STRATEGIE INNOVATIVE
PER SFIDE GLOBALI

XXXII Congresso Nazionale Divisione di Chimica Analitica

6-10 settembre 2026, Venezia

PROGRAMME

Ca' Foscari University Scientific Campus, Mestre (Venice)

www.unive.it/analitica2026-eng

Società Chimica Italiana
Divisione di Chimica Analitica

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

Università Ca'Foscari Venezia
Dipartimento di Scienze Molecolari e Nanosistemi

GOLD SPONSOR

Agilent

GNR ANALYTICAL INSTRUMENTS GROUP

SILVER SPONSOR

Assing Research Partner

deltek

HANNA instruments

Lab Service Analytica

LECO EMPOWERING RESULTS

LNI SWISSGAS

nanoVision

PalmSens

SRA INSTRUMENTS ANALYTICAL SOLUTIONS

thasar

ThermoFisher SCIENTIFIC

BRONZE SPONSOR

SIAD

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 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.

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 Lecture PL1 - Environment - R. Ebinghaus** *Auditorium*		
10.15 - 10.35	**Young Researcher Award: D. Spanu** *Auditorium*		
10.35 - 11.05	**COFFEE BREAK**		
	Chemometrics and Data Quality (CHEMO) *Auditorium*	**Sensors and Biosensors (SENS)** *Room 1*	**Bioanalytics & -omics (BIO-OMICS)** *Room 2*
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	B. Giussani	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 (CHEMO) *Auditorium*	**Analytical Spectroscopy (SPA)** *Room 1*	**Bioanalytics & -omics (BIO-OMICS)** *Room 2*
15.00 - 15.20	M. Barbera	Keynote W. Giurlani	J. Brandi
15.20 - 15.35	S. Pellacani	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**		

Tuesday 8 September 2026 - Morning

08.30 - 09.00	**Participant registration**		
09.00 - 09.45	**Plenary Lecture PL2 - Biosensors - S. Campuzano Ruiz** *Auditorium*		
	Sensors and Biosensors (SENS) *Auditorium*	**Environment and Cultural Heritage (ABC)** *Room 1*	**Green Analytical Chemistry (GREEN)** *Room 2*
09.55 - 10.15	Keynote F. Di Francesco	Keynote L. Carena	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**		
	Sensors and Biosensors (SENS) *Auditorium*	**Environment and Cultural Heritage (ABC)** *Room 1*	**Green Analytical Chemistry (GREEN)** *Room 2*
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

	Bioanalytics (BIO) *Auditorium*	**Separation Science - Mass Spectrometry (SEPMS)** *Room 1*	**Forensic Analytical Chemistry / Toxicology (FOR/TOS)** *Room 2*
15.00 - 15.20	N. Kassouf	Keynote N. Riboni	Keynote E. Barberis
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

Wednesday 9 September 2026

08.30 - 09.00	**Participant registration**		
09.00 - 09.45	**Plenary Lecture PL3 - GreenPrep - E. Psillakis** *Auditorium*		
	Sensors and Biosensors (SENS) *Auditorium*	**Separation Science (SEP)** *Room 1*	**Analytical Spectroscopy / Electroanalytics (SPA/ELE)** *Room 2*
09.55 - 10.15	M. Gamella	C. M. Montone	M. Giorgetti
10.15 - 10.30	M. Mosquera	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**		
	Sensors and Biosensors (SENS) *Auditorium*	**Separation Science (SEP)** *Room 1*	**Analytical Spectroscopy (SPA)** *Room 2*
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**		
15.00 - 17.00	**Social Tour**		
19.00	**Social Dinner**		

Thursday 10 September 2026

08.30 - 09.00	**Participant registration**		
	Sensors and Biosensors - Electroanalytics (SENS-ELE) *Auditorium*	**Food and Nutraceuticals (ALI)** *Room 1*	**Environment and Cultural Heritage (ABC)** *Room 2*
09.10 - 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**		
	Sensors and Biosensors - Electroanalytics (SENS-ELE) *Auditorium*	**Food and Nutraceuticals (ALI)** *Room 1*	**Environment and Cultural Heritage (ABC)** *Room 2*
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**		

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 Lecture PL1 – 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)

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

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** Looking beyond replicates: multivariate error analysis for robust NIR spectroscopy
Barbara Giussani

ROOM 1 – BUILDING EPSILON

Parallel Session: Sensors and Biosensors (SENS)

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-trigged 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 theratyping applications
Antonella Miglione

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)

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

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 30)**

AUDITORIUM DANILO MAINARDI – BUILDING ALFA

Parallel Session: Chemometrics and Data Quality (CHEMO)

15.00 - 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** Unveiling Chemical Fingerprints of Aging in Balsamic Vinegar of Modena (PGI) with GC-IMS
Samuele Pellacani

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)

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)

15.00 - 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 Cavalera

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

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)

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** ChemDoE: 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)

17.00 - 17.15 **O-SPA-07** SWIR Hyperspectral Imaging for Small Microplastics (≤100 µm) 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

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)

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 Lecture PL2 – 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)

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)

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 (µITIES)
Salvatore Barreca

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)

09.55 - 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)

11.30 - 11.45 **O-SENS-13** Functional PNA probes for electrochemical magneto-genoassays for simultaneous detection of multiple allergen food detection
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

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)

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)

11.30 - 11.45 **O-GREEN-05** From Sensing to Remediation: Starch-Based Bioplastics as Sustainable Adsorbents for Wastewater Dyes Removal
Raffaela 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 32)**

AUDITORIUM DANILO MAINARDI – BUILDING ALFA

Parallel Session: Bioanalytics (BIO)

15.00 - 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 glicosylase activity
Erica Belforte

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)

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)

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 DANILO MAINARDI – BUILDING ALFA

Parallel Session: Bioanalytics (BIO)

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

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)

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)

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

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 Lecture PL3 – 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)

09.55 - 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

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)

09.55 - 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-Multidetection 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)

09.55 - 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** Ti3C2Tx MXenes in Li-S Batteries to Balance Polysulphide Adsorption and Li2S 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)

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

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)

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

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)

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 CO2 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
Fabjola 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 37)**

15.00 - 17.00 **Social Tour**

19.00 **Social Dinner**

Thursday 10 September 2026

08.30 - 09.00 **Participant registration**

AUDITORIUM DANILO MAINARDI – BUILDING ALFA

Parallel Session: Sensors and Biosensors - Electroanalytics (SENS-ELE)

09.10 - 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 Zr1-xTixS3 nanoswords
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)

09.10 - 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)

09.10 - 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

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)

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)

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 Spectrophometric Assays and Untargeted UHPLC-HRMS
Desiree Bozza

12.15 - 12.30 **O-ALI-10** Multimodal Analytical Characterization of Spray-Congealed EGCG Microparticles: Stability Enhancement, Controlled Release and Chemometric Validation
Gaia Rizzo

ROOM 2 – BUILDING EPSILON

Parallel Session: Environment and Cultural Heritage (ABC)

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

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

P-CHEMO-01	Making Soil Chemistry Visible: Chemometric Maps as Visual Tools for Translating Complex Soil Data into Soil Literacy	Marcella Barbera
P-CHEMO-02	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 biofuid discrete sampling and analysis of chemical stress marker	Pierluigi Barbieri
P-CHEMO-03	A Fused Approach Using Ion Mobility Spectrometry and Spectroscopy for Honey Authentication	Rebecca Barbieri
P-CHEMO-04	Tackling the water fingerprinting riddle pairing EIS and chemometrics	Antonio Bova
P-CHEMO-05	A proof of concept for the detection of emerging contaminants in wastewater using portable spectroscopy and MCR-ALS	Marina Cocchi
P-CHEMO-06	Rapid and non-destructive authentication of Specialty Coffee by Near-Infrared Hyperspectral Imaging	Giorgia Foca
P-CHEMO-07	From Lab to Field: Multivariate Control Chart implementation in NEMO Device for Water Quality Monitoring	Guglielmo Emanuele Franceschi

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

Bioanalytics (BIO)

POSTER SESSION 1 Monday 7 September 14.00 - 15.00

P-BIO-01	Oxidized gum Arabic/gelatin hydrogels as tunable scaffolds for 3D pancreatic tumor organoid culture	Laura Anfossi
P-BIO-02	Gelatin as Macromonomer in Solid Phase Synthesis of nanoMIPs	Claudio Baggiani
P-BIO-03	Metal Complexation of Tuvusertib and Benzosertib anticancer agents for the Rational Design of Liposomal formulations	Mariastefania Bellomo
P-BIO-04	Analytical Insights into the Lipid Mediator Landscape Across Biological Matrices and Disease States	Denise Biagini
P-BIO-05	LC-MS/MS-Based Proteomics Identifies mtDNA-Dependent Protein Signatures of Breast Cancer Metastasis	Daniela Cecconi
P-BIO-06	HRMS-based untargeted metabolomics profiling of lung epithelial cells exposed to antibiotic transformation products	Federica Dal Bello
P-BIO-07	Integrated metabolomics and lipidomics characterization of intracellular and extracellular compartments in drug-sensitive and multidrug-resistant cell models	Alice Di Bernardo

P-BIO-08	Trace element imbalances in Chronic Kidney Disease (CKD) patients undergoing dialysis: the role of hemodialysis treatment as an environmental factor	Alessia Fabbris
P-BIO-09	Hyaluronic Acid Crosslinked Films as Antibiotic Delivery Systems for Chronic Wound Healing	Nicoletta Gatti
P-BIO-10	An optimized workflow for untargeted serum lipidomics: impact of sample handling and acquisition strategies	Arianna Ghignone
P-BIO-11	Paper microextraction patch for in vitro metabolic profiling to identify Klebsiella pneumoniae	Chiranjit Ghosh
P-BIO-12	MS/MS fragmentation characterization of imidazole- and triazole-based compounds: effect of the azole scaffold on fragmentation pathways	Valentina Greco
P-BIO-13	Application of the Taguchi Method as an Efficient and Sustainable Approach for Bioanalytical Method Development	Elena Gregoris
P-BIO-14	Orthogonal transcription of two genes within a single synthetic DNA network	Michela Giovanna Izzo
P-BIO-15	nanoHPLC-HRMS Analysis of Oxo-Histidine Formation in Aβ(1-42) after Boron Neutron Capture Therapy	Andrea Magnani
P-BIO-16	Decoding CSF protein complexes in neurodegenerative diseases through mass spectrometry	Marcello Manfredi
P-BIO-17	CRISPR-Cas13-Powered Detection of the Tumor Marker p53	Chiara Micucci
P-BIO-18	Polythymine-templated copper nanoclusters as fluorescent probes for an innovative label-free LFA assay based on aptamers	Maria Minunni
P-BIO-19	Mass spectrometry reveals bacterial metabolite and molecular remodelling in the ageing thymic microenvironment	Claudio Medana

Environment and Cultural Heritage (ABC)

POSTER SESSION 2 Tuesday 8 September 14.00 - 15.00

P-ABC-01	Optimizing Solar-Based Advanced Oxidation Processes by Combining Design of Experiments and ASCA	Monika Adanyi
P-ABC-02	Chemometric Analysis of Emerging Contaminant Dynamics Across a Full-Scale Wastewater Treatment Plant: the QIMERA Pilot Study	Eugenio Alladio

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

P-ABC-18	Clean-up of sulfonamide antibiotics in soil sample extracts using molucularly imprinted polymers prepared by precipitation polymerisation	Alessandro Lo Presti
P-ABC-19	Personal Care Products (PCPs) and Polycyclic Aromatic Hydrocarbons (PAHs) in the snowpack of the Lake Tahoe region (USA)	Elena Marchiori
P-ABC-20	Removal of pollutants by chemical and/or electrochemical technique from industrial wastewater	Salvatore Mastromarino
P-ABC-21	Natural photoactivity and self-purification capacity of quarry lake waters of the Piedmont region	Andrea Mittaridonna
P-ABC-22	Assessing airborne microplastics concentrations in indoor working environments using Py-GC-MS	Francesca Modugno
P-ABC-23	Spectroscopic Investigation of the Formation of Alizarin-Aluminium Lake Pigments under Variable Synthesis Conditions	Ligia Maria Moretto
P-ABC-24	Tecniche analitiche avanzate per l'indagine rapida di PFAS volatili	Daniele Morosini
P-ABC-25	Occurrence and environmental monitoring of per- and polyfluoroalkyl substances (PFAS) in groundwater	Guido Perra
P-ABC-26	Confluences as hotspots of carbonate-system reorganization in headwater stream networks	Rossano Piazza
P-ABC-27	AgNPs-Modified TiO2 on Recycled Polystyrene: A Sustainable Approach for Visible-Light Photodegradation of Organic Dyes	Lorenzo Remia
P-ABC-28	Validation and application of the UNI ISO 11338-2:2021 analytical method for the determination of polycyclic aromatic hydrocarbons in atmospheric particulate matter	Maria Ricciardi
P-ABC-29	Characterization of Ancient Cosmetic Residues in Greek Lekythoi from the Necropolis of Spina by Analytical Pyrolysis	Alessandro Girolamo Rombolà
P-ABC-30	Co-Occurrence and Correlation of Fluorinated Microplastics, Additives, and Perfluoroalkyl Substances (PFAS) in the Venice Lagoon Waters	Beatrice Rosso
P-ABC-31	Pathways of Tire and Road Wear Particles (TWPs) from the Dranaige basin to the Venice Lagoon	Beatrice Rosso

P-ABC-32	Unravelling Plastic-Associated Contamination in Antarctic Snow: SMPs, PAs, and PFAS through an Integrated Analytical Approach	Elisa Scalabrin
P-ABC-33	Exploring the performance of hexagonal boron nitride as novel photocatalyst towards the degradation of PFAS	Iván Sciscenko
P-ABC-34	Soil-biodegradable chitosan-cutin coatings for sustainable controlled release fertilizers	Costanza Scopetani
P-ABC-35	A Streamlined and Fully Automated Online SPE-ICP-MS Method for Ultra-Trace Mercury Monitoring in Natural Waters	Davide Spanu
P-ABC-36	The quest for an analytical method to analyze cVMS in snow	Giorgia Trevisanato
P-ABC-37	Organic Contaminants in Unhatched Seabird Eggs from Terra Nova Bay (Ross Sea, Antarctica): PAHs, Fragrances, UV Filters, and Bisphenols	Marco Vecchiato
P-ABC-38	Optimization of an Isotope Dilution GC-MS Method for PFAS Analysis in Water	Daniele Zatta
P-ABC-39	Tetracycline interaction with Ca2+ and Zn2+: speciation study and antiproliferative activity in non-small lung cancer cells	Ottavia Giuffrè
P-ABC-40	Chemical characterization and seasonal variability of PM2.5 in an urban-industrial area of southern italy: the role of ionic species, polycyclic aromatic hydrocarbons and levoglucosan as indicators of emission sources	Marco Trifuoggi
P-ABC-41	Remediation of heavy hydrocarbon-contaminated land using electrochemical techniques: the case study of the Napoli Est SIN	Maria Toscanesi

Forensic Analytical Chemistry / Toxicology (FOR/TOS)

POSTER SESSION 2 Tuesday 8 September 14.00 - 15.00

P-FOR/TOS-01	Non target analysis of emerging pollutants in urine samples - method development and first results from a screening on agricultural workers	Pierluigi Barbieri
P-FOR/TOS-02	From Microplastics to Cardiovascular Damage: A Multimodal Analytical Platform	Gennaro Battaglia
P-FOR/TOS-03	Identification and estimation of microplastics in soil collected from the ecotourism destinations of the Eastern Himalayas	Sayan Bhattacharya

P-FOR/TOS-04	Characterization of Brorphine Urinary Metabolites and Sex-Specific pharmacokinetic profile though Untargeted Metabolomics and Molecular Networking	Ludovica Chiodo
P-FOR/TOS-05	CdS quantum dots in the skin: the smaller they are, the deeper they go	Giovanna Marussi
P-FOR/TOS-06	Multiparametric analytical approach for the characterization and quality assessment of novel tobacco and nicotine products	Elena Papa
P-FOR/TOS-07	Integrated UHPLC-MS/MS air monitoring and in vitro toxicological assessment of occupational exposure to 1,4-butanediol diglycidyl ether (BDDE)	Emanuele Porru
P-FOR/TOS-08	Are fluorine-free textiles really fluorine-free? Results of their volatile PFAS screening by HS-SPME-GC-MS/MS	Maurizio Quinto
P-FOR/TOS-09	Non-Destructive MicroNIR Chemometric Profiling of Bloodstains for Field-Deployable BPA: From Substrate Effects to Species Discrimination and Aging	Gaia Rizzo
P-FOR/TOS-10	An LC-MS/MS method for the determination of PFOA, ADV and cC6O4 in human plasma	Elisa Roggia
P-FOR/TOS-11	An innovative online SPE-HPLC-MS/MS method for the simultaneous analysis of 21 phthalate and alternative plasticizer metabolites in human biological samples	Giorgia Rossetti
P-FOR/TOS-12	From many tools to one: an all-in-one R pipeline for untargeted NPS screening by LC-HRMS/MS	David Serafini

Green Analytical Chemistry (GREEN)

POSTER SESSION 2 Tuesday 8 September 14.00 - 15.00

P-GREEN-01	3D-Printed Wooden stir bars as tunable sorptive phases for the extraction of emerging contaminants	Erica Ceccardi
P-GREEN-02	Electrochemical Quantification of Polyphenols in NADES: A Green Analytical Approach	Elia Frignani
P-GREEN-03	Innovative 3D-printed device for FPSE of complex matrices	Marcello Locatelli
P-GREEN-04	Giving horse hoof waste a second life as dye sorbent from wastewaters	Lisa Rita Magnaghi
P-GREEN-05	A Sustainable Analytical Method for Detecting Olive Oil Adulteration Using Subcritical Fluid Chromatography	Antonella Satira

Sensors and Biosensors (SENS)

POSTER SESSION 3 Wednesday 9 September 14.00 - 15.00

P-SENS-01	In-situ electrochemical generation of initiator for ionic polymerization	Elisa Ausili
P-SENS-02	Flower-inspired paper-based microfluidic platform for in situ electrochemical monitoring of nitrate and pH in soil	Laura Belcastro
P-SENS-03	Dual-Purpose Ni-Sensitive Bioplastic Films: A Smart Jewellery Coating for Allergen Detection and Skin Protection	Raffaela Biesuz
P-SENS-04	Silicon Nanowires platforms via electrodeposition and Metal-Assisted Chemical Etching	Marco Bonechi
P-SENS-05	Impedance Spectroscopy for Detection of Polystyrene Micro- and Nanoplastics in Water	Alessandro Carvani
P-SENS-06	pH-Activated Self-Propagating Protein Aggregation Enables Plasmonic Single-Molecule Affinity Detection at 10-20 M	Michele Catacchio
P-SENS-07	Validation of a Stencil-Printed Biosensor for Glucose Monitoring in Industrial Fermentation Media	Alessandra Cimino
P-SENS-08	Electrochemical Sensor as Smart Device for White Blood Cell Measurement in Synovial Fluid	Bianca Comegna
P-SENS-09	Green electrosynthesized polydopamine-based MIPs for the electrochemical detection of non-electroactive Glyphosate and Melamine	Alessandra Cutaia
P-SENS-10	From dopamine sensing to electrochromic actuation: an analog logic OECT-based platform	Giada D'Altri
P-SENS-11	New Approaches to Produce 3D-Printed Electroanalytical Devices Integrating Laser-Nanostructured Sensing Films	Flavio Della Pelle
P-SENS-12	Norepinephrine-Derived MIPs on Porous Silica Interferometers for Label-Free Optical Sensing	Tiziano Di Giulio
P-SENS-13	Design of an rGO-AuNP Biosensor for Protein Detection Leveraging Proximity-Induced DNA Strand Displacement	Denise Di Lena
P-SENS-14	Water-Processable 2D Metal-COF Inks for Versatile Electrochemical Sensing in Clinical and Environmental Analysis	Alexandru Dron
P-SENS-15	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	Afsaneh Emamiamin

P-SENS-16	Peptide-based gel to improve stability of electrochemical biosensors	Gabriella Iula
P-SENS-17	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	Federico Marini
P-SENS-18	Electrochemical Biosensing of Human E-Cadherin through Internalin A-Mediated Molecular Recognition	Laura Martina
P-SENS-19	Electrochemical sensor for quantifying Gremlin-1-expressing exosomes in breast cancer liquid biopsy	Grazia Nota
P-SENS-20	Comprehensive investigation for the simultaneous detection of ferric and ferrous ions in hydrochloric acid media by microelectrode voltammetry	Michael Douglas Peçanha de Souza
P-SENS-21	Analytical Optimization of Molecularly Imprinted Electrochemical Sensors for PFOS Determination in Water Samples	Michael Douglas Peçanha de Souza
P-SENS-22	How changing printer and manufacturing parameters affect the electrochemical perfomance of 3D-printed devices	Gennaro Persico
P-SENS-23	Electrochemical Approaches for Fast Cannabinoid Analysis in Hashish	Laura Pigani
P-SENS-24	Single-Molecule Ultrasensitive Biomarker Detection: New Frontiers in Early-Stage HPV Screening	Lucia Sarcina
P-SENS-25	An ML-assisted inkjet-printed electrochemical sensor for the detection of glyphosate in surface water	Alessandro Silvestri
P-SENS-26	Liquid Crystal-Templated Silver Electrodeposits as Electrocatalytic Platforms for Haloacetic Acid Detection	Angela Maria Stortini
P-SENS-27	Polydopamine MIP-Based Biosensor for Trace-Level Detection of Benzo[a]pyrene	Angelo Tricase
P-SENS-28	Development of an Electrochemical Biosensor for the Detection of Bisphenol A	Fabiola Zanette

Separation Science (SEP)

POSTER SESSION 3 Wednesday 9 September 14.00 - 15.00

P-SEP-01	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	Anna Aquilone
P-SEP-02	Identification and quantification of microplastics in complex samples through hydrogen peroxide digestion followed by pyrolysis-gas chromatography-mass spectrometry	Giulia Bonaccorso
P-SEP-03	Tracking Polymer Migration: Optimized Extraction and Validation for Dry Food Packaging	Eleonora Conterosito
P-SEP-04	Orthogonal RP-UPLC and SEC-UPLC Approaches for Quantitative Analysis and Integrity Assessment of Cetuximab-Based Antibody-Drug Conjugates	Doretta Cuffaro
P-SEP-05	Towards greener chiral separations using supercritical fluid chromatography	Simona Felletti
P-SEP-06	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	Vincenzo Ferrone
P-SEP-07	Exhaled breath volatolomics for the diagnosis of cancer and respiratory diseases	Micaela Galletta
P-SEP-08	Hydroponic micropollutant adsorption via sewage sludge biochar	Fabio Gosetti
P-SEP-09	True Quantitation of Terpenes in Cannabis sativa L. Essential Oil Using Relative Response Factors in GC-FID analysis	Giuseppe Micalizzi
P-SEP-10	Kendrick Mass Defect Filtering Enables High-Throughput Untargeted Annotation of Minor Phytocannabinoids: Toward Streamlined Phytocannabinomics	Enrico Taglioni

Analytical Spectroscopy (SPA)

POSTER SESSION 3 Wednesday 9 September 14.00 - 15.00

P-SPA-01	Mimicking Atmospheric Deposition: Controlled Resuspension vs Filtration Approaches for generation of PM10 reference materials	Fabjola Bilo

P-SPA-02	Metabolomic analysis by 1H-NMR of porcine plasma for physiological status monitoring	Luca Cicero
P-SPA-03	The contribution of XPS to the investigation of unregulated fibrous minerals: the case of antigorite.	Marzia Fantauzzi
P-SPA-04	Selective Palladium recovery by EPS-based biosorbents and valorisation into ORR electrocatalysts	Claudia Giovani
P-SPA-05	Development of a Multi-Bounce UV-Vis Spectrophotometer with Extended Optical Pathlength for Sub-ppm Metal Detection in Water	Walter Giurlani
P-SPA-06	Statistically Controlled Synthesis and Physicochemical Characterization of green fluorescent PolyT-Templated Copper Nanoclusters	Maria Minunni
P-SPA-07	Analytical characterization of antimicrobial Zn/Ag hybrid phosphates	Rosaria Anna Picca
P-SPA-08	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	Alice Rossi
P-SPA-09	Recovery of Rare Earth Elements by chitosan: Influence of Molecular Weight on Nd^{3+} and Gd^{3+} Removal	Marta Siddi

Food and Nutraceuticals (ALI)

POSTER SESSION 3 Wednesday 9 September 14.00 - 15.00

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