five extractions to a volume of about 20-30 ml. and transfer to a platinum crucible, carefully washing the beaker with alcohol and transferring the washings into the crucible. Slowly burn off the alcohol and then ignite the crucible until no carbon remains.

Cool the crucible and place into a 250 ml. beaker. Wash the crucible with about 50 ml. hot, distilled, *neutral* water and titrate with N/50 HCl, using methyl orange as an indicator.

1 cc N/50 HCl = .00607% sodium oleate

Three samples were prepared as described in last year's report, that is, by incorporating definite amounts of sodium oleate in soap-free oil, and mailed to the various members of the committee. A blank consisting of the soap-free oil was also mailed, making a total of four samples. Following are results:

	Sample 1	Sample 2	Sample 3	Sample 4
Per cent Sodium Oleate Incorp.	0.0000	0.0050	0.0100	0.0500
Laboratory No. 1	0.0000	0.0066	0.0095	0.0440
Laboratory No. 2	0.0030	0.0079	0.0121	0.0452
Laboratory No. 3	0.0000	0.0024	0.0085	0.0401
Laboratory No. 4	0.0027	0.0057	0.0064	0.0470
Average	0.0014	0.0056	0.0091	0.0441

An examination of above results indicates that the average of all analyses checks closely the amount of sodium oleate that was actually incorporated. However, some discrepancies exist in the individual analyses of samples one and two. In view of the very small amounts of soap present in the samples and the nature of the analysis itself, the variations are not considered serious.

Your committee agrees that the analysis is a lengthy one; also believes that concordant results can be obtained only by the most careful analysts, and therefore suggests that the procedure outlined above be adopted as a tentative method only, for the time being.

L. A. Spielman, Chairman
N. T. Joyner
J. J. Lappen
R. C. Stillman

Report of The Fat Analysis Committee

THE last report of the Fat Analysis Committee recommended methods for Wiley melting point, thiocyanogen value, a modified Twitchell method for separation of liquid solid fatty acids, and a modified AOAC method for detection of foreign fats containing tristearin in unhydrogenated pork fat. These methods were formally adopted and published.

It was decided to continue the work on liquid solid acid separations in the light of work done and reported abroad by Cocks Christian & Harding, who claim that the Twitchell lead-salt alcohol method yields low results for iso-oleic acid. Samples have been distributed for analysis by the Cocks Christian and Harding method, the present method as adopted last year, and the Baughman-Jamieson method.

It was further decided to investigate a number of specific tests for oils, as follows:

Bellier Test for Peanut Oil.

AOAC Test for Unhydrogenated Fish Oil.

Ghose-Pal Test for Hydrogenated Fish Oil.

Besson Test for Kapok Oil.

Baudoin Test for Sesame Oil.

Samples covering the above tests have been distributed to the committee for cooperative tests, but the data are not ready at this time.

The committee has under consideration further work on the method for detection of foreign fats containing tristearine in unhydrogenated pork fats. The question of whether the use of pre-melted glyceride in determining the melting point of the separated glycerides is of any influence may require some additional cooperative work.

One of the committee members has called attention to the fact that some of the beakers and test tubes specified for use in the method for Wiley melting point are not standard. The committee is considering the possibility of changing these specifications so that standard equipment can be used.

W. H. Irwin, Chairman.
R. W. Bailey
C. P. Long
M. L. Sheeley
H. P. Trevithick
T. C. Law
H. J. Morrison
L. M. Tolman
J. J. Vollertsen

Report of the Revision of Methods Committee 1937

DUE to the addition of several new methods and a new section on sulfonated oils, it was found necessary this year to add a number of new pages to the Lefax binder. These additions, together with a number of necessary changes in the methods generally, resulted in the expenditure of $215 to bring our methods up to date.

This expenditure made it advisable to consider revision of the prices for sets of methods, with the result that the following schedule is now in force: complete sets with binder $3, complete sets without binder $2, revisions $0.50.

The following are the new methods added: Modified Twitchell method for separation of liquid and solid acids, thiocyanogen value, Wiley Melting point, and a modified AOAC method for detection of foreign fats containing tristearin in unhydrogenated pork fats.

The new section on sulfonated oils comprises methods for the following determinations: Moisture and three methods for organically combined sulfuric anhydride.

Changes made in existing methods were the following: (1) the method for grinding cottonseed cake for determination of color was modified, (2) some inconsistencies with regard to designation of standard solutions were corrected in the method for free fatty acids, (3) some changes in temperature designations and color limits were made in the refining methods, (4) the language describing the FAC color standards was changed to conform with the new composition of the standards, (5) several minor changes were made in the soap methods, particularly in the rosin determination, (6) the method for volatile hydrocarbons in soap was deleted as inadequate and was replaced by a method proposed by the Procter & Gamble laboratories, and (7) some methods for screen test of powdered soap products were added.

The attention of the committee was directed to an inconsistency in the description of the pellet size for the fat pellet in the Wiley Melting point determination. This will be corrected in the forthcoming revisions.

W. H. Irwin, Chairman.

REPORT OF COMMITTEE ON REVIEW OF SCIENTIFIC LITERATURE ON OILS AND FATS

The report on the third Annual Review of Scientific Literature on Fats and Oils has already appeared in two sections in the March and April numbers of OIL AND SOAP. We believe this report speaks for itself and is entirely too lengthy to be read at one of the regular meetings of the Oil Chemists' Society.

The Committee wishes to acknowledge the work of Mr. M. M. Piskur, Chemical Librarian for Swift & Company. The value of this report, we believe, lies primarily in the thoroughness in which it covers the literature. It is this feature that the Committee particularly wants to credit to Mr. Piskur.

G. R. Greenbank
G. S. Jamieson
H. A. Mattill
R. C. Newton, Chairman.

SEED ANALYSIS COMMITTEE REPORT

THE work of the Seed Analysis Committee this season was a continuation of that done last year and has been confined entirely to a study of the fuming and preparation of the cotton seed sample. The question of the lint determination, on which a very brief preliminary report was made last year, is being studied by the Crude Mills Committee and is subject to their report.

Before taking up the details of the investigation, it was thought some interest might be felt in a comparison showing the number of tests outside of tolerance on the 1936-37 Check Seed Series with that of 1935-36:

Season	No. of Coll.	Oil	Amm.	F.F.A.	Mois.	Total
1936-37	39	106	83	61	56	306
1935-36	40	114	94	74	35	317

This comparison shows clearly that there has been no general improvement in the efficiency of the group, and also that the oil determination (apparently one of the simplest tests) has a very considerably higher percentage of error than any other. The number of tests out of tolerance this season varied from 22 on Sample No. 6 to 41 on Sample No. 7, with no evidence that any unusual quality of the sample, such as high or low percentage of moisture or other component or off-quality, had any influence in either decreasing or increasing the number of errors.

It will be remembered that the report of this Committee last year recommended a further study of the fuming procedure as a possible cause of variation in oil results. In order to check this possibility the present fuming temperature was checked against both higher and lower ones, holding other variables the same. The results of these tests showed that a very slight increase in temperature (5°-10° C.) gave definitely "off" results and a high degree of charring of the lint. The present temperature, with careful handling and the avoidance of lint discoloration, was satisfactory. Temperatures considerably lower than now used gave completely satisfactory results, entirely eliminated lint charring, but carried the penalty of an increased "fluffiness" or "lintiness" of the sample. The conclusion was reached that while with careful handling under favorable conditions, the present temperature is satisfactory, it is too close to the upper limit of the fuming range to be safe and could be the source of error, especially in routine work where oven loads and sample types are so varied.

In order to check the agreement between results obtained by the present method and one using a lower temperature, Check Sample No. 3 was sent to all collaborators. The results as reported showed identical values for both oil and ammonia with about a 36% reduction in the number of errors for the Special Method. The members of the Committee also determined the remainder of the Check Series by both methods and found the average oil and ammonia values to be identical by either. No particular reduction in the number of errors was noted on this series; however, the degree of error was less using a lower temperature.

Charring or lint discoloration (the most important objection to the pres-