



University of  
South Australia



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# Mass Spectrometry & Proteomics Facility Information Handbook

A Mass Spectrometry & Proteomics facility  
co-funded by the University of South Australia,  
Bioplatforms Australia,  
and the Government of South Australia.

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## Contents

<b>1</b>	<b>Mass Spectrometry &amp; Proteomics</b>	<b>3</b>
<b>2</b>	<b>Introduction</b>	<b>3</b>
<b>3</b>	<b>Use of the Facility</b>	<b>3</b>
<b>3.1</b>	<b>Work Request Procedure</b>	<b>3</b>
<b>4</b>	<b>Instrument Charges &amp; Costings</b>	<b>4</b>
<b>5</b>	<b>Guests &amp; Visitors</b>	<b>4</b>
<b>6</b>	<b>Equipment &amp; Laboratory Usage</b>	<b>5</b>
<b>6.1</b>	<b>Sample Preparation &amp; Storage</b>	<b>5</b>
<b>6.2</b>	<b>Instrument User Rules</b>	<b>5</b>
<b>7</b>	<b>Booking Instruments</b>	<b>6</b>
<b>7.1</b>	<b>EZBooking User Rules</b>	<b>6</b>
<b>7.2</b>	<b>Priority Booking</b>	<b>6</b>
<b>7.3</b>	<b>Safety</b>	<b>6</b>
<b>7.4</b>	<b>Building Emergency Evacuation</b>	<b>8</b>
<b>7.5</b>	<b>After Hours Access</b>	<b>8</b>
<b>8</b>	<b>Instrument Damage &amp; Malfunction</b>	<b>9</b>
<b>9</b>	<b>Data Management &amp; Integrity</b>	<b>9</b>
<b>10</b>	<b>Acknowledgement</b>	<b>9</b>
<b>11</b>	<b>Instruments &amp; Locations</b>	<b>10</b>
<b>11.1</b>	<b>Instrument Locations</b>	<b>10</b>
<b>11.2</b>	<b>Bruker autoflex maX MS</b>	<b>10</b>
<b>11.3</b>	<b>Thermo Orbitrap Exploris 480 LC-MS</b>	<b>11</b>
<b>11.4</b>	<b>Bruker timsTOF fleX MALDI/LC-MS</b>	<b>11</b>
<b>11.5</b>	<b>SCIEX ZenoTOF 7600 LC-MS</b>	<b>12</b>
<b>11.6</b>	<b>Agilent 6495B LC-QqQ MS</b>	<b>12</b>
<b>11.7</b>	<b>Agilent 8900 ICP-QQQ-MS</b>	<b>13</b>
<b>11.8</b>	<b>Bruker Autoflex Speed MALDI-ToF/ToF MS</b>	<b>13</b>
<b>11.9</b>	<b>Agilent Intuvo 9000 GC-MS</b>	<b>14</b>
<b>11.10</b>	<b>Shimadzu QqQ 8040 GC-MS</b>	<b>14</b>
<b>11.11</b>	<b>SCIEX QqQ 6500+ LC-MS, SCIEX QTRAP 6500 LC-MS, SCIEX QqQ 4500 LC-MS</b>	<b>15</b>



<b>12 APPENDICES</b> .....	16
<b>12.1 Frequently Asked Questions</b> .....	16
<b>12.2 Fee Schedule</b> .....	17
<b>12.3 City West Campus Map</b> .....	25
<b>12.4 Staff Contacts</b> .....	26

# 1 Mass Spectrometry & Proteomics

The **Mass Spectrometry & Proteomics (MSP)** facility (located within Clinical & Health Sciences at the University of South Australia) provides expertise for tissue mass spectrometry imaging and proteomic analyses. MSP is a Proteomics Node for Bioplatforms Australia in South Australia established under the National Collaborative Research Infrastructure Strategy (NCRIS). We offer all types of proteomic services, including quantitative proteomics, phosphoproteomics and glycomics. Furthermore, our facility offers small molecule quantitation, as well as lipidomics capabilities. We also facilitate metabolomics studies, often in collaboration with the Australian Wine Research Institute (AWRI), which is a Metabolomics Node for Bioplatforms Australia, also located here in South Australia.

## Bioplatforms Australia's Vision:

Bioplatforms Australia enables Australian life science research by investing in state-of-the-art infrastructure and associated expertise in the specialist fields of genomics, proteomics, metabolomics and bioinformatics. Our proteomic partners offer leading edge infrastructure, scientific expertise and advanced protein discovery services. A broad range of services are offered, including mass spectrometry, monoclonal antibody production and drug screening.

**Bioplatforms Australia's Mission** is to support world class research and innovation in the life sciences by:

- Ensuring broad and efficient access to state-of-the-art biomolecular ('omic) platform capabilities.
- Facilitating greater multi-disciplinary integration in basic and translational bioscience.
- Contributing to research collaborations that address scientific challenges of national significance.
- Supporting industrial applications of biomolecular technology and scientific collaborations between researchers and industry.
- Expanding international research networks.
- Sustaining a national intellectual capability and capacity.

## 2 Introduction

This handbook provides a reference for users and supervisors who wish to access the MSP facility located within Clinical & Health Sciences at the University of South Australia. While every effort has been made to ensure that the information contained within this document is correct and current, the policies outlined below are subject to change in line with University policies and procedures.

## 3 Use of the Facility

### 3.1 Work Request Procedure

For all internal and external access and work requests, please send an email to [msh.bioplatforms@unisa.edu.au](mailto:msh.bioplatforms@unisa.edu.au). For students, please ensure your supervisor is cc'd and has approved your request for access and/or work. You will receive an email response informing you how to proceed. You may be invited to attend a short meeting to discuss your research needs, or be directed to a MSP staff member to begin training or analysis. There are two ways to perform research using our instrumentation, either through training and running the instrument yourself, or having one of our MSP staff members assist you. This depends on the analytical platform you wish to use and the 'omics' methodology required. Please note that for some instruments, a minimum training session will be necessary, and this will be charged as a minimum number of hours as required.



## 4 Instrument Charges & Costings

A feeschedule is provided as an appendix in this document (section 12.2) and may change periodically. For specific workflows, such as Mass Spectrometry Imaging and label-free LC-MS quantitation, pricing has been established for the required setup and replicate runs, respectively. Instruments are available to both internal and external academics in South Australia at the same cost, and staff time is only costed for sample preparation, data analysis, and reporting. Commercial work is invoiced at full cost recovery, and this costing will be provided up-front before work begins. South Australian industry partners will have priority access to the facility as required.

## 5 Guests & Visitors

Anyone who enters the laboratories must have completed the mandatory University of South Australia inductions beforehand. During the work session, any Personal Protective Equipment (PPE) requirements of the laboratory (shown below) must be followed:

### Safety

- Enclosed footwear must be always worn in all laboratories.
- Safety glasses must also be always worn in all laboratories. Safety glasses will be provided to you when you enter a laboratory.
- Please do not accidentally touch any surfaces, equipment or containers. If a demonstration has been organised, please follow the directions of the MSP staff member.

### Emergency

- In case of an emergency, please follow the instructions of the MSP staff member, emergency warden or University of South Australia security staff. All buildings have a public address system to broadcast emergency alerts.

### Medical

- Do you have a pacemaker or are pregnant? Please advise your MSP staff member before entering the laboratory. Strong magnetic fields (that may interfere with a pacemaker) and teratogenic chemicals may be present in some laboratories.

**Food or drinks are not permitted in any laboratory at any time.**



## 6 Equipment & Laboratory Usage

### 6.1 Sample Preparation & Storage

Whenever possible, samples prepared by MSP staff will be stored in appropriate conditions inside the MSP laboratories. After analysis, these samples will be stored for a maximum of 36 months before disposal.

Users who bring samples into the instrument laboratory should also remove them when the analysis is complete. Unless MSP staff have been informed beforehand, any samples left in the laboratories by a user are subject to immediate disposal.

### 6.2 Instrument User Rules

- Please be polite and courteous to MSP staff and other laboratory users.
- You must follow all procedures and instructions, there are no exceptions.
- You must follow the data indexing system on each system used.
- You must fill in the logbook for any system before you begin work.
- Instruments that can be used independently must not be modified by the user. The instrument PC must not be modified in any way except for the specific purpose of acquiring and storing the data obtained by the instrument.
- Samples are not to be left in the laboratory or instrument.

## 7 Booking Instruments

For MS systems that do not require MSP staff to operate, all instrument bookings are made online using a system called EZBooking. You will require a University of South Australia account to use this booking system, which makes it particularly convenient for internal users. For external users, please email [msp.bioplatforms@unisa.edu.au](mailto:msp.bioplatforms@unisa.edu.au) to help facilitate a booking. Please note that you will not be able to make a booking until you become an approved user in our facility.

Please click the following link to access the booking system:

[https://ezbooking.unisa.edu.au/EZBooking/EZbooking/cgi-bin/ezb\\_frameset.cgi?goToAction=default](https://ezbooking.unisa.edu.au/EZBooking/EZbooking/cgi-bin/ezb_frameset.cgi?goToAction=default)

### 7.1 EZBooking User Rules

- Please attend the start of your session on time.
- Do not book a session for someone else in your name, as the person named on the booking calendar must attend. Other students and staff may also attend the experiment, but all must be inducted to enter the laboratory.
- Do not use an instrument if you have not booked it.
- Do not use an instrument if you have not been trained on it.

Please note that we use the booking system to count the number of hours of instrument use. This is extremely important because without an adequate level of usage, we cannot justify the expense of keeping all our instruments running. Failure to use the booking system with integrity will result in a warning in the first instance, and any further occurrences may result in termination of your booking privileges by the MSP Node Director.

### 7.2 Priority Booking

We can provide assistance with priority bookings if you are subject to time constraints.

Possible reasons for providing you a priority booking include:

- Having family commitments.
- If you are restricted to business hours.
- If you have time-sensitive experiments in progress.
- You are visiting us from another institution.

### 7.3 Safety

It is University of South Australia policy that all tasks are risk assessed before they are undertaken. It is the responsibility of researchers (and their supervisors) that this is carried out to an appropriate standard. If any medium or high-risk reagents/materials provided by the user is involved in the analysis, MSP staff require a risk assessment to be provided for all reagents/materials beforehand. Please discuss these requirements with MSP staff prior to use, so your samples can be analysed safely.

Laboratories within Clinical & Health Sciences are classified based on inherent hazards that have been determined by a risk assessment-based approach by Laboratory co-ordinators and Work Health and Safety system procedures. Clear signage at the entrance to each laboratory and/or appropriate colour coded lines on the floor indicate the status of a laboratory and areas within a laboratory. Laboratories with mixed risk level will have both requirements described on signage at the entrance.

**Laboratory classification:**

- **GREEN** – hazards similar to an office environment - no specific PPE requirements, no hazardous chemicals
- **ORANGE** – general laboratory
- **RED** – laboratory or area within a laboratory with a higher level of hazard(s), which has potential to cause serious injury or death. – e.g. hydrofluoric acid, liquid nitrogen and radiation that requires specific PPE above that for an Orange laboratory.

Fully enclosed footwear with a broad, low heel must be worn at all times in all laboratories by equipment users.

Glove wearing may be required to protect skin and to minimise sample contamination during handling. In all cases, the choice of gloves, and when they are to be used, should be indicated by your risk assessment in consultation with MSP staff members.

Breaches of safety are treated seriously. University of South Australia policy stipulates that all safety breaches and near misses are reported at <http://w3.unisa.edu.au/safetyandwellbeing/default.asp>. Any MSP staff member can ask a researcher to stop work if safety requirements are not being adequately addressed. If this is the case, your online booking privileges will be suspended and you will only be able to recommence your work once all University of South Australia policy requirements are met.



## 7.4 Building Emergency Evacuation

If you hear a continuous alarm bell or tone (or are requested by an Emergency Warden/Security to evacuate the building), you must:

- Follow their instructions.
- Leave the building immediately by the nearest safest exit stairs – do not hesitate.
- You are not allowed to use the lift; you must use the stairs and keep to the left.
- Proceed to the assembly point and report yourself to the Building Evacuation Officer.
- Remain at the assembly point until you are advised the emergency is over (“all clear”) by Building Evacuation Officers/Deputy Building Evacuation Officers/Security.
- Do not re-enter just because the alarm has stopped.

In the event of a fire:

- All equipment must be left behind.
- All doors must be closed to prevent the spread of fire.

As part of your laboratory induction, the closest emergency assembly area will be pointed out to you:

<b>Building</b>	<b>Assembly Point</b>	<b>Assembly Point Number</b>
<b>MM</b>	Grassed area south of MM building	7
<b>HB</b>	SAHMRI Courtyard, North Terrace	3
	Corner North Terrace and Morphett Street (outside Adelaide Convention Centre)	8

## 7.5 After Hours Access

After hours include: weekdays before 7 am and after 7 pm, weekends, public holidays and other periods when the university is closed. After hours access may be permitted to University of South Australia staff and students, but requires written permission from both the Technical Services Manager and the Instrument co-ordinator. All requests for after hours access must be submitted in writing to [misp.bioplatforms@unisa.edu.au](mailto:misp.bioplatforms@unisa.edu.au).



## 8 Instrument Damage & Malfunction

In the event of an instrument malfunction, or if you are unsure if the instrument is functioning normally, please contact a MSP staff member by direct contact, phone or email ([msp.bioplatforms@unisa.edu.au](mailto:msp.bioplatforms@unisa.edu.au)). Staff details can be found in “Staff Contacts” (section 12.4). MSP staff will instruct you on what to do next, or they will attend to the malfunctioning equipment themselves. Please do not attempt to fix, re-boot or modify the instrument. Record your observations in the logbook.

Any repair costs for damage caused by researcher misuse will be charged back to the user’s research group or company.

## 9 Data Management & Integrity

Instrument users are responsible for the archiving of their data. Users are strongly encouraged to backup their data during the booked hours. The loss of any data is not the responsibility of the instrument co-ordinator or any MSP staff member.

It is the responsibility of the user to ensure academic and scientific integrity of all data, data analysis and interpretation. Although instrument co-ordinators and MSP staff members may provide some advice regarding analysis and interpretation, all responsibility for scientific accuracy and integrity remains with the individual researcher.

## 10 Acknowledgement

All users are required to acknowledge use of the instrument in any research output derived from the images and data obtained. For the purposes of collating research outputs facilitated by the facility, **the following acknowledgement must be included in any research output (i.e. scientific publication) that contains any data produced by MSP instrumentation.**

### **Acknowledgement:**

*“The authors acknowledge Bioplatforms Australia, the University of South Australia, and the State and Federal Governments, which co-fund the NCRIS-enabled Mass Spectrometry and Proteomics facility at the University of South Australia.”*

## 11 Instruments & Locations

### 11.1 Instrument Locations

Instrument/Service	Building/Floor-Room
<b>Bruker autoflex maX MS</b>	HB8-48
<b>Thermo Orbitrap Exploris 480 LC-MS</b>	HB8-48
<b>Bruker timsTOF fleX MALDI/LC-MS</b>	HB8-48
<b>SCIEX ZenoTOF 7600 LC-MS</b>	HB8-48
<b>Agilent 6495B LC-QqQ MS</b>	MM2-11
<b>Agilent 8900 ICP-QQQ-MS</b>	HB7-43
<b>Bruker AutofleX Speed MALDI-ToF/ToF MS</b>	HB7-43
<b>Agilent Intuvo 9000 GC-MS</b>	HB7-43
<b>Shimadzu QqQ 8040 GC-MS</b>	HB5-52
<b>SCIEX QqQ 6500+ LC-MS</b>	HB5-52
<b>SCIEX QTRAP 6500 LC-MS</b>	HB5-52
<b>SCIEX QqQ 4500 LC-MS</b>	HB5-52

The City West Campus map is provided in the Appendix of this document (section 12.3).

### 11.2 Bruker autoflex maX MS



The Bruker autoflex maX MALDI-TOF MS is capable of rapid discovery and characterisation workflows including polymer analysis, glycan profiling and characterisation, molecular imaging, lipid analysis, peptide mass fingerprinting and TLC-MALDI. With up to 2 kHz speed in MS mode and 200 Hz for MS/MS because of its smartbeam-II laser, time sensitive analysis – such as would be needed for biopharmaceutical integrity screening – can be made in minutes. The ionisation efficiency of the smartbeam-II laser minimises sample consumption and maximises quality data output from each target position, even for complex samples. The ionisation is gentle enough that tissue samples may be stained after analysis in MALDI MS Imaging workflows.

### 11.3 Thermo Orbitrap Exploris 480 LC-MS



The Thermo Orbitrap Exploris 480 MS system joins the family of next-generation Thermo Scientific mass spectrometers built on a common architecture with the guiding principle of ultimate performance and ease of use. Combined with the Thermo EASY-nLC 1200 and Proteome Discoverer software, the platform is the latest generation of accurate mass and high-resolution technology for proteomics analysis. The system is configured for label-free nLC-MS/MS of peptides from complex protein samples and can be used for high-throughput characterisation of serum, plasma, and other complex sample types. The system is equipped with the Thermo Scientific FAIMS Pro interface, which minimises co-isolation of isobaric peptides, increases the number of unique peptides identified, and improves signal-to-noise to sample low-abundance peptides.

### 11.4 Bruker timsTOF fleX MALDI/LC-MS



The Bruker timsTOF fleX MS system is a super-fast and highly sensitive ESI instrument for metabolomic, lipidomic, glycomic and proteomic analyses, as well as an integrated MALDI source for rapid Tissue Mass Spectrometry Imaging applications. Built on the standard for shotgun proteomics, the timsTOF fleX combines the best in 4D-Omics using robust ESI measurements, along with Bruker's cutting edge MALDI Imaging technology to spatially resolve a wide range of molecules directly from tissue, all in one single platform. Changing from ESI to MALDI occurs within a matter of seconds. No complicated changeover means making zero compromises in productivity and the ability to move effortlessly from world class Omics identification and quantification workflows to creating high-definition molecular maps of tissue sections to visualise your analyte of target.

## 11.5 SCIEX ZenoTOF 7600 LC-MS



The SCIEX ZenoTOF 7600 MS system is the high-resolution mass spectrometry solution that combines powerful MS/MS sensitivity, fragmentation technology and a step-change in data independent acquisition. Driven by the power of the Zeno trap coupled with electron activated dissociation (EAD) fragmentation technology, this fragment-centric revolution unlocks sensitivity gains allowing you to uncover new information for certainty in your results to make better-informed decisions, faster. Detect up to 20x more ions in every experiment and access a spectrum of tuneable fragmentation techniques to unlock new perspectives for every molecule, in every experiment.

## 11.6 Agilent 6495B LC-QqQ MS



The Agilent 6495B LC-QqQ MS system is the highest performance triple quad available and is ideally suited for targeted quantitation of metabolites and peptides, as well as samples that are low in concentration and require high sensitivity. The combination of utmost sensitivity, extended mass range, ease of maintenance, and the power and flexibility of MassHunter makes this the system of choice for demanding applications, such as the quantitation of per- and polyfluoroalkyl substances (PFAS), which are very persistent environment contaminants that break down slowly over time.

## 11.7 Agilent 8900 ICP-QQQ-MS



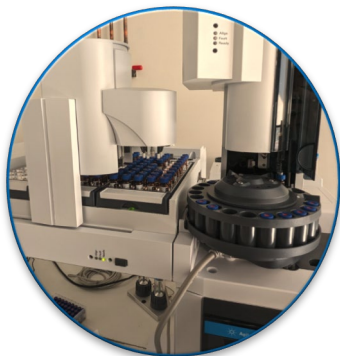
The Agilent 8900 Inductively Coupled Plasma Triple Quadrupole Mass Spectrometer (ICP-QQQ-MS) is a state-of-the-art instrument used for the analysis of elements from samples digested into an aqueous matrix. The 8900 boasts higher sensitivity than the 8800 predecessor and is suited for quantitative analysis of almost any element up to ppm and as low as ppq concentration, utilising Agilent's ORS™ to remove problematic spectral interferences. High throughput allows up to 20 samples per hour to be analysed and can be set up to accommodate acid or alkaline digests.

## 11.8 Bruker Autoflex Speed MALDI-ToF/ToF MS



The Bruker Autoflex Speed Matrix-Assisted Laser Desorption/Ionisation (MALDI) Time-of-Flight (ToF) MS system is a highly sensitive instrument that is suitable for multiple applications. The system can analyse multiple types of analytes, including (but not limited to) drugs, metabolites, lipids, glycans, peptides, proteins, and polymers. This system is configured as a Biotyper platform which allows the fast and reliable high-confidence identification and taxonomical classification of microorganisms, such as bacteria, yeasts and fungi.

## 11.9 Agilent Intuvo 9000 GC-MS



The Agilent Intuvo 9000 Gas Chromatograph with Electron Capture Detector/Mass Spectrometer (GC-ECD/MS) is a state-of-the-art analytical solution tailored for the detection and quantification of volatile organic compounds (VOCs) in various sample matrices. Designed with precision and performance in mind, this instrument is specifically engineered for the analysis of halogenated compounds and other environmentally significant substances. The Intuvo 9000 GC-ECD/MS offers unparalleled detection sensitivity and accuracy. With its innovative design, intuitive operation, and exceptional reliability, the Intuvo 9000 GC-ECD/MS sets a new standard for gas chromatography in VOC analysis.

## 11.10 Shimadzu QqQ 8040 GC-MS



The Shimadzu triple-quad GCMS-TQ8040 features smart technologies to boost the efficiency of routine analytical work. It is perfect for applications in fields such as pharmaceutical products, environmental monitoring and food science.



## 11.11 SCIEX QqQ 6500+ LC-MS, SCIEX QTRAP 6500 LC-MS, SCIEX QqQ 4500 LC-MS



The SCIEX LC-MS/MS systems perform the quantitative sensitivity and robustness method on ADME, regulated bioanalysis, food and environmental contaminant screening, targeted quantitative proteomics, or clinical research.





## 12 APPENDICES

### 12.1 Frequently Asked Questions

#### **I don't know if my samples are compatible with the system or will work, who should I talk to?**

Please contact any MSP staff member, who will advise you about the system and sample compatibility.

#### **Who should I contact for training?**

Please contact MSP staff members directly.

#### **How do I gain laboratory access?**

All University of South Australia users are required to complete compulsory Work Health and Safety online modules. After completion, users must send copies of their completion certificates to the MSP Team ([misp.bioplatforms@unisa.edu.au](mailto:misp.bioplatforms@unisa.edu.au)). No laboratory activity can commence until these modules are complete. You will need to complete a local laboratory specific induction before you are granted access.

#### **My access card stopped working, what do I do?**

Please contact the MSP Team ([misp.bioplatforms@unisa.edu.au](mailto:misp.bioplatforms@unisa.edu.au)) detailing your problem.

#### **Can I use equipment myself?**

For certain MS infrastructure, including the MALDI-ToF MS and LC-Qq-ToF MS platforms, it is possible to be trained and subsequently use the system yourself. Specific equipment, such as the Thermo Orbitrap Exploris 480 and Bruker timsTOF fleX, are only managed by MSP staff members and cannot be used independently.

## 12.2 Fee Schedule

The instrument access fee schedule below is subject to change. Pricing is reviewed on an annual basis. Although every effort is made to update the information below, please contact MSP for an official quotation.

STAFF FEE					
SERVICE	INFORMATION	UNIT	INTERNAL RATES	EXTERNAL ACADEMIC	INDUSTRY RATES
MSP Staff time	Sample preparation, extensive data analysis and reporting	Per hour	\$80	\$120	\$200

### MSP Pricing Structure – Main Services *Effective May 2024*

Data analysis (database searching) and reporting is limited to simple output files/graphs produced from the software vendor: Proteome Discoverer output for data dependent acquisition (DDA) data and Spectronaut output for data independent acquisition (DIA) data.

Extensive data analysis/interpretation is available on request, but will be charged at the corresponding MSP Staff Time per hour rate (minimum charge 4 hours).

**Unless otherwise specified by the quote, the MSP delivery address for samples is:  
University of South Australia, Level 0 (Loading Dock), Bradley Building, Cnr North Terrace and Morphett Street Bridge, Adelaide SA 5000, AUSTRALIA.**

It is the responsibility of the client to ensure the packaging and shipping of samples to the MSP facility is appropriate for the entirety of the delivery. If you are unsure, we are available to discuss these needs with you, especially regarding the mandatory declarations for imported samples.

QUALITATIVE ANALYSIS					
SERVICE	INFORMATION	SAMPLE NUMBER	INTERNAL RATES*	EXTERNAL ACADEMIC*	INDUSTRY RATES*
<b>LC-MS</b>					
LC-MS/MS Analysis for Protein Identification	Trypsin digestion, clean-up, nanoLC-MS/MS data acquisition, simple database search and reporting	1-5	\$200 per sample	\$270 per sample	\$330 per sample
		6+	\$170 per sample	\$225 per sample	\$280 per sample
LC-MS/MS Analysis for Protein Identification (On-bead digestion)	Trypsin digestion, clean-up, nanoLC-MS/MS data acquisition, simple database search and reporting	1-5	\$200 per sample	\$270 per sample	\$330 per sample
		6+	\$170 per sample	\$225 per sample	\$280 per sample
Protein estimation	Protein estimation	1+	\$30 per sample	\$35 per sample	\$40 per sample
LC-MS/MS Analysis for Small Molecule Identification	Small molecule extraction, clean-up, LC-MS/MS data acquisition, simple database search and reporting	1-5	\$200 per sample	\$270 per sample	\$330 per sample
		6+	\$170 per sample	\$225 per sample	\$280 per sample
MS Analysis of Purified Intact Proteins	Direct injection, MS data acquisition and simple reporting	1-5	\$150 per sample	\$210 per sample	\$280 per sample
		6+	\$130 per sample	\$180 per sample	\$250 per sample
Data Independent Acquisition (DIA) LC-MS/MS for Protein Identification	<b>PoA (Price on Application) for:</b> DIA-PASEF using the timsTOF fleX LC-MS FAIMS-DIA using the Thermo Orbitrap Exploris 480 LC-MS Zeno SWATH DIA using the SCIEX ZenoTOF 7600 LC-MS				
LC-MS/MS Analysis with SEER nanoparticle enrichment	Trypsin digestion, nanoparticle enrichment, clean-up, LC-MS/MS data acquisition, simple database search and reporting	Multiples of 20 samples	\$1250 per sample	\$1250 per sample	\$1500 per sample
SEER nanoparticle enrichment	Trypsin digestion, nanoparticle enrichment, clean-up	Multiples of 20 samples	\$1000 per sample	\$1000 per sample	\$1200 per sample

\*All prices listed are ex. GST. Prices include UniSA levies where applicable.

Formal quotes are available upon request. Send us an email at [msh.bioplatforms@unisa.edu.au](mailto:msh.bioplatforms@unisa.edu.au)

We are happy to negotiate discounts for larger sample sizes (more than 50 samples).

MALDI-MS					
SERVICE	INFORMATION	SAMPLE NUMBER	INTERNAL RATES*	EXTERNAL ACADEMIC*	INDUSTRY RATES*
MALDI-MS Analysis for Proteins/ Polymers/ Lipids/ Glycans/ Small Molecules	Trypsin digestion, clean-up, MS data acquisition, simple database search and reporting	1-5	\$200 per sample	\$270 per sample	\$330 per sample
		6+	\$170 per sample	\$225 per sample	\$280 per sample
MALDI-MS Biotyper® Analysis	Microbial identification of isolates and simple reporting with sample preparation completed by the client	1-50	\$150 minimum (\$3 per sample)		\$300 minimum (\$6 per sample)
MALDI-MS Analysis using the AutofleX Speed	MS data acquisition, simple data analysis and reporting with sample preparation completed by the client	1-10	\$150 setup fee		\$300 setup fee
MALDI-MS Analysis using the AutofleX Max	MS data acquisition, simple data analysis and reporting with sample preparation completed by the client	1-10	\$200 setup fee		\$350 setup fee
MALDI Imaging using the timsTOF fleX	Sample preparation, enzyme application, matrix deposition, MS data acquisition, simple data analysis and reporting	(PoA for large cohort)	\$1000 per slide	\$1300 per slide	\$1800 per slide

\*All prices listed are ex. GST. Prices include UniSA levies where applicable.

Formal quotes are available upon request. Send us an email at [msh.bioplatforms@unisa.edu.au](mailto:msh.bioplatforms@unisa.edu.au)

We are happy to negotiate discounts for larger sample sizes (more than 50 samples).

<b>GC-MS</b>					
<b>SERVICE</b>	<b>INFORMATION</b>	<b>SAMPLE NUMBER</b>	<b>INTERNAL RATES*</b>	<b>EXTERNAL ACADEMIC*</b>	<b>INDUSTRY RATES*</b>
Single-compound analysis	Focus on the separation and quantification of a specific compound within a sample	1-5	\$35 per sample	\$46 per sample	\$60 per sample
		6+	\$30 per sample	\$39 per sample	\$50 per sample
Two-to-five - compound analysis	Simultaneous separation and quantification of a small number of specific compounds (2-5) within a sample	1-5	\$60 per sample	\$80 per sample	\$100 per sample
		6+	\$50 per sample	\$65 per sample	\$85 per sample
Complex - compound analysis	Simultaneous separation and quantification of a larger number of specific compounds (5-10) within a sample	1-5	\$120 per sample	\$150 per sample	\$200 per sample
		6+	\$100 per sample	\$130 per sample	\$170 per sample
New Method Development	PoA (Price on Application)				

\*All prices listed are ex. GST. Prices include UniSA levies where applicable.

Formal quotes are available upon request. Send us an email at [msh.bioplatforms@unisa.edu.au](mailto:msh.bioplatforms@unisa.edu.au)

We are happy to negotiate discounts for larger sample sizes (more than 50 samples).

ICP-QQQ-MS					
SERVICE	INFORMATION	SAMPLE NUMBER	INTERNAL RATES*	EXTERNAL ACADEMIC*	INDUSTRY RATES*
Small project	Simple acid or alkaline digestion, single ORS gas mode from an available method, data processing	1-10	\$1000	\$1300	\$1700
		11+	PoA	PoA	PoA
Medium project	Acid digestion of inorganic samples (aqua regia, inverse aqua regia, no hydrofluoric acid), multiple ORS gas modes, includes a challenging element (for instance, but not limited to, halogens, Au, Ag, Pt, Hg, B), partial method development, data processing	1-10	\$1700	\$2200	\$2700
Complex project	Acid and alkaline digestion, full method development and validation, inorganic or organic samples requiring HF or four-acid digestion, multiple challenging elements including any lanthanides or actinides, multiple ORS gas modes, data processing	Any	PoA	PoA	PoA

\*All prices listed are ex. GST. Prices include UniSA levies where applicable.

Formal quotes are available upon request. Send us an email at [misp.bioplatforms@unisa.edu.au](mailto:misp.bioplatforms@unisa.edu.au)

We are happy to negotiate discounts for larger sample sizes (more than 50 samples).

<b>Per- and polyfluoroalkyl substances (PFAS) analysis via Agilent 6495B QqQ MS</b>					
<b>SERVICE</b>	<b>INFORMATION</b>	<b>SAMPLE NUMBER</b>	<b>INTERNAL RATES*</b>	<b>EXTERNAL ACADEMIC*</b>	<b>INDUSTRY RATES*</b>
Single-compound analysis	Focus on the separation and quantification of a specific compound within a sample	1-5	\$110 per sample	\$140 per sample	\$180 per sample
		6+	\$95 per sample	\$120 per sample	\$160 per sample
Two-to-five - compound analysis	Simultaneous separation and quantification of a small number of specific compounds (2-5) within a sample	1-5	\$280 per sample	\$320 per sample	\$470 per sample
		6+	\$240 per sample	\$310 per sample	\$400 per sample
Complex - compound analysis	Simultaneous separation and quantification of a larger number of specific compounds (5-10) within a sample	1-5	\$500 per sample	\$650 per sample	\$800 per sample
		6+	\$600 per sample	\$780 per sample	\$950 per sample
New Method Development	PoA (Price on Application)				

### **PFAS analysis available**

L-PFOS (Sodium perfluoro-1-octanesulfonate CAS: 4021-47-0)

PFOA (Perfluoro-n-octanoic acid CAS: 335-67-1)

PFHxA (Perfluoro-n-hexanoic acid CAS: 307-24-4)

L-PFHxS (Sodium perfluoro-1-hexanesulfonate CAS: 82382-12-5)

\*All prices listed are ex. GST. Prices include UniSA levies where applicable.

Formal quotes are available upon request. Send us an email at [msh.bioplatforms@unisa.edu.au](mailto:msh.bioplatforms@unisa.edu.au)

We are happy to negotiate discounts for larger sample sizes (more than 50 samples).

<b>QUANTITATIVE ANALYSIS</b>					
<b>SERVICE</b>	<b>INFORMATION</b>	<b>SAMPLE NUMBER</b>	<b>INTERNAL RATES*</b>	<b>EXTERNAL ACADEMIC*</b>	<b>INDUSTRY RATES*</b>
MRM/SRM Assay Development & Analysis	Method development for targeted quantitation of proteins, peptides or small molecules, LC-MS/MS data acquisition, simple data analysis and reporting	1-5	\$200 per sample	\$270 per sample	\$330 per sample
		6+	\$170 per sample	\$225 per sample	\$280 per sample
Label Free Quantitation using LC-MS/MS Analysis in Triplicate	Trypsin digestion, clean-up, nanoLC-MS/MS data acquisition, simple database search and reporting, in triplicate	1-5	\$600 per sample	\$810 per sample	\$990 per sample
		6+	\$510 per sample	\$675 per sample	\$840 per sample
Vitamin D3 metabolite analysis	Four vitamin D3 (25OH, 3-epi-25OH, 1,25-OH2, 24,25-OH2) SLE clean-up, derivatisation, data analysis and reporting	1-5	\$150 per sample	\$210 per sample	\$280 per sample
		6+	\$130 per sample	\$180 per sample	\$250 per sample
Glyphosate and AMPA analysis	Simultaneous determination of glyphosate and AMPA in urine, SPE clean-up, LC-MS/MS data acquisition, data processing and reporting	1-5	\$125 per sample	\$160 per sample	\$200 per sample
		6+	\$105 per sample	\$135 per sample	\$165 per sample

\*All prices listed are ex. GST. Prices include UniSA levies where applicable.

Formal quotes are available upon request. Send us an email at [msh.bioplatforms@unisa.edu.au](mailto:msh.bioplatforms@unisa.edu.au)

We are happy to negotiate discounts for larger sample sizes (more than 50 samples).



QUANTITATIVE ANALYSIS (OTHER)					
SERVICE	INFORMATION	SAMPLE NUMBER	INTERNAL RATES*	EXTERNAL ACADEMIC*	INDUSTRY RATES*
New Method Development			PoA (Price on Application)		
New Method Development & Validation			PoA (Price on Application)		
Protein Quantitation using Stable Isotope Labelling			PoA (Price on Application)		
Post-translational modification quantification (e.g. phosphorylation, acetylation, ubiquitylation and others)			PoA (Price on Application)		

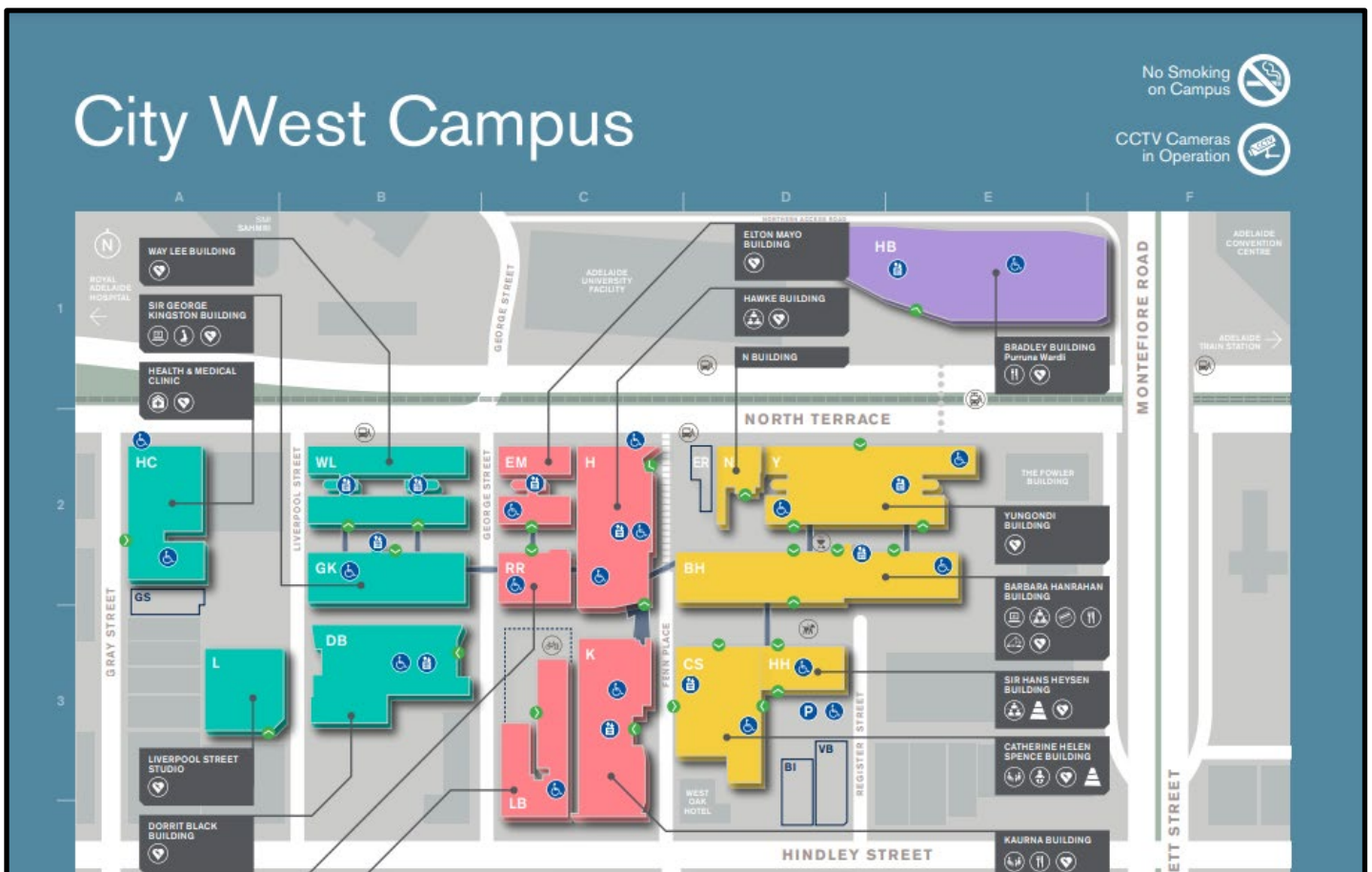
\*All prices listed are ex. GST. Prices include UniSA levies where applicable.

In order to address your specific research/industry needs, please outline your scientific matter to us *via* email at [mSP.bioplatforms@unisa.edu.au](mailto:mSP.bioplatforms@unisa.edu.au)

After initial discussions, we can then provide formal quotes to you.

We are happy to negotiate discounts for larger sample sizes (more than 50 samples).

## 12.3 City West Campus Map



The MSP facility is located in the Bradley Building (also known as HB) as part of the City West Campus of the University of South Australia. **On the map provided, it is coloured purple and situated in coordinate E1 (top right).** The main entrance is located on North Terrace.

### ***Shipping address***

**University of South Australia, Level 0 (Loading Dock), Bradley Building, Cnr North Terrace and Morphett Street Bridge, Adelaide SA 5000, AUSTRALIA.**

### ***Background***

The Bradley Building is a flagship research, teaching and public engagement facility. It is home to key clinical & health sciences research concentrations, which investigate diseases such as cancer, diabetes, heart and cardiovascular disease and a range of related therapies.

The building also houses the futuristic Museum of Discovery (MOD).



## 12.4 Staff Contacts

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For specific enquiries, please contact the relevant MSP staff member

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