procedure for the determination of vitamin A and fish liver oils for animal feeds.

While the vitamin A assay methods for official pharmaceutical products will cover most commercial oils and concentrates, it would be impossible to expect them to be directly suitable for margarine, feeds, and certain other vitamin A containing materials. However the new U.S.P. Standard and the adoption by the U.S.P. of physicochemical methods should facilitate the adoption of physicochemical methods for other products. One of the Vitamin Committee members, E. E. Rice, is the chairman of a committee of margarine chemists who have already worked out good chemical methods for the assay of vitamin A in margarine that should be adaptable for official use. Another member of the committee, H. C. Schaefer, has been appointed an associate referee of the Association

Report of the Refining Committee April, 1950

DURING the course of the year E. Handschumaker, working in the laboratories of Lever Brothers Company, has carried on an extensive study of the Servall method of contrifuge refining. His work has been done with two main objectives in view:

- a) An attempt to develop a reproducible refining method at a single temperature.
- b) An investigation of the multipaddle machine developed in 1948 by Charles Cole and exhibited to the Refining Committee at the meeting in New York in 1948.

Mr. Handschumaker has written a complete report of his investigations, and this has been mailed to the various members of the Refining Committee. In brief, its conclusions are that the single temperature method of refining is practicable and reproducible and that the Cole multipaddle machine, while its use is practicable, needs certain refinements.

His recommendation is that further collaborative work on the centrifuge method would be futile unless all members of the committee were prepared to equip themselves with multipaddle machines similar to those constructed by Mr. Cole. It is his opinion that most of the differences reported among the collaborators in the past were due to the use of single agitators and minor modifications in technique. It is essential to follow every step of the method outlined as exactly as possible in order to obtain concordant results.

A T THE meeting in Chicago in November 1949 a subcommittee consisting of F. R. Earle, chairman, G. A. Crapple, and N. F. Kruse was appointed to make a thorough review and study of the whole question of centrifuge refining and to recommend further action to the committee as a whole.

This subcommittee first reviewed the files in detail

of Official Agricultural Chemists with the assignment of investigating official physicochemical methods for feeds.

Since a reliable and reproducible vitamin A standard has been officially adopted and since official physicochemical assays have been or will be adopted in fields of interest to the Oil Chemists' Society, the present membership of the Vitamin Committee has carried out its original assignment. We recommend that a new problem be assigned to this committee and that new members be chosen who are especially qualified to work out that problem.

H. N. BROCKLESBY
H. J. DEUEL JR.
E. HANDSCHUMAKER
R. W. HARRISON
B. L. OSER
J. A. RAYNOLDS

- E. E. RICE
- A. C. RICHARDSON
- T. D. SANFORD
- H. C. SCHAEFER
- N. D. EMBREE, chairman

and then sent out a questionnaire to the Refining Committee to obtain their views.

Fourteen members of the Refining Committee answered the questionnaire and the consensus was:

- a) That the present standard A.O.C.S. Methods of refining were functioning well.
- b) That the use of the centrifuge to consolidate foots should not be made a part of the official procedure for refining degummed oil.
- c) That the 200-gram centrifuge method was of no particular interest and should be not studied further.
- d) On the question as to whether the centrifuge method of refining, using the Servall machine, should be investigated further, the committee was equally divided.
- e) Despite the answer to d, a majority of the committee indicated that they would not be interested in a centrifuge method, even though the standard deviation was markedly improved over the present cup method.
- f) On questions concerning problems needing further study there was no agreement among the members of the committee, and seven of the 14 reported that they had no suggestions for collaborative work.

As a result of the answers to their questionnaire, the subcommittee reported to the Refining Committee that the greater number of members felt that the present cup method is functioning adequately and recommends that no further collaborative work be done by the committee as a whole until such time as there is agreement on the need for the study of specific problems. At their request the subcommittee has been discharged.

F. R. EARLE	R. R. KING
G. A. CRAPPLE	N. F. KRUSE
M. M. DURKEE	J. R. MAYS JR.
O, J. FIALA	H. S. MITCHELL
D. L. HENRY	H. E. MOORE
G. W. HOLMAN	S. O. SORENSEN
W. A. JACOB	E. H. TENENT
A. A. Kiess	EDWARD M. JAMES, chairman