

tained compared with figures obtained by the official method. The agreement was satisfactory. Several minor suggestions were made, all of which were passed on to the Fisher Scientific Co.

#### Miscellaneous

The Committee has been requested to study some procedure by which to better evaluate fats for soap production with respect to color. This problem is being considered but we have no data to present now.

The following people have collaborated with the Committee in some part of this program: R. T. Milner, G. W. Agee, J. J. Ganucheau and B. W. Beadle.

E. W. BLANK	J. E. MARONEY
E. W. COLT	L. B. PARSONS
F. G. DOLLEAR	H. A. SCHUETTE
J. L. LAING	S. O. SORENSEN
J. FITELSON	L. M. TOLMAN
C. P. LONG	F. C. WOEKEL
V. C. MEHLENBACHER, <i>chairman</i>	

## Report of the Committee On Uniform Methods and Cooperative Work Fall Convention—1944

Only two committee reports were submitted for consideration of the Committee on Uniform Methods and Cooperative Work at this Fall Meeting in Chicago, Oct. 25-27.

#### Soap Analysis Committee:

The Soap Analysis Committee report as submitted by M. L. Sheely, chairman, contained two recommendations. These were as follows:

1. That the complete set of methods for soaps containing synthetic detergents be adopted as tentative. The committee described these methods in their report.
2. That a new procedure for the determination of potassium hydroxide and potassium carbonate in potash paste soaps also be adopted as tentative.

These recommendations were considered by the Committee on Uniform Methods and Cooperative Work and have their approval. Upon motion by the chairman of the latter committee, and a proper second from the floor, these recommendations were adopted.

#### The Committee on Analysis of Commercial Fats and Oils:

This committee has done considerable work and has made the following recommendations with reference to changes in the Thiocyanogen method:

1. Increase the reagent from an excess of 100-150% to 150-200%.
2. Increase the potassium iodide from 1.00 gram to 1.66 grams.

With reference to the Fat Analysis Committee color standards they recommended that the table of interpretation, which has been published previously in *Oil and Soap*, be incorporated as part of the method.

All of the above recommendations were considered by the Committee on Uniform Methods and Cooperative Work and have their approval. Upon motion by the chairman of the latter committee, with a proper second from the chair, these recommendations were unanimously adopted.

J. T. R. ANDREWS	E. B. FREYER
J. J. GANUCHEAU	T. C. LAW
C. P. LONG	H. P. TREVITHICK
J. J. VOLLERTSEN, <i>Chairman</i>	

## Solidification Point Curves of Binary Acid Mixtures IV. Triacontanoic to Tetratriacontanoic Acids<sup>1</sup>

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IN earlier communications (6) from this laboratory on the subject of the analytical chemistry of the fatty acids there have been presented solidification-point diagrams for binary mixtures of consecutive pairs of so-called "even" acids from *n*-decanoic to *n*-triacontanoic and a discussion of the qualitative and quantitative aspects of these diagrams when viewed as analytical tools. With this communication we extend the list to the C<sub>34</sub> acid, thus enlarging the scope of application of the resulting phase diagrams of binary mixtures to lac wax, cotton wax, and beeswax.

The latter probably contains all of the even *n*-fatty acids from C<sub>24</sub> to C<sub>34</sub> (2), but a quantitative analysis of even so common a product has not yet been carried out.

The use of solidification-point diagrams in the analysis of fatty acid mixtures is dependent upon the fractional distillation of their methyl or ethyl esters into binary mixtures. Although the problem does not usually arise in the analysis of the glyceride oils, a successful separation of the acids commonly associated with many of the waxes must still be mastered; that it will come through improved distillation techniques is quite probable if our own experiences with Chinese insect wax (6d) may be deemed prophetic of success.

<sup>1</sup>This investigation was supported in part by a grant from the Wisconsin Alumni Research Foundation, whose aid is gratefully acknowledged.

<sup>2</sup>Now Ensign, USNR. His doctoral dissertation, 1944, formed the basis for this communication.

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