

PINMRF RULES

You should know and adhere to the following rules in order to maintain user privileges on the Facility spectrometers. Failure to adhere to these rules will result in the suspension of your NMR privileges until you have completed training and checkout again.

1. Sign into the log books before starting your spectrometer session. If there is a problem with the system, indicate it in the log books (you will not be charged for this entry!), put an “Out of Service” sign on the system, and contact Donna Bertram at 4-7850.
2. **ABSOLUTELY NO FOOD OR DRINKS** are allowed in the NMR room, or near any other computers or spectrometers.
3. **NEVER** attempt to use a spectrometer for which you are not trained.
4. Some NMR experiments require additional hardware training beyond the standard training required for checkout. Examples of such experiments include low-temperature VT, experiments involving nuclei other than ^1H , ^{19}F , ^{31}P and ^{13}C , and 2D and 3D experiments not discussed in the standard PINMRF training materials. Please contact PINMRF staff for assistance with such experiments.
5. Small metal objects (e.g. loose staples, staplers, metal pens, and paper clips) **MUST NOT** be brought into the NMR spectrometer room.
6. Credit cards, magnetic data storage tapes, diskettes, and analog watches should not be brought near the magnet because loss of data or damage to them will occur. The safe region is indicated by the yellow chain - do not bring these items within the zone formed by the chain and back of the spectrometer.
7. Observe the sign-up rules given at the training session and posted on the scheduler.

Warnings

Some magnets are fitted with a pneumatic anti-vibrational platform. The magnet can be easily damaged while the anti-vibration system is engaged.

NEVER lean against the magnet or the anti-vibration system.

NEVER hold or pull any part of the magnet or the anti-vibration system.

NEVER stand on the anti-vibration system while it is engaged.

Safety Procedures

DO NOT take metal objects (keys, credit cards, metal chairs, tools, etc.) **WITHIN THE MAGNET'S 5 GAUSS FIELD LINE.**

DO NOT allow unauthorized persons to approach the magnets.

OBEY ALL the safety notices posted in the Facility and especially those around the magnets.

In Case of a Magnet Quench

When a superconducting magnet quenches all of the cryogenics in the magnet will be rapidly boiled off. This will generate large amounts of He and N₂ gas, and these cold gases will condense the water in the air and will generate a large cloud of vapor. In the event of a magnet quench, **PLEASE IMMEDIATELY LEAVE THE ROOM IN A CALM AND ORDERLY FASHION.** Do not waste time attempting to retrieve your NMR sample! If the room quickly fills with vapor kneel down and crawl along the floor. The oxygen level will be higher down low and visibility will be better. Notify PINMRF staff as soon as possible. Please note that a quench is an extremely rare occurrence, but in the extremely unlikely event that one occurs we do not want anyone to panic.

RULES FOR RESERVATION AND USE OF WALK-ON TIME ON:

INOVA-300-2 (4100 BRWN)
INOVA-300-1 (365 WTHR), ARX-400 (369 WTHR)
DPX300 (408 HANS)
ARX300 (G43 RHPH)

The rules for the use of walk-on NMR time on these instruments are as follows:

1. Each user must reserve his/her own time. No one may reserve time for another person.
2. Please do not sign up for time unless you are sure you will use it. If you cannot use time you have reserved, please remove your name from the time slot as soon as possible so someone else may use it. People not using time they reserve may lose access to the instrument.
3. Times at which sign-up may begin are clearly indicated on the sign-up sheets and must be followed.
4. Limits on reservation of time (per person per machine per indicated time period) are as follows:
 - a) 9 AM to 5 PM - up to two 15 minute reservations per day;
 - b) 5 PM to 11 PM - one reservation per day of length 15 to 60 minutes;
 - c) 11 PM to 9 AM - one reservation per week of length 1 to 10 hours;
 - d) Persons more than five minutes late for a reserved time block forfeit that block if another user arrives before them; forfeited time still counts against the allotment totals given above.
 - e) **IF THE MACHINE IS UNRESERVED AND NOT IN USE AT THE BEGINNING OF A TIME BLOCK, THE ABOVE LIMITS MAY BE SURPASSED UNTIL ANOTHER USER WHO HAS NOT EXHAUSTED THEIR TIME ALLOTMENT FOR THE DAY WISHES TO USE THE INSTRUMENT.**

5. Note that, on days scheduled as “maintenance/development,” the instruments are available for use but are subject to the rules posted for maintenance and development days.
6. Please try to make reservations between 5 PM and 9 AM (evening/nighttime blocks) contiguous with those of other users. Please try not to fragment the schedule to the point where there are a lot of small blocks open but no one-hour or larger blocks for the people who really need them.
7. If you are trained on both the Bruker ARX and the DRX systems, please use the least crowded instrument when possible.
8. Advance reservations of time for training and other special situations may be made only by PINMRF Staff. Exceptions to these rules are available for special situations by permission of PINMRF at least two business days in advance of the time needed. Approved requests will be initialed on the sign-up sheet by a member of the PINMRF staff.
9. Non-approved reservations violating these rules are invalid and should be brought to the attention of PINMRF staff.