

## MICROWAVE CAREER AWARD



**Kiyoo Tomiyasu**

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

Kiyoo Tomiyasu was born in Las Vegas, Nevada on September 25, 1919. He received the B.S. degree in Electrical Engineering from the California Institute of Technology, Pasadena, in 1940 and the M.S. degree in Communication Engineering from Columbia University, New York, N.Y., in 1941. He received the Ph.D. degree in Engineering Science and Applied Physics from Harvard University, Cambridge, Massachusetts, in 1948.

In 1949 he joined the Sperry Gyroscope Company, Great Neck, New York, as a Project Engineer, and in 1952 was promoted to Engineering Section Head for Microwave Research in the Microwave Components Department. In this capacity he was responsible for developments on ferrites, microwave components, spectroscopy and radiometers. In 1955 he joined General Electric Microwave Laboratory, Palo Alto, California, as a Consulting Engineer, and five years later he transferred to the General Electric Research and Development Center, Schenectady, New York, where he was involved with lasers and microwave projects. In 1969 he became a Consulting Engineer at General Electric Valley Forge Space Center, Philadelphia, Pennsylvania.

For the past several years he has been involved with microwave remote sensing of the earth using satellite-borne radiometers, scatterometers and synthetic aperture radars. He helped design the NASA/JSC Skylab S-193 Microwave Radiometer Scatterometer Altimeter, and he was a Principal Investigator of the NASA Langley Research Center AAFE RADSCAT sensor. On SEASAT, he was responsible for specifying the spacecraft interfaces with the scatterometer and synthetic aperture radar. He has also worked on a conceptual design of a coarse resolution, wide swath synthetic aperture radar for imaging sea ice, oceanic oil spills and geologic features, and inferring soil moisture. He has been concerned with the propagation of microwave signals through rain, troposphere and ionosphere.

His total publications list over sixty papers and twenty patents have been issued in his name. In 1977 he was granted a General Electric Company Charles Proteus Steinmetz Award for outstanding individual achievement over a sustained period as evidenced by impact on the company and society. As part of this award a \$5,000 stipend was designated to California Institute of Technology to be used for three annual scholarships.

Dr. Tomiyasu was president of MTT-S in 1960–1961, and has subsequently served on the Nominations Committee and the Awards Committee. He was the Editor of MTT TRANSACTIONS in 1958 and 1959, and Guest Editor of the May 1978 Special Issue of the TRANSACTIONS on High Power Microwaves. In 1973 he was elected Honorary Life Member of MTT-S and of its Administrative Committee. At the IEEE level he has served on the Publications Board, the Technical Activities Board and most recently on the Awards Board.

Dr. Tomiyasu was elected to the IEEE Fellow Grade in 1962. His name is listed in several biographical references among which are American Men of Science, Who's Who in Engineering, Men of Achievement, Leaders in Electronics, and Who's Who in the East. He is a member of the American Physical Society.