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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-in-Chief or appropriate Editor. All contact information is listed on the back cover page. Whenever possible, e-mail is the preferred form of submission.

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

2001 Bipolar/BiCMOS Circuits and Technology Meeting (BCTM)

The 2001 Bipolar/BiCMOS Circuits and Technology Meeting (BCTM) will be held in Minneapolis, MN, from September 30 to October 2, 2001. BCTM provides a forum for the technical communication focused on the needs and interests of bipolar and BiCMOS engineers. The conference covers the design, performance, fabrication, testing and application of bipolar, BiCMOS and BiFET integrated circuits. This year's conference includes a short course, an evening banquet, several invited papers, a vendor exhibition, and a best student paper award.

The conference starts off with a Short Course on Sunday, September 30. The course is divided into four sessions, each 1.5 hours in length. The first session will be taught by Klaus Runge (Gtran) concerning high-speed IC circuit design for optical communications. Joerg Berkner (Infineon Technologies AG) will teach the second session and will discuss parameter extraction for bipolar compact models. The third session will be led by Jeff Johnson (IBM) on the topic of process device simulation of SiGe HBT DC/AC characteristics. David Pehlke (Ericsson) will give the final short course session on the subject of production measurement techniques. The BCTM short course has become a very popular part of the conference and attracts a large percentage of the BCTM attendees each year.

On Monday morning, the technical program begins with the keynote speaker, Behrooz Abdi, from Motorola. Mr. Behrooz will discuss communication applications for the next decade and their requirements for circuits and technologies. After the Monday morning technical sessions, everyone is invited to a luncheon with an invited speaker. A banquet will be held on Monday evening. Several exhibits by design, test/measurement, and CAD/modeling vendors will also be on display at the conference.

The conference technical sessions offer exceptional technical papers that provide the latest and most significant developments in Bipolar/BiCMOS integrated circuits. Presentations are given in the following areas: Analog/Digital Circuit Design, Radio Frequency Circuit Design, Device Physics, Modeling and Simula-



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Your Comments Solicited

Your comments are most welcome. Please write directly to the Editor-in-Chief of the Newsletter at the address given on the back cover page.

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EDS Announces Two New Membership Programs for Its Chapters



James B. Kuo

The Electron Devices Society would like to announce the start of two new membership programs, i.e., the Senior Member Program (SMP) and the Membership Fee Subsidy Program (MFSP). These programs, which will both be administered by the EDS Chapters, are described in the following paragraphs. We welcome and encourage your participation in these new programs. If you have any questions, please contact the EDS Executive Office. Thank you for supporting IEEE and EDS.

Senior Member Program (SMP)

EDS has initiated a new program to increase its number of members with the grade of Senior Member. This is the highest IEEE grade for which an individual can apply and is the first step to becoming a Fellow of IEEE. If you have been in professional practice for 10 years, you may be eligible for Senior Membership. Just so you are aware, one's educational history is counted towards this 10-year requirement (e.g., 3 years for BS, etc.)

New Senior Members receive a wood and bronze plaque and a credit certificate for up to US\$25 for a new IEEE society membership. Upon request, the IEEE Admission and Advancement Department will send a letter to your employer (supervisor or whomever you designate) recognizing this new status as well.

With EDS' new program, your local EDS chapter can also benefit from your successful elevation to Senior Member. All that is required is for you to indicate on your Senior Member application form that EDS is your nominating entity. Actually, there is a line on the application form that specifically requests the Nominator's Section or Society. So please just indicate 'EDS'.

If you are approved for elevation to Senior Member, then your local EDS chapter will receive US\$25 from EDS within the first quarter of 2002. In addition, as a result of indicating EDS as your nominating entity, EDS will also receive US\$10 from the IEEE as part of the IEEE's Nominate-a-Senior-Member Initiative.

For more information concerning Senior Membership, please visit http://www.ieee.org/membership/grades_cats.html#SENIORMEM.

EDS ADCOM ELECTED MEMBERS-AT-LARGE

Term Expires:

2001

A. S. Brown (2)
T. P. Chow (2)
K. F. Galloway (1)
S. J. Hillenius (1)
C. Jagadish (1)
M. A. Shibib (2)
R. Singh (1)

2002

C. L. Claeys (1)
J. A. Dayton, Jr. (1)
M. Fukuma (1)
K. M. Lau (1)
K. Lee (1)
M. L. Ostling (1)
D. L. Pulfrey (1)
K. Shenai (2)

*2003

I. Adesida (2)
T. Hiramoto (1)
L. Lunardi (1)
A. A. Santos (2)
S. C. Sun (2)
H. S. P. Wong (1)
P. K. L. Yu (2)

Number in parenthesis represents term.

* Members elected 12/00

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Upcoming Technical Meetings

Bipolar/BiCMOS

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tion, Process Technology, and Power Devices. Invited and tutorial papers highlight the technical sessions by leading experts from industry and academia. These papers focus on new directions in Bipolar/BiCMOS technology, including emerging technologies.

The Analog/Digital Design Session covers: Analog ICs; Digital ICs; Mixed Analog/Digital ICs; Novel Design Concepts and Methods; DACs and ADCs; Amplifiers; Integrated Filters; Communications ICs; Sensors; Gate Arrays; Cell Libraries; Analog Master Chips; Analog ICs describing novel subsystems within a VLSI Chip; and Packaging of High-Performance ICs.

The Radio Frequency Design Session will contain papers on: Low-Noise Amplifiers; Automatic Gain Control; Low-Phase Noise VCOs; Active Mixers; Active Gytrators; Noise Suppression Techniques; Frequency Synthesizers; Radio Subsystems; Packaging of RF Components; and Designing with Passive Components at RF Frequencies.

The Device Physics Session covers the following areas: New Device Physics Phenomena in Si, SiGe, and III-V Devices; Profile Design Issues and Scaling Limits;

Hot Electron Effects and Reliability Physics; Non-Equilibrium Transport and High Field Phenomena; Low-Frequency Noise; and Novel Measurement Techniques.

The Modeling and Simulations

Session covers: Improved BJT and HBT Models; Behavioral Modeling Techniques; Parameter Extraction Methodologies and Test Structures; RF and Thermal Simulation Techniques; Modeling of Passive Components, Interconnect and Packages; Statistical Modeling; and Device, Process and Circuit Simulation.

The Process Technology Session

Session covers: Advances in Processes and Device Structures Demonstrating Capabilities of High-Speed, Low-Power, Low-Noise, High-Current, High-Voltage, etc.; BiCMOS Processes; Advanced Process Techniques; Si and Si-C Homojunction Bipolar/BiCMOS devices; III-V and SiGe Heterojunction Bipolar/BiCMOS Devices; and Fabrication of High-Performance Passive Components including MEMs.

The Power Devices Session focuses on Discrete and Integrated Bipolar/BiCMOS Power Devices and High-Voltage ICs. Areas included are: Automotive Electronics; Disc Drives; Display Drives; Power Supplies; Electric Utility; Medical Electronics; Motor Controls; Regulators; Amplifiers; Converters; Aerospace Electronic Applications; BiCMOS Circuits for Controlling Power Devices; CAD and Modeling of Power Devices; and Packaging of Power Devices.

The Bipolar/BiCMOS Circuits and Technology Meeting is held at the Marriott City Center Hotel in downtown Minneapolis. The Marriott offers the finest hotel accommodations in the Twin Cities area. Explore the ultramodern City Center shopping complex adjoining the hotel. Stroll by skywalk to an array of boutiques, cinemas, nightspots, and the tree-lined sidewalks of the famous Nicollet Mall. Minneapolis features world-famous cultural attractions such as the Guthrie Theater, Minneapolis Orchestra Hall, and historic Orpheum and State Theaters. In nearby Bloomington is the largest fully enclosed retail and family entertainment complex in the United States—The Mall of America. Here you can shop at over 400 stores, ride a roller coaster, shoot a round of miniature golf, or dine in sunlight or candlelight. There are two wonderful zoos and many other tourist sites in the Twin Cities.

BCTM is sponsored by the IEEE Electron Devices Society, in cooperation with IEEE Solid-State Circuits Society and the IEEE Twin Cities Section. The 2001 Conference Chair is Kenneth O, University of Florida, Gainesville, FL. The Technical Program Chair is Hiroshi Iwai, Tokyo Institute of Technology, Yokohama, Japan. Interested parties can contact the BCTM Conference Manager:

*Janice Jopke
CCS Associates
Eden Prairie, MN*

2001 International SOI Conference

The 27th Annual IEEE International SOI Conference, the premier conference dedicated to current trends in Silicon-on-Insulator technology, will be held October 2-4, 2001 at the Sheraton Tamarron Resort in Durango, CO. A one-day Tutorial Short Course will precede the conference on October 1.

The SOI Conference was established with the support of IEEE to provide a forum for open discussion in all areas of silicon-on-insulator technologies and their applications. Ever increasing demand and modifications in this technology bring the industry together to discuss



new accomplishments and gains. Original papers presenting new developments in the industry will be presented at the conference.

The 2001 SOI International Conference will begin with a half-day plenary session followed by two days of oral sessions, a poster session, and a closing recent news session on Thursday. Session topics will focus on basic materials research, device research, circuit development (special and improved), and applications and uses. The poster session is preceded by short oral presentations by the authors to guide conference participants to topics of specific interest. Rump sessions will be held on

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SOI Conference

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Wednesday evening, October 3. These sessions encourage attendees to share their opinions and expertise on the chosen topics of discussion.

Additionally, a materials and equipment exhibition relating to SOI technology will be held concurrently with the conference. Participants will have the opportunity to visit the exhibit area to see what's new in SOI. Overall, the 2001 SOI International Conference offers attendees a broad spectrum of information, opportunities for discussion with one's peers, and is a must for engineers with direct involvement or partial involvement in SOI.

The 2001 SOI Conference seeks papers on a wide range of SOI technology including:

- Double gate/vertical channel structures, other novel structures,
- SOI material science, modification, characterization and manufacture,
- Physics and modeling of SOI devices,
- SOI circuit applications (high-performance, low power, high-voltage/low voltage, microwave, analog circuits etc),
- New SOI structures, circuits and applications (3D integration, displays, microactuators, microsensors, etc),
- SOI reliability issues (hot-carrier injection, radiation effects, high-temperature operation, etc.),
- Manufacturability and process integration of SOI devices and circuits, and
- Alternate silicon-on-insulator material efforts.

At the conclusion of the Conference, a Best Paper Award will be presented. Abstracts for 2001 SOI Conference needed to be submitted electronically to www.soiconference.org by May 10, 2001. Late news papers with exceptional merit will be considered for the Late News session if submitted on or before August 15, 2001.

Once again, the popular One-Day Tutorial Short Course will be offered preceding the 2001 SOI International Conference. Tutorial Short Course instructors have many years of experience in the field of silicon-on-insulator technology. The course is intended to educate attendees in detail about current trends and issues in the SOI industry. The SOI 2001 Tutorial Short Course will focus on applications and devices, as well as discussions about

prospects for future business and how these technologies may be applied. Participants will receive copies of all visual presentations.

The SOI Conference is held annually throughout the United States. This year's conference is being held at the Sheraton Tamarron Hotel in Durango, CO. The conference is guided by an international steering committee and a technical committee comprised of members of the society throughout the world. The 2001 conference is organized by: General Chairperson, Harold Hovel (IBM Corporation); Technical Program Chair, Dimitris Ioannou (George Mason University); Local Arrangements Chairperson, Mike Liu (Honeywell Solid State Electronics Ctr.); Treasurer and Registration Chair, Mike Mendicino (Motorola); Rump and Poster Chair, John Conley (NASA/Jet Propulsion Laboratory); and Short Course Chair, James Burns (MIT Lincoln Lab).

One of the most popular conference centers in the United States, the Sheraton Tamarron Hotel is located in Durango, in southwestern Colorado. Durango is a year-

round meeting and recreational destination right in the heart of the San Juan Mountains. Tamarron's 750-acre resort and conference complex combines the best of both worlds: a natural wilderness setting with full service meeting and conference capabilities. Plan to attend 2001 SOI, and take advantage of the opportunity to explore southwestern Colorado before or after the conference. Enjoy the beautiful scenery, explore a goldmine, hike in the San Juan Mountains, or take a rafting trip down the rapids. Whatever the choice, Durango is sure to please as a great conference destination combined with the regal beauty of the San Juan Mountains.

You may contact the 2001 IEEE International SOI Conference for additional information as follows: c/o BACM, 520 Washington Blvd., #350, Marina del Rey, CA 90292, TEL: 310-305-7885; FAX: 310-305-1038; E-Mail: bacm@mediaone.net; or at <http://www.soiconference.org>.

*Harry Hovel
IBM Corporation
Yorktown Heights, NY*

2001 International Conference on Simulation of Semiconductor Processes and Devices (SISPAD)



Hotel Divani-Apollon Palace where the Conference will be held.

The 2001 International Conference on Simulation of Semiconductor Processes and Devices (SISPAD 2001) will be held on September 5-7, 2001 at the Divani-Apollon Palace Hotel in Athens, Greece. SISPAD provides an opportunity for the presentation and discussion of recent advances in modeling and simulation of semiconductor devices, processes and equipment for both increased physical understanding and for applications to both design and manufacturing. The program consists of 20-minute oral presentations, with ample time for questions and

answers. In addition, a poster session is planned, which provides a less formal venue and allows more in-depth interaction with the authors. Paper topics include:

- Device simulation including quantum effects and novel devices in Silicon or compound semiconductors
- Process modeling and simulation including both continuum and atomistic approaches
- Semiconductor equipment simulation
- Circuit/Interconnect modeling
- Integration of process, device and circuit simulation

- Advanced numerical methods and algorithms
- Compact modeling and parameter extraction
- Determination of model parameters and material properties through simulation
- Simulation of microelectromechanical devices

The SISPAD 2001 program will feature an expanded selection of invited speakers. The list of invited speakers includes:

- Asenov (Un. of Glasgow)
- D. Antoniadis (MIT)
- R. Dutton (Stanford Un.)
- M. Jaraiz (Un. of Valladolid)
- Y. Kamakura (Osaka Un.)
- W. Schoenmaker (IMEC)
- Scholten (Philips)
- N. Shigyo (Toshiba)

The SISPAD conference is a truly international conference. The conference site rotates between North America, Europe and Asia. The 1999 and 2000 conferences were held at Kyoto, Japan, and Seattle, USA, respectively. Submissions include a broad cross-section of industry, university and government sponsored work. For SISPAD 2001, 165 papers have been submitted from 25 countries all over the world. By attending, you will have the opportunity to interact with the worldwide leaders in TCAD research and development. The conference organizers strive to maintain an intimate conference (typical attendance is 150-200 people) with plenty of opportunities for "hallway" discussions. In addition to the Conference Technical Program, several social activities are being

planned to allow attendees ample opportunity to enjoy their stay. The Conference will be held at the Hotel Divani-Apollon Palace, which is located at Kavouri-Vouliagmeni, a suburb of Athens on the Saronic Bay.

Athens, the most historic capital of Europe is a city with an unequalled cultural tradition and unique historic monuments. Additional information about museums and archeological sites in Athens, as well as through out Greece can be obtained from the website of the Ministry of Culture: <http://www.culture.gr>. For additional information, please view the conference website at <http://imel.demokritos.gr/sispad.html>.

*Dimitris K. Tsoukalas
Institute of Microelectronics
Aghia, Greece*

2001 International Symposium on Semiconductor Manufacturing (ISSM)

The International Symposium on Semiconductor Manufacturing (ISSM) is a worldwide forum specifically designed for semiconductor device manufacturers and suppliers. ISSM 2001 will be held Monday, October 8 through Wednesday, October 10 at the San Jose, CA, Fairmont Hotel.

Created more than a decade ago by key corporate executives, ISSM places an emphasis on sharing industrial experiences, technical solutions and opinions on the advancement of manufacturing science. ISSM has developed into one of the most respected and well-attended conferences in the industry. Now celebrating its tenth anniversary, ISSM has a stellar conference planned for 2001.

Recognizing that manufacturing expertise is a cornerstone to corporate success, ISSM places a high priority on relevance, significance and applicability to wafer fabrication. Additionally, plenary presentations provide opportunities for presenting broad visions and outlining key challenges facing the industry.

This year's event covers timely and important topics like Factory Design; Manufacturing Strategy and Structure; Ultra Clean Technology; Process and Metrology Equipment; Process Materials Optimization; Environment, Safety and Health; Manufacturing Control and Execution; Defect Reduction; and Yield Enhancement.

As an international conference, ISSM seeks the best talent from around the world. As many as fifty companies from fifteen countries are represented in a typical year. Conference presenters include manufacturing professionals, engineers, and managers from semiconductor, equipment, and materials companies as well as academic experts from universities and research organizations. Thus, attendees are exposed to the latest technical information.

Each day is introduced with keynote addresses from renowned industry leaders. This year's star-studded roster includes Craig Barrett from Intel, Morris Chang from Taiwan Semiconductor Corporation, D. J. Dunn from ASML, Koichi Nagasawa from the Japanese Electronics and Information Technology Industries Association, Hector Ruiz from Advanced Micro Devices, and Ken Schroeder from KLA-Tencor. These speakers are certain to present analyses, strategies, and demonstrations as they reveal their perspectives to an attentive and rapt audience.

Prospective authors are required to e-mail a two-page abstract that includes technical figures. To ensure high quality, abstracts are thoroughly and comprehensively peer reviewed by ISSM's international technical committees. Once accepted, authors work with a coach to complete their paper according to ISSM and IEEE guidelines. All papers are pub-



lished in the conference proceedings. Oral presentations are projected electronically at the conference, and poster papers are presented in a highly interactive session. The formal Call for Papers, submission templates and other guidelines can be found at the ISSM web site: <http://www.issm.com>. The deadline for submitting an abstract was Friday, April 20, 2001.

In addition to the oral and interactive technical presentations, there will also be two separate workshops on Sunday, October 7. One workshop focuses on Current Manufacturing Challenges of 300mm. The second workshop explores Manufacturing Issues Beyond the 70nm Node.

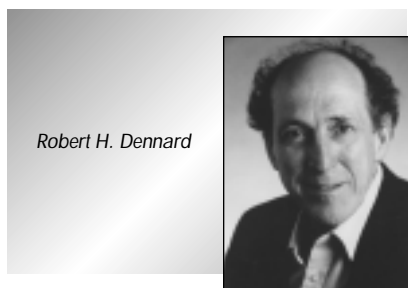
ISSM 2001 will be held at the Fairmont Hotel in San Jose, CA. Located in the heart of Silicon Valley, the area offers a wide variety of interests to those visiting from out of state or out of the country. Extended time can be spent in San Francisco, the Napa Valley wine country, Lake Tahoe, Yosemite National Park, or the charming seaside towns of Carmel and Monterey.

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Society News

EDS Members Named Winners of 2001 IEEE Medals

Two EDS members won 2001 IEEE Medals. Dr. Robert H. Dennard won the IEEE Edison Medal and Dr. Kurt E. Petersen won the IEEE Simon Ramo Medal.



Robert H. Dennard

IEEE Edison Medal

"For the invention of the 1-transistor DRAM cell, and contributions to the development of MOSFET device scaling principles."

In his remarkable career at IBM, Dr. Robert H. Dennard has played a key role in two of the most groundbreaking innovations of the microelectronics industry. His work on the one-transistor memory cell led the way to readily available, inexpensive, high-density memory, which has transformed the industry. Further, the principles he helped to develop for scaling MOSFET devices are so ubiquitous that they are now commonly referred to simply as "the scaling laws."

Dr. Dennard joined the IBM Research Division in 1958, where his early experience included the study of new devices and circuits for logic and memory applications, and the development of advanced data communication techniques. Since joining the IBM Thomas J. Watson Research Center, in Yorktown Heights, NY, in 1963, he has been involved in microelectronics research and development. His primary work there has been in MOSFETs and integrated digital circuits that use them. His accomplishments include pioneering the dynamic RAM memory cell used in most computers today, and playing a key role in the development of the concept of MOSFET scaling. He has held many titles at IBM, and is currently an IBM Fellow in the Silicon Technology Depart-

ment. He has been issued 26 U.S. patents, and has 77 published technical papers or articles to his name.

Robert H. Dennard was born in Terrell, TX, in 1932. He received his B.S. and M.S. degrees in Electrical Engineering from Southern Methodist University, Dallas, in 1954 and 1956, respectively. He earned a Ph.D. from Carnegie Institute of Technology in Pittsburgh, PA, in 1958. A Fellow of the IEEE, Dr. Dennard has earned dozens of awards and honors including the National Medal of Technology from President Reagan for his work on the one-transistor dynamic memory cell. He was also elected to the National Academy of Engineering. Dr. Dennard received the IEEE Cleo Brunetti Award, the IRI Achievement Award from the Industrial Research Institute, and the Harvey Prize from Technion, Haifa, Israel. He was inducted into the National Inventors Hall of Fame and is a member of the American Philosophical Society.



Kurt E. Petersen

IEEE Simon Ramo Medal

"For contributions to microelectromechanical systems (MEMS) science and technology and their integration into systems applications."

Dr. Kurt E. Petersen has been instrumental in establishing the promising field of MEMS, from early conceptual ideas to finished system designs. He has also founded three of the key companies of the field.

Dr. Petersen's seminal review paper, "Silicon as a Mechanical Material" appeared in the May 1982 issue of the Proceedings of the IEEE, and is credited with inspiring widespread research in a

field that has already delivered impressive results, and holds great promise for the future. This paper is still regarded as required reading for anyone entering this area of study. In addition, he initiated and led the development and commercial implementation of several crucial MEMS processing technologies.

In 1982, he co-founded Transensory Devices, and in 1985 he co-founded Lucas NovaSensor. These companies developed pressure sensors and accelerometers, which were widely used in the medical and automotive industries, and inspired other MEMS-based business and research that followed. More recently, he founded Cepheid, a developer of integrated bioanalytical test systems, where he is President, Chief Operating Officer, and Director.

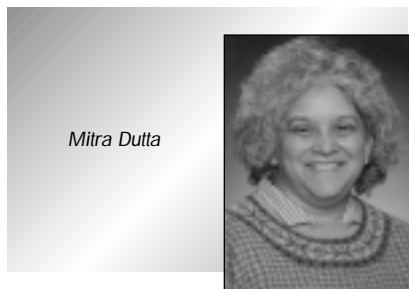
Kurt E. Petersen was born on February 13, 1948 in San Francisco, CA. He obtained a B.S. cum laude from the University of California, Berkeley, in 1970, and a Ph.D. degree from the Massachusetts Institute of Technology in 1975, both in Electrical Engineering. He joined the IBM Research Division in San Jose, CA, as a research staff member in 1975, where he initiated his groundbreaking work.

Dr. Petersen is a Fellow of the IEEE, and has been a key force behind a number of Institute activities related to MEMS. He has served on numerous technical program committees as well as Chairman of the Solid-State Sensors and Actuators Workshop and Chairman of the first International Conference on MEMS. He is invited frequently to speak on the subject of MEMS and, particularly, the commercialization of MEMS.

A member of Tau Beta Pi and Sigma Xi, he has won many honors, including an award for the "Year's Best R&D" from R&D Magazine, the "Best New Product of the Year" from Design News Magazine. He holds more than 22 patents and has published more than 100 technical papers.

Kurt Petersen and his wife, Carol, reside in Fremont, CA. He has two children, Scott, a software guru at Adobe Microsystems, and Brett, a molecular biologist soon to attend medical school. His outside interests include travel, cosmology, and skiing.

EDS Member Named Winner of the 2000 IEEE-USA Harry Diamond Award



Mitra Dutta

Dr. Mitra Dutta—IEEE Fellow and EDS Member—has been selected as the year 2000 recipient of the IEEE-USA Harry Diamond Award. Dr. Dutta, the only woman receiving this award in its 51-year history, was cited as follows:

“For innovative design, characterization, and realization of high performance heterostructure optoelectronic devices, and establishment of major research programs in this field.”

The official presentation of the IEEE-USA Harry Diamond Award to Dr. Dutta will take place at the IEEE-USA PACE Conference in Tampa, FL, during the Awards

Ceremony on Saturday evening, April 28, 2001. Her citation as well as the citations (and names) of all other Harry Diamond Award recipients are at <http://www.ieeeusa.org/AWARDS/diamond.html>.

Dr. Mitra Dutta received a B.Sc. and an M.Sc. in physics (first class honors) from the University of Delhi. She then spent three years on the faculty at the College of Arts, Science and Technology in Kingston, Jamaica, as well as lecturing part-time at the Physics Department of the University of the West Indies. She received her Ph.D. in physics from the University of Cincinnati, OH, following which she was a research associate at Purdue University and at City College, NY, as well as a visiting scientist at Brookhaven National Laboratory. She then worked at the Electronics Technology and Devices Laboratory (ETDL), Fort Monmouth, which was incorporated into the Army Research Laboratory, first as team leader for the optoelectronics team, then as branch chief and finally as director of the physics division. After moving the laboratory to Adelphi, MD, she joined the Electronics Division of the Army Research Office (ARO). After a short time in ARO's Electronics Division, she was appointed as Associate Director of ARO's Engineering Sciences Directorate and assumed the duty of leading ARO's electronics program. Dr. Dutta recently assumed a Senior Executive Service position of ARO's Direc-

tor of Research and Technology Integration, which entails duty as the deputy director of ARO; ARO is now a component of the US Army Research Laboratory.

She has over one hundred and sixty refereed publications, one hundred and seventy conference presentations, ten book chapters, edited two books, and has had twenty-four US patents issued. She is a Fellow of the Optical Society of America, an IEEE Fellow, and a member of the American Physical Society. She has received the IEEE Harry Diamond Memorial Award in 2000, the Army R&D Achievement Awards in 1990, 1992 and 1994, the ETDL Harold Jacobs' Award in 1991, one of the ten outstanding AMC Personnel of the Year Award in 1992, led the team that won the prestigious Paul A. Siple Memorial Award (First Prize) at the 19th Army Science Conference held in Orlando, FL, in June 1994, and was elected one of the twenty Fellows of Army Research Laboratory. She is an Adjunct Professor of the Electrical and Computer Engineering and Physics Departments of North Carolina State University, an Adjunct Professor of Physics at the University of North Carolina at Chapel Hill, and has had adjunct appointments at the Electrical Engineering Departments of Rutgers University and the University of Maryland.

Mike Strosio
Army Research Office
Triangle Park, NC

Announcement of Newly Elected AdCom Members

On December 10, 2000, the EDS Administrative Committee (AdCom) held its annual election of officers and members-at-large. The following are the results of the election and brief biographies of the members-at-large.

OFFICERS

The following individuals were re-elected for a one-year term beginning 1/1/2001:

President: Cary Y. Yang, *Santa Clara University*
Vice President: Steven J. Hillenius, *Agere Systems*
Treasurer: April S. Brown, *Georgia Institute of Technology*
Secretary: John K. Lowell, *PDF Solutions Inc.*

ADCOM MEMBERS-AT-LARGE

A total of seven persons were elected to three-year terms (2001-2003) as mem-

bers-at-large of the EDS AdCom. Four of the seven individuals were re-elected for a second term, while the other three were first-time electees. The backgrounds of the electees span a wide range of professional and technical interests.

SECOND TERM ELECTEES:



Ilesanmi Adesida

ILESANMI ADESIDA

received his Ph.D. in Electrical Engineering from the University of California, Berkeley, in 1979. From 1979 to 1984, he worked at Cornell University. He was the Head of the Electrical Engineering Department at Tafawa Balewa University, Bauchi, Nigeria, from 1985 to 1987. In 1987, he joined the University of Illinois at Urbana-Champaign, where he is currently a Professor of Electrical and Com-

puter Engineering and an Associate Director of the Center for Compound Semiconductor Microelectronics. His research interests are nanoelectronics and high speed devices and circuits. He has served on the organizing committees of several conferences and also served as an Associate Editor of the *Journal of Electronic Materials*. He was awarded the Oakley-Kunde Award for Excellence in Undergraduate Education in 1994 and was named a University Scholar in 1997.



Arlene A. Santos

ARLENE A. SANTOS

has been involved in silicon integrated circuit technology development and manufacturing for 18 years. Arlene is currently a senior product integration manager at National Semiconductor Corporation where she man-

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Newly Elected AdCom Members

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ages an engineering staff responsible for design and process integration, functional test, and failure analysis. She was the lead integration engineer in visible imaging sensor technology development at Westinghouse Electric Corporation where she co-authored technical publications on design, fabrication, and characterization of charge-coupled devices. Upon graduation from the Massachusetts Institute of Technology, she worked in the chemical vapor deposition and photolithography development at Harris Semiconductor Corporation. She has been actively involved in the IEEE Electron Devices Society (EDS) in the last six years. Arlene has served as the founding chair of the ED/SSC Baltimore Chapter in 1997, the chair of the Technical Committee on Semiconductor Manufacturing from 1998 to 1999, chair of the Graduate Fellowship Sub-committee in 2000, and EDS Website Coordinator, and vice-chair for Regions 1-3 and 7 Subcommittee for Regions and Chapters. She also served in the Program Committee for the International Symposium on Semiconductor Manufacturing (ISSM) from 1998 to 2000.



S. C. Sun

S.C. SUN is the Director of R&D Advanced Module Technology at Taiwan Semiconductor Manufacturing Company (TSMC). He received his Ph.D. degree in Electrical Engineering from Stanford University.

His research interests include CVD metallization, high dielectric constant materials for DRAM applications, and low dielectrics by rapid thermal processing. He has worked at HP, AT&T Bell Labs, and AMD for 16 years in the U.S. He returned to Taiwan in 1991 to build National Nano Device Lab as the Deputy Director. In 1996 he joined TSMC. Dr. Sun has served on various technical committees of IEDM, ECS Meeting, Microprocesses and Nanotechnology Conference (Japan), IEDMS and VLSI-TSA (Taiwan).



Paul K.L. Yu

PAUL K.L. YU received his Ph.D. from the California Institute of Technology in 1983. Since July 1983, he has been a faculty member in the Department of Electrical and Computer Engineering at

the University of California at San Diego (UCSD) where he is now a professor. At UCSD, he conducts research in materials and device for fiber optics and optoelectronics applications. He is a Senior Member of IEEE and a member of OSA. Currently, his research focus is in solving problems for microwave photonics systems. He has published more than 100 papers in the area of photonics.

FIRST-TIME ELECTEES:



Toshiro Hiramoto

TOSHIRO HIRAMOTO (M'93) received B.S., M.S., and Ph.D. degrees in electronic engineering from the University of Tokyo in 1984, 1986, and 1989, respectively. In 1989, he joined the Device Development Center, Hitachi Ltd., Ome, Japan, where he was engaged in the device and circuit design of ultra-fast BiCMOS SRAMs. Since 1994, he has been an Associate Professor with Institute of Industrial Science, University of Tokyo, Japan. He has also been an Associate Professor with VLSI Design and Education Center, University of Tokyo, since 1996. His research interests include low power and low voltage design of advanced CMOS devices, SOI MOSFETs, device/circuit cooperation scheme for low power VLSI, quantum effects in nano-scale MOSFETs, and silicon single electron transistors.



Leda M. Lunardi

LEDA M. LUNARDI received the B.Sc. and M.Sc. in physics from the University of Sao Paulo, Sao Paulo, Brazil, in 1976 and 1979, respectively, and her Ph.D. in electrical engineering from Cornell University in 1985. Her Ph.D. thesis was the first one in the USA on GaAs-based heterojunction bipolar transistors. In 1985, she joined AT&T Bell Labs, in Murray Hill, NJ, where her research focused on high speed heterojunction devices, including resonant tunneling structures. In 1990, she joined the Photonics Research Devices Department in Crawford Hill, Holmdel, where along with S. Chandrasekhar, pioneered the long wavelength optical electronic integrated photoreceivers (OEICs) for a broad range of applications. After the AT&T split, she stayed with AT&T Labs-

Research, where her research was in high-speed electronics and regional optical networks. In May 2000, she joined the recently formed Optical Networks Research group in JDS Uniphase in Freehold, NJ, where her current research areas are in optical communications, dense wavelength division multiplexing (DWDM) and high-speed electronics for time division multiplexing. She has published over 70 refereed papers and conference talks. Dr. Lunardi is the co-recipient of the 2000 IEEE/LEOS Engineering Achievement Award for the design and development of high performance of long wavelength OEICs. She has served on a variety of IEEE technical committee conferences. More recently, she is the 2001 IEDM Technical Program vice-chair and the 2002 IEEE/Cornell Conference on High Performance Devices Conference Chair. She is an IEEE/EDS Distinguished Lecturer.



H.S. Philip Wong

H. S. PHILIP WONG received the B.Sc. (Hons.) degree from the University of Hong Kong in 1982, the M.S. degree from the State University of New York, Stony Brook, in 1983, and the Ph.D. degree in electrical engineering from Lehigh University, Bethlehem, PA, in 1988. He joined the IBM Thomas J. Watson Research Center, Yorktown Heights, in 1988, where he is now Senior Manager of Exploratory Devices and Integration Technology. Since 1993, he has been working on the device physics, fabrication, and applications of nanoscale CMOS devices. His recent work has been on the physics and fabrication technology of double-gate/back-gate MOSFETs and strained Si MOSFETs for CMOS technologies towards the 25-nm channel length regime. In the applications arena, his work has been on solid-state imaging. His recent work has been imaging devices using CMOS technologies and the impact of device scaling on CMOS imaging systems. His interest in solid-state imaging began when he joined IBM in 1988. From 1988 to 1992, he was a member of a team that worked on the design, fabrication, and characterization of a high resolution, high color-fidelity CCD image scanner for art works archiving. These scanners are now in use at several premier museums around the world.

In Memory of Pierre Rossel

It is with a profound sadness that we acknowledge the passing of Pierre Rossel, Research Director at LAAS-CNRS, on April 5, 2001, at the age of 58. His courage and will during his two-year battle against cancer were exemplary.



Pierre Rossel was born in 1943 in Banyuls sur mer, France. After an Engineering degree obtained at ENSHEIT Toulouse in 1965, he obtained a Ph.D. in 1968 and a State Doctorate degree in 1973 from the Paul Sabatier University in Toulouse, France. From 1965 to 1967, he was a lecturer at this University and from then became a full-time researcher at LAAS laboratory, belonging to the French National Scientific Research Centre (CNRS). He created and managed two research groups and was the Director of the Joint laboratory between LAAS-CNRS and Motorola Semiconductor.

His research activities were on MOS devices and circuits, and, starting in 1976, focused on silicon power devices and Smart Power Integrated Circuits. Among the numerous research projects he has managed, one can cite his work on dynamic instabilities of MOST, on avalanche mechanisms, on longitudinal and transversal mobility models, and on macro modeling of power RF MOST. He has invented new MOS switching structures with very low on-resistance (LUMOS), with floating islands (FLIMOS, FLIDIODE), worked on planar termination techniques (SIPOS), and proposed some innovative integration architectures, based on the self-shielding mechanism, for power integrated circuits.

He conducted about 50 Ph.D. theses and published 93

journal papers and 187 conference papers, among them 27 invited talks. He participated in 18 books and held 4 patents.

He was an active member of several technical societies, among them the IEEE (Electron Devices and Microwave Theory and Techniques), EPS (European Physical Society), SFP (Société Française de Physique), SEE (Société des Électriciens et des Electroniciens), EPE (European Power Electronics), SBM (Sociedade Brasileira da Microeletronica). He acted as a chairman or a technical committee member for numerous conferences: ESSDERC (European Solid State Device Research Conference), EPE (European Power Electronics), IEEE BCTM (Bipolar, BiCMOS Circuits and Technology), IEEE PESC (Power Electronics Specialist Conference), IEEE PEDES (Power Electronics, Drives and Energy Systems for Industrial Applications), MIEL (International Conference on Microelectronics), MIXDES (Mixed Design of Integrated Circuits and Systems), SBMICRO/ICMP (International Conference on Microelectronics and Packaging), IPEC (International Power Electronics Conference). Pierre Rossel was a guest editor for the special issue of IEEE TED on "Power and High-Voltage Integrated Circuits" in December 1986.

He received the first Award of the Midi-Pyrénées Innovation Competition three times, and was part of the best research team in 1995, nominated by the CNRS and the *Nouvel Économiste* newspaper.

His tenacity and imagination have led the path to several long-term research projects, which are still conducted today in different places.

Pierre Rossel is survived by his wife, Françoise, a son and a daughter.

Errata to the Nobel Prize Article that Appeared in the April 2001 Issue

Unfortunately, there was an error made in the April 2001 issue of the EDS Newsletter regarding the article entitled IEEE Members Who Received the Nobel Prize for Physics. In the write-up concerning one of the winners of the award, Zhores I. Alferov, a very vital portion of his accomplishments was inadvertently omitted, i.e. his work involving the first cw room temperature operation of a double heterojunction laser. The author of this portion of the article, Nick Holonyak, had submitted this pertinent information, but an error was made in transcribing the text from its original source. The affected portion of the write-up concerning Zhores I. Alferov's accomplishments should have read as follows:

After the semiconductor laser work of 1962, Alferov and his research group launched a large effort to realize double heterojunction devices (for superinjection and carrier and photon con-

finement). He was able, with the AlGaAs-GaAs system, to demonstrate the first low threshold double heterostructure lasers (1968), cw operation at room temperature (1970), high-efficiency heterojunction solar cells (1970), heterojunction p-n-p-n switches (1969), laser p-n-p-n switches (1971), high-efficiency AlGaAs heterostructure LEDs (1968), wide-gap emitter AlGaAs transistors (1972), and grating lasers with narrow beam divergence (1974). He is credited with being one of the prime instigators of the new field of heterostructure electronics, which now includes quantum well heterostructures and superlattices. His most recent work has been concerned with trying to convert the quantum-well laser with quantum-dot laser.

We sincerely apologize to both Zhores Alferov and Nick Holonyak for the error in the April issue.

Call For Nominations – EDS AdCom

The Electron Devices Society of the IEEE invites the submission of nominations for election to its Administrative Committee (AdCom). Presently, the AdCom meets twice per year and is composed of 22 members. Seven members will be elected this year for a term of three years, and a maximum of two consecutive terms is allowed. In 2001, the election will be held after the AdCom meeting on Sunday, December 2. Electees begin their term in office on January 1, 2002.

Nominees are being sought to fill the slate of candidates. Nominees may be self-nominated, or may be nominated by another person; in the latter case, the nominee must have been contacted and have agreed to serve if elected. Any member of

EDS in good standing is eligible to be nominated. As another condition for nomination and election, a nominee must be willing to attend the two annual AdCom meetings.

Please send your nominee's name, address, and supporting information to the EDS Executive Director, W. F. Van Der Vort (see page 2 for contact information) in time to be received by the deadline of **October 19, 2001**. It is very desirable that submissions include a biographical summary in a standard two-page format. The EDS Executive Office can provide you with an example of the format. If you have any questions regarding the nomination requirements or process, feel free to contact the Nominations and Elections Chair, Bruce F. Griffing (see page 2 for contact information).

Call for Nominations for the EDS Chapter of the Year Award

The EDS Chapter of the Year Award is given each year based on the quantity and quality of the activities and programs implemented by the chapters during the prior July 1–June 30 period. Nominations for the award can only be made by Chapter Partners, SRC Chairs/Vice-Chairs, or self-nominated by Chapter Chairs. The winning chapter will receive a certificate and check for \$1000 to be presented at the International Electron Devices Meeting (IEDM). The schedule for the award process is as follows:

Action	Date
Call for Nominations E-Mailed to Chapter Chairs, Chapter Partners, SRC Chairs & SRC Vice-Chairs	6/1
Deadline for Nominations	9/15
Regions/Chapters Committee Selects Winner	Early-October
Award given to Chapter Representative at IEDM	First week of December

EDS Administrative Committee Election Process

The Members-at-Large (MAL) of the EDS AdCom are elected for staggered three-year terms, with a maximum of two consecutive terms. The 1993 Constitution and ByLaw changes mandated increasing the number of elected MALs from 18 to 22, and required that there be at least two members from both IEEE Region 8 (Europe, Mid. East & Africa) and Region 10 (Asia & Pacific). It also required that there be at least 1.5 candidates for each opening. From 1998 to 2000, seven, eight, and seven positions were filled, respectively. In 2001, seven positions will again be filled.

The election procedure begins with the announcement and Call For Nominations in the EDS Newsletter. The slate of nominees is developed by the EDS Nominations Committee and includes the non-Committee and self-nominations received. Nominees are asked to submit a two-page biographical resume in a standard format. Nominations are closed around the end of October, and the biographical resumes are distributed to the 'full' voting members of AdCom prior to the AdCom meeting. Nominees are urged to attend the December AdCom meeting, and the election is held after the conclusion of the meeting.

A continuing flow of new AdCom members who are interested in working for the improvement of the Society and its related technical areas is key to the continued development of EDS and the field of electron devices. Those interested in the field, the Society, and its operations are encouraged to attend AdCom meetings, become involved in Society activities, and to consider running for election to AdCom.

EDS Chapter Subsidies for 2002

Requests for subsidies from EDS chapters are due on August 1, 2001. Last year, the EDS AdCom awarded funding to 56 chapters, with most amounts primarily ranging from US\$250 to US\$1000. In April, Chapter Chairs were sent an e-mail notifying them of the current funding cycle. A list of guidelines was included with each e-mail. In general, activities which are considered fundable include, but are not limited to,

membership promotion travel allowances for invited speakers to chapter events, and support for student activities at local institutions. Subsidy requests should be sent via e-mail, fax, or mail to the EDS Administrator, Laura J. Riello. Her contact information is the same as W.F. Van Der Vort's, included on page 2. Prior to the submission of the subsidy request, the Chapter Chair must submit a chapter activ-

ity report to its respective SRC Chair by July 1. This report should include a general summary of chapter activities (one to two pages) for the prior July 1–June 30 period. You must also attach a copy of the activity report to your chapter subsidy request. Final decisions concerning subsidies will be made by the EDS Regions/Chapters Committee in early October. Subsidy checks will be issued by early December.

EDS DISTINGUISHED LECTURER PROGRAM - LECTURERS RESIDING IN EASTERN USA & CANADA

The EDS Distinguished Lecturer Program exists for the purpose of providing EDS Chapters with a list of quality lecturers who can potentially give talks at local chapter meetings. To arrange for a lecture, the EDS chapters should contact the Distinguished Lecturer directly. A general guideline for the visit, but not the absolute rule, is that the lecturer should be able to include the meeting site with an already planned travel schedule at a small incremental cost to the travel plan. Alternatively, a prior coincident travel plan would not be required if the lecturer is already located within an approximate fifty mile radius of a meeting site. Although the concept of the program is to have the lecturers minimize travel costs by combining their visits with planned business trips, EDS will help subsidize lecturer travel in cases where few/no lecturers will be visiting an area and/or a chapter cannot pay for all the expenses for a lecturer trip. For a full listing of EDS Distinguished Lecturers and travel plans, please contact Laura Riello of the EDS Executive Office (Tel: 1-732-562-3927, Fax: 1-732-235-1626, E-Mail: l.riello@ieee.org).

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Distinguished Lecturer Report from the Santa Clara Valley Chapter

The EDS Santa Clara Valley Chapter, held a half day Symposium on the emerging area of Bluetooth technology on March 16, 2001. Over 130 IEEE members and interested people attended this program which had several invited speakers from various organizations active in this field, who covered technology trends, devices and fabrication technologies and applications of Bluetooth products.

The program started with a talk by Benjamin Thompson, Senior Analyst at Dataquest Gartner Incorporated, who covered the current industry status and future trends in this emerging application area. Over 20 companies, including major players in the wireless communication arena are actively providing products for application to notebook, cellular phones and digital set top boxes for short range communications. Mr. Thompson concluded by showing business projections for growth of market approaching \$2 billion dollars in the year 2005.

Several speakers, including Paul Kempf of Conexant Technology, Marshall Wang of Signia Technologies and Willie Lu of Infineon Technologies, described VLSI technology trends applicable to Bluetooth products, including SOC's manufactured with integrated RF CMOS technologies. The role of SiGe BiCMOS technology with deep trenches, SOI technologies, and other advanced CMOS technologies were described for many of the requirements and applications of Bluetooth products.



Jayasimha Prasad

Jayasimha Prasad, An IEEE/EDS Distinguished Lecturer, covered SiGe Technology for wireless applications and showed specific device and material parameters which must be optimized for wireless applications.

Bernard Xavier from National Semiconductor compared Bipolar and CMOS technologies for implementation of a Bluetooth Radio Modem IC with specific requirements, and Michael Current of Silicon Genesis provided insights to use and advantages of SOI substrates in many applications.



Xing Zhou

The seminar concluded with a talk on Hetero-Material Gate Field-Effect Transistors by **Xing Zhou** of Nanyang Technological University, Singapore, on the unique features of the HMGFET device.

Xing Zhou is an IEEE/EDS Distinguished Lecturer.

The seminar provided an excellent opportunity for our members to learn a great deal about this emerging technology from experts in the Bluetooth Technology area.

IEDM Short Courses on Videotape

The 2000 IEEE International Electron Devices Meeting was held this past year in San Francisco, CA. The two short courses that were offered at this meeting were titled "Advanced Interconnects: Design, Process, and Integration" and "Technology for the Internet Era." These short courses are now available on videotape to purchase through IEEE Customer Service.

Advanced Interconnects: Design, Process, and Integration

Presented by Jim Ryan, IBM; Scott Wills, Georgia Institute of Technology; Ron Goldblatt, IBM; Karen Maex, IMEC; T.R. Yew, UMC; Anthony Oates, Agere Systems.

As technologies scales to the 0.13 μm generation and below, interconnect performance is an increasingly large factor to consider in high-performance and low-power chip designs. To improve interconnect performance at the same pace as transistor performance, revolutionary changes in the material systems are required. However, there are significant challenges associated with the introduction of new materials into a manufacturing environment. This course will describe the materials, process, manufacturing, and design trends in interconnect technology with a focus on copper and low-K interconnect systems.

The first lecture will cover interconnect trends and chip design issues and how they influence the selection of the interconnect architecture. The second lecture will present an overview of the materials and process issues for copper and low-K materials focusing on the evolution of the materials systems over time. The third lecture will describe unique integration

issues surrounding copper and low-K. The fourth lecture will discuss the manufacturing issues including defect monitoring and parameter control at the sector level. Finally, interconnect reliability issues will be covered contrasting the failure modes in Aluminum to Copper.

Order information:

Title: Advanced Interconnects: Design, Process, and Integration	
NTSC Order No. EV6969	NTSC ISBN 0-7803-6804-5
PAL Order No. EV6970	PAL ISBN 0-7803-6805-3
IEEE Member Price: \$350.00	List Price: \$450.00

Technology for the Internet Era

Presented by Sam Shichijo, Texas Instruments Inc.; Mike McMahan, Texas Instruments Inc.; Walter Y. Chen, Scenix; Anantha Chandrakasan, MIT; Akira Matsuzawa, Matsushita Electric; Joachim Burghartz, Delft University of Technology.

The new millennium marks the beginning of the Internet era. With the proliferation of high speed and portable Internet access devices such as cellular phone, PDA, cable modem and DSL, ubiquitous, high speed Internet access is becoming a reality. In the PC era of the '80's and '90's, microprocessor and memory were the components that drove growth of the PC industry. In this Internet era, DSP and analog/mixed signals circuits will be the components that drive the growth in Internet products. The field of Internet access systems is very diverse, ranging from wireless cellular phones to wired broadband access devices with correspondingly diverse circuit and device

continued on page 14

IEDM Short Courses

(continued from page 11)

requirements. This course will explore the key components of both wireless and wired Internet access systems and the implications on device technology. The course starts with system overviews and then discusses the corresponding circuit and device technology.

The first lecture describes the system overview of wireless systems including cellular, satellite and short distance applications.

The second lecture addresses the wired systems for broadband access and home network applications. The third lecture presents the issues of low power system and circuit design for networked applications. The fourth lecture deals with the mixed signal circuit design for System-on-Chip. The final lecture discusses the RF technology issues for both wireless and wired system applications.

Order information:

Title: Technology for the Internet Era

NTSC Order No. EV6971

PAL Order No. EV6972

IEEE Member Price: \$350.00

NTSC ISBN 0-7803-6806-1

PAL ISBN 0-7803-6807-X

List Price: \$450.00

Here's how to place your order for the two IEDM videos:

Tel: (800) 678-4333 (in the USA or Canada) or
(732) 981-0060

Fax: (732) 981-9667

www: <http://shop.ieee.org/store>

E-Mail: customer.service@ieee.org

EDS Independent Short Courses Held in 2000 Now Available on Videotape

The following EDS Independent Short Courses held in 2000 are now available on videotape:

Circuit Designs and Technology for RF-CMOS

NTSC Product No. EV6975 NTSC ISBN 0-7803-6827-4

PAL Product No. EV6976 PAL ISBN 0-7803-6828-2

Overview of Fiber Optic Communications

NTSC Product No. EV6977 NTSC ISBN 0-7803-6829-0

PAL Product No. EV6978 PAL ISBN 0-7803-6830-4

Using Modeling to Resolve Design and Reliability Issues

NTSC Product No. EV6979 NTSC ISBN 0-7803-6831-2

PAL Product No. EV6980 PAL ISBN 0-7803-6832-0

Here's how to place your order for the above videos:

Tel: (800) 678-4333 (in the USA or Canada)

or (732) 981-0060 Fax: (732) 981-9667

www: <http://shop.ieee.org/store/>

E-Mail: customer.service@ieee.org

EDS Members Recently Elected to IEEE Senior Member Grade!

Lisa P. Allen*
Mark L.G. Althouse
Fariborz Assaderaghi
Rashid Bashir
Joseph B. Bernstein*
Mansun Chan
Wei-Tung K. Chien
Michael V. Davidovich
Zoran Djuric
Abasifreke U. Ebong
William J. Gallagher*
Luis M. Hernandez-Garcia
Hongtao Han
Jifa Hao*
Ken-Ya Hashimoto

Kiki Ikossi
Hiroshi Kondoh
Joseph J. Kopanski
Sergy Korenev
Robert R. Krchnavek
Francois Le Chevalier
Gil S. Lee*
Chang Liu*
Ruichen Liu
Akira Matsuzawa
Philip A. Mawby*
Millard G. Mier*
Takashi Mizutani
Donald P. Monroe
Chandra V. Mouli

S. S. Narayanan
Hiroshi Nozawa
William D. Palmer*
Oswaldo DeMelo Pereira*
Angelo Pinto
Michael Schilling
Charles E. Stutz
Christer Svensson
Osamu Tabata*
James Victory
Steven H. Voldman
Scott A. Wartenberg
Kirt R. Williams

* = Individual designated EDS as nominating entity

If you have been in professional practice for 10 years, you may be eligible for Senior Membership, the highest grade of membership for which an individual can apply. New senior members receive a wood and bronze plaque and a credit certificate for up to US \$25 for a new IEEE society membership. In addition, a letter will be sent to employers, recognizing this new status.

For more information on senior member status, visit http://www.ieee.org/membership/grades_cats.html#SENIORMEM. To apply for senior member status, fill out an application at <http://www.ieee.org/organizations/rab/md/smelev.htm>.

Archival CD-ROM of PVSC Proceedings Now Available!

A limited quantity of the proceedings of the IEEE Photovoltaic Specialists Conference, which started back in 1962, is now available in a 5 CD set. The CDs include all of the papers, figures and photos for every paper presented at the conferences. The CD-ROM set is divided into separate conferences. Each conference is indexed

separately which allows you to search within a specified number of conferences. Included in the CD-ROM set are versions of Acrobat Reader (with search) for Microsoft Windows, Apple Macintosh and UNIX. You may search by author and/or title. You can also use a full text search to find any word within the documents.

The price of the PVSC Archival CD-ROM is US\$300 for IEEE members and US\$400 for non-members. If you are interested in ordering the set, please contact the EDS Office for an order form (contact information on page 2).

New Membership Programs

(continued from page 2)

To apply for Senior Member grade, please complete an application form which is available at <http://www.ieee.org/organizations/rab/md/smelev.htm>. You can also request a hard copy Senior Member packet by mail or fax as follows:

IEEE Admissions and Advancements
Department
445 Hoes Lane, PO Box 1331
Piscataway, NJ 08855-1331
FAX: 732 981 0225

We strongly encourage you to apply for IEEE Senior Membership to enhance your career. At the same time, you will be helping your local EDS chapter. To take full advantage of this opportunity, please be certain to indicate EDS as the nominating entity on your application form.

Membership Fee Subsidy Program (MFSP)

IEEE policy currently allows a 50% discount on IEEE dues and one society membership for any individual whose annual salary is less than US\$8600. This offering is referred to as the Minimum Income Special Considerations Option. The Electron

Devices Society now has a new program for its chapters called the Membership Fee Subsidy Program (MFSP), which will both complement the IEEE Minimum Income offering and provide a significant additional benefit for qualified individuals.

With the EDS Membership Fee Subsidy Program, EDS will pay the other 50% of the IEEE and EDS dues that are not covered by IEEE for individuals qualifying for the Minimum Income option for 10 individuals per chapter. These individuals can be either prospective new members or existing members. Although the IEEE Minimum Income option allows individuals to purchase publication subscriptions for one society at a 50% reduced rate, the EDS MFSP does not cover the payment of publication subscriptions.

If a chapter has individuals who qualify for the reduced IEEE Minimum Income offering and the EDS MFSP, all the Chapter Chair needs to do is coordinate the obtaining and submission of the IEEE/EDS membership application forms (for prospective new members) and/or IEEE membership renewal bills (for existing members) for the individuals he/she is proposing to be covered by EDS. The Chapter Chair should also contact the EDS Executive Office to advise of their participation in the program. All applica-

tion forms and renewal bills should be mailed to the EDS Executive Office. Once received, the application forms and bills will be coded by the Executive Office with a special account number and submitted to the pertinent IEEE department for processing.

In subsequent years of participation in the EDS MFSP, the chapter must replace a minimum of six of the ten members who were paid for by EDS in the previous years. Also, a given member will only be allowed to have his/her memberships paid for by EDS a maximum of two times. These two policies will avoid having the same members receive the benefit each year and encourage new membership. These EDS members receiving the MFSP benefits are encouraged to participate in chapter activities and promote its growth.

Aside from being a program for existing EDS chapters, the EDS Membership Fee Subsidy Program is also an extremely good means to help facilitate the launching of new chapters in low income geographical areas. For any questions concerning the program, please contact the EDS Executive Office.

James B. Kuo
University of Waterloo
Waterloo, Canada

ISSM

(continued from page 5)

Online conference registration and hotel information will be available on the ISSM web site in mid-July.

For registration or general information about ISSM, please visit our web site at <http://www.issm.com>, or contact Audrey Measel at ISSM, c/o Meetings Plus,

1777 Botelho Dr., Suite 100, Walnut Creek, CA 94596, TEL: 925-287-5388, FAX: 925-287-5398, E-Mail: ameasel@meetingsplus.com.

ISSM is sponsored by IEEE (Electron Devices Society and Components, Packaging and Manufacturing Technology Soci-

ety), the Ultra Clean Society, and Semiconductor Equipment & Materials International (SEMI).

Michael R. Splinter
TMG
Santa Clara, CA

Regional and Chapter News

USA, Canada and Latin America (Regions 1-6, 7 & 9)

ED Dallas Chapter

by Jose Alfonso Cadena-Hernandez

Over the past quarter of 2001, the Dallas chapter had two interesting lectures focused on emerging technologies in the semiconductor area. The first lecture title was "IEEE 1394b Physical Layer Signaling," where two main objectives were covered: how physical layer signaling is going to be accomplished on IEEE 1394b and how higher transmission speeds are going to be targeted with current materials and cables characteristics. The second lecture title was "Enabling Advanced Optical Networks—Photonic and Optoelectronic Principles and Components," where emerging technologies on the optoelectronic field are being created in order to reach faster transmission speeds. The audience was prominent in both lectures with an average of 25 people attending. Future lectures and seminars are going to be posted soon.

—Chuck Yarling, Editor

ED Cuba Chapter

by Maria Sanchez Colina

A seminar, entitled "Red, Green and Blue Light Emitting Devices from Wide Bandgap II-VI Compounds," was held at the University of Havana on February 6, 2001. This seminar was followed by the annual chapter Workshop on February 8, 2001. This Workshop included contributions in the field of Solar Cells, Semiconductor Lasers, Nanostructures, and Photodetectors. Also, two invited lectures were presented: "Silicon Oxynitrides: A New Kind of Opto-electronic Material?"

and "Growth and Characterization of II-VI Semiconductor Thin Films." A total of 30 individuals from Cuba, Mexico, Colombia, and the USA attended the meeting.

—Adelmo Ortiz Conde, Editor

Europe, Middle East & Africa (Region 8)

AP/ED/MTT/COM/EMC Tomsk Chapter

A report from the International Conference on Modern Techniques and Technology (MTT'2001)

by Oleg Stoukatch

The Tomsk Chapter (Russian Section) in past years has regularly organized the research and technical conferences on various fields. The International Conference on Modern Techniques and Technology (MTT'2001) was held February 26–March 2, 2001 at the Tomsk Polytechnic University with technical co-sponsorship support from EDS. Representatives of different Siberian and foreign universities participated in the conference.

The conference consisted of the works on problems from different fields of radio-engineering, power engineering, instrument making, electromechanics, and electric material science. A higher professional activity was demonstrated by participants. A tutorial on the modern level of technical and information means usage in health services was also organized. The conference included the special session "Youth, science, individuality" on globalization of high education problems.

One of the best traditions of Tomsk conferences, the social program, was particularly rich and contained a concert, award dinner, excursion to the Tomsk 398-year historic downtown and a visit to the northernmost botanic garden in the world.

Based on the active support of EDS and ComSoc, many events have been coordinated by the Chapter and the Tomsk Student Branch, such as the Student Paper Contest on Information Security, the IEEE-Siberian conference of students,

post-graduate students and young researchers on electron devices and materials (SIBEDM), etc. For further information about the events organized by the Tomsk Chapter, please visit our web site <http://me.tusur.ru/~tieee/> or write by email to ird@tusur.ru.

Finally, the Tomsk Chapter thanks the ED Society for sponsorship and hopes for the continuation of mutually advantageous cooperation.

2002 International Conference on Microelectronics (MIEL)

by Ninoslav Stojadinovic

The 23rd International Conference on Microelectronics (MIEL 2002) will be held May 12-15, 2002 at the Faculty of Electronic Engineering, University of Nis, Yugoslavia. The MIEL 2002 Conference will be organized by the ED/SSC Yugoslavia Chapter, in cooperation with the Faculty of Electronic Engineering, University of Nis, and Ei-Holding Co.-Nis, under the co-sponsorship of the IEEE EDS, with the cooperation of IEEE SSCS, and under the auspices of the Serbian Ministry of Science, Technology and Development, Yugoslav Secretariat of Development and Science, Yugoslav Academy of Engineering and City Assembly of Nis.

MIEL is an outstanding European conference, providing an international forum for the presentation and discussion of the recent developments and future trends in the field of microelectronics. Since 1984, there is an aura of internationalization around the MIEL conferences, providing an opportunity for specialists from both academic and industrial environments from the West and East, as well as from the countries of the Third World, to meet in an informal, friendly atmosphere and exchange experiences in the theory and practice of microelectronics.

The topics to be covered by the technical program include all important aspects of microelectronic devices, circuits and systems, ranging from materials and processes, technologies and devices, device physics and modeling, process and device simulation, circuit design and testing, system design and packaging, and characterization and reliability. Based on the past decade's history, it is expected that the technical program of the Confer-



University of Nis, Nis, Yugoslavia - Site of MIEL 2002.

ence MIEL 2002 will consist of about 150 contributed papers by authors from more than 30 countries all around the world, which will be structured into oral and poster sessions. These papers, together with 15 invited papers, which are to be presented by the world leading authorities from the field of microelectronics, will form the solid foundation of MIEL 2002. Two related scientific events, namely the workshops "Power Devices and ICs" and "Microsystem Technologies," containing six invited papers each, will round off the technical program of MIEL 2002.

Among the invited papers are: "Process-Related Reliability of Gate Dielectric for ULSI Device" (C.Y. Chang, National Chiao Tung University, Taiwan), "Isolation Issues in Power Integrated Circuits" (G. Charitat, LAAS-CNRS, France), "SOI Devices for 0.1 micron Gate Lengths" (J.-P. Colinge, University of California, USA), "Access to Microsystem Technology: the MPC Services Solution" (B. Courtois, CMP, France), "Microsystems: Research Task, Education Task, Application Fields, Examples" (H. Detter, Technical University of Vienna, Austria), "Silicon-Carbide Parameters for Process and Device CAD Tools" (S. Dimitrijevic, Griffith University, Australia), "Challenges Facing Power BiCMOS Integration" (T. Efland, Texas Instruments, USA), "Future Microelectronics Beyond Roadmaps" (S. Hillenius, Agere Systems Inc., USA), "Quantum Well Intermixing for Optoelectronic Device Integration" (C. Jagadish, Australian National University, Australia), "Diamond Technology for MEMS and Electronics: Review of Status and Perspectives" (E. Kohn, University of Ulm, Germany), "Semiconductor Device for Fiber Optical Communication Systems" (L. Lunardi, JDS Uniphase Corp., USA), "Advances in Silicon Carbide Power MOS Technology" (P. Mawby, University of Wales, United Kingdom), "Smart Sensor Interface Electronics" (G. Meijer, Delft University of Technology, The Netherlands), "Circuit Design in Multi-GHz Environment" (V. Oklobdzija, University of California, USA), "SiC Device Technology for High Voltage and RF Power Applications" (M. Ostling, Royal Institute of Technology, Sweden), "Integrated Hall Magnetic Sensors" (R. Popovic, EPFL, Switzerland), "Benefits of Process and Device Calibration at Early Stages of CMOS Development" (H. Puchner, LSI Logic Corp., USA), "Trends in Power ICs" (C.A.T. Salama, University of Toronto, Canada), "Is Innovation and

Competition Crucial in the Power Semiconductor Industry? A Market Perspective" (E.M. Shankar, De Montfort University Leicester, United Kingdom), "Semiconductor Technologies for Powering Microchips in the Information Age: From Source to Load" (K. Shenai, University of Illinois at Chicago, USA), "Technology Options for Developing Manufacturable Nanoelectronics" (R. Singh, Clemson University, USA), "MOCVD and PVD Diffusion Barriers for Copper Interconnect" (S. C. Sun, Taiwan Semiconductor Mfg. Co., Taiwan), "Progress in Intelligent Power Semiconductor Devices" (Y. Uchida, Fuji Electric Co., Japan), "Biologically Inspired Optical Vision Sensors" (J. Van der Spiegel, University of Pennsylvania, USA), "Reliability of Microsystems from the Materials Point of View" (J. Villain, University of Applied Sciences Augsburg, Germany), "Recent Developments in Silicon Optoelectronic Devices" (H. Wong, City University of Hong Kong), and "Silicon Technology: Nanoscale CMOS and the Road Beyond" (P. Wong, IBM, USA).

The authors of the contributed papers are asked to submit two-page extended abstracts (including figures, tables and references) which will serve as the basis for the paper selection. Therefore, it should clearly state the purpose of the work and the novelty and significance of the results obtained. A cover page of the abstract should include the complete address (including fax and e-mail) of the author to be contacted, as well as the preference for oral or poster presentation. The deadline for the receipt of the abstracts, which should be sent to the Conference Chairman only in electronic form (MS Word, PDF, PostScript), is September 30 2001. After the paper selection, authors of accepted papers will receive information regarding the layout of papers, transparencies, slides and posters, along with the notice of acceptance.

For further information, please contact: Prof. Dr. Ninoslav Stojadinovic, MIEL 2002 Conference Chairman; Department of Microelectronics, Faculty of Electronic Engineering; University of Nis; Beogradska 14, 18000 Nis, Yugoslavia; TEL: +381 18 529-326, FAX: +381 18 46-180, E-Mail: nino@unitop.elfak.ni.ac.yu, <http://europa.elfak.ni.ac.yu/miel/>.

—Ninoslav Stojadinovic, Editor

MTT/ED Egypt Chapter

by Ibrahim A. Salem

1- On 24 October 2000, we held the second workshop on Teaching Photonics

at Egyptian Engineering Faculties and Institutes. This workshop was held at Cairo University-National Institute of Laser Enhanced Science. There were eight presented papers and the proceedings of this workshop carries the IEEE Catalog No.00EX398.

2- On November 28, 2000, our chapter held a one-day workshop on Teaching Electromagnetics. The workshop was held at the Academy of Scientific Research and Technology. Eight papers were presented and discussed.

3- We held our 18th National Radio Science Conference at Mansoura University, March 27–29, 2001. Sixty-nine papers were presented on three successive days, each day having three parallel sessions. The Conference is sponsored by the IEEE-EDS and IEEE Egypt Section, and it carries the IEEE Catalog No. 01EX462. During this conference three invited papers were also presented:

"Phased Arrays for the New Millennium" by Dr. Eli Brookner as D.L. from IEEE-ASE, "Study of Limitations on Pixel Size of High Resolution Image Sensors" by Dr. El-Sayed, EID Photobit Tech. Corp., and "New Considerations and Challenges for Millimeter Wave Antennas" by Dr. Yehia Antar, Royal Military College, Canada.

ED Israel Chapter

by Gady Golan

1. On Wednesday, January 17, 2001, at the Holon Inst. of Technology (HAIT) - Holon. The subject of the meeting was "Time of Flight Transient Analysis in a Molecular Doped Polymer using a Dispersive-Trapping Formalism." The guest lecturer was Prof. Aaron Peled from HAIT and the Chairman of the meeting was Dr. Gady Golan – IEEE-EDS Israel, Secretary.

2. On Tuesday, March 13, 2001, at the Holon Inst. of Technology (HAIT) - Holon. The subject of the meeting was "Development of Piezoelectric Actuators for MEMS Applications." The guest lecturer was Dr. Shaul Niv from HAIT and the Chairman of the meeting was Dr. Gady Golan – IEEE-EDS Israel, Secretary.

3. On Tuesday, March 27, 2001, at the Holon Inst. of Technology (HAIT) - Holon a meeting concerning "Vacuum Photo-Thermal Processing as a Novel Method for Thin Film Systems Treatment." Fifty people (most of them students and some academic staff) attended the meeting in Holon, and the Chairman of the meeting was Dr. Gady Golan – IEEE-EDS Israel, Secretary.

—Gady Golan, Editor

Asia & Pacific (Region 10)

ED/LEO Victoria Chapter

by Dalma Novak

The Chapter has been busy over the last few months. Professor Kent Choquette from the University of Illinois at Urbana-Champaign gave an IEEE Distinguished Lecturer address on the topic of Vertical Cavity Lasers on December 11, 2000. In addition, on February 12, 2001, Professor George Stegeman from CREOL, University of Central Florida, gave a seminar on Optical Spatial Solitons: An Experimental Overview. The Chapter will also have a new Chair commencing on April 9, 2001. Dr. Malin Premaratne from Redfern Broadband Networks, Melbourne, will take over as Chair of the joint LEOS/EDS Chapter from Prof. Dalma Novak who formed the Chapter in September 1998.

For more information, please contact Dr. Dalma Novak, Department of Electrical and Electronics Engineering, The University of Melbourne, Parville VIC 3052, Australia. TEL: 61-3-9344-5789, FAX: 61-3-9344-7412, E-Mail: d.novak@ee.mu.oz.au.

AP/ED Bombay Chapter

by Juser Vasi

During January–March 2001, the AP/ED Bombay Chapter organized four events, listed below.

On January 15, 2001, Dr. Seshu B. Desu from the University of Massachusetts, Amherst, USA, talked on "Recent developments in high-density solid-state memories."

On January 18, 2001, Dr. Narain Arora from Simplex Solutions Inc., USA, and well-known expert in MOS modeling, gave a talk on "Challenges of modeling high-speed interconnects in CMOS technology" to an audience of over 100, including many researchers in CMOS technology. Dr. Arora also spent a considerable amount of time interacting with EDS members in Bombay before and after the talk.

On March 1, 2001, Mr. Sitaraman Iyer from Carnegie-Mellon University, USA, talked on "Modeling a CMOS-MEMS gyroscope". This talk also attracted a large audience, including many students.

Because of high student interest evinced in MEMS, the AP/ED Bombay Chapter organized a half-day tutorial workshop on MEMS given by Dr. Prakash Apte of Tata Institute of Fundamental Research, Bombay, on March 21, 2001. This workshop was very successful with over 150 participants, including many students. The audience included electrical, mechanical and chemical engineers,



Dr. Prakash Apte presenting a half-day workshop on MEMS at the AP/ED Bombay Chapter.

besides physicists and materials scientists.

The IEEE AP/ED Bombay has new Office Bearers. They are: Girish Kumar, Chair (gkumar@ee.iitb.ac.in), Arvind Shaligram, Vice-Chair (ads@electronics.unipune.ernet.in), V. Ramgopal Rao, Vice Chair (ramgopal.rao@ieee.org), Mahesh Patil, Secretary-Treasurer (mbpatil@ee.iitb.ac.in), and Juser Vasi, Immediate Past Chair (j.vasi@ieee.org).

For more information, please contact Juser Vasi, Electrical Engineering Department, IIT Bombay, Powai, Mumbai 400076, India. FAX: 91-22-5783480, E-Mail: j.vasi@ieee.org.

ED/MTT India Chapter

by K.S. Chari

The Chapter, in association with the IEEE Delhi section Jamia Millia Islamia student branch, organized a group discussion "Innovations in Semiconductor Technology-Impact on human life" on December 7, 2000. Papers presented were: "ECR Plasma Processing" by Dr. K. Akhtar, "Amorphous Semiconductors" by Prof. M. Hussain, "Quantum Well and Superlattices and its applications" by Dr. Safiul Islam, "Multi Value VLSI Circuits" by Dr. A. Q. Ansari, "Wearable PCs" by Ms. Ritu Jain and "Effect of Miniaturization" by Ms. Shipra Sharma. The event was organized by Dr. Mini S. Thomas and Mr. Sultan Haider and was attended by about 60 students and faculty.

The Chapter celebrated its Silver Jubilee with a function jointly organized with the IEEE Delhi Section on December 19, 2000, at the India International Center, New Delhi. The event was graced by Prof. Bruce Eisenstein (IEEE President) and his wife, Prof. Toby Eisenstein. The Chapter Chair in his opening remarks highlighted the distinctions achieved by the Chapter. This includes the 4 Best Chapter Awards given by EDS and MTTs and acknowledgements for outstanding performances; the growth of the Chapter activities from its

modest beginnings; and its future plans. Prof. Eisenstein gave a presentation on the IEEE global activities and the technical initiatives pursued by it for the advancement of science and engineering and fostering the contributions by members in various fields. The event was followed by a Millennium Dinner at which the IEEE President presented Silver Jubilee Momentos to the chapter office bearers and executive members (Dr. Chari, Prof. Devi Chadha, Dr. Govind, and Prof. Bharati Bhat, Prof. S. K. Koul, and Prof. Jitender Bihari). Dr. H. L. Bajaj (Past Region 10 Director) also attended the function.

The Chapter presented a summary of its activities and progress at the IEEE India Council meeting on December 22, 2000, arranged in honor of the visiting IEEE President Prof. Bruce Eisenstein. The President was impressed by the chapter activities and in particular the IEEE STAR program. As a token of appreciation of these efforts, the President granted extra funding from the Presidential fund. The Chapter Chair thanked the President for his help in building the STAR program.

The Chapter sponsored a one-day workshop on Electromagnetic Compatibility of Electrical/Electronic equipment on January 22, 2001, with IEEE PES-IAS Delhi Chapter and Delhi Section. Dr. Paolo Teniti, Mr. Giordano Malfermo, and Dr. Lamberto Brunelli from Italy conducted the workshop. The technical sessions covered practical problems related to understanding of the standards and their applications, illustrations of main problems occurring in some categories of products and relevant design provisions for power electronics equipment. Over 70 delegates have attended the workshop.

Under the STAR program initiatives, the Chapter joined the National Science Center of New Delhi in hosting the North India Science and Engineering Fair during January 23–25, 2000. The event was attended by 7 states from India with a total participation of 62 teams and featured 47 projects. A total of 400 students and teachers participated in the fair. The winners of the Chapter prizes for this event were: Ms. Chhavi Bhasin (Guru Harkrishan Public School), Gurnam Singh (Jiwan Jyoti Senior Secondary Public School), Visharad Kapoor (St. Lukes Senior Secondary School) and Ankesh Jain (Govt. Inter College Agra). The fair was organized by Dr. A. S. Manekar and Dr. Sivaprasad Khened. Prof. Yash Pal gave away the prizes to the winning students. The Chapter chair also addressed at the same venue on

January 30, 2000, 70 teachers from the Central Tibetan School Authority on the theme of Information Technology and use of IT in school education.

The IEEE Delhi Chapter and IEEE student Chapter of Delhi College of Engineering organized an event, Brainwave: Hardware Conceptualization (February 27 to March 3, 2001). Prof. Bhattacharyya and the student branch office bearers coordinated the event.

The Chapter, the Electronic Science Department, and the Electronics Society Kurukshetra organized a national level Symposium on Electronics and Technology (NASET) March 2-3, 2001. The event covered items like science and technology quiz, technical paper presentations, hardware design contest, and discussions on professional activities of the IEEE ED/MTT Chapter. The Prizes for the best entries in this events were won by the following students: For paper presentation: Vikas Kumar, Aashish Bharadwaj, Sumit, Sandeep, Meghna Pathania, Parikriti Gupta, Amit Sardana, and Nitish Singh. For Quiz Competition: Saket Agarwal, Arun, Aashish Jain and Sudeep Ghatak. For Hardware competition: Nakul, Janender, Lovkesh Gupta, Satvinder Singh. The hardware exhibition attracted over 20 entries covering various facets of electron-

ics instrumentation and applications.

NASET 2K1 was attended by over 350 graduate and post graduate students coming from over 10 universities and the inaugural was addressed by Shri R. S. Chaudhury (Vice Chancellor of the Kurukshetra University). The symposium was organized Prof. P. J. George, Dr. Dinesh Kumar, Dr. Vohra, and Ms. Anurekha Sharma, and student members of the ED/MTT at KUK. Prof. J. S. Yadav, and Prof. Narendra Nath presided over final function and prize distribution.

For more information, please contact Dr. K. S. Chari, Director, Micro Electronics & Photonics Division, Department of Electronics, C. G. O. Complex, New Delhi, India, TEL: 91-11-4361464; FAX: 91-11-4363082; E-Mail: chariks@usa.net.

ED Malaysia Chapter

by Burhanuddin Yeop Majlis

The ED Malaysia Chapter had a General Meeting on February 24, at Palm Garden Resort, Putra Jaya, to elect a new chairman and committee members for 2001 (see picture). Prof. Burhanuddin Yeop Majlis has been reelected as Chairman of ED Malaysia, Associate Prof. Dr. Sahbudin Hj. Shaari as Vice-Chairman, Mrs. Badariah Bais the Secretary, Mr. Ibrahim Ahmad as Treasurer and six com-



The ED Malaysia Chapter Committee of 2001.

mittee members to represent universities and research institutions in Malaysia. The elected committee members are: Associate Prof. Dr. Khairi Saidin from Universiti Teknoligi Malaysia, Associate Prof. Dr. Mat Johar Abdullah from Universiti Sains Malaysia, Mr. Rahman Wagiran from Universiti Putra Malaysia, Associate Prof. Dr. Zaiki Awang from UiTM, Prof. Muhammad Mat Salleh from Universiti Kebangsaan Malaysia and Mr. Zaliman Sauli from MIMOS.

The ED Malaysia Chapter will organize the 2001 IEEE National Symposium on Microelectronics (NSM'01) November 12-13, 2001, at Awana Resort, Genting Highland, 50 kilometers from Kuala Lumpur. The scope of the symposium covers all fields of microelectronics, such as device physics, process technologies, VLSI and MMIC circuits design, optoelectronics, MEMS and sensors, packaging and test, etc. The symposium fee is RM600 for IEEE members and RM650 for non-IEEE members. This symposium is also open to Singaporeans.

For more information, please contact Prof. Burhanuddin Yeop Majlis, Dept. of Electrical, Electronics and System Engineering, Universiti Kebangsaan Malaysia. TEL: 603-89265861, FAX: 603-89259080, E-Mail: burhan@eng.ukm.my.

CPMT/ED/R Singapore Chapter

by M. K. Radhakrishnan

The Chapter was engaged in activities including conducting Technical Talks and in final preparation for IPFA Conference, during the first quarter of 2001. Three technical talks were arranged during the period. These include the talk on "ESD in semiconductor devices" by Dr. J. J. Liou of University of Central Florida and by Prof. Rao Tummala (Chairman, IEEE CPMT Society) on "Global Collaboration of SOP and SOC for the Microelectronic Systems of the Future." The talks were well attended by engineers from industry as well as academia.

The 8th IPFA conference, scheduled for



Chapter Silver Jubilee function inaugural by Prof. Bruce Eisenstein, IEEE President.



Participants of the NASET2K1 held at Kurukshetra University.

July 9–13, 2001, has a very good response from the device analysis community. The Advance Program has been finalized. Forty oral papers, describing the advances in the field will be presented in the conference, apart from the keynote paper and two best paper exchanges from sister symposia in USA and Europe. From this year onwards, IPFA will have exchange of Best Papers from ISTFA, USA and ESREF, Europe. The best paper of IPFA99 was invited for presentation in the last ISTFA (2000). Details of IPFA including the advance programme and tutorials can be obtained from the web site at <http://www.ewh.ieee.org/reg/10/ipfa>.

The chapter will be hosting the EDS AdCom meeting in July during the IPFA week-end. The chapter is looking for this occasion to foster the ties with other chapters in the region as well as with experts in the field.

For further information, contact the Chapter Chair, M. K. Radhakrishnan, TEL: 65-7705439, E-Mail: radha@ime.org.sg.

—W. K. Choi, Editor



After the ceremony of the Best Poster Paper Rewards; from the left, Dr. Moonyong Lee, Program Committee Chair; Prof. Se-Geun Park, EDS Korea Chapter Chair; Mr. Sung-Bum Bae; Mr. Soo D. Cho; and Dr. Hyungkyu Lim, Conference Chair.

ED Korea Chapter

by Se-Geun Park

The Chapter co-sponsored the 8th Korean Conference on Semiconductors at COEX Convention Center in Seoul, Korea, February 14–15, 2001. This Conference is the largest annual meeting in the Semiconductor R&D field in Korea, and has been organized jointly by the Korean Physical Society, Institute of Electronics Engineers of Korea, Korean Institute of Electrical Engineers, and Materials Research Society of Korea. At the opening ceremony, the Korea Chapter Chair presented the Best Poster Paper Awards to Sung-Bum Bae of Kookmin University and Soo D. Cho of Kyungpook National University, who were selected at the last year's conference.

The titles are "High Resistivity Zn-doped Buffer Layer Growth for GaN Based Electronic" and "Modeling and Extraction of Small Signal Characteristic Parameters in Submicron S-MOSFET's for Microwave", respectively.

The Program committee of 2001 Asia-Pacific Workshop on Fundamentals and Application of Advanced Semiconductor Devices (AWAD) is accepting contributed papers from interested authors. It will be held July 5–7, 2001, at beautiful Cheju Island. The Workshop is co-sponsored by the Korea Chapter.

ED/SSC Seoul Chapter

by Taegeun Park

The ED/SSC Seoul Chapter sponsored the 8th Korean Conference on Semiconductors (KCS) held at COEX, Seoul, Korea, February 14–15, 2000. The 8th KCS included 20 invited papers, 350 papers in 33 regular sessions, and 120 papers in two poster sessions. Prof. Chun-Yen Chang, the President of National Chiao Tung University, was invited as a keynote speaker for the conference and he presented a seminar on February 14 entitled, "Present and Future Prospects of Sub-0.1 μ m CMOS Technology For Wireless Communications". Prof. Chang was also invited to the ED/SSC Chapter meeting on February 15 at Yonsei University to give a talk on "High Lights of Taiwan High Technology Development and the Roles of High Education." A total of 23 persons attended this seminar from both academia and industry. After the seminar, seven members of the IEEE ED/SSC Seoul Chapter had a dinner meeting with Dr. Chang. There were several discussions on Chapter activities to improve the roles of the ED/SSC Seoul Chapter.

In February and March, the Seoul Chapter hosted EDS Distinguished Lecturer, Prof. Yuri Poplavko, who presented his research on "High Q very stable dielectric Ceramic and Non-linear ferro-electric ceramic" at Chungbuk National University and Korea Telecom.



After the technical seminar by Prof. Chang.

ED Kansai Chapter

by Hiroshi Nozawa and Masaru Kazumura

The newly formed Kansai Chapter held a lecture session on February 13, 2001, to commemorate its year-end 2000 establishment. Dr. Yoshio Nishi, Senior Vice President of Texas Instruments, Inc. and IEEE Fellow was invited to speak on this auspicious occasion. Facing 28 IEEE members from universities and industries at Campus Plaza, Kyoto, Dr. Nishi presented his talk on "Silicon Technology Strategy for Internet Era" as shown in the photo. He lectured on trends in the past, present, and future in terms of silicon devices, interconnects, and integration which also have resulted in the changes in technology R&D model. Silicon technology after becoming the dominant design of integrated circuits has been driven by Moore's Law and the scaling principle, with DRAM and, later, MPU as technology drivers. Dr. Nishi asserted that, as we gradually move from the PC era toward an "Internet Era," the strategy for silicon technology has been changing from density/performance driven to more functionality on chip driven. Dr. Nishi, who certainly enjoyed the opportunity to give a talk as well as chatting with colleagues on the Committee of IEEE Kansai Chapter, congratulated on the successful launching of the new Chapter and encouraged technical activity in the Kansai Chapter.

The Kansai Chapter Executive Committee meeting was held at Kyoto University, Kyoto, April 4, 2001. At the beginning of the meeting, H. Nozawa of Kyoto Univ., M. Kazumura of Matsushita, Y. Yamamoto of Kyoto Univ., and T. Otsuki of Kyoto Univ., were approved to serve as the chair, vice-chair, secretary, and treasurer, respectively, for two-year terms until the end of year 2002. Then, the role and service of the chapter were discussed. It was decided to form six committees under the chapter in order to enhance the activity of the chapter. They are: 1) Nomination

continued on page 23



Prof. Yuri Poplavko's seminar.

EDS Meetings Calendar

(As of 25 May 2001)

The complete EDS Calendar can be found at our web site:
<http://www.ieee.org/organizations/society/eds/EDSCal.html>. Please visit!

July 3 - 7, 2001, T **Siberian Russian Student Workshop and Tutorial on Electron Devices and Materials** Location: Novosibirsk State Technical University, Novosibirsk, Russia Contact: Alexander Gridchin, Novosibirsk State Technical University, 20 Karl Marx Prospect, Dept. of Applied & Theoretical Physics, Novosibirsk, Russia 630092 Tel: +7 3832 46 0877 Fax: +7 3832 46 0209 E-Mail: algrid@ref.nstu.ru Deadline: 3/31/01 www: ref.nstu.ru/ieeesb/edm

July 9 - 13, 2001, T **IEEE International Symposium on the Physical and Failure Analysis of Integrated Circuits** Location: Westin Stamford & Westin Plaza Hotels, Singapore, Singapore Contact: Kin-Leong Pey, National University of Singapore, Dept. of Elec. Engrg., 4 Engineering Drive 3, Singapore, Singapore 117576 Tel: +65 874 6918 Fax: +65 779 7703 E-Mail: elepey@nus.edu.sg Deadline: 12/1/00 www: http://www.ewh.ieee.org/reg10/ipfa/submission.html

July 15 - 20, 2001, T **International Conference on Nitride Semiconductors** Location: Adam's Mark Hotel, Denver, CO, USA Contact: Patricia Hastings, Materials Research Society, 506 Keystone Dr., Warrendale, PA, USA 15086 Tel: +1 724 779 3003 Fax: +1 724 779 8313 E-Mail: hasting@mrs.org Deadline: 10/18/00 www: http://www.mrs.org/meetings/icns-4/

July 29 - August 2, 2001, T **Intersociety Energy Conversion Engineering Conference** Location: Westin Hotel, Savannah, GA, USA Contact: William Turner, Energy Systems Lab, 215 Wisenbaker Eng. Research Center, College Station, TX, USA 77843 Tel: +1 979 862 8480 Fax: +1 979 862 8687 E-Mail: wdt5451@esl.tamu.edu Deadline: 12/31/01 www: http://www.asme.org/conf/iecec01

August 6 - 7, 2001, T **International Symposium on Low Power Electronics and Design** Location: Hilton Waterfront Beach Resort, Huntington Beach, CA, USA Contact: Enrico Macii, Politecnico di Torino Dip. Di Automatica e Informatica, Corso Duca degli Abruzzi 24, Torino, Italy 10129 Tel: +39 011 564 7074 Fax: +39 011 564 7099 E-Mail: enrico@athena.polito.it Deadline: 2/9/01 www: http://www.cse.psu.edu~islpd

August 13 - 16, 2001, * **IEEE International Vacuum Microelectronics Conference** Location: University of California at Davis, Davis, CA, USA Contact: Julie Sheehan, 423 First Street, Davis, CA, USA 95616-8766 Tel: +1 530 757 3331 Fax: +1 530 757 7943 E-Mail: jasheehan@ucdavis.edu Deadline: 5/1/01 www: http://www.cevs.ucdavis.edu/Cofred/Public/aca/

August 13 - 15, 2001, @ **IEEE Non-Volatile Semiconductor Memory Workshop** Location: Hyatt Regency Monterey, Monterey, CA, USA Contact: Arthur Wang, Hyundai Electronics America, 3103 North First St., San Jose, CA, USA 95134 Tel: +1 408 232 8811 Fax: +1 408 232 8805 E-Mail: arthur.wang@hea.com Deadline: 2/23/01 www: http://www.hea.com/hean2/flash/nvsmw/index.html

August 25 - 29, 2001, T **IEEE Conference on Intelligent Transportation Systems** Location: Oakland Marriott City Center, Oakland, CA, USA Contact: Kate Miller, University of California at Berkeley, EECS, 195M Cory Hall, #1770, Berkeley, CA, USA 94720 Tel: +1 510 642 0348 Fax: +1 510 642 6330 E-Mail: klohe@eecs.berkeley.edu Deadline: Not Available www: http://www.itsc2001.berkeley.edu

September 5 - 7, 2001, @ **International Conference on Simulation of Semiconductor Processes and Devices** Location: Divani Apolon Palace, Athens-Vouliagmeni, Greece Contact: Dimitris Tsoukalas, Institute of Microelectronics, NSCR 'Demokritos', Aghia, Paraskevi, Greece 15310 Tel: +30 1 6540796 Fax: +30 1 6511723 E-Mail: d.tsoukalas@imel.demokritos.gr Deadline: 3/2/01 www: http://www.imel.demokritos.gr/sispad.html

September 9 - 13, 2001, T **Electrical Overstress/Electrostatic Discharge Symposium** Location: Oregon Convention Center, Portland, OR, USA Contact: Lisa Pimpinella, ESD Association, 7900 Turin Road Building 3, Suite 2, Rome, NY, USA 03440-2069 Tel: +1 315 339 6937 Fax: +1 315 339 6793 E-Mail: eosesd@aol.com Deadline: 1/15/01 www: http://www.esda.org

September 10, 2001, T **IEEE High Frequency Postgraduate Student Colloquium** Location: Cardiff University, Cardiff, United Kingdom Contact: Cherrie Summers, ENGIN, PO Box 925, Newport Road, Cardiff, United Kingdom CF24 0YF Tel: +44 2920874421 Fax: +44 2920874421 E-Mail: summersc@cardiff.ac.uk Deadline: Not Available www: Not Available

September 10 - 14, 2001, T **International Conference on Electromagnetics in Advanced Applications** Location: Torino, Italy Contact: Roberto Graglia, Politecnico di Torino, Depto. Di Elettronica, Corso Duca delgi Abruzzi 24, Torino, Italy 10129 Tel: +39 011 5644056 Fax: +39 011 5644099 E-Mail: graglia@polito.it Deadline: 3/2/2001 www: http://www.polito.it/iceaaol

September 10 - 14, 2001, T **International Crimean Microwave Conference "Microwave & Telecommunication Technology"** Location: Sevastopol State Technical University, Sevastopol, Ukraine Contact: Pavel Yermolov, P.O. Box 240, Sevastopol, Crimea, Ukraine 99057 Tel: Not Available Fax: +38 0692 555768 E-Mail: micoc@bios.iuf.net Deadline: 5/31/01 www: http://iee.orbita.ru/aps/crim01e.htm

September 11 - 13, 2001, T **European Solid-State Device Research Conference** Location: Arvena Park Hotel, Nuremberg, Germany Contact: Herbert Grunbacher, Carinthia Tech Institute, Richard-Wagner-Strauss 19, Villach, Austria A-9500 Tel: +43 4242 2004-123 Fax: +43 4242 2004-179 E-Mail: hg@cti.ac.at Deadline: 4/6/01 www: www.essdrc.org

September 18 - 20, 2001, T **International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory** Location: Institute of Mechanics & Mathematics of NASU, Lviv, Ukraine Contact: Mykhaylo Andriychuk, Inst. of Applied Problems of Mech. & Math. of NASU, 3"B" Naukova str., Lviv, Ukraine 79601 Tel: +380 322 651944 Fax: +380 322 637088 E-Mail: andre@iapmm.lviv.ua Deadline: 6/1/01 www: http://www.ewh.ieee.org/soc/cpmt/ukraine

September 18 - 20, 2001, T **International Microwave Electronics: Measurements,**

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 T = Technical Co-Sponsorship Support

@ = Alternates support between 'Sponsorship/Co-Sponsorship' and 'Technical Co-Sponsorship'
 # = Cooperation Support

Identification, Applications Conference

Location: Novosibirsk State Technical University, Novosibirsk, Russia **Contact:** Boris Kapilevich, Siberia State Academy of Telecomm & Informatics, Kirova st no. 86, Dept of Applied Electrodynamics & Antennas, Novosibirsk, Russia 630102 **Tel:** +07 3832 660943 **Fax:** +7 3832 222581 **E-Mail:** boris@neic.nsk.su **Deadline:** 4/1/01 **www:** <http://www.nstu.ru/memiam2001>

September 25 - 28, 2001, T **International Conference on Solid-State Devices and Materials** **Location:** Diamond Hotel, Tokyo, Japan **Contact:** Hiroaki Masuko, Business Center for Academic Societies Japan, 5-16-9 Honkomagome, Bunkyo-ku, Tokyo, Japan 113-8622 **Tel:** +81 3 5814 5800 **Fax:** +81 3 5814 5823 **E-Mail:** hmasuko@bcasj.or.jp **Deadline:** Not Available **www:** <http://www.ssdm.bcasj.or.jp/>

September 30 - October 2, 2001, * **IEEE Bipolar/BiCMOS Circuits and Technology Meeting** **Location:** Marriott City Center Hotel, Minneapolis, MN, USA **Contact:** Janice Jopke, CCS Associates, 6611 Countryside Drive, Eden Prairie, MN, USA 55346 **Tel:** +1 612 934 5082 **Fax:** +1 612 934 6741 **E-Mail:** jjopke@aol.com **Deadline:** 3/16/01 **www:** <http://ectm.et.tudelft.nl/www/BCTM>

October 1 - 4, 2001, @ **International Symposium on Compound Semiconductors** **Location:** Komaba Campus, University of Tokyo, Meguro-ku, Tokyo 153-8902, Japan **Contact:** Kazuhiko Hirakawa, Institute of Industrial Science, University of Tokyo, 4-6-1 Komaba, Meguro-ku, Tokyo 153-8505, Japan **Tel:** +81 3 5452 6260 **Fax:** +81 3 5452 6262 **E-Mail:** hirakawa@nano.iis-u-tokyo.ac.jp **Deadline:** 6/15/01 **www:** <http://www.icsc.iis-u-tokyo.ac.jp>

October 1 - 5, 2001, T **European Symposium on Reliability of Electron Devices, Failure Physics and Analysis** **Location:** Palatium of Arcachon, Arcachon, France **Contact:** Nathalie Labat, Université Bordeaux 1 - Laboratoire IXL, 351, cours de la Libération, TALENCE Cedex, France 33405 **Tel:** +33 556 84 6551 **Fax:** +33 556 37 1545 **E-Mail:** esref@ixl.u-bordeaux.fr **Deadline:** 3/14/01 **www:** <http://www.ixl.u-bordeaux.fr>

October 1 - 4, 2001, * **IEEE International SOI Conference** **Location:** Sheraton Tamarron Resort, Durango, CO, USA **Contact:** Bobbi Armbruster, BACM, 520 Washington Blvd. Suite 350, Marina Del Rey, CA, USA 90292 **Tel:** +1 310 305 7885 **Fax:** +1 310 305 1038 **E-Mail:** bacm@

mediaone.net **Deadline:** 5/10/01 **www:** <http://www.soiconference.org>

October 2 - 7, 2001, T **International School on Chaotic Oscillations and Pattern Formation** **Location:** Holiday Hotel "Volzhskie Dali," Saratov, Russia **Contact:** Dmitry Trubestkov, Saratov State University - State Ed. & Scientific Centre "College", 83 Astrakhanskaya, Saratov, Russia 410026 **Tel:** +7 8452 241696 **Fax:** +7 8452 523864 **E-Mail:** true@cas.ssu.runnet.ru **Deadline:** Not Available **www:** <http://cas.ssu.runnet.ru/chaos01/chaos01.html>

October 8 - 10, 2001, @ **IEEE International Symposium on Semiconductor Manufacturing** **Location:** Fairmont Hotel, San Jose, CA, USA **Contact:** Suzanne Harkless, McGettigan Meetings Plus, 1777 Botelho Drive, Walnut Creek, CA, USA 94596 **Tel:** +1 925 287 5237 **Fax:** +1 925 287 5300 **E-Mail:** suzanne@meetingsplus.com **Deadline:** 4/20/01 **www:** <http://www.issm.com>

October 9 - 13, 2001, * **International Semiconductor Conference** **Location:** Sinaia Hotel, Sinaia, Romania **Contact:** Doina Vancu, IMT-Bucharest, CAS Office, PO Box 38-160, Bucharest, Romania 72225 **Tel:** +40 1 490 82 36 **Fax:** +40 1 490 82 38 **E-Mail:** CAS@imt.ro **Deadline:** 4/15/01 **www:** <http://www.imt.ro/CAS>

October 15 - 18, 2001, * **IEEE International Integrated Reliability Workshop** **Location:** Stanford Sierra Camp, Lake Tahoe, CA, USA **Contact:** Andreas Martin, Infineon Technologies AG, RM MON Bldg. 75 Otto-Hahn-Ring 6, Muenchen, Germany D-81739 **Tel:** +49 89 234 45257 **Fax:** +49 89 234 45822 **E-Mail:** Andreas.Martin@infineon.com **Deadline:** 7/6/01 **www:** <http://www.irps.org/irw/index.html>

October 15 - 18, 2001, T **International Workshop on Computational Electronics** **Location:** University of Illinois, Urbana, IL, USA **Contact:** Umberto Ravaioli, University of Illinois at Urbana-Champaign, 3255 Beckman Institute 405 N. Mathews Avenue, Urbana, IL, USA 61801 **Tel:** +1 217 244 5765 **Fax:** +1 217 244 4333 **E-Mail:** ravaioli@uiuc.edu **Deadline:** 6/15/01 **www:** <http://www.ceg.uiuc.edu/iwce8>

October 21 - 24, 2001, * **IEEE Gallium Arsenide Integrated Circuits Conference** **Location:** Renaissance Harborplace Hotel, Baltimore, MD, USA **Contact:** Mary Clemente, IEEE, 445 Hoes Lane, Piscataway, NJ, USA 08855 **Tel:** +1 732 562 5350 **Fax:** +1 732 981 1203

E-mail: m.e.clemente@ieee.org **Deadline:** 4/18/01 **www:** <http://www.gaasic.org>

October 21, 2001, T **Gallium Arsenide Reliability Workshop** **Location:** Renaissance Harborplace Hotel, Baltimore, MD, USA **Contact:** Anthony Immorlica, Sanders, A Lockheed Martin Company, 65 Spit Brook Road, Nashua, NH, USA 03060 **Tel:** +1 603 885 1100 **Fax:** +1 603 885 6061 **E-Mail:** anthony.a.immorlica@lmco.com **Deadline:** Not Available **www:** Not Available

October 22 - 25, 2001, T **International Conference on Solid-State & Integrated Circuit Technology** **Location:** Hotel Equatorial, Shanghai, China **Contact:** Mengqi Zhou, Chinese Institute of Electronics, PO Box 165, Beijing, China 100036 **Tel:** +86 10 6816 0825 **Fax:** +86 10 6816 0825 **E-Mail:** mqzhou@public.bta.net.cn **Deadline:** 4/1/01 **www:** <http://www.cie-china.org>

October 22 - 25, 2001, T **International Conference on Noise in Physical Systems and 1/F Fluctuations** **Location:** University of Florida Hotel and Conf. Center, Gainesville, FL, USA **Contact:** Gijs Bosman, University of Florida, College of Engrg, 565 Engrg. Bldg. #33, Gainesville, FL, USA 32608 **Tel:** +1 352 392 0910 **Fax:** +1 352 392 8381 **E-Mail:** bosman@ece.ufl.edu **Deadline:** 2/1/01 **www:** <http://www.doce-conferences.ufl.edu/ICNF/>

October 22 - 26, 2001, T **European Photovoltaic Solar Energy Conference and Exhibition** **Location:** International Congress Centre, Munich, Germany **Contact:** Bettina Kaisa, WIP, Sylvesteinstr. 2, Muenchen, Germany D-81369 **Tel:** Not Available **Fax:** Not Available **E-Mail:** bettina.kaisa@wip-munich.de **Deadline:** Not Available **www:** <http://www-munich.de>

October 28 - November 2, 2001, # **International Conference on Silicon Carbide and Related Materials** **Location:** Tsukuba Congress Center, Tsukuba, Japan **Contact:** Hajime Okumura, Electrotechnical Laboratory, 1-1-4 Umezono, Tsukuba, Ibaraki, Japan 305-8565 **Tel:** +81 298 61 5431 **Fax:** +81 298 61 5434 **E-Mail:** okumura@etl.go.jp **Deadline:** 6/1/01 **www:** <http://www.icscm2001.gr.jp>

October 28 - 30, 2001, * **IEEE Conference on Nanotechnology** **Location:** Outrigger Wailea Resort, Maui, HI, USA **Contact:** Toshio Fukuda, Nagoya University, Center for Cooperative Research in Advanced Science and Tech., 1, Furo-cho, Chikusa-ku, Nagoya, Japan 464-8603 **Tel:** +81 52 789 4478 **Fax:** +81 52 789 3115 **E-Mail:** fukuda@

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= Cooperation Support

main.nagoya-u.ac.jp Deadline: 5/31/01 www: <http://www.mein.nagoya-u.ac.jp/> IEEE-NANO

October 29 - 31, 2001, T **International Conference on Microelectronics** Location: Ecole Mohammadia d'Ingenieurs, Rabat, Morocco Contact: Gehan Sabry, University of Waterloo — VLSI Research Group, Dept. of ECE, DC Room 3580, Waterloo, Ontario, Canada N2L 3G1 Tel: +1 519 888 4567 Fax: +1 519 746 5195 E-Mail: gsabry@vlsi.uwaterloo.ca Deadline: 4/1/01 www: Not Available

October 31 - November 2, 2001, T **International Microprocesses and Nanotechnology Conference** Location: Kunibiki Messe, Masue, Shimane, Japan Contact: Hiroaki Masuko, Busi-

ness Center for Academic Societies Japan, 5-16-9 Honkomagome, Bunkyo-ku, Tokyo, Japan 113-8622 Tel: +81 3 5814 5800 Fax: +81 3 5814 5823 E-Mail: hmasuko@bcasj.or.jp Deadline: 7/1/01 www: <http://www.nano.ee.es.osaka-u.ac.jp/mnc>

November 1 - 2, 2001, T **International Workshop on Gate Insulators** Location: Shufu-Kaikan, Tokyo, Japan Contact: Hiroshi Iwai, Interdisciplinary Graduate School of Science & Engineering,, Tokyo Institute of Technology, 4259 Nagatsuta, Midori-ku, Yokohama, Japan 226-8502 Tel: +81 45 924 5471 Fax: +81 45 924 5487 E-Mail: iwai@ae.litech.ac.jp Deadline: Not Available www: Not Available

November 4 - 8, 2001, # **International Conference on Computer Aided Design** Location: DoubleTree Hotel, San Jose, CA, USA Contact: Kathy MacLennan, MP Associates, Inc., 5305 Spine Road, Suite A, Boulder, CO, USA 80301 Tel: +1 303 530 4562 Fax: +1 303 530 4334 E-Mail: kathy@dac.com Deadline: 4/9/01 www: <http://www.iccad.com>

November 7, 2001, T **IEEE Electron Devices Activities in Western New York** Location: Rochester Institute of Technology, Rochester, NY, USA Contact: Karl Hirschman, RIT Microelectronic Engineering, 82 Lomb Memorial Drive, Rochester, NY, USA 14623-5604 Tel: +1 716 475 5130 Fax: +1 716 475 5041 E-Mail: kdhemc@rit.edu Deadline: Not Available www: Not Available

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= Cooperation Support

Regional & Chapter News

(continued from page 20)

Committee; Chair: K. Taniguchi of Osaka Univ., 2) Awards Committee; Chair: T. Nishimura of Mitsubishi, 3) Publicity and Publication Committee; Chair: A. Suzuki of Sharp, 4) Technical Committee Chair: M. Kuzuhara of NEC, and 6) Educational and Membership Committee; Chair: H. Takasu of Rohm. Finally, the chapter schedule for the next three months, including several DL (distinguished lecture) plans, was determined. The DL information will be sent to the chapter members by e-mail in time.

—Hisayo Momose, Editor



A lecture session by Dr. Yoshio Nishi to commemorate newly formed Kansai Chapter.

Report of the 2000 VLSI/IEDM Post-conference Workshop

by Tahui Wang

The 2000 VLSI/IEDM Post-Conference Workshop was held at National Chiao Tung University, Hsinchu, Taiwan, on February 16. The purpose of this workshop was to give those industrial engineers, uni-



From left to right: Y. Yamamoto (Secretary), A. Suzuki (Publicity and Publication Committee Chair), H. Takasu (Educational and Membership Committee Chair), H. Iwai (EDS Regions/Chapters Committee Chair), H. Nozawa (Chair), M. Kazumura (Vice Chair), T. Nishimura (Awards Committee Chair), M. Kuzuhara (Technical Committee Chair).

versity faculties and students, who did not attend the VLSI Technology Symposium and the IEDM of last year, an opportunity to learn the most recent advances in silicon-based VLSI devices and technologies. This workshop attracted more than 170 participants. Owing to a limitation of the budget, only 130 attendees were allowed. Both IEEE members and non-members were invited.

The workshop was organized into six different areas and six invited experts gave the presentations. These included: "Advanced CMOS Device and High-k" (Dr. H. C. Li, NDL), "Logic Technology" (Dr. K. Young, TSMC), "Low-K and Interconnect" (Dr. B. T. Dai, NDL), "High-K gate dielectric" (Prof. Albert Chin, NCTU), "RF CMOS Technology" (Dr. S. C. Wong, TSMC), and "Flash Memory Technology" (Prof. Steve S. Chung, NCTU). These presentations were organized from more than

50 selected papers in the above two conferences. For each topic, tutorial materials were also included in the lectures such that the attendees could understand the fundamentals of each area. This was the first time that the EDS Taipei Chapter had this activity and it was very successful in terms of the number of attendees.

ED Taipei Chapter

by Tahui Wang

The chapter announced its new web site early this year. It can be used as a gateway to IEEE members worldwide. From the sitemap in the web, people can have easy access to Taiwan's academic institutions as well as major semiconductor manufacturing companies located at the Science-Based Industrial Park, Hsinchu, which is known as the Taiwan Silicon Valley. The web site is <http://www.edstaipei.edu.tw>.

—Tahui Wang, Editor



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