SUNDAY 9 JULY 2023

1300	Registration Opens		
1350	**Conference Opening - Welcome address and other announcements**		
1410	**SESSION SUN-01 (UNI HALL)**	**ADVANCES IN INSTRUMENTATION & METHODS**	**SESSION CHAIR: DR NICOLE RIJS**
1410	**Plenary lecture 1** (40 + 5 min)	**Dr Marianne Engeser** University of Bonn (Germany)	*Metallo-supramolecular aggregates in the gas phase: avoid and provoke fragmentation*
1455	**Speaker 1** (17 + 3 min)	**Dr Michael Pfrunder** Queensland University Of Technology	*Diastereomer Resolution of M4L6 Coordination Cages by Ultra-High-Resolution Ion Mobility Mass Spectrometry*
1515	**Speaker 2** (17 + 3 min)	**Oscar Lloyd Williams** * University Of New South Wales	*Investigating Small Molecules as Templating Agents for Coordination Driven Self-Assembly with Ion Mobility Mass Spectrometry*
1535	Close of session SUN-01		
1535	Afternoon tea break and networking in the exhibition foyer (25 min)		
1535	**All Poster sessions - POSTERS UP**		
1600	**SESSION SUN-02 (UNI HALL)**	**ADVANCES IN INSTRUMENTATION & METHODS (CONTINUE)**	**SESSION CHAIR: DR ALAN MACCARONE**
1600	**Keynote Lecture 1** (25 + 5 min)	**Dr Berwyck Poad** Queensland University Of Technology	*Resolving Macromolecular Complexity Using Ion Mobility and Mass Spectrometry*
1630	**Speaker 3** (17 + 3 min)	**Jayden Mckinnon** * University of Wollongong	*Enhancing Metabolite Coverage in MALDI-MSI using Laser Post-Ionisation (MALDI-2)*
1650	**Speaker 4** (17 + 3 min)	**Merryn Baker** * University Of New South Wales	*Metal organic frameworks for enhancing the analysis of volatile organic compounds in breath by high resolution mass spectrometry*
1710	Close of session SUN-02		
1800	**Welcome Reception Science Space (UOW Innovation Campus)**		
2000	Close of Welcome reception and Sunday program		

CLICK HERE TO VIEW THE ABSTRACT BOOK

Monday 10 JULY 2023

800	Registration Opens		
820	**Welcome and announcements**		
825	**SESSION MON-01 (UNI HALL)**	**ION CHEMISTRY, ACTIVATION AND SPECTROSCOPY**	**SESSION CHAIR: PROF STEVE BLANKSBY**
825	**Plenary lecture 2** (40 + 5 min)	**Prof Anouk Rijs** Vrije Universiteit Amsterdam (Netherlands)	*Advancing Structural Characterization Methods in Mass Spectrometry for Protein Aggregation Analysis*
910	**Keynote Lecture 2** (25 + 5 min)	**Dr Chris Hansen** University Of New South Wales	*Zero-pressure photolysis quantum yields determined by photoionisation mass spectrometry*
940	**Speaker 5** (17 + 3 min)	**Patricia Kelly** * University Of Wollongong	*Space for (Molecular Weight) Growth: A tricyclic product in the reaction of distonic benzonitrylium-2-yl radical cations with acetylene*
1000	**POSTER Lightning talks**	**Poster lightning talks** 2 min each	*Posters P-01, P-03, P-05, P-07, P-09, P-11, P-13, P-15*
1020	Close of session MON-01		
1020	Morning tea break and Poster session		
1020	**Poster session - ODD NUMBER POSTERS (40 min)**		
1100	**SESSION MON-02 (UNI HALL)**	**NEW ADVANCES IN LIPIDOMICS**	**SESSION CHAIR: DR RUSSEL PICKFORD**
1100	**Speaker 6** (17 + 3 min)	**Jayden Lee Roberts** * Murdoch University / Australian National Phenome Centre	*High-Resolution DBS-Based Lipidomics Platform*
1120	**Speaker 7** (17 + 3 min)	**Rangika Maggona Gurunnanselage** * Queensland University Of Technology	*Isomer resolution of lipid biomarkers in human plasma*
1140	**Speaker 8** (17 + 3 min)	**Dr Samuel Brydon** Queensland University Of Technology	*Synergistic Approach to Lipid Structure Elucidation Using Selective Fragmentation Methods*
1200	Close of session MON-02		
1200	Lunch Break and vendor workshop		
1215	**Vendor worshop (Uni Hall, 30 min)** Workshop hosted by ***Thermo Fisher (Platinum Sponsor)***		ThermoFisher SCIENTIFIC The world leader in serving science

CLICK HERE TO VIEW THE ABSTRACT BOOK

Monday 10 JULY 2023

1330	SESSION MON-03 (UNI HALL)	CLINICAL AND DIAGNOSTIC	SESSION CHAIR: DR SARAH HANCOCK
1330	**Keynote Lecture 3** (25 + 5 min)	**Prof Sally Ann Poulsen** Griffith University	*Characterising the interactions of biomolecules associated with health and disease using native mass spectrometry*
1400	**Speaker 9** (17 + 3 min)	**Melissa Sam** * University Of New South Wales / NSW Health Pathology	*Mass spectrometry-based assays for measuring bound Infliximab in patient sera. Can we improve patient outcomes?*
1420	**Speaker 10** (17 + 3 min)	**Dr David Harman** Western Sydney University	*The first accurate measurement of somatostatin concentration in human blood*
1440	**Speaker 11** (17 + 3 min)	**Monique Ryan** * Murdoch University / Australian National	*Comprehensive Lipidomics Workflow for Population Phenotyping and Application to Non-Severe Burns*
1500	Close of session MON-03		
1500	Afternoon tea break and networking in the exhibition foyer (30 min)		
1530	**SESSION MON-04 (UNI HALL)**	**COMPUTATIONAL/BIOINFORMATICS**	**SESSION CHAIR: DR LUKE CARROLL**
1530	**Keynote Lecture 4** (25 + 5 min)	**A/Prof Ben Parker** University Of Melbourne	*Proteome-wide systems genetics in mouse populations*
1600	**Speaker 12** (17 + 3 min)	**A/Prof William Donald** University Of New South Wales	*Interpretable machine learning on metabolomics data reveals biomarkers for Parkinson's disease*
1620	**Speaker 13** (17 + 3 min)	**Dr Chris Pook** The University of Auckland / Liggins Institute	*Spectral deconvolution of All Ions Fragmentation data for improved structural elucidation of low-abundance compounds in the plasma metabolome*
1640	Close of session MON-04		
1640	Close of Monday program		

CLICK HERE TO VIEW THE ABSTRACT BOOK

Tuesday 11 JULY 2023

800	Registration Opens		
820	**Welcome and announcements**		
825	**SESSION TUE-01 (UNI HALL)**	**MASS SPECTROMETRY IMAGING**	**SESSION CHAIR: A/PROF SHANE ELLIS**
825	**Plenary lecture 3** (40 + 5 min)	**Dr Jens Soltwisch** University of Munster (Germany)	*MALDI-MS imaging at high spatial resolution – challenges and recent developments*
910	**Keynote Lecture 5** (25 + 5 min)	**Dr David Bishop** University of Technology Sydney	*Immuno-mass spectrometry imaging – potential and pitfalls*
940	**Speaker 14** (17 + 3 min)	**Ashna Kumar** * University Of Wollongong	*Investigation of small-molecule drug uptake in pancreatic ductal adenocarcinoma tumours via MALDI-MSI*
1000	**Speaker 15** (17 + 3 min)	**Jesse Michael** * University Of Wollongong	*Plasma Post-Ionisation combined with Atmospheric Pressure MALDI on a timsTOF Pro for the analysis of Lipid Spatial Distributions and Turnover in APOE-knockout Mouse Brains*
1020	Close of session TUE-01		
1020	Morning tea Break and Vendor Workshop		
1025	**Vendor worshop (Uni Hall, 30 min)** Workshop hosted by ***Shimadzu (Gold Sponsor)***		SHIMADZU Excellence in Science
1110	**SESSION TUE-02 (UNI HALL)**	**NEW ADVANCES IN LIPIDOMICS (2ND SESSION)**	**SESSION CHAIR: A/PROF TODD MITCHELL**
1110	**Speaker 16** (17 + 3 min)	**Dr Sarah Hancock** Victor Chang Cardiac Research Institute	*Discovery of n-10 monounsaturated fatty acids in pancreatic ductal adenocarcinoma by ozone-induced dissociation: a new target for improving chemotherapy efficacy?*
1130	**Speaker 17** (17 + 3 min)	**Lachlan Jekimovs** * Queensland University Of Technology	*Uncovering non-canonical unsaturated fatty acids in the brain*
1150	**Speaker 18** (17 + 3 min)	**Dr Andrew Jenner** University Of New South Wales, BMSF	*Establishment of Reliable and Convenient GC-MS Analysis of Human Faecal Short Chain Fatty Acid (SCFA)*
1210	**Speaker 19** (17 + 3 min)	**Puttandon Wongsomboon** * Queensland University of Techonology	*Lipid mass spectrometry in a nutshell: deep profiling of fatty acids in edible nuts*
1230	Close of session TUE-02		
1230	Close of Tuesday program		
1230	Lunch Break (take away lunch provided)		
	OPTIONAL EVENTS		
1315	**ANZSMS business meeting (Molecular Horizon Institue, Building 42, Room 42.101)**		**Event for ANZSMS Members**
1445	ANZSMS business meeting closes		
1500	**ANZSMS FeMS Networking event (Uni Hall)** Afternoon tea and light refreshment provided during the event		**Event open to all** ***Sponsored by SCIEX*** SCIEX The Power of Precision
1700	ANZSMS FeMS Networking event closes		

WEDNESDAY 12 JULY 2023

800	Registration Opens		
820	**Welcome and announcements**		
825	**SESSION WED-01 (UNI HALL)**	**ENVIRONMENTAL AND FORENSIC**	**SESSION CHAIR: DR CELINE KELSO**
825	**Plenary lecture 4** (40 + 5 min)	**Prof Malcolm McLeod** Australian National University (Australia)	*Delivering the CanTEST Health and Drug Checking Service*
910	**Speaker 20** (17 + 3 min)	**Prof Gavin Reid** University Of Melbourne	*Large Scale Monitoring of Illicit Drug Use via Mass Spectrometry Based Trace Residue Analysis of Discarded Drug Packaging and Paraphernalia*
930	**Speaker 21** (17 + 3 min)	**Dr Maiken Ueland** University Of Technology Sydney	*Search and recovery of human remains in mass disasters*
950	**POSTER Lightning talks**	**Poster lightning talks** 2 min each	*Posters P-02, P-04, P-06, P-08, P-10, P-12, P-14, P-16*
1010	Close of session WED-01		
1010	Morning tea break and Poster session		
1010	**Poster session - EVEN NUMBER POSTERS (40 min)**		
1100	**SESSION WED-02 (UNI HALL)**	**ENVIRONMENTAL AND FORENSIC (2ND SESSION)**	**SESSION CHAIR: PROF MALCOLM MCLEOD**
1100	**Speaker 22** (17 + 3 min)	**Brandon Bills** Thermo (Platinum Sponsor)	*Data-Dependent Analysis of PFAS using Mass Defect and Real-Time Library Searching*
1120	**Speaker 23** (17 + 3 min)	**Lisa Hua** * University Of New South Wales	*Metal organic frameworks for improving the analysis of perfluoroalkyl substances by mass spectrometry*
1140	**Speaker 24** (17 + 3 min)	**A/Prof David Beale** RMIT University Agilent (Gold sponsor presetnation)	*Wild-Caught Freshwater Turtles Exposed to Elevated PFAS: Omics-Based Ecosurveillance Reveals Atypical Scute Formation and Biological Impact*
1200	**Speaker 25** (17 + 3 min)	**Caitlin Jenkins** * University Of Wollongong	*What's in a Vape? Chemical Analysis of Electronic Cigarettes by GC-MS*
1220	Close of session WED-02		
1220	Lunch Break		
1230	**Vendor worshop (Uni Hall, 30 min)** Workshop hosted by ***Agilent (Gold Sponsor)***		Agilent

CLICK HERE TO VIEW THE ABSTRACT BOOK

WEDNESDAY 12 JULY 2023

1320	SESSION WED-03 (UNI HALL)	METABOLOMICS	SESSION CHAIR: PROF GAVIN REID
1320	**Speaker 26** (17 + 3 min)	**Liang Jiang** * Charles Sturt University	*Untargeted metabolomic analysis with direct electrospray ionisation mass spectrometry for discrimination of Botrytis cinerea infection in grapes*
1340	**Speaker 27** (17 + 3 min)	**Connor Phillips** * University Of Technology Sydney	*Investigation into the metabolomic effects of the non-protein amino acid azetidine-2-carboxylic acid (AZE)*
1400	**Speaker 28** (17 + 3 min)	**Dr Jake Violi** University of New South Wales	*Optimisation and investigation of different options for HILIC-MS/MS based metabolomics*
1420	**Speaker 29** (17 + 3 min)	**River Pachulicz** * University Of Adelaide	*Direct injection ion mobility-mass spectrometry for structural analysis and identity confirmation of anthocyanins in Brassica oleracea extracts*
1440	Close of session WED-03		
1440	Afternoon tea break and networking in the exhibition foyer (30 min)		
1440	**All Posters Sessions - Posters DOWN**		
1510	**SESSION WED-04 (UNI HALL)**	**NATIVE MS/STRUCTURAL BIOLOGY**	**SESSION CHAIR: A/PROF ALEX DONALD**
1510	**Keynote Lecture 6** (25 + 5 min)	**Prof Tara Pukala** The University of Adelaide	*Exploring DNA triplex assemblies for antigene technologies using structural mass spectrometry*
1540	**Speaker 30** (17 + 3 min)	**Lewis McFarlane** * The University of Adelaide	*In-depth characterisation of Naja nivea venom using a multifaceted mass spectrometry approach*
1600	**Speaker 31** (17 + 3 min)	**Manatsu Nose** * University Of New South Wales	*Identification of bioactive natural products using multiplexed, multistage native mass spectrometry*
1620	**Speaker 32** (17 + 3 min)	**Dr Louise Sternicki** Griffith University	*Characterising virus-like particles with native charge detection mass spectrometry*
1640	Close of session WED-04		
1900	**Conference Dinner** to to be held at the Aspire Event Centre, Innovation Campus (Building 230, Level 2 Function Room) **Speeches and Awards Presentations** Conference Dinner Sponsored by ***Thermo Fisher Scientific***		ThermoFisher SCIENTIFIC The world leader in serving science
2300	End of Conference Dinner and close of Wednesday program		

CLICK HERE TO VIEW THE ABSTRACT BOOK

Thursday 13 JULY 2023

800	Registration		
825	**Welcome and announcements**		
830	**SESSION THU-01 (UNI HALL)**	**GLYCOMICS / PROTEOMICS**	**SESSION CHAIR: A/PROF MORTEN THAYSEN-ANDERSEN**
830	**Plenary lecture 5** (40 + 5 min)	**Dr Weston Struwe** Oxford University (UK)	*Unravelling Virus Glycoprotein Structure and Function across Molecular Scales*
915	**Keynote Lecture 7** (25 + 5 min)	**Dr Manuela Klingler-Hoffmann** University of South Australia	*Towards clinical applications: proteomics of patient derived cells and tissues*
945	**Speaker 33** (17 + 3 min)	**Dr Dylan Harney** University Of Sydney	*Dietary Restriction Induces a Sexually Dimorphic Type I Interferon Response in Mice with Gene-Environment Interactions*
1005	Close of session THU-01		
1005	Morning tea (25 min)		
1030	**SESSION THU-02 (UNI HALL)**	**AWARDS SESSION**	**SESSION CHAIR: PROF TARA PUKALA (ANZSMS PRESIDENT)**
1030	**Morrison Medal Award Presentation** (25 + 5 min)	**Prof Ute Roessner** Morrison Medal 2023	*The role of mass spectrometry in understanding beneficial plant root microbe interactions*
1100	**Guilhaus Award 2023 Presentation** (17 + 3 min)	**Dr David Marshall** Guilhaus Research Award - winner 2023	*Investigating Photochemical Reactions with Photodissociation Action Spectroscopy*
1120	**Guilhaus Award 2021 Presentation** (17 + 3 min)	**Dr Berin Boughton** Guilhaus Research Award - winner 2021	*Imaging metabolic flux using mass spectrometry imaging*
1140	**Prize annoucements and Conference Closure**	Awards for Best Student Presentation, Best Student Poster. Passport Competitioan Draw Prize Travel Awards	
1210	Close of session THU-02		
1210	End of Thursday program		
1210	Conference closes		

CLICK HERE TO VIEW THE ABSTRACT BOOK