Contributors to This Issue

Stuart L. Blank, B.S. (ceramic engineering), 1962, Alfred University, New York State College of Ceramics; M.S. (materials science), 1964, Ph.D. (materials science), 1967, University of California; Bell Laboratories, 1969—. Mr. Blank has been involved in investigating the growth of materials by liquid-phase epitaxy, in developing new materials for magnetic bubble device applications, and in transferring the epitaxial growth technology to Western Electric for production of magnetic bubble materials. He is also investigating crystal growth, phase transitions, and defects in oxide materials. At present, he is supervisor of the Epitaxial Materials and Processes group in the Electronic Materials and Processes Department. Member, American Ceramic Society, National Institute of Ceramic Engineers, American Association for Crystal Growth.

Andrew H. Bobeck, B.S. (electrical engineering), 1948, M.S. (electrical engineering), 1949, Purdue University; Bell Laboratories, 1949—. Mr. Bobeck has specialized in the development of magnetic components. His early work involved the first solid-state driven core memory and the twistor memory. His interest in magnetic logic and storage eventually led to the magnetic bubble concept. A significant contribution to magnetic bubble development was the discovery that garnet materials can be prepared with a growth-induced uniaxial anisotropy, an observation that led to the epitaxial garnet films in general use today. At present, he supervises an activity aimed at the development of very high density bubble devices. Distinguished Engineering Alumnus, 1968, Doctor of Engineering (honorary), 1972, Purdue University; Stuart Ballantine medal, 1973, Franklin Institute; co-recipient, 1975, Morris Liebmann award; National Academy of Engineering, 1975; Valdemar Poulsen Gold Medal, 1976, Danish Academy of Technical Sciences. Fellow, IEEE, Tau Beta Pi, Eta Kappa Nu. He has been awarded more than 115 patents.

A. Duane Butherus, B.S. (chemistry), 1961, Andrews University; Ph.D. (chemistry), 1967, Michigan State University; Bell Laboratories,

1967—. Mr. Butherus has done materials investigations in a range of fields including polymers, solid-state ion conductors, and other electrochemically related systems. His current interests are in plasma chemistry and bubble memory processing techniques.

Frank J. Ciak, Bell Laboratories, 1968—. Mr. Ciak has worked in the Device Design Group on the development of magnetic bubble memory devices and associated test equipment. He designed magnet-setting apparatus and in-process bubble device test stations currently in use at Western Electric, Reading, Pa.

Nicholas F. Maxemchuk, B.S.E.E., 1968, City College of New York; M.S.E.E., 1970, Ph.D. 1974, University of Pennsylvania; RCA Laboratories, 1968–1976; Bell Laboratories, 1976—. Since joining Bell Laboratories, Mr. Maxemchuk has been a member of the technical staff of the Electronic and Computer Systems Research Laboratory.

Carlo Scagliola, Dr. Ing. (Electronic Engineering) 1970, University of Pisa, Italy. Mr. Scagliola has been with CSELT (Centro Studi e Laboratori Telecomunicazioni), Turin, Italy since 1970, where he is presently Head, Speech Processing Department. He has been engaged in adaptive speech coding, in assessment of the quality of digitally coded speech, and in studies on automatic synthesis of the Italian language. He served as a consultant at Bell Laboratories from January 1977 through January 1978.

David H. Smithgall, B.S. (E.E.), 1967, M.S. (E.E.), 1968, Ph.D. (E.E.), 1970, Cornell University; Western Electric Engineering Research Center, 1970—. Mr. Smithgall has worked in various areas of process control and has published in the areas of optical waveguides, control, microprocessor applications, and optical fiber measurements. His current interests include the measurement, characterization, and control of optical fiber manufacturing processes. Member, IEEE.

Walter Strauss, B.E.E., 1948, College of the City of New York; Ph.D. (physics), Columbia University, 1961; Department of Electrical Engineering, College of the City of New York, 1948–1953; Bell Laboratories, 1960—. At Bell Laboratories, Mr. Strauss has been concerned with problems related to magnetoelasticity, piezoelectricity, and magnetic devices. Member, American Physical Society, Eta Kappa Nu, New York Academy of Sciences.

John Stuller, B.S.E.E., 1963, Massachusetts Institute of Technology; M.S.E.E.; 1967, University of Southern California; Ph.D., 1971, University of Connecticut; Northrop Nortronics Corp., 1963–1965; TRW Systems Group, 1965–1968; Perkin Elmer Corp. 1970–1971; Department of Electrical Engineering, University of New Brunswick, Fredericton, New Brunswick, Canada, 1971–1974; Bell Laboratories, 1977—. At Bell Laboratories, Mr. Stuller has been engaged in analytical and simulation studies of both intraframe and interframe video coders. His primary area of interest is in the statistical theory of communications and its application.

Hans S. Witsenhausen, I.C.M.E., 1953 and Lic. Sc. Phys., 1956, Université Libre de Bruxelles; Ph.D., 1966, Massachusetts Institute of Technology; Electronic Associates, 1957–63; Electronic Systems Laboratory, 1963–65; Hertz Fellow, 1965–66; Bell Laboratories, 1966—. Mr. Witsenhausen is currently working in the Communications Analysis Research Department. He has published articles on hybrid computation, control theory, optimization, geometric inequalities, and other applied mathematical fields. He was Senior Fellow at Imperial College of Science and Technology, London, in 1972, visiting professor at M.I.T. in 1973, and Vinton Hayes senior fellow at Harvard University in 1975–76. Member, American Mathematical Society, IEEE, Sigma Xi.