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international ELECTRON DEVICES meeting

1996

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DECEMBER 8–11, 1996

TECHNICAL DIGEST

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1996 International Electron Devices Meeting
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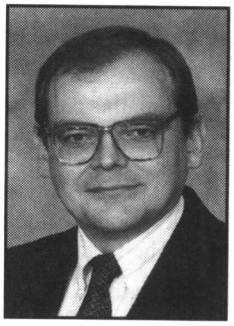
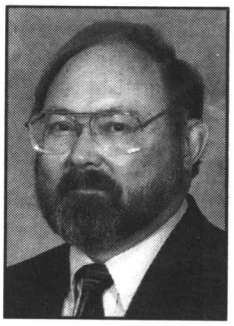
WELCOME FROM THE GENERAL CHAIR



Steve Hillenius
General Chair

The Conference Committee and I welcome you to the 1996 IEEE International Electron Devices Meeting. This year the conference returns to San Francisco and continues a 42 year tradition as the premier forum for the presentation of the latest research and development in the area of electron devices and their applications. The conference reflects the strong international nature of our industry with invited speakers and contributed papers from major semiconductor centers from around the world.

This year we are introducing two new features to the IEDM to improve the accessibility of the information in the abstracts. We have included 50 word abstracts on the IEDM home page which are available now (please visit our site at http//www.ieee.org/conference/iedm). We are also introducing the digest in a CD ROM version that will be distributed along with the technical digest.

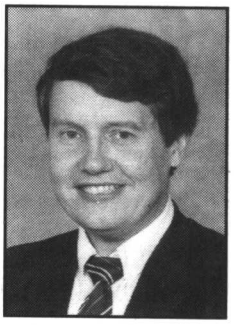


Ken Galloway
Technical Program Chair

Two short courses are scheduled for Sunday. These are designed for broad appeal to the IEDM participants including those unfamiliar with the topics. The courses cover the topics of DRAM technology trends and the issues of the back end modules. Both of these courses are organized and lectured by active researchers and represent the world experts in these fields.

The plenary talks on Monday feature the topics of micro-mechanical systems, silicon on insulator technology and the silicon foundry business featuring speakers from North America, Europe, and Asia.

This years Luncheon speaker will be Dr. Gordon Moore, co-founder and Chairman of the Board of Intel, speaking on "Silicon Device Fabrication Technology Revisited". Dr. Moore's talk will address the complex technology trends.



Pierre Woerlee
Technical Program Vice Chair

On Tuesday night, two panel sessions are planned on the diverse topics of system on a chip applications and the people issues of semiconductor development.

On behalf of the IEEE Electron Devices Society, which sponsors the IEDM, Ken Galloway, Technical Program Chairman and Pierre Woerlee, Technical Program Vice Chairman, I wish to express my sincere appreciation and congratulations to the members of the conference committee for the outstanding job they have done in planning and organizing the 1996 meeting. The authors are to be commended for their efforts in preparing and presenting the high-quality papers that form the foundation of this conference.

It is with great pleasure that I extend a warm welcome to them and to all of the attendees of the1996 IEEE International Electron Devices Meeting.

AWARD PRESENTATIONS

PLENARY SESSION
Monday, December 9

1995 Roger A. Haken Best Student Paper Award:
To: Scott Crowder, Stanford University, Stanford, CA

For the paper entitled: "The Effect of Source/Drain Processing on the Reverse Short Channel Effect of Deep Sub-Micron Bulk and SOI NMOSFETs".

Paul Rappaport Award
To: Reinout Woltjer, Ger Paulzen, Henk Pomp, Herbert Lifka and Pierre Woerlee, Philips Research Laboratory, Eindhoven, The Netherlands

For the paper entitled: "Three Hot-Carrier Degradation Mechanisms in Deep Submicron PMOSFETs"

EDS Distinguished Service Award
To: Alfred U. MacRae,
Berkley Heights, NJ

"To recognize and honor outstanding service to the Electron Devices Society"

J.J. Ebers Award
To: Tetsushi Sakai
NTT Electronics Technology Corporation, Kanagawa, Japan

"For outstanding technical contributions to electron devices"

IEDM LUNCHEON
Tuesday, December 10

1996 IEEE Cledo Brunetti Award
To: Mitsumasa Koyanagi (SM'IEEE), Tohoku University, Sendai, Japan

"For pioneering research and development of the three dimensional stacked capacitor DRAM cell."

1996 IEEE Morris N. Liebmann Memorial Award
To: Seiki R. Ogura (F'IEEE), IBM Corporation, Hopewell Junction, NY

"For contributions to and leadership in the development of the lightly doped drain silicon field effect transistor (LDDFET)."

1996 IEEE Jack A. Morton Award
To: Robert W. Dutton (F'IEEE), Stanford University, Stanford, CA

"For seminal contributions to semiconductor process and device modeling."

1996 IEEE David Sarnoff Award
To: Hiroyuki Sakaki (SM'IEEE), University of Tokyo, Tokyo, Japan

"For pioneering studies of quantum effects in semiconductor microstructures."

LUNCHEON PRESENTATION

"Silicon Device Fabrication Technology Revisited" a presentation by Gordon E. Moore, Chairman of the Board, Intel.

CONFERENCE HIGHLIGHTS

Date	Time	Place	Event
12/8	9:00 a.m. - 5:30 p.m.	Continental Ballrooms 1-4 & 6-9	Short Courses
12/9	9:00 a.m. - 12:00 p.m.	Continental Ballrooms 1-9	Plenary Session
12/9	6:00 p.m. - 7:00 p.m.	Continental Ballrooms 1-9	Reception
12/10	9:00 a.m. - 11:35 a.m.	Continental Ballroom 4	Emerging Technologies Session
12/10	12:20 p.m. - 2:00 p.m.	Grand Ballroom B	Luncheon
12/10	8:00 p.m. - 10:00 p.m.	Continental Ballrooms 1-4 & 6-9	Panel Sessions

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