

## PROGRAM (tentative)

### March 15 (Sun)

**Registration 16:00-18:00**

**Informal get-together 18:00-20:00**

### March 16 (Mon)

**Registration 10:00-10:20**

**Opening 10:20-10:30**

**Session 1: Tutorial 1 10:30-11:20 (Chair: N. Suzuki and H. Yoshikawa)**

T-1 Ion Beam Sputtering for High Resolution Depth Profiling

H. J. Kang,\* D. W. Moon, and H.-I. Lee ·····\*\*\*

**Break 11:20-11:35**

**Session 2: Non-destructive analysis 11:35-12:35 (Chair: N. Suzuki and H. Yoshikawa)**

O-1 Non-Destructive Depth Profiling by XPS Peak Shape Analysis

S. Hajati\* and S. Tougaard ·····\*\*\*

O-2 Combination of High-Resolution RBS and Angle-Resolved XPS: Accurate Depth Profiling of Chemical States

K. Nakajima\* ·····\*\*\*

**Lunch 12:35-13:45**

**Session 3: SIMS and cluster ions 13:45-15:15 (Chair: K. J. Kim and Y. Abe)**

O-3 Sputter Depth Profiling by SIMS; Calibration of SIMS Depth Scale Using Multi-layer Reference Materials

K. J. Kim,\* J. S. Jang, and T. E. Hong ·····\*\*\*

O-4 Depth Profiling Analysis of Organic Materials by Using ToF-SIMS and Gradient Shaving Preparation

H. Itoh\* ·····\*\*\*

O-5 Organic Depth Profiling by Cluster Ion Sputter

Y. Abe\* ·····\*\*\*

**Break 15:15-15:35**

**Session 4: Sputter depth profiling 15:35-16:35 (Chair: H. J. Kang and T. Nagatomi)**

O-6 Brief History and Current Activity in ISO/TC201/SC4 for Depth Profiling

M. Suzuki\* . . . . .\*\*\*

O-7 Auger Depth Profiling Analysis Using an Inclined Holder

T. Ogiwara\* and S. Tanuma . . . . .\*\*\*

**Break 16:35-16:55**

**Session 5: Depth distribution function 16:55-17:55 (Chair: H. J. Kang and T. Nagatomi)**

O-8 Monte Carlo Study of Depth Distribution Function of Secondary Electrons

Z. J. Ding\* . . . . .\*\*\*

O-9 Evaluation of Depth Distribution Function for AR-XPS using Synchrotron Radiation Hard X-ray

H. Yoshikawa,\* H. Tanaka, M. Kimura, T. Ogiwara, T. Kimura, S. Fukushima,  
K. Kumagai, S. Tanuma, M. Suzuki, and K. Kobayashi . . . . .\*\*\*

**March 17 (Tue)**

**Session 6: Tutorial 2 9:30-10:20 (Chair: Z. J. Ding and S. Hajati)**

T-2 The Backscattering Factor for Systems with Non-uniform In-depth Profile

A. Jablonski\* . . . . .\*\*\*

**Break 10:20-10:40**

**Session 7: XPS 10:40-12:10 (Chair: Z. J. Ding and S. Hajati)**

O-10 Recent Status of Thin Film Analyses by XPS

H. Iwai,\* J. S. Hammond, and S. Tanuma . . . . .\*\*\*

O-11 Applications of XPS on Nanoscale Material Research

F. Liu,\* Z. Zhao, L. Qiu, and L. Zhao . . . . .\*\*\*

O-12 Study of SiO powder by X-ray Photoelectron Spectroscopy Analysis

H. Tohma\* . . . . .\*\*\*

**Lunch 12:10-13:30**

**Session 8: Poster (for viewing) 13:30-17:00**

**Informal get-together 18:30-20:30**

**March 18 (Wed)**

**Session 9: Poster short presentation 1 9:30-10:50 (Chair: J. H. Lee and H. Iwai)**

- P-1 Low Damage Etching of Polymer Materials for Depth Profile Analysis Using Large Ar Cluster Ion Beam  
S. Ninomiya,\* K. Ichiki, H. Yamada, Y. Nakata, T. Seki, T. Aoki, and J. Matsuo . . . . . \*\*\*
- P-2 Direct and Real-Time Surface Analysis and Imaging of Biological Samples by Probe Electrospray  
K. Hiraoka,\* L. C. Chen, D. Asakawa, S. Takeda, and T. Kubota . . . . . \*\*\*
- P-3 Depth Profiling of Polystyrene Using Charged Water Droplet Impact  
Y. Sakai,\* Y. Iijima, R. Takaishi, D. Asakawa, and K. Hiraoka . . . . . \*\*\*
- P-4 Characterisation and Optimisation of a Polyatomic Ion Source for Organic Depth Profiling  
A. J. Roberts,\* S. J. Hutton, C. J. Blomfield, I. Drummond, and S. C. Page . . . . . \*\*\*
- P-5 Test of the Consistency of Angle Resolved XPS Data for Depth Profile Reconstruction using the Maximum Entropy Method  
A. J. Roberts,\* K. Macak and K. Takahashi . . . . . \*\*\*
- P-6 Nondestructive Depth Resolved Analysis by using Grazing Exit Fluorescence-Yield X-ray Absorption Spectroscopy  
K. Shinoda,\* S. Sato, S. Suzuki, T. Uruga, H. Tanida,  
H. Toyokawa, Y. Terada, and Y. Takagaki . . . . . \*\*\*
- P-7 In-Depth Profile of Hf-Based Gate Insulator Films on Si Substrates Studied by Angle-Resolved Photoelectron Spectroscopy Using Synchrotron Radiation  
S. Toyoda,\* H. Kumigashira, M. Oshima, G. L. Liu, Z. Liu, and K. Ikeda . . . . . \*\*\*
- P-8 Synchrotron Radiation Photoemission Spectroscopy for Native Oxide Layer on Vanadium and VCrTa  
Y. Teraoka,\* A. Yoshigoe, and J. Harries . . . . . \*\*\*

**Break 10:50-11:10**

**Session 10: Poster short presentation 2 11:10-12:40**

**(Chair: K. Yanagiuchi and K. Takahashi)**

- P-9 Metal/Organic Interface Analysis Based on Photoelectron Spectroscopy and its Application Studies on the Next Generation Electronic Devices  
J. H. Lee\* . . . . . \*\*\*
- P-10 Depth Profiling of Perhydrosilazane Thin Film Using Multi Anode XPS Technique  
H. Watanabe,\* E. Tadaoka, and M. Nomoto . . . . . \*\*\*
- P-11 An Improved Backscattering Correction Equation for Wide Analytical Conditions on Quantitative Auger Analysis  
S. Tanuma\* . . . . . \*\*\*

- P-12 Calculation of Depth Distribution Functions for CuO and SiO<sub>2</sub>  
H. Shinotsuka,\* H. Yoshikawa, and S. Tanuma . . . . . \*\*\*
- P-13 Inelastic Scattering Cross Section of Si from Angular Dependent Reflection Electron Energy  
Loss Spectra  
H. Jin,\* H. Yoshikawa, H. Iwai, S. Tanuma, and S. Tougaard . . . . . \*\*\*
- P-14 Oxygen Enhanced Surface Roughening of Si(111) Induced by Low Energy Xe<sup>+</sup> Ion Sputtering  
T. Miyagawa,\* K. Inoue, M. Inoue . . . . . \*\*\*
- P-15 Influences of Measurement Conditions on Etching Rate of GaAs/AlAs Superlattice  
in Auger Electron Spectroscopy Sputter Depth Profiling  
T. Nagatomi,\* T. Bungo, and Y. Takai . . . . . \*\*\*
- P-16 In-Situ Observation of the Reaction between Iron and Carbon in TEM  
N. Ishikawa,\* T. Aoyagi, T. Kimura, K. Furuya, H. Harada, and T. Inami . . . . . \*\*\*
- P-17 Diagnosis and Cleaning of Carbon Contamination on SiO<sub>2</sub> Thin Film  
A. Kurokawa, K. Odaka,\* Y. Azuma, T. Fujimoto, I. Kojima . . . . . \*\*\*

**Lunch 12:40-13:40**

**Session 11: Poster presentation 1 13:40-14:40 (Chair: M. Arai and H. Itoh)**  
Odd number

**Session 12: Poster presentation 2 14:40-15:40 (Chair: T. Ogiwara and H. Tohma)**  
Even number

**Korea-Japan-China symposium 15:40-19:00**

**Closing 19:00-19:10**

**Timetable (tentative)****March 15 (Sun)**

| Program               | Time        | Chairpersons & Remarks  |
|-----------------------|-------------|---|
| Registration          | 16:00-18:00 | At Lobby of the TOYOKO Inn Naha Asahibashi-Ekimae Hotel. Please see |
| Informal get-together | 18:00-20:00 | Please come to Registration Desk.                                   |

**March 16 (Mon)**

| Program   | Time        | Remarks  |
|---|-------------|--|
| Registration  | 10:00-10:20 | Registration on March 15 is strongly recommended.  |
| Opening   | 10:20-10:30 |  |
| Session 1: Tutrial 1<br>T-01 H. J. Kang   | 10:30-11:20 | Chair: N. Suzuki and H. Yoshikawa  |
| Break   | 11:20-11:35 |  |
| Session 2: Non-destructive analysis<br>O-01 S. Hajati<br>O-02 K. Nakajima         | 11:35-12:35 | Chair: N. Suzuki and H. Yoshikawa  |
| Lunch   | 12:35-13:45 | Included in registration fee. Please see <a href="http://www.sasj.jp/iSAS/iSAS09/social_prg.html">http://www.sasj.jp/iSAS/iSAS09/social_prg.html</a> . |
| Session 3: SIMS and cluster ions<br>O-03 K. J. Kim<br>O-04 H. Itoh<br>O-05 Y. Abe | 13:45-15:15 | Chair: K. J. Kim and Y. Abe  |
| Break   | 15:15-15:35 |  |
| Session 4: Sputter depth profiling<br>O-06 M. Suzuki<br>O-07 T. Ogiwara           | 15:35-16:35 | Chair: H. J. Kang and T. Nagatomi  |
| Break   | 16:35-16:55 |  |
| Session 5: Depth distribution<br>O-08 Z. J. Ding<br>O-09 H. Yoshikawa             | 16:55-17:55 | Chair: H. J. Kang and T. Nagatomi  |

**March 17 (Tue)**

| Program  | Time        | Remarks   |
|--|-------------|---|
| Session 6: Tutrial 2<br>T-02 A. Jablonski                      | 9:30-10:20  | Chair: Z. J. Ding and S. Hajati   |
| Break  | 10:20-10:40 |   |
| Session 7: XPS<br>O-10 H. Iwai<br>O-11 F. Liu<br>O-12 H. Tohma | 10:40-12:10 | Chair: Z. J. Ding and S. Hajati   |
| Lunch  | 12:10-13:30 | <b>NOT</b> included in registration fee. Please see <a href="http://www.sasj.jp/iSAS/iSAS09/social_prg.html">http://www.sasj.jp/iSAS/iSAS09/social_prg.html</a> . |
| Session 8: Poster (for viewing)                                | 13:30-17:00 | Presenters are requested to put their posters on the panel.   |
| Informal get-together  | 18:30-20:30 | Details are informed at the conference site.  |

**March 18 (Wed)**

| Program  | Time        | Remarks  |
|--|-------------|--|
| Session 9: Poster short presentation<br>P-01 ~ P-08  | 9:30-10:50  | Chair: J. H. Lee and H. Iwai   |
| Break  | 10:50-11:10 |  |
| Session 10: Poster short presentation<br>P-09 ~ P-17 | 11:10-12:40 | Chair: K. Yanagiuchi and K. Takahashi  |
| Lunch  | 12:40-13:40 | Included in registration fee. Please see <a href="http://www.sasj.jp/iSAS/iSAS09/social_prg.html">http://www.sasj.jp/iSAS/iSAS09/social_prg.html</a> . |
| Session 11: Poster presentation 1<br>Odd number      | 13:40-14:40 | Chair: M. Arai and H. Itoh   |
| Session 12: Poster presentation 2<br>Even number     | 14:40-15:40 | Chair: T. Ogiwara and H. Tohma   |
| Korea-Japan-China symposium                          | 15:40-19:00 | Details are informed at the conference site.   |
| Closing  | 19:00-19:10 |  |