

CONTRIBUTORS TO THIS ISSUE

E. Arthurs, Ph.D., 1957 (Electrical Engineering), Massachusetts Institute of Technology; M.I.T., 1957-1962; Bell Laboratories, 1962—. From 1957 to 1962 Mr. Arthurs was on the faculty of the M.I.T. Electrical Engineering Department. Since joining Bell Laboratories in 1962, he has worked on a variety of computer and communication network problems.

Václav E. Beneš, A.B., 1950, Harvard College; M.A. and Ph.D., 1953, Princeton University; Bell Laboratories, 1953—. Mr. Beneš has pursued mathematical research in traffic theory, stochastic processes, frequency modulation, combinatorics, servomechanisms, stochastic control, and filtering. In 1959-60 he was visiting lecturer in mathematics at Dartmouth College. In 1971 he taught stochastic processes at SUNY Buffalo, and in 1971-72 he was Visiting MacKay Lecturer in electrical engineering at the University of California in Berkeley. He is the author of *General Stochastic Processes in the Theory of Queues* (Addison-Wesley, 1963), and of *Mathematical Theory of Connecting Networks and Telephone Traffic* (Academic Press, 1965). Member, American Mathematical Society, Association for Symbolic Logic, Institute of Mathematical Statistics, SIAM, Mathematical Association of America, IEEE, Phi Beta Kappa.

Ronald Caruso, B.S., 1956, Rutgers University; M.S., 1964, Stevens Institute of Technology; Bell Laboratories, 1968—. Mr. Caruso is engaged in materials characterization of semiconductor crystals and epitaxial iron garnet films. Member, American Chemical Society, Phi Beta Kappa, Pi Mu Epsilon, Phi Lambda Upsilon.

Gerard J. Foschini, B.S.E.E., 1961, Newark College of Engineering, Newark, NJ; M.E.E., 1963, New York University, New York; Ph.D., 1967 (Mathematics), Steven Institute of Technology, Hoboken, NJ; Bell Laboratories, 1961—. Mr. Foschini has been with Bell Laboratories, Holmdel, NJ, since 1961. He initially worked on real-time program design. For many years he worked in the area of communication theory. In the spring of 1979 he taught at Princeton University. Mr. Foschini has supervised planning the architecture of data communications networks. Currently, he is involved with digital radio research. Member, Sigma Xi, Mathematical Association of America, IEEE, New York Academy of Sciences.

Craig A. Gaw, B.S. (with Distinction), 1970, M.S., 1974, Ph.D., 1979 (Electrical Engineering), Northwestern University; Argonne National Laboratory, 1967-1970; Bell Laboratories, 1978—. At Bell Laboratories, Mr. Gaw has been engaged in the characterization of GaAs double heterostructure injection laser material and devices. He is particularly interested in identifying parameters that affect device quality and reliability. Member, Tau Beta Pi, Sigma Nu, Sigma Xi, IEEE, EMSA.

Basil W. Hakki, B.S.E.E., 1957, M.S., 1958, Ph.D., 1960 (Electrical Engineering), University of Illinois; Bell Laboratories, 1963—. After joining Bell Laboratories, Mr. Hakki was involved in the design and analysis of GaAs two-valley microwave oscillators. He then worked with III-V light-emitting diodes and lasers. His work on GaAs double heterostructure injection lasers covered many aspects of the laser, including reliability, device design for cw and high-power operation, and device physics. He is currently involved in the study of quaternary lasers.

Walter R. Holbrook, B.S.M.E., 1969, Lafayette College; Bell Laboratories, 1959—. At Bell Laboratories Mr. Holbrook's work included the design of light-emitting diodes. Currently, he is a member of the Laser Development Department.

Andrew S. Jordan, B.S. (Metallurgy), 1959, Pennsylvania State University; Ph.D. (Metallurgy), 1965, University of Pennsylvania; Bell Laboratories, 1965—. Mr. Jordan has worked mainly in the area of compound semiconductors. He had been involved in the growth, phase equilibria, and impurity incorporation of ZnTe, CdTe, GaP, and GaAs. More recently, he has studied the degradation and reliability of GaP LEDs. Currently, he is engaged in modeling GaAs crystal growth. Member, Electrochemical Society.

Chinlon Lin, B.S.E.E., 1967, National Taiwan University; M.S., 1970, University of Illinois; Ph.D., 1973, University of California at Berkeley; Bell Laboratories, 1974—. Mr. Lin has worked on tunable dye lasers, short-pulse generation, nonlinear optics in fibers for frequency conversion, single-mode fiber dispersion and bandwidth studies, picosecond-injection-laser pulse generation and high-speed optoelectronics. At Berkeley, he received an IBM Fellowship and a Lankersheim Scholarship. He is currently in the Physical Optics and Electronics Research Department. Mr. Lin received an IEE (London) Electronics Letters Premium Paper Award in 1980 for a paper on zero-

dispersion-wavelength tailoring in single-mode fibers. Senior Member, IEEE, Topical Advisor for Fiber and Integrated Optics for the Optical Society of America.

Pao-Lo Liu, B.S., 1973 (Physics), National Taiwan University; M.S., 1976, Ph.D., 1979 (Applied Physics), Harvard University; Bell Laboratories, 1979—. At Bell Laboratories, Mr. Liu has worked on picosecond pulse generation, high-speed integrated optical modulators. He is currently a member of the Coherent Optics Research Department.

Dan L. Philen, B.S., 1968 (Chemistry), Auburn University; Ph.D., 1975 (Physical Chemistry), Texas A&M University; Georgia Institute of Technology, 1976–1979; Bell Laboratories, 1979—. Since joining Bell Laboratories Mr. Philen has been engaged in exploratory measurements on optical fiber properties. Member, American Chemical Society, Optical Society of America, Sigma Xi, Sigma Pi Sigma, Phi Lambda Upsilon.

Jack Salz, B.S.E.E., 1955, M.S.E., 1956, and Ph.D., 1961, University of Florida; Bell Laboratories, 1961—. Mr. Salz first worked on remote line concentrators for the electronic switching system. Since 1968 he has supervised a group engaged in theoretical studies in data communications and is currently a member of the Communications Methods Research Department. During the academic year 1967–68, he was on leave as Professor of Electrical Engineering at the University of Florida. In Spring 1981, he was a visiting lecturer at Stanford University. Member, Sigma Xi.

B. W. Stuck, S.B., S.M., Sc.D. (Electrical Engineering), Massachusetts Institute of Technology in 1969, 1969, and 1972, respectively; Bell Laboratories, 1972—. Since joining Bell Laboratories in 1972, Mr. Stuck has worked on a variety of digital communication and computer systems. Member, MAA, SIAM, IMS, ORSA, IEEE.

Akira Tomita, B.S., 1974, M.S., 1978 (Applied Physics), Hokkaido University, Sapporo, Japan; M.S., 1979, Ph.D., 1980 (Optics), University of Arizona; Bell Laboratories, 1980—. Mr. Tomita has worked in the field of nonlinear optical phase conjugation. He is currently working on lightwave telecommunication systems.

A. R. Tynes, B.S., 1950 (Engineering Physics), Montana State University; M.S., 1953 (Physics), Ph.D., 1963 (Physics), Bell Labora-

tories, 1961—. Presently Mr. Tynes is a member of the Undersea Systems Laboratory.

Allyn R. Von Neida, B.S. (E.E.), B.S. (Metallurgy), 1954, Lehigh University; Ph.D., 1960, Yale University; Bell Laboratories, 1961—. Mr. Von Neida has worked on materials for magnetic memories and is now engaged in crystal growth and characterization of semiconductors. Member, AIME, American Physical Society, Sigma Xi.