

pended in water, determined potentiometrically, does not in a number of instances agree with these extrapolated values but is found to be in the neighborhood of the values reported in the literature as determined directly by cataphoresis or other methods. The measured isoelectric "point" of a protein probably is not a definite point but should in all probability be referred to as an "isoelectric range." *The position of this isoelectric range on the pH scale is dependent on the chemical composition of the protein.* The calculated isoelectric point is very near the hydrogen-ion concentration of neutral water. This is what would be predicted on the theory that at the higher concentrations of acid and alkali the binding of acid and alkali follows the adsorption law. *The calculated isoelectric points are not related to the chemical composition of the proteins.*

From these findings we conclude that the chemical nature of a protein and the power of a protein to bind acid and alkali in stoichiometrical relationships depends upon the chemical groups within the protein molecule and is therefore limited to the range between pH 2.5 and pH 10.5. Thus our findings afford a logical explanation for the divergent views of Loeb *et al.* and other workers who hold that acid and alkali binding are of a stoichiometrical chemical nature and those workers who insist that colloidal adsorption is the predominating factor. *Both are correct*, and we have shown in what regions (in terms of hydrogen-ion concentration) one or the other phenomenon may be expected to predominate.

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**AMERICAN ASSOCIATION FOR THE
ADVANCEMENT OF SCIENCE
ANNUAL REPORT OF THE PERMANENT
SECRETARY FOR THE FISCAL
YEAR 1924-25¹**

THE permanent secretary reports as follows concerning the work of the association during the year 1924-25 and plans for the year 1925-26.

PUBLICATIONS

A special issue of *SCIENCE* (February 6, 1925) was arranged to present the general reports of the fifth Washington meeting. Special reports of associated societies were presented in subsequent issues of

¹ Presented to the Executive Committee on October 25, 1925.

SCIENCE. The issue of February 6 was sent to all members, including those who receive *The Scientific Monthly*. The usual booklet on the organization and work of the Association was revised and was again used in the circularization of new members of the affiliated societies. About 7,000 circular letters inviting such persons to join the Association were sent out October 1, 1925. About 4,000 more letters are to be sent out. The official statement of the Association on the status of the Evolution Theory was printed as a leaflet for use at the time of the Scopes trial and later. Additional copies of this leaflet are available if needed. The new volume of summarized proceedings is nearly off the press. Its publication is expected within the next few weeks. The work of proof-reading has been in the hands of Dr. Sam F. Trelease, of Columbia University. In the preparation of the manuscripts the permanent secretary has been greatly assisted by the Washington staff. One new feature of the volume is an annotated list of all the organizations that are associated with the Association, each name being followed by a brief statement concerning the organization, secured from its secretary. With the help of the editor of *SCIENCE* plans have been made by which the preliminary announcement of the Kansas City meeting is to appear in *SCIENCE* for Friday, November 27, 1925. This issue is to be sent to those who receive *The Scientific Monthly* as well as to the regular subscription list of *SCIENCE*. It is hoped that this arrangement will prove to be an improvement. A considerable expense will be thereby avoided.

DIVISION AND ACADEMY RELATIONS

The arrangements with the two divisions have been continued as heretofore. The new arrangement with affiliated academies is going into effect smoothly. Division allowances amounted to \$1,746 for the fiscal year 1924-25. The allowances to the affiliated academies and the local branch amounted to \$1,540; this item will probably be only about half as large for next year, under the new arrangement.

MEETINGS

The fifth Washington meeting was by far the largest in the history of the Association and it was successful in many ways. Full reports concerning it have been published. There were two summer meetings of the Association in 1925, one held jointly with the Southwestern Division (at Boulder, Colo., June 8-11) and the other held jointly with the Pacific Division (at Portland, Ore., June 17-20). The two summer meetings cost the association the sum of \$782.42,

largely on account of mailing the preliminary announcements to all Association members. The permanent secretary suggests that, since the association pays considerable funds to the two divisions, since the annual expenses of the association have recently been somewhat greater than the corresponding annual incomes (thus acting to decrease the emergency reserve), and since the association as such can have but slight part in joint summer meetings, it may be well to hold no summer meeting in 1926. Preparations for the Kansas City meeting seem to be well in hand. It promises to be an exceptionally interesting meeting.

GENERAL ORGANIZATION

The Committee of One Hundred on Scientific Research was reorganized, the membership being made up at a special conference on this subject, held at President Pupin's invitation at his home in Norfolk, Conn., July 25-26. At this conference were present President Pupin (chairman of the Committee of One Hundred), Dr. Cattell (chairman of the Executive Committee), Dr. True (secretary of the Committee of One Hundred), and the permanent secretary. The lists were referred to the members of the executive committee and were approved, after which letters of appointment were sent out over the president's signature. At the suggestion of Drs. Slosson and Cattell, and with their help, the permanent secretary recently arranged for one or more members in each state to act as an intelligence committee to send in prompt information concerning any anti-science or anti-education movements or activities that may occur in the given state. It is planned that such reports as may be sent in will be prepared for publication by Dr. Slosson and published in *SCIENCE* and perhaps elsewhere. In selecting state representatives, the divisions and the affiliated academies have been consulted.

QUESTIONNAIRE OF THE COMMITTEE ON PUBLICATION

With the annual dues statement sent out on October 1, was sent to each member a questionnaire concerning the proposal to inaugurate a popular journal of science under the auspices of the association, to which about 4,178 replies have thus far been received, out of about 5,900 that have been heard from by payment of dues. Favorable to the proposal are 3,110, while 828 oppose it and 240 are undecided.

MEMBERSHIP

During the year 1924-25 the total gain in membership was 2,077, the net gain being 1,376. At the end of the year the number of members in good standing was 13,437 and the total enrollment was 14,263. The

membership in good standing was 94.2 per cent. of the total enrollment on September 30, 1925. The recent rapid influx of new members continues unabated and even accelerated and the ratio of the number of members in good standing to the total enrollment continues to increase, though slowly, of course.

FINANCIAL AFFAIRS

The annual report of the treasurer shows that the amount now available for appropriation, aside from special funds and liabilities, is \$6,930.61. This may be wholly or partially appropriated to further research, either by direct appropriation or through allotment of grants by the Committee on Grants.

The annual financial report of the permanent secretary shows that the balance in checking account and in emergency fund has been reduced during the last year. On September 30, 1924, the amount of these two items was \$3,161.71 and on September 30, 1925, they amounted to only \$1,688.25. The permanent secretary suggests that the emergency fund should not be allowed to be further decreased and that the policy of some slight economy be adopted for the current year or that some special effort be directed toward increasing the annual appropriable income at least as rapidly as expenditures may be increased. The printing of the preliminary announcement of the Kansas City meeting in *SCIENCE* will result in a material saving. If no summer meetings are held next summer, another substantial saving may be secured. On the other hand, the budget calculation shows that only \$700 of the prospective income is uncared for by the proposed budget. Against this may be set the possibilities: (1) of the annual-meeting expenses being somewhat larger than predicted and (2) of the need for some extra funds to support the work of the Committee of One Hundred on Scientific Research. Special attention is called to the probability that locally raised funds for the Kansas City meeting will probably not be nearly adequate for the extra expenses of the meeting. As the years go by we find it increasingly difficult to raise local funds for the annual meetings. It appears that conventions are being more and more financed by direct taxation of those who attend, and it seems to the permanent secretary that our association might well adopt a general policy leading to or towards the employment of a registration fee for the annual meeting or some other regular method calculated to defray the extra expenses of the meeting. With some such arrangement the annual meetings may continue to be improved.

BURTON E. LIVINGSTON,
Permanent Secretary