

# ALAN BICKSLER FOWLER



Alan Bicksler Fowler, IBM Physicist and IBM Fellow at the Thomas J. Watson Research Center in Yorktown Heights, NY, died August 4, 2024, in Pittsburgh, PA. He was also a fellow of the American Physical Society and a member of the National Academy of Sciences, the National Academy of Engineering, a foreign member of the Royal Society of London, and a fellow of the Institute of Electrical and

Electronic Engineers.

Alan was born in Denver, CO on October 15, 1928, the son of Alan Bruce and Minnie Bicksler Fowler. He spent his first years in Guernsey, WY and later lived and was educated in the public schools of Baltimore, MD and Newport, RI. Alan received BS and MS degrees at Rensselaer Polytechnic Institute. His education was interrupted when he enlisted in the Army in 1946 and spent most of his time in Italy, near Trieste. After graduating, he was called back into the Army during the Korean War. He spent most of that tour as a physicist in the Signal Corps Labs at Ft. Monmouth, NJ. He then worked part time at Raytheon Research while earning his PhD in Applied Physics at Harvard University in 1958. That year he began work at the IBM Research Division and worked there until he retired in 1993. His additional work included three months at Cambridge University, six months at Munich Technical University as a Humboldt scholar, and a year at IBM San Jose, CA.

Alan's principal contributions were to studies of electron transport in two dimensional systems — mainly inversion layers in MOS structures. He, with colleagues Frank Fang, Web Howard, and Phil Stiles, made the first observations of 2-dimensional behaviors in 1965 that led to numerous patents for IBM. Alan and Frank Stern co authored a much cited review article in regards to this work. In 1981, Alan was awarded the Franklin Institute's Wetherill Medal for his contributions to physics.

He shared most of his life with his high school sweetheart and wife, Kathleen Devlin Fowler, who died in 2016 after almost 66 years of marriage. They had four children: Stephen (Lisa Moschak) Fowler, Susan (Thomas) Fowler-Finn, Andrew (Phúc Nguyen) Fowler, and Sarah (Christof Paar) Fowler. He had 10 grandchildren and two great grandchildren. Alan was predeceased by his siblings Robert, Barbara Stutz, and Anne Larmer.

In addition to his work and family life, Alan was an avid reader (history, poetry, fiction), an audiophile, birdwatcher, hiker, rambler, saltwater fisherman (out of Sheepshead Bay), tennis and badminton player, woodworker and world traveler.

A celebration of his life will be held in Westchester County, NY later this year. For those so called to honor his life, donations to the Greater Pittsburgh Community Food Bank, 1 N. Linden St., Duquesne, PA 15110, would be greatly appreciated.

Private arrangements were entrusted to **PITTSBURGH CREMATION & FUNERAL CARE, ROBINSON TOWNSHIP, PA.**



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