

# 2014

## INTERNATIONAL CONFERENCE ON

# SOLID STATE

# DEVICES AND MATERIALS

# ssdm 2014

### Sep. 8-11, 2014

### Tsukuba International Congress Center (EPOCHAL TSUKUBA), Ibaraki, Japan

## SCOPE OF CONFERENCE

### Core Areas

- 1 **Advanced LSI Processing & Materials Science**  
(Chair: K. Kita, Univ. of Tokyo)
- 2 **Advanced Interconnect and 3D Integration/ Materials and Characterization**  
(Chair: M. Ueki, Renesas Electronics Corp.)
- 3 **CMOS Devices / Device Physics**  
(Chair: M. Masahara, AIST)
- 4 **Advanced Memory Technology**  
(Chair: T. Endoh, Tohoku Univ.)
- 5 **Advanced Circuits and Systems**  
(Chair: K. Kagawa, Shizuoka Univ.)
- 6 **Compound Semiconductor Electron Devices & Related Technologies**  
(Chair: N. Hara, Fujitsu Labs. Ltd.)
- 7 **Photonic Devices and Related Technologies**  
(Chair: Y. Ishikawa, Univ. of Tokyo)
- 8 **Advanced Material Synthesis and Crystal Growth Technology**  
(Chair: T. Suemasu, Univ. of Tsukuba)
- 9 **Physics and Applications of Novel Functional Devices and Materials**  
(Chair: T. Machida, Univ. of Tokyo)
- 10 **Organic Materials Science, Device Physics, and Applications**  
(Chair: T. Someya, Univ. of Tokyo)

### Strategic Areas

- 11 **Sensors and Materials for Biology, Chemistry and Medicine**  
(Chair: J. Ohta, NAIST)
- 12 **Spintronics Materials and Devices**  
(Chair: H. Munekata, Tokyo Tech)
- 13 **Applications of Nanotubes, Nanowires, and Graphene**  
(Chair: S. Hara, Hokkaido Univ.)
- 14 **Power Devices and Materials**  
(Chair: M. Kato, Nagoya Inst. of Tech.)
- 15 **Photovoltaic Materials and Devices**  
(Chair: M. Isomura, Tokai Univ.)

### Short Courses

- A. **Trends for Future Power Devices**  
(Organizer: Shizuo Fujita, Kyoto University)
- B. **Functional Devices in Integrated Systems (tentative)**  
(Organizer: Hitoshi Wakabayashi, Tokyo Institute of Technology)

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## Plenary Talks



**Dr. Kazuo Kyuma**

Council for Science and Technology Policy,  
Cabinet Office, Japan



**TBD**

"Strategy for science and technology innovations  
- Expectations for Solid State Devices and Materials"

## Paper Deadlines

Regular **April 28, 2014**

Late News **July 10, 2014**

### Organizing Committee

- Chair  
K. Masu (Tokyo Tech)
- Vice-Chair  
T. Fukui (Hokkaido Univ.)

### Steering Committee

- Chair  
Y. Miyamoto (Tokyo Tech)
- Vice-Chair  
S. Hara (Hokkaido Univ.)

### Program Committee

- Chair  
S. Takagi (Univ. of Tokyo)
- Vice-Chairs  
S. Fujita (Kyoto Univ.)  
A. Fujiwara (NTT Corp.)  
H. Wakabayashi (Tokyo Tech)  
E. Y. Chang (NCTU)

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## Short Courses

Short Courses for young researchers and students, will be held on 8 September 2014, the first day of SSDM2014

### A. Trends for Future Power Devices

(Organizer: Shizuo Fujita, Kyoto University)

### B. Functional Devices in Integrated Systems (tentative)

(Organizer: Hitoshi Wakabayashi, Tokyo Institute of Technology)

## Invited Speakers

### Advanced LSI Processing & Materials Science (Area 1)

V. V. Afanas'ev (KU Leuven, Belgium)  
S. A. Dayeh (UCSD, USA)  
W. Mizubayashi (AIST, Japan)  
S. Salahuddin (UC Berkeley, USA)

### Advanced Interconnect and 3D Integration/ Materials and Characterization (Area 2)

T. Nakamura (PETRA, Japan)  
A. Rahman (Altera, USA)  
H. M. Yamamoto (IMS, Japan)  
C. Y. Yang (SCU, USA)

### CMOS Devices / Device Physics (Area 3)

U. E. Avci (Intel, USA)  
X. Gong (NUS, Singapore)  
T. Takahashi (Keio Univ., Japan)  
S.-Y. Wu (TSMC, Taiwan)

### Advanced Memory Technology (Area 4)

D. Ielmini (POLIMI, Italy)  
M. N. Kozicki (ASU, USA)  
H. Sato (Tohoku Univ., Japan)

### Advanced Circuits and Systems (Area 5)

T. Nakura (Univ. of Tokyo, Japan)  
O. Paul (Univ. of Freiburg, Germany)  
W. Rhee (Tsinghua Univ., China)

### Compound Semiconductor Electron Devices & Related Technologies (Area 6)

M. J. W. Rodwell (UCSB, USA)  
S. Suzuki (Tokyo Tech, Japan)  
E. Zanoni (Univ. of Padova, Italy)

### Photonic Devices and Related Technologies (Area 7)

B. Ben Bakir (CEA-Leti, France)  
E. Kasper (Univ. Stuttgart, Germany)  
M. P. Mack (Luxtera, USA)  
T. Mizumoto (Tokyo Tech, Japan)

### Advanced Material Synthesis and Crystal Growth Technology (Area 8)

P. Aseev (ISOM, Spain)  
O. Bierwagen (PDI, Germany)  
H. Hibino (NTT BRL, Japan)  
Z. Wang (Max Planck Inst., Germany)

### Physics and Applications of Novel Functional Devices and Materials (Area 9)

G. Eda (NUS, Singapore)  
K. He (Tsinghua Univ., China)  
A. Oiwa (Univ. of Tokyo, Japan)

### Organic Materials Science, Device Physics, and Applications (Area 10)

M. Berggren (Linköping Univ., Sweden)  
J.-J. Kim (SNU, Korea)  
Y. Ohmori (Osaka Univ., Japan)  
P. Wierchowicz (Merck, UK)

### Sensors and Materials for Biology, Chemistry and Medicine (Area 11)

T. Fujii (Univ. of Tokyo, Japan)  
S. Ingebrandt (UASK, Germany)  
T. Suzuki (NICT, Japan)  
M.-H. Wu (CGU, Taiwan)

### Spintronics Materials and Devices (Area 12)

L. Bi (UESTC, China)  
M. Cinchetti (Univ. of Kaiserslautern, Germany)  
J. Hong (Korea Univ., Korea)  
H. Yoda (TOSHIBA, Japan)

### Applications of Nanotubes, Nanowires, and Graphene (Area 13)

G. Koblmüller (WSI, Germany)  
M. Shulaker (Stanford Univ., USA)  
H. Xu (Lund Univ., Sweden)  
P. D. Ye (Purdue Univ., USA)

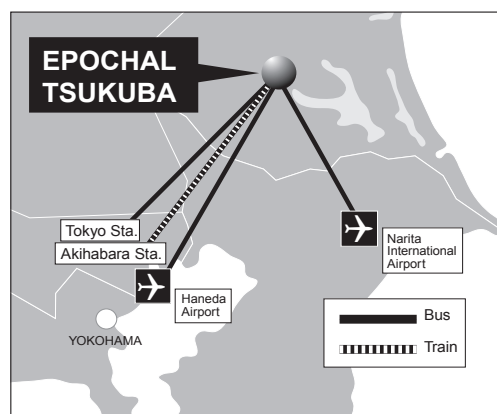
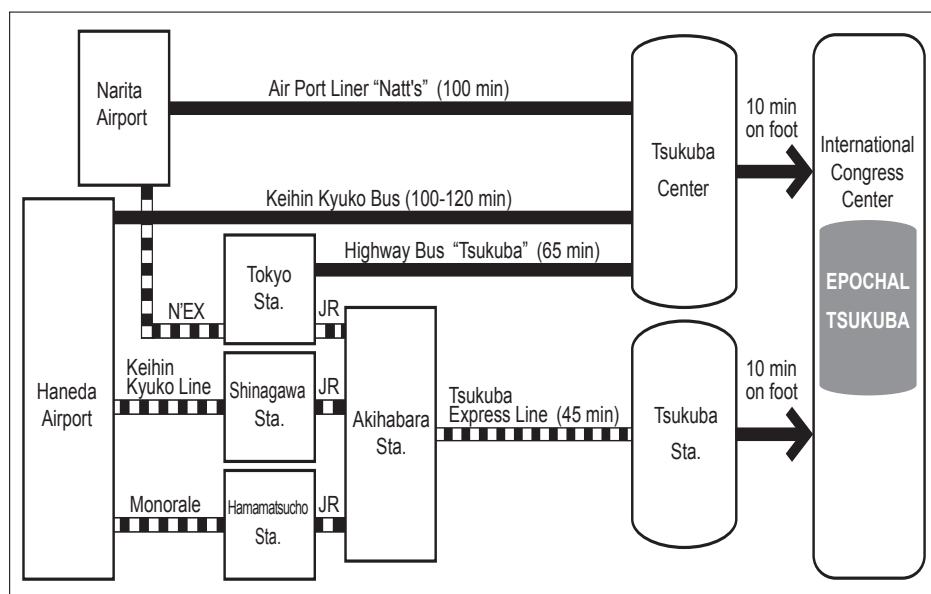
### Power Devices and Materials (Area 14)

J. A. Cooper (Purdue Univ., USA)  
H. J. Mattausch (Hiroshima Univ., Japan)  
P. Parikh (Transphorm, USA)  
M. Sumitomo (DENSO, Japan)

### Photovoltaic Materials and Devices (Area 15)

W.-G. Diao (NCTU, Taiwan)  
G. S. Higashi (Alta Devices, USA)  
S. Ikeda (Osaka Univ., Japan)  
J. Nakamura (SHARP, Japan)  
H. Segawa (Univ. of Tokyo, Japan)

Invited speakers may change



## Further Information

For any questions or further information, please contact:  
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