



W. P. Allis (left), MIT mathematical physicist and master of ceremonies at the annual dinner of the Gaseous Electronics Conference, shown during the meeting with D. Gabor and S. Dushman.

guished guests who included, among the pioneers in the field, I. Langmuir, A. W. Hull, S. Dushman, W. D. Coolidge, W. B. Nottingham, A. v. Engel, and L. Tonks. Dr. Langmuir spoke about studies in the crystallization of super-cooled water vapor and Dr. Tonks discoursed on the physiological effects of warm Martinis. The affair concluded with an illustrated talk by Dr. Coolidge of his personal studies of the Mayan culture of the Yucatan peninsula.

The conference committee for the 1951 meeting consisted of J. D. Cobine, W. P. Allis, R. B. Holt, J. A. Hornbeck, A. O. McCoubrey, and L. Malter. The success of the conference was due largely to the efforts of Dr. Cobine, excellently supported by the host organization, the General Electric Company.

The executive committee elected for the 1952 conference consists of W. P. Allis, D. Alpert, J. D. Cobine, J. A. Hornbeck, L. Varney, and L. Malter. The hosts in 1952 will be RCA Laboratories and Princeton University. The conference will be held at Princeton University on September 4, 5, 6, 1952.

Bound copies of abstracts of the papers presented at the conference may be obtained, while the supply lasts, from Dr. J. D. Cobine, General Electric Company, Schenectady, New York.

L. Malter
RCA Laboratories

Electron Emission

APS Division of Electron Physics Meets

A meeting of the Division of Electron Physics of the American Physical Society was held November 1, 2, and 3 at the National Bureau of Standards. This was one of the events commemorating the 50th anniversary of the Bureau. The subject of the meeting was the emission of electrons from surfaces.

The meeting opened with a review by Dr. Conyers Herring of the theory of the metallic surface. About half of the program was concerned with thermionic emission. In this part of the meeting there were a num-

ber of papers on electron emission from BaO and on the physical and chemical experiments contributing to an understanding of this emission. Barium sulfide, thorium dioxide, and "L-cathode" thermionic emitters were discussed.

Several papers were presented on experimental and theoretical studies of secondary emission from metals and semiconductors. A feature of this part of the program was an experimental study presented by Dr. R. R. Law which indicated that a time delay of the order of 3×10^{-10} seconds may be intrinsic in the secondary emission of electrons. There were several papers on field emission, electron emission by ion bombardment, "flicker effect", contact arcing, and the periodic deviation in the Schottky effect.

The attendance at this meeting was about 250. The program was arranged by a committee headed by Dr. J. B. Johnson. Dr. and Mrs. L. Marton and their associates at the National Bureau of Standards provided excellent local arrangements. A dinner was held on November 2 with Professor S. C. Brown as toastmaster and with talks by Professor A. E. Ruark and Dr. E. R. Piore.

R. L. Sproull
Cornell University

Physics Teaching

The AAPT Meeting in Chicago

The American Association of Physics Teachers held their own special part of the twentieth anniversary meeting of the AIP on Friday and Saturday (October 26-27) of that most interesting week of meetings last fall. Quite a few people were heard to remark that they enjoyed the frequent contacts with many physicists made possible by the location of all the meetings in the same building. The excellent exhibits arranged by the cooperating industries also provided an attractive general feature.

The committee who planned the program for the AAPT performed a most significant service. The invited papers were timely, presented with appropriate emphasis, and covered a wide range of interest. The program consisted of five sessions of contributed and invited papers dealing with problems and methods of teaching physics, demonstration experiments and lectures, and numerous topics in physics of particular interest to the teaching profession. Teachers who reported recent successes in presenting physics to students in the "contributed papers" part of the program provided stimulating ideas for their associates for many phases of the subject; and that the leaders of the panel titled "Cooperation of High Schools and Colleges on Problems of Physics Teaching" did a fine job was evidenced by the pointed and constructive reactions heard in the general discussion. It was unfortunate that all of the high school and college teachers of the nation could not have been there to listen and participate.

One vivid impression growing out of this meeting of physics teachers should be stated and pondered. Phys-

ics teachers are very busy people these days, and their students are in great demand as physicists. In fact, this demand is so great that schools and colleges either cannot find the physics teachers they need or cannot hire them if found. More teachers of physics at all levels are essential if the need for physicists is to be satisfied. The national government, large industries, and directors of research programs all recognize this need and showed it by the careful planning and effort represented by the invited papers. These afforded the physics teachers interesting glimpses of what physicists are doing. Certainly no teacher of physics who attended these meetings would need to hesitate for illustrations when discussing the possibilities of a rewarding career with a prospective student.

R. F. Paton
University of Illinois

Mechanics Colloquium

Eight Monthly Lectures at Illinois Tech

This year's mechanics colloquium, sponsored by Illinois Institute of Technology, consists of eight monthly lectures by prominent American scientists. All meetings except the May 7 session will be held on the Illinois Tech campus and are free and open to the public. Four of the lectures have already taken place. The remaining sessions are: February 6, "Elastic Vibrations of Bodies of Non-Trivial Shape", by H. Ekstein, senior physicist with Armour Research Foundation; March 5, "Turbulence Investigations and Some Applications in Engineering", by Arnold M. Kuethe, professor of aerodynamics at the University of Michigan; April 2, "Use of Reeves and IBM Computers in the Solution of Some Nonlinear Vibration Problems", by Dana Young, professor of applied mechanics at the University of Minnesota; May 7, "Solution of Some Stress, Vibration and Failure Problems in Industry", by Charles Lipson, consultant, Detroit, Michigan. The May 7 session, a joint meeting with the Western Society of Engineers and with the Chicago section of the Society for Experimental Stress Analysis, will be held at the Technological Institute, Northwestern University, Evanston, Illinois.

URSI-IRE Spring Meeting

At National Bureau of Standards

A meeting of the U.S.A. National Committee of the International Scientific Radio Union (URSI) and the Institute of Radio Engineers Professional Group on Antennas and Propagation is being held at the National Bureau of Standards, Washington, D. C., on April 21, 22, 23 and 24, 1952. Sessions will be held concerning the following topics: radio measurement methods and standards; tropospheric radio propagation; ionospheric radio propagation; terrestrial radio noise; radio astronomy; antennas and waveguides; radio waves and circuits, including general theory; and electronics (tubes

and semi-conductors). A preliminary program and advance registration forms will be available after March 10, 1952. These and further information concerning the meetings may be obtained from A. H. Waynick, Secretary, U.S.A. National Committee of URSI, The Pennsylvania State College, State College, Pennsylvania.

Nonferrous Analysis

Spectrographers to Meet in May

A symposium on instrumental methods of analysis in the nonferrous industry is being planned by the American Association of Spectrographers. The symposium will take place in Chicago sometime during May, and it has been announced that contributed papers having to do with the topic of the symposium will be welcome. Inquiries should be addressed to Robert Raisig, Chairman of the Symposium Committee, c/o Apex Smelting Company, 2537 W. Taylor Street, Chicago 12, Illinois.

Desert Research

Symposium in Israel

Sometime in May a one-week symposium which aims to give an integrated picture of the present state of desert research, dealing with the problems involved and the modern methods of approach in the main fields of research, will be held in Jerusalem by the Research Council of Israel, in cooperation with Unesco. The program, which it is hoped will stimulate the further development of desert science and thereby contribute to the reclamation of arid areas, will devote four days to meetings and the remainder of the time to excursions into the Negev, the arid zone in the south of Israel, as well as visits to other places of interest in the country. Five sections, featuring papers by eminent specialists, have been scheduled in the following related fields of desert science: climate, soil, hydrology, wind and solar energy, and biology. Information on the symposium is available from the Israel Office of Information, 11 East 70th Street, New York 21, New York.

Molecular Structure

Symposium at Ohio State in June

The Symposium on Molecular Structure and Spectroscopy will be held at the Department of Physics and Astronomy, the Ohio State University, as usual in June, from June 9 to June 13, 1952. There will be discussions of the interpretation of molecular spectroscopic data as well as methods for obtaining such data. In addition, there will be sessions devoted to those phases of spectroscopy of current interest. A dormitory will be available for those who wish to reside on the campus during the meeting. For further information, or for a copy of the program when it becomes available, write to Professor Harald H. Nielsen, Department of Physics and Astronomy, The Ohio State University, Columbus 10, Ohio.