Soy Food Conference in Peoria

More than 100 persons have accepted invitations to the International Conference on Soybean Protein Foods at Peoria, Ill., Oct. 17–19, 1966.

Most speakers for the two and one-half day food research-coordinating meeting are scheduled, but plans of speakers from foreign countries are still tentative, according to the office of the program chairman, R. J. Dimler, director of the Department of Agriculture's Northern Utilization Laboratory, Peoria. Five US government agencies, two United Nations organizations, Soybean Council of America, National Soybean Processors Association and American Soybean Association are sponsoring the conference.

Canadian Conference on Membrane

A symposium on membrane structure and function is to be held at the Alpine Inn, Ste. Marguerite, Quebec, Feb. 27 to March 3, 1967.

The meeting is co-sponsored by the Biochemistry Division of The Chemical Institute of Canada, and the Canadian Biochemical Society. Sessions on Electron Microscopy, Chemistry and Composition, Membrane Structure, Model Systems and Surface Films, and Membrane Transport will be scheduled, and internationally known speakers have been invited to participate in the program.

Attendance at this symposium is limited; applications and conference programs may be obtained from The Chemical Institute of Canada, 151 Slater Street, Ottawa 4, Ontario, Canada. Deadline for submission of applications is Dec. 1, 1966.

GC and TLC Courses Offered by University of Wisconsin

A general gas chromatography course for beginning and practicing gas chromatographers will be given Nov. 7–9, 1966 at the University of Wisconsin, Madison. The course is presented in cooperation with F & M Scientific Division, Hewlett-Packard Co.

For further information, write: Mr. J. T. Quigley, Engineering Institute, University of Wisconsin, 432 N. Lake St., Madison, Wis. 53706.

Following the GC course, a TLC course is scheduled for Nov. 10–11, 1966. Workshop sessions are scheduled to dovetail with lecture discussions.

For further information, write: Mr. R. G. Schuenzel, Engineering Institute, at the address given above.

• *New Products*

American Gilsonite Company, Salt Lake City, Utah, has developed a commercial hydrogenated mixture of heterocyclic amines. These nitrogen heterocyclics are unusually good solvents, particularly for high molecular weight polymers. This may encourage their use in the rubber and plastics industry. Detailed data sheets are available upon request.

North American Fibre Co., Newark, N.J., has developed Tallow-Floc, a new settling agent for tallows and greases that effects separation of clear fat above tankage, moisture and other solids by means of gravity alone. Tallow-Floc also improves the quality of the fat product.

Liquid Dynamics, Chicago, Ill., has available a large capacity QUADRONIC for liquid-liquid extraction and separation in processing plants. The capacity of the QUADRONIC, Model No. 4824, is 275 to 350 gallons per minute, combined streams.

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peared during storage in sealed cans, suggesting further reaction of this compound. Spectrophotometric evidence was presented for the formation of a colored Maillard-type product between lysine and malonaldehyde in model systems. The results indicate that the low TBA numbers found in stored cooked irradiated meat are due to a combination of antioxidant development and further reaction of oxidation products.

Surface area of human erythrocyte lipids: Reinvestigation of experiments on plasma membrane. R. S. Bar, D. W. Deamer and D. G. Cornwell (Dept. of Physiolog. Chem., Ohio State Univ., Columbus, Ohio). *Science* **153**, 1010–12 (1966). Ratios of the lipid monolayer area to the erythrocyte surface area are 2:1 at low surface pressures and approach 1:1 at collapse pressures. Unsaturated phospholipids in cholesterol-phospholipid complexes of membrane extracts resemble their saturated derivatives at collapse pressures. Area ratio and phospholipid area data are related by an equation that tests hypothetical values for molecular areas used in membrane models.

Serum high-density lipoprotein: Effect of change in structure on activity of chicken adipose tissue lipase. A. Seanu (Depts. of Med. and Biochem., Univ. of Chicago, Chicago, Illinois). *Science* **153**, 640–41 (1966). The high-density (1.063 to 1.21 g/ml) lipoprotein in human serum was analyzed as activator for a lipoprotein lipase isolated from chicken adipose tissue. The activating capacity was lost when the lipoprotein was extracted with a mixture of ethanol and ethyl ether (3:2 by volume) at −10C and it was restored upon incubation of the extracted protein with aqueous sols of either whole phospholipids or the lecithin fraction prepared from the high-density lipoprotein. Since phospholipids sols alone proved ineffective as substrate activators, the complex which forms upon incubation of the extracted lipoproteins with phospholipids appears to be a necessary requirement for lipoprotein lipase activity.

Carbohydrate and lipid metabolism in animals treated with pyrrolidinomethyl tetracycline. S. Banerjee, K. S. Kumar and A. Bandyopadhyay (Res. Div., Dey's Med. Stores (Mfg) Private Ltd., Calcutta, India). *Proc. Soc. Exp. Biol. Med.* **122**, 652–57 (1966). Pyrrolidinomethyl tetracycline was administered to rats, rabbits and monkeys for 10 days and changes in the utilization of glucose and distribution of lipids in the tissues were studied. Treated animals showed diminished glucose tolerance. They had decreased glycogen and increased cholesterol and total lipids in the liver. There was a rise in plasma levels of lipids such as cholesterol, phospholipids, triglycerides and free fatty acids. Changes indicated impaired metabolism of carbohydrate and lipids. Tetracycline moiety of the antibiotic seemed responsible for the changes observed. The drug should be used with caution as its therapeutic effect might disturb the normal metabolic patterns in the body.

Effect of Triton ingestion on fat retention, blood lipids and growth in fats. S. S. Pawar and H. C. Tidwell (Dept. of Biochem., Univ. of Texas, Southwestern Med. School, Dallas). *Proc. Soc. Exp. Biol. Med.* **122**, 665–667 (1966). The effect of Triton on fat retention, blood lipids and growth in rats was studied by determining the amount of fed fat retained in the body, EFA levels of blood and increase in body weight, respectively, after its ingestion along with fat over a 12-week period. Triton does decrease fat retention. An increase in Triton concentration showed little, if any, change in per cent fat retention. EFA levels were decreased at the end of 12 weeks indicating that Triton itself was not absorbed from the intestinal tract but the feeding of polyunsaturated fatty acids did decrease the level of the blood lipids. Average growth per week in all the rats on the different diets was almost the same, which suggests that Triton has no toxic effect as indicated by normal growth and well-being of the rats.

Studies with acidulated cottonseed oil soapstock. 3. B. Lipstein and S. Bornstein (Div. of Poul. Sci., The Volcani Inst. Agr. Res., Rehovot, Israel). *Poultry Sci.* **45**, 651–661 (1966). The safety of supplementing layer rations with acidulated cottonseed oil soapstock (ACS) which had undergone hot alkaline saponification prior to acidulation, has been tested in 4 trials. The results obtained appear to justify the conclusion that such soapstock can be used safely as an oil supplement for layers up to a 3% dietary level, provided its gossypol content does not exceed 0.1%. Apparently the gossypol found in ACS is less active than that found in crude cottonseed oil (CCO). The danger of pink whites appearing in stored eggs, following the feeding of ACS, is even more remote than that of gossypol discoloration of yolks.