

LONNIE LEE VAN ZANDT 1937-1995

Lonnie Lee Van Zandt, 57, Professor of Physics at Purdue University, died Thursday, July 20, 1995 at home, after being in declining health for the preceding three months. Professor Van Zandt was born on September 29, 1937 in Bound Brook, New Jersey. He received the B.S. degree in Physics from Lafayette College (Pennsylvania) in 1958 and the degrees of A.M. and Ph.D. in Physics from Harvard University in 1959 and 1964, respectively. He was a staff member at the Ford Motor Company Scientific Laboratory from 1962 to 1964 and the Massachusetts Institute of Technology Lincoln Laboratory from 1964 to 1967. He joined the Purdue Physics Faculty as an Assistant Professor in 1967, was promoted to Associate Professor in 1970 and was Professor of Physics since 1982. In 1978, he was a Visiting Professor at Tsing Hua University, Taiwan.

He published over 85 articles in technical journals and supervised the Ph.D. research of eleven students. His early professional work was in the theory of electron transport in oxides. Since 1977, his research was primarily focused on the dynamical theory of DNA polymer and its interaction with electromagnetic radiation from the perspective of basic physics principles.

Lonnie's interests were not just confined to the specialized fields of physics for which he was best known to the scientific community. Any subjects that happened to pique his curiosity were fair game for his relentless scrutiny, and invariably led to articles, letters and memos to colleagues, journals, magazines and the news media, ranging from the *Physical Review*, *Physical Review Letters*, *American Journal of Physics*, *Biopolymers* and *Biophysical Journal* to the *Lafayette Journal and Courier* to the *National Review*, and to seminars and popular lectures. These subjects touched on esoteric issues in quantum theory and thermodynamics as well as very practical ones, such as the source of CO₂ in the atmosphere and global warming, the transport of materials from earth to a base on the moon, the identification and accommodation of learning disabled students, learning how to view 3-D objects with the unaided eye from stereoscopic pairs of drawings, and the dynamics of the baseball bat. In the introduction to his article on the baseball bat, an article which was recently cited as a classic in its field by Robert Adair, Sterling Professor of Physics at Yale University, Lonnie wrote, "The baseball bat can serve as a familiar medium to draw the attention of students and lay audiences to the general subjects of vibrations and waves, the dynamics of collisions and flight of projectiles, the theory of elastic deformations, and a few other related topics" Here was Lonnie at his best, as a researcher, and a teacher relating the joys of scientific inquiry to both colleagues and the general public.

Lonnie was a dedicated Ph.D. mentor and classroom teacher. He did not coddle students or strive to win popularity contests. In a note I received from him in 1990, there was attached an extremely complimentary letter from one of his students in PHYS 221, which described how helpful Lonnie was in helping the student prepare for his medical school exam. Lonnie wrote: "My reasons for passing this note on to you are, of course, transparent. But I feel that one letter like this is worth a thousand angry CIE pink sheets. This is what I believe should be the real end of teaching: somebody learned something."

Lonnie served on the Physics Qualifying Examination, Graduate Curriculum, Library, Ph.D. Certification, and Solid State Advisory Committees. He was a counselor for both undergraduate and graduate students, and was a member of the Executive Committee of Sigma Xi. He was a volunteer with the Tippecanoe Mental health Association, was active as a judge in local science fairs and as a member of the Physics Textbook Adoption Committee of the Tippecanoe County School Corporation. He was a member of St. Boniface Catholic Church of Lafayette, Indiana.

His first marriage was to Peggy Jo Boulware in 1961. His second marriage was in 1975 to Kung-Ching Lu. He is survived by his wife; children, Patricia A. Van Zandt of Baltimore, MD, Lonnie L. Van Zandt III of Denver, CO, Virginia E. Van Zandt of Charleston, SC, and Karl S. Van Zandt, at home; and three brothers, Ed Shea of Wheaton, IL, Roger Shea of Atlanta, GA, and David Van Zandt of Indianapolis.

In a very moving note to the Physics department on the day that Lonnie passed away, his wife, K-C, expressed in just a few words what I think Lonnie was all about:

"We appreciated the cards, the flowers, the packet of information on brain tumors, the food people brought, and so on. We have been slow in writing to express our gratitude, partly because we wanted to try the shark cartilage treatment and hoped to be able to report good progress. Lonnie was a fighter. He never gave up even after we signed on with the Hospice Program for terminally ill patients."

"Lonnie loved his job and field of Physics. He loved to solve problems and share knowledge. I know that he will be missed by his colleagues and the community. ..."

Yes, indeed Lonnie was a fighter, but a fighter in the best sense of the word. One might say that he was a fighter for clarity of thought. Lonnie never took anything for granted, and throughout his life, he shared his skepticism and sharp insights on many aspects of science and other areas of human affairs with students, colleagues and the general public.

We will all miss Lonnie. We need more people like him to keep us honest in the way we go about making sense of the world around us. To Lonnie's family, we give our deepest condolences and our sincere hopes that the memories of Lonnie's great courage and bright spirit will soon begin to ease somewhat the sorrow of his passing.

Arnold Tubis