



John C. Burgess, a Fellow of the Acoustical Society of America (ASA) and general chair of the first three joint meetings of the Acoustical Societies of America and Japan, passed away on May 14, 2017, in Hawai'i at age of 93. John was the recipient of the Society's Distinguished Service Citation (1996) as well as two

Distinguished Service Awards (1978, 1996) and a Medal of Special Merit (1988) from the Acoustical Society of Japan. He served *The Journal of the Acoustical Society of America* as associate editor for signal processing from 1997 to 2004. John joined the ASA in 1957 and was elected a Fellow in 1978.

John grew up in New England and graduated from Brown University, Providence, Rhode Island, in 1944 with an engineering BS. After seeing wartime action in the Pacific as a submarine officer, John moved to the San Francisco Bay Area where he stayed until 1966. He received his MS (1949) and PhD (1955) from Stanford University, Stanford, California; worked at the Stanford Research Institute from 1953 to 1961; and then joined United Technology Center in Sunnyvale, California, where he managed the analysis of Titan IIC rocket motors. In 1966, John moved to the University of Hawai'i, Honolulu, as a full professor in the Department of Mechanical Engineering, chairing the department for his first two years there. He retired as professor emeritus in 1995.

John's research focused on signal processing and adaptive control in acoustics. He was the first to solve the problem of unstable weight vector convergence during adaptive sound control, introducing a popular control method later known as the "Filtered-x LMS algorithm" (Burgess 1981). He also developed several new data windows optimized for adaptive arrays of acoustical sensors and other applications (Burgess 1992, 2004).

Starting in 1972, John spent all but one of his sabbaticals at the National Research Council in Ottawa, Ontario, Canada.

In 1975, during one such visit, he noted that the ASA always held its meetings in eastern or midwestern states. Wasn't it time to expand? Employers might balk at supporting travel elsewhere, but John suggested a carrot, a joint conference with some other acoustical society and what better than with the world's second oldest acoustical society, the Acoustical Society of Japan, founded in 1936.

The first joint conference took place in Hawai'i, and John was the obvious choice as general chair. During the organizing meeting, John introduced a novel scheduling method. He arranged four sheets of plywood into a chart 8 feet high (technical committees and social functions) by 16 feet long (time). As the meeting progressed, the plywood filled with cards, immediately showing conflicts and possible resolutions. The concept was so successful that both Societies used it for years thereafter.

The Hawai'i joint meetings introduced a new era for Society conferences. At the second joint meeting, submitted papers exceeded 1,000 for the first time in the Society's history. Locales once considered exotic began to host conferences. Joint meetings with new partners, such as the European Acoustical Association, soon followed. One likes to think that it all began with John, one day in 1975, drinking coffee while sitting on a large impedance tube in an Ottawa laboratory and musing about new meeting locations for the Society.

Selected References by John C. Burgess

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