SinS
SOLUTIONS in SCIENCE
MOLECULAR CHARACTERISATION

LIVE EVENT 4TH - 6TH JULY 2023
CARDIFF CITY HALL, CARDIFF

CONFERENCE & EXHIBITION EVENT CATALOGUE

Platinum Sponsor
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Welcome to the Solutions in Science (SinS) conference and exhibition. SinS is a ground-breaking event that brings together the amalgamation of several analytical conferences, events, and special interest group meetings, organized by Scientists for Scientists. 

Sponsored and supported by many of the Royal Society of Chemistry special interest groups, the British Mass Spectrometry Society, ChromSoc, the British Society for Nanomedicine, the Institute of Physics, and the Institute of Food Science & Technology, SinS stands as the pinnacle of analytical excellence, destined to be one of the major analytical events of 2023.

Attendees to SinS will come from a diverse array of scientific backgrounds, including academia, research organizations, regulators, industrial laboratories, and analytical service providers. SinS will provide a dynamic forum for exchanging views and experiences while developing innovative solutions to address analytical challenges head-on.

Under the guidance of Conference Chair Professor John Langley, SinS was conceived with the vision of creating a sustainable and comprehensive analytical meeting. It aims to bring together scientists from various fields to network, share ideas, and discuss solutions.

The SinS Conference revolves around the characterization of molecules in numerous applications, ranging from medical and pharmaceutical to food and beverage, environmental, oil and gas, forensics, and beyond. Sustainability serves as a common thread throughout the three days of the conference, highlighting the importance of environmentally conscious practices in analytical sciences.

During each day of the conference, registered delegates will have the opportunity to tailor their participation by choosing from a selection of oral presentations, tutorials, and CPD certified sessions that run simultaneously. Furthermore, plenary presentations on sustainability or environmental themes will enrich all three days. Complementing the conference is the SinS exhibition which will give attendees opportunities to network and discuss with instrument suppliers their needs and applications and view poster presentations. Lunch and refreshments will be available to all participants and will again be freely available and served in the Exhibition networking hall.

The first day of SinS will focus on analytical challenges and solutions in environmental science, water analysis, food analysis, and the concept of ‘One Health’—incorporating both human and veterinary clinical medicine. Simultaneously, delegates can attend tutorials on green techniques, emerging modalities in GC-VUV spectroscopy, and automation. The day culminates in a forum discussion on chromatography.

Day two delves into clinical and forensic themes in one conference room, featuring presentations on trace level contamination measurements in receiving waters, hyphenated techniques, emerging modalities, and measurements in environmental applications. In a separate room, tutorials and open discussions will cover topics such as One Health, next-generation medicines, particle measurement, and troubleshooting for GC and GC-MS.

On the final day, delegates can choose between sessions on One Health and next-generation medicine or Green Techniques and Emerging Modalities. Both sessions culminate with captivating plenary sessions on Environmental/Digital and One Health, delivered by renowned experts in their respective fields. The conference wraps up with the presentation of awards. SinS will return to Cardiff in July 2025, keep an eye on the website for more information.

Enjoy your SinS!

Marcus Pattison
Exhibition Organiser
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Email: info@peftec.com

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Plenary Speakers

Dr. Francisco Pena-Pereira, Associate Professor at Department of Analytical and Food Chemistry, University of Vigo

Francisco Pena-Pereira is Associate Professor at Department of Analytical and Food Chemistry, University of Vigo, Spain. His research interests include the application of miniaturized sample preparation techniques toward greener analytical methods, the design of paper-based microfluidic devices for on-site analysis with portable optical readout systems, as well as the assessment of chemical systems by metric tools. He has authored 75 papers (47% first decile), yielding an H-index of 33. He has been included in the Ranking of Stanford University among the 2% most cited researchers in the world (2019-20, career long impact; 2018-20, single year impact).

Dr. Paul Ferguson, Associate Principal Scientist - Separation Science at AstraZeneca, AstraZeneca

A highly motivated leader with broad experience in the early and late development environments of the pharmaceutical industry. Over twenty years experience as an analytical chemist within the industry - leading analytical technology development, rapid analytical synthetic chemistry enabling support, early clinical phase project management and late stage formulation support. Exceptional networks with academic and industrial collaborators in the field of analytical chemistry.

Specialties: Extensive practical and theoretical knowledge of separation techniques (principally LC, CE, SFC) and related hyphenated techniques (LC/MS, CE/MS), chiral separations, drug product sample preparation, chromatographic column technology and selectivity, method development and validation, green analytical chemistry, software development, team leadership, continuous improvement, networking and conference organisation.

Dr. Saer Samanipour, Assistant Professor of Analytical Chemistry, Van’t Hoff Institute Amsterdam

Dr. Saer Samanipour is assistant professor of Analytical Chemistry at Van ’t Hoff Institute for Molecular Science (HIMS), University of Amsterdam. Additionally, he is an honorary senior fellow at The Queensland Alliance for Environmental Health Sciences (QAEHS) of the University of Queensland, Australia (UQ). Prior, he was a research scientist at the Norwegian Institute for Water Research (NIVA) working on application of non-target screening in environmental sciences.

Samanipour’s research focuses on the development of information extraction tools for spectrometric detection technology for particularly in the environmental application domain.

Professor Steve Conlan PhD FRSB, Professor of Molecular and Cell Biology, Swansea University Medical School

Steve Conlan is Professor of Molecular and Cell Biology, Swansea University Medical School, with over 25 years of experience in biomedical research and higher education. He is also Chief Scientific Officer at Continuum Life Sciences, a UK biotechnology company dedicated to finding a cure for cancer through research into Long Term cancer survivors.

Steve is involved in the leadership of several organisations; Chair of the Board of Trustees of the British Society of Nanomedicine, and Co-Vice Chair of the European Technology Platform – Nanomedicine. He is on the programme board, and is research and innovation lead, for two national precision medicine initiatives: Advanced Therapies Wales and Genome Partnerships Wales, and is a Wales Cancer Research Centre executive group member, and partnerships lead.

Steve is a Fellow of the Royal Society of Biology, and works closely with businesses, healthcare providers and research organisations in the UK and internationally to drive forward translational biomedical research. His university research focuses on the development of advanced therapeutics; Antibody Drug Conjugates, exosomes, and nanoparticle deliver systems, and understanding disease processes involving transcription and epigenomics.
Scientific Committee

Prof John Langley PhD BSc CChem CSci FRSC SinS Conference Chair, Mass Spectrometry and Chromatography Academic, University of Southampton

John has 35+ years’ experience of mass spectrometry (MS) and chromatography and has led and managed the MS Facility since 1988, during which time over 1000 users have been trained in the use of modern MS. He has 117 peer-reviewed publications, H-index is 35, and has delivered innovative approaches to MS and chromatography-MS, e.g. the first academic open access MS instrumentation in 1995, open access LC-MS, GC-MS and then SFC-MS in 2014. John has supervised 22 students who graduated with PhDs, and is currently supervisor to four PhD students, and second supervisor to a further five PhD students. All of his PhD studentships have been jointly funded by industry, spanning the pharmaceutical, agrochemical, petrochemical and polymer chemistry sectors. He is a Fellow of the Royal Society of Chemistry (RSC), Chartered Chemist, Chartered Scientist, Member of RSC Analytical Division Council (2014-20), Chair of the RSC Separation Science Group (2009-2022) and President of the International Mass Spectrometry Foundation (2018-2022). He is the only person to have been Chair of the BMSS and the RSC Separation Science Group.

John is also a diligent PhD examiner who is frequently called upon (19 Universities – both UK and abroad) and presently is external examiner at Robert Gordon University (Analytical MSc). In 2016-17 he was awarded the BMSS lectureship, a role he took very seriously, giving 18 lectures across the UK targeted at PhD students, covering over 4500 miles (mainly by train!) and in 2021 John was presented with the British Mass Spectrometry Society medal.

John’s research ability is to apply his skills in analytical science to a broad range of challenging problems and systems. He is enthusiastic about collaborative working and applying new technologies, and applying his research approaches to a range of applications new environmental projects, whilst others aligns to the petrochemical industry, agrochemicals and pharmaceutical (including therapeutic oligonucleotides). He is director of the SW Regional GCxGC-HRMS facility, and in the process of enabling the equivalent SW Regional LCxLC-IMS-HRMS facility that should be commissioned early 2023.

Dr A Ruth Godfrey (CSci, CChem, MRSC), Associate Professor in Liquid Chromatography Mass Spectrometry, Swansea University

Ruth is an Innovation and Engagement Associate Professor at Swansea University with 20 years’ experience in analytical science. She is a Chartered Chemist and Chartered Scientist committed to designing measurement advances for industry and government, focussing on sample separation, mass spectrometry and spectroscopy approaches for pharmaceutical and environmental analysis. She is a member of the SW Regional GCxGC-HRMS and LCxLC-IMS-HRMS facilities, and is PI for the first UK GC-VUV spectroscopy installation. She has 84 publications that span the life science and environmental sectors, and has co-developed with industry and government new analytical methods leading to an increase in commercial and/or regulatory service provision. In addition to reviewing for UKRI, she is also a registered European Commission expert evaluator in analytical science.

Ruth has over 10 years’ experience delivering training in analytical science, which includes over 30 postgraduate research (PGR) projects (9 PhDs), and the creation of training packages for industry, government and academia. She has helped shape graduate training globally as an RSC qualifications assessor, a member of the RSC Committee for Accreditation and Validation, and as secretary of the RSC Instrumental Analysis Expert Working Group. More recently, she has become a member of the RSC Separations Sciences Group and is excited to help support the coordination of activities across these roles.

Dr Leon Barron, Reader in Analytical & Environmental Sciences, Imperial College London

Dr. Leon Barron is a Reader in Analytical & Environmental Sciences at Imperial College London. He received both a BSc in Analytical Science (2001) and a PhD in Analytical Chemistry (2005) from Dublin City University, Ireland. Since 2009, he has led the Emerging Chemical Contaminants group focusing on chemicals and their transformation products in our environment, especially regarding development of targeted/non-targeted analytical methods for compound identification, monitoring, toxicity and risk assessment. In addition, he runs large-scale monitoring programmes using wastewater-based epidemiology to assess community and population level consumption and exposure to chemicals. His expertise lies in analytical chemistry, particularly in separation science, mass spectrometry and machine learning for applications in environmental, forensic and biological systems analysis. He has published >80 peer-reviewed journal articles to date and secured ~£7.5 M in research grants and contracts as Principal/Co-Investigator. He sits on the editorial board of Science & Justice, Journal of the Chartered Society of Forensic Sciences and from 2011-2014 was its Editor in Chief. He is a Fellow of the Royal Society of Chemistry, the Chartered Society of Forensic Sciences and the Higher Education Academy. He also sits on the committees of the RSC Separation Science Interest Group and the London Biological Mass Spectrometry Discussion Group.

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Dr Kathy Ridgway BSc (hons), PhD, C. Chem, MRSC, Senior Applications Chemist, Element (formally Anatune Ltd)

Dr Kathy Ridgway has over 29 year’s laboratory experience as an analytical chemist – mainly working with GC-MS. She started her career doing pesticide residue analysis, before moving on to work on a wide range of food contaminants at Unilever Research. During this time, she completed a PhD at the University of Loughborough focussed on alternative extraction techniques. Following over 10 years at Unilever, she worked as a technical specialist in Taints and off-flavours at Reading Scientific services limited (RSSL). She now works as a Senior Applications Chemist at Element (formally Anatune Ltd) on automation of sample preparation protocols and alternative extraction techniques. Her main focus is on food, flavour and fragrance applications. She is an active member of the Royal Society of Chemistry, being involved with both the Food Group (past secretary and chair) and the separation science interest group (SSG - current secretary). She is also on the organising committee of the BMSS Environmental and Food Analysis special interest Group (EFASIG). She has published several papers, contributed to several book chapters, written magazine articles and presented her work at international conferences.

Dr Diane Turner PhD FRSC, Senior Consultant & Director, Anthias Consulting Ltd

Diane Turner is the Founder, Director and Senior Consultant of Anthias Consulting Ltd. A Warwick University Graduate, Diane completed her Masters in analytical chemistry and started her career in environmental chemistry, later gaining significant experience as an Applications Chemist. Diane has developed methods for, given support and high-quality training for companies in most industries around the world for more than 20 years. Diane is a visiting Academic & Consultant at The Open University where she continues her disease diagnosis research from her PhD along with food, drug and space applications. Diane is President of the Royal Society of Chemistry Analytical Sciences Community and Chair of the Analytical Chemistry Trust Fund. She is a Trustee of the Recycling Organisation for Research Opportunities (RORO). Diane is on the Building Effective Analytical Measurement (BEAM) panel and the Industry Advisory Board of the Community for Analytical Measurement Science (CAMS). She is a member of the Government Chemist Programme Expert Group (GCPEG). Diane is co-author of “Gas Chromatography-Mass Spectrometry: How Do I Get the Best Results?” published by the Royal Society of Chemistry.

Dr Jackie Mosely, Associate Professor, Centre of Excellence in Mass Spectrometry, University of York

Jackie began research into fundamental aspects of mass spectrometry during a PhD at the University of Warwick, UK, before continuing at the University of Waterloo, Canada. Employment followed as an Application Scientist, later becoming the Senior Scientist for Bruker Daltonics Ltd, supporting all civilian MS-based product lines. Returning to University, at Durham University, she established a research group in mass spectrometry and managed the University MS service. She took up the post of Reader at Teesside University in the Waters Centre for Innovation before relocating to the University of York and the Centre of Excellence in Mass Spectrometry. Current research projects span a wide range of applications (primarily pharmaceutical, agrochemical, lipids, metal-ligands and air- and solvent-sensitive samples), but at the core, research focuses on developing mass spectrometry, from the high performance of FT ICR MS through to the transportable quadrupole MS, and employing chromatographic separation and ion mobility separation for complex samples. She is the Immediate Past Chair of the British Mass Spectrometry Society with much experience at organising conferences and training courses. Spectroscopy Update review group, published in the Journal of Analytical Atomic Spectrometry.
Dr Sam Whitmarsh PhD MChem CChem FRSC, Director of Digital transformation, CatSci

Dr Sam Whitmarsh has 20 years’ experience across the synthetic and analytical chemistry spaces specialising in separation science, with a focus on multi-dimensional chromatography and high-resolution mass spectrometry of complex mixtures. Sam completed his PhD at the university of Bristol before moving to AstraZeneca as an Analytical Scientist in Process Research and Development. Sam moved to BP and spent 10 years in a range of technical and leadership roles leaving as Global Analytical Expert and leading the BP Analytical Science Network. In 2020, Sam moved back to the pharmaceutical industry and joined CatSci Ltd as the Head of Process Research and Development, leading the growth of the scientific team from 20 to nearly 60 before moving to lead the CatSci digital offer in his current role as Director of Digital Transformation. Sam is a founding member of the LabLinks community – an free online community helping scientists from across the disciplines to Link. Learn and Succeed. Sam is also a member and past secretary of the Royal Society of Chemistry Separation Science interest group.

Dr Lewis Couchman, Facility & Research Director, Analytical Services International

Lewis is currently the Facility & Research Director at Analytical Services International, based at St Georges, University of London. His current role involves overseeing the development, implementation, and routine analysis of biological samples for TDM, forensic and clinical toxicology, and for the support of clinical trials. Lewis completed his BSc degree at Loughborough University, his MSc and Clinical Scientist Training courses at Queen Mary University of London and King’s College Hospital, and his PhD at the University of Leicester. Additionally, Lewis is a committee member of the Royal Society of Chemistry Separation Science Group and London Biological Mass Spectrometry Discussion Group, a member of The International Association of Forensic Toxicologists and The International Association of Therapeutic Drug Monitoring and Clinical Toxicology, and the Chair of the London Toxicology Group.

Graham Mills, Professor of Environmental Analytical Chemistry, University of Portsmouth

Graham Mills has been Professor of Environmental Analytical Chemistry at the University of Portsmouth, since 2008 and has over thirty-five years experience in the field. His main research interests are in monitoring water quality and measurement of organic pollutants particularly by the use of passive sampling techniques. Other areas of interest include development of novel sample preparation methods in analytical chemistry, use of high-field NMR in environmental toxicology and fate of pharmaceutical residues in the aquatic environment. He sits on two Royal Society of Chemistry Committees (Separation Science Group and Water Science Forum) that are related to these research activities.

Alan Cross B.Sc, MRSC, Analytical Chemist, Reading Scientific Services Ltd

Alan graduated from the University of Exeter with a degree in chemistry and went straight into the lab as an analytical chemist for the National Laboratory Service, mastering the fundamentals of environmental water analysis, focussing mainly on Atomic Spectroscopy, but also covering HPLC, GC-MS, wet chemistry and microbiological methodologies. Alans’ next career move was moving into the exciting world of Food and Pharmaceutical analysis, joining the growing team at RSSL, a contract analysis lab, joining the metals team building further expertise in atomic spectroscopy as well as elemental combustion analysis. The experience gained in the role meant Alan became a subject matter expert in the field of elemental impurities regulations in pharmaceutical products, this has led to several publications and conference talks on the subject. Outside of the day job, Alan also is the secretary for the RSC Food Group and is a writer/reviewer for the Atomic Spectroscopy Update review group, published in the Journal of Analytical Atomic Spectrometry.
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Wednesday 4pm Room 3
Dr Diane Turner
‘Applied Troubleshooting for GC & GC-MS’
Tutorial with open discussion

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SinS Conference Party

From 7:15pm on Wednesday 5th of July at the The Proud Mary Pub

Food and Drinks are included. Please bring your drinks tokens (which were clipped to your badge to exchange for Beers, wine or soft drinks).

The Proud Mary Pub is located a short walk from the venue: 42-43 St Mary St, Cardiff, CF10 1AD.

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# Conference Programme: Day 1 - Tuesday 4th July

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<thead>
<tr>
<th>Time</th>
<th>LOWER HALL</th>
<th>FERRIER HALL</th>
<th>SYNDICATE ROOM D</th>
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<tbody>
<tr>
<td>10:00</td>
<td>SinS 2023 Registration and Exhibition</td>
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<td>11:00</td>
<td>Conference Opening Ceremony</td>
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<td>11:10</td>
<td>Plenary session: Sustainability Dr Francisco Pena-Pereira, Associate Professor at Department of Analytical and Food Chemistry, University of Vigo</td>
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<td>12:00</td>
<td>Building a global culture of sustainability in science, Dr Pernilla Sorme, My Green Lab</td>
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<td>12:20</td>
<td>Flash Posters Presentations</td>
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<td>12:50</td>
<td>Lunch Break &amp; Exhibition</td>
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<td>12:50</td>
<td>LOWER HALL: Vendor Presentation</td>
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<td></td>
<td>Method Development Strategies using Selectivity as a tool</td>
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<td>Dr Helen M Poole</td>
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<td>14:00</td>
<td>Keynote: Using multi-modal passive samplers for the estimation of risk and bioaccumulation in Gammarus pulex</td>
<td>Keynote: Artificial Intelligence as a booster for food metabolomic workflows based on comprehensive two-dimensional gas chromatography</td>
<td>Sponsored by Water Research Forum</td>
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<td>Ms Alexandra Richardson, Imperial College London</td>
<td>Prof Chiara Cordero, University of Turin</td>
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<td>Sponsored by Water Research Forum</td>
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<td>14:30</td>
<td>A fully automated system for Simultaneous, High Sensitivity Detection of PAHs, PCBs and Multi-Residue Pesticides in Waste Water using Headspace SPME Arrow and APGC-MS/MS</td>
<td>The use of vacuum assisted headspace solid phase microextraction for analysis of volatiles in Food</td>
<td>Dr Kathy Ridgway, Element Laboratory Solutions</td>
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<td>Mr Janitha De Alwis, Waters Corporation</td>
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<tr>
<td>14:50</td>
<td>Combination of passive sampling, targeted analysis and suspect screening to assess the occurrence and distribution of polar organic chemicals in two chalk streams in Hampshire, UK</td>
<td>A case study on novel methodology for the detection of acrylamide in food, beverages and water at the point-of-need</td>
<td>Mr Tom Sutton, Microsaic Systems</td>
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<td>Ms Rosamund Robinson, University of Portsmouth</td>
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<td>15:10</td>
<td>From suspect screening to toxicity and exposure assessment of novel acidic contaminants in drinking water</td>
<td>Characterisation of Vanilla Extract Odour by Chemical and Sensory Analyses</td>
<td>Mr Lewis Jones, Sensient Flavors &amp; Extracts</td>
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<td>Mr David Ciccarelli, Imperial College London</td>
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## Conference Programme: Day 1 - Tuesday 4th July

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<thead>
<tr>
<th>15:30</th>
<th>Coffee Break &amp; Exhibition</th>
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<tr>
<td>16:00</td>
<td><strong>LOWER HALL</strong></td>
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<td>ONE HEALTH</td>
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<td>(Chair: Lisa Hinchliffe)</td>
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<tr>
<td>16:00</td>
<td><strong>FERRIER HALL</strong></td>
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<td></td>
<td>Latest Challenges in molecular characterisation</td>
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<td>(Chair: Dr Jackie Mosely, University of York)</td>
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<tr>
<td>16:00</td>
<td><strong>SYNDICATE ROOM D</strong></td>
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<tr>
<td></td>
<td>Keynote: Robust in vitro characterisation is imperative for successful in vivo nanomedicines</td>
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<td>Ms Kadie Edwards, University of Swansea</td>
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<td>Sponsored by JPAG</td>
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<td>16:30</td>
<td><strong>LOWER HALL</strong></td>
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<td>An analytical and epigenetic investigation of the environmental and human health impacts of per- and polyfluoroalkyl ‘Forever chemicals’</td>
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<td>Ms Denise De Meijer, Swansea University Medical School</td>
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<td>16:50</td>
<td><strong>FERRIER HALL</strong></td>
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<td>Advancing Sport and Nutritional Science Research: Integrating LCMS-8045 and Nexera X2 Systems at the Carnegie School of Sport of Leeds Beckett University</td>
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<td>Dr Theocharis Ispoglou, Leeds Beckett University</td>
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<tr>
<td>16:50</td>
<td><strong>SYNDICATE ROOM D</strong></td>
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<td></td>
<td>Characterising biosurfactants produced by Bacillus humi using LC MS/MS</td>
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<td></td>
<td>Dr Jackie Mosely, University of York</td>
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<td>17:10</td>
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<td>Our Journey Towards a Digitalised &amp; Automated Workflow for Plate Purification</td>
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<td>Mrs Johanna Kollback, AstraZeneca</td>
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<td>17:10</td>
<td><strong>FERRIER HALL</strong></td>
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<td>Real-world tyre wear emissions, and different chemical compositions of European and US tyres</td>
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<td>Mr Nick Molden, Emissions Analytics</td>
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<tr>
<td>17:30</td>
<td><strong>SYNDICATE ROOM D</strong></td>
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<td></td>
<td>Forum: CAMS Chromatography State of the Nation Update</td>
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<td>17:50</td>
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<td></td>
<td>Mixer &amp; Exhibition</td>
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<td>19:30</td>
<td><strong>FERRIER HALL</strong></td>
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<td></td>
<td>Informal Mixer at Tiny Rebel from 19:30</td>
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<td>19:30</td>
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### Keynote: Robust in vitro characterisation is imperative for successful in vivo nanomedicines

*Ms Kadie Edwards, University of Swansea*

Sponsored by JPAG

### Keynote: Molecular diversity vs chemical diversity: Combination of chemoselective derivatisations, chromatography, and mass spectrometry to reveal functional groups in complex mixtures.

*Dr Diana Palacio-Lozano*

Sponsored by BMSS

### Tutorial with open discussion: Automation

Utilising Automated Sample Preparation for Analytical Analysis

*Mr Jonathan Dunscombe, Element Laboratory Solutions*
## Conference Programme: Day 2 - Wednesday 5th July

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<tr>
<th>Time</th>
<th>LOWER HALL</th>
<th>FERRIER HALL</th>
<th>SYNDICATE ROOM D</th>
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<tbody>
<tr>
<td>08:55</td>
<td>SinS 2023 Announcements</td>
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<tr>
<td>09:00</td>
<td>Plenary session: Sustainability&lt;br&gt;Going green in separation science – focussing on the ‘how?’&lt;br&gt;Dr Paul Ferguson, Principal Scientist - Separation Science at AstraZeneca</td>
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<tr>
<td>09:45</td>
<td>Coffee Break &amp; Exhibition</td>
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### LOWER HALL

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<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>10:30</td>
<td>Keynote: Lewis Couchman&lt;br&gt;CLINICAL &amp; FORENSIC&lt;br&gt;(Chair: Dr Kathy Ridgway, Element Laboratory Solutions)</td>
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<tr>
<td>11:00</td>
<td>Pushing the boundaries of automation in bioanalytical science - how far can we go?&lt;br&gt;Dr Camila Liscio, Element Laboratory Solutions</td>
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<td>11:20</td>
<td>Antimicrobials in vegetable samples: d-SPE as an efficient clean up step to get accurate results at trace concentration levels&lt;br&gt;Ms Irantzu Vergara-Luis, University of the Basque Country (UPV/EHU)</td>
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<tr>
<td>11:40</td>
<td>Understanding the importance of sample preparation for the analysis of biological samples&lt;br&gt;Prof Tony Edge, Avantor</td>
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<tr>
<td>12:00</td>
<td>LOWER HALL: Vendor Presentation&lt;br&gt;Exogenous Microbial Metabolite Imaging via MALDI 8030 benchtop mass spectrometer (Sidrah Rahman, University of Nottingham)</td>
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### FERRIER HALL

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<th>Event</th>
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<tr>
<td>10:30</td>
<td>Keynote: Dr Cathy Frankis, Reading Scientific Services Limited (RSSL)&lt;br&gt;CONTAMINANTS&lt;br&gt;(Chair: Dr Kathy Ridgway, Element Laboratory Solutions)</td>
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<tr>
<td>11:00</td>
<td>Development of novel ICP-MS-CRIS instrumentation hyphenating inductively coupled plasma mass spectrometry with collinear resonance ionisation spectroscopy&lt;br&gt;Dr Giles Edwards, The University of Manchester</td>
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<tr>
<td>11:20</td>
<td>Comparing HPLC-MS and SFC-MS for PFAS analysis – an ionization efficiency-based effect study&lt;br&gt;Mr Paul O’Nion, RSSL</td>
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<tr>
<td>11:40</td>
<td>Establishing workflows to Simplify Data processing for two-dimensional Gas Chromatography Data&lt;br&gt;Mr Paul O’Nion, RSSL</td>
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### SYNDICATE ROOM D

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>10:30</td>
<td>Tutorial with open discussion: Green Techniques and Emerging modalities&lt;br&gt;Gas Chromatography-Vacuum Ultraviolet spectroscopy (GC-VUV): a sustainable alternative measurement technology for volatile species&lt;br&gt;Dr Ruth Godfrey, Swansea University Medical School</td>
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</table>

Please note, the program was correct at time of printing.

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<th>TIME</th>
<th>LOWER HALL</th>
<th>FERRIER HALL</th>
<th>SYNDICATE ROOM D</th>
</tr>
</thead>
</table>
| 14:00 | CLINICAL & FORENSIC  
(Chair: Lewis Couchman)  
Keynote: Rachel Carling | Hyphenated Techniques and Emerging Modalities  
Chair: Dr Ruth Godfrey, Swansea University Medical School  
Keynote: What do we want from our hyphenated solutions?  
Prof John Langley, University of Southampton | |
| 14:30 | Cardiff Forensic  
Lewis Couchman | Tackling the challenges of modern fuel with the application of chromatography and mass spectrometry  
Ms Molly Wilson, University of Southampton | Tutorial with open discussion:  
OneHealth, Next gen medicines, particle measurement  
Dr Lewis Francis, Swansea University Medical School |
| 14:50 | The use of short 10 mm columns for rapid LC-MS analyses. AVANTOR  
Dr Arianne Soliven, Avantor | Extending the Applicability Range of Refractive Index Detector via hyphenation with temperature gradient Temperature-responsive Liquid Chromatography for quantitative analysis  
Ms Elena Bandini, University of Ghent | |
| 15:10 | Mass spectroscopy: Life at the interface. Hyphenated parallel (FT-IR) - MS for unambiguous ID in complex samples  
Mr Nathan Hawkins, Spectrometrics Ltd | Fragmentation tree prediction based on molecular fingerprints  
Ms Viktoriia Turkina, Van ‘t Hoff Institute for Molecular Sciences (HIMS), University of Amsterdam | |
| 15:30 | Conference Break & Exhibition | | |
| 16:00 | CLINICAL & FORENSIC  
Keynote: Mark Parkin, Eurofins Forensic | ENVIRONMENTAL  
(Chair: Leon Barron)  
Keynote: Jacqui Hamilton | |
| 16:30 | Patrick Sears | Handheld liquid chromatography for field-based analysis  
Dr Ali Salehi-Reyhani, Imperial College London | Tutorial with open discussion:  
Applied Troubleshooting for GC & GC-MS  
Dr Diane Turner, Anthias Consulting Ltd |
| 16:50 | A combination of liquid chromatography tandem-mass spectrometry androgen profiling and machine learning identifies three distinct androgen metabolism subtypes in women with polycystic ovary syndrome  
Dr Angela Taylor, University of Birmingham | Developing an assay to determine impact of environmental conditions on the breeding of endangered species  
Ms Kelly-Anne Harrison, Avantor | |
| 17:10 | Drugs of Misuse: A Year Long-Study Monitoring Heroin Use in England  
Ms Derryn Grant, Imperial College London | Quantification & Identification Of Microplastics In Environmental Samples By Pyrolysis-Gc/Ms  
Mr Andrew Ward, JSB UK & Ireland | |
| 17:30 | Conference Ends | | |
| 19:15 | Conference Mixer from 19:15 at Proud Mary Pub (Drinks and Food included for Delegates and Exhibitors) | | |
# Conference Programme: Day 3 - Thursday 6th July

<table>
<thead>
<tr>
<th>TIME</th>
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<tr>
<td>08:55</td>
<td><strong>SinS 2023 Announcements</strong></td>
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</table>
| 09:00 | **One Health: Next generation medicine**  
(Chair: Sam Whitmarsh) | **Green Techniques and Emerging Modalities**  
(Chair: Diane Turner) |
| 09:00 | **Keynote: Navigating the Complexities of Oligonucleotide Analysis via LCMS: Challenges and Solutions**  
Dr Nigel Richardson, CatSci | **Keynote: Possibilities and limitations of purely aqueous temperature responsive liquid chromatography in LCxLC**  
Prof Frederic Lynen, Ghent University |
| 09:30 | **Characterisation Of Oligonucleotides By Negative Ion ESI Tandem MS and IMS**  
Mr Fabien Hannauer, University of Southampton | **Automated SIFT-MS - pushing the boundaries of high-throughput analysis**  
Dr Mark Perkins, Element Laboratory Solutions |
| 09:50 | **Multitarget Analysis of Xenobiotics in Breast Milk. First Steps Towards the Study of the Exposome**  
Ms Inés Baciero, University of the Basque Country (UPV/EHU) | **The Analysis of Pesticide Products using Ultra-High-Performance Supercritical Fluid Chromatography-Mass Spectrometry**  
Ms Rebecca Baker, University of Southampton |
| 10:10 | **Enabling the recycling of technology critical elements from e-waste through metrology research**  
Dr Sarah Hill, National Measurement Laboratory, LGC | **The need for non targeted analysis of Nitrosamines within the Pharmaceutical industry**  
Mr Andrew James, Ellutia |
| 10:30 | **Coffee Break & Exhibition**                                              |                                                                            |
| 11:00 | **Measurement and in silico prediction of pharmaceutical biotransformation in receiving water**  
Mx Olukemi Oloyede, Imperial College London | **Cumulative Neutral Loss Model for Fragment Deconvolution in Electrospray Ionization High-Resolution Mass Spectrometry Data**  
Ms Denice van Herwerden, University of Amsterdam |
| 11:20 | **Methods Database – Streamline HPLC Method Transfer and Data Comparison**  
Dr Azzedine Dabo, GSK | **From Helium to Hydrogen, a cost effective way to improve your lab’s green credentials**  
Mr Alan Griffiths, LECO |
| 11:40 | **An Informatics Environment Designed for Molecular Characterization & Analytical Knowledge Management**  
Dr Ed Milton-Harris, ACD/Labs UK | **Delivering Digital Work Instructions and AR Remote Support to Reduce Customer Downtime**  
Mr Nathan Burley, SSS Ltd |
| 12:00 | **Coffee Break & Exhibition**                                              |                                                                            |
Conference Programme: Day 3 - Thursday 6th July

<table>
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<tr>
<td>13:00</td>
<td>Plenary session: ENVIRONMENTAL/DIGITAL (Chair: Caroline Gauchotte-Lindsay)</td>
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<td>Dr. Saer Samanipour, Van’t Hoff institute Amsterdam</td>
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<tr>
<td>13:50</td>
<td>Plenary session: One Health (Chair: John Langley)</td>
</tr>
<tr>
<td></td>
<td>Prof Steve Conlan, Swansea University Medical School</td>
</tr>
<tr>
<td>14:40</td>
<td>Awards</td>
</tr>
<tr>
<td>14:45</td>
<td>Meeting close</td>
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Poster Presentations

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