PROGRAM
Tuesday, March 14, 1978
Cabaña Hyatt House

7:30 Registration

MORNING SESSION (Circus Maximus Central)

Session Chairman: Dr. Eugene Meieran
Intel Corporation
Santa Clara, California

8:30 Welcoming Remarks and Introduction
Dr. Max R. Lorenz
IBM Corporation
San Jose, California

8:40 "Where is Silicon Technology Heading?"
Dr. Robert N. Noyce
Intel Corporation
Santa Clara, California

9:30 "Iso-planar Technology and Material"
Dr. Douglas L. Peltzer
Fairchild Semiconductor
Mt. View, California

COFFEE BREAK

10:20 "V-MOS Technology"
Dr. Thurman J. Rodgers
American Micro-Systems, Inc.
Santa Clara, California

11:45 LUNCHEON (Circus Maximus North)

12:00 Ross N. Tucker Memorial Award Presentation to Berry L. Chin,
Department of Materials Science, University of California,
Berkeley, California

12:30 "UFO’s — Borders of Science"
Dr. Robert F. Creegan
State University of New York
Albany, New York

AFTERNOON SESSION (Circus Maximus Central)

Session Chairman: Dr. Robert Surnham
Xerox Research Center
Palo Alto, California

1:30 "Defect Characterization of Silicon"
Dr. L. C. Rimerling
Bell Laboratories
Murray Hill, New Jersey

2:15 "Materials Aspects of LSI Device Reliability"
Dr. Craig R. Barrett
Intel Corporation
Santa Clara, California

3:00 COFFEE BREAK

3:30 "Recent Advances in Electroluminescent Memory Devices"
Dr. Vincent Marreillo
IBM Corporation
San Jose, California

4:15 "Prospects for Large Scale Applications of Solar Cells"
Dr. Paul Bergqvist
Solar Energy Research Institute
Golden, Colorado

5:00 HOSTED COCKTAIL PARTY
Cabaña Hyatt House (Circus Maximus North)

8:00 - 3:00 Vendor Exhibits
ABOUT THE SPEAKERS

DR. CHARLES R. BARKETT received his Ph.D. degree in Materials Science from Stanford University in 1964. He spent one year at the National Physical Laboratory, England, as a NATO Fellow and then joined the faculty at Stanford University where he pursued research on the physical and mechanical properties of materials, defects in solids, and high rate physical vapor deposition. In 1978 he joined Bell where he has been involved with technology development, management, and new business development. He is currently Division Director, Quality Assurance/Reliability Engineering, for all Intel Components Divisions. Dr. Barrett has authored or co-authored over 40 technical publications and one textbook.

PROFESSOR ROBERT T. CREAGH received his B.A. degree from Manhattan College. He received his Ph.D. degree from Duke University in 1959. He has taught courses in Philosophy and Psychology at William and Mary, Dartmouth College, Bucknell University. Dr. Creagh joined the State University of New York at Albany in 1952 as Professor of Philosophy. He has also served as Chairman of the Department of Philosophy. He has published many articles and attends in various fields of Philosophy and Psychology and is the author of several books. His interests have been active in the field of Unidentified Flying Objects. He has conducted interviews in the public and private sectors concerned with UFO reports in the USA, Great Britain, France and Canada. He has served on an investigative panel with some of the principal UFO investigators in the USA. Professor Creagh has presented a series of papers on the UFO problems. A paper entitled "The physical properties of radiant energy" was presented in 1970 at the Don Bisco Symposium on the subject of UFOs. He is a member of the Sigma Xi, Phi Lambda Upsilon, AAS, AIME, and the American Physical Society.

DR. VINCENT MARRELLO received his BASc degree in Engineering Science from the University of Toronto in 1970 and his M.S. and Ph.D. degrees in Electrical Engineering from the California Institute of Technology in 1971 and 1974, respectively. He joined the IBM San Jose Research Laboratory in 1975 where he is studying the properties of dielectric thin films and electroluminescent memory devices. His recent work involves studies of degradation mechanisms in dielectric heterostructures, laser to silicon effects in silicate, and analytical techniques for the electrical characterization of semiconductor materials. He is a member of the Sigma Xi, Phi Lambda Upsilon, AAS, AIME, and the American Physical Society.

DR. GORDON H. ROYCE received his B.S. degree from Grinnell (Iowa) College in 1949 and his Ph.D. degree in Physical Electronics at Massachusetts Institute of Technology in 1952. Upon completion of his schooling, he joined the research division of Bell Telephone Laboratories, Inc. as a research scientist in the Shockley Semiconductor Laboratory of Bell Labs in Palo Alto, California shortly after its formation in 1956. Here he worked toward the realization of silicon devices. In 1959, Dr. Royce was one of the founders of Fairchild Semiconductor where as Director of Research he was responsible for all semiconductor memory creation processes. Presently he is Technical Director for Fairchild Bipolar LSI, engaged in the production of LSI Isoplanar RAMS, PROMS and high speed logic.

DR. PAUL HAPGOOD received his B.S. degree in 1948 and his M.S. degree in 1953 from Georgia Institute of Technology and his Ph.D. degree in 1964 from Arizona State University. Dr. Hapgood, Director of the Poler Energy Research Institute, is an internationally recognized pioneer in solar energy conversion and a contributor on photovoltaic science. Dr. Hapgood has helped formulate the national solar energy program through service on government research advisory committees for NASA, NBS, NDA, the National Science Foundation, and the National Academy of Sciences. Before his appointment as SERI Director, Dr. Hapgood served as a member of the Board of Trustees of Grinnell College since 1961 and is a member of the Stuart Ballantine medal from the Franklin Institute for his "Contributions being of mankind through scientific research and development," and received the Edward G. Cox Award from the American Solar Energy Society for his "contributions to the field of solar energy conversion and utilization." He is a member of the National Academy of Engineering, a Fellow of the IEEE, and is a member of the Visiting Committee for Kearny, N.J. and Stanford.

DR. DOUGLAS L. FEITZER received his B.A. from Knox College in 1960 and his B.S. in Physics from New Mexico State University in 1961. In 1966 he joined the U.S. Advanced Computer Lab in Camarillo, California working on superconducting cryogenic memories. In 1970 he joined Fairchild R & D and participated in VLSI and NoC process development including the ion implant process. Presently he is Technical Director for Fairchild Nuclear Spectroscopy with responsibility for all semiconductor process development, component packaging, and reliability engineering. He is currently Director, Quality Assurance/Reliability Engineering, for all Intel Components Divisions. Dr. Barrett has authored or co-authored over 40 technical publications and one textbook.