

Society of Women Engineers

BIOSKETCH FOR DOROTHY M. HOFFMAN

Donor, SWE Hoffman Program and Dorothy and Earl Hoffman Scholarships

Dorothy M. Hoffman was a native of New York City, attended the City College of New York and received a B.S. in Chemical Engineering from Rensselaer Polytechnic Institute in 1947. She received an M.S. in Chemical Engineering from Bucknell University in 1948. After a year with the General Electric Research Laboratory in Schenectady, she joined the International Resistance Company in Philadelphia, where as research engineer and later as head of process development she played a major part in the development of the evaporated metal film resistor.

In 1962 she joined RCA as a member of the Technical Staff at the David Sarnoff Research Center in Princeton. After retirement from RCA in 1992, Ms. Hoffman served as a consultant until 1996. Over a technical career spanning more than 40 years, Ms. Hoffman consistently made significant contributions to the design and fabrication of thin films and to vacuum technology. Individually and collectively, her contributions made a major impact in numerous electrical, electronic, optical and electro-optical applications. Some examples include; thin film Nichrome resistors now the standard of the industry; numerous optical filters used, for example, in TV cameras; and infrared imaging devices used in satellites for surveillance and land surveying.

Ms. Hoffman was nationally known for her many contributions to vacuum technology which greatly improved the reliability and repeatability of thin film processing techniques, leading to higher yield in the fabrication of numerous electronic and electro-optic devices. Her three patents and more than 17 important publications in the field attest to her sustained contributions to high vacuum technology.

For SWE, Dorothy was a strong champion and Life Member. She showed outstanding dedication to SWE objectives particularly in the field of career guidance, actively lecturing at colleges, high schools, and counselors' meetings. Serving, by example, as an excellent role model for younger women particularly at the high school level, she always found time in a busy schedule to counsel. Her legacy, the Hoffman Program and Hoffman Scholarships, are directed toward making young women aware of careers in engineering. She regarded engineering as full of fun, fascination and challenge. She was a talented, qualified, enthusiastic spokeswoman who modestly regarded her own abilities while encouraging others to follow and achieve the same high standards.

During her career, Ms. Hoffman received numerous awards for her research and service activities. She was the recipient of not one but two prestigious RCA Laboratory Outstanding Achievement Awards during her employment at RCA. She was the first woman to be elected President of the American Vacuum Society (AVS) in 1968 and was elected AVS Honorary Member in 1982. In 1982 she was selected by the Central Jersey Engineering Council as "Engineer of the Year". She was elected SWE Fellow in 1984

