

On November 22, 1970, we lost one of the world leaders in electroacoustics with the death, at the age of 73, of Ir. Roelof Vermeulen of The Netherlands. He had retired in 1959 after an innovative career spanning 35 years, all of it at the Philips Research Laboratories in Eindhoven. He was a member of AES and a valued friend to many of the Society's leaders.

Ir. Vermeulen joined the Philips Laboratories in 1923, after taking de-



Roelof Vermeulen

grees in both mechanical and electrical engineering at the Technical University in Delft. He had an important share in the development of the first Philips electrodynamic speaker, and of the Philips-Miller system. In the 1930's, he made experiments looking toward the electroacoustical amplification of sound from violins. As a part of these experiments he used an electromagnetic system to "drive" a number of slave violins from a single master instrument.

He did important work on loudspeakers, microphones, pickups, sound film, disc recording, tape recording, hearing aids. He also made a number of experiments in stereophony, some of which were reported in a paper on stereo reverberation which he wrote for the AES Journal of July, 1958. He worked as early as 1946 on four-channel stereo, or "ambiophony," in collaboration with Maestro Leopold Stokowski. By coincidence, Stokowski had written Philips Laboratories last August recalling those experiments with sound coming

from all corners of the room.

Ir. Vermeulen became deeply interested in electronic music in the early 1950's and aided composers in that field by giving them access to his laboratories. He was an excellent amateur violinist, and from 1946 to 1951 was President of the Board of the Eindhoven School of Music. For his contributions to music education, he was awarded Knighthood in the Order of Orange-Nassau.

He was one of the initiators and a vice president of the first International Congress of Acoustics, held at Delft in 1953. He also strongly supported the activities of the International Electrotechnical Commission through its early years.

Ir. Vermeulen became Director of Acoustic Research at Philips in 1947, and later became Scientific Advisor to the Laboratories, the post he held at his retirement. He was a member of many professional societies, among them, in addition to AES, the Society of Motion Picture and Television Engineers and the Acoustical Society of America, of which he was a Fellow. He also belonged to the Dutch Acoustical Society, the Dutch Radio Society, the Dutch Audiological Society, and the Royal Institution of Engineers, as well as a number of others. The rewards from his work will enrich us for a long time to come.

DR. WILFRED W. WETZEL, one of the creators of magnetic tape recording in this country, died December 26, 1970 in Scottsdale, Arizona. Starting in 1944, he undertook for the 3M Company the task of developing magnetic materials for recording tape, then about to emerge as an American product under the spur of the "liberated" German magnetic systems. Dr. Wetzel's success was one of the central factors in the swift growth of magnetic recording in the United States, and in the establishment of the 3M Company as a major supplier of tape.

He was born in Little Falls, Minnesota, and took his BA and PhD degrees from the University of Minnesota in 1928 and 1933, respectively. He taught physics at Cornell from 1933 to 1936. Later academic assign-

ments were at the Massachusetts Institute of Technology, University of Minnesota and University of Chicago.

In 1940, he joined the Navy's Bureau of Ordnance to work on the protection of ships from magnetic mines, leading to studies in detection and recording of underwater sound.

Dr. Wetzel's pioneering work on oxides for magnetic tape got its first large confirmation in 1948 when the American Broadcasting Company ordered one-and-a-half million feet of 3M's new tape for delayed broadcasts. That started the rush to magnetic recording. Dr. Wetzel became Technical Director of 3M's magnetic tape laboratories, and did original work in many areas of magnetic recording. He also devoted himself to the magnetic recording problems of engineers in motion pictures, recording and broadcasting through personal contact and technical papers.

For his services in aiding the film industry to absorb magnetic recording, the Society of Motion Picture and Television Engineers gave him their S. L. Warner Memorial Award.



Wilfred W. Wetzel

At the time of his retirement in 1964 he was Vice President and General Manager of 3M's Magnetic Products Division, which he had had such a large hand in building. He was a gentle man who surely had not a single enemy in the world, and his easygoing responsiveness will be missed by everyone who knew him. This Society, of which he was a long-time member, extends its deep sympathy to his wife and family.