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TECHNICAL DIGEST

international ELECTRON DEVICES meeting

1981

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December 7-8-9

Late News!
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TECHNICAL DIGEST

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WELCOMING STATEMENT FROM THE GENERAL CHAIRMAN

Don L. Scharfetter
General Chairman

Al F. Tasch, Jr.
Technical Program
Chairman

Welcome to the 1981 International Electron Devices Meeting. This international forum on electron devices has been held every year, starting in 1955, in Washington, D.C. Attendance over the last five years has been increasing at the rate of approximately 12% per year, and attendance in 1981 is expected to exceed 2,000. The number of paper submissions has also approximately matched this pace. Abstracts submitted for consideration totaled 405. The program this year is composed of 26 contributed sessions composed of 170 accepted papers. These sessions cover the six main activity areas of the IEDM: Solid State Devices; Device Technology; Integrated Circuits; Quantum Electronics and Energy Conversion Devices; Detectors, Sensors and Displays; and Electron Tubes. In addition to the contributed sessions, which generally include an appropriate invited paper, are the Plenary Session and the Evening Panel Sessions. The three invited papers given Monday morning in the Plenary Session cover emerging potential technologies. These are a New Approach to a Self-Contained Solar Energy System; the Emerging Technology of Molecular Beam Epitaxy as Applied to Silicon; and Nonvolatile Semiconductor Memories.

This year will be the third year the IEDM has scheduled a panel session for Tuesday evening. In continuing to explore the desires of its attendees, the program committee this year has organized two panels which run simultaneously. One follows up on the Plenary Session topic of solar energy and is entitled Prospects for Photovoltaics, while the second addresses processing issues in leading-edge silicon integrated circuits technology. The issue of innovation, current industrial productivity, and perhaps changes needed in the structure of our society in the 1980's will be addressed by our Tuesday luncheon speaker, Dr. Tom Vanderslice, President and Chief Operating Officer of General Telephone and Electronics in his presentation entitled "Challenges of Technological Leadership."

The growth of R&D activities reported on at the IEDM, even in periods of economic slowdown, attests to the increasing importance attached to these activities by both the private and public sectors of the industrialized world. In recognition of this growing and more geographically dispersed base from which the IEDM attracts attendees, beginning next year the IEDM will be held in San Francisco in even years and return on odd years to its present location, the Washington Hilton. In 1982 the site for the IEDM is the San Francisco Hilton.

I want to congratulate the Conference Committee for the excellent job they have done in planning and organizing the 1981 IEDM, and thank them in behalf of the members of the IEEE Electron Devices Society, which sponsors the IEDM, for their hard work and dedication to excellence. Finally, and most importantly, I want to thank the authors of the papers for their commitment to technical excellence and welcome them and all attendees to the 1981 International Electron Devices Meeting.

Don Scharfetter
General Chairman

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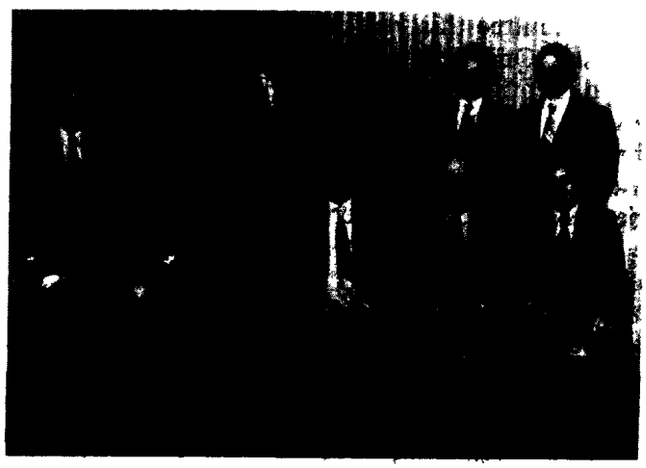

1981 IEDM Conference and Program Committee

Seated from left to right are: Melissa Widerkehr, Conference Manager, Al F. Tasch, Jr , Technical Program Chairman, Don L. Scharfetter, General Chairman, Michael S. Adler, Technical Program Vice Chairman, Richard True, Electron Tubes. *Standing from left to right are:* Tak Ning, Integrated Circuits, William Hunter, Device Technology, Richard Thom, Detectors, Sensors, and Displays, Charles D David, Jr , Publications Chairman, Nino A. Masnari, Solid-State Devices, James S. Harris, Jr., Quantum Electronics and Energy Conversion Devices *(Not pictured:* Robert Bartolini, Publicity Chairman, Takashi Tokuyama, International Arrangements Chairman, Kurt Garbrecht, International Arrangements Vice Chairman, George Douglass, Jr., Local Arrangements Chairman, Horst W. Gerlach, Treasurer, Matt Kuhn, Chairman, Electron Devices Society.)

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General Electric Co.
Corporate Research and Development Center
Schenectady, NY

PANEL DISCUSSION MEMBERS

Panel Moderator: Michael S. Adler
General Electric
Schenectady, NY

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Ft. Collins, CO

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Bell Telephone Laboratories
Murray Hill, NJ

Yasutaka Ban
Fujitsu Ltd.
Kawasaki, Japan

Youssef A. El-Mansy
Intel Corp.
Aloha, OR

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Co-Chairmen: J.E. Smith
W.M. Shedd

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Co-Chairmen: L.C.Parrillo
H.J. Geipel

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D.F. Barbe

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