

# Section News



## Northeast Section hears Dr. Silbert

On Tuesday, Nov. 14, 1978, the Northeast Section of AOCS held its second dinner meeting of the season at the Bristol Motor Inn, Bristol, Pa. The meeting was arranged and chaired by Frank Luddy, AOCS Secretary, and featured Dr. Leonard Silbert of the Eastern Regional Research Center, USDA, Philadelphia, Pa. The timeliness and the interest in Dr. Silbert's talk were evident from the fact that over 40 people drove 1½ hours each way to join the 15 local members at the meeting. Dr. Silbert began with the establishment of the four regional research laboratories in 1941 (the Russell Research Center came later) and discussed their early involvement in basic, applied and developmental research essential to agriculture. He pointed out that agriculture, industry and consumers have greatly benefited by the new products and processes developed at these laboratories. The marketing services and economic returns derived are universally known for their extensive contributions to the knowledge and growth of science.

Dr. Silbert emphasized that the regional research centers early recognized the importance of basic research for solving practical problems and briefly described selected contributions of the Center's fatty acid and glyceride researches that have been adopted by and used in industry. The interplay and feedback between applied and basic research continues to be essential for the process of discovery and innovation, he said. He described and illustrated real and potential applications arising from long term research, particularly in areas of his group's fundamental studies on the chemistry of isopropenyl esters,  $\alpha$ -anions, esterifications via metal salt alkylations, and thiocyanations. His group's research has achieved preparation of esters to provide a nearly general range of structures (including hindered, aromatic, and aliphatic containing acid sensitive groups) through appropriate choice of either isopropenyl esters or metal salt alkylations. Long chain isopropenyl esters are unique for incorporating water repellent properties in paper and cloth, a property attained at very low degree of substitution, ( $DS < 0.001$ ). The development of  $\alpha$ -anions of fatty acids and the versatility of their chemistry has solved the problem of obtaining directly and simply numerous  $\alpha$ -substituted derivatives, some of which had been unavailable by any other method. Some had only been possible by indirect methods involving total synthesis.

The mystery of the empiricism of the classical Thiocyanogen Value has been resolved, which led to further discoveries in methods of controlling the preparation of specific isomeric adducts from thiocyanogen addition to olefins and olefinic acids (esters).

While his group's investigations were fundamental in approach, discovery of useful applications for the compounds and processes were a prime consideration. He emphasized the potential biological activities of some long chain aliphatic derivatives reported in the literature which suggested to him to be a much overlooked area of investigation for new derivatives of fatty acids. In this regard, screening tests of several compounds from his group's research uncovered unexpected pesticidal and potential physiological activity that ought to encourage further exploration. However, much of the work he described has been concluded owing to reorganization, loss of personnel, and redirection to new programs. His present emphasis is

directed to developing methods and techniques for introducing substituents at specific and selected sites in long chain fatty acids. ●



Dr. L.S. Silbert talks to Northeast Section meeting.



At November Northeast Section meeting were, from left, Daniel Swern, Temple University; Dr. Silbert; Ron Koos and Phil Pfeffer, both of USDA, and David Min, Best Foods.

## Bailey Award night to be Feb. 7

The 17th Alton E. Bailey Award dinner has been scheduled for Feb. 7, 1979, by the North Central Section of the AOCS, which sponsors the presentation to recognize research or service in the field of fats and oils.

The 1979 recipient will be the 17th person to receive the award. The dinner will be held in Henrici's Restaurant at the Ramada O'Hare Inn, 6600 N. Mannheim Rd., Chicago.

North Central Section's annual all-day symposium will be March 28, 1979, at the North Shore Hilton in Skokie, IL. Topics this year will be Diet and Disease; New Oil/Processing Methods; and Analytical Methods.

Reservations for all North Central meetings may be made through Robert Husch, Interstate Foods, 3800 S. Morgan, Chicago, IL 60609 (312-254-9400). ●