

# Half Day Short Course

## A04. Mass Spectrometry Imaging (MSI)

### Content

1. Elemental & Molecular MSI (Ionization Techniques & Mass Analyzers)
2. MSI Workflows and Sample Preparation Strategies for :  
*Lipids & Metabolites*  
*Proteins & Peptides*  
*Glycans*  
*MS-based Immunoimaging*
3. Data Analysis

### Details

Instructor	Prof. Martina Marchetti-Deschmann TU Wien Institute of Chemical Technologies and Analytics
Date	27 August 2023
Time	13:30–16:30 h
Duration	3 h plus coffee break
Location	CICG Geneva
Fees	130 CHF (delegate) 80 CHF (student)
Included	Coffee break If booking 2 courses: lunch

### Instructor

*Prof. Martina Marchetti-Deschmann* is Professor for Mass Spectrometric Methods / Analytical Chemistry at the TU Wien, where she is heading the Research Group of Mass Spectrometric Bio- and Polymer Analysis in the Research Division of Imaging and Instrumental Analytical Chemistry at the Institute of Chemical Technologies and Analytics. She obtained her PhD in Chemistry at the University of Vienna and is working in the field of Instrumental Analytical Chemistry for over 20 years. Martina started her scientific career in mass spectrometry and hyphenated techniques, mainly in the field of Proteomics and Glycomics. Her special interests are fragmentation studies (lipids, proteins, peptides) and the characterization of post-translational modifications.



Prof. M. Marchetti-Deschmann

Over the last years she specialized in Mass Spectrometry Imaging (MSI). Her group was the first lab that combined molecular and elemental imaging in multi-instrument approaches (MS & Infrared, (Immuno)histology, Fluorescence, XRF or AFM, but also MALDI & LA-ICP MSI). She is an internationally recognized expert for instrument advances and innovative methodologies that allow for multi-measurements of one sample to gather localized, multi-instrument information down to the cellular level.

Martina seeks to advance mass spectrometric research, education and professionalization. Besides others she is founding member of the MS Imaging Society (MSIS, 2017), being also president since 2021. She published over 137 peer-reviewed articles, 7 book chapters and holds three patents. She received the eLearning Award at TU Wien in 2010, was awarded the Beynon Prize from the Journal "Rapid Communications in Mass Spectrometry" in 2007 and the Fritz Feigl Prize in 2013 awarded by the Austrian Society of Analytical Chemistry (ASAC).