



NEWS

and VIEWS

ACOUSTICS AND MAN

TWENTIETH ANNIVERSARY MEETING

Twenty years ago on May 10-11, 1929 the formal organization and the first meeting of the Acoustical Society took place at Bell Telephone Laboratories in New York City. This event stemmed from the enthusiasm of a group of some forty interested people that had met on the preceding December 27, 1928.

Twenty years later the Society met in New York City on May 5-7 and featured for this anniversary meeting the theme: Acoustics and Man. The theme was significant in two respects. It reflected a trend in acoustics during the past twenty years and emphasized the present tendency of scientists, generally, to give more attention to the impact of their work on the lives of men. It was from this viewpoint that the papers were grouped into the functional rather than phenomenological classes: acoustics in communication, acoustics in comfort and safety, acoustics in research, and acoustics in the arts.

In commemorating the first meeting, the session on Friday was held at the Murray Hill Laboratory of Bell Telephone Laboratories where some four hundred members assembled for a series of demonstration lectures on new developments in communication acoustics and tours of acoustic laboratory areas. Then at the anniversary dinner on Friday evening a certificate of honorary membership was presented to Harvey Fletcher, first president of the Society, in recognition of his outstanding contributions in acoustics. The pioneering work of Wallace Clement Sabine in acoustics was acknowledged in a letter from the Society to his widow who is living in Boston.

From the program one could see that the outlook for acoustics and the Society is bright. The sessions were highlighted by invited papers reviewing the fields and probing into possible future developments in each of the functional categories. In communications R. Bown and H. F. Olson reviewed the applications of acoustics and predicted new communication systems when account is taken of the fundamental nature of speech and hearing. Contributed papers covered the subjects of propagation of waves in loudspeakers, conduits, methods for measuring the properties of such waves, and the effect of noise and speech clipping on communication.

For the arts, H. Fletcher and W. T. Bartholomew stressed the importance of technical acoustics in generating artistic appeal. Contributed papers discussed the functions of the acoustic department of the Juilliard School of Music, the analysis and synthesis of speech sounds, acoustical properties of rooms and pianos, and musical scales.

In the field of acoustics in comfort and safety, V. O. Knudsen and L. L. Beranek compared the progress in noise insulation and reduction in houses and buildings in Europe with that in the United States. Contributed papers discussed hearing surveys, sounds of mosquitoes, acoustic methods for locating gall stones, and the effects

of walls and wall damping on the noise levels and transient response in rooms. Industrial noise and methods for calculating hearing losses were discussed. Methods for quieting structures were described.

During the session on research in acoustics, P. M. Morse and C. Kittel discussed the similarity in the fundamental equations and processes between acoustics and other branches of physics and the similarity between heat wave transmission and ultrasonic transmission in granular material. Contributed papers discussed systems for studying wave propagation and cavitation at ultrasonic frequencies, types of waves that can exist in liquid and solid materials, scattering and absorption in various media and methods for producing and detecting such waves. One session was devoted to psycho-acoustics and the use of sound waves and electrical potentials to measure hearing properties and stimulate nerve responses.

—J. C. Steinberg

N EQUALS ONE

SEMI-CENTENNIAL OF APS

To witness the ($50n$)th anniversary of a Society— n being zero or any positive integer—is an experience which, by and large, comes only once in a lifetime; indeed there are many lives that never include such an occasion, and few indeed are the careers which comprise two values of n . Such an opportunity was vouchsafed to the members and guests of the American Physical Society at Cambridge, Massachusetts, on June 16, 17, and 18, 1949; the value of n was one. The Society was founded on May 20, 1899, by some forty physicists who gathered in a very small lecture-room (Room 304) of Fayerweather Hall of Columbia University in New York City; the names of thirty-eight are on record, it is certain that a few have been lost to history. Of the thirty-eight, six are still living at the moment of this writing, but not one of them was able to attend the meeting. One, Frederick Bedell, was an Editor of the *Physical Review* from 1895 until 1922; this includes seventeen years of the period before that journal became the property of the Society, and counting these it is the longest period of service yet given us by anyone, except that of G. B. Pegram as Treasurer. The others are W. D. Bancroft, Bergen Davis, Marcia A. Keith, Isabelle Stone and F. A. Waterman. The first regular meeting of the Society was held on October 28, 1899. Two at least of those who attended it were at our Semi-Centennial Meeting: these are G. B. Pegram (Treasurer of the Society) and L. P. Wheeler. They were joined by 591 others who registered at the desk, and an unknowable number of still others who failed to register. This was the biggest summer meeting of our history, with one exception. Considering the season of the year, we may deem this a satisfactory attendance at the unique occasion, though a larger one would have been appropriate and welcome.

The Ceremonial Session was held on the Thursday afternoon in the Sanders Theatre of Harvard University. The present and thirty-sixth, President of the Society, F. W. Loomis, opened it with a brief and eloquent address, and called then in succession on the delegates of