chain-scission reactions, respectively. Combined, these reactions give the measure of the deterioration and non-film formation reactions occurring in the film in the early stages of exposure.

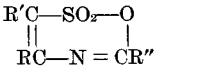
ATTENUATED TOTAL REFLECTANCE STUDIES ON DRYING OIL FILMS. A. E. Rheineck, R. H. Peterson and G. M. Sastry (N. Dakota State Univ., Fargo, N. D.). *Paint Technol.* 39(511), 484–489 (1967). Oxidative polymerization of oil films is a process which starts at the surface. It was felt that attenuated total reflectance (ATR) infrared spectroscopic studies would show changes in surface structure during the drying. Changes in the top and bottom surface spectra of 2 ml films cast on tin were determined with time for linseed, dehydrated castor, safflower and isomerized safflower oils. The area of absorption bands for hydroxyl (3600–3100 cm^{-1}), carbonyl (1800–1600 cm^{-1}) conjugated *trans-trans* and *cis-trans* and isolated *trans* (1000–925 cm^{-1}) were normalized by the area of the methylene and methyl bands (3000–2500 cm^{-1}) for the same sample to yield a Y function for each group. A series of plots of Y function for each group for film ages up to eight days were prepared. The data confirm previous findings concerning isomerization of *cis* to *trans* groups during film formation. Other changes in surface groups are specific to the oil compositions. There appears to be a general increase in concentration of *trans* unsaturation at the surfaces and an increase in more polar groups within the film. Top and bottom surfaces showed essentially identical spectra.

SUCROSE ESTER PROCESS. L. I. Osipow. *Am. Ink. Maker* 44, No. 9, 48, 51 (1966). Sucrose stearate is formed by emulsifying sucrose dissolved in propylene glycol with methyl stearate to give a transparent micro-emulsion. Upon distillation of the propylene glycol, methyl alcohol is eliminated. Application of the process to the development of drying oils for printing inks is indicated. (Rev. Current Lit. Paint Allied Ind. No. 301.)

APPLICATION OF THE ANALYSIS OF STEROLS TO THE STUDY OF OIL PAINT MEDIA. J. P. Wolff, A. Karleskind and F. Audiau. *Double Liaison* **1966**, No. 136, 1529–36. Paint oils contain appreciable amounts of different sterols, the relative ratios of which vary according to their nature. The sterols may be accurately determined qualitatively and quantitatively by the analytical process described. The mixed sterols are separated from the other constituents of the oils by thin-layer chromatography, and the mixture is analyzed by gas chromatography. In the same way, this process enables us to know the purity of the oils with some precision and to determine the nature of the mixtures in the case of raw oils as well as in the case of paint media based on oils, whether or not the oils have been treated. (Rev. Current Lit. Paint Allied Ind. No. 301.)

• Detergents

DETERGENT COMPOSITIONS CONTAINING 2-DIOXY-1,2,5-OXATHIAZINE. G. L. Broussalian (Monsanto Co.). *U.S. 3,337,467.* A process for manufacturing a detergent material comprises blending in a 100:5 to 100:70 weight ratio a soap and a 2-dioxy-1,2,5-oxathiazine having the formula:



where R and R′ are alicyclic or aliphatic radicals containing 8 to 22 C atoms, or hydrogen; R and R′ having a combined total of 8 to 22 C atoms and at most one of R and R′ being hydrogen; R″ being either hydrogen or a lower alkyl radical. The compound described above is then hydrolyzed by heating the blend in the presence of alkali to the corresponding vicinal acylamido sulfonate.

DETERGENT COPOLYMER OF POLYGLYCOL ALKENYL ETHERS. F. A. Stuart, W. T. Stewart, W. Love and F. W. Kavanagh (Chevron Research Co.). *U.S. 3,337,516.* An oil-soluble polymer is claimed of (A) polymerizable oil-solubilizing compounds having a single double bond and containing an aliphatic chain of 4 to 30 C atoms, and (B) at least one alkenyl ether of polyalkylene glycol having a molecular weight of 220 to 30,000 and 2 to 7 C atoms in each alkylene group, the alkenyl group containing from 3 to 20 C atoms. The polymerized composition contains (A) and (B) in a weight ratio between 40:60 and 96:4, has a molecular weight of at least 50,000 and a solubility in oil of at least 0.5%.

MICROBIOLOGICALLY ACTIVE QUATERNARY AMMONIUM COMPOUNDS. R. L. Wakeman and J. F. Coates (Millmaster Onyx Corp.).

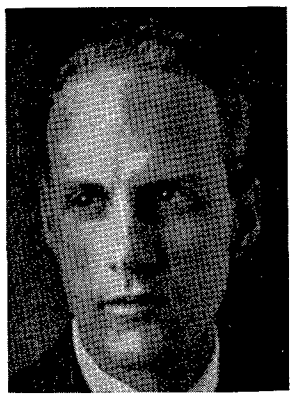
(Continued on page 42A)

• *AOCS Past Presidents*

With the following biographical sketch of A. E. Bailey, JAOCS continues a series begun in the October issue, compiled and written by R. W. Bates. The series will include the twenty presidents who have served the Society since 1947, when the first series of this kind was completed.

ALTON EDWARD BAILEY, 1951

Alton Edward Bailey was the 42nd president of the American Oil Chemists' Society. Ed was born in Midland, Texas, May 24, 1907. He received a B.S. Degree from the University of New Mexico in 1927.



A. E. Bailey

His first position was with the Santa Fe Railroad as an Analytical Chemist. In 1929 he joined the Cudahy Packing Co. where he worked until 1941. It was while he was with Cudahy that his remarkable interest and abilities in the technology of fats and oils developed. On leaving Cudahy he went to the Southern Regional Research Laboratory at New Orleans as a Fats and Oils Research Chemist where he remained until 1946. His contribution to the literature while at that institution was considerable.

He was Chief Process Engineer for the Girdler Corporation, 1946–1950 in Louisville, Ky. While at Girdler he was instrumental in the development of the semicontinuous deodorizer which is extensively used today in the industry.

At the time of his death in 1953, he was Vice-President, Director of Research of the HumKo Products Co. in Memphis, Tennessee.

Ed made many major contributions in original research, and fortunately for the industry, he was a prolific writer.

His "Industrial Oil and Fat Products" (Ed. 1 & 2) is a standard reference book today. Another volume, "Melting and Solidification of Fats," paved the way for the dilatometric measurements used to characterize fats. He was also the editor and contributor to "Cottonseed." In all he had over 40 publications.

Ed was the father of four children: Mrs. Albert E. Maulin of New Orleans, John S. Bailey of Los Angeles, William Alton and Robert Edward of Memphis and three grandchildren, Edward, Melba and Mercedes Maulin of New Orleans.

Ed was one of the outstanding fat and oil technologists of our time.

We are indebted to Mrs. Dottie Bailey for the statistical information used.

Pollution Symposium at Montreal

Industrial Water and Air Pollution is the subject of a one-day symposium to be held at the Windsor Hotel, Montreal, Feb. 22, 1968. The symposium is sponsored by the Montreal Sections of the Chemical Institute of Canada and the Canadian Society for Chemical Engineering. It will deal with current problems and possible remedies.

For details, contact K. Dunlop, Domtar Chemicals Ltd., 1155 Dorchester Blvd. W., Montreal.