

# IMSC 2014

## 20<sup>th</sup> International Mass Spectrometry Conference

August 24-29, 2014  
Geneva, Switzerland

Detailed Programme

v. 29.07.2014



20<sup>th</sup> IMSC

International Mass Spectrometry Conference  
Geneva, Switzerland  
August 24–29, 2014



SFSM

Société Française de Spectrométrie de Masse

## Monday, August 25<sup>th</sup>

09h00  
11h00

### MOS01 - Fourier-Transform MS

Room 1

Chairs: Yury Tsybin, Julia Chamot-Rooke

**MOS01-1** **Keynote: 40 Years of Fourier Transform Mass Spectrometry: progress and prospects**  
*Alan Marshall - Florida State University, USA*

**MOS01-2** **Novel mass analyzers for rapid high-performance FTMS**  
*Yury O. Tsybin - Ecole Polytechnique Federale de Lausanne, Switzerland*

**MOS01-3** **2D FT-ICR MS using non-uniform sampling (NUS) and advanced data processing. Application to human plasma triglyacylglycerols (TAG) analyzed by nano ESI/IRMPD**  
*Christian Rolando - Université Lille 1, France*

**MOS01-4** **New developments in speeding up Orbitrap mass spectrometry**  
*Alexander Makarov - ThermoFisher Scientific (Bremen) GmbH, Germany*

**MOS01-5** **Non orbital electrostatic traps and MR-TOF**  
*Anatoly Verenchikov - Mass Spectrometry Consulting, MSC-CG, Montenegro*

09h00  
11h00

### MOS02 - Synthetic Macromolecules

Room 2

Chairs: Anna Crecelius, Ulrich Schubert, Gérard Hopfgartner

**MOS02-1** **Keynote: MALDI-TOF Mass Spectrometry as a powerful tool for the structure elucidation of complex polymers**  
*Harald Pasch - University of Stellenbosch, South Africa*

**MOS02-2** **CID versus activated EPD for the characterization of PAMAM dendrimers**  
*Aura Tintaru - Aix-Marseille University & CNRS, UMR 7273: Institut de Chimie Radicalaire, France*

**MOS02-3** **Atmospheric pressure solid analysis probe with ion mobility-mass spectrometry as a new powerful tool for the characterization of complex industrial mixtures**  
*Caroline Barrère - Normandie University, France*

**MOS02-4** **MS/MS of incompletely and fully condensed POSS with different substituents – folding and unfolding routes.**  
*Thierry Fouquet - Public Research Centre Henri Tudor, Luxembourg*

**MOS02-5** **Segregation in dried droplet polymer sample spots examined by MALDI Imaging MS**  
*Steffen Michael Weidner - Federal Institute for Materials Research and Testing (BAM), Germany*

09h00  
11h00

### MOS03 - Mass Spectrometry Instrumentation

Room 3

Chairs: Matthias Frank, Günter Allmaier

**MOS03-1** **Keynote: Analysis of viruses, VLP-antibody complexes and vaccines by means of nano ESI combined with differential mobility analyzer and bionanoparticles collection**  
*Günter Allmaier - Vienna University of Technology, Austria*

**MOS03-2** **Precision mass spectrometry on short-lived nuclides: new methods and results**  
*Lutz Schweikhard - University of Greifswald, Germany*

**MOS03-3** **A new primary ion beam source for secondary ion mass spectrometry using vacuum electrospray of ionic liquids**  
*Yukio Fujiwara - National Institute of Advanced Industrial Science and Technology (AIST), Japan*

**MOS03-4** **Gas flow in electrospray ionization/atmospheric pressure interfaces: simulation and experiment**  
*Julius Reiss - TU Berlin, Germany*

**MOS03-5** **Development of high mass resolution tandem time-of-flight (TOF) mass spectrometer applicable to High Energy Electron Transfer Dissociation (HE-ETD)**  
*Shigeo Hayakawa - Osaka Prefecture University, Japan*

09h00  
11h00

### MOS04 - Aerosol MS and Atmospheric Science

Room 4

Chairs: Urs Baltensperger, Renato Zenobi

**MOS04-1** **Keynote: Molecular characterization of atmospheric aerosols by High-Resolution Mass Spectrometry**  
*Alexander Laskin - Pacific Northwest National Laboratory, USA*

**MOS04-2** **Simultaneous gas- and particle- phase measurements using a chemical ionization high-resolution time-of-flight mass spectrometer**  
*Claudia Mohr - University of Washington, USA*

**MOS04-3** **Characterization of organic trace species in gaseous and particulate emissions of a ship diesel engine fueled with diesel and heavy fuel oil**  
*Thorsten Streibel - University of Rostock, Germany*

MOS04-4	<b>Molecular characterization of secondary organic aerosol from the green leaf volatile 3-Z-hexenal and related precursors</b> <i>Mohammad Safi Shalamzari - University of Antwerp (Campus Drie Eiken), Belgium</i>	
MOS04-5	<b>New soft ionisation ultra-high resolution mass spectrometry methods for characterizing the organic fraction of atmospheric particles</b> <i>Markus Kalberer - University of Cambridge, UK</i>	
<b>09h00 11h00</b>	<b>MOS05 - Nucleic Acids</b> <i>Chairs: Daniele Fabris, Eric Forest</i>	<b>Room 5</b>
MOS05-1	<b>Keynote: Mass spectrometry for nucleic acids biophysics</b> <i>Valérie Gabelica - Inserm/Univ. Bordeaux (U869), France</i>	
MOS05-2	<b>Ligand binding to DNA G-quadruplexes studied by ESI-MS from potassium solutions</b> <i>Adrien Marchand - Inserm / Univ. Bordeaux, France</i>	
MOS05-3	<b>Formation and dissociation of the tetramolecular DNA i-motif by the sequences d(XnC4Ym) in the gas- and solution-phase</b> <i>Xinhua Guo - Jilin University, China</i>	
MOS05-4	<b>Non-standard gas-phase fragmentation of short, highly charged oligonucleotides</b> <i>Rahel Eberle - University of Bern, Switzerland</i>	
MOS05-5	<b>MS-based elucidation of RNA structures</b> <i>Matteo Scalabrin - The RNA Institute, University at Albany, USA</i>	
<b>15h00 17h00</b>	<b>MOS06 - Clinical Applications and Screening</b> <i>Chairs: Yoshi Wada, Ruedi Aebersold</i>	<b>Room 1</b>
MOS06-1	<b>Keynote: Direct mass spectrometric analysis of mucosal membranes – experimental approaches and applications</b> <i>Zoltan Takats - Imperial College London, UK</i>	
MOS06-2	<b>Individualized tissue analysis for EGFR-dependent phosphoproteomic signature in non-small-cell lung cancer</b> <i>Yi Ting Wang - Chemical Biology and Molecular Biophysics Program, Taiwan International Graduate Program, Institute of Chemistry, Academia Sinica, Taipei, Taiwan and Institute of Biochemical Sciences, National Taiwan University, Taipei, Taiwan</i>	
MOS06-3	<b>Screening of biological samples by SWATH acquisition and processing by high resolution reference spectra</b> <i>Stefan König - IRM Bern, Switzerland</i>	
MOS06-4	<b>Ultrasensitive detection and quantitation of neuroactive steroids using a post-activation ion-molecule reaction mediated by lithium</b> <i>Scott A. Shaffer - University of Massachusetts Medical School, USA</i>	
MOS06-5	<b>New approaches to multiplex newborn screening of lysosomal storage disorders by tandem mass spectrometry</b> <i>Frantisek Turecek - University of Washington, USA</i>	
<b>15h00 17h00</b>	<b>MOS07 - Imaging MS – Instrumentation</b> <i>Chairs: Ron Heeren, Markus Stöckli</i>	<b>Room 2</b>
MOS07-1	<b>Keynote: Expanding the usefulness of secondary ion mass spectrometry for biologically relevant measurements</b> <i>Christopher Anderton - PNNL, USA</i>	
MOS07-2	<b>A comparison of DESI and MALDI ionisation on an oa-TOF MS for tissue imaging experiments</b> <i>Emmanuelle Claude - Waters Corporation</i>	
MOS07-3	<b>MALDI-MS Imaging with a Synapt G2-S Mass Spectrometer: improving the lateral resolution to ~7 µm and the sensitivity for lipid analysis by use of novel matrices</b> <i>Hans Kettling - University of Münster, Germany</i>	
MOS07-4	<b>Low temperature plasma mass imaging (LTP-MSI): do-it-yourself instrumentation and applications in biology.</b> <i>Robert Winkler - CINVESTAV Unidad Irapuato, Mexico</i>	
MOS07-5	<b>High performance platform for atmospheric pressure high resolution MALDI mass spectrometry imaging</b> <i>Bernhard Spengler - Justus Liebig University Giessen, Germany</i>	
<b>15h00 17h00</b>	<b>MOS08 - Carbohydrates</b> <i>Chairs: Catherine Costello, Leopoldo Ceraulo</i>	<b>Room 3</b>
MOS08-1	<b>Keynote: Automated, detailed glycan analysis by LC/MS for biotherapeutics and integrated biology</b> <i>Pauline Rudd - National Institute for Bioprocessing Research and Training, Fosters Avenue, Blackrock, Dublin, Ireland</i>	
MOS08-2	<b>CE-ESI-MS/MS as a tool in protein glycosylation analysis</b> <i>Guinevere Kammeijer - Leiden University Medical Center (LUMC), The Netherlands</i>	

- MOS08-3** Xylan oligosaccharide mass profiling method for identification of arabidopsis thaliana with altered O-acetylation in glucuronoxylans  
*Sun-Li Chong - Department of Food and Environmental Sciences, University of Helsinki, Finland*
- MOS08-4** Meaning and consequence of the competitive presence of the hydrogen bond and salt interactions on the dissociation orientation of deprotonated adducts in ESI  
*Ekaterina Dary - CEA-Genoscope/UMR8030, France*
- MOS08-5** Rational identification of glycan structure from MALDI spectra based on informatics and quantum chemical calculation  
*Hiroimitsu Takaba - Kogakuin University, Japan*

15h00  
17h00

## MOS09 - Environment – Biological Systems Interactions

Room 4

*Chairs: Kristin Schirmer, Thomas Hofstetter*

- MOS09-1** **Keynote:** Deciphering the chemical language of insects by Mass Spectrometry  
*Joanne Yew - Temasek Life Sciences Laboratory, Singapore*
- MOS09-2** Characterization of plant glycosylated proteome and its changes during ageing and under environmental stress conditions  
*Andrej Frolov - Universität Leipzig, Germany*
- MOS09-3** Metabolomic approaches to assess neurotoxic effects of Imidacloprid on the freshwater snail *Lymnaea stagnalis*  
*Sara Tufi - VU Amsterdam, The Netherlands*
- MOS09-4** Distribution and characteristics of methyl mercury in the tissues of shark and whale  
*Hyun-Mee Park - Korea Institute of Science and Technology, South Korea*
- MOS09-5** Cocktail approach for microsomal CYP450 phenotyping using UHPLC-QTOF  
*Dany Spaggiari - Université de Genève, Switzerland*

15h00  
17h00

## MOS10 - Microbes and Viruses

Room 5

*Chairs: Günter Allmaier, Robert Hettich*

- MOS10-1** **Keynote:** Rapid characterization of microorganisms by Mass Spectrometry: what can be learned and how  
*Catherine Fenselau - Univ of Maryland, USA*
- MOS10-2** Top-down Mass Spectrometry probes immune evasion by pathogenic neisseria meningitidis  
*Julia Chamot-Rooke - Institut Pasteur, France*
- MOS10-3** Improvement in bacterial strain differentiation by MALDI-TOF MS profiling by using microwave-assisted enzymatic digestion  
*Zbynek Zdrahal - Masaryk University, Czech Republic*
- MOS10-4** Discrimination of cyanobacterium *Microcystis aeruginosa* by MALDI-MS and analysis of its genetic diversity  
*Liwei Sun - Southeast University, China*
- MOS10-5** Deep quantitative proteomics to reveal regulatory mechanisms that govern carbon metabolism in mycobacteria.  
*Marc Moniatte - EPFL, Switzerland*

## Tuesday, August 26<sup>th</sup>

09h00  
11h00

### TOS11 - Targeted and Quantitative Proteomics

Room 1

Chairs: Paola Picotti, Markus Stöckli

- TOS11-1** **Keynote: Dynamic signaling interactomes in health and disease**  
*Anne-Claude Gingras - Lunenfeld-Tanenbaum Research Institute at Mount Sinai Hospital / Department of Molecular Genetics, University of Toronto, Canada*
- TOS11-2** **The impact of biochemical background on quantification ranges of data-dependent, directed and targeted proteomics strategies**  
*Alexander Schmidt - Biozentrum, University of Basel, CH-4056 Basel, Switzerland*
- TOS11-3** **Quantitative proteomic analysis by variable SWATH acquisition of differentially expressed proteins in monocyte-derived dendritic cells**  
*Ying Zhang - University of Geneva, Switzerland*
- TOS11-4** **Comprehensive proteomic analysis of 3D human liver and cardiac spheroids for drug toxicity investigation**  
*Nathalie Selevsek - Functional Genomics Center Zurich (FGCZ), Zurich, Switzerland*
- TOS11-5** **Multiplex quantification of microbial and plant protein toxins in complex matrices by immuno-extraction and high resolution targeted mass spectrometry**  
*Mathieu Dupre - CEA, France*

09h00  
11h00

### TOS12 - Lipidomics

Room 2

Chairs: Andrej Shevchenko, Eric Forest

- TOS12-1** **Keynote: Natural variation of a signalling lipid**  
*Markus Wenk - National University of Singapore, Singapore*
- TOS12-2** **Novel oxysterols in mouse and man**  
*William Griffiths - Swansea University, UK*
- TOS12-3** **Lipidomic characterization of tumor tissues using LC/MS, SFC/MS, MALDI-MS and multivariate data analysis**  
*Michal Holčapek - University of Pardubice, Czech Republic*
- TOS12-4** **Malarial parasite development: lipidomic analysis of the P. falciparum life cycle in human erythrocytes**  
*Todd W Mitchell - University of Wollongong, Australia*
- TOS12-5** **Identification and immunomodulatory functions of novel galactosylceramides from gut commensal microbe Bacteroides fragilis**  
*Sungwhan Oh - Harvard Medical School, USA*

09h00  
11h00

### TOS13 - Gas-Phase Ion Spectroscopy

Room 3

Chairs: Jos Oomens, Julia Chamot-Rooke

- TOS13-1** **Keynote: Spectroscopy of ions in aqueous nanodrops**  
*Evan Williams - University of California, Berkeley, USA*
- TOS13-2** **Two-dimensional photofragmentation mass-spectrometry of cold ions.**  
*Oleg Boyarkine - EPFL, Switzerland*
- TOS13-3** **Gas phase reactions of seleniranium ions results in Pi-ligand exchange in competition with electron transfer**  
*George N. Khairallah - School of Chemistry - University of Melbourne, Australia*
- TOS13-4** **Conformational equilibrium of single and double protonated 1,4-diamine-2-butenes by IRMPD spectroscopy**  
*Thiago C. Correra - Institute of Chemistry - University of São Paulo, Brazil*
- TOS13-5** **Laser Spectroscopic Investigations of Dichlorofluorobenzenes by REMPI and MATI Spectroscopy**  
*Sascha Krüger - Kiel University, Department of Physical Chemistry, Germany*

09h00  
11h00

### TOS14 - Detectors and High-Mass MS

Room 4

Chairs: Renato Zenobi, Günter Allmaier

- TOS14-1** **Keynote: High mass detection in imaging mass spectrometry**  
*Ron M.A. Heeren - FOM-AMOLF, The Netherlands*
- TOS14-2** **Development of a time and position sensitive ion detector for a stigmatic imaging mass spectrometer**  
*Yosuke Kawai - Osaka University, Japan*
- TOS14-3** **Factors that affect transmission of high mass MALDI ions in a multi-quadrupoles rectilinear ion trap mass spectrometer**  
*Wen-Ping Peng - National Dong Hwa University, Taiwan*
- TOS14-4** **A novel freestanding ultra-nanocrystalline diamond membrane for protein mass detection using MALDI-TOF-MS**  
*Diana Hildebrand - Center for Hybrid Nanostructures (CHYN) & Institute of Applied Physics, University of Hamburg, Germany*



**TOS14-5** Heavy ion mass spectrometry using STJ cryodetectors -- from Ferritin to the +1 charge state of bacteriophage HK97 capsid at 13MTh  
*Mark Bier - Carnegie Mellon University, USA*

**09h00  
11h00**

## **TOS15 - Effect-Directed Analytical MS**

Room 5

*Chairs: Marc Suter, Olivier Laprévote*

**TOS15-1** **Keynote: Towards higher throughput in effect-directed analysis**  
*Marja Lamoree, Institute for Environmental Studies, VU University, Amsterdam, The Netherlands*

**TOS15-2** **Identification of emerging pharmaceutical pollutants and human metabolites in urban wastewater treatment plant using Effect Directed Analysis**  
*Caroline Gardia-Parège - EPOC-LPTC, France*

**TOS15-3** **Online LCxLC-ToF MS for effect-directed analysis in effluent and surface water**  
*Xiyu Ouyang - Institute for Environmental Studies (IVM), VU University Amsterdam, The Netherlands*

**TOS15-4** **Exploring the performance of a nontarget screening workflow on known environmental contaminants**  
*Meng Hu - Department Effect-Directed Analysis, Helmholtz Centre for Environmental Research - UFZ, Germany; RWTH Aachen University, Department of Ecosystem Analyses, Institute for Environmental Research, Germany*

**TOS15-5** **Direct mass spectrometry-to-bioassay correlation for rapid identification of toxic pollutants in water using high-throughput effect directed analysis**  
*Jeroen Kool - VU University, the Netherlands*

**15h00  
17h00**

## **TOS16 - Labelling Strategies and Quantitative Biomolecule Analysis**

Room 1

*Chairs: Paola Picotti, Marc Suter*

**TOS16-1** **Keynote: Measuring protein synthesis and breakdown using stable isotopes and mass spectrometry**  
*Dwight Matthews - University of Vermont, USA*

**TOS16-2** **Using Selective Reaction Monitoring (SRM) mass spectrometry to unmask regulatory feedback loops controlling adipogenesis**  
*Robert Ahrends - ISAS, Germany*

**TOS16-3** **Assessing the variability of <sup>15</sup>N metabolic labeling-based proteomics in mouse brain and plasma**  
*Giuseppina Maccarrone - Max Planck Institute of Psychiatry, Germany*

**TOS16-4** **A novel SWATH-MS platform for comprehensive characterization of the epigenetic histone modifications**  
*Joerg Dojahn - AB Sciex, Germany*

**TOS16-5** **MeCAT - New possibilities of protein analysis and quantification**  
*David Benda - Humboldt-Universität zu Berlin, Germany*

**15h00  
17h00**

## **TOS17 - Protein Phosphorylation and other Post-translational Modifications**

Room 2

*Chairs: Jesper Olsen, Ruedi Aebersold*

**TOS17-1** **Keynote: Mapping high resolution kinase-substrate network**  
*Andy Tao - Purdue University, USA*

**TOS17-2** **Characterization of N-linked glycans from vaccine antigens: The CYD tetravalent Dengue vaccine**  
*Jean Dubayle - Sanofi Pasteur, France*

**TOS17-3** **Characterization of N-terminal acetylated proteins in Pseudomonas aeruginosa PA14 strain**  
*Julie Hardouin - University of Rouen, France*

**TOS17-4** **Monitoring dynamic protein phosphorylation on intact proteins by native MS on an orbitrap EMR**  
*Violette Gautier - Utrecht University, Utrecht, The Netherlands*

**TOS17-5** **Characterization of unusual post-translational modifications in antibodies and related molecules**  
*Patrick Schindler - NOVARTIS, Switzerland*

**15h00  
17h00**

## **TOS18 - Ion-Molecule and Ion-Ion Reactions in the Gas-Phase**

Room 3

*Chairs: Peter Armentrout, Gianluca Giorgi*

**TOS18-1** **Keynote: Non-covalent molecular recognition as probed by tandem mass spectrometry**  
*Mary Rodgers - Department of Chemistry, Wayne State University, Detroit, Michigan, USA*

**TOS18-2** **Using a charge-tagged proline-based organocatalyst for mass spectrometric mechanistic studies**  
*Johann Alexander Willms - Rheinische Friedrich-Wilhelms-Universität, Germany*

**TOS18-3** **Electrospray mass spectrometric study of the metal triflates used as catalysts in their interaction with organic ligands: isomer recognition**  
*Claudio Iacobucci - Université Nice Sophia Antipolis, France*

TOS18-4	<b>Selective decomposition of formic acid into H<sub>2</sub> and CO<sub>2</sub> catalyzed by coinage metal hydride cluster ions</b> <i>Athanasios Zavras - The University of Melbourne - Australia</i>	
TOS18-5	<b>Ion/ion reactions: new chemistries for metal ion removal, oxidation of peptides, and esterification in the Gas Phase</b> <i>Scott McLuckey - Purdue University, USA</i>	
<b>15h00 17h00</b>	<b>TOS19 - Microfluidic Devices and Nanotechnology</b> <i>Chairs: Hubert Girault, Detlef Günther</i>	<b>Room 4</b>
TOS19-1	<b>Keynote: Recombinant protein QC and disease diagnostics using chip integrated affinity MALDI strategies</b> <i>Thomas Laurell - Dongguk University, Seoul, South Korea</i>	
TOS19-2	<b>When ambient ionization meets miniature ion trap mass spectrometer: chemistry, instruments and applications</b> <i>Zheng Ouyang - Purdue University, USA</i>	
TOS19-3	<b>Microfluidics lipidomics using a novel integrated mass spectrometry technology</b> <i>Giuseppe Astarita - Waters Corp</i>	
TOS19-4	<b>Membrane-assisted isoelectric focusing device as a micro-preparative fractionator for two dimensional shotgun proteomics</b> <i>Mohammad Pirmoradian - Karolinska Institute, Sweden</i>	
TOS19-5	<b>Ultrafast peptide decomposition by superheating</b> <i>Matthias O. Altmeyer - Twente University, Germany</i>	
<b>15h00 17h00</b>	<b>TOS20 - Imaging MS - Applications</b> <i>Chairs: Olivier Laprèvote, Markus Stöckli</i>	<b>Room 5</b>
TOS20-1	<b>Keynote: MALDI molecular imaging of proteins, metabolites and drugs for preclinical and clinical research</b> <i>Axel Walch - Helmholtz-Zentrum München, Germany</i>	
TOS20-2	<b>Identification and spatial localization of proteins from mouse brain tumor using a combination of MALDI imaging and LC-MALDI</b> <i>Arndt Asperger - Bruker Daltonik GmbH, Germany</i>	
TOS20-3	<b>High spatial and high mass resolution of metabolite analysis using AP-MALDI MSI</b> <i>Dhaka Bhandari - Justus-Liebig-Universität Giessen, Germany</i>	
TOS20-4	<b>Towards quantification based MS imaging: filling the gap between MALDI MS Imaging and tissue microproteomics</b> <i>Isabelle Fournier - Université Lille 1, France</i>	
TOS20-5	<b>TLC-MALDI-FT-ICR-MS coupled to imaging mass spectrometry – A unique approach to first identify then subsequently map parasite specific lipid markers in vivo.</b> <i>Berin Boughton - Metabolomics Australia, University of Melbourne, Australia</i>	

<b>09h00</b> <b>11h00</b>	<b>WOS21 - New Ionization Techniques</b> <i>Chairs: Frantisek Turecek, Silvia Catinella</i>	<b>Room 1</b>
<b>WOS21-1</b>	<b>Keynote: The development and future of spray ionization techniques</b> <i>Brian Chait - Rockefeller University, USA</i>	
<b>WOS21-2</b>	<b>Development of surface acoustic wave nebulization</b> <i>David Goodlett - University of Maryland, USA</i>	
<b>WOS21-3</b>	<b>Charged droplet beam source for secondary ion mass spectrometry using nano electrospray in vacuum</b> <i>Satoshi Ninomiya - University of Yamanashi, Japan</i>	
<b>WOS21-4</b>	<b>Matrix-free desorption/ionization induced by neutral cluster impact for soft analysis of complex (bio-)samples</b> <i>Michael Durr - Justus Liebig University Giessen, Germany</i>	
<b>WOS21-5</b>	<b>UV-LDI- and MALDI-mass spectrometry augmented by UV-LaserPostionization: coupling a wavelength-tunable OPO-laser (213-400 nm) to a synapt G2-S mass spectrometer</b> <i>Jens Soltwisch - University of Münster, Germany</i>	
<b>09h00</b> <b>11h00</b>	<b>WOS22 - Cell Biology and Cellular Pathways</b> <i>Chairs: Anne-Claude Gingras, Gérard Hopfgartner</i>	<b>Room 2</b>
<b>WOS22-1</b>	<b>Keynote: Quantitative interaction proteomics for epigenetics</b> <i>Michiel Vermeulen - Radboud University Nijmegen, The Netherlands</i>	
<b>WOS22-2</b>	<b>Characterisation of human cell lines using rapid evaporative ionization mass spectrometry</b> <i>Nicole Strittmatter - Imperial College London, UK</i>	
<b>WOS22-3</b>	<b>The production pipeline of the MHC peptidome</b> <i>Arie Admon - Technion - Israel Institute of Technology, Israel</i>	
<b>WOS22-4</b>	<b>A sentinel protein assay for the quantification of cellular process activities using PRM and DIA</b> <i>Paul J. Boersema - Insitute of Biochemistry, ETH Zürich, Switzerland</i>	
<b>WOS22-5</b>	<b>Quantifying 14-3-3 protein interaction and phosphorylation dynamics with SWATH mass spectrometry</b> <i>Ben C. Collins - ETH Zurich, Switzerland</i>	
<b>09h00</b> <b>11h00</b>	<b>WOS23 - Top-down Proteomics</b> <i>Chairs: Julia Chamot-Rooke, Yury Tsybin</i>	<b>Room 3</b>
<b>WOS23-1</b>	<b>Keynote: A Version of the human proteome project that embraces quantitative top down MS</b> <i>Neil Kelleher - Northwestern University, USA</i>	
<b>WOS23-2</b>	<b>Sequencing of native protein complexes</b> <i>Mikhail Belov - Thermo Fisher Scientific, Germany</i>	
<b>WOS23-3</b>	<b>Top-down native ETD yields conformationally selective fragment patterns</b> <i>Albert Konijnenberg - Universiteit Antwerpen, Belgium</i>	
<b>WOS23-4</b>	<b>Combining low- and high-resolution top-down mass spectrometry for hemoglobin disorder diagnosis</b> <i>Didia Coelho Graça - Geneva University, Geneva, Switzerland</i>	
<b>WOS23-5</b>	<b>Extreme ultraviolet activation and fragmentation of peptide and protein ions</b> <i>Alexandre Giuliani - Synchrotron SOLEIL / INRA, France</i>	
<b>09h00</b> <b>11h00</b>	<b>WOS24 - Trace Gas Analysis of Breath and Food Flavours</b> <i>Chairs: Patrik Spanel, Gianluca Giorgi</i>	<b>Room 4</b>
<b>WOS24-1</b>	<b>Keynote: Clinical breath (VOC) analysis - pearls and pitfalls</b> <i>Wolfram Miekisch - University Medicine of Rostock, Germany</i>	
<b>WOS24-2</b>	<b>Breath acetone to monitor life style interventions in field conditions: an exploratory study using proton transfer reaction mass spectrometry (PTR-MS)</b> <i>Devasena Samudrala - Radboud University, The Netherlands</i>	
<b>WOS24-3</b>	<b>In vivo exhaled breath analysis: adding to lung disease diagnosis and drug monitoring</b> <i>Pablo M-L Sinues - ETH Zurich, Switzerland</i>	
<b>WOS24-4</b>	<b>PTR-TOF-MS characterization of roasted coffees (C. arabica) from different geographic origins</b> <i>Sine Yener - Fondazione Edmund Mach, Italy</i>	
<b>WOS24-5</b>	<b>Evolved gas analysis by single photon ionization–Mass Spectrometry: a tool to distinguish different types of coffee</b> <i>Michael Fischer - Helmholtz Zentrum München, Germany</i>	



09h00  
11h00

## WOS25 - Nanomaterials in MS, Nanomaterials Characterization

Room 5

Chairs: Hui-Fen Wu, Laurent Fay

WOS25-1 **Keynote: Nanomaterial-based affinity mass spectrometry for the analysis of biomolecules**  
Yu-Chie Chen - National Chiao Tung University, Taiwan

WOS25-2 **Novel metal oxide nanomaterials for global phosphoproteome**  
Yu Bai - Peking University, College of Chemistry, China

WOS25-3 **Characterization of noble metal nanoclusters and nanocages on atomic scale by ESI-Q-TOF mass spectrometry**  
Elina Kalenius - University of Jyväskylä, Finland

WOS25-4 **Analysis of organic surface modifications of manufactured nanomaterials by thermogravimetry coupled to MS (TGA-MS)**  
Per Axel Clausen - National Research Centre for the Working Environment, Denmark

WOS25-5 **A new ICP-TOF-MS and new capabilities for the analysis of micro- and nanosamples**  
Olga Borovinskaya - ETH Zürich, Switzerland

15h00  
17h00

## WOS26 - Metabolomics

Room 1

Chairs: Oliver Fiehn, Olivier Laprévotte

WOS26-1 **Keynote: From MS data to systems biology applications in medicine – with specific emphasis on metabolic disorders and their co-morbidities**  
Matej Oresic - Steno Diabetes Center, Denmark

WOS26-2 **Advanced LC-HRMS and GC-MS based methods for metabolomics of Fusarium head blight on wheat**  
Rainer Schuhmacher - University of Natural Resources and Life Sciences Vienna (BOKU), Austria

WOS26-3 **Combination of double isotopic labeling and high resolution mass spectrometry: a novel method for untargeted fungal metabolic profiling**  
Emilien Jamin - INRA, ToxAlim UMR1331, Platform MetaToul-AXIOM, France

WOS26-4 **Deciphering *de novo* induction of novel biomarkers in mycobiome interactions by MS-based metabolomics and microNMR**  
Jean-Luc Wolfender - School of Pharmaceutical Sciences, Switzerland

WOS26-5 **GC-MS based metabolite profiling as a means to hybrid performance prediction in winter wheat**  
Andrea Matros - IPK-Gatersleben, Germany

15h00  
17h00

## WOS27 - Small Molecules – Data Acquisition and Analysis

Room 2

Chairs: Thomas Hankemeier, Silvia Catinella

WOS27-1 **Keynote: Beyond the elemental composition: computer-assisted identification methods in a high resolution era**  
Robert Mistrik - HighChem, Slovakia

WOS27-2 **Data-independent vs data-dependent fragmentation analysis for comprehensive screening of polar organic substances in environmental samples using LC-ESI-Orbitrap**  
Matthias Ruff - Eawag - Aquatic Research, Switzerland

WOS27-3 **Application of MALDI imaging to analyze glycosyl flavonoids from plant tissue, a method to localize and differentiate isomeric compounds by MS/MS data.**  
Norberto Lopes - Univeristy of São Paulo, Brazil

WOS27-4 **Supersonic gas jet shift with respect to the radio-frequency quadrupole axis for increasing efficiency of environmental chemical analysis by mass spectrometry**  
Valerii Raznikov - The Branch of Talrose Institute for Energy Problems of Chemical Physics of Russian Academy of Sciences, Russia

WOS27-5 **Comparison of the qTOF and Orbitrap configurations for the global metabolomic profiling on the example of the Pseudomonas Aeruginosa endometabolome.**  
Victor Nesatyy - NUS, Singapore

15h00  
17h00

## WOS28 - Biomolecular Conformation in the Gas-Phase and in Solution

Room 3

Chairs: Lars Konermann, Julia Chamot-Rooke

WOS28-1 **Keynote: Protein structure and folding in the Gas Phase**  
Kathrin Breuker - CCB - Centrum für Chemie und Biomedizin, University of Innsbruck, Austria

WOS28-2 **Discovering a new subunit for an old complex by native mass spectrometry**  
Sharon Michal - Weizmann Institute of Science, Israel

**WOS28-3 Stability of the B2B3-beta crystallin heterodimer to increased oxidation by radical probe and ion mobility mass spectrometry**  
*Kevin Downard - University of Sydney, Australia*

**WOS28-4 Investigating the effects of ligands on nucleic acid structure and dynamics by IMS-based approaches**  
*Dan Fabris - The RNA Institute, University at Albany, USA*

**WOS28-5 Conformational dynamics of cellobiose dehydrogenase probed by structural mass spectrometry**  
*Alan Kadek - Institute of Microbiology ASCR, Prague, Czech Republic*

**15h00  
17h00**

## **WOS29 - Ambient Ionization and Miniaturization**

**Room 4**

*Chairs: Zheng Ouyang, Renato Zenobi*

**WOS29-1 Keynote: Ambient MS in motion: 3D robotic sampling, dynamic ionization, and microplasmas**  
*Facundo Fernandez - Georgia Institute of Technology, USA*

**WOS29-2 Reactions in DART source and analysis examples - mechanism study**  
*Shuying Liu - Changchun Institute of Applied Chemistry, China*

**WOS29-3 Sub-mm linear ion trap mass spectrometer made using lithographically patterned ceramic plates**  
*Daniel Austin - Brigham Young University, USA*

**WOS29-4 Progress on pocket Mass Spectrometer development**  
*Mo Yang - Korea Basic Science Institute, South Korea*

**WOS29-5 Miniaturised laser-based mass spectrometer for *in situ* investigation of planetary bodies**  
*Peter Wurz - University of Bern, Switzerland*

**15h00  
17h00**

## **WOS30 - Geology, Astrophysics and Space Exploration**

**Room 5**

*Chairs: Roland Thissen, Detlef Günther*

**WOS30-1 Keynote: High precision mass spectrometry in a cometary coma: first results from the Churyumov Gerasimenko comet nucleus exploration**  
*Kathrin Altwegg - University of Bern, Switzerland*

**WOS30-2 Formation of negative ions from “water group” positive ions at high collision energies: implications for the ionosphere of Titan.**  
*Miroslav Polasek - J. Heyrovský Institute of Physical Chemistry of the ASCR, Czech Republic*

**WOS30-3 In situ exploration of solar system bodies: the potentiality of an Orbitrap Based Mass Analyser**  
*Christelle Briois - LPC2E, France*

**WOS30-4 The study of leak detection for spacecraft with quadrupole mass spectrometer**  
*Yan Rongxin - Beijing Institute of Spacecraft Environment Engineering, China*

**WOS30-5**

## Thursday, August 28<sup>th</sup>

09h00  
11h00

### ThOS31 - Biomarkers and Diagnostics

Room 1

Chairs: Silvia Catinella, Gérard Hopfgartner

- ThOS31-1** **Keynote: Mass spectrometric profiling strategies for population phenotyping**  
*Matthew Lewis - MRC-NIHR National Phenome Centre, Department of Surgery and Cancer, Imperial College London, London UK*
- ThOS31-2** **Automated dried blood spot instrumentation coupled to HPLC-Qq mass spectrometry – A vitamin D and E case study**  
*Götz Schlotterbeck - FHNW, Switzerland*
- ThOS31-3** **Biomarker MS assays for small cell lung cancer: exploring Molecular Imprinted Polymer potential in clinical proteomics.**  
*Cecilia Rossetti - University of Oslo, Norway*
- ThOS31-4** **Ovarian cancer: hunting biomarkers by Mass Spectrometry Imaging and tissue proteomic**  
*Michel Salzet - Université Lille 1, France*
- ThOS31-5** **Discrimination of metastasis from breast and pancreatic cancer by MALDI imaging**  
*Soeren Deininger - Bruker Daltonik GmbH, Germany*

09h00  
11h00

### ThOS32 - Ion Mobility MS

Room 2

Chairs: Dave Clemmer, Günter Allmaier

- ThOS32-1** **Keynote: An (Ion Mobility) Mass Spectrometry based framework to understand protein structure**  
*Perdita Barran - The University of Manchester, UK*
- ThOS32-2** **Structural and energetics studies of iron porphyrine complexes by Ion Mobility Mass Spectrometry and collision induced dissociation**  
*Ameneh Gholami - University of Ottawa, Canada*
- ThOS32-3** **Choosing the right buffer gas in ion mobility spectrometry: the effect of ion-neutral interactions**  
*Thomas Wyttenbach - UCSB, USA*
- ThOS32-4** **FAIMS-HRMS as a novel tool for in-depth analysis of crude oil**  
*Alessandro Vetere - Max-Planck-Institut für Kohlenforschung, Germany*
- ThOS32-5** **Ion mobility separation of star- and linear-shaped poly- and oligothiophenes – limits and possibilities to determine 3D structures**  
*Martina Marchetti-Deschmann - Vienna University of Technology, Austria*

09h00  
11h00

### ThOS33 - Data Analysis – General

Room 3

Chairs: Pietro Franceschi, Yury Tsybin

- ThOS33-1** **Keynote: Central dogma of proteomics provides identification of protein targets, action mechanisms and cellular death pathways of small molecule drugs**  
*Roman Zubarev - Karolinska Institutet, Sweden*
- ThOS33-2** **New approaches for optimizing the FTMS resolution in proteomics**  
*Marc-André Delsuc - Université de Strasbourg, France*
- ThOS33-3** **Dynamically harmonized FT-ICR cell. Further characterization and new potential applications**  
*Evgeny Nikolaev - Institut of Energy Problems of Chemical Physics Russian Academy of Sciences, Russia*
- ThOS33-4** **Evaluation of spectral accuracy in triple quadrupole instruments**  
*Jose Ignacio Garcia Alonso - University of Oviedo, Spain*
- ThOS33-5** **Predicting concentrations of small molecules without standard substances in LC/ESI/MS via ionization efficiency scales**  
*Anneli Kruve - University of Tartu, Estonia*

09h00  
11h00

### ThOS34 - JMS Award Symposium

Room 4

Chair: Michael Linscheid

- ThOS34-1** **A novel, ultrasensitive approach for quantitative carbohydrate composition and linkage analysis using LC-ESI ion trap tandem mass spectrometry**  
*Kathirvel Alagesan - Max Planck Institute of Colloids and Interfaces, Germany*
- ThOS34-2** **Method of duty cycle enhancement for orthogonal accelerator TOF MS with axial symmetric mass analyser, connected with drift tube IMS**  
*Denis Mikhailovich Chernyshev - National Research Nuclear University MEPhI, Linantek Ltd, Russia*
- ThOS34-3** **Membrane inlet Mass Spectrometry for in-field security applications**  
*Stamatios Giannoukos, University of Liverpool, UK*
- ThOS34-4** **Nucleation and chemical reactivity of mixed aerosol particles: new approach based on mass spectrometric detection**  
*Josef Lengyel - J. Heyrovský Institute of Physical Chemistry, Academy of Science of the Czech Republic, Czech Republic*

ThOS34-5 **Synthesis and reactions of atomically precise clusters**  
*Michael Wleklinski - Purdue University, USA*

09h00  
11h00

**ThOS35 - Elemental and Isotopic MS, ICP-MS General, Cultural Heritage and Archaeology** Room 5

*Chairs: Ryszard Lobinski, Detlef Günther*

ThOS35-1 **Keynote: Interested in the determination of molecules with a heteroatom in a complex matrix – why not use ICP-MS for speciation and bioimaging?**  
*Jörg Feldmann - University of Aberdeen, UK*

ThOS35-2 **Novel coupling of separations with laser desorption elemental and molecular Mass Spectrometry**  
*Jan Preisler - Masaryk University, Czech Republic*

ThOS35-3 **Investigation of the pharmacological behavior of novel platinum(IV)-based anticancer agents by means of ICP-MS and LA-ICP-MS**  
*Sarah Theiner - Institute of Inorganic Chemistry, University of Vienna, Austria*

ThOS35-4 **Precise quantification and isotope ratio measurement of boron in U3Si2-Al nuclear fuel by ICP-TOF-MS**  
*Abhijit Saha - Radioanalytical Chemistry Division, Bhabha Atomic Research Centre, India*

ThOS35-5 **Isotope ratio mass spectrometry for the study of catalytic reactions of transformation hydrocarbons**  
*Olesya Krol - IHP SB RAS, Russia*

15h00  
17h00

**ThOS36 - Advanced MS in Food and Nutrition**

Room 1

*Chairs: Michel Nielsen, Laurent Fay*

ThOS36-1 **Keynote: Advanced MS-methods to study toxic secondary metabolites in food crops**  
*Rudolf Krska - Universität für Bodenkultur Wien, Austria*

ThOS36-2 **Improved precision of measured isotope ratio through peak parking and scan-based statistics in IDMS of small organic molecules**  
*Andreas Breidbach - EC-JRC-IRMM, Belgium*

ThOS36-3 **GC-APCI-MS/MS to enhance sensitivity for residues and contaminants analysis in food and biological fluids**  
*Emmanuelle Bichon - LABERCA-Oniris, France*

ThOS36-4 **The power of ion mobility-mass spectrometry for increased selectivity in food analysis: “A new beginning for Collision Cross Section”**  
*Séverine Goscinny - Scientific Institute of Public Health, Belgium*

ThOS36-5 **Non-Target and unknown screening of food samples using accurate mass LC-MS/MS screening techniques**  
*Ashley Sage - AB SCIEX, UK*

15h00  
17h00

**ThOS37 - Hyphenated Techniques – Applications**

Room 2

*Chairs: Gérard Hopfgartner, Marc Suter*

ThOS37-1 **Keynote: Digital microfluidic sample processing for separations and Mass Spectrometry**  
*Aaron Wheeler - University of Toronto, Canada*

ThOS37-2 **Online SPE-nano-LC-HRMS for analysis of polar organic micropollutants in environmental samples: method development, validation and applications**  
*Michael Andrej Stravs - Eawag, Dübendorf, Switzerland*

ThOS37-3 **Characterization of bioactive peptides from snake venoms by LC-MS coupled to bioactivity assessment via at-line nanofractionation**  
*Marija Mladić - VU Universtiy Amsterdam, The Netherlands*

ThOS37-4 **Analysis of oligosaccharides in complex samples using MS-based techniques**  
*Leon Coulier - DSM Biotechnology Center, The Netherlands*

ThOS37-5 **Monoclonal antibodies complete primary structure and biosimilarity assessment in a single analysis by sheathless capillary electrophoresis-mass spectrometry**  
*Gahoual, Rabah - Laboratoire de Spectrométrie de Masse des Interactions et des Systèmes (LSMIS), CNRS – UMR7140, University of Strasbourg, Strasbourg, France*

15h00  
17h00

**ThOS38 - Non-Covalent Interactions**

Room 3

*Chairs: Albert Heck, Leopoldo Ceraulo*

ThOS38-1 **Keynote: Combining advanced native MS techniques for the characterization of non-covalent complexes**  
*Sarah Cianferani - CNRS - IPHC - LSMBO, France*

ThOS38-2 **Opposing charges in ESI-MS of non-covalent complexes explain many observations**  
*Rachel Loo - UCLA David Geffen School of Medicine, USA*

**ThOS38-3 Automated non-covalent mass spectrometry in drug discovery: improved screening of protein-ligand interactions**  
*Rebecca Burnley - UCB Celltech, UK*

**ThOS38-4 Novel application of ion mobility and high resolution mass spectrometry to characterise Ligand binding to a DNA aptamer**  
*Chris Nortcliffe - University of Manchester, UK*

**ThOS38-5 UV-MALDI-MS analysis of non-covalent complexes with a 6-Aza-2-thiothymine-matrix: effect of wavelength and fluence on the detection of the complexes**  
*Andreas Schnapp - Institute for Hygiene, Biomedical Mass Spectrometry, University of Münster, Germany*

**15h00  
17h00**

### **ThOS39 - Informatic Tools for MS**

Room 4

*Chairs: Thomas Hankemeier, Ruedi Aebersold*

**ThOS39-1 Keynote: Highly sensitive feature detection for LC-MS-based metabolomics**  
*Oliver Kohlbacher - University of Tübingen, Germany*

**ThOS39-2 Illuminating the 'dark matter' of mass spectrometry**  
*Steve Stein - NIST, USA*

**ThOS39-3 enviMass 2.0 – A workflow for fast spill and trend detection of micropollutants in aquatic systems using LC-HRMS data**  
*Martin Loos - Eawag, Switzerland*

**ThOS39-4 MassTrees to study the evolution of the influenza virus and detect antiviral resistant strains**  
*Kavya Swaminathan - University of Sydney, Australia*

**ThOS39-5 Spectviewer, a software for mass spectrometry Imaging**  
*Jean-Pierre Both - CEA, France*

**15h00  
17h00**

### **ThOS40 - 2D and 3D Analysis and Imaging of Inorganic, Organic, and Biological Materials** Room 5

*Chairs: John Vickerman, Detlef Günther*

**ThOS40-1 Keynote: 2D and 3D imaging of inorganic, organic, and biological samples**  
*John Fletcher - Department of Chemistry and Molecular Biology, University of Gothenburg, Sweden*

**ThOS40-2 Cellular scale imaging of cancer drugs using a stigmatic MALDI imaging mass spectrometer**  
*Hiroki Kannen - Osaka university, Japan*

**ThOS40-3 High resolution MALDI imaging of tryptic peptides in fresh frozen and FFPE tissue**  
*Katharina Huber - Justus Liebig University Giessen, Germany*

**ThOS40-4 Highly multiplexed imaging of tumor tissues with subcellular resolution by mass cytometry**  
*Bernd Bodenmiller - University of Zurich, Switzerland*

**ThOS40-5 Inspecting the anticancer drugs cisplatin and NKP1339 in tissue sections by LA-ICP-MSI**  
*Alexander Egger- Austrian Drug Screening Institute GmbH - ADSI, Austria*



## Friday, August 29<sup>th</sup>

09h00  
11h00

### FOS41 - Gas-Phase Ion Fragmentation Mechanisms

Room 1

Chairs: Gianluca Giorgi, Leopoldo Ceraulo

FOS41-1 **Keynote: Surface-induced dissociation: characterization of an activation method for large complexes**  
Vicki Wysocki - Ohio State University, USA

FOS41-2 **CO<sub>2</sub> incorporation in hydroxide and hydroperoxide containing water clusters - unifying mechanism for hydrolysis and protolysis**  
Einar Uggerud - Department of Chemistry, University of Oslo, Norway

FOS41-3 **Post-collision internal energy distributions and PAH ion fragmentation**  
Paul Mayer - University of Ottawa, Canada

FOS41-4 **Peptide fragmentation: energetics, structures, and mechanisms**  
Peter Armentrout - Department of Chemistry, University of Utah, USA

FOS41-5 **Distinction of alpha and beta forms of substituted glucose by tandem mass spectrometry and ion mobility spectrometry**  
Laurence Charles - Aix-Marseille University, France

09h00  
11h00

### FOS42 - Forensics and Doping

Room 2

Chairs: Laurent Bigler, Olivier Laprévotte

FOS42-1 **Keynote: Mass spectrometry in forensic hair testing: example of drug-facilitated crimes**  
Pascal Kintz - X-Pertise Consulting, France

FOS42-2 **Screening for anabolic steroids in sports: new strategy based on the direct analysis of phase I and phase II metabolites by LC-MS/MS**  
Georgina Balcells - Bioanalysis Research Group, IMIM-Hospital del Mar, Spain

FOS42-3 **New technologies to help facing new challenge for growth promoters' detection**  
Laure Beucher - LABERCA ONIRIS, France

FOS42-4 **Analysis of sexual assault evidence by ambient mass spectrometry: a statistical comparison between DESI-MS and EASI-MS**  
Mario Francesco Mirabelli - Università della Calabria, Italy

FOS42-5 **Unambiguous Differentiation of Explosives-related Isomers using Electrospray High-Resolution Mass Spectrometry**  
Adrian Schwarzenberg - Université Pierre et Marie Curie, France

09h00  
11h00

### FOS43 - Environmental Analysis

Room 3

Chairs: Marja Lamorée, Marc Suter

FOS43-1 **Keynote: Wastewater-based epidemiology: the analysis of human biomarkers in sewage**  
Kevin Thomas - NIVA, Norway

FOS43-2 **Suspect and non-target screening of lake sediments: approaches to identify records of organic contaminants in complex matrix**  
Juliane Hollender - Eawag, Swiss Federal Institute of Aquatic Science and Technology, Switzerland

FOS43-3 **Influence of extraction pH upon the FT-ICR MS profiles of water samples from the Athabasca oil sands region**  
Mark Barrow - University of Warwick, UK

FOS43-4 **Tracing genotoxic disinfection by-products after medium pressure UV water treatment using nitrogen labeling and mass spectrometry**  
Annemieke Kolkman - KWR Watercycle Research Institute, The Netherlands

FOS43-5 **High resolution mass spectrometry based metabolomics: a new tool to detect and characterize emerging pollutants in water and food matrices.**  
Jerome Cotton - CEA/Profilomic, France

09h00  
11h00

### FOS44 - Very Large Biomolecules and Structural Biology

Room 4

Chairs: Michal Sharon, Eric Forest

FOS44-1 **Keynote: Mass Spectrometry and very large biomolecules**  
Albert Heck - Utrecht University, The Netherlands

FOS44-2 **Probing protein structural transitions in complex biological backgrounds and on a large scale**  
Paola Picotti - ETH Zurich, Inst. of Biochemistry, Switzerland

FOS44-3 **Radical probe Mass Spectrometry for high throughput protein footprinting**  
Simin Maleknia - University New South Wales, Australia

FOS44-4	<b>Rapid and direct MALDI-MS identification of pathogenic bacteria from blood via ionic liquid-modified magnetic nanoparticles</b> <i>Hui-Fen Wu - National Sun Yat-Sen University, Taiwan</i>
FOS44-5	<b>Structural analysis of protein complexes by chemical cross-linking and mass spectrometry</b> <i>Alexander Leitner - ETH Zurich, Switzerland</i>
<b>09h00 11h00</b>	<b>FOS45 - Single Cell MS</b> <i>Chairs: Bernd Bodenmiller, Renato Zenobi</i>
FOS45-1	<b>Keynote: Single cell pheno-functional proteomics by mass cytometry</b> <i>Scott Tanner - Fluidigm Canada Inc., Canada</i>
FOS45-2	<b>Absolute quantification of proteins and protein modifications on the single-cell level</b> <i>Serena Di Palma - Institute of Molecular Life Sciences, Switzerland</i>
FOS45-3	<b>Profiling of algal populations with single-cell MALDI-FT-ICR mass spectrometry</b> <i>Jasmin Krismer - Department of Chemistry and Applied Biosciences, ETH Zurich, Switzerland</i>
FOS45-4	<b>Near-field laser ablation sample capture for mass spectrometry imaging</b> <i>Kermit K. Murray - Louisiana State University, USA</i>
FOS45-5	<b>Detection of microbial resistance markers in clinical samples using MALDI mass spectrometry</b> <i>Omar Belgacem, SHIMADZU</i>

Room 5

