



SOP FOR HMSTRUST ANALYTICAL LABORATORY USER'S POLICY  
 PQMS3-HMST-SOP-0002-V1

DOCUMENT AUTHORISATION		Date of Next Review: 17/07/2019	
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## 1. INTRODUCTION

The HMSTrust Analytical Laboratory is a centralised core facility for chemical and physical material characterisation, overseen by experienced analytical scientists.

The HMSTrust Analytical Laboratory is open access, with equipment made available to all MIPS staff, external institutions and companies.

### 1.1. Purpose

The purpose of this procedure is to outline the HMSTrust Analytical Laboratory policy for users

### 1.2. Scope

This SOP applies to user access and use of the HMSTrust Analytical Laboratory facility.

### 1.3. Competency

Staff and users must have the necessary level of knowledge, through training and experience, to ensure that the procedure is followed as described herein.

## 2. RESPONSIBILITIES

It is the responsibility of the HMSTrust Analytical Laboratory staff members to ensure that HMSTrust Laboratory users are familiar with the content of this procedure.

It is the responsibility of HMSTrust Analytical Laboratory users to follow the procedure described herein.

## 3. DEFINITIONS

DEFINITION	BRIEF EXPLANATION
ARIN	Australian Research Infrastructure Network: Online laboratory management system used by the HMSTrust Laboratory to manage resources
CI	Chief Investigator
HMST	Helen Macpherson Smith Trust
MIPS	Monash Institute of Pharmaceutical Sciences

## 4. HEALTH AND SAFETY CONSIDERATIONS

There are no particular hazards associated with this procedure.

## 5. PROCEDURE

Access to the HMSTrust Analytical Laboratory Facility is granted following a formal laboratory induction process which covers training in the use of equipment, good housekeeping practices, and occupational health and safety procedures. External users will also be required to attend a safety induction to the Parkville Campus. Inexperienced users may be expected to undergo a competency evaluation under the supervision of Laboratory staff prior to working independently.

This ensures users are able to safely use the equipment, generate publication quality data and leave the equipment in a fit operational state for the next user.

## **5.1. Gaining Usage Rights to the Equipment**

Monash Chief Investigators (CI), external institutions and companies are required to complete a HMSTrust Analytical Laboratory Group Registration Form, after which a laboratory group profile will be set up on the laboratory booking and billing system.

All users of the laboratory equipment shall receive training and may be required to demonstrate competency on the specific equipment they wish to use. Upon completion of the training and evaluation of competency, each user becomes registered to operate that specific piece of equipment and will be granted booking rights on the ARIN booking system.

Users are only permitted to book and operate equipment that they have been registered for. Registered users are not allowed to instruct other non-registered users on how to use any of the equipment. Registered users are also not permitted to make bookings on behalf of unregistered users. Only HMSTrust Analytical Laboratory staff or approved delegates are authorised to train new users.

### **5.1.1. Training Sessions and Competency**

Prior to using equipment for the first time, the user should consult with HMSTrust Analytical Laboratory staff to discuss their project needs. In the case of honours or early stage PhD students, involvement of their supervisor is encouraged. Following this discussion a training session will be organised on the required equipment. Prior to a training session the user will be given a copy of relevant equipment instructions or SOP that cover basic use of the equipment, safety considerations, and general housekeeping. Additional instructions covering topics such as data processing may also be provided. The user will be expected to read the training material prior to the session.

Tutorials on complex equipment will be followed up with a competency evaluation. The scope of the evaluation varies depending on the equipment being used. This process is essential to ensure the user is collecting valid data and to establish appropriate operational practices.

Tutorials will typically run from 30 minutes to 4 hours depending on complexity and the needs of the individual and the instrument. Any associated evaluation may be included in the initial tutorial for simple equipment. For more complicated equipment, evaluation may be carried out the first time the user uses the equipment on their own.

### **5.1.2. Refresher Tutorials**

Refresher tutorials are available on request for any equipment within the HMSTrust Analytical Laboratory. A refresher tutorial is strongly recommended if you have not used a certain piece of equipment for more than six months.

## **5.2. Booking Equipment**

Users will only be granted access to each piece of equipment on the booking system after they have attended training. All equipment must be booked using the online booking system at <https://cfms.arin.org.au/cfms/>.

All instruments are bookable for a minimum of one hour other than the Ensign Plate Reader, the BioTek Plate Washer and the Janus Liquid Handler. Users will be charged based on the time they have booked or the actual time they have used (whichever is greater). Bookings may be cancelled more than 24 hours in advance without incurring any penalties. Users who fail to provide 24 hours' notice (including if the user is away due to illness) will be charged for their full booking. These charges may be offset if your cancellation is re-booked in whole or partly by another user.

If a user finds that their analysis work has failed due to equipment malfunction they can have their booking fee reversed. Booking costs will not be refunded where analyses have failed as the result of user error.

Monash users will be able to access the instruments 24 hours a day, 7 days per week. External users will only be granted out of business hours access to the equipment by special arrangement.

## **5.3. Instrument Breakdown**

All care must be taken by the user to ensure that laboratory instruments are used in compliance with its Standard Operating Procedure (SOP). If an instrument breakdown occurs, it must be reported as soon as is practical to the HMSTrust Analytical Laboratory Manager. Any damage to the instrument caused by user negligence may result in the user being suspended from accessing the instrument either temporarily or permanently. The HMSTrust Analytical Laboratory conducts a preventative maintenance schedule which is aimed at keeping the instruments in good running order however the HMSTrust Analytical Laboratory accepts no financial responsibility should the instrument breakdown result in interruptions to research undertaken in the laboratory. If damage to the instrument is due to user error the user's CI or organisation will be responsible for the costs of repairing the instrument. We will endeavour to repair the instrument as soon as possible but users should be aware that this is subject to the instrument supplier's ability to carry out repairs.

#### **5.4. Insurance and User Safety**

All users of the HMSTrust Analytical Laboratory are required to attend a safety induction prior to entering the laboratory. Laboratory users are expected to comply with the safety procedures and wear safety equipment at all times whilst in the laboratory and as instructed during their safety induction. Users new to the Parkville campus must also attend a general campus safety induction. Continued breaches to this policy may result in a temporary suspension or cancellation to their access to the laboratory. All Monash Staff and students are covered under the Monash liability insurance. Users employed by another institutions or organisations however are only covered under Monash's public liability insurance and should therefore ensure prior to commencing work, that they are covered under their employer's insurance while undertaking work within the Laboratory.

#### **5.5. Charging Structure**

Usage of instruments, computers and staff time within the HMSTrust Analytical Laboratory will be charged according to the following schedules, but may be subject to change at any time.

##### **5.5.1. Annual Membership and Charges**

Laboratories have the option of paying an annual membership which entitles the laboratory to a reduced pricing schedule and 20 non-chargeable trainings (see Appendix 6.1.). Laboratories without a membership will be charged according to the non-member pricing schedule (see Appendix 6.2.).

Equipment users must be pre-approved by their CI or by an authorised person using the HMSTrust Analytical Laboratory Group Registration Form or via an email to HMSTrust Analytical Laboratory staff at [pharm.hmstlab-contact@monash.edu](mailto:pharm.hmstlab-contact@monash.edu). Monash CIs are also required to specify a fund code and fund name to which usage charges may be charged for each user.

A Membership entitles a Laboratory to register up to 10 users.

#### **5.6. Consumables Ordering**

A basic range of consumables and mobile phase solvents will be available and is included in the cost of equipment hire. Any consumables not provided are to be purchased by the user via the Monash University procurement system or supplied by the user. Only specified consumables should be used with all HMSTrust Laboratory equipment. A list of permitted consumables for each piece of equipment is included in the Standard Operating Procedure provided during training. Please contact the HMSTrust Analytical Laboratory Manager if you have any special requirements.

#### **5.7. Invoicing**

A summary of user charges will be sent to each Laboratory group or organisation for review each month. The summary will provide a breakdown of each user's charges and usage patterns for the previous month. It is the responsibility of each CI to monitor their users' laboratory use. Internal group charges will then be automatically transferred using the Monash finance systems. External clients will receive a monthly invoice.

#### **5.8. Enforcement of Policy**

If a user is found to be in breach of this policy, for example providing access or unauthorised training to unregistered users, they will receive a reminder of their obligation to adhere to the HMSTrust Analytical Laboratory User Policy. Further non-compliance with the policy will result in a suspension or cancellation to their laboratory access.

## 6. APPENDICES

### 6.1 HMSTrust Analytical Laboratory Price List: Member's Rates

MEMBER'S RATES 10 August 2016 (Annual Membership: \$12,000)	Peak (Mon-Fri 8am-5pm)	Off Peak (Mon-Fri 5pm – 8am, Sat and Sun)
Laboratory Induction	No charge	n/a
Equipment training – up to 20 sessions per year	No charge	n/a
Additional equipment training (including equipment hire)	\$50.00 per training	n/a
HPLC #1, 2 and 3– Shimadzu Prominence	\$6.00 per hour	\$4.20 per hour
HPLC#4 – Shimadzu Nexera with Diode Array Detector	\$8.50 per hour	\$5.95 per hour

LC-MS MS – Shimadzu 8030	\$9.50 per hour	\$6.65 per hour
LC-MS MS– Shimadzu 8050 (2 instruments available)	\$11.50 per hour	\$8.05 per hour
MALDI MS – Shimadzu 7090*	\$50.00 per hour	\$25.00 per hour
GC-MS – PerkinElmer Clarus 680/SQ8T	\$11.50 per hour	\$8.05 per hour
XRD – Shimadzu 7000L	\$50.00 per hour	\$25.00 per hour
Karl Fischer AutoTitrator	\$50.00 per hour	\$50.00 per hour**
Robotic Liquid Handler – PerkinElmer Janus Integrator *	\$10.00 per hour	\$8.00 per hour
Plate Washer – PerkinElmer BioTek*	\$10.00 per hour	\$8.00 per hour
Plate Reader – PerkinElmer EnSight *	\$20.00 per hour	\$14.00 per hour
Raman Microscope - PerkinElmer RamanMicro 200	\$50.00 per hour	\$25.00 per hour
Thermogravimetric Analyser (TGA) – PerkinElmer Pyris 1	\$50.00 per hour	\$25.00 per hour
Differential Scanning Calorimeter – PerkinElmer DSC8500	\$50.00 per hour	\$25.00 per hour
Raman Spectrometer – PerkinElmer RamanFlex 400F	\$50.00 per hour	\$25.00 per hour
FTIR Spectrometer – PerkinElmer Frontier	\$50.00 per hour	\$25.00 per hour
FTIR Microscope – PerkinElmer Spotlight 400	\$50.00 per hour	\$25.00 per hour
MP-Bio FastPrep®24 5G Tissue Homogeniser	No charge	No charge
Stability Ovens	\$20.00 per rack per week	n/a

\*This instrument can be booked in 15 minute increments

\*\*The HMSTrust Laboratory is unable to offer off-peak rates on this instrument due to the high cost of consumables

## 6.2 HMSTrust Analytical Laboratory Price List: Non-Member's Price List

NON-MEMBER'S RATES 10 August 2016	
Laboratory Induction	No charge
Equipment training (including equipment hire)	\$100.00 per session
HPLC #1, 2 and 3 – Shimadzu Prominence	\$12.00 per hour
HPLC #4 – Shimadzu Nexera with Diode Array Detector	\$17.00 per hour

LC-MS MS– Shimadzu 8030	\$19.00 per hour
LC-MS MS – Shimadzu 8050 (2 instruments available)	\$23.00 per hour
MALDI MS – Shimadzu 7090*	\$200.00 per hour
GC-MS – PerkinElmer Clarus 680/SQ8T	\$23.00 per hour
XRD – Shimadzu 7000L	\$100.00 per hour
Karl Fischer AutoTitrator	\$100.00 per hour
Robotic Liquid Handler – PerkinElmer Janus Integrator*	\$20.00 per hour
Plate Washer – PerkinElmer BioTek*	\$20.00 per hour
Plate Reader – PerkinElmer EnSight**	\$40.00 per hour
Raman Microscope - PerkinElmer RamanMicro 200	\$100.00 per hour
Thermogravimetric Analyser (TGA) – PerkinElmer Pyris 1	\$100.00 per hour
Differential Scanning Calorimeter – PerkinElmer DSC8500	\$100.00 per hour
Raman Spectrometer – PerkinElmer RamanFlex 400F	\$100.00 per hour
FTIR Spectrometer – PerkinElmer Frontier	\$100.00 per hour
FTIR Microscope – PerkinElmer Spotlight 400	\$100.00 per hour
MP-Bio FastPrep®24 5G Tissue Homogeniser	No charge
Stability Ovens	\$20.00 per rack per week

\*This instrument can be booked in 15 minute increments.

Please note that although we make every attempt to provide the best possible rates, prices are subject to change without notice.

## 7. REFERENCES

### 7.1. Internal

[HMSTrust Analytical Laboratory Group Registration Form for External Users PQMS3-HMST-FRM-0002.docx](#)

[HMSTrust Analytical Laboratory Group Registration Form for Internal Users PQMS3-HMST-FRM-0003.docx](#)

### 7.2. External

Not Applicable.

Version no.	Date of Issue	Reviewed by: name	Amendments
1	17/07/2017	Julia Morizzi	Transferred over to PQMS SOP format.