

Contributors



Fernando Bardati (S'63-M'66) was born in Rome, Italy, on March 29, 1941. He obtained the electronic engineering degree at the University of Rome, Rome, Italy, in 1965.

In 1966, he joined the Institute of Electronics, University of Rome, as Assistant Professor of Microwaves, doing research on the propagation of electromagnetic and elastic waves in anisotropic media and, more recently, on the microwave heating of biological tissues. Since 1971, he has been engaged as Associate Professor in educational activities concerning applied electronics and electrical measurements.

Dr. Bardati is a member of the Associazione Elettrotecnica ed Elettronica Italiana (AEI).



Gerald G. Berry was born in 1932 in Los Angeles, CA.

In 1964 he joined the Aerospace Corporation, Los Angeles, where he is a Research Specialist in the Millimeter Wave Radiometry Section of the Electronics Research Laboratory. He has been engaged in the design and construction of millimeter-wave radiometers, with emphasis on research and development of 100- to 200-GHz mixers.



Chun Hsiung Chen was born in Taipei, Taiwan, Republic of China, on March 7, 1937. He received the B.S. degree in electrical engineering from National Taiwan University, Taipei, Taiwan, in 1960, the M.S. degree in electrical engineering from National Chiao Tung University, Hsinchu, Taiwan, in 1962, and the Ph.D. degree from National Taiwan University in 1972.

In 1963 he joined the faculty of the Department of Electrical Engineering, National Taiwan University, where he is now a Professor. In 1974

he was a Visiting Researcher for one year at the Department of Electrical Engineering and Computer Sciences, University of California, Berkeley. His areas of interest are antennas, waves in inhomogeneous media, and numerical techniques in electromagnetics.



Robert L. Dickman was born in New York City, NY, on May 16, 1947. He received the A. B., M.A., M. Phil., and Ph.D. degrees in physics from Columbia University, New York, NY, in 1969, 1972, 1974, and 1976, respectively.

In 1975 he was appointed a Research Associate in the Physics Department of Rensselaer Polytechnic Institute, Troy, NY. During his tenure in this position, he worked at the Millimeter-Wave Radio Astronomy Facility at the Aerospace Corporation, Los Angeles, CA, doing

research on interstellar molecular clouds. In 1978 he became a Member of the Technical Staff at Aerospace. In 1980 he joined the staff of Five College Radio Astronomy Observatory at the University of Massachusetts, Amherst. His present research interests include millimeter-wave receivers, molecular line radio astronomy, radiative transport, and hydrodynamics.

Dr. Dickman is a member of the American Physical Society, the American Astronomical Society, and Sigma Xi.



Daniel J. Esdale was born at Carrickfergus, Northern Ireland, in 1955. He was educated at Carrickfergus Grammar School and later at Loughborough University of Technology, Leicestershire, England. He received the B.Sc.(Hons) degree with Diploma in Industrial Studies in Electronic Engineering and Physics in 1977. The industrial year of this sandwich degree was spent at the Admiralty Underwater Weapons Establishment, Portland, Dorset, England. During this period he was involved in various aspects of

design, fabrication and testing of precision active filters for sonar applications utilizing thick-film technology.

After graduating he worked for the Advanced Development Division of the Racal Electronics Group, involved with the design of ultra broad-band amplifiers for instrumentation systems. Since September 1979 he has been researching for a doctorate at Leeds University, England, in the area of GaAs MESFET oscillators, in particular their noise performance.



Patrick E. Ferguson, for a photograph and biography please see page 277 of the March 1981 issue of this TRANSACTIONS.



Michael J. Howes was born in Lowestoft, England, and acquired his early education while working at a Government Fisheries Research Station. He received the B.Sc. and Ph.D. degrees from The University of Leeds, Leeds, England, in 1965 and 1967, respectively.

He is presently a Senior Lecturer in the Department of Electrical and Electronic Engineering, The University of Leeds. His research interests are in the areas of microwave devices and microwave systems in general and his personal research work is currently associated with the circuit-device interaction aspects of field-effect transistor microwave oscillators and mixers.



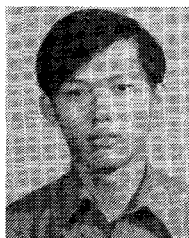
Kunikatsu Kobayashi, for a photograph and biography please see page 176 of the February 1981 issue of this TRANSACTIONS.



Ismo V. Lindell (S'68-M'70) was born in Wiborg, Finland, on November 23, 1939. He received the degrees of Dipl. Eng., Lic. Tech. and Dr. Tech. in 1963, 1967, and 1971, respectively, all in electrical engineering from the Helsinki University of Technology, Espoo, Finland.

He was Research and Teaching Assistant from 1963 to 1970, Acting Associate Professor from 1970 to 1975 and Associate Professor since 1975, in radio engineering with the Helsinki University of Technology. During the academic year 1972-1973 he was a Visiting Associate Professor at the University of Illinois, Urbana. His main interest is in electromagnetic theory.

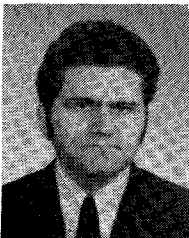
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Chang-Tsuo Liu was born in Chinmen, Fuchien, Republic of China, on August 13, 1956. He received the B.S.E.E. and M.S.E.E. degrees from National Taiwan University (N.T.U.), Taipei, Taiwan, in 1978 and 1980, respectively.

From 1978 to 1980 he was a graduate student of N.T.U. and worked with Prof. Chun Hsiung Chen in the area of numerical techniques for electromagnetic problems. His topics of interest include antennas, waveguides, and numerical techniques in electromagnetics.

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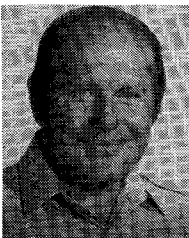
Asher Madjar (M'72) born on October 11, 1945. He received the B.S. and M.S. degrees in electrical engineering from the Technion—Israel Institute of Technology, Haifa, Israel, in 1967 and 1969, respectively, and the D.Sc. degree in electrical engineering from Washington University, St. Louis, MO, in 1979.

While at the university he conducted research on large-signal modeling of GaAs FET's and on computer-based methods of semiconductor device modeling. He is presently employed by the

Government of Israel and the Technion where he is carrying out work on microwave devices and components.

Dr. Madjar is Chairman of the Israel MTTS chapter.

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Marian L. Majewski (M'79) received the M.Sc. degree in electronic engineering from Warsaw Technical University, Warsaw, Poland, in 1965, and the Ph.D. degree from the same University, in 1973, for his research work on microwave solid-state devices and their applications.

From 1965 to 1973 he was an Assistant Professor in the Department of Electronic Engineering at the Warsaw Technical University. From 1973 to 1977 he held an Adjunct Professor position at the same University. During 1977-1978 he was

with the Institute of Astrophysics, Optics and Electronics, Mexico, as a Visiting Professor. Since 1978 he has been a Lecturer in the Department of Communication and Electronic Engineering at the Royal Melbourne Institute of Technology, Melbourne, Australia. He is the author or co-author of more than twenty professional papers and book translations, and a book: *Microwave Amplifiers with Gunn- and IMPATT-Diodes* and one patent. His present research interests include the technology of

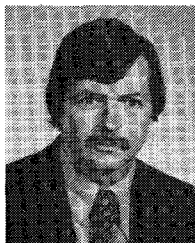
microwave integrated circuits and their applications to satellite communications.

Dr. Majewski is a member of the Institution of Engineers, Australia, and the Counselor of the IEEE at the Royal Melbourne Institute of Technology.

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Yoshiaki Nemoto (S'72-M'73), for a photograph and biography please see page 177 of the February 1981 issue of this TRANSACTIONS.

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James K. Plourde (S'60-M'68) received the B. S. E. E. degree from Southeastern Massachusetts University, North Dartmouth, MA, in 1960, and the Sc. M. and Ph.D. degrees from Brown University, Providence, RI, in 1964 and 1968, respectively.

From 1968 to 1970, he was employed by the NASA Electronics Research Center, Cambridge, MA, where his research included millimeter-wave and far-infrared spectroscopy. He has been a Member of the Technical Staff in the Solid State Microwave and Lightwave Components Department of Bell Laboratories in Allentown, PA, since 1970. His present interests include microwave components for communication systems. He has received six patents on dielectric resonator devices.

Dr. Plourde is a member of Sigma Xi.

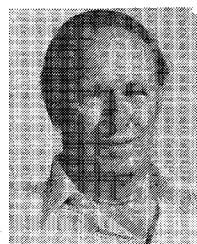
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Chung-Li Ren (M'75) was born in Chefoo, China, on June 1, 1931. He received the B.S. degree from the Taiwan College of Engineering, Taiwan, China; the M.S. degree from the University of Notre Dame, Notre Dame, IN, both in electrical engineering; and the Ph.D. degree in electrophysics from the Polytechnic Institute of Brooklyn, Brooklyn, NY, in 1953, 1957, and 1964, respectively.

From 1957 to 1959, he was a Senior Research Fellow at the Polytechnic Institute of Brooklyn. In 1960, he became a Senior Graduate Assistant at the Microwave Research Institute of the Polytechnic Institute where he was engaged in research on wave propagation and scattering in multimode waveguides and other related topics in electromagnetic theory. He was also a Lecturer in the Department of Electrical Engineering at the same Institute. Since 1965, he has been with the Bell Laboratories, North Andover, MA, where he has been concerned with the theory and development of microwave filters and solid-state components for microwave radio as well as millimeter-wave waveguide transmission systems. His recent activity has been concerned with research and development of microwave filters using dielectric resonators. He has published various technical papers and received patents in the area of microwave circuits for communication system.

Dr. Ren is a member of Sigma Xi.

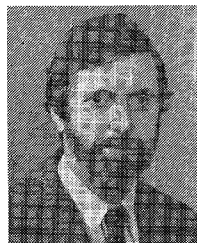


Robert W. Rose was born in Rutherglen, Vic., Australia, on October 30, 1923. After service in the Royal Australian Air Force, he completed a Diploma of Radio Engineering at the Royal Melbourne Institute of Technology (RMIT), Melbourne, Australia.

He spent five years in the Accident Investigation Branch of the Australian Department of Civil Aviation. He rejoined RMIT in 1955 as Head of the Industrial Electronics Department, and is currently Principal Lecturer in the Department of Communication and Electronic Engineering. His research interests are in the areas of microwave amplifiers, microwave filters and hybrid technology.

Mr. Rose is a member of the Institution of Radio and Electronics Engineers, Australia.

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Fred J. Rosenbaum (S'57-M'63-SM'70-F'79) was born in Chicago, IL, on February 15, 1937. He received the B.S., M.S., and Ph.D. degrees in electrical engineering from the University of Illinois, Urbana, in 1959, 1960, and 1963, respectively.

While at the university, he conducted research on ferrites and Cerenkov radiation. In 1963 he joined the Research Division of McDonnell Aircraft Corp., St. Louis, MO, where he worked on masers and dielectric resonators. In 1965 he

became a member of the faculty of Washington University, St. Louis, where he is now Professor of Electrical Engineering. At the university he directs graduate research in the areas of GaAs FET's, millimeter-wave semiconductor devices, computer modeling, and materials measurements.

Dr. Rosenbaum has been a member of the MTT AdCom and served as Vice-President and President. He was editor of the IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES from 1972 to 1975. In 1979 he was a member of the IEEE Delegation to the Popov Society and in 1980 was recognized as a D. E. Evans Visiting Fellow at the University of Queensland, Brisbane, Australia.

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Risaburo Sato (SM'62-F'77), for a photograph and biography please see page 178 of the February 1981 issue of this TRANSACTIONS.

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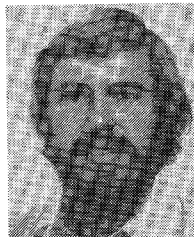


James R. Scott (S'80) was born in Melbourne, Australia, on February 1, 1957. He received the B.Eng (Communications, with Distinction) degree from the Royal Melbourne Institute of Technology, Melbourne, Australia, in 1979, and has, since then, been developing a low-noise X-band mixer as the basis of the M.Eng. (Communications) degree by research.

His research interests also include MIC fabrication techniques and the use of dielectric resonators in bandpass, bandstop, and directional filters.

Robert S. Symons (A'52-M'58-F'72), for a photograph and biography please see page 280 of the March 1981 issue of this TRANSACTIONS.

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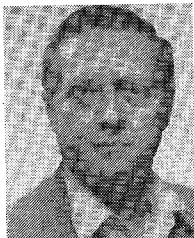


Rodney S. Tucker (S'72-M'75) was born in Melbourne, Australia, in March 1948. He received the B.E. and Ph.D. degrees from the University of Melbourne, in 1969 and 1975, respectively.

From 1973 to 1975 he was a Lecturer in Electrical Engineering at the University of Melbourne. In 1975 he was awarded a Harkness Fellowship for two year's postdoctoral study in the USA. During 1975-1976 he was with the Department of Electrical Engineering and Computer Sciences,

University of California, Berkeley, and during 1976-1977 he was with the School of Electrical Engineering, Cornell University, Ithaca, NY. From 1977 to 1978 he was with Plessey Research (Caswell) Ltd., Allen Clark Research Centre, England. He is presently a Senior Lecturer in Electrical Engineering at the University of Queensland, St. Lucia, Brisbane, Australia. His major research interests are in microwave active and passive circuits, semiconductor optoelectronic devices, and optical communications systems.

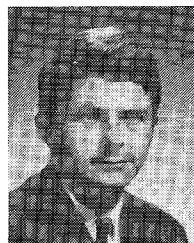
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Gerald Valier received the B.S. degree in electrical engineering from the University of Illinois, Urbana, in 1957. He served with the U.S. Army from 1953 to 1955 as a radar specialist.

Since joining Varian Associates, Inc., Palo Alto, CA, in 1957, he has been associated with all aspects of the measurement of electron devices with particular emphasis on measurements of noise and distortion in devices subjected to severe environmental stress. He has held the position of Manager of Environmental Test and was responsible for the establishment of the Division's extensive environmental facilities. In his present position, he is a Senior Engineer responsible for special projects.

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William J. Wilson (M'80) was born in Spokane, WA, on December 16, 1939. He received the B.S.E.E. degree from the University of Washington, Seattle, in 1961, and the M.S.E.E., E.E., and Ph.D. degrees in electrical engineering from the Massachusetts Institute of Technology, Cambridge, in 1963, 1964, and 1970, respectively.

From 1964 to 1967 he served in the U.S. Air Force, working on military communication satellites. In 1970 he joined The Aerospace Corporation, Los Angeles, CA, and was involved in the design and construction of the millimeter-wave receivers and radio astronomy observations. In 1976 he was on a leave of absence in the Electrical Engineering Department at the University of Texas at Austin. He returned to Aerospace in 1977 where he was involved with research in millimeter-wave radiometers and low-noise receivers. In 1980 he joined the staff of NASA's Jet Propulsion Laboratory, Pasadena, CA.

Dr. Wilson is a member of the American Astronomical Society, Commission V of the International Union of Radio Sciences (URSI), the International Astronomical Union, Tau Beta Pi, and is an associate member of Sigma Xi.