



IN MEMORIAM

Sekharipuram V. Venkateswaran
Professor of Atmospheric and Oceanic Science, Emeritus
Los Angeles
1926 — 2005

Sekharipuram Venkateswaran, professor emeritus of atmospheric and oceanic science at UCLA, died after a long illness on February 14, 2005 in Northridge, California, at the age of 79. Over his long career at UCLA, he developed an international reputation as a research scientist. He was also an outstanding teacher and scholar with a passion for knowledge, a well-loved advisor, and an esteemed colleague truly dedicated to the advancement of science. Many of the faculty and students in the department remember his infectious laugh and constant encouragement. Indeed, he often took it upon himself to mentor the graduate students and assistant professors by providing sage advice.

Venki, as he was affectionately called by friends and colleagues, was born in Calicut, Kerala, India in 1926. He received his B.Sc. and M. S. from Presidency College, Madras, India in 1947, and his Ph.D. at the Physical Research Laboratory, Gujarat, India in 1955. That same year he joined the Department of Meteorology at UCLA, as an assistant research meteorologist, and worked with the founder of the department, J. Bjerkness, on a model for the general circulation of the atmosphere in winter. Between 1960 and 1963 he held the position of assistant research geophysicist in the Institute of Geophysics and Planetary Physics at UCLA. He was appointed assistant professor of meteorology at UCLA in 1963, became a full professor in 1971, and remained with the department until his retirement in 1994. Venki became internationally recognized for his research contributions in the general field of upper atmospheric science. His best-known contributions were the development of innovative techniques to measure atmospheric ozone, and the modeling of gravity waves, atmospheric tides and global ionospheric dynamo winds.

During his career at UCLA, Venki taught an exceptionally wide variety of classes. His emphasis was always on the fundamental concepts, rather than details, and he made the fundamentals seem easy. He was an outstanding teacher and the first recipient of the S. V. Venkateswaren Award for Excellence in Teaching and Education, which was initiated by our department to honor him and encourage others to emulate his qualities. His unselfish devotion to his graduate students was legendary, and students felt extremely fortunate to be able to interact with him. Although he shunned the limelight himself, Venki left a broad legacy in the form of his graduate students, many of whom went on to become leading experts in the field of space physics. In 1999, at an NSF-sponsored symposium that brought together members of all three subsections of near Earth space physics, the corresponding three invited tutorials, remarkably, were all given by Venki's former students.

Venki was a scientist with extremely broad research interests. He had an encyclopedic knowledge of a wide variety of subjects and an extensive book collection that was constantly used by his colleagues. Research and teaching in the department consists of the following sub-areas: dynamic and synoptic meteorology, cloud physics and atmospheric chemistry, radiation and upper atmosphere physics. While the majority of Venki's papers are in upper atmosphere physics, his interest and knowledge went far beyond a single sub-area. In this way, Venki was able to critically evaluate the research and teaching activities of the entire department better

than anybody else. This unique ability and his willingness to help others significantly contributed to the department in maintaining its breadth, integrity and high standard. Venki often joked that he could teach every single undergraduate and graduate course that the department offered.

In the early 1970s, the Department of Transportation (DOT) launched a national research project, Climate Impact Assessment Program (CIAP), which was concerned with the harmful consequences of supersonic aircraft to the Earth's ozone layer. Venki was asked to chair a radiation panel of the Program. In this capacity, he prepared what was essentially a climatic atlas of the solar ultraviolet radiation in different wavelengths reaching the Earth's surface. A grant from CIAP gave an opportunity for the general circulation model (GCM) project of Professors Mintz and Arakawa in the department to expand the vertical domain of the GCM to include the stratosphere. Venki contributed to this pioneering work by formulating the stratospheric physics of the GCM, which included the photochemistry for ozone production. In this way, the UCLA GCM became one of the first GCMs that explicitly predicted the ozone constitution.

Venki is survived by his wife, Julia, and by nephews and nieces on several continents. Towards the end of his life, he found great comfort in contemplating the atmospheric, physical and scientific notions that had played such an important part in his teaching and research. On the occasion of receiving the first S. V. Venkateswaran Award for Excellence in Teaching Education, he observed that, apart from hours spent with family, the happiest times in his life had been those he spent with his students. He loved sharing coffee and pastry with colleagues and friends, and his greatest joy was opening a new book. Venki was an inspiration to all who met him, and he will be deeply missed.

Richard Thorne
Roger Wakimoto