RULES AND REGULATIONS
FOR THE SAMPLE CHANGER NMR INSTRUMENT USERS

1. Every person who would like to use one of the 400 MHz NMR spectrometers with the sample changer must be authorized to do so by the NMR Facility staff. This authorization will include:
   a. An introduction by the NMR staff.
   b. To read and sign “Rules and Regulations for the sample changer”.

To be authorized you have to be approved by the NMR staff after which you together sign a copy of “Rules and Regulations”.

2. Every NMR user must respect the booking rules, see separate posted information notice.
   - All samples should be inserted into the rack in consecutive order during daytime. During nights “first in first served” will be valid. Saturday and Sunday have the same system with day and night as the rest of the week but the list will not be changed between Friday pm and Monday.

   - Day samples for Maximum 20 minutes at a time can be added in total for the two NMR auto samplers (auto400 and auto400-2), weekend up to 2 hrs in total for both instruments. When the last of the samples are finished you are allowed to add a new set of samples/experiments for 20 minutes.

   - To the experiment time you must add 3 1/2 (day) 6 min (night) per sample for locking, tuning, shimming and so on.

   - Night runs should only be inserted when the night notice (moon label) is put on the table around 3 pm (Mon-Fri).
   - One single user may book for maximum 12h in total for the two NMR auto samplers (auto400 and auto400-2), weekend up to 2*12 hrs in total for both instruments, preferably less, allowing more users to run. i.e. check how much time other users have booked for night runs before entering yours. Night: 8 pm – 8 am.

   - Night samples which have not been run due to "overbooking" will be removed without notifying you, i.e. you have to reload them yourself.

3. When the list is full, please contact the responsible person in the NMR group. It is only allowed to remove experiments already run in ICON if you can not find anyone in the NMR-group, in order to enter a new experiment.

4. The volume of your sample should be between 4 and 5 cm, not less because shimming will be lousy, not more because the tube will be too heavy and it may damage the probe-head.

5. All samples, that you want to recover, must be well-marked with a thin water-proof marker pen. No other label is accepted.
6. **The tube must be full length** (not be broken in top), otherwise the sample changer grip arm may loose the grip! The use of an inferior (scratched, damaged) and/or dirty NMR tube can damage the NMR spectrometer’s probe. Please note that the cap should be placed symmetrically onto the tube.

7. **Always check** that the **position of your sample in the carousel is the same as in ICON.** When you submit a sample in ICON your sample must already be inserted in the carousel.

8. **Metal objects are NOT allowed in the spectrometer room.** Bringing metal objectives such as keys, tools close to magnets could seriously damage the magnets. Remove all magnetic stuff from your pockets. Move carefully around the magnet so you don’t disturb ongoing experiments.

9. Never touch the thinner cylindrical part of the spinners. **Always grip around the fat part with reflector tape.** The reason is to avoid your finger fat to enter into the system. The tube as well as the thinner cylindrical part of the sample holder should be **wiped off with a Kleenex** before inserting into the rack.

10. **Use the depth gauge** for every sample and make sure that the sample is in **correct position in the spinner.** It is very important that the sample is not going too deep down into the probe, it can cause the automation to stop.

11. **Do not touch the spectrometer!** It is standing on ‘air feet’ and will begin to move.

12. (Auto-sampler 1) **Do not touch the auto-sampler holders!** Be careful so that you do not change the auto-sampler’s position. **Use the arrow knobs to move the rack so that you can put in your sample.**

13. (Auto-sampler 1) **Never take a sample from the auto sampler arm working position!** After your sample is finished you must wait to the carousel have changed to the next sample or **Use the arrow knobs to move the rack so that you can pick your sample,** if your sample was the last one in the queue. Otherwise the auto-sampler will stop! (Since it believes that the sample is still in the spectrometer).

14. **Samples** which have not been picked from the sample changer rack will be **removed once or twice a day** and be put into respectively lab groups can by the cap-colour.

15. **When there is a problem,** e.g. the NMR instrument stops running; you should immediately contact the NMR staff. If a sample breaks in the probe-head you MUST inform. This can happen, even using the sample changer, because of a crack in the NMR tube, *i.e.* you should check your NMR tubes regularly for cracks. Finally, whenever you have made a mistake or created some sort of mess, you **MUST inform the NMR group.** Smaller problems or if you notice something, that seems to be wrong please note that in the report book (signed)

The operator hereby acknowledges that he/she has read the NMR Rules and Regulations, and that he/she will follow them.
The NMR staff hereby approve that the operator is authorised.

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