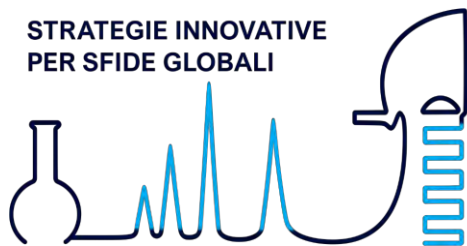


STRATEGIE INNOVATIVE  
PER SFIDE GLOBALI



# XXXII Congresso Nazionale Divisione di Chimica Analitica

6-10 settembre 2026, Venezia

## PROGRAMME

Ca' Foscari University Scientific Campus, Venice Mestre

[www.unive.it/analitica2026-eng](http://www.unive.it/analitica2026-eng)



**Società  
Chimica  
Italiana**  
Divisione di Chimica Analitica

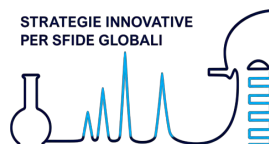


Università  
Ca' Foscari  
Venezia  
Dipartimento di Scienze Ambientali,  
Informatica e Statistica



Università  
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Venezia  
Dipartimento di Scienze  
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**XXXII Congresso Nazionale**  
**Divisione di Chimica Analitica**  
6-10 settembre 2026, Venezia

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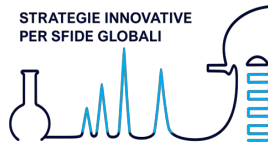
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**XXXII Congresso Nazionale  
Divisione di Chimica Analitica**  
6-10 settembre 2026, Venezia

MEDIA PARTNER

ANALYTICAL &  
BIOANALYTICAL  
CHEMISTRY

Water, Air,  
&  
Soil Pollution

AN INTERNATIONAL JOURNAL OF  
ENVIRONMENTAL POLLUTION

On behalf of the Scientific Committee and the Organising Committee, I am delighted to welcome you to the 32nd National Congress of the Analytical Chemistry Division of the Italian Chemical Society, to be held from 6 to 10 September 2026 at the Scientific Campus of Ca' Foscari University of Venice in Mestre.

“Innovative Strategies for Global Challenges” is the central theme of this year’s Congress. At a time marked by increasingly rapid environmental, health-related and technological transformations, analytical chemistry is called upon not only to measure, but also to generate reliable data, interpret them, and transform them into knowledge and practical tools for decision-making. From this perspective, the Congress aims to highlight the central contribution of our discipline to scientific, technological and social progress.

The scientific programme fully reflects the vitality and interdisciplinary nature of analytical chemistry. Four days of scientific sessions will bring together plenary lectures devoted to particularly topical issues—from the challenge posed by PFAS and innovation in biosensors to green and sustainable analytical chemistry—alongside keynote lectures, parallel oral presentations and three extensive poster sessions. The sessions will cover chemometrics and data quality, bioanalysis and omics, sensors, separation science, spectroscopy, mass spectrometry and electroanalytical chemistry, as well as environmental, food, forensic and toxicological applications and applications in the field of cultural heritage. Particular attention will also be devoted to digitalisation, artificial intelligence, automation and the development of increasingly sustainable approaches.

Above all, Analitica 2026 aims to provide a forum for meeting, discussion and exchange. The dialogue between universities, research institutions and industry, the Young Researcher Award, and the significant space reserved for the younger generations all demonstrate the Division’s commitment to fostering scientific and professional development, encouraging the exchange of ideas and supporting the creation of new collaborations. The social and networking events included in the programme will also help to strengthen the bonds within our community.

It is a particular source of pride for us to welcome you to Venice and Mestre, an area where historical heritage, environmental challenges and the capacity for innovation come together in a truly unique way. I hope that these days will be rich in ideas, stimulating scientific exchanges and lasting relationships, and that they will renew the sense of community that has always been at the heart of the Analytical Chemistry Division.

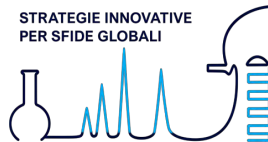
I wish you all a successful and enjoyable Congress.

Carlo Barbante

*Chair Analitica 2026*

## Guidelines for Presenters

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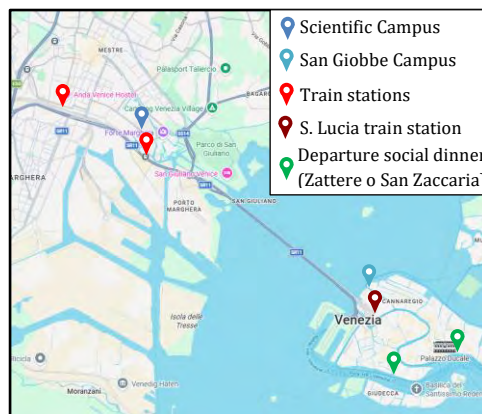
**XXXII Congresso Nazionale  
Divisione di Chimica Analitica**  
6-10 settembre 2026, Venezia

### SCIENTIFIC CAMPUS

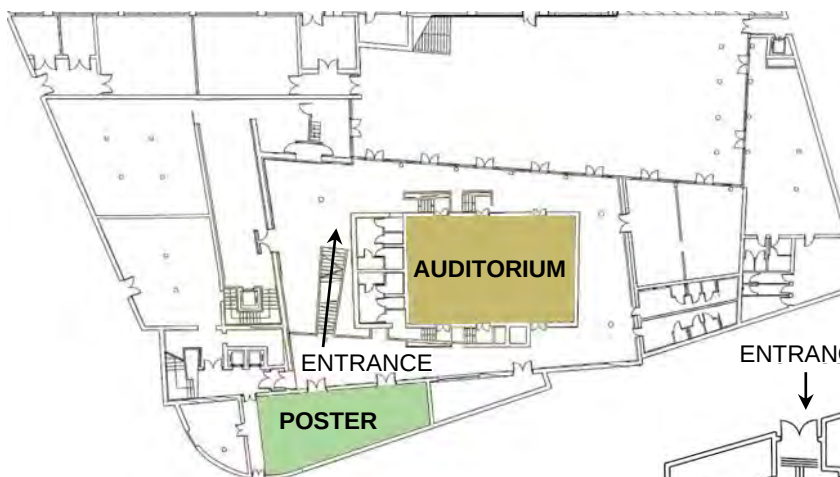
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<https://maps.app.goo.gl/ZRhQF7CSXrPJmd4x7>

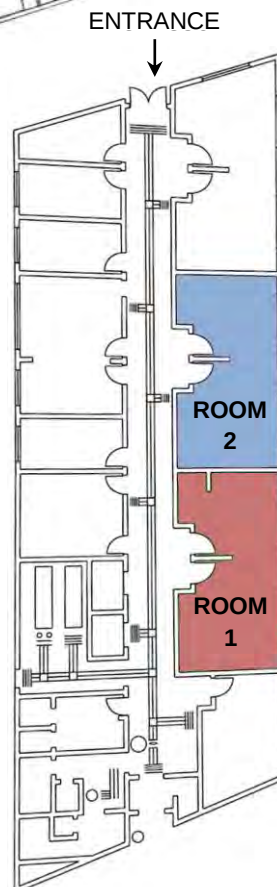
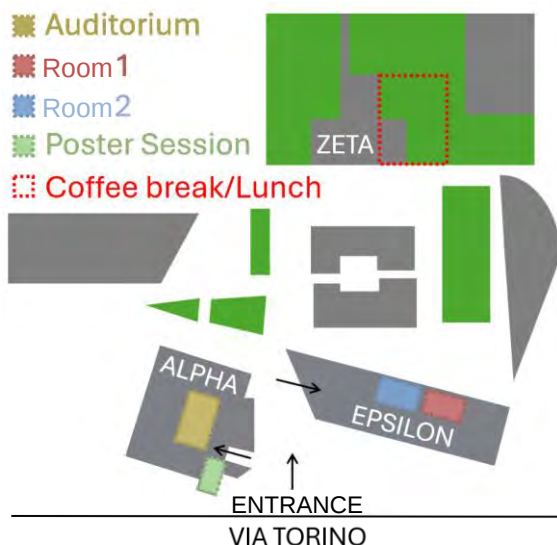
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### BUILDING ALFA FLOOR -1



### SCIENTIFIC CAMPUS



### BUILDING EPSILON GROUND FLOOR

### GUIDELINES FOR ORAL PRESENTATIONS

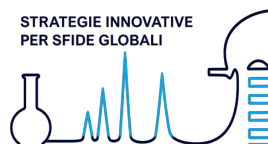
Keynote lectures: 20 minutes (17 minutes for the presentation + 3 minutes for discussion)

Oral presentations: 15 minutes (12 minutes for the presentation + 3 minutes for discussion)

Slides must be prepared using Microsoft PowerPoint in 16:9 format.

Presentation files may be uploaded in the assigned lecture room on the day of the relevant session, no later than 9:00 a.m. for morning presentations or 2:00 p.m. for afternoon presentations. Please contact the staff present in the room for assistance.

## Programme Summary



**XXXII Congresso Nazionale  
Divisione di Chimica Analitica**  
6-10 settembre 2026, Venezia

### Sunday 6 September 2026

|               |                          |
|---------------|--------------------------|
| 17.00 - 21.00 | Participant registration |
| 19.00 - 21.00 | Welcome reception        |

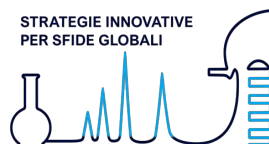
### Monday 7 September 2026 - Morning

|               |                                                               |                                                   |                                                       |
|---------------|---------------------------------------------------------------|---------------------------------------------------|-------------------------------------------------------|
| 08.30 - 09.00 | Participant registration                                      |                                                   |                                                       |
| 09.00 - 09.30 | Congress Opening                                              |                                                   |                                                       |
| 09.30 - 10.15 | Plenary 1 - Environment - R. Ebinghaus<br><i>Auditorium</i>   |                                                   |                                                       |
| 10.15 - 10.35 | Young Researcher Award: D. Spanu<br><i>Auditorium</i>         |                                                   |                                                       |
| 10.35 - 11.05 | COFFEE BREAK                                                  |                                                   |                                                       |
|               | Chemometrics and Data Quality<br>(CHEMO)<br><i>Auditorium</i> | Sensors and Biosensors<br>(SENS)<br><i>Room 1</i> | Bioanalytics & -omics<br>(BIO-OMICS)<br><i>Room 2</i> |
| 11.10 - 11.30 | Keynote C. Malegori                                           | Keynote A. Scroccarello                           | Keynote V. Marassi                                    |
| 11.30 - 11.45 | D. Ballabio                                                   | V. Marchianò                                      | C. D. Calvano                                         |
| 11.45 - 12.00 | F. Marini                                                     | A. Glovi                                          | F. Bartolini                                          |
| 12.00 - 12.15 | B. Benedetti                                                  | B. Cassano                                        | F. Fanti                                              |
| 12.15 - 12.30 | A. Bova                                                       | L. Sartorelli                                     | N. Interino                                           |
| 12.30 - 12.45 | S. Fornasaro                                                  | A. Miglione                                       | A. Cerrato                                            |
| 12.45 - 13.00 | C. Durante                                                    | M. Carbone                                        | E. Salviati                                           |
| 13.00 - 13.15 | S. Pellacani                                                  | P. Kalligosfyri                                   | F. Biondi                                             |
| 13.15 - 14.00 | LUNCH                                                         |                                                   |                                                       |
| 14.00 - 15.00 | POSTER SESSION 1: CHEMO, BIO                                  |                                                   |                                                       |

### Monday 7 September 2026 - Afternoon

|               |                                                               |                                                   |                                                       |
|---------------|---------------------------------------------------------------|---------------------------------------------------|-------------------------------------------------------|
|               | Chemometrics and Data Quality<br>(CHEMO)<br><i>Auditorium</i> | Analytical Spectroscopy<br>(SPA)<br><i>Room 1</i> | Bioanalytics & -omics<br>(BIO-OMICS)<br><i>Room 2</i> |
| 15.00 - 15.05 |                                                               | Keynote W. Giurlani                               | Cristina Giovannoli Award Ceremony                    |
| 15.05 - 15.20 | M. Barbera                                                    |                                                   | J. Brandi                                             |
| 15.20 - 15.35 | B. Giussani                                                   | C. Giovani                                        | S. Cavalera                                           |
| 15.35 - 15.50 | M. Ruocco                                                     | R. A. Picca                                       | P. Di Battista                                        |
| 15.50 - 16.05 | V. Caponigro                                                  | E. De Giglio                                      | M. Locatelli                                          |
| 16.05 - 16.20 | V. Mongelli                                                   | F. Pellegrino                                     | S. Conoci                                             |
| 16.20 - 16.35 | A. Biancolillo                                                | G. Casula                                         | V. Testa                                              |
| 16.35 - 17.00 | COFFEE BREAK                                                  |                                                   |                                                       |
| 17.00 - 17.15 | G. Tamasi                                                     | M. Barbaresi                                      | G. Ventura                                            |
| 17.15 - 17.30 | L. Teja                                                       | G. Putzolu                                        | E. Robotti                                            |
| 17.30 - 17.45 | M. Casale                                                     | C. Adriano                                        | E. Spezzani                                           |
| 17.45 - 18.00 |                                                               |                                                   | G. Solarino                                           |
| 18.00 - 19.00 | Divisional Assembly                                           |                                                   |                                                       |

## Programme Summary



**XXXII Congresso Nazionale**  
**Divisione di Chimica Analitica**  
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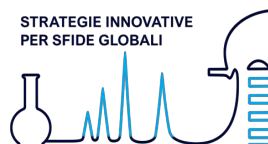
### Tuesday 8 September 2026 - Morning

|               |                                                                        |                                                                 |                                                            |
|---------------|------------------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------|
| 08.30 - 09.00 | Participant registration                                               |                                                                 |                                                            |
| 09.00 - 09.45 | <b>Plenary 2 - Biosensors - S. Campuzano Ruiz</b><br><i>Auditorium</i> |                                                                 |                                                            |
|               | <b>Sensors and Biosensors (SENS)</b><br><i>Auditorium</i>              | <b>Environment and Cultural Heritage (ABC)</b><br><i>Room 1</i> | <b>Green Analytical Chemistry (GREEN)</b><br><i>Room 2</i> |
| 09.55 - 10.00 | Keynote F. Di Francesco                                                | Keynote L. Carena                                               |                                                            |
| 10.00 - 10.15 |                                                                        |                                                                 | J. Gambetta Vianna                                         |
| 10.15 - 10.30 | W. Cimmino                                                             | E. Ceccardi                                                     | G. Musile                                                  |
| 10.30 - 10.45 | V. Mazzaracchio                                                        | S. Barreca                                                      | S. Della Posta                                             |
| 10.45 - 11.00 | C. Maffezzoni                                                          | E. Cerri                                                        | F. Alchera                                                 |
| 11.00 - 11.30 | COFFEE BREAK                                                           |                                                                 |                                                            |
|               | <b>Sensors and Biosensors (SENS)</b><br><i>Auditorium</i>              | <b>Environment and Cultural Heritage (ABC)</b><br><i>Room 1</i> | <b>Green Analytical Chemistry (GREEN)</b><br><i>Room 2</i> |
| 11.30 - 11.45 | S. Fortunati                                                           | M. Ginepro                                                      | R. Biesuz                                                  |
| 11.45 - 12.00 | A. Puzzello                                                            | D. Monticelli                                                   | A. Zanoletti                                               |
| 12.00 - 12.15 | G. Moro                                                                | S. Frassati                                                     | T. Pobat                                                   |
| 12.15 - 12.30 | I. V. Di Cristoforo                                                    | M. Mataloni                                                     | C. Crescenzi                                               |
| 12.30 - 12.45 | L. Fiore                                                               | C. Abate                                                        | I. Sciscenko                                               |
| 12.45 - 13.00 | D. Paolini                                                             | C. Bretti                                                       | M. Tramontini                                              |
| 13.00 - 13.15 |                                                                        | A. Irto                                                         |                                                            |
| 13.15 - 14.00 | LUNCH                                                                  |                                                                 |                                                            |
| 14.00 - 15.00 | POSTER SESSION 2: ABC, FOR/TOS, GREEN                                  |                                                                 |                                                            |

### Tuesday 8 September 2026 - Afternoon

|               |                                                |                                                                        |                                                                              |
|---------------|------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------------------|
|               | <b>Bioanalytics (BIO)</b><br><i>Auditorium</i> | <b>Separation Science - Mass Spectrometry (SEPMS)</b><br><i>Room 1</i> | <b>Forensic Analytical Chemistry / Toxicology (FOR/TOS)</b><br><i>Room 2</i> |
| 15.00 - 15.05 |                                                | Keynote N. Riboni                                                      | Keynote E. Barberis                                                          |
| 15.05 - 15.20 | N. Kassouf                                     |                                                                        |                                                                              |
| 15.20 - 15.35 | F. Di Nardo                                    | E. Taglioni                                                            | E. Alladio                                                                   |
| 15.35 - 15.50 | E. Belforte                                    | S. Palmieri                                                            | G. Micalizzi                                                                 |
| 15.50 - 16.05 | R. Shariati                                    | M. Del Bubba                                                           | V. Greco                                                                     |
| 16.05 - 16.20 | T. Serra                                       | V. Cinquepalmi                                                         | E. Papa                                                                      |
| 16.20 - 16.35 | N. Bagheri                                     | N. Ruin                                                                | L. Martina                                                                   |
| 16.35 - 17.00 | COFFEE BREAK                                   |                                                                        |                                                                              |
| 17.00 - 17.15 | C. Scandurra                                   | M. Bianco                                                              | I. Bracaglia                                                                 |
| 17.15 - 17.30 | F. Grassi                                      | A. Satira                                                              | G. Ferrero                                                                   |
| 17.30 - 17.45 | V. Rondinini                                   | L. Sorarù                                                              | E. Castrignanò                                                               |
| 17.45 - 18.00 |                                                | S. Morozzi                                                             | R. De Santo                                                                  |

## Programme Summary



**XXXII Congresso Nazionale**  
**Divisione di Chimica Analitica**  
 6-10 settembre 2026, Venezia

### Wednesday 9 September 2026

|               |                                                           |                                                  |                                                                              |
|---------------|-----------------------------------------------------------|--------------------------------------------------|------------------------------------------------------------------------------|
| 08.30 - 09.00 | Participant registration                                  |                                                  |                                                                              |
| 09.00 - 09.45 | Plenary 3 - GreenPrep - E. Psillakis<br><i>Auditorium</i> |                                                  |                                                                              |
|               | <b>Sensors and Biosensors (SENS)</b><br><i>Auditorium</i> | <b>Separation Science (SEP)</b><br><i>Room 1</i> | <b>Analytical Spectroscopy / Electroanalytics (SPA/ELE)</b><br><i>Room 2</i> |
| 10.00 - 10.15 | M. Gamella                                                | C. M. Montone                                    | M. Giorgetti                                                                 |
| 10.15 - 10.30 | M. Mosquera Ortega                                        | S. Giordani                                      | M. Minella                                                                   |
| 10.30 - 10.45 | M. Abate                                                  | M. Galletta                                      | D. Biggio                                                                    |
| 10.45 - 11.00 | I. Iacobellis                                             | D. Coniglio                                      | M. Bonechi                                                                   |
| 11.00 - 11.30 | COFFEE BREAK                                              |                                                  |                                                                              |
|               | <b>Sensors and Biosensors (SENS)</b><br><i>Auditorium</i> | <b>Separation Science (SEP)</b><br><i>Room 1</i> | <b>Analytical Spectroscopy (SPA)</b><br><i>Room 2</i>                        |
| 11.30 - 11.45 | L. Torsi                                                  | V. Termopoli                                     | R. D'Agata                                                                   |
| 11.45 - 12.00 | B. Comegna                                                | D. Corradini                                     | M. C. Sportelli                                                              |
| 12.00 - 12.15 | D. Sestaioni                                              | G. Pinto                                         | C. Pastura                                                                   |
| 12.15 - 12.30 | S. Gianvittorio                                           | C. Nosengo                                       | F. Bilo                                                                      |
| 12.30 - 12.45 | S. Ventisette                                             | B. Pasquini                                      | L. R. Magnaghi                                                               |
| 12.45 - 13.00 | A. Marinangeli                                            | E. Trovato                                       | D. Cuffaro                                                                   |
| 13.00 - 13.15 | T. Di Giulio                                              | V. Braghin                                       | C. Passavia                                                                  |
| 13.15 - 14.00 | LUNCH                                                     |                                                  |                                                                              |
| 14.00 - 15.00 | POSTER SESSION 3: SENS, SEP, SPA, ALI                     |                                                  |                                                                              |
| 16.00 - 18.00 | Social Tour                                               |                                                  |                                                                              |
| 19.00         | Gala Dinner                                               |                                                  |                                                                              |

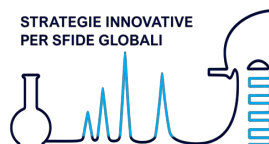
### Thursday 10 September 2026

|               |                                                                                  |                                                       |                                                                 |
|---------------|----------------------------------------------------------------------------------|-------------------------------------------------------|-----------------------------------------------------------------|
| 08.30 - 09.15 | Participant registration                                                         |                                                       |                                                                 |
|               | <b>Sensors and Biosensors - Electroanalytics (SENS-ELE)</b><br><i>Auditorium</i> | <b>Food and Nutraceuticals (ALI)</b><br><i>Room 1</i> | <b>Environment and Cultural Heritage (ABC)</b><br><i>Room 2</i> |
| 09.15 - 09.30 | L. Capelli                                                                       | C. Bellinghieri                                       | M. Cescon                                                       |
| 09.30 - 09.45 | P. S. Sfragano                                                                   | L. Cappellin                                          | T. Chenet                                                       |
| 09.45 - 10.00 | A. Raucci                                                                        | F. Eugelio                                            | F. Cristaudo                                                    |
| 10.00 - 10.15 | D. Muratov                                                                       | C. G. De Nido                                         | M. H. Belay                                                     |
| 10.15 - 10.30 | G. E. Franceschi                                                                 | C. Orecchio                                           | S. Pellegrino                                                   |
| 10.30 - 10.45 | L. Mazzoni                                                                       | F. Fantasma                                           | M. Fattobene                                                    |
| 10.45 - 11.00 | A. Cutaia                                                                        |                                                       | M. Ferretti                                                     |
| 11.00 - 11.30 | COFFEE BREAK                                                                     |                                                       |                                                                 |
|               | <b>Sensors and Biosensors - Electroanalytics (SENS-ELE)</b><br><i>Auditorium</i> | <b>Food and Nutraceuticals (ALI)</b><br><i>Room 1</i> | <b>Environment and Cultural Heritage (ABC)</b><br><i>Room 2</i> |
| 11.30 - 11.45 | G. Arrabito                                                                      | R. Cecire                                             | M. Ricciardi                                                    |
| 11.45 - 12.00 | M. Lettieri                                                                      | L. Sforzi                                             | S. Pettenuzzo                                                   |
| 12.00 - 12.15 | F. Lugli                                                                         | D. Bozza                                              | L. Rivoira                                                      |
| 12.15 - 12.30 | G. Cazzador                                                                      | G. Rizzo                                              | G. Siviero                                                      |
| 12.30 - 12.45 |                                                                                  |                                                       | D. Peroni                                                       |
| 12.45 - 13.10 | CONGRESS CLOSING                                                                 |                                                       |                                                                 |

## Programme

Sunday 6 September

Monday 7 September



**XXXII Congresso Nazionale  
Divisione di Chimica Analitica**  
6-10 settembre 2026, Venezia

### Sunday 6 September 2026

**17.00 - 21.00**    **Participant registration**

**19.00 - 21.00**    **Welcome reception**

### Monday 7 September 2026

**08.30 - 09.00**    **Participant registration**

**09.00 - 09.30**    **Congress Opening**

**09.30 - 10.15**    Plenary 1 – Environment – **Prof. Ralf Ebinghaus** - Institute of Coastal Environmental Chemistry, Helmholtz-Zentrum Geesthacht. **“Forever Chemicals’ – PFAS as an analytical challenge caught between benefit and harm”**

**10.15 - 10.35**    **Young Researcher Award: Davide Spanu “Less Is More: Simplifying Routine Elemental Speciation”**

**10.35 - 11.05**    **COFFEE BREAK**

#### AUDITORIUM DANILO MAINARDI – BUILDING ALFA

**Parallel Session: Chemometrics and Data Quality (CHEMO)** – Chair M. Casale and B. Giussani

**11.10 - 11.30**    **KN-O-CHEMO-01** Chemometric strategies for understanding the role of physical information in near-infrared spectroscopy: penetration depth of the radiation and particle size contribution

Cristina Malegori

**11.30 - 11.45**    **O-CHEMO-02** A comprehensive free and open app for chemometric modelling

Davide Ballabio

**11.45 - 12.00**    **O-CHEMO-03** One-Class Modeling in Multi-Source Analytical Chemistry: A Flexible SIMCA-Based Framework

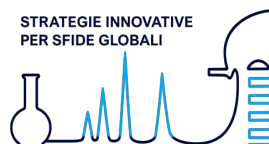
Federico Marini

**12.00 - 12.15**    **O-CHEMO-04** Data independent acquisition and regions of interest multivariate curve resolution: toward more reliable models for suspect screening analysis in complex samples

Barbara Benedetti

## Programme

Monday 7 September



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- 12.15 - 12.30 O-CHEMO-05** Back to equilibrium chemistry: using chemometrics to reimagine potentiometric titrations for unusual purposes  
Antonio Bova
- 12.30 - 12.45 O-CHEMO-06** The data quality challenge in SERS spectroscopy: experimental design and variance-aware chemometrics  
Stefano Fornasaro
- 12.45 - 13.00 O-CHEMO-07** Untargeted Screening of Emerging Contaminants in Wastewater: comparing chromatographic methods through a novel ROI-MCR based approach  
Caterina Durante
- 13.00 - 13.15 O-CHEMO-08** Unveiling Chemical Fingerprints of Aging in Balsamic Vinegar of Modena (PGI) with GC-IMS  
Samuele Pellacani

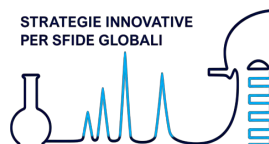
## ROOM 1 – BUILDING EPSILON

**Parallel Session: Sensors and Biosensors (SENS)** – Chair M. Minunni and A. Roda

- 11.10 - 11.30 KN-O-SENS-01** Nanomaterial-based colorimetric analytical devices: challenges and future perspectives  
Annalisa Scroccarello
- 11.30 - 11.45 O-SENS-02** Propofol-Induced Inhibition of Horseradish Peroxidase (HRP): Development of an Amperometric Biosensor In Biological Samples  
Verdiana Marchianò
- 11.45 - 12.00 O-SENS-03** Streamlined electrochemical miRNA detection through a peptide-based hydrogel surface modification strategy  
Alessandra Glovi
- 12.00 - 12.15 O-SENS-04** Eco- Friendly Flexible Electrodes for self-triggered DNA Release  
Blanca Cassano
- 12.15 - 12.30 O-SENS-05** Toward all PEDOT:PSS printed wearable biosensors for glucose detection  
Luca Sartorelli
- 12.30 - 12.45 O-SENS-06** Portable electrochemical sensing of CFTR function in cystic fibrosis epithelial models for therotyping applications  
Antonella Miglione

## Programme

Monday 7 September



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- 12.45 - 13.00 O-SENS-07** Aptamer-mediated activation of CRISPR/Cas12a signal amplification for electrochemical detection of OA  
Mattia Carbone
- 13.00 - 13.15 O-SENS-08** Fully 3D-Printed Electrochemical Biosensors for Liquid Biopsy Applications  
Panagiota Kalligosfyri

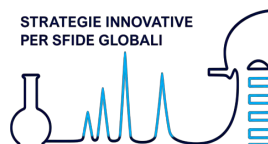
## ROOM 2 – BUILDING EPSILON

**Parallel Session: Bioanalytics & -omics (BIO-OMICS)** – Chair A.L. Capriotti and C. Baggiani

- 11.10 - 11.30 KN-O-BIO-OMICS-01** AF4-UV/MALS Fractionation of Cerebrospinal Fluid Extracellular Vesicles Enables Fraction-Resolved Tracking of Molecular Markers  
Valentina Marassi
- 11.30 - 11.45 O-BIO-OMICS-02** Decoding Phospholipid and Oxysterol Signatures in Pancreatic Cancer  
Cosima Damiana Calvano
- 11.45 - 12.00 O-BIO-OMICS-03** Miniaturized approach for the analysis of lipid oxidative stress biomarkers in plasma and oral fluid by UHPLC-MS/MS analysis  
Francesco Bartolini
- 12.00 - 12.15 O-BIO-OMICS-04** Untargeted UHPLC-Q-Orbitrap-MS/MS metabolomics combined with molecular networking and machine learning for saffron authentication and traceability  
Federico Fanti
- 12.15 - 12.30 O-BIO-OMICS-05** Multi-Omic Profiling of Fecal Samples in Idiopathic REM Sleep Behavior Disorder: An Integrated Metabolomic Approach  
Nicolò Interino
- 12.30 - 12.45 O-BIO-OMICS-06** Negative-Ion-Mode Lipidomics of Triglycerides Enabled by Aza-Paternò-Büchi Derivatization  
Andrea Cerrato
- 12.45 - 13.00 O-BIO-OMICS-07** Resolving tricky lipid isomers by Ion Mobility-MALDI-MS/MS Imaging  
Emanuela Salviati

## Programme

Monday 7 September



**XXXII Congresso Nazionale  
Divisione di Chimica Analitica**  
6-10 settembre 2026, Venezia

- 13.00 - 13.15 O-BIO-OMICS-08** Towards Green Approaches to Sample Preparation for Metabolomics: Ultrasound-Assisted Extraction using Natural Deep Eutectic Solvents (NADES) and UHPLC-Orbitrap HRMS metabolite profiling of foodborne pathogens  
Federico Biondi
- 13.15 - 14.00 LUNCH**
- 14.00 - 15.00 POSTER SESSION 1: CHEMO, BIO (poster list from page 32)**

### AUDITORIUM DANILO MAINARDI – BUILDING ALFA

**Parallel Session: Chemometrics and Data Quality (CHEMO)** – Chair M. Cocchi and A. Ulrici

- 15.05 - 15.20 O-CHEMO-09** Multivariate investigation of the factors governing rare earth element accumulation patterns in soil-plant systems  
Marcella Barbera
- 15.20 - 15.35 O-CHEMO-10** Looking beyond replicates: multivariate error analysis for robust NIR spectroscopy  
Barbara Giussani
- 15.35 - 15.50 O-CHEMO-11** Study of headspace: an innovative monitoring approach using MicroNIR/Chemometrics  
Marialuisa Ruocco
- 15.50 - 16.05 O-CHEMO-12** Sampling Matters: Structured Subsampling For Scalable Class-Modelling In Spectroscopy Big Data  
Vicky Caponigro
- 16.05 - 16.20 O-CHEMO-13** Biofunctional Large-Area Molecular Surfaces for Ultrasensitive Detection in the Early Diagnosis of Cervical Cancer  
Valentina Mongelli
- 16.20 - 16.35 O-CHEMO-14** Chemometric treatment of HS-SPME-GC-MS data to investigate volatile profile evolution of sulphite-free sparkling wines under commercial storage conditions  
Alessandra Biancolillo

## ROOM 1 – BUILDING EPSILON

### Parallel Session: Analytical Spectroscopy (SPA) – Chair A. Rossi and M. Giorgetti

- 15.00 - 15.20**    **KN-O-SPA-01** Advanced quantification strategies applied to XRF spectroscopy for metal determination in complex matrices  
Walter Giurlani
- 15.20 - 15.35**    **O-SPA-02** Waste to Energy: Analytical characterization and valorisation of Spent Activated Carbons as electrocatalysts for ORR  
Claudia Giovani
- 15.35 - 15.50**    **O-SPA-03** XPS and LC-MS characterization of artificial saliva droplets on common substrates: the role of surfactants  
Rosaria Anna Picca
- 15.50 - 16.05**    **O-SPA-04** Gellan Gum hydrogels loaded with tannic Acid or pomegranate peel extract for cartilage regeneration: analytical characterization of green bioactive materials  
Elvira De Giglio
- 16.05 - 16.20**    **O-SPA-05** Technique-dependent oxidation metrics in Graphene Family Materials: revisiting the meaning of the O/C ratio as an absolute probe of the oxidation level  
Francesco Pellegrino
- 16.20 - 16.35**    **O-SPA-06** Surface functionalization of Marble waste with Stearic Acid investigated by XPS  
Giulio Casula

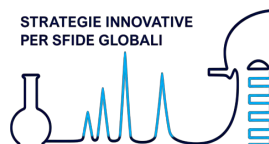
## ROOM 2 – BUILDING EPSILON

### Parallel Session: Bioanalytics & -omics (BIO-OMICS) – Chair S. Furlanetto and P. Reschiglian

- 15.00 - 15.05**    **2026 Cristina Giovannoli Award Ceremony – Bioanalytics Thematic Group**
- 15.05 - 15.20**    **O-BIO-OMICS-09** LFQ nano-UHPLC/Orbitrap MS Analysis Reveals Antioxidant Reprogramming Induced by ASX-Loaded Nanoparticles in Retinal Cells  
Jessica Brandi
- 15.20 - 15.35**    **O-BIO-OMICS-10** From the panel to the liver: development of a lateral flow immunoassay for the differential diagnosis of European Brown Hare Syndrome virus and Rabbit Haemorrhagic Disease virus-2  
Simone Cavallera
- 15.35 - 15.50**    **O-BIO-OMICS-11** Paper-based colorimetric device integrating 2D-transition metal dichalcogenides for the nanozymatic-sensing of glutathione in saliva  
Paolo Di Battista

## Programme

Monday 7 September



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- 15.50 - 16.05 O-BIO-OMICS-12** Development and validation of an HPLC-PDA method for the quantification of the ADC 1959-sss/DM4 in biological fluids and tissues  
Marcello Locatelli
- 16.05 - 16.20 O-BIO-OMICS-13** Electrochemical Approach for PCR-Free Detection of Mi-RNA Biomarkers for future implementation in Point of Care Device  
Sabrina Conoci
- 16.20 - 16.35 O-BIO-OMICS-14** NanoMIPs can sandwich too: ELISA-like assays for protein detection  
Valentina Testa
- 16.35 - 17.00 COFFEE BREAK**

### AUDITORIUM DANILO MAINARDI – BUILDING ALFA

**Parallel Session: Chemometrics and Data Quality (CHEMO)** – Chair M. Cocchi and A. Ulrici

- 17.00 - 17.15 O-CHEMO-15** Geographical authentication of agri-food products through spectroscopic and spectrometric analysis and data fusion: an integrated approach for EVOOs and Sangiovese wines  
Gabriella Tamasi
- 17.15 - 17.30 O-CHEMO-16** doetools: An Open-Source, Workflow-Oriented Python Library for Design of Experiments  
Lorenzo Teja
- 17.30 - 17.45 O-CHEMO-17** Untargeted authentication of italian honeys by eem fluorescence spectroscopy and chemometric analysis  
Monica Casale

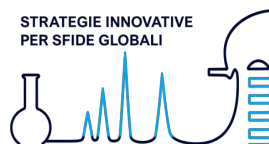
### ROOM 1 – BUILDING EPSILON

**Parallel Session: Analytical Spectroscopy (SPA)** – Chair A. Rossi and M. Giorgetti

- 17.00 - 17.15 O-SPA-07** SWIR Hyperspectral Imaging for Small Microplastics ( $\leq 100 \mu\text{m}$ ) Detection: Imaging Challenges and Perspectives for Method Validation  
Marta Barbaresi
- 17.15 - 17.30 O-SPA-08** NIR Spectroscopy for Real-Time Monitoring of Organozinc Reaction Systems  
Giordano Putzolu

## Programme

Monday 7 September



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- 17.30 - 17.45 O-SPA-09** Improvements in the Quality Control of Coagulation Factor Concentrates by MicroNIR and Chemometrics  
Cristina Adriano

### ROOM 2 – BUILDING EPSILON

**Parallel Session: Bioanalytics & -omics (BIO-OMICS)** – Chair S. Furlanetto and P. Reschiglian

- 17.00 - 17.15 O-BIO-OMICS-15** From in silico screening to confident assay design: AccePep for automated species-specific marker peptide discovery  
Giovanni Ventura
- 17.15 - 17.30 O-BIO-OMICS-16** Sample handling and HRMS data acquisition in the optimization of untargeted serum lipidomics and applications  
Elisa Robotti
- 17.30 - 17.45 O-BIO-OMICS-17** DNA-Binding Protein-Controlled Synthetic Molecular Operations for Programmable Biosensing and CRISPR Signal Amplification  
Elena Spezzani
- 17.45 - 18.00 O-BIO-OMICS-18** Intracellular metabolic response to glutamine deprivation in NSCLC cell lines: an untargeted UHPLC-HRMS and chemometric study  
Giovanni Solarino
- 18.00 - 19.00 DIVISIONAL ASSEMBLY**

## Tuesday 8 September 2026

**08.30 - 09.00** Participant registration

**09.00 - 09.45** Plenary 2 – Biosensors – **Prof. Susana Campuzano Ruiz** - Complutense University of Madrid. “**Frontier Bioelectroanalytical Technologies: Revolutionizing How We Sense Health**”

### AUDITORIUM DANILO MAINARDI – BUILDING ALFA

**Parallel Session: Sensors and Biosensors (SENS)** – Chair M. Giannetto and L. Torsi

**09.55 - 10.15** **KN-O-SENS-09** Next-Generation Biosensing Technologies for the Detection of Infectious Agents  
Fabio Di Francesco

**10.15 - 10.30** **O-SENS-10** Machine Learning-Assisted Electrochemical Fingerprinting for Multiclass Classification of Cancer Cell Lines Using Disposable Paper-Based Sensors  
Wanda Cimmino

**10.30 - 10.45** **O-SENS-11** Development of a Wearable Electrochemical Platform for On-Field Detection of Oxalate in Spinach within a Precision Agriculture Framework  
Vincenzo Mazzaracchio

**10.45 - 11.00** **O-SENS-12** Calibration of electronic nose sensor arrays using multivariate models  
Cristian Maffezzoni

### ROOM 1 – BUILDING EPSILON

**Parallel Session: Environment and Cultural Heritage (ABC)** – Chair F. Modugno and C. Minero

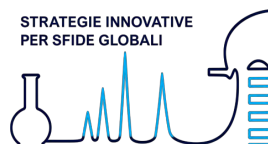
**09.55 - 10.15** **KN-O-ABC-01** Direct photolysis of oxolinic acid in surface waters: the role of divalent cations and antioxidants.  
Luca Carena

**10.15 - 10.30** **O-ABC-02** Long-chain PFAS Adsorption onto Polypropylene Falcon Tubes: From Analytical Bias to a Potential Extraction Approach  
Erica Ceccardi

**10.30 - 10.45** **O-ABC-03** Direct determination of PFAS (GenX) by ion-transfer voltammetry at micro-interfaces between two immiscible electrolyte solutions ( $\mu$ ITIES)  
Salvatore Barreca

## Programme

Tuesday 8 September



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- 10.45 - 11.00 O-ABC-04** ICP-MS and Antarctica: lead isotopic composition as dust tracer in the Antarctic plateau  
Elisa Cerri

## ROOM 2 – BUILDING EPSILON

**Parallel Session: Green Analytical Chemistry (GREEN)** – Chair G. Adami and R. Biesuz

- 10.00 - 10.15 O-GREEN-01** Toward a Green Sample Preparation of Marine Sediments Using Modified Coffee Brewing Systems  
Julia Gambetta Vianna
- 10.15 - 10.30 O-GREEN-02** A High-Precision Nanoliter Liquid Handler for Automated Analytical and Microfluidic Systems  
Giacomo Musile
- 10.30 - 10.45 O-GREEN-03** A butyl acetate-based dispersive liquid-liquid microextraction method for sustainable pesticide analysis in water  
Susanna Della Posta
- 10.45 - 11.00 O-GREEN-04** Tailoring eutectic solvent mixtures physicochemical properties via DoE to optimize polyphenol extraction from blueberry by-products  
Federica Alchera
- 11.00 - 11.30 COFFEE BREAK**

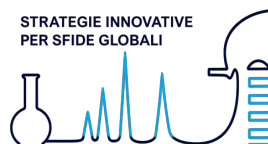
## AUDITORIUM DANILO MAINARDI – BUILDING ALFA

**Parallel Session: Sensors and Biosensors (SENS)** – Chair M. Giannetto and L. Torsi

- 11.30 - 11.45 O-SENS-13** Functional PNA probes for electrochemical magneto-genoassays for simultaneous detection of multiple allergens in food  
Simone Fortunati
- 11.45 - 12.00 O-SENS-14** Microneedle-based Electrochemical Immunosensor for IL-18: towards Minimally Invasive Diagnosis of Amyotrophic Lateral Sclerosis  
Alessandro Puzzello
- 12.00 - 12.15 O-SENS-15** Yes/No Screening of Per- and Polyfluoroalkyl Substances in Drinking Water: A Supramolecular Impedimetric Sensor  
Giulia Moro

## Programme

Tuesday 8 September



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- 12.15 - 12.30 O-SENS-16** UV laser-induced graphene paper-aptasensors for insulin detection  
Ida Valeria Di Cristoforo
- 12.30 - 12.45 O-SENS-17** From laboratory innovation to market-oriented diagnostics: a wearable paper-based sensor for sweat chloride determination in cystic fibrosis  
Luca Fiore
- 12.45 - 13.00 O-SENS-18** A new 3D-printing-based approach for mass production of laser-reduced graphene oxide (bio)sensors  
Davide Paolini

## ROOM 1 – BUILDING EPSILON

**Parallel Session: Environment and Cultural Heritage (ABC)** – Chair F. Modugno and C. Minero

- 11.30 - 11.45 O-ABC-05** Synthesis of maltodextrin polymers for the treatment of natural waters contaminated by arsenic and antimony  
Marco Ginepro
- 11.45 - 12.00 O-ABC-06** High-Resolution Lead Isotope Ratio Analysis by ESI-Orbitrap: Method Validation  
Damiano Monticelli
- 12.00 - 12.15 O-ABC-07** The gradual melting of glaciers increases the presence of ice-nucleating particles through the decomposition of organic matter in Arctic soils  
Stefano Frassati
- 12.15 - 12.30 O-ABC-08** Pushing the boundaries of quadrupole single-particle ICP-MS for Si/Al atomic ratio determination in Antarctic particulate matter  
Matilde Mataloni
- 12.30 - 12.45 O-ABC-09** Investigation of the adsorption capacity of a novel graphene-based nanohybrid platform for levofloxacin  
Chiara Abate
- 12.45 - 13.00 O-ABC-10** Investigating GLDA and MGDA interactions with environmentally significant cations.  
Clemente Bretti
- 13.00 - 13.15 O-ABC-11** A natural polyphenol as a green M2+ chelating agent in environmental and industrial matrices  
Anna Irto

## ROOM 2 – BUILDING EPSILON

**Parallel Session: Green Analytical Chemistry (GREEN)** – Chair G. Adami and R. Biesuz

- 11.30 - 11.45 O-GREEN-05** From Sensing to Remediation: Starch-Based Bioplastics as Sustainable Adsorbents for Wastewater Dyes Removal  
Raffaella Biesuz
- 11.45 - 12.00 O-GREEN-06** Elemental analysis of critical raw materials in Black Mass by TXRF  
Alessandra Zanoletti
- 12.00 - 12.15 O-GREEN-07** Green MicroNIR/Chemometrics Approach for Trihalomethanes Monitoring in Water  
Tatsiana Pobat
- 12.15 - 12.30 O-GREEN-08** Fast Ultra-Trace Analysis of Trifluoroacetic and Triflic Acids in Drinking and Groundwater  
Carlo Crescenzi
- 12.30 - 12.45 O-GREEN-09** Degradation of emerging contaminants in concentrated streams using UV/sulfite/iodide and UV/hydrogen peroxide treatment trains  
Iván Sciscenko
- 12.45 - 13.00 O-GREEN-10** Advances in sustainable agriculture: investigating the composition and the environmental behaviour of a biocompatible agricultural product  
Michela Tramontini
- 13.15 - 14.00 LUNCH**
- 14.00 - 15.00 POSTER SESSION 2: ABC, FOR/TOS, GREEN (poster list from page 34)**

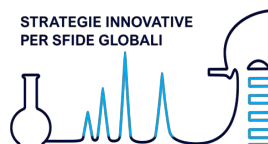
## AUDITORIUM DANILO MAINARDI – BUILDING ALFA

**Parallel Session: Bioanalytics (BIO)** – Chair S. Cinti and M. Mirasoli

- 15.05 - 15.20 O-BIO-01** Design of experiments-based optimization of a Cu-MOF nanozyme chemiluminescent system for hydrogen peroxide detection  
Nicholas Kassouf
- 15.20 - 15.35 O-BIO-02** Colloidal carbon nanoparticles as label in lateral flow immunoassay  
Fabio Di Nardo
- 15.35 - 15.50 O-BIO-03** Activity based (bio)sensor for the monitoring of MutyH DNA glycosylase activity  
Erica Belforte

## Programme

Tuesday 8 September



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- 15.50 - 16.05 O-BIO-04** BESIDES (BiomolEcular SIgnature DEtection System): a lab-on-chip-based analytical platform for life biomarkers detection in astrobiology investigations  
Rojin Shariati
- 16.05 - 16.20 O-BIO-05** Rational design of multiplex Nucleic Acid Lateral Flow Assays for improved miRNA selectivity  
Thea Serra
- 16.20 - 16.35 O-BIO-06** Topology-gated CRISPR-Cas12a activity enables topoisomerase sensing and inhibitor screening  
Neda Bagheri

## ROOM 1 – BUILDING EPSILON

**Parallel Session: Separation Science - Mass Spectrometry (SEPMS)** – Chair B. Roda and F. Gosetti

- 15.00 - 15.20 KN-O-SEPMS-01** Beyond single-platform analysis: complementary separation and mass spectrometry strategies for IAS and NIAS characterization  
Nicolò Riboni
- 15.20 - 15.35 O-SEPMS-02** A Software-Driven Suspect Screening LC-HRMS Workflow for Endogenous Modified Nucleosides  
Enrico Taglioni
- 15.35 - 15.50 O-SEPMS-03** Experimental design of full-scan acquisition parameters for DDA in untargeted orbitrap metabolomics in plant matrices  
Sara Palmieri
- 15.50 - 16.05 O-SEPMS-04** A Two-Step Prioritization Framework for the Nontargeted LC-HRMS Analysis of Contaminants of Environmental Concern and Dissolved Organic Matter in a Drinking Water Treatment Plant  
Massimo Del Bubba
- 16.05 - 16.20 O-SEPMS-05** A multi-analytical strategy based on RPLC-PDA and RPLC-ESI-TWIMS-MS/MS for the unambiguous identification of isomeric carotenoids  
Valeria Cinquepalmi
- 16.20 - 16.35 O-SEPMS-06** Advanced VOC Profiling in Recycled Plastics Using HS-SPME/GC×GC-MS  
Nicola Ruin

**ROOM 2 – BUILDING EPSILON**

**Parallel Session: Forensic Analytical Chemistry / Toxicology (FOR/TOS)** – Chair M. Sergi and F. Bianchi

- 15.00 - 15.20 KN-O-FOR/TOS-01** Decoding the Human Exposome: Advanced GC×GC-MS Strategies to Understand Healthy Aging  
Elettra Barberis
- 15.20 - 15.35 O-FOR/TOS-02** CACTUS: Chemometrics and Analytical Chemistry Tools - An Open-Source Software for Forensic, Educational, and Research Data Analysis  
Eugenio Alladio
- 15.35 - 15.50 O-FOR/TOS-03** Monitoring of Pesticides in Cannabis sativa L through Chromatographic approaches with Particular Emphasis on Miniaturized and Automated Extraction  
Giuseppe Micalizzi
- 15.50 - 16.05 O-FOR/TOS-04** Magnetic molecularly imprinted nanoparticles for automated fentanyl determination by HPLC-MS/MS  
Valentina Greco
- 16.05 - 16.20 O-FOR/TOS-05** Innovative forensic approach for the detection of gunshot residues by NIR spectroscopy and multivariate analysis  
Elena Papa
- 16.20 - 16.35 O-FOR/TOS-06** Source apportionment of PM2.5 oxidative potential in Southern Italy: insights from DTT and AA assays  
Laura Martina
- 16.35 - 17.00 COFFEE BREAK**

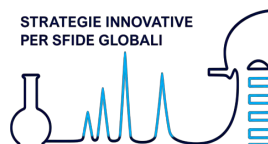
**AUDITORIUM DANILLO MAINARDI – BUILDING ALFA**

**Parallel Session: Bioanalytics (BIO)** – Chair S. Cinti and M. Mirasoli

- 17.00 - 17.15 O-BIO-07** Coupling cell-free genetic circuits with HCR for enhanced, enzyme-free biomarker sensing  
Cecilia Scandurra
- 17.15 - 17.30 O-BIO-08** Dynamic Control of Enzyme-Inhibitor Complexes via input-mediated Synthetic Gene Circuits  
Francesco Grassi

## Programme

Tuesday 8 September



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- 17.30 - 17.45 O-BIO-09** AF4-MD Characterization of Bio-Conjugation on SiNPs for highly sensitive TCL-POCT Applications  
Virginia Rondinini

### ROOM 1 – BUILDING EPSILON

**Parallel Session: Separation Science - Mass Spectrometry (SEPMS)** – Chair B. Roda and F. Gosetti

- 17.00 - 17.15 O-SEPMS-07** Integrating RPLC-HRMS and Bioinformatics to Uncover Leishmania Species Marker Peptides  
Mariachiara Bianco
- 17.15 - 17.30 O-SEPMS-08** Urinary Trace Element Profiling in Leukemia Patients by ICP-MS: Method Development and Validation for a Case-Control Study  
Antonella Satira
- 17.30 - 17.45 O-SEPMS-09** A Novel HPLC-APCI-MS/MS Method for the Extraction and Quantification of Targeted OH-PAHs in Animal Tissues  
Luca Sorarù
- 17.45 - 18.00 O-SEPMS-10** Non-targeted LC-HRMS as a powerful tool for the discrimination of wheat samples from different varieties and geographical origin  
Sara Morozzi

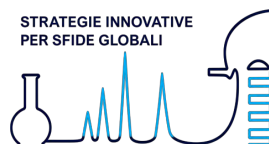
### ROOM 2 – BUILDING EPSILON

**Parallel Session: Forensic Analytical Chemistry / Toxicology (FOR/TOS)** – Chair M. Sergi and F. Bianchi

- 17.00 - 17.15 O-FOR/TOS-07** Rapid Screening of New Psychoactive Substances Using ASAP-IMS-HRMS: An Ambient Ionization and Ion Mobility Approach  
Ilenia Bracaglia
- 17.15 - 17.30 O-FOR/TOS-08** Orbitrap HRMS-based workflow for hair analysis to reveal hidden patterns of NPS exposure  
Giorgia Ferrero
- 17.30 - 17.45 O-FOR/TOS-09** A Portable SiMoLS Platform to Address Emerging NPS Threats in Drug- Related Death Investigations  
Erika Castrignanò

## Programme

Tuesday 8 September



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- 17.45 - 18.00 O-FOR/TOS-10** Determination of Priority Bisphenol A Alternatives in Urine:  
Development and Validation of an Analytical Method Based on PARC Prioritization  
Riccardo De Santo

## Wednesday 9 September 2026

**08.30 - 09.00** Participant registration

**09.00 - 09.45** Plenary 3 – GreenPrep – **Prof. Elia Psillakis** - Technical University of Crete. “**The ten misunderstandings of green and sustainable analytical chemistry**”

### AUDITORIUM DANILO MAINARDI – BUILDING ALFA

**Parallel Session: Sensors and Biosensors (SENS)** – Chair O. Abollino and F. Ricci

**10.00 - 10.15** **O-SENS-19** Frontier Electroanalytical Biosensing for Epitranscriptomic and Telomerase Hallmarks of Cancer  
María Gamella

**10.15 - 10.30** **O-SENS-20** Bamboo-Derived Biochar Coupled with Carbon Nanotubes for Sensitive Electrochemical Detection of Bisphenol A  
Monica Mosquera Ortega

**10.30 - 10.45** **O-SENS-21** Sustainable 3D-Printed Electrochemical Sensors: from Manufacturing to Applications in Food Analysis  
Michele Abate

**10.45 - 11.00** **O-SENS-22** Bio-Electronic Sensor for Early Xylella Fastidiosa Detection  
Ilaria Iacobellis

### ROOM 1 – BUILDING EPSILON

**Parallel Session: Separation Science (SEP)** – Chair M. Careri and T. Cataldi

**10.00 - 10.15** **O-SEP-01** Green Click Chemistry-Derived Monolithic Sorbents for Automated In-Tube SPME-LC-MS/MS Analysis  
Carmela Maria Montone

**10.15 - 10.30** **O-SEP-02** AF4-Multidetector for the Characterization, Isolation and Downstream Application of Royal Jelly-Derived Nanocarriers  
Stefano Giordani

**10.30 - 10.45** **O-SEP-03** Static headspace enantioselective comprehensive two-dimensional gas chromatography-time-of-flight mass spectrometry for Citrus essential oil analysis  
Micaela Galletta

**10.45 - 11.00** **O-SEP-04** HILIC-ESI-HRMS characterization of free amino acids in barattiere (Cucumis melo L.) fruits  
Davide Coniglio

**ROOM 2 – BUILDING EPSILON**

**Parallel Session: Analytical Spectroscopy / Electroanalytics (SPA/ELE)** – Chair M. Innocenti and G. Spoto

- 10.00 - 10.15 O-SPA/ELE-01** Prussian Blue structures for metal-Ion batteries: Analysis by X-ray techniques  
Marco Giorgetti
- 10.15 - 10.30 O-SPA/ELE-02**  $\text{Ti}_3\text{C}_2\text{T}_x$  MXenes in Li-S Batteries to Balance Polysulphide Adsorption and  $\text{Li}_2\text{S}$  Deposition  
Marco Minella
- 10.30 - 10.45 O-SPA/ELE-03** An analytical assessment of methods for determining hydrogen diffusion in ARMCO iron  
Deborah Biggio
- 10.45 - 11.00 O-SPA/ELE-04** Electroanalytical characterisation of ruthenium-based molecular catalysts for green hydrogen production  
Marco Bonechi
- 11.00 - 11.30 COFFEE BREAK**

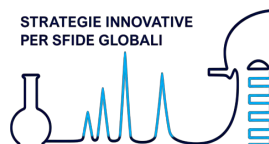
**AUDITORIUM DANILO MAINARDI – BUILDING ALFA**

**Parallel Session: Sensors and Biosensors (SENS)** – Chair O. Abollino and F. Ricci

- 11.30 - 11.45 O-SENS-23** Sensing Regimes Governing Potentiometric Immunoassays  
Luisa Torsi
- 11.45 - 12.00 O-SENS-24** Magnetic carbon black modified with molecularly imprinted polymer for the selective extraction and determination of carvacrol  
Bianca Comegna
- 12.00 - 12.15 O-SENS-25** Ultrafast Polymerization of Molecularly Imprinted Polyserotonin for advanced biosensing  
Davide Sestaioni
- 12.15 - 12.30 O-SENS-26** Reagentless Electrochemical Sensing Platforms Based on Reagent-Preloaded 3D-Printed Microcells and Screen-Printed Electrodes  
Stefano Gianvittorio

## Programme

Wednesday 9 September



**XXXII Congresso Nazionale  
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- 12.30 - 12.45 O-SENS-27** Rationally Designed Multivalent Polynorepinephrine Molecularly Imprinted Nanoassemblies as Green Synthetic Receptors for Ultrasensitive SPR Detection of Interleukin-17A  
Simone Ventisette
- 12.45 - 13.00 O-SENS-28** Molecularly Imprinted Polymer Nanoparticles-Based Plasmonic Sensor for Rapid Pesticide Detection  
Alice Marinangeli
- 13.00 - 13.15 O-SENS-29** Visible-light activated MIP polymerization on photoiniferter-modified electrode surface for electrochemical sensing  
Tiziano Di Giulio

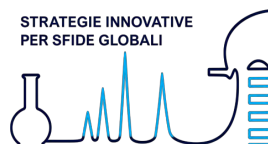
## ROOM 1 – BUILDING EPSILON

**Parallel Session: Separation Science (SEP) – Chair M. Careri and T. Cataldi**

- 11.30 - 11.45 O-SEP-05** Lignin-Derived Magnetic Sorbents for Dispersive Magnetic Solid-Phase Microextraction (DMSPME) of Xenobiotic Compounds in Water Samples  
Veronica Termopoli
- 11.45 - 12.00 O-SEP-06** Untargeted and targeted metabolomic study of plant secondary metabolites in selenium biofortified cabbage (*Brassica oleracea*)  
Danilo Corradini
- 12.00 - 12.15 O-SEP-07** LC-MS/MS and MALDI-TOF Strategies for Biofluid Fingerprinting and Species Identification from Blood Traces  
Gabriella Pinto
- 12.15 - 12.30 O-SEP-08** A Greener Workflow for the Extraction and Analysis of Carotenoids from Mango Peel Waste  
Chiara Nosengo
- 12.30 - 12.45 O-SEP-09** Risk-Based Approach and Design of Experiments in the development of a Capillary Isoelectric Focusing Analytical Procedure Platform for the charge heterogeneity characterization of monoclonal antibodies  
Benedetta Pasquini
- 12.45 - 13.00 O-SEP-10** Multi-analytical approaches for the comprehensive chemical characterization of *Jasminum grandiflorum* L. absolute  
Emanuela Trovato

## Programme

Wednesday 9 September



**XXXII Congresso Nazionale  
Divisione di Chimica Analitica**  
6-10 settembre 2026, Venezia

- 13.00 - 13.15 O-SEP-11** Integrated dual-split high capacity sorptive extraction and chemometrics reveal extraction-dependent volatile signatures in *Hypericum perforatum*  
Valentina Braghin

## ROOM 2 – BUILDING EPSILON

**Parallel Session: Analytical Spectroscopy (SPA)** – Chair M. Innocenti and G. Spoto

- 11.30 - 11.45 O-SPA-10** Plasmonic Liquid Biopsy for the Detection and Quantification of Circulating MicroRNAs at Ultra-Low Levels in Brain Cancer Patients  
Roberta D'Agata
- 11.45 - 12.00 O-SPA-11** Spectroscopic characterization of zinc/copper basic carbonates as catalyst precursors for CO<sub>2</sub> hydrogenation  
Maria Chiara Sportelli
- 12.00 - 12.15 O-SPA-12** A Microfluidic Assay for Tumor DNA Capture Based on PNA-Functionalized Magnetic Beads  
Chiara Pastura
- 12.15 - 12.30 O-SPA-13** Liquid Aerosol Sampling Meets TXRF: A New Strategy for Airborne PM Characterization  
Fabiola Bilo
- 12.30 - 12.45 O-SPA-14** In silico optimization of tunable pH-indicating dye mixtures  
Lisa Rita Magnaghi
- 12.45 - 13.00 O-SPA-15** Colorimetric Approaches for Dopamine Detection in Pharmaceutical Formulations and Food Waste Matrices  
Doretta Cuffaro
- 13.00 - 13.15 O-SPA-16** T-XRF as a Rapid Quantitative Tool for Metal Speciation in Incinerator Bottom Ash: A Methodological Comparison with ICP-OES  
Cristiana Passavia
- 13.15 - 14.00 LUNCH**
- 14.00 - 15.00 POSTER SESSION 3: SENS, SEP, SPA, ALI (poster list from page 39)**
- 16.00 - 18.00 Social Tour**
- 19.00 Gala Dinner**

## Thursday 10 September 2026

08.30 - 09.15 Participant registration

### AUDITORIUM DANILO MAINARDI – BUILDING ALFA

**Parallel Session: Sensors and Biosensors - Electroanalytics (SENS-ELE)** – Chair G. Marrazza and F. Arduini

- 09.15 - 09.30 O-SENS-ELE-01** Nanoscale Compartmentalization of CRISPR-Cas12a on DNA Origami for Orthogonal Multiplexed DNA Detection  
Luca Capelli
- 09.30 - 09.45 O-SENS-ELE-02** Upcycling of soot nanoparticles into Au hybrid nanocomposites for electrochemical sensing applications  
Patrick Severin Sfragano
- 09.45 - 10.00 O-SENS-ELE-03** Thermodynamically Guided Temperature Control for Electrochemical Nucleic Acids Biosensing  
Ada Raucci
- 10.00 - 10.15 O-SENS-ELE-04** Fast and flexible resistive gas sensors on quasi-1D Zr<sub>1-x</sub>Ti<sub>x</sub>S<sub>3</sub> nanowires  
Dmitry Muratov
- 10.15 - 10.30 O-SENS-ELE-05** From Lab to Field: NEMO Device Optimization for Amperometric Free Chlorine Quantification  
Guglielmo Emanuele Franceschi
- 10.30 - 10.45 O-SENS-ELE-06** Voltammetric Determination of Emerging Pharmaceutical Contaminants: Application to Synthetic Progestins  
Letizia Mazzoni
- 10.45 - 11.00 O-SENS-ELE-07** Targeted sensing of L-Tryptophan in biological fluids using Imprinted Polypyrrole-based Screen-Printed Electrodes  
Alessandra Cutaia

## ROOM 1 – BUILDING EPSILON

### Parallel Session: Food and Nutraceuticals (ALI) – Chair F. Della Pelle and C.D. Calvano

- 09.15 - 09.30**    **O-ALI-01** Development of a novel workflow for parallel analysis of mineral oil and PAHs in food additives derived from fats and oils using off-line HPLC-GC×GC-FID/TOFMS  
Carlo Bellinghieri
- 09.30 - 09.45**    **O-ALI-02** CI-IMS-TOF opens new horizons in food science and technology  
Luca Cappellin
- 09.45 - 10.00**    **O-ALI-03** Untargeted UHPLC-HRMS Metabolomics for Substrate-Driven Profiling of Water Kefir Fermentation  
Fabiola Eugelio
- 10.00 - 10.15**    **O-ALI-04** A contamination-controlled analytical approach for the determination and characterization of anthropogenic microparticles in sea salts  
Cristina Grazia De Nido
- 10.15 - 10.30**    **O-ALI-05** Image-based modelling of three-way data for food authentication: butter case study  
Ciro Orecchio
- 10.30 - 10.45**    **O-ALI-06** Nutraceutical Potential of Cannabis sativa L. var. Kompolti Infusion: Polyphenolic Profile, Antioxidant Capacity and Neuroprotective Effects  
Francesca Fantasma

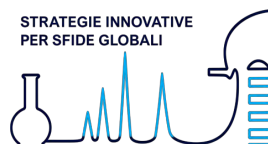
## ROOM 2 – BUILDING EPSILON

### Parallel Session: Environment and Cultural Heritage (ABC) – Chair A. Cappiello and C. De Stefano

- 09.15 - 09.30**    **O-ABC-12** Investigation of metal adsorption from aqueous solutions onto marine waste-derived hydroxyapatites  
Mirco Cescon
- 09.30 - 09.45**    **O-ABC-13** Adsorption of Heavy Metals from Water Matrices using Geopolymer-Based Adsorbent Materials  
Tatiana Chenet
- 09.45 - 10.00**    **O-ABC-14** LC-HRMS non-target screening in a tropical megacity river and aquaculture: a complementary SPE approach  
Federico Cristaudo

## Programme

Thursday 10 September



**XXXII Congresso Nazionale  
Divisione di Chimica Analitica**  
6-10 settembre 2026, Venezia

- 10.00 - 10.15 O-ABC-15** Untargeted UPLC-HRMS and multivariate statistical analysis: A combined approach for investigating contaminants of emerging concern in aquatic systems  
Masho Hilawie Belay
- 10.15 - 10.30 O-ABC-16** New Frontiers in Fenton Chemistry: Integrating Disinfection and Decontamination Through Oxidation by Performic Acid  
Simone Pellegrino
- 10.30 - 10.45 O-ABC-17** Decoding geochemical availability and blue carbon dynamics in Marine Protected Areas: the case of Tremiti Islands  
Martina Fattobene
- 10.45 - 11.00 O-ABC-18** Development and validation of an accurate GC-MS method for the characterisation of the *Solanum lycopersicum* volatilome under biotic stress  
Marysol Ferretti
- 11.00 - 11.30 COFFEE BREAK**

## AUDITORIUM DANILO MAINARDI – BUILDING ALFA

**Parallel Session: Sensors and Biosensors - Electroanalytics (SENS-ELE)** – Chair G. Marrazza and F. Arduini

- 11.30 - 11.45 O-SENS-ELE-08** Sensing at interfaces: adding spatiotemporal control to label-free electrochemical analyses  
Giuseppe Arrabito
- 11.45 - 12.00 O-SENS-ELE-09** Capturing Chronic Inflammation with a Simple Blood Drop: An Electrochemical Biosensor for Haptoglobin  
Mariagrazia Lettieri
- 12.00 - 12.15 O-SENS-ELE-10** On-site differentiation of legal and illicit cannabis using a field-deployable electrochemical sensing device  
Filippo Lugli
- 12.15 - 12.30 O-SENS-ELE-11** Cardboard-Based Laser-Induced Graphene Sensors for Sustainable Histamine Monitoring in Real Food Samples  
Giulia Cazzador

## **ROOM 1 – BUILDING EPSILON**

### **Parallel Session: Food and Nutraceuticals (ALI) – Chair F. Della Pelle and C.D. Calvano**

- 11.30 - 11.45**    **O-ALI-07** Multi-analytical profiling of controlled coffee fermentation for aroma modulation and Robusta quality improvement  
Riccardo Cecire
- 11.45 - 12.00**    **O-ALI-08** Experimental Design to optimize protocols for the extraction and analytical detection of microplastics in lipid-rich food matrices  
Laura Sforzi
- 12.00 - 12.15**    **O-ALI-09** Valorization of Fruit Waste through Spectrophotometric Assays and Untargeted UHPLC-HRMS  
Desiree Bozza
- 12.15 - 12.30**    **O-ALI-10** Multimodal Analytical Characterization of Spray-Congeaed EGCG Microparticles: Stability Enhancement, Controlled Release and Chemometric Validation  
Gaia Rizzo

## **ROOM 2 – BUILDING EPSILON**

### **Parallel Session: Environment and Cultural Heritage (ABC) – Chair A. Cappiello and C. De Stefano**

- 11.30 - 11.45**    **O-ABC-19** A sustainable method for the determination of BTEX in the atmosphere by Headspace GC-FID  
Maria Ricciardi
- 11.45 - 12.00**    **O-ABC-20** Non-Target Screening and Risk Assessment for Safe Rainwater Reuse in Protected Agriculture  
Silvia Pettenuzzo
- 12.00 - 12.15**    **O-ABC-21** Analytical assessment of microplastic occurrence along the European water cycle continuum  
Luca Rivoira
- 12.15 - 12.30**    **O-ABC-22** A Low-Viscosity Sample Pretreatment Methodology for Crystalline Quartz Quantification in Viscous Pastes  
Giacomo Siviero
- 12.30 - 12.45**    **O-ABC-23** Solutions for direct analysis in air: from VOCs to metals. An introduction to the Tofwerk technology  
Daniela Peroni
- 12.45 - 13.10**    **CONGRESS CLOSING**

## POSTER SESSIONS

|                             |                                           |                                                                                                                                   |
|-----------------------------|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| <b>POSTER<br/>SESSION 1</b> | Monday 7 September<br>14.00 - 15.00       | CHEMO Chemometrics and Data Quality; BIO Bioanalytics                                                                             |
| <b>POSTER<br/>SESSION 2</b> | Tuesday 8 September<br>14.00 - 15.00      | ABC Environment and Cultural Heritage; FOR/TOS<br>Forensic Analytical Chemistry / Toxicology; GREEN Green<br>Analytical Chemistry |
| <b>POSTER<br/>SESSION 3</b> | Wednesday 9<br>September 14.00 -<br>15.00 | SENS Sensors and Biosensors; SEP Separation Science;<br>SPA Analytical Spectroscopy; ALI Food and Nutraceuticals                  |

## LIST OF POSTER CONTRIBUTIONS

### Chemometrics and Data Quality (CHEMO)

#### POSTER SESSION 1 Monday 7 September 14.00 - 15.00

|                   |                                                                                                                                                                                                                                                    |                        |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| <b>P-CHEMO-01</b> | Making Soil Chemistry Visible: Chemometric Maps as Visual Tools for Translating Complex Soil Data into Soil Literacy                                                                                                                               | <u>M. Barbera</u>      |
| <b>P-CHEMO-02</b> | Framing variability of stress states in individuals by high frequency acquisition of digital biomarkers from wearable sensor devices and Self Organizing Maps: base for reasoned biofluid discrete sampling and analysis of chemical stress marker | <u>P. Barbieri</u>     |
| <b>P-CHEMO-03</b> | A Fused Approach Using Ion Mobility Spectrometry and Spectroscopy for Honey Authentication                                                                                                                                                         | <u>R. Barbieri</u>     |
| <b>P-CHEMO-04</b> | Tackling the water fingerprinting riddle pairing EIS and chemometrics                                                                                                                                                                              | <u>A. Bova</u>         |
| <b>P-CHEMO-05</b> | A proof of concept for the detection of emerging contaminants in wastewater using portable spectroscopy and MCR-ALS                                                                                                                                | <u>M. Cocchi</u>       |
| <b>P-CHEMO-06</b> | Rapid and non-destructive authentication of Specialty Coffee by Near-Infrared Hyperspectral Imaging                                                                                                                                                | <u>G. Foca</u>         |
| <b>P-CHEMO-07</b> | From Lab to Field: Multivariate Control Chart implementation in NEMO Device for Water Quality Monitoring                                                                                                                                           | <u>G.E. Franceschi</u> |

|                   |                                                                                                                                                           |                     |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| <b>P-CHEMO-08</b> | Exploring aging-related differences in Balsamic Vinegar of Modena PGI by a fused chromatographic and spectroscopic approach                               | <u>G. Gazzoli</u>   |
| <b>P-CHEMO-09</b> | Maximizing Sensitivity for non target pollutant analysis in LC-HRMS-Orbitrap: a Design of Experiments (DoE) study                                         | <u>S. Licen</u>     |
| <b>P-CHEMO-10</b> | Stochastic and Ensemble-Averaged Affinity-Binding Regimes: A Coexisting Framework                                                                         | <u>E. Macchia</u>   |
| <b>P-CHEMO-11</b> | Variable Selection Driven Transition from Untargeted to Targeted Metabolomics of HCC Biomarkers                                                           | <u>V. Caponigro</u> |
| <b>P-CHEMO-12</b> | Assessing penetration limits in near-infrared spectral imaging: in-depth chemical mapping                                                                 | <u>P. Oliveri</u>   |
| <b>P-CHEMO-13</b> | An experimental design approach for the development of curcumin-loaded zein/caseinate films                                                               | <u>R.A. Picca</u>   |
| <b>P-CHEMO-14</b> | The Distribution of Rare Earth Elements and Heavy Metals in Marine Sediments in the Coastal Area of the Gela Industrial District (Southern Sicily, Italy) | <u>C. Cucolo</u>    |

## Bioanalytics (BIO)

### POSTER SESSION 1 Monday 7 September 14.00 - 15.00

|                 |                                                                                                                                                               |                       |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| <b>P-BIO-01</b> | Oxidized gum Arabic/gelatin hydrogels as tunable scaffolds for 3D pancreatic tumor organoid culture                                                           | <u>L. Anfossi</u>     |
| <b>P-BIO-02</b> | Gelatin as Macromonomer in Solid Phase Synthesis of nanoMIPs                                                                                                  | <u>C. Baggiani</u>    |
| <b>P-BIO-03</b> | Metal Complexation of Tuvusertib and Benzosertib anticancer agents for the Rational Design of Liposomal formulations                                          | <u>M. Bellomo</u>     |
| <b>P-BIO-04</b> | LC-MS/MS-Based Proteomics Identifies mtDNA-Dependent Protein Signatures of Breast Cancer Metastasis                                                           | <u>D. Cecconi</u>     |
| <b>P-BIO-05</b> | HRMS-based untargeted metabolomics profiling of lung epithelial cells exposed to antibiotic transformation products                                           | <u>F. Dal Bello</u>   |
| <b>P-BIO-06</b> | Integrated metabolomics and lipidomics characterization of intracellular and extracellular compartments in drug-sensitive and multidrug-resistant cell models | <u>A. Di Bernardo</u> |
| <b>P-BIO-07</b> | Trace element imbalances in Chronic Kidney Disease (CKD) patients undergoing dialysis: the role of hemodialysis treatment as an environmental factor          | <u>A. Fabbris</u>     |

|                 |                                                                                                                                         |                    |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| <b>P-BIO-08</b> | Hyaluronic Acid Crosslinked Films as Antibiotic Delivery Systems for Chronic Wound Healing                                              | <u>N. Gatti</u>    |
| <b>P-BIO-09</b> | An optimized workflow for untargeted serum lipidomics: impact of sample handling and acquisition strategies                             | <u>A. Ghignone</u> |
| <b>P-BIO-10</b> | Paper microextraction patch for in vitro metabolic profiling to identify <i>Klebsiella pneumoniae</i>                                   | <u>C. Ghosh</u>    |
| <b>P-BIO-11</b> | MS/MS fragmentation characterization of imidazole- and triazole-based compounds: effect of the azole scaffold on fragmentation pathways | <u>V. Greco</u>    |
| <b>P-BIO-12</b> | Application of the Taguchi Method as an Efficient and Sustainable Approach for Bioanalytical Method Development                         | <u>E. Gregoris</u> |
| <b>P-BIO-13</b> | Orthogonal transcription of two genes within a single synthetic DNA network                                                             | <u>M.G. Izzo</u>   |
| <b>P-BIO-14</b> | nanoHPLC-HRMS Analysis of Oxo-Histidine Formation in A $\beta$ (1-42) after Boron Neutron Capture Therapy                               | <u>A. Magnani</u>  |
| <b>P-BIO-15</b> | Decoding CSF protein complexes in neurodegenerative diseases through mass spectrometry                                                  | <u>M. Manfredi</u> |
| <b>P-BIO-16</b> | CRISPR-Cas13-Powered Detection of the Tumor Marker p53                                                                                  | <u>C. Micucci</u>  |
| <b>P-BIO-17</b> | Polythymine-templated copper nanoclusters as fluorescent probes for an innovative label-free LFA assay based on aptamers                | <u>M. Minunni</u>  |
| <b>P-BIO-18</b> | Mass spectrometry reveals bacterial metabolite and molecular remodelling in the ageing thymic microenvironment                          | <u>C. Medana</u>   |
| <b>P-BIO-19</b> | Single-Molecule Ultrasensitive Biomarker Detection: New Frontiers in Early-Stage HPV Screening                                          | <u>L. Sarcina</u>  |

## Environment and Cultural Heritage (ABC)

### POSTER SESSION 2 Tuesday 8 September 14.00 - 15.00

|                 |                                                                                                                              |                   |
|-----------------|------------------------------------------------------------------------------------------------------------------------------|-------------------|
| <b>P-ABC-01</b> | Optimizing Solar-Based Advanced Oxidation Processes by Combining Design of Experiments and ASCA                              | <u>M. Adanyi</u>  |
| <b>P-ABC-02</b> | Chemometric Analysis of Emerging Contaminant Dynamics Across a Full-Scale Wastewater Treatment Plant: the QIMERA Pilot Study | <u>E. Alladio</u> |

|                 |                                                                                                                                            |                                     |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| <b>P-ABC-03</b> | Integrated Computational and HPLC-HRMS Workflow for Untargeted Environmental Surveillance of Pharmaceutical Contaminants in surface waters | <u>S. Arpaia</u>                    |
| <b>P-ABC-04</b> | PFAS compositional ratios as indicators of persistent landfill leachate contamination in groundwater after landfill closure                | <u>M. Barbera</u>                   |
| <b>P-ABC-05</b> | Environmental distribution of a plant-derived biostimulant in different scenarios: comparison between tropical and temperate-climate soils | <u>P. Calza</u>                     |
| <b>P-ABC-06</b> | Metakaolin-Based Geopolymers for Metal Cations Removal from Aqueous Matrices                                                               | <u>E. Capodaglio</u>                |
| <b>P-ABC-07</b> | Exploring PFOS and PFOA Isomers through HPLC-MS/MS methods                                                                                 | <u>M. Carrara</u>                   |
| <b>P-ABC-08</b> | Nanostructured Silver-Silicate Composites for Effective Phytohormone Contaminant Remediation                                               | <u>R.M. Cigala</u>                  |
| <b>P-ABC-09</b> | On the cis-trans isomerisation of the sunscreen UV filter ethylhexyl methoxycinnamate in different environments                            | <u>I. Coralli</u>                   |
| <b>P-ABC-10</b> | Trace Metal Speciation and Environmental Behaviour in Coastal Lagoon Sediments: A Case Study from Faro Lake (Mediterranean Sea)            | <u>F. Crea</u>                      |
| <b>P-ABC-11</b> | Untargeted HRMS profiling of river water micropollutants: expanding chemical space through complementary solid-phase extraction            | <u>F. Cristaudo</u>                 |
| <b>P-ABC-12</b> | Recovery through phytoremediation: greenhouse study on hyperaccumulator plant species                                                      | <u>E. De Rosa</u>                   |
| <b>P-ABC-13</b> | Assessment of metal impurity partitioning in coagulation-flocculation processes using model iron-based coagulants                          | <u>D. Fabbri</u>                    |
| <b>P-ABC-14</b> | Adsorption and advanced oxidation of valganciclovir in aqueous systems: removal efficiency and transformation products                     | <u>D. Fabbri</u>                    |
| <b>P-ABC-15</b> | Evaluating Wastewater Treatment Efficiency in Antarctica through Passive Sampling Techniques                                               | <u>J. Gambetta</u><br><u>Vianna</u> |
| <b>P-ABC-16</b> | Multi-Element Determination in Brown Bear ( <i>Ursus arctos</i> ) Hair as a Tool for Environmental Biomonitoring in Northeastern Italy     | <u>F. Girolametti</u>               |
| <b>P-ABC-17</b> | Influence of inorganic matrices on the analytical pyrolysis of polymers: towards a validated multi-analytical workflow                     | <u>E. Gregoris</u>                  |

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|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| <b>P-ABC-18</b> | Clean-up of sulfonamide antibiotics in soil sample extracts using molecularly imprinted polymers prepared by precipitation polymerisation                            | <u>A. Lo Presti</u>    |
| <b>P-ABC-19</b> | Personal Care Products (PCPs) and Polycyclic Aromatic Hydrocarbons (PAHs) in the snowpack of the Lake Tahoe region (USA)                                             | <u>E. Marchiori</u>    |
| <b>P-ABC-20</b> | Removal of pollutants by chemical and/or electrochemical technique from industrial wastewater                                                                        | <u>S. Mastromarino</u> |
| <b>P-ABC-21</b> | Natural photoactivity and self-purification capacity of quarry lake waters of the Piedmont region                                                                    | <u>A. Mittaridonna</u> |
| <b>P-ABC-22</b> | Assessing airborne microplastics concentrations in indoor working environments using Py-GC-MS                                                                        | <u>F. Modugno</u>      |
| <b>P-ABC-23</b> | Spectroscopic Investigation of the Formation of Alizarin-Aluminium Lake Pigments under Variable Synthesis Conditions                                                 | <u>L.M. Moretto</u>    |
| <b>P-ABC-24</b> | Tecniche analitiche avanzate per l'indagine rapida di PFAS volatili                                                                                                  | <u>D. Morosini</u>     |
| <b>P-ABC-25</b> | Occurrence and environmental monitoring of per- and polyfluoroalkyl substances (PFAS) in groundwater                                                                 | <u>G. Perra</u>        |
| <b>P-ABC-26</b> | Confluences as hotspots of carbonate-system reorganization in headwater stream networks                                                                              | <u>R. Piazza</u>       |
| <b>P-ABC-27</b> | AgNPs-Modified TiO <sub>2</sub> on Recycled Polystyrene: A Sustainable Approach for Visible-Light Photodegradation of Organic Dyes                                   | <u>L. Remia</u>        |
| <b>P-ABC-28</b> | Validation and application of the UNI ISO 11338-2:2021 analytical method for the determination of polycyclic aromatic hydrocarbons in atmospheric particulate matter | <u>M. Ricciardi</u>    |
| <b>P-ABC-29</b> | Characterization of Ancient Cosmetic Residues in Greek Lekythoi from the Necropolis of Spina by Analytical Pyrolysis                                                 | <u>A.G. Rombolà</u>    |
| <b>P-ABC-30</b> | Co-Occurrence and Correlation of Fluorinated Microplastics, Additives, and Perfluoroalkyl Substances (PFAS) in the Venice Lagoon Waters                              | <u>B. Rosso</u>        |
| <b>P-ABC-31</b> | Pathways of Tire and Road Wear Particles (TWP) from the Dranaige basin to the Venice Lagoon                                                                          | <u>B. Rosso</u>        |
| <b>P-ABC-32</b> | Unravelling Plastic-Associated Contamination in Antarctic Snow: SMPs, PAs, and PFAS through an Integrated Analytical Approach                                        | <u>E. Scalabrin</u>    |

|                 |                                                                                                                                                                                                                                       |                       |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| <b>P-ABC-33</b> | Exploring the performance of hexagonal boron nitride as novel photocatalyst towards the degradation of PFAS                                                                                                                           | <u>I. Sciscenko</u>   |
| <b>P-ABC-34</b> | Soil-biodegradable chitosan-cutin coatings for sustainable controlled release fertilizers                                                                                                                                             | <u>C. Scopetani</u>   |
| <b>P-ABC-35</b> | A Streamlined and Fully Automated Online SPE-ICP-MS Method for Ultra-Trace Mercury Monitoring in Natural Waters                                                                                                                       | <u>D. Spanu</u>       |
| <b>P-ABC-36</b> | The quest for an analytical method to analyze cVMS in snow                                                                                                                                                                            | <u>G. Trevisanato</u> |
| <b>P-ABC-37</b> | Organic Contaminants in Unhatched Seabird Eggs from Terra Nova Bay (Ross Sea, Antarctica): PAHs, Fragrances, UV Filters, and Bisphenols                                                                                               | <u>M. Vecchiato</u>   |
| <b>P-ABC-38</b> | Optimization of an Isotope Dilution GC-MS Method for PFAS Analysis in Water                                                                                                                                                           | <u>D. Zatta</u>       |
| <b>P-ABC-39</b> | Tetracycline interaction with Ca <sup>2+</sup> and Zn <sup>2+</sup> : speciation study and antiproliferative activity in non-small lung cancer cells                                                                                  | <u>O. Giuffrè</u>     |
| <b>P-ABC-40</b> | Chemical characterization and seasonal variability of PM <sub>2.5</sub> in an urban-industrial area of southern Italy: the role of ionic species, polycyclic aromatic hydrocarbons and levoglucosan as indicators of emission sources | <u>M. Trifuoggi</u>   |
| <b>P-ABC-41</b> | Remediation of heavy hydrocarbon-contaminated land using electrochemical techniques: the case study of the Napoli Est SIN                                                                                                             | <u>M. Toscanesi</u>   |

## Forensic Analytical Chemistry / Toxicology (FOR/TOS)

### POSTER SESSION 2 Tuesday 8 September 14.00 - 15.00

|                     |                                                                                                                                                    |                        |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| <b>P-FOR/TOS-01</b> | Non target analysis of emerging pollutants in urine samples - method development and first results from a screening on agricultural workers        | <u>P. Barbieri</u>     |
| <b>P-FOR/TOS-02</b> | From Microplastics to Cardiovascular Damage: A Multimodal Analytical Platform                                                                      | <u>G. Battaglia</u>    |
| <b>P-FOR/TOS-03</b> | Identification and estimation of microplastics in soil collected from the ecotourism destinations of the Eastern Himalayas                         | <u>S. Bhattacharya</u> |
| <b>P-FOR/TOS-04</b> | Characterization of Brorphine Urinary Metabolites and Sex-Specific pharmacokinetic profile though Untargeted Metabolomics and Molecular Networking | <u>L. Chiodo</u>       |

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|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| <b>P-FOR/TOS-05</b> | CdS quantum dots in the skin: the smaller they are, the deeper they go                                                                                       | <u>G. Marussi</u>  |
| <b>P-FOR/TOS-06</b> | Multiparametric analytical approach for the characterization and quality assessment of novel tobacco and nicotine products                                   | <u>E. Papa</u>     |
| <b>P-FOR/TOS-07</b> | Integrated UHPLC-MS/MS air monitoring and in vitro toxicological assessment of occupational exposure to 1,4-butanediol diglycidyl ether (BDDE)               | <u>E. Porru</u>    |
| <b>P-FOR/TOS-08</b> | Are fluorine-free textiles really fluorine-free? Results of their volatile PFAS screening by HS-SPME-GC-MS/MS                                                | <u>M. Quinto</u>   |
| <b>P-FOR/TOS-09</b> | Non-Destructive MicroNIR Chemometric Profiling of Bloodstains for Field-Deployable BPA: From Substrate Effects to Species Discrimination and Aging           | <u>G. Rizzo</u>    |
| <b>P-FOR/TOS-10</b> | An LC-MS/MS method for the determination of PFOA, ADV and cC6O4 in human plasma                                                                              | <u>E. Roggia</u>   |
| <b>P-FOR/TOS-11</b> | An innovative online SPE-HPLC-MS/MS method for the simultaneous analysis of 21 phthalate and alternative plasticizer metabolites in human biological samples | <u>G. Rossetti</u> |
| <b>P-FOR/TOS-12</b> | From many tools to one: an all-in-one R pipeline for untargeted NPS screening by LC-HRMS/MS                                                                  | <u>D. Serafini</u> |

### Green Analytical Chemistry (GREEN)

#### POSTER SESSION 2 Tuesday 8 September 14.00 - 15.00

|                   |                                                                                                             |                      |
|-------------------|-------------------------------------------------------------------------------------------------------------|----------------------|
| <b>P-GREEN-01</b> | 3D-Printed Wooden stir bars as tunable sorptive phases for the extraction of emerging contaminants          | <u>E. Ceccardi</u>   |
| <b>P-GREEN-02</b> | Electrochemical Quantification of Polyphenols in NADES: A Green Analytical Approach                         | <u>E. Frignani</u>   |
| <b>P-GREEN-03</b> | Innovative 3D-printed device for FPSE of complex matrices                                                   | <u>M. Locatelli</u>  |
| <b>P-GREEN-04</b> | Giving horse hoof waste a second life as dye sorbent from wastewaters                                       | <u>L.R. Magnaghi</u> |
| <b>P-GREEN-05</b> | A Sustainable Analytical Method for Detecting Olive Oil Adulteration Using Subcritical Fluid Chromatography | <u>A. Satira</u>     |

## Sensors and Biosensors (SENS)

### POSTER SESSION 3 Wednesday 9 September 14.00 - 15.00

|                  |                                                                                                                                                             |                       |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| <b>P-SENS-01</b> | In-situ electrochemical generation of initiator for ionic polymerization                                                                                    | <u>E. Ausili</u>      |
| <b>P-SENS-02</b> | Flower-inspired paper-based microfluidic platform for in situ electrochemical monitoring of nitrate and pH in soil                                          | <u>L. Belcastro</u>   |
| <b>P-SENS-03</b> | Dual-Purpose Ni-Sensitive Bioplastic Films: A Smart Jewellery Coating for Allergen Detection and Skin Protection                                            | <u>R. Biesuz</u>      |
| <b>P-SENS-04</b> | Silicon Nanowires platforms via electrodeposition and Metal-Assisted Chemical Etching                                                                       | <u>M. Bonechi</u>     |
| <b>P-SENS-05</b> | Impedance Spectroscopy for Detection of Polystyrene Micro- and Nanoplastics in Water                                                                        | <u>A. Carvani</u>     |
| <b>P-SENS-06</b> | pH-Activated Self-Propagating Protein Aggregation Enables Plasmonic Single-Molecule Affinity Detection at 10-20 M                                           | <u>M. Catacchio</u>   |
| <b>P-SENS-07</b> | Electrochemical Sensor as Smart Device for White Blood Cell Measurement in Synovial Fluid                                                                   | <u>B. Comegna</u>     |
| <b>P-SENS-08</b> | Green electrosynthesized polydopamine-based MIPs for the electrochemical detection of non-electroactive Glyphosate and Melamine                             | <u>A. Cutaia</u>      |
| <b>P-SENS-09</b> | From dopamine sensing to electrochromic actuation: an analog logic OECT-based platform                                                                      | <u>G. D'Altri</u>     |
| <b>P-SENS-10</b> | New Approaches to Produce 3D-Printed Electroanalytical Devices Integrating Laser-Nanostructured Sensing Films                                               | <u>F. Della Pelle</u> |
| <b>P-SENS-11</b> | Norepinephrine-Derived MIPs on Porous Silica Interferometers for Label-Free Optical Sensing                                                                 | <u>T. Di Giulio</u>   |
| <b>P-SENS-12</b> | Design of an rGO-AuNP Biosensor for Protein Detection Leveraging Proximity-Induced DNA Strand Displacement                                                  | <u>D. Di Lena</u>     |
| <b>P-SENS-13</b> | Water-Processable 2D Metal-COF Inks for Versatile Electrochemical Sensing in Clinical and Environmental Analysis                                            | <u>A. Dron</u>        |
| <b>P-SENS-14</b> | Development of a Lateral Flow assay based on CRISPR/Cas-technology for the detection of Trastuzumab as a HER2-positive breast and gastric cancers biomarker | <u>A. Emami Amin</u>  |
| <b>P-SENS-15</b> | Peptide-based gel to improve stability of electrochemical biosensors                                                                                        | <u>G. Iula</u>        |

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|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| <b>P-SENS-16</b> | Measuring the state-of-charge (SoC) and equivalent series resistance (ESR) of exhausted alkaline and zinc-carbon batteries for possible recharging using a self-built, open-source Arduino-based tool | <u>F. Marini</u>             |
| <b>P-SENS-17</b> | Electrochemical Biosensing of Human E-Cadherin through Internalin A-Mediated Molecular Recognition                                                                                                    | <u>L. Martina</u>            |
| <b>P-SENS-18</b> | Electrochemical sensor for quantifying Gremlin-1-expressing exosomes in breast cancer liquid biopsy                                                                                                   | <u>G. Nota</u>               |
| <b>P-SENS-19</b> | Comprehensive investigation for the simultaneous detection of ferric and ferrous ions in hydrochloric acid media by microelectrode voltammetry                                                        | <u>M.D. Peçanha de Souza</u> |
| <b>P-SENS-20</b> | Analytical Optimization of Molecularly Imprinted Electrochemical Sensors for PFOS Determination in Water Samples                                                                                      | <u>M.D. Peçanha de Souza</u> |
| <b>P-SENS-21</b> | How changing printer and manufacturing parameters affect the electrochemical performance of 3D-printed devices                                                                                        | <u>G. Persico</u>            |
| <b>P-SENS-22</b> | Electrochemical Approaches for Fast Cannabinoid Analysis in Hashish                                                                                                                                   | <u>L. Pigani</u>             |
| <b>P-SENS-23</b> | An ML-assisted inkjet-printed electrochemical sensor for the detection of glyphosate in surface water                                                                                                 | <u>A. Silvestri</u>          |
| <b>P-SENS-24</b> | Liquid Crystal-Templated Silver Electrodeposits as Electrocatalytic Platforms for Haloacetic Acid Detection                                                                                           | <u>A.M. Stortini</u>         |
| <b>P-SENS-25</b> | Polydopamine MIP-Based Biosensor for Trace-Level Detection of Benzo[a]pyrene                                                                                                                          | <u>A. Tricase</u>            |
| <b>P-SENS-26</b> | Development of an Electrochemical Biosensor for the Detection of Bisphenol A                                                                                                                          | <u>F. Zanette</u>            |

## Separation Science (SEP)

### POSTER SESSION 3 Wednesday 9 September 14.00 - 15.00

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|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| <b>P-SEP-01</b> | Development and Optimization of a QuEChERS MOF-based d-SPE Method for Multi-Residue Analysis in Cereal-based Foods: Exploring Clean-up and Pre-concentration Strategies | <u>A. Aguilone</u>   |
| <b>P-SEP-02</b> | Identification and quantification of microplastics in complex samples through hydrogen peroxide digestion followed by pyrolysis-gas chromatography-mass spectrometry    | <u>G. Bonaccorso</u> |

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|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| <b>P-SEP-03</b> | Tracking Polymer Migration: Optimized Extraction and Validation for Dry Food Packaging                                                                                                         | <u>E. Conterposito</u> |
| <b>P-SEP-04</b> | Orthogonal RP-UPLC and SEC-UPLC Approaches for Quantitative Analysis and Integrity Assessment of Cetuximab-Based Antibody-Drug Conjugates                                                      | <u>D. Cuffaro</u>      |
| <b>P-SEP-05</b> | Towards greener chiral separations using supercritical fluid chromatography                                                                                                                    | <u>S. Felletti</u>     |
| <b>P-SEP-06</b> | Efficient Valorization of Waste Surgical Masks for the Production of Activated Carbon-like Sorbent and Its Application in Solid-Phase Extraction and UHPLC-PDA Analysis of Phthalates in Water | <u>V. Ferrone</u>      |
| <b>P-SEP-07</b> | Exhaled breath volatolomics for the diagnosis of cancer and respiratory diseases                                                                                                               | <u>M. Galletta</u>     |
| <b>P-SEP-08</b> | Hydroponic micropollutant adsorption via sewage sludge biochar                                                                                                                                 | <u>F. Gosetti</u>      |
| <b>P-SEP-09</b> | True Quantitation of Terpenes in Cannabis sativa L. Essential Oil Using Relative Response Factors in GC-FID analysis                                                                           | <u>G. Micalizzi</u>    |
| <b>P-SEP-10</b> | Kendrick Mass Defect Filtering Enables High-Throughput Untargeted Annotation of Minor Phytocannabinoids: Toward Streamlined Phytocannabinomics                                                 | <u>E. Taglioni</u>     |

### Analytical Spectroscopy (SPA)

#### POSTER SESSION 3 Wednesday 9 September 14.00 - 15.00

|                 |                                                                                                                               |                     |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------|---------------------|
| <b>P-SPA-01</b> | Mimicking Atmospheric Deposition: Controlled Resuspension vs Filtration Approaches for generation of PM10 reference materials | <u>F. Bilo</u>      |
| <b>P-SPA-02</b> | Metabolomic analysis by 1H-NMR of porcine plasma for physiological status monitoring                                          | <u>L. Cicero</u>    |
| <b>P-SPA-03</b> | The contribution of XPS to the investigation of unregulated fibrous minerals: the case of antigorite.                         | <u>M. Fantauzzi</u> |
| <b>P-SPA-04</b> | Selective Palladium recovery by EPS-based biosorbents and valorisation into ORR electrocatalysts                              | <u>C. Giovani</u>   |
| <b>P-SPA-05</b> | Development of a Multi-Bounce UV-Vis Spectrophotometer with Extended Optical Pathlength for Sub-ppm Metal Detection in Water  | <u>W. Giurlani</u>  |

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|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| <b>P-SPA-06</b> | Statistically Controlled Synthesis and Physicochemical Characterization of green fluorescent PolyT-Templated Copper Nanoclusters                                                                                   | <u>M. Minunni</u> |
| <b>P-SPA-07</b> | Analytical characterization of antimicrobial Zn/Ag hybrid phosphates                                                                                                                                               | <u>R.A. Picca</u> |
| <b>P-SPA-08</b> | Development of a Stability-Indicating HPLC-DAD Method for Related Substances Analysis in a Drug Product Containing Two Active Pharmaceutical Ingredients using an ICH Q14-Compliant Full Factorial Design Approach | <u>A. Rossi</u>   |
| <b>P-SPA-09</b> | Recovery of Rare Earth Elements by chitosan: Influence of Molecular Weight on Nd <sup>3+</sup> and Gd <sup>3+</sup> Removal                                                                                        | <u>M. Siddi</u>   |

### Food and Nutraceuticals (ALI)

#### POSTER SESSION 3 Wednesday 9 September 14.00 - 15.00

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|-----------------|--------------------------------------------------------------------------------------------------------------------------------|----------------------|
| <b>P-ALI-01</b> | Study of the effects of non-thermal technologies on the chemical composition of food through different analytical methods.     | <u>L. Acquaticci</u> |
| <b>P-ALI-02</b> | Extended automation of olive oil analysis according to CE Regulation 2022/2104 and 2022/2105                                   | <u>A. Carretta</u>   |
| <b>P-ALI-03</b> | Rare Earth Elements in wine as a geographical fingerprint of provenance: signal masking effect and multivariate interpretation | <u>M. Consumi</u>    |
| <b>P-ALI-04</b> | Evaluation of the stability of two new probiotic CA activators                                                                 | <u>M. Locatelli</u>  |
| <b>P-ALI-05</b> | Fast and reliable TD-GC-MS method for coffee volatilome characterization and species/origin classification                     | <u>V. Maurino</u>    |