



Harry F. Olson

**Harry F. Olson**, eminent scientist and expert in acoustics and electronic sound recording died on April 1 in Princeton, NJ. Olson, who worked for RCA for almost 40 years, developed several types of microphones for broadcasting and recording, high-fidelity loudspeakers, improved phonograph pickup and recording equipment, underwater sound equipment and sound motion picture and public address systems. Among his outstanding contributions were his work in the development of the RCA magnetic tape recorder for television and the music synthesizer, which could produce electronically any musical or other sounds. Granted more than 100 patents for his inventions, Olson invented an acoustic stethoscope that enabled doctors in the 1940s to hear every sound made by the human body. His other work included the phonetic typewriter and a speech processing system.

A past president of the AES and editor of its *Journal* from 1966-69, Olson maintained rigorous standards in judging papers submitted for publication. As an exacting and diligent editor, he helped establish the stature

of the *Journal* as a quality publication. He served as editor emeritus of the *Journal* for the past 13 years.

Born in Mt. Pleasant, Iowa, in 1901, Dr. Olson attended the University of Iowa, where he received a B.S. degree in 1924, and a Ph.D. degree in 1928. The university's alumni association recently chose Olson for its distinguished alumni achievement award.

In 1928, he joined RCA as a member of the research department. Except for a two-year period (1930-32), when he was associated with the engineering department of RCA Photophone, Dr. Olson was continuously associated with the RCA research organization. In 1934, he was placed in charge of acoustical research for the RCA Manufacturing Company and subsequently became director of the acoustical and electromechanical laboratory at RCA Laboratories in Princeton. He was appointed staff vice president of acoustical and electromechanical research in 1966.

During the course of his professional life, Olson wrote numerous acoustical studies and contributed more than 130 articles and professional

papers. He was the author of several books, including *Applied Acoustics*, *Elements of Acoustical Engineering* and *Musical Engineering*.

Recognized for his innovations, Olson was elected to the National Academy of Science in 1959, and later became a fellow of the American Physical Society, the Institute of Electrical and Electronics Engineers, the AES, the Society of Motion Picture and Television Engineers and the Acoustical Society of America, of which he was a past president.

For his outstanding achievements in the field of audio engineering, Olson received numerous awards, among them the John H. Potts Medal of the Audio Engineering Society in 1949 and the John Ericsson Medal of the American Society of Swedish Engineers in 1964. He received three awards from the IEEE: the Mervin J. Kelly Award in 1967, the Consumer Electronics Award in 1969 and the Lamme Medal in 1970. Dr. Olson was awarded the first Silver Medal in Engineering Acoustics of the Acoustical Society of America in 1974 and the Society's Gold Medal Award in 1981.