

**Sunday, 06. October 2024***Short Course*

09:30 - 15:30

R8

**SC1 - Introduction to practical supercritical fluid chromatography***Instructor:* Caroline West (University of Orleans, France)*Instructor:* Davy Guillarme (University of Geneva, Switzerland)*Instructor:* Isabelle François (Chromisa Scientific, France)*Short Course*

09:30 - 15:30

R9

**SC3 - Introduction to multi-dimensional chromatography***Instructor:* Bob Pirok (Van 't Hoff Institute for Molecular Sciences, University of Amsterdam, Netherlands)*Instructor:* Peter Schoenmakers (University of Amsterdam, Netherlands)*Short Course*

09:30 - 15:30

R10

**SC2 - Towards a better understanding of performing good practical reversed phase HPLC***Instructor:* Melvin Euerby (University of Strathclyde, United Kingdom)*Plenary*

17:00 - 17:30

1A

**P-OC - Opening Ceremony***Chair:* Tony Edge (ISC 2024, United Kingdom)*Plenary*

17:30 - 18:15

1A

**P-1 - Navigating the Evolving Therapeutic Landscape with Advanced Analytical Technologies***Chair:* Tony Edge (ISC 2024, United Kingdom)*Speaker:* Kelly Zhang (Genentech, United States)**Navigating the Evolving Therapeutic Landscape with Advanced Analytical Technologies**

17:30 - 18:15

*Presenter:* Kelly Zhang (Genentech, United States)*Plenary*

18:15 - 19:00

1A

**P-2 - Very fast capillary GC for mobile measurement applications***Chair:* Adrian Clarke (Novartis, Switzerland)*Speaker:* Alastair Lewis (University of York, United Kingdom)**Very fast capillary GC for mobile measurement applications**

18:15 - 19:00

*Presenter:* Alastair Lewis (University of York, United Kingdom)*Awards*

19:00 - 19:30

1A

**A-1 - Awards***Chair:* Daniel Meston (Gustavus Adolphus College, United States)*Chair:* Didier Thiébaud (ESPCI Paris - PSL, France)*Social Event*

19:30 - 21:00

2

**Welcome Reception**

**Monday, 07. October 2024***Oral*

08:30 - 10:20

1A

**O.1 - Fundamentals 1***Chair:* Tony Edge (ISC 2024, United Kingdom)*Chair:* Fabrice Gritti (Waters Corporation, United States)**Optimizing liquid chromatography through fluid dynamics simulations**

08:30 - 09:00

*Presenter:* Gert Desmet (Free University Brussels, Belgium)**Characterization of solute-solvent interactions for neutral and ionized compounds in liquid chromatography systems by means of Abraham's solvation parameter model**

09:00 - 09:20

*Presenter:* Xavier Subirats (University of Barcelona, Spain)**Overcoming the modulation challenges in two-dimensional liquid chromatography**

09:20 - 09:40

*Presenter:* Rick S van den Hurk (University of Amsterdam, Netherlands)**Development of global machine learning models for understanding retention mechanism and predicting retention time in supercritical fluid chromatography/mass spectrometry**

09:40 - 10:00

*Presenter:* Omidreza Heravizadeh (Department of Systems Life Sciences, Graduate School of Systems Life Sciences, Kyushu University, Japan)**Insights into the solute-adsorbent interactions in HILIC**

10:00 - 10:20

*Presenter:* Alla Chernobrovkina (Lomonosov Moscow State University, Russian Federation)*Oral*

08:30 - 10:20

1B

**O.2 - Environmental***Chair:* Leon Barron (Imperial College London, United Kingdom)**The art of separating biosurfactants produced by *Bacillus humi***

08:30 - 09:00

*Presenter:* Jackie A Mosely (University of York, United Kingdom)**Analysis of (micro-)plastic-associated chemicals released into marine environments by comprehensive multidimensional gas chromatography-mass spectrometry**

09:00 - 09:20

*Presenter:* Lucy Howarth-Forster (University of Plymouth, United Kingdom)**Separation, detection and speciation of five chelating agents in complex radioactive effluents with high-resolution Orbitrap mass spectrometry**

09:20 - 09:40

*Presenter:* Romain Klein (Université Paris Saclay, CEA, France)**Molecularly imprinting-based solid phase extraction for the extraction of target steroid hormones and their transformation products present in wastewater samples**

09:40 - 10:00

*Presenter:* Rayco Guedes-Alonso (University of Las Palmas de Gran Canaria, Spain)**The feasibility of combining gas chromatography/comprehensive two-dimensional gas chromatography and mass spectrometry for the determination of poly- & perfluorinated hydrocarbons in environmental applications**

10:00 - 10:20

*Presenter:* Flavio Antonio Franchina (University of Ferrara, Italy)

Oral

08:30 - 10:20

1C

**O.3 - Omics**

Chair: Bogusław Buszewski (KUJAWSKO-POMORSKIE CENTRUM NAUKOWO-TECHNOLOGICZNE IM. PROF. JANA CZOCHRAJSKIEGO, Poland)

Chair: John Langley (University of Southampton, United Kingdom)

**Liquid and Supercritical Chromatography Coupled to Multimodal Tandem Mass Spectrometry in Metabolomics**

08:30 - 09:00

Presenter: Gérard Hopfgartner (University of Geneva, Switzerland)

**Mitigating artifact formation in high-temperature LC-MS for bottom-up proteomics and quality control of protein biopharmaceuticals**

09:00 - 09:20

Presenter: Juraj Lenčo (Charles University, Faculty of Pharmacy, Czech Republic)

**PLOT, Pillars and Particles: Exploring column formats for omics**

09:20 - 09:40

Presenter: Steven Ray Wilson (University of Oslo, Norway)

**Optimized UHPSFC-HRMS/MS workflow for molecular networking to explore the specialized metabolism of *Trichoderma reesei***

09:40 - 10:00

Presenter: Ilias El Ouar (IFPEN, France)

**Analyte identification in untargeted analysis. Chromatography matters.**

10:00 - 10:20

Presenter: Georgios Theodoridis (Aristotle University of Thessaloniki, Greece)

Refreshments &amp; Exhibition

10:20 - 11:00

2

**Refreshments & Exhibition**

Oral

11:00 - 12:30

1A

**O.4 - Chromatographic Modelling**

Chair: Gert Desmet (Free University Brussels, Belgium)

**Refinements of the Hydrophobic Subtraction Model and applications to the characterisation of modern HPLC stationary phases**

11:00 - 11:30

Invited Speaker: Josep Serret (Element Materials Technology, United Kingdom)

**Development of a CEX platform method for monoclonal antibodies following ICHQ14 and DoE**

11:30 - 11:50

Presenter: Georg Hölzl (Novartis Manufacturing GmbH, Austria)

**Exploring the utility of complementary incomplete separations in liquid chromatography**

11:50 - 12:10

Presenter: Leon Ewoud Niezen (Vrije Universiteit Brussel, Belgium)

**Unlocking Objective Numerical Evaluation of Data Analysis Strategies: A Novel Platform to Generate Highly Realistic LC×LC and GC×GC Data**

12:10 - 12:30

Presenter: Nino Milani (University of Amsterdam, Netherlands)

Oral

11:00 - 12:30

1B

**O.5 - Chirality**

Chair: John Lough (United Kingdom)

Chair: Daniel Meston (Gustavus Adolphus College, United States)

**Chiral stationary phases for isomer separations in bioanalytical and biopharmaceutical applications**

11:00 - 11:30

Presenter: Michael Laemmerhofer (University of Tuebingen, Institute of Pharmaceutical Sciences, Germany)

<b>Unconventional van Deemter curves in chiral chromatography</b>		11:30 - 11:50
<i>Presenter:</i> Simona Felletti (University of Ferrara, Italy)		
<b>Exploiting the inherent chirality of cellulose: HPLC for enantiomeric separation on non-conventional cellulose derivatives as chiral stationary phases</b>		11:50 - 12:10
<i>Presenter:</i> Anna Florentina Lehrhofer (University of Natural Resources and Life Sciences, Vienna (BOKU), Austria)		
<b>Flavanone diastereomeric excesses in bitter orange (Citrus aurantium L.) measured with SFC-SFC-MS in multiple heart-cutting mode</b>		12:10 - 12:30
<i>Presenter:</i> Laurine Réset (Institut de Chimie Organique et Analytique, Université d'Orleans, France)		
<i>Oral</i>		
11:00 - 12:30		1C
<b>O.6 - Purification</b>		
<i>Chair:</i> Tony Taylor (Element Material Technologies, United Kingdom)		
<i>Chair:</i> Paul Ferguson (Astra Zeneca, United Kingdom)		
<b>Vacuum-Assisted Headspace Microextraction: Fostering Innovation</b>		11:00 - 11:30
<i>Presenter:</i> Elia Psillakis (Technical University of Crete, Greece)		
<b>Multicolumn countercurrent chromatography combined with ethanol for the green purification of Crocin-I extracted from saffron</b>		11:30 - 11:50
<i>Presenter:</i> Chiara De Luca (University of Ferrara, Italy)		
<b>Improvement in downstream purification process efficiency by removing bottleneck unit operations</b>		11:50 - 12:10
<i>Presenter:</i> Alistair Hurst (emp Biotech GmbH, Germany)		
<b>The strength of peak recycling in sustainable and challenging purification of natural compounds</b>		12:10 - 12:30
<i>Presenter:</i> Yannick Krauke (KNAUER Wissenschaftliche Geräte GmbH, Germany)		
<i>Refreshments &amp; Exhibition</i>		
12:30 - 13:30		2
<b>Lunch &amp; Exhibition</b>		
<i>Tutorial</i>		
13:00 - 14:00		1B
<b>T1 - Building 'Green' into your Chromatographic Methods</b>		
<i>Instructor:</i> Paul Ferguson (Astra Zeneca, United Kingdom)		
<i>Instructor:</i> Diane Turner (United Kingdom)		
<i>Vendor Seminar</i>		
13:00 - 14:00		3A
<b>V1 - Science Meets Sensation: Unveiling the Chemistry of G &amp; T (Shimadzu)</b>		
<i>Poster</i>		
13:30 - 15:00		2
<b>P1 - Posters 1</b>		
Board 1	<b>Enhancement in ASAPrep™ for analytical to preparative scale-up in SFC</b>	13:30 - 13:30
<i>Presenter:</i> Richard Hodgson (Shimadzu UK Ltd, United Kingdom)		
Board 4	<b>Automatic optimization of gradient profile using AI algorithms on functional food analysis with HPLC</b>	13:30 - 13:30
<i>Presenter:</i> Yoshiyuki Watabe (Shimadzu General Service, Japan)		

Board 7	<b>Just add some valves - Increased sample loading capacity for online SPE-HPLC</b>	13:30 - 13:30
<i>Presenter:</i> Mareike Prüfer (KNAUER Wissenschaftliche Geräte GmbH, Germany)		
Board 10	<b>Fully-automated and Derivatization-free GC-MS Analysis of SCFAs in Human Biospecimen</b>	13:30 - 13:30
<i>Presenter:</i> Hana Seličová (Masaryk University, Czech Republic)		
Board 13	<b>Boost productivity with intelligent strategies for routine data analysis, processing and reporting for HPLC-UV and HPLC-UV-MS workflows</b>	13:30 - 13:30
<i>Presenter:</i> Sylvia Grosse (Thermo Fisher Scientific, Germany)		
Board 16	<b>Overcoming challenges of high-volume chromatography utilising YOLO machine learning model</b>	13:30 - 13:30
<i>Presenter:</i> Jonathan Scott (Sygnature Discovery Ltd, United Kingdom)		
Board 19	<b>Online Mixed-Mode SPE for Quantitative LC-MS/MS analysis of a N-Nitrosamine Drug Substance-Related Impurity in an Allergy Relief Drug Product</b>	13:30 - 13:30
<i>Presenter:</i> Matthew Knox (Resolian, United Kingdom)		
Board 22	<b>Application of Green Analytical Method for analysis of residues of Chemical Contaminants using APGC-MS/MS with RTC PAL Solid Phase Micro-Extraction (SPME) Arrow</b>	13:30 - 13:30
<i>Presenter:</i> Dnyaneshwar Shinde (RASID LAB M42 Healthcare, United Arab Emirates)		
Board 25	<b>Application of the AQbD approach for the development of HPLC method for Mixture of Hair Dyes</b>	13:30 - 13:30
<i>Presenter:</i> Arturs Kalimulins (Institute of Chromatography, Latvia)		
Board 28	<b>Vacuum In-Tube Extraction (V-ITEX) - a new, efficient, automated extraction technique and its application to a range of sample matrices</b>	13:30 - 13:30
<i>Presenter:</i> Andrew Ward (JSB UK & Ireland, United Kingdom)		
Board 31	<b>Trace Analysis of PFAS in Soils using Automated Sample Preparation</b>	13:30 - 13:30
<i>Presenter:</i> Cassandra Rusher (ePrep Europe Ltd., United Kingdom)		
Board 34	<b>Comparison of critical quality attributes of therapeutic monoclonal antibodies from the NISTCHO cell line under varying critical process parameters</b>	13:30 - 13:30
<i>Presenter:</i> Thomas Berger (Paris-Lodron-University of Salzburg, Austria)		
Board 37	<b>Impact of High-Performance Liquid Chromatography System Characteristics on Non- Specific Adsorption of Biomolecules</b>	13:30 - 13:30
<i>Presenter:</i> Paula Hong (Waters Corporation, United States)		
Board 40	<b>Analytical Strategy for Evaluation of Enzymatic Activity in the Synthesis of a Pharmaceutical Intermediate</b>	13:30 - 13:30
<i>Presenter:</i> Penny Perlepe (Bristol Myers Squibb Company, United Kingdom)		
Board 43	<b>Development of a robust cation exchange chromatography method for charge variant analysis</b>	13:30 - 13:30
<i>Presenter:</i> Sylvia Grosse (Thermo Fisher Scientific, Germany)		
Board 46	<b>Determination of aminoketone impurity in starting material by SFC and IR</b>	13:30 - 13:30
<i>Presenter:</i> Els Keppens (Johnson&Johnson Innovative Medicine, Belgium)		
Board 49	<b>Product Profiling of Monoclonal Antibodies by Ion-exchange Chromatography with Online Desalting using Reversed-phase Traps and Fractionation Collector</b>	13:30 - 13:30
<i>Presenter:</i> Annika van der Zon (University of Amsterdam, Netherlands)		

Board 52	<b>Charge Variant Separation and Characterization of Various Antibodies Using CZE-MS, cIEF-MS, and IEX-MS on Intact and Subunit Level</b>	13:30 - 13:30
<i>Presenter:</i> Jasmin Schairer (Aalen University, Germany)		
Board 55	<b>pLC-SWATH-MS for verification of covalent kinase inhibitor binding to target tyrosine kinases</b>	13:30 - 13:30
<i>Presenter:</i> Benedikt Masberg (Eberhard Karls University Tübingen, Germany)		
Board 58	<b>Anion exchange HPLC monitoring of mRNA in vitro transcription reactions to support mRNA manufacturing process development</b>	13:30 - 13:30
<i>Presenter:</i> Emma N. Welbourne (University of Sheffield, United Kingdom)		
Board 61	<b>Multidimensional LC-MS for biologics characterization: From simple heart cutting to versatile workflow automation</b>	13:30 - 13:30
<i>Presenter:</i> Alexander Schwahn (Thermo Fisher Scientific, Switzerland)		
Board 64	<b>Confident Material Selection in HPLC and UHPLC Instrumentation</b>	13:30 - 13:30
<i>Presenter:</i> Katherine Lovejoy (Thermo Fisher Scientific, Germany)		
Board 67	<b>Quantitative analysis method for isoorientin and baicalin from <i>Phyllostachys edulis</i> and <i>Scutellaria baicalensis</i> extract</b>	13:30 - 13:30
<i>Presenter:</i> Eunjung Son (Korea Institute of Oriental Medicine, Korea, Republic of)		
Board 70	<b>Preparation of Magnetic Nanoparticle-Immobilized Enzyme Reactor and Its Application in Characterization and Sequence Mapping of mRNA using LC-MS</b>	13:30 - 13:30
<i>Presenter:</i> Yachao Hao (University of Tuebingen, Germany)		
Board 73	<b>Development of a ppm level analytical method for the determination of N-methylpropylamine in a pharmaceutical API by HS-GCMS</b>	13:30 - 13:30
<i>Presenter:</i> Adrian Doggett (Bristol Myers Squibb, United Kingdom)		
Board 76	<b>Adeno-Associated Virus and Virus-Like Particles Analysis by Newly Developed Size Exclusion Chromatography Columns</b>	13:30 - 13:30
<i>Presenter:</i> John Davies (Agilent Technologies, United Kingdom)		
Board 79	<b>A novel approach for multiple CQAs monitoring of mAbs from bioreactors using 2D-LC-MS</b>	13:30 - 13:30
<i>Presenter:</i> Maria Grübner (Thermo Fisher Scientific, Germany)		
Board 82	<b>Achieving High Recovery &amp; Reproducibility in High Throughput Sample Preparation Using Silica/Polymer Composite 96-Well SPE Plates</b>	13:30 - 13:30
<i>Presenter:</i> David Dunthorne (Avantor, United Kingdom)		
Board 85	<b>Multi-column two-dimensional liquid chromatography screening platform for stereo-peptidomics and application to an antimicrobial peptide polyene</b>	13:30 - 13:30
<i>Presenter:</i> Cornelius Knappe (University of Tuebingen, Germany)		
Board 88	<b>Implementation of 3D printed integrated clarification and capture columns for antibodies purifications</b>	13:30 - 13:30
<i>Presenter:</i> Simone Dimartino (The University of Edinburgh, United Kingdom)		
Board 91	<b>Anion-exchange chromatography separation of AAV empty and full capsids using non-toxic choline-type salts</b>	13:30 - 13:30
<i>Presenter:</i> Werner Conze (Tosoh Bioscience GmbH, Germany)		
Board 94	<b>Bioanalytical LC-MS/MS Method for the Analysis of Abemaciclib, Neratinib, Capecitabine, Alpelisip, Tamoxifen, and Fulvestrant</b>	13:30 - 13:30
<i>Presenter:</i> Yahya M. Alshehri (Saudi Food and Drug Authority, Saudi Arabia)		
Board 97	<b>Robust, Rapid SEC-MALS Titer Analysis of AAV Particles Using 3µm, 550Å Monodisperse SEC Media in Bioinert Column Hardware</b>	13:30 - 13:30

*Presenter:* Michael Oliver (Thermo Fisher Scientific, United Kingdom)

Board 100                    **Effect of Analytical Conditions on Oligonucleotide Adsorption in Ion-Pairing Reversed Phase and Ion Exchange Chromatography**                    13:30 - 13:30

*Presenter:* Daniel Esser (YMC Europe GmbH, Germany)

Board 103                    **Analysis of adeno-associated virus using reversed-phase chromatography techniques**                    13:30 - 13:30

*Presenter:* Matthew Quinn (Avantor, United Kingdom)

Board 106                    **Chiral Screening and Optimisation using Supercritical Fluid Chromatography and Design of Experiments**                    13:30 - 13:30

*Presenter:* Matthew Knox (Resolian, United Kingdom)

Board 109                    **Methanesulfonic Acid in Chiral SFC: The Quest for Perfect Peaks and the Trials of Resolution**                    13:30 - 13:30

*Presenter:* Astrid Buica (AstraZeneca AB, Sweden)

Board 112                    **Green solvents for enantioselective liquid chromatography of liquid crystalline materials**                    13:30 - 13:30

*Presenter:* Petra Vaňkátová (Institute of Physics of the Czech Academy of Sciences, Czech Republic)

Board 115                    **High-performance liquid chromatographic separation and absolute configuration assignment of iminoflavans on chiral polysaccharide stationary phases**                    13:30 - 13:30

*Presenter:* Mohamed Nadjib Rebizi (University of Ziane Achour/Faculty of Exact Sciences and Computer Science, Algeria)

Board 118                    **Advancements in Analytical Strategies for Oxylipin Characterization: Automated derivatization, Chiral Separation, and Isotopic Labeling**                    13:30 - 13:30

*Presenter:* Zijing Xu (University of Tuebingen, Germany)

Board 121                    **Amplify chiral resolution using a column leap-frogging SFC system**                    13:30 - 13:30

*Presenter:* Raymond Wong (Shimadzu, United Kingdom)

Board 124                    **Supercritical Fluid Chromatography for Chiral Analysis and Preparative Purification**                    13:30 - 13:30

*Presenter:* Anita Prechl (Gedeon Richter Plc, Hungary)

Board 127                    **Evaluation of Chromatographic Modelling Software to Streamline GC and LC Method Development**                    13:30 - 13:30

*Presenter:* John Gallant (Restek Corporation, United States)

Board 130                    **Chromatographic Method Evaluation & Optimisation for Fixed-Dose Combination (FDC) Formulation Compatibility Study**                    13:30 - 13:30

*Presenter:* Sara Ryan (AstraZeneca, United Kingdom)

Board 133                    **Modeling Software for Retention Prediction in Gradient Reverse Phase Liquid Chromatography (RPLC) - A Diagnostic Tool**                    13:30 - 13:30

*Presenter:* Thomas Brown (Advanced Chemistry Development UK Ltd., United Kingdom)

Board 136                    **Utilising Digital Tools to Automate UPLC Method Development in Pharmaceuticals**                    13:30 - 13:30

*Presenter:* Rhiannon Gibson (AstraZeneca, United Kingdom)

Board 139                    **Theoretical and practical guidelines for solvent dilution between the two dimensions in online comprehensive two-dimensional liquid chromatography**                    13:30 - 13:30

*Presenter:* Megane Aebischer (Institute of Pharmaceutical Sciences of Western Switzerland (ISPSO)- University of Geneva, Switzerland)

Board 142                    **A perspective on leveraging reinforcement learning to aid method development in liquid chromatography**                    13:30 - 13:30

*Presenter:* Leon Ewoud Niezen (Vrije Universiteit Brussel, Belgium)

Board 145                    **Determination of Sodium benzoate, Potassium sorbate, and**                    13:30 - 13:30

	<b>Methylparaben in Herbal cough syrups by HPLC-UV</b>	
	<i>Presenter:</i> Thamer S. Alghamdi (Saudi Food and Drug Authority (SFDA), Saudi Arabia)	
Board 148	<b>Integration of in-silico modelling into a targeted HPLC method development workflow</b>	13:30 - 13:30
	<i>Presenter:</i> Shreya Bondili (Pharmaron UK, United Kingdom)	
Board 151A	<b>The role of modeling in ICH Q14</b>	13:30 - 13:30
	<i>Presenter:</i> Amanda Guiraldelli (University of Campinas, Brazil)	
Board 151B	<b>Enhanced Robustness Assessment for MODR Design: Development of a Stability-Indicating UHPLC-UV Procedure for Quantifying Ondansetron-Related Compounds Using QbD Principles</b>	13:30 - 13:30
	<i>Presenter:</i> Amanda Guiraldelli (University of Campinas, Brazil)	
Board 154	<b>Modelling of small molecule binding to phospholipids using IAM-HPLC and QSRR approaches enhanced by machine learning algorithms.</b>	13:30 - 13:30
	<i>Presenter:</i> Krzesimir Ciura (Medical University of Gdańsk, Poland)	
Board 157	<b>Advanced Scoring Procedures in Separation Screening Methods</b>	13:30 - 13:30
	<i>Presenter:</i> Jan Barton (Mestrelab Research S.L., Spain)	
Board 160	<b>Advancing complex sample analysis with global retention models in RPLC: transferability across different plant species</b>	13:30 - 13:30
	<i>Presenter:</i> Pau Peiró (University of Valencia, Spain)	
Board 163	<b>A comparison between HS-SPME, DI-SPME, and liquid injection on GC-MS for the analysis of oxygenated and nitrated polycyclic aromatic hydrocarbons in urine of smokers</b>	13:30 - 13:30
	<i>Presenter:</i> Atallah Elzein (UK Health Security Agency, United Kingdom)	
Board 166	<b>New type of derivatization agents for LC/MS analysis of amino acids</b>	13:30 - 13:30
	<i>Presenter:</i> Tereza Hofmanová (University of Hradec Králové, Czech Republic)	
Board 169	<b>Dispersive liquid-liquid microextraction vs. phospholipid removal sample preparation for LC-MS: method cross-validation for clinical bioanalysis of selected breast cancer drugs</b>	13:30 - 13:30
	<i>Presenter:</i> Lu Turković (University of Zagreb Faculty of Pharmacy and Biochemistry, Croatia)	
Board 172	<b>Development of UHPLC-DIA-HRMS method for O-glycans profiling in tear fluid</b>	13:30 - 13:30
	<i>Presenter:</i> Katerina Plachka (Charles University, Faculty of Pharmacy, Czech Republic)	
Board 175	<b>Quantitation of Panel of Per- and Polyfluoroalkyl Substances (PFAS) in Biological Matrix</b>	13:30 - 13:30
	<i>Presenter:</i> Ed Goucher (Thermo Fisher Scientific, United States)	
Board 178	<b>Development, validation and application of novel HILIC based HPLC-MS/MS methods for the measurement of Ribavirin in human plasma and dried blood spots</b>	13:30 - 13:30
	<i>Presenter:</i> Mark Bayliss (North Bristol NHS Trust, United Kingdom)	
Board 181	<b>Paper-Arrow Mass-Spectrometry: A Seamless Integration of Modified Paper Chromatography with Paper Spray for Detection of Cortisol in Human Saliva</b>	13:30 - 13:30
	<i>Presenter:</i> Tung-Ting Sham (University of Liverpool, United Kingdom)	
Board 184	<b>Enhanced Analysis of Coordination Compounds in Tryptophan Metabolism Using Bioinert-Coated Hardware in High-Performance Liquid Chromatography</b>	13:30 - 13:30
	<i>Presenter:</i> Daniel Esser (YMC Europe GmbH, Germany)	
Board 187	<b>Development and Comparison of Reversed-Phase Liquid Chromatography, Hydrophilic Interaction Liquid Chromatography and Supercritical Fluid Chromatography for the Analysis of</b>	13:30 - 13:30



**Regioisomeric Fluorofentanyl Derivatives**

*Presenter:* Melvin Euerby (University of Strathclyde, United Kingdom)

Board 190                    **Enantiomeric Separation of Diphenidines by Polar Organic Chiral Liquid Chromatography on Polysaccharide-Based Stationary Phases**                    13:30 - 13:30

*Presenter:* Melvin Euerby (University of Strathclyde, United Kingdom)

Board 193                    **Separation and Quantification of Novel Synthetic Fentanyl in Clinical Extracts by high pH reverse-phase LC-MS/MS**                    13:30 - 13:30

*Presenter:* Benjamin Barrett (Shimadzu UK Ltd, United Kingdom)

Board 196                    **A pilot study using an untargeted approach to screen for drugs of abuse in multiple clinic sites in UK**                    13:30 - 13:30

*Presenter:* Jinkang Zhang (UK Health Security Agency, United Kingdom)

Board 199                    **Real-World Applications of Automated Sample Preparation for Drug of Abuse Analysis in Biological Samples**                    13:30 - 13:30

*Presenter:* Colin Hastie (Element Lab Solutions, United Kingdom)

Board 202                    **Characterization of Reversed-Phase Liquid Chromatographic Columns Containing Anionic Exchange Functionality**                    13:30 - 13:30

*Presenter:* Patrik Petersson (Ferring Pharmaceuticals, Denmark)

Board 205                    **Performance evaluation of a new reversed-phase C18 column for peptide mapping and monitoring of monoclonal antibodies**                    13:30 - 13:30

*Presenter:* Susanne Fabel (Thermo Fisher Scientific, Germany)

Board 208                    **Development of Novel Inert HPLC Column Hardware to Reduce Impact of Non-specific Interactions**                    13:30 - 13:30

*Presenter:* John Gallant (Restek Corporation, United States)

Board 211                    **Towards the fabrication of polymeric monolithic columns for HILIC applications**                    13:30 - 13:30

*Presenter:* Milica Micic (Technological University Dublin, Ireland)

Board 214                    **Adapting the surfaces of commercially available 3D printing resins for applications in separation science**                    13:30 - 13:30

*Presenter:* Sinead Currivan-Macdonald (Technological University Dublin, Ireland)

Board 217                    **SweetSep™ AEX200 a New Stationary Phase for Fast and High-Resolution Separation of Carbohydrates using HPAEC-PAD**                    13:30 - 13:30

*Presenter:* Andrew Reeder (Verulam Scientific, United Kingdom)

Board 220                    **Evaluation of Positively Charged Surface Stationary Phases for Improved Chromatographic Separations of Basic Analytes in Small Molecules and Peptides**                    13:30 - 13:30

*Presenter:* Harald John Ritchie (Advanced Materials Technology, United States)

Board 223                    **Reaction Principles for in-Situ Functionalization of Ion Chromatography Columns**                    13:30 - 13:30

*Presenter:* Manuel Stehrenberger (Zurich University of Applied Sciences, Switzerland)

Board 226                    **Evaluation of Bidentate Endcapping Silylation Reagents for HPLC**                    13:30 - 13:30

*Presenter:* NORIKAZU NAGAE (ChromaNik Technologies Inc., Japan)

Board 229                    **Evaluation of retention behavior and stability of a novel trifunctional biphenyl phase**                    13:30 - 13:30

*Presenter:* NORIKAZU NAGAE (ChromaNik Technologies Inc., Japan)

Board 232                    **Novel end-capping method with silyl-reagent including ethylene chain**                    13:30 - 13:30

*Presenter:* Etsuko Shearer (BioNik Inc., Japan)

Board 235                    **Non-suppressed Ion Chromatography on Hydrophilic Columns using Electrospray-MS Compatible Eluents**                    13:30 - 13:30

*Presenter:* Brett Paull (University of Tasmania, Australia)

Board 238	<b>Generic LC method development strategies: spin-off for effective cost efficient laboratory teaching</b>	13:30 - 13:30
<i>Presenter:</i> Salma Isah Yarima (University of Sunderland, United Kingdom)		
Board 241	<b>Quantification of metal ion leaching in metal alloys used in HPLC instruments and columns and the impact it can have to separations</b>	13:30 - 13:30
<i>Presenter:</i> David Bell (ASKkprime LLC, United States)		
Board 243	<b>Enhancing Viral Purification with 3D Printed High-Resolution Chromatography Media</b>	13:30 - 13:30
<i>Presenter:</i> Jingwen Lei (The University of Edinburgh, United Kingdom)		
<i>Tutorial</i>		
14:00 - 15:00		1C
<b>T2 - Harnessing the power of Data Analytics: your analytical journey from complexity to clarity</b>		
<i>Instructor:</i> Camilla Liscio (Element Lab Solutions, United Kingdom)		
<i>Vendor Seminar</i>		
14:00 - 15:00		3A
<b>V3 - The International Women in Chromatography Community launch &amp; Networking</b>		
<i>Chair:</i> Diane Turner (United Kingdom)		
<i>Oral</i>		
15:00 - 16:30		1A
<b>O.7 - Novel instrumentation</b>		
<i>Chair:</i> Simone Dimartino (The University of Edinburgh, United Kingdom)		
<i>Chair:</i> Ali Salehi-Reyhani (Imperial College London, United Kingdom)		
	<b>Sustainable 2LabsToGo</b>	15:00 - 15:30
<i>Presenter:</i> Gertrud Morlock (Justus Liebig University Giessen, Germany)		
	<b>Immobilized Artificial Membrane Liquid Chromatography vs Liposome Electrokinetic Chromatography: suitability in drug/bio membrane partitioning studies and effectiveness in the assessment of drugs' passage through the respiratory mucosa.</b>	15:30 - 15:50
<i>Presenter:</i> Giacomo Russo (Edinburgh Napier University, United Kingdom)		
	<b>Optimization and the use of 2-dimensional chromatography for on-line mRNA digestion and sequencing</b>	15:50 - 16:10
<i>Presenter:</i> Fiona Anna-Maria Rupprecht (Thermo Fisher Scientific, Germany)		
	<b>Online LCxSFC: how to make a successful coupling?</b>	16:10 - 16:30
<i>Presenter:</i> Margaux Sanchez (Institute of Analytical Sciences, France)		
<i>Oral</i>		
15:00 - 16:30		1B
<b>O.8 - Forensics</b>		
<i>Chair:</i> Tony Edge (ISC 2024, United Kingdom)		
<i>Chair:</i> Peter Myers (University of Liverpool, United Kingdom)		
	<b>Separating the guilty from the innocent - The use of chromatography in forensic science</b>	15:00 - 15:30
<i>Presenter:</i> David Thompson (Keele University, United Kingdom)		
	<b>Applying the Green and Simple Moka-Pot Extraction to detect Performance Enhancing Drugs Via HPLC-MS/MS In Dietary Supplements.</b>	15:30 - 15:50
<i>Presenter:</i> Matteo Baglietto (University of Genoa, Italy)		
	<b>Evaluation of Supramolecular Deep Eutectic Solvents, Cyclodextrin- and Cyclofructan- based Chiral Selectors for the Enantioseparation of Novel Psychoactive Substances in CE and HPLC - The Potential</b>	15:50 - 16:10

**of the Use of Deep Eutectic Solvents and Amino Acid-Based Ionic Liquids as Additives**

*Presenter:* Constantina Kapnissi-Christodoulou (University of Cyprus, Cyprus)

**Characterisation of a seized illicit drug sample by high resolution liquid chromatography mass spectrometry**

16:10 - 16:30

*Presenter:* Alan Barnes (Shimadzu Corporation, United Kingdom)

*Oral*

15:00 - 16:30

1C

**O.9 - Petroleum, Plastics and Biopolymers - A Tribute to Keith Bartle**

*Chair:* Andrew Feilden (Bicycle Therapeutics, United Kingdom)

*Chair:* Pernilla Sorme (My Green Lab, United Kingdom)

**New Fuels and New Challenges - Release the Hyphens!**

15:00 - 15:30

*Presenter:* John Langley (University of Southampton, United Kingdom)

**Integrated analysis of plastic additives in medical devices with online SFE-SFC-MS**

15:30 - 15:50

*Presenter:* Caroline West (University of Orleans, France)

**Aromatic-selective size exclusion chromatography (ASSEC): A swift solution for complex petroleum characterization**

15:50 - 16:10

*Presenter:* Saroj Panda (Saudi Aramco, Saudi Arabia)

**Going big: HRMS-hyphenated separations unleash the analysis of complex proteoforms over 100 kDa**

16:10 - 16:30

*Presenter:* Andrea Gargano (University of Amsterdam, Netherlands)

*Refreshments & Exhibition*

16:30 - 17:30

2

**Refreshments & Exhibition**

*Tube & Slam*

17:30 - 18:30

1A

**S1 - ISC Tube & Slam**

*Chair:* Simone Dimartino (The University of Edinburgh, United Kingdom)

*Chair:* David Bell (ASKprime LLC, United States)

*Chair:* Petra Lewits (Merck KGaA, Germany)

*Speaker:* Chiara De Luca (University of Ferrara, Italy)

*Speaker:* Simona Felletti (University of Ferrara, Italy)

*Speaker:* Greta Compagnin (University of Ferrara, Italy)

*Speaker:* Yannick Krauke (KNAUER Wissenschaftliche Geräte GmbH, Germany)

*Speaker:* Mareike Prüfer (KNAUER Wissenschaftliche Geräte GmbH, Germany)

*Speaker:* Bram Huygens (Vrije Universiteit Brussel, Belgium)

*Speaker:* Jelle Verdonck (KU Leuven, Belgium)

**The terms of the van Deemter equation**

17:30 - 17:35

*Presenter:* Chiara De Luca (University of Ferrara, Italy)

*Presenter:* Simona Felletti (University of Ferrara, Italy)

*Presenter:* Greta Compagnin (University of Ferrara, Italy)

**SMB Chromatography**

17:35 - 17:40

*Presenter:* Yannick Krauke (KNAUER Wissenschaftliche Geräte GmbH, Germany)

*Presenter:* Mareike Prüfer (KNAUER Wissenschaftliche Geräte GmbH, Germany)

**When I find my peaks in times of trouble, J. van Deemter comes to me, speaking words of wisdom, ABC**

17:40 - 17:45

*Presenter:* Bram Huygens (Vrije Universiteit Brussel, Belgium)

**The magic of biomonitoring**

17:45 - 17:50

*Presenter:* Jelle Verdonck (KU Leuven, Belgium)

*Awards*

18:30 - 19:30

1A

**A-2a - Rising Stars of Separation Science Presentations (LCGC)***Chair:* Caroline Hroncich (United Kingdom)*Chair:* Caroline West (University of Orleans, France)*Chair:* John Langley (University of Southampton, United Kingdom)*Chair:* Gert Desmet (Free University Brussels, Belgium)*Chair:* Simone Dimartino (The University of Edinburgh, United Kingdom)*Awards*

20:00 - 23:59

Cavern Club

**A-2b - Rising Stars of Separation Science Awards/The Cavern Club (LCGC) - BY INVITATION ONLY***Chair:* Tony Edge (ISC 2024, United Kingdom)*Chair:* Alasdair Matheson (LCGC International, Europe, United Kingdom)

**Tuesday, 08. October 2024***Oral*

08:30 - 10:20

1A

**O.19 - Sustainability 1***Chair:* Didier Thiébaud (ESPCI Paris - PSL, France)*Chair:* Elia Psillakis (Technical University of Crete, Greece)**Building a Global Culture of Sustainability in Science**

08:30 - 09:00

*Presenter:* Pernilla Sorme (My Green Lab, United Kingdom)**Putting a number on chromatography sustainability within the pharmaceutical industry: Analytical Method Greenness Score (AMGS)**

09:00 - 09:20

*Presenter:* Francis Power (AstraZeneca, United Kingdom)**Eco-Optimized HPLC Columns: Navigating Toward a Greener Analytical Future**

09:20 - 09:40

*Presenter:* David Bell (ASKprime LLC, United States)**Laboratory Sustainability - the mediocre present and the positive future**

09:40 - 10:00

*Presenter:* Emma Poole (Element Laboratory Solutions, United Kingdom)**Removing chromatography bottlenecks using convolutional neural network in automated purification**

10:00 - 10:20

*Presenter:* Rodrigo Mancini (Sygnature Discovery Ltd, United Kingdom)*Oral*

08:30 - 10:20

1B

**O.11 - Bioanalysis***Chair:* Tim Sangster (United Kingdom)*Chair:* Davy Guilleme (University of Geneva, Switzerland)**Large molecule bioanalysis using LC-MS, method optimization considerations**

08:30 - 09:00

*Presenter:* Ludovic Staelens (UCB Pharma, Belgium)**The Use of High Throughput (HT) Vacuum Jacketed UHPLC for the Investigation of the Metabolism, Toxicokinetics and "Omic" effects of Methapyrilene in the Rat**

09:00 - 09:20

*Presenter:* Ian Wilson (Imperial College London, United Kingdom)**A review of analytical parameters in 'rapid' liquid chromatographic methods for bioanalysis: Can we do better?**

09:20 - 09:40

*Presenter:* Katie Lawlor (Kings College London, United Kingdom)**Bottom-up Protein LC-MS: Can buffer choice make or break a rapid tryptic digestion assay?**

09:40 - 10:00

*Presenter:* Ashley Sean Phillips (Resolian, United Kingdom)**SMART SAMPLERS FOR SIMPLIFIED LC-MS/MS ANALYSIS OF PROTEIN BIOMARKERS**

10:00 - 10:20

*Presenter:* Trine G Halvorsen (University of Oslo, Norway)*Oral*

08:30 - 10:20

1C

**O.12 - HILIC***Chair:* Peter Myers (University of Liverpool, United Kingdom)*Chair:* Gert Desmet (Free University Brussels, Belgium)**The analysis of small polar molecules by HPLC**

08:30 - 09:00

*Presenter:* David McCalley (University of the West of England, United Kingdom)

**Practical applications of HILIC for the analysis of polar compounds**

09:00 - 09:20

*Presenter:* Tony Edge (ISC 2024, United Kingdom)

**Characterization of Hydrophilic Interaction Liquid Chromatography (HILIC) Columns using fluorouridine derivatives**

09:20 - 09:40

*Presenter:* Tohru Ikegami (Kyoto Institute of Technology, Japan)

**Beyond conventional: evaluating the potential of HILIC for collagen peptide mapping analysis**

09:40 - 10:00

*Presenter:* Martina Lioi (University of Pavia, Italy)

**Insights into retention behavior and selectivity in HILIC through quantitative retention mechanism assessment**

10:00 - 10:20

*Presenter:* Yong Guo (Fairleigh Dickinson University, United States)

*Roundtable*

09:20 - 10:20

3A

**R2 - CAMS State of the Nation - Separation Science - are we in trouble?**

*Chair:* Melissa Hanna-Brown (University College Cork, Ireland)

*Panellist:* Paul Ferguson (Astra Zeneca, United Kingdom)

*Panellist:* Tony Edge (ISC 2024, United Kingdom)

*Panellist:* Patrick Knight (Shimadzu Research Laboratory, United Kingdom)

*Panellist:* John Langley (University of Southampton, United Kingdom)

*Panellist:* Diane Turner (United Kingdom)

*Panellist:* Jackie A Mosely (University of York, United Kingdom)

*Refreshments & Exhibition*

10:20 - 11:00

2

**Refreshments & Exhibition**

*Oral*

11:00 - 12:30

1A

**O.13 - Big Data Modelling**

*Chair:* Kelly Zhang (Genentech, United States)

*Chair:* Tony Taylor (Element Material Technologies, United Kingdom)

**Harnessing Cloud Computing for Breakthroughs in Chromatography and Analytical Chemistry**

11:00 - 11:30

*Presenter:* Tim Myers (Microsoft, United States)

**Exploration of critical parameters for the retention of molecules in achiral Supercritical Fluid Chromatography with the support of Data Science**

11:30 - 11:50

*Presenter:* Astrid Buica (AstraZeneca AB, Sweden)

**Automated Method Development in Liquid Chromatography for Polymer Analysis**

11:50 - 12:10

*Presenter:* Tijmen S. Bos (University of Amsterdam, Netherlands)

**Automating Method Development for 1D and 2D-LC of Biopharmaceuticals**

12:10 - 12:30

*Presenter:* Bob Pirok (Van 't Hoff Institute for Molecular Sciences, University of Amsterdam, Netherlands)

*Oral*

11:00 - 12:30

1B

**O.14 - Emerging Column Technology 1**

*Chair:* Michael Laemmerhofer (University of Tuebingen, Institute of Pharmaceutical Sciences, Germany)

*Chair:* Lucie Nováková (Charles University, Faculty of Pharmacy, Czech Republic)

**Vacuum Jacketed Columns: Principles, Laboratory Practices, and**

11:00 - 11:30

**More**

*Presenter:* Fabrice Gritti (Waters Corporation, United States)

**SPP 3,5-Dinitrobenzamido-silica: exploiting the key strengths of a simple but effective LC Stationary Phase** 11:30 - 11:50

*Presenter:* Abdulrahman Al-Abcha (School of Pharmacy and Pharmaceutical Sciences, University of Sunderland, United Kingdom)

**Investigating Novel GC Column Chemistries for Improved Performance, Sensitivity and Data Quality and Accuracy** 11:50 - 12:10

*Presenter:* Vanessa Abercrombie (Agilent Technologies, United States)

**New Monodisperse fully porous particles (MFPP) for HPLC analysis** 12:10 - 12:30

*Presenter:* Mark Woodruff (Fortis Technologies Ltd, United Kingdom)

*Oral*

11:00 - 12:30

1C

**O.15 - Drugs of Abuse**

*Chair:* John Langley (University of Southampton, United Kingdom)

*Chair:* Jackie A Mosely (University of York, United Kingdom)

**A Holistic Approach to the Analysis of Novel Psychoactive Substances** 11:00 - 11:30

*Presenter:* Oliver Sutcliffe (Manchester Metropolitan University, United Kingdom)

**Wastewater Analysis for Narcotics Detection at High Temporal Resolution using LC-MS/MS and LC-HRMS** 11:30 - 11:50

*Presenter:* Leon Barron (Imperial College London, United Kingdom)

**Analytical Method Development for Synthetic Opioids in Wastewater to Monitor Community Consumption Activity** 11:50 - 12:10

*Presenter:* Derryn Grant (Imperial College London, United Kingdom)

**"Crossing my fingers! Once more into the abyss....". Analytical considerations for detection of nitazene opioids and related substances in today's illicit drug market** 12:10 - 12:30

*Presenter:* Lewis Couchman (Analytical Services International Ltd, United Kingdom)

*Roundtable*

11:30 - 12:30

3A

**R1 - Sustainability in separation science: Is it worth it?**

**Sustainability in separation science: Is it worth it?** 11:30 - 11:40

*Presenter:* Matthew Osborne (AstraZeneca UK Operations, United Kingdom)

*Presenter:* Andreas Otto (Agilent Technologies, Germany)

*Presenter:* Elia Psillakis (Technical University of Crete, Greece)

*Presenter:* Pernilla Sorme (My Green Lab, United Kingdom)

*Presenter:* John Warner (Technology Greenhouse, LLC, United States)

*Refreshments & Exhibition*

12:30 - 13:30

2

**Lunch & Exhibition***Tutorial*

13:00 - 14:00

1B

**T3 - Applied Troubleshooting for Gas Chromatography**

*Instructor:* Diane Turner (United Kingdom)

*Vendor Seminar*

13:00 - 14:00

3A

**V4 - Characterising the Impact of Switching from Helium to Hydrogen Carrier Gas on the SPME-GCxGC-TOFMS Analysis of Terpenes Standards Across a Range of SPME Fibres (Restek)***Instructor:* Simona Nicoara (The Open University, United Kingdom)*Careers Fair*

13:00 - 16:30

3B

**CF1 - Speed-dating job interviews at ISC2024***Poster*

13:30 - 15:00

2

**P2 - Posters 2**

Board 2

**Deep Eutectic Solvent-Based Ultrasound-Assisted Emulsification Microextraction coupled with UHPLC-QTOF-MS for the Rapid Analysis of Paraben Preservatives in Water Samples**

13:30 - 13:30

*Presenter:* Wanghsien Ding (National Central University, Taiwan, China)

Board 5

**The Evolving Landscape of PFAS Detection, an Outline of Methods**

13:30 - 13:30

*Presenter:* Mollie Nero (Restek, United States)

Board 8

**Development of a Semivolatile Column Optimized for the Analysis of Hazardous Waste**

13:30 - 13:30

*Presenter:* Russell Haworth (Restek UK, United Kingdom)

Board 11

**Considerations for the analysis of PFAS by LC-MS/MS**

13:30 - 13:30

*Presenter:* Matt James (VWR International Ltd, United Kingdom)

Board 14

**Reduced Instrument Downtime for Organochlorine Pesticide Analysis by Using an Optimized SPE Cartridge for Sample Extract Cleanup**

13:30 - 13:30

*Presenter:* Sebastian Prisacariu (Restek Corporation, United States)

Board 17

**Mitigating Matrix Issues via Filter Aid to Improve Solid-Phase Extraction Methods**

13:30 - 13:30

*Presenter:* Sebastian Prisacariu (Restek Corporation, United States)

Board 20

**Evaluation of removal of steroid hormones in waters and solids from natural wastewater treatment facilities and identification of their main transformation products using ultra-high performance liquid chromatography in combination with high-resolution mass spectrometry**

13:30 - 13:30

*Presenter:* Rayco Guedes-Alonso (University of Las Palmas de Gran Canaria, Spain)

Board 23

**Fast, high sensitivity analysis of chlorophenols and common odorants to assess water quality by HiSorb TD-GC-MS**

13:30 - 13:30

*Presenter:* Terry Buckland (KRSS Ltd UK, United Kingdom)

Board 26

**SWIEET - A salt-free alternative to QuEChERS**

13:30 - 13:30

*Presenter:* Nadja Kalinke (University of Tuebingen, Institute of Physical and Theoretical Chemistry, Germany)

Board 29

**New Developments in Drug Binding Studies using High-Performance Affinity Microcolumns and Non-Covalent Entrapment: Environmental and Pharmaceutical Applications**

13:30 - 13:30

*Presenter:* David Hage (University of Nebraska-Lincoln, United States)

Board 32

**Improving Short Chain PFAS Analysis using Reversed Phase Conditions**

13:30 - 13:30

*Presenter:* Stephanie Rosenberg (Advanced Materials Technology, United States)

Board 35

**CHROMATOGRAPHIC PROFILING OF KARATAU ERYNGIUM EXTRACTS**

13:30 - 13:30

*Presenter:* Mereke Alimzhanova (Al-Farabi Kazakh National University, Kazakhstan)



Board 38	<b>Development and Validation of a Novel Method Based on Extraction, Purification and Chromatographic Techniques for Obtaining and Quality Control of Almond Hull Triterpene Acids</b>	13:30 - 13:30
<i>Presenter:</i> Imeda Rubashvili (Ivane Javakhishvili Tbilisi State Univeristy, Georgia)		
Board 41	<b>Automated MicroLLE for Sample Preparation of Semi Volatiles in Water</b>	13:30 - 13:30
<i>Presenter:</i> Cassandra Rusher (ePrep Europe Ltd., United Kingdom)		
Board 44	<b>Using LC-MS/MS analysis to quantify chemical contamination in soils using a passive sampling device.</b>	13:30 - 13:30
<i>Presenter:</i> Leon Barron (Imperial College London, United Kingdom)		
Board 47	<b>Quantifying tyre emissions in environmental samples using gas chromatography</b>	13:30 - 13:30
<i>Presenter:</i> Ime Usen (Emissions Analytics, United Kingdom)		
Board 50	<b>Non-radioactive electron capture detector based on high energy photoionization</b>	13:30 - 13:30
<i>Presenter:</i> Maximilian J. Kueddelsmann (Leibniz University Hannover, Institute of Electrical Engineering and Measurement Technology, Germany)		
Board 53	<b>Simultaneous separation of chloramines and common anions in water samples by gradient suppressed ion chromatography with combined conductivity and UV absorbance detection</b>	13:30 - 13:30
<i>Presenter:</i> Ibraam Mikhail (University of Tasmania, Australia)		
Board 56	<b>Stability and assessment of nutrients in parenteral nutrition solutions</b>	13:30 - 13:30
<i>Presenter:</i> Jelle Verdonck (KU Leuven, Belgium)		
Board 59	<b>Two-dimensional HPLC for separation of isomeric compounds in milk thistle (<i>Silybum marianum</i>) extract</b>	13:30 - 13:30
<i>Presenter:</i> Petr Chocholouš (Charles University, Faculty of Pharmacy, Czech Republic)		
Board 62	<b>Comparison of sample preparation for determination of mycotoxins in cannabis and cannabis derived products using LC-FLD and LC-MS/MS</b>	13:30 - 13:30
<i>Presenter:</i> Giorgia Greco (KNAUER, Germany)		
Board 65	<b>The Determination of 510 Pesticide Residues in Agricultural Products by LC-MS/MS and GC-MS/MS</b>	13:30 - 13:30
<i>Presenter:</i> Ho Won Chang (Busan regional office of food and drug safety, Korea, Republic of)		
Board 68	<b>Determination of rare sugars by high performance liquid chromatography</b>	13:30 - 13:30
<i>Presenter:</i> Annika Malz (Shimadzu Europa GmbH, Germany)		
Board 71	<b>Quantitative analysis of quinine in tonic water and bitter lemon</b>	13:30 - 13:30
<i>Presenter:</i> Annika Malz (Shimadzu Europa GmbH, Germany)		
Board 74	<b>Great taste and plant-based: Can advanced analytical tools tackle flavour challenges in plant-based foods?</b>	13:30 - 13:30
<i>Presenter:</i> Terry Buckland (KRSS Ltd UK, United Kingdom)		
Board 77	<b>Allergen Analyses of Edible Insects: Insights from Scientific Literature</b>	13:30 - 13:30
<i>Presenter:</i> Maja Bensa (University of Ljubljana, Slovenia)		
Board 80	<b>Miniaturized solid-phase microextraction analysis of pesticides in grapes</b>	13:30 - 13:30
<i>Presenter:</i> Yerkanat Syrgabek (Al-Farabi Kazakh National University, Kazakhstan)		

Board 83	<b>Determination of dichlorodiphenyltrichloroethane and its degradation products in fruits and vegetables using a magnetic solid phase extraction and gas chromatography-mass spectrometry</b>	13:30 - 13:30
<i>Presenter:</i> Preeyaporn Phosiri (Khon Kaen University, Thailand)		
Board 86	<b>Determination of multi-class pesticide residues in food samples using a selective sample enrichment method combined with liquid chromatography-mass spectrometry</b>	13:30 - 13:30
<i>Presenter:</i> Rodjana Burakham (Khon Kaen University, Thailand)		
Board 89	<b>The effect of various washing methods on pesticide residues, toxic and essential elements removal in rice</b>	13:30 - 13:30
<i>Presenter:</i> Khulood Alnabati (Saudi Food and Drug Authority, Saudi Arabia)		
Board 89	<b>Automated, highly sensitive analysis of target residual fumigants in foods for regulatory food safety testing by multi-step enrichment-headspace-trap (MSE-HS-trap) coupled with GC-MS</b>	13:30 - 13:30
<i>Presenter:</i> Terry Buckland (KRSS Ltd UK, United Kingdom)		
Board 92	<b>Optimisation of Liquid Chromatography Mass Spectrometry to differentiate and Quantify Glycosaminoglycans in Human Breastmilk</b>	13:30 - 13:30
<i>Presenter:</i> Melissa Greenwood (Newcastle University, United Kingdom)		
Board 95	<b>Using a Virtual Liquid Chromatography Tool to Develop Methods for Novel Psychoactive Substances</b>	13:30 - 13:30
<i>Presenter:</i> Mollie Nero (Restek, United States)		
Board 98	<b>Quantitation of an Oral Fluid Drug Panel Including THC Using High Resolution Accurate-Mass (HRAM) Orbitrap Mass Spectrometry</b>	13:30 - 13:30
<i>Presenter:</i> Ed Goucher (Thermo Fisher Scientific, United States)		
Board 101	<b>The OPCW Central Analytical Database</b>	13:30 - 13:30
<i>Presenter:</i> Jakub Michał Milczarek (Organisation for the Prohibition of Chemical Weapons, Netherlands)		
Board 104	<b>Combining chromatographic techniques with spectroscopic techniques and machine learning algorithms for predicting molecular weight of drugs of abuse: An intelligent hyphenated approach</b>	13:30 - 13:30
<i>Presenter:</i> Sulaf Assi (Liverpool John Moores University, United Kingdom)		
Board 107	<b>Exploring extra-column band broadening effects toward a well-arranged instrumental configuration in capillary liquid chromatography</b>	13:30 - 13:30
<i>Presenter:</i> Takeshi Hara (Shimadzu Corporation, Japan)		
Board 110	<b>New Porous Monodisperse HPLC particles</b>	13:30 - 13:30
<i>Presenter:</i> Mark Woodruff (Fortis Technologies Ltd, United Kingdom)		
Board 113	<b>New porous monodisperse particles for increasing resolution in Liquid Chromatography</b>	13:30 - 13:30
<i>Presenter:</i> Mark Woodruff (Fortis Technologies Ltd, United Kingdom)		
Board 116	<b>Method Transfer Across HPLC Platforms: From Routine to Problematic</b>	13:30 - 13:30
<i>Presenter:</i> Jennifer Simeone (Waters Corporation, United States)		
Board 119	<b>Characterization of biomimetic chromatography columns based on plasma proteins through the Abraham solvation parameter model</b>	13:30 - 13:30
<i>Presenter:</i> Marti Roses (University of Barcelona, Spain)		
Board 122	<b>Analysis of perfume long-lastingness in personal care products through headspace gas chromatography mass spectrometry method</b>	13:30 - 13:30
<i>Presenter:</i> Chung Lee Yee (Winnox Cosmeceutics Sdn Bhd, Malaysia)		

Board 125	<b>Establishing an internal standard cassette and development strategy suitable for LC-MS/MS quantitation of lipophilic compounds in multiple tissues.</b>	13:30 - 13:30
<i>Presenter:</i> Cheryl Parry (Unilabs York Bioanalytical Solutions, United Kingdom)		
Board 128	<b>Consideration of <math>\pi</math>-<math>\pi</math> and CH-<math>\pi</math> interactions as dipole-dipole interactions in biphenyl stationary phases</b>	13:30 - 13:30
<i>Presenter:</i> Etsuko Shearer (BioNik Inc., Japan)		
Board 131	<b>GC Method development within the Pharmaceutical Industry - A challenging case study</b>	13:30 - 13:30
<i>Presenter:</i> Benjamin Berkoff (Pharmaron UK, United Kingdom)		
Board 134	<b>Utilizing a UPLC™ (Ultra Performance Liquid Chromatography) system coupled to a compact benchtop Time of Flight Mass Spectrometer(ToF) for rapid accurate mass information in a walk-up environment</b>	13:30 - 13:30
<i>Presenter:</i> Chris Henry (Waters Corporation, United Kingdom)		
Board 137	<b>Trapped Ion Mobility Separation as an Additional Dimension for Better Coverage of Isomeric Lipids and Metabolites in UHPLC/MS of Biological Samples</b>	13:30 - 13:30
<i>Presenter:</i> Robert Jirásko (University of Pardubice, Czech Republic)		
Board 140	<b>Chemical characterization and fractionation of bioactive compounds derived from European medicinal plants</b>	13:30 - 13:30
<i>Presenter:</i> Katharina Wetzel (University of Duisburg-Essen, Germany)		
Board 143	<b>Size and Composition Analysis of Polymeric Drug Delivery Systems by Two-Dimensional Liquid Chromatography with Online Sample Transformation</b>	13:30 - 13:30
<i>Presenter:</i> Joshka Verduin (Vrije Universiteit Amsterdam, Netherlands)		
Board 146	<b>LC Fractionation as sample preparation technique for <math>^{14}\text{C}</math> quantitation with accelerator mass spectrometry to study drug metabolism and bioavailability of new pharmaceutical drugs</b>	13:30 - 13:30
<i>Presenter:</i> Jonas Dinser (Boehringer Ingelheim Pharma GmbH & Co KG, Germany)		
Board 149	<b>Comparison of Electrospray and UniSpray in Profiling of Endogenous Steroids in Plasma Samples</b>	13:30 - 13:30
<i>Presenter:</i> Taťána Gazárková (Charles University, Faculty of Pharmacy, Czech Republic)		
Board 152	<b>Ultra-Fast Scanning Quadrupole Mass Spectrometry Combined with GCxGC for Comprehensive Analysis of Complex Matrix Samples</b>	13:30 - 13:30
<i>Presenter:</i> Kazuhiro Kawamura (Shimadzu Corporation, Japan)		
Board 155	<b>Development of an immobilised artificial membrane liquid chromatography-mass spectrometry-based platform for high throughput and reliable assessments of the pulmonary permeability of drugs</b>	13:30 - 13:30
<i>Presenter:</i> Amy Dillon (Edinburgh Napier University, United Kingdom)		
Board 158	<b>Distribution of selected technology-critical elements among cytosolic biomolecules in the northern pike liver analysed by hyphenated system of size exclusion high-performance liquid chromatography and inductively coupled plasma mass spectrometry (SEC-HPLC-ICP-MS)</b>	13:30 - 13:30
<i>Presenter:</i> Zoran Kiralj (Ruđer Bošković Institute, Croatia)		
Board 161	<b>A chemometric approach for chemical characterization of recycled plastic used in personal care packaging with pyrolysis-APGC-QToF mass spectrometry</b>	13:30 - 13:30
<i>Presenter:</i> Rachel Sanig (University of Liverpool, United Kingdom)		
Board 164	<b>Online Nanoflow Ion-Exchange Chromatography - Native Mass Spectrometry in Characterization of Complex Proteoform Mixtures</b>	13:30 - 13:30

*Presenter:* Ziran Zhai (University of Amsterdam, Netherlands)

Board 167	<b>An exhaustive characterization of polyvinyl chloride to support chemical recycling processes by two-dimensional SEC-RPLC-ESI-HRMS method for five PVC waste.</b>	13:30 - 13:30
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*Presenter:* Noémie Auchère (IFP Energies Nouvelles, France)

Board 170	<b>A novel generic approach, avoiding SPE and enzymatic phosphorylation, to the measurement of labile phosphate metabolites of antiviral pro-drugs in dried blood spots by column switching Anion-Exchange/HILIC-MS/MS</b>	13:30 - 13:30
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*Presenter:* Mark Bayliss (North Bristol NHS Trust, United Kingdom)

Board 173	<b>Improved Separation of Anhydrosugar Isomers using HILIC-MS: Application to Biomass Burning Marker Detection in Environmental Samples</b>	13:30 - 13:30
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*Presenter:* Brett Paull (University of Tasmania, Australia)

Board 176	<b>Development of an HPLC-HRMS method for the identification and semi-quantitation in river water samples of the transformation products originated from heterogenous photocatalysis of antipsychotic drugs</b>	13:30 - 13:30
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*Presenter:* Federica Dal Bello (University of Turin, Italy)

Board 179	<b>Chromatographic Resolution and Investigation of Structurally Related Components during the Quantitative Analysis of N-Nitroso-Propranolol in Drug Substance using LC-MS/MS</b>	13:30 - 13:30
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*Presenter:* Amy Bartlett (Waters Corporation, United Kingdom)

Board 182	<b>Deciphering the glycan isomers of glycosphingolipids in biological samples using a porous graphitized carbon column</b>	13:30 - 13:30
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*Presenter:* Karel Hořejší (University of Pardubice, Czech Republic)

Board 185	<b>Towards stability monitoring of polymer nanoparticles by online two-dimensional hydrodynamic and size-exclusion chromatography</b>	13:30 - 13:30
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*Presenter:* Thomas Holmark (University of Amsterdam, Netherlands)

Board 188	<b>Characterization of Sugammadex-related Isomeric Cyclodextrin Impurities by Cyclic Ion Mobility High-Resolution Mass Spectrometry Methods</b>	13:30 - 13:30
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*Presenter:* Péter Soma Szakály (Hevesy György PhD School of Chemistry, ELTE Eötvös Loránd University, Hungary)

Board 191	<b>Hyper-fast gas chromatograph and ion mobility spectrometer with flow-optimized ion source and high repetition rate to resolve short chromatographic peaks</b>	13:30 - 13:30
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*Presenter:* Alexander Nitschke (Leibniz University Hannover, Institute of Electrical Engineering and Measurement Technology, Germany)

Board 194	<b>Optimising biocatalytic esterification of fatty acids in aqueous conditions by GC-MS.</b>	13:30 - 13:30
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*Presenter:* Rhona Cowan (University of Edinburgh, United Kingdom)

Board 197	<b>RP-UHPLC columns: evaluation guidelines and quick selection tool</b>	13:30 - 13:30
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*Presenter:* Cristina Suteu (Novartis PHARMA AG, Switzerland)

Board 200	<b>Optimisation of UHPLC determination of furans and phenols in biorefinery products</b>	13:30 - 13:30
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*Presenter:* Kristine Meile (Latvian State Institute of Wood Chemistry, Latvia)

Board 203	<b>Analytical challenges in ADME studies using the HPLC-UV method</b>	13:30 - 13:30
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*Presenter:* László Valkai (Gedeon Richter Plc, Hungary)

Board 206	<b>Development of a sensitive Liquid Chromatography-Tandem Mass Spectrometry analytical method of steroid hormones in small whale blubber biopsies</b>	13:30 - 13:30
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*Presenter:* Daniela Dulgheriu (Norwegian University of Life Sciences, Norway)

Board 209	<b>On-chip packing of silicon-glass microfluidic channels: Novel column formats in HPLC miniaturisation</b>	13:30 - 13:30
<i>Presenter:</i> Mitch De Waard (Vrije Universiteit Brussel, Belgium)		
Board 212	<b>Rapid analysis of volatile flavour compounds by headspace GC-MS</b>	13:30 - 13:30
<i>Presenter:</i> Asger Geppel (Novonosis A/S, Denmark)		
Board 215	<b>Wafer-scale rubbing-induced microsphere assembly: A step closer to ordered structures in liquid chromatography</b>	13:30 - 13:30
<i>Presenter:</i> Ignaas Shiraaz Jimidar (Vrije Universiteit Brussel, Belgium)		
Board 218	<b>Rapid Screening of Herbal Medicine Using Single Quadrupole LC-MS</b>	13:30 - 13:30
<i>Presenter:</i> Yoshiyuki Watabe (Shimadzu General Service, Japan)		
Board 221	<b>Monitoring the Aging of Natural Ester Insulating Fluids using SFC-MS</b>	13:30 - 13:30
<i>Presenter:</i> Julie Herniman (University of Southampton, United Kingdom)		
Board 224	<b>DEVELOPMENT AND VALIDATION OF A STABILITY-INDICATING RP-HPLC METHOD COUPLED BY TANDEM MASS SPECTROMETRY FOR RITLECITINIB AND ITS DEGRADATION PRODUCTS</b>	13:30 - 13:30
<i>Presenter:</i> Jelena Kovačić (University of Zagreb, Croatia)		
Board 227	<b>Size-resolved characterization of lipid-based nanoparticles with online coupled asymmetric flow field flow fractionation and small angle x-ray scattering</b>	13:30 - 13:30
<i>Presenter:</i> Herje Schagerlöf (Lund University, Sweden)		
Board 230	<b>Best Practices for Liposome Analysis with the Charged Aerosol Detector</b>	13:30 - 13:30
<i>Presenter:</i> Susanne Fabel (Thermo Fisher Scientific, Germany)		
Board 233	<b>Comparison of the pharmacokinetics and metabolic fate of gefitinib - 3 - PROTACs and gefitinib in the rat following subcutaneous dosing</b>	13:30 - 13:30
<i>Presenter:</i> Amy Bartlett (Waters Corporation, United Kingdom)		
Board 236	<b>Do all methods described in the pharmacopoeia really work? Adaptation and verification of a theoretically incorrect pharmacopeial method</b>	13:30 - 13:30
<i>Presenter:</i> Istavan Kese		
Board 239	<b>The Benefits of Comprehensive Two-Dimensional Liquid Chromatography for the Separation of Complex Biological Mixtures</b>	13:30 - 13:30
<i>Presenter:</i> Hannah Denison (Syngenta, United Kingdom)		
<i>Tutorial</i>		
14:00 - 15:00		1C
<b>T4 - In-silico retention modelling for chromatographic separations</b>		
<i>Instructor:</i> Clementine Castel (AstraZeneca, United Kingdom)		
<i>Instructor:</i> Jennifer Field (Shimadzu UK, United Kingdom)		
<i>Vendor Seminar</i>		
14:00 - 15:00		3A
<b>V5 - Vendor-neutral automation of any LC-MS data for reporting and ML/AI (Mestrelab)</b>		
<i>Oral</i>		
15:00 - 16:30		1A
<b>O.16 - Miniaturisation</b>		
<i>Chair:</i> Jörg Kutter (Denmark)		
<i>Chair:</i> Oliver Sutcliffe (Manchester Metropolitan University, United Kingdom)		

<b>To Infinity (1290) and Beyond - Miniaturising HPLC out of the lab</b>	15:00 - 15:30
<i>Presenter:</i> Ali Salehi-Reyhani (Imperial College London, United Kingdom)	
<b>ChromaSkin and Permeapad®: innovative tools for investigating the passage through the skin of chemicals.</b>	15:30 - 15:50
<i>Presenter:</i> Ilaria Neri (University of Naples Federico II, Italy)	
<b>Portable ion chromatography-based platform for robust in-field analysis of nitrogen containing anions and cations in environmental and industrial waters</b>	15:50 - 16:10
<i>Presenter:</i> Brett Paull (University of Tasmania, Australia)	
<b>Rapid and Reliable Nitrite Content Analysis in Pharmaceutical Excipients with the ACQUITY™ QDa™ II Mass Detector</b>	16:10 - 16:30
<i>Presenter:</i> Henry Foddy (Waters Corporation, United Kingdom)	
<i>Oral</i>	
15:00 - 16:30	1B
<b>O.17 - Clinical</b>	
<i>Chair:</i> Michal Holčápek (University of Pardubice, Czech Republic)	
<i>Chair:</i> Coral Barbas (Universidad San Pablo CEU, Spain)	
<b>Quantitative Retention-Chemical Structure Relationship (QSRR) in the study of biological activity</b>	15:00 - 15:30
<i>Presenter:</i> Bogusław Buszewski (KUJAWSKO-POMORSKIE CENTRUM NAUKOWO-TECHNOLOGICZNE IM. PROF. JANA CZOCHRAŁSKIEGO, Poland)	
<b>HILIC/MS Quantitation of Low-Abundant Phospholipids and Sphingolipids in Human Plasma and Serum: Dysregulation in Pancreatic Cancer</b>	15:30 - 15:50
<i>Presenter:</i> Ondrej Peterka (University of Pardubice, Czech Republic)	
<b>Body volatolome, from sampling to understanding: a promising solution for health monitoring</b>	15:50 - 16:10
<i>Presenter:</i> Elsa Boudard (ESPCI, France)	
<b>Machine Guided Optimization of Organic Semi-Conductor Films for Light Activated Antimicrobials and Antiviral Surfaces</b>	16:10 - 16:30
<i>Presenter:</i> Joseph Kaye (Imperial College London, United Kingdom)	
<i>Oral</i>	
15:00 - 16:30	1C
<b>O.18 - Separation Technology of the Future</b>	
<i>Chair:</i> Gertrud Morlock (Justus Liebig University Giessen, Germany)	
<i>Chair:</i> Bo Zhang (Xiamen University, China)	
<b>The fantastic world of gold colloids and other things small</b>	15:00 - 15:30
<i>Presenter:</i> Mathias Brust (University of Liverpool, United Kingdom)	
<b>The Power of Vacuum UV Detection in Gas Chromatography in the Pharmaceutical Industry</b>	15:30 - 15:50
<i>Presenter:</i> Richard Ladd (VUV Analytics, United States)	
<b>Unravelling the mobility profiles of protonated pharmaceutical ions: a comparative study using advanced ion mobility spectrometry techniques</b>	15:50 - 16:10
<i>Presenter:</i> Jackie A Mosely (University of York, United Kingdom)	
<b>In-Column Derivatisation' (ICD): A modernised approach to selective post-column assays</b>	16:10 - 16:30
<i>Presenter:</i> Matt James (VWR International Ltd, United Kingdom)	

*Roundtable*

15:30 - 16:30

3A

**R3 - Need for Chromatography Roundtable***Refreshments & Exhibition*

16:30 - 17:10

2

**Refreshments & Exhibition***Plenary*

17:10 - 18:10

1A

**P-3 - Sustainable Separations for a Circular Economy through Green Chemistry***Chair:* Paul Ferguson (Astra Zeneca, United Kingdom)*Speaker:* John Warner (Technology Greenhouse, LLC, United States)**Sustainable Separations for a Circular Economy through Green Chemistry**

17:10 - 17:55

*Presenter:* John Warner (Technology Greenhouse, LLC, United States)

**Wednesday, 09. October 2024***Oral*

08:10 - 10:00

1A

**O.10 - Oligonucleotides***Chair:* Christina Vanhinsbergh (AstraZeneca, United Kingdom)**Separation of next-generation therapeutic oligonucleotides using ion-pair chromatography based on fundamental separation science**

08:10 - 08:40

*Presenter:* Torgny Fornstedt (Karlstad university, Sweden)**From LC-UV to MS-based methodology for the analysis of siRNA**

08:40 - 09:00

*Presenter:* Anthony Ehkirch (Novartis Pharma AG, Switzerland)**Separation method development of oligonucleotides on mixed-mode column and by 2D-LC/UV/MS**

09:00 - 09:20

*Presenter:* Jufang Wu Ludvigsson (AstraZeneca, Sweden)**Development of Multiple Heartcutting Two-Dimensional Liquid Chromatography with Ion-Pairing Reversed-Phase and Hydrophilic Interaction Chromatography for Characterization of Impurities in Therapeutic Oligonucleotides**

09:20 - 09:40

*Presenter:* Daniel Meston (Gustavus Adolphus College, United States)**Dispelling the myths of Oligonucleotide chromatography**

09:40 - 10:00

*Presenter:* Ken Cook (Thermo Fisher Scientific, United Kingdom)*Oral*

08:10 - 10:00

1B

**O.20 - BMSS - Mass Spectrometry in Separation Science***Chair:* Jackie A Mosely (University of York, United Kingdom)**Analysis of Bicycles- Novel Medium Molecules**

08:10 - 08:40

*Presenter:* Andrew Feilden (Bicycle Therapeutics, United Kingdom)**Monitoring the Aging of Natural Ester Insulating Fluids using SFC-MS**

08:40 - 09:00

*Presenter:* Julie Herniman (University of Southampton, United Kingdom)**The Fastest Chromatography is No Chromatography at All: Introducing Selected Ion Flow Tube Mass Spectrometry (SIFT-MS)**

09:00 - 09:20

*Presenter:* Tony Taylor (Element Material Technologies, United Kingdom)**Unprecedented Reproducibility Achieved in the First High-Resolution Ion Mobility Inter-lab Lipidomic Study of Human Plasma**

09:20 - 09:40

*Presenter:* Lucy Woods (MOBILion Systems, United States)**Paper Arrow Mass Spectrometry: A Seamless Integration of Modified Paper Chromatography with Paper Spray for an Exemplary Clinical Scenario of Paracetamol Overdose**

09:40 - 10:00

*Presenter:* Yufeng Zhou (University of Liverpool, United Kingdom)*Oral*

08:10 - 10:00

1C

**O.21 - Water analysis***Chair:* Leon Barron (Imperial College London, United Kingdom)*Chair:* Caroline Gauchotte-Lindsay (University of Glasgow, United Kingdom)**Anyone for a Cocktail? Applying analytical techniques to investigate the occurrence of chemicals of emerging concern in the aquatic environment.**

08:10 - 08:40



*Presenter:* Fiona Regan (School of Chemical Sciences, Dublin City University, Ireland)

**Portable and field-deployable liquid chromatography - mass spectrometry system for haloacetic acids analysis in drinking water**

08:40 - 09:00

*Presenter:* Ibraam Mikhail (University of Tasmania, Australia)

**Development of a column switching for direct online enrichment and separation of polar and nonpolar analytes from aqueous matrices**

09:00 - 09:20

*Presenter:* Kjell Kochale (Institut für Umwelt & Energie, Technik & Analytik e.V., Germany)

**Enhanced Non-Targeted Analysis Efficiency and Identification Confidence for Polyfluorinated Alkyl Substances Using Liquid Chromatography and Cyclic Ion Mobility Mass Spectrometry**

09:20 - 09:40

*Presenter:* Michael McCullagh (Waters Corporation, United Kingdom)

**Development and application of non-target and suspect screening for environmental chemical regulatory purposes in the United Kingdom**

09:40 - 10:00

*Presenter:* Emmelianna Kumar (Environment Agency United Kingdom, United Kingdom)

*Refreshments & Exhibition*

10:00 - 10:40

2

**Refreshments & Exhibition**

*Oral*

10:40 - 12:10

1A

**O.22 - Untargeted Analysis 1**

*Chair:* Mathias Brust (University of Liverpool, United Kingdom)

*Chair:* David Thompson (Keele University, United Kingdom)

**The Power of Separation Techniques in Metabolomics**

10:40 - 11:10

*Presenter:* Coral Barbas (Universidad San Pablo CEU, Spain)

**Untargeted analysis of antioxidant degradation products utilising LC-HRMS**

11:10 - 11:30

*Presenter:* Siobhan Murphy (Element Life Sciences Manchester, United Kingdom)

**Building of a high-resolution mass spectral library by LC-Orbitrap: chemical exposure agents**

11:30 - 11:50

*Presenter:* Stepan Koudelka (Masaryk University, Czech Republic)

**The Role of Semi-Quantitative Approach in Identifying Fragrance Content in Perfumes**

11:50 - 12:10

*Presenter:* adnan ALMUSSALLAM (Saudi food and drug authority, Saudi Arabia)

*Oral*

10:40 - 12:10

1B

**O.23 - Food 1**

*Chair:* Irena Vovk (National Institute of Chemistry, Slovenia)

**The Flavors of Chromatography**

10:40 - 11:10

*Presenter:* Lewis Jones (Sensient Flavors & Extracts, United Kingdom)

**Novel Stationary Phase for the Separation of all Classes of Carbohydrates**

11:10 - 11:30

*Presenter:* Jean-Pierre Chervet (Antec Scientific, Netherlands)

**Comparison of state-of-the-art analytical platforms for the analysis of growth promoters in livestock biofluids**

11:30 - 11:50

*Presenter:* Sebastian Löbbecke (University of Duisburg-Essen, Germany)

**Advantages of SFC-MS over LC-MS in food safety analysis**

11:50 - 12:10

*Presenter:* Gesa Schad (Shimadzu Europa GmbH, Germany)

*Oral*

10:40 - 12:10

1C

**O.24 - Emerging Column Technology 2**

*Chair:* David McCalley (University of the West of England, United Kingdom)

*Chair:* Daniel Meston (Gustavus Adolphus College, United States)

**Chromatographic column orderliness achieved by bottom-up precision engineering**

10:40 - 11:10

*Presenter:* Bo Zhang (Xiamen University, China)

**3D printed stationary phases for the downstream processing of therapeutic antibodies**

11:10 - 11:30

*Presenter:* Simone Dimartino (The University of Edinburgh, United Kingdom)

**Crosslinking Effects on the Separation of Anions with Novel Hybrid Anion Exchangers for Ion Chromatography**

11:30 - 11:50

*Presenter:* Andrew Zill (Thermo Fisher Scientific, United States)

11:50 - 12:10

**Orthogonal separation in comprehensive two-dimensional liquid chromatography (LC × LC) using Sil-Lys-2C18 as stationary phase in both dimensions**

*Presenter:* Yassine Oulad El Majdoub (Duisburg-Essen, Germany)

*Refreshments & Exhibition*

12:10 - 13:10

2

**Lunch & Exhibition**

*Tutorial*

12:40 - 13:40

1B

**T5 - Practical LC-MS; If a little bit works, then a little bit less probably works better!**

*Instructor:* Tony Taylor (Element Material Technologies, United Kingdom)

*Poster*

13:10 - 14:40

2

**P3 - Posters 3**

Board 3

**Exploring chromatographic modes hyphenated to MS for improved characterization of phosphorothioated oligonucleotides**

13:10 - 13:10

*Presenter:* Luca Tutiš (Vrije Universiteit, Netherlands)

Board 6

**Chemometric strategies for characterization and optimization of oligonucleotide separations**

13:10 - 13:10

*Presenter:* Sanne E. Boot (University of Amsterdam, Netherlands)

Board 9

**Analysis of therapeutic phosphorothioate oligonucleotides, their impurities and metabolites by liquid chromatography coupled with mass spectrometry**

13:10 - 13:10

*Presenter:* Zuzana Vosáhllová (Charles University, Faculty of Science, Czech Republic)

Board 12

**Effective method transfer of semi-preparative reversed-phase liquid chromatographic purification of oligonucleotides**

13:10 - 13:10

*Presenter:* Katherine Lovejoy (Thermo Fisher Scientific, Germany)

Board 15

**Analysis of mRNA therapeutics using Ion- Pair Reversed- Phase HPLC**

13:10 - 13:10

*Presenter:* Alexandra Webb (University of Sheffield, United Kingdom)

Board 18	<b>Ultra-sensitive quantitation of therapeutic oligonucleotide in human plasma by liquid chromatography combined with both high resolution accurate mass Orbitrap mass spectrometer and Triple Quadrupole mass spectrometer</b>	13:10 - 13:10
<i>Presenter:</i> Jon Bardsley (Thermo Scientific, United Kingdom)		
Board 21	<b>Investigation of IEX-HPLC for single base resolution sgRNA quality control Demonstrating a time-saving approach for good separation in drug development</b>	13:10 - 13:10
<i>Presenter:</i> Nils Schomann (BioSpring GmbH, Germany)		
Board 24	<b>Analysis of Oligonucleotide Therapeutics Using 2D Liquid Chromatography</b>	13:10 - 13:10
<i>Presenter:</i> Jessica Dale (University of Sheffield, United Kingdom)		
Board 27	<b>Multi-attribute method to characterize mRNA cap and tail, by UPLC-MS</b>	13:10 - 13:10
<i>Presenter:</i> Agathe Bousquier (Sanofi, France)		
Board 30	<b>Rapid and reliable MS-based identification of oligonucleotide impurities in a regulatory-compliant environment</b>	13:10 - 13:10
<i>Presenter:</i> Marcus Hoffmann (Thermo Fisher Scientific, Germany)		
Board 33	<b>Optimising the extraction of oligonucleotides by SPE</b>	13:10 - 13:10
<i>Presenter:</i> Colin Pipe (Avantor, United Kingdom)		
Board 36	<b>New Column Technology for Improved Oligonucleotide Separations</b>	13:10 - 13:10
<i>Presenter:</i> Peter Pellegrinelli (Advanced Materials Technology, United States)		
Board 39	<b>Advancing mRNA analysis: exploring possibilities of ion-pairing RPLC</b>	13:10 - 13:10
<i>Presenter:</i> Jonathan Maurer (Institute of Pharmaceutical Sciences of Western Switzerland, University of Geneva, Switzerland)		
Board 42	<b>Multi-attribute method to characterize mRNA cap and tail, by UPLC-MS</b>	13:10 - 13:10
<i>Presenter:</i> Agathe Bousquier (Sanofi, France)		
Board 45	<b>Going Big, Small, and Low: Semi-Prep Columns with Small Particles for Polynucleotide Applications</b>	13:10 - 13:10
<i>Presenter:</i> Richard Williams (Thermo Fisher Scientific, United Kingdom)		
Board 48	<b>A Novel Sampling and Gas-Phase Derivatization Strategy Using Silica Monoliths for Gas Chromatography-Mass Spectrometry-based Metabolomics</b>	13:10 - 13:10
<i>Presenter:</i> Kazuhiro Kawamura (Shimadzu Corporation, Japan)		
Board 51	<b>Aza-Paternò-Büchi Reaction Allows Pinpointing Carbon-Carbon Double Bonds in unsaturated lipids from different seaweed species by untargeted approach</b>	13:10 - 13:10
<i>Presenter:</i> Anna Laura Capriotti (Sapienza University of Rome, Italy)		
Board 54	<b>Multi-targeted analysis of steroids by liquid chromatography-tandem mass spectrometry</b>	13:10 - 13:10
<i>Presenter:</i> Min Su (University of Tuebingen, Germany)		
Board 57	<b>Solid-phase extraction sample pretreatment for LC-MS analysis of metabolites in biological samples</b>	13:10 - 13:10
<i>Presenter:</i> Klára Faistauerová (University of Hradec Králové, Czech Republic)		
Board 60	<b>Development of LC/MS platform for analysis of polar metabolites, endocannabinoids and oxylipins in biological samples</b>	13:10 - 13:10
<i>Presenter:</i> Zdenka Neuerova (University of Hradec Králové, Czech Republic)		
Board 63	<b>Identification of key biomarkers to personalize management and cure of patients with cholangiocarcinoma</b>	13:10 - 13:10

*Presenter:* Andrea Cerrato (Sapienza University of Rome, Italy)

Board 66                    **Development of RP-LC x chiral SFC-MS approach for analysis of FAHFA isomers in biological samples**                    13:10 - 13:10

*Presenter:* Oleksandr Kozlov (University of Hradec Králové, Czech Republic)

Board 69                    **Comprehensive Single-Platform Lipidomic/Metabolomic Analysis Using Supercritical Fluid Chromatography-Mass Spectrometry**                    13:10 - 13:10

*Presenter:* Miroslav Lída (University of Hradec Králové, Czech Republic)

Board 72                    **Comprehensive Analysis of Nonpolar Lipids in Human Plasma and Serum Samples using RP-UHPSFC/MS**                    13:10 - 13:10

*Presenter:* Veronika Šubrtová (University of Pardubice, Czech Republic)

Board 75                    **Effect of Mobile Phase Composition on Retention Behavior of Metabolites in Bioinert LC Analysis**                    13:10 - 13:10

*Presenter:* Alena Langová (UNIVERSITY OF PARDUBICE, Czech Republic)

Board 78                    **High-Throughput and Comprehensive Lipidomic Analysis by UHPSFC/MS Using a Bioinert Column**                    13:10 - 13:10

*Presenter:* Petra Peroutková (University of Pardubice, Czech Republic)

Board 81                    **Method development for the determination of aromatic amino acids and their gut microbiota-host cometabolites in human urine by LC-MS/MS**                    13:10 - 13:10

*Presenter:* Domniki Gallou (Aristotle University of Thessaloniki, Greece)

Board 84                    **Whole Blood Untargeted Metabolomics in Three Microsampling Devices using GC-MS: An optimization Study**                    13:10 - 13:10

*Presenter:* Georgios Theodoridis (Aristotle University of Thessaloniki, Greece)

Board 87                    **New derivatization method for the determination of non-polar lipids using RP-UHPLC/MS/MS in negative ion mode**                    13:10 - 13:10

*Presenter:* Yasmin Kadyrbekova (University of Pardubice, Czech Republic)

Board 90                    **Comprehensive multidimensional UHPLC×UHPSFC/MS-MS analysis of human plasma samples**                    13:10 - 13:10

*Presenter:* Tomáš Hájek (University of Pardubice, Czech Republic)

Board 93                    **An untargeted analytical workflow based on Kendrick mass defect filtering reveals dysregulations in acylcarnitines in prostate cancer tissue**                    13:10 - 13:10

*Presenter:* Enrico Taglioni (Sapienza University of Rome, Italy)

Board 96                    **Determination Of Short Chain Fatty Acids (SCFAs) In Human Fecal Samples By GC-MS**                    13:10 - 13:10

*Presenter:* Christina Virgiliou (Biomic AUTH, Greece)

Board 99                    **Versatile use of microfluidic LC columns, optimized configuration for achieving significant increases in proteome coverage at low nanoLC flow rates**                    13:10 - 13:10

*Presenter:* Michael Oliver (Thermo Fisher Scientific, United Kingdom)

Board 102                    **Statistical tools for comparing chromatographic assay methods to other analytical techniques during method validation**                    13:10 - 13:10

*Presenter:* Jean-Marc Roussel (Independent consultant, France)

Board 105                    **Anytime anywhere access to HPLC instruments for students**                    13:10 - 13:10

*Presenter:* Raymond Wong (Shimadzu, United Kingdom)

Board 108                    **Derivatisation as a mean for response factor levelling-up to improve LC analysis: a case study**                    13:10 - 13:10

*Presenter:* Emanuele Petruzzella (Emanuele Petruzzella, United Kingdom)

Board 111                    **Advancements in Chemical Analysis: Identifying 28 Allergens in Cosmetics using GC-MS**                    13:10 - 13:10

*Presenter:* KHALID ALABDULLATIF (Saudi Food and Drugs Authority, Saudi Arabia)

Board 114                    **HPTLC-MS<sup>n</sup> and HPTLC-image analyses of phytochemicals in leaves, fruits and bark of staghorn sumac (*Rhus typhina* L.)**                    13:10 - 13:10

*Presenter:* Vesna Glavnik (National Institute of Chemistry, Slovenia)

Board 117                    **SIMULTANEOUS SEPARATION OF CARDIOVASCULAR MEDICARIONS IN THEIR COMBINATION DRUGS USING MICELLAR LIQUID CHROMATOGRAPHY**                    13:10 - 13:10

*Presenter:* Ibrahim Alothaim (Saudi Food and Drug Authority, Saudi Arabia)

Board 120                    **Development of a Fast LC-ESI-MS/MS Method for Biomonitoring Livestock Antiparasitic Residues in Greece: Quantification of Ivermectin, Albendazole, and Their Metabolites in Sheep Plasma and Faeces**                    13:10 - 13:10

*Presenter:* Theodora Barmpouni (Benaki Phytopathological Institute, Greece)

Board 123                    **Development of a Sensitive Method for the determination of Enrofloxacin in falsified veterinary medicine**                    13:10 - 13:10

*Presenter:* Ibrahim Alothaim (Saudi Food and Drug Authority, Saudi Arabia)

Board 126                    **Gas Chromatography-Tandem Mass Spectrometry Method for the Quantitative Determination of Ethylene Glycol and Diethylene Glycol in Pediatric Syrups**                    13:10 - 13:10

*Presenter:* Yahya M. Alshehri (Saudi Food and Drug Authority, Saudi Arabia)

Board 129                    **Evaluation of PolyArc ® detector with splitless and cool-on-column injection modes for quantification by Gas Chromatography without reference materials**                    13:10 - 13:10

*Presenter:* Anna Yates (Syngenta, United Kingdom)

Board 132                    **Analytical Validation Studies for Sampling and Quantitative Determination of Terbinafine HCl Residues on the Pharmaceutical Equipment Surfaces for Cleaning Validation**                    13:10 - 13:10

*Presenter:* Imeda Rubashvili (Ivane Javakhishvili Tbilisi State Univeristy, Georgia)

Board 135                    **Exploring the selectivity of commercially-available anion-exchange LC stationary phases**                    13:10 - 13:10

*Presenter:* Ahmed Mazen (University of Sunderland, United Kingdom)

Board 138                    **A Teaching and Research Laboratory Facility, Training the Next Generation**                    13:10 - 13:10

*Presenter:* Alba Navarro Rodriguez (The University of Edinburgh, United Kingdom)

Board 141                    **Corrosion inhibitors: how can non-specific interactions and adsorption impact quantification using UHPLC-HRMS?**                    13:10 - 13:10

*Presenter:* Didier Thiébaud (ESPCI Paris - PSL, France)

Board 144                    **Detailed chemical characterisation of pyrolysis oils from mixed plastic waste using GC×GC-TOF MS**                    13:10 - 13:10

*Presenter:* Terry Buckland (KRSS Ltd UK, United Kingdom)

Board 147                    **Multi-technique approach for the classification and characterisation of new biofuels**                    13:10 - 13:10

*Presenter:* Laval Nicolas (University of Southampton, United Kingdom)

Board 150                    **Functionality-type and chemical-composition separation for poly(lactide-co-glycolide) using gradient elution with basic and acidic additives in normal phase liquid chromatography**                    13:10 - 13:10

*Presenter:* Masashi Serizawa (University of Amsterdam, Netherlands)

Board 153                    **Structural Analysis of Cationic Modified Polysaccharides by Gas Chromatography**                    13:10 - 13:10

*Presenter:* Florian Klepel (Dow Germany, Germany)

Board 156                    **Method Development for the Analysis of Biopolymers as Polylactic**                    13:10 - 13:10

**Acid with Gel Permeation Chromatography***Presenter:* Giorgia Greco (KNAUER, Germany)

Board 159	<b>New approach for the depletion of <math>\Delta^9</math>-THC from CBD rich samples by Simulated Moving Bed</b>	13:10 - 13:10
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*Presenter:* Greta Compagnin (University of Ferrara, Italy)

Board 162	<b>Development of purification strategies for natural compounds by simulated moving bed chromatography in lab scale</b>	13:10 - 13:10
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*Presenter:* Yannick Krauke (KNAUER Wissenschaftliche Geräte GmbH, Germany)

Board 165	<b>Enhancing normal phase LC purification of Vitamin K1 cis- and trans- isomers through accurate fraction collection with temperature control</b>	13:10 - 13:10
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*Presenter:* Maria Grübner (Thermo Fisher Scientific, Germany)

Board 168	<b>Innovative separation platform via novel macro porous spongy monoliths for high throughput affinity chromatography.</b>	13:10 - 13:10
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*Presenter:* Tetsuya Tanigawa (Kyoto Prefectural University, Japan)

Board 171	<b>Determining Purity Using Charged Aerosol Detector with Inverse Gradient: A Revolutionary Approach</b>	13:10 - 13:10
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*Presenter:* Dominika Mária Herr (Cyclolab Ltd., Hungary)

Board 177	<b>SYNTHESIS AND CHARACTERIZATION OF BIODEGRADABLE GEMINI SURFACTANT</b>	13:10 - 13:10
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*Presenter:* khushi bhatt (parul university, India)

Board 180	<b>Reviewing applicability of Ethanol and Methanesulfonic Acid as Greener Alternatives in Liquid Chromatographic Method Development</b>	13:10 - 13:10
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*Presenter:* Imogen Howard (AstraZeneca, United Kingdom)

Board 183	<b>Use of technological advances and new approaches to modernise commercial liquid chromatography methods</b>	13:10 - 13:10
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*Presenter:* Abi Herbert (AstraZeneca, United Kingdom)

Board 186	<b>Comparing low pH additives for liquid chromatographic separations</b>	13:10 - 13:10
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*Presenter:* Bethany Richards (AstraZeneca, United Kingdom)

Board 189	<b>A comparison of HPLC methods for the Bioethanol fermentation process control</b>	13:10 - 13:10
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*Presenter:* Martin Meyer (Shimadzu Europa GmbH, Germany)

Board 192	<b>Chromatographic Analysis of Lithium-Ion Battery Electrolytes</b>	13:10 - 13:10
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*Presenter:* WALDEMAR WEBER (Shimadzu Europa GMBH, Germany)

Board 195	<b>Ion chromatographic analysis of inorganic anions including silicate in insulating material</b>	13:10 - 13:10
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*Presenter:* Philipp Jochems (Shimadzu Europa GmbH, Germany)

Board 198	<b>Characterization of solute solvent-interactions in liquid chromatography: Search for reliable green HPLC solvents</b>	13:10 - 13:10
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*Presenter:* Marti Roses (University of Barcelona, Spain)

Board 201	<b>Sustainability in Extractables and Leachables: Implementing Green Chemistry Principles to a HR-LC-MS Screening Method</b>	13:10 - 13:10
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*Presenter:* Joel Haines (Resolian Analytical Sciences, United Kingdom)

Board 204	<b>Greening HPLC: Sustainable Practices to Reduce Environmental Impact</b>	13:10 - 13:10
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*Presenter:* Petra Lewits (Merck KGaA, Germany)

Board 207	<b>Sustainable Solvents in Thin-Layer Chromatography: Evaluation of Separation Performance and Environmental Compatibility</b>	13:10 - 13:10
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*Presenter:* Petra Lewits (Merck KGaA, Germany)

Board 210      **Bioprospecting of soil-borne microorganisms and chemical dereplication of their anti-microbial constituents with the aid of UPLC-QTOF-MS and Molecular Networking approach**      13:10 - 13:10

*Presenter:* Adivhaho Khwathisi (university of venda, South Africa)

Board 213      **Non-target detection of endocrine active compounds in wine and botanicals**      13:10 - 13:10

*Presenter:* Gertrud Morlock (Justus Liebig University Giessen, Germany)

Board 216      **Genotoxics in food products, cosmetics and perfumes**      13:10 - 13:10

*Presenter:* Gertrud Morlock (Justus Liebig University Giessen, Germany)

Board 219      **Design of a Dual Ion Source coupled to HRMS to enhance the chemical characterization of comprehensive 2D-LC of European Medicinal Plants**      13:10 - 13:10

*Presenter:* Marvin Häßler (Universität Duisburg Essen, Germany)

Board 222      **Evaluating the impact of migration test conditions on the quantification of organic compounds for the approval of materials in contact with drinking water**      13:10 - 13:10

*Presenter:* Ana Isabel Penetra (Empresa Portuguesa das Águas Livres, S.A. (EPAL), Portugal)

Board 225      **Utilization of Monodisperse Fully Porous Particles for Chromatographic Improvement in Mass Spectrometry based Metabolomics for Disease Detection**      13:10 - 13:10

*Presenter:* Ken Butchart (Fortis Technologies Ltd, United Kingdom)

Board 228      **Gas chromatography low energy-electron ionisation mass spectrometry (GC-LE-EI-MS) in non-targeted analysis**      13:10 - 13:10

*Presenter:* Francesco Friedrich Russo (Bundesanstalt für Materialforschung und -prüfung (BAM), Germany)

Board 231      **Fluorinated Additives used in LiBs - Forever Chemicals of Tomorrow?**      13:10 - 13:10

*Presenter:* Juliane Scholl (Bundesanstalt für Materialforschung und -prüfung (BAM), Germany)

Board 234      **Overcoming Challenges in Metabolite Identification within DIA-Based SWATH-MS Studies**      13:10 - 13:10

*Presenter:* Adrian Brun (University of Tuebingen, Germany)

Board 237      **GC-FID Platform method for determination of halogenated aromatic regioisomers**      13:10 - 13:10

*Presenter:* Adrian Doggett (Bristol Myers Squibb, United Kingdom)

Board 240      **Comparative Analysis of Blood Microsampling Devices for Global Untargeted Metabolic Profiling**      13:10 - 13:10

*Presenter:* Georgios Theodoridis (Aristotle University of Thessaloniki, Greece)

Board 242      **Development of fully automated liquid-liquid extraction gas chromatography - electron ionization - Orbitrap mass spectrometry (LLE-GC-[EI]-Orbitrap MS) method for chemical exposure agent profiling**      13:10 - 13:10

*Presenter:* Kateřina Coufalíková (Masaryk University, Czech Republic)

Board 244      **Reassessing Candidate Structures for NTS LC/HRMS<sup>2</sup> Features by Predicting Retention Times with Unsupervised Learning**      13:10 - 13:10

*Presenter:* Gordian Sandberg (Stockholm University, Sweden)

Board 246      **Determination of Intracellular 2-Hydroxyglutarate Enantiomers Using Two-Dimensional Liquid Chromatography**      13:10 - 13:10

*Presenter:* Makoto Tsunoda (University of Tokyo, Japan)

Board 248      **The effectiveness of immobilised artificial membrane and liposome electrokinetic chromatography in predicting the pulmonary delivery of drugs in humans.**      13:10 - 13:10

*Presenter:* Dorota Orzel (Edinburgh Napier University, United Kingdom)

*Careers Fair*  
13:10 - 14:10

3B

**CF2 - Engaging Chromatography careers: Imagine what you can do!**

*Tutorial*  
13:40 - 14:40

1C

**T6 - Experience the power of Free, Web-based Computer Modeling Tools to Simulate Gas Chromatographic Separations. Having a GC in your laptop**

*Instructor:* Jaap de Zeeuw (CreaVisions, Netherlands)

*Oral*  
14:40 - 16:10

1A

**O.25 - Polymer Analysis**

*Chair:* Bo Zhang (Xiamen University, China)

*Chair:* John Langley (University of Southampton, United Kingdom)

**LC METHODS TO STUDY POLYMER STRUCTURE**

14:40 - 15:10

*Presenter:* Peter Schoenmakers (University of Amsterdam, Netherlands)

**Characterisation of biodegradable polymers and photodegradation products by pyrolysis multidimensional gas chromatography-mass spectrometry (Py-GC<sub>x</sub>GC-MS)**

15:10 - 15:30

*Presenter:* Robyn Barrett (University of Plymouth, United Kingdom)

**Boosting the separation efficiency of Hydrodynamic Chromatography by shaping the cross-channel section**

15:30 - 15:50

*Presenter:* Valentina Biagioni (Sapienza University of Rome, Italy)

**Employing capillary electrophoresis where chromatography fails: assessment of the charge heterogeneity of polymeric nanoparticles**

15:50 - 16:10

*Presenter:* Govert Somsen (Vrije Universiteit Amsterdam, Netherlands)

*Oral*  
14:40 - 16:10

1B

**O.26 - Sustainability 2**

*Chair:* Diane Turner (United Kingdom)

*Chair:* Paul Ferguson (Astra Zeneca, United Kingdom)

**SFC-MS coupling: Current state and advances**

14:40 - 15:10

*Presenter:* Lucie Nováková (Charles University, Faculty of Pharmacy, Czech Republic)

**Going For Green In Chromatographic Analysis - A Perspective From Within The Pharmaceutical Industry**

15:10 - 15:30

*Presenter:* Matthew Osborne (AstraZeneca UK Operations, United Kingdom)

**Improving sustainability through modernisation of LC methods**

15:30 - 15:50

*Presenter:* Gemma Lo (VWR International Ltd, United Kingdom)

**How transparency and awareness can make a change in your lab's sustainability journey**

15:50 - 16:10

*Presenter:* Andreas Otto (Agilent Technologies, Germany)

*Oral*  
14:40 - 16:10

1C

**O.27 - Novel Pharmaceutical Modalities**

*Chair:* Deirdre Cabooter (KU Leuven, Belgium)

*Chair:* Ludovic Staelens (UCB Pharma, Belgium)

**Utilizing the on/off retention model of proteins to enhance**

14:40 - 15:10



**selectivity in liquid chromatography**

*Presenter:* Davy Guillarme (University of Geneva, Switzerland)

**High-throughput HPLC analysis of lipids and related impurities with ELSD and MS detection for the quality control before and after the LNP formulation**

15:10 - 15:30

*Presenter:* Mareike Prüfer (KNAUER Wissenschaftliche Geräte GmbH, Germany)

**Addressing the analytical gap in the analysis of non-biological complex drugs - a case study for the comprehensive chemical analysis of bituminosulfonate**

15:30 - 15:50

*Presenter:* Thomas Gröger (Helmholtz Munich, Germany)

**Expanding the mRNA Characterization Toolbox using Size-exclusion Chromatography, Multi-angle Light Scattering Detection and Mass Photometry**

15:50 - 16:10

*Presenter:* Jelle De Vos (RIC group, Belgium)

*Poster*

14:40 - 16:10

3A

**P4 - Flash Posters**

*Chair:* David Bell (ASKprime LLC, United States)

*Refreshments & Exhibition*

16:10 - 16:50

2

**Refreshments & Exhibition**

*Plenary*

16:50 - 17:25

1A

**P-4 - Adventures with Mass Spectrometry and Joy**

*Chair:* Tim Sangster (United Kingdom)

*Speaker:* Perdita Barran (The University of Manchester, United Kingdom)

**Adventures with Mass Spectrometry and Joy**

16:50 - 17:20

*Presenter:* Perdita Barran (The University of Manchester, United Kingdom)

*Plenary*

17:25 - 18:20

1A

**P-5 - Unraveling the Threads: Exploring Degradation Pathways of Materials in Art**

*Chair:* Tony Taylor (Element Material Technologies, United Kingdom)

*Speaker:* Maarten van Bommel (University of Amsterdam, Netherlands)

**Unraveling the Threads: Exploring Degradation Pathways of Materials in Art**

17:25 - 18:10

*Presenter:* Maarten van Bommel (University of Amsterdam, Netherlands)

*Social Event*

19:00 - 23:30

Liverpool Cathedral

**Gala Dinner**

**Thursday, 10. October 2024***Oral*

08:30 - 10:00

1A

**O.28 - Fundamentals 2***Chair:* Adrian Clarke (Novartis, Switzerland)*Chair:* Torgny Fornstedt (Karlstad university, Sweden)**Unraveling mass transfer phenomena of biomolecules in liquid chromatography**

08:30 - 09:00

*Presenter:* Deirdre Cabooter (KU Leuven, Belgium)**Reimagining the  $C_m$  and  $C_s$ -terms of van Deemter's equation**

09:00 - 09:20

*Presenter:* Bram Huygens (Vrije Universiteit Brussel, Belgium)**Optimal thermal control for temperature responsive LC columns**

09:20 - 09:40

*Presenter:* Ken Broeckhoven (Vrije Universiteit Brussel, Belgium)**Optimizing gradient profiles for liquid chromatography: a comparison of optimization algorithms and the influence of the chromatographic response function**

09:40 - 10:00

*Presenter:* Gerben B. van Henten (University of Amsterdam, Netherlands)*Oral*

08:30 - 10:00

1B

**O.29 - Untargeted Analysis 2***Chair:* Didier Thiébaud (ESPCI Paris - PSL, France)**Chromatography in Metabolomics - Progress in High Throughput Metabotyping by LC-MS**

08:30 - 09:00

*Presenter:* Ian Wilson (Imperial College London, United Kingdom)**A click inverse electron-demand Diels-Alder reaction for assigning the carbon-carbon double bond regiochemistry in untargeted lipidomics**

09:00 - 09:20

*Presenter:* Andrea Cerrato (Sapienza University of Rome, Italy)**Modern chromatography for non-target screening applications**

09:20 - 09:40

*Presenter:* Stefan Bieber (AFIN-TS GmbH, Germany)**LC-MS-Based Global Metabolic Profiles of Alternative Blood Specimens Collected by Microsampling**

09:40 - 10:00

*Presenter:* Daniel Marques De Silva (Aristotle University of Thessaloniki, Greece)*Oral*

08:30 - 10:00

1C

**O.30 - Food 2***Chair:* Lewis Jones (Sensient Flavors & Extracts, United Kingdom)*Chair:* Michael Laemmerhofer (University of Tuebingen, Institute of Pharmaceutical Sciences, Germany)**Challenges in chromatographic analyses of phytonutrients in food samples**

08:30 - 09:00

*Presenter:* Irena Vovk (National Institute of Chemistry, Slovenia)**Practices for improving the quantitative analysis of PFAS**

09:00 - 09:20

*Presenter:* Stephan Buckenmaier (Agilent Technologies, Germany)**Analysis of volatiles in food - untargeted analysis using GERSTEL Dynamic Headspace (DHS) and the LECO Pegasus® BT 4D TOF**

09:20 - 09:40

*Presenter:* Kathy Ridgway (Element Lab Solutions, United Kingdom)**Using head-space SPME and Hi-Sorb extraction techniques gas**

09:40 - 10:00

**chromatography mass spectrometry to assess the volatiles in  
mature Cheddar cheese**

*Presenter:* David Mannion (Teagasc Food Research Centre, Ireland)

*Refreshments & Exhibition*

10:00 - 10:40

2

**Refreshments & Exhibition**

*Plenary*

10:40 - 11:25

1A

**P-6 - Prioritizing and elucidating the structure of toxic chemicals based on complementary empirical analytical information from LC/HRMS**

*Chair:* Daniel Meston (Gustavus Adolphus College, United States)

*Speaker:* Anneli Kruve (University of Stockholm, Sweden)

**Prioritizing and elucidating the structure of toxic chemicals based  
on complementary empirical analytical information from LC/HRMS**

10:40 - 11:25

*Presenter:* Anneli Kruve (University of Stockholm, Sweden)

*Plenary*

11:25 - 12:10

1A

**P-7 - Implementation of Liquid-Based Separation Science on Future Astrobiology Missions**

*Chair:* Diane Turner (United Kingdom)

*Speaker:* Peter Willis (NASA, United States)

**Implementation of Liquid-Based Separation Science on Future  
Astrobiology Missions**

11:25 - 11:55

*Presenter:* Peter Willis (NASA, United States)

*Refreshments & Exhibition*

12:10 - 13:30

2

**Lunch & Exhibition**

*Awards*

13:30 - 14:00

1A

**A-3 - Awards (Poster | Slam | Tube)**

*Chair:* Tony Edge (ISC 2024, United Kingdom)

*Chair:* Simone Dimartino (The University of Edinburgh, United Kingdom)

*Chair:* David Bell (ASKprime LLC, United States)

*Plenary*

14:00 - 14:30

1A

**P-8 - Potential of Chromatographic and Ion Mobility Separations in Lipidomic Analysis & ISC 2026**

*Chair:* Jörg Kutter (Denmark)

*Speaker:* Michal Holčapek (University of Pardubice, Czech Republic)

**Potential of Chromatographic and Ion Mobility Separations in  
Lipidomic Analysis**

14:00 - 14:30

*Presenter:* Michal Holčapek (University of Pardubice, Czech Republic)

*Plenary*

14:30 - 15:00

1A

**P-9 - Monitoring emerging risks in food: new approaches based on electrophoretic techniques coupled to mass spectrometry & ISC 2028**

*Chair:* Christina Vanhinsbergh (AstraZeneca, United Kingdom)

*Speaker:* Ana García-Campaña (University of Granada, Spain)

**Monitoring emerging risks in food: new approaches based on  
electrophoretic techniques coupled to mass spectrometry**

14:30 - 15:00

*Presenter:* Ana García-Campaña (University of Granada, Spain)

*Plenary*

15:00 - 15:30

1A

**P-10 - Farewell Address**

*Chair:* Tony Edge (ISC 2024, United Kingdom)