The 1966 AOCS Fats and Oils Short Course held at Michigan State University, East Lansing, attracted 115 American and overseas attendees. Twenty-five experts were on hand to review a decade of change in commodities and products, and to provide instruction in the latest industrial and research techniques.

AOCS Reviews Growth and Change in Fat and Oil Processing

A COMPREHENSIVE four-day program on "Processing and Quality Control of Fats and Oils," held at Michigan State University in late August, was attended by 142 people. Over 100 American attendees, representing all phases of industry, government and the universities, as well as 13 foreign enrollees from as far away as Iran and Central America, came to learn about present-day operations and the latest technological developments. The instructors were 25 experts, representing all facets of the Fats and Oils Industry.

LeRoy Dugan, Jr., Professor of Food Science at the host University, was Chairman of this AOCS Short Course, and made all arrangements for the program at the Kellogg Center of Continuing Education. Mrs. Lois Crauer served as Co-chairman. Social events included a guided bus tour of the beautiful 4000-acre campus, and of its extensive facilities, which are being rapidly expanded to meet society's needs. This was followed by a chicken barbeque for the group, their families and friends.

In the decade since the last processing symposium, the Fats and Oils Industry has undergone considerable change.

L. H. Going, Lois Crauer, LeRoy Dugan, Jr., and Noel Kuhrt.

Soybeans and their products now are the leading commodity traded. Soybeans have more than doubled in agricultural production. Edible tallow is the other source fat currently showing continued expansion above normal growth.

The high yields of quality oils from seed crops and fats from rendered tissue is a combined result of improved handling procedures of the source material, the trend to continuous processing techniques, better designed control systems, larger and more sophisticated specialized equipment, and the application of the statistical approach to plant operations. Interesterification, hydrogenation, and winterization processes have contributed a whole new range of triglyceride compositions, permitting custom manufacture of a tremendous variety of product lines, thus meeting the demands of shortening, margarine, and salad oil formulations. This industry has contributed much to the product quality and to the fast growth of such items as snack and packaged foods, pre-mixes of all types for home, restaurant, and commercial establishments.

Quality control of fats and oils are maintained by use of such data as solids fat indices and selective activity ratio in hydrogenation, and crystallization configurations in plastic shortenings, the use of mono- and diglycerides in formulations. Complete fatty acid composition analyses has become a reality with such tools as microphase vaporization as an adjunct to gas chromatography, and the selective techniques of the new copper and chromium salt catalyst. To assure no contamination of fats and oils with chlorinated pesticides, the product is monitored with electron capture gas liquid chromatography, a new technique so sensitive that it measures these impurities in nanogram quantities.

Process control computers are finding applications in the industry, and are warranted to meet increased product volume, the great variety of product specification, the complexity of multivariables in processing, and the development of proper on stream instrumentation.

The success of the East Lansing course demonstrates once again the value of the AOCS continuing education program, both to the members and to the industries it serves and represents.