

ISPlasma is held annually as part of the Tokai Region Nanotechnology Manufacturing Cluster supported by MEXT to establish an advanced plasma nanotechnology science research foundation for global competitiveness in this region.

## SCOPE

### • Plasma Science and Technology

Advanced Plasma & Surface Diagnostics Etching Process	Simulation and Database Deposition Process
Solar Cells Based on Plasma Science	Advanced Plasma Flexible Electronics

### • Nitride Semiconductors

Crystal Growth of GaN and Related Materials Characterization	MBE Growth of Nitrides Device Processing
Electronic Devices	Optical Devices

### • Nanomaterials

Nanocarbon Materials	Porous Materials
Lithium-ion Rechargeable Battery Cells	Surface Modification
Surface Functionalization	Composite
Functionally Grade Materials	Nanoparticles

### • Integration Technology of Plasma Science, Nitride Semiconductors and Nanomaterials

### • Industry-Academia-Government Collaboration

## SCHEDULE AT A GLANCE

<b>Mar. 6 (Sun)</b>	Welcome Party at Cafe Sala, NIT
<b>Mar. 7 (Mon)</b>	Opening Technical Session Poster Session
<b>Mar. 8 (Tue)</b>	Technical Session Panel Discussion "Application of Advanced Plasma Technology for Nitride Semiconductors II" Poster Session Banquet at SAPPORO NAGOYA BREWERY KOUYOUEN
<b>Mar. 9 (Wed)</b>	Technical Session Panel Discussion "Establishment of Advanced Plasma Nanotechnology Science Research Foundation toward Open Innovation" Poster Session Closing

## SPECIAL ISSUE

- Submission Deadline: Thursday, March 31, 2011
- Selected papers will be published in a special issue of Jpn. J. Appl. Phys. (JJAP)

## RELATED CONFERENCES

- IC-PLANTS 2011 (Mar. 10-12, 2011)  
Takayama Public Cultural Hall, Gifu, Japan
- 10th Nitride Semiconductor Application Workshop (Mar. 10, 2011)  
Nagoya, Japan (To Be Announced)

<http://www.isplasma.jp/>

## REGISTRATION : Online Registration is now available.

<b>Registration Fee :</b>	<b>General</b>	<b>Student</b>
Early Registration (before Jan. 31)	<b>JPY 20,000</b>	<b>JPY 3,000</b>
Late Registration (until Feb. 28)	<b>JPY 25,000</b>	<b>JPY 5,000</b>
On-site Registration (after Mar. 1)	<b>JPY 30,000</b>	<b>JPY 7,000</b>
<b>Banquet Fee (on Mar. 8)</b>	<b>JPY 5,000</b>	<b>JPY 2,000</b>

**For those attending only the Mar. 9, PM Session : Registration Fee is FREE.**  
\* **Advanced online registration is required.**  
(Industry-Academia-Government Collaboration Lecture and Panel Discussion)

## SOCIAL EVENT

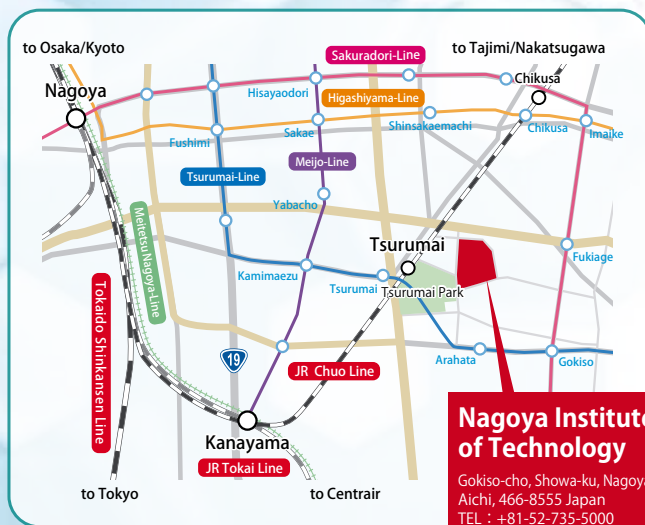
### • Welcome Party

Sunday, Mar. 6, 18:00~  
Cafe Sala, NIT

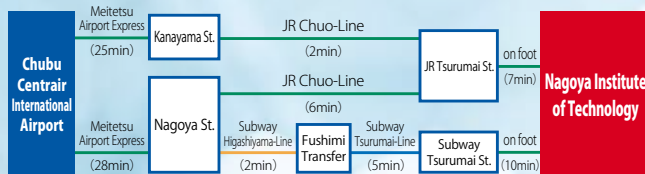
### • Banquet

Tuesday, Mar. 8, 18:30~  
SAPPORO NAGOYA BREWERY KOUYOUEN  
Fee : General 5,000 JPY Student 2,000 JPY

## ACCESS



**Nagoya Institute of Technology**  
Gokiso-cho, Showa-ku, Nagoya,  
Aichi, 466-8555 Japan  
TEL : +81-52-735-5000



\* ( ) time as a standard.

<http://www.isplasma.jp/>



# ISPlasma2011

3rd International Symposium on Advanced Plasma Science and its Applications for Nitrides and Nanomaterials

## March 6-9, 2011

Nagoya Institute of Technology, Nagoya, Japan

## Organizing Committee

### Chairperson

Masaru Hori, Plasma Nanotechnology Research Center, Nagoya University

### Vice-Chairperson

Hideki Masuda, Nagoya Institute of Technology  
Hiroshi Amano, Nagoya University  
Keiji Nakamura, Chubu University

Sponsored by :

Aichi Science & Technology Foundation,  
ISPlasma2011 Organizing Committee

Co-sponsored by :

Aichi Prefecture, Nagoya City, Gifu Prefecture, Nagoya University, Nagoya Institute of Technology, Meijo University, Chubu University, The Japan Society of Applied Physics, The Japan Society of Plasma Science and Nuclear Fusion Research, The Japanese Association for Crystal Growth

Grants :

Nagoya Convention & Visitors Bureau, Daiko foundation

## Contact

Secretariat : c/o Aichi Science & Technology Foundation

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<http://www.isplasma.jp/>

# ISPlasma2011

Program

## Mar.7 (Mon)

### Plenary Speaker

Hiroyuki Sakaki (Toyota Technological Institute, JAPAN)

### Special Keynote Speaker

John Robertson (Cambridge University, UK)

### Keynote/Knowledge Cluster Speakers

#### Plasma Science and Technology

J-P. Booth (CNRS, FRANCE)  
U. Czarnetzki (Ruhr-University Bochum, GERMANY)  
D. B. Graves (UC Berkeley, USA)  
M. Hori (Nagoya University, JAPAN)  
O. Takai (Nagoya University, JAPAN)

#### Nitride Semiconductors

B. Daudin (CEA Grenoble, FRANCE)  
T. Egawa (Nagoya Institute of Technology, JAPAN)  
N. Grandjean (EPFL, SWITZERLAND)

#### Nanomaterials

M. Oda (ULVAC, Inc., JAPAN)  
H. Takikawa (Toyohashi University of Technology, JAPAN)  
Y. Watanabe (Nagoya Institute of Technology, JAPAN)

### Mar. 6 (Sun)

17:30	Registration
18:00	Welcome Party at Cafe Sala, NIT
19:30	

### Mar. 7 (Mon)

9:00	Registration						
9:20	Opening						
	Plenary Lecture: Hiroyuki Sakaki (Toyota Technological Institute, JAPAN)						
	Special Keynote Lecture: John Robertson (Cambridge University, UK)						
	Knowledge Cluster Lecture						
12:00	Lunch						
13:00	Poster Session 1						
14:30	<table border="1"> <tr> <td>Plasma 1 Advanced Plasma Measuring Technology</td> <td>Nitride 1 Plasma Assisted Growth</td> <td>Nanomaterials 1 Nanoparticles</td> </tr> <tr> <td>Plasma 2 Simulation</td> <td>Nitride 2 Optical Devices</td> <td>Nanomaterials 2 Surface Modification/Surface Functionalization</td> </tr> </table>	Plasma 1 Advanced Plasma Measuring Technology	Nitride 1 Plasma Assisted Growth	Nanomaterials 1 Nanoparticles	Plasma 2 Simulation	Nitride 2 Optical Devices	Nanomaterials 2 Surface Modification/Surface Functionalization
Plasma 1 Advanced Plasma Measuring Technology	Nitride 1 Plasma Assisted Growth	Nanomaterials 1 Nanoparticles					
Plasma 2 Simulation	Nitride 2 Optical Devices	Nanomaterials 2 Surface Modification/Surface Functionalization					
17:30	Poster Session 2						
19:00							

<http://www.isplasma.jp/>

## Mar.8 (Tue)

### Keynote Speakers

#### Plasma Science and Technology

M. J. Goeckner (University of Texas at Dallas, USA)  
F. Laermer (Robert Bosch GmbH, GERMANY)  
A. Wendt (University of Wisconsin-Madison, USA)

#### Nitride Semiconductors

D. Alquier (Université de Tours, FRANCE)  
H. Amano (Nagoya University, JAPAN)  
A. Khan (University of South Carolina, USA)  
A. Krost (Otto von Guericke University Magdeburg, GERMANY)  
F. Ponce (Arizona State University, USA)  
D. Ueda (Panasonic Corp., JAPAN)

#### Nanomaterials

A. Yoshino (Asahi Kasei Corp., JAPAN)  
H. Zhou (Texas A&M University, USA)

### Panel Discussion

#### Application of Advanced Plasma Technology for Nitride Semiconductors II

<Moderator>

Y. Nanishi (Ritsumeikan University, JAPAN/ Seoul National University, KOREA)

<Panelist>

D. Alquier (Université de Tours, FRANCE)  
H. Amano (Nagoya University, JAPAN)  
B. Daudin (CEA Grenoble, FRANCE)  
N. Grandjean (EPFL, SWITZERLAND)  
H. Kano (NU Eco Engineering Co.,Ltd., JAPAN)  
A. Khan (University of South Carolina, USA)  
Y. Tokuda (Aichi Institute of Technology, JAPAN)  
D. Ueda (Panasonic Corp., JAPAN)  
A. Uedono (University of Tsukuba, JAPAN)

### Mar. 8 (Tue)

9:00	Registration						
9:20	<table border="1"> <tr> <td>Plasma 3 Etching Process I</td> <td>Nitride 3 Device Characterizations</td> <td>Nanomaterials 3 Lithium-ion Rechargeable Battery Cells</td> </tr> <tr> <td>Plasma 4 Etching Process II</td> <td>Nitride 4 GaN/Si and its Applications</td> <td>Nanomaterials 4 Porous Materials</td> </tr> </table>	Plasma 3 Etching Process I	Nitride 3 Device Characterizations	Nanomaterials 3 Lithium-ion Rechargeable Battery Cells	Plasma 4 Etching Process II	Nitride 4 GaN/Si and its Applications	Nanomaterials 4 Porous Materials
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Plasma 4 Etching Process II	Nitride 4 GaN/Si and its Applications	Nanomaterials 4 Porous Materials					
12:00	Lunch						
13:00	Poster Session 3						
14:30	Nitride 5 Recent Progress in Nitride Devices						
18:30	Nitride 6 Panel Discussion Plasma Science and Nitride Semiconductors II						
20:00	Banquet at SAPPORO NAGOYA BREWERY KOUYOUEN						

<http://www.isplasma.jp/>

## Mar.9 (Wed)

### Keynote Speakers

#### Plasma Science and Technology

J. G. Han (Sungkyunkwan University, KOREA)  
M. Kondo (AIST, JAPAN)  
J. Vlcek (University of West Bohemia, CZECH REPUBLIC)

#### Nitride Semiconductors

F. Scholz (Ulm University, GERMANY)  
E. Yoon (Seoul National University, KOREA)

#### Nanomaterials

K. Mizuuchi (Osaka Municipal Technical Research Institute, JAPAN)  
M. Meyyappan (NASA Ames Research Center, USA)

#### Industry-Academia-Government Collaboration

T. Arimoto (JST, JAPAN)  
M. Hori (Nagoya University, JAPAN)  
W. Izumiya (Sangyo Times Inc., JAPAN)  
C. Mantel (Selantek, Inc., USA)  
W. Vandervorst (IMEC, BELGIUM)

### Panel Discussion

#### Establishment of Advanced Plasma Nanotechnology Science Research Foundation toward Open Innovation

<Moderator>

N. Odake (Nagoya Institute of Technology, JAPAN)

<Panelist>

T. Arimoto (JST, JAPAN)  
M. Hori (Nagoya University, JAPAN)  
W. Izumiya (SangyoTimes Inc., JAPAN)  
Y. Madokoro (Aichi Prefectural Government, JAPAN)  
C. Mantel (Selantek, Inc., USA)  
W. Vandervorst (IMEC, BELGIUM)

\*Tentative

### Mar. 9 (Wed)

9:00	Registration						
9:20	<table border="1"> <tr> <td>Plasma 5 Thin Film Deposition Process</td> <td>Nitride 7 III-Nitride Microstructures</td> <td>Nanomaterials 5 Composite/Functionally Grade Materials</td> </tr> <tr> <td>Plasma 6 Solar Cells Based on Plasma Science/ Advanced Plasma Flexible Electronics</td> <td>Nitride 8 Growth of GaN and Related Materials</td> <td>Nanomaterials 6 Nanocarbon Materials</td> </tr> </table>	Plasma 5 Thin Film Deposition Process	Nitride 7 III-Nitride Microstructures	Nanomaterials 5 Composite/Functionally Grade Materials	Plasma 6 Solar Cells Based on Plasma Science/ Advanced Plasma Flexible Electronics	Nitride 8 Growth of GaN and Related Materials	Nanomaterials 6 Nanocarbon Materials
Plasma 5 Thin Film Deposition Process	Nitride 7 III-Nitride Microstructures	Nanomaterials 5 Composite/Functionally Grade Materials					
Plasma 6 Solar Cells Based on Plasma Science/ Advanced Plasma Flexible Electronics	Nitride 8 Growth of GaN and Related Materials	Nanomaterials 6 Nanocarbon Materials					
12:00	Lunch						
13:00	Poster Session 4						
14:30	Industry-Academia-Government Collaboration 1 * Global Open Innovation						
	Industry-Academia-Government Collaboration 2 * Panel Discussion						
18:00	Closing						

\*Registration Fee: Free, Simultaneous Interpretation

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