## Contributors to This Issue

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 III-V semiconductor crystals and epitaxial iron garnet films. Member, American Chemical Society, Phi Beta Kappa, Pi Mu Epsilon, Phi Lambda Upsilon.

Thomas R. Elken, B.A., 1974, St. Olaf College; Ph.D., Operations Research, 1977, Stanford University; Bell Laboratories, 1977—. Mr. Elken has worked on models and algorithms for allocating capacity in the loop network. He is currently developing algorithms for loop capacity expansion when the alternatives are cable, pair gain systems, and range extension equipment. Member, Operations Research Society of America, Phi Beta Kappa.

Winfield J. Giguere, B.S.E.E., 1954, University of New Hampshire; Bell Laboratories, 1954—. Mr. Giguere's early years with the Laboratories included development work on carrier systems and exploratory development of Bellboy® and high-speed PCM circuits. He was active in the design and development of a preliminary four-phase data transmission set in 1960. As an equipment packaging engineer, he was engaged in the command system equipment design for the Telstar satellite experiment. In 1963, he became supervisor of a physical design group engaged in the packaging of voice frequency transmission and ac signaling equipment. In 1972 he became Head, Exchange Transmission Physical Design Department, and in that capacity became SARTS Project Manager until April 1979. He is now Head, Digital Processing and Physical Design Department with responsibility for DACS development. Member, IEEE, Tau Beta Pi, Phi Kappa Phi.

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.

Fred J. Pfeufer, B.E.E., 1960, City College of New York; M.E.E., 1962, New York University; Bell Laboratories, 1960—. Mr. Pfeufer has worked on a variety of projects including design and development of units for Type E and Type F sf signaling, exploratory development for common channel signaling, and initial designs for the Metallic Facility Terminal (MTF). Most recently, he coordinated the development planning and specifications for the first sarts generics, and he led the development of the sarts human-machine interface. He is currently with AT&T, where he is a staff specialist in the Network Design Division. Member, Eta Kappa Nu, Tau Beta Pi.

Vasant K. Prabhu, B.E. (Dist.), 1962, Indian Institute of Science, Bangalore, India; S.M., 1963, Sc.D., 1966, Massachusetts Institute of Technology; Bell Laboratories, 1966—. Mr. Prabhu has been concerned with various theoretical problems in solid-state microwave devices and digital and optical communication systems. Member, IEEE, Eta Kappa Nu, Sigma Xi, Tau Beta Pi, and Commission 6 of URSI.

Lawrence R. Rabiner, S.B. and S. M., 1964, Ph.D. (electrical engineering), Massachusetts Institute of Technology; Bell Laboratories, 1962—. From 1962 through 1964, Mr. Rabiner participated in the cooperative plan in electrical engineering at Bell Laboratories. He worked on digital circuitry, military communications problems, and problems in binaural hearing. Presently, he is engaged in research on speech communications and digital signal processing techniques. He is coauthor of Theory and Application of Digital Signal Processing (Prentice-Hall, 1975) and Digital Processing of Speech Signals (Prentice-Hall, 1978). Former President, IEEE, G-ASSP Ad com; former Associate Editor, G-ASSP Transactions; former member, Technical Committee on Speech Communication of the Acoustical Society. Member, G-ASSP Technical Committee of the Acoustical Society, G-ASSP Technical Committee on Speech Communication, IEEE Proceedings Editorial Board, Eta Kappa Nu, Sigma Xi, Tau Beta Pi. Fellow, Acoustical Society of America and IEEE.

Aaron E. Rosenberg, S.B (E.E) and S.M. (E.E.), 1960, Massachusetts Institute of Technology; Ph.D. (E.E.), 1964, University of Pennsylvania; Bell Laboratories, 1964—. Mr. Rosenberg is presently engaged in studies of systems for man-machine communication by voice in the Acoustics Research Department at Bell Laboratories. Member, Eta Kappa Nu, Tau Beta Pi, Sigma Xi; fellow, Acoustical Society of America; member, IEEE and IEEE Acoustics, Speech, and Signal Processing Group Technical Committee on Speech Processing.

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. He has since engaged in theoretical studies of data communications and is currently supervisor of the Data Theory Group. During the academic year 1967–68, he was on leave as Professor of Electrical Engineering at the University of Florida. Member, Sigma Xi.

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 III-V semiconductors. Member, AIME, American Physical Society, Sigma Xi.

Jean-Jacques Werner, Ing. Deg., 1965, INSA, Lyon, France; M.S. (E.E.), 1967, Laval University, Canada; Eng. Sc.D. (E.E.), 1973, Columbia University; Bell Laboratories, 1973—. At Bell Laboratories, Mr. Werner has worked on problems in data transmission and digital signal processing. Member, Sigma Xi, IEEE.

Jay G. Wilpon, B.S. (mathematics), A.B. (economics), (cum laude), 1977, Lafayette College; Bell Laboratories, 1977—. At Bell Laboratories, Mr. Wilpon has been engaged in speech communications research and is presently concentrating on problems of speech recognition.

