

mentioned that this might be an actual loss due to interesterification with the column packing.

Sample 16. Tall oil methyl esters. It was voted to delete the prohibition against tall oil from the scope of method Ce 1-62. Other changes approved were to extend the range of the permitted column lengths to 4-10 ft and to extend the fatty acids chain lengths included to 8-24 carbon atoms. It is recognized that a single sample with such a wide range can not be accurately analyzed using isothermal techniques but a single commercial fatty acid does not contain major components of the entire molecular weight range. These proposed changes were presented to the parent Instrumental Techniques Committee and to the Uniform Methods Committee.

The Gas Chromatography Subcommittee was organized as a joint AOCS-AOAC effort and the method is now being read into AOAC standards. It has also been copied on a letter ballot under ASTM Committee D-1 and seems likely to be accepted for fatty acid analysis by the ASTM. It thus appears that the goal of a uniform method in the various technical societies is being realized.

Future work of the Committee will include checking the applicability to other commercial fats and fatty acids as they are suggested. In the immediate future, collaborative analysis of peanut oil methyl esters to check the performance of individual collaborators with the analysis of a relatively simple sample, and re-examination of tall and menhaden oil methyl esters will be attempted. When the Special Task Group for the Preparation of Methyl Esters completes its work and makes specific recommendations, its suggested method will be tested in conjunction with the Gas Chromatographic method. The Fatty Nitrogen Derivatives Sub-Committee of the Industrial Oils And Derivatives Committee is working on a gas chromatographic procedure. When it is ready the Gas Chromatography Subcommittee will help in final cooperative testing.

Spectroscopy Subcommittee

The Spectroscopy Subcommittee met April 23, with fifteen members and guests present, presided over by Subcommittee Chairman, R. R. Allen. Since they had no pending projects, the meeting consisted of discussions of tasks which the Subcommittee should consider. It was decided that no purpose could be gained from further collaborative investigation of near IR methods for determination of hydroxyl groups as these methods are limited to the determination of a primary OH group in samples containing no secondary hydroxyl groups. (See Report of the Spectroscopy Committee 1961-62.) The group also agreed that no collaborative work should be undertaken on the near IR method for determination of isolated *cis* content as this value can be obtained by the official method for isolated *trans* (Cd 14-61) and iodine value, by difference. Similarly a proposal to investigate the determination of *cis, cis*, methylene interrupted dienes in fats by conjugation with lipoxidase was not accepted because of very little interest in this method.

• Erratum

JAOCS 40, page 593, October, 1963. STOCKBURGER AND BRANDNER: THE REACTIONS OF ALKYLENE OXIDES WITH VARIOUS BUTYL AND OTHER ALCOHOLS. Equations F and H should be shown as:

A small absorption peak at 10.3 microns due to glyceride oils which contain no *trans* isomers but which give an apparent *trans* content of 1-3% was discussed and it was decided that an average correction should be worked out and considered for possible inclusion in the method for the determination of *trans* content of fats and derivatives. (Cd 14-61).

The subcommittee voted not to attempt any further collaborative work until a need for a specific method was presented.

Special Task Group for Preparation of Methyl Esters

This Task Group met with the Spectroscopy Subcommittee. J. R. Chipault presided at the portion of the meeting dealing with discussions of the activities of the Task Group.

This Task Group has obtained a triglyceride sample containing approximately 25% elaidate and 40% ricinoleate and prepared mixed fatty acids. Portions of the materials were sent to seven collaborating laboratories for preparation of methyl esters from the fatty acids by the methanol:sulfuric acid and the methanol:BF₃ methods and from triglycerides by the methanol:sulfuric acid procedure. Only three collaborators had reported by the time of the meeting. Despite the fact that only limited results were available and those reporting felt that the hydroxyl determination gave a poor analytical constant and that the determination of *trans* unsaturation in glycerides gave a value that was too high because of a small absorption at 10.33 microns by all triglycerides, the data available indicated that the esterification procedures used had little or no effect on the hydroxyl or the *trans* contents of the samples.

Plans for the coming year include the preparation of methyl esters by the H₂SO₄ and BF₃ methods from beef fat and beef fatty acids.

Instrumental Techniques Committee

The entire Instrumental Techniques Committee met April 24, following the individual meetings of the Subcommittees. Results of the Subcommittee meetings were reviewed and plans for future activities discussed. Recommendations of the Gas Chromatography Subcommittee regarding specific changes in method (Ce 1-62) were approved by the Instrumental Techniques Committee and moved on to the Uniform Methods Committee for final action.

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REFERENCES

- O'Connor, R. T. and J. R. Chipault, JAOCS 45 14, 32-34 (1963).

