

Program and Contents

June 15, 2023 (Thu)

Opening remarks (9:50-10:00)

Session 1 (10:00-12:30)

O1-1. (10:00-10:30) - *Invited* -

Improvements of atom probe tomography for steel application

Jun Takahashi (*Nippon Steel*)

O1-2. (10:30-11:00) - *Invited, online-*

Li-ion Battery Cathode Materials Studied with Atom Probe Tomography

Y. Chen (*CAMECA, USA*)

O1-3. (11:00-11:30) - *Invited* -

Sputtering of Polymers Produced by Vacuum Electrospray Droplet Ions

Satoshi Ninomiya (*U. Yamanashi*)

Break (11:30-11:40)

O1-4. (11:40-12:10) - *Invited* -

ToF-SIMS - a Powerful Tool for Analyzing Battery Materials in 3D

Marcus Rohnke (*Justus Liebig University Giessen*)

O1-5. (12:10-12:40) - *Invited* -

Complexity to clarity: detecting, identifying and analyzing complex materials with machine learning

Paul J. Pigram (*La Trobe U., Australia*)

Lunch (12:40-14:10)

Poster short presentation (14:10-14:30)

2 minutes speech for every poster presenter



Poster session (14:30-16:00)

- P-1.
Evaluation of biomolecule distribution in human skin by ToF-SIMS
E. Nakata (*Seikei University*)
- P-2.
Analysis of ToF-SIMS data of human skin treated with diclofenac using sparse autoencoder
A. Shinozaki (*Seikei University*)
- P-3.
Development of an aging estimation method for ocean plastics by using ToF-SIMS and machine learning
T. Masuda (*Seikei University*)
- P-4.
Evaluation of biomolecule distribution in human skin by ToF-SIMS
E. Nakata (*Seikei University*)
- P-5.
Quantitative and qualitative analyses of mass spectra of organic electroluminescent (OEL) samples using a simple artificial neural network
Y. Kiuchi (*Seikei University*)
- P-6.
Observation of ripple development on Si surface caused by oblique incident O_2^+ ion beam over a range of ion parameters
M. Hatada (*Toray Research Center, Inc.*)
- P-7.
Effects of Sample Hardness on Secondary Ion Yield of Organic Molecules in GCIB-SIMS
T. Toku (*Graduate School of Engineering, University of Hyogo*)
- P-8.
Study on desorption/ionization efficiency of polymer molecules affected by mixing with non-aromatic organic acids
M. Fujii (*Yokohama National University*)
- P-9.
Molecular weight dependence of organic polymer damage by Ar-GCIB sputtering
T. Seki (*Kyoto Univ.*)
- P-10.
High-depth resolution and high-sensitivity evaluation of SiC power devices by SIMS
Y. Hori (*Toshiba Nanoanalysis Co.*)

Break (16:00-16:10)

Session 2 (16:00-17:30)

O1-6. (16:00-16:30) - *Maker Session* -

Microanalytical characterization of SiC, Diamond and GaN materials using dynamic SIMS

Paula PERES (*CAMECA*)

O1-7. (16:30-17:00) - *Invited , online-*

Customized Secondary Ion Mass Spectrometry tools for production and research

Graham A Cooke (*HIDEN,UK*)

O1-8. (17:00-17:30) - *Invited , online-*

A. Dexter (*UK*)



June 16, 2023 (Fri)

Session 3 (10:00-12:40)

O2-1. (10:00-10:30) - *Invited* -

The Importance of Sample Preparation in Time-of-Flight Secondary Ion Mass Spectrometry Analysis for Semiconductor Applications

J-P. Barnes (*U. Grenoble Alpes*)

O2-2. (10:30-11:00) - *Invited* -

Development of Dual-laser SNMS Technique and Investigation of Its Ionization Mechanism

Reiko Saito (*Toshiba*)

Break (11:00-11:10)

O2-3. (11:10-11:40) - *Invited* -

John S. Fletcher (*U. Gothenburg*)

O2-4. (11:40-12:00) - *Maker Session* -

Maker Session

IONTOF Japan

O2-5. (12:00-12:20) - *Maker Session* -

Latest Information on PHI's TOF-SIMS Instrument PHI nanoTOF 3

Shin-ichi Iida (*ULVAC- Φ*)

O2-6. (12:20-12:40) - *Maker Session* -

Mechanical Properties Measurement using Water GCIB for Biological Materials

Naoko Sano (*Ionoptika Ltd., TOYAMA*)

Lunch (12:40-14:00)

Poster (Karen) Award Ceremony (14:00-14:10)

Session 4 (14:10-16:50)

O2-7. (14:10-14:40) - *Invited* -

Research on SIMS analysis in advanced materials in Korea

Tae Eun Hong (*KBSI, Korea*)

O2-8. (14:40-15:10) - *Invited* -

Latest developments in SIMS bioanalysis using water gas cluster ion beams

Nicholas Lockyer (*U. Manchester*)

O2-9. (15:10-15:40) - *Invited* -

Anna Kotowska (*U. Nottingham, UK*)

Break (15:40-15:50)

O2-10. (15:50-16:20) - *Invited* -

Polymer surface glass transition temperature determined by in-situ ToF-SIMS

Lutao Weng (*The Hong Kong University of Science and Technology*)

O2-11. (16:20-16:50) - *Invited* -

Biological Analysis Breakthroughs Enabled by 3D OrbiSIMS

David Scurr (*U. Nottingham, UK*)

O2-12. (16:50-17:20) - *Invited, online-*

Metrology-led innovation using OrbiSIMS: enabling measurement of molecular shapes

Gustavo Trindade (*NPL, UK*)

Closing remarks (17:20-17:30)

