SISS

The Scientific International Symposium
on SIMS and Related Techniques Based
on Ion-Solid Interactions

SISS12 Program

Program * Invited speaker
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June 10, 2010 (Thu.)

10:00 Opening remarks

M. Kudo Seikei univ.

10:05-12:15 [[Dynamic SIMS session]]

1* " **Towards the ultimate depth resolution limits in SIMS** "

W. Vandervorst Interuniversity Microelectronics Center (IMEC)

2* " **Determination of interface position and layer thickness of multilayer films by composition depth profiling** "

K. J. Kim Korea Research Institute of Standards and Science (KRISS)

3**.** " **Evaluation of atomic mixing for silicon atoms in silicon isotope superlattices under cesium and oxygen ion bombardments** "

M. Tomita Toshiba Corporate Research & Development Center

4* " **Isotope analysis by SIMS and material processing** "

H. Yurimoto Hokkaido Univ.

（**Instrument maker's talk**）
5. **" Latest developments on NanoSIMS instrumentation for life science and materials "**

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F. Horréard    CAMECA
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(12:15-13:10 coffee break)

13:10-14:10 [[Post-Ionization session]]

1* " **Development of multi-turn TOF-SIMS system with a femto-second laser for post-ionization** "

M. Ishihara Osaka Univ.

2* “ **Detection of polymers using Laser SNMS** “

T. Sakamoto Kougakuin Univ.

(14:10-14:25 coffee break)

14:25-16:25 [[Atom probe session]]

1* “ **Depth profiling optimization using Atom Probe Tomography** “

F. Vurpillot Univ. of Rouen

2* “ **3D-atom probe: facts, artifacts and applications in semiconductors** “

W. Vandervorst Interuniversity Microelectronics Center (IMEC)

3. “ **Atom Probe analysis of molecular system** ”

M. Taniguchi Kanazawa Inst. of Technology

4. “ **Recent progress in laser-assisted 3DAP and its application** “

T. Okubo National Institute for Material Science (NIMS)

(Instrument maker’s talk)
5. ” **Latest developments on 3D Atom Probe instrumentation for nanoscale elemental analysis** “

F. Horréard CAMECA.

(16:25-16:40 break & transfer to next site)

16:40-18:00 [[Poster session]] (at Hall on the 12th floor, University Building #10)

P1. ” **An analysis of the distribution of ferruginol in the heartwood-forming *Cryptomeria japonica* xylem using ToF-SIMS** ”
K. Kuroda Forestry and Forest Products Research Institute
P2. ” **Lignin distribution in the xylem of maple by TOF-SIMS molecular imaging** ”
K. Saito Nagoya Univ.
P3. ” **Simulation of fragmentation of polyethylene glycole by quantum molecular dynamics for TOF-SIMS spectral analysis** ”
N. Kato Seikei Univ.
P4. ” **TOF-SIMS study of the lipid layer (18-MEA) damage on the outermost hair surface** ”
M. Okamoto Kao
P5. ” **Emission of a Single Molecule by Argon-Cluster Bombardment behind a Suspended Graphene Sheet** ”
S. Nakano Hyogo Univ.
P6. ” **Nondestractive Analytical Area Navigation in TOF-SIMS using integrated SEM** ”
K. Fujioka Kogakuin Univ.
P7. ” **Image Analysis of Small Particles with a Combination of SEM and TOF-SIMS** ”
H. Wada Kogakuin Univ.

P8. ” **SIMS Analysis of Low dose As implantation in SiGe** ”

Y.H. Huang GLOBALFOUNDRIES

P9. ” **ToF-SIMS depth profile analysis of sodium in silicon oxide** ”

D. Kobayashi AGC

P10. ” **Effect of the uni-molecular dissociation of CsI cluster ions on the apparent mass in the TOF-SIMS of CsI** ”

T. Nakanaga AIST

P11. ” **Matrix effect-free depth profiling of multilayered Si/Ti with laser-SNMS** ”

S. Nishinomiya Nippon Steel

17:00-19:00 Social meeting (at the same place of Poster session)

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June 11, 2010 (Thu.)

9:00-10:40 [[Cluster Ion beams session]]

1. ” **Characteristics of the ion source for the electrospray droplet impact ionization method** “

K. Hiraoka Univ. of Yamanashi

2. ” **Soft-ionization SIMS by using argon cluster ions** “

K. Mochiji Univ. of Hyogo

3. ” **Availability of gas cluster SIMS to biomolecular analysis** “

S. Ninomiya Univ. of Yamanashi

(10:20-10:35 coffee break)

10:35-12:05 [[Theoretical approach session]]

1* “ **SIMS with cluster projectiles as seen by computer simulations** ”

Z. Postawa Jagiellonian Univ.

2. “ **Damage and sputtering with cluster impact by MD simulations** “

T. Aoki Kyoto Univ.

3. “ **A brief report on improving data by multivariate & informatics techniques** “

S. Aoyagi Shimane Univ.

4. “ **Dead time correction methods for the pulse counting detector** “

A. Takano NTT Advanced Technology

(12:05-13:10 Lunch break)

13:10-14:50 [[Maldi imaging session]]

1* “**Clinical application of metabolite imaging with MALDI and/or SIMS** ”

M. Setou Hamamatsu Univ. School Med.

2* “**Breakthrough in Mass spectrometry by superconducting molecule detector** ”

M. Okubo Advanced Industrial Science and Technology (AIST)

(Instrument maker’s talks)
3. “ **Small Molecular Imaging MS using MALDI-FT-ICR MS** ”

K. Saitou Bruker Daltonics

4. “ **Development of Mass Microscope** ”

T. Harada Shimadzu

(14:50-15:05 coffee break)

15:05-17:35 [[TOF-SIMS session]]

1* ” **TOF-SIMS for bio-analysis above and beyond the static limit** “

J. S. Fletcher Univ. of Manchester

2* ” **Investigations and comparisons on Multivariate Analyses for TOF-SIMS Image Analysis** “

T. Kono Asahi Kasei

3* “ **ToF SIMS study of semi-crystalline polymer surfaces** ”

L. T. Weng Hong Kong Univ. of Sci. Technol.

4. “ **Advances in 3D TOF-SIMS imaging of organics: from depth profiling to FIB sectioning** ”

G. Fisher Physical Electronics

(Instrument maker’s talks)
5. “**Recent progress and Application of Gas Cluster Ion Beam** “

T. Miyayama Ulvac-phi

6. “ **Recent TOF-SIMS developments at ION-TOF** “

M. Terhorst ION-TOF

17:35-17:40 Closing remarks

S. Hayashi Nippon Steel