

# PRESIDENT'S ADDRESS

By W. D. HUTCHINS

AS PRESENTED AT MEMPHIS MEETING AMERICAN OIL CHEMISTS' SOCIETY, MAY 23, 1935

IT HAS been eight years since the A. O. C. S. has had the privilege of gathering in this beautiful city for its annual meeting. I am sure the members are proud of the Society's growth both in size and influence.

Before accounting to you for the past year, it might be well for us to think back at this moment and consider the progress which our Society has made during the past eight years.

The membership of the Society should think with pride of the growth of the influence of the Society; the improvement of the analytical methods; the research work done by the members and reported at its meeting; the growth in membership; the improvement of its official publication, the OIL AND SOAP; the improvement in its financial standing; and last, but not least, the co-operation and untiring efforts of its committee which have been the shining star in the Society's field of success.

During this year of current economical changes, a period in which this industry as well as others knew not what the tomorrow might bring forth in the business or social world, our Society has pressed forward steadily. While your president may not feel that he can point out any great or unusual accomplishments during the year, it is with pride that we review the past year in so far as it may record the history of the A. O. C. S. The membership of the Society for the second time in succession has reached a new high peak; the total membership now being 354, an increase of 52.

We wish time permitted us to mention all the various committees, but this cannot be done, and we wish to say in passing that the Membership Committee under the leadership of its chairman, Mr. A. A. Robinson, has done a wonderful work for the Society this year and we hope that the succeeding committee will keep up the good work.

The activities of our technical committees have, we believe, been above the average, although some of them have done a great amount of work which their reports will prove. These committees have accomplished much and I am sure the

future will prove the value of their efforts.

Probably the most successful Fall Meeting in the history of our Society was held in Chicago, October 11-12, 1934. The program, we believe, was the best yet presented at a Fall Meeting. The first report of the Committee on Sulphonated Oils was read and showed what enthusiasm, interest and co-operation can accomplish. The reports of the other committees showed that they were active with the exception of the Detergents Committee, which was abolished. The attendance at this meeting was larger than that of any Fall Meeting, the registered attendance being 155 which indicates a maximum attendance of approximately 175-200. Our industrial friends were very loyal and their exhibits were very interesting and helped to make the meeting a most successful one.

The Society should feel proud and congratulate themselves on having such loyal and interested members as the Chicago group. Their untiring efforts on behalf of the Fall Meeting is the secret of the success of that great gathering.

The Journal Committee should be congratulated upon the great improvements shown in the OIL AND SOAP during the past year. Our Committee has accomplished much, yet they have not reached the goal, and we ask that each member of the Society support the committee and the Journal by contributing original scientific papers, by patronizing the advertisers and by offering constructive criticism to those responsible for our Journal. No chemical library should be without a copy of it and a little boost or good word to your friends will help bring new subscribers and more papers. The Society is indebted to Mr. W. H. Irwin for his untiring efforts in behalf of our Journal. The Society owes its most sincere appreciation to Mr. Irwin for his unselfish services and should co-operate with him and his Committee in order that their work might be made as light and interesting as possible.

Our Treasurer's report will inform you as to the financial conditions of the Society. This report will show that the Society is increasing its assets steadily and there

is a greater cash balance than in several years. Of course, you realize that we have not been able to recover all of the money which was tied up in banks and frozen assets. We were fortunate in coming out of the financial reorganization of 1933 without having our surplus entirely depleted, and the Society is rapidly building up its surplus for future emergencies.

The question of co-operative work among the members of our Society has been given a great deal of attention this year due to the fact that the N. C. P. A. discontinued its co-operative work and left our members with only the Smalley Foundation Program. The Governing Board desired to relieve, as far as possible, the laboratories and especially the Referee Laboratories of the financial burden which co-operative work has placed on them in the past. With this idea in mind they held a joint meeting with the Referee Board and the matter was gone over very thoroughly and a distinct understanding reached relative to the future policy of the Society on this matter. The Referee Board was asked to formulate the plans and bring them before the Society in their report.

It has been the aim of the Society this year to establish a closer contact with the American Chemical Society and the Bureau of Standards in order that the methods might be standardized and much of the work of our Soap Committee recognized, and the results of their efforts utilized. The American Chemical Society has appointed a Soap Committee, and we feel that the committees of these two Societies co-operating with the Bureau of Standards can accomplish much. We believe we will have more uniform methods for soap analysis as all of the improvements in methods will be tried out and those satisfactory adopted as standard.

During the year there were two new committees appointed, the Free Fatty Acids Committee, of which Mr. C. H. Cox is chairman, and a committee for "Preparation of Review on the Progress in Science of Oils, Fats and Soaps," of which Dr. R. C. Newton is chairman. I am sure their reports will be of exceptional interest to the members.

With our Society in excellent condition from every standpoint, we think the future should find each member of the Society concentrating upon three questions: (1) How can I best serve and improve my profession? (2) How can I enlighten and improve myself as

a chemist? (3) How can I best serve my employer and humanity? In such times of economical and social unrest as the present, we should not lose sight of either of these questions and we should do our utmost to arrive at the correct answers. If we find the correct

answers and strive to reach the goal, we will have done our duty toward our profession, our Society, humanity and ourselves.

May I personally thank all of the active members of the Society for their support which I deeply and sincerely appreciate.

# THE ADJUSTMENT OF LOVIBOND RED GLASSES\*

By ROGER S. ESTEY

Electrical Testing Laboratories, New York, N. Y.

## Introduction

The Lovibond color system consists of red, yellow and blue sets of colored glass slides of standard size and color. These glasses are graded and numbered in terms of the intensity or depth of color on the three scales. The first scientific description of this system was published by the U. S. Bureau of Standards.<sup>1</sup>

Certain yellow and red glasses can be combined to produce amber colors which closely match the colors of vegetable oils. It so happens that in matching oil colors the match is much less affected by the choice of the yellow component than it is by the red. In fact for most purposes the single yellow glass designated "35-Y" is sufficient. The match is so sensitive to small differences in red, however, that the manufacturer's designations on the red glasses are not accurate enough to facilitate the precise grading of oils which this American industry requires.

In response to this need, the U. S. Bureau of Standards has revised the scale for numbering Lovibond red glasses and has regraded many glasses on the new scale. The regrade numerals for each glass usually consist of an integral part and a fractional part expressed to one, two or three decimal places. The Electrical Testing Laboratories has developed a procedure for altering the color of a Lovibond glass just enough to eliminate the decimal part of the regrade designation and produce a glass having an integral grade on the new and more accurate scale.

<sup>1</sup>Gibson, Harris and Priest. B. S. Sci. Pap. No. 547, 22, 1 (1927).

## The Priest-Gibson N" Scale

The following discussion is limited to the consideration of the grading and adjusting of Lovibond red glasses when combined with a "35-yellow" glass. The effect of deviating from the 35-point on the yellow scale has been discussed previously by the Bureau of Standards.<sup>2</sup>

The Priest-Gibson N" scale<sup>3</sup> for Lovibond red glasses was developed

<sup>2</sup>Priest, Judd, Gibson and Walker. B. S. J. R. 2, (R. P. 58) 793 (1929).

<sup>3</sup>In the publications of the U. S. Bureau of Standards (which comprise the bulk of the literature in this field), the manufacturer's color scale is designated by N. The Bureau then developed a revised scale which they called N". This scale was not completely satisfactory and after receiving further revision has been designated N".

at the U. S. Bureau of Standards in response to the needs of the vegetable oil industry for a more accurate scale than that supplied by the maker of the Lovibond glasses. It is well-known that the American Oil Chemists' Society has been influential in bringing about this development. The new scale has two essential advantages not possessed by the old. It is truly additive and it is based on fundamental measurements independent of the choice of observer or the permanence of a particular set of colored standards.<sup>1</sup>

Lovibond glasses regraded by the Bureau of Standards have received grades on the N" scale which differ from the nominal Lovibond assignment by the amounts shown in Fig.

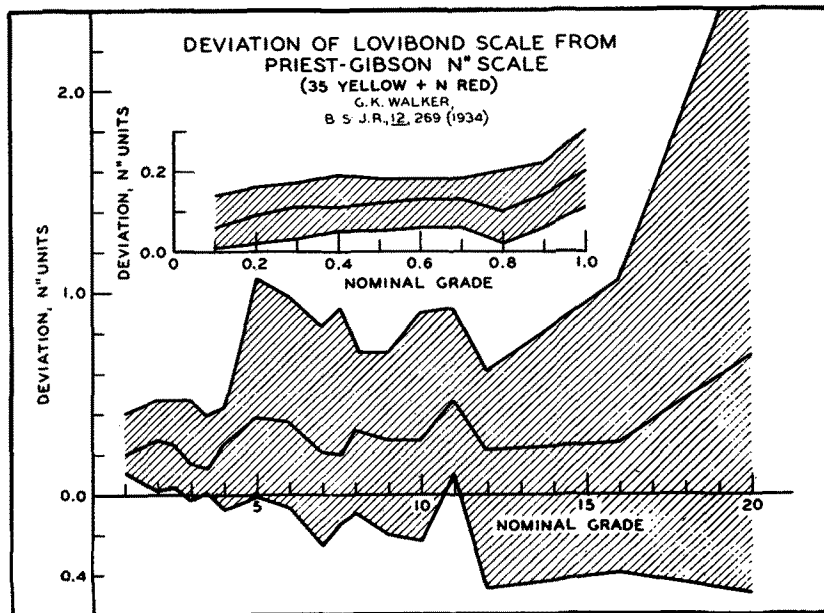


FIG. 1. DEVIATION OF LOVIBOND SCALE FROM PRIEST-GIBSON N" SCALE.

\*A paper presented at the 26th annual meeting of the American Oil Chemists' Society at Memphis, Tenn., May 23-24, 1935.