



Memorial Resolution

Anant K. Ramdas
May 19, 1930 – November 22, 2024

Department of Physics and Astronomy
Purdue University

Anant K. Ramdas, the Karl Lark-Horovitz Distinguished Professor Emeritus of Physics and Astronomy at Purdue University, passed away on November 22, 2024, at the age of 94. He was a pioneering condensed-matter physicist whose work fundamentally advanced understanding of optical and semiconductor physics. Professor Ramdas was beloved as a scholar, mentor, and generous supporter of scientific education.

Professor Andrew Hirsch, former Department Head, remembers Anant well, saying, “He was a fantastic physicist, and Anant had a wonderful sense of humor and an infectious laugh. It was always a delight to spend time with him and his wonderful wife, Vasanti.”

Born on May 19, 1930 in Pune, India, Ramdas completed his B.Sc. at Poona University in 1950, followed by his M.Sc. (1953) and Ph.D. (1956) also at Poona, with affiliation to the Raman Research Institute under the guidance of Nobel Laureate C. V. Raman.

Shortly after earning his doctorate, he joined the Department of Physics at Purdue University in 1956 as a research associate, beginning a lifelong academic career in West Lafayette, Indiana. Over nearly six decades, he inspired generations of students, colleagues, and researchers with his deep commitment to scientific discovery and education. He was promoted to Assistant Professor (1960), Associate Professor (1962), and Professor (1967). In 2002, he was named the Karl Lark-Horovitz Distinguished Professor of Physics and Astronomy.

Ramdas conducted pioneering experimental work on the optical properties of solids, especially spectroscopic investigations of semiconductors, their vibrational and electronic excitations, and heterostructures. His research spanned Raman and Brillouin spectroscopy, photoluminescence, magneto-optics, and modulation spectroscopy.

Professor Ramdas is remembered not only for his intellect and technical achievements but also for his warmth, encouragement of young scholars, and belief in community. He established the Ramdas Award and the Raman Prize at Purdue University, in partnership with his wife Vasanti, to support and recognize exceptional students in physics and astronomy — a lasting testament to his dedication to student achievement.

Ramdas authored over 200 scientific publications in the fields of semiconductor spectroscopy and the physical understanding of material properties. He guided 35 doctoral students, with many continuing influential scientific careers, and was known for the rigor and clarity of his instruction to both graduate and undergraduate students.

In addition to a large physics book collection, Anant had an incredible collection of crystals and other rocks at his home.

Ramdas received numerous honors over his career, recognizing his lasting impact on physics:

- Fellow of the American Physical Society (1969)
- Fellow of the Indian Academy of Sciences (1969)
- Alexander von Humboldt Senior U.S. Scientist Award (1977–78)
- Raman Centenary Medal, Indian Academy of Sciences (1988)
- Frank Isakson Prize from the American Physical Society (1994)
- Herbert Newby McCoy Award from Purdue University (1994)
- Fellow of the Optical Society of America (1996)
- Fellow of the AVS-The Science and Technology Society (2002)