

# Emerson William Pugh

*Born May 1, 1929, Pasadena, Calif.; president of IEEE and leader of the IBM History Project.*



*Education:* BSc, physics, Carnegie Mellon University, 1951; PhD, physics, Carnegie Mellon University, 1956.

*Professional Experience:* assistant professor of physics, Carnegie Mellon University, 1956-1957; IBM Corp.: staff member, IBM Research, 1957-1958, manager of metal physics group, IBM Research, 1958-1961, visiting scientist at IBM Zurich Laboratory, 1961-1962, senior engineer, IBM Components Division, 1962-1965, IBM Group Director of Operational Memory, 1965-1966, director, Technical Planning, IBM Research Division, 1966-1968, special assistant to

IBM vice president and chief scientist, 1968-1971, consultant to the IBM director of research, 1971-1973, research manager of exploratory magnetics, 1975-1980, member, research review board, 1981-1982, member of IBM Technical History Project, 1983-1993; manager of IBM Technical History Project, 1985-1993; executive director of the National Academy of Sciences' study of Motor Vehicle Emissions and Fuel Economy (on leave from IBM), 1974.

*Honors and Awards:* fellow, American Physical Society, 1962; fellow, Institute of Electrical and Electronics Engineers (IEEE), 1972; president, Magnetism Society, IEEE, 1973-1974; fellow, American Association for the Advancement of Science, 1977; distinguished lecturer, Magnetism Society, IEEE, 1980; IEEE Centennial Medal, 1984; distinguished visitor, IEEE Computer Society, 1984-1986; president elect, president, and past president, IEEE, 1988-1990; Merit Award, Carnegie Mellon University Alumni Association, 1990; Achievement Award, IEEE Magnetism Society, 1991; IEEE Literary Award, 1992.

Emerson W. Pugh was a research staff member at the IBM T.J. Watson Research Center, Yorktown Heights, New York. Technology assessment, the history of computers, information storage technologies, and technology policy are his primary interests.

He has held senior management positions at IBM, including director of memory development for the Data Processing Group and director of technical planning for the Research Division. Earlier he managed the development of the highest-performance main-memory array shipped with System/360 computers. He has initiated and led research and development studies in laboratories in Switzerland, Japan, and the US. On leave in 1974, he served as executive director of a National Academy of Sciences study of automobile emissions and fuel economy conducted for the Environmental Protection Agency and the US Congress.

Pugh was president of the Institute of Electrical and Electronics Engineers (IEEE), the world's largest professional technical society. Previously, he has held numerous IEEE positions, among them executive vice president, vice president for technical activities, president of the Magnetism Society, editor-in-chief of the Transactions on Magnetism, and distinguished visitor for the Computer Society. He is also a member of the United Engineering Trustees Board, which is the governing body for the Engineering Societies Library, the Engineering Foundation, and the United Engineering Center in New York City.

Pugh is chairman of the Friends Committee of the IEEE History Center, a director of the IEEE Foundation, and a trustee of the Charles Babbage Foundation.

## BIBLIOGRAPHY

### Significant Publications

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- Pugh, E.M., and E.W. Pugh, *Principles of Electricity and Magnetism*, 2nd ed., Addison-Wesley, Reading, Mass., 1970.
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- Pugh, E.W., *Memories That Shaped an Industry—Decisions Leading to IBM System/360*, MIT Press, Cambridge, Mass., 1984.
- Pugh, E.W., L.R. Johnson, and J.H. Palmer, *IBM's 360 and Early 370 Systems*, MIT Press, Cambridge, Mass., 1991.

## UPDATES

Portrait added (MRW, 2013)