

REGISTRATION

The participation to the Workshop is free-of-charge for all IMASS members in good standing with the 2023 membership fee. They need, however, to register using the link present in the event page on the Web site of the Society

<http://www.imass.it>

IMASS members who cannot attend in person will be able to follow the meeting through our ZOOM platform (details will follow).

The workshop is open, only for in person attendance, to non-IMASS members too, with the following fee:

- **50 Euro in person attendance**

FOR MORE INFORMATION...

If you need more information and indications about the workshop, please contact:

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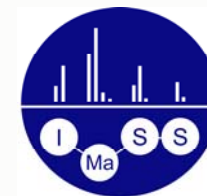
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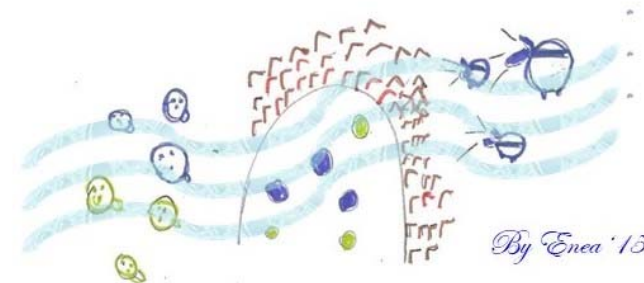


IMASS—Italian Mass
Spectrometry Society

IMASS Sponsored Event

Extreme Chromatography Workshop

*A meeting on next frontiers in
analytical separation*



Rome
May 8, 2023
Marconi room
CNR Headquarters
Piazzale Aldo Moro, 7, Rome

SCIENTIFIC & ORGANIZING COMMITTEE

Fabio BONELLI (Chairman)

Andrea RAFFAELLI (Co-Chairman)

Andrea ARMIROTTI

Stefano BRIZZOLARA

Sergio GALLO

Claudio IACOBUCCI

Simone SIDOLI

SPEAKERS

Andrea ARMIROTTI (IIT)

Michela ANTONELLI (IRBM)

Stefano BRIZZOLARA (SSSup S. Anna)

Luciano CALLIPO (Agilent)

Emanuele CECCON (Restek)

Giulia MAZZOCCANTI (Università di Roma)

Luigi MONDELLO (Università di Messina)

Gabriella PINTO (Università di Napoli)

Antonio TRIOLO (Menarini)

Andrea RAFFAELLI (SSSup S. Anna)

Valentina SCHIAVO (Università di Torino)

Anna SEVERONI (Thermo)

Reverse Phase High Performance Liquid Chromatography (RP-HPLC) is probably the most employed separation procedure for the analysis of organic substances in different matrices. Such a technique takes advantage of differential interactions of the analytes with a non-polar stationary phase and a polar mobile phase. The most diffuse HPLC columns contain a stationary phase based on C18-modified silica and similar derivatives, whereas the mobile phase makes use of water, methanol and acetonitrile, with acidic or basic modifiers or buffers, very often in gradient mode.

Unfortunately, there are some classes of analytes that are too polar to be retained on the above columns (such as polar pesticides) and other compounds, on the contrary, with a so low polarity that they are not able to be released from the stationary phase. These two "extreme" situations come about to be the main topic of this meeting, which will present useful solutions for these challenging analytes.

Moreover, in the frame of "Extreme Chromatography" techniques, bidimensional and comprehensive HPLC will find a place among the workshop presentations, as well as chiral separations.

SCIENTIFIC PROGRAM

Morning Session, Chairman: Fabio Bonelli

- 10:00 Fabio Bonelli: Introduction
- 10:10 Giulia Mazzocanti (Università di Roma La Sapienza)
Frontiers in chromatography: Insights into chiral separations
- 10:50 Gabriella Pinto (Università di Napoli Federico II)
LC-MRM/MS quantification of protein hormones involved in female fertility
- 11:10 Stefano Brizzolara, Andrea Raffaelli (SSSup S. Anna, Pisa)
Challenges in the HPLC Separation and MS Detection of Carotenoids and Liposoluble Vitamins
- 11:30 Andrea Armirotti (IIT, Genova)
A tricky challenge: LC-MS analysis of neurotransmitters and other polar metabolites in mouse cerebrospinal fluid
- 11:50 Luciano Callipo (Agilent)
2D-LC for Organic Molecules Identification in Wine Samples
- 12:10 Michela Antonelli (IRBM)
Practical Considerations for Peptide Analysis
- 12.30 Lunch Break
- Afternoon Session Chairman: Andrea Raffaelli**
- 14:30 Luigi Mondello (Università di Messina)
Comprehensive Two-Dimensional Liquid Chromatography-Tandem Mass Spectrometry for the Analysis of Complex Food Samples
- 15:00 Emanuele Ceccon (Restek)
Polar analytes and large panels, is there necessarily a need to rely to extreme solutions? A reflection on going back to basic
- 15:20 Antonio Triolo (Menarini, Firenze)
LC-MS hints and tips: how to help an imperfect pair to live a perfect married life
- 15:40 Anna Severoni (Thermo)
Ion-exchange chromatography coupled to mass spectrometry (IC-MS) for analysis of polar compounds
- 16.00 Valentina Schiavo (Università di Torino)
Analysis of Underivatized Aminoacids in Food Matrices