

## PROGRAM

DAY 1 - MONDAY, APRIL 27<sup>TH</sup>

- 11:00 Badge pick up open
- 12:00 Lunch
- 14:00 **INV-1 - Two decades of Orbitrap Mass Spectrometry as a mainstream technology for high-resolution Accurate Mass Analysis**  
*Invited lecture*  
**A. Makarov**  
*Thermo Fisher Scientific - Bremen (DE)*
- 14:30 **#05 - Automated sample classification, calibration, molecular formula assignment, and statistical verification of ultra-complex FT-ICR Mass Spectrometry data streams**  
**R. Rodgers<sup>1</sup>, T. Potu<sup>2</sup>, L. Babcock-Adams<sup>1</sup>, C.L. Hendrickson<sup>1</sup>, M.L. Aguilera<sup>1</sup>, A.J. Tello-Rodriguez<sup>1</sup>, C. Rüger<sup>3</sup>, C.R. Weisbrod<sup>1</sup>, M. Sueur<sup>4</sup>, P. Giusti<sup>4</sup>, G.S. Vallverdu<sup>5</sup>**  
<sup>1</sup> National High Magnetic Field Laboratory - Tallahassee (US) <sup>2</sup> Florida State Univ. - Tallahassee (US)  
<sup>3</sup> Univ. Rostock (DE) <sup>4</sup> TotalEnergies Research and Technology - Harfleur (FR)  
<sup>5</sup> Univ. Pau et des Pays de l'Adour - Pau (FR)
- 15:00 **#11 - Ion dynamics and methodological optimization for Orbitrap isotope ratio analysis of complex organic acid mixture**  
**H. Gontijo Machado**  
*Univ. Estadual de Goiás - Goiânia (BR)*
- 15:30 **#01 - Experimental tests for non-covalent interactions in large molecules: a case of substituted pyridinium ions**  
**A. Tsybizova<sup>1</sup>, G. Vladimir<sup>2</sup>, C. Peter<sup>3</sup>**  
<sup>1</sup> Sorbonne Univ., IPCM - Paris (FR) <sup>2</sup> Univ. Basel, Department of Chemistry - Basel (CH)  
<sup>3</sup> ETH Zurich, Department of Chemistry and Applied Biosciences - Zurich (CH)
- 16:00 Break (30')
- 16:30 **INV-2 – Advancing top-down proteomics for comprehensive characterization of protein complexes and proteoforms**  
*Invited lecture*  
**R. Chan, M.S. Fischer, D.S. Roberts, E.A. Chapman, E.J. Larson, S.J. McIlwain, Y. Ge**  
*Univ. Wisconsin-Madison (US)*
- 17:00 **#20 - Coupling trapped ion mobility with two-dimensional mass spectrometry to analyze complex organic matter on the new 18 T timsMRMS**  
**M. Van Agthoven<sup>1</sup>, J. Maillard<sup>2</sup>, M. Sueur<sup>1</sup>, S. Ollivier<sup>1</sup>, C. Wootton<sup>3</sup>, M.A. Delsuc<sup>4</sup>, P. Giusti<sup>2</sup>, C. Afonso<sup>5</sup>**  
<sup>1</sup> Univ. Rouen-Normandy - Mont-Saint-Aignan (FR)  
<sup>2</sup> TotalEnergies Research and Technology Gonfreville - Harfleur (FR)  
<sup>3</sup> Bruker Daltonics - Bremen (DE)  
<sup>4</sup> IGBMC - CNRS UMR 7104 - INSERM U 1258 – Univ. Strasbourg - Illkirch-Graffenstaden (FR)  
<sup>5</sup> Univ. Rouen-Normandy - Harfleur (FR)
- 17:30 Flash poster talks
- 18:00 Normandy and the heritage of William the Conqueror, by **J-G. Guyant**
- 18:30 Mixer and welcome reception and poster set up

DAY 2 - TUESDAY, APRIL 28<sup>TH</sup> - MORNING

- 09:00 **INV-3 – High resolution mass spectrometry in a spatial context**  
*Invited lecture*  
**R. Heeren**  
*M4I, Univ. Maastricht (NL)*
- 09:30 **#38 - Sulfur as a source of dark matter in proteomics: roles of mass accuracy and fragmentation pathways**  
**K. Hakansson<sup>1</sup>, K.L. Wu<sup>1</sup>, M. Polak<sup>2</sup>, M.M. Youssef<sup>3</sup>, E.R. Noche<sup>1</sup>, S.A. Defiglia<sup>1</sup>, S.D. Dunham<sup>2</sup>, C.R. Weisbrod<sup>2</sup>, L.C. Anderson<sup>1</sup>**  
<sup>1</sup> *NHMFL/Florida State Univ. - Tallahassee (US)*  
<sup>2</sup> *NHMFL - Tallahassee (US)*  
<sup>3</sup> *Ain Shams Univ. - Cairo (EG)*
- 10:00 **#07 - An unique and convergent LC-ExcedlonPro platform for both quantification of modified nucleosides and RNA sequencing for epitranscriptomics**  
**D. Touboul<sup>1</sup>, L. Li En Tay<sup>2</sup>, N. Ulryck<sup>2</sup>, S. Bourcier<sup>1</sup>, E. Nicol<sup>1</sup>, M. Graille<sup>2</sup>**  
<sup>1</sup> *LCM, Ecole Polytechnique - Palaiseau (FR)*  
<sup>2</sup> *BIOC, Ecole Polytechnique - Palaiseau (FR)*
- 10:30 *Break (30')*
- 11:00 **INV-4 – A quaternary hybrid instrument for state-of-the-art FT-ICR Mass Spectrometry at 14.5 and 21 Tesla**  
*Invited lecture*  
**C. Weisbrod<sup>1</sup>, J.D. Canterbury<sup>2</sup>, M.W. Senko<sup>2</sup>, L. Babcock-Adams<sup>1</sup>, M. Polak<sup>1</sup>, N.K. Kaiser<sup>1</sup>, L.C. Anderson<sup>1</sup>, J.P. Quinn<sup>1</sup>, M.L. Aguilera<sup>1</sup>, R.P. Rodgers<sup>1</sup>, C.L. Hendrickson<sup>1</sup>, K. Hakansson<sup>1</sup>**  
<sup>1</sup> *National High Magnetic Field Laboratory - Tallahassee (US)*  
<sup>2</sup> *Thermo Fisher Scientific - San Jose (US)*
- 11:30 **#30 - Quantitative top-down proteomics analysis from 1–50 human cells using spray-capillary CE-MS**  
**S. Wu**  
*Univ. Alabama - Tuscaloosa (US)*
- 12:00 Flash poster talks
- 12:30 *Lunch and poster session*

DAY 2 - TUESDAY, APRIL 28<sup>TH</sup> - AFTERNOON

- 14:30 **INV-5 – Title to come**  
*Invited lecture*  
**J.M. Spraggins**  
Vanderbilt Univ., Nashville/TN (US)
- 15:00 **#26 - The more the merrier: multimodal dissociation for native top-down MS on an FTICR**  
**A. Kádek<sup>1</sup>, E. Gurler<sup>1,2</sup>, T. Smrcka<sup>1,2</sup>**  
<sup>1</sup> Institute of Microbiology CAS - Prague (CZ)  
<sup>2</sup> Charles Univ. - Prague (CZ)
- 15:30 **#22 - Evaluation of dissolved organic matter structural models using systematic LC-HRMS and IMS-HRMS investigation of synthetic molecules**  
**J. Hawkes<sup>1</sup>, A. Craig<sup>1</sup>, A. Flygare<sup>1</sup>, L. Moodie<sup>1</sup>, P. Oliveira<sup>2</sup>, L. Valadares Tose<sup>2</sup>, K. Jeanneditfouque<sup>2</sup>, F. Fernandez Lima<sup>2</sup>**  
<sup>1</sup> Univ. Uppsala (SE)  
<sup>2</sup> Florida International Univ. - Miami (US)
- 16:00 *Break (30')*
- 16:30 **INV-6 – timsMRMS – the next generation of ultra-high resolution MS instrumentation**  
*Invited lecture*  
**C.A. Wootton<sup>1</sup>, A. Theisen<sup>1</sup>, G.F. Brabeck<sup>1</sup>, M.E. Colley<sup>5</sup>, J.M. Spraggins<sup>5</sup>, J. Maillard<sup>2,3</sup>, C.P. Rüger<sup>3</sup>, C. Afonso<sup>3,4\*</sup>, P. Giusti<sup>2,3,4</sup>**  
<sup>1</sup> Bruker Daltonics GmbH & Co. Kg, Bremen (DE)  
<sup>2</sup> TotalEnergies One Tech, R&D, Downstream Processes & Polymers, TotalEnergies Research & Technology Gonfreville, Harfleur (FR)  
<sup>3</sup> International Joint Laboratory, iC2MC: Complex Matrices Molecular Characterization, Harfleur (FR)  
<sup>4</sup> Univ Rouen Normandie, INSA Rouen Normandie, CNRS, Normandie Univ, COBRA UMR 6014, INC3M FR 3038, Rouen (FR)  
<sup>5</sup> Department of Biochemistry, MRBIII U9228, Vanderbilt Univ. (US)
- 17:00 **#36 - Fast Photochemical Oxidation of Nucleic acids (FPON) enables submolecular mapping of protein–DNA interfaces and conformational dynamics by High-Resolution Mass Spectrometry**  
**P. Novak<sup>1</sup>, E. Biryukova<sup>1</sup>, M. Polak<sup>1</sup>, A. Kadek<sup>1</sup>, V. Brinsa<sup>2</sup>, A. Hnizda<sup>2</sup>, J. Cerny<sup>3</sup>**  
<sup>1</sup> Institute of Microbiology, Czech Academy of Sciences - Prague (CZ)  
<sup>2</sup> First Faculty of Medicine, Charles Univ. - Prague (CZ)  
<sup>3</sup> Institute of Biotechnology, Czech Academy of Sciences - Prague (CZ)
- 17:30 **#18 - Structural deciphering of oil and alkyd-based paints: Analysis by depolymerization and HRMS**  
**B. Almasri<sup>1</sup>, C. Rolando<sup>2</sup>**  
<sup>1</sup> Univ. Lille, UAR CNRS 2014, US INSERM 41, PLBS, Villeneuve d'Ascq (FR)  
<sup>2</sup> CARMeN Institute, Univ. Rouen Normandy (FR)

DAY 3 - WEDNESDAY, APRIL 29<sup>TH</sup> - MORNING

- 09:00**      **INV-7 – Life in a Nutshell: biotic and abiotic chemistry in natural complex systems**  
*Invited lecture*  
**P. Schmitt-Kopplin**<sup>1,2,3</sup>  
<sup>1</sup> Technical Univ. Munich TUM, Analytical Food Chemistry, Weihenstephan, Freising (DE)  
<sup>2</sup> Helmholtz Munich, Analytical BioGeoChemistry, Oberschleissheim (DE)  
<sup>3</sup> Max Plank Institute for Extraterrestrial Physics, Center for Astrochemical Studies, Garching (DE)
- 09:30**      **INV-8 – Aerosolomics for maritime emissions and engine decarbonization: FTMS fingerprints of ammonia dual-fuel exhaust and wet-scrubber discharges**  
*Invited lecture*  
**C. Rürger**<sup>1</sup>, **H. Czech**<sup>1</sup>, **E. Schneider**<sup>1</sup>, **H. Hansen**<sup>1</sup>, **F. Carl**<sup>1</sup>, **S. Ehlert**<sup>2</sup>, **M. Aguilera**<sup>3</sup>,  
**T. Streibel**<sup>1</sup>, **B. Buchholz**<sup>4</sup>, **R. Zimmermann**<sup>1</sup>  
<sup>1</sup> Univ. Rostock, Department of Analytical Chemistry - Rostock (DE)  
<sup>2</sup> Photonion GmbH - Schwerin (DE)  
<sup>3</sup> National High Magnetic Field Laboratory - Tallahassee (US)  
<sup>4</sup> Univ. Rostock, Department of Piston Machines and Internal Combustion Engines - Rostock (DE)
- 10:00**      **#34 - Development of FTICR MS methods for the advanced molecular characterization of electrolytes and passivation layers in lithium-ion batteries**  
**T. Sombret**<sup>1</sup>, **E. Kherchiche**<sup>1</sup>, **M. Hubert-Roux**<sup>1</sup>, **A. Gajan**<sup>2</sup>, **J. Maillard**<sup>3</sup>, **S. Ollivier**<sup>1</sup>,  
**C. Afonso**<sup>1</sup>, **P. Giusti**<sup>3</sup>  
<sup>1</sup> Univ. Rouen Normandie, INSA Rouen Normandie, Univ. Caen Normandie, ENSICAEN, CNRS, Institut CARMeN UMR 6064, - Rouen (FR)  
<sup>2</sup> SAFT, Corporate Research, - Bordeaux (R)  
<sup>3</sup> TotalEnergies OneTech, TotalEnergies Research & Technology Gonfreville, Harfleur (FR)
- 10:30**      *Break (30')*
- 11:00**      **INV-9 – Deep learning-enhanced characterization of (Glyco-) peptide fragmentation on the Orbitrap-Omnitrap**  
*Invited lecture*  
**S. Mohammed**  
Univ. Oxford and the Rosalind Franklin Institute (UK)
- 11:30**      **#19 - Surpassing DFT limitations in FT MS: transient fitting via parallelized genetic algorithm**  
**C. Rolando**<sup>1</sup>, **U. Abdulkarimova**<sup>2</sup>, **P. Collet**<sup>3</sup>  
<sup>1</sup> CARMeN Institute, Univ. Rouen Normandy (FR)  
<sup>2</sup> French-Azerbaijani Univ. - Baku (AZ)  
<sup>3</sup> Univ. Andrés Bello - Viña Del Mar (CL)
- 12:00**      Flash poster talks
- 12:30**      *Lunch and poster session*

DAY 3 - WEDNESDAY, APRIL 29<sup>TH</sup> - AFTERNOON

- 14:30**      **INV-10 – AI-driven software development and machine learning optimization for FTICR mass spectrometry**  
*Invited lecture*  
**W. Kew<sup>1</sup>, K.J. Zemaitis<sup>1</sup>, P. Xiang<sup>1</sup>, R. Chu<sup>1</sup>, Y. Corilo<sup>1</sup>, J. Lindquist<sup>1</sup>, S. Munikoti<sup>1</sup>, J. Strube<sup>1</sup>, T.P. Wörner, M. Biel<sup>2</sup>, A.A. Makarov<sup>2</sup>, L. Paša-Tolić<sup>1</sup>**  
<sup>1</sup> Pacific Northwest National Laboratory, Richland, WA (US)  
<sup>2</sup> Thermo Fisher Scientific, Bremen (DE)
- 15:00**      **#03 - Molecular characterization of bio-based binder after outdoor aging and PAV aging by Orbitrap mass spectrometry**  
**O. Lacroix, N. Dolmazon, S. Laage**  
TotalEnergies OneTech - Solaize (FR)
- 15:30**      **#08 - Spatial mapping of adrenal steroidogenesis by MALDI-FTICR Mass Spectrometry Imaging**  
**E. Nicol<sup>1</sup>, F. Bonnet-Serrano<sup>2</sup>, L. Thomeret<sup>2</sup>, F. Violon<sup>2</sup>, K. Perlemoine<sup>2</sup>, M. Favier<sup>3</sup>, P. Renquet<sup>1</sup>, A. Jouinot<sup>2</sup>, J. Bertherat<sup>2</sup>, G. Assié<sup>2</sup>, D. Touboul<sup>1</sup>**  
<sup>1</sup> LCM, IP Paris, Ecole Polytechnique, CNRS UMR 9168 - Palaiseau (FR)  
<sup>2</sup> INSERM U1016-CNRS UMR8104, Institut Cochin - Paris (FR)  
<sup>3</sup> Plateforme HistIM, Institut Cochin - Paris (FR)
- 16:00**      **INV-11 – Unveiling the molecular complexity of produced water: from predictive modeling to HPLC-21T FT-ICR MS**  
*Invited lecture*  
**B. Gontijo<sup>1</sup>, J. Roque<sup>1</sup>, H. Machado<sup>1</sup>, B. Acioli<sup>1</sup>, M. Aguilera<sup>2</sup>, I. Medeiros<sup>3</sup>, R. Mesquita<sup>3</sup>**  
<sup>1</sup> UFG - Goiania (BR)  
<sup>2</sup> MagLab - Tallahassee (US)  
<sup>3</sup> PETROBRAS - Rio de Janeiro (BR)
- 16:30**      *Break (30')*
- 17:00**      **Social activities:**  
*Walking tour of the city center of Rouen*
- 19:30**      Conference dinner (at the Joan of Arc Historical)

DAY 3 - THURSDAY, APRIL 30<sup>TH</sup> - MORNING

- 09:00 **INV-12 – Be patient and release the pressure: recipe for high-resolution charge detection mass spectrometry**  
*Invited lecture*  
**A. Heck**  
*Univ. Utrecht, The Netherlands*
- 09:30 **#14 - Direct Screening of Diamondoids and Geochemical Markers in Brazilian Crude Oils by APPI (+) FT-ICR MS - Insights into Thermal Maturity**  
**D. Muller<sup>1</sup>, T. Covas<sup>1</sup>, R. Pereira<sup>1</sup>, M. Rangel<sup>1</sup>, J. Roque<sup>1</sup>, Y. Rocha<sup>2</sup>, J. Lopes<sup>2</sup>, I. Souza<sup>2</sup>, B. Vaz<sup>1</sup>**  
<sup>1</sup> CEMEP - Federal Univ. Goiás - Goiania (BR)  
<sup>2</sup> CENPES - Petrobras - Rio de Janeiro (BR)
- 11:00 **INV-13 – Advancing single-cell and spatial proteomics with novel LC-MS and tissue dissection workflows**  
*Invited lecture*  
**Y. Kwon<sup>1</sup>, J.M. Fulcher<sup>1</sup>, P. Xiang<sup>1</sup>, P. Dawar<sup>1</sup>, R. Kumar<sup>1</sup>, S.M. Williams<sup>1</sup>, Y. Zhu<sup>1,2</sup>, A. Arif<sup>3</sup>, S.K.Y. Tang<sup>3</sup>, L. Paša-Tolić<sup>1</sup>**  
<sup>1</sup> Pacific Northwest National Laboratory, Environmental Molecular Sciences Div., Richland, WA (US)  
<sup>2</sup> Genentech, Dpt. Proteomic and Genomic Technologies, South San Francisco, CA (US)  
<sup>3</sup> Stanford Univ., Dpt. Mechanical Engineering, Stanford, CA (US)
- 10:30 *Break (30')*
- 11:00 **INV-14 – Protein quantitation across broad mass ranges in FTMS: handle with care!**  
*Invited lecture*  
**Y.O. Tsybin**  
*Spectroswiss, Lausanne (CH)*
- 11:30 **INV-15 – Title to come**  
*Invited lecture*  
**C. Afonso**  
*Univ. Rouen Normandie (FR)*
- 12:00 *Lunch eat in or to go. Closing at 2.00 pm*

## POSTER PROGRAM

- #04** – Dissecting nitrosamine dissociation using tandem mass spectrometry techniques  
**S. Weekes<sup>1</sup>, M. Li<sup>2</sup>, C.A. Wootton<sup>3</sup>, M.P. Barrow<sup>4</sup>, S.W. Holman<sup>5</sup>, A. Ray<sup>6</sup>, P.B. O'connor<sup>4</sup>**  
<sup>1</sup> *Analytical Science Centre of Doctoral Training, Univ. Warwick - Coventry (UK),*  
<sup>2</sup> *Advanced Mass Spectrometry Research Technology Platform, Univ. Warwick - Coventry (UK)*  
<sup>3</sup> *Bruker Daltonics GmbH and Co. Kg - Bremen (DE)*  
<sup>4</sup> *Department of Chemistry, Univ. Warwick - Coventry (UK)*  
<sup>5</sup> *Chemical Dvlpt, Pharmaceutical Technology & Development, Operations, AstraZeneca - Macclesfield (UK)*  
<sup>6</sup> *Analytical Science & Technology, Global Product Dvlpt, Operations, AstraZeneca - Macclesfield (UK)*
- #06** – Analysis of synthetic and environmental micro- and nano-polyethylene terephthalates (PET) based-plastics by depolymerization and HRMS  
**B. Almasri<sup>1</sup>, C. Rolando<sup>2</sup>**  
<sup>1</sup> *Univ. Lille, UAR CNRS 2014, US Inserm 41, PLBS, Villeneuve d'Ascq (FR)*  
<sup>2</sup> *CARMeN Institute, Univ. Rouen Normandy (FR)*
- #09** – Conformer-selective ECD analysis of proteins using a novel gated TIMS-MRMS platform  
**A. Theisen, C.A. Wootton**  
*Bruker Daltonics GmbH & Co. KG - Bremen (DE)*
- #10** – Single ion detection with FT-ICR MS: trapped ion kinetic energy correction for improved charge determination  
**N. Kaiser<sup>1</sup>, S. Beu<sup>2</sup>, C. Hendrickson<sup>1</sup>, J. Quinn<sup>1</sup>, J. Kafader<sup>3</sup>, C. Weisbrod<sup>1</sup>**  
<sup>1</sup> *National High Magnetic Field Laboratory - Tallahassee, FL (US)*  
<sup>2</sup> *S.C. Beu Consulting – Austin/TX (US)*  
<sup>3</sup> *Northwestern Univ. – Evanston/IL (US)*
- #12** – Isomer-level description of complex bio-oils enabled by gTIMS hyphenated to 18 T FTICR MS  
**T. Imhoff, S. Ollivier, J. Maillard, C. Barrère-Mangote, M. Hubert-Roux, M. Mignot, P. Giusti, C. Afonso**  
*Institut CARMeN UMR CNRS 6064, Univ. Rouen Normandie, Mont-Saint-Aignan, Rouen (FR)*
- #13** – Novel sample preparation for the pre-treated biomass characterization using MALDI-FTICR  
**P. Renquet<sup>1</sup>, S. Devos<sup>1</sup>, A. Le Masle<sup>2</sup>, F. Bataille<sup>2</sup>, E. Nicol<sup>1</sup>, D. Touboul<sup>1</sup>**  
<sup>1</sup> *Laboratoire de Chimie Moléculaire, CNRS UMR 9168, Institut Polytechnique de Paris - Palaiseau (FR)*  
<sup>2</sup> *IFP Energies nouvelles, Rond-point de l'échangeur de Solaize - Solaize (FR)*
- #16** – Prescribed fire severity reshapes the molecular fingerprint of topsoil organic matter in a mediterranean pinus forest revealed by Orbitrap UHRMS (ESI+)  
**N. Jiménez-Morillo<sup>1</sup>, G. Correa-López<sup>1</sup>, A.Z. Miller<sup>1</sup>, C. Tsitsigianni<sup>1</sup>, B. Martínez-Haya<sup>2</sup>**  
<sup>1</sup> *Instituto de Recursos Naturales y Agrobiología de Sevilla (IRNAS-CSIC), Sevilla (ES)*  
<sup>2</sup> *BIO-MS Group, Dpt. of Physical, Chemical and Natural Systems, Univ. Pablo de Olavide, Sevilla (ES)*
- #17** – Molecular characterization of soils impacted by Tajogaite lava deposition using ultra-high-resolution Orbitrap MS  
**N. Jiménez-Morillo<sup>1</sup>, J. Mataix-Solera<sup>2</sup>, G. Correa-López<sup>1</sup>, S. Gutiérrez-Patricio<sup>1</sup>, J. Martínez-Martínez<sup>3</sup>, J. Vegas<sup>3</sup>, F. Gázquez<sup>4</sup>, B. Martínez-Haya<sup>5</sup>, A.Z. Miller<sup>5</sup>**  
<sup>1</sup> *Instituto de Recursos Naturales y Agrobiología de Sevilla (IRNAS-CSIC), Sevilla (ES)*  
<sup>2</sup> *GETECMA. Dpt. de Agroquímica y Medio Ambiente, Univ. Miguel Hernández, Elche (Spain)*  
<sup>3</sup> *Instituto Geológico y Minero de España (IGME-CSIC), Madrid (Spain)*  
<sup>4</sup> *Department of Biology and Geology. Univ. Almería (Spain)*  
<sup>5</sup> *BIO-MS Group, Dpt. of Physical, Chemical and Natural Systems, Univ. Pablo de Olavide, Sevilla (Spain)*

- #21** – Liquid chromatography coupled to Orbitrap Excedlon Pro for HRMS profiling and steroids quantification in adrenocortical tumors  
**C. Amoros<sup>1</sup>, F. Bonnet-Serrano<sup>2</sup>, B. Farguet<sup>1</sup>, L. Thomeret<sup>2</sup>, K. Perlemoine<sup>2</sup>, F. Violon<sup>2</sup>, G. Assié<sup>2</sup>, J. Bertherat<sup>2</sup>, D. Touboul<sup>1</sup>**  
<sup>1</sup> LCM, IP Paris, Ecole Polytechnique, CNRS UMR 9168 - Palaiseau (FR)  
<sup>2</sup> INSERM U1016-CNRS UMR8104, Cochin Institute - Paris (FR)
- #24** – Compositional analysis hydrothermal extracts of softwood bark by direct-infusion ESI FT-ICR Mass Spectrometry  
**J. Jänis, M. Nikunen, T. Kekäläinen, M. Negm**  
Univ. Eastern Finland - Joensuu (FI)
- #25** – Comparative molecular characterisation of bio-oils from different feedstocks FTICR MS  
**H. Wang<sup>1</sup>, M. Li<sup>2</sup>, S. Weekes<sup>1</sup>, B. Gannon<sup>1</sup>, C.G. Littlejohn<sup>1</sup>, P.B. O'connor<sup>1</sup>, S. Gu<sup>1</sup>, S. Banks<sup>3</sup>, M.P. Barrow<sup>1</sup>**  
<sup>1</sup> Department of Chemistry, Univ. Warwick - Coventry (UK)  
<sup>2</sup> Advanced Mass Spectrometry RTP, Univ. Warwick - Coventry (UK)  
<sup>3</sup> College of Engineering and Physical Sciences, Aston Univ. - Birmingham (UK)
- #27** – Molecular insights into DNA mismatch repair: probing protein–protein and protein–ligand interactions by Native High-Resolution Mass Spectrometry  
**J. Jänis<sup>1</sup>, H. Le<sup>1</sup>, M. Laitaoja<sup>1</sup>, K. Rasheed<sup>2</sup>, P. Friedhoff<sup>2</sup>, J. Lebbink<sup>3</sup>**  
<sup>1</sup> Univ. Eastern Finland - Joensuu (FI)  
<sup>2</sup> Univ. Giessen - Giessen (DE)  
<sup>3</sup> Erasmus MC - Rotterdam (NL)
- #29** – Unraveling the molecular complexity of dissolved organic matter issued from wood combustion using trapped ion mobility spectrometry coupled with 18 T FTICR MS  
**A. Duhamel<sup>1</sup>, E. Varea<sup>2</sup>, C. Wootton<sup>3</sup>, F. Portet-Koltalo<sup>4</sup>, C. Afonso<sup>1</sup>**  
<sup>1</sup> Normandie Univ., CNRS, CARMEN UMR 6064 and FR 3038, Univ. Rouen Normandie - Rouen (FR)  
<sup>2</sup> Normandie Univ, CNRS CORIA UMR 6614, UNIROUEN, INSA Rouen - Rouen (FR)  
<sup>3</sup> Bruker Daltonics GmbH & Co.KG - Bremen (DE)  
<sup>4</sup> Normandie Univ., CNRS, CARMEN UMR 6064 and FR 3038, Univ. Rouen Normandie - Evreux (FR)
- #32** – Development of on-line coupling between supercritical fluid chromatography and 18 T FTICR MS for the molecular characterization of wood bio-oil  
**G. Limousin<sup>1</sup>, T. Imhoff<sup>2</sup>, M. Hubert-Roux<sup>3</sup>, P. Giusti<sup>2</sup>, M. Mignot<sup>3</sup>, C. Afonso<sup>3</sup>**  
<sup>1</sup> Univ. Rouen Normandie, INSA Rouen Normandie, CNRS, CARMEN UMR 6064, INC3M FR 3038/International Joint Laboratory, iC2MC: Complex Matrices Molecular Characterization, Harfleur, France - Mont-Saint-Aignan (FR)  
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- #33** – Development of a hyphenated LC-MS method to characterize N- glycan structures of recombinant glycoproteins produced in microalgae  
**X. Richard<sup>1</sup>, O. Perruchon<sup>1</sup>, P. Lerouge<sup>1</sup>, S. Ollivier<sup>2</sup>, C. Afonso<sup>2</sup>, E. Mathieu-Rivet<sup>1</sup>, C. Loutelier-Bourhis<sup>2</sup>**  
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- #35** – Fundamental Understanding of interfacial mechanisms of Li-ion batteries by FTICR mass spectrometry and imaging mass spectrometry: effect of lithium difluorophosphate as an electrolyte additive  
**T. Sombret<sup>1</sup>, E. Kerchiche<sup>1</sup>, M. Hubert-Roux<sup>1</sup>, A. Gajan<sup>2</sup>, J. Maillard<sup>3</sup>, C. Afonso<sup>1</sup>, P. Giusti<sup>3</sup>**  
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- #37** – Help wanted: trying to understand ICR m/z peaks splitting of specific ions produced by MALDI or SALDI  
**J. Far, W.H. Müller, E. De Pauw, G. Eppe**  
Mass Spectrometry Laboratory (MSLab), Univ. Liège (BE)
- #40** – Extending high-mass performance in Orbitrap-based CDMS via FTMS booster-enhanced acquisition and isotope depletion  
**L. Li<sup>1</sup>, A. Kozhinov<sup>2</sup>, K. Nagornov<sup>2</sup>, Y. Tsybin<sup>2</sup>, A. Mathew<sup>1</sup>, R. Heeren<sup>1</sup>**  
<sup>1</sup> Maastricht Univ., Maastricht MultiModal Molecular Imaging Institute (M4I), Maastricht (NL)  
<sup>2</sup> Spectroswiss - Lausanne (CH)
- #41** – Extending protein sequence coverage in Orbitrap-based top-down proteomics using FTMS booster-enhanced acquisition and isotope depletion  
**T. Tebi<sup>1</sup>, M.A.H. Ron<sup>1</sup>, M. Anjusha<sup>1</sup>, L. Linglan<sup>1</sup>, O.T. Yury<sup>2</sup>, K. David<sup>3</sup>, O.N. Konstantin<sup>4</sup>**  
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