



The University of Vermont
FACULTY SENATE

Resolution in Memoriam
Jie Yang
Associate Professor of Physics
1956 - 2020

Presented by Matthew White
Assistant Professor, Department of Physics
December 14, 2020

The faculty, staff and students of the Department of Physics are shocked and saddened by the untimely death of a dear colleague, Dr. Jie Yang, Associate Professor of Physics, who passed away on October 10, 2020. Born in An Shan, China in 1956, the patience and persistence that served him well as a physicist was possibly a result of living through Mao's Cultural Revolution in the sixties and seventies. Dr. Yang was a gifted scholar. He won a full scholarship to pursue his Ph.D. in physics at Princeton University by finishing in 2nd place on the national CUSPEA examination administered by Nobel laureate T.D. Lee.

As a postdoctoral fellow at the University of Chicago, Jie worked closely with Tom Rosenbaum (current President of Caltech) and Gab Aeppli to elucidate the properties of dipolar ferromagnets. He then seamlessly moved from experimental condensed matter physics into biological physics when he accepted a research position at the University of Virginia School of Medicine in the early 1990s. It was there that he made fundamental contributions to the emerging field of atomic force microscopy by co-inventing the cryogenic atomic force microscope (US patent, No. 5,410,910) and using it to obtain the first AFM images of DNA.

Dr. Yang joined the physics faculty in 1994. With funding from the Army Research Office, he continued his research of applying atomic force microscopy to a variety of biological systems such as the condensation of DNA on lipid membranes. His published work appears in top journals in condensed matter physics and biological physics. In recent years, Dr. Yang collaborated with researchers in the College of Engineering in using AFM to explore the microstructure and mechanical properties of engineering materials.

For over 25 years, his students were greatly appreciative of his sincere encouragement, his pleasant disposition, and his enthusiasm about physics. Jie highly valued education, and he was especially proud of the academic accomplishments of his son Jeffrey, an alumnus of Princeton, and his daughter Kailey who is an undergraduate at MIT. His colleagues and students in the physics department will remember Professor Yang fondly for his kindness, his generosity, and his infectious smile.

Thomas I. Chittenden
President, Faculty Senate

Suresh Garimella
President, University of Vermont