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Contributions Welcome

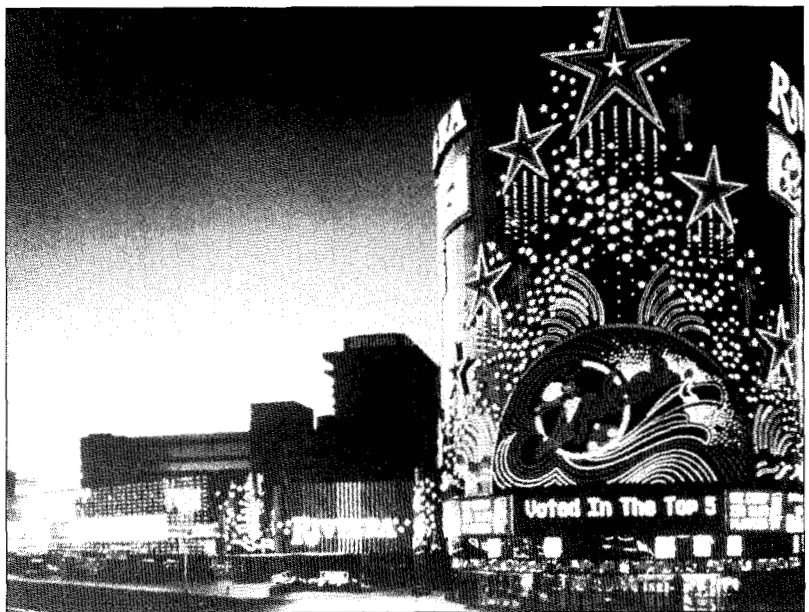
Readers are encouraged to submit news items concerning the Society and its members. Please send your ideas/articles directly to either the Editor or appropriate Associate Editor. All contact information is listed on page 2. Whenever possible, e-mail is the preferred form of submittal.

Newsletter Deadlines

<u>Issue</u>	<u>Due Date</u>
January	October 1st
April	January 1st
July	April 1st
October	July 1st

IEEE Electron Devices Society Newsletter

1995 International Reliability Physics Symposium (IRPS)



The 1995 International Reliability Physics Symposium (IRPS) will be held at the Riviera Hotel in Las Vegas, NV from April 3rd to 6th. This is one of the foremost symposia related to semiconductor component and system reliability, including all aspects of: IC fabrication, process control, assembly, packaging, test and failure analysis. The 1995 IRPS will continue emphasizing building-in reliability for VLSI/ULSI devices and hybrid components during their design, manufacture and test. The IRPS is truly an "international" symposium with nearly 100 presentations from engineers and scientists around the world (Asia, North & South America and Europe).

As such, the IRPS provides a broad based experience for all of its attendees. Three full days of technical sessions are scheduled with the latest work and state-of-the-art developments to be presented to an international audience by speakers from industry, university, and government organizations.

Technical Program

Under the co-sponsorship of the Reliability and Electron Devices societies of the IEEE, the symposium focuses directly on subjects of interest to both societies.

(continued on page 3)

Your Comments Solicited

Your comments and suggestions are most welcome. Please write directly to the Editor of the Newsletter at the address given on page 2.

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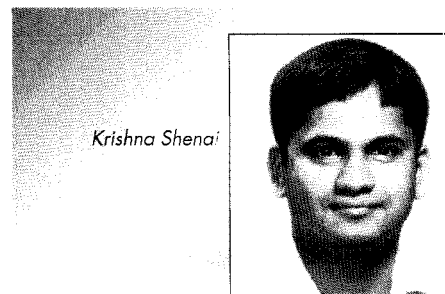
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Message from the Editor



Krishna Shenai

As the Editor of your new EDS Newsletter, I would like to take this opportunity to introduce the six Associate Editors who provide valuable inputs from different parts of the world. As the EDS Jr. Past President, Michael S. Adler, mentioned in the first issue of the Newsletter (July, 1994), EDS is truly a global society and our success largely depends on how effectively we can communicate with all members of the society in every corner of this globe. The Associate Editors provide this important link and serve as the interface between the Newsletter and local chapters.

Since the publication of the first issue of the Newsletter, we have seen significant growth in EDS member activities around the world. We have been made aware of several local conferences and meetings of interest to EDS members and have witnessed some significant increases in attendance at major EDS-sponsored conferences. As an example, the BCTM-94 held in Minneapolis, MN, October 10-11, 1994, registered nearly a 20% increase in attendance largely due to good publicity provided via the Newsletter article published in the first issue. Personally, I have received very positive comments from many EDS members. Several other EDS AdCom members also provided similar feedback.

The success of the Newsletter depends strongly on its contents and the manner in which it can serve the interests of EDS members. The input to this process is best provided by individual EDS members through their local chapter representatives or the Newsletter editorial staff. I would like to invite each and every member of EDS to participate in this process and take the initiative to communicate your thoughts that impact the welfare of our technical society.

(continued on page 6)

EDS ADCOM MEMBERS-AT-LARGE

Term Expires:

1994

J.T. Clemens
A.G. Foyt
J.L. Merz
L.C. Skinner, II
C.G. Sodini
R.B. True

1995

S. Asai
P.E. Cottrell
W.D. Johnston, Jr.
L.C. Parrillo
J.M. Woodall
C.Y. Yang

* 1996

B.F. Griffing
T. Ikoma
R.P. Jindal
J.B. Kuo
J.K. Lowell
I. Mojzes
T.H. Ning
R.J. Van Overstraeten

* Members elected 12/93

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1995 IRPS

(continued from page 1)

Most of the presentations address identification of new microelectronic failure mechanisms, improve insights into existing failure mechanisms, and new or innovative analytical techniques.

Tutorials/Workshops

Several technical tutorials are planned for Monday April 3rd and will be given by experts in their fields. Along with the presentation will come a bound set of all of the tutorial notes and diagrams. This value-added feature of the IRPS tutorial program offers the attendees an opportunity to dis-

cover new and challenging areas of interest in a learning environment.

The IRPS workshops are held to enhance the synergy of the symposium by bringing together special interest groups from key topics of reliability physics. These types of groups can act as a sounding board for your ideas and issues in your area of interest.

Equipment Demonstrations

A very interesting and unique aspect of this annual symposium is the Equipment Demonstration program which is held throughout the week. Manufacturers of the latest state-of-the-art analytical and test systems provide demonstrations of their equipment to individuals and small groups by appointment. This allows for educational interaction and learning about new techniques and tools in the marketplace.

Conference Location — Las Vegas, NV

This year, the IRPS will return to Las Vegas after 4 years of other locations. Las Vegas has appeal for all of the attendees. Entertainment has no beginning or end in Las Vegas. The choice of the Riviera Hotel offers many attractions along with the excitement and events of the surrounding hotels.

Companion's Program

One of the strong benefits of the IRPS program is the Companion's program. This program offers fun-filled tours and activities for the attendees' spouses and companions. There will be a hospitality room for companions to gather before daily tours and attractions. A Companion's booth will be available near the Symposium registration area Sunday evening and Monday.

If you do attend the IRPS, we would like you to consider what role you would like to take in becoming involved in the IRPS in the coming years. The success of the IRPS is based partly on a strong group of volunteers.

Further Information

We hope that you find the 1995 IRPS technical program and supporting functions especially interesting and that they fully meet your expectations. For further information concerning the IRPS, please contact the General Chairman, Joe McPherson, Texas Instruments, Inc., P.O. Box 655012 M/S 385, 13532 Floyd Road, Dallas, TX 75243, TEL: (214) 995-2183, FAX: (214) 995-2932 (e-mail: JOMC@mimi@magic.itg.ti.com).

—Steve Groothuis,
Texas Instruments, Dallas, TX.

1995 Symposia on VLSI Technology and Circuits



The 1995 Symposium on VLSI Technology will be held at the Kyoto Grand Hotel, Kyoto Japan, June 6-8, 1995. Founded first in 1980, the Symposium has been contributing greatly to the development of VLSI from 1.0 micron to deep sub-micron era by providing excellent opportunities to researchers in this field all over the world to interact with each other. The Symposium has been held in the US. and Japan every other year. In the last Symposium held in Honolulu, Hawaii, USA., 76 papers out of 208 submitted papers were presented to over 400 attendees. The subjects included (1) fabrication technology such as lithography, dry etching, dielectric formation, interconnection, (2) SOI technology, (3) deep sub-micron MOSFETs as well as their reliability, (4) memories such as DRAMs, SRAMs and Flash memories.

The scope of the 1995 Symposium continues to cover all aspects of VLSI technology, such as, but not limited to (1) new concepts and breakthroughs in VLSI devices and processes, (2) new devices including quantum effect devices with pos-

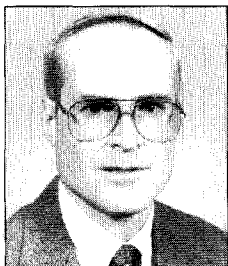
sible VLSI implications, (3) new materials, patterning and fabrication technology for VLSIs, (4) simulation, modeling, design, metrology and testing of devices and processes, (5) packaging and reliability of VLSI devices, (6) monitoring, modeling, control and automation of VLSI manufacturing, and (7) theories and fundamentals related to above subjects. Anticipating the arrival of 0.1 micron era at the beginning of the 21st century, excellent papers pertaining to 0.1 micron device technologies and gigabit level integration are expected. The actual program will be fixed after reviewing the submitted papers (submission deadline: January 9, 1995) and will be announced by the end of March, 1995.

In addition to regular sessions, plenary talks by invited speakers and rump sessions are planned. Also planned is a one-day Workshop which will be held prior to the Symposium on June 5, 1995. The program committee lead by chairman Eiji Takeda (Hitachi) and co-chairman Bill Siu (Intel) and Workshop organizer Masahiro

(continued on page 4)

Summary of the June 1994 AdCom Meeting

W. Dexter Johnston, Jr.



The twice yearly meetings of the EDS Administrative Committee (AdCom) provide the setting for handling all official business of EDS, including review of the financial and technical status of our diverse technical publishing and meetings activities, and formal approval of all proposals which involve financial expense or commitment. AdCom meetings are open to all members of EDS to attend and see first-hand the business operations of your Society. It provides an excellent overview of the extensive and diverse activities and I would encourage any interested member to attend.

The most recent meeting took place at the University of Colorado in Boulder on Sunday, June 19 (the day prior to the Device Research Conference). AdCom votes taken by e-mail since the prior meet-

ing (December 1993) were noted as an addendum to the Minutes of that meeting, which was then approved.

Highlights of the President's report noted that the Society continues to be successful in meeting the financial challenges of these changing times, in part due to the operational cost savings which have followed from the creation of an Executive Director's office within IEEE Headquarters in Piscataway, NJ to provide efficient support for Society volunteers. The specific contributions of Executive Director, Bill Van Der Vort, and Administrator, Laura Riello, were explicitly recognized as making possible our major initiatives to expand and revitalize our support of Chapters in Regions 1-7 and 9, technical outreach and formation of new chapters in Regions 8 and 10, and implementation of this Newsletter.

Jim Clemens and Cary Yang reviewed 1993 activity and 1994 plans for technical meetings and Chapter formation in Region 10. EDS has just become part of the current Circuits and Systems (CAS) and Reliability (R) societies chapter in Singapore, and discussion is currently underway regarding the splitting of the 1,000 member Tokyo Chapter. Lew Terman announced the successful completion of

negotiation with the Japan Society of Applied Physics and the signing of a "Sister Society" agreement which will give EDS members the opportunity to subscribe to the Japanese Journal of Applied Physics at much reduced rates, to present papers at JSAP meetings, and to register for JSAP meetings at the member rate.

Mike Adler announced that as a result of the 1993 visits by Bruce Griffing, Mike, and me, we have two more new chapters in Region 8 (Egypt and France) and are well on our way to our goal of doubling the number of EDS chapters in Region 8. Together with the Microwave Theory and Techniques Society (MTTS), we have developed a plan to provide IEEE membership fee grants to cover the cost of 72 IEEE, EDS and MTT memberships in the nations of Eastern Europe and the former Soviet Union where financial hardship is extreme. (The cost to EDS will be approximately \$3,000 per year for three years - this funding was approved at the 12/93 AdCom meeting.) Also, Mike is close to finalizing a plan to provide libraries in these countries with microfiche copies of the past ten years and next three years of IEEE periodicals. The EDS share of cost here will be about \$3,000, one time. A motion to fund this was made and passed unanimously.

Suzanne Nagel, Division I Director, offered congratulations to the Society for the resurrection of the Newsletter, and Editor Krishna Shenai received a round of applause for his leadership and hard work. Suzanne asked that ED appoint one or two representatives to serve on a financial and editorial oversight board for the Division Circuits and Devices Magazine. Lu Kasprzak and Steve Hillenius were appointed for finances and editorial matters, respectively.

As usual, approximately half of our major technical meetings and half of the Society sponsored publications were reviewed as to finances, strategies, and issues by exception. The Phoenix and San Diego Chapters gave capsule activity reports, and the Technical Committee Chairs for Electronic Materials (George Craford) and Vacuum Devices (Richard True) provided New Technology Updates.

A copy of the AdCom minutes has been provided to your Chapter Chairperson if you are interested in more detail. The next AdCom meeting will be held on Sunday December 11, 1994 (the day prior to the

1995 VLSI Symposia (continued from page 3)

Kashiwagi (Toshiba) and Jason Woo (UCLA) are now organizing these events to make them attractive and informative. Subjects concerning low power electronics, PDA and low cost manufacturing are possible topics for discussion at the Workshop.

Besides formal sessions, informal activities such as a reception, banquet, continental breakfast and coffee break will also be prepared. These will help in developing an interpersonal network during the Symposium period. In addition to the Symposium itself, one can enjoy abundant traditional Japanese buildings and arts as well as the beautiful scenery of the 1200 years old former Capital of Japan.

Following this Symposium, the 1995 Symposium on VLSI Circuits will be held June 8-10, 1995 at the same location. This Symposium will focus on circuit design and will offer good opportunities to design and technology researchers to exchange ideas. The scope of this Symposium includes all aspects of VLSI circuits, such as (1) circuits

for digital, analog, memory, communications and signal processing applications, including A/D and D/A converters, mixed analog/digital functions and interface circuits, (2) systems and architectures related to VLSI circuits, (3) VLSI CAD and testing, and (4) fundamentals related to the above subjects, including innovative circuits and device structures.

For further information, please contact Secretariat (USA): Wiederkehr and Associates, Suite 610, 1545 18th Street, NW, Washington, DC 20036, USA, Tel: +1-202-986-1137, Fax: +1-202-986-1139 or Secretariat(Japan): c/o Business Center for Academic Societies Japan, Conference Dept. 5-16-9 Honkomagome, Bunkyo-ku, Tokyo 113, Japan, Tel: +81-3-5814-5800, Fax: +81-3-5814-5823.

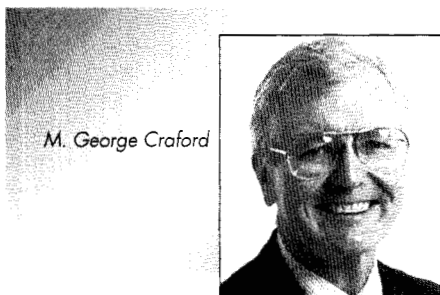
—Eiji Takeda

ULSI Research Center,
Central Research Laboratories,
Hitachi Ltd., 1-280 Higashi-Koigakubo,
Kokubunji-shi, Tokyo 185, Japan.

EDS Members Named Winners of 1995 IEEE Field Awards

Four members of the Electron Devices Society have been named winners of 1995 IEEE Technical Field Awards. These awards will be presented at various IEEE meetings/conferences to be held in 1995.

M. George Craford will receive the IEEE Morris N. Liebmann Memorial Award "for contributions and leadership in the research, development, and manufacturing of visible-spectrum LED materials and

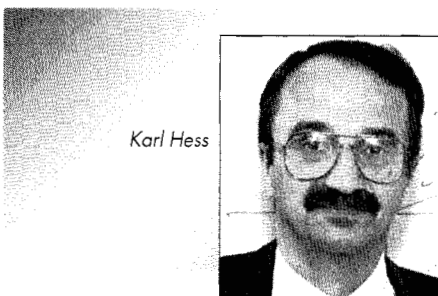


M. George Craford

devices." Dr. Craford is R&D Manager at the Hewlett-Packard Company, responsible for the development of technology and processes for manufacturing visible LEDs. He is most well known for his contributions to the development of nitrogen doped GaAsP technology for yellow and red-orange LEDs. He is a Fellow of IEEE and a member of the National Academy of Engineering. He has also received the Electronics Division Award of the Electrochemical Society.

Karl Hess will receive the IEEE David Sarnoff Award "for contributions to high field transport and real space transfer effects in semiconductor heterolayer structures." Dr. Hess is Professor of Electrical and Computer Engineering, Research Professor in the Beckman Institute and Coordinated Science Laboratory, as well as Adjunct Professor of Supercomputing Applications at the University of Illinois.

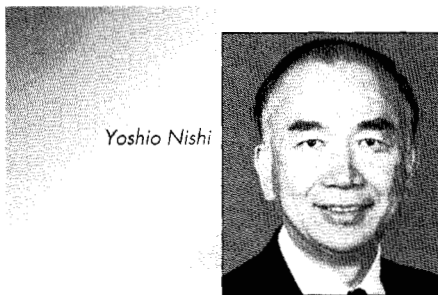
The contributions of his students have been crucial to his achievements. His students include: H. Shichijo; M. Keever; K. Bren-



Karl Hess

nan; J.Y. Tang; D. Widiger; T. Wang; P. Martin; M. Artaki; D. Arnold; J. Higman; K. Kim; I. Kizilyalli; S. Manion; D. Bailey; H. Song; J. Bude; P. Sotirelis; V. Pevzner; P.D. Yoder; and M. Grupen. Dr. Hess is a Fellow of IEEE and the recipient of the 1993 EDS J.J. Ebers Award.

Yoshio Nishi will receive the IEEE Jack A. Morton Award "for contributions to the basic understanding and innovative development of MOS device technology." Dr. Nishi is Director, Integrated Circuit Business Division R&D Center at Hewlett-

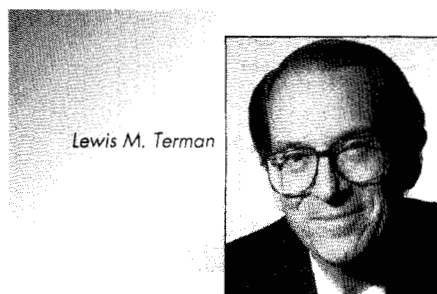


Yoshio Nishi

Packard Company. Prior to joining HP in 1986, Dr. Nishi was head of the Advanced Memory Technology Department at Toshiba. While at Toshiba, Dr. Nishi also did pioneering work on process simulation for impurity redistribution in Si-

SiO₂ systems, and discovered the paramagnetic center, PB center, at the Si-SiO₂ interface. He is a Fellow of IEEE and his awards include: IR-100 awards (1982 and 1986); IECE Japan Award (1972); and Distinguished Speaker Award for Stanford CS Lecture Series (1986).

Lewis M. Terman will receive the IEEE Solid-State Circuits Award "for leadership in the field of MOS devices and circuits for semiconductor memories." Dr. Terman is currently Program Manager of CMOS high-speed and low-power programs at IBM T.J. Watson Research Center. He was



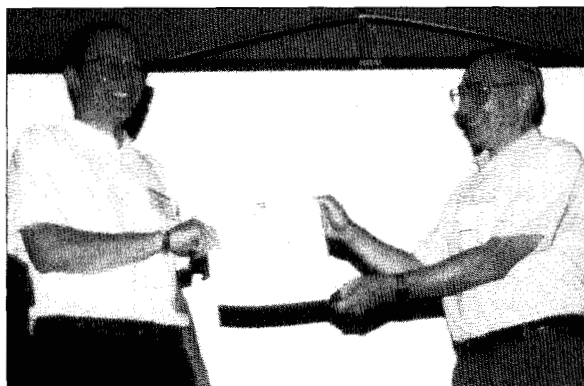
Lewis M. Terman

the first to publish on the C-V measurement of surface states in MOS structures. He has made numerous contributions to IBM's MOS memory products, including as a co-inventor of the SPT DRAM cell now used in IBM's DRAM products of 4Mb and beyond. He also managed research resulting in the fastest SRAM and DRAM chips reported. Dr. Terman has been very active in IEEE and EDS activities, including being President of EDS (1990 and 1991). He is a Fellow of IEEE and a Fellow of the American Association for the Advancement of Science. He holds 23 patents and has received numerous awards from IBM.

—Tak H. Ning,
IBM Research Center,
Yorktown Heights, NY.

IEDM) at the San Francisco Hilton. A tentative agenda, with room and time, is now available from the Executive Office. Following the meeting, the election of new members of AdCom for the 1995-1997 term will take place, as discussed by Lew Terman in the last (October) issue of this Newsletter.

—W. Dexter Johnston, Jr.
AT&T Bell Laboratories,
Room MH 2D-228, 600 Mountain Avenue
Murray Hill, NJ 07974

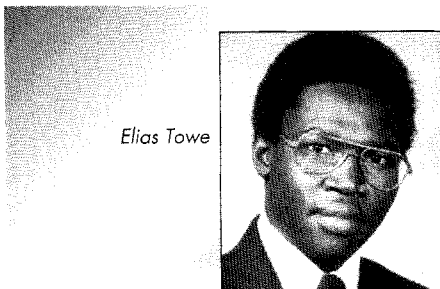


Presentation of Fellow Certificate
at the 94 DRC in Bolder, CO.,
by Prof. Marvin H. White,
Lehigh University, EDS
Membership Chairperson to
Prof. Mark Lundstrom of
Purdue University.

Message from the Editor *(continued from page 2)*

The following are profiles of the EDS Newsletter Associate Editors.

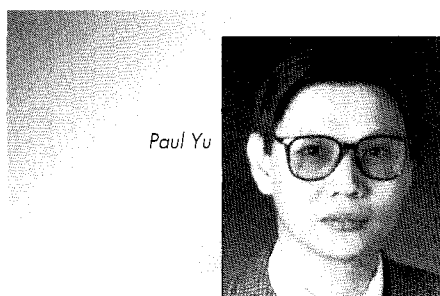
Elias Towe is on the faculty of the University of Virginia. He is a graduate of the Massachusetts Institute of Technology



Elias Towe

where he received the S.B., S.M. and Ph.D., degrees. He joined the faculty of the University of Virginia in 1990. His research interests are in optoelectronics and advanced electronic and photonic materials such as rhodopsins. He has been a recipient of several awards, including: the Vinton Hayes Fellowship at MIT, the Commonwealth of Virginia Scholar Award, the Outstanding Young Faculty Teaching Award in Electrical Engineering at the University of Virginia, and the National Science Foundation Young Investigator Award from the PYI/NYI program.

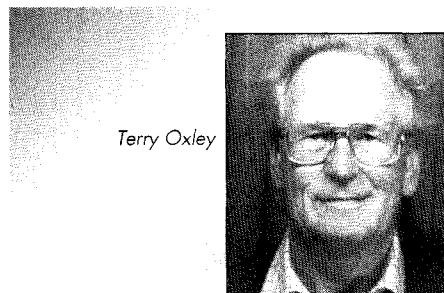
Paul K.L. Yu is a Professor of Electrical Engineering at the University of California at San Diego (UCSD), San Diego, CA. He



Paul Yu

received his B.S. in Physics (1979), M.S. in Applied Physics (1979) and Ph.D. in Applied Physics (1983), all from the California Institute of Technology, Pasadena, CA. His present research interests at UCSD include interface properties of superlattices grown by metalorganic vapor phase epitaxy, optical properties of semiconductors, and physical properties of high speed optoelectronic devices and circuits. He is the 1994 Vice Chairman of the San Diego AP/ED/MTT Joint Chapter. He has published over 80 technical papers. He is a Senior Member of IEEE.

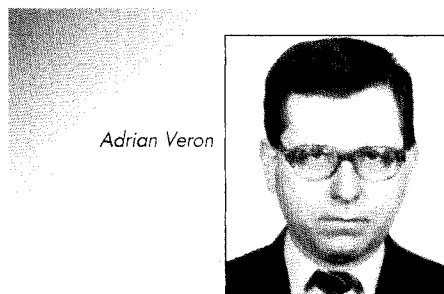
Terry H. Oxley is a Private Consultant. He is a Chartered Engineer, Member of IEE and a Fellow of the IEEE. He joined the GEC Hirst Research Center in 1946., after service in the Royal Navy. He has been involved in the Research and Development of microwave semiconductor solid-state



Terry Oxley

devices and associated circuits/components/sub-systems, from 1950 through 1988, and has written several books and received many patents. In 1977, he received Her Majesty's Silver Jubilee Medal, for his contributions to microwave components; and in 1989, the GEC Nelson Gold Medal for Company technical achievement. At present, he is the Chairman of the IEEE UKRI MTT/ED/AP/LEO Chapter.

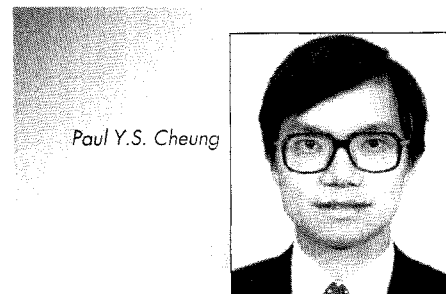
Adrian Veron is a Senior Development Engineer at the Discrete Devices Division, Baneasa S.A. Electronic Devices Manufacturing Company, Bucharest, Romania and an Associate Researcher at the R&D Institute for Microtechnology Bucharest. He is also an Assistant Professor, Department of



Adrian Veron

Electronics and Communications, Polytechnic Institute of Bucharest. He received a B.S. in 1975, a M.S. in 1976 and a Ph.D. in 1994, from the Polytechnic Institute of Bucharest. His current areas of research include power bipolar and MOS transistors and integrated circuits, device physics and technology, gettering and yield analysis. He was the EDS Chapter Chairman of the IEEE Romania Section in 1992 and 1993.

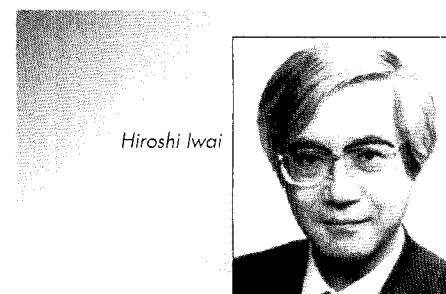
Paul Y.S. Cheung is Dean of Engineering at the University of Hong Kong. He received his B.Sc.(Eng) and Ph.D. degrees in electrical engineering from Imperial College of Science & Technolo-



Paul Y.S. Cheung

gy, London in 1973 and 1978, respectively. He joined the University of Hong Kong in 1980 and has been a faculty member for 14 years. His research interest includes VLSI design, computer architecture and signal processing applications. He has been an active IEEE volunteer serving in the Hong Kong Section and the Asia Pacific Region. He was the Chairman of the RAB/TAB Transnational Committee in 1993-94, and will serve as Region 10 Director for 1995-96.

Hiroshi Iwai is a Senior Research Scientist of ULSI Research Laboratories, Research and Development Center, Toshiba Corporation, Kawasaki, Japan. He received the B.S. and Ph.D. degrees in



Hiroshi Iwai

electrical engineering from the University of Tokyo, Japan in 1972 and 1992, respectively. He joined Research and Development Center of Toshiba Corporation in 1973. His awards include: Local Commendation for Invention from Japan Institute of Invention and Innovation (1990) and Grand Prize of Nikkei BP Technology Awards (1994). He has developed several generations of high density memory and logic LSIs including CMOS, bipolar, and Bi-CMOS devices. He has also contributed to research on device physics related to small-geometry MOS and bipolar transistors, as well as research on T-CAD. Currently he supervises high speed and high frequency silicon device technologies.

Chapter Reports

Regions 1-6, 7 & 9

Region 9 Activities

— by Prof. Edval Santos

During January 15-20, 1995, the Federal University of Pernambuco at Recife will welcome experts from all over the world for the IV Brazilian Microelectronics School. It is a workshop type event which will focus on microelectronics for telecommunications. This is the first time this event is held on the northeastern coast of Brazil. It is expected that researchers, graduate and advanced undergraduate students will come to Recife from all over Brazil and other countries.

The event has the support of the Electron Devices Society, the Circuits and Systems Society, the Brazilian Microelectronics Society, the Brazilian Telecommunications Society, the Foundation for the Support of Science and Technology in Pernambuco State (FACEPE) and the Federal University of Pernambuco.

The organizers look forward to welcome all participants to the short courses, advanced talks and round-tables, and expect that many of them may also enjoy the summer in Recife-Brazil.

CAS/ED Chapter of the Los Angeles Council

— by Dr. Paramjit Singh

The chapter officers are: Michael G. Weber, Chapter Chair (MGWEBBER@ANANOV@SSW@BEACH), Paramjit Singh, Chapter Vice-Chair (singh@nb.rockwell.com), Stan Wong, Secretary/Treasurer (s.wong@ieee.org). Greetings from the Orange County, CA chapter of Electron Devices Society. The Orange County chapter is a joint chapter of the Electron Devices/Circuits and Systems societies. We try to arrange 3-4 technical meetings per year in an attempt to keep the local membership up-to-date on the technological issues of the day. This year has not been very busy for us so far. We are planning to hold two meetings in the upcoming months. Our next meeting is scheduled for Nov. 15, 1994. Prof. April Brown from Georgia Tech. will be the speaker at this meeting. Prof. Brown is an EDS Distinguished Lecturer and will be talking about "Electronic Materials for Wireless Communications." We invite all the local chapter members and other interested parties to attend the meeting. Meeting schedule and place will be announced in the LA council calendar.

We are in need of volunteers to run the



Group picture taken at the September meeting of AP/ED/MTT Chapter of San Diego at the Cafe Del Rey Moro. The first row consists of (from right to left): Jonathan Roussos, Rick Sturdivant (Speaker), and Ralph Levy (chapter chairman). The second row consists of Al Clavin (past chapter chairman), Don Harris, Bob Traynor, Red Thompson, and Tatsuo Matsumoto.

activities of the chapter. If you are interested in volunteering your time and share your talents with us, please contact Mike Weber at (714) 762-1056 or Paramjit Singh at (714) 833-6222.

CAS/ED Chapter of the Pikes Peak Section

— by Prof. Gerald Oleszek

The Colorado Springs, CO Chapter annually holds 4-6 technical meetings per year, which not only have been technically interesting but also intellectually stimulating. Titles and speakers for the past year have been: "Survey of Surface Techniques as Used in Material Characterization" by Professor Tom Christensen of the University of Colorado, "Giant Magneto resistance in Metallic Layered Structures" by Professor Robert Camley of the University of Colorado, "The Status of Multichip Module Technology" by Tom Paquette of Ford Microelectronics, and "Trends and Issues of Automotive Power Products" by Steve McEuen of Ford Microelectronics.

Planned for October 1994 is a Technical Presentation entitled, "Microelectromechanical Systems Research Review" by Dr. William C. Tang, Senior Research Manager at Ford Microelectronics, Inc. in Colorado Springs. Our plan is to hold 3 more technical meetings before the end of the year and we are currently setting up the agenda.

AP/ED/MTT Chapter of the San Diego Section

— by Prof. Paul Yu

The chapter likes to welcome back all its members after a long summer break (since

June). We held a lunch meeting in September with 24 attendees (see photograph).

The speaker was Mr. Rick Sturdivant from Hughes Aircraft Co. and the title of his talk was "Suspended Substrate Stripline Bandpass Filter." It was a fascinating talk with much discussion throughout the meeting. We have lined up the speaker for the November and January meetings and we are soliciting inputs for the February and March Meetings. Starting in January 1995, we plan to hold dinner meetings, rather than lunch meetings so that members have more time to interact. Please email your inputs and comments to Paul Yu via yu@ece.ucsd.edu.

— Paul K. L. Yu, Associate Editor

Region 8

An EDS Region 8 Chapters Meeting was held 13th September 1994 at Edinburgh, Scotland during the ESSDERC Conference. Jointly chaired by Dexter Johnson and Mike Adler, twelve Region 8 representatives presented their Chapter status and joined in open discussion to forward future cooperation and growth. It was unanimously agreed that the meeting was extremely worthwhile and should be continued on an annual basis.

United Kingdom & Republic of Ireland MTT/ED/AP/LEO Joint Chapter

Effective September 9, 1994, the status of the Chapter has been changed, to incorporate the Lasers & Electro-Optics Society. The Chapter has planned six events, thus completing its activity schedule of thirteen

events for the 1994 calendar year. A detailed report on these activities will be published in the April 1995 issue of the Newsletter.

Planning for 1995 activities is proceeding and the program will be publicized in the April 1995 Newsletter Issue. It is anticipated this will include: A lecture series spread over venues at London, Dublin, Belfast, Manchester and Leeds; EDMO'95 Workshop on "High Performance Electron Device for Microwave and Optoelectronic Applications" at The University of Leeds; and, M'COM Workshop - "Microwave and Millimeter-Wave Communications" (jointly organized with the UKRI Communications Chapter) at King's College, London. For further information, please contact Mr. Terry H. Oxley, Chapter Chairman, "Tremont," Back Lane, Halam, Newark, Notts BG22 8AG, UK, TEL: +44 636-815510, FAX: +44 636-815865.

Germany ED Chapter

On August 26, 1994 Prof. Dr. Kenichi Iga, Tokyo Institute of Technology came to the Aachen University of Technology and gave a seminar on "MOCVD and CBE Technology for Vertical Cavity Surface Emitting Lasers and Related Optoelectronic Devices." The talk by the "father of surface emitting lasers" attracted an audience from both IEEE members and non-members and it highlighted recent progress in the field. Planning is proceeding for further events. For further information, please contact Prof. Klaus Heime, Chapter Chairman, Inst. Für Halbleitertechnik, RWTH Aachen, D-52056 Aachen, Germany, TEL: +49 241-807746, FAX: +49 241-8888199.

North Italy AP/CAS/ED/MTT Chapter

In 1994, the Chapter activity has been devoted to the organization of the European Gallium Arsenide and Related III-V Compounds Application Symposium (GAAS'94), a conference cooperatively sponsored by IEEE that was held in Torino from 28 to 30 April 1994. Such a conference has become the European forum for the exchange of knowledge and experience between industries and the academic world in the field of compound semiconductor-based microwave circuits. About 200 participants attended from the European countries and from US, Japan and the former Soviet Union, presenting about 100 papers, both research and production oriented. Furthermore, there were eleven invited speakers, of which three were from the US, one from Japan and seven from European countries. For further information,

please contact Prof. Carlo N. Naldi, Chapter Chairman, Dipartimento di Elettronica, Politecnico di Torino, C. Dunna Drgl Agruzzi 24, 10128 Torino, Italy, TEL: +39 11-564-4069, FAX: +39 11-564-4099.

France ED/MTT Chapter

The first General Assembly of the newly formed ED/MTT Chapter has been planned to elect committee members. The first activity of the new Chapter entitled "Topical Meeting on Optical Microwave Interactions" will be organized with the IEEE LEOS at Abbaye des Vaux de Cernay near Paris on Nov. 21-23, 1994. The goal is to facilitate information exchanges between scientific communities in the rapidly growing areas of technology. The France Chapter held a 1993 Fall Meeting in Seillac (France) and LEOS held a 1993 Summer Topical Meeting in Santa Barbara on the subject. For further information, please contact Dr. John M. Magarshack, Chapter Chairman, 52A Chemin de Hauts Besnards, 92500 Rueill-Malmaison, France, TEL: +44 33-1-4708-3707, FAX: +44 33-67-55-46-02.

Switzerland CAS/ED Chapter

— by Andre A. Jaecklin

Since its inception in 1988, the "International Symposium on Power Semiconductor Devices and ICs" (ISPSD), traditionally sponsored by EDS, has evolved as the most prestigious professional event worldwide in the area of semiconductor devices for power applications. So far, this conferences has alternated between Japan and the US on a yearly basis.

In 1994, ISPSD was invited to take place in Europe for the first time. Organized as a joint effort between the Federal Institute of Technology, Zurich, (ETHZ) and ABB Switzerland, ISPSD'94 was held in Davos, Switzerland, between May 31 and June 2, 1994, with Wolfgang Fichtner, ETHZ, as General Chairman and Andre Jaecklin, ABB Corp, Research, as Program Chairman.

An almost overwhelming flood of abstracts were submitted; more than twice as many as in the preceding year and three times the number compared to two years ago. The fact that more than half of the contributions originated from Europe - including Eastern Europe - is a testament to European contributions in this field. It also suggests that there is clearly a need for such a forum in Europe in this area. Since the meeting was limited to three days, only less than one third of a total of 220 contributions could be accepted. This was a diffi-

cult decision, but it ensured a final program of very high quality.

The conference itself turned out to be very successful with an attendance of more than 200 people from eighteen countries. Both, the professional facilities of the Davos Congress Center as well as the Alpine surroundings apparently stimulated many of the foreign participants — especially those from overseas. A particularly good reception was given at the afternoon poster session at the Hotel Schatzalp to where the entire crowd was moved by means of a nostalgic cable car.

The dominant topic in the field was represented by the Insulated Gate Bipolar Transistor (IGBT) with almost half of the presentation concentrating on this subject. The major growth, however, appears to be shifting from high to medium and low power where integration of electronic means of control onto the silicon power devices as well as into modules becomes an issue of ever higher importance.

As dinner speaker at the Conference Banquet, Willi Roos, Deputy CEO of ABB Switzerland, gave an excellent talk on the subject "20 years after the first energy crisis. . .", illustrating the changing but all the more challenging problems of energy supply over the years. For further information, please contact Dr. Daniel J. Mlynec, Chapter Chairman, EPFL-Centre de Conception de Circuits Integres, DE-LEG-C31 El-Ecublens, 1015 Lausanne, Switzerland, TEL: +41 21-693-4681, FAX: +41 21-693-4663.

Romania ED Chapter

The main concern of the Chapter has been to strengthen the contacts with outstanding professionals in the field of electron devices worldwide.

In August 1994, our Chapter organized a technical meeting based on a lecture presented by Prof. S. M. Sze from National Chiao Tung University - Hsinchu, Taiwan and entitled "Evolution of MOSFET - from Invention to ULSI." The distinguished lecturer, a prominent figure in the field of semiconductor devices, made an outstanding review of the historical developments of the MOS transistor from the discovery phase, to the basic technology development and finally into the volume production of modern ULSI circuits. Future trends of microelectronics were also discussed. The initiative of Prof. Sze to visit Romania and to deliver such a presentation to the members of the Chapter was highly appreciated.

— Adrian Veron, Associate Editor

— Terry Oxley, Associate Editor

Region 10

SSDM'94 Report

— by Kunio Tada (Univ. of Tokyo),
Conference Chairman, SSDM'93-'94

The International Conference on Solid State Devices and Materials (SSDM) covers the entire field of solid state devices and materials based on Si and compound semiconductors, from basic physical phenomena to the most recent improvements in device performance and material technology. This is the largest international forum held in Japan in the above comprehensive area. The SSDM was started in 1969 as an annual domestic conference and since 1990, it has been held as an annual international conference.

The SSDM'94 was held at the Pacifico Yokohama in Yokohama near Tokyo on Aug. 23-26, 1994 under the sponsorship of the Japan Society of Applied Physics in corporation with seven professional societies including the IEEE EDS. Out of 468 contributed papers submitted, 303 were accepted for presentation. In addition, 39 papers were invited. Exactly one-third of the contributed papers were from abroad. The number of participants was 774.

During the plenary session, the SSDM Paper Award, given to the best paper of the last conference, was presented to Prof. E. Kasper, Mr. H. Kibbel, Mr. H. Herzog, and Dr. A. Gruhle from Germany for their paper entitled "Growth of 100 GHz SiGe-HBT Structures" published at SSDM'93. The SSDM Award was presented to Prof. M. Koyanagi and Dr. N. Hashimoto for their paper entitled "Novel High Density, Stacked Capacitor MOS RAM" published at the 10th Conference in 1978. The SSDM Award is the major award to be presented to an outstanding and a well-established contribution made in the past ten years or more. The SSDM Young Researcher Awards were presented to three persons who published excellent papers at the last conference at the age of thirty or less. Titles of special symposia and rump sessions, which were organized to emphasize selected topics of particular importance, are highlighted in the following:

Symposia

(1) APCT'94 (4-day symposium with 85 papers) The 3rd International Meeting on Advanced Processing and Characterization Technologies (APCT'94) was held concurrently as part of SSDM'94; (2) Silicon-on-Insulator Technology (19 papers); (3) Single Electron Tunneling (10 papers); and,

(4) Neurodevices and Neurochips (19 papers).

Rump Sessions

(1) Low Power and High Speed Devices for the 0.1 micron Era, (2) Fabrication Technology of Micro-Photonic Devices for Optical Interconnection, and (3) Fabrication and Application of Quantum Nano-Structures.

Extended abstracts of SSDM'94 with more than 1,000 pages and similar back issues for the 1st through 25th conferences (all are in English) are still available for sale. The SSDM'95 will be held on Aug. 21-24, 1995 in Osaka at the International House, Osaka. The 3rd Symposium on Amorphous Insulation Thin Films will be held concurrently as part of SSDM'95. The deadline for submission of abstracts is April 15, 1995. For more information on the SSDM, please contact SSDM Secretariat, Business Center for Academic Societies Japan, Honkomagome 5-16-9, Bunkyo-ku, Tokyo, 113 Japan, FAX: +81-3-5814-5823.

— Hiroshi Iwai, Associate Editor

Hong Kong ED Chapter

The newly formed ED Chapter in Hong Kong launched the first annual Hong Kong Electron Devices Meeting (HKEDM) on 18th July, 1994. This event was intended to be an annual event to draw technologists, research workers in both industry and academia together and provide them a forum for exchange in research results and progress, especially in technology areas which are relevant to the Asia Pacific region. The first event was a modest start of a one-day meeting. The Keynote address was delivered by Prof. James Plummer of Stanford University on "SOI - Power ICs, VLSI Devices and Process Technology Issues." The Meeting was divided into three sessions covering a) Silicon Process Technology Devices, b) Compound Semiconductor and Micro-Sensors & Actuators and c) Electro-Optical & Display Devices. Fourteen papers will be delivered by speakers from 8 different research laboratories or companies, both local and overseas.

"The main meeting for EDS is the IEDM which is an international event. However, there is a great need for researchers and technologists in the local area to have meetings and encourage interflow of ideas and results," said Dr. Man Wong, Chairman of the HKEDM Organizing Committee who is also the EDS Chapter Chairman in Hong Kong. He further stated "We hope that HKEDM can set up a model for other EDS Chapters that there will be other local EDM-

type of meetings elsewhere for such interflow. Contributions from elsewhere are of course welcome, especially in technologies relevant to local community. Eventually, we hope that the EDMs will foster more cooperation and networking between Chapters in the Region in particular."

Anyone interested to know more about HKEDM, please contact Dr. Man Wong directly at the Department of Electrical & Electronic Engineering, HKUST, Clearwater Road, Hong Kong or by Internet E-MAIL: eemwong@uxmail.ust.hk.

News on TENCON 95

The 1995 IEEE Region 10 International Conference on Microelectronics and VLSI will be held at the Hong Kong Convention and Exhibition Centre, Hong Kong, from November 7-10, 1995. The conference takes on a timely theme Asia-Pacific Microelectronics 2000, highlighting the strong and growing focus on high technology development in the region's rapidly expanding economy as we approach the 21st Century. The scope of the conference covers five major areas: A) Solid State Device Physics, Technology, Characterization, Modeling, Simulation and Reliability; B) Integrated Circuit Technology and Packaging; C) Sensors, Actuators, Displays and Micro-mechanical systems; D) Integrated Circuits and Systems; E) Applications of Integrated Circuits. Extended summaries of papers are invited to be sent to Prof. Charles Sodini, MIT (email: sodini@mtl.mit.edu) from North America & Europe, and to Prof. Cuong T. Nguyen, HKUST (email: eenguyen@uxmail.ust.hk) no later than March 17, 1995.

The following keynote lectures have been arranged for TENCON 95

1) Pallab Chatterjee, Texas Instruments: Gigachip Technology and Applications. Talk will cover system trends and technology directions/choices.

2) Tak N. Ling, IBM: CMOS Technology Projections. Talk will cover DRAM, SRAM logic, devices, interconnect, and power dissipation, etc., and potential roadblocks to these projections.

3) Eugene Wong, HKUST: Models of academic/industrial link, and which ones are particularly suited to the Asian context.

4) C.D. Tam, Motorola Semiconductor Asia Pacific: Development of Semiconductor industry in Asia Pacific Region (tentative).

Further information can be obtained from Dr. Nelson Yung, TENCON 95 Secretary (email: nyung@hkueee.hku.hk).

— Paul Y.S. Cheung, Associate Editor



Announcement of the
53rd Annual
DEVICE RESEARCH CONFERENCE



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UNIVERSITY OF VIRGINIA
CHARLOTTESVILLE, VA
JUNE 19-21, 1995

Abstract Deadline: March 1, 1995

The DRC brings together scientists, engineers, and students to discuss new and exciting breakthroughs and advances in the field of device research. The DRC is sponsored by the IEEE Electron Devices Society. The conference will be held at the University of Virginia from Monday, June 19 through Wednesday, June 21. The DRC and the Electronic Materials Conference (EMC) of the AIME will again coordinate activities. The EMC will be held at the same location on June 21-23. Device oriented papers should be submitted to the DRC and materials oriented papers to the EMC.

Papers are solicited on a wide variety of **novel device structures** including, but not limited to, the following:

- Silicon CMOS/BiCMOS
- Silicon Scaled and Ultrasmall Devices
- SOI and 3D Devices
- Thin Insulators & Hot Electron Effects
- Non-Volatile Memories
- Thin Film Transistors
- Low Power Device Technology
- Smart & High Power Devices
- Device Modeling
- Vacuum Devices
- Sensors and Micromachined Devices
- Display Technology
- SiGe Devices
- III-V or II-VI FET or Bipolar Devices
- Quantum Effect Devices
- Integrated Optoelectronics
- Microwave/Millimeter-wave Devices
- Optical Sources and Detectors
- Superconducting Devices
- New Characterization Techniques
- Device Reliability
- Amorphous or Organic Devices
- Wide-Bandgap Devices
- Packaging & Interconnects

CALL FOR PAPERS: Authors are requested to send twenty-five (25) copies of a summary of their paper, together with the IEEE copyright transfer form, to Peter Asbeck, DRC Technical Program Chairman. A summary sent by facsimile can not be accepted.

The summary must consist of one page of text (500 words, abstracts that exceed the suggested length will be returned) and one page of figures (line drawings are preferred; photos with line features or gray scale may not reproduce well). The summary must clearly reflect the content of the paper, and be in a form suitable for publication. The text page should include the authors' names, address, affiliation, telephone number, and appropriate literature references. The figures should be clearly labeled and captioned. Accepted summaries will be reproduced in the conference program exactly as submitted. To allow the accepted abstracts to be published without figures, the text should be understandable without figures and the figures should not be referenced. **Previously published results will be automatically rejected.**

The deadline for summaries is March 1, 1995. Late papers may be submitted up to the day before the conference, but the acceptance criteria will become more stringent as the conference approaches.

FURTHER INFORMATION: Registration forms and information on accommodations can be obtained from the Local Arrangements Chairman, Elias Towe.

Early registration is encouraged with a reduced registration fee offered as an incentive. Students also will receive a reduced registration fee. Limited travel funds are available to students presenting papers. Further information on student assistance may be obtained by writing to Umesh Mishra.

IVMC '95
Eighth International Vacuum Microelectronics Conference
July 30 - August 4, 1995
Portland, Oregon



Sponsored by

Electron Devices Society



The Eighth International Vacuum Microelectronics Conference is a comprehensive forum for the presentation, discussion, and exchange of the very latest results in the field of vacuum microelectronics. An internationally recognized set of plenary speakers will review the details of the technology, as well as give presentations in the areas of applications and market analysis. In addition to fundamental theoretical and experimental discussions, the program will include technical sessions on flat-panel field-emitter displays and RF power devices. Panel discussions will focus on timely topics of importance.

SUN

5-9 pm Registration
7-9 pm Welcome Reception

MON

8:30-12 noon General Session
12-1:30 pm Group lunch
1:30-5 pm General Session
6-10 pm Conference social event

TUES

8:30-12 noon General Session
12-1:30 pm Group lunch
1:30-3 pm Poster Session I
3:15-5:30 pm General Session
7:30-9 pm Poster Session II

WED

8:30-12 noon General Session
12-5:30 Afternoon free
5:30-7 pm Cocktails & Hors d'oeuvres
7-9 pm Featured lecture

THURS

8:30-12 noon General Session
12-1:30 pm Box Lunch with Panel Discussion
1:30-5 pm General Session

CALL FOR PAPERS

Papers are invited on all technical topics related to vacuum microelectronics, including the modeling, fabrication, characterization, performance, and failure analysis of vacuum-microelectronic devices. The deadline for receipt of abstracts is April 30, 1995.

Please contact the IVMC '95 for details:

IVMC '95

1201 Don Diego Avenue
Santa Fe, NM 87501 (USA)

Telephone: (505) 989-4735. Fax: (505) 989-1073. E-mail: 70404,2407@compuserve.com

CALL FOR PAPERS

1995 NVSMW 14th IEEE NONVOLATILE SEMICONDUCTOR MEMORY WORKSHOP AUGUST 13 - 16, 1995 MONTEREY, CALIFORNIA

The 14th IEEE Nonvolatile Semiconductor Memory Workshop (NVSMW) will be held at the Hyatt Regency Hotel in Monterey, California on August 13 - 16, 1995. The workshop is sponsored by the IEEE Electron Devices Society.

The NVSMW is a meeting of specialists in all aspects of nonvolatile microelectronics. There are morning and late afternoon technical sessions with the afternoon left free for informal interactions or to enjoy the many attractions of the Monterey peninsula. There also will be a lively evening "rump" session on a hot topic in the nonvolatile field.

Papers are solicited in all aspects of nonvolatile semiconductor technology including:

- Device Physics
- Processing
- Testing
- New Technologies
- Programmable Logic
- Cell Design
- Integrated Circuits
- Solid State Disks, Memory Cards
- Reliability, Quality Assurance
- New Applications

To present a paper please submit a one page abstract with supporting figures to the Technical Chairman at the address below. A proceedings consisting of a bound copy of all abstracts will be handed out to attendees at the conference. In keeping with the workshop nature of the conference, no photographs or recordings will be allowed.

The deadline for submitting abstracts to the Technical Chairman is May 5, 1995. A limited number of late new papers will be accepted until July 1, 1995.

If you are planning to attend the conference or to present a paper please send your name, address and, if appropriate, a preliminary title of your presentation to the General Chairman. Conference registration and hotel information will only be sent to those who respond.

General Chairman:

Rustom Irani
Wafer Scale Integration
957 Cascade Drive
Sunnyvale, CA 94087 USA
(510) 498-1729
FAX (510) 657-8495

Technical Chairman:

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SunDisk Corporation
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Santa Clara, CA 95054 USA
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FAX (408) 562-0503

Finance Chairman:

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Santa Clara, CA 95054 USA
(408) 765-9610
FAX (408) 765-9206



SISDEP'95

6th International Conference on
Simulation of Semiconductor Devices and Processes
Erlangen, Germany - September 6-8, 1995

Call for Papers

The 6th International Conference on Simulation of Semiconductor Devices and Processes provides an open forum for the presentation of the latest results and trends in process and device simulation. 1995, the SISDEP will take place in Erlangen, Germany, organized by the Lehrstuhl für Elektronische Bauelemente, Universität Erlangen-Nürnberg, in cooperation with the Fraunhofer-Institut für Integrierte Schaltungen. Areas of interest include, but are not restricted to

- Process simulation and equipment modeling
- Device modeling and simulation of complex structures
- Device simulation and parameter extraction for circuit models
- Integration of processes, device and circuit simulation
- Practical applications of simulation
- Algorithms and software

Paper Submission

Authors are requested to submit 15 copies of the abstract of their contributions to the organizer for review by the Conference Committee before **March 1, 1995** by mail. The abstract should include title, names, affiliation, mail address, phone number, fax number, and electronic mail address. It should not exceed two pages of A4 or 8½"x11" paper. Double-sided printing is appreciated.

Contributors will be notified of the committee's decision by May 1, 1995. Details about registration and hotel reservation will be enclosed. The closing date for early registration is May 15, 1995. Deadline for submission of the final camera-ready papers is June 1, 1995.

Conference Committee

G. Baccarani, Università di Bologna, Italy	M. Orlowski, Motorola, USA
K. De Meyer, IMEC, Belgium	A. Poncet, CNET/CNS, France
W. Fichtner, ETH Zürich, Switzerland	H. Ryssel, Universität Erlangen-Nürnberg, Germany
M. Fukuma, NEC, Japan	W. Schilders, Philips, The Netherlands
H. Jacobs, Siemens, Germany	S. Selberherr, Technische Universität Wien, Austria
S. Jones, GMMT, United Kingdom	T. Toyabe, Hitachi, Japan
S. Laux, IBM, USA	H. Van der Vorst, Rijksuniversiteit Utrecht, The Netherlands
C. Lombardi, SGS-Thomson, Italy	

For further information contact:

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fax: +49-9131-85-8698

email: sisdep@ais.fhg.de

IEEE Electron Devices Society Meetings Calendar

(As of November 10, 1994)

<u>DATE</u> 1995	<u>NAME/LOCATION</u>	<u>CONTACT/ABSTRACT DEADLINE</u>
Jan. 15-20	1995 BRAZILIAN SCHOOL OF MICROELECTRONICS /Cidade Universitaria, Recife, Brazil	Edval J.P. Santos - Deadline: Not Applicable Tel: 55-81-271-01-11 Fax: 55-81-271-03-59
Jan. 31- Feb. 2	1995 IEEE MULTI-CHIP MODULE CONFERENCE /The Cocconut Grove, Santa Cruz, CA	Lisa Pascal - Deadline: Past Due Tel: (408) 459-2263 Fax: (408) 459-4829
Feb. 15-17	1995 IEEE INTERNATIONAL SOLID-STATE CIRCUITS CONFERENCE / San Francisco Marriott, San Francisco, CA	Diane S. Suitters - Deadline: Past Due Tel: (202) 639-4255 Fax: (202) 347-6109
Mar. 13-17	1995 ULTRAFAST ELECTRONICS AND OPTOELECTRONICS TOPICAL MEETING /Dana Point Resort, Dana Point, CA	Ellen Murphy - Deadline: Past Due Tel: (202) 416-1995 Fax: (202) 416-6100
Mar. 21-23	1995 NATIONAL RADIO SCIENCE CONFERENCE /Alexandria University, Alexandria, Egypt	Ibrahim A. Salem - Deadline: Past Due Tel: 20-2-258-0256 Fax: 20-2-349-8217
Mar. 23-25	1995 IEEE INTERNATIONAL CONFERENCE ON MICROELECTRONIC TEST STRUCTURES /Nara-ken New Public Hall, Nara, Japan	Yukinori Kuroki - Deadline: Past Due Tel: 81-92-641-1101 Fax: 81-92-641-5866
April 3-6	1995 IEEE INTERNATIONAL RELIABILITY PHYSICS SYMPOSIUM /Riviera Hotel, Las Vegas, NV	Joseph W. McPherson - Deadline: Past Due Tel: (214) 995-2183 Fax: (214) 995-2932
Apr. 20-22	1995 IEEE INTERNATIONAL WORKSHOP ON CHARGE-COUPLED-DEVICES AND ADVANCED IMAGE SENSORS /Dana Point Resort, Dana Point, CA	Eric R. Fossum - Deadline: 12/16/94 Tel: (818) 354-3128 Fax: (818) 393-0045
May 1-4	1995 IEEE CUSTOM INTEGRATED CIRCUITS CONFERENCE /Santa Clara Convention Center & Westin Hotel, Santa Clara, CA	Melissa Widerkehr - Deadline: 12/14/94 Tel: (202) 986-2166 Fax: (202) 986-1139
May 9-13	1995 IEEE INTERNATIONAL CONFERENCE ON INDIUM PHOSPHIDE AND RELATED MATERIALS /Hokkaido University Conference Hall, Sapporo, Hokkaido, Japan	Melissa Estrin - Deadline: Past Due Tel: (908) 562-3896 Fax: (908) 562-8434
May 14-17	1995 IEEE MICROWAVE AND MILLIMETER-WAVE MONOLITHIC CIRCUITS SYMPOSIUM /Orange County Convention Civic Center, Orlando, FL	Val Peterson - Deadline: Past Due Tel: (707) 577-2304 Fax: (707) 577-4090
May 16-18	1995 UNIVERSITY/GOVERNMENT/INDUSTRY MICROELECTRONICS SYMPOSIUM /J.J. Pickle Research Center, University of Texas, Austin, TX	Mahboob Khan - Deadline: Past Due Tel: (408) 749-4213 Fax: (408) 749-5585
May 23-25	1995 IEEE INTERNATIONAL SYMPOSIUM ON POWER SEMICONDUCTOR DEVICES AND INTEGRATED CIRCUITS /Yokohama Convention Center, Yokohama, Japan	Toshiaki Yachi - Deadline: Past Due Tel: 81-422-59-3129 Fax: 81-422-59-2172
May 30 - June 2	1995 INTERNATIONAL SYMPOSIUM ON ELECTRON, ION AND PHOTON BEAMS SYMPOSIUM /Scottsdale Conference Resort, Scottsdale, AZ	John N. Randall - Deadline: 1/6/95 Tel: (214) 995-2723 Fax: (214) 995-2836
May 31- June 2	1995 INTERNATIONAL SYMPOSIUM ON VLSI TECHNOLOGY, SYSTEMS AND APPLICATIONS /Hyatt Hotel, Taipei, Taiwan	Genda J. Hu - Deadline: 12/16/94 Tel: (408) 943-4861 Fax: (408) 943-2118
June 6-8	1995 IEEE SYMPOSIUM ON VLSI TECHNOLOGY /Kyoto Grand Hotel, Kyoto, Japan	Hiroyoshi Komiya - Deadline: 1/9/95 Tel: 81-727-82-5131 Fax: 81-727-80-2685
June 7-10	1995 CONFERENCE ON INSULATING FILMS ON SEMICONDUCTORS /Grand Hotel de Paris, Villard-de-Lans, France	Sorin Cristoloveanu - Deadline: Past Due Tel: 33-76-85-60-40 Fax: 33-76-85-60-70
June 19-21	1995 IEEE DEVICE RESEARCH CONFERENCE /University of Virginia, Charlottesville, VA	Umesh K. Mishra - Deadline: 3/1/95 Tel: (805) 893-3586 Fax: (805) 893-2149
June 25-29	1995 IEEE TRANSDUCERS - INTERNATIONAL SOLID-STATE SENSORS AND ACTUATORS CONFERENCE /City Conference Center, Stockholm, Sweden	Beril Hok - Deadline: 1/1/95 Tel: 46-21-80-00-99 Fax: 46-21-80-10-09
July 30 - Aug. 4	1995 IEEE INTERNATIONAL VACUUM MICROELECTRONICS CONFERENCE /Portland Marriott Hotel, Portland, OR	Judith A. Sjoberg - Deadline: 4/30/95 Tel: (505) 989-4735 Fax: (505) 989-1073
July 31 - Aug. 4	1995 INTERSOCIETY ENERGY CONVERSION ENGINEERING CONFERENCE /Buena Vista Palace Hotel, Orlando, FL	D. Yogi Goswami - Deadline: Past Due Tel: (904) 392-0812 Fax: (904) 392-1071
Aug. 6-9	1995 IEEE CORNELL CONFERENCE ON ADVANCED CONCEPTS IN HIGH SPEED SEMICONDUCTOR DEVICES AND CIRCUITS /Cornell University, Ithaca, NY	George N. Maracas - Deadline: 4/8/95 Tel: (602) 965-2562 Fax: (602) 965-0775

DATE	NAME/LOCATION	CONTACT - ABSTRACT DEADLINE
Aug. 13-16	1995 IEEE NON-VOLATILE SEMICONDUCTOR MEMORY WORKSHOP/ Hyatt Monterey Hotel, Monterey, CA	Rustom Irani - Deadline: 5/5/95 Tel: (510) 498-1729 Fax: (510) 657-8495
Aug. 21-24	1995 INTERNATIONAL CONFERENCE ON APPLICATIONS OF DIAMOND FILMS AND RELATED MATERIALS/NIST, Gaithersburg, MD	Albert Feldman - Deadline: 1/30/95 Tel: (301) 975-5740 Fax: (301) 990-8729
Aug. 21-24	1995 INTERNATIONAL CONFERENCE ON SOLID-STATE DEVICES AND MATERIALS/ International House, Osaka, Japan	Bus. Ctr. Academic Soc. - Deadline: 4/15/95 Tel: 81-3-5814-5800 Fax: 81-3-5814-5823
Aug. 29 - Sept. 1	1995 IEEE INTERNATIONAL SYMPOSIUM ON COMPOUND SEMICONDUCTORS/ Shilla Hotel, Cheju Island, Korea	Yoon Soo Park - Deadline: 4/30/95 Tel: (703) 696-5755 Fax: (703) 696-2611
Sept. 6-8	1995 IEEE INTERNATIONAL CONFERENCE ON SIMULATION OF SEMICONDUCTOR DEVICES AND PROCESSES/Universitat Erlangen-Nurnberg, Erlangen, Germany	Heiner Ryssel - Deadline: 3/1/95 Tel: 49-9131-85-8633 Fax: 49-9131-85-8698
Sept. 18-19	1995 IEEE/SEMI INTERNATIONAL SYMPOSIUM ON SEMICONDUCTOR MANUFACTURING/Hyatt Regency Hotel, Austin, TX	Court Skinner - Deadline: 3/24/95 Tel: (408) 721-7420 Fax: (408) 736-8503
Sept. 18-21	1995 INTERNATIONAL CONFERENCE ON SILICON CARBIDE AND RELATED MATERIALS/Kyoto Research Park, Kyoto, Japan	Hiroyuki Matsunami - Deadline: 4/14/95 Tel: 81-75-753-5340 Fax: 81-75-751-1576
Sept. 22-23	1995 TOPICAL WORKSHOP ON III-V NITRIDES/Nagoya International Conference Hall, Nagoya, Japan	Hadis Morkoc - Deadline: Not Available Tel: (217) 333-0722 Fax: (217) 244-2278
Sept. 25-27	1995 EUROPEAN SOLID-STATE DEVICE RESEARCH CONFERENCE/Netherlands Congress Centre, The Hague, The Netherlands	Antonius J.G. Spiekerman - Deadline: 3/24/95 Tel: 31-15-782431 Fax: 31-15-785691
Oct. 1-3	1995 IEEE BIPOLAR/BICMOS CIRCUITS AND TECHNOLOGY MEETING/ Marriott City Center Hotel, Minneapolis, MN	Janice V. Jopke - Deadline: 4/3/95 Tel: (612) 934-5082 Fax: (612) 934-6741
Oct. 2-4	1995 IEEE INTERNATIONAL CONFERENCE ON COMPUTER DESIGN: VLSI IN COMPUTERS AND PROCESSORS/Four Seasons Hotel, Austin, TX	Wayne Wolf - Deadline: 3/6/95 Tel: (609) 258-1424 Fax: (609) 258-3745
Oct. 2-5	1995 IEEE INTERNATIONAL SOI CONFERENCE/Westward Look Hotel, Tucson, AZ	Sandy Grawet - Deadline: 5/26/95 Tel: (310) 371-3438 Fax: (310) 371-1567
Oct. 11-15	1995 INTERNATIONAL SEMICONDUCTOR CONFERENCE/Hotel Sinaia, Sinaia, Romania	Doina Vancu - Deadline: 4/30/95 Tel: 401-6333040 Fax: 401-3127519
Oct. 15-18	1995 INTERNATIONAL CONFERENCE ON VLSI AND CAD/ The Swiss Grand Hotel, Seoul, Korea	Deog Kyoona Jeona - Deadline: 8/17/95 Tel: 82-02-880-7437 Fax: 82-02-887-6576
Oct. 19-21	1995 SEMICONDUCTOR MANUFACTURING TECHNOLOGY WORKSHOP/ Vanguard International Semiconductor Corporation, Hsinchu, Taiwan, R.O.C.	Chi-Ming Chang - Deadline: 4/1/95 Tel: 886-35-770355 Fax: 886-35-787952
Oct. 22-25	1995 IEEE INTERNATIONAL INTEGRATED RELIABILITY WORKSHOP/Stanford Sierra Camp, South Lake Tahoe, CA	David L. Erhart - Deadline: Not Available Tel: (602) 814-4256 Fax: (602) 814-4167
Oct. 23-27	1995 EUROPEAN PHOTOVOLTAIC SOLAR ENERGY CONFERENCE AND EXHIBITION/Nice, Italy	Jurgen Schmid - Deadline: Not Available Tel: 49-721-608-2725 Fax: 49-721-695-224
Oct. 24-28	1995 INTERNATIONAL CONFERENCE ON SOLID-STATE AND INTEGRATED CIRCUITS TECHNOLOGY/Beijing International Convention Centre, Beijing, China	Mengqi Zhou - Deadline: Past Due Tel: 861-8263459 Fax: 861-8263458
Oct. 25-27	1995 INTERNATIONAL SYMPOSIUM ON SIGNALS, SYSTEMS AND ELECTRONICS/ Parc 55 Hotel, San Francisco, CA	Tatsuo Itoh - Deadline: 3/15/95 Tel: (310) 206-4820 Fax: (310) 206-4819
Oct 29	1995 GALLIUM ARSENIDE RELIABILITY WORKSHOP/Sheraton Harbor Island Resort, San Diego, CA	Anthony A. Immorlica - Deadline: 8/7/95 Tel: (315) 456-3514 Fax: (315) 456-0695
Oct. 29 - Nov. 1	1995 IEEE GALLIUM ARSENIDE INTEGRATED CIRCUITS SYMPOSIUM/ Sheraton Harbor Island Resort, San Diego, CA	George Bechtel - Deadline: 5/1/95 Tel: (415) 941-3438 Fax: (415) 941-5120
Nov. 5-9	1995 IEEE INTERNATIONAL CONFERENCE ON COMPUTER-AIDED DESIGN/San Jose Red Lion Hotel, San Jose, CA	Kevin Lepine - Deadline: Not Available Tel: (303) 530-4562 Fax: (303) 530-4334
Nov. 7-10	1995 IEEE REGION 10 CONFERENCE (TENCON '95) ON MICROELECTRONICS AND VLSI/Hong Kong Convention and Exhibition Centre, Wanchai, Hong Kong	Nelson Yung - Deadline: 3/17/95 Tel: 852-859-2685 Fax: 852-559-8738
Nov. 13-15	1995 IEEE/SEMI ADVANCED SEMICONDUCTOR MANUFACTURING CONFERENCE AND WORKSHOP/Hyatt Regency Hotel, Cambridge, MA	Margaret M. Kindling - Deadline: 3/1/95 Tel: (202) 457-9584 Fax: (202) 659-8534

IEEE Division I Director's Report

Suzanne Nagel



This is the first column I have written for a Society Newsletter in my capacity as your Division I Director, so I'm somewhat in a quandary as to how to best address issues or topics that you would like to hear about. So please, provide feedback!

I now realize that as a Division Director, I wear multiple hats: one that relates to activities in our division, a second that relates to interactions with other entities, both outside our division and at the Institute level, and yet a third as an elected board member responsible for activities of the Institute. IEEE is an exceedingly complex organization with a very diverse set of member activities and needs. Needless to say, it takes a tremendous amount of energy and effort just to understand how things work, much less try to be involved with trying to improve things.

At the Division level, I have focused on first trying to understand the activities of EDS, CASS, CPMTS, LEOS and the Solid State Circuits Council to expand my base from my LEOS activities. By year's end, I

will have attended at least one of all of the administrative committee meetings. To date, this has been very valuable, and I see many opportunities to both share practices and explore synergies. One critical area we can all participate in is supporting C&D Magazine, both in contributing to and improving its content, as well as expanding its subscriber base. I am exploring expanding the oversight and editorial board to provide more support. I firmly believe C&D Magazine can be our divisional vehicle for presenting more application oriented material to our members. Incidentally, this is an issue with which all of our society entities are struggling.

Another observation I would make is that there is a tremendous opportunity for us to co-sponsor a sub-set of small meetings on emerging topical areas of interest. By bringing together cross-societal members working on components and packaging for advanced applications, we can explore how our efforts can meet user needs. This is essential if we want to ensure that our field has a healthy and viable economic base.

I also feel we could work together more effectively to provide chapter and local support to our members. Usually, local meetings and other events have a broad cross-section of interest, and by joining forces we could deliver more value.

We are also exploring the possibility of

putting together a mini-publication offering targeted new markets for our publications, relative to the traditional library subscribers. In this way, we may be able to expand our circulation base.

These are just a few of the things we can explore within our division. There are other societies outside our division, like MTTs, which has a high degree of synergy with our activities. I look forward to facilitating discussions on how to best address these opportunities.

At the Institute level, I have been impressed to see the commitment and activities of other IEEE volunteers working on education, publications, professional activities, standards and throughout the regions, providing needed support to members. I'd like to discuss some of my thoughts on that in my next report.

Lastly, the Institute is earnestly exploring ways to improve itself, both in terms of its services and in the efficiency and effectiveness of its structure. I strongly urge you to provide input to both me and your Administrative Committee on what types of changes you would like to see in IEEE.

Thanks for your input and congratulations on your many activities. Your society plays an important role in advancing our technology.

—Suzanne R. Nagel,
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