Contributors to This Issue

Sved V. Ahamed, B.E., 1957, University of Mysore; M.E., 1958, Indian Institute of Science; Ph.D., 1962, University of Manchester, U.K.; Post-Doctoral Research Fellow, 1963, University of Delaware; Assistant Professor, 1964, University of Colorado; M.B. A. (Economics), 1978, New York University; Bell Laboratories, 1966-. At Bell Laboratories, Mr. Ahamed has worked in computer-aided engineering analysis and design of electromagnetic components, designed and implemented minicomputer software and hardware interfacing, applied algebraic analysis to the design of domain circuits, and investigated computer aids to the design of bubble circuits. He has investigated new varacter designs for microwave power in the C-band and developed hardware and software interfacing for audio frequency codecs. Beginning in 1975, he optimized codec designs, encoding techniques, and speech-encoded data storage and manipulation by minicomputers. Since 1977, he has been simulating the overall performance of the loop plant while carrying bidirectional digital data in the range of 56 to 324 kbaud.

Jont B. Allen B.S. (E.E.), 1966, University of Illinois; M.S., 1968, Ph.D., 1970, University of Pennsylvania; Bell Laboratories, 1970—. Mr. Allen is presently working in the areas of cochlear modeling, small room acoustics, dereverberation of speech signals, and digital signal processing. His main efforts have been directed toward cochlear mathematical modeling, the problem of removing room reverberation from recorded speech signals by digital signal processing, and modeling the psychophysical effects of room reverberation.

Charles J. Aloisio, Jr., B. S. (E.E.), 1965, Newark College of Engineering; M.S., 1968, Ph.D. (Eng.), 1970, School of Aeronautics and Engineering Sciences, Purdue University; Bell Laboratories, 1952—. At Bell Laboratories, Mr. Aloisio has been investigating the mechanical and electrical characteristics of plastics and the relationship between

processing and the resulting properties of plastics. He is currently supervisor of the Plastics Engineering and Characterization Group.

Ray R. Cammons, A.A. (Mechanical Engineering), Southern Technical Institute; Certified Apprenticeship, Aircraft Tooling, Lockheed Aircraft Corp; Western Electric, 1972–1977; Bell Laboratories, 1977—. Mr. Cammons has had experience in plastic compounding and wire and cable extrusion, and currently is working in injection molding and mold design.

Allen H. Cherin, B.E.E., 1961, City College of New York; M.S.E.E., 1965, University of Vermont; Ph.D. (E.E.), 1971, University of Pennsylvania; Bell Laboratories, 1965–. Mr. Cherin is engaged in studies associated with the characterization, splicing, and packaging of optical fibers. Member, IEEE, OSA.

Fan R. K. Chung, B.S., 1970, National Taiwan University; Ph.D., 1974, University of Pennsylvania; Bell Laboratories, 1974—. Mrs. Chung's current interests include combinatorics, graph theory, and the analysis of algorithms. She is presently investigating various problems in the theory of switching networks.

Juan R. Maldonado, Doctor in Ciencias Fisico Matematicas, 1961, University of Havana, Cuba; Ph.D., Experimental Solid State Physics, 1968, University of Maryland; CMQ-TV, Havana, Cuba, 1957-61; University of Havana, 1960-61; University of Maryland, 1962-68; Bell Laboratories, 1968—. Mr. Maldonado was engaged at CMQ-TV with television transmitters and video equipment. He was an instructor in the E.E. and Physics Departments at the University of Havana, and was supervisor of the electronics facilities of the Physics Department and a Research Assistant at the University of Maryland. He has worked with ferroelectric ceramic electro-optic and display devices, liquid crystals, X-ray fluorescence systems, and X-ray lithography at Bell Laboratories. Member, AIP, IEEE, SPIE, AAAS, Sigma Xi, and Sigma Pi Sigma.

Dan Maydan, B.Sc. (E.E.), 1957, and M.Sc. (E.E.), 1962, Israel Institute of Technology; Ph.D. (Physics), 1965, Edinburgh University; Bell Laboratories, 1967—. Mr. Maydan has worked on acousto-optical interaction for modulating laser beams. He currently supervises a group working on X-ray lithography for the fabrication of vLsI devices and dry processing techniques. Senior Member, IEEE.

Frank C. Pirz, B.S.E.E., 1968, Polytechnic Institute of Brooklyn; M.S.E.E., 1972, M.S. Computer Science, 1972, University of Massachusetts; Bell Laboratories, 1972—. Mr. Pirz is currently involved in real-time signal processing software and hardware development in the Acoustics Research department.

Montel V. Pursley, B.S.E.E., 1960, M.S.E.E., 1967, Newark College of Engineering; Bell Laboratories, 1953—. Mr. Pursley is currently involved in processing and analysis of line-of-sight microwave radio propagation data. His earlier Bell Laboratories experience included work on single-sideband long-haul radio systems, phased array radars, and oxide coated cathodes. Member, Tau Beta Pi.

Lawrence R. Rabiner, S.B. and S.M., 1964, Ph.D. (electrical engineering), 1967, 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. Member, 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.

Philip J. Rich, B.S., 1972, University of Illinois, M.S. (Physics), 1974, Georgia Institute of Technology, Bell Laboratories, 1974-. Mr. Rich is currently engaged in studies related to the characterization and splicing of optical fibers. Member, OSA.

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.

Irwin W. Sandberg, B.E.E., 1955, M.E.E., 1956, and D.E.E., 1958, Polytechnic Institute of Brooklyn; Bell Laboratories, 1958—. Mr. Sandberg has been concerned with analysis of radar systems for military defense, synthesis and analysis of active and time-varying networks, several fundamental studies of properties of nonlinear systems, and with some problems in communication theory and numerical analysis. His more recent interests include macroeconomics and the economic theory of large corporations. Fellow and member, IEEE; member, American Association for the Advancement of Science, Eta Kappa Nu, Sigma Xi, and Tau Beta Pi.

Carolyn E. Schmidt, B.S. (Mathematics), 1974, Lafayette College; Bell Laboratories, 1974—. Miss Schmidt is a member of the Acoustic Research Department and is currently involved in work on speech communications. Member, Phi Beta Kappa.

Arvids Vigants, B.E.E., 1956, City College of New York; M.S. (E.E.), 1957, Eng. Sc.D. (E.E.), 1962, Columbia University; Bell Laboratories, 1962—. Mr. Vigants has worked on various electromagnetic wave propagation topics and is currently working on problems in line-of-sight microwave propagation and microwave radio systems. Member, Eta Kappa Nu, Tau Beta Pi, Sigma Xi, URSI/USNC Commission F, IEEE.