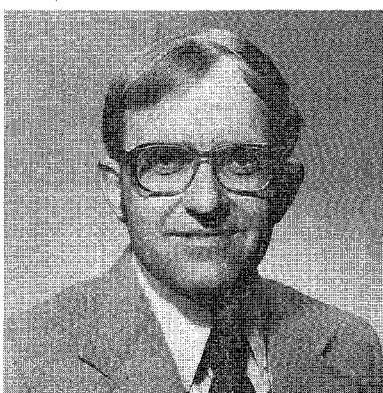


1980 MTT-S MICROWAVE PRIZE

E. R. Carlson — T. F. McMaster — M. V. Schneider

For paper: "Subharmonically Pumped Millimeter-Wave Mixers", IEEE Trans. on Microwave Theory and Techniques, vol. MTT-26, pp. 706-715, October 1978.



Eric R. Carlson (M'73) was born in Cleveland, Ohio, on August 26, 1941. He received the B. S., M.S., and Ph.D. degrees in physics from Yale University, New Haven, CT, in 1963, 1965, and 1972, respectively.

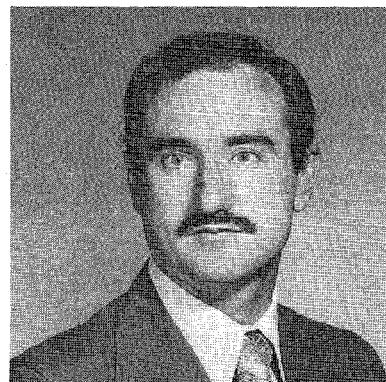
From 1972 to 1973 he was a Research Staff Physicist at Yale University, and in 1973 he joined the Radio Physics Research Department at Bell Laboratories, Crawford Hill, in Holmdel, N.J. He has worked primarily on circuits and solid-state devices for millimeter-wave receivers in the 100-300-GHz frequency range and the applications of these receivers in radio astronomy and upper atmospheric measurements.

Dr. Carlson is a member of the American Physical Society.

Thomas F. McMaster (M'77) was born in New York City, New York in 1944. He received the B.S.E.E. degree from Drexel University, Philadelphia, Pennsylvania, in 1972, and the M.S.E.E. degree from the Polytechnic Institute of Brooklyn, Brooklyn, New York in 1974.

He joined Bell Laboratories in 1972, where he has worked on the development of millimeter-wave mixers and waveguide components, long-haul coaxial cable communication systems. He is presently the supervisor of the Domestic Satellite Design Group in Holmdel, New Jersey.

Mr. McMaster is a member of Eta Kappa Nu and Phi Kappa Phi.



Martin V. Schneider was born in Bern, Switzerland. He received the Diploma in Physics and the Doctorate in Natural Sciences from the Swiss Federal Institute of Technology, Zurich, Switzerland in 1956 and 1958 respectively.

From 1959 to 1961, he was a research assistant at the Swiss Federal Institute of Technology and in 1961 he joined the Radio Research Laboratory at Bell Laboratories, Inc. in Holmdel, New Jersey. He has worked on thin film solid-state devices and circuits, Schottky barrier photo-circuits. He is presently engaged in advanced work on millimeter-wave devices and circuits for use in communication receivers and for remote sensing.

Dr. Schneider is a visiting Professor of Electrical Engineering at the University of Virginia, a Fellow of the IEEE and a member of the Editorial Board of MTT. He has been actively engaged in IEEE matters by serving as MTT Group Chapter Chairman and as Section Chairman for the New Jersey Coast Section of the IEEE. He enjoys hiking in his spare time and he has gone on extended bicycle trips along the canals of Burgundy and Nivernais in France.

MICROWAVE APPLICATION AWARD

Erwin F. Belohoubek

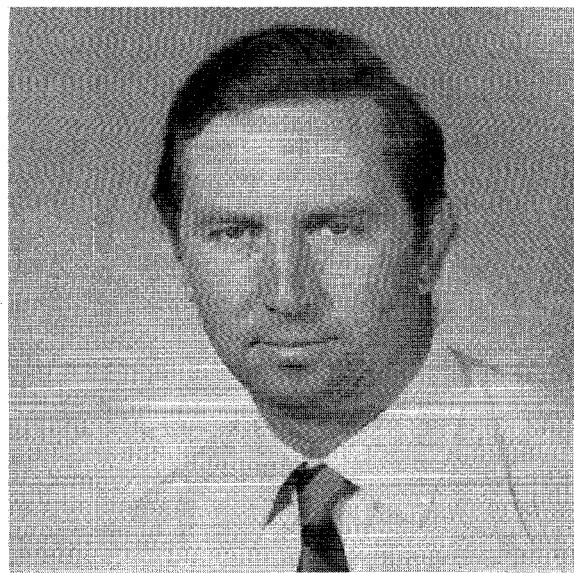
For pioneering the concepts and practical implementations of internal matching of microwave transistors.

Erwin F. Belohoubek received a Diplom-Ingenieur degree in 1953 and a PhD in Electrical Engineering in 1955 from the Technical University in Vienna, Austria. From 1953 to 1955 he worked as a Research Assistant at the Institute for High-Frequency Techniques at the Technical University.

In 1956 he joined the RCA Tube Division in Harrison, New Jersey, as Research Engineer and, in 1957, transferred to the David Sarnoff Research Center, in Princeton, as a Member of Technical Staff, where he worked on the development of magnetrons, electrostatically and magnetically focused traveling-wave tubes, and a crossed-field microwave delay tube.

In 1969 Dr. Belohoubek was put in charge of a group working on microwave hybrid integrated circuits. Currently, as Head of Microwave Circuits Technology at the Microwave Technology Center, he is responsible for the development of passive and active MIC circuits, including high-power transistor amplifiers, multipliers, linear bipolar and FET amplifiers, active microwave filters, various solid-state radars, and other microwave subsystems. He received an Outstanding Performance Award from the RCA Electronic Components Division in 1963 and an RCA Laboratories Achievement Award in 1967.

Dr. Belohoubek holds eight patents and has written more than 25 papers in the areas of microwave techniques, traveling-wave tubes, and microwave integrated circuits. He is a Fellow of IEEE.



MICROWAVE CAREER AWARD

Seymour B. Cohn

For a career of meritorious achievement and outstanding technical contribution in the field of microwave theory and techniques.

Dr. Seymour B. Cohn (S'41—A'44—M'46—SM'51—F'59) was born in Stamford, Conn., on October 21, 1920. He received the B.E. degree in electrical engineering from Yale University in 1942, and M.S. and Ph.D. degrees in engineering sciences and applied physics from Harvard University in 1946 and 1948, respectively.

From 1942 to 1945 he was employed as a Special Research Associate by the Radio Research Laboratory of Harvard University, and also represented that laboratory as a Technical Observer with the U.S. Air Force. From 1948 to 1953 he was with Sperry Gyroscope Company, Great Neck, N.Y., where he advanced to the position of Research Engineer. From 1953 to 1960 he was with the Stanford Research Institute, Menlo Park, Calif., as Head of the Microwave Group and from 1957 as Manager of the Electromagnetics Laboratory. In 1960 he joined Rantec Division, Emerson Electric Company, Calabasas, Calif., as Vice President and Technical Director. In 1967 he formed S. B. Cohn Associates, Inc., and since that date has practiced as an independent consultant to various companies in the microwave industry.

Dr. Cohn is a member of Tau Beta Pi and Sigma Xi. In 1954 he received the Annual Award for the Advancement of Basic and Applied Science given by the Yale Engineering Association. He is a former member and ex-chairman of the G-MTT Administrative Committee, and was the recipient of the G-MTT 1964 Microwave Prize. He is an Associate Editor of the Microwave Journal, and a member of the Editorial Board of the Advances in Microwave series published by the Academic Press. In 1974 Dr. Cohn was given the Lamme gold medal, which is one of the six major annual awards of the IEEE.



MICROWAVE CAREER AWARD

Werner J. Kleen

For contributions in developing modern microwave tubes and their theory and in introducing advanced microwave technology into the European space effort.

Dr. Werner J. Kleen studied Physics at the Universities of Hannover, Gottingen and Heidelberg (1931 Dr. phil. nat., 1936 Dr. habil). He worked until 1946 at Telefunken, Berlin; 1946-50 at CSF, Paris; 1950-52 at the Instituto Nacional de Electronica, Madrid; 1952-67 at Siemens AG, where he finished as Director of the Research Laboratory in Munich. During 1968-71, he was elected Director of the European Space Research and Technology Center (ESTEC) of Noordwijk, Netherlands of ESRO (now ESA). Dr. Kleen taught at University of Munich, University of Madrid, Technical University of Stockholm and Chalmers University of Goteborg. He is author and coauthor of many publications and several books on classical and microwave electron tubes. Dr. Kleen has received many awards including the Plaque of Svenska Teknolog Foereningen; Gauss-Weber Medal of the University of Gottingen; Honorary Professor at the Technical University, Munich; Ring of Honour of the Verband Deutscher Elektrotechniker (VDE). He was elected Fellow of the IEEE in 1957.

