The Technical Program Committee has issued a call for papers to be presented at the AOCS 66th Annual Spring Meeting, April 27-30, 1975, in the Statler Hilton, Dallas, Tex. Papers on lipids, fats and oils, and all related areas are welcome.

Submit three copies of a 100-300 word abstract with title, authors, and speaker to Thomas H. Smouse, Research Scientist, Anderson Clayton Foods, 3333 N. Central Expy., Richardson, Tex. 75080.

The deadline for submitting papers is December 1, 1974.

current methodology for isolation, identification, and determination of lipid classes and their component parts. The author critically examines literature on lipids and brings together in a systematic manner the best of the procedures that have been developed.

Progress in the Chemistry of Fats and Other Lipids, Volume 13, R.T. Holman. This book is designed to fill a serious gap in the literature of a field in which there is rapid expansion. Each volume contains a number of critical up-to-date surveys of special branches of this subject. Of interest not only to the specialist but also to the chemist, biochemist, and medical scientist interested in lipid chemistry.

Fat-Soluble Vitamins, R.A. Morton. A detailed and comprehensive review of the many different aspects of the science and technology of fat-soluble vitamins is presented. Certain of the topics covered have never been reviewed previously in depth, but, in this book, they are surveyed systematically by specialists in the field.

Biochemical Pharmacology, Rudolph A. Peters, Chairman Editorial Board. This journal provides a forum for the publication of all phases of pure and applied cellular and molecular pharmacology. It includes organochemical, physicochemical, biochemical and cytological studies, as well as short communications, preliminary communications, book reviews, announcements and notices.

Biochemical Systematics, E. Schoffeniels and T. Swain, editors. This journal is devoted to the publication of original articles and occasional invited reviews on the application of biochemistry and chemistry to systematic problems in biology. All classes of organisms susceptible to chemical or biochemical study will be covered, and any type of chemical or biochemical information may be used in demonstrating their phyletic or other interrelationships.

Biorheology: The Official Journal of the International Society of Biorheology, A.L. Copley and G.W. Scott Blair, editors. Biorheology comprises the study of deformation and flow of biological systems or of materials directly derived from living organisms. Provisions are made for publishing articles on descriptions of apparatus and techniques for biorheological studies. Works published in English, French, German, and Russian concerned with processes in the living organism and with materials originating from the organisms.

Journal of Steroid Biochemistry, J.R. Pasqualini and R. Scholler, editors. This journal meets the growing interest in steroid biochemistry by providing an international forum for workers concerned with any aspect of the subject: structure and physicochemical properties, the methodology of their detection and measurement, biosynthesis and catabolism, mechanism of action of steroid hormones at cellular and molecular level, their interaction with other classes of compounds, effect of steroids, microbiological transformation, and comparative endocrinology of steroids.

Life Sciences, B.B. Brodie, Chairman, Editorial Board. This journal provides a medium for the prompt publication of new and significant information in biology. *Life Sciences* publishes full-length papers in English on the results of original research in all branches of the biological sciences for a broad scientific audience. It represents a growing awareness of the value of an integrative approach in the solution of major problems in the life sciences.

Plenum Publishing Corp., 227 W. 17th St., New York, N.Y.—Eleonore Jentsch

Fungal Lipid Biochemistry, J.D. Weete. This volume examines comprehensively the distribution and biochemistry of lipids in fungi. Reviewing the literature to date, the author explores total lipid abundance in fungal cells and cell fractions and the distribution and metabolism of the

major lipid classes as they occur in fungi. In addition there are two contributions by leading specialists on the physiology and ultrastructure of fungal spore formation and germination with particular emphasis on lipids.

Methods in Membrane Biology, Vol. I, E.D. Korn, editor. Volume I discusses the preparation and use of liposome membrane models and describes experimental methods for equilibrium studies with monolayers. Renowned experts explore the reconstitution of mitochondrial membranes and derive a method for the reassembly of all membranes. Included is a report of circular dichroism and absorption studies on biomembranes.

Methods in Membrane Biology, Vol. II, E.D. Korn editor. The second volume discusses the application of nuclear magnetic relaxation measurements to membrane biology and explores the relationship of these measurements to the organization of membrane lipids. Noted scientists examine the isolation and characterization of membrane glycoproteins and glycolipids and provide a succinct account of procedures for the preparation and isolation of "right-side-out" and "inside-out" sealed membrane vesicles. Additionally, this work reports on a sophisticated experimental and mathematical analysis of the kinetics of membrane transport.

The Prostaglandins, Vol. I, P.W. Ramwell, editor. Reflecting the rapid progress in prostaglandin research, world-renowned medical scientists, including Nobel Laureate U.S. von Euler, critically examine recent developments of a wide variety of topics currently generating biomedical interest. The first systematic and interdisciplinary work in this crucial area, Volume I in this major, new treatise focuses on the role of this biogenic agent in regulating and modulating physiological functions.

The Bile Acids: Chemistry, Vol. I, P.P. Nair and D. Kritchevsky, editors. This volume is devoted exclusively to the chemistry of bile acids. It contains chapters by internationally recognized experts on the methodology for their isolation and determination, their mass spectrometry, and their physical chemistry.

The Bile Acids: Physiology and Metabolism, Vol. II, P.P. Nair and D. Kritchevsky, editors. Focusing on significant research on the bile acids and their salts in the last decade, an international team of experts treats the physiological and metabolic aspects of these substances in this volume. In particular, these vital areas are emphasized: the implications of recent studies in the mechanisms of bile acid biogenesis and in the transport of bile salts through the enterohepatic circulation, the response of bile salt metabolism to hormonal and pharmacological stimulation, and the metabolism of bile salts in relation to health and disease.

Practical Liquid Chromatography, S.G. Perry, R. Amos, and P.I. Brewer. Offering a step-by-step guide to practical aspects involved in producing effective separations of lipophilic substances in organic media, this volume provides a thorough background on thin layer techniques and emphasizes new column technology.

Raven Press, 15 W. 84th St., New York, N.Y.

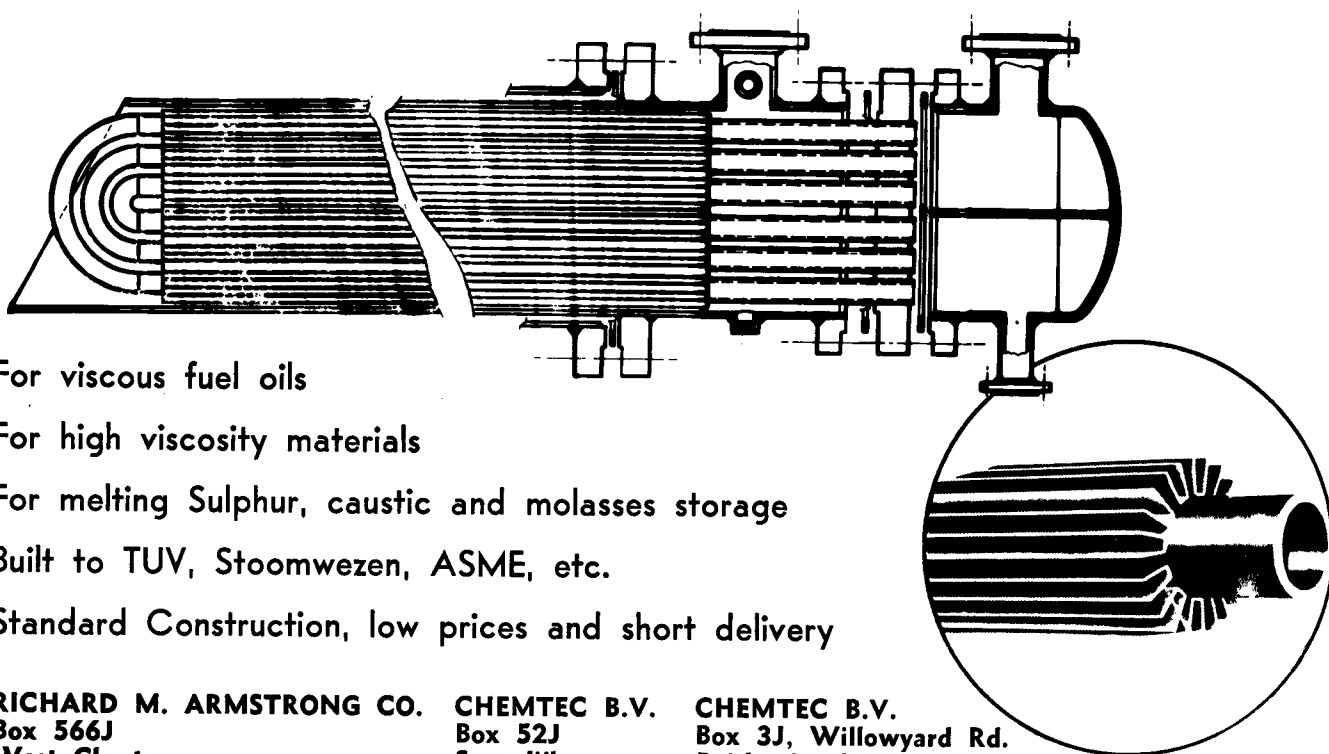
Dietary Lipids and Postnatal Development, C. Galli, G. Jacini, and A. Pecile. This book provides a multidisciplinary account of the problems related to nutritional requirements and the biological roles of dietary lipids during early stages of postnatal development in mammals and, especially, in man. The relevance of lipids and lipid-soluble vitamins to growth emerges from studies carried out with several experimental models and from clinical observations. ■

• **Meetings.**

(Continued from page 612A)

- by The Center for Professional Advancement, Denver, Colo. Contact: Linda Carbonneau-Wussler, Assistant Registrar, The Center for Professional Advancement, 29 Division St., P.O. Box 997, Somerville, N.J. 08876.
- Oct. 3-4, 1974—Sterilization Techniques for Microbiological Control and Sterility Short Course, sponsored by The Center for Professional Advancement, Chicago, Ill. Contact: Linda Carbonneau-Wussler, Assistant Registrar, The Center for Professional Advancement, 29 Division St., P.O. Box 997, Somerville, N.J. 08876.
- Oct. 7-9, 1974—Recent Advances in Separation Techniques Short Course, sponsored by The Center for Professional Advancement, Edison, N.J. Contact: Linda Carbonneau-Wussler, Assistant Registrar, The Center for Professional Advancement, 29 Division St., P.O. Box 997, Somerville, N.J. 08876.
- Oct. 7-9, 1974—21st Canadian Spectroscopy Symposium, Ottawa, Can. Contact: J.L. Dalton, secretary, 21st Canadian Spectroscopy Symposium, Department of Energy, Mines and Resources, Mines Branch, 555 Booth St., Ottawa, Ont. K1A 0G1, Can.
- Oct. 7-11, 1974—First International Working Conference on Stored-Product, Savannah, Ga. Contact: Stored-Product Insects Research and Development Laboratory Box 5125, Savannah, Ga. 31403.
- Oct. 7-11, 1974—Automatic Control and Applications Short Course, sponsored by Leeds & Northrup, Leeds & Northrup Technical Training Center, North Wales, Pa. Contact: D.S. Luppold, manager of Technical Training Center, Leeds & Northrup, North Wales, Pa. 19454.
- Oct. 14, 1974—Annual Joint Association of Official Analytical Chemists/Society of Cosmetic Chemists Symposium, Twin Bridges Marriott Hotel, Washington, D.C. Contact: Jack A. Lawrence, Reheis Chemical Co., 235 Snyder Ave., Berkeley Heights, N.J. 07922.
- Oct. 14-18, 1974—Management Studies for Chemists, Urwick Management Center, Slough, Bucks, England. Contact: Dr. M.D. Robinson, The Chemical Society, Burlington House, London W1V 0BN, England.
- Oct. 21-25, 1974—Liquid Analysis Instrumentation, Control, and Applications Seminar, sponsored by Leeds & Northrup, Leeds & Northrup Technical Training Center, North Wales, Pa. Contact: D.S. Luppold, Manager of Technical Training Center, Leeds & Northrup Co., North Wales, Pa. 19454.
- Oct. 22-24, 1974—Symposium & Exhibit on Recent Developments in Research Methods and Instrumentation, sponsored by National Institutes of Health, National Institutes of Health, 9000 Rockville Pike, Bethesda, Md. Contact: Judith M. Summers, Office of Administrative Services, National Institutes of Health, Building 31, Room 1C-02, Bethesda, Md. 20014.
- Oct. 23-24, 1974—International Technico-Economical Symposium, "Production and Consumption of Chemical Specialties, Multi-purpose Functional Chemicals, Market Directed Chemicals, Performance Products," Brussels-Hilton, Brussels, Belgium. Contact: i.b./c.c. Administration, Nieuwelaan 65, B-1820 Strombeek, Belgium.
- Oct. 28-31, 1974—29th Annual Instrument Society of America's International Conference and Exhibit, New York Coliseum, New York, N.Y. Contact: Mr. Robert G. Hand, Assistant Manager, Publications and Education Services, Instrument Society of America, 400 Stanwix St., Pittsburgh, Pa. 15222.
- Nov. 4-6, 1974—87th Annual Meeting of National Paint and Coatings Association, Hyatt Regency Hotel, Atlanta, Georgia. Contact: Paint Industry Housing Bureau,

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Atlanta Convention and Visitors' Bureau, 229 Peachtree St., N.E., Suite 1414, Atlanta, Ga. 30303.

Nov. 6-9, 1974—52nd Annual Meeting and 39th Paint Industries' Show of Federation of Societies for Paint Technology, Atlanta Civic Center, Atlanta, Ga. Contact: Federation of Societies for Paint Technology, 121 S. Broad St., Philadelphia, Pa. 19107.

Nov. 11-13, 1974—Safety in Chemical Laboratories & Chemical Pilot Plants Short Course, sponsored by The Center for Professional Advancement, S. Plainfield, N.J. Contact: Linda Carbonneau-Wussler, Assistant Registrar, The Center for Professional Advancement, 29 Division St., P.O. Box 997, Somerville, N.J. 08876.

Nov. 11-15, 1974—Solvent Extraction & Ion Exchange Short Course, sponsored by The Center for Professional Advancement, Edison, N.J. Contact: Linda Carbonneau-Wussler, Assistant Registrar, The Center for Professional Advancement, 29 Division St., P.O. Box 997, Somerville, N.J. 08876.

Nov. 14-15, 1974—Sterilization Techniques for Microbiological Control & Sterility Short Course, sponsored by The Center for Professional Advancement, E. Brunswick, N.J. Contact: Linda Carbonneau-Wussler, Assistant Registrar, The Center for Professional Advancement, 29 Division St., P.O. Box 997, Somerville, N.J. 08876.

Nov. 18-22, 1974—First National Meeting of Federation of Analytical Chemists and Spectroscopy Societies, Chalfonte-Haddon Hall, Atlantic City, N.J. Contact: George Heinze, Johnson & Johnson, 501 George St., New Brunswick, N.J. 08816.

Dec. 1-5, 1974—67th Annual Meeting, American Institute of Chemical Engineers, Hilton Hotel, Washington, D.C. Contact: Robert M. Jameson, Federal Power Commission, Room 6112, 825 N. Capitol St., N.E., Washington, D.C. 20426.

Dec. 2-5, 1974—XIX International Dairy Congress, New Delhi, India. Contact: V. Kurien, 123 Vigyan Bhavan Annex, Maulana, Azad Marg, New Delhi 110011, India

Dec. 4-6, 1974—Liquid Chromatography Short Course, sponsored by The Center for Professional Advancement, E. Brunswick, N.J. Contact: Linda Carbonneau-Wussler, Assistant Registrar, The Center for Professional Advancement, 29 Division St., P.O. Box 997, Somerville, N.J. 08876.

Dec. 4-6, 1974—Intra-Science Symposium, "New Ideas in Genetic Disease with Special Reference to Membrane Structure," Miramar Hotel, Santa Monica, Calif. Contact: Ms. Marilyn Cheung, Intra-Science Research Foundation, P.O. Box 430, Santa Monica, Calif. 90406.

Jan. 16, 1975—Food and Your Well-Being II: Annual Symposium on Food Safety, Richard B. Russell Agricultural Research Center, Athens, Ga. Contact: Thota Hamsa, Student Chapter of IFT, Department of Food Science, University of Georgia, Athens, Ga. 30602.

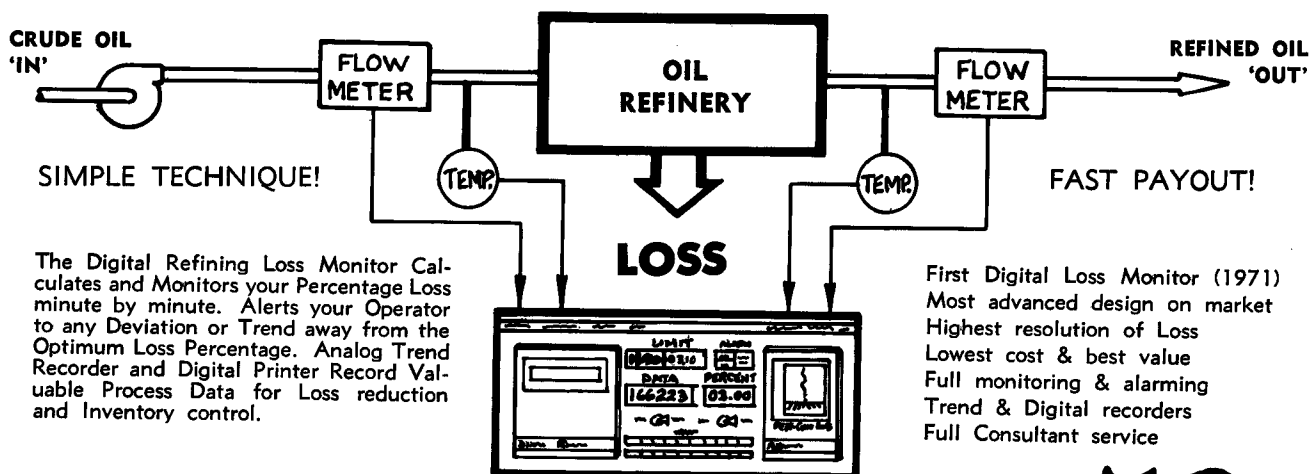
Mar. 3-7, 1975—Twenty-sixth Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy, Cleveland Convention Center, Cleveland, Ohio. Contact: Peter M. Castle, 1975 Pittsburgh Conference, Building 401, Room 4A31, Westinghouse Research Laboratories, Beulah Rd., Pittsburgh, Pa. 15235.

April 14-18, 1975—Labex International 75, sponsored by UTP Exhibitions Ltd., Earls Court, London, England. Contact: Bevan M. Gilpin, Labex International 75, UTP Exhibitions Ltd., 121 King St., London, W6 9JG, England.

May 4-8, 1975—2nd National Conference on Complete Waste Reuse, "Water's Interface with Energy, Air, and Solids," American Institute of Chemical Engineers, Pal-

(Continued on page 635A)

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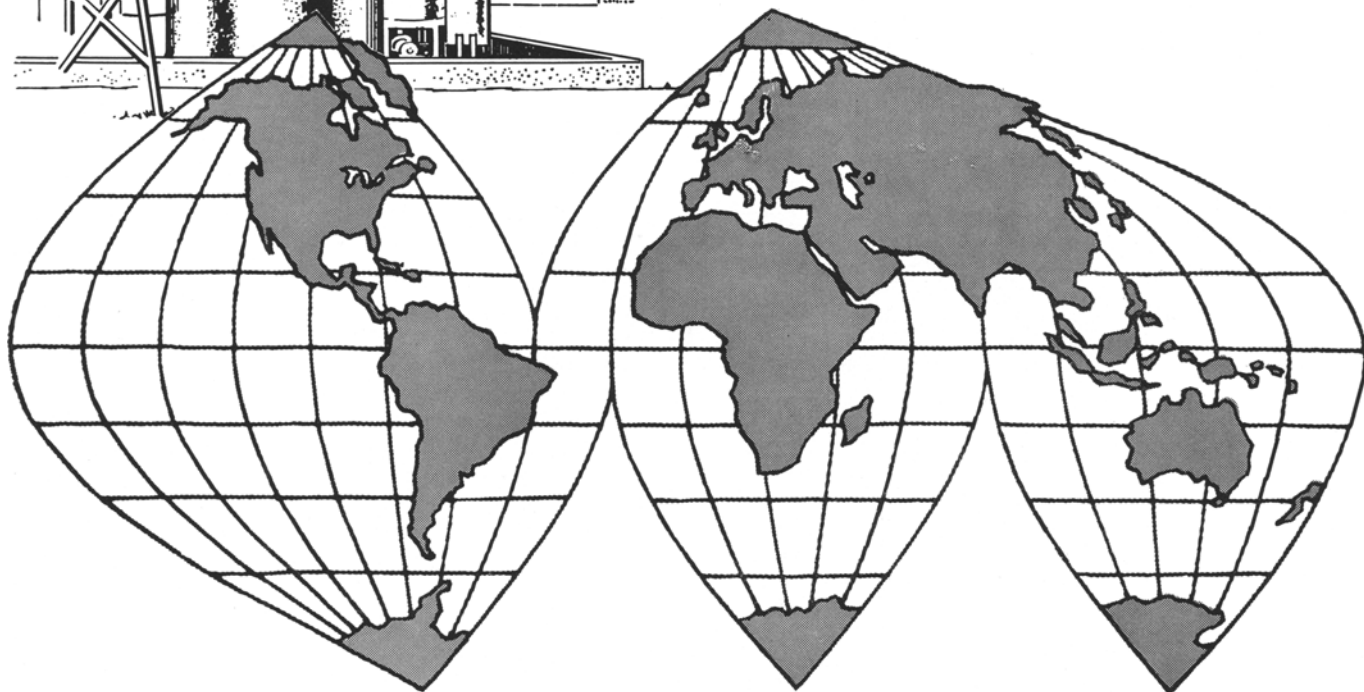
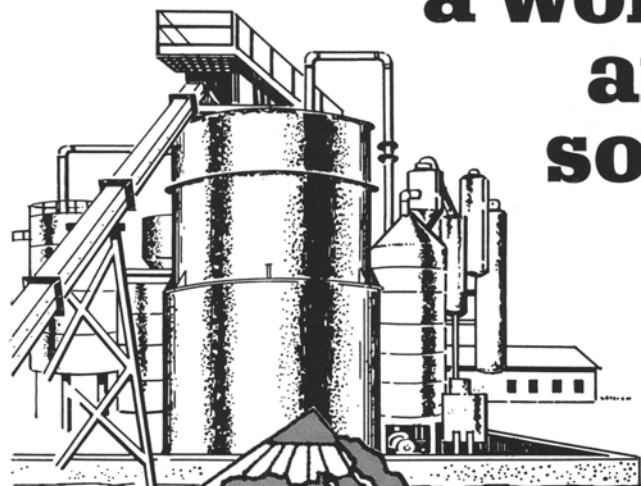
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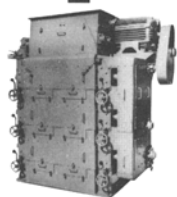


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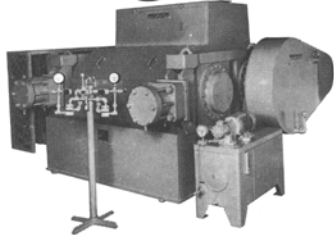
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• Four Corners. . . (Continued from page 622A)

Tensioactifs, C.I.D. with the collaboration of the Patronato Juan de la Cierva for Scientific and Technical Research, the meeting included the following program:

General lectures: "Considerations on the Use of Irreplaceable Natural Resources," was discussed by F. Doussinague (Petroquímica Española, S.A.). M. Hernandez Balonos (Laboratorio Control de Aduanas) discussed "Necessity of Chemical, Physical, and Biological Controls for Surface-Active Agents."

Specific topics: Under the heading of "Essays on Detergency: Washing Efficiency," the following were presented: "The International Normalization of Methods of Essay," L. Marcou (Montanoir); "Contribution to the Definition of a Method for Statistic Evaluation of Washing Agents on Textile Fibers," M. Ph. Galbrun (Sandoz A.G.); "Essays on Domestic Detergents—An Approach to Practical Situations," W.A.C. Brown and J.P. Ferrandis (Procter and Gamble España, S.A.); "Detergency in Water—Solvent Two Phase Systems," S.V. Vaecck (Ministere des Affaires Economiques-Belgium); "Colorimetric Evaluation of Washing Effects," R. Griesser (Ciba-Geigy, S.A.); "Influence of Light on Optical Brightening Effectiveness," K. Dieter-Bode (Bayer, A.G.); "Analytical Evaluation of Fluorescent Whitening Agents," P. Latini (Sigma spa); and "Un Mariage de Raison: Le Detergent et son Parfum," A. Slagmulder (U.O.P. Fragrances).

Another general topic of discussion was softeners agents.

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Papers in this area included: "Talking about Fabric Softeners," K. Smith (Armour Hess Chemistry Ltd.); "Prevention of Coacervation Between Anionic Fluorescent Dyes and Cationic Softeners with Aethoxylated Quaterharies," T. Sato and M. Katsumi (Sinorkao, S.A.); and "Recent Developments in the Manufacture and Use of Quaternary Softening Agents," Dr. Inglis (Rewo Chemische Fabrik GmbH).

"Detergents on Cosmetics" was the third topic of discussion. Under this category, the following were presented: "Studies of Marketing for the Launching of a New Foaming Bath Product," H.O. Schmidt (Haarmann and Reimer, S.A.E.); "Amphoteric Surfactants, Their Physicochemical Properties and their Use in the Cosmetic Industry," R. Hutteringer (Th. Goldschmidt, S.A.); "Theoretical Aspects of Emulsion Technology Applied to the Cosmetic Industry," I. Gonzalez (Atlas Chemical Corporation); "Anaerobic Microorganisms: Their Influence in the Alteration of Surfactants," J.B. Urgell (Lamirsa, S.A.); and "Recent Techniques in the Formation of Cosmetic and Make-up Products," D. Connor (Albright and Wilson, Ltd., Marchon Division).

The proceeding of the Meeting, including all communications and discussions, was published recently.

National Congress of Microbiology

The National Congress of Microbiology met last fall in Granada.

After a brief introduction of Dr. Montoya, vice president, Organizing Committee, Dr. Vazquez, president, Spanish Society of Microbiology, gave the inaugural lecture.

As a part of the scientific program, there was a symposium, with three sessions on "Microbian Genetic," with Drs. Cerda, Montoya, and Vazquez as chairmen. Of special interest were the lectures on "Transformations in Prokaryotes" and "Regulation of the Syntosis of the Cell Wall and Exocell Enzymes in Yeasts" given by Drs. Canovas and Sentandren, respectively.

All the papers presented were gathered in the following sections: "Microbian Structure and Physiology," "Taxonomy and Ecology of Microbes," "Microbian Genetics," "Microbiology of Infections," "Antibiotics and Other Antimicrobial Substances," and "Virology, Immunology, and Applied Microbiology."

The Fat Institute and Derivative of Seville was represented by M.C. Duran with the paper "The Yeast in the Riped Black Olives Fermentations in Brize." ■

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The Instrument Society of America recently published the fourth edition of *Standards and Practices for Instrumentation* edited by G.F. Harvey. Updated and expanded, the new edition serves as a one source reference to instrumentation and control standards developed by national and international standards organizations.

The book is divided into three sections. Section I contains abstracts of 700 standards published by 76 U.S. standards writing bodies and titles of 160 international standards. Section II provides a comprehensive subject index to all abstracts and titles, and Section III offers the reader full texts of 40 current Instrument Society of America standards and recommended practices.

The book may be order from: Instrument Society of America, Publications Department, 400 Stanwix St., Pittsburgh, Pa. 15222. Book purchasers in Europe should address their orders to: John Wiley & Sons Ltd., Baffins Lane, Chichester, Sussex POL9 1UD, England. ■