

## SSDM 2007 Advance Program General Information

### DATE

Conference: **September 19-21, 2007 (Official language is English)**  
Short Course: **September 18, 2007 (in Japanese)**

### LOCATION

#### **Tsukuba International Congress Center (EPOCHAL TSUKUBA)**

2-20-3 Takezono, Tsukuba, Ibaraki, 305-0032, Japan

Phone: +81-29-861-0001 Fax: +81-29-861-1209

Tsukuba International Congress Center, located in Tsukuba Science City, is a core facility for research exchanges in Japan. People more than 2 million have visited the Center since its establishment in 1999, demonstrating the Center's great contribution to such exchanges. The Congress Center is located just 50 km from Tokyo and 40 km from Narita Airport. With the recent opening of the Tsukuba Express, Tsukuba can be accessed in 45 min from Akihabara, Tokyo.

<http://www.epocal.or.jp/index.html>

### REGISTRATION

The registration desk will be open from September 18 to 21 in the entrance hall on the first floor. The registration hours are as follows:

September 18	9:00-17:00	Convention Hall (3F)
19	9:00-12:00	Main Convention Hall (1F)
19	12:00-17:00	Entrance Hall (1F)
20	9:00-17:00	Entrance Hall (1F)
21	9:00-15:30	Entrance Hall (1F)

#### **Early registration will be accepted only through the conference website until August 17, 2007, 13:00**

**Japan time.** (<http://www.ssdm.jp>)

Advanced registration through the conference website will be closed September 5, 2007, 17:00 Japan time. After the date, registration can be made at the conference site as on-site registration. Early registration is recommended.

	Registration Fee		Short Course (in Japanese)	Banquet
	Before 13:00, August 17 (Japan time)	After 13:00, August 17 (Japan time)		
Regular	JPY45,000	JPY50,000	JPY15,000	JPY7,000
Student	JPY7,000		JPY3,000	JPY4,000
Accompanied person				JPY4,000

\* Fees include tax.

- 1) The registration fee includes one copy of the abstract book and a CD-ROM. However, it does not include the banquet, and an additional payment is required to attend the banquet (Regular: JPY7,000, Student/Accompanied person: JPY4,000).
- 2) Those who register as students are required to fax a copy of their current student ID to Kinki Nippon Tourist Co., Ltd. (KNT) (Fax: +81-3-5256-1588) at the time of registration and to present their student ID at the registration desk in order to be eligible for the student registration fee. When sending the fax, please write down your registration ID, which will be given at the completion of the online registration of individual information.
- 3) Registration is complete only after payment is made in full.

### Payment Procedure

Payment can be made by:

- One of the following credit cards:  
1. VISA 2. MasterCard 3. Diners Club 4. American Express 5. JCB
- A bank transfer to KNT Co., Ltd. (Message: SSDM)  
Account at Sumitomo Mitsui Banking Corp., Suzuran Branch, 1-3-12 Nishishimbashi, Minato-ku, Tokyo 105-0003, Japan (SWIFT Code: SMBCJPJT, Ordinary Account: 6103515, Account Name: Kinki Nippon Tourist Co., Ltd.)

\* Personal checks are not acceptable.

### Confirmation of Pre-Registration

Upon receipt of your online registration, a written confirmation will be faxed or e-mailed to you after your payment is confirmed.

Please bring this confirmation slip with you and present it to the registration desk.

### Registration Cancellation

Conference:

Cancellation fee of JPY3,000 will be deducted from the refund. Cancellation should be made in writing to KNT Co., Ltd. No cancellation will be accepted on or after August 21, 2007. Extended Abstracts will be sent to absent registrants after the conference.

Short Course:

Cancellation fee of JPY2,000 will be deducted from the refund. Cancellations should be made in writing to KNT Co., Ltd. No cancellation will be accepted on or after August 21, 2007. Short-course textbooks will be sent to the absent registrants after the conference.

Banquet:

Cancellation fee of JPY1,000 will be deducted from the refund, Cancellations should be made in writing to KNT Co., Ltd. No cancellation will be accepted on or after August 21, 2007.

### Inquiries for Registration

Kinki Nippon Tourist Co., Ltd. (KNT)

Global Business Management Branch

Tokyo Kintetsu Bldg. 6F

19-2 Kanda-Matsunaga-cho

Chiyoda-ku

Tokyo 101-8641, Japan

Phone: +81-3-5256-1581

Fax: +81-3-5256-1588

E-mail: [ssdm2007-gb@or.knt.co.jp](mailto:ssdm2007-gb@or.knt.co.jp)

Office hours: 9:30-17:30 (weekdays only)

### On-site Registration

Registration fees should be paid in Japanese Yen or credit cards. VISA, MasterCard, Diners Club, American Express and JCB are acceptable. No personal checks are acceptable.

### BANQUET

The conference banquet will be held on the evening of Wednesday, September 19. The banquet fee (Regular: JPY7,000, Student/Accompanied person: JPY4,000) is NOT included in the Registration fee. Participants who wish to attend the banquet are requested to order the banquet ticket through the on-line registration. Banquet tickets may also be purchased at the on-site registration desk.

### LATE NEWS PAPERS

Submission of Late News Papers has been already closed on 24:00, July 30, 2007 (Japan time). The accepted papers will be on "Advance Program Part II" which will be distributed at the venue during the conference.

### SPECIAL Issue of JJAP

Authors of papers presented at SSDM 2007 are encouraged to submit the original to the Special Issue of the Japanese Journal of Applied Physics, which will be published in April 2008.

## **RUMP SESSIONS - September 20 (Thursday) 18:30-20:30**

### **Session A (Room 101, 1F)**

“Oxide Electronics – Status and Outlook –”

Increasing interests on oxides are attracted by the rich possibilities and keen demands of metal-oxides as the key materials for future electronics. High-k oxides for alternative gate dielectrics and ferroelectric capacitors for non-volatile memories are well known examples for the SSDM community. Even more exciting applications are now being uncovered, from ultraviolet light emitting devices and high mobility thin film transistors through electric-control of magnetism in multiferroics to resistance change nonvolatile memories. Several keynotes will be delivered for the latter by panelists and near-future challenges in the emerging materials research will be discussed with the audience.

Organizer/Moderator: M. Kawasaki (Tohoku Univ., Japan)

Panelists: H. Akinaga (AIST, Japan)  
T. Kamiya (Tokyo Tech., Japan)  
H. Okamoto (Univ. of Tokyo, Japan)

A couple of panelists may be added.

### **Session B (Room 102, 1F)**

“New Materials Meet Advanced Silicon Technology”

Scaling device dimensions has been the most powerful and effective strategy to boost device performance for last 40 years. In recent years, however, we face a number of obstacles to the effectiveness of this strategy. Unfortunately, some of the obstacles seem to be irremovable by evolving the traditional “silicon technology”. In fact, one might concern that some fundamental problems and limits reside in our traditional materials: Si, SiO<sub>2</sub>, etc. Therefore, the introduction of materials which are/were new to researchers in silicon community is almost inevitable for enhancing device & LSI performance continuously (stepwise?) and for adding “new functionality” to LSIs in future, and will be a new vehicle, which takes us to a promised land (not a hell), where advanced LSIs improve our quality of life in many respects. In this rump session, we will discuss “new materials” for advanced silicon technology. Which materials will be used for which purposes, and when? What are criteria of introducing a certain material into LSIs? Can new or innovative materials (including nanoscale Si dots and wires) provide additional functionality to LSIs? By collaborating prominent panelists and audience, we will try to draw a private roadmap for new materials in LSIs. Particularly, we would like to encourage material specialists to join the discussion since the silicon technology really needs their help.

Organizer: H. Ishiuchi (Toshiba Corp., Japan)  
Moderators: K. Uchida (Toshiba Corp., Japan)  
F. Boeuf (ST Microelectronics, France)

Panelists: H. Watanabe (NEC Corp., Japan)  
S. Takagi (Univ. of Tokyo, Japan)  
T. Usui (Toshiba Corp., Japan)  
A. S. Spinelli (Politecnico di Milano, Italy)  
E. Y. Chang (National Chiao Tung Univ., Taiwan)  
M. Mueller (NXP Semiconductors Research, Belgium)

One or two more panelists will be added.

## SHORT COURSE

Short Course entitled “Emerging Silicon Technology” will be held on Tuesday, September 18 at Convention Hall (3F) . All lectures are given in Japanese.

## AGREEMENT NOT TO PRE-PUBLISH ABSTRACTS

By submitting an abstract to the committee for review, the author(s) agrees that the work will not be published prior to presentation at the conference. Papers found to be in breach of this agreement will be withdrawn by the conference committee.

## AWARDS

“SSDM Awards” will be given to outstanding papers presented at previous conferences.

### SSDM Award

Given for an outstanding contribution to the field of solid state devices and materials, among papers presented prior to 2001.

### SSDM Paper Award

Given for the best paper presented at the previous year’s conference.

### SSDM Young Researcher Award

Given for outstanding papers authored by young researchers and presented at the previous year’s conference.

## FINANCIAL SUPPORT

Limited financial support is available for presentations by full-time students. Student presenters who are interested in support should contact the secretariat directly (e-mail: [ssdm@intergroup.co.jp](mailto:ssdm@intergroup.co.jp)) prior to the end of August after receiving their acceptance letter. A copy of their student ID should be submitted at application.

## TRAVEL GRANT

A travel grant is available for young researchers under 35 years old from overseas universities or public research institutes. The grant is available only to those whose abstracts are accepted, and who have applied for the grant. Submitting an application form does not guarantee that the grant will be awarded. Each related area chair will choose one candidate from the applicants. Late news papers are not eligible for travel grant.

The grant is authorized by the Marubun Research Promotion Foundation (MRPF), which is one of the cooperation organizations. The grant covers part of the recipient’s travel costs, but does not necessarily cover all their expenses. Successful candidates must attend the ceremony which will be held during the conference (details of which will be given later) to receive the grant. Failure to attend will result in forfeiture of the grant.

## VISA REQUIREMENT

All overseas participants must have a valid passport.

Overseas participants who require a visa should consult the nearest Japanese Embassy or Consulate as soon as possible. If your paper is accepted for presentation at SSDM 2007 and your visa application requires an invitation to attend the conference, please contact the SSDM Secretariat.

## OFFICIAL TRAVEL AGENT

Kinki Nippon Tourist Co., Ltd. (KNT)

Global Business Management Branch

Tokyo Kintetsu Bldg. 6F, 19-2 Kanda-Matsunaga-cho, Chiyoda-ku

Tokyo 101-8641, JAPAN

Phone: +81-3-5256-1581 Fax: +81-3-5256-1588

E-mail: [ssdm2007-gb@or.knt.co.jp](mailto:ssdm2007-gb@or.knt.co.jp)

## Hotel Accommodations

Rooms have been reserved at hotels around Conference venue (EPOCHAL TSUKUBA) by KNT. Hotel reservations are proceeded on first-come-first-served basis. If your selected hotel is fully booked, we will make a reservation at your second choice hotel. After application deadline, KNT will send a confirmation slip informing the confirmed hotel name, and the exact room charge. Reservations can be made through the conference website. (<http://www.ssdm.jp>)

Hotel Name	<b>Okura Frontier Hotel Tsukuba</b>
Room Rates	Single: JPY11,550 Twin: JPY10,500 (per person, per night)
Hotel Deposit	JPY20,000
Check-in/out	Check-in:14:00/Check-out:11:00
Address	1-1364-1, Azuma Tsukuba, Ibaraki 305-0031, Japan
Phone	+81-29-852-1112
Access to Hotel	2 min. walk from Tsukuba Sta. , A3 exit.
To Conference site	6 min. walk

Hotel Name	<b>Okura Frontier Hotel Tsukuba Epochal</b>
Room Rates	Single: JPY11,550 Twin: JPY10,500 (per person, per night)
Hotel Deposit	JPY20,000
Check-in/out	Check-in:14:00/Check-out:11:00
Address	2-20-1 Takezono, Tsukuba, Ibaraki 305-0032, Japan
Phone	+81-29-860-7700
Access to Hotel	8 min. walk from Tsukuba Sta. , A3 exit.
To Conference site	Next to the site

Hotel Name	<b>Hotel Grand Shinonome</b>
Room Rates	Single: JPY7,500
Hotel Deposit	JPY10,000
Check-in/out	Check-in:15:00/Check-out:10:00
Address	488-1 Onozaki, Tsukuba, Ibaraki 305-0034, Japan
Phone	+81-29-856-2211
Access to Hotel	5 min. walk from Tsukuba Sta.
To Conference site	13 min. walk

Hotel Name	<b>Hotel Route Tsukuba</b>
Room Rates	Single: JPY6,825
Hotel Deposit	JPY10,000
Check-in/out	Check-in:15:00/Check-out:10:00
Address	1145-3 Hanamuro, Tsukuba, Ibaraki 305-0025, Japan
Phone	+81-29-860-2111
Access to Hotel	20 min. walk (or 5 min. by taxi) from Tsukuba Sta.
To Conference site	30 min. walk (or 10 min. by taxi)

Hotel Name	<b>Tsukuba Daily Inn</b>
Room Rates	Single: JPY6,930
Hotel Deposit	JPY10,000
Check-in/out	Check-in:16:00/Check-out:10:00
Address	1-12-4 Sengen, Tsukuba, Ibaraki 305-0047, Japan
Phone	+81-29-851-0003
Access to Hotel	30 min. walk (or 7 min. by taxi) from Tsukuba Sta.
To Conference site	15 min. walk (or 3 min. by taxi)

Hotel Name	<b>Akihabara Washington Hotel</b>
Room Rates	Single: JPY11,550 Twin: JPY8,925 (per person, per night)
Hotel Deposit	JPY20,000
Check-in/out	Check-in:14:00/Check-out:10:00
Address	1-8-3 Sakumacho, Kanda, Chiyoda-ku, Tokyo 101-0025, Japan
Phone	+81-3-3255-3311
Access to Hotel	1 min. walk from Tsukuba Express Akihabara Sta.
To Conference site	45 min. by Tsukuba Express and 8 min. walk

Hotel Name	<b>Asakusa View Hotel</b>
Room Rates	Single: JPY15,693
Hotel Deposit	JPY20,000
Check-in/out	Check-in:13:00/Check-out:11:00
Address	3-17-1 Nishi-Asakusa, Taito-ku, Tokyo 111-8765, Japan
Phone	+81-3-3847-1111
Access to Hotel	1 min. walk from Tsukuba Express Asakusa Sta.
To Conference site	40 min. by Tsukuba Express and 8 min. walk

Hotel Name	<b>Hotel Sunroute Asakusa</b>
Room Rates	Single: JPY9,500
Hotel Deposit	JPY10,000
Check-in/out	Check-in:14:00/Check-out:10:00
Address	1-8-5 Kaminarimon, Taito-ku, Tokyo 111-8765, Japan
Phone	+81-3-3847-1511
Access to Hotel	5 min. walk from Tsukuba Express Asakusa Sta.
To Conference site	40 min. by Tsukuba Express and 8 min. walk

Hotel Name	<b>Tsukuba Kenshu Center</b>
Room Rates	Single: JPY4,900 Single with breakfast: JPY5,300
Hotel Deposit	The payment in full for your room charge
Check-in/out	Check-in:16:00(no later than 23:00)/Check-out:10:00
Address	1-13-5 Amakubo, Tsukuba, Ibaraki 305-0005, Japan
Phone	+81-29-851-5152
Access to Hotel	10 min. by bus and 10 min. walk from Tsukuba Sta.
To Conference site	10 min. walk and 15 min. by bus

- Notes: 1) All room rates are per person per night including breakfast and 10% service charge, but excluding consumption tax.  
2) The above rates are valid only during the period of the SSDM 2007 meeting.  
3) Communication fee of 500 JPY is required for per reservation and this is charged as handling charge for KNT.  
4) The deposit will be deducted from your hotel bill. Please settle the balance with the hotel cashier.  
5) The above rates and information are subject to change without notice.  
6) It is excluding breakfast in room charge at Tsukuba Kenshu Center. More information, please contact to KNT.

### Application and Payment

Participants wishing to reserve hotel accommodations should access the Registration and Accommodation pages of the conference website. The page will be opened in early June and hotel reservations should be made by no later than August 18, 2007 (Japan time). A confirmation sheet will be sent by KNT after the application deadline.

Application should be accompanied by the payment of room deposit and communication fee of 500 JPY.

No reservation will be confirmed in the absence of this payment. All payment must be paid only in Japanese yen by one of the following methods.

- 1) Credit Card:  
(VISA, MasterCard, Diners Club, American Express or JCB only)  
\* Please fill in the necessary items with your signature in the credit card section of the application form.
- 2) Bank Transfer:  
Sumitomo Mitsui Banking Corp.  
Suzuran Branch  
SWIFT Code: SMBCJPJT  
Ordinary Account: 6103515  
Account Name: Kinki Nippon Tourist Co., Ltd.

### Cancellation Policy for Accommodations

In case of cancellation, a written notification should be sent to KNT by e-mail (ssdm2007-gb@or.knt.co.jp) or by FAX (+81-3-5256-1588) to avoid any trouble.

Hotels: Up to 14 days before the arrival date No Charge  
13-7 days before ..... 10 % of daily room charge  
6-2 days before ..... 40 % of daily room charge  
Less than 2 days, or no notice given . 100 % of daily room charge

### INSURANCE

The organizer cannot accept responsibility for accidents that may occur during a delegate's stay. Delegates are therefore encouraged to obtain travel insurance (medical, personal accident, and luggage) in their home countries prior to departure.

### CLIMATE

Tsukuba is warm and sometimes humid in September. The temperature range is 18-30°C .

### ELECTRICAL APPLIANCES

Japan operates on 100 volts for electrical appliances. The frequency is 50 Hz in eastern Japan including Tsukuba (conference site) and Tokyo, and 60 Hz in western Japan including Kyoto and Osaka.

## SSDM 2007 INSTRUCTION for SPEAKERS

### Oral Presentation

#### Time Schedule

	Session Time	Presentation	Discussion
Plenary	40 min.	35 min.	5 min.
Invited	30 min.	25 min.	5 min.
Regular-1	20 min.	17 min.	3 min.
Regular-2	15 min.	12 min.	3 min.

Buzzer First: Warning, Second: End of speech , Third: End of discussion.

#### Audio-Visual Equipment

The meeting rooms will contain the following audiovisual equipment:

- LCD projector (**PC itself is not provided**)
- Microphone
- Projection laser pointer

Speakers wishing to present their papers using the LCD projector are requested to verify their PC's compatibility with the LCD projector that will be located in the Preview Room (402) on the fourth floor prior to their presentations.

### Poster Presentation

Poster sessions are scheduled for Thursday, September 20, from 13:00 to 15:00 at Multi-Purpose Hall(1F). Poster boards will be available with identifying labels at Multi-Purpose Hall on the first floor. Authors are requested to prepare their posters between 9:00 and 12:00 on September 20 and remove them by 18:00 on September 20. Any posters remaining after 18:00 will be disposed of by the secretariat. Usable space on each poster board will be approximately 900 mm wide and 1,500 mm high. Pushpins will be available. Each presentation will be assigned a board, labeled with the paper number. Please display the paper title, author names and affiliations on the poster. Authors are requested to stay near their posters during the poster session for discussions.

### Short Oral Presentation for Poster Presenters

All poster presenters are required to make 2 minutes short oral presentation of September 20. The presentation time should be kept strictly to 2 minutes per poster presentation, including the time needed to move on to the next speaker. To ensure the session progresses smoothly, it is essential that these short presentations be held in a quick, successive sequence. While one speaker is giving his/her presentation, the next several speakers should wait nearby in line for their turn in order to move on to the next presentation. Note that any absent speakers will be skipped and each presentation will be automatically stopped after 2 minutes have elapsed. Only a PC projector will be made available. You should send your presentation file to the secretariat (ssdm2007-abs@intergroup.co.jp) by e-mail by August 24. The file must be an exact "2-page" landscape PDF. Because the presentation time is limited, please describe your research objective and results clearly and do NOT show the author list or the title on your file, those of which will be prepared by the SSDM Secretariat.

Short oral presentations will be held, as follows.

Room 101	Area 1		
Room 102	Area 3	Room 303	Area 6
Room 201A	Area 2, 12	Room 304	Area 10, 13
Room 201B	Area 5, 11	Room 405	Area 9
Room 202A	Area 7	Room 406	Area 4
Room 202B	Area 8		