• *Names in the News*

E.R. GILMONT ('68), Director of Research and Development, A. Gross & Co., Div. of Millmaster-Onyx Corp, Newark, N.J., was installed as President-elect of the American Institute of Chemists. He has served on the New Chapters Committee of the Institute, was instrumental in developing the new state institute organization and has most recently been President of the New Jersey Institute of Chemists, a division of the national group.

JOHAN BJORKSTEN ('51), Bjorksten Research Foundation, Madison, Wisc., was installed as District Director of the American Institute of Chemists until 1974. Dr. Bjorksten has long been active in The Institute, having served as its National President in 1962 and as chairman of the Chicago Chapter. He received the Honor Scroll of the Chicago Chapter in 1959.

H.R.L. STREIGHT, principal research engineer for DuPont of Canada Limited, Montreal, is the new President of The Chemical Institute of Canada; and PIERRE GRENIER, Dean of the Faculty of Science, Laval University, Quebec, is the new President-Elect. Announcement of these elections was made at the 54th Canadian Chemical Conference and Exhibition (May 31–June 2, 1971).

The appointment of G.B. VERMONT as Director of Research and Development for the Chemical Group of Mallinckrodt Chemical Works, was announced by S.H. Anonsen, Senior Vice President. Dr. Vermont will be responsible for all Chemical Group research and development based in St. Louis.

Two key management appointments have been announced by Blaw-Knox Chemical Plants, Inc., Pittsburgh, Pennsylvania. W.A. COOMBES and R.J. HANSOTTE have been named assistant technical managers. Coombes joined the company in 1965 as a process engineer and for the past year has been assistant manager of extraction, food and biochemicals. Prior to joining Blaw-Knox he was associated with the Mallinckrodt Chemical Company. Hansotte has been with Blaw-Knox Chemical Plants since 1952, serving as a chemical process engineer, project engineer and most recently as assistant technical engineer.

The appointment of L.G. MACKIN ('57) as vice president of research and development has been announced by Capital City Products Co., Division of Stokely-Van Camp, Inc. a major refiner and processor of edible oil products located in Columbus, Ohio. Mackin will assume responsibility for all Capital City Products' research and development activities. He joined the company in 1935 as a quality control chemist. He has since served as a research chemist, refining chemist, refinery superintendent and, most recently, director of research.

L.G. Mackin

L.J. Nutter

L.J. NUTTER ('65) and JOHN NADENIAK, co-owners of Nu-Chek-Prep, Elysian, Minn., have been involved in research and production of lipids for over a combined span of 25 years. Two years ago the company started production of high purity lipid standard preparation.

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COMPLETE PROGRAM
AOCS 45th FALL MEETING
CHALFONTE-HADDON HALL HOTEL
ATLANTIC CITY, NEW JERSEY
OCTOBER 3-6

R.T. O'Connor to Receive Honors From ASTM

R.T. O'CONNOR ('45), chief, Cotton Physical Properties Laboratory, Southern Marketing and Nutrition Research Div., Agricultural Research Service, U.S. Department of Agriculture, New Orleans, La., was granted the ASTM Award of Merit and named a Fellow of the American Society for Testing and Materials (ASTM) the world's largest source of voluntary consensus standards for materials, products, systems and services.

R.T. O'Connor

The Award of Merit is granted to individuals for distinguished service to the cause of voluntary standardization. O'Connor will receive the award "for his outstanding investigations and development of spectroscopic methods for analysis of agricultural products and their application to studies of composition and chemical structure."

O'Connor has received three awards from the U.S. Department of Agriculture—the Superior Service Award in 1955, Distinguished Service Award in 1958, and the Certificate of Appreciation in 1958. He received the Harvey W. Wiley Award of the Association of Official Analytical Chemists in 1967.

Other honors of O'Connors include his appointment in 1958 until the present as research consultant in chemistry at Tulane University; 1961–1962 he was chairman of the Louisiana Section of the American Chemical Society; and in 1970 he was national secretary of the American Oil Chemists' Society, vice president in 1971 and president-elect for 1972.

In addition, he is a member of the American Association for the Advancement of Science, American Association of Textile Chemists and Colorists, American Chemical Society, Research Society of America, Society of Applied Spectroscopy, charter member of the Coblentz Society, and a Fellow of the American Institute of Chemists. He is also a member of Alpha Chi Sigma, Sigma Xi, New Orleans Academy of Science, and the New York Academy of Science.

O'Connor has authored approximately 170 articles related to instrumental methods of analysis and their applications to investigations of agricultural commodities.

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REDUCTION IN ADIPOCYTE ATP BY LIPOLYTIC AGENTS: RELATION TO INTRACELLULAR FREE FATTY ACID ACCUMULATION. A. Angel, K. S. Desai and M. L. Halperin (Dept. of Med., Univ. of Toronto, Toronto 181, Canada). *J. Lipid Res.* 12, 203–13 (1971). Epinephrine, norepinephrine, ACTH and dibutyryl 3′,5′-cyclic AMP reduced adipocyte ATP levels during 60 min incubation; glucose displayed a protective effect. The reduction in adipocyte ATP levels could not be attributed solely to: a direct hormone effect, deficiency in metabolic substrate, activation of adenyl cyclase with ATP consumption, loss of adenine nucleotide from the cell or loss of cells during incubation, lipolytic rate per se, or extracellular accumulation of FFA or glycerol. To determine whether intracellular FFA accumulation was a causative factor, intracellular FFA levels were measured during hormone-stimulated lipolysis. This was accomplished by using sucrose-U-^{14}C as a marker for the extracellular space to correct for contamination of cells by extracellular albumin-bound FFA. These experiments showed that the fall in adipocyte ATP correlated with FFA saturation of medium albumin and progressive accumulation of FFA within the adipocyte. Furthermore, the proctective effect of glucose noted above was associated with a marked reduction in intracellular FFA as compared to the extracellular FFA pool.

GLYCOSPHINGOLIPIDS IN THE SPLEEN OF DEVELOPING RATS. T. T. Kuske and A. Rosenberg (Med. Service, Francis Delafield Hosp. and Dept. of Med., Columbia Univ. College of Physicians and Surgeons, New York, N.Y. 10032). *J. Lipid Res.* 12, 173–78 (1971). Splenic cholesterol and glucosyl, lactosyl, trihexosyl and sialyl lactosyl ceramides were studied in developing normal rats from birth to 96 days of age. Total lipid, extracted from pooled organs for each age group in the study, were subjected to mild alkaline hydrolysis and separated into purified glycolipid fractions in high yield, by a series of silicic acid column and thin-layer chromatographic procedures. Enzymatic and colorimetric methods were applied to quantitative analysis of each splenic glycosphingolipid fraction and the fatty acids were analyzed by gas-liquid chromatography. Glycosphingolipid content in the total spleen increased over the period of the study. The most rapid increase occurred during the third and fourth weeks. There was also a 2.5 fold change in the concentration (per gram of tissue) of glucosyl and sialyl lactosyl ceramides, the principal glycosphingolipids of rat spleen. In contrast, cholesterol concentration increased only slightly. A precisely equimolar ratio of glucosyl and sialyl lactosyl ceramide was observed throughout all stages of splenic development. Fatty acid compositions of these two lipid fractions were always significantly different.

REDUCTION AND ESTERIFICATION OF CHOLESTEROL AND SITOSTEROL BY HOMOGENATES OF FECES. R. S. Rosenfeld and L. Hellman (Inst. for Steroid Res. and Dept. of Oncology, Montefiore Hosp. and Med. Cen., New York, N.Y. 10467). *J. Lipid Res.* 12, 192–97 (1971). Mixtures of cholesterol-1,2^{3}H and sitosterol-4^{14}C have been incubated with suspensions of feces in order to compare the behavior of the phytosterol with transformations known to take place with cholesterol under these conditions. Within the limitations of the study, both labeled sterols were esterified to the same extent, and reduction of the Δ^5 double bond to the saturated analogue proceeded equally in both substances. After correcting for procedural losses, the recoveries of ^{3}H and ^{14}C from the incubations were always less than the controls; this strongly indicates destruction of sterol by feces microorganisms.

THE ISOLATION OF LIPOPROTEINS FROM HUMAN PLASMA BY ULTRACENTRIFUGATION IN ZONAL ROTORS. H. G. Wilcox, D. C. Davis and M. Heimberg (Dept. of Pharmacol., Vanderbilt Univ. School of Med., Nashville, Tenn. 37203). *J. Lipid Res.* 12, 160–72 (1971). The major classes of lipoproteins were isolated from human plasma by ultracentrifugation in continuous density gradients using the Ti-14 and Ti-15 zonal rotors. Chylomicrons + VLDL, LDL, and HDL were separated from each other and from the more dense residual proteins (albumin fraction) of plasma by rate-zonal flotation in NaBr gradients in the density range 1.0–1.4. The chylomicron-VLDL fraction was subfractionated into consituent chylomicrons and VLDL by zonal ultracentrifugation in NaBr gradients in the density range 1.0–1.1. Plasma lipoproteins were analyzed for composition of lipids and content of protein, for electrophoretic mobility on paper, and for antigenic determinants by immunolectrophoresis and immunodiffusion. Flotation constants (S_f) of the LDL and HDL were calculated from measurements made in the analytical ultracentrifuge. Lipoproteins isolated from plasma by zonal ultracentrifugation were identical by these criteria to lipoproteins isolated by the usual procedure of sequential ultracentrifugation in solvents of increasing density.

SURFACE PRESSURE—SURFACE AREA CHARACTERISTICS OF A SERIES OF AUTOXIDATION PRODUCTS OF CHOLESTEROL. Aida M. Kamel, A. Felmeister and N. D. Weiner (College of Pharmacy, Rutgers Univ., Newark, N.J. 07104). *J. Lipid Res.* 12, 155–59 (1971). The π-A characteristics of seven known oxidation products of cholesterol were determined. In all cases, the oxidation products yielded films which were more expanded than the film of cholesterol. Shifts in the position of the functional polar groups or the double bond within the sterol molecule results in marked changes in the π-A curves. Furthermore, replacement of the 3-hydroxy group by a keto group results in a significant decrease in the collapse pressure of the films. Mixed films of each of the oxidation products with dipalmitoyl glycerylphosphorylcholine, egg lecithin and cholesterol showed marked condensation effects. However, the data suggest that if air oxidation of cholesterol did occur at a biological membrane containing cholesterol and phospholipids, the permeability characteristics and other properties of the membrane might not be altered significantly.

EFFECT OF HEMOGLOBIN CONCENTRATION ON THE OXIDATION OF LINOLEIC ACID. Y. Nakamura and T. Nishida (Burnsides Res. Lab., Univ. of Illinois, Urbana, Ill. 61801). *J. Lipid Res.* 12, 149–54 (1971). The inhibitory effect of high concentrations of hemoglobin on the oxidation of linoleic acid was related to the ability of hemoglobin to associate with the fatty acid. Ultracentrifugation of the mixture of hemoglobin and potassium linoleate revealed that approximately 880 moles of linoleic acid could associate with 1 mole of hemoglobin. High concentrations of hemoglobin apparently reduced the amount of free linoleic acid accessible to the heme group, thus preventing the oxidation of the fatty acid. With low hemoglobin concentrations, at which the oxidation began immediately after the addition of the catalyst, the amount of free linoleic acid was considerably greater than that of bound linoleic acid.

• *Names in the News . . .*

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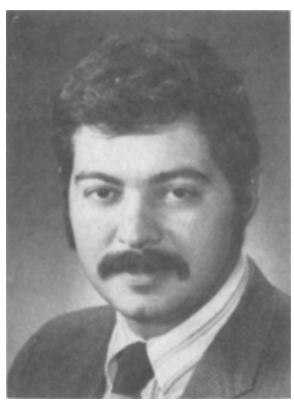
MICHAEL J. HEIN ('58) has been promoted to vice president, production development, of Capital City Products Co. in Columbus, Ohio. Hein, who joined the company in 1957 as a chemical engineer, will be responsible for feasibility studies of product markets and their methods of production.

M.J. Hein



A.J. Del Vecchio

The appointment of A.J. DEL VECCHIO ('68) to the technical staff of the C.J. Patterson Company, Kansas City, Mo., was announced by L.F. Marnett, Vice President and Technical Director. Del Vecchio will be in charge of a new section of the technical group responsible for both fundamental and applications-oriented research in certain areas of food technology. Prior to joining the Patterson Company, Del Vecchio had broad experience with Atlas Chemical Industries, Inc. in the areas of research and product development.