

TABLE III
Cooperative Analyses of Built Synthetic Detergent

% Apparent Total P ₂ O ₅					
Lab.	Molybdate	2 EP.	Lab.	Molybdate	2 EP.
1	26.85	27.19	7	27.46	27.11
2	27.99	27.62	8	27.80	28.10
3	27.33	27.63	9	27.15	27.11
4	27.93	26.97	10	27.40	27.53
5	27.15	27.25	11	27.31	27.29
6	27.15	27.04	12	27.20	28.00
Average Molybdate.....	27.35		Average 2 EP.....		27.40
High Molybdate.....	27.99		High 2 EP.....		28.10
Low Molybdate.....	26.85		Low 2 EP.....		26.97
Spread Molybdate.....	1.14		Spread 2 EP.....		1.13
Standard Dev.....	0.83		Standard Dev.....		0.39

TABLE IV
Cooperative Analyses of Built Synthetic Detergent

% Total P ₂ O ₅ —Two Endpoint Method			
Lab.		Lab.	
1.....	26.57	7.....	26.26
2.....	26.41	8.....	26.43
3.....	26.41	9.....	26.33
4.....	26.55	10.....	26.33
5.....	26.69	11.....	26.75
6.....	26.71	12.....	26.39
		13.....	26.36
Average.....	26.48		
High.....	26.75; low 26.26; spread 0.49		
	Standard deviation: $\sqrt{\frac{\sum d^2}{n-1}} = 0.16.$		
	Accepted standard deviation for two endpoint method = 0.32.		

from 25 to 30% total P₂O₅, has been found to be 0.32 vs. 0.60 by the method employing alkalimetric titration of the washed yellow phosphomolybdate precipitate, which was the procedure previously in operation. The two endpoint method offers a substantial reduction in the time required for analysis. From the best estimates obtained it is believed that a 50% reduction in elapsed time may be realized, with an even greater saving in the personal attention required.

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Report of the Referee Board 1953-1954

FOR the year ending May 31, 1954, 41 Referee Chemists were appointed. Thirty-five were renewals, and 26 were given certificates on cottonseed, oil cake and meal, and fatty oils. Thirteen held restricted certificates either from choice of application or by the discretion of the Board. The chemists are located in 12 states and 25 cities and represent 21 different laboratory organizations.

During the 1953-54 period the Board saw fit to suspend one chemist on the basis of factual information that his results were not of an accuracy expected of Referee Chemists.

The matter of qualifications, specifically educational, again arose during the period. It was the consensus of the Referee Board (not unanimous) that an active member could qualify without the possession of a degree in chemistry or chemical engineering from an accredited college or university. The matter was referred to the Governing Board by your chairman. It was the consensus of the Governing Board that the Referee Board could not require an active member to possess said college degree under Article V, Section 5, of the constitution and by-laws. Two chemists with many years of experience were certified as a result of this decision.

The 1953-54 Referee Board, cognizant of factors that will necessitate the replacement of some veteran members of the Board, feel duty-bound to offer some recommendations for the guidance of future Boards, viz.:

1. The Board urges a revision of Article V, Section 5, of the constitution and by-laws. This qualification should be written in a manner so clear that

only one interpretation is possible. The 1953-54 Board feels that the possession of a degree in chemistry or chemical engineering from an accredited college or university should be a basic requirement for Referee certification.

2. The laboratory of a new applicant should be inspected by a member of the Referee Board or by two qualified members of the Society before certification is granted. The possession of approved equipment is very essential.

3. New applicants should be personally interviewed by the Referee Board or a Board member to ascertain his or her fitness for certification. Attendance at the spring meeting of the Society by prospective applicants would facilitate this phase.

The Referee Board urges prospective applicants to participate in the Smalley check sample program. Performance on the check samples has a considerable bearing on our decisions.

R. R. KING	PROCTER THOMPSON
G. CONNER HENRY	R. W. BATES,
A. S. RICHARDSON	chairman

Addenda

IN passing, your chairman would like to pay tribute, on behalf of the Society, to a veteran member of the Referee Board, who has indicated his intention of retiring from active participation in the Board's activities.

Dr. Richardson has served on the Referee Board for 23 years, most of this service has been as chairman. The amount of energy, patience, and time he has expended in this important Society activity has been tremendous. The Society is deeply grateful for his efforts and truly wishes him well.

R. W. BATES