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Dr. Chaudhari is currently Manager of the Department of Amorphous and Magnetic Materials and is also coordinator of the Materials Program in Magnetic Bubbles. He joined IBM in 1966 at the Research Center to work on defects in crystalline solids, the phenomenon of superplasticity and problems in thin films. Dr. Chaudhari's education includes a B.S. in Metallurgy from the Indian Institute of Technology, Kharagpur, 1961 and an M.S. and D.Sc., both in Metallurgy, from the Massachusetts Institute of Technology which he received in 1963 and 1965, respectively. He previously was with MIT as a Research Assistant from 1961 to 1965 and a Research Associate from 1965 to 1966. In 1963 he worked for a brief period with the Danish Atomic Energy Commission. He is a member of the American Physical Society.

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Mr. Cuomo is Manager of the Materials Processing Area of the Central Scientific Services Department at the Research Center. He received a B.S. in Chemistry from Manhattan College in 1958 and an M.S. in Physical Chemistry from St. John's University in 1960, where he also served as a Teaching Assistant. He joined the Research Division in 1963 as a Staff Member. His interests are in processes for materials preparation which include sputter deposition, chemical vapor deposition, and electrodeposition. Some particular interests are in epitaxy and stoichiometric compound formation. He is a member of the Electrochemical Society and is on the Program Committee for the International Conferences on Chemical Vapor Deposition.

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Mr. Gambino is a member of the research staff in the Physical Sciences Department of the Research Center. His education includes a B.A. in Chemistry from the University of Connecticut, 1957 and graduate study in chemistry at the Polytechnic Institute of Brooklyn. He worked as a physical scientist in solid state at the U.S. Army Signal Research and Development Laboratory from 1958 to 1960 where he studied ferrite single crystal growth. He was employed by Pratt and Whitney Aircraft from 1960 to 1961. Since joining IBM in 1961, his research has been largely concerned with the compounds and alloys of the rare earth elements. Recently, he has been engaged in an investigation of the preparation and properties of materials in the amorphous state. He is a member of the American Chemical Society, American Ceramic Society and RESA.

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Dr. Gazis is Director of the General Sciences Department at the Research Center in Yorktown Heights. He joined IBM in 1961 and previously worked at the General Motors Research Laboratory. He has worked in the fields of applied mechanics and operations research with particular emphasis on applications of techniques of the mathematical and computer sciences to environmental and social problems. His education includes a Civil Engineering degree from the Polytechnic Institute of Athens, Greece in 1952, an M.S. in Civil Engineering from Stanford University, California in 1954, and a Ph.D. in Engineering Mechanics from Columbia University, New York in 1957. He received the Lanchester Prize of Operations Research in 1959 for his work on traffic theory and an IBM Outstanding Contribution Award in 1968 for a project on computer control of traffic at the Lincoln Tunnel (New York City). He is a member of the American Physical Society, the Operations Research Society of America, the American Association for the Advancement of Science and the Society for Natural Philosophy.

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Dr. Harris received a B.E.P. degree from Cornell University in 1961, and M.S. and Ph.D. degrees in Solid State Physics from the University of Illinois in 1963 and 1966, respectively. He was a post doctoral Research Associate in Physics at the University of Illinois in 1967. He joined IBM Research in 1967, where he works primarily in the fields of applied physics and semiconductor devices. Dr. Harris is a member of Sigma Xi and the American Physical Society.

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Dr. Hellwarth received the B.S.E., M.S.E. and Ph.D. degrees in Electrical Engineering from the University of Michigan in 1955, 1957, and 1961, respectively. He is now a Senior Engineer engaged in the design and planning of small data acquisition and control computing systems at the laboratory in Boca Raton. During his professional career he has worked at the Cooley Electronics Laboratory, the Communication Science Laboratory of the University of Michigan and was an officer and director at the Paralan Electronics Corporation. Dr. Hellwarth first became associated with IBM in 1962 at Poughkeepsie, New York, where he conducted experimental studies in speech processing, audio-response systems, and electro-optics. In 1965, he joined IBM as a full-time employee at the laboratory in Raleigh, North Carolina. Since then, he has worked on and managed projects in audio-response systems, data communications over common-carrier lines, and in operator-oriented communications terminals. He transferred to his current location in 1968. Dr. Hellwarth is a member of the Audio Engineering Society, Tau Beta Pi, Eta Kappa Nu, Phi Kappa Phi and Sigma Xi.

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Mr. Kelley is currently a junior at Cubberley Senior High School in Palo Alto, California. He has been involved in computer programming for over three years and has been a student employee at the IBM Scientific Center in Palo Alto since September 1970. He is also a student member of the ACM.

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Dr. Price is a member of the theoretical group in the General Sciences Department at the Thomas J. Watson Research Center. He obtained a Ph.D. in Theoretical Physics from Cambridge University in 1951, and was research assistant to the late Fritz London at Duke University, and a member of the Institute for Advanced Study at Princeton, before joining the IBM Watson Laboratory at Columbia University in 1953. He is a Fellow of the American Physical Society.

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Mr. Rutz received an A.B. in Mathematics in 1941 from Shurtleff College, Alton, Illinois, and an M.S. in Physics in 1947 from the State University of Iowa. He worked in the Electronics Sections of the Research Division of Sandia Corporation from 1948 to 1951 and joined the IBM Research Department in 1951. He is now engaged in research on semiconductor devices including transistors, tunnel diodes, injection lasers and related devices at the Research Center. Mr. Rutz is a member of the American Physical Society and IEEE.

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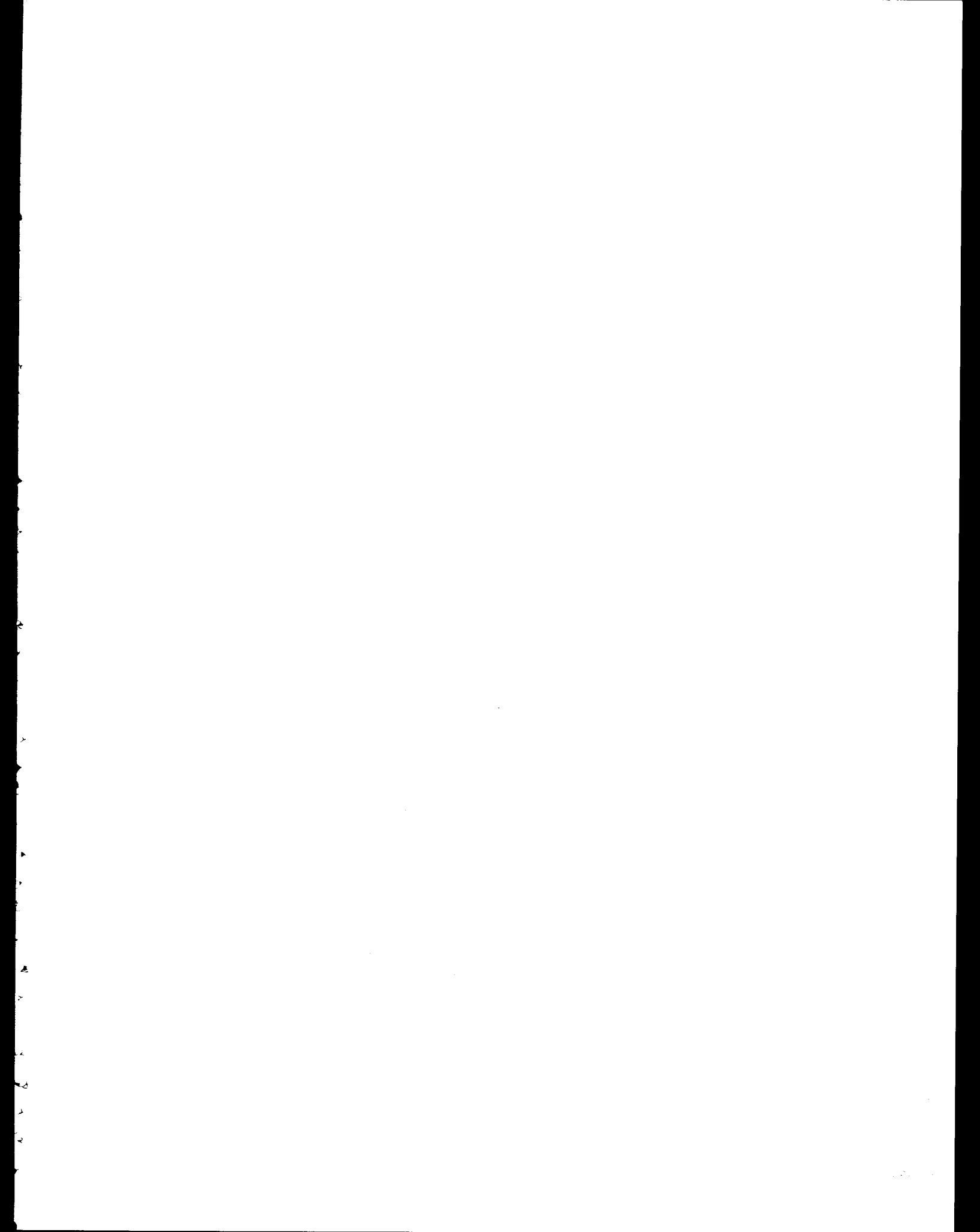
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Mr. van der Pool is Scientific Relations Manager of IBM Nederland in Amsterdam, The Netherlands. He holds a doctoral

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*Erratum: Reference 12 should be: R. P. Brent, "On the Davidenko-Branin Method for Solving Simultaneous Nonlinear Equations," *IBM J. Res. Develop.* 16, No. 4, 434 (1972).

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