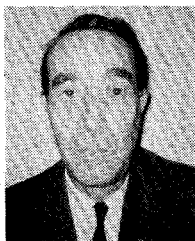


Contributors



J. A. F. Cornick obtained his degree in Natural Science at Oxford University in 1948.

He joined the General Electric Company and worked in the Semiconductor Division until 1962, transferring to Mullard Ltd., Hazel Grove, Cheshire, England, in that year. From then to the present he has worked in both microwave and power semiconductor areas, with device development being the main activity.

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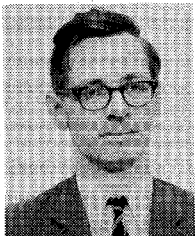


E. G. S. Davidson was born in Stonehaven, Scotland, on March 22, 1937. He received the Associateship of Robert Gordon's Institute of Technology Aberdeen, Aberdeen, Scotland, in 1962, and is studying for the M.Sc. degree at Dundee University, Dundee, Scotland.

He has been engaged since 1962 in the research and development of microwave semiconductor devices and ferrite components in the Microwave Development Laboratory of Ferranti Limited, Dundee, Scotland.

Mr. Davidson is an associate member of the Institution of Electrical Engineers of Great Britain.

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P. R. Emtage was born in London, England, on January 1, 1935. He received the B.A. degree in 1956, and the M.A. and Ph.D. degrees in theoretical physics in 1959, all from the University of Oxford, Oxford, England. This was followed by a year of postdoctoral study at Northwestern University, Evanston, IL.

He joined the General Electric Company, Syracuse, NY, in 1960 to work on semiconductors and on charge transport across thin films. Since 1963 he has been with the Westing-

house Electric Corporation in Pittsburgh, PA, where his theoretical work has included band structure and conduction processes in metals, semiconductors, and insulators, trapping and recombination processes, magnetism and magnetic bubbles, surface-wave transducers, high-current vacuum arcs, and infrared detectors.

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Fred E. Gardiol (S'68-M'69-SM'74), photograph and biography not available at the time of publication.

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Joseph Helszajn (M'64) was born in Brussels, Belgium, in 1934. He received the Full Technological Certificate of the City and Guilds of London Institute from Northern Polytechnic, London, England, in 1955, the M.S.E.E. degree from the University of Santa Clara, Santa Clara, CA, in 1964, and the Ph.D. degree from the University of Leeds, Leeds, England, in 1969. He received the D.Sc. degree from Heriot-Watt University, Edinburgh, Scotland, in 1976.

He has held a number of positions in the microwave industry. From 1964 to 1966 he was Product Line Manager at Microwave Associates, Inc., Burlington, MA. Currently, he is working as a consultant. He is also a Senior Research Fellow at Heriot-Watt University, Edinburgh, Scotland. He is the author of the books *Principles of Microwave Ferrite*

Engineering (NY: Wiley) and *Nonreciprocal Microwave Junctions and Circulators* (NY: Wiley, 1975).

Dr. Helszajn is a fellow of the Institution of Electronic and Radio Engineers (England). In 1968 he was awarded the Insignia Award of the City and Guilds of London Institute.

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J. S. Joshi was born in India in 1946. He received the Bachelor of Technology degree in electrical engineering in 1968 and the Master of Technology degree in electrical communication engineering in 1970, both from the Indian Institute of Technology, Powai, Bombay. His dissertation work for the Master's degree was on tunnel diode characterization and their performance as amplifiers and oscillators at microwave frequencies.

In 1970 he went to England and joined Mullard Ltd., Hazel Grove, as a Microwave Engineer, working on high-performance transferred-electron-device oscillators. In October 1971 he was sponsored by the company for a part-time Doctor of Philosophy course with the Council for National Academic Awards (CNAA), London. He successfully completed this course in September 1976. Presently, he is engaged in microwave mixer diode and associated circuit work. His current interests include device-circuit interaction for active solid-state devices, mixer diodes and configurations, analytical techniques, and associated computer-aided design work. He has several published works in reputed international journals to his credit.

Dr. Joshi is an associate member of the Institution of Electrical Engineers, London, England.

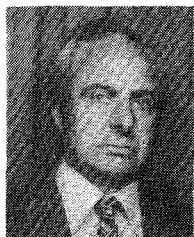
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Nobuaki Kumagai (M'59-SM'72), for a photograph and biography please see page 80 of the January 1977 of this TRANSACTIONS.

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S. Le-Ngoc, for a photograph and biography please see page 81 of the January 1977 issue of this TRANSACTIONS.

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Robert W. Murray was born in Ayr, Scotland, on June 20, 1927. He received the M.A. (Hon) degree in mathematics and natural philosophy at Aberdeen University, Aberdeen, Scotland, in 1948.

He then joined Ferranti Limited, Edinburgh, Scotland, and has worked on gaseous plasma devices and microwave semiconductor control devices. He is currently chief microwave development engineer in the Microwave Components Division of Ferranti Limited, Dundee,

Scotland.

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Tsukasa Nagao (M'72) graduated from the National Defense Academy, Yokosuka, Japan, in 1957. He received the M.S. and Ph.D. degrees in electrical communication engineering from Tohoku University, Sendai, Japan, in 1961 and 1964, respectively.

From 1965 to 1967, he was a Lecturer and, since 1968, he has been an Assistant Professor in the Department of Electrical Engineering, the National Defense Academy. His main areas of research interest are microwave ferrites

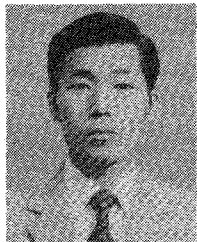
and their applications, microwave, millimeter-wave, and optical waveguides, and high-speed communications.

Dr. Nagao is a member of IECEJ and JSAP.

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S. Nemoto, for a photograph and biography please see page 81 of the January 1977 issue of this TRANSACTIONS.

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Katsunari Okamoto was born in Hiroshima City, Japan, on October 19, 1949. He received the B.S. and M.S. degrees in electrical engineering, both from the University of Tokyo, Tokyo, Japan, in 1972 and 1974, respectively.

At present, he is studying toward the Ph.D. degree in the Graduate School of the University of Tokyo, specializing in light beam transmission.

Mr. Okamoto is a member of the Institute of Electronics and Communication Engineers of

Japan.

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Takanori Okoshi (S'56-M'60) was born in Tokyo, Japan, on September 16, 1932. He received the B.S., M.S., and Ph.D. degrees, all from the University of Tokyo, Tokyo, Japan, in 1955, 1957, and 1960, respectively, all in electrical engineering.

In 1960 he was appointed an Instructor, and in 1961, became an Associate Professor in the Department of Electronic Engineering, University of Tokyo, where he worked primarily in the field of microwave circuits, microwave

measurements, and microwave electron devices. From 1963 through 1964, on leave of absence from the University of Tokyo, he joined Bell Laboratories, Inc., Murray Hill, NJ, where he was engaged in research on electron guns. He returned to the University of Tokyo in 1964, and since then he has been working again in the microwave field, specializing in microwave planar (two-dimensional) circuits and collectors for beam-type tubes. In 1972 he joined the Technical University of Munich on a temporary basis as a Guest Professor. At present, his main fields of interest are microwave planar circuits, optical waveguides, holographic memories, and three-dimensional imaging. In January 1977 he became Professor at the University of Tokyo.

Dr. Okoshi is an Associate Editor of the IEEE Transactions on Microwave Theory and Techniques.

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Olivier Parriaux, photograph and biography not available at the time of publication.

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Marian W. Pospieszalski was born in Częstochowa, Poland, on January 22, 1944. He received the M.Sc. and D.Sc. degrees in electronic engineering from the Warsaw Technical University, Warsaw, Poland, in 1967 and 1976, respectively.

Since 1967 he has been with the Institute of Electronics Fundamentals, Warsaw Technical University, Warsaw, Poland, where he is currently an Assistant Professor. His research interests are concerned with electromagnetic

surface wave structures and their applications in microwave circuits and in microwave measurement techniques.

Dr. Pospieszalski is a member of the Polish Association of Theoretical and Applied Electrotechnics.



Yasunori Sakaguchi was born in Hyogo, Japan, on November 7, 1952. He received the B.E. degree in communication engineering from Osaka University, Osaka, Japan, in 1976.

At present he is a graduate student at Osaka University, Osaka, Japan, where he has been engaged in research on magnetostatic waves and their applications.

Mr. Sakaguchi is a member of the Institute of Electrical Communication Engineers of Japan.

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Steven N. Stitzer (M'74) was born in Rocky Mount, NC, on December 19, 1948. He received the B.S.E.E., M.S.E.E., and Ph.D. degrees from Carnegie-Mellon University, Pittsburgh, PA, in 1970, 1971, and 1974, respectively.

From 1972 to 1973 he was with the Naval Research Laboratory, Washington, DC, working on computer simulation of nuclear fusion plasmas. Since 1974 he has been an Engineer at the Westinghouse Electric Corporation,

Systems Development Division, Baltimore, MD. He has been involved with research and development in frequency-selective and ferrite-diode power limiters for microwave and radar receiver protector applications.

Dr. Stitzer is a member of the IEEE MTT Group.

✦



Robert A. Suttie was born in Perth, Scotland, on October 2, 1948. He received the B.Sc. (Hons) in applied physics from Dundee University, Dundee, Scotland, in 1973.

Since 1973 he has been a Development Engineer with Ferranti Limited, Dundee, Scotland, working on receiver protection devices.

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Makoto Tsutsumi (M'71) was born in Tokyo, Japan, on February 25, 1937. He received the B.S. degree in electrical engineering from Ritsumeikan University, Kyoto, Japan, in 1960, and the M.S. and Ph.D. degrees in electrical communication engineering from Osaka University, Osaka, Japan, in 1962 and 1970, respectively.

During 1963-1973 he was a Research Associate in the Faculty of Engineering, Osaka University, engaged in research on magnetoelectric effects in antiferromagnetics, magnetic, and magnetoelastic surface wave devices for signal processing. Since 1974 he has been a Lecturer in the Faculty of Engineering, Department of Electrical Communication Engineering, Osaka University.

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G. L. Yip (S'63-M'67-SM'75), for a photograph and biography please see page 82 of the January 1977 issue of this TRANSACTIONS.