Committee Spotlights

The Environmental Committee's scope was modified during the 1976 Fall Meeting in Chicago as explained in this report by chairman E.F. Harp.

In the past year the committee has reviewed and recommended a revision of the committee charter. As initially conceived, the scope of the committee was to obtain and disseminate information to the AOCS membership on the general topic of environmental control. This was not a big success and the major problem was that it did not have the broad support of the companies from which information was solicited. A very limited amount of information was obtained. The committee is of the opinion that this is not a useful course to continue to pursue and recommended its scope be changed to

- assisting the Technical Committee chairman in providing environmental programs;
- providing advice and recommendations to the Governing Board, the President, or other committees on environmental issues;
- maintaining liaison with trade associations in the areas of interest to the Society; and
- identifying environmental-related analytical problems for consideration by the Analytical Committee.

The revised charter was approved by the Governing Board on September 26, 1976.

The Committee has made suggestions on topics and speakers to Joyce Kern in connection with a technical program on the EPA and the Fats and Oils Industry that she developed for the 1977 spring meeting.

Contacts with the following trade associations have been designated: Pulp and Paper Association-E. Fritz, Shortening Institute-G.N. McDermott, Fatty Acid Producers' Council of the Soap and Detergent Association-E.F. Harp.

A report on the activities of the Fatty Acid Producers' Council highlighted the fact that it has joined two other petitioners in requesting a change in the hexane solubles regulation in the state of Illinois. As a result of extensive testimony and negotiations, the Illinois EPA has proposed a modification of its rule on hexane extractables which would permit up to 15 mg/liter polar and 15 mg/liter nonpolar hexane solubles if a separation is made analytically. Polar hexane solubles are associated with fats and oils of animal or vegetable origin. If no analytical separation is made between polar and nonpolar, then the limit will remain 15 mg/liter. The present regulation sets a maximum of 15 mg/liter total with no provision for distinguishing between polar and nonpolar hexane solubles. This proposal has been agreed to by the FAPC and its copetitioners and has been presented to the Illinois Pollution Control Board with a recommendation for adoption. Action on this is pending.

The 16 committee members whose names are listed here represent producers of fatty acids and nitrogen derivatives, tall oil, soap and detergents, and edible fats, oils and extracts as well as representatives of consulting engineering firms and the USDA. E.F. Harp, Armak Company, Chairman; M.J. Boyer, The Chester Engineers; C.A. Carroll, Lever Brothers Company; A.A. Crego, Glidden-Durkee; R.O. Feuge, USDA; E. Fritz, Union Camp Corporation; E.N. Gerhardt, Emery Industries, Inc.; G.M. Kreutzer, Libby, McNeil & Libby; J.P. Krumbein, Reichold Chemicals, Inc.; G.N. McDermott, The Procter & Gamble Company; F.E. Middleton, Jr., The C.F. Sauer Company; D.D. Moffatt, Armour Dial; A.M. Tenny, TENCO Hydro Aerosciences, Inc.; F.B. White, Foster-Wheeler Corporation; N.H. Witte, Central Soya; C.J. Ziel, Best Foods.

The Flavor and Standards Nomenclature Committee is a subcommittee of the Standards Committee, a technical committee whose responsibility involves formulation, adoption, and use within the Society and its technical committees of uniform specifications and nomenclature in methods, publications, and related activity. This report is by subcommittee chairman T.H. Smouse.

This committee is attempting to standardize the nomenclature of flavors of edible fats and oils and to define these flavors in terms of minimum number of chemical compounds. However, attempts at accomplishing this have been disappointing. Efforts to characterize and predict the organoleptic flavor score of an oil by gas liquid chromatography (GLC) have yielded high correlation with actual organoleptic scores.

The committee is composed of industrial, academic, government, and private research members. It presently has twenty members, of which three are in European countries while the remainder are domestic. Several collaborative studies have been made in comparing organoleptic data with GLC instrumental data and it appears that the instrumental method of determining flavor scores of fats and oils is more precise with less variability than the organoleptic method.

The committee is presently collecting data from a collaborative study on soybean oil. The flavor scores from laboratories of participating members will be correlated to the GLC data collected at several laboratories by different methods.

If correlation coefficients continue to be high for soybean oil, the committee will begin looking at other oils to determine if one method is applicable to all oils or if each oil needs a specific correlation equation to effectively determine the flavor instrumentally.

Such a method would be very effective in following the effect of processing upon flavor. Since the instrumental method is more precise, it can show differences in the flavor scores of fats and oils that a panel would not statistically detect. Such a method could be used in refineries to decrease use of taste panels, saving time and personnel. Also, in cases of wide disagreement from panel results, the instrumental method could be used to resolve such disagreements. It has been suggested that this method be used during shipping and transferring of oils to determine the effect of residence time while traveling. In addition to the above advantages, others will be generated since the method is fast and accurate and has good reproducibility with less variation than the organoleptic sensory method.

The Soap and Synthetic Detergent Analysis Committee (Joint with ASTM) has responsibility for developing methods of analysis of soaps and synthetic detergents. This report is by Chairman E.A. Setzkorn.

In the past, the committee has developed a number of different analytical methods for the analysis of soaps and

synthetic detergents. These methods have been published in the AOCS Book of Methods and in ASTM.

The committee is continuing work to develop methods for soap and detergent analysis to meet the needs of government and industry. A very definite goal for future work is to coordinate our efforts in method development with ISO TC 91, (International Standards Organization, Technical Committee 91). This effort will save much time and provide a common basis for analytical evaluation of detergents and detergent raw materials traded in international commerce.

The present organization of our committee is as follows: E.A. Setzkorn, chairman, Continental Oil Co., Ponca City, Oklahoma.

Task Group 34, Analysis of Sodium Citrate in Detergents: A.J. Schmitz, Jr., chairman; A.T. Ballum; D.S. Corliss; B. Cohen; H.F. Robinson; R.M. Kelley; E.A. Setzkorn. This TG completed work on a method which was voted for acceptance as a tentative method in 1976. It is therefore anticipated that this TG will be disbanded.

Task Group 35, Analysis of Alpha Olefin Sulfonate: R.D. Gorsich, chairman; G. Battaglini; C.W. Lutz; L. McFarquhar; K. Guin; S.C. Paviak; H. Robinson; E.A. Setzkorn; J.P. Simko; G. Spiegelman. Final drafting of a method is currently in progress in this task group.

Task Group 36, Analysis of CMC in Detergents: J.V. Corbishley, chairman; A.T. Ballum; D. Corliss; R. Kelley, J. Rader; E.A. Setzkorn.

Task Group 37, Analysis of Linear Alkylates Detergent: J. Corinth, chairman; M. Mausner; R. Kelley; D. Lundgren; E. Kaelble; C. Ellis; K. Guin; E.A. Setzkorn.

Task Group 38, Analysis of Nonionic Surfactants: K. Guin, chairman; W. Kraszewski; R. Gorsich; C. Ellis; R. Kelley; R. Lehne; E. Kaelble; A. Russell; D. Lundgren; T. Yu; A. Schmitz; H. Hatcher; J. Crossley; H. Locke; M. Mausner; E.A. Setzkorn.

Additional Members: M. Brungel, T. Campbell, J. Cassidy, R. Davis, J. Diliberto, G. Feighner, H. Gochman, J. Greenberg, E. Holtveg, F. Lense, E. Miller, A. Mankowich, A. Sabia, H. Stupel, J. Taylor, R. Teates.

• NEW BOOKS (Continued from page 338A)

Considering that the book is not inexpensive, the quality of the reproduction of the papers is frequently poor, in some cases bordering on illegibility. Sometimes important plates or illustrations are omitted due to procurement or reproduction difficulties forcing the interested reader to refer to the original publication after all. Certainly practicing thermal analysts, particularly those who publish, should be familiar with these milestone papers. Many may find it convenient and economical to have them bound together in a single volume.

> ALLAN P. GRAY Perkin Elmer Corp. Norwalk, CT

Treatise on Correlation of Energy Data with Atomic Numbers and the Periodic Table of Elements, by A. Calderelli (Published by A. Calderelli, Dover, NJ, 1976, 58 p, paperback, no price).

Basically the treatise is an unsuccessful attempt to find better graphical or mathematical representations for chemical periodicity. Thermochemical properties of the elements are related to the atomic numbers. Comparing a large number of numerical data, even if they are systematically organized, is not easy. The author has not found a solution to this problem nor offered a significant contribution to the field of chemical periodicity as has, for example, the book by Sanderson (Reinhold, 1960).



also Fatty Acid Hydrogenation Edible Oil Hydrogenation Fatty Alcohol Manufacture

The book has data compiled from the literature and presented in 15 tables and 16 graphs. The heat of atomization, heat capacity, heat content, standard electromotive force, ionization potential and surface energy are presented for the elements. For simple organic compounds and some inorganic halides and oxides the heats of formation are given. The book has references for the data; however, few original sources are cited and much use is made of handbooks.

This book would be of little use to the typical reader of this journal. Persons specifically interested in locating energy data for the elements might find the references helpful.

> E. GORDON MULLER Colgate-Palmolive Company New York, NY

Obituaries ____

Mrs. Sven Young dies

Marian Young, wife of AOCS member Sven E. Young of Toronto, Canada, died unexpectedly on Jan. 16, 1977. Mrs. Young served as Ladies Chairman for the 1962 Fall Meeting in Toronto, at which Dr. Young was general chairman.

Hans Suter dies

The AOCS has been notified of the death last year of Dr. Hans Suter of Mettler Instrument A.G. in Greifesnee-Zurich, Switzerland. Dr. Suter had been a member of the AOCS since 1971.