



## Meetings

### AOCS National Meetings

- Oct. 5-8, 1969—Minneapolis, Leamington Hotel.  
 April 26-30, 1970—New Orleans, Jung Hotel.  
 Sept. 27-Oct. 1, 1970—Chicago, Conrad Hilton Hotel.

### Other Organizations

- August 11-13, 1969—49th Annual Convention of the American Soybean Association, the Ocean Forest Hotel, Myrtle Beach, South Carolina.  
 Aug. 17-24, 1969—3rd NMR Symposium, Physical Chemistry Division and University of Toronto, Toronto, Ontario, Canada.  
 Aug. 24-26, 1969—National Soybean Processors Association Annual Meeting, Brown Palace Hotel, Denver, Colo.  
 Aug. 20-27, 1969—12th International Conference on Coordination Chemistry, University of Sydney, Australia.  
 Aug. 27-29, 1969—Symposium on Multiple Bonding in Inorganic Chemistry, University of Manitoba, Winnipeg, Manitoba, Canada.  
 Sept. 3-5, 1969—15th Canadian High Polymer Forum, Queen's University, Kingston, Ontario, Canada.  
 Sept. 7-11, 1969—XIIIth International Conference on the Biochemistry of Lipids, Eugenides Foundation, Athens, Greece.  
 Sept. 8-9, 1969—Society of Cosmetic Chemists National Seminar, Riverfront Inn, St. Louis, Mo.  
 Sept. 8-12, 1969—International Symposium on Conformational Analysis, Universite Libre de Bruxelles, Brussels, Belgium.  
 \* Sept. 16-18, 1969—Massachusetts Institute of Technology, Conference on Amino Acid Fortification of Protein Foods, Kresge Auditorium, Cambridge, Mass.  
 Sept. 23-25, 1969—8th Annual Meeting of ASTM Committee E-19 on Chromatography, Sheraton Hotel, Philadelphia, Pa.  
 \* Oct. 3, 1969—Annual Meeting of the Canadian Committee on Fats and Oils, the Prairie Regional Laboratory of N.R.C., Saskatoon, Canada.  
 \* Oct. 19-22, 1969—19th Canadian Chemical Engineering Conference, The Canadian Society for Chemical Engineering, and 3rd Symposium on Catalysis, Physical Chemistry Division, University of Alberta, Edmonton, Alberta, Canada.  
 \* Oct. 27-30, 1969—Instrument Society of America, 24th International Instrumentation-Automation Conference and Exhibit, Astrodome, Houston, Texas  
 Nov. 2-7, 1969—Society of Cosmetic Chemists Arden House Conference, Joint Sponsorship with Columbia University College of Pharmacy, Arden House, Harri-man, N.Y.  
 \* Dec. 1-5, 1969—32nd Exposition of Chemical Industries, The New York Coliseum, New York, N.Y.  
 Dec. 2, 1969—Society of Cosmetic Chemists Annual Scientific Meeting and Medal Award Dinner Dance, Americana Hotel, New York City.

\* Additions to previous calendar

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The substance is converted to a water soluble derivative by mild alkaline hydrolysis sufficient for deacylation of glycerides. The derivative formed elutes after glycerophosphorylinositol mono- or diphosphate on anion-exchange chromatography. Strong acid hydrolysis of the water-soluble derivative results in the production of four major  $^{32}\text{P}$ -containing compounds separable by anion exchange chromatography, none of which elute with inositol polyphosphate fractions. Products from acid or alkaline hydrolysis liberate inorganic orthophosphate upon enzymic digestion or heating near pH 5 as expected for phosphate monoesters. The properties suggest that the phosphorylated compound is a polar phospholipid-like material of unknown structure.

STUDIES ON THE SYNTHESIS OF FATTY ACIDS BY A BEEF HEART MITOCHONDRIAL ENZYME SYSTEM. J. V. Dahlen and J. W. Porter (Dept. of Physiol. Chem., Univ. of Wisconsin, Madison, Wis.). *Arch. Biochem. Biophys.* 127, 207-223 (1968). Studies are reported on an enzyme system located on the outer membrane of beef heart mitochondria which synthesizes fatty acids by the elongation of pre-existing acids (or acyl-CoA compounds). Proof that fatty acid primers (octanoate, palmitate and linoleate) are elongated by the sequential addition of one or more molecules of acetyl-CoA to the carboxyl end of the fatty acid was obtained by GLC and decarboxylation of the bio-synthesized fatty acids. Malonyl-CoA was not a substrate for this reaction and no evidence was obtained for the *de novo* synthesis of fatty acids. The elongation reaction requires only an acyl-CoA primer, acetyl-CoA and NADH. The potassium salt of a fatty acid plus ATP and  $\text{Mg}^{++}$  can substitute for the acyl-CoA. The primer specificity is very broad but the maximum incorporation of acetyl-CoA was observed with octanoic acid as a primer. When linoleic acid was the primer, arachidonic and other polyunsaturated  $\text{C}_{20}$  acids were produced. The optimum pH of the reaction was 7.8-8.0 in glycylglycine buffer. NADPH inhibited the incorporation of acetyl-CoA into fatty acids.

GLYCOLIPIDS ISOLATED FROM PORCINE INTESTINE. C. Suzuki, A. Makita and Z. Yosizawa. (Tohoku Univ. School of Medicine, Sendai, Japan). *Arch. Biochem. Biophys.* 127, 140-9 (1968). Preparative silicic acid-Hyflo Superpel column chromatography of crude lipid extracts of porcine intestine gave two glycolipid fractions. The larger fraction was separated into hematosides, porcine intestinal glycolipids I and II (PIGL-I & PIGL-II) and sphingomyelin. From the smaller fraction, cerebrosides, ceramide dihexosides, ceramide trihexosides, cerebroside sulfate and globoside I were isolated and further characterized by qualitative and quantitative analysis. On the basis of chromatographic and analytical data, PIGL-I and PIGL-II were shown to be novel glycolipids. It is concluded that the glycolipid composition of porcine intestine is species and organ specific.

ACETYL GROUP TRANSFER IN LIPOGENESIS. I. STUDIES INVOLVING THE DEGRADATION OF FATTY ACIDS BY THE KUHN-ROTH AND RELATED METHODS. R. Rognstad, J. Woronsberg and J. Katz (Cedars-Sinai Medical Center, Los Angeles, Cal.). *Arch. Biochem. Biophys.* 127, 429-36 (1968). A method to test the role of citrate or acetyl carnitine in acetyl group transfer out of the mitochondria was proposed, based on the loss of tritium from T-acetyl CoA in the citrate synthase reaction. The method was based on comparing the T/ $^{14}\text{C}$  ratios in acetate obtained by the Kuhn-Roth degradation of lactate and fatty acids formed in adipose tissue from glucose-6- $^{14}\text{C}$ -6-T. Isotope discrimination against tritium was found in the citrate synthase reaction. The Kuhn-Roth oxidation, when applied to the degradation of tritium-labeled fatty acids, causes labilization of tritium from the terminal methyl end. In addition, a significant fraction of the acetate produced arises from the center of the fatty acid molecule. Various modifications of the Kuhn-Roth procedure did not markedly improve the results. It was concluded that the procedures based on available degradation procedures are so far not adequate to test the acetyl transport question. The Kuhn-Roth degradation of labeled compounds must be used with great caution in the interpretation of isotope-distribution patterns.

II. FATTY ACID SYNTHESIS FROM INTRA- AND EXTRAMITOCHONDRIAL ACETYL COA. R. Rognstad and J. Katz. *Ibid.*, 437-44. In order to evaluate the role of citrate as an acetyl carrier from the mitochondria to the cytosol a comparative study was made of the pathways of fatty acid synthesis from acetyl CoA, double labeled with  $^{14}\text{C}$  and T in the acetyl moiety,

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