Department of Chemistry, University of Michigan  
Signup Rules and Guidelines for Use of Departmental NMR Spectrometers

**Mercury 300:**
- a. During the peak hours of 8 am - 10 pm, the machine is walk-on, limited to 15 minute time blocks. Use of additional contiguous time beyond 15 minutes is not permitted unless there is no queue for the machine.
- b. During the hours of 10 pm - 8 am, 30 minute time blocks may be reserved, with a maximum of 120 minutes per user per day (24 hours prior reservation), or unlimited time if reserved at least 2 days in advance.
- c. Weekends and holidays: Users can sign up for as much time as needed; 24 hours advance for short term blocks (up to 2 hours); 48 hours advance reservation for longer blocks.

**Inova 400:**
- a. During the peak hours of 8 am to 10 pm, 10 minute time blocks up to a maximum of 50 minutes per day per user may be reserved (24 hours prior reservation).
- b. During the hours of 10 pm to 8 am, 30 minute time slots, up to 120 minutes combined (24 hours advance reservation), or unlimited time if reserved at least 2 days in advance.
- c. Weekends and holidays: Users can sign up for as much time as needed; 24 hour advance for short term blocks (up to 2 hour); 48 hour advance reservation for longer blocks.

**Inova 500:**
- a. During the peak hours of 8 am to 10 pm, 10 minute time blocks up to a maximum of 50 minutes per day per user (24 hour prior reservation).
- b. During the hours of 10 pm to 8 am, 30 minute time slots, up to 120 minutes combined (24 hour advance reservation), or unlimited time if reserved at least 2 days in advance.
- c. Weekends and holidays: Users can sign up for as much time as needed; 24 hour advance for short term blocks (up to 2 hours); 48 hours advance reservation for longer blocks.

**Bruker AMX 500:**
- a. This instrument is intended for long term experiments (days to weeks).
- b. Sign-up is one week in advance. There is no limit to the amount of time that can be reserved. However, the NMR staff must be consulted before reserving time for experiments that last more than one week.

**Notes**
1. Any given user can only reserve time for him/her-self.
2. Any one user is restricted to 100 minutes reserved time per day, combined, on the Varian 400, and 500 MHz instruments during the weekday 8 am - 10 pm period. Walk on usage does not count towards the 100 minute limit.
3. Users may NOT sign up for the time slots immediately preceding the open, walk-on periods, or prior to the evening time slots, AND then continue to use the instruments during the walk-on/longer time slot periods.
4. Users will forfeit their scheduled time if he/she is more than 5 minutes late according to the clock in the NMR room.
5. All users MUST use the remote stations for data analysis. There is no charge for use of these machines. All research groups are encouraged to purchase a Linux workstation, or Macintosh OS X 10.3 computer. The department has a site license for the VnmrJ NMR software.
6. Users who need more than the permitted time during peak hours, or need the assistance of the NMR staff to perform non-routine experiments, can schedule longer time blocks during the day if approved and scheduled by the NMR staff.
7. Use of the 500 MHz instruments will be recharged at a rate of $10.50 per hour and all other instruments will be recharged at $6.30 per hour. Non Chemistry Department users are charged at a higher rate.

**Additional Comments**
1. The departmental NMR center is a multi-user facility; and, all users must be considerate of the sign-up rules in order for everyone to be accommodated. Habitual violation (> 2x) of the rules by any individual will not be tolerated and could result in loss of NMR privileges.
2. The ability to measure nmr spectra is VITAL to nearly all researchers in the Chemistry department. Not only must all users respect the sign-up regulations, they must also respect the hardware! If there is trouble with any of the NMR instruments, ask the NMR staff for help. If the NMR staff is not available, then wait for help before proceeding. Haphazard experimentation with the NMR hardware will not be tolerated under ANY circumstances; violation of this policy will result in immediate and permanent loss of NMR privileges.
3. It is the responsibility of all users to learn the capabilities of each instrument to maximize efficient use of the NMR hardware. For example, the 400 and 500 MHz instruments are equipped with pulse field gradients, which eliminates the need for long phase cycles in 2D spectra. The overall result is that 2D data can be acquired on these instruments much more rapidly.
4. Use of the Bruker AMX500 and Varian spectrometers is restricted to faculty, graduate students, and postdocs. Undergraduates engaged in long term independent research projects under faculty direction will be trained on these instruments upon approval.