

NATIONAL ACADEMY OF SCIENCES

ANNUAL MEETING IN WASHINGTON

Featured by a special symposium on artificially produced mesons, the annual meeting of the National Academy of Sciences took place on April 23, 24, and 25 in Washington, D. C. The meson conference, which was part of a scientific session held at the National Bureau of Standards in recognition of the fiftieth anniversary of the Bureau's founding, constituted a complete review of recent meson production by means of modern laboratory accelerating equipment. The symposium speakers included E. T. Booth of Columbia University's Nevis Cyclotron Laboratories, Bernard Feld of the Massachusetts Institute of Technology, C. Richman of the University of California Radiation Laboratory, A. Roberts of the University of Rochester, and Robert R. Wilson of Cornell University.

The scientific session held during the first day of the meeting took place in the Academy building and was followed in the evening by an address on the Palomar Observatory by Ira Sprague Bowen, director of the Mt. Wilson and Palomar Observatories.

FREQUENCY CONTROL

SIGNAL CORPS SPONSORS SYMPOSIUM

The fifth annual Frequency Control Symposium, sponsored by the Signal Corps Engineering Laboratories, Fort Monmouth, New Jersey, was held at the Berkeley-Carteret Hotel, Asbury Park, New Jersey, on May 1 through May 3. This symposium is held each year to review the progress made on problems connected with precision frequency control, primarily at radio frequencies.

The program was made up of invited papers given by representatives of laboratories of universities and other organizations engaged in Government-sponsored research and development in this field, by members of the radio industry, and by engineers of the Signal Corps Engineering Laboratories.

The first day's program was concerned with progress made in the field of crystal synthesis. Papers were concerned with the basic problems of physical chemistry encountered in crystal growth and with techniques for growing large single crystals of quartz.

Discussion on the second day centered around items such as the physics of quartz oscillator plates, mathematical theory of nonlinear oscillator circuits, improved characteristics of crystal units, electromagnetic filters, and basic theory of piezoelectricity in crystals.

Problems of crystal unit and radio equipment manufacturers, as related to frequency control, were discussed on the third day. Items included the review of newly developed crystal fabricating equipment, test equipment and procedures, and military specifications for crystal units.

A banquet held in connection with the symposium was well attended. Lt. Col. William M. Young, director of Squier Signal Laboratory, Fort Monmouth, New Jersey, acted as toastmaster. The principal speaker was Dr. Frederick Pough of the American Museum of Natural History; his talk, entitled "The Glamorous Crystal", was concerned with gems in general and was illustrated by color slides.

Attendance at the symposium was most gratifying, the total registration being 255. The breakdown of attendance showed representation from sixteen universities, five industrial laboratories, twenty-seven Government agencies, and fifty-two manufacturers. Geographically, this attendance covered all major regions of the United States. Great Britain, Canada, and Australia also were represented.

E. W. Johnson Squier Signal Laboratory

THE AMERICAN PHYSICAL SOCIETY

ANNUAL SPRING MEETING HELD IN WASHINGTON

This year's Spring Meeting of the American Physical Society, held in Washington, D. C. on the 26th, 27th, and 28th of April, departed significantly from recent Washington APS meetings in that it was conveniently and centrally located. All of the individual sessions were within easy walking distance of one another. The National Bureau of Standards, this year celebrating its fiftieth anniversary, played host for a considerable portion of the meeting, although a number of sessions were held at two nearby hotels, the Shoreham and the Wardman Park. About three hundred ten-minute papers (including several post-deadline papers) were presented during the three-day meeting and were distributed among some twenty-five technical sessions. Attendance, it is reported, was at an all-time high. A total of 2150 Physical Society members and guests registered for the meeting.

Although nuclear physics, theoretical and experimental, dominated much of the program, several wellattended sessions and special symposia were concerned with such relatively nonnuclear subjects as high-polymer physics, ultrasonics, fluid dynamics, ferromagnetism, crystals and semiconductors, spectroscopy, biophysics, electrical phenomena in gases, and low temperature physics. The Society's division of high-polymer physics held two symposia. The first, with the theme "Transitions in Polymers", included a session of seven contributed papers which was presided over by L. A. Wood and which featured an invited thirty-minute paper by T. G. Fox, Jr. in review of the factors influencing glass formation and crystallization in polymers. The second symposium, with A. V. Toblansky presiding, dealt at length with the relative effects of frequency and temperature on the dynamic mechanical properties