

# Contributors



I. BADY  
A'42-M'54-SM'56

Isidore Bady was born in Brooklyn, N. Y., on July 21, 1913. He received the B.S. degree from the College of the City of New York in 1933 and the M.E.E. degree from the Polytechnic Institute of Brooklyn, N. Y., in 1949. He is currently working towards a doctoral degree at Rutgers University, Princeton, N. J.

He has been employed by the United States Army Signal Research and Development Laboratory, Fort Monmouth, N. J., since 1941. Initially he worked on instrumentation for the evaluation of components and materials. The frequency range covered was from dc through microwaves. Instrumentation under pulse conditions was also included. For the past four years he has worked in the field of magnetic materials, particularly ferrites.

Mr. Bady is a member of Phi Beta Kappa.



C. G. ENGLEFIELD  
S'60-M'61

C. G. Englefield was born in London, England, on October 6, 1935. He received the B.Sc. (Eng.) degree from Queen Mary College, University of London, in 1957, and was awarded the Anthony Williams Memorial Prize. After two years of graduate study he received a NATO Studentship to continue at the University of British Columbia, Vancouver, Canada. His field of study has been the application of dielectric loading to traveling-wave tubes and linear accelerators.



William J. Getsinger was born in Waterbury, Conn., on January 24, 1924. He received the B.S. degree from the University of Connecticut, Storrs, in 1949 and the M.S. and Engineer degrees from Stanford University, Stanford, Calif., in 1959 and 1961, respectively, all in electrical engineering.



W. J. GETSINGER  
S'48-A'50-M'55

From 1950 to 1957 he worked at Technicraft Laboratories, Tomaston, Conn., and the Westinghouse Electric Company, Baltimore, Md., on the design and development of waveguide components and assemblies. In 1957 he joined the staff of the Stanford Research Institute, Menlo Park, Calif., where he has since been working on stripline components and antennas.

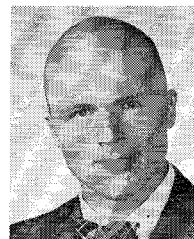


G. I. HADDAD

George I. Haddad was born in Aindara, Lebanon, on April 7, 1935. He received the B.S.E.E. degree in 1956, and the M.S.E.E. degree in 1958, both from the The University of Michigan, Ann Arbor.

From 1957 to September, 1958, he was associated with the Engineering Research Institute of The University of Michigan, engaged in research on electromagnetic accelerators. In 1958 he joined the Electron Physics Laboratory. He held a University of Michigan Research Institute fellowship for the academic year of 1958-1959 and for the spring semester of 1959-1960. He is presently an Instructor in electrical engineering and is completing work for the Ph.D. degree.

Mr. Haddad is a member of Eta Kappa Nu and an associate member of Sigma Xi.



E. L. JOHANSEN  
S'54-A'55-M'60

Elmer L. Johansen was born in Lake Forest, Ill., on June 28, 1930. He received the B.A. degree from Harvard College,

Cambridge, Mass., in 1952 and the M.S.E.E. degree from the University of Michigan, Ann Arbor, Mich., in 1954.

Following discharge from the Army in 1956 he was engaged in radar countermeasures work for the Cook Research Laboratories, Morton Grove, Ill. In 1958 he joined the staff of the Institute of Science and Technology at The University of Michigan where he is currently working on high-resolution side-looking radar.



E. M. T. JONES  
S'45-A'51-M'55-SM'56

Edward M. T. Jones was born in Topeka, Kans., on August 19, 1924. He received the B.S.E.E. degree in 1944 from Swarthmore College, Swarthmore, Pa., and the M.S. and Ph.D. degrees in electrical engineering in 1948 and 1950, respectively, from Stanford University, Stanford, Calif.

He was a Radar Maintenance Officer in the U. S. Navy from 1944 to 1946, and from 1948 to 1950 he was a Research Associate at Stanford University. In 1950 he joined the staff of Stanford Research Institute, Menlo Park, Calif., and in 1957 became Head of the Microwave Group of the Electromagnetics Laboratory. In November, 1961, he joined the staff of TRG-West, Palo Alto, Calif. His fields of specialty include microwave filters and antennas, stripline components, and parametric amplifiers.

Dr. Jones is a member of the Scientific Research Society of America, Sigma Tau and Sigma Xi.



R. J. KING  
M'60

Ray J. King was born in Montrose, Colo., on January 1, 1933. He received the B.S. degree in electronics in 1956 and the B.S.E.E. degree in 1957, both from Indiana Technical College, Fort Wayne, Ind., and the M.S.E.E. degree in 1960 from the University of Colorado, Boulder.

From 1956 to 1958 he was an Instructor of electronic engineering at Indiana Technical College, and since 1960 he has been Assistant Professor of electrical engineering and Acting Associate Chairman there. He was on leave during the summer of 1961 as a Research Associate in the Engineering Experiment Station of the University of Colorado's Microwave Laboratory, and will be a National Science Foundation Faculty Fellow at the University during 1962-63.

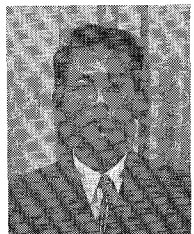
Mr. King is a member of the ASEE, Sigma Phi Delta, and Iota Tau Kappa.



R. MITTRA  
S'54-M'57

Raj Mittra was born in Banaras, India, on July 1, 1932. He received the B.S. degree from the University of Agra, India, in 1950, and the M.S. degree from the Institute of Radiophysics and Electronics of the University of Calcutta, India, in 1952. He received the Ph.D. degree in electrical engineering from the University of Toronto, Toronto, Ontario, Can., in 1957.

From 1956 to 1957 he was an Assistant Professor of electrical engineering at Pennsylvania State University, University Park. Since 1957 he has been at the University of Illinois, Urbana, as an Assistant Professor of electrical engineering where he is associated with the Antenna Laboratory. He spent the summer of 1959 at the Microwave Laboratory of the University of Colorado, Boulder, and the summer of 1961 at the Boeing Airplane Company, Seattle, Wash.



M. MIYAGI  
SM'61

Masahisa Miyagi was born in Okayama City, Japan, on August 13, 1926. He received the B.S. degree in electrical engineering and the Dr. Eng. degree from Kyoto University, Japan, in 1950 and 1961, respectively.

Since 1950 he was worked as Development Engineer of microwave communications systems at Nippon Electric Company, Ltd., Kawasaki, Japan. From 1950 to 1957 he was engaged particularly on the development and design of IF amplifiers for

4000-Mc super-multichannel telephone relay systems between Tokyo-Osaka and Tokyo-Sendai, Japan. From 1958 to 1961 his main projects were the development and design of transmitters and receivers for over-the-horizon communication, which are now in operation throughout Japan. He is presently Chief of Design of radio equipment for over-the-horizon communication systems.

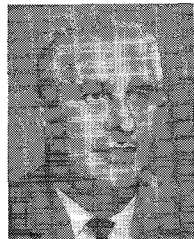
Dr. Miyagi is a member of the IECE of Japan.



F. E. MUNYAK

Frank E. Munyak was born in Oklahoma City, Okla., on January 15, 1923. He received the B.S.E.E. degree from St. Louis University, St. Louis, Mo. in 1950, and did graduate work at St. Louis University from 1953 to 1955.

Since 1950, he has worked for various companies on microwave components and systems. He joined the Sperry Microwave Electronics Company in Clearwater, Fla., in 1958 as a Senior Staff Engineer in the Microwave Component Section, where he has worked on strip line components and ferrite devices.



G. J. NEUMANN

George J. Neumann was born in Little Neck, N. Y., on June 10, 1918. He served in the United States Marine Corps from 1942 to 1945. He received the B.A. and M. A. degrees in physics in 1952 and 1953, respectively, from Hofstra College, Hempstead, N. Y.

From 1952 to 1958 he was with the Sperry Gyroscope Company, Great Neck, N. Y., in the Microwave Development Group. He was Project Engineer engaged in research and development of microwave spectrometers and microwave countermeasure devices. Since 1958 he has been with the newly formed Sperry Microwave Electronics Company, Clearwater Fla. He is Engineering Supervisor of the Solid-State and Microwave Component Development section.

Mr. Neumann is a member of Sigma Pi Sigma.



J. E. ROWE  
S'51-M'56-SM'61

Joseph E. Rowe was born in Highland Park, Mich., on June 4, 1927. He received the B.S. degree in electrical engineering and in mathematics in 1951, the M.S.E.E. degree in 1952, and the Ph.D. degree in electrical engineering in 1955, all from The University of Michigan, Ann Arbor.

Since 1951 he has been associated with The University of Michigan Office of Research Administration, engaging in fundamental research on microwave systems, microwave devices, electromagnetic field theory and plasmas. Formerly a Lecturer, Assistant Professor, and Associate Professor of electrical engineering, he is now Professor of electrical engineering and Director of the Electron Physics Laboratory at The University of Michigan.

Dr. Rowe is a member of the AIEE, the American Mathematical Society and the Society for Industrial and Applied Mathematics. He is also a member of Sigma Xi, Phi Kappa Phi, Tau Beta Pi and Eta Kappa Nu.



P. E. SEIDEN  
S'57-M'61

Phillip E. Seiden was born in Troy, N. Y., on December 25, 1934. He received the B.S. and M.S. degrees from the University of Chicago, Ill., in 1955 and 1956, respectively, and the Ph.D. degree from Stanford University, Stanford, Calif., in 1960, all in physics.

From 1956 to 1959 he worked at the Research Laboratory of Lockheed Missiles and Space Division, Sunnyvale, Calif., on problems of ferromagnetism and ferroelectricity. Concurrently, from 1957 to 1960, he was a Research Associate at the Microwave Laboratory at Stanford University, working on problems in ferrimagnetic resonance. This work was continued in 1960 at the Institut Fourier of the University of Grenoble, France, with the support of a National Science Foundation Postdoctoral Fellowship, and is being carried out presently at the IBM Research Center, Yorktown Heights, N. Y.

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



E. D. SHARP  
S'54-A'55-M'57

Eugene D. Sharp was born in Greeley, Colo., on October 29, 1931. He received the B.S.E.E. and M.S.E.E. degrees in 1954 and 1956, respectively, from Stanford University, Stanford, Calif.

From 1954 to 1955 he was employed by the Air Research Organization, Inc., Tullahoma, Tenn., and from 1955 to 1956 he was a Teaching Assistant in electrical engineering at Stanford University. From 1956 to 1958 he was a Project Officer at the Rome Air Development Center, Griffiss AFB, Rome, N. Y., working in the Antenna Development Section. In 1958 he joined the staff of Stanford Research Institute, Menlo Park, Calif., where he has been working on a study of electronic scanning antennas, ECM antennas, and high-power waveguide filters. He is studying for the Ph.D. degree in electrical engineering at Stanford University on a part-time basis under the Honors Cooperative Program.

Mr. Sharp is a member of Tau Beta Pi.



Jean G. Van Bladel was born in Antwerp, Belgium, on July 27, 1922. He received the degree of Electrical Engineer from Brussels University in 1947, and the M.S. and Ph.D. degrees in electrical engineering, from the University of Wisconsin, Madison, in 1949 and 1950, respectively.

From 1950 to 1954 he was head of the Radar department of the Manufacture Belge de Lampes et de Matériel Electronique, Brussels. From 1954 to 1956 he was Asso-



J. G. VAN BLADEL  
M'54-SM'56

ciate Professor of electrical engineering at Washington University, St. Louis, Mo. From 1956 to 1960 he was Associate Professor of electrical engineering at the University of Wisconsin and is currently a Professor there.

Mr. Van Bladel is a consultant with the Midwestern Universities Research Association Accelerator Project and a member of Sigma Xi and Eta Kappa Nu.



G. B. WALKER

George B. Walker was born in Thackerston, Scotland, in 1919. He received the M.A. degree in mathematics and natural philosophy from the University of Glasgow, Scotland, in 1940, and the Ph.D. degree from the University of London, England, in 1950.

From 1940 to 1946 he was a member of the research staff of the Mullard Radio Valve Co. Ltd., Mitcham, England, and held a Turner and Newall Fellowship at Imperial College, London, from 1947 to 1950. From

1950 to 1959 he lectured in electrical engineering at the Universities of Sheffield and London. Since 1953 he has been in charge of a project relating to the use of dielectrics in microwave tubes which was supported in England by the Atomic Energy Research Establishment and British Admiralty. This project, including staff and equipment, was transferred to Canada in 1959, at which time he was appointed Research Professor at the University of British Columbia, Vancouver, Can. Research in Canada is being supported by the Defence Research Board and National Research Council.

Dr. Walker is an associate member of the IEE.



L. R. WHICKER  
M'60

Lawrence R. Whicker was born in Bristol, Va., on October 3, 1934. He received the B.S. and M.S. degrees in electrical engineering from the University of Tennessee, Knoxville, in 1957 and 1958, respectively.

From 1958 to September, 1961, he was associated with the Sperry Microwave Electronics Company, Clearwater, Fla., where he was concerned with the design of microwave filters and solid-state millimeter wavelength components. Currently he is a Ford Foundation Fellow at Purdue University, Lafayette, Ind., where he is studying towards the Ph.D. degree.

Mr. Whicker is a member of Eta Kappa Nu, Phi Kappa Phi and Tau Beta Pi.