Joseph W. Simon (S'55) was born in Owensboro, Ky., on May 18, 1931. He received the B.S. degree in electrical engineering from the University of Kentucky, Lexington, and the M.S. degree in microwave engineering from the University of Florida, Gainesville, in 1958 and 1963, respectively.

In 1958 he joined Sperry Microwave and Electronics Company, Clearwater, Fla., as a Design and Development Engineer of ferrite and microwave components. In 1964 he joined Scientific Atlanta Inc., Atlanta, Ga., as a Senior Engineer in the microwave development area.

Mr. Simon is a member of Omicron Delta Kappa, Tau Beta Pi, and Eta Kappa Nu.

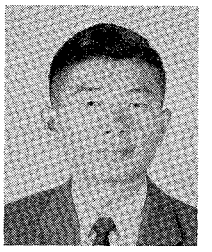
❖

R. J. Wenzel (S'61–M'62) was born in Milwaukee, Wis., on September 11, 1939. He received the B.S. degree in electrical engineering from Marquette University, Milwaukee, Wis., in 1961, and the M.S. degree in electrical engineering from the Massachusetts Institute of Technology, Cambridge, in 1962, under an Alfred P. Sloan Fellowship.

He joined the Research Laboratories Division of The Bendix Corp., Southfield, Mich. in 1962, where he has been engaged in the development of exact synthesis techniques for distributed networks, solid-state parametric devices, and harmonic generators.

Mr. Wenzel is a member of Tau Beta Pi, Eta Kappa Nu, Pi Mu Epsilon, and an associate member of Sigma Xi.

❖



Cavour W. H. Yeh (S'56–M'63) was born in Nanking, China, on August 11, 1936. He received the B.S., M.S., and Ph.D. degrees in electrical engineering from the California Institute of Technology, Pasadena, in 1957, 1958, and 1962, respectively.

From 1959 to 1962 he was a part-time Instructor in the Electrical Engineering Department, University of Southern California. He has been an Assistant Professor in the Electrical Engineering Department, University of Southern California, Los Angeles, since 1962. At present he is also a Consultant with the Jet Propulsion Laboratory, Pasadena. His research has been concerned chiefly with the guiding and propagation of microwave, and electromagnetic diffraction problems.

Dr. Yeh is a member of Sigma Xi and Eta Kappa Nu.

Selected Microwave Papers

Based on technical merit and timeliness, microwave papers in journals published outside the United States have been selected and compiled below, many with annotations. Reprints of the papers may be obtainable by writing directly to the author. The papers are in English unless noted otherwise.

—K. Tomiyasu, *Associate Editor for Abstracts*

PAPERS FROM JOURNALS PUBLISHED IN ENGLAND. COMPILED BY DR. E. A. ASH, UNIVERSITY COLLEGE, LONDON.

16) Multiplicative Processing Antenna Systems for Radar Applications, A. Ksienski, Hughes Aircraft Co., Culver City, Calif. *Radio and Electronic Engineer*, vol 29, pp 53–67; Jan 1965. (Presents a theoretical investigation of antenna systems using nonlinear processing techniques and evaluates the obtainable improvement in resolution. An experiment carried out at *X* band essentially confirms the theory.)

17) Some Applications of the Scattering Matrix, P. C. J. Hill, B.B.C. Research Station, Kingswood Warren, Tadworth, Surrey, England, *Proc. IEE*, vol 112, pp 15–20; Jan 1965. (A tutorial article.)

18) Method for Measurement of Plane Resistors at Microwave Frequencies, E. Schanda, L. v.d. Kint, and J. T. Murnaghan, Mr. Schanda is at Bern University, Bern, Switzerland, *Proc. IEE*, vol 112, pp 49–54; Jan 1965. (Describes a method of measuring the resistivity of lossy sheets by locating the sheet in a waveguide, transverse to the propagation direction, and a quarter guide wavelgnth from a short circuit. Detailed graphs to facilitate evaluation of measurements are presented. Results obtained at 7 Gc for a number of different materials are compared with the values predicted from dc measurements.)

19) Radiation from an Electric Dipole in a Plasma Column, S. R. Seshadri, Sylvania Electronic Systems, Waltham, Mass., *Proc. IEE*, vol 112, pp 249–253; Feb 1965. (The analysis, which relates to a cold, collisionless plasma is concerned with evaluating the portion of the power which is radiated, related to that which propagates as a surface wave. Conditions where the latter is small [of interest for vehicle re-entry problems] are found.)

20) Current Distribution and Impedance of an Antenna in a Parallel Plate Region, B. Rama Rao, Harvard University, Cambridge, Mass., *Proc. IEE*, vol 112, pp 259–268; Feb 1965. (An integral equation approach leads to an expression for the current distribution in closed form, which is shown to predict experimental results adequately. The study is particularly concerned with resonances near the points where the plates are separated by half a wavelength.)

21) Waves Guided by a Boundary with Time-Space Periodic Modulation, E. S. Cassedy, Polytechnic Institute of Brooklyn, Brooklyn, N. Y., *Proc. IEE*, vol 112, pp 269–279; Feb 1965. (Presents a very general treatment which embraces both propagation in periodic structures and parametric electronics and electromagnetic wave mixing phenomena. The waves found in the latter case are shown to satisfy the Manly-Rowe relationship.)

22) Development of Group Delay Equalizers for 4 Gc/s, D. Merlo, Post Office Research Station, Dollis Hill, London, England, *Proc. IEE*, vol 112, pp 289–295; Feb 1965. (Following a brief account of the theory of equalizers based on cavity chains in two arms of a 3 dB coupler, some specific designs carried out in the 4 Gc/s band are described. Experimental results include data on overall delay variation with ambient temperature.)