

of papers on the behavior of high-polymer solutions. In a class by itself was a paper on the stress-strain behavior of collagen tendons. No doubt the most recondite papers on the program were the two on the random-walk theory of the long-chain molecule.

During the business session held February 2 announcement of the results of the election of division officers for 1950 was made, as follows: chairman, W. L. Davidson; vice chairman, J. Burton Nichols; secretary, W. James Lyons; treasurer, J. W. Liska. Other members of the executive committee are: Paul Doty, Hubert M. James, and R. B. Stambaugh. Adopted during the session was an amendment to the by-laws designating Physics Today as the journal for official announcements of the division.

—W. James Lyons

AT STANFORD

APS MEETING REPORTED

The Stanford meeting of the American Physical Society last December 29 and 30 had somewhat greater interest and attendance than was originally expected for a west coast meeting at that time of year. The program consisted of seventy contributed and six invited papers, and the attendance was close to two hundred. Most of those contributing and attending came from the Pacific Coast—California, Oregon, and Washington—although several came from the mountain states and the middle west, and a few from the east. A wide variety of subjects was represented, including reports on infrared spectra, x-rays, nuclear induction, nuclear reactions, particle accelerators, corona studies, artificial mesons, and cosmic radiation.

The program was arranged with two parallel sessions, mainly of contributed papers, on Thursday afternoon, and three parallel sessions of contributed papers on Friday morning. The short distances between meeting rooms, and the pleasantness (even in December) of the open air arcades that characterize Stanford architecture, made for more extended coverage of contributed papers than is usually the case, as well as for informal discussion in between. Nature cooperated by steadily increasing the temperature during the two days of the meeting, until nearly all of the visitors from southern California shed their topcoats. Thursday morning and Friday afternoon were each devoted to single sessions, mainly of invited papers. The first of these dealt with upper air research, and provided an excellent summary of the present state of knowledge in this very interesting branch of physics. The Friday afternoon session in the Little Theatre was very well attended, and was felt by many to be a fitting climax to the meeting. It consisted of three unusually interesting papers on varied topics: the Stanford microwave laboratory (Chodorow), an experimental determination of the energy level displacement in singly ionized helium (Skinner), and a theory of the origin of cosmic rays and geomagnetism (Teller).

Of particular interest to this reviewer were the papers on cosmic radiation by Forster and by Brode, Fretter, and collaborators, and the theoretical analysis of high energy scattering data by Christian and Noyes. The former group dealt with the presence of very heavy mesons in

the atmosphere and the balance between positive and negative charges of penetrating particles. The latter group demonstrated a significant difference between neutron-proton and proton-proton interactions, the latter requiring a strong and rather singular tensor interaction effective in triplet states.

The meeting will long be remembered by Stanford physicists as one of their very pleasant and all-too-rare opportunities to show their colleagues from elsewhere at first hand the activities of the physics department and the microwave laboratory. Judging by many favorable comments on the occasion, they feel justified in hoping that the meeting was equally enjoyable for the visitors.

—L. I. Schiff

BURNED

PRINCETON CYCLOTRON DESTROYED

Princeton University's 18 million volt cyclotron was virtually destroyed by fire during the early morning hours of February 22. Although the precise cause could not be determined, the heavy oil used to cool the copper generating coils that provided the instrument's electrical field somehow was ignited. An estimated 800 gallons of oil was contained in tanks above and below the orbit in which accelerated particles were made to travel.

The cyclotron was not in operation at the time of the fire, a fact that was determined upon examining temperature records from the cyclotron room, although it had been in use until about an hour before the oil fire began. The three-foot concrete radiation shield lining the room served beyond its original call of duty by confining the fire to the single room in the basement of the Palmer Physical Laboratory, thus preventing the flames from spreading further.

Built in 1936, the Princeton cyclotron was among the first to be constructed. It has since undergone various and extensive modifications, and has been used recently under the joint sponsorship of the University and the Office of Naval Research. The magnet and other heavy metal parts may be salvaged, but otherwise the instrument has been reported a total loss.

SOCIETY ACTIVITIES

U. S. COMMITTEE JOINS INTERNATIONAL UNION

The U. S. National Committee on Theoretical and Applied Mechanics, recently organized by seven national scientific and engineering societies, has been admitted by unanimous consent as an adhering body to the International Union of Theoretical and Applied Mechanics, according to a communication from J. M. Burgers, secretary of the Union with headquarters in Delft, Holland.

Member organizations of the U. S. Committee are the Society for Experimental Stress Analysis, the American Society of Civil Engineers, the American Institute of Chemical Engineers, the Fluid Dynamics section of the American Physical Society, the Institute for Aeronautical Sciences, the American Mathematical Society, and the American Society of Mechanical Engineers, which is providing the secretariat.

It is the stated object of the committee to promote

theoretical and applied mechanics in the United States, to represent the United States in the International Union of Theoretical and Applied Mechanics, and to carry on such activities as are necessary as an agency of the International Union.

Officers of the committee are Hugh L. Dryden, chairman, and C. E. Davies, secretary-treasurer, both of the ASME, while the following represent member societies: H. W. Emmons, ASME; R. D. Mindlin, SESA; M. G. Salvadori, ASCE; T. B. Drew, AIChE; R. J. Seeger, APS; N. J. Hoff, IAS; and E. Reisner, AMS. Theodor von Karman, S. Timoshenko, J. C. Hunsaker, and R. von Mises are members at large.

The U. S. Committee grew out of American participation in the Seventh International Congress on Theoretical and Applied Mechanics held in London, April, 1948. The need for some coordination of widespread activity in the field of mechanics in the United States prompted the Applied Mechanics Division of the ASME to suggest a permanent organization of various national bodies interested in mechanics to sponsor United States participation in international congresses and symposia. Consequently a charter was drafted and presented before an organizational meeting of the U. S. Committee during the 1948 Annual Meeting of the ASME. Delegates approved a proposed charter for submission to their respective societies. One of the first actions of the Committee at its meeting of May 23, 1949 was to apply for admission to the International Union.

Future plans call for American representation at a collegium on geophysics in 1950, and at a meeting of the IUTAM in Rome. Plans are already under way for an international congress for theoretical and applied mechanics to be held in the United States during 1951.

TELEVISION JOINS THE FAMILY

The name of the Society of Motion Picture Engineers has officially been changed to the Society of Motion Picture and Television Engineers, according to an announcement by Earl I. Sponable, president of the society.

ESTABLISHED

NEW TECHNICAL PHOTOGRAPHY JOURNAL

Published by the Photographic Society of America and edited by Paul Arnold, a new journal called *Photographic Science and Technique* will be devoted to the uses of photography for scientific and industrial research and to the new methods and equipment used in photographic technique.

This new technical supplement to the Society's official monthly, *PSA Journal*, is the first publication of a national society to present papers and articles specifically on the technical aspects of photography as a science.

NBS EXPANDS

NEW RADIO LAB AT BOULDER

A site in Colorado directly south of the town of Boulder has been selected by the National Bureau of Standards for the construction of a new radio division laboratory. It is expected that the new laboratory facilities will en-

able the Bureau's radio propagation research to be considerably extended. The radio division, which is the central Federal group for coordinating such research and for defining primary standards of high frequency electric quantities, is concerned generally with the technology of long-distance radio communication.

Several factors entered into the selection of the site. For one thing, it was necessary to avoid regions congested by electrical and radio facilities. It was, however, desirable to locate any such major laboratory within some reasonable distance of a large city to satisfy equipment and service needs, and since Denver is only twenty or so miles to the south, this requirement was met. It was also felt important that the laboratory be near a major university which might provide a source for new personnel and an opportunity for graduate training of junior staff members. The new site is located close to the campus of the University of Colorado. Technical factors calling for moderate climate and diverse terrain were also satisfied by the Colorado site.

Construction of the laboratory is expected to begin sometime next year, and present plans call for a research staff of about 300 persons, most of whom will be transferred from the Bureau's Washington staff.

CONFERENCES COMING

ON TELEMETERING

An invitation has been extended to members of the American Institute of Physics to participate, either by giving papers or by lending other support, in the technical conference on telemetering to be held in Philadelphia during three days of the week beginning May 22. The conference is being jointly sponsored by the American Institute of Electrical Engineers and the National Telemetering Forum and will deal with all phases of all types of telemetering. Hope has been expressed that a large sum of representative opinion may emerge for wide circulation and the forwarding of the art. Those interested in further information should address inquiries to W. J. Mayo-Wells, the conference chairman, at the Applied Physics Laboratory of the Johns Hopkins University, Silver Spring, Maryland.

ON WAVE PROPAGATION

A symposium on the theory of electromagnetic wave propagation is to be held in New York City from June 6-8 under the sponsorship of New York University's department of mathematics and the Geophysical Research Directorate of the Air Force's Cambridge research laboratories. The aim of the symposium is to provide for an exchange of views of those engaged in current research in electromagnetic theory, basic applications to propagation, diffraction, etc. Among those expected to speak at the symposium are H. G. Booker of Cornell, H. Bremmer of Philips Research Laboratories in Eindhoven, Holland, K. O. Friedrichs and Bernhard Haurwitz of NYU, R. E. Langer of the University of Wisconsin, Harold Levine of Harvard, Wilhelm Magnus of Caltech, and Nathan Marcuvitz of Brooklyn Polytechnic Institute. Further in-