

## 700 MHz NMR Lab Protocols and Procedures Policy

This policy is intended to ensure that all users of the University of Lethbridge 700 MHz NMR facility are aware of some basic rules which will help to ensure the longevity of this facility, reduce the occurrence of costly repairs, and ensure that the majority of users have access to the instrument when needed.

### General

1. All users must have WHMIS training before using the 700 MHz NMR facility.
2. No food or drink is allowed inside the magnet lab (SA6216).
3. You pack out what you packed in! i.e. the magnetic resonance facility is not a storage facility and all items brought in by a user must be taken out when they leave.
4. All users agree to follow the working alone policy for the Magnetic Resonance Facility.

### Booking

1. All approved users can view the magnet's schedule online by logging onto the magnetic resonance facility webpage at <http://www.uleth.ca/artsci/magnetic-resonance/booking>. This site should be used to determine which probe is currently in the magnet and which probe is scheduled to be in the magnet. Solutions users can then log into our *faces* group (ulethnmr) at: <http://faces.ccrcc.uga.edu/>. This site **MUST** be used to book all solution-state usage of the 700 MHz NMR instrument, and use of the instrument without booking is **NOT ALLOWED**. All Solid-state users must submit a request to book any available solid-state time using the online web-form submission found here: <http://www.uleth.ca/artsci/magnetic-resonance/700-mhz-request-time>
2. The instrument is divided up into **30 minute** time slots in both peak and non-peak hours. In addition, the peak hours are split into three different types of time slots: (1) time slots reserved for experiments requiring 2 hours or less; (2) time slots for experiments requiring 2 to 4 hours; (3) Flex-slots that can be booked to run experiments that require 2 to 4 hours **OR** as part of the overnight run when 16 hours is required. The specific time break down of the instrument can be found on page 3 of this document.
3. Rules for Non-Peak hour usage:
  - (i) The spectrometer may be reserved for experiments which require any amount of time to run. However, runs requiring 4 hours or less of time must be booked **no more** than 24 hours in advance.
  - (ii) Each user is restricted to a **MAXIMUM** of 2 time slots that are more than 4 hours in length per week. (IE. individual users are only allowed two overnight runs per week)
  - (iii) Each user is restricted to a **MAXIMUM** of 1 weekend time slot every 4 weeks.
  - (iv) Booking of the instrument more than 8 weeks in advance during non-peak hours is **prohibited**.
4. Rules for Peak hour usage:
  - (i) A maximum of four consecutive 30 minute time slots can be booked during the peak hours which are reserved for time slots that are 2 hours or less.
  - (ii) A maximum of 8 (4 hours) and a minimum of 4 (2 hours) consecutive 30-minute time slots can be booked during the peak hours which are reserved for time slots that are 2 to 4 hours.
  - (iii) The Flex-slots can be utilized for experiments that require 2 to 4 hours to run **OR** they can be used to extend an overnight run to 16 hours in length.
  - (iv) Back to back bookings during peak hours are permitted **if and only if** the next time slot is available within 30 minutes of your time ending.

- (v) During peak hours each user is restricted to a **MAXIMUM** of 4 time slots that are more than 2 hours in length per week.
  - (vi) Booking of the instrument more than 4 weeks in advance during peak hours is **prohibited**.
5. General Rules for both Peak and Non-Peak Hour usage:
- (i) If a user books a time block longer than one 30 minute slot and does not use all of their time they **MUST** release the slots that they have not used. This can be done by logging back on to *faces* and deleting your appointment. When you attempt to delete your appointment *faces* will automatically delete any time slots from your booking that are in the future.
  - (ii) All bookings during peak and non-peak hours are forfeited if the user arrives more than 30 minutes late. If a user is going to be late for a booking during non-peak hours they should log on to *faces*, delete their appointment, and rebook the spectrometer for the time they will be arriving.
6. Instructors are permitted to use the instrument for durations in excess of 2 hours during peak hours for the purpose of regularly scheduled courses. These sessions must be booked at least 7 days in advance.
7. Exceptional instances, which require a user to book the spectrometer outside of these rules, will be considered on a case by case basis by the NMR facility manager and require at least 1 working day notice. Requests to use the instrument outside of normal rules should be submitted here:  
<http://www.uleth.ca/artsci/magnetic-resonance/700-mhz-time-exception-request>

## Facility Usage

1. All users must be trained in **standard operating procedures** by an approved trainer and should only carry out the experiments that they have been approved to do. This means that users **MAY NOT** train other users!
2. If you are unsure of what you are doing **STOP, DO NOTHING**, and ask an appropriately trained user or trainer for help. (Users who detect other users incapable of performing standard operating procedures must report this to the NMR facility manager immediately.)
3. Under **NO** circumstances should a user adjust or modify pulse powers (ex. p11) or durations (ex. p1). This can lead to probe arcing and results in a very costly probe repair/replacement.
4. Every sample (NMR tube) **MUST** be properly labeled and **REMOVED** from the lab after your session. The only exceptions to this rule will be samples prepared as standards for the facility and will require approval by the facility manager.
5. All problems with the NMR spectrometer **MUST** be reported to the manager immediately.
6. The magnetic resonance facility must be kept clean and organized at all times.

## Time Schedule for the 700 MHz NMR Spectrometer

### Peak and Non-Peak Hour Breakdown

Time	Monday - Friday	Saturday	Sunday
<b>8AM – 12 PM</b>	Peak Hours. 2 to 4 hour runs	Non-Peak Hours	Non-Peak Hours
<b>12PM – 4PM</b>	Peak Hours 2 hour or less runs		
<b>4PM-8PM</b>	Flex Slots		
<b>8PM-7:59AM (Overnight)</b>	Non-Peak Hours		

### Violations

Any individual who violates any of the aforementioned rules is subject to:

- 1<sup>st</sup> Violation: A verbal warning from the manager to the individual
- 2<sup>nd</sup> Violation: A written warning detailing the offence will be sent to the individual and their Supervisor.
- 3<sup>rd</sup> Violation: The individual will be suspended from the facility until an appropriate reprimand is agreed upon by both the chair and manager and this reprimand is carried out.
- 4<sup>th</sup> Violation: The individual will be permanently suspended from the facility.

Failure to show up for booked instrument time is treated more harshly. All No-shows for scheduled bookings will be treated with a one-warning system. The first no-show will result in a written warning to the user and their supervisor. The second no-show will result in the user being banned from the instrument for a period of two weeks.

Thank-you for your cooperation!

Any questions or concerns may be directed to the NMR facility manager.

## **700 MHz NMR Lab Protocols and Procedures Policy**

### **Confirmation of Compliance**

The facility policy is intended to ensure that all users of the University of Lethbridge 700 MHz NMR facility are aware of some basic rules which will help to ensure the longevity of the facility, reduce the occurrence of costly repairs, and ensure that users have access to the instrument when needed. This Policy is subject to revision at any time and will be reviewed at the least once per year. All users will be notified of changes via email and the new policy will be posted on the facility website. Any user who agrees to comply with this policy also agrees to comply with any future changes in the policy.

### **Agreement to Comply with the 700 MHz NMR Policies**

This certifies that I have read, understood and am willing to comply with the 700 MHz NMR Policies in their entirety. I also understand that it is my responsibility to ensure all individuals under my supervision comply with these policies.

Name (Printed): \_\_\_\_\_

UofL ID#: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_