

Meetings

AOCS National Meetings

Sept. 16-19, 1973-Chicago, Ill., Pick Congress Hotel.Apr. 28-May 1, 1974-Mexico City, Mexico, Maria Isabel Sheraton Hotel, Aristos Downtowner.

Sept. 29-Oct. 2, 1974-Philadelphia, Pa., Sheraton Hotel. Apr. 27-30, 1975-Dallas, Tex., Statler Hilton.

Sept. 28-Oct. 1, 1975-Cincinnati, Ohio, Netherland Hilton.

AOCS Conference

June 17-20, 1973-Analysis of Lipids and Lipoproteins, Ramada Inn, Champaign, Ill. Contact: James Lyon, Executive Director, 508 S. Sixth, Champaign, Ill. 61820.

Other Organizations

- June 3-6, 1973-American Institute of Chemical Engineers 75th National Meeting, Detroit Hilton and Sheraton Cadillac Hotels, Detroit, Mich. Contact: F.J. Van Antwerpen, executive secretary, AIChE, 345 East 47th St., New York, N.Y. 10017.
- June 4-6, 1973-56th Canadian Chemical Conference and Exhibition, Chemical Institute of Canada, Queen Elizabeth Hotel, Montreal. Contact: CIC, 151 Slater St., Rm. 906, Ottawa, Ont. K1P 5H3, Can.
- June 5-6, 1973-First National Polymer Characterization Conference, New York, N.Y. Contact: William A. Kulok, NYU, 600 Third Ave. 37 NR, New York, N.Y. 10016.
- June 7-8, 1973-Study Days on Modification of Structure, Contamination and Environment, Association Francaise pour l'Etude des Corps Gras, University of Provence, Marseille. Contact: M.-Th. Juillet, secretary general, Societe de Chimie Industrielle, 80, Avenue du 18 Juin 1940, 92500 Rueil-Malmaison, Paris, France.
- June 10-13, 1973-33rd Annual Meeting of the Institute of Food Technologists, Miami Beach Convention Hall, Miami Beach, Fla. Contact: E.H. Hoffman, IFT, Suite 2120, 221 N. LaSalle, Chicago, Ill. 60601.
- June 11-15, 1973-Short Course on Use of Radioisotopes (Special Feature: Liquid Scintillation Counting), Liverpool Polytechnic, Liverpool, U.K. Contact: Head, Chemistry Dept., Liverpool Polytechnic, Byrom St., Liverpool, L3 3AF, U.K.
- June 11-15, 1973-Gordon Research Conference on Lipid Metabolism, Kimball Union Academy, Meriden, N.H. Contact: Alexander M. Cruickshank, director, Gordon Research Conferences, Pastore Chemical Lab., University of Rhode Island, Kingston, R.I. 02881.
- June 11-15, 1973-Short Course on Advances in Emulsion Polymerization and Latex Technology, Lehigh University, Bethlehem, Pa. Contact: Gary Poehlein, Dept. of Chemical Engineering, Lehigh University, Bethlehem, Pa. 18015.
- June 18-20, 1973-Seventh General Assembly of the International Union of Independent Laboratories, Wiesbaden, Germany. Contact: A. Herzka, Ashbourne House,

- Alberon Gardens, London, NW11 OBN, United Kingdom.
- June 18-23, 1973-First Perfumery and Cosmetics Industries Intertrade Show, Parc des Expositions, Porte de Versailles, Paris, France. Contact: SIPEC, 80 Route de Saint-Cloud, 92500 Rueil-Malmaison, Paris, France.
- June 19-20, 1973-First National Joining Plastics Conference, New York. Contact: William A. Kulok, NYU, 600 Third Ave. 37 NR, New York, N.Y. 10016.
- June 19-23, 1973-Eastbourne Conference "Towards 2000," Grand Hotel, Eastbourne, United Kingdom. Contact: Oil and Colour Chemists' Association, Wax Chandlers' Hall, Gresham Street, London EC2V 7AB (01-606 1439), United Kingdom.
- June 20-27, 1973-Alchema '73 and the European Meeting of Chemical Engineering, Frankfurt/Main, Germany.
- June 25-26, 1973-First National Urethane Conference, New York. Contact: William A. Kulok, NYU, 600 Third Ave. 37 NR, New York, N.Y. 10016.
- June 25-29, 1973-MIT Summer School Program on Enzymes and Their Use in Analysis and Clinical Diagnosis, Massachusetts Institute of Technology, Cambridge, Mass. Contact: Director of the Summer Session, Rm. E19-356, MIT, Cambridge, Mass. 02139.
- June 27-28, 1973-Understanding Plastics, New York University. Contact: William A. Kulok, NYU, 600 Third Ave. 37 NR, New York, N.Y. 10016.
- July 1-7, 1973-International Union of Biochemistry Ninth International Congress of Biochemistry, Stockholm International Fairs and Activity Center, Stockholm, Sweden. Contact: The Secretariat, Ninth International Congress of Biochemistry, c/o Svenska Kemstsamfundet, Wenner-Gren Center, 6 tr, S-113 46 Stockholm, Sweden.
- July 2-6, 1973-Second Conference of the Association Internationale de la Couleur, University of York, England
- July 9-13, 1973-Principles of Polymer Science and Technology, Barbizon-Plaza Hotel, New York. Contact: William A. Kulok, program director, 600 Third Ave. 37 NR, New York, N.Y. 10016.
- July 9-13, 1973-Short Course on Dispersions of Pigments and Resins in Organic and Aqueous Media, Kent State University, Kent, Ohio. Contact: Carl J. Knauss, Chemistry Dept., Kent State University, Kent, Ohio 44242.
- July 16-20, 1973-Decorating Plastics, Barbizon-Plaza Hotel, New York. Contact: William A. Kulok, program director, 600 Third Ave. 37 NR, New York, N.Y. 10016.
- July 17-20, 1973-XVIth International Conference on the Biochemistry of Lipids, University of Nottingham, Nottingham. Contact: D.N. Brindley, Dept. of Biochemistry, University of Nottingham Medical School, Nottingham NG7 2RD, England.
- July 17-28, 1973-NATO Advanced Study Institute on Generic Techniques in Systems Reliability Assessment, University of Liverpool, Liverpool, U.K. Contact: E.J. Henley, University of Houston, Houston, Tex. 77004.
- July 22-28, 1973-Fifth Inter-American Congress of Chemical Engineering, Rio de Janeiro, Brazil. Contact: Jean-Michel Charrier, Dept. of Chemical Engineering, McGill University, Box 6070, Montreal 101, Can.
- July 23-27, 1973-Blow Molding Principles and Practices, Barbizon-Plaza Hotel, New York. Contact: William A. Kulok, program director, 600 Third Ave. 37 NR, New York, N.Y. 10016.
- July 25-26, 1973-Understanding Plastics, New York University. Contact: William A. Kulok, NYU, 600 Third Ave. 37 NR, New York, N.Y. 10016.
- Aug. 6-10, 1973-Fundamentals of Plastics, Barbizon-Plaza Hotel, New York. Contact: William A. Kułok, program director, 600 Third Ave. 37 NR, New York, N.Y. 10016.

- Aug. 12-17, 1973-ISA Short Courses on Process and Environmental Analytical Instrumentation and on Sampling and Sample Systems for Process and Environmental Instrumentation, Temple Buell College, Denver, Colo. Contact: Instrument Society of America, Education Dept., 400 Stanwix St., Pittsburgh, Pa. 15222.
- Aug. 13-17, 1973-Extrusion Principles and Practices, Barbizon-Plaza Hotel, New York. Contact: William A. Kulok, program director, 600 Third Ave. 37 NR, New York, N.Y. 10016.
- Aug. 20-24, 1973-Injection Molding Principles and Practices, Barbizon-Plaza Hotel, New York. Contact: William A. Kulok, program director, 600 Third Ave. 37 NR, New York, N.Y. 10016.
- Aug. 27-29, 1973-National Soybean Processors Association Annual Meeting, Tan-Tar-A Resort & Golf Club, Osage Beach, Mo. Contact: Robert Wilbur, 1225 Connecticut Ave., N.W., Washington, D.C. 20036.
- Aug. 27-31, 1973-Introduction to Foams, Barbizon-Plaza Hotel, New York. Contact: William A. Kulok, program director, 600 Third Ave. 37 NR, New York, N.Y. 10016.
- Aug. 27-31, 1973-Short Course and Computer Workshop: Reliability Technology Theory and Practice, University of Houston, Tex. Contact: E.J. Henley, University of Houston College of Engineering, Houston, Tex. 77004.
- Sept. 2-7, 1973-Instituto Tecnologico Metalurgico "Emilio Jimeno" First International Congress on Mercury, University of Barcelona, Barcelona, Spain. Contact: Primer Congreso Internacional del Mercurio, Instituto Tecnologico Metalurgico "Emilio Jimeno" de la Facultad de Ciencias, Universidad de Barcelona. Barcelona, 14, Spain.
- Sept. 4-14, 1973-ISO-USA-1973, Ninth Triennial Meeting of the International Organization for Standardization, Sheraton-Park Hotel, Washington, D.C. Contact: Dean Maskevich, American National Standards Institute, Inc., 1430 Broadway, New York, N.Y. 10018.
- Sept. 9-12, 1973-Fourth Joint Meeting of the Canadian Society for Chemical Engineering and the American Institute of Chemical Engineers, Hotel Vancouver, Vancouver, B.C. Contact: CSChE, 151 Slater St., Rm. 906, Ottawa, Ont. K1P 5H3, Can.
- Sept. 10-12, 1973-Course on Noise Control in Manufacturing Plants, Chicago. Contact: Gloria Cianci, Bolt Beranek and Newman Inc., 50 Moulton, Cambridge, Mass. 02138.
- Sept. 10-13, 1973-International Microwave Power Institute Eighth Annual Microwave Power Symposium, Loughborough University of Technology. Contact: (Americas and Asia) R.A. Peterson, Raytheon Co., Microwave and Power Tube Division, Foundry Ave., Waltham, Mass. 02154; (Europe) R.B. Smith, School of Electrical and Electronic Engineering, University of Bradford, Bradford 7, Yorkshire, United Kingdom.
- Sept. 23-26, 1973-National Forum on "Growth with Environmental Quality?" Assembly Center, Tulsa, Okla. Contact: Bruce Carnett, manager, public relations, Metropolitan Tulsa Chamber of Commerce, 616 S. Boston Ave., Tulsa, Okla. 74119.
- Sept. 24-26, 1973-Course on Noise Control in Manufacturing Plants, New York. Contact: Gloria Cianci, Bolt Beranek and Newman Inc., 50 Moulton, Cambridge, Mass. 02138.
- Sept. 25-28, 1973-FILTECH 73 (International Filtration and Separation Exhibition), Olympia Hall, London, U.K. Contact: F. Wells, Shoemaker, Eaton-Dikeman, P.O. Box 126, Mount Holly Springs, Pa. 17065.
- Sept. 27-29, 1973-Third International Symposium: Metal-Catalyzed Lipid Oxidation, Institut des Corps Gras, Association Francaise des Techniciens des Corps Gras and Ecole Superieure d'Application des Corps Gras,

- Paris, France. Contact: ITERG, 5 Boulevard de Labour-Maubourg, 75007 Paris, France.
- Oct. 9-12, 1973-Association of Official Analytical Chemists 87th Annual Meeting, Marriott Hotel, Twin Bridges, Washington, D.C. 20001. Contact: L.G. Ensminger, executive secretary, AOAC, Box 540, Benjamin Franklin Station, Washington, D.C. 20044.
- Oct. 15-18, 1973-28th Instrument Society of America International Conference and Exhibit, Astrohall, Houston, Tex. Contact: Diane R. Schaffler, ISA, 400 Stanwix, Pittsburgh, Pa. 15222.
- Oct. 16-19, 1973-10th (Jubilee) Symposium on Colouristics, Eger, Hungary. Contact: Hungarian Chemical Society, 1368 Budapest 5, P.O. Box 204, Hungary.
- Oct. 23-25, 1973-Course on Noise Control in Manufacturing Plants, Memphis. Contact: Gloria Cianci, Bolt Beranek and Newman Inc., 50 Moulton, Cambridge, Mass. 02138.
- Oct. 24-25, 1973-Symposium on Environmental Chemistry: Know-How and Chemicals in 1973-78, Brussels, Belgium. Contact: i.b./c.c. Administration, Nieuwelaan 65, B-1820 Strombeek, Belgium.
- Oct. 25-28, 1973-Third International Symposium on Atherosclerosis, Kongresshalle, West Berlin, Germany. Contact: Kongressgesellschaft für arztliche Fortbildung e.V., 1 Berlin 41, Wrangelstrasse 11-12, Germany.
- Oct. 29-Nov. 2, 1973-Fourth International Conference on Atomic Spectroscopy, Toronto, Ont., Can.
- Nov. 5-7, 1973-Course on Noise Control in Manufacturing Plants, Miami. Contact: Gloria Cianci, Bolt Beranek and Newman Inc., 50 Moulton, Cambridge, Mass. 02138.
- Nov. 11-15, 1973-American Institute of Chemical Engineers 66th Annual Meeting, Bellevue Stratford Hotel, Philadelphia, Pa. Contact: F.J. Van Antwerpen, executive secretary, AIChE, 345 East 47th St., New York.
- Nov. 14-16, 1973-Joint Eastern Analytical Symposium and National Meeting of Society for Applied Spectroscopy, Statler-Hilton Hotel, New York. Contact: Michael W. Miller, NL Industries, P.O. Box 420, Hightstown, N.J. 08520.
- Nov. 14-17, 1973-51st Annual Meeting and 38th Paint Industries' Show, Conrad Hilton Hotel, Chicago, Ill. Contact: Dennis A. Bergren, De Soto, Inc., 1700 South Mt. Prospect Rd., Des Plaines, Ill. 60018.
- Nov. 19-21, 1973-Symposium on Water Quality Parameters-Selection, Measurement and Monitoring, Analytical Chemistry Div., Chemical Institute of Canada, Burlington, Ont., Can. Contact: S. Barabas, Analytical Methods Research Div., Canada Centre for Inland Waters, Burlington, Ont., Can.
- Dec. 10-12, 1973-Second Joint Conference on Sensing of Environmental Pollutants, Sheraton-Park Hotel, Washington, D.C. Contact: Philip N. Meade, Instrument Society of America, 400 Stanwix St., Pittsburgh, Pa. 15222.
- May 1-2, 1974-International Symposium on Flammability and Fire Retardants, Parkway Hotel, Cornwall, Ont., Can. Contact: Vijay Mohan Bhatnagar, editor, Advances in Fire Retardants, 209 Dover Rd., Cornwall, Ont., Can.
- May 5-8, 1974—Sixth Annual Offshore Conference, Astrohall, Houston, Tex. Contact: Stan R. Houston, 6200 N. Central Expressway, Dallas, Tex. 75206.

HAHN LABORATORIES

Consulting and Analytical Chemists

1111 Flora St. P.O. Box 1177 Columbia, S.C. 29202

ABSTRACTS R.A. REINERS, Editor. Abstractors: IN.E. Deuniarcyk, J.E. Cov. S.F. Herb, F.A. Kummerow, Biserka Matijasevic and E.G. Perkins R.A. REINERS, Editor. Abstractors: N.E. Bednarcyk, J.E. Covey, J.C. Harris,

Fats and Oils

THE AUTOCATALYTIC FAT-SPLITTING PROCESS. F. Crespo (Inst. Nacional de Tecnol. Indust., Buenos Aires, Argentina). Seifenöle-Fette-Wachse 99(3), 55-57 (1973). The author discusses the theory of the fat-splitting process and reports trials with beef tallow. Cited is the formation of glycerin, diglycerides and monoglycerides.

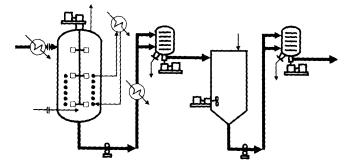
CHEOMATOGRAPHIC ANALYSIS OF ROSIN PART IN CANDELILLA WAX. J.C. Morales and G. Torres E. (Mexican Inst. of Technol. Invest., A.C., Anal. Central Lab., Calzada Legaria No. 694, Mexico (10) D.F.). Seifen-öle-Fette-Wachse 99(1), 17-20 (1973). Qualitative and quantitative analyses of the resinous part of candelilla wax by means of thin-layer chromatography demonstrate that 15-18% of the wax is resinous. It is composed of esterified triterpenes and tetra- and penta-cyclenes.

HEATS OF HYDROGENATION. IX. CYCLIC ACETYLENES AND SOME MISCELLANEOUS OLEFINS. R.B. Turner, A.D. Jarrett, P. Goebel and B.J. Mallon (Dept. of Chem., Rice Univ., Houston, Tx. 77001). J. Amer. Chem. Soc. 95, 790-2 (1973). The heats of hydrogenation in acetic acid solution at 25C of octyne-4, cyclocetyne, cyclononyne, cyclodecyne, cycloundecyne, cyclodecyne, and cyclotetradecadiyne-1,8 have been determined. Results for 16 miscellaneous olefins are also reported.

PREPARATION AND FRACTIONATION OF THE HIGH MELTING GLYCERIDE FRACTION OF MILK FAT. J.W. Sherbon and R.M. Dolby (New Zealand Dairy Res. Inst., Palmerston North, New Zealand). J. Dairy Sci. 56, 52-60 (1973). High melting glyceride (HMG) was prepared from anhydrous milk fat and from a commercially prepared hard fraction of a different milk fat. The latter glyceride was further fractionated by progressive



VOTATOR Batch **Hydrogenation** System



- For the selective hydrogenation of edible fats and oils.
- Automatic control of process variables Reaction heat control (patent pending) Safety features and interlocks. Remote control.
- · Operating flexibility. Built-in repeatability.
- Efficient use of gas and catalyst.

Write to: **Votator Division** Chémetron Corporation P. O. Box 43 Louisville, Kentucky 40201



crystallization from acetone. The first precipitation of HMG reduced the softening point of the supernatant fat to about 18C, primarily be eliminating fats melting above 20C. The melting properties of the supernatant to the recrystallization of HMG depended upon the source of fat. That from anhydrous milk fat had a limited melting range whereas that from the hard fraction had an extended melting range.

SOME UNUSUAL VOLATILE CARBONYL COMPONENTS OF POTATO CHIPS. R.G. Buttery (Western Reg. Res. Lab., ARS, USDA, Berkeley, Cal. 94710). J. Agr. Food Chem. 21, 31-33 (1973). Combined capillary gas chromatography-mass spectrometry analysis of the earbonyl fraction of the volatile oil of potato chips detected a number of unusual aldehydes which were shown to be 4-methylpent-2-enal, 4-methylhex-2-enal, 2-isosnown to be 4-methylpent-2-enal, 4-methylnex-2-enal, 2-iso-propylbut-2-enal, 2-methylmercaptomethylbut-2-enal, 2-methylmercaptomethyl-4-methylpent-2-enal, 2-phenyl-4-methylpent-2-enal and 2-phenyl-5-methylhex-2-enal. These compounds are probably formed in the potato chips during the frying by aldol-type condensations. Other compounds also characterized included 2-methylhexa-4,5-dione, acetophenone, hepta-trans,-trans-2,4-dienal, and octa-trans,trans-2.4-dienal.

CHARACTERIZATION OF LIPIDS FROM SEEDS OF THE ROSACEA FAMILY. T. Gutfinger, S. Romano and A. Letan (Dept. of Food Eng. Biotech., Technion-Israel Inst. of Tech., Haifa, Israel). J. Food Sci. 37, 938-40 (1972). Apricot and peach kernels are by-products in the canning and fruit drying industry. The oil from almond kernel is used in various cosmetic products and pharmaceuticals; also oils extracted from kernels of apricot and peach are sometimes used for the same purposes. Data are available on the fatty acid composition of the different Prunus species, but no data are available on the fatty acid composition of the Prunus species cultivated in Israel. Sterol and tocopherol composition was reported only for almond oil; no data are available on sterol and tocopherol composition of the apricot and peach oils. Recently the canning of apricots and peaches in this country increased very appreciably. It was of interest therefore to find possible uses for oils from kernels of apricots and peaches (also substitutes for almond oil). An investigation of compositions of all three oils was thus undertaken. It is also worth mentioning that the prices of apricot and peach seeds (kernels) are much lower than those of almond seeds.

SURFACE AREAS OF NATURALLY OCCURRING LIPID CLASSES AND THE QUANTITATIVE MICRODETERMINATION OF LIPIDS. L.I. Burke, Gajanan S. Patil, R.V. Panganamala, J.C. Geer and D.G. Cornwell (Depts. of Physiol. Chem. and Pathol., Ohio State Univ., Columbus, Ohio 43210). J. Lipid Res. 14, 9-15 (1973). The surface area (A) of a lipid was directly proportional to the amount of lipid in a surface flux (A). the amount of lipid in a surface film (A = k μ moles) measured at constant surface pressure, temperature and subphase composition. A surface area of 2300 cm²/µmole was obtained for cholesterol isolated from human adrenal and aorta and for cholesterol from hydrolysates of cholesteryl esters isolated from the same tissues. Unsaturated methyl esters that contained from one to four cis double bonds had the same surface area, 39.4 Å²/molecule. As a consequence, naturally occurring triglyceride mixtures which had similar saturated-unsaturated fatty acid ratios had the same surface area, 6090 cm²/ μ mole. Naturally occurring phospholipid mixtures had the same surface area, 4590 cm²/µmole, and it appeared that the composition of these mixtures was regulated to control the physical properties of the mixtures. Surface area was much more sensitive than colorimetric procedures for the estimation of cholesterol and triglycerides. The surface area/molecule was a criterion of purity and an expanded surface area/molecule was an indication of autoxidation. Thus, surface area measurements were valuable for both the microdetermination and the characterization of lipid classes.

KINETICS OF THE PROCESSES OF DESORPTION FROM FATTY ACID MONOLAYERS. G.S. Patil, R.H. Matthews and D.G. Cornwell (Dept. of Physiol. Chem., Ohio State Univ., Columbus, Ohio 43210). J. Lipid Res. 14, 26-31 (1973). The surface area, A, of contracting fatty acid monolayers was measured as a function of time, t, at constant surface pressure. In the initial temporal phase, $\ln A$ was linear with $t^{1/2}$. In a subsequent steady-state phase, $\ln A$ was linear with t. The initial de-