

study is presented. The procedure devised allows one to view hair in the SEM while still attached to the panelist's head. The technique is nondestructive to the hair, permitting the study of sequential treatments on the same hair. The evaluation of a shampoo on the hair after 0, 5, 10 and 20 treatments is possible. The hair is removable from the SEM as many times as required for treatment without the necessity of cutting the hair from the scalp. Additionally the apparatus allows for complete axial rotation of the hair in the SEM. The functionality of two hair care products, a shampoo and a conditioner, is demonstrated. Micrographs of hair damages before and after treatment are categorized and numerically rated. The difference ratio was devised as an index to measure the degree of improvement of damaged sites.

THE RELATIONSHIP BETWEEN AEROSOL EMULSIONS AND FOAMS. II. AQUEOUS TRIETHANOLAMINE MYRISTATE/MINERAL OIL/FREON PROPELLANT SYSTEMS. P.A. Sanders ("Freon" Products Lab. E. I. du Pont de Nemours & Co., Inc., Wilmington, Del. 19898). *J. Soc. Cosmet. Chem.* 24(10), 623-37 (1973). Aerosols were prepared from emulsion concentrates, and foams obtained from the aerosols. Two emulsion concentrates were prepared by 14 methods. Emulsion quality was judged by photomicrographs and phase separation times. Aerosols were prepared from the best and poorest emulsions from each of the two concentrates by adding propellant. Concentrates with the smallest droplet size and the longest separation times produced the least drainage and the smallest range of bubble sizes. Best emulsion concentrates were obtained by adding aqueous triethanolamine at room temperature to the myristic acid-mineral oil solution at 54.4 C. A theory to account for the efficiency of this procedure is proposed which involves the formation of a triethanolamine myristate/myristic acid complex during the initial addition of the aqueous phase.

IN-LINE, CONTINUOUS MIXING AND PROCESSING OF COSMETIC PRODUCTS. S.J. Chen (Kenics Corp., Danvers, Mass. 01923). *J. Soc. Cosmet. Chem.* 24(10), 639-53 (1973). Controllable and predictable mixing can be achieved in the in-line, no-

moving-part device. Main mixing mechanisms in the device are flow division and radial mixing. Energy consumption is small for both laminar and turbulent flow processing. A very narrow drop size distribution was obtained using the device for dispersion applications. The drop size can be controlled by changing the flow rate in the device. Seventy per cent of the dispersion is within  $\pm 20\%$  of the mean drop size.

DEPENDENCE OF HYDROPHILE-LIPOPHILE BALANCE OF NONIONIC SURFACTANTS ON THE SIZE OF THE MOLECULE. L. Marszall (Pharmacy 62, Nowek/Swiecia, Poland). *Koll.-Z. u. Z. Polymere* 251(7), 609-10 (1973). On the basis of two simplifying assumptions the dependence of HLB<sub>D</sub> of nonionic surfactants on the size of their molecule may be evaluated in an approximate fashion for surfactants of different polyoxyethylene chain lengths attached to the same hydrocarbon chain and for surfactants of different hydrocarbon chain lengths attached to the same polyoxyethylene chain.

THERMODYNAMIC PROPERTIES OF LIQUIDS, INCLUDING SOLUTIONS. XI. POLYMERIC MONOLAYERS ON LIQUID SURFACES. M.L. Huggins (Arcadia Inst. for Sci. Res., Woodside, Calif). *Koll.-Z. u. Z. Polymere* 251(7), 449-55 (1973). A new theoretical treatment of the dependence of surface pressure on the concentration of linear polymer molecules in a monolayer is presented. The development follows closely that in the author's new theory of the thermodynamic properties of three-dimensional solutions.

SPECTROSCOPIC STUDY IN THE NEAR INFRA-RED OF THE STRUCTURE OF WATER IN MICELLAR AND MESOMORPHIC GELS IN THE SYSTEM POTASSIUM LAURATE-WATER. J. Francois (C.N.R.S.-Center of Res. about Macromolecules, Strasbourg, France). *Koll.-Z. u. Z. Polymere* 251(7), 594-9 (1973). The organization of soap molecules have a great influence on the structure of water. A model explaining the variation of soap structure as it changes with concentration is proposed.

BASE MATERIALS FOR CARPET SHAMPOOS WITH REGARD TO AEROSOL PRODUCTS. J.K. Smid (Chem-Y, Fabriek van Chem.

## Call for Nominations Award in Lipid Chemistry

### Sponsored by Applied Science Laboratories

In April 1964 the Governing Board of the American Oil Chemists' Society established an Award in Lipid Chemistry under the sponsorship of the Applied Science Laboratories Inc., State College, Pa. Previous awards were presented as follows: Erich Baer, August 1964; Ernest Klenk, October 1965; H.E. Carter, October 1966; Sune Bergstrom, October 1967; Daniel Swern, October 1968; H.J. Dutton, October 1969; E.P. Kennedy, September 1970; E.S. Lutton, October 1971; A.T. James, September 1972; and F.D. Gunstone, September 1973.

The award consists of \$2500 accompanied by an appropriate certificate. It is now planned that the 11th award will be presented at the AOCS Fall Meeting in Philadelphia, September 29-October 3, 1974.

### Canvassing Committee Appointees

Policies and procedures governing the selection of award winners have been set by the AOCS Governing Board. An Award Nomination Canvassing Committee has been appointed. Members are: C.D. Evans, Chairman; C.W. Williams; D.L. Berner; G. Fuller; and R.J. Buswell. The function of this committee is to solicit nominations for the 11th award. Selection of the award winner will be made by the Award Committee whose membership will remain anonymous.

### Rules

The rules prescribe that nominees shall have been responsible for the accomplishment of original research in lipid chemistry and must have presented the results thereof through publication of technical papers of high quality. Preference will be given to individuals who are actively associated with research in lipid chemistry and who have made fundamental discoveries that affect a large segment of the lipid field. For award purposes, the term "lipid chemistry" is considered to embrace all aspects of the chemistry and biochemistry of fatty acids, of naturally occurring and synthetic compounds and derivatives of fatty acids, and of compounds that are related to fatty acids metabolically, or occur naturally in close association with fatty acids or derivatives thereof. The award will be made without regard for national origin, race, color, creed or sex.

Letters of nomination together with supporting documents must be submitted in octuplicate to C.D. Evans, Northern Regional Research Center, 1815 N. University, Peoria, Ill. 61604 before the deadline of April 1, 1974. The supporting documents shall consist of professional biographical data, including a summary of the nominee's research accomplishments, a list of his publications, the degrees he holds, together with the names of the granting institutions, and the positions held during his professional career. There is no requirement that either the nominator or the nominee be a member of the American Oil Chemists' Society. In addition, letters from at least three other scientists supporting the nomination must be submitted in octuplicate.

**Remember the DEADLINE, April 1, 1974**