Contributors

Jack R. Baird (S'60–M'63) was born in Colchester, Ill., on May 1, 1931. He received the B.S., M.S., and Ph.D. degrees in electrical engineering in 1958, 1959, and 1963, respectively, from the University of Illinois, Urbana.

From 1951 through 1954 he served in the U. S. Air Force as an instructor in radar at Lowry Air Force Base, Denver, Colo. He joined the Electro-Physics Laboratory (formerly Ultramicrowave Laboratory) at the University of Illinois in 1956 as an undergraduate technician and now, as an Assistant Professor, is still active with that laboratory. His research interests have included problems in field emission, nonlinear microwave plasmas, megavolt electronics, deflection modulation, microwave detectors, and other problems relating to the generation, transmission, and detection of millimeter waves.

Dr. Baird is a member of Tau Beta Pi and Sigma Xi.

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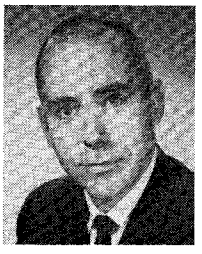

Keith S. Champlin (S'56–M'59) was born in Minneapolis, Minn., on August 20, 1930. He received the B.S., M.S., and Ph.D. degrees in electrical engineering in 1954, 1955, and 1958, respectively, all from the University of Minnesota, Minneapolis.

After serving in the U. S. Army Signal Corps in 1951 and 1952, he was briefly associated with the Physics Department of the University of Minnesota and Remington Rand Univac, Minneapolis, Minn. Both positions dealt with applications of radio telemetry to high-altitude research. As a graduate student, he was engaged in research on noise in semiconductors, first as Research Assistant and later as Research Fellow. His thesis work was in the field of fluctuations in *p-n* junction devices. At present, he is Professor of Electrical Engineering at the University and is directing research on interactions of microwaves and ultramicrowaves with semiconductors and solid-state plasmas. For three months in 1963, he was an Exchange Professor at the Laboratoire de Physique, Ecole Normale Supérieure, Université de Paris, France.

Dr. Champlin is the recipient of the 1963 Distinguished Teaching Award granted by the Institute of Technology, University of Minnesota. He is also a member of Tau Beta Pi, Eta Kappa Nu, Gamma Alpha, and Sigma Xi.

Robert V. Garver (M'57) was born in Minneapolis, Minn., on June 2, 1932. He received the A.B. degree in physics from the University of Maryland, College Park, in 1956.

In 1956, he became affiliated with what is now the Microwave Branch at the Harry Diamond Laboratories (formerly Diamond Ordnance Fuze Laboratories), U. S. Army Materiel Command, Washington, D. C. His work has been on microwave semiconductor diode switches, limiters, and phase modulators.

Mr. Garver is a member of the American Physical Society.

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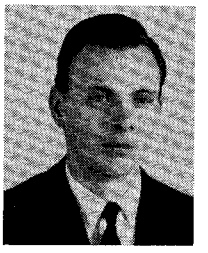

Peter S. Hauge (S'66) was born in Minneapolis, Minn., on November 3, 1940. He received the B.S. and M.S.E.E. degrees in electrical engineering from the University of Minnesota, Minneapolis, in 1961 and 1963, respectively.

He is presently a Research Fellow at the University of Minnesota, engaged in research in the use of microwaves as a diagnostic tool for investigating transport properties of semiconductors. He is currently a candidate for the Ph.D. degree in electrical engineering at the University.

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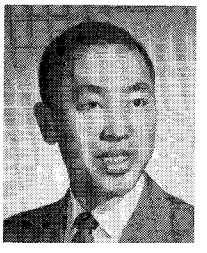

Ting Hei Mak (S'61–M'64) was born in Hong Kong, China, on November 21, 1937. He received the B.S. degree in electrical engineering from Polytechnic Institute of Brooklyn, Brooklyn, N. Y., in 1963, and completed one year of graduate studies at the same institution.

In 1965, he joined the Harry Diamond Laboratories, U. S. Army Materiel Command, Washington, D. C., as an Electronic Engineer and has since been engaged in the design and development of semiconductor microwave switches and ferrite phase shifters.

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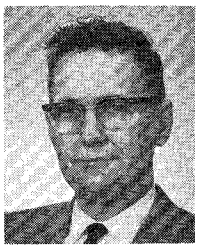
Robert A. Moore (S'54, M'58) was born in Cullman, Ala., on August 12, 1932. He received the B.S. degree in electrical engineering from the University of Alabama, University, in 1954, and the M.S. and Ph.D. degrees in electrical engineering from Northwestern University, Evanston, Ill., in 1956 and 1960, respectively.



Except for six months active Army duty at which time he was assigned to the Switching Devices Group, Ft. Monmouth, N. J., where he conducted research on ferrite devices, he has been employed by the Aerospace Division, Westinghouse Defense and Space Center, Baltimore, Md. During this period he has conducted studies on microwave propagation and radar systems. More recently he has been concerned with ferrimagnetic techniques and devices. He is presently in charge of the Ferrimagnetic Technology Group where he is concerned with development of ferrimagnetic waveguide devices and delay lines.

Dr. Moore is a member of the American Institute of Physics. He is a past Chairman of the Baltimore Chapter of AP/MTT.

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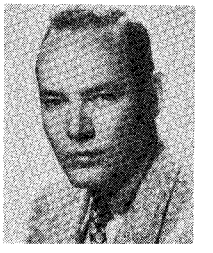

Charles B. Sharpe (S'46–A'52–M'57–SM'60) was born in Windsor, Ontario, Canada, on April 8, 1926. He received the B.S. degree from the University of Michigan, Ann Arbor, in 1947, the S.M. degree from the Massachusetts Institute of Technology, Cambridge, in 1949, and the Ph.D. degree from the University of Michigan, in 1953, all in electrical engineering.

From 1953 to 1955 he served as Assistant Project Officer in the guided missile branch of the U. S. Navy Bureau of Ordnance, Washington, D. C., and as a Technical Aide in the Office of Naval Research. Since 1955, when he returned to the University of Michigan, he has conducted research in microwave circuit theory, microwave measurements of ferroelectrics, linear array theory, and the synthesis of nonuniform lines. In 1961 he became associated with the Radar and Optics Laboratory of the Institute of Science and Technology at the University and currently is a Professor of Electrical Engineering there.

Dr. Sharpe is a member of Tau Beta Pi and Sigma Xi.

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James R. Wait (SM'56–F'62) was born in Ottawa, Canada, on January 23, 1924. During World War II he was in charge of a radar maintenance group at Kingston, Ontario, Canada. After the war he received the B.A.Sc. and M.A.Sc. degrees in engineering physics

in 1948 and 1949, respectively, and the Ph.D. degree in electromagnetic theory in 1951, all from the University of Toronto, Toronto, Ontario.

From 1948 to 1951 he was associated with Newmont Exploration, Ltd., in New York, N. Y., and Jerome, Ariz. From 1952 to 1955 he was a Section Leader at the Defense Research Telecommunications Establishment, Ottawa, where he was primarily concerned with electromagnetic problems. Since joining the National Bureau of Standards, Boulder, Colo., in 1955, he has concentrated on the theoretical aspects of radio propagation. In 1961 he was appointed Adjoint Professor of Electrical Engineering at the University of Colorado, Boulder. For the academic year 1966–1967 he was a Visiting Professor at Harvard University, Cambridge, Mass. Since 1963 he has been a Senior Research Fellow at the Environmental Science Services Administration, Boulder, where he is also a Consultant to the Director of the Institute of Telecommunication Sciences and Aeronomy.

Dr. Wait was awarded the Department of Commerce Gold Medal for highly distinguished authorship in the field of radio propagation in 1958, the Boulder Scientist Award sponsored by the Scientific Research Society of America in 1960, the NBS Samuel Wesley Stratton Award in 1962, and the Arthur S. Flemming Award, Washington, D. C., Chamber of Commerce, and the Harry Diamond Award from the IEEE, both in 1964. He is also a member of the U. S. National Committee of URSI and the Administrative Committee of the Group on Antennas and Propagation.

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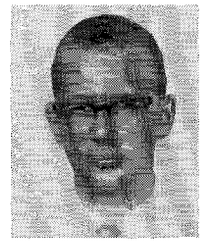

Denis C. Webb (M'62) was born in Skowhegan, Me., on May 12, 1938. He received the B.S. degree in engineering physics in 1960, and the M.S. degree in physics in 1961, both from the University of Michigan, Ann Arbor.

From 1961 to 1966 he was employed by the Westinghouse Defense and Space Center, Baltimore, Md. His work included studies of electromagnetic propagation structures, particularly for delay line and millimeter-wave maser applications. He also conducted investigations of magnetoacoustic and magnetostatic mode phenomena for purposes of amplification, delay, and frequency conversion. In 1966 he joined the W. W. Hansen Laboratories of Physics, Stanford, Calif., where he is investigating magnetoacoustic propagation in axially magnetized rods and pursuing graduate studies at Stanford University.

Mr. Webb is a member of Tau Beta Pi.

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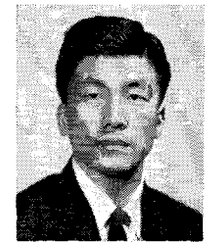

Eikichi Yamashita (M'66) was born in Tokyo, Japan, in 1933. He received the B.S. degree from the University of Electro-communications, Tokyo, in 1956, and the M.S. and Ph.D. degrees from the University of Illinois, Urbana, in 1963 and 1966, respectively, all in electrical engineering.

He was a member of the research staff on millimeter-wave engineering at the Electrotechnical Laboratory, Tokyo, Japan, from 1956 to 1964. He was with the Electro-Physics Laboratory at the University of Illinois from 1961 to 1963, and from 1964 to 1966. Since 1966 he has been with the Antenna Laboratory at the University. His research work since 1956 has been on microstrip transmission lines, hybrid modes of Goubau lines, wave propagation in a gaseous plasma, microwave harmonic generation in a gaseous plasma, the pyroelectric effect detector in the submillimeter-wave region, and tunnel diode oscillators.

Dr. Yamashita is a member of the Institute of Electrical Communication Engineers of Japan and Sigma Xi.