

Chairs	Sessions	Name	Title	Room number	Start	End
	Registration				09:00	11:00
	Welcome	Professor Sonia Rocha	Welcome session	Lecture Room B	11:00	11:15
	Plenary 1	Professor Sir Ian Gilmore	One Pandemic inside anotherL Alcohol use before (during and after) Covid-19	Lecture Room B	11:15	12:00
	Plenary 2	Dr Oliver Sutcliffe	Addressing the challenges of New Psychoactive Substance detection within frontline environm	Lecture Room B	12:00	12:45
	Lunch				12:45	13:45
Karen Faulds	Session 1 Frontiers in spectroscopy	Juergen Popp	Translating Raman spectroscopy into clinics to solve unmet clinical needs - where do we stand	Lecture Room B	13:45	14:30
		Sheona Shankland	Application of Raman spectroscopy to Investigate Age-Related Disease in Archaeological Huma	Lecture Room B	14:30	14:50
		Christian Johannessen	Strengthen the ties: Raman optical activity in the absolute configuration determination field	Lecture Room B	14:50	15:10
	Tea & Coffee				15:10	15:40
Rick Dunn	Session 2 Frontiers in mass sptrometry	James MacRae	Two Short Stories on Metabolomics: An Introduction to Isotope Labelling	Lecture Room B	15:40	16:05
		Marina Wright Muelas	Relationships between metabolite and drug uptake and excretion by mammalian cell lines and	Lecture Room B	16:05	16:25
		Elena Hunter	Low field NMR for One Health: Near-Patient Diagnostics at the Benchtop Scale	Lecture Room B	16:25	16:45
		Dakshat Trivedi	Characterisation of serum identifies metabolic signatures of molecular differences in an ageing	Lecture Room B	16:45	17:05
Cassio Lima	Exhibition poster flash session 1	Kamila Schmidt	Reverse engineering of bacterial soil: The development of a metabolite extraction method for	Lecture Room B	17:05	17:10
		Raquel Portela	Review on existing standards, guides and practices for Raman spectroscopy	Lecture Room B	17:10	17:15
		Nigel Gotts	The CMR MS Facility, from crates to riches	Lecture Room B	17:15	17:20
		Nikesh N Patel	Development of a SERS-active magnetic bead	Lecture Room B	17:20	17:25
		Zoe Whalley	Novel Spectroscopic Approaches to Study 3D Printed Formulations	Lecture Room B	17:25	17:30
		Daniel Smaje	Probing Metabolic Behaviour of Bacteria at Surfaces	Lecture Room B	17:30	17:35
		Afeefa Kiran Chaudhary	Using synthetic biology to develop natural sunscreen compounds from algae	Lecture Room B	17:35	17:40
		Giorgia Marucci	From drug discovery to manufacturing, A-TEEM,ÑĈ fluorescence for fast and accurate	Lecture Room B	17:40	17:45
		Shwan Ahmed	Simultaneous Raman and Infrared spectroscopy: a novel combination for studying bacterial	Lecture Room B	17:45	17:50
		Ufuk Yilmaz	Nanoscale characterization of organic-inorganic perovskites with AFM-IR	Lecture Room B	17:50	17:55
		Sara Sadia Chowdhury	Investigating antimicrobial resistance mechanisms in urinary tract infection bacteria	Lecture Room B	17:55	18:00
		Cristina Saladas	Valorization of Blackcurrant waste	Lecture Room B	18:00	18:05
		Sahand Shams	Application of metabolomics and molecular imaging techniques for better understanding of	Lecture Room B	18:05	18:10
		Safaa Al Jedani	Collection Modes of Optical Photothermal Infrared Micro-spectroscopy on Head and Neck	Lecture Room B	18:10	18:15
Benjamin Clark	Point of Care Detection of Drug Induced Liver Injury Using a SERS-based Lateral Flow Device	Lecture Room B	18:15	18:20		
Yu Chen	Construction of E. coli for enhanced CO2 fixation and validation of construction using	Lecture Room B	18:20	18:25		
	Drinks Reception				18:30	20:00

Chairs	Sessions	Name	Title	Room number	Date	Start	End	
		Registration				12/04/2022	09:00	10:00
	Plenary 3	Dr Hatice Altug	Frontiers in Nanophotonics: Enabling Technology for Next-Generation Optical Biosensors and Bioimaging	Lecture Room B	12/04/2022	10:00	10:50	
		Tea & Coffee				12/04/2022	10:50	11:20
Jo Denbigh	Session 3.1 Molecular spectroscopy for pharma	Daniel-Ralph Hermann	Quantum Cascade laser based VCD characterised by a high temporal spectral resolution	Lecture Room C	12/04/2022	11:20	11:45	
		Rodolfo I. Teixeira	Probing Photoredox Catalysis using Time-Resolved Infrared Spectroscopy	Lecture Room C	12/04/2022	11:45	12:05	
		Mais Al-Attili	Spatially Offset Raman Spectroscopy for the Monitoring of Solvent Content During Pharmaceutical Drying	Lecture Room C	12/04/2022	12:05	12:25	
		Roy Aerts	Vibrational optical activity to elucidate the conformational behaviour of the antibiotic vancomycin and derivative	Lecture Room C	12/04/2022	12:25	12:45	
Kat Hollywood	Session 3.2 VOCs for health and disease	Holly Douglas	Developing and optimising Breath Biopsy OMNI, a robust HRAM GC-MS pipeline for the identification and quantification of volatile organic compounds	Lecture Room D	12/04/2022	11:20	11:45	
		Waqar Ahmed	Microbial volatiles as biomarkers of lung infection in the ICU	Lecture Room D	12/04/2022	11:45	12:05	
		Priscilla Rocio-Bautista	Dielectric Barrier Discharge Ionization with different sample introduction formats for small molecule applications	Lecture Room D	12/04/2022	12:05	12:25	
		Amy Worrall	Towards Early Intervention for Age-related Hearing Loss: Analysis of Inflammation in Murine Cochlear Fibrocytes	Lecture Room D	12/04/2022	12:25	12:45	
		Lunch				12/04/2022	12:45	13:45
Dakshat Trivedi	Session 4.1 Informatics for the omics	Eirik Almklov Magnussen	Deep Learning-enabled Inference of Morphology and Distribution of Molecular Absorption of Biological Cells from Raman Spectroscopy	Lecture Room D	12/04/2022	13:45	14:10	
		Waseem Ahmed	Study of Prediction Intervals in Machine Learning Assisted Mid-Infrared Spectroscopy for the Diagnosis of Neonatal Jaundice	Lecture Room D	12/04/2022	14:10	14:30	
		Georg Ramer	Nanoscale computational staining	Lecture Room D	12/04/2022	14:30	14:50	
		John Kalivas	Autonomous local target adaptive calibration and prediction	Lecture Room D	12/04/2022	14:50	15:10	
Peter Weightman	Session 4.2 Imaging spectroscopy and Nano-IR	Peter Gardner	Simultaneous QCL + OPO IR and concomitant Raman spectroscopy at sub-micron spatial resolution	Lecture Room C	12/04/2022	13:45	14:10	
		Samantha Walker	Investigating E. coli biofilm development and its distortion using sub-killing antimicrobial concentrations: a Raman spectroscopy approach	Lecture Room C	12/04/2022	14:10	14:30	
		Cassio Lima	O-PTIR spectroscopy as an emerging tool to probe cell-to-cell variance in single-cell microbial metabolomics	Lecture Room C	12/04/2022	14:30	14:50	
		A. Catarina V. D. dos Santos	Nanoscale chemical imaging of a commercially available recycled polyolefin blend using tapping-mode AFM-IR	Lecture Room C	12/04/2022	14:50	15:10	
		Tea & Coffee				12/04/2022	15:10	15:40
Marina Wright Muelas	Session 5.1 Bioanalytical mass spectrometry	Julian Griffin	Mass spectrometry based Lipidomics to understand cardiovascular disease and steatosis risk	Lecture Room D	12/04/2022	15:40	16:05	
		Adam Burke	A Methodology for LA-REIMS in the Direct Analysis of Clinical Urine Samples	Lecture Room D	12/04/2022	16:05	16:25	
		Edward Emmott	SCoPE2-based single-cell proteomics	Lecture Room D	12/04/2022	16:25	16:45	
		Najla Almasoud	MALDI-TOF-MS for bacterial classification	Lecture Room D	12/04/2022	16:45	17:05	
Peter Gardner	Session 5.2 CLIRSPEC	Rabia Sannam Khan	Discrimination of moderately differentiated oral squamous cell carcinoma from diabetic oral mucosa using Fourier Transform Infrared Spectroscopy	Lecture Room C	12/04/2022	15:40	16:05	
		Sara Mosca	Determination of Inclusion Depth in Ex-vivo Animal Tissues using Surface Enhanced Spatially Offset Raman Spectroscopy	Lecture Room C	12/04/2022	16:05	16:25	
		Andrew Callander	SERS Detection of Nanoparticles in Tissue Using NIR-II Light	Lecture Room C	12/04/2022	16:25	16:45	
		Mustafa Kansiz	Enhanced Tri-modal Optical-Photothermal Infrared (O-PTIR) Spectroscopy Advances in Spatial Resolution, Sensitivity and Quantification	Lecture Room C	12/04/2022	16:45	17:05	
Paul Richardson/Thanyaporn Tengsuttiwat	Exhibition poster flash session 2	Catherine Winder	Standardised metabolite annotation workflows for enhancing biological interpretation in metabolomic data	Lecture Room B	12/04/2022	17:05	17:10	
		Jodie Fergusson	Development of highly sensitive, reproducible and recyclable SERS substrates	Lecture Room B	12/04/2022	17:10	17:15	
		Amy Colleran	Understanding the link between the skin microbiome bacteria and odorous thioalcohol generation at the skin surface	Lecture Room B	12/04/2022	17:15	17:20	
		Srinivasa Rao Saranu	Unique naked nanoparticle SERS substrates	Lecture Room B	12/04/2022	17:20	17:25	
		Mark Christie	Catching nucleation in action using surface-enhanced Raman spectroscopy (SERS)	Lecture Room B	12/04/2022	17:25	17:30	
		BARIS AKBALI	Ambient electrospray deposition of gold nanoparticles for uniform and highly sensitive Surface Enhanced Raman Spectroscopy	Lecture Room B	12/04/2022	17:30	17:35	
		Felix Frank	Swipe and wipe: The next generation phosphate sensing platform based on NH ₂ -MIL-88B(Fe) and mid-infrared spectroscopy	Lecture Room B	12/04/2022	17:35	17:40	
		Taghrid Alomar	Rapid Analysis of Multiple Sudan Dyes Using Surface-Enhanced Raman Spectroscopy	Lecture Room B	12/04/2022	17:40	17:45	
		Boumedienne Boudjelida	Surface sensitive photothermal AFM-IR, Probing nanoscale chemistry at the top surfaces only	Lecture Room B	12/04/2022	17:45	17:50	
		James Matthew Thomson	A focus on Raman peak fitting or how to finally have inter-unit reproducible data	Lecture Room B	12/04/2022	17:50	17:55	
		Najla Almasoud	Rapid quantification of Paracetamol and its major metabolites paracetamol sulfate potassium and paracetamol sodium	Lecture Room B	12/04/2022	17:55	18:00	
		Ashley Love	Process analytical technologies applied to flow chemistry	Lecture Room B	12/04/2022	18:00	18:05	
		Adam Holland	An innovative approach to Raman image generation	Lecture Room B	12/04/2022	18:05	18:10	
Paul Richardson	High-Throughput Quantification of the Major Components of E-cigarette Liquids using Portable Raman Spectroscopy	Lecture Room B	12/04/2022	18:10	18:15			
		Walk to Victoria Gallery and Museum (VGM)				12/04/2022	18:30	19:15
		Drinks Reception & Gala Dinner at the Victoria Gallery & museum				12/04/2022	19:30	Late

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Registration						13/04/2022	09:00	09:25
Duncan Graham	Session 6 SERS/SORS	Steven Bell	SERS above, within and around bacteria	Lecture Room B	13/04/2022	09:25	09:50	
		Aristea Anna Leventi	A New Model for SERS Quantitation Based on a Combined sp-ICPMS and Fast LA-ICP-ToF-MS Imaging Strategy	Lecture Room B	13/04/2022	09:50	10:10	
		Ben Gardner	Deep Raman Spectroscopy (DRS): Advances, Considerations and Limitations	Lecture Room B	13/04/2022	10:10	10:30	
		Samantha McCabe	Nanotags for imaging of glioblastoma using surface enhanced spatially offset Raman spectroscopy (SESORS)	Lecture Room B	13/04/2022	10:30	10:50	
Tea & Coffee						13/04/2022	10:50	11:20
Adam Burke	Session 7.1 Metabolomics	Rick Dunn	Metabolite annotations and precision medicine for the masses – a Jekyll and Hyde story	Lecture Room D	13/04/2022	11:20	11:45	
		Brendan Norman	Biotransformation analyses in the inherited disease alkaptonuria reveal new pathways in tyrosine metabolism	Lecture Room D	13/04/2022	11:45	12:05	
		Ivayla Roberts	Untargeted metabolomics of COVID-19 patient serum reveals potential prognostic markers of both severity and	Lecture Room D	13/04/2022	12:05	12:25	
		Baptiste Busi	Toward quality control and contaminant analysis of spices using benchtop NMR	Lecture Room D	13/04/2022	12:25	12:45	
Paul	Session 7.2 The Williams-Wright Award Session presented by the Coblenz Society	Paul Pudney	Spectroscopy in fast moving consumer goods industry	Lecture Room C	13/04/2022	11:20	11:45	
		David Tiemessen	Exploiting ultrafast 1D and 2D-IR spectroscopy for organometallic chemistry: Controlling photo-dissociation us	Lecture Room C	13/04/2022	11:45	12:05	
		Neil Overall	How I kept sane during lockdown	Lecture Room C	13/04/2022	12:05	12:25	
		Michelle Bailey	Brillouin spectroscopy as a probe of biomechanics	Lecture Room C	13/04/2022	12:25	12:45	
Lunch						13/04/2022	12:45	13:45
Chris Sammon	Session 8 IRDG's Martin & Willis Prize Session	Hannah Carruthers	Three-Dimensional Spectroscopic Chemical Imaging of Pharmaceutical Tablets	Lecture Room B	13/04/2022	13:45	14:10	
		Thanyaporn Tengsuttiwat	Metabolic fingerprint analysis of cytochrome b5-producing <i>E. coli</i> N4830-1 using FT-IR spectroscopy	Lecture Room B	13/04/2022	14:10	14:30	
		William Skinner	SERS micro-spheres for pH measurements in patient-derived in-vitro airway cultures	Lecture Room B	13/04/2022	14:30	14:50	
		Matthew Pratley	Intensification of the Production of Sustainable Monomers with In-Situ Infrared Monitoring	Lecture Room B	13/04/2022	14:50	15:10	
		Annelouise McCullogh	Application of infrared spectroscopy to derive structure-activity relationships for industrially relevant heterog	Lecture Room B	13/04/2022	15:10	15:30	
Tea & Coffee						13/04/2022	15:30	16:00
	Plenary 4	Professor Melissa Hanna-Bro	Using the Power of Partnerships to Innovate at Speed	Lecture Room B	13/04/2022	16:00	16:45	
			Prizes, Closing Remarks	Lecture Room B	13/04/2022	16:45	17:15	
			Free time for tours/networking		13/04/2022	17:15	Late	