



Israeli, Hellenic, Italian and French  
Mass Spectrometry Societies

# The 1<sup>st</sup> “Middle Eastern and Mediterranean Sea Region Countries MS workshop”

ME-MED MS 2010

17<sup>th</sup>- 22<sup>nd</sup>, October

Weizmann Institute of Science, Israel  
Ebner Auditorium

## Sunday 17/10

16:30 - 19:00	Registration
19:00 - 19:10	Welcome. Vice President of the Weizmann Institute of Science, <b>Haim Garty</b> President of Israeli Mass Spectrometry Society <b>Alla Shainskaya</b>
19:10 – 20:00	<b>Keynote Lecture - Alexander Makarov</b> Thermo Scientific <i>Orbitrap Mass Spectrometry: Recent Developments</i>
20:00 – 22:00	Cocktail party and get-together

## Monday 18/10

09:00 - 11:05	<b>Session 1 – Biomedical Application 1</b>
<b>Chair:</b>	<b>Michal Sharon</b>
09:00 – 09:25	<b>Lisa Cazares</b> (Virginia Medical Center, USA) <i>MALDI tissue imaging mass spectrometry: clinical applications for disease diagnosis and prognosis</i>
09:25 – 09:50	<b>Anthony Tsarbopoulos</b> (University of Patras, Greece) <i>The role of mass spectrometry in drug design and development</i>
09:50 – 10:15	<b>Arie Admon</b> (Technion - Israel Institute of Technology, Israel) <i>A novel paradigm for cancer diagnosis</i>
10:15 – 10:40	<b>Angela Bachi</b> (San Raffaele Scientific Institute, Italy) <i>Proteomic characterization of secreted microvesicles from NPCs in physiological and pro/anti inflammatory conditions</i>

10:40 – 11:05	<b>Gonçalo da Costa</b> (Centro de Química e Bioquímica, Universidade de Lisboa, Portugal) <i>Protein glycation in familial amyloidotic polyneuropathy</i>
11:05 - 11:20	Coffee Break
11:20 - 13:00	<b>Session 2 - Analytical Mass Spectrometry</b>
<b>Chair:</b>	<b>Aviv Amirav</b>
11:20 – 11:45	<b>Gianluca Giorgi</b> (Department of Chemistry, University of Siena, Italy) <i>Trapping stereoisomeric bioorganic ions</i>
11:45 – 12:10	<b>Achille Cappiello</b> (Università di Urbino, Italy) <i>Quantitative evaluation of cinnamaldehyde in in-vitro dermal absorption experiments using a direct-ELC-MS interface</i>
12:10 – 12:35	<b>Yves Gimbert</b> (Université Joseph Fourier, France) <i>Studies by low collision tandem mass spectrometry of catalytic processes using Pd and Pt.</i>
12:35 – 13:00	<b>Thomas Fechner</b> (AB SCIEX, Germany) <i>Multi-target quantitation and general unknown screening for pharmaceuticals and personal care products in water samples using different LC/MS/MS technologies</i>
13:00 - 14:00	Lunch and Poster session I
14:00 - 15:00	Thermo Scientific workshop
15:15 - 16:55	<b>Session 3 - Forensic Mass Spectrometry</b>
<b>Chair:</b>	<b>Anthony Tsarbopoulos</b>
15:15 – 15:40	<b>Francesco Botrè</b> (Sapienza University of Rome, Italy) <i>Tackling the challenge of detecting masking agents: what we already know and what we should learn soon</i>
15:40 – 16:05	<b>Torsten Vielhaber</b> (University of Münster, Germany) <i>Elemental nanobarcode for security applications</i>
16:05 – 16:30	<b>Zeev Karpas</b> (NRCN, Israel) <i>Uranium in hair as forensic evidence: laser ablation-ICPMS</i>
16:30 – 16:55	<b>Dana Sonenfeld</b> (Israeli Police) <i>Recently-encountered drugs in the israel market</i>
17:00 - 17:30	Coffee Break & poster session
17:30 - 18:30	Agilent Technologies workshop followed by beer-party

## Tuesday 19/10

09:00 - 10:40	<b>Session 4 – Metabolomics and Glycomics I</b>
<b>Chair:</b>	<b>Catherine E. Costello</b>
09:00 – 09:25	<b>Lloyd W. Sumner</b> (Nobel foundation, USA) <i>Metabolomics and integrated functional genomics reveal novel information related to legume secondary metabolism</i>
09:25 – 9:50	<b>Alina D. Zamfir</b> (Department of Chemical and Biological Sciences, “Aurel Vlaicu” University of Arad, Romania) <i>Chip-based electrospray mass spectrometry for glycolipidomics in biomedical research</i>
9:50 – 10:15	<b>Loubna A. Hammad</b> (Indiana University, Bloomington) <i>Multiple- chromatography mass spectrometry using an reaction aminopropyl column for the quantification monitoring liquid</i>
10:15 – 10:40	<b>Ljubica Svilar</b> (Université Pierre et Marie Curie, France) <i>Appearance of nitrogenised azaphilones, secondary metabolites from fungi hypoxylon fragiforme under unusual electrospray conditions</i>

10:40 - 11:10	Coffee Break
11:10 - 12:50	<b>Session 5 - Quantitative Proteomics</b>
<b>Chair:</b>	<b>Roman A. Zubarev</b>
11:10 – 11:35	<b>Hanno Steen</b> (Children’s Hospital Boston and Harvard Medical School, USA) <i>Proteomics strategies for the identification of co-regulated proteins</i>
11:35 – 12:00	<b>Tamar Geiger</b> (MPI Martinsried, Germany) <i>The super-SILAC method for quantitative proteomics of archived human tumors</i>
12:00 – 12:25	<b>Yishai Levin</b> (University of Cambridge, UK) <i>Label-free data independent quantitative proteomics in complex samples</i>
12:25 – 12:50	<b>Cédric Mesmin</b> (CEA, iBiTec-S, Service de Pharmacologie et d’Immunoanalyse, France) <i>Liquid chromatography-mass spectrometry assay for the identification and absolute quantification of the apelin peptides in human plasma and Bovin colostrum.</i>
12:50 - 13:40	Lunch Break Poster session I
13:40 - 14:40	Bruker workshop
15:00 - 16:40	<b>Session 6 – Fundamentals, Special Topics in Mass Spectrometry</b>
<b>Chair:</b>	<b>Eugene N. Nikolaev</b>
15:00 – 15:25	<b>Roman A. Zubarev</b> (Karolinska Institute, Sweden) <i>Mass spectrometry, stable isotopes, and the origin of life</i>
15:25 – 15:50	<b>Zoltan Takats</b> (Justus-Liebig University, Germany) <i>Methods and principles of in-vivo mass spectrometry</i>
15:50 – 16:15	<b>Valery V. Raznikov</b> (Institute for Energy Problems, Russia) <i>Some unexpected ion distributions in RFQ with a gas flow along its axis measured by ortho-TOF MS</i>
16:15 – 16:40	<b>Pierangela Palma</b> (Università di Urbino, Italy) <i>Performance evaluation of an efficient gradient generator in nano-LC-MS</i>
16:40 - 17:10	Coffee Break & poster session II
17:10 - 18:10	Perkin Elmer workshop followed by beer-party

## Wednesday 20/10

Short Day – Excursion to Jerusalem

09:00 - 10:40	<b>Session 7 – Novel instrumentations in MS, GC and LC MS</b>
<b>Chair:</b>	<b>Zeev Karpas</b>
09:00 – 09:25	<b>Eugene N. Nikolaev</b> (Institute for Energy Problems, Russia) <i>FTICR cell with dynamic harmonization of the electric field in the whole volume by shaping of excitation and detection electrode assembly</i>
09:25 – 09:50	<b>Aviv Amirav</b> (Tel-Aviv University, Israel) <i>5975-SMB - a new type of GC-MS with advanced capabilities</i>
09:50 – 10:15	<b>Oded Heber</b> (Weizmann Institute, Israel) <i>Mass spectrometry using electrostatic ion beam trap (EIBT)</i>
10:15 – 10:40	<b>Alexander B. Fialkov</b> (Tel-Aviv University, Israel) <i>Fast and ultra fast GC-MS with a supersonic molecular beam</i>
10:40 - 11:10	Coffee Break

11:10 - 12:25	<b>Session 8 – Environmental Science and Novel Methods</b>
<b>Chair:</b>	<b>Jean-Claude Tabet</b>
11:10 – 11:35	<b>Farid Ichou</b> (UPMC, Paris, France) <i>Reproducibility evaluation of the CID spectra recorded using different instrumental platforms under a standardized analysis procedure</i>
11:35 – 12:00	<b>Efim S. Brodsky</b> (Institute of Ecology, Russia) <i><sup>35</sup>Cl/<sup>37</sup>Cl isotope ratio evaluation in PCDD/PCDF by GC-MSHR using chlorinated molecular ion clusters</i>
12:00 – 12:25	<b>Nadine Goeppert</b> (Weizmann Institute, Israel) <i>Detection of free and conjugated estrogens with online-SPE LC-MS/MS in environmental matrices</i>
13:00	Departure to Jerusalem (Lunch boxes will be provided)
13:00	Lunch
14:00	ISMS members internal meeting. Report and elections

## Thursday 21 /10

09:00 - 10:40	<b>Session 9 – Metabolomics and Glycomics II</b>
<b>Chair:</b>	<b>Alina D. Zamfir</b>
09:00 – 09:25	<b>Carlos Cordeiro</b> (Centro de Química e Bioquímica, Departamento de Química e Bioquímica, Faculdade de Ciências da Universidade de Lisboa, Portugal) <i>FTICR mass spectrometry in protein glycation</i>
09:25 – 09:50	<b>Asaph Aharoni</b> (Weizmann Institute, Israel) <i>Recent developments in plant and yeast metabolomics</i>
09:50 – 10:15	<b>Iain Campuzano</b> (Waters Corporation, UK) <i>Sites of metabolic substitution: definitive metabolite structures deduced using ion mobility and molecular modeling</i>
10:15 – 10:40	<b>Natali Stojiljkovic</b> (Laboratoire des Courses Hippiques (LCH), France) <i>Development of a metabolomic approach based on liquid chromatography–high resolution mass spectrometry for the screening of anabolic steroids in equine urine</i>
10:40 - 11:10	Coffee Break
11:10 - 12:50	<b>Session 10 – Post-translational Modifications, Peptidomics and Proteomics</b>
<b>Chair:</b>	<b>Lloyd Sumner</b>
11:10 – 11:35	<b>Bernhard Kuster</b> (Technische Universität München, Germany) <i>Confident phosphorylation site localization using the Mascot Delta Score</i>
11:35– 12:00	<b>Albert T. Lebedev</b> (Moscow State University, Russia) <i>Mass spectrometry to establish the skin secretory peptidome of ranid and hylid frogs</i>
12:00 – 12:25	<b>Judith Steen</b> (Harvard Medical School, USA) <i>Cytokinesis meets proteomics</i>
12:25 – 12:50	<b>Alla Shainskaya</b> (Weizmann Institute, Israel) <i>Study of acetylation of chey, a response regulator in chemotaxis of escherichia coli by advanced mass spectrometry approaches</i>
12:50 - 13:50	Poster session Lunch Break
13:50 - 14:50	Waters workshop

15:15 - 16:55	<b>Session 11 – Fundamentals and Innovations</b>
<b>Chair:</b>	<b>Michael Przybylski</b>
15:15 – 15:40	<b>Julia Laskin</b> (PNNL, USA) <i>Ion-Surface Collisions in Mass Spectrometry</i>
15:40 – 16:05	<b>Alexandre Giuliani</b> (Synchrotron SOLEIL, France) <i>VUV spectroscopy of peptides in the gas phase probed by synchrotron radiation</i>
16:05 – 16:30	<b>Vladimir Frankevich</b> (ETH, Switzerland) <i>Insights into the Mechanism of Electrospray and Laserspray Ionization</i>
16:30 – 16:55	<b>Vlacheslav I. Kozlovskiy</b> (Institute for Energy Problems, Russia) <i>The study of ion mobility in gas-filled segmented RFQ interfaced to O-TOF MS</i>
17:00 – 17:15	Coffee Break
17:15 - 18:15	ABSciex workshop
18:30	Departure to restaurant
19:30 - 22:30	Workshop dinner

## Friday 22/10

09:00 - 10:40	<b>Session 12 – Novel Applications</b>
<b>Chair:</b>	<b>Asaph Aharoni</b>
09:00 – 09:25	<b>Michael Przybylski</b> (University of Konstanz, Germany) <i>Mass spectrometric approaches for elucidation of “misfolding” and aggregation structures of neurodegenerative proteins: Ion mobility-MS and affinity-MS</i>
09:25 – 09:50	<b>Jean-Claude Tabet</b> (Université Paris, France) <i>Behavior of positive and negative DNA complex systems toward various activation modes in FT/MS</i>
09:50 – 10:15	<b>Michal Sharon</b> (Weizmann Institute, Israel) <i>Gas-phase compaction and unfolding of protein structures</i>
10:15 – 10:40	<b>Arnd Ingendoh</b> (Bruker Daltonik, Germany) <i>Ultra-high resolution ETD top-down proteomic analysis: challenges and potential</i>
10:40 - 11:00	Coffee Break
11:00 - 12:50	<b>Session 13 - Biomedical Applications II</b>
<b>Chair:</b>	<b>Alla Shainskaya</b>
11:00 – 11:25	<b>Spiros D. Garbis</b> (Biomedical Research Foundation -Academy of Athens, Center for Basic Research II – Biotechnology Division, Greece) <i>Towards a systematic understanding of mechanism-based markers for cancer prevention: The functional convergence of ex vivo and in vivo Proteomics</i>
11:25 – 11:50	<b>Claudia Cozma</b> (University of Konstanz, Germany) <i>Highly sensitive and specific clinic diagnostics of Fabry’s Disease in dry blood spots by multiple reaction monitoring mass spectrometry</i>
11:50 – 12:50	<b>Closing Keynote Lecture - Catherine E. Costello</b> (Boston University, USA) <i>Decoding the secret lives of sugars</i>
12:50 – 13:30	<b>Award Ceremony. Closing</b> Music, beer and fun.