

Scientific Program of SISS-19

11th May, 2017 (Thu.)

- **Opening Remarks: 9:30-9:40**

- **Bio-SIMS 1: 9:40-10:50**

O1-1. (9:40-10:20) -Plenary Talk-

Mass Spectrometry Imaging in Flies, Cells, and Vesicles

Andrew Ewing (Chalmers University of Technology, University of Gothenburg)

O1-2. (10:20-10:50) -Invited-

Multiplex Protein SIMS Imaging of Hippocampus Tissues

Dae Won Moon (Daegu Gyeongbuk Institute of Science and Technology)

- **Coffee break: 10:50-11:05**

- **Bio-SIMS 2: 11:05-12:05**

O1-3. (11:05-11:35) -Invited Talk-

Profiling of Soft Materials with Cluster-Atomic Ion Co-Sputter

Jing-Jong Shyue (Academia Sinica)

O1-4. (11:35-12:05) -Invited Talk-

Applications of SIMS in the field of Cosmetic Science

Masayuki Okamoto (Kao Corporation)

- **Lunch: 12:05-13:15**

- **Data Analysis and Simulation: 13:15-15:00**

O1-5. (13:15-13:45) -Invited Talk-

Recent Advances in Computer Modeling of Cluster Bombardment of Organic Materials

Zbigniew Postawa (Jagiellonian University)

O1-6. (13:45-14:15) -Invited Talk-

TBD

Alex Henderson (University of Manchester)

O1-7. (14:15-14:45) -Invited Talk-

Hyperspectral Image Analysis of Spatially/Spectrally Overlapped Datasets for Chemical Imaging

Shunsuke Muto (Nagoya University)

O1-8. (14:45-15:05)

TOF-SIMS Imaging Data Fusion and the Interpretation of TOF-SIMS Spectra

Satoka Aoyagi (Seikei University)

- **Coffee break: 15:05-15:20**

- **Sponsor Session: 15:20-16:40**

O1-9. (15:20-15:40)

TBD

Philippe Saliot (Cameca Instruments, Inc.)

O1-10. (15:40-16:00)

TBD

TBD (ULVAC-PHI)

O1-11. (16:00-16:20)

TBD

TBD (TOYAMA)

O1-12. (16:20-16:40)

TBD

Markus Terhost (ION-TOF GmbH)

- **Short Presentation: 16:40-17:20**

- **Poster Session: 17:30-18:30**

- **Reception: 18:30-20:00**

12th May, 2017 (Fri.)

● **Mass Imaging: 9:00-10:30**

O2-1. (9:00-9:40) -Plenary Talk-

Multimodal Imaging Mass Spectrometry in Translational Research (Including our new tandem SIMS approach of course)

Ron M. A. Heeren (Maastricht University)

O2-2. (9:40-10:10) -Invited Talk-

TBD

Yuki Sugiura (Keio University)

O2-3. (10:10-10:30)

Transmission SIMS Imaging Using a Secondary Electron Microscope

Kaoru Nakajima (Kyoto University)

● **Coffee break: 10:30-10:45**

● **Instrumentation & Application 1: 10:45-12:15**

O2-4. (10:45-11:15) -Invited Talk-

Time-of-Flight SIMS (Real Time) Imaging of Deuterium in a Duplex Stainless Steel Microstructure and Data Fusion with SEM Topography Data: Towards a Better Understanding of Hydrogen Assisted Cracking in Steel

Wolfgang E. S. Unger

(BAM - Federal Institute for Materials Research and Testing)

O2-5. (11:15-11:45) -Invited Talk-

Highly Sensitive Detection of Hydrogen in Metallic Materials with Secondary Ion Mass Spectrometry -Interstitial Hydrogen and Hydrogen Trapped by Intermetallic Precipitates-

Toru Awane (Kyushu University)

O2-6. (11:45-12:15) -Invited Talk-

Study of III-V Semiconductor Materials and Devices Using SIMS

Lixia Zhao (Chinese Academy of Sciences)

● **Lunch: 12:15-13:15**

● **Atom Probe Tomography: 13:15-14:15**

O2-7. (13:15-13:45) -Invited Talk-

Secondary Ion Mass Spectrometry and Other Ion- and Electron-Based Analytical Microscopies: Successful Examples of a Synergetic Approach

Hugues François Saint-Cyr (Cameca Instruments, Inc.)

O2-8. (13:45-14:15) -Invited Talk-

Quantitative Measurement of Compositions in Steels by Atom Probe Tomography
Goro Miyamoto (Tohoku University)

● **Coffee break: 14:15-14:30**

● **Instrumentation & Application 2: 14:30-16:00**

O2-9. (14:30-15:00) -Invited Talk-

Is Low Energy Cesium the Solution for Depth Profiling Hybrid Materials ?
Laurent Houssiau (University of Namur)

O2-10. (15:00-15:30) -Invited Talk-

Surface Electrochemistry of Rechargeable Li-, Na-, and K-ion Batteries
Shin-ichi Komaba (Tokyo University of Science)

O2-11. (15:30-16:00) -Invited Talk-

Mass Spectrometric Characterization of Electric Double Layer at
Electrode-Electrolyte Interface Using in situ Liquid SIMS
Zihua Zhu (Pacific Northwest National Laboratory)

● **Coffee break: 16:00-16:10**

● **Instrumentation & Application 3: 16:10-17:50**

O2-12. (16:10-16:50) -Plenary Talk-

TBD

Ian Gilmore (National Physical Laboratory)

O2-13. (16:50-17:10)

Rapid 500 nm-Resolution Imaging of the Cellular Lipidome in Model Neurons by
TOF-SIMS Parallel Imaging MS/MS
Gregory L. Fisher (Physical Electronics)

O2-14. (17:10-17:30)

Large O₂ Cluster Ions as a Sputter Beam for ToF-SIMS Depth Profiling of Alkali
Metals in Thin SiO₂ Films
Derk Rading (ION-TOF GmbH)

O2-15. (17:30-17:50)

Measurement of Large Molecules with Cluster Ion Beam
Jiro Matsuo (Kyoto University)

● **Closing Remarks: 17:50-18:00**