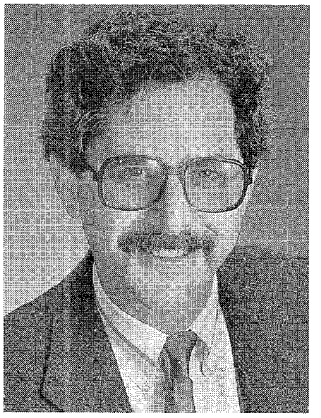
# 1993 Distinguished Lecturers



Paul F. Goldsmith

**Paul Goldsmith** carried out his PhD research developing a sensitive heterodyne receiver for the 1.3mm wavelength range and used it to carry out some of the earliest observations of the J = 2-1 transition of carbon monoxide and its isotopic variants. This research into the structure of molecular clouds continued at Bell Laboratories, where he was also involved in designing the quasioptical millimeter wave feed system for the 7-m offset Cassegrain antenna. In 1977 he moved to the University of Massachusetts, where he studied the thermal balance of interstellar clouds and their physical conditions. He also initiated development of cryogenic mixer receivers at the Five College Radio Astronomy Observatory and in 1981 led a team which carried out the first submillimeter astronomical observations with a laser local oscillator heterodyne system. Dr. Goldsmith's astronomical research has addressed questions of the relationship of molecular clouds to young stars and detailed studies of molecular material near the center of the Milky Way. A professor at the University of Massachusetts from 1986 to 1992, Dr. Goldsmith is one of the co-investigators for the Submillimeter Wave Astronomy Satellite (SWAS). His research in technology has focused on Gaussian optics, quasioptical system design, and imaging systems. In 1982 he was one of the founders of Millitech Corporation, where he was Vice President for Research and Development until 1992, working primarily in the area of millimeter wavelength imaging as well as quasioptical component and system design. In 1993 Dr. Goldsmith joined the faculty of Cornell University as Professor of Astronomy, and Director of the National Astronomy and Ionosphere Center. He is a member of the American Astronomical Society, Sigma Xi, URSI, and is a Fellow of the IEEE, and is MTT Distinguisher Lecturer for 1992–1993.

Ferdo Ivanek

**Ferdo Ivanek** received the Dipl. Ing. and Dr. techn. degrees in Electrical Engineering from the Technical University in Vienna, Austria. Until 1967 he worked in Yugoslavia on the introduction of microwave radio systems, on radio equipment design and manufacturing start-up. From 1959–1962, he was on leave of absence for research at the Microwave Laboratory, Stanford University. In 1967, he joined the Fairchild R&D Laboratory for work on communications applications of new solid-state microwave devices.

From 1971 to 1986, he worked at Farinon Electric on microwave solid-state component development and system design where his positions included Director of Product Development and Director of Systems Research. In 1986, he started Communications Research, an independent consulting service where his clients include communications equipment manufacturers, the International Telecommunication Union and the World Bank.

He has published over 50 journal articles and conference papers. He is editor and coauthor of "Terrestrial Digital Microwave Communications" (Artech, 1989). He holds one patent.

He became a Senior Member of IEEE in 1960 and an IEEE fellow in 1992. He is a member of Sigma Xi (1960). MTT-S service includes 1978–1979 Chairman of the Santa Clara Valley Chapter, 1979–1983 Chairman of the Microwave Systems Technical Committee (MTT-16), 1982 National Lecturer ("Microwave Communications Technology"), ADCOM member since 1983, Technical Program Chairman of the 1984 International Microwave Symposium, 1991 MTT-S President.

Other past IEEE service includes 1979–1986 Communications Society Representative to the Solid-State Circuits Council and 1985–1989/1992-MTT-S Representative to the Committee on Communications and Information Policy. Currently also serving in the Meetings and Conferences Department of the IEEE Communications Society and on the IEEE/TAB Society Review Committee.

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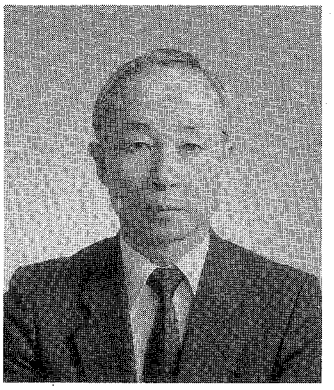

Tsukasa Yoneyama

**Tsukasa Yoneyama** received his B.E., M.E. and Ph.D. degrees, all in electrical communication engineering, from Tohoku University in 1959, 1961 and 1964, respectively. He was appointed a research associate and an associate professor at the Research Institute of Electrical Communication, Tohoku University, in 1964 and 1966, respectively, and a professor in 1986 after serving as a professor at the Faculty of Engineering, Ryukyu University, from 1984 to 1986.

Working in the field of antennas, and microwave and millimeter wave transmission lines, he has proposed and developed the nonradiative dielectric waveguide, which has been proven to be attractive for the use of millimeter wave integrated circuits and antennas.

Dr. Yoneyama is a member of the Institute of Electronics, Information and Communication Engineers (IEICE) of Japan, the Institute of Electrical Engineers (IEE) of Japan, the Institute of Television Engineers (ITE) of Japan, and a Fellow member of IEEE. He was Chairman of the Research Committee of Microwaves, IEICE, from 1989 to 1991, Chairman of IEEE MTT-S Tokyo Chapter from 1991 to 1992, and also served as Chairman of the Steering Committee of the 3rd Asia-Pacific Microwave Conference, held in Tokyo in 1990. From 1993 to 1995, he is the Distinguished Microwave Lecturer of IEEE MTT-S for Region 10.

Dr. Yoneyama published more than 80 papers. He was awarded the Inada Memorial Prize, the Best Publication Prize, and the Best Paper Prize from the IEICE in 1963, 1983, and 1990, respectively.

# The Historical Exhibit

Plan to visit the Microwave Theory and Techniques Society Historical Collection at the World Congress Center this year. The collection covers the development of microwave theory, devices, and systems and includes items which represent significant contributions to the microwave profession. Hardware, photographs, and other artifacts are displayed along with descriptive information. When this collection is not being shown at each year's symposium, it is on permanent display at the Historical Electronics Museum in Baltimore, Maryland. As an additional attraction for attendees at this year's meeting, the IEEE Center for the History of Electrical Engineering has promised to provide a few bound volumes of transcripts of interviews of Radiation Laboratory alumni which were done during the 1991 MTT Symposium in Boston. The Historical Exhibit area will offer a special opportunity to relax and visit during the technical session breaks and share in the experiences of the 1993 IEEE MTT-S International Microwave Symposium.

The Historical Exhibit will be open as follows:

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| Tuesday | 9:00 am to 4:00 pm |
| Wednesday | 9:00 am to 5:00 pm |
| Thursday | 9:00 am to 4:00 pm |

We encourage attendees and guests to use the Historical Exhibit area as a meeting place during the Symposium.