EuroAnalysis Geneva 2023

27–31 August 2023
Switzerland

Analytical Probing of Complex Systems

PROGRAMME

20.07.2023

Sunday, August 27, 2023

	PLENARY	
17:00	PL-1	**Identifying Metabolic Regulation through Metabolomics** *Uwe Sauer*
17:40	PL-2	**Historical View on Analytical Sciences in Switzerland** *Detlef Günther*
18:15		**Opening Ceremony**

Monday, August 28, 2023 - AM

	PLENARY	
9:00	PL-3	**Luminescent sensors: making the invisible visible** *Sergey Borisov*
	PARALLEL SESSION 1	
	KEYNOTE	
9:50	KN1-1	**Mid-Infrared Photonics: From Emerging Technology to Enabling Tool** *Boris Mizaikoff*
	S1-1 **OPTICAL SENSORS**	
10:45	IT1-1	**Assessing and minimising measurement artefacts in phosphorescence lifetime based sensing** *Dmitri Papkovsky*
11:00	OP1-1-1	**Real-time continuous monitoring of dynamic concentration profiles with biosensing by particle motion** *Max Bergkamp*
11:15	OP1-1-2	**Continuous blood typing within capillary via packing-enhanced nanoscattering of gold nanoparticles** *Po-Ling Chang*
11:30	OP1-1-3	**Machine Learning-Assisted Biothiols Detection using Multicolor Plasmonic Patterns Enabled by Controlled Growth of Silver on Gold Nanorods** *Mohammad Reza Hormozi-Nezhad*
11:45	OP1-1-4	**Reversible Thermochromic Polydiacetylene/Zinc(II)/Cadmium Selenide Quantum Dots Nanocomposites for Optical Sensing Applications** *Jirapa Rueangsuwan*
	PARALLEL SESSION 2	
	KEYNOTE	
9:50	KN1-2	**New Ways to Prepare More Performant Stationary Phase Supports for Liquid Chromatography** *Gert Desmet*

	S1-2 **SEPARATION SCIENCE**	
10:45	IT1-2	**HPLC and cylindrical PAGE purification of RNA aptamers with single nucleotide resolution** *Li Niu*
11:00	OP1-2-1	**Investigation of the Retention Mechanisms of Porous Graphitic Carbon as Stationary Phase in HPLC** *Frank Michel*
11:15	OP1-2-2	**Pegda-Based Ionic Imprinted Polymers for Selective Binding of Lithium** *Valentina Testa*
11:30	OP1-2-3	**Hyphenated thermogravimetry–gas chromatography–mass spectrometry: a successful technique for the analysis of complex materials and thin films** *Eleonora Conterosito*
11:45	OP1-2-4	**Actual developments in HPLC modeling** *Imre Molnár*

	PARALLEL SESSION 3	
	KEYNOTE	
9:50	KN1-3	**Analysis of complex biological samples with Confocal Raman Imaging and Chemometrics. A case study: Microplastics in Tissues** *Jose Manuel Amigo*

	S1-3 **ANALYTICAL SPECTROSCOPY**	
10:45	IT1-3	**Exploring the Versatility of X-ray Techniques for Nanoparticles Characterization and Quantification** *Laura Torrent*
11:00	OP1-3-1	**Analytical spectroscopical assessment of the interaction between metal nanoantimicrobials and lipid membranes** *Margherita Izzi*
11:15	OP1-3-2	**Polarization-Modulation InfraRed Reflection Absorption Spectroscopy (PM-IRRAS): an innovative tool for «in situ» characterization of polymer coatings** *Maurice Brogly*
11:30	OP1-3-3	**Combining high sensitivity laser infrared spectroscopy with gas chromatography** *Markus Metsälä*
11:45	OP1-3-4	**On the Measurement of the Mutual Diffusivity of Binary Gas Mixtures with FTIR Spectroscopy** *Valerio Loianno*

	PARALLEL SESSION 4	
	KEYNOTE	
9:50	KN1-4	**Sizing and counting particles by high-resolution native charge detection mass spectrometry** *Albert Heck*

	S1-4 **MASS SPECTROMETRY**	
10:45	IT1-4	**Localizing N-glycan Changes in Aging Skin by MALDI FTICR MS Imaging** *Martina Marchetti-Deschmann*
11:00	OP1-4-1	**Pyrylium based derivatization imaging mass spectrometer revealed the localization of L-DOPA** *Makoto Muto*

11:15	OP1-4-2	**Optimization of the use of Py-Tag for next generation derivatization reagents in imaging mass spectrometry** *Hitomi Shikano*
11:30	OP1-4-3	**Transition metal identification and speciation in cultural heritage samples by MALDI FT-ICR MS as salen complexes** *Elena Giaretta*
11:45	OP1-4-4	**Determination of hydrolysis products of organophosphorus nerve agents in soil and plant materials using liquid chromatography and tandem mass spectrometry** *Anastasiia Frolova*

Monday, August 28, 2023 - PM

	PLENARY	
13:30	PL-4	**Spectroscopy with Quantum Cascade Lasers for High-Precision Gas Analysis** *Lukas Emmenegger*
	PARALLEL SESSION 1	
	KEYNOTE	
14:20	KN2-1	**High affinity synthetic ligands for protein and virus sensing** *Róbert Gyurcsanyi*
	S2-1 **CHEMICAL SENSORS AND BIOSENSORS**	
14:50	IT2-1	**TBC** *TBC*
15:05	OP2-1-1	**Continuous biomarker monitoring with single molecule resolution by measuring free particle motion** *Alissa D. Buskermolen*
15:20	OP2-1-2	**Polymeric Nanofibers as Sensors – Towards Lab on a Mat** *Agata Michalska*
15:35	OP2-1-3	**Using a 3D printer for low-cost construction of the sensing areas of self/rapid tests** *Despina Kalogianni*
15:50	PS1	**Coffee Poster**
	S3-1 **CHEMICAL SENSORS AND BIOSENSORS**	
17:00	IT3-1	**Aptamer-based detection of emerging cancer biomarkers to guide cancer diagnosis and management** *María Jesús Lobo-Castañón*
17:15	OP3-1-1	**Application of aptamer-based biosensors for electrochemical detection of heavy metal cations** *Marta Jarczewska*
17:30	OP3-1-2	**Electrochemical bioplatform for interrogating the most common and carcinogenic human papillomavirus DNA** *Goksu Ozcelikay*
17:45	OP3-1-3	**An electrochemical strip-test integrated with smartphone for COVID-19 diagnosis** *Wanwisa Deenin*

	PARALLEL SESSION 2	
	KEYNOTE	
14:20	KN2-2	**Taking the characterization of biopharmaceutical products to the next level by improving speed and selectivity of chromatography** *Davy Guillarme*
	S2-2 **SEPARATION SCIENCE**	
14:50	IT2-2	**How to optimize SFC-MS methods effectively using current state-of-the art instrumentation** *Lucie Nováková*
15:05	OP2-2-1	**Time Efficiency: A Wonderful but Little-known Performance Indicator in Separation Sciences** *Tarso Kist*
15:20	OP2-2-2	**Continuous manufacturing of monoclonal antibodies: Dynamic control of multiple integrated polishing chromatography steps using BioSMB** *Nitika Nitika*
15:35	OP2-2-3	**A native multi-dimensional monitoring workflow for at-line characterization of mAb titer, size, charge, and glycoform heterogeneities in cell culture supernatant** *Srishti Joshi*
15:50	PS1	**Coffee Poster**
	S3-2 **SEPARATION SCIENCE**	
17:00	IT3-2	**Application of electrocolorimetric extraction for the determination of Ni(II) ions in chocolate samples: A green methodology for food analysis** *Waleed Alahmad*
17:15	OP3-2-1	**TBC** *TBC*
17:30	OP3-2-2	**Separation of e-waste metals using green aqueous two-phase systems based on functionalized ionic liquids and deep eutectic solvents** *Jasmina Mušović*
17:45	OP3-2-3	**Electrospray Ionization Drift Tube Ion Mobility Spectrometer with Ultra-High Resolving Power: Design and Optimization** *Marc-Aurèle Boillat*
	PARALLEL SESSION 3	
	KEYNOTE	
14:20	KN2-3	**Novel Printing Strategies to Underpin Quantitative Imaging** *Heidi Goenaga-Infante*
	S2-3 **ANALYTICAL SPECTROSCOPY**	
14:50	IT2-3	**Biosynthetic trifluoromethyl (CF3) methionine labelling to probe structures and dynamics of virus coat proteins and molecular chaperone oligomers by 19F NMR spectroscopy** *Satoshi Kishigami*
15:05	OP2-3-1	**Absolute quantification of pure free radical reagents by combination of effective magnetic moment method and quantitative electron paramagnetic resonance method** *Nobuhiro Matsumoto*
15:20	OP2-3-2	**Vibrational spectroscopy of blood plasma glycoproteins** *Liudmila Voronina*

15:35	OP2-3-3	**Challenges during evaluation, qualification, and implementation of an NMR spectrometer in an GMP environment** *Mario Schleep*
15:50	PS1	**Coffee Poster**
	S3-3 **ANALYTICAL SPECTROSCOPY**	
17:00	IT3-3	**Laser Induced XUV Spectrometry (LIXS): Even Better Than the Real LIBS** *Davide Bleiner*
17:15	OP3-3-1	**Improvement of fuel-cells based on data from multiple analytical techniques** *Thomas Nauser*
17:30	OP3-3-2	**Cross-validation of ID ICP/MS, RBS, and MEIS for determination of Absolute Mole Fractions of Elements in Nanometer-Thick Metal Alloy Films** *Yong-Hyeon Yim*
17:45	OP3-3-3	**Capabilities of LA-N_2-MICAP-MS for Direct Solid Analysis** *Dylan Käser*
	PARALLEL SESSION 4	
	KEYNOTE	
14:20	KN2-4	**Structure Elucidation of Iron Chelators Produced by Microorganisms** *Laurent Bigler*
	S2-4 **MASS SPECTROMETRY**	
14:50	OP2-4-1	**Rapid profiling the glycosylation effects on cellular entry of SARS-CoV-2 using MALDI-MS with high mass detection** *Yuye Zhou*
15:05	OP2-4-2	**Comparative Analysis of Haemoglobin Solution and Gas Phase Stability Using Mass Spectrometry** *Julian Harrison*
15:20	OP2-4-3	**In vitro and in vivo assessments of metabolic stability, pharmacokinetic and pharmacodynamic properties of a potent dual inhibitor of 5-lipoxygenase and soluble epoxide hydrolase by mass spectrometry-based approaches** *Manuela Giovanna Basilicata*
15:35	OP2-4-4	**Considerations for developing an analytical strategy for fast small molecule MS-based screening in complex samples in industrial biotechnology** *Leon Coulier*
15:50	PS1	**Coffee Poster**
	S3-4 **MASS SPECTROMETRY**	
17:00	IT3-4	**“Direct” Thorium-Lead dating of gem quality corundum by laser ablation ICP-TOF-MS** *Markus Wälle*
17:15	OP3-4-1	**Signal beat on quantification accuracy of spodumene by LA-ICPMS** *XiJuan Tan*
17:30	OP3-4-2	**Single-cell analysis using a downward-pointing vertical ICP-TOFMS** *Sandro Fazzolari*
17:45	OP3-4-3	**Compound Specific Radiocarbon (14C) Dating of Our Colourful Past: from Theory to Practice** *Laura Hendriks*

	TECHNICAL SEMINAR	
16:00	TS-01	**Springer / RSC Seminar**

Tuesday, August 29, 2023 - AM

	PLENARY	
9:00	PL-5	**Counting molecules, dodging blood cells: continuous, real-time molecular measurements directly in the living body** *Kevin Plaxco*
	PARALLEL SESSION 1	
	KEYNOTE	
9:50	KN3-1	**Modern designs of molecularly imprinted polymers for electrochemical sensing and analysis: Recent developments and future prospects** *Sibel A. Özkan*
	S4-1 **CHEMICAL SENSORS AND BIOSENSORS**	
10:45	IT4-1	**A Disassembly Approach for Analyte Detection** *Felix Zelder*
11:00	OP4-1-1	**All Covalently Bound Ion-Selective Membranes for Increased Stability in Potentiometric Sensing** *Tara Forrest*
11:15	OP4-1-2	**New H+-selective electrodes based on amine-type ionophores** *Andrei Siamionau*
11:30	OP4-1-3	**Determination of benzoate in cranberry and lingonberry using a solid-contact ion-selective electrode** *Johan Bobacka*
11:45	OP4-1-4	**Sensing of cancer related-cell membrane proteins using ion-sensitive field-effect transistors for liquid biopsy** *Miyuki Tabata*
	PARALLEL SESSION 2	
	KEYNOTE	
9:50	KN3-2	**Emerging mycotoxins in the food chain: challenges and perspectives** *Doris Marko*
	S4-2 **FOOD**	
10:45	IT4-2	**Selected Ion Flow Tube Mass Spectrometry: a novel technology for high throughput phenotyping of the grape berry volatilome** *Thomas Baerenzung dit Baron*
11:00	OP4-2-1	**Development of dipstick-type DNA biosensors for visual identification of olive cultivar origin** *Natalia-Maria Christopoulou*
11:15	OP4-2-2	**Development of a new method for determination of total antioxidant capacity of the macroalgae using fiber optic reflectance spectrophotometer** *Dilek Özyurt*

11:30	OP4-2-3	**Tracking transformations of dietary metabolites through gut microbial metabolism** *Jacob Folz*
11:45	OP4-2-4	**Recovery of phenolic compounds from olive tree leaves: characterization of deep eutectic solvent extracts** *Sonia Sentellas*

	PARALLEL SESSION 3	
	KEYNOTE	
9:50	KN3-3	**Expanding the droplet microfluidic toolkit: Electrokinetic manipulation of droplet composition** *Robbyn Anand*
	S4-3 **ANALYTICAL NANOSCIENCE**	
10:45	IT4-3	**High-Throughput Quantification and Classification of Nanoparticles and Microparticles with Single Particle ICP-TOFMS** *Alexander Gundlach-Graham*
11:00	OP4-3-1	**Capillary electrophoresis coupled to ICP-MS: a new promising analytical tool for separation and detection of nanoplastic particles** *Carlos Adelantado Sánchez*
11:15	OP4-3-2	**Speciation of Nanoparticles by Imprinting** *Daniel Mandler*
11:30	OP4-3-3	**Nanoscale Investigation of Heterogenous Catalytic Processes using Tip-Enhanced Raman Spectroscopy** *Naresh Kumar*
11:45	OP4-3-4	**Advancing measurements at nanoscale: analytical strategies to evaluate encapsulation efficiency, drug release and nanoparticles concentration** *Marcela Segundo*

	PARALLEL SESSION 4	
	KEYNOTE	
9:50	KN3-4	**Engineering biology to bring diagnostics to low resource areas** *Lisa Hall*
	S4-4 **ANALYTICAL SCIENCE AND GLOBAL HEALTH**	
10:45	IT4-4	**Development of Dried Milk Spots Sampling Method for Comprehensive Human Milk Composition Analysis: A Novel Analytical Approach for Global Health Studies** *Peiheng Wang*
11:00	OP4-4-1	**TBC** *TBC*
11:15	OP4-4-2	**LC-MS characterization and stability assessment elucidates role of charge variants in the degradation of monoclonal antibody therapeutics** *Himanshu Malani*
11:30	OP4-4-3	**Fast screening of biological fluids for VSIG1 – a diagnostic tool for gastric cancer** *Damaris-Cristina Gheorghe*
11:45	OP4-4-4	**Classification pipeline for in vivo Raman spectroscopy-aided colorectal cancer detection** *Jan Valis*

Tuesday, August 29, 2023 - PM

	PLENARY	
13:30	PL-6	**Decoding the protein dance: probing the proteome-wide choreography of protein conformational changes** *Paola Picotti*
	PARALLEL SESSION 1	
	KEYNOTE	
14:20	KN4-1	**Precision medicine: The rise of electrochemical biosensing at the molecular level** *Susana Campuzano Ruiz*
	S5-1 **CHEMICAL SENSORS AND BIOSENSORS**	
14:50	IT5-1	**Low-cost Flexible Laminated Graphene Paper Solid-contact Ion-selective Electrodes** *Tom Lindfors*
15:05	OP5-1-1	**Inkjet Printing in the Development of Solid-State Potentiometric Sensors** *Petar Kassal*
15:20	OP5-1-2	**Peculiarities of the potentiometric response of ion-selective membranes containing two neutral ionophores** *Konstantin Mikhelson*
15:35	OP5-1-3	**Electrochemical biosensing platforms in molecular oncology for clinical sample analysis** *Martin Bartosik*
15:50	PS2	**Coffee Poster**
	S6-1 **CHEMICAL SENSORS AND BIOSENSORS**	
17:00	IT6-1	**TBC**
17:15	OP6-1-1	**Electrochemical bioplatforms for sensing food derived nucleic acids: Aiding personalized nutrition** *María Gamella*
17:30	OP6-1-2	**Validated portable device for the qualitative and quantitative electrochemical detection of MDMA, ready for on-site use** *Robin Van Echelpoel*
17:45	OP6-1-3	**Smart Wound Dressings for the Real-Time Monitoring of the Healing Status** *Federica Mariani*
	PARALLEL SESSION 2	
	KEYNOTE	
14:20	KN4-2	**Analytical advancements in speciation analysis to explore trace element cycling in the environment** *Lenny Winkel*
	S5-2 **ENVIRONMENTAL**	
14:50	IT5-2	**Capsule phase microextraction: a field deployable, holistic sample preparation approach for modern high throughput analytical laboratories** *Abuzar Kabir*

15:05	OP5-2-1	**3D-Printed microreactor for “in-situ” detection of ammonia in natural water** *Kurt Debruille*
15:20	OP5-2-2	**Robust and portable ion chromatography-based nutrient analyser for in-field nitrite and nitrate monitoring in water** *Yonglin Mai*
15:35	OP5-2-3	**Testing the Chalcogenide Fe3+ Electrode in Seawater** *Todd Martz*
15:50	PS2	**Coffee Poster**
	S6-2 **FOOD**	
17:00	IT6-2	**Greener Approach to Determination of Free Tryptophan in Cold-pressed Oils by Reversed-Phase Dispersive Liquid-Liquid Microextraction and High-Performance Liquid Chromatography** *Slavica Ražić*
17:15	OP6-2-1	**Phytosomes use to enhance the anti-ageing effectivness of nutraceutics and cosmeceutics** *Simona Carmen Litescu*
17:30	OP6-2-2	**Analysis of PFAS from food samples** *Hans Wollseifen*
17:45	OP6-2-3	**The Chocolate Benchmark: Evaluating latest PTR-MS Advancements** *Philipp Sulzer*
	PARALLEL SESSION 3	
	KEYNOTE	
14:20	KN4-3	**Imaging Neuromodulation in the Brain with Near-Infrared Fluorescent Nanosensors** *Markita Landry*
	S5-3 **ANALYTICAL NANOSCIENCE**	
14:50	IT5-3	**Bio-inspired design of organelle-targeting fluorescent nano-optodes with spatiotemporal resolution for dynamic ions imaging** *Yueling Liu*
15:05	OP5-3-1	**Monitoring lag-phase α-synuclein aggregation in various conditions using RT-fast** *Imad Abrao Nemeir*
15:20	OP5-3-2	**A generic approach based on long-lifetime fluorophores for the assessment of protein binding to polymer nanoparticles by fluorescence anisotropy** *Viola Horvath*
15:35	OP5-3-3	**Application of capillary electrophoresis coupled to ICP-MS/MS for examination of cisplatin encapsulation in liposome nanocarriers** *Magdalena Matczuk*
15:50	PS2	**Coffee Poster**
	S6-3 **ANALYTICAL SCIENCE AND GLOBAL HEALTH**	
17:00	OP6-3-1	**Extension of LC-MS Stability Studies of Eltrombopag Olamine to In-silico Simulations: An Effort to Exploit Drug Related Substances in Drug Discovery** *Saurabh Ganorkar*
17:15	OP6-3-2	**Interaction between Gemcitabine and divalent metal cations: a speciation study with implication in nanomedicine** *Federica Carnamucio*

17:30	OP6-3-3	**How to Overcome Analytical Challenges Commonly Encountered in the Analysis of Cr and Cr(VI) in Environmental and Biological Matrices Using (µLC-)ICP-MS** *Jelle Verdonck*
17:45	OP6-3-4	**Development of an analytical method for a fast and accurate determination of elemental impurities in drug products by ICP-MS with a quantification based on isotopic dilution** *Ines Korbi*

	PARALLEL SESSION 4	
	KEYNOTE	
14:20	KN4-4	**Environmental metabolomics for unraveling the toxicity mechanisms of metals and nanoparticles in phytoplankton species** *Vera Slaveykova*
	S5-4 **METABOLOMICS AND PROTEOMICS**	
14:50	IT5-4	**Insights into the Responses of the mTOR Pathway to Growth-Affecting Signals in Zebrafish PAC2 Cells using Targeted Phosphoproteomics** *Nikolai Huwa*
15:05	OP5-4-1	**Optimization of MSI technologies for environmental toxicology: A case study with Zebrafish eleutheroembryos** *Albert Menendez-Pedriza*
15:20	OP5-4-2	**The histone code of pancreatic cancer stem cells by nanoLC-MS/MS based epiproteomics** *Daniela Cecconi*
15:35	OP5-4-3	**Development and validation of an untargeted LC-MS metabolomics method with post-column infusion for matrix effect monitoring in plasma and feces** *Pingping Zhu*
15:50	PS2	**Coffee Poster**
	S6-4 **MASS SPECTROMETRY**	
17:00	IT6-4	**A "Hot" Date with Capsaicinoids: Molecular Networking meets TRPV1** *Joshua Smith*
17:15	OP6-4-1	**Real-time analyses of volatile compounds in breath and food flavour by selected ion flow tube mass spectrometry (SIFT-MS)** *Patrik Spanel*
17:30	OP6-4-2	**Fast semi-quantification of plasticizer metabolites in urine by the use of a guard column coupled to mass spectrometry** *Iria González Mariño*
17:45	OP6-4-3	**Propose 'NO' to heart disease! Tracer-based metabolomics: Profiling Nitric Oxide (NO) metabolites in a 3D cell culture model** *Pandian Kanchana*
	TECHNICAL SEMINAR	
16:00	TS-02	**Agilent Seminar - New solutions for chromatography and mass spectrometry**

Wednesday, August 30, 2023 - AM

	PLENARY	
9:00	PL-7	**Environmental Mass Spectrometry: the long road from sensitive target to comprehensive non-target screening** *Heinz Singer*
	PARALLEL SESSION 1	
	KEYNOTE	
9:50	KN5-1	**Single Molecule Electrochemistry: From electrochemically modulating single molecule fluorescence to counting single proteins for quantitative analysis** *Justin Gooding*
	S7-1 **ELECTROANALYSIS**	
10:45	IT7-1	**Electrochemical performance of nitrogen doped carbon films and their application for electroanalysis for biological fluid** *Osamu Niwa*
11:00	OP7-1-1	**Electrochemical study of recombinant manganese peroxidase from maize along with nanocomposite materials for glucose detection** *Anahita Izadyar*
11:15	OP7-1-2	**Biochar - nontraditional and green electrode material for miniaturized electrochemical sensors** *Ľubomír Švorc*
11:30	OP7-1-3	**Promotion and inhibition of electrochemical reaction for electroactive small molecules on monolayer graphene surface** *Yuko Ueno*
11:45	OP7-1-4	**A Physically Small, Antifouling Sensor for Selective Detection of Dopamine** *Danny K.Y. Wong*
	PARALLEL SESSION 2	
	KEYNOTE	
9:50	KN5-2	**Trace metal monitoring in aquatic systems: emphasis on the development and application of in situ metal bioavailability-oriented sensing tools** *Mary-Lou Tercier-Waeber*
	S7-2 **ENVIRONMENTAL**	
10:45	IT7-2	**Does “push-pull” agriculture, as practiced by farmers, alter the composition of plant volatiles in fields to promote biological pest control?** *Meredith Christine Schumann*
11:00	OP7-2-1	**An on-site sample preparation approach for plant eco-metabolomics and its application to agroecosystems in East Africa** *Jakob Lang*
11:15	OP7-2-2	**Preparation and application of low-cost adsorbents for the removal of antiretroviral drugs in wastewater** *Precious Mahlambi*
11:30	OP7-2-3	**Antibiotics invading South African waters: Analytical perspectives from a developing country with limited laboratory infrastructure** *Lawrence Madikizela*

11:45	OP7-2-4	**Ultrasensitive pH Sensing in Natural Waters towards in situ Measurements** *Robin Nussbaum*

	PARALLEL SESSION 3
	KEYNOTE

9:50	KN5-3	**Clinical assays with paper, naked eye or camera: simplicity versus sensitivity?** *Daniel Citterio*

	S7-3 **FIELD DEPLOYABLE AND PAPER-BASED DEVICES**

10:45	IT7-3	**Drug Quantification in Whole Blood using a Paper-Analytical Device for Point-Of-Care Therapeutic Drug Monitoring** *Jean-Manuel Segura*
11:00	OP7-3-1	**Fabrication of electrochemical paper-based devices by programmable drawing** *Varvara Pagkali*
11:15	OP7-3-2	**Development of a screening method for total sulfonamides in environmental waters using pipette tip solid-phase extraction with smartphone-based fluorimetric detection** *Diego Barzallo*
11:30	OP7-3-3	**Standard Addition for Immunoassays** *Monika Conrad*
11:45	OP7-3-4	**Effect of substrate porosity in the analysis of residues using Surface Enhanced Raman Spectroscopy (SERS)** *Nikita Tyagi*

	PARALLEL SESSION 4
	KEYNOTE

9:50	KN5-4	**Vibrational Spectroscopy for Process Understanding** *Katherine Bakeev*

	S7-4 **ANALYTICAL SCIENCE IN INDUSTRY**

10:45	IT7-4	**Application of digitalisation tools for efficient data processing, electronic lab notetaking, and population and use of databases in UHPLC method development of peptide and protein-based pharmaceuticals** *Samual Charles Burnage*
11:00	OP7-4-1	**Rapid, automated Characterization of Microplastics and various other Samples from Materials to bio using Laser Direct Infrared Imaging and Spectroscopy** *Andreas Kersten*
11:15	OP7-4-2	**Advanced MS and NMR technologies for deep insights into plant-based food** *Maurien Olsthoorn*
11:30	OP7-4-3	**Direct Phospholipid Speciation of Lipid Feedstock Using A New THF-Based HILIC-ICPMS Approach** *Wladimir Ruiz*
11:45	OP7-4-4	**Thermal decomposition of lithium-ion-battery electrolyte and the influence on the cell performance** *Sabrina Schoenemeier*

	PARALLEL SESSION 5	
	S7-5 **EUCHEMS DAC STUDY GROUP, CHEMOMETRICS**	
10:45	OP7-5-1	**Sampling Strategies for Plant Analysis: Dealing with many Nested Sources of Variance** *Claudia Beleites*
11:00	OP7-5-2	**Development and GMP Validation of a NIR/PLS-based Assay and Water Content Analysis for Extended-Release Tablets** *Ana Sofia Lourenço*
11:15	OP7-5-3	**xx-CovSel: A family of variable selection methods in chemometrics** *Jean-Michel Roger*
11:30	OP7-5-4	**Interpreting fluorescence hyperspectral images. From bilinear to hybrid multilinear models** *Anna de Juan*
11:45	OP7-5-5	**Integrating information from multiple sources through data fusion** *Federico Marini*

Wednesday, August 30, 2023 - PM

	PLENARY	
13:30	PL-8	**Single cell metallomics** *Gunda Köllensperger*

	PARALLEL SESSION 1	
	KEYNOTE	
14:20	KN6-1	**Conducting vial electromembrane extraction and development of generic methods** *Stig Pedersen-Bjergaard*
	S8-1 **ELECTROANALYSIS**	
14:50	IT8-1	**New trends in the development of boron-doped diamond electrodes: Approaches based on heteroepitaxy and additive manufacturing** *Simona Baluchová*
15:05	OP8-1-1	**The influence of the surface pretreatment of a boron-doped diamond electrode on the determination of selected pesticides** *Mariola Brycht*
15:20	OP8-1-2	**Paper-based electrochemical biosensors for the detection of circulating miRNA signature: a tool towards decentralized management of Lung Cancer** *Giulia Moro*
15:35	OP8-1-3	**Electrochemical Determination of Thiamethoxam in Food and Water Samples Based on Fe2O3@g-C3N4@melamine Schiff base composite** *Atul Kapoor*
15:50	PS3	**Coffee Poster**
	S9-1 **ELECTROANALYSIS**	
17:00	IT9-1	**Label-free detection of protein post-translational modifications with a biological nanopore** *Chan Cao*

17:15	OP9-1-1	**Fabrication of ZnO Nanoparticles Assisted Molecularly Imprinted Polymer-Based Electrochemical Sensor for the Selective Determination of Sorafenib** *S. Irem Kaya*
17:30	OP9-1-2	**Voltammetry and Amperometry of Biologically Active Organic Compounds - Where We Are Heading 100 Years After the Discovery of Polarography** *Jiri Barek*
17:45	OP9-1-3	**Electrochemical detection of enzymatic assay in microfluidic channels** *Eline Thomas*

	PARALLEL SESSION 2	
	KEYNOTE	
14:20	KN6-2	**Chemical uptake and potential health risks of using treated wastewater in agriculture: An analytical perspective** *Ester Heath*
	S8-2 **ENVIRONMENTAL**	
14:50	IT8-2	**Exploring the potential of laser ablation as a means of sample introduction for microplastics characterization via inductively coupled plasma-mass spectrometry operated in single-particle mode** *Thibaut van Acker*
15:05	OP8-2-1	**Low-cost and miniaturised determination of atmospheric gaseous elemental mercury by passive sampling and voltammetric detection on screen-printed gold electrodes** *Eduardo Pinilla-Gil*
15:20	OP8-2-2	**Factors controlling the mercury entry and bottom-up transfer in aquatic trophic webs** *Mariia Petrova*
15:35	OP8-2-3	**Improved target, suspect- and non-target analysis of environmental contaminants using a GC-EI&CI-TOF-MS system** *Marleen Vetter*
15:50	PS3	**Coffee Poster**
	S9-2 **SAMPLE PREPARATION**	
17:00	IT9-2	**Development of multi-residue methods for the determination of high production volume chemicals in muscle, skin and liver of seafood** *Rosa M. Marcé*
17:15	OP9-2-1	**TBC** *TBC*
17:30	OP9-2-2	**Study of variations in polymer inclusion membranes for antibiotic separation from milk** *Kristóf Jakab*
17:45	OP9-2-3	**Comprehensive Investigation of different Coatings and Adsorbents for SPME and their Influence on Analytical Performance** *Frank Michel*

	PARALLEL SESSION 3	
	KEYNOTE	
14:20	KN6-3	**Imaging mass spectrometry in translational spatial biology** *Ron Heeren*

	S8-3 **LIFE SCIENCES**	
14:50	IT8-3	**Discovery of Antimicrobials Against Multidrug-Resistant Pathogens from Unexplored Natural Sources** *Rémi Martinent*
15:05	OP8-3-1	**Novel RP-HPLC based assay for selective and sensitive endotoxin quantification** *Anika Hoffmann*
15:20	OP8-3-2	**Identification of wine markers in ancient pottery using liquid chromatography coupled to tandem mass spectrometry (LC-MS/MS)** *Sonia Sentallas*
15:35	OP8-3-3	**Towards Continuous Cytokine Monitoring in Organ-based Platforms** *Maud Linssen*
15:50	PS3	**Coffee Poster**
	S9-3 **LIFE SCIENCES**	
17:00	IT9-3	**Understanding mental health from single hair by nanoparticle-assisted laser desorption/ionization mass spectrometry imaging** *Shu Taira*
17:15	OP9-3-1	**Fast determination of total malondialdehyde in urine by HPLC-MS/MS** *Chango Lescano*
17:30	OP9-3-2	**Investigation of Cell Biochemical Behavior under Physical Microenvironment Using Scanning Electrochemical Microscopy** *Fei Li*
17:45	OP9-3-4	**Calibrating from within: multitargeted quantification of chronic kidney disease-related endogenous metabolites using an LC–MS/MS internal calibration approach** *Gioele Visconti*
	PARALLEL SESSION 4	
	KEYNOTE	
14:20	KN6-4	**Commercializing cell and gene therapies: A perspective from the analytical quality control function** *Christoph Meyer*
	S8-3 **ANALYTICAL SCIENCE IN INDUSTRY**	
14:50	IT8-4	**Rapid Estimation of Size-Based Heterogeneity in Monoclonal Antibodies by Machine Learning-Enhanced Dynamic Light Scattering** *Anuj Shrivastava*
15:05	OP8-4-1	**Lean Approach to Analytical Procedure Development for Therapeutic Synthetic Peptides** *Ruben Wälchli*
15:20	OP8-4-2	**Simulation of Intraluminal Performance of Lipophilic Weak Bases in Fasted Healthy Adults Using DDDPlusTM** *Marina Statelova*
15:35	OP8-4-3	**Selected Highlights in Analytical Chemistry at the ZHAW Wädenswil** *Caspar Demuth*
15:50	PS3	**Coffee Poster**

	S9-4 **ANALYTICAL SCIENCE IN INDUSTRY**	
17:00	IT9-4	**Sequence confirmation and impurity characterization of therapeutic oligonucleotides – A quality by design approach** *Giovanni Calderisi*
17:15	OP9-4-1	**Green solvents and reagents selection with multi-criteria decision analysis** *Marek Tobiszewski*
17:30	OP9-4-2	**Dealing with Moving 1D-Targets in Purity Analyses of Biopharmaceuticals Using 2D-LC Coupled to Mass Spectrometry** *Jens Trafkowski*
17:45	OP9-4-3	**Characterizing nanoparticles: Determining size distribution and elemental composition simultaneously, using SMPS-ICPMS** *Ayush Agarwal*

	PARALLEL SESSION 5	
	S9-5 **DAC EUCHEMS DAC STUDY GROUP STUDY GROUP, BIOANALYTICS**	
17:00	OP9-5-1	**Sensitive platforms for fast on-site screening of food** *Raluca-Ioana Stefan-van Staden*
17:15	OP9-5-2	**Introduction to Electrochemical Biosensor** *Ozcelikay Goksu*
17:30	OP9-5-3	**DNA mismatch repair assessment in gastric and colon cancers using stochastic microdisks** *Ruxandra-Maria Ilie-Mihai*
17:45	OP9-5-4	**Biosensors in Environment and Diagnostics** *Guenter Gauglitz*

Thursday, August 31, 2023 - AM

	PLENARY	
9:00	PL-9	**Microfluidic devices for analytical and pharmaceutical applications** *Jörg P. Kutter*

	PARALLEL SESSION 1	
	KEYNOTE	
9:50	KN7-1	**Universal electrochemical biosensor for all HIV types** *Karin Chumbimuni-Torres*
10:20		**Coffee Break**
	S10-1 **ELECTROANALYSIS**	
10:45	IT10-1	**Boron-Doped Diamond and Nitrogen-Incorporated Tetrahedral Amorphous Carbon Electrodes for Pharmaceutical Analysis** *Greg Swain*
11:00	OP10-1-1	**Electrochemical screening of lipase activity in pancreatic preparations** *Olha Sarakhman*
11:15	OP10-1-2	**Application of capillary electrophoresis in controlled drug release studies** *Tomas Krizek*

11:30	OP10-1-3	**Purpose-Made Capillary Electrophoresis Instrumentation** *Peter Hauser*

	PARALLEL SESSION 2	
	KEYNOTE	
9:50	KN7-2	**Do Biomolecules Retain their Native Conformation in the Gas Phase?** *Renato Zenobi*
10:20		**Coffee Break**
	S10-2 **MASS SPECTROMETRY**	
10:45	IT10-2	**Holistic analysis of a Swiss karst spring using on-site, in-situ RPLC-HRMS/MS and laboratory based IC-HRMS/MS** *Johannes Schorr*
11:00	OP10-2-1	**LC-MS/MS-based strategy for studying the influence of environmental conditions on saponin content in plant organs Saponaria officinalis, L.** *Katarzyna Pawlak*
11:15	OP10-2-2	**OctoChemDB: A Web Service for Efficient Dereplication of Natural Products using High-Resolution Mass Spectra** *Ricardo Silvestre*
11:30	OP10-2-3	**Comprehensive GCXGC high resolution MS and selective isolation of chemicals in the investigation of human chemosignals elicited from emotional stimulation** *Fabio Di Francesco*

	PARALLEL SESSION 3	
	KEYNOTE	
9:50	KN7-3	**Glimpses into an Analytical Chemistry Textbook of the Future** *Charles Lucy*
10:20		**Coffee Break**
	S10-3 **ANALYTICAL SCIENCE EDUCATION**	
10:45	IT10-3	**Support for understanding analytical chemistry by questions and videos** *Gunnar Schwarz*
11:00	OP10-3-1	**Remote teaching in Analytical Chemistry – Lessons learned during COVID-19 pandemic** *Martin Vogel*
11:15	OP10-3-2	**Case-based active learning in BSc and MSc subjects of analytical chemistry for the improvement of soft skills** *Anna Rigol*
11:30	OP10-3-3	**A modern curriculum for educating industry-oriented specialists in analytical and bioanalytical chemistry** *Jean-Manuel Segura*

	PARALLEL SESSION 4	
	KEYNOTE	
9:50	KN7-4	**Open droplet arrays for multimodal analysis at high throughput** *Petra Dittrich*

10:20		**Coffee Break**
	S10-4 **MICROFLUIDICS AND FLOW ANALYSIS**	
10:45	IT10-4	**Digital Microfluidic Analytical Systems with Integrated Chemical Sensor and Antimicrobial Surfaces** *Stefan Nagl*
11:00	OP10-4-1	**Addressing some challenges on metal ions determination in dynamic water systems using flow-based approaches** *António Range*
11:15	OP10-4-2	**Monitoring dynamic water systems with microfluidic paper-based devices for in-situ analysis** *Raquel Mesquita*
11:30	OP10-4-2	**Automated solid phase extraction and fluorimetric detection with a flow-based method for the determination of tetracyclines in wastewater** *María Alejandra Vargas Muñoz*
	AWARDS	
11:50	PL-10	**Microplastics in the Aquatic Environment: Green Analytical Protocols, Vectors of Pharmaceuticals and Risk to Biota** *Damia Barcelo*
12:20	PL-11	**Where nanomaterials can be a unique tool for the improvement of biosensors** *Antje Bäumner*
	PLENARY	
12:50		**Closing Ceremony**