Nabil Farhat, professor emeritus in the department of electrical and systems engineering, passed away on November 3 at his home in West Mt. Airy. He was 87.

Born in Palestine in 1933, Dr. Farhat received a BS in electrical engineering from the Technion Israel Institute of Technology in 1957. He went on to receive an MS in electrical engineering from the University of Tennessee in 1959 and a PhD from Penn's Moore School of Electrical Engineering (now part of the School of Engineering and Applied Science) in 1963. While a student at Penn, he was a Graduate Research Fellow at the Moore School.

In 1964, Dr. Farhat joined the faculty at the Moore School as an assistant professor of electrical engineering. Soon after joining the school, he was appointed the Head of the Electro-Optics and Photonic Neuroengineering Laboratory. In 1973, he was appointed the Alfred G. and Meta A. Ennis Associate Professor of Electrical Engineering at the Moore School (Almanac December 4, 1973). In 1976, he was promoted to a full professor. He held this position until 2013, when he retired and took emeritus status.

While at Penn, Dr. Farhat's work was widely acknowledged. In 1970, he received a Lindback Award for Distinguished Teaching, and the same year his research won an award from the RCA Corporation. Dr. Farhat was elected a fellow of the Institute of Electrical and Electronics Engineers (IEEE) and The Optical Society (OSA) and was a member of the Electromagnetics Academy and the Mahoney Institute of Neurological Sciences.

He was a widely-cited and respected expert in optoelectronics and photonics, lecturing and publishing prolifically and serving on the boards of several scholarly journals. In the early 1980s, he was one of the first scientists to work on optical realization of neural networks, including developing an innovative system of three-dimensional imaging radar that allowed researchers to see distant objects in three dimensions (Almanac May 22, 1980).

Most recently, his research focused on the qualitative theory of nonlinear dynamics, bifurcation and chaos, and its application to the modeling and understanding of cortical dynamics in the brain.

Dr. Farhat is survived by his wife, Joan English Farhat; his brother, Amir Farhat; his sister, Malaka Safadi (Bassam); nephews, Rami Safadi and Andrew English; nieces, Reema Safadi and Alice English; and great nephews, Ryyan and Sam Safadi.

The memorial service was private. In lieu of flowers, memorial contributions may be made to a charity of the donor's choice.