istry," under the chairmanship of Professor H. S. Taylor, of Princeton University. Professor Emeritus V. N. Ipatieff, of Northwestern University, will be the guest of honor at a dinner of the division on Tuesday, April 4. He will deliver an address on "The History of Catalysis and Petroleum Chemistry."

The Division of Biological Chemistry has scheduled a symposium on "Vitamins," and the Division of Cellulose Chemistry, a symposium on "American Cellulose in 1939." The Division of Industrial and Engineering Chemistry has arranged a symposium on "Thermal Insulation," in which the Division of Petroleum Chemistry will join.

The Division of Chemical Education plans four sessions —one a joint symposium with the Division of Physical and Inorganic Chemistry on "Theories and Teaching of Acids and Bases"; another devoted to a group of papers on chemical education in high schools; a third, for student papers; and, finally, a session for miscellaneous papers within the field of the division. Hundreds of teachers in the colleges, universities, secondary and elementary schools in the nation will take part.

The Division of Physical and Inorganic Chemistry will present a symposium on "Fundamentals of Heterogeneous Catalysis," with Professor Taylor as chairman. "The Application of Micro- and Semimicrochemistry to Industry" will be the subject of a symposium of the Division of Microchemistry, with Dr. G. E. F. Lundell, of the National Bureau of Standards, as chairman.

The Division of the History of Chemistry announces two sessions, one of which, jointly with the Division of Medicinal Chemistry, will be devoted to a symposium on the "History of Medicinal Chemistry in Baltimore." Dr. Henry E. Sigerist, director of the Institute of History of Medicine of the Johns Hopkins School of Medicine, will be a principal speaker. Professor Krantz will present a paper on "The History of Pharmacology in Baltimore."

The Division of Rubber Chemistry will feature a symposium on "Synthetic Rubber and Elastic Polymers." Other symposia will include "Industrial Utilization of Dairy Products" and "Colloids and Water and Waste Treatment.".

Six sessions will be held by the Division of Organic Chemistry, four by the Division of Paint and Varnish Chemistry, two by the Division of Sugar Chemistry and Technology, and two by the Division of Gas and Fuel Chemistry.

THE TORONTO MEETING OF THE FEDERA-TION OF AMERICAN SOCIETIES FOR EXPERIMENTAL BIOLOGY

THE Federation of American Societies for Experimental Biology will meet in Toronto from April 26 to 29. The Royal York Hotel will be the headquarters, and all scientific sessions, motion pictures and state demonstrations will be held in this hotel. The federation is formed by the union of the American Physiological Society, the American Society of Biological Chemists, the American Society for Pharmacology and Experimental Therapeutics and the American Society for Experimental Pathology. Dr. Glenn E. Cullen, of the University of Cincinnati, will be chairman of the federation by virtue of his election at the recent Baltimore meeting as president of the American Society of Biological Chemists. Dr. Walter E. Garrey is president of the American Physiological Society; Dr. Arthur L. Tatum, of the University of Wisconsin, of the American Society for Pharmacology and Experimental Therapeutics, and Dr. C. Phillip Miller, of the University of Chicago, of the American Society for Experimental Pathology.

The scientific sessions will begin on Thursday morning, April 27. Wednesday will be available for visiting the University of Toronto and other points of interest. The American Institute of Nutrition will meet in the King Edward Hotel, about four blocks away, on this day. On Thursday evening at 9 o'clock the local committee will provide an informal smoker. The annual dinner will be held on Friday evening.

The American Physiological Society will hold two symposia, one on "Carbohydrate Metabolism" and the other on "The Synapse." A joint symposium will be held with the Biochemical Society on "The Red Blood Cells."

Members of the local committee are: Dr. V. E. Henderson, *chairman*; Dr. N. B. Taylor, *secretary*; Dr. E. T. Waters, *treasurer*; Dr. G. E. Hall, Dr. A. M. Wynne, Dr. D. Y. Solandt, Dr. G. H. Lucas, public information; Dr. R. A. Cleghorn, Dr. G. L. Duff, Dr. P. H. Greey, Dr. W. R. Campbell, Dr. J. K. W. Ferguson, Dr. D. A. Irwin, Dr. K. C. Fisher and B. F. Crocker.

THE SIXTH PACIFIC SCIENCE CONGRESS

ANNOUNCEMENT has been made by the National Research Council that the Sixth Pacific Science Congress will be held in San Francisco and vicinity during the period, July 24 to August 12, 1939, under the auspices of the council. The fifth congress in this series was held at Victoria and Vancouver, B. C., in 1933, under the auspices of the National Research Council of Canada, and previous congresses have been held at three-year intervals in other countries of the Pacific region.

Sessions of the sixth congress will be held at Stanford University and at the University of California at Berkeley, as host institutions on this occasion, and certain public functions and other sessions of the congress will be held in "Pacific House" on the grounds of the Golden Gate International Exposition through courtesy of the Department of the Pacific Area of the Exposition. The general arrangements are in charge of the standing Committee on Pacific Investigations of the National Research Council, of which Dr. Herbert E. Gregory, director emeritus of the Bishop Museum in Honolulu, is the chairman. Responsibility for completing the program and for local arrangements is in the hands of a Committee on the Sixth Pacific Science Congress, especially appointed by the Research Council for this purpose, of which Dr. Charles B. Lipman, dean of the Graduate School of the University of California at Berkeley, is the chairman.

In accordance with the plans of previous congresses of this series, the program of the sixth congress will "emphasize the discussion of comprehensive scientific topics of general interest to the peoples living within the Pacific basin," and the theme of the congress will be "the present stage of knowledge of Pacific scientific problems and methods by which that knowledge may be most profitably enlarged." As the congress is designed for discussion and interchange of ideas rather than for precise formulation of attempted solution of problems, the program is being arranged as a series of symposia rather than as a list of independent papers. Among the subjects to be discussed are:

- The Pacific Basin: structure and dynamics; geophysics and geology.
- The Pacific Ocean: properties, dynamics and life; oceanography.
- Pacific climates, past and present: meteorology, paleontology, paleobotany.
- Man and culture in the Pacific region; characteristics, dispersal and development, objectives and results of research; anthropology, human geography and ethnobotany.
- Territorial fauna of Pacific islands: characteristics, origin, distribution, human relations; chiefly entomology, malacology and ornithology.
- Terrestrial flora of Pacific islands and border lands: characteristics, origin, distribution, human relations; botany.
- Classification and utilization of Pacific lands.
- Communicable diseases of the Pacific area: origin, history, distribution; tropical medicine.
- Nutritional problems of the Pacific area.
- Conservation of the marine life of the Pacific Ocean.
- Soil resources of the Pacific islands and borders: characteristics, conservation.

Miscellaneous topics:

- Facilities and program of institutions interested in scientific studies of the Pacific area.
- Means and methods for cooperative research.
- Present status of research in Pacific scientific problems and the outstanding problems that merit attention. General lectures on regions and special topics.

Additional information concerning the congress may be obtained by addressing the secretary-general, Dr. Roy E. Clausen, Room 205 Hilgard Hall, University of California, Berkeley, California.

THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE AND THE NATIONAL EDUCATION ASSOCIATION

JUST before the meeting in Richmond, on December 24, the officers of the association received the following letter from Dr. Reuben T. Shaw, president of the National Education Association:

As a fellow of long standing in the American Association for the Advancement of Science, who is now honored with the leadership of the National Education Association, I extend to you the greetings of the nation's teachers and their best wishes for the success of your convention at Richmond.

Scientists and teachers have a community of interest. The scientist discovers truth, the teacher interprets it. We hope that both may cooperate as one profession, interested in aiding man on his road to happiness. In that capacity let us appraise the results of research and investigation, not so much in terms of scientific achievement as in terms of their effect upon the democratic society which the American people have adopted as the Good Life.

It is one thing to shout the alarm that democracy is challenged to-day. That alarm has often been sounded. It is another thing quietly to answer that challenge with the effective weapons that lie in truth and its acceptance and application by mankind. Those weapons are the tools with which the scientist and the teacher work each day. With them let us lay impregnable foundations for the security of free self-government.

By unanimous vote of the council on December 30, the officers of the association sent the following reply to Dr. Shaw:

The Council of the American Association for the Advancement of Science has received with lively appreciation the friendly greetings of the National Education Association which are conveyed in your letter of December 23. It is a source of satisfaction that two of the largest organizations of teachers and scientists in the world are affiliated and consciously cooperating in the increase and diffusion of knowledge among men. Many of the members of the American Association for the Advancement of Science are teachers, many of the National Education Association are scientists, and in large part the ultimate aims of our two associations are complementary.

With the belief that there can be no permanent progress of mankind except through the discovery and promulgation of truth and that science and education are now the principal means of human progress, the American Association for the Advancement of Science welcomes the cordial cooperation of the National Education Association and in turn desires to offer its support in your efforts to increase and improve education.

SCIENTIFIC NOTES AND NEWS

DR. WILLIAM D. COOLIDGE, director of the Research Laboratory of the General Electric Company, has been awarded the Faraday Medal for 1938 for "notable scientific and industrial achievement" by the council of the British Institution of Electrical Engineers. Dr. Coolidge is the second member of the General Electric Company to receive the medal, the other having been the late Dr. Elihu Thomson.