SOCIETIES AND MEETINGS

THE SEISMOLOGICAL SOCIETY OF AMERICA—EASTERN SECTION

THE Eastern Section of the Seismological Society of America held its fourteenth annual meeting in Freeman Hall on the campus of Fordham University, New York City, June 9 and 10, 1939. The Reverend Joseph Lynch, S.J., well-known seismologist and head of the department of physics, welcomed the guests and members of the section.

The sessions were officially opened on Friday morning at 9:15 by the chairman, H. E. McComb, of the U. S. Coast and Geodetic Survey. To allow time for more informal discussion and a tour of some of the scientific exhibits of the World's Fair, a departure was made from the usual procedure. Two days are customarily devoted to the presentation of committee reports, election of officers and the reading of papers. This year the seismologists continued in session until 7:15 in the evening, completing the scheduled program and stopping only long enough at 1:30 to enjoy a buffet luncheon as guests of the university. Because of the warm weather the lunch was served in one of the basement laboratories, where suction flasks and pyrex beakers provided the necessary "scientific" atmosphere.

Reassembled again at 2:30 P.M., the delegates resumed with presentation of papers and reports. Animated discussion attended the reading of the report of the committees on microseisms and amateur seismology and the paper of A. C. Chick, Providence, R. I., on "Trends in Earthquake Insurance since 1933." Other papers of special interest should be mentioned: "The Nature and Origin of Microseisms," by J. Emilio Ramirez, S.J., of Bogotá, Colombia; "The Problem of Earth Deformation," by M. King Hubbert, Columbia University, and a report by A. G. Ingalls, of the editorial staff of the *Scientific American,* on "Amateur Seismology." The formal meeting was terminated by the reports of the resolutions and nominating committees and the election of officers for the ensuing year. The unanimous choice was as follows: *Chairman,* A. C. Ruge, of the Department of Civil Engineering, Massachusetts Institute of Technology; *Vice-Chairman,* A. J. Westland, S.J., Department of Physics, Spring Hill College; *Secretary,* W. A. Lynch, Department of Physics, Fordham University; *Treasurer,* H. Landsberg, Geophysical Laboratory, Pennsylvania State College; *Fifth Member of the Executive Committee,* H. E. McComb, of the U. S. Coast and Geodetic Survey.

At 10 o'clock Saturday, June 10, practically the entire group assembled again for a three-hour informal discussion of current seismological problems. Topics of timely import were, a new speed control for seismograph drums, demonstrated by A. C. Ruge; the necessity of putting all our seismographs to work; the new instruments and equipment at cooperative stations of the U. S. Coast and Geodetic Survey; the need for more sensitive instruments in the Gulf Coast States.

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SPECIAL ARTICLES

STUDIES IN THE PHYSICAL CHEMISTRY OF INSULIN[1]

I. THE SOLUBILITY AND DIELECTRIC PROPERTIES OF INSULIN AND ITS CRYSTALLIZATION WITH RADIOACTIVE ZINC

INSULIN, which can be crystallized in a state of high purity, and possesses unusual chemical stability, as well as specific physiological properties, is a very suitable protein for quantitative physical chemical studies. This paper gives preliminary results of a series of investigations in progress in these laboratories upon the physical chemical properties of insulin and its interaction with ions and dipolar ions.

Crystalline zinc insulin[2] was dissolved in sufficient N/10 hydrochloric acid to bring the final pH to 2.5, electrodialyzed against N/300 hydrochloric acid in a Brintzinger type electrodialyzer for four hours, and then freed from acid by continuing the electrodialysis against distilled water for twenty hours. The protein precipitated in amorphous form; the supernatant solution had a conductivity of about 3×10^{-6} ohm^{-1} cm^{-1} and was chloride-free. The insulin was washed with conductivity water.

Measurements of solubility in water and glycine solutions were carried out at 5° by rotating portions of amorphous insulin prepared in the above manner with successive aliquots of solvent. After each equilibration, lasting from two to eight days, the suspension was allowed to settle, and the supernatant solution filtered through sintered glass. Analysis was performed by precipitating the insulin with trichloracetic acid, washing free of solvent with dilute trichloracetic acid solution, digesting the protein and determining the nitrogen colorimetrically with Nessler's reagent.

[1] From the Department of Physical Chemistry, Harvard Medical School, and the Jefferson Physical Laboratory, Harvard University.

[2] Furnished through the kindness of Eli Lilly and Company.