

Authors

John D. Axe, Jr.

B.S. in Chemistry, 1955, University of Denver; Ph.D. in Chemistry, 1960, University of California, Berkeley. National Science Foundation Post Doctoral Fellow in the Physics Department at Johns Hopkins University, 1961-62. Joined IBM in 1962 and is currently engaged in solid state optical spectroscopy at the Thomas J. Watson Research Center, Yorktown Heights, New York.

Heard Kilpatrick Baumeister

A.B., 1952, Columbia College. Joined IBM in 1952 at the Watson Scientific Computing Laboratory in New York City. Has been engaged in air lubrication and electromagnetic actuator studies. Is presently working on tape drive development at the Data Systems Division Development Laboratory in Poughkeepsie, N. Y.

James F. Gibbons

B.S., 1953, Northwestern University; National Science Foundation Fellow, Stanford University, 1953-55; M.S., 1954; National Academy of Sciences Fellow, 1955-56; Ph.D. in Electrical Engineering, 1956. Was Fulbright Fellow, Cambridge University, 1956-57. Now Associate Professor, Electrical Engineering, Stanford University. Member Technical Staff, Bell Telephone Laboratories, 1956. Consultant, Shockley Transistor Corporation, since 1957. Chief interests are in transistor circuits and solid state devices. Member Phi Eta Sigma, Pi Mu Epsilon, Eta Kappa Nu, Tau Beta Pi, and Sigma Xi.

Etienne Gorog

Baccalauréat degree, University of Paris, first part 1952, second part 1953; Licence és-Sciences, 1957, University of Paris and Rennes; Doctorate degree in Applied Mathematics, with distinction and honors, 1961, (3rd cycle thesis), Faculté des Sciences, Grenoble. Joined IBM World Trade Corporation in 1960 at the IBM France Laboratory and has been engaged in research on applications of modern algebra to coding and switching theory.

Thomas G. Greene

B.E. in Electrical Engineering, 1961, Yale University. Joined IBM in 1961 at the Poughkeepsie Scientific Computation Center, Data Systems Division. Member of ACM and IEEE.

Maurice Hanan

B.S. in Mathematics, 1955, Brooklyn Polytechnic Institute; M.S., 1958, Ph.D. in Mathematics, 1960, Carnegie Institute of Technology. Was an Instructor of Mathematics at Carnegie Institute Technology. Joined IBM in 1960 at the Ossining, N. Y., Laboratory of the Advanced Systems Development Division. Since 1961 has been working in coding theory. Now on leave of absence from IBM for the academic year 1962-63 as Assistant Professor in the Engineering Science Department at Pratt Institute. Member of Pi Mu Epsilon, Sigma Xi, and the American Mathematics Society.

William E. Harding

B.S., 1949; M.S. in Physics, 1950, Polytechnic Institute of Brooklyn. From 1950-57 was director of Germanium and Silicon Semiconductor Research and Development Department at Radio Receptor Company, Inc. Joined IBM in 1957 and is currently working in engineering and development of semiconductor components, Components Division, Poughkeepsie, N. Y. Member of Sigma XI, American Physical Society and IEEE.

Gabor Koves

B.S.M.E., 1950, Budapest Institute of Technology, Budapest, Hungary. M.S. in Physical Metallurgy, 1962, Illinois Institute of Technology. Associate Professor of Metallurgy at Budapest Institute of Technology, 1949-56. Joined IBM in 1957. Presently staff metallurgist at the General Products Division Development Laboratory, Rochester, Minnesota. Member Alpha Sigma Mu, American Society for Metals, and American Institute for Mining, Metallurgical, and Petroleum Engineers.

Herbert J. Kump

B.S. in Physics, 1951, Pennsylvania State University; M.E.E., 1960, Syracuse University. Joined IBM at Endicott, New York in 1955 and has worked in the magnetic recording and storage field. Is presently engaged in the development of a magnetic thin film memory in the Components Division at Poughkeepsie, New York.

William E. Langlois

Sc.B. in Physics, 1953, Notre Dame. Ph.D. in Applied Mathematics, 1957, Brown University. From 1956-59, research engineer at the Polychemicals Department, E. I. duPont de Nemours & Company, concentrating on hydrodynamics of non-Newtonian fluids. Joined IBM

in 1959 and is now studying lubricating theory at the IBM Research Laboratory at San Jose.

John R. Lankard

Served as Radar Technician in U. S. Air Force, 1950-54. Employed by the Department of Justice as electronic specialist 1954-60; during this period studied Physics at Long Island University. Is now attending Marist College, Poughkeepsie, New York. Joined IBM in 1960 and is presently working on optical resonance research at the Thomas J. Watson Research Center, Yorktown Heights, New York.

C. Michael Melas

B.S., 1951, Massachusetts Institute of Technology; M.S., 1954, University of California. Joined IBM in 1958 at the San Jose Research Laboratory. Later worked in research on data transmission systems at the Advanced Systems Development Division, San Jose. Now studying for a doctorate of science at the Sorbonne under an IBM fellowship award. Senior member IEEE.

John L. Moll

B.Sc., 1943; Ph.D. in Electrical Engineering, 1952, Ohio State University. Assistant in Mathematics, 1946-49, Instructor and Research Assistant, 1950-52, Ohio State University. Associate Professor in Electrical Engineering, 1957-60 and Professor since 1960, Stanford University. Was development engineer, magnetrons, Radio Corporation of America, 1944-45. In 1953-56, worked on transistor development, Bell Telephone Laboratories; engaged in solid state research, 1956-58. Interests have been in the fields of semiconductor electronics and high frequency oscillators. Is a Fellow of IEEE and member of American Physical Society and Sigma Xi.

Walter E. Mutter

B.S. in Chemistry, 1942, Polytechnic Institute of Brooklyn; Ph.D. in Physics, 1949, Massachusetts Institute of Technology. From 1943-46, worked on image orthicon tube development at RCA, Lancaster, Pennsylvania. Joined IBM in 1949 and has been engaged in storage tube design, character recognition studies, and semiconductor device development. Presently working on silicon switching transistors in the Components Division Laboratory at Poughkeepsie, New York. Member of American Physical Society, IEEE, Electrochemical Society, and Sigma Xi.

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. Before joining IBM in 1960, he taught mathematics at the University of Michigan, Princeton University, and Brown University.

Now at the Advanced Systems Development Division Laboratory, Yorktown Heights, N. Y. Member of American Mathematical Society, Mathematical Association of America, and Sigma Xi.

Joseph A. Pesch

B.S. in Physics, St. Norbert College, 1952; M.S. in Physics, State University of Iowa, 1957. From 1957-62 employed by Allis-Chalmers Manufacturing Company in metals research. Joined IBM at the General Products Division Development Laboratory at Rochester; main interest is magnetic and physical properties of iron alloys. Member of American Physical Society.

Norman Raver

B.E.E., 1948, City College of New York; M.E.E., 1951, Polytechnic Institute of Brooklyn. Instructor at Polytechnic Institute, 1945-51. Served in U. S. Air Force 1951-54. Formerly employed at International Telephone and Telegraph, where he worked on SAC Command and Control System, message switching exchange systems and COMLOGNET. Joined IBM in 1961 to work on centralized systems at the Advanced Systems Development Division, Yorktown Heights, New York.

William E. Rudge

B.S. in Physics, 1960, Yale University. Joined IBM at the Data Systems Division Development Laboratory in 1960, Poughkeepsie, New York. Has developed fly's eye lens technique and supplied photographic masks to development groups and pilot lines.

Yasuo Satô

M.A., 1941; Ph.D. in Seismology, 1956, Tokyo University. Joined faculty of Tokyo University in 1948, becoming Professor of Geophysics in 1961 at the Earthquake Research Institute of the University. Was Research Assistant, Columbia University, 1956-58, and Visiting Professor, Columbia University, 1960-62. Was manager of the geophysics project at the IBM Watson Laboratory in New York, 1960-62. Member of the Seismological Society of America, Seismological Society of Japan and the American Geophysics Union.

Geza Schay, Jr.

B.A., 1956, Eötvös University, Budapest, Hungary; Ph.D. in Mathematical Physics, 1961, Princeton University. Joined IBM in 1960 as a staff mathematician in the Advanced Systems Development Division. Is presently working on stochastic problems. Prior to joining IBM he worked at the Central Research Institute for Physics in Budapest, Hungary; at the Research Laboratory of Electronics of MIT, and taught physics at Tufts University.

Gerald J. Sprokel

Ph.D. in Physical Chemistry and Theoretical Physics, 1952, Utrecht University. Came to the United States in 1954, sponsored by the American Visco Co.; developed instrumentation to measure electrostatic charge distribution on yarn. In 1956, attended Oak Ridge Institute for Nuclear Studies and later established a radioisotope laboratory at American Visco Co. Joined IBM at Endicott in 1958 as a radiochemist; is presently developing radiation detection instruments.

Mirek J. Stevenson

A.B., 1953; M.A., 1954; Ph.D. 1958, Columbia University. Joined IBM in 1958 at the Poughkeepsie Research Laboratory in the Physics Department, and has worked in the field of cyclotron resonance. More recently has been working in the field of optical masers at the Yorktown Research Laboratory. Dr. Stevenson is now president of Quantum Science Corporation in New York City. Is member of American Physical Society and IEEE.