

ACOUSTICAL SOCIETY RECOGNIZES SEVEN WITH 1987 AWARDS

The Acoustical Society of America has honored seven individuals with its 1987 awards.

Cyril M. Harris (Columbia University) received the society's highest award, the Gold Medal, for "service to the society, for improved understanding of absorption of sound in gases, and for contributions to the science and practice of architectural acoustics." In the 1960s, Harris used a spherical resonator—a hollow steel sphere 2 meters in diameter—to study the effects of atmospheric humidity, temperature and pressure on the absorption and velocity of sound at various frequencies in air. He has published numerous research papers on architectural acoustics, and he has been the acoustical designer of many concert halls and opera houses, including the Metropolitan Opera House, the final reconstruction of Avery Fisher Hall and the New York State Theatre in New York, and the John F. Kennedy Center for the Performing Arts in Washington, DC.

Harris received his BA (1938) and MA (1940) from UCLA, and his PhD in physics (1945) from MIT. He was a research engineer at Bell Telephone Laboratories (Murray Hill, New Jersey, 1945–51), a science consultant for the London branch of the Office of

Cyril M. Harris



Naval Research (1951) and a Fulbright Lecturer at Delft University of Technology (1951–52). He went to Columbia in 1952 as an associate professor, and became a full professor in 1964. In 1976 he was named Charles Batchelor Professor of Electrical Engineering and a professor of architecture. In addition to serving as vice-president (1960–61) and president (1964–65) of ASA, he was an associate editor of the *Journal of the Acoustical Society of America* in 1959–71.

Eberhard Zwicker (Technical University of Munich, FRG) was honored with the Silver Medal in Psychological and Physiological Acoustics for his "prolific contributions to our knowledge of fundamental auditory properties and for the applications of his discoveries to environmental, technological and clinical applications." His research interests have centered on sound detection and processing in the human auditory system. He expanded on work by Harvey Fletcher on critical auditory bands and developed a model of auditory processes based on them. He applied the model to loudness perception of steady-state and varying sounds. In addition, he has used auditory masking to study relations between sound perception

Eberhard Zwicker



and underlying neurophysiological responses. In this connection he studied nonlinear processes in the cochlea, in part through cochlear sound emission.

Zwicker received his doctoral degree in 1952 from the University of Stuttgart (FRG). He remained at the university, becoming a full professor, and in 1967 became director of the Institute for Electroacoustics at the Technical University of Munich. He served as dean of the faculty of electrical engineering in 1977–79.

Dennis H. Klatt (MIT) received the Silver Medal in Speech Communication for "fundamental and applied contributions to the synthesis and recognition of speech." Klatt has conducted detailed experimental studies of timing in speech production, and he has developed models for how listeners extract, store and access information from auditory signals. In addition, he has worked extensively on speech synthesis, including developing DECTALK, a widely used software system for speech synthesis. (See PHYSICS TODAY, October, page 139.)

Klatt received his PhD from the University of Michigan in 1964, and became an assistant professor in electrical engineering at MIT in 1965. He

Dennis H. Klatt

