ures and the General Conference voted to substitute "Celsius."

In the interest of eventual uniformity of practice, the use of "Celsius" appears desirable, the Bureau report states, but "it is not practicable to impose this term on those who prefer 'centigrade.'" The report considered the decision as strictly applying only to French because the choice was made on that basis.

# SOUND IN ST. LOUIS ACOUSTICAL SOCIETY MEETS

The small number of papers at the thirty-eighth meeting of the Acoustical Society of America, held in St. Louis November 17-19, 1949, made it possible to dispense with simultaneous sessions and to have a relatively uncrowded program with ample allowance for discussion. The result was an intimate, relaxed atmosphere which was reminiscent of the prewar meetings of the Society.

Because of the distance of St. Louis from the population centers on the East and West Coasts and perhaps also because of the letdown from the twentieth anniversary meeting, both the number of papers presented (47) and the number of registrants (181) were the smallest in some years. On the other hand, the number attending the technical sessions and the banquet represented an unusually large fraction of the registration.

In the first paper of the meeting Hale I. Sabine reported a beginning in the task of reconciling the absorption coefficient values measured by different methods and in different test chambers. Activities in this field had come to an abrupt halt in 1939. The remainder of the morning session was concerned with other problems in architectural acoustics. An invited paper by H. C. Roberts began the Thursday afternoon session in which he reported work in determining experimentally the natural frequencies of the vibration of large structures such as bridges. Large mechanical vibrators and strain gauge detectors are used. H. M. Trent described a different type of "experimental" determination of the normal modes of slim, elongated structures such as skyscrapers and ships; in this method two cross-coupled electrical transmission lines, suitably tapered, are used to simulate the vibrational characteristics of the structure. Electrical measurements on the transmission lines permit the determination of the first few normal modes of the structure represented. Other papers on vibration were presented on the same program.

The Friday sessions on psycho-acoustics were the most outstanding sessions of the Society within the writer's memory. All of the nineteen papers were interesting and were well presented. Highlights of the program were S. R. Silverman's impressions of speech and hearing activities abroad; H. K. Dunn's demonstration by tape recordings of the life-like vowels produced by his electrical transmission line simulator of the vocal tract; Wayne Rudmose's work in resolving a discrepancy existing since 1933 between the thresholds for minimum audible field and minimum audible pressure; a theory of A. MacDonald and R. H. Bolt to explain the masking effect of reverberation on the intelligibility of speech; J. C. R. Lick-

lider's discussion of the mechanism of the auditory frequency selectivity; and the discussions of the anatomy of the ear and of the fenestration operation by Walter P. Covell, M.D. and T. E. Walsh, M.D.

The Saturday sessions carried the papers whose subject matter did not fit into the previous sessions. Two independently developed ultrasonic microphones were described by Clayton H. Allen and by Herbert W. Cooper. The current status of the electrostatic speaker development at Harvard University was treated by Arthur A. Janszen. Two papers by P. J. Westervelt and by U. Ingard and S. Labate were concerned with the nonlinear phenomena connected with sound passing through circular apertures. A very detailed experimental and theoretical analysis of the modes of a rectangular whistle was given by W. L. Nyborg and C. L. Woodbridge.

-R. Clark Jones

## ARTS AND SCIENCES

150TH ANNIVERSARY OF CONNECTICUT ACADEMY

The Connecticut Academy of Arts and Sciences, founded in 1799 by a group of colonial scholars who first met in the old State House in New Haven, celebrated on November 4 its one thousandth meeting with a special program in the Yale University Art Gallery. This, according to a Yale announcement, featured a discussion of cosmic rays by Thomas H. Johnson, chairman of Brookhaven's physics department, an excursion into biology by Berkeley nuclear physicist Max Delbruck, and a concerto for trumpet and bassoon composed by Paul Hindemith, professor of the theory of music at Yale.

Ezra Stiles, Yale's seventh president, attempted as early as 1781 to stimulate interest in founding an academy dedicated to art and science, the announcement stated, but the then uncordial relations between Yale and Connecticut authorities led the State legislature to refuse to charter the proposed organization. Some eighteen years later the path became smoothed, perhaps, it is suggested, because the governor and the lieutenant governor had been made Yale College Fellows by virtue of their office, and the academy received its charter. Its first president was Timothy Dwight of Yale and its first vice president was Jonathan Trumbull, then governor of Connecticut.

## HONORS AND AWARDS

PHYSICISTS HONORED IN GREAT BRITAIN

One of the two Royal Medals for 1949, awarded following recommendations made by the British Royal Society Council which were formally approved by King George, has been presented to Sir George Thomson in recognition of his many contributions to atomic physics, and especially for his work in establishing the wave properties of the electron. Among the other medals recently presented by the Royal Society are the Copley Medal, awarded to G. C. de Hevesy for his work on radioactive elements and tracer techniques; the Sylvester Medal, awarded to L. J. Mordell for his mathematical work in the theory of numbers; and the Hughes Medal, awarded to C. F. Powell for his work in recording the tracks of high energy particles in photographic emulsions.

#### MEDAL OF THE UNIVERSITY OF LIEGE

Harald H. Nielsen, chairman of the department of physics and astronomy at Ohio State University, has been awarded the Medal of the University of Liège. The presentation, made last fall on the occasion of a lecture given by Dr. Nielsen at an astrophysics seminar at the Belgian university, was for his work in infrared spectroscopy. On leave of absence from Ohio State, Dr. Nielsen is studying and working in Europe under a Guggenheim fellowship.

## SOCIETY ACTIVITIES

### CRYSTALLIZED

The American Society of X-Ray and Electron Diffraction and the Crystallographic Society of America have decided to terminate their organizations and to recombine as a single society, the American Crystallographic Association. Officers for the new society, which formally came into being on January 1, 1950, are: I. Fankuchen of the Polytechnic Institute of Brooklyn, president; R. W. G. Wyckoff of the National Institute of Health at Bethesda, vice president; Howard Evans of the Philips Laboratories at Irvington-on-Hudson, secretary; and Jerome Karle of the Naval Research Laboratory, treasurer.

#### NEW OFFICERS

New officers of the Physics Club of the Lehigh Valley, elected at a recent meeting, are C. E. Barnett, president; K. D. Larsen, vice president; and H. L. Raub, secretary-treasurer. The meeting was featured by a discussion of the deformation of single zinc crystals. D. C. Jillson of the New Jersey Zinc Company was the speaker.

## RESPONSIBLE

An announcement has been received of the formation of a Society for Social Responsibility in Science, whose purpose is "to foster throughout the world . . . a tradition of personal moral responsibility for the consequences for humanity of professional activity, with emphasis on constructive alternatives to militarism. . . ."

The announcement also states that "a noteworthy feature of the new organization is that an attempt will be made to work on a unanimous basis, rather than by the usual parliamentary procedure." Physicists among its officers and council members are Leonard Dart and William T. Scott.

## MISCELLANY

## INSTITUTE OF PHOTOGRAPHY

In Rochester, N. Y., the home built by the late George Eastman of the Eastman Kodak Company has been transformed into a public educational institute of photography with facilities for exhibitions, demonstrations, lectures, and the showing of motion pictures. Ceremonies attending the formal opening of the George Eastman House, as it is to be known, were held in Rochester November 9. The permanent collection of the institute covers the entire history of the photographic field as seen in equipment, photographs, and literature. A separate Hall of

Contemporary Photography (housed in what formerly was the Eastman garage) contains exhibits pertaining to photography in science and industry, including sections dealing with nuclear physics, astronomy, x-ray and electron diffraction, and spectroscopy.

## TECHNICAL INFORMATION SERVICES

The Office of Technical Services of the U. S. Department of Commerce has announced the continuation during the coming year of its basic technical information services for industry, particularly for firms that do not have their own laboratories or elaborate technical facilities.

#### RAYTHEON

Raytheon Manufacturing Company, Waltham, Massachusetts, has established a research division under Carlo L. Calosi as director of research. Members of the research division staff in charge of its various sections are: S. Rich for the servo-sonic department; P. B. Carwile for the ultrasonic section; W. Roth for the servo-mechanism section; C. G. Smith for the gas tube section; W. M. Gottschalk and H. G. Rudenberg for the microwave and tube section; and R. M. Cudmore for the services section.

## HOBART CUTLER DICKINSON

Hobart C. Dickinson, retired former chief of the heat and power division at the National Bureau of Standards, died November 27 in Washington, D. C. after a brief illness at the age of seventy-four. He had served the Bureau as a physicist for forty-two years and built the first altitude chamber for testing airplanes. During much of his career he was greatly concerned over traffic safety problems and advanced a number of proposals which in practice have done much to alleviate highway dangers. Dr. Dickinson was a fellow of the American Association for the Advancement of Science and of the American Physical Society; he also held membership in a number of other organizations, including the Society of Automotive Engineers, which he helped organize and which he served as president in 1933.

### DANIEL B. FEER

Daniel B. Feer, assistant professor of physics in the College of Engineering, New York University, died of a heart attack on November 8th. A graduate of Harvard, magna cum laude, in 1944, Dr. Feer took his MA and PhD degrees there in 1946 and 1948 respectively and spent the year 1948-49 in the School of Mathematics of the Institute for Advanced Study at Princeton.

Dr. Feer specialized in the quantum theory of fields and in elementary particle physics. During the war he was a special research associate in the Electro-acoustic and Systems Research Laboratories of Harvard University. He was a member of the American Physical Society and of the Harvard Chapters of Phi Beta Kappa and Sigma Xi.