

Half Day Short Course

M03. MALDI Mass Spectrometry

Content

1. How exactly does MALDI work?
2. MALDI vs. other soft ionization methods
3. MALDI ionization mechanism
4. Typical applications of MALDI
5. MALDI imaging

Details

Instructor	Prof. Renato Zenobi ETH Zurich
Date	27 August 2023
Time	09:00–12:00 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



Dr. R. Zenobi

Prof. Renato Zenobi is Professor of Analytical Chemistry at ETH Zurich. He received a M.S. degree from ETH and a Ph.D. at Stanford University. This was followed by two postdoctoral appointments at the University of Pittsburgh and the University of Michigan. Renato Zenobi returned to Switzerland in 1992 as a Werner Fellow at the EPFL, Lausanne, where he established his own research group. He became assistant professor at the ETH in 1995, was promoted to associate professor in 1997, and to full professor in 2000. In 2010 he was appointed Associate Editor of Analytical Chemistry (American Chemical Society). He has chaired the 2014 International Mass Spectrometry Conference in Geneva, Switzerland.

Zenobi's research areas include laser-based analytical chemistry, electrospray and laser-assisted mass spectrometry, ambient mass spectrometry, and near-field optical microscopy and spectroscopy. He has made important contributions to the understanding of the ion formation mechanism in matrix-assisted laser desorption/ionization (MALDI) mass spectrometry, and to ambient ionization methods. He is well known for the development of analytical tools for the nanoscale, in particular TERS (tip-enhanced Raman spectroscopy), a spectroscopic methodology with ≈ 10 nm spatial resolution.

Renato Zenobi has received many awards for his scientific work, including the Ruzicka Prize, the Merck-Prize, the Simon-Widmer Award, honorary professorships at the Chinese Academy of Sciences (Changchun), at Hunan University, and at Changchun University of Chinese Medicine, the Thomson Medal, the 2014 RUSNANO prize, the 2015 Fresenius Award (German Chemical Society/GDCh), an ERG Advanced grant (2017), and the 2019 "Golden Owl" honoring excellent teaching at ETH Zurich.