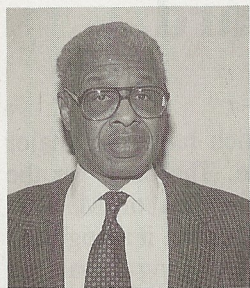
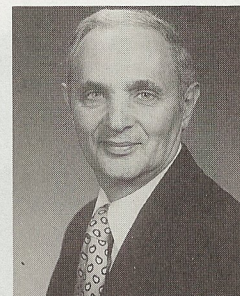


1993 Microwave Application Award



John Carter



Irving Reingold

The Microwave Application Award is presented aperiodically to individuals for an outstanding application of microwave theory and techniques. The eligibility requirements are creation of a new device, component, or technique, novel use of components, or both.

The 1993 recipients of the award are: Irving Reingold and John Carter, formerly of the US Army Laboratory Command, Electronics Technology and Devices Laboratory, Fort Monmouth, NJ.

The award citation reads: "FOR GAS DISCHARGE AND FERRITE DUPLEXER APPLICATIONS TO MILITARY RADAR."

John Carter received the B.S. degree in physics from West Virginia State University, Morgantown, and has performed graduate studies at New York University and Monmouth College.

John Carter has over forty years experience in the development of high-power components for power conditioning systems and high-power microwave transmitters. These include gas discharge devices, ferrite devices, and optical and microwave transmitters. Mr. Carter has also worked extensively in the areas of high-power microwave effects, pulse generators, and X-ray generators. Since 1987 he has been Consultant to the U.S. Army Electronics Technology and Devices Laboratory, Fort Monmouth, NJ, in high-power electronics and applications. Earlier, from 1965 to 1987 he was Project Manager for research and development for new concept and devices for power conditioning and radar transmitters, for the U.S. Army Electronics Technology and Devices Laboratory and predecessor organizations. From 1949 to 1965, he was Project Engineer in the same organization, specializing in gaseous electronics and solid-state physics. He has over 50 professional publications and holds over 25 patents.

Irving Reingold retired in March 1985 as Deputy Director of the Fort Monmouth, New Jersey Electronics Technology and Devices Laboratory (ETDL). From March 1985 to June 1989 he was associated with the Southeastern Center for Electrical Engineering Education (SCEEE) as an Adjunct Professor and Consultant; since June 1989 until November 1992, he has been associated with Geo-Centers, Inc., the follow-on support service contract to ETDL. Since March 1985 he has worked on numerous special assignments for the Laboratory Director and Deputy Director. Prior to his position as Deputy Director of the Electronics Technology and Devices Laboratory, he served as Director of the Beam, Plasma and Display Devices Division of the Laboratory, US Army Electronics Research and Development Command, Fort Monmouth, NJ. His activities at the Fort Monmouth Laboratory complex since 1945 covered a wide spectrum of technologies; including radar system; microwave tubes and associated transmitter devices; display related development, techniques, and applications; and high energy pulsers for directed energy weapons. He has published extensively, and is the holder or co-holder of a dozen patents.

Irving Reingold is and was active on many government, Institute of Electrical and Electronic Engineers (IEEE), and Society for Information Display (SID) committees. He was the Army Deputy Member of the Advisory Group on Electron Devices (AGED); was a member of the Sponsors Advisory Committee for the SID-IEEE-AGED Biennial Display Research Conference; was a member of the Administrative Committee of the IEEE Professional Society on Electron Devices; and a member of the IEEE PRESS Editorial Board. He was the 1985-1990 Chairman of the IEEE NJ Coast Section Honors and Awards Committee.

Irving Reingold received the B.S. degree and the Engineer's Degree from the Newark College of Engineering (now the New Jersey Institute of Technology) in 1942 and 1949 respectively. He is a licensed Professional Engineer in the State of New Jersey; a Life Fellow of the IEEE; a Fellow of the Society for Information Display; and a member of Sigma Xi. He was the recipient of the 1952 US Army Electronics Research and Development Laboratory Technical Leadership Award and the 1978 Frances Rice Darne Memorial Award presented by the SID. In 1985 he was the recipient of the Department of the Army Commander's Award and Medal of Meritorious Civilian Service, the Office of the Under Secretary of Defense for Research and Development Citation for Service on the Advisory Group on Electron Devices, and the IEEE Region 1 Award for Electrical Engineering Management. In 1988 he received the Beatrice Winner Memorial Award presented by the SID; and in 1990 he received the IEEE Professional Achievement Award. In 1990, Mr. Reingold was invited to become a member of the MIT Electromagnetics Academy for a five year term. He is listed in Who's Who in the East, and American Men and Women of Science; Who's Who in Technology Today; Leaders in Electronics; and Who's Who in Aviation and Aerospace, US Edition. He is presently a member of the New Jersey Institute of Technology Project CAP (Career Advancement Plan) Workforce 2000 Action Council. Mr. Reingold is the co-recipient (with John Carter) of the 1992 IEEE Microwave Theory and Techniques Society Applications Award. This prestigious award consists of a certificate and a cash sum of \$1,000, and is in recognition of the development of gas discharge and ferrite microwave duplexers and their application to high power radar systems.