

PhD Advanced Course: Advanced Analytical Tools: Multiple Applications for Mass Spectrometry (3rd Edition)

Programa Provisório (sujeito à confirmação dos palestrantes)

June 24, 2024 (Monday)

Introduction to Mass Spectrometry and Instrumentation. Applications: Pharmaceutical and Biomedical; Clinical and Forensic Toxicology

9:30h – Opening Session (Maria Rosário Bronze)

9:45h – Noélia Duarte (FFULisboa): “Fundamentals on mass spectrometry and instrumentation”.

11:00h – Discussion

11:15h – Break

11:30h – Andreia Bento da Silva – “The Structural Analysis Laboratory at FFUL - Views and Resources for Research”

12:30h – Discussion

13:00h – Lunch Break

14:30h - Vitória Rodrigues (Synlab): “Novel methodologies in the identification of microorganisms”

15:30h – Discussion

15:45h - Antonio Castanera (INMLCF): “Mass spectrometry and workflow in forensic toxicology”

16:45h – Discussion

June 25, 2024 (Tuesday)

MS Applications: Pharmaceutical and Biomedical; Clinical and Forensic Toxicology; Metabolomics

9:30h – João Ruivo (IPDJ): “Application of Mass Spectrometry in Doping Control”

10:30h – Discussion

10:45h – Tiago Gonçalves (UMLDBQ): «The Military Laboratory Unit for Biological and Chemical Defense and Mass Spectrometry»

11:45 – Discussion

12:00 – José Paulo da Silva (UAig): "LC-MS based analysis of marine biotoxins"

13:00h – Discussion

13:15h - Lunch Break

14:30h - Ana Guerreiro (UniMS – ITQB/IBET): “Tackling the complexity of metabolomics using MS platforms”

15:30h – Discussion

15:45h – Silvia Rocha (UAveiro): Body fluids metabolomics as a powerful strategy for biomarkers discovery based on advanced GC-MS based methodologies

16:45 – Discussion

June 26, 2024 (Wednesday)

MS Applications: Foodomics and Lipidomics

9:30h – Pedro Mena (University of
 plant bioactives: from farm to fork"
 10:30h – Discussion

Parma): “Targeted LC-MS applications for

10:45h – Ville Koistinen (University of Turku) – “Metabolomics analysis of phytochemicals from food”
 11:45 – Discussion
 12:00 – Gerardo Rivera “to be defined”
 13:00 – Discussion
 14:30 – Maria Rosário Domingues (UAveiro): “Lipidomics in health and disease”.
 15:30h – Discussion

June 26, 2024 (Wednesday)

MS Applications: Proteomics

9:30h – Bruno Manadas (CNCB-UCoimbra): “A different vision of translational research in biomarker discovery: Case Study for Parkinson’s disease potential biomarkers”
 10:30h – Discussion
 10:45h – Ricardo Gomes (UniMS - ITQB/iBET): “The analytical power of the QTOF-LC-MS platform to assess biologics quality attributes”
 11:45h – Discussion
 12:00 – Hugo Osório (IPATIMUP): “Mass spectrometry-based proteomics in cancer”
 13:00h – Discussion
 13:15h – Lunch Break
 14:30h – Carlos Cordeiro (FCULisboa): “Magnetic Resonance Mass Spectrometry: From small molecules to macromolecular assemblies”
 15:30 – Discussion
 15:45 – Debora Penque (INSA): “Disease biomarkers discovery by Proteomics-based approaches”
 16:45 – Discussion

June 27, 2024 (Thursday)

Other applications of mass spectrometry

09:30h – Alexandra Antunes (IST-Ulisboa): “to be defined”.
 10:30h – Discussion
 10:45h – João Paulo Correia Leal (CTN – IST): The lab in a nutshell: fundamental Chemistry Studies in a Mass Spectrometer
 11:45h – Discussion
 12:00h – Sofia Catarino (ISA-ULisboa): “ICP-MS applications for wine quality and authenticity assessment
 13:00 – Discussion
 13:15h – Lunch Break
 14:30h – Hugo Santos (FCT-UNL) Mass-Up: an all-in-one open software application for MALDI-TOF mass spectrometry knowledge discovery
 16:45 – Discussion



June 28, 2024 (Friday)

Other applications of mass spectrometry

9:30h – José Câmara (University of Madeira) – “to be defined”

10:30h – Discussion

10:45h – Paulo Madeira (ASCENZA): “to be defined”

11:45 – Discussion

12:00h – Cristina Barrocas Dias (UÉvora): “to be defined”

13:00 – Discussion

13:15h – Lunch Break

14h30 – Tutorial period