

# Contributors



**Peter L. Booth** was born in Sheffield, England on August 20, 1939. He received the B.Sc. degree in Physics from Durham University, England, in June 1962.

In 1962 he joined Mullard Research Laboratories, Redhill, England, (now Philips Research Laboratories) where he has worked on ferrite devices, masers, mixers, and receivers and most recently on TRAPATT pulsed oscillators.

+

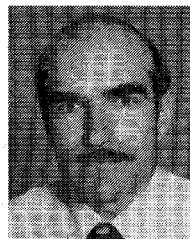


**Thomas J. Brazil** (S'76-M'77) was born in Co. Offaly, Ireland, on September 4, 1952. He received the B.E. and Ph.D. degrees in electronic engineering from University College, Dublin, Ireland, in 1973 and 1977, respectively.

From 1977 to 1979 he was with the Allen Clark Research Centre of the Plessey Company Ltd., England, working on high-power IMPATT amplifiers and microstrip circulators. After a period in 1979 as a member of Staff in the Department of Electronic and Electrical

Engineering of the University of Birmingham, Birmingham, England, he has now returned to hold a similar position in University College, Dublin.

+



**Richard J. Cameron** was born in Glasgow, Scotland, in January 1947. He received the B.Eng. degree in Electronics from Loughborough University, England, in 1969.

In 1969 he joined Marconi Space and Defence system in Stanmore, England. Activities there include small earth station design, satellite telecommunication system analysis, and computer-aided microstrip component and circuit design. Since joining the European Space Agency's technical establishment (ESTEC, in the Netherlands) in 1975, he has been concerned with the research and development of advanced microwave passive and active components and circuits with applications to future telecommunication satellite systems.

Mr. Cameron is a member of the Institution of Electrical Engineers.

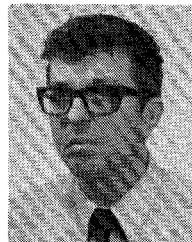
+



**David C. Chang** (M'67-SM'76) was born in Hupeh, China, on September 9, 1941. He received the B.S. degree in electrical engineering from Cheng Kung University, Tainan, Taiwan, China, in 1961 and the M.S. and Ph.D. degrees in applied physics from Harvard University, Cambridge, MA, in 1963 and 1967, respectively.

He joined the University of Colorado, Boulder, in 1967, and is a Professor of Electrical Engineering since 1975 and Director of the Electromagnetics Laboratory since 1977. In 1972 he was a Visiting Professor at Queen Mary College, University of London, London, England. In addition, he is an associate editor of IEEE TRANSACTIONS on Antennas and Propagation and is a consultant to Kaman Science Corp., Colorado Springs, Colorado, and Southeastern Center for Electrical Engineering Education, Orlando, Florida.

Dr. Chang is a member of the International Scientific Radio Union Commissions A, B, C, and E. He is the immediate past chairman of the IEE-MTT-S 15 subcommittee on Microwave Field Theory, and past chairman of the Denver Chapter of the IEEE EMC/IM group.



**Haim Cory** (M'73) received the B.Sc., M. Sc., and D. Sc. degrees in physics from the Technion—Israel Institute of Technology, Haifa, Israel, in 1959, 1963, and 1967, respectively.

From 1968 to 1970 he worked as a Visiting Scientist in the Groupe de Recherches Ionosphériques, Saint-Maur-des Fossés, France. Since 1970 he has been a Senior Lecturer in the Electrical Engineering Department of the Technion. He has spent his sabbatical year (1977-1978) in the Electrical and Electronic Engineering Department, Queen Mary College, London, Great Britain. His current fields of interest are passive microwave devices and antenna radomes.

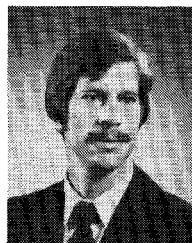
+



**D. Dasgupta** was born in Calcutta, India, on October 23, 1952. He received the B.Sc.(Hons.) degree in physics and the B.Tech. and M.Tech. degrees in radio physics and electronics from the University of Calcutta Calcutta, India, in 1970, 1973, and 1975, respectively.

He joined the Institute of Radio Physics and Electronics, University of Calcutta, as a Senior Research Fellow in 1976 and he worked as a Research Associate in 1979. At present he is a Lecturer at the Institute of Radio Physics and Electronics and is working towards the Ph.D. degree.

+



**Michael S. Hersman** (S'73-M'77) was born in Cincinnati, OH, in 1953. He received the B.S. degree from the University of Cincinnati, Cincinnati, OH, in 1976, and the M.S. degree from the University of Southern California, Los Angeles, in 1978, both in electrical engineering.

Since joining Hughes Aircraft Company Los Angeles, CA, in 1976, he has been concerned with millimeter wave radiometry and its application to space sensors. He is currently involved in a flight sensor program, which is part of the Defense Meteorological Satellite Program (DMSP).

Mr. Hersman is a member of Tau Beta Pi and Eta Kappa Nu.

+



**Asamitsu Higashisaka** was born in Japan, on June 20, 1944. He received the B.E. and M.E. degrees from Hiroshima University, Hiroshima, Japan, in 1967 and 1969, respectively.

He joined Central Research Laboratories, Nippon Electric Company, Ltd., Kawasaki, Japan, in 1969. He has been engaged in the development of GaAs bulk effect devices and power GaAs MESFET's. He is now a supervisor of the GaAs integrated circuits group in the Basic Technology Research Laboratories.

Mr. Higashisaka is a member of the IECE of Japan. In 1979, he was awarded the Okochi Memorial Grand Technology Prize for his contributions to scientific progress in GaAs MESFET's.

**Stuart R. Longley** (M'72) was born in Tatsfield, England on January 6, 1940. He received the M.Sc. degree in microwave and quantum electronics from University College, London, England, in 1969.

From 1956 to 1961 he was a Student Apprentice with Philips Research Laboratories, Redhill, Surrey, England. From 1969 to 1979 he was a member of the scientific staff at these laboratories where he worked on ferrite components, solid-state sources, and parametric amplifiers. He is now Microwave Product Manager of Mullard Ltd. Mr. Longley, a Chartered Engineer, is a member of the IERE.



**Kazuhiko Ogusu** (M'76) was born in Hamamatsu, Japan, on June 25, 1947. He received the B.E. and M.E. degrees from Shizuoka University, Hamamatsu, Japan, in 1970 and 1972, respectively.

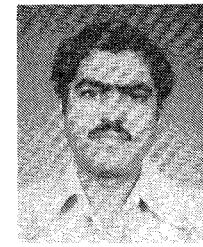
Since 1972, he has been a Research Associate with the Department of Electrical Engineering, Shizuoka University. At present, his main fields of interest are millimeter-wave and optical integrated circuits.

Mr. Ogusu is a member of the Institute of Electronics and Communication Engineers of Japan and the Optical Society of America.



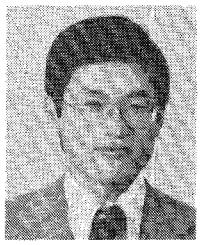
**Abhai Mansingh** was born in Fatehpur (U.P.), India, on March 12, 1937. He received the B.Sc. and M.Sc. degrees in physics from the University of Allahabad, India, in the years 1957 and 1959, respectively, and the D. Phil. degree in the field of dielectrics from the same University in 1964.

From 1965 to 1967 he was a National Research Council of Canada PDF, and an Assistant Professor in Physics from 1967 to 1971 at the Queen's University, Kingston, Canada. Since 1972 he has been working as a Reader in Physics at Delhi University, India. He has been NRC-CIDA (Canada) Research Associate from 1974 to 1977. His scientific activities have been devoted mainly to the studies of the electrical behavior (from dc to microwave region) of polar liquids, ferroelectrics, amorphous, and crystalline semiconductors.



**Anand Parkash** was born in Multan, West Pakistan, in 1944. He received the B.Sc. (honors) and M.Sc. degrees from the University of Delhi, India, in 1965 and 1968, respectively. In 1978 he joined the Department of Physics and Astrophysics, University of Delhi, to work towards the Ph.D. degree in the field of dielectric and magnetic properties of ferrites at microwave frequencies, and in the development of techniques for these measurements.

Since 1968, he has been working as a Lecturer in Physics at Hans Raj College, University of Delhi, India.



**Takayuki Mizuta** was born in Kochi, Japan, on August 20, 1950. He graduated from Kochi Technical College in 1971.

In the same year he joined Microwave and Satellite Communications Division, Nippon Electric Co., Ltd., Yokohama, Japan. Since then he has been working on industrial engineering of Hybrid IC's for microwave telecommunication equipments. During that period he was at Central Research Laboratories, Nippon Electric Co., Ltd., working on microwave GaAs monolithic

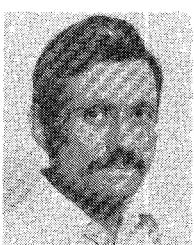
amplifiers.

Mr. Mizuta is a member of the Japan Society of Applied Physics.



**Gene A. Poe** was born in Tulsa, OK, in 1942. He received the BSEE degree in 1964 and MSEE degree in 1965 from the University of California, Berkeley.

Since 1966 he has been engaged in the analyses of microwave radiometer system performance and the extraction of geophysical and meteorological data from radiometric measurements. Since joining Hughes Aircraft Company Los Angeles, CA, in 1978 he has been involved in the analysis of millimeter wave radiometers with emphasis on satellite applications.



**Barrie H. Newton** was born in Manchester, England on February 13, 1941. He received the B.Eng. degree in 1962 and the Ph.D. degree in 1965, both in electrical engineering, from the University of Sheffield, Sheffield, England.

The three years research work at Sheffield was on magnetically loaded aerials used in the low- and medium-frequency bands. From 1965 to the present time he has worked at Philips Research Laboratories on microwave solid-state devices, including varactor harmonic generators

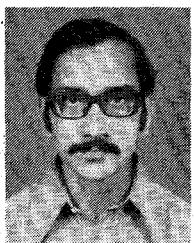
and parametric amplifiers. His current research interests are in Gunn, IMPATT, and TRAPATT oscillators and amplifiers and their use in microwave integrated circuits. Dr. Newton is an Associate Member of the IEE.



**John David Rhodes** (M'76-SM'78) was born in Doncaster, Yorkshire, England, on October 9, 1943. He received the B.Sc., Ph.D., and D.Sc. degrees in electrical engineering, from the University of Leeds, Leeds, Yorkshire, England, in 1964, 1966, and 1974, respectively.

From 1966 to 1967 he was a Research Fellow in the Department of Electrical and Electronic Engineering at the University of Leeds. He then joined Microwave Development Laboratories, Inc., Natick, MA, as a senior Research Engineer.

He currently holds a personal chair in the Department of Electrical and Electronic Engineering at the University of Leeds and is also a consultant in microwave engineering to Microwave Development Laboratories, Inc.



**P. K. Saha** was born in Calcutta, India, on July 15, 1943. He received the B.Sc.(Hons.) degree in physics and the M.Tech. degree in radio physics and electronics from the University of Calcutta, Calcutta, India, in 1963 and 1966, respectively, and the Ph.D. degree from the University of Leeds, Leeds, England, in 1970.

During 1970 he was a Post Doctoral Fellow at Queen Mary College, University of London, London, England, and since 1971 has been on the teaching staff of the Institute of Radio Physics and Electronics, University of Calcutta. He has worked in the area of microwave antenna systems and is currently engaged in the field of microwave semiconductor devices and microwave integrated circuits.

1981 he joined AEG-Telefunken in Ulm, West Germany as a millimeterwave R & D engineer.

+



**Sean O. Scanlan** (M'62-SM'66-F'76) was born in Dublin, Ireland, on September 20, 1937. He received the B.E., M.E., and D.Sc. degrees from the National University of Ireland, University College Dublin, Dublin, Ireland, and the Ph.D. degree from the University of Leeds, Leeds, England.

From 1959 to 1963 he was with the Mullard Research Laboratories, Surrey, England, and from 1963 to 1973 he was with the Department of Electrical and Electronic Engineering, University of Leeds, where he was Professor of Electronic Engineering from 1968. Since 1973 he has been Professor of Electronic Engineering at University College, Dublin.

Dr. Scanlan is a Fellow of the Institution of Electrical Engineers, a Fellow of the Institute of Mathematics and its Applications, and a Member of the Royal Irish Academy.

+



**Ippalapalli Sreenivasiah** (S'71-M'77) was born in Vinjapalli, Andhra Pradesh, India, on September 13, 1944. He received the B.E. degree in telecommunication engineering from Osmania University, Hyderabad, India in 1966, and the M.S. and Ph.D. degrees in electrical engineering from the University of Washington, Seattle, WA, in 1972 and 1976, respectively.

From 1966 to 1970 he was with the Defence Electronics Research Laboratory, Hyderabad, India, where he was involved in the design and development of microwave antennas. In 1977, he joined the University of Colorado, Boulder, where he has been involved in theoretical and experimental work in EMC and EMI related problems.

+



**Vijai K. Tripathi** (M'68) received the B.Sc. degree from Agra University, Uttar Pradesh, India, the M.Sc. Tech. degree in electronics and radio engineering from Allahabad University, Allahabad, Uttar Pradesh, India, and the M.S.E.E. and Ph.D. degrees in electrical engineering from the University of Michigan, Ann Arbor, in 1958, 1961, 1964, and 1968, respectively.

From 1961 to 1963 he was a Senior Research Assistant at the Indian Institute of Technology, Bombay, India. In 1963 he joined the Electron Physics Laboratory of the University of Michigan where he worked as a Research Assistant from 1963 to 1965, and as a Research Associate from 1966 to 1967 on microwave tubes and microwave solid-state devices. From 1968 to 1973 he was an Assistant Professor of Electrical Engineering at the University of Oklahoma, Norman. In 1974 he joined Oregon State University, Corvallis, where he is an Associate Professor of Electrical and Computer Engineering. His current research activities are in the areas of microwave circuits and devices, electromagnetic fields, and solid-state devices.

Dr. Tripathi is a member of Eta Kappa Nu, Sigma Xi, and American Society for Engineering Education.



**Klaus Solbach** was born in Witten, West Germany in 1951. He received the Dipl.-Ing. degree from the Technical University of Aachen, West Germany in 1974 and the Dr.-Ing. degree from the University Duisburg, West Germany in 1979.

From 1975 to 1980 he was employed at the University Duisburg as a research assistant. He has been engaged in investigations of the properties and circuit applications of dielectric image lines in the millimeter wave frequency range. In

---