Northeast Section

"The Application of Nuclear Magnetic Resonance in Fats and Oils" will be the topic of the afterdinner lecture at the Military Park Hotel in Newark on December 8, 1970. The chairman of the meeting, J. P. McNaught, secured the services of W. A. Bosin who will talk primarily on the application of wide-line NMR as opposed to high resolution NMR.

The presentation will indicate the present state of art of this type of instrumentation which is used for the identification of chemical compounds. For example, the NMR instrumentation that is presently available, what has and can be done, aand other potential applications that have received little attention to date.

The AOCS Northeast Section met on September 15, 1970 at Whyte's Restaurant in New York City. This was also the occasion for presentation of the Achievement Award, 1970, to S. S. Chang. A. N. Wrigley, former president of the Northeast Section, made the following address during the ceremony.

"We are gathered here tonight to honor Professor Stephen S. Chang, 1970 recipient of the Achievement Award of the Northeast Section, American Oil Chemists' Society.

This Award was established five or six years ago, under the leadership of Henry Salomon and George Raupp, to recognize and encourage careers of high achievement in our science and industry. The rules stated: 'An award will be given annually to a person in the Northeast Section for his outstanding research or service in the field of lipids and all allied aand associated products.' Some idea of the significance and stature of this Award can gained by considering its first four recipients, in the years 1966 to 1969. These were:

R. W. Riemenschneider, Daniel Melnick, W. C. Ault and Benjamin H. Thurman. Their contributions to research and technology have been the lifeblood of our fat and oil industry.

In 1970 the Achievement Award Committee gave careful and thoughtful consideration to the fine contributions of several outstanding men. The field was narrowed to three figures of great accomplishment in the field of fats and lipids. We now take great satisfaction in hailing Professor Chang as this year's winner of this prestigious award!

Stephen S. Chang was born in Peiping, China, and received his B.S. in Chemistry at the National Chi-Nan University in Shanghai. After a masters degree at Kansas State University, he won his doctorate at the University of Illinois, majoring in food technology, with a minor in organic chemistry.

In the 1950's he was first a research associate at the University of Illinois, then a research chemist at Swift and Company and A. E. Staley Manufacturing Company. In 1960 he joined the Rutgers staff as Associate Professor, and since 1962 has held the rank of Professor of Food Science at Rutgers, the State University.

Dr. Chang's achievements in the chemistry and technology of fats and oils are very well known both in the United States and internationally, especially in Europe and Asia. He is the author of over 60 scientific papers and patents. Dr. Chang and coworkers were the first to systematically identify the volatile flavor compounds in typical reverted soybean oil. They found that 2-pentylfurane is predominantly responsible for the 'beany' and 'grassy' reversion flavors.

Quite recently Steve fractionated, isolated and identified the minor constituents of commercial fatty acids and found that these minor constituents are partly responsible for the color and odor instability of the fatty acids. Steve and his associates developed a process for removing the troublemaking constituents by passing the fatty acids through a column of silicic acid. A patent has been applied for, and commercialization seems probable.

Steve has also made important contributions to the

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Left to right: S. S. Chang receives the plaque from A. N. Wrigley. The inscription was: "To Professor Stephen S. Chang in recognition of his outstanding contributions to original research in lipid chemistry."



Left to right: Mrs. S. S. Chang, Dr. Chang, A. N. Wrigley receiving the Appreciation Award from Don Fritz for a fine work he has done as a president of NEAOCS in 1969-70.



Graduate students from Rutgers State University. Left to right: Stephen Paveles, Keshabananda Talapatra, R. M. Ramer, Shu-Chi Lee, M. M. Blumenthal, Hsuing Cheng, Bill May and Sherman Lin.

• Flotation Surfactants at Climax . . .

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C_s/C₆ alcohol

alcohols

not identified

Product by Union Carbide,

 $\begin{array}{l} \mbox{Primary alcohol} + 1 \mbox{ hexanol} \\ \mbox{Primary alcohol} \ \mbox{C}_{6}\mbox{-}\mbox{C}_{10} \end{array}$

Product by Hercules Powder

Product by National Products

Co., not identified

Co., not identified

Primary and secondary

Frother	No.	R15
Frother	No.	R17

Alfol No. 6 Alfol No. 610 Hercofroth 1565

NCP Ethyl Accelerator

Glidco Terpenes SW

Part 3

List of reagents substituted for hydrocarbon or vapor oil that gave near equal results to the standard test rating of C_1 with a rating of A+ or A.

Reagent	Reagent Type	
Napoleum 600	Product by Kerr-McGee, not identified	
702 Conventional Neut.	Product by Kerr-McGee, not identified	
1002 Conventional Neut.	Product by Kerr-McGee, not identified	
Sinc Tech No. 6	Produced by Sinclair Refining Co., not identified	
Sinc Tech No. 8	Produced by Sinclair Refining Co., not identified	
Shellflex 210	Produced by Shell Oil Co., not identified	
Shellflex 212	Produced by Shell Oil Co., not identified	
Shell 61S Oil	Produced by Shell Oil Co., not identified	
Heavy Cycle Oil	Produced by Shell Oil Co., not identified	

Part 4

List of reagents substituted for more than one reagent that gave near equal results to the standard test rating of C_I with a rating of A+ or A.

50% CS 460	Product by Stepan Chemical
50% 328-97	Co., not identified
Dow Froth 250	Product by Dow Chemical Co.
Agent 328-97	Product by Stepan Chemical
-	Co.

[Received August 25, 1969]

Chemical Processing Equipment and Industrial Process Controls Exhibition in France

The French chemical industry has an 8.5% growth rate; its output has nearly doubled in the last six years; capital investment is expected to be \$750 million in three years, and \$400 million in export sales opportunities for over five years is forecast. The French chemical industry has \$4 billion to spend in the next five years for plant modernization and construction. As one of the strongest sectors in the French industrial complex, the chemical industry leads the list consistently in annual growth and is now searching for the latest developments in plant automation and chemical processing equipment. Here is an opportunity to meet with French technicians and buyers in Europe's biggest chemical trade fair in 1971. For more information call 202-967-2434, U.S. Commercial Exhibition, Salon International de la Chimie, Paris, April 19-25, 1971. • Local Section News . . .

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understanding of hydrogenation flavor, deep fat frying and butter fat modification. He is currently studying the flavor chemistry of beef, butter, potato chips and onions. Dr. Chang's service to the AOCS is well known to all of

Dr. Chang's service to the AOCS is well known to all of us. He has served as President of the Northeast Section, as Associate Editor of JAOCS, and is currently the President of the American Oil Chemists' Society.

It should be mentioned that Professor Chang is unique in his training program for oil chemists. His former post doctorates and graduate students are now working all over the world in both fat research and the fat and oil industry."



Left to right: D. S. Fritz, President of NEAOCS, Manny Eijadi, Vice President and Daniel Meshnick, Treasurer.

Free Trade Zones Abroad Provide Useful Bases for U. S. Exporters

Customs-privileged areas overseas, such as free trade zones, can often provide U.S. exporters with bases at which they can process, sell, distribute and service their products, the U.S. Department of Commerce says in a new publication, "Free Trade Zones and Related Facilities Abroad."

Free trade zones, which offer exemption from customs duties under individual systems of regulation and control, are not new. However, as international trade operations have grown in volume and complexity, and as the pressure of competition has intensified, governments and traders alike have become increasingly interested in the potentialities of developing and using customs-privileged areas to facilitate the handling of export and import shipments.

facilitate the handling of export and import shipments. Published as a service to U.S. businessmen, "Free Trade Zones and Related Facilities Abroad" presents data on facilities, administration, restrictions and controls for free trade zones in Europe, Latin America, the Caribbean, Asia and Africa.

Frequently, U.S. firms can save on transportation costs by shipping in bulk to free trade zones and repacking there, the publication notes.

Typically, customs duties become payable, and other import controls become operative, only if and when foreign goods are removed from a free trade zone or similar facility for use or consumption in the country in which it is located, the 128-page publication says.

"Free Trade Zones and Related Facilities Abroad" is available from the Sales and Distribution Branch, U.S. Department of Commerce, Washington, D.C. 20230.