

41 th French Days of Mass Spectrometry, Montpellier



UNIVERSITÉ DE
MONTPELLIER



la science pour la vie, l'humain, la terre



LUNDI
30 JUIN

09h00 – 11h00

Formation

David TOUBOUL - Marceau LEVASSEUR

Classification et annotation de spectres MS/MS par réseau moléculaire

11h15 – 13h00

Club Jeunes SFSM

13h00 – 14h00

Accueil des participants

14h00 – 14h45

Cérémonie d'ouverture

14h45 – 15h30

Plénière n°1

Gérard Hopfgartner - Multiple Dissociation Methods for Complementary LC-MS/MS Analysis: Potential and Pitfalls

Université de Genève

15h30 – 16h00

Prix de la thèse SFSM – Isaure Sergent

16h00 – 16h30

Pause Café



16h30 – 16h45

Spotlight : AffiniseP

Naraghi K. : Innovative SPE kits for sample preparation and selective extraction in MS-based analysis

16h45 – 17h15

Prix de la recherche SFSM – David Ropartz

17h25 – 20h00

Cocktail de Bienvenue

MARDI

1^{er} JUILLET

09h00 – 09h45

Plénière n°2

Charlotte Uetrecht – Flying viruses – mass spectrometry meets X-rays
Université de Siegel

09h45 – 10h05

Session Flash Poster Impairs



10h05 – 10h35

Pause Café



10h35 – 12h05

Biology / Health *Amphi A*

HRMS for complex organic mixtures *Amphi B*

Oral n°1 : Léo Froelicher-Bournaud

Automated quantification of leniolisib in human plasma by liquid chromatography-tandem mass spectrometry

Oral n°2 : Maud Gregson

Non-invasive and rapid characterization of Atopic Dermatitis by Mass Spectrometry

Oral n°3 : Corentin Beaumal

Investigating the Complexity of Fc Fusion Proteins O-glycosylation using electron-based fragmentation approaches

Oral n°4 : Salomé Poyer

Development of HILIC-MS and cIMS-MS methods to study enzymatic degradation of oligosaccharides *in situ*

Oral n°5 : Noémie Auchère

Comprehensive characterization of PET pretreated waste: a non-targeted approach to support advance recycling processes by ASE-RPLC-ESI-HRMS/MS and molecular networks

Oral n°6 : Antoine Duhamel

Advanced characterization of dissolved organic matter by trapped ion mobility spectrometry coupled to 18 T Fourier transform ion cyclotron mass spectrometry

Oral n°7 : Nathan Traullé

Dopant-assisted apci, a useful method for on-line investigation of the lignocellulosic biomass fast pyrolysis products

Oral n°8 : Guillaume Limousin

Development of on-line coupling between supercritical fluid chromatography and high-resolution mass spectrometry for the molecular characterisation of wood bio-oil

12h05 – 13h20

Pause Repas



MARDI

1^{er} JUILLET

13h20 – 14h20

Session Poster N° impairs

14h20 – 15h05

Plénière n°3

Theodore Alexandrov – Spatial Single-Cell Metabolomics: Decoding Metabolism One Cell at a Time
Université de San Diego

15h05 – 15h20

Spotlight : Jeol

Senoussaoui I. : Exploring the Power of Ionization: Versatile Techniques in the JMS-T2000GC Mass Spectrometer

15h20 – 15h50

Pause Café



15h50 – 17h40

MS-Imaging *Amphi A*

Exposome / Environnement *Amphi B*

Oral n°9 : David Touboul

Steroid imaging in adrenocortical tissue using chemical derivatization and MALDI-FTICR

Oral n°10 : Mélanie Moreau

A new spatial multiomics and multimodal workflow for deeper biological sample analysis in human pancreatic cancer

Oral n°11 : Théo Sombret

Advanced molecular characterization of passivation layers in lithium-ion batteries by FTICR imaging mass spectrometry

Oral n°12 : Aline Cournut

TOF-SIMS imaging combined with LC-MS/MS and molecular network: multimodal analysis to decipher the interaction between Cognac barrels and environmental fungi

Oral n°13 : Brunella Cipolletta

Immobilized Trypsin – Enhanced MALDI-Imaging Analysis of Surfaces and Cross-Sections of Works of Art,

Oral n°14 : Laurent Debrauwer

Widening exposome exploration with a novel multiplexed HRMS analytical approach : a case study on pesticide internal exposure

Oral n°15 : Chloé Arthozoul

Tracing the evolution of the CH₂ patterns in the Soluble Organic Matter (SOM) of carbonaceous chondrites using UHRM

Oral n°16 : Bayan Almasri

Structural deciphering of environmental polyesters' microplastics

Oral n°17 : Clémentine Gavalon

From Water Contamination to Human Exposure: A Mass Spectrometry-Based Approach for Persistent, Mobile, and Toxic Compounds

Oral n°18 : Youcef Haddad

Multi-level mass spectrometry to reveal the presence of a third liquid phase in living plant tissues



MERCREDI
2 JUILLET

09h00 – 09h45

Plénière n°4

Caroline Tokarski – From Bench to Artwork: Connecting Fundamental Research to Cultural Heritage through Mass Spectrometry
Université de Bordeaux

09h45 – 10h00

Spotlight : Covaris

Bhattacharyya D. : Confident Proteomics Data from FFPE – Starting with a Comprehensive, Robust Sample Preparation Workflow

10h00 – 10h20

Session Flash Poster pairs



10h20 – 10h50

Pause Café



10h50 – 12h00

Forensics / Heritage
Amphi A

Proteomics
Amphi B

Oral n°19 : Alix Munoz
Beyond Routine: How LC-HRMS Cracked a Critical Forensic Case
Oral n°20 : Clothilde Comby-Zerbino
Luminescence in archaeological lime mortars: an investigation by FT-ICR-MS
Oral n°21 : Massamba Ndiaye
Bottom-up proteomics analysis of immunoglobulins in equine plasma by TIMS-MS to improve doping control

Oral n°22 : Pierre Otuszewski
Multi-omics analysis of potato tubers using a single extraction method using HRMS
Oral n°23 : Salomé Coppens
Unlocking Single-Cell Proteomics: development, optimization and application of a new workflow for CSF cells profiling
Oral n°24 : Lucas Ferreira de Castro
A Microfluidic Device for Electrochemical Cell Lysis and Protein Digestion: Towards Integrated Multi-Omics Analysis

12H00 – 13h15

Pause Repas



13h15 – 14h15

Session Poster N° pairs

14h15 – 16h25

Instrumentation / Structurale *Amphi A*

Oral n°25 : Evolène Deslignière

Electron capture charge reduction enables recording long transients in Orbitrap-based CDMS for lower mass analytes

Oral n°26 : Eva Audouin

Development of a subzero nano-chromatography system coupled to FT-ICR-MS and ECD for characterizing structural changes in oxidized proteins

Oral n°27 : Fabien Chirot

Addressing structural relaxation and oligomer stability using trap-and-release tandem ion mobility spectrometry

Oral n°28 : Emmanuelle Sachon

Fundamental investigation of peptide fragmentation by collision mass spectrometry: structure/dissociation relationship

Oral n°29 : Léa Letissier

In-depth characterization of multimeric Fc-fusion proteins using native MS and denaturing Top-Down MS with integrated Proton Transfer Charge Reduction (PTCR)

Oral n°29 : Sarah Delaux

Deciphering heterogeneities of endogenous *Torpedo Marmorata* Nicotinic Acetylcholine Receptor by Charge Detection Mass Spectrometry and Intact Mass Analysis

Metabolomics *Amphi B*

Oral n°31 : Lantomalala Elsa

Razafindrabenja

Combining AcquireX™ data acquisition and Feature-Based Molecular Networking approach to deeply explore oxidation markers of condensed tannins

Spotlight : MS Vision

Casanova J-M. : Maintenance, Optimization, and Development in Mass Spectrometry

Oral n°32 : Thomas Yon

Exploring chemodiversity and potential applications of Polynesian microalgae

Oral n°33 : Océane Busont

Exploring bioactive compounds in plant biomass through molecular networks and mass spectrometry imaging

Oral n°34 : Ilias El Ouar

A novel peptides database based on t-SNE algorithm for enhanced dereplication of natural products in high resolution tandem mass spectrometry

Oral n°35 : Acécio De Sousa Dias

Aroma and phenolic compounds of new white grape varieties using targeted and untargeted mass spectrometry approaches

16h25 – 16h50

Pause Café



16h50 – 17h10

Special guest : Jean Claude Tabet

After a 50-year career, partly with the SFSM, new adventures? The end of a chimera: instrument-independent CID spectra? MS is never without surprises !

17h10 – 18h10

40 ans SFSM

18h10 – 01h00

Diner de Gala



09h30 – 10h00

Accueil Café



10h00 – 11h10

Volatolomics

Amphi A

Oral n°36 : Jérémy Ratel

Fecal volatolomics to detect newborns at high risk of Necrotizing Enterocolitis eight days before the first symptoms

Oral n°37 : Isabelle Andriot

Comparison of Secondary Electro-Spray Ionisation-Orbitrap-MS (SESI-Orbitrap) and Proton Transfer Reaction-ToF-MS (PTR-MS) for aroma analyses in headspace and nospace conditions

Oral n°38 : Aya Fakih

Volatolomics based on HS-SPME-GC-Q Exactive-Orbitrap MS to phenotype *Listeria monocytogenes* grown on synthetic medium

Lipids

Amphi B

Oral n°39 : Delphine Vergoz

Singular features of lipidome of *Acinetobacter baumannii* antibiotics persister cells by HPLC-MS/MS and MALDI-FTICR MS

Spotlight : Bruker

Siroit C. : Advances in hardware design and function of the new timsOmni MS Platform - Discover more with the new benchtop timsTOF system

Oral n°40 : Cyrielle Clément

Advancing Skin Ceramide Analysis: Innovative Profiling Using Supercritical Fluid Chromatography and High-Resolution Mass Spectrometry (Q-ToF)

11h10 – 11H25

Spotlight : Waters

Claude E. : Latest improvements in DESI mass spectrometry imaging (MSI)

11h20 – 12h10

Plénière n°5

Régis Gougeon – Message in a bottle: molecular memories of wines and spirits
Université de Bourgogne

12H10 – 12h45

Clôture



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