

Authors

Brian S. Berry

B.Sc., 1949; M.Sc., 1951; Ph.D., 1954, University of Manchester. Was Assistant Lecturer in Metallurgy, University of Manchester, 1950-54. Post-doctoral research appointment at Yale University, 1954-56. Investigator with the Fulmer Research Institute, 1956-58. Has been with the Metallurgy Group since joining IBM Research in 1958, and has worked principally on the use of mechanical relaxation phenomena to study point defects in metallic crystals. Member of Sigma Xi, The Institute of Metals, and The American Institute of Mining, Metallurgical and Petroleum Engineers.

David Dew-Hughes

B.Sc. in Physical and Theoretical Metallurgy, 1954, Birmingham University; D. Eng. in Physical Metallurgy, 1959, Yale University. Joined IBM Research in 1958 as associate engineer in the Semiconductor Research Department. Is now University Demonstrator in Metallurgy at Cambridge, England. Member of The Institute of Metals, The American Institute of Mining, Metallurgical and Petroleum Engineers, American Society for Metals, and Sigma Xi.

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Albert S. Hoagland

B.S., 1947; M.S., 1948; Ph.D., 1954, in Electrical Engineering at the University of California, Berkeley. Project engineer on the California Digital Computer Program, 1948 to 1950; Consultant to IBM on the RAMAC and assistant professor at the University of California, 1954 to 1956. Joined IBM Research Laboratory in San Jose 1956 where he was senior research engineer with responsibility for mass storage technology. Appointed manager of engineering sciences for the San Jose Research Laboratory in 1959. Appointed manager of departmental processing systems, Advanced Systems Development Division, San Jose, 1961; Member of Sigma Xi, Tau Beta Pi, Eta Kappa Nu, Phi Beta Kappa, AIEE, and senior member of IRE.

David P. Kennedy

Member of Radiation Laboratory, MIT, 1940-42, engaged in the design of radar equipment. From 1942-58 was employed by Raytheon Manufacturing Company as a Senior Engineer, working in the fields of microwave tubes, microwave communication system design, and semiconductor devices. Instructed at the Graduate School of Engineering, Northeastern University, 1953-58. Joined Poughkeepsie Product Development Laboratory, Data Systems Division, in 1958. Is an Advisory Physicist and presently engaged in the theoretical and mathematical analysis of semiconductor devices, Components Division. Is a member of the American Physical Society.

Robert W. Keyes

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Heinz Koehler

M.S. with major in physics and mathematics, Friedrich Schiller University, Germany, 1953. From 1953-55 associated with German Academy of Science as physicist, working in electronmicroscopy. Also worked for Siemens and Halske, 1955-56, in thin film development. From 1956-59 with Well Surveys, Inc. as physicist in basic nuclear research. In 1958 he joined IBM as an Associate Physicist in the Physical Technology Department of the General Products Division Development Laboratory in Endicott. He is now associated with the General Electric Co. Member of the American Physical Society and the German Physical Society.

Bohdan Kostyshyn

B.S. in Physics, 1951, Queens College, N. Y. From 1951-53 pursued graduate studies at Kansas State College and University of Maryland. Associated with National Bureau of Standards, 1953-55, working in high-frequency magnetic measurement. In 1955 joined IBM as Associate Physicist in the Physical Technology Department of the General Products Division Development Laboratory in Endicott. His work included both theoretical and applied

studies of magnetic phenomena. Promoted to Staff Physicist in December, 1958. In 1961 he was transferred to the IBM Space Guidance Center at Owego, N. Y., where he is continuing work on magnetic phenomena.

Ta-Cheng Ku

B.S.M.E., National Pei Yang University, 1946; M.S.M.E., University of California, 1950; Ph.D., University of California, 1953. From 1944-46, employed by the North China Power Co. as Assistant Engineer; 1951-52, Instructor in Department of Mineral Technology, University of California; 1952-53, National Research Council as Research Assistant, investigating the brittle fracture of steel. In 1953 he joined IBM as Associate Engineer in the Physical Technology Department of the General Products Division Development Laboratory in Endicott. Some of his work includes studies of print quality, mechanism of carbon transfer, photoelasticity, and wear characteristics of selected planes of single-metal crystals. Promoted to Advisory Engineer in 1956; Senior Engineer in 1958; and Manager of the Physical Technology Department in 1961.

Arthur S. Nowick

A.B., 1943, Brooklyn College; A.M., 1948, Ph.D., 1950, Columbia University. Worked as physicist at the National Advisory Committee for Aeronautics, Cleveland Laboratory, from 1944 to 1946; instructor, Institute for Study of Metals, University of Chicago, 1949-51; Assistant Professor and then Associate Professor of Metallurgy, Yale University, 1951-1957. Joined IBM in 1957 at the Watson

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Frank P. Palermo

B.S. in Mathematics, 1949, Case Institute of Technology; Sc.M. in Mathematics, 1952, and Ph.D. in Mathematics, 1955, Brown University. Joined IBM in 1960, working in the Applied Mathematics Group, Advanced Systems Development Division at Ossining, N. Y. Before joining IBM, taught mathematics at the University of Michigan, Princeton University, and Brown University. Is member of American Mathematical Society, Mathematical Association of America, and Sigma Xi.

Hwa-Nien Yu

B.S., 1953; M.S., 1954; Ph.D., 1958 (all in Electrical Engineering), University of Illinois. Worked on high speed computer design at the Digital Computer Laboratory, University of Illinois, as research assistant, 1954-1957. Joined IBM in December, 1957 in the Applied Logic Department at the Research Laboratory in Poughkeepsie. Is currently engaged in exploratory solid-state device work in the Advanced Systems Development Division at Yorktown Heights, New York. He is a member of Eta Kappa Nu, Pi Mu Epsilon, Sigma Xi, and IRE.