AOCS—ISF Symposium on Basic Aspects of Detergency

The Symposium on Basic Aspects of Detergency has been arranged for the AOCS-ISF World Congress in Chicago and is scheduled for the afternoon of September 29, 1970.

M. E. Ginn

The Chairman and organizer of the Symposium is M.E. Ginn of the Maysury-Columbia Co., a division of Alberto-Culver Co. The participating research scientists will present papers on key factors relating to the detergency process. Topics are considered timely in view of current interests in exploring detergent compositions which are effective yet have minimal effect on the environment and ecology. Development of such composition requires a fairly complete understanding of the physics and chemistry of cleaning. It is hoped that the presented papers will shed further light on the cleaning process and some of the component operations involved.

The first paper will be delivered by A.M. Schwartz of the Gillette Co. Research Institute and will cover recent advances in the theory of detergency. (See complete abstracts in this issue). Dr. Schwartz is well known for his numerous contributions to the science of surface chemistry. Of the many publications and patents authored by Dr. Schwartz, perhaps he is best known for his two comprehensive texts on surface active agents. Dr. Schwartz has awards from the ASTM and the Society of Cosmetic Chemists for his various contributions.

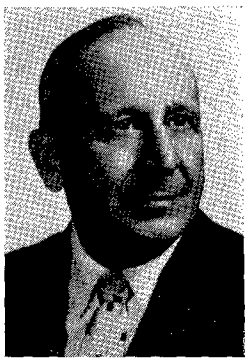
Toshio Nakagawa of the Shionogi & Co. Research Laboratory of Japan will present the second paper and this will deal with gel filtration of surfactants. Gel filtration chromatography permits separation of surfactants according to micelle size and micellar properties are considered important factors in detergency. Dr. Nakagawa has numerous publications dealing with the analysis and physicochemical properties of surfactants and in 1970 will be awarded the prize of the Japan Oil Chemists' Society. This paper is co-authored by Hiroaki Jizomoto.

Stig Friberg of the Swedish Institute for Surface Chemistry will discuss the association of surfactants into liquid crystal systems and its influence on solubilization and emulsification phenomena. Liquid crystals have been shown to be important in the detergency process. Dr. Friberg has had a distinguished academic career. In addition to being head of the Swedish Institute for Surface Chemistry, Dr. Friberg has chaired key committees of various Scandanavian technical associations.

The interactions of colloidal particles with complex ions and polymers will be reviewed by Egon Matijević of the Institute of Colloid and Surface Science of Clarkson College of Technology. These interactions are particularly important in various applications such as in emulsion formation, soil removal, and flotation. Dr. Matijevic is presently Director of the Clarkson Institute of Colloid and Surface Science. He has published numerous papers in the field of colloids and dispersions and is Editor of the Series on Surface and Colloid Science, a collective work which is now being published.

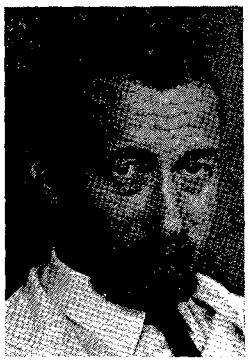
The last paper on the program will cover the statistical analysis of detergency tests which involve a natural soil and will be presented by J.R. Trowbridge of the Colgate-Palmolive Co. This paper will include some interesting practical results and will present a design for optimizing detergent composition. Dr. Trowbridge has specialized in synthetic organic chemistry primarily in the field of surface active agents. He has developed and published several methods for the treatment of detergency evaluation data.

The international attendance of the meeting should permit interesting discussion.



A. M. Schwartz

Toshio Nakagawa



Stig Friberg

Egon Matijevic

J. R. Trowbridge

ABSTRACTS: FATS AND OILS

(Continued from page 272A)

PROGRESS IN RAPESEED OIL TECHNOLOGY. H. Niewiadomski (Gdansk). *Przemysl Spozywczy* 23(10), 425–28 (1969). A review of current processing technology. (Rev. Franc. Corps Gras)

THE GLYCERIDE COMPOSITION OF VEGETABLE OILS AS DETERMINED BY ARGENTATION TLC. I. DETERMINATION OF THE RELATIVE COMPLEXING FORCES OF FATTY ACID ESTERS WITH SILVER IONS. H. Grynberg and K. Ceglowska (Inst. of General Chemistry, Warsaw). *Rev. Franc. Corps Gras* **17**, 89–91 (1970). Factors such as positional isomerism of double bonds, chain length of unsaturated acids, and position of the fatty acid radical in the glyceride, which affects the strength of the bond with silver ions, were studied. Since all saturated esters had the same R_f value regardless of chain length, the R_f values of the unsaturated acids were related to this value in order to determine the relative bonding forces. Esters with the same number of double bonds were complexed less strongly with increasing chain length. The relative bonding forces were determined by adding those for the individual fatty acids.

II. ANALYSIS OF CRAMBE SEED OIL. *Ibid.*, 173–76. The oil of *Crambe abyssinica* was fractionated by argentation-TLC into groups of glycerides which were identified on the basis of the bonding force values of the individual glycerides. Quantitative results were calculated from the composition of the fatty acids at particular positions. These results differ from those obtained by enzymatic hydrolysis. This oil was found to contain more than 60% of symmetrical dierucates. Other erucate-containing glycerides amounted to less than 5% of the total amount of glycerides.

GAS PHASE ANALYTICAL SEPARATION AND STRUCTURAL STUDY OF CERAMIDES. G. Casparrini, E. C. Horning and M. G.

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