

of an inconsistency in present estimates of nuclear radii. Electron scattering, isotope shift, and μ -mesic x-rays all provide a measure of the average electrostatic potential within the nucleus, and all correspond to a nuclear radius of $1.2 \times 10^{-13} A^{1/3}$ cm. The differences in the binding energies of mirror nuclei equated to the difference in electrostatic energy give $1.45 \times 10^{-13} A^{1/3}$ cm. Possibly the difficulty is reconcilable by the observation that the smaller value is obtained principally from measurements on heavy nuclei and the larger value from light nuclei. Next H. Barschall (University of Wisconsin) described his experiments on the scattering of neutrons by heavy nuclei. This work and its interpretation by the next speaker, V. F. Weisskopf (Massachusetts Institute of Technology), in terms of a "cloudy crystal ball" model of the nucleus has already received considerable attention (see report of Brookhaven Mev neutron cross section conference in June 1953, *Physics Today*). Weisskopf assumes the interaction between neutron and nucleus is a universal complex potential $V = 19 \text{ Mev } (1 + 0.05 i)$ with radius $1.45 \times 10^{-13} A^{1/3}$. It gives remarkably good agreement with experiment over a wide range of energy and mass number. The last paper of the conference, by C. Goodman (Massachusetts Institute of Technology), presented some evidence for nuclear excitation by the electrostatic field of an incident proton.

Discussion leaders for the various sessions were Drs. D. C. Peaslee, T. Bonner, E. Gerjuoy, D. Inglis, and R. K. Adair. A report of the conference, containing expanded abstracts of the papers presented, is in preparation by Dr. P. Stehle of the University of Pittsburgh, and may be obtained from him. This participant felt that one of the more pleasing features of the conference was the strong Canadian representation, in the audience and on the speakers platform. The scientific community, like other communities, is healthiest when it has healthy neighbors.

E. Gerjuoy
University of Pittsburgh

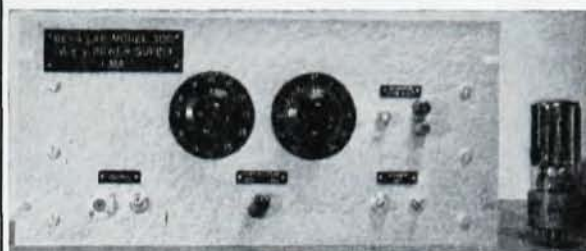
AAPT

Summer Meeting at Pittsburgh

The regular summer meeting of the American Association of Physics Teachers was held at Pittsburgh, Pennsylvania, June 25-27. One hundred and fourteen members were registered. About fifty other persons attended the sessions or participated in trips to local points of interest.

All sessions were held in the air-conditioned auditorium of the Mellon Institute of Industrial Research. In the lobby, where the local Convention Bureau assisted with registration, fourteen publishers and three apparatus companies exhibited books and equipment. In the auditorium fourteen contributed papers were presented, and there were four symposia, with titles and invited papers as follows: Physics in Medicine—Physics in Physiology, Applications of Physics to Medical Research Problems, Premedical Courses in Physics (Ad-

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vantages and Present Trends); The Integration of High School and College Teaching of Physics—Certification of Physics Teachers, College Entrance Requirements in Mathematics and Physics, Administrative Problems in High School Physics and Mathematics, Guidance Programs in High School and the Stimulation of Interest in Physics; Transistor Physics—The Physics of Semiconductors, The Physics of Transistors, Teaching Applications of Transistors, Some Fundamental Experiments in Transistor Physics; The School and College Study of Admission with Advanced Standing—Philosophy and Objectives of the Study, Curricular Modifications Proposed in the Field of Physics, Administrative Problems and Arrangements, Other Ford Foundation Programs Concerned with High School-College Integration. Two other invited papers were presented; these were on International Fellowships and Professorships, and Physics in the Liberal Arts College. A fuller account of the proceedings will appear in a forthcoming issue of the American Journal of Physics. Dr. J. G. Winans of the University of Wisconsin, who made tape recordings of most of the principal speeches, will duplicate them for anyone who will send him the necessary blank tapes. Typewritten copies of the speeches or abstracts, if available, may be had by writing to the speakers themselves. Names and addresses of speakers and copies of the official program will be supplied by Dr. W. C. Kelly of the University of Pittsburgh as long as they remain available.

At the banquet, held in the air-conditioned Georgian Terrace Room of the Hotel Webster Hall, there were no formal addresses; two students from the Music Department of Carnegie Institute of Technology played a sonata for violin and piano by Senaillié. An open meeting followed, at which Dr. R. E. Gibson, the Director of the Applied Physics Laboratory of Johns Hopkins University, gave an address on Science, Art and Education.

Special events included trips to Mellon Institute, the University of Pittsburgh, Carnegie Institute of Technology, the Buhl Planetarium, Westinghouse Research Laboratories, Carnegie Art Galleries and Museum, Civic Light Opera, Phipps Conservatory, U. S. Steel, Pittsburgh Airport, H. J. Heinz Co., and the Saxonburg site of the Carnegie Tech synchrocyclotron, where the festivities ended with a picnic. The weatherman was kind, no really excessive temperatures being encountered, and the only rain occurring while the members were safely indoors.

Charles Williamson
Carnegie Institute of Technology

NSF Travel Grants

For 1954 International Meetings

A limited number of grants to help cover travel expenses to six international scientific meetings scheduled for the latter half of 1954 are being offered by the National Science Foundation. Application forms are available from the Foundation, Washington 25, D. C.,