CHARLES M. WOLFE

1935–2008

Elected in 1991

“For fundamental achievements in the synthesis and characterization of ultrapure III-V semiconductors.”

BY ABE L. CROSS
SUBMITTED BY THE NAE HOME SECRETARY

CHARLES M. WOLFE, professor emeritus of electrical engineering at Washington University in St. Louis, passed away on October 18, 2008, at the age of 72.

Charles Wolfe was born on December 21, 1935, in Morgantown, West Virginia, to parents Slidell Brown Wolfe and Mae Louise Wolfe. He received his bachelor of science and master of science degrees in electrical engineering from West Virginia University in 1961 and 1962. In 1965 he received his Ph.D. from the University of Illinois. A veteran of the U.S. Marine Corps, he served from 1955 to 1958.

Dr. Wolfe was a staff member at the Massachusetts Institute of Technology’s Lincoln Laboratory from 1965 to 1975, when he joined the faculty at Washington University in St. Louis. He was appointed as the Samuel C. Sachs Professor of Electrical Engineering in 1982 and served in that capacity until 1990. He became professor emeritus in 1998.

For his contributions to the development of high-purity gallium arsenide for microwave and optical device applications, Dr. Wolfe received an Electronics Division Award from the Electrochemical Society in 1978. Also in 1978 he was elected a fellow in the Institute for Electrical and Electronics Engineers (IEEE).
Charles Wolfe and Gregory Stillman were joint recipients of the prestigious IEEE Jack A. Morton Award in 1990 for the growth and characterization of ultra-high-purity gallium arsenide and related compounds. Along with Gregory Stillman and Nick Holonyak, Dr. Wolfe published *Physical Properties of Semiconductors* (Prentice Hall, 1989.) The book has since been cited in numerous publications.

For his fundamental achievements in the synthesis and characterization of ultrapure III-V semiconductors, Dr. Wolfe was elected a member of the National Academy of Engineering in 1991. He was honored specifically for his work in developing and purifying gallium arsenide compounds for their use in high-speed analog and digital integrated circuits for a variety of electronic applications.

The University of Illinois Department of Electrical and Computer Engineering honored Dr. Wolfe with a Distinguished Alumni Award in 1993. The award recognizes graduates who have made professional and technical contributions that bring distinction to themselves, the department, and the university.

Dr. Wolfe’s love for academia and the educational process, displayed by his endless drive to learn and to answer the unanswered questions of our physical world, was balanced in his life by his deep passion for the “romantic arts” of music, painting, poetry, love, and family. Ever charismatic, Charlie, as he was affectionately known, will always be remembered by those who knew and loved him as a unique-minded, fun-loving, dry-witted, mischievous, and passionate soul, who lived his life on his own terms. He is survived by his children, David M. Wolfe and Diana Michele Foster, and his grandchildren, Brandi Foster, Jeremy Foster, Chloe Wolfe, and Charles Wolfe.