Meetings

AOCS National Meetings

Sept. 24–28, 1972—Ottawa, Canada, Chateau Laurier Hotel, Holiday Inn.
April 29–May 3, 1973—New Orleans, La., Jung Hotel.

Other Organizations

May 3–5, 1972—ACS Regional Meeting, Pittsburgh, Pa.
May 8–10, 1972—Instrument Society of America CHEMPID Symposium: "The Safety Factor and Its Influence on Operating Margin," Marriott Motor Hotel, Philadelphia, Pa.
May 11–20, 1972—Short Courses on "Chromatography Lab Automation" and "High Sensitivity Gas Chromatography," Washington University School of Continuing Professional Education, St. Louis, Mo.
May 21–24, 1972—Annual Meeting of the Institute of Food Technologists, Minneapolis Auditorium and Convention Hall, Minneapolis, Minn.
June 5–7, 1972—55th Canadian Chemical Conference and Exhibition of The Chemical Institute of Canada, Laval University, Quebec.
June 5–13, 1972—Short Course on the "Fundamentals of Lipid Chemistry," AOCS and Centro de Estudos de Bioquimica, Espinto and Porto, Portugal.
June 12–14, 1972—Third International Congress on Advances in Automated Analysis, Technicon Corporation, New York Hilton Hotel, New York.
June 12–16, 1972—Short Course on "Advances in Emulsion Polymerization and Latex Technology," Lehigh University, Bethlehem, Pa.
June 12–17, 1972—First International Meeting, "Pollution: Engineering and Scientific Solutions," Society of Engineering Science, Tel-Aviv University, Tel-Aviv, Israel.
June 18–22, 1972—Congress of the International Society for Fat Research, Goteborg, Sweden.
June 18–22, 1972—76th Annual Conference of the Association of Food and Drug Officials of the U.S., Kutsher's Country Club, Monticello, N.Y. Contact: K.A. Silver, 850 Third Ave., Rm. 700, Brooklyn, N.Y.
June 19–22, 1972—65th Annual Meeting and Exposition, Air Pollution Control Association, Hotel Fontainebleau, Miami Beach, Fla.
June 19–23, 1972—Symposium on "Lipid Metabolism," Kimball Union Academy, Meriden, N.H.
July 10–14, 1972—1972 Program in Color Technology at Rensselaer, "Principles of Color Technology," Rensselaer Polytechnic Institute, Troy, N.Y. Contact: Office of Continuing Studies, Rensselaer Polytechnic Institute, Troy, N.Y. 12181.
July 23–28, 1972—Instrument Society of America Research Conference on Instrumentation Science, Hobart and William Smith Colleges, Geneva, N.Y.
July 25–29, 1972—Fifth International Sunflower Conference, Clermont-Ferrand, France.
August 14–17, 1972—III Inter-American Conference on Materials Technology, Copacabana Palace Hotel, Rio de Janeiro, Brazil. Contact: I.A.C.M.T.—Travel Planners, Box 32366, San Antonio, Tex. 78216.
Aug. 19–21, 1972—National Soybean Processors Association Annual Meeting, Washington Plaza Hotel, Seattle, Wash.
Aug. 20–25, 1972—8th Annual Meeting of the Federation of European Biochemical Societies, International Congress Centre RAI, Amsterdam.
Aug. 21–25, 1972—Fifth International Congress on Catalysis, Miami Beach, Florida.
September 11–13, 1972—Analytical Chemistry Workshop, Analytical Chemistry Division, The Chemical Institute of Canada, Ottawa, Ontario.
September 23–27, 1972—11th Annual Meeting, ASTM Committee E-19 on Chromatography, Stouffer's River Front Inn, St. Louis, Mo. Contact: J.H. Fager, Union Carbide Corp., Box 65, Tarrytown, N.Y. 10592.
Oct. 1–5, 1972—Food and Dairy Exposition, Atlantic City, N.J.
Oct. 9–12, 1972—27th Annual Instrument Society of America Conference, Coliseum, New York.
Oct. 25–26, 1972—International Symposium: "Organic and Inorganic Intermediates for Europe for the 1970's," International Business Contact Club, Brussels, Belgium.
Oct. 25–31, 1972—4th International Chemistry Exhibition and Mac '72, Milan, Italy.
November 28–30, 1972—Second International CAMAG Symposium on Thin Layer Chromatography and Elec-

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Board Members-at-Large

R.J. Hlavacek (1964)

Assistant to Technical Director, Research and Development Division, Hunt-Wesson Foods; 1948–63, Swift and Co. Research Lab.; B.A. Lawrence College, 1944; Ph.D. Northwestern University, 1949; AOCS: Bond Award Comm. 1968, 1969, 1970; Ways and Means Comm. 1969, 1970; Flavor Nomenclature and Standards 1969, 1970; Membership Comm. 1969, 1970; Society Improvement Comm. 1970, 1971; co-chairman of Fats and Oils Processing Short Course at Michigan State University.

E. Jungermann (1951)

Vice President, Research and Development, Armour Dial, Inc., Chicago, Ill. AOCS: Education Comm. 1959–; Soap and Synthetic Detergent Analysis Comm. 1961–; Chairman, 1963 Short Course; Program Comm. 1964 Fall Convention; Member-at-Large North Central Section, 1963; Journal Comm., 1966–; Short Course Comm., 1967; N.Y. Convention Comm. 1968; Associate Editor, Journal 1969–; Awards Administrative Comm., 1970; Publications Comm., 1969–; Journal Comm., 1970; Short Course Comm., 1971; AOCS Award of Merit, 1971.

F.A. Kummerow (1945)

Professor of Food Chemistry, University of Illinois, Urbana. Author of 168 publications. His former students in AOCS include R.R. Allen, S.S. Chang, G.A. Jacobson and J.G. Endres. University of Wisconsin, doctor's degree in biochemistry 1943; Kansas State University 1950; Clemson University, Clemson, S.C., 1945; AOCS: Journal, 1953–56; Membership; Abstractor.

Other Board Members (the four most recent AOCS past presidents) are: J.C. Cowan ('41), Chief, Oilseed Laboratory, Northern Regional Research Laboratory, ARS, USDA, Peoria, Ill.; G.C. Cavanagh ('46), Chief Chemist and Research Director, Ranchers Cotton Oil Co., Fresno, Calif.: S.S. Chang ('52), Professor of Food Chemistry, Dept. of Food Science, Rutgers State University, New Brunswick, N.J.; and R.R. Allen ('50), Director of Exploratory Research, Anderson Clayton Foods, Richardson, Tex.

Ex-Officio Members are: A.R. Baldwin, D.L. Henry, E.R. Hahn and J. Lyon.

Biochemistry 10, 4711–17 (1971). Glycopeptides have been isolated from both the low-(*d* 1.090) and high-(*d* 1.120) density membranes isolated by the glycerol-lysis technique. Three size classes of glycopeptide were obtained on treatment with trypsin which were identical with those obtained by proteolytic digestion using intact platelets. However, a chondromucopeptide obtained from intact platelets by trypsin treatment was not obtained using isolated membranes suggesting that it is a product of the platelet "release reaction." Brief digestion of intact platelets with chymotrypsin, which does not induce the release reaction, did not yield the chondromucopeptide and in this case the isolated macroglycopeptide was larger than that obtained by treatment. These results show that both types of membrane vesicle are derived from the outer surface of the platelet and may reflect areas of anatomical specialization on the platelet surface, as previously suggested from electron mieroscopy.

STEROL AND TRITERPENE SYNTHESIS IN THE DEVELOPING AND GERMINATING PEA SEED. D.J. Baisted (Dept. of Biochem. and Biophysics, Oregon St. Univ., Corvallis, Ore. 97331). *Biochem. J.* 124, 375–83 (1971). Developing and germinating pea seeds were compared with respect to their capacity to incorporate mevalonate into sterols and triterpenes. The capacity for sterol synthesis is greatest in the least mature fruits and decreases during their development. Label is shown, by gas-liquid chromatography and counting the radioactivity of trapped fractions, to be associated with campesterol, β-sitosterol and isofucosterol. During early stages of germination sterol synthesis is insignificant. The triterpene fraction becomes heavily labelled during both development and germination. The label is associated almost exclusively with β-amyrin during germination but with cycloartenol and 24-methylenecycloartanol during development. It is only in the terminal stages of maturation that β-amyrin becomes significantly labelled. At the same time an unidentified radioactive polar compound appears. The possible significance of the appearance of this polar compound and the regulation of the synthesis of these higher terpenoids is discussed.

ANTITUMOR ACTIVITY OF GLYCERYL ETHERS. K. Ando, K. Kodama, A. Kato, G. Tamura and K. Arima (Lab. of Microbiol., Dept. of Agr. Chem., Univ. of Tokyo, Bunkyo-ku, Tokyo, Japan). *Cancer Res.* 32, 125–9 (1972). Antitumor activity of fatty alcohols and *a*-glyceryl ethers of fatty alcohols was examined with Ehrlich carcinoma in mice. Significant antitumor activity was exerted against Ehrlich ascites carcinoma by i.p. administration of capryl, lauryl and myristyl *a*-glyceryl ethers. Capryl and lauryl glyceryl ethers suppressed the growth of solid tumor when administered through various routes. Administration s.c. was the most effective.

HUMAN SERUM LIPOPROTEINS. EVIDENCE FOR THREE CLASSES OF LIPOPROTEINS IN S_f 0–2. J.J. Albers, Chi-Hong Chen and F. Aladjem (Dept. of Microbiol., Univ. So. California Med. School, Los Angeles, Cal. 90033). *Biochemistry* 11, 57–63 (1972). The lipoprotein composition of the S_f 0–2 lipoproteins from the serum of individuals and from pooled serum was studied. S_f 0–2 was found to contain three classes of lipoproteins: high density lipoproteins (HDL_1), low density lipoproteins (LDL_3) and a lipoprotein which shares antigenic determinants with LDL, LDL-a-1. HDL_1 has a sedimentation coefficient at d 1.002 g/cm^3 of 4.6 S, and a molecular weight by Agarose gel chromatography of 0.5×10^6. The electrophoretic and immunological properties of HDL_1 are similar to those of HDL_2.

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trophoresis, Park Sheraton Hotel, New York. Contact: Program Director, CAMAG, Inc., 2855 S. 163 St., New Berlin, Wis. 53151.

June 20–27, 1973—Achema '73 and the European Meeting of Chemical Engineering, Frankfurt/Main, Germany.

July 2–6, 1973—Second Congress of the *Association Internationale de la Couleur,* University of York, England.

Oct. 29–Nov. 2, 1973—Fourth International Conference on Atomic Spectroscopy, Toronto, Ontario, Canada.

6,11-DIHYDRO-11-HYDROXY-6-OXO-2,2,5-TRIMETHYL-2*H*-NAPHTHO (1,2-*b*)PYRAN. A STABLE QUINONE HEMIKETAL RELATED TO VITAMIN K AND OF SPECIAL INTEREST CONCERNING OXIDATIVE PHOSPHORYLATION. N.I. Bruckner and N.L. Bauld (Dept. Chem., Univ. Texas, Austin, Tx. 78712). *J. Org. Chem.* 36, 4045–6 (1971). Argentic oxide oxidation of 6-methoxy-2,2,5-trimethyl-2*H*-naphtho(1,2-*b*)pyran gives the title compound in 35% yield. The latter is a stable hemiketal of special interest because it is structurally analogous to an intermediate proposed for oxidative phosphorylation. The hemiketal is isolated from an acidic medium and is isomerized only slowly and partially by triethylamine in refluxing benzene. Various attempts to prepare phosphate esters of the ketal hydroxyl function were unsuccessful.

FURTHER STUDIES OF THE LIPID COMPOSITION AND BIOCHEMICAL PROPERTIES OF TETRAHYMENA PYRIFORMIS MEMBRANE SYSTEMS. G.A. Thompson, Jr., R.J. Bambery and R.Y. Nozawa (Dept. Botany, Univ. Texas, Austin, Tx. 78712). *Biochemistry* 10, 4441–7 (1971). Each of several membrane systems of *Tetrahymena* has been found to have a characteristic lipid distribution. The triterpene alcohol tetrahymonol is present in surface membranes at a concentration more than seven times that found in the cell's endoplasmic reticulum. The surface membranes also contain a threefold enrichment in alkyl glyceryl ether phospholipids. However, it appears that the lipid mixture arriving at these surface locations from the sites of their synthesis has not yet become enriched in these species. Possible mechanisms for achieving the selective accumulations are discussed.

A MEMBRANE-BOUND PHOSPHOLIPASE A1 PURIFIED FROM ESCHERICHIA COLI. C.J. Scandella and A. Kornberg (Dept. of Biochem., Stanford Univ. School of Med., Stanford, Calif. 94305). *Biochemistry* 10, 4447–56 (1971). Phospholipase A1 bound tightly in the cell membrane hydrolyzes membrane phospholipids following heat treatment, lysis or aging (48 hr at 0C) of *E. coli* cells. This enzyme may be responsible for phospholipid breakdown and for changes in membrane integrity which have been observed following phage infection, the addition of antibody and complement or colicin action. The enzyme was purified approximately 5000-fold to near homogeneity by solubilization with sodium dodecyl sulfate (SDS)-butanol, isoelectric precipitation, acetone fractionation and SDS-acrylamide gel electrophoresis. The enzyme is stable in 3% SDS and tends to aggregate in the absence of detergent. Neither detergent nor the lipids which copurify with the enzyme are necessary for activity. The enzyme hydrolyzes the 1-acyl chain of phosphatidylcholine, phosphatidylethanolamine, phosphatidylglycerol (PG) and diphosphatidylglycerol at comparable rates. The K_m for PG is 3×10^{-7} M. Hydrolysis of L-phosphatidylcholine but not D-phosphatidylcholine or triglyceride identifies the enzyme as phospholipase A1 and distinguishes it from known lipases.

BLOOD GROUPS AND SERUM CHOLESTEROL AMONG 10,000 ADULT MALES. J.H. Medalie, C. Levene, C. Papier, U. Goldbourt, F. Dreyfuss, D. Oron, H. Neufeld and E. Riss (Dept. of Family Med., Tel Aviv Med. School, Tel Aviv, Israel). *Atherosclerosis* 14, 219–29 (1971). An analysis of blood groups and cholesterol has been made as part of a long-term prospective investigation of ischemic heart disease among 10,000 Israeli males, aged 40 and over. The total mean serum cholesterol level for men of blood group A1 was found to be significantly higher than the mean for the combined ABO groups, although this did not hold for every individual country of origin. Among the Rh, MN, Kell, Duffy and Kidd blood groups, Kell was the only one which showed a significant association with mean serum cholesterol. Men with both A1 and Kell + exhibited a higher mean cholesterol level than either group separately. The question is raised whether the significant statistical associations in this study population have biological implications.

CORRELATIVE STUDY OF BLOOD COAGULATION AND SERUM LIPIDS IN DIABETICS WITHOUT CLINICALLY RECOGNIZABLE COMPLICATIONS. M.H. Ghanem, S. Tawfik, F.K. Guirgis and M. El-Sawy (Depts. of Med. & Clinical Pathol., Faculty of Med., Univ. of Alexandria, Alexandria, U.A.R.). *Atherosclerosis* 14, 277–81 (1971). Blood coagulability and serum lipids have been studied in 28 diabetic patients without clinically recognizable complications. Changes of plasma FFA were correlated with platelet adhesiveness and thromboplastic activity. Positive correlation was also obtained between serum phospholipids on one hand and whole blood coagulation and re-