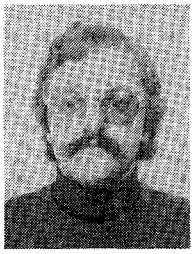
Contributors



Olivier Benevello was born in Antibes, France, on April 29, 1952. He received the Mastership degree in electronics and the Elaborate Study degree in electronics from the University of Nice, Nice, France, in 1975 and 1976, respectively.

Since 1976, he has worked with the Microwave and Microelectronics Research Group of Nice University and is presently engaged in the study of microstrips filters.

✤

Jozef J. M. Dekkers was born in Tilburg, The Netherlands, on November 27, 1949. He received the B.Sc. and M.Sc. degrees in electrical engineering from the Delft University of Technology, The Netherlands, in 1972 and 1974, respectively. He is currently working towards the Dr.-Ing. degree at the Institute of Semiconductor Electronics of the Technical University of Aachen, Germany. His research activities are in the area of GaAs-microwave devices.

✤

R. F. Humphryes was born in London, England, in 1946. He received the B.Sc. (Eng.) degree in 1967, the M.Sc. degree in 1969, and the Ph.D. degree in 1972 from the University of London, England.

Since 1971 he has been employed by Kelvin Hughes, the marine instrumentation division of Smiths Industries Ltd., England. He was responsible for establishing the microwave integrated circuit and surface acoustic wave facilities within Kelvin Hughes. At present he is a Principal Engineer, primarily concerned with advanced signal processing components and systems and their possible applications to marine radar and sonar. Currently he is on sabbatical leave from Kelvin Hughes and is now with the Electrical Materials Laboratory, the Delft University of Technology, The Netherlands, where he has joined a group investigating silicon-microtransducers.

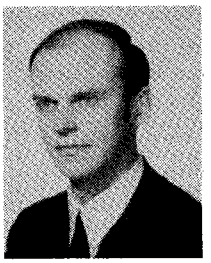
Dr. Humphryes was awarded the Institution Premium from the IEE (London) in 1972. Dr. Humphryes is a member of the Royal Institute of Navigation, the IEE (London), and the Dutch Physical Society.

✤

Hiroyoshi Ikuno was born in Fukuoka Prefecture, Japan, on August 16, 1939. He received the B.E. degree in communication engineering and the M.E. degree in electrical engineering, from Kyushu University, Fukuoka, Japan, in 1962 and 1964, respectively.

From 1967 to 1970 he was a Research Associate of Communication Engineering at Kyushu University. He was an Assistant Professor at Kumamoto University, Kumamoto, Japan, from 1970 to 1972, and since 1972 he has been an Associate Professor. His research interests are in the area of electromagnetic wave theory.

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



Marek Jaworski was born in Kraków, Poland, on July 3, 1944. He received the M.S. degree in electrical engineering from the Warsaw Technical University, Warsaw, Poland, in 1968, and the Ph.D. degree in physics from the Institute of Physics, Polish Academy of Sciences, Warsaw, Poland, in 1976.

From 1968 to 1969 he was a Research Assistant in the Department of Electrical Engineering, Warsaw Technical University, Warsaw, Poland. Since 1969 he has been with the Institute of Physics, Polish Academy of Sciences, Warsaw, Poland, where he has been working in the area of microwave spectroscopy. His current research interests include microwave diagnostics of semiconductors, numerical analysis, and electromagnetic wave theory.

✤

Kalman Kalikstein was born in Strzemieszyce, Poland, on September 4, 1929. He received the B.S. degree in physics from Brooklyn College, Brooklyn, NY in 1952, and the M.S. and Ph.D. degrees in physics from New York University, New York, NY, in 1954 and 1962, respectively.

From 1953 to 1964 he was at the Naval Applied Science Laboratory, Brooklyn, NY, where he worked on microwave devices and did research on resonance and high power effects in ferrites and on electromagnetic and nuclear scattering. From 1964 to 1965, as a Research Associate at Fundamental Methods, Inc., New York, NY, he was engaged in hypervelocity-impact and shock-wave studies. In 1965 he became an Assistant Professor of Physics at Hunter College of the City University of New York, New York, NY, where his present experimental work is in the area of phosphor luminescence and Dember effect. His theoretical research is in the field of electromagnetic scattering. He is now an Associate Professor.

Dr. Kalikstein is a member of the American Physical Society.

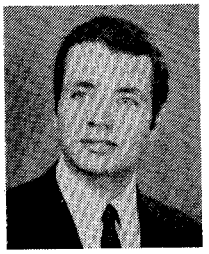
✤

Toshiaki Kamiya was born in Shizuoka-ken, Japan, on March 17, 1953. He received the B.S. degree in electrical engineering from Shizuoka University in 1975 and the M.S. degree from Tohoku University in 1977.

He was engaged in research of anisotropic metal diffused-optical wave guide. He is currently working at the Nihon Gakki Seizo Corp. of Hamamatsu City and studying the research of speaker systems.

Mr. T. Kamiya is a member of the Institute of Electronic and Communication Engineering of Japan.

✤



Abdel-Messias Khilla was born in Assiut, Egypt, in March 1946. He received the B.S. (honors) and the M.S. degrees from Assiut University, Assiut, Egypt, in 1967 and 1973, respectively, all in electrical engineering.

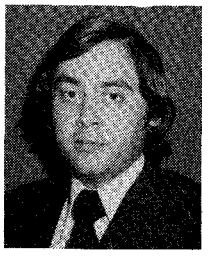
From 1968 to 1971 he was in the Egyptian Army. From 1971 to 1974 he was a Teaching Assistant at Assiut University, Egypt. Since 1974 he has been working on ferrite devices. He is now working towards his doctoral thesis in the Department of Electrical Engineering, University of Duisburg, Duisburg, Germany.

Amiya Kumar Mallick was born in Hooghly, West Bengal, India, on December 9, 1938. He received the BEE degree with honours in communication engineering from Jadavpore University, Calcutta, India, in 1960, and the M.Tech. degree in UHF and microwave engineering from the Indian Institute of Technology, Kharagpur, India, in 1961.

In 1962, he joined the All India Radio, Calcutta, India, where he worked as an Assistant Engineer until the end of 1965. He then joined the Department of Electronics and Electrical Communication Engineering, Indian Institute of Technology, Kharagpur, India, initially as a Teacher Trainee, and in 1967 became a Lecturer. He is now working there as an Assistant Professor. His current research areas include guided microwave devices and microwave antennas.

Mr. Mallick is an associate member of the Institution of Engineers (India).

✤



David Penunuri was born in Phoenix, AZ, on February 4, 1949. He received the B.S., M.S., and Ph.D. degrees in electrical engineering from the University of Southern California, Los Angeles, in 1971, 1974, and 1976, respectively.

He joined Rockwell International in 1975 as a Technical Staff Member. He is currently responsible for research in surface acoustic wave signal processing.

✤

Dominique Pompei was born in Maillot, Algeria, on July 25, 1947. He received the Mastership degree in physics from the University of Nice, Nice, France, in 1969, and the Elaborate Study degree in quantum electronics and the "Doctorat" degree in electronics from the University of Marseille, Marseille, France, in 1970 and 1972, respectively.

Since 1971, he has been a Teaching Assistant at the Nice Institute of Technology, Nice, France, and has worked with the Microwave and Microelectronics Research Group of Nice University on propagation on microstrip lines.

✤

Stig Rehnmark (S'71–M'76) was born in Hörnefors, Sweden, on August 12, 1944. He received the M.Sc. and Ph.D. degrees in electrical engineering from Chalmers University of Technology, Göteborg, Sweden, in 1969 and 1976, respectively.

From 1969 to 1975, he was a Research and Teaching Assistant at the Division of Network Theory, Chalmers University of Technology. His field of interest at that time was microwave couplers, phase shifters, and power dividers. In April 1975, he became the Research Engineer in the same division and he was the Project Leader of the Chalmant antenna, which is the first two-dimensional (8×8 elements) phased array in Sweden and is intended for maritime satellite communication in the *L* band. In 1976, he received a scholarship from the Swedish–American Foundation for studies in the United States. Since July 1976, he has been on a leave of absence from his position at Chalmers University of Technology and is currently with Anaren Microwave, Inc., Syracuse, NY. At Anaren he has been working on the research, development, and production of couplers, baluns, power dividers, mixers, beam-forming networks, and other microwave components in the frequency range 30 MHz–18 GHz.

Gordon P. Riblet (M'73) was born in Boston, MA, on December 12, 1943. He received the M.S. and Ph.D. degrees in physics from the University of Pennsylvania, Philadelphia, in 1966 and 1970, respectively.

From 1970 to 1972 he was employed as a Research Scientist at the University of Cologne, Cologne, Germany, performing research in solid-state physics. Since 1972 he has been employed as a Research Scientist at the Microwave Development Laboratories, Natick, MA, working in areas of ferrrite devices and computerized test measurements.

✤

Edouard Rivier was born in Lyon, France, on October 2, 1934. He received the degrees of Engineer in Electronics and "Docteur es Sciences" from the University of Grenoble, Grenoble, France, in 1958 and 1967, respectively.

He worked at the University of Grenoble before joining the Microwave and Microelectronics Research Group of the University of Nice, Nice, France, in 1967. He is currently the Scientific Manager of this group.

✤

Gitindra S. Sanyal was born in Dhubri, India, on February 1, 1922. He received the B.Sc. (honors) degree in physics and the M.Sc. degree in applied physics from the University of Calcutta, Calcutta, India, in 1941 and 1943, respectively, and obtained both the general and advanced diplomas of Marconi College, Chelmsford, England, in 1946.

From 1943 to 1945 he was employed by the All India Radio as a Junior Maintenance Engineer. He was with Pye Limited, Cambridge, England, during 1946 to 1949 while working on the development of microwave slot arrays. From 1949 to 1954 he served as a Lecturer at the Institute of Radio Physics and Electronics, University of Calcutta, Calcutta, India, and worked on microwave antennas and microwave behavior of ferromagnetics. In 1955, he joined the Indian Institute of Technology, Kharagpur, India, where he is currently a Professor of Electronics heading a research group working in the field of microwave antennas and electromagnetic scattering.

Mr. Sanyal is a fellow of the Indian National Science Academy and the Institution of Engineers (India), and a member of the Institution of Electronics and Telecommunication Engineers of India.

✤

Kimio Shibayama was born in Tokyo, Japan, on October 19, 1919. He received the B.S. and Ph.D. degrees in electrical engineering from Tohoku University, Sendai, Japan, in 1947 and 1961, respectively.

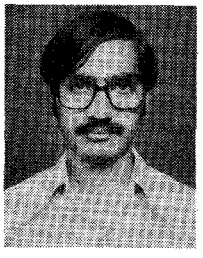
He became a Research Assistant in 1947, Assistant Professor in 1954, and was appointed a Professor in 1962, at the Research Institute of Electrical Communication, Tohoku University. He has been engaged in work at the Elastic-Wave Circuits Division. His main work has included investigation of ultrasonic transducers based on short column type, mechanical filters, and acoustic surface waves.

Dr. Shibayama is a member of the Acoustical Society of America, the Acoustical Society of Japan, and the Institute of Electrical and Communication Engineers of Japan.

Klaus Solbach was born in Witten, Federal Republic of Germany, in 1951. He received the Dipl.-Ing. degree from the Technical University of Aachen, Aachen, Germany, in 1974.

Since 1975 he has been employed at the University of Duisburg, Duisburg, Federal Republic of Germany, as a Research Assistant. He is engaged in investigations of the properties, production techniques, and practical applications of the dielectric image line.

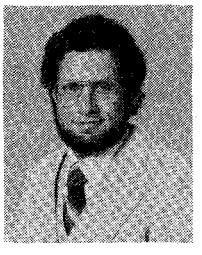
✤



Neeraj C. Srivastava was born in Jodhpur, India, on September 29, 1953. He received the B.Sc. degree in 1972, from the University of Jodhpur and was awarded the Sir Donald Field gold medal and the University gold medal. He received the M.S. and Ph.D. degrees in Physics from the Indian Institute of Technology, Delhi, in 1974 and 1977, respectively.

He is currently Senior Scientific Officer in the Physics Department, I.I.T., Delhi.

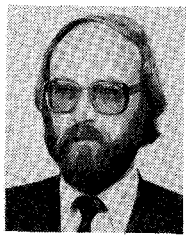
✤



Richard B. Swerdlow (M'63) was born in Philadelphia, PA, on May 12, 1939. He received the BSEE degree from the University of Pennsylvania (Moore School), Philadelphia, in 1960, and the MSEE degree from the Massachusetts Institute of Technology, Cambridge, MA, in 1962.

He has been with Bell Telephone Laboratories since 1963. Until 1970 he performed effectiveness studies for anti-ballistic missile systems to aid in design and modification. From 1972 to 1975 he studied noise processes in the new single sideband microwave radio transmission system for telephone communication. This work involved new measurement and analysis techniques. Since 1975 he has been involved in the analysis of special modulation techniques for Radio Telephony. He also holds two patents in communications.

✤

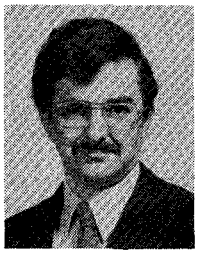


Adrian Venema was born in Cimahi, Indonesia, in 1932. He received the B.Sc. electrical engineering degree in 1954 from the Polytechnic School in Leeuwarden, The Netherlands, and the M.Sc. degree in electrical engineering from the Delft University of Technology in 1968.

Between 1954 and 1959 he worked as an Engineer at the University of Utrecht, The Netherlands, on linear accelerators. From 1959 until 1961 he investigated electronic control systems at the Institute of Textile Technology (T.N.O), The Netherlands. Since 1961 he has been at the Delft University of Technology, The Netherlands, where he worked at first in the electronic teaching laboratory and then in the network theory laboratory. Since 1969 he has been employed in the Electrical Materials Laboratory where, at present, he is a Senior Lecturer and Laboratory manager. His research activities are concerned with silicon-microtransducers and in particular the application of surface acoustic waves and MOS structures to such devices.

Mr. Venema is a member of the Dutch Electronic and Radio Society.

✤

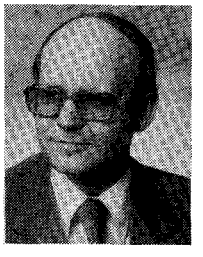


Claude M. Weil (M'64) was born in Newcastle-on-Tyne, England, on June 26, 1937. He received the B.Sc. degree in 1959 from the University of Birmingham, Birmingham, England, the M.S.E. degree in 1963 from George Washington University, Washington, DC, and the Ph.D. degree in 1970 from the University of Pennsylvania, Philadelphia, all in electrical engineering.

He has been employed, in the past, as a Navy Systems and Instrumentation Engineer and has designed microwave components and antennas. He has also been an Instructor in Electronics and has held positions as a Research Fellow and Associate while in graduate school. He joined the Environmental Protection Agency, Office of Research and Development, in 1971, and is currently engaged in research activities associated with EPA's program of nonionizing radiation. His present interests include interactions of electromagnetic energy with biological media, UHF-microwave exposure techniques, and dosimetric methods.

Dr. Weil is a member of Sigma Xi and the International Microwave Power Institute, Canada.

✤



Ingo Wolff was born in Köslin, Germany, on September 27, 1938. He received the Dipl.–Ing. degree, the Dr.–Ing. degree, and the Habilitation degree from the Technical University Aachen, Aachen, Germany.

From 1964 to 1974 he worked on millimeter-wave techniques, microwave ferrite techniques, and microstrip techniques at the Technical University of Aachen. Since 1974 he has been a Professor of Electrical Engineering at the University of Duisburg, Duisburg, Germany.

✤

Kazuhiko Yamanouchi was born in Fukuoka-ken, Japan, on January 27, 1936. He received the B.S. and the Ph.D. degrees in electrical engineering from Tohoku University, Sendai, Japan, in 1959 and 1965, respectively.

He became a Research Associate in 1965 and has been an Assistant Professor since 1969 at the Research Institute of Electrical Communication, Tohoku University. He is studying propagation, transducers, amplifiers, and filters of acoustic surface waves, the interaction between laser beams and acoustic waves, and submicron processing utilizing electron-beam exposure.

Dr. Yamanouchi is a member of the Institute of Electronic and Communication Engineering of Japan, the Japan Society of Applied Physics, and the acoustical Society of Japan.