

## MSU-NMR Facility Policies

### ❖ **Training:**

Contact Dr. Xu Xue (Dr. Snow) to set up a training session for the NMR instruments. Users must complete their training before access to the instruments is allowed. Once training is completed, the user will be issued a login to the [Faces Scheduling System](#).

### ❖ **Instrument Malfunction:**

Notify Dr. Snow immediately if you suspect an instrument malfunction. **DO NOT try to fix it yourself.** In case of an unexpected power outage, do not attempt to turn on or turn off either the computer or the console. If a serious problem occurs (ex. a broken NMR tube in the magnet), leave a note on the keyboard to prevent further use by others. Alert Dr. Snow via email if she is not in her office. Dr. Snow will inform everyone if there is an instrument failure that cannot be quickly resolved.

### ❖ **Data Transfer:**

Students can use the “WinSCP” program to login to the NMR computers and access data from their labs. Email Dr. Snow for instructions: [snow@chemistry.msstate.edu](mailto:snow@chemistry.msstate.edu).

### ❖ **NMR tube pickup:**

- All NMR tubes must be labeled. (Suggested Labeling method: initial-reaction (notebook page)-solvent-others, for example, **XX-I-230-CDCI3**)
- All NMR samples must be collected within **72 hours** of the experiment associated with that sample being run.
- If user does not expect to be present when the long NMR experiment finishes, clear instructions should be left on how to store the sample for the next user.

### ❖ **Time Reservation:**

**Please see allowed times below:**

#### **300 NMR:**

*6:00 am – 7:00 am:* Walk-on time; no reservation needed. First come, first served.

*7:00 am – 7:00 pm:* Maximum **30 minutes** reservation.

*7:00 pm – 6:00 am:* overnight experiment, no maximum time limit.

(Overnight experiment should finish before *6:00 am*, users can leave a note if they cannot show up at *6:00 am* to pick their NMR tube).

Sunday: Reservation for long experiments, no maximum time limit.

#### **600 NMR:**

No maximum time limits.

Protein Group users may reserve the instrument at any time. All other users may reserve any available time up to 24 hours in advance.

#### **500 NMR with IconNMR:**

- It is recommended to reserve your NMR time through [Faces Scheduling System](#) for auto operations. For manual operations and long experiments, reservations will be needed.
- IconNMR operations with / without reservation:

	Submit your sample anytime	Priority On	Set Start Time	Manual Operation	Maximum length of daytime experiments	Maximum length of nighttime experiments
With Reservation	Yes	Yes	Yes	Yes	2 hours	N/A
Without Reservation	Yes	No	No	No	20 mins	2 hours

6:00 am – 7:00 am: Walk-on time; no reservation needed. First come, first served.

7:00 am – 7:00 pm: Maximum **120 minutes** reservation. Long experiments can be submitted during daytime, it will be automatically shifted to the night queue.

7:00 pm – 6:00 am: overnight experiment, no maximum time limit.

Sunday: Reservation for long experiments, no maximum time limit.

1. Anyone wishing to schedule a NMR time must use his or her own account to reserve time through the Faces Scheduling System. Please email Dr. Snow to request an account.
2. If you need to run a longer experiment during the daytime, for example, VT NMR experiment, please send a request to Dr. Snow 24 hours before the experiment start.
3. Please remove your reservation if you finish early.
4. For overnight experiments, please only reserve the time needed for your experiment, as others may wish to run a late-night experiment.

#### ❖ Penalties for Reservation Rule Violation:

Reserve only the time you are sure you need. Cancellations should be made as early as possible. Users who do not show in the first 15 mins of their reservation and not cancel that reservation will be counted as a reservation rule violation.

- 1<sup>st</sup> violation, an email warning will be sent out, Cc'd to the PI.
- Starting from 2<sup>nd</sup> violation, for each violation, PI can choose between a penalty fee (up to one hour of instrument usage fee) and a 2 weeks' suspension period of the student's NMR account.

#### ❖ NMR lab rules:

1. No food or drink is allowed in the NMR lab.
2. Always clean up after yourself. The NMR room is a chemistry lab, so all laboratory safety rules apply.
3. Sign in the logbook before you start the experiment.
4. Make sure that the NMR tube fits properly into the spinner, the tube that does not fit properly (loose/tight) is not allowed.
5. The user running an overnight experiment is responsible for exiting the NMR session properly: removing the sample, signing in the logbook, and keeping the instrument ready for the next user.

❖ **Instrument Misuse:**

**1st offense:**

- User will receive an email warning.
- User's advisor will be notified.
- User need to assist with repairs or cleaning.

**2nd offense:**

- Suspended from the instrument for 2 weeks.
- Retraining on the instrument with advisor present.

**3rd offense:**

- Suspended indefinitely from the instrument.
- Users will have to get someone else to run their samples.