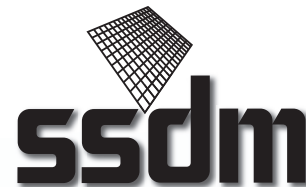


# 2016

## INTERNATIONAL CONFERENCE ON

# SOLID STATE

# DEVICES AND MATERIALS



### Sep. 26-29, 2016

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

### Scope of Conference

#### Core Areas

- ① **Advanced LSI Processing & Materials Science**  
(Chair : S. Migita, AIST)
- ② **Interconnect Technologies and 3D Integration / Sensor / MEMS Integration / Materials and Characterization**  
(Chair : N. Sugiyama, Toray Research Center, Inc.)
- ③ **CMOS Devices / Device Physics**  
(Chair : N. Sugii, Hitachi, Ltd.)
- ④ **Advanced Memory Technology**  
(Chair : K. Hamada, Micron Memory Japan Inc.)
- ⑤ **Advanced Circuits and Systems**  
(Chair : H. Takao, Kagawa Univ.)
- ⑥ **Compound Semiconductor Electron Devices & Related Technologies**  
(Chair : T. Suzuki, JAIST)
- ⑦ **Photonic Devices and Related Technologies**  
(Chair : H. Isshiki, Univ. of Electro-Communications)
- ⑧ **Advanced Material Synthesis and Crystal Growth Technology**  
(Chair : T. Nagata, NIMS)
- ⑨ **Physics and Applications of Novel Functional Devices and Materials**  
(Chair : T. Tanamoto, Toshiba Corp.)
- ⑩ **Organic Materials Science, Device Physics, Applications and Printed Technologies**  
(Chair : K. Fujita, Kyushu Univ.)

#### Strategic Areas

- ⑪ **Sensors and Materials for Biology, Chemistry and Medicine**  
(Chair : T. Sakata, Univ. of Tokyo)
- ⑫ **Spintronics Materials and Devices**  
(Chair : Y. Suzuki, Osaka Univ.)
- ⑬ **Applications of Nanotubes, Nanowires, and Graphene and Related 2D Materials**  
(Chair : Y. Ohno, Nagoya Univ.)
- ⑭ **Power Devices and Materials**  
(Chair : H. Umezawa, AIST)
- ⑮ **Photovoltaic Materials and Devices**  
(Chair : K. Ohdaira, JAIST)

### Plenary Talks



**Tomohiro Saito**  
(NHK, Japan)

Future of Television:  
8K Super Hi-Vision



**Geoffrey W. Burr**  
(IBM, USA)

Crossbar arrays for  
Storage Class  
Memory and  
non-Von Neumann  
computing



**Akira Toriumi**  
(Univ. of Tokyo, Japan)

Step back and  
forward for beyond Si

### Paper Deadlines

Regular **May 20, 2016**  
Late News **July 21, 2016**

#### Organizing Committee

Chair : T. Kanayama (AIST)  
Vice-Chair : H. Ohno (Tohoku Univ.)

#### Steering Committee

Chair : M. Masahara (AIST)  
Vice-Chair : T. Endoh (Tohoku Univ.)

#### Program Committee

Chair : T. Hiramoto (Univ. of Tokyo)  
Vice-Chairs: K. Shiraiishi (Nagoya Univ.) J. Ohta (NAIST)  
: T. Sogawa (NTT Basic Res. Labs.) F. Boeuf (STMicroelectronics)

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## Short Courses

Short Courses for young researchers and students, will be held on 26 September 2016, the first day of SSDM2016. All lectures will be given in English.

### A. Fundamental Physics for Modeling and Simulations toward Future Electron Devices

(Organizer: Kenji Shiraishi, Nagoya Univ.)

### B. Trends for Organic Electronics (tentative)

(Organizer: Jun Ohta, NAIST)

## Invited Speakers

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

Hiroaki Arimura (IMEC, Belgium)  
 Pouya Hashemi (IBM, USA)  
 Louis Hutin (CEA-Leti, France)  
 Min-Hung Lee (National Taiwan Normal Univ., Taiwan)

### Interconnect Technologies and 3D Integration / Sensor / MEMS Integration / Materials and Characterization (Area 2)

Viorel Balan (CEA-Leti, France)  
 C. Raman Kothandaraman (IBM, USA)  
 Takehito Shimatsu (Tohoku Univ., Japan)  
 TBD

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

Veeresh Deshpande (IBM, Germany)  
 Xiao Gong (NUS, Singapore)  
 Wataru Mizubayashi (AIST, Japan)  
 Minoru Oda (Toshiba Corp., Japan)

### Advanced Memory Technology (Area 4)

Venkatesh Gopinath (Adesto Technologies Corp., Inc., USA)  
 Yu Lu (Hikstor Technology Co., Ltd., China)  
 Jong Chul Park (Samsung Electronics Co., Ltd., Korea)  
 Philip Wong (Stanford Univ., USA)

### Advanced Circuits and Systems (Area 5)

Shoji Kawahito (Sizuoka Univ., Japan)  
 Hiroki Morimura (NTT Corp., Japan)  
 Masahiko Yoshimoto (Kobe Univ., Japan)  
 TBD

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

Hidetoshi Ishida (Panasonic Corp., Japan)  
 Norihide Kashio (NTT Device Innovation Center, Japan)  
 Martin Kuball (Univ. of Bristol, UK)  
 Dimitris Pavlidis (Boston Univ., USA)

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

Stefan Abel (IBM, USA)  
 Mitsuru Sugawara (QD Laser, Inc., Japan)  
 Mitsuru Takenaka (Univ of Tokyo, Japan)  
 Zhiping J. Zhou (Peking Univ., China)

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

Yi-Chia Chou (NCTU, Taiwan)  
 Xiangfeng Duan (Univ. of California, Los Angeles, USA)  
 Seiichi Miyazaki (Nagoya Univ., Japan)  
 Tomohiro Yamaguchi (Kogakuin Univ., Japan)

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

Iuliana Radu (IMEC, Belgium)  
 Yuya Shimazaki (Univ. of Tokyo, Japan)  
 Dmitri Strukov (Univ. of California, Santa Barbara, USA)  
 Masahito Ueda (Univ. of Tokyo, Japan)

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

Alexandre Carella (CEA-Liten, France)  
 Laylay Chua (NUS, Singapore)  
 Junichi Hanna (Tokyo Tech, Japan)  
 Hironori Kaji (Kyoto Univ., Japan)

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

Matsuhiko Nishizawa (Tohoku Univ., Japan)  
 Tsuyoshi Sekitani (Osaka Univ., Japan)  
 Yu-Lin Wang (National Tsing Hua Univ., Taiwan)  
 Yoshimitsu Yanagawa (Hitachi, Ltd., Japan)

### Spintronics Materials and Devices (Area 12)

Taichi Goto (Toyohashi Univ. of Tech., Japan)  
 Xiufeng Han (Chinese Academy of Sci., China)  
 Kyung-Jin Lee (Korea Univ., Korea)  
 Takahiro Moriyama (Kyoto Univ., Japan)

### Applications of Nanotubes, Nanowires, and Graphene and Related 2D Materials (Area 13)

Magnus Borgström (Lund Univ., Sweden)  
 Qing Cao (IBM, USA)  
 Debdeep Jena (Cornell Univ., USA)  
 Xiuling Li (Univ. of Illinois, USA)

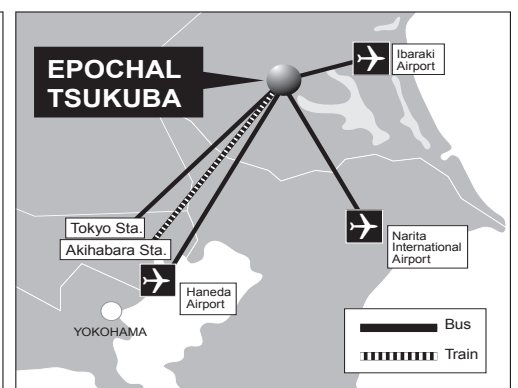
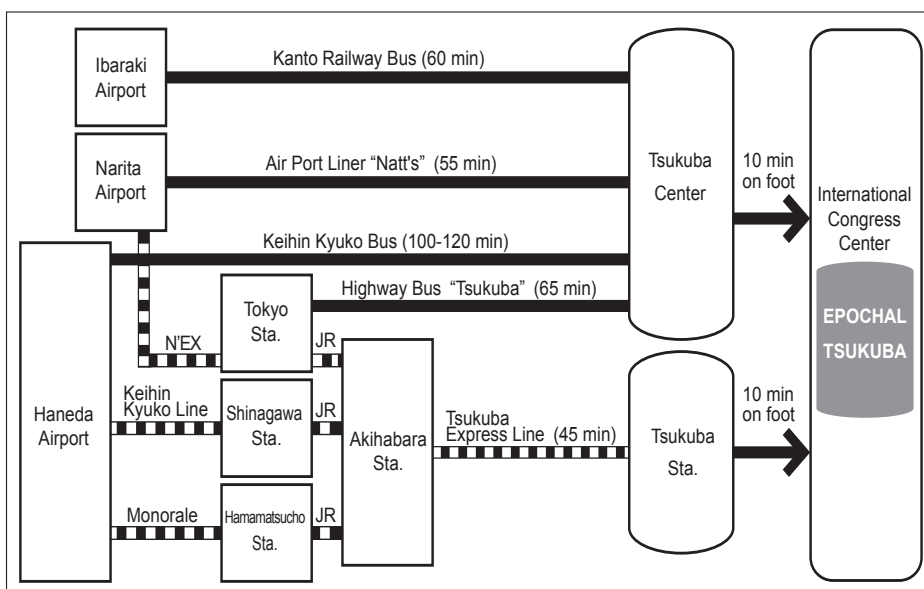
### Power Devices and Materials (Area 14)

Sujit Banerjee (Monolith Semiconductor Inc., USA)  
 Salvatore Coffa (STMicroelectronics, Italy)  
 Nando Kaminski (Univ. of Bremen, Germany)  
 Hiroshi Kawarada (Waseda Univ., Japan)  
 Koji Kita (Univ. of Tokyo, Japan)

### Photovoltaic Materials and Devices (Area 15)

Liyuan Han (NIMS, Japan)  
 Kuo-Chuan Ho (National Taiwan Univ., Taiwan)  
 Fan Ying Meng (Chinese Academy of Sci., China)  
 Kong Fai Tai (Solar Frontier K.K., Japan)

Invited speakers may change



## Further Information

For any questions or further information, please contact: Secretariat for SSDM2016

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