## (Continued from page 390A)

G.m.b.H., Hamburg, Germany). Tenside 1, 18-26 (1964). Studies on detergent biodegradability were conducted in several water purification plants in Germany. Degradation of soft detergents reached at least 80% and often higher. Practical biodegradability results are greatly influenced by the actual mode of operation of the purification plant and significant data can only be obtained by extending the observations over a long period of time. Comparative results of previous studies by other workers are quoted.

SURFACE ACTIVITY ON SOLID SURFACES. O. Driedger and A. W. Neumann (Fraunhofer Inst. of Surf. Phys. and Chem., Marienthal-Pfalz, Germany). *Tenside* 1, 3–7 (1964). The measurement of the contact angle between liquids of higher surface tension and solids of lower surface tension makes it possible to determine the surface tension of the solid. In contact with liquids whose surface tension is lower than that of the solids, the solid surface tension becomes lower. The character of this surface tension lowering is studied in the case of single crystals and glass surfaces in the presence of various liquids. THE SAFETY OF SYNTHETIC DETERGENTS. D. Wade (Procter & Gamble Co., Cincinnati, Ohio). *Riv. Ital. Sostanze Grasse* 41, 550–4 (1964). The physiological characteristics of modern synthetic detergents are reviewed.

NONYL PHENOL-ETHYLENE OXIDE CONDENSATES AS NONIONIC SURFACE ACTIVE AGENTS. R. V. Ainscow (Lankro Chem. Ltd.). *Mfg. Chemist* 36, 44 (1965). Chemical inertness, reproducibility of product, compatibility with other compounds, structural flexibility and low cost, coupled with a high degree of surface activity under a variety of conditions, underline current market acceptance of the nonyl phenol-ethylene oxide condensates as a most versatile group of surface active compounds.

A SIMPLE U.V. ABSORPTIMETER FOR THE ESTIMATION OF CERTAIN NONIONIC EMULSIFIERS AND OTHER AROMATIC COMPOUNDS. D. E. Herring (E. R. Howard Ltd., Suffolk, G. B.). J. Soc. Cosmetic Chemists 16, 79 (1965). The construction and circuitary of an inexpensive U.V. absorptimeter are described. It is shown that this simple instrument is useful for the estimation and detection of emulsifiers and other compounds showing U.V. absorption.

SUCROSE ETHERS. V. R. Gaertner (Monsanto Co.). U.S. 3,170,915. Described are compounds of the formula  $R-CH_2$ -sucrose in which R is selected from the group consisting of alkyl radicals, alkenyl radicals having the olefinic double bond beyond the  $\alpha$ -position relative to the ether oxygen atom, and alkyloxy radicals having from 8 to 24 carbon atoms, and alkaryl radicals having a total of 14-24 carbon atoms and from 8-18 carbons in at least 1 alkyl radical attached to the aryl ring, and the sucrose is linked to the methylene group through the oxygen atoms of one of the hydroxyl groups of the sucrose.

BIODEGRADABILITY OF AMPHOTERIC DETERGENTS. I. A. Eldib (Eldib Engineering and Research, Inc.). Soap Chem. Specialties 41(5), 77–80, 161, 163–5 (1965). This paper is a report on the biodegradability of amphoteric surfactants of the Nalkyl  $\beta$ -aminopropionate type known as "Deriphats" and manufactured by General Mills, Inc. Chemistry of amphoterics, the test procedure, and analytical techniques are described. The amphoteries studied are at least 88% biodegradable at all times under conditions, the branched chain alkylbenzene sulfonates (TPABS) are no more than 60% biodegradable.

BUILT LIQUID DETERGENT. B. H. Gedge (Procter & Gamble Co.). U.S. 3,169,930. A process for preparing a substantially nonaqueous built liquid detergent comprises the following steps: (a) admixing a liquid nonionic detergent surface active agent constituted of a water solubilizing polyoxyethylene group in chemical combination with an organic hydrophobic compound selected from a group consisting of polyoxypropylene, alkyl phenol and dialkyl phenol in which the alkyl group contains from 6-12 carbons, the reaction product of an excess of propylene oxide and ethylene diamine, and aliphatic alcohols having from 8-18 carbons, the nonionic detergent having a molecular weight of about 300-11,000, with a colloidal suspension of dehydrated polyphosphate salts (sodium pyrophosphate or tripolyphosphate) in a dehydrating vehicle selected from a group consisting of glycols of 2-4 carbons, glycerol, 1-octanol, monoethanol amine, or mixtures thereof, the nonionic detergent agent being added in an amount in excess of about 0.50 times the amount of the colloidal polyphosphate; and (2) from this resulting mixture distilling off the dehydrating vehicle thereby leaving the dehydrated polyphosphate salts in colloidal suspension in the nonionic agent.

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# Newly Formed Cryobiology Group Announces August Meeting

Of considerable interest to some members of AOCS is the Society of Cryobiology, established in late 1963 by a group of persons concerned with the lack of adequate communication among investigators in the various phases of low temperature biology.

The activities of the society consist of annual meetings and publication of a journal. The first annual meeting was held August, 1964, in Washington, D. C., and several hundred persons were in attendance. Disciplines represented included botany, bacteriology, food science, engineering, biophysics, surgery, physiology and several others. The meeting consisted of five symposia, a considerable number of original research papers, and a display in industrial equipment. The topics covered ranged from the freezing of blood, to food, to freezing treatments for ulcers and Parkinson's disease. The next meeting will be held August 2-4, 1965 at the Park Motor Inn, in Madison, Wisconsin.

The current president of the society is Dr. B. J. Luyet, Director of the American Foundation for Biological Research, Madison, Wisconsin. Inquiries concerning subscriptions should be directed to: Cryobiology, 4200 Heathfield Road, Rockville, Maryland 20853. Inquiries concerning membership should be directed to: Owen Fennema, Babcock Hall, University of Wisconsin, Madison, Wisconsin.