

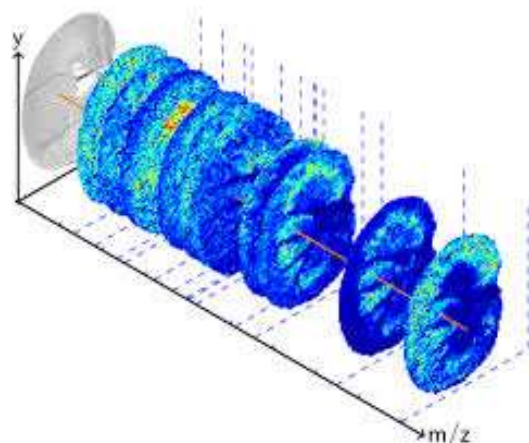
Laboratory of Metallomics and Nanotechnologies

invites you to seminar:

MALDI Imaging of MT in tissue slices of chicken embryos

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MALDI Imaging mass spectrometry has entered the field of tissue-based research by providing unique advantages for analyzing tissue specimen in an unprecedented detail. A broad spectrum of analytes ranging from proteins, peptides, protein modification over small molecules, drugs and their metabolites as well as pharmaceutical components, endogenous cell metabolites, lipids, and other analytes are made accessible by this *in situ* technique in tissue. Some of them were even not accessible in tissues within the histological context before. Thereby, the great advantage of MALDI Imaging is the correlation of molecular information with traditional histology by keeping the spatial localization information of the analytes



after mass spectrometric measurement. This method is label-free and allows multiplex analysis of hundreds to thousands of molecules in the very same tissue section simultaneously. Imaging mass spectrometry brings a new quality of molecular data and links the expert discipline of pathology and deep molecular mass spectrometric analysis to tissue-based research. This review

will focus on state-of-the-art of MALDI Imaging mass spectrometry, its recent applications by analyzing tissue specimen and the contributions in understanding the biology of disease as well as its perspectives for pathology research and practice.



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