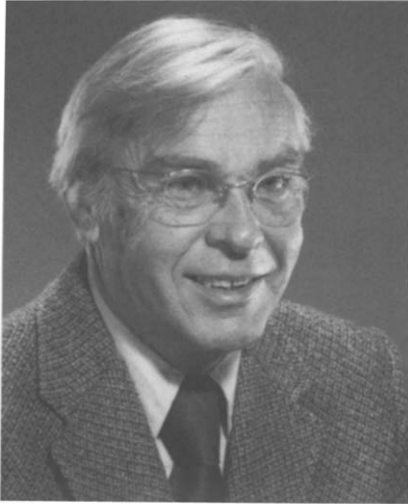


OBITUARIES

Professor Ralph A. Seban



Dr. Ralph A. Seban, a professor emeritus of the Mechanical Engineering Department

ment at the University of California at Berkeley, died of cancer in Oakland on June 13, 1993.

Professor Seban was born in Los Angeles, California on May 11, 1917. He received his B.S. (1938), M.S. (1940), and Ph.D. (1948) all in Mechanical Engineering from the University of California at Berkeley. He joined the University of California at Berkeley in 1946. He continued to be an active member of the heat transfer community until his death.

Professor Seban taught thermal science courses and performed state-of-the-art research, which assisted the Berkeley heat transfer group in becoming a leading heat transfer research center in the U.S. From 1958 to 1964, Professor Seban served as the Chairman of the Heat Power Systems Division at Berkeley, and he served as the Chairman of the Mechanical Engineering Department

from 1965 to 1969. Professor Seban was also a member of the Executive Committee of the ASME Heat Transfer Division (1967-72), Chairman of the Heat Transfer Division (1970-71), and Senior Technical Editor for the *ASME Journal of Heat Transfer* in 1971. In 1970, he became a Fellow of ASME and an Honorary Member in 1977. He became a member of the U.S. National Academy of Engineering in 1978. Professor Seban received the ASME Heat Transfer Division Memorial Award in 1964, the ASME-A.I.Ch.E. Max Jakob Memorial Award in 1980, and the ASME Heat Transfer Division's 50th Anniversary Award in 1988.

On behalf of his students, I offer my condolences to his wife, Jean, and his five children. We will all miss him.

Amir Faghri

Professor Darryl E. Metzger



Darryl Metzger passed away in August after a four-month battle with cancer of the esophagus.

From the mid-1960s, Darryl made a significant contribution to the study and application of convective heat transfer, with particular emphasis on gas-turbine cooling systems. This research, which was funded by leading U.S. gas turbine companies and government agencies, was applied principally to the cooling of gas turbine blades and discs. As well as publishing numerous papers on heat transfer, he was a regular invited speaker and panelist at, and organizer of, many

national and international conferences and meetings.

Darryl was awarded his Bachelor's, Master's and Doctorate degrees from Stanford University, which he left in 1963 to become Assistant Professor at Arizona State University. He spent the majority of his subsequent career at Arizona, becoming Associate Professor of Engineering in 1966 and full Professor in 1970. In 1985, he received the Alexander von Humboldt award, which enabled him to spend a month for each of the next six years as Visiting Professor with Sigmar Wittig's research group at the University of Karlsruhe, and just over a year ago he was named Regent's Professor.

As well as being active in research, Darryl was heavily involved in professional and academic matters. At Arizona, he was responsible for giving lectures from sophomore to graduate level and supervised approximately 100 senior projects over a 20-year period. He was Department Chairman of Mechanical and Aerospace Engineering from 1974 to 1987 and played a full part in the University's administration. In ASME, he was a member of many committees and was Chairman of the IGTI Heat Transfer Division from 1982 to 1984.

My own association with Darryl was mainly through a shared interest in the

cooling of rotating turbine discs. We first met at the ASME gas Turbine Conference in Brussels in 1970, although, as a research student, I was familiar with his earlier work on this subject. Some of the most memorable conferences that I have ever attended were organized by Darryl. Perhaps the best of these was the symposium on Heat and Mass Transfer in Rotating Machinery at the International Center for Heat and Mass Transfer, Dubrovnik, in the former Yugoslavia in 1982. With the aid of Dick Goldstein, Darryl tried to repeat his success in 1992 but the civil unrest in the former Yugoslavia made this impossible and the venue was changed to Marathon, Greece, which also proved to be a splendid location. Remembering Darryl looking his usual relaxed, fit and youthful self last year at the ICHMT symposium in Marathon in August and at the AGARD meeting in Antalya, Turkey, in October, I find it difficult to accept that he is no longer with us.

Darryl was born in Salinas, California on July 11, 1937 and passed away on August 1, 1993. He leaves behind a wife, Dorothy, and four children; he also leaves a large gap in the international heat transfer community.

Mike Owen