12th European Fourier Transform Mass Spectrometry Workshop

MATERA (Italy)

April 5 – 8, 2016
12\textsuperscript{th} European Fourier Transform Mass Spectrometry Workshop

MATERA (Italy)

April 5 – 8, 2016
Organised by

Italian Chemical Society
Division of Mass Spectrometry

Under the patronage of

International Mass Spectrometry Foundation

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COMMITTEES

SCIENTIFIC COMMITTEE

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Tommaso Cataldi  University of Bari, Italy
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Gianluca Giorgi  University of Siena, Italy
Peter O’Connor  University of Warwick, UK
Yury Tsybin  Spectroswiss Sarl, Lausanne, Switzerland

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Sabino Aurelio Bufo  University of Basilicata, Italy
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### SCIENTIFIC PROGRAMME

#### Tuesday, April 5

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<tr>
<td>1:00 p.m. – 2:15 p.m.</td>
<td>Registration and poster installation</td>
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<tr>
<td>2:15 p.m. – 2:45 p.m.</td>
<td>Welcome and opening ceremony</td>
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<td><strong>Session 1: FT instrumentation</strong></td>
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<td>Chairpersons: Peter B. O’Connor, Julia Chamot-Rooke</td>
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</tbody>
</table>
| 2:45 p.m. – 3:15 p.m. | **PL1: 21 Tesla Fourier transform ion cyclotron resonance mass spectrometry: instrumentation and applications**  
   | Alan G. Marshall, John P. Quinn, Lissa C. Anderson,                      |
|                 |   Nathan K. Kaiser, Donald F. Smith, Greg T. Blakney, Tong               |
|                 |   Chen, Steven C. Beu, Christopher L. Hendrickson                        |
|                 | National High Magnetic Field Laboratory and Department of Chemistry and  |
|                 |   Biochemistry, Florida State University, Tallahassee, Florida, USA      |
| 3:15 p.m. – 3:45 p.m. | **PL2: Orbitrap mass spectrometry: new frontiers**                      |
|                 | Alexander Makarov                                                        |
|                 | Thermo Fisher Scientific, Bremen, Germany                                |
| 3:45 p.m. – 4:15 p.m. | **PL3: Towards the era of phase-centric FTMS**                           |
|                 | Yury O. Tsybin, Konstantin O. Nagornov, Anton N. Kozhinov                |
|                 | Ecole Polytechnique Fédérale de Lausanne, Biomolecular Mass Spectrometry|
|                 | Laboratory, Lausanne, Switzerland                                        |
| 4:15 p.m. – 5:00 p.m. | Coffee break and poster session                                          |
| 5:00 p.m. – 5:30 p.m. | **PL4: Ion clouds micromotion in FT ICR mass-spectrometer in ultrahigh resolution mode of operation**  
   | Eugene Nikolaev, Gleb Vladimirov, Oleg Kharybin, Pavel                   |
|                 |   Chuvakhov, Goekhan Baykut, Roland Jertz                                |
|                 | Institute for Energy Problems of Chemical Physics Russian Academy of    |
|                 |   Sciences, Moscow, Russia                                                |
| 5:30 p.m. – 5:45 p.m. | **OR1: Enabling routine isotopic fine structure analysis**               |
|                 | Roland Jertz, Claudia Kriete, Matthias Witt, Jochen                      |
|                 |   Friedrich, Christopher Thompson, Michael Easterling, Eugene            |
|                 |   Nikolaev, Goekhan Baykut                                               |
|                 | Bruker Daltonik GmbH, Bremen, Germany                                     |
| 5:45 p.m.       | End of session                                                            |
| 7:00 p.m.       | Welcome cocktail with guided tour of Sassi di Matera                    |
## Wednesday, April 6

### 8:30 a.m. – 9:00 a.m. Registration

**Session 2: Two-dimensional mass spectrometry**

Chairpersons: Yury O. Tsybin, Filomena Lelario

### 9:00 a.m. – 9:30 a.m.

**PL5: Using 2-dimensional mass spectrometry (2DMS) for proteomics**

*Maria van Agthoven, Pui Yiu Lam, Chris Wootton, Federico Floris, Alice Lynch, Marc-André Delsuc, Peter B. O’Connor*

Department of Chemistry, University of Warwick, Coventry, UK

### 9:30 a.m. – 9:45 a.m.

**OR2: Principles, details, and pitfalls of the implementation of 2D FT-ICR MS Spectroscopy**

*Lionel Chiron, Christian Rolando, Marc-André Delsuc*

I.G.B.M.C. Université de Strasbourg, Illkirch, France

### 9:45 a.m. – 10:00 a.m.

**OR3: Getting the best performance out of 2-D FTICRMS**

*Maria A. van Agthoven, Federico Floris, Alice Lynch, Christopher Wootton, Lionel Chiron, Mark Barrow, Marc-André Delsuc, Christian Rolando, Peter B. O’Connor*

Department of Chemistry, University of Warwick, Coventry, UK

### 10:00 a.m. – 10:15 a.m.

**OR4: Bidimensional FT-ICR MS using non uniform sampling (NUS): a fully data independent acquisition (DIA) for complex mixture analysis at high resolution on both precursor and fragment ions**

*Fabrice Bray, Lionel Chiron, Matthias Witt, Marc-André Delsuc, Christian Rolando*

Chemistry Department, Université Lille 1, Villeneuve d'Ascq, France

### 10:15 a.m. – 11:00 a.m. Coffee break and poster session

**Session 3: Ion activation & dissociation**

Chairperson: Evan Williams

### 11:00 a.m. – 11:30 a.m.

**PL6: Fourier Transform ion cyclotron resonance and infrared multiphoton dissociation (IRMPD) mass spectrometry for structural characterization of bioactive molecules**

*Giuliana Bianco*

Dipartimento di Scienze, Università degli Studi della Basilicata, Potenza, Italy
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| 11:30 a.m. – 11:45 a.m. | **OR5**: A Comparative study of electron ionization dissociation and ultraviolet photodissociation for characterizing native proteins and protein complexes  
*Huilin Li, Yuewei Sheng, Jennifer S. Brodbelt, Joseph A. Loo*  
Department of Biological Chemistry, University of California, Los Angeles, USA |
| 11:45 a.m. – 12:00 p.m. | **OR6**: Electron capture dissociation and ion mobility mass spectrometry of biologically relevant phosphopeptides  
*Andrea F. Lopez-Clavijo, Carlos A. Duque-Daza, Andrew J. Creese, Peter Winn, Helen J. Cooper*  
College of Life & Environmental Sciences, The University of Birmingham, Edgbaston, UK |
| 12:00 p.m. – 12:30 p.m. | **Session 4: Nucleic acids & informatics**  
Chairperson: Alessandro Buchicchio |
| 12:00 p.m. – 12:30 p.m. | **PL7**: Dissociation of ribonucleic acids (RNA) and RNA-peptide complexes by FT-ICR MS  
*Heidelinde Glasner, Eva-Maria Schneeberger, Jovana Vusurovic, Kathrin Breuker*  
Institute of Organic Chemistry, University of Innsbruck, Innsbruck, Austria |
| 12:30 p.m. – 12:45 p.m. | **OR7**: ΦSDM (Phased Spectrum Deconvolution Method) – a super-resolution algorithm for Fourier transform mass spectrometry  
*Konstantin Aizikov, Dmitry Grinfeld, Arne Kreutzman, Eugen Damoc, Alexander Makarov*  
Thermo Fisher Scientific, Bremen, Germany |
| 12:45 p.m. – 1:00 p.m. | **OR8**: Sequence Protein IDentification by Randomized sequence Transcriptomic-database and Mass Spectrometry (SPIDER-TMS): a transcriptomic-proteomic integrated software for rapid identification of proteins by FTMS  
*Giuliana Bianco, Renzo Calace Sarli, Gabriele Cruciani, Patrizia Falabella, Gerarda Grossi, Raffaella Pascale*  
Dipartimento di Scienze, Università degli Studi della Basilicata, Potenza, Italy |
<p>| 1:00 p.m. – 2:30 p.m. | Lunch |</p>
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| 2:30 p.m. – 3:00 p.m. | **PL8: Orbitrap FTMS - challenges and opportunities in proteomics**  
Roman Zubarev  
Department of Medicinal Biochemistry and Biophysics, Karolinska Institutet, Stockholm, Sweden |
| 3:00 p.m. – 3:15 p.m. | **OR9: Improving the sensitivity of proteome analyses using high resolution FTMS by iterative exclusion of identified peptides**  
Simion Kreimer, Lev Levitsky, William F. Danielson, Mikhail E. Belov, Barry L. Karger, Mikhail V. Gorshkov, Alexander R. Ivanov  
Moscow Institute of Physics and Technology State University, Dolgoprudny, Moscow Region, Russia |
| 3:15 p.m. – 3:45 p.m. | **PL9: Innovations in the FTMS analysis of glycans and glycoconjugates**  
Yi Pu, Liang Han, Deborah Leon, Edwin Motari, John Haserick, Andrea Carpentieri, Giulia Bandini, Rebecca Glaskin, Kshitij Khatri, Yiqun Huang, Joseph Zaia, Phillips W. Robbins, John Samuelson, Cheng Lin, Catherine E. Costello  
Center for Biomedical Mass Spectrometry, Boston University School of Medicine, Boston, USA |
| 3:45 p.m. – 4:00 p.m. | **OR10: The molecular clock of islet amyloid polypeptide: from dimerization to deamidation**  
Yuko P.Y. Lam, Christopher A. Wootton, Juan Wei, Mark Barrow, Peter B. O’Connor  
Department of Chemistry, University of Warwick, Coventry, UK |
| 4:00 p.m. – 4:30 p.m. | **PL10: FTMS approaches for rapid sequencing of glycosaminoglycans**  
I. Jonathan Amster  
Department of Chemistry, University of Georgia, Athens, USA |
<p>| 4:30 p.m. – 5:00 p.m. | <strong>Coffee break and poster session</strong> |</p>
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| 5:00 p.m. – 5:30 p.m. | **PL11: Top-down proteomics: the next step in clinical microbiology?**  
Julia Chomot-Rooke  
Structural Mass Spectrometry and Proteomics Unit,  
Institut Pasteur, Paris, France |
| 5:30 p.m. – 5:45 p.m. | **OR11: Typing Pseudomonas aeruginosa strains using ultrahigh resolution MALDI-FTICR MS**  
Leiden University Medical Center, Leiden, The Netherlands |
| 5:45 p.m. – 6:00 p.m. | **OR12: A combined approach of top-down FT-ICR and native mass spectrometry to investigate the molecular details of oncogenic p53 reactivation**  
Sam Hughes, Jenna Scotcher, C. Logan Mackay, Pat. R. Langridge-Smith, Ted Hupp, David J. Clarke  
School of Chemistry, University of Edinburgh, UK |
| 6:00 p.m.     | **End of session**                                                     |
## Thursday, April 7

### Session 7: HRMS in characterizing food

**Chairpersons:** Tommaso R. I. Cataldi, Laura Scrano

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<tr>
<td>9:00 a.m. – 9:30 a.m.</td>
<td><strong>PL12: FT-ICR-MS for the metabolomic profiling of wines and champagnes</strong>&lt;br&gt;C.Roullier-Gall, S. Heinzmann, M. Witting, F. Moritz, P. Jeandet, D. Steyer, M.Gonsior, Philippe Schmitt-Kopplin&lt;br&gt;Research Unit Analytical BioGeoChemistry, Helmholtz Zentrum Muenchen, Neuherberg, Germany</td>
</tr>
<tr>
<td>9:30 a.m. – 9:45 a.m.</td>
<td><strong>OR13: Characterization of native and oxidized fatty acids in mussels by liquid chromatography-electrospray ionization-Fourier transform mass spectrometry</strong>&lt;br&gt;Ilario Losito, Laura Facchini, Alessandra Valentini, Tommaso R.I. Cataldi, Francesco Palmisano&lt;br&gt;Dipartimento di Chimica, Università degli Studi di Bari Aldo Moro, Bari, Italy</td>
</tr>
<tr>
<td>9:45 a.m. – 10:00 a.m.</td>
<td><strong>OR14: Foodomics: Fourier transform mass spectrometry based characterization of sparus aurata phospholipidome</strong>&lt;br&gt;Sara Granafei, Pietro Azzone, Ilario Losito, Francesco Palmisano, Tommaso R.I. Cataldi&lt;br&gt;Dipartimento di Chimica &amp; Centro SMART, Università degli Studi di Bari Aldo Moro, Italy</td>
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### Session 8: Residues in food

**Chairperson:** Sabino A. Bufo

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<tr>
<td>10:00 a.m. – 10:45 a.m.</td>
<td><strong>PL13: Liquid chromatography coupled to high resolution mass spectrometry within pesticide residue control in food</strong>&lt;br&gt;Amadeo R. Fernández-Alba&lt;br&gt;European Union Reference Laboratory for Pesticide Residues in Fruit &amp; Vegetables. University of Almeria, Almería, Spain</td>
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<tr>
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| 11:15 a.m. – 11:30 a.m. | OR15: *Advances in Orbitrap™ based analytical methods for food allergen management*  
Rosa Pilolli, Elisabetta De Angelis, Linda Monaci  
Institute of Sciences of Food Production, National Research Council, ISPA-CNR, Bari, Italy |
| 11:30 a.m. – 11:45 a.m. | OR16: *Target analysis and retrospective screening of fusarium mycotoxins and their modified forms in cereals and derived products by liquid chromatography – high resolution mass spectrometry*  
Biancamaria Ciasca, Michelangelo Pascale, Valerio Guido Altieri, Francesco Longobardi, Michele Suman, Veronica M.T. Lattanzio  
Institute of Sciences of Food Production, National Research Council, ISPA-CNR, Bari, Italy |
| 11:45 a.m. – 12:15 p.m. | PL14: *Top-Down mass spectrometry of proteins and protein complexes*  
Joseph A. Loo  
Department of Biological Chemistry, David Geffen School of Medicine at UCLA, University of California Los Angeles, USA |
| 12:15 p.m. – 12:30 p.m. | OR17: *Top-down analysis of calmodulin using 2D FT-ICR MS*  
Federico Floris, Maria van Agthoven, Lionel Chiron, Christopher Wootton, Mark Barrow, Marc-André Delsuc, Peter B. O’Connor  
Department of Chemistry, University of Warwick, Coventry, UK |
| 12:30 p.m. – 2:00 p.m. | Lunch  
Session 10: Ultra high resolution MS, biomolecular recognition, MS imaging  
Chairpersons: Kathrin Breuker, Patrizia Falabella |
| 2:00 p.m. – 2:30 p.m. | PL15: *Using ultra-high resolution mass spectrometry to find what lies beneath the surface*  
Lilijana Paša-Tolić, Jared Shaw, Nikola Tolić, Malak Tfaily, Lawrence Walker, Rosalie Chu, Yufeng Shen, Errol Robinson, David Koppenaal, Nancy J Hess  
Environmental Molecular Sciences Laboratory (EMSL), |
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| 2:30 p.m. – 3:00 p.m. | PL16          | **Combining bioaffinity tools with high resolution mass spectrometry: new perspectives for biomedical and biomolecular recognition analysis**  
*Michael Przybylski, Loredana Lupu, Hendrik Rusche, Zdenek Kukacka, Yannick Baschung, Stefan Slamnoiu, Adrian Moise, Mary Murphy, Jeff Bornheim*  
Steinbeis Center for Biopolymer Analysis & Biomedical Mass Spectrometry and University of Konstanz, Department of Chemistry, Konstanz, Germany |
| 3:00 p.m. – 3:15 p.m. | OR18          | **Structural characterization of individual compound in complex mixtures by FTICR MS combined with in ESI-source H/D exchange**  
*Alexey Kononikhin, Yury Kostyukevich, Alexander Zherebker, Igor Popov, Oleg Kharybin, Irina Perminova, Eugene Nikolaev*  
Moscow Institute of Physics and Technology, Moscow, Russia |
| 3:15 p.m. – 3:45 p.m. | PL17          | **High resolution MSI: increased information content and specificity**  
*Liam A. McDonnell*  
Fondazione Pisana per la Scienza ONLUS and Leiden University Medical Center, Pisa, Italy |
| 3:45 p.m. – 4:00 p.m. | OR19          | **Dissociation behavior of a bifunctional TEMPO-benzyl active ester for peptide structure analysis by free radical initiated peptide sequencing (FRIPS) mass spectrometry**  
*Christoph Hage, Christian Ihling, Mathias Schäfer, Andrea Sinz*  
Department of Pharmaceutical Chemistry & Bioanalytics, Martin Luther University Halle-Wittenberg, Halle/Saale, Germany |
| 4:00 p.m. – 11:00 p.m. | Excursion     | **Discover the magnificence of Taranto and Gala Dinner** |
## Friday, April 8

### Session 11: Nanodrops, sources, clusters

**Chairperson:** Ilario Losito

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<th>Time</th>
<th>Session Description</th>
<th>Speaker(s)</th>
<th>Institution(s)</th>
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<td>9:15 a.m. – 9:45 a.m.</td>
<td><strong>PL18:</strong> The chemistry of ions in aqueous nanodrops</td>
<td>Evan R. Williams</td>
<td>Department of Chemistry, University of California, Berkeley, California, USA</td>
</tr>
<tr>
<td>9:45 a.m. – 10:00 a.m.</td>
<td><strong>OR20:</strong> Supercharging of analytes via a novel modified Ion source</td>
<td>Christopher A. Wootton, Haytham E. M. Hussein, Mang ying Wong, Cookson K. C. Chiu, Lewis A. Baker, Scott Habershon, Anthony J. Stace, Mark P. Barrow, Peter B. O’Connor</td>
<td>Department of Chemistry, University of Warwick, Coventry, UK</td>
</tr>
<tr>
<td>10:00 a.m. – 10:15 a.m.</td>
<td><strong>OR21:</strong> Tandem Cryo Trap FT-MS for kinetics and spectroscopy of transition metal clusters</td>
<td>Jennifer Mohrbach, Sebastian Dillinger, Gereon Niedner-Schatteburg</td>
<td>Fachbereich Chemie and Forschungszentrum OPTIMAS, TU Kaiserslautern, Germany</td>
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<tr>
<td>10:15 a.m. – 10:45 a.m.</td>
<td><strong>Coffee break</strong></td>
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<td>10:45 a.m. – 11:15 a.m.</td>
<td><strong>PL19:</strong> High performance analysis of complex mixtures by high-field FT-Orbitrap MS: exploring the carbon space</td>
<td>Wolfgang Schrader, Alessandro Vetere</td>
<td>Max-Planck Institut für Kohlenforschung, Mülheim an der Ruhr, Germany</td>
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<tr>
<td>11:15 a.m. – 11:30 a.m.</td>
<td><strong>OR22:</strong> Advanced automated processing of data from gas chromatography/ultrahigh-resolution mass spectrometry for petroleum analyses</td>
<td>Christopher P. Rüger, Theo Schwemer, Martin Sklorz, Peter B. O’Connor, Mark P. Barrow, Ralf Zimmermann</td>
<td>Institute for Chemistry, University of Rostock, Rostock, Germany</td>
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### Session 12: Petroleomics, bio-oil, hydrocarbons

**Chairperson:** Alan G. Marshall

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| 11:30 a.m. – 11:45 a.m. | OR23: Development of a robust methodology for the characterization of biomass pyrolysis bio-oil by electrospray ionization  
Jasmine Hertzog, Vincent Carré, Anthony Dufour, Frédéric Aubriet  
Lorraine University, LCP-A2MC, METZ, France |
| 11:45 a.m. – 12:00 p.m. | OR24: Understanding tridimensional structural changes of hydrocarbon during oxygenation in the ocean using SA-TIMS-FT-ICR MS  
Paolo Benigni, Rebecca Marin, Kathia Sandoval, Christopher Thompson, Mark E. Ridgeway, Melvin A. Park, Piero Gardinali, Francisco Fernandez-Lima  
Florida International University, Miami, USA |
| 12:00 p.m.       | Closing remarks and farewell                                                                   |
LIST OF POSTER COMMUNICATIONS

P1  CHARACTERIZATION OF A QUADRUPOLAR-DETECTION NADEL ICR CELL FOR FT-ICR MS AT THE CYCLOTRON FREQUENCY
Konstantin O. Nagornov, Anton N. Kozhinov, Christophe Masselon, Yury O. Tsybin
Spectroswiss Sàrl, Lausanne – Switzerland

P2  STATIC HARMONIZATION OF DYNAMICALLY HARMONIZED FT ICR CELL. HIGH ORDER CONTRIBUTIONS TO THE ELECTRIC FIELD
Ekaterina Zhdanova, Yury Kostyukevich, Eugene Nikolaev
Institute for Energy Problems of Chemical Physics Russian Academy of Sciences Leninskij, Moscow - Moscow Institute of Physics and Technology, Dolgoprudnyi, Russia

P3  AGC TARGET-DEPENDENT EFFECTS IN LTQ-FT SIGNAL ACQUISITION AND CONSEQUENCES ON DATA QUALITY
Konstantin Nagornov, Anton Kozhinov, Yury O. Tsybin, Christophe Masselo
Laboratoire de Biologie à Grande Echelle - CEA Grenoble, INSERM U0138, Université Grenoble Alpes, Grenoble- France

P4  ADVANCED DATA ACQUISITION ELECTRONICS FOR FTMS
Anton N. Kozhinov, Konstantin O. Nagornov, Kristina Srzentić, Yury O. Tsybin
Spectroswiss Inc, Lausanne, Switzerland

P5  LEAST-SQUARES FITTING FOR FTMS APPLICATIONS
Yury O. Tsybin, Anton N. Kozhinov, Konstantin O. Nagornov
Spectroswiss Sarl, Lausanne – Switzerland

P6  TIME-DEPENDENT FREQUENCY OF ION MOTION, TRANSIENT MODULATION, AND SPECTRAL COMPOSITION IN FT-ICR MS
Oleg Tsybin, Konstantin Nagornov, Anton Kozhinov, Yury Tsybin
Peter the Great St. Petersburg Polytechnic University, Saint-Petersburg - Russia
P7  STATIC HARMONIZATION OF DYNAMICALLY HARMONIZED FT ICR CELL. HIGH ORDER CONTRIBUTIONS TO THE ELECTRIC FIELD
Ekaterina Zhdanova, Yury Kostyukevich, Eugene Nikolaev
Institute for Energy Problems of Chemical Physics Russian Academy of Sciences Leninskij Moscow - Russia Moscow Institute of Physics and Technology, Dolgoprudnyi, Russia

P8  IDENTIFICATION OF N-TERMINAL ENDOGENEOUS FRAGMENTS OF TAU PROTEIN IN HUMAN CEREBROSPINAL FLUID BY ONLINE NANOFLOW LC-ESI-Q/ORBITRAP MS
Gunnar Brinkmalm, Claudia Cicognola, Erik Portelius, Henrik Zetterberg, Kaj Blennow, Kina Höglund
Department of Psychiatry and Neurochemistry, Sahlgrenska Academy at University of Gothenburg, Mölndal, Sweden

P9  TARGETING CANCER-RELATED PROTEOFORMS UNCOVERED WITH PROTEOGENOMICS
Marialaura Dilillo, Avinash Yadav, Erik de Graaf, Paolo Aretini, Liam McDonnell
Fondazione Pisana per la Scienza – ONLUS, Dipartimento di Chimica e Chimica Industriale – Università di Pisa

P10 PROTEOMIC APPROACHES FOR A DIAGNOSISOF PARASITIC CONGENITAL INFECTIONS
A. Alexandra Emmanuel, Chiara Giangrande, Florence Migot-Nabias, Joëlle Vinh

P11 IDENTIFICATION OF TWO SERINE PROTEASES FROM LEPTOMASTIX DACYLOPII VENOM BY DIRECT INFUSION (+)-ESI-FTICR-MS
Giuliana Bianco, Patrizia Falabella, Gerarda Grossi, Cristina Labella, Simona Laurino, Raffaella Pascale, Philippe Schmitt-Kopplin, Heiko Vogel
University of Basilicata, Potenza, Italy
P12  DE NOVO SEQUENCING OF PEPTIDES DERIVED FROM SCORPION VENOM
Meng Li, Yuko P. Y. Lam, Christopher A. Wootton, Peng Chen, Mark P. Barrow, Hongzheng Fu, Peter B. O’Connor
University of Warwick, Coventry, United Kingdom

P13  CYSTEINE OXIDATION PROBED BY IRMPD SPECTROSCOPY OF KEY INTERMEDIATES
Debora Scuderi, Enrico Bodo, Barbara Chiavarino, Simonetta Fornarini, Maria Elisa Crestoni
Dipartimento di Chimica e Tecnologie del Farmaco, Università degli Studi di Roma La Sapienza, Roma, Italy

P14  FTMS AS A TOOL TO DEVELOP A CLINICAL ASSAY FOR MEASURING CEREBROSPINAL FLUID LEVELS OF PRE-SYNAPTIC PROTEINS
Ann Brinkmalm, Gunnar Brinkmalm, Henrik Zetterberg, Kaj Blennow, Annika Öhrfelt
Institute of neuroscience and physiology, Sahlgrenska Academy, University of Gothenburg

P15  SUPERMETALLIZATION OF PEPTIDES AND PROTEINS STUDIED BY FTICR MS COUPLED WITH ECD AND CID
Yury Kostyukevich, Alexey Kononikhin, Maria Indeykina, Igor Popov, Eugene Nikolaev
Moscow Institute of Physics and Technology, Moscow - Skolkovo Institute of Science and Technology, Skolkovo, Russia

P16  HIGH-RESOLUTION ORBITRAP™-BASED MASS SPECTROMETRY FOR RAPID DETECTION OF PEANUTS IN NUTS
Elisabetta De Angelis, Simona L. Bavaro, Rosa Pilolli, Linda Monaci
Institute of Sciences of Food Production, National Research Council (ISPA-CNR)

P17  ASPECTS OF METABOLIC PROFILING AND QUALITY CONTROL OF OLIVE OIL USING FT-ICR MS DIRECT INFUSION METHOD
Theodwra Nikou, Matthias Witt, Maria Lalioti, Panagiotis Stathopoulos, Aiko Barsch, Leandros A Skaltsounis, Maria Halabalaki
Bruker Daltonik GmbH, Bremen, Germany
P18 FEASIBILITY STUDY OF INCLUSION OF MIXTURES OF PESTICIDES IN WHITE WINE MATRIX
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P20 MULTICLASS SCREENING METHOD TO DETECT 64 ANTIBIOTICS IN FEED BY HIGH PERFORMANCE LIQUID CHROMATOGRAPHY COUPLED TO HYBRID HIGH RESOLUTION MASS SPECTROMETRY
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P21 MULTICLASS DETECTION OF ANABOLIC AGENTS IN BOVINE BILE BY LC-HR-MS/MS
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P30  FRAGMENTATION STUDY OF MAJOR SPIROSOLANE-TYPE GLYCOALKALOIDS BY COLLISION INDUCED DISSOCIATION (CID) AND INFRARED MULTIPHOTON DISSOCIATION (IRMPD) TANDEM MASS SPECTROMETRY
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P35 STUDYING THE INTERACTIONS AND THE BINDING SITES OF AN ORGANO-OSMIUM (II) ANTICANCER COMPLEX TO BIOMOLECULES USING ULTRA-HIGH RESOLUTION FT-ICR TANDEM MASS SPECTROMETRY

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P36 DETERMINATION OF TERNARY CRUDE OIL MIXTURES BY FOURIER TRANSFORM ION CYCLOTRON RESONANCE MASS SPECTROMETRY AND STATISTICAL METHODS

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