

Meetings

American Physical Society

1953 Annual Meeting at Harvard

Approximately three hundred contributed papers and seventeen invited addresses on the general program, and an additional eleven invited papers on the programs of three separate symposia, were presented at the annual meeting of the American Physical Society at Cambridge, Massachusetts, January 22-24. Some two thousand physicists registered for the three-day meeting, which was held on the campus of Harvard University and which included programs in theoretical and experimental nuclear, atomic, and molecular physics, the solid state, microwave spectroscopy, cryogenics, magnetic properties, fluid dynamics, biophysics, and a variety of other topics.

Of the special symposia, the first featured three papers (by G. K. Green, H. S. Snyder, and J. P. Blewett) dealing with the Brookhaven cosmotron and with prospective use of the principle of alternate gradient focusing in accelerator design. The Society's Division of Electron Physics presented a symposium of four papers: "Electron Physics in the Upper Atmosphere" (Marcus O'Day), "Studies of Thermally Ionized Gases Produced by Shock Waves" (Arthur Kantrowitz), "Studies in Oxide-Coated Cathodes" (L. S. Nergaard), and "The Strong-Focusing Synchrotron" (M. S. Livingston). The Division of Fluid Dynamics symposium, concerned primarily with boundary layer behavior at high velocities, included papers by G. B. Schubauer, F. H. Clauser, C. C. Lin, and H. W. Liepmann.

Invited papers on the general program of the meeting were given by Francis Bitter, P. W. Bridgman, H. G. Dehmelt, R. H. Dicke, E. L. Hahn, G. R. Harrison, J. A. Hornbeck, G. F. Hull, Sr., P. D. Johnson, A. F. Kip, Gunnar Lindström, H. V. Neher, L. S. Osborne, E. C. Pollard, James Rainwater, Julian Schwinger, and Alexander Zucker.

J. H. Van Vleck's retiring presidential address, presented on the afternoon of January 23rd during the joint ceremonial session of the American Physical Society and the American Association of Physics Teachers, was entitled "Two Barrier Phenomena", and dealt in turn with the deleterious effects of present visa policy upon science and scientists, and with some specific aspects of the behavior of atoms in the ammonia molecule. On the evening of the same day the ballroom of the Hotel Continental in Cambridge was filled to capacity for the banquet of the Society and the Associa-

tion. The after-dinner speaker was J. A. Stratton, vice president and provost of the Massachusetts Institute of Technology, who provided his audience with some penetrating observations on the conditions and limitations of contemporary scientific and engineering education, both in this country and in England. The recently established Oliver E. Buckley Solid State Physics Prize, awarded for the first time at the banquet, was presented to William Shockley of Bell Labs, who responded by producing, apparently from nowhere, a large and brilliant nosegay of feather flowers.

This year's spring meeting of the Physical Society will take place in Washington, D. C., April 30th through May 2nd, with sessions at the two headquarters hotels, the Shoreham and the Wardman Park. Other forthcoming meetings will be held in Rochester, N. Y. (June 18-20), and at Albuquerque, N. M. (September 2-5).

Laboratory Teaching

Discussed at AAPT Annual Meeting

The twenty-second annual meeting of the American Association of Physics Teachers was held, in conjunction with the annual meeting of the American Physical Society, at Harvard University January 22, 23, and 24. Registration and the programs of the first two mornings were held in Burr Hall, the new Harvard building devoted to the interests of the physical science courses in general education. Burr Hall, very modern as regards architecture, has two large lecture rooms, four small conference rooms, some offices, and a "hide-out" where a lecturer may be protected from interruption during those last crucial minutes before a class.

The greatest emphasis in the short papers presented at this meeting was on the underlying philosophy of laboratory teaching and the approaches that have been worked out at various institutions. An introductory round table on the aims and methods of undergraduate laboratory teaching had a panel consisting of V. E. Eaton, H. V. Neher, C. L. Henshaw, and Sanborn C. Brown. Dr. Eaton, of Connecticut Wesleyan, provided a good summation of the topic by stating that the object of laboratory work in physics is neither to make the student into a laboratory technician nor to give him experience with all kinds of equipment nor to teach him fundamental principles *through* the laboratory, but rather to give him an opportunity to share such problems of the research worker as the empirical determination of a relation between various experimentally observed quantities, the emphasis on graphical expression as an important tool, some first-hand acquaintance with the scientific method, and some understanding of errors. Various speakers emphasized the desirability of flexibility in the laboratory program and of the selection of problems, at all levels, which are interesting and challenging. That precludes the type of experiment whereby a well-known law is checked. If possible, every experiment should include an element of surprise. This is worked out differently in the elementary laboratory

TEXTS FOR MECHANICS COURSES

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Clothbound, c. 384 pp., 132 illus.; August 1953 — probable price \$7.50

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PLACEMENT SERVICE REGISTER OF THE AMERICAN INSTITUTE OF PHYSICS

to be held in connection with the

American Physical Society Meeting

April 30, May 1 & 2, 1953

Shoreham Hotel, Washington, D. C.

LOOKING FOR PHYSICISTS?

Universities, institutions, government laboratories, and companies wishing to post notices of positions may send descriptions of the openings on 8½ x 11 paper in multiple copies (*15 required*) to the Institute office, or post them on arrival at the meeting. If you plan to have a representative present, to interview applicants, please indicate his name at the bottom of the job description sheets.

SEEKING A NEW POSITION?

Applicants may obtain registration forms and further information from the Institute office. Pre-registration is essential. Complete registration forms must be received at the Institute office by *April 20, 1953* to insure their inclusion at this register.

INTERVIEWS.

It is to the advantage of the registrants to be present. Interviews will be arranged between employers' representatives and applicants attending the meeting.

PLEASE REPORT TO THE PLACEMENT OFFICE UPON ARRIVAL AT THE MEETING

AMERICAN INSTITUTE OF PHYSICS, 57 East 55th Street, New York 22, N.Y.

than it is in those advanced courses which are an introduction to research, but the object is similar in that it is hoped that the student will develop initiative in planning experiments and a critical attitude in evaluating what has been done. Individual experiments, chiefly in the fields of electricity and optics, and a lesser number in mechanics, were described. The latter, rightly done, are also interesting and challenging and frequently offer insight into related phenomena of other fields.

In the second round table discussion, the panel consisted of professors in such allied fields as chemistry and electrical, chemical, and mechanical engineering, in which physics often plays an important role. The engineers in general desire that the physicist place more emphasis on fundamentals: the underlying definitions, the use of measuring instruments, the basic mathematical manipulations, and on the fundamental units. This, inevitably, led to a discussion of the "slug", held in favor by the engineers, but despised by many a physicist, some of whom would not be "found dead" with one.

J. G. Winans of Wisconsin reported that all the speeches at the Iowa Conference of College Teachers last June were taken down on a wire recorder. They were then transcribed and mimeographed and two hundred and fifty copies were bound and distributed, chiefly to those who attended the meeting. Such a procedure should tend to improve the quality of the speeches and to make the continuation of discussions begun at the meetings more feasible. No recording of speeches was attempted at this Harvard meeting.

Friday afternoon the AAPT met in Sanders Theater in joint session with the American Physical Society. In the absence of President W. S. Webb of the AAPT, the president-elect, P. E. Klopsteg, presided during the Association's section of the meeting, immediately following which Mark W. Zemansky presented the Oersted Medal to Richard M. Sutton of Haverford College who has done so much for the teaching of physics, even aside from his book on demonstration experiments. Dr. Sutton responded by speaking on the "Heritage of a Physics Teacher". There followed the eleventh Richtmyer lecture on "Nuclear Magnetism" given by Edward M. Purcell of Harvard who recently shared the Nobel award in physics with Felix Bloch.

Tea Friday afternoon in the new (and as yet unused) Gordon McKay Laboratory of Applied Science gave an appreciated opportunity to meet and talk with friends.

At the business meeting of the Association, Saturday noon, Marsh W. White of Penn State was chosen as the new president-elect.

Harvard University's efficient hospitality was shown in many ways, not the least of which was the opening of the Harkness Commons to our members for lunch. The Commons is housed in another new building not far from the Jefferson Laboratory, and the meals were both generous and good. Furthermore, the weather, which does not always cooperate in Boston, was until Saturday clear and not very cold. The rainy Saturday was chiefly disadvantageous in that it interfered with a

spectacular demonstration of electrostatics which Eric M. Rogers of Princeton tried to show us.

Mildred Allen
Mount Holyoke College

Radio Engineering

New England Meeting in Connecticut

The University of Connecticut will be host on Saturday, April 11th to the annual New England meeting sponsored by the North Atlantic Region of the Institute of Radio Engineers. Papers are to be presented on propagation, cosmotron instrumentation, color television, TD2 microwave systems, acoustical design, and servomechanisms. The meeting will be held in the new Student Union building, and reservations can be made for spending Friday night, April 10th, on campus by contacting Professor Edward J. Robb, Box U-37, University of Connecticut, Storrs, Connecticut.

Industrial Research

Conference at Columbia in June

The fourth annual Conference on Industrial Research sponsored by Columbia University's department of industrial engineering will be held at the Arden House Campus of Columbia during the week of June 1-5. The general topic to be considered is Coordination and Control of Research Operations, with discussions and clinic sessions to be held in addition to the presentation of prepared papers on various aspects of the relationship between industrial research and the objectives of the sponsoring companies. The Proceedings of this conference, as in previous years, will be published by the Columbia University Press.

College Physicists

Colloquium to Hear Condon

One of the special features of the Colloquium of College Physicists to be held at the University of Iowa, Iowa City, June 17-20, 1953, will be a series of four lectures by E. U. Condon, Director of Research of the Corning Glass Works and President of the American Association for the Advancement of Science, on the general subject of "The Physics of the Glassy State". An exhibit of various devices, experimental and nonexperimental, for which prizes are offered will be held in conjunction with the Colloquium.

Microwave Optics

Symposium at McGill University

A symposium on microwave optics will be held at McGill University, Montreal, Canada on June 22, 23 and 24, 1953. Topics discussed will include physical and geometrical optics applied to microwaves, diffraction and scattering, and artificial dielectrics. Two hundred word abstracts of proposed papers should be sent to Professor G. A. Woonton, Eaton Electronics Laboratory, McGill University by April 15th.