New user registration forms NMR

Anyone wishing to use the NMR spectrometers must contact the staff responsible for the NMR facility equipment. New users will receive training and must be authorized by the relevant equipment manager(s) before they can operate the appropriate instrument independently.

Full name: .....

Mail (address UB): .....

Position (researcher, technical staff, PhD student, trainee) : .....

ISM Groups: .....

Picture

Internship grade or level (Tech, Master 1, ...) : .....

Date of arrival in the unit: ..... Time spent on-site: .....

I, the undersigned, ..., undertake to complete the practical training on the use of NMR spectrometers and to comply with the User Guidelines (attached).

Date: ..... Signature of the new user:

Supervisor's full name and signature:

This form must be returned to the NMR CESAMO team once it has been signed
Corinne SANGLAR, Othilie DE REGT office on the 2th floor EST door 9N29b
Yannick CHOLLET office on the 2th floor EST door 2N31

Training : ☐ french ☐ english

For NMR facility use only :

Training completed on : .....

CESAMO Analytical Facility
NMR user guidelines

For all spectrometer use and analysis requests

- Copy to be retained -

I . Security

The presence of strong magnetic fields and liquefied gases requires all users to be familiar with and comply with the safety instructions established by the NMR facility and posted at the entrances to the rooms.

II . Training and Authorization

Anyone wishing to use the CESAMO NMR spectrometers must contact the equipment managers, who will introduce them to the NMR facility. The user will then receive training and must be authorized to operate the appropriate instrument independently. **No one is permitted to use these instruments before completing the required training.**

III . Instructions

NMR spectrometers are essential research tools for the scientific community. Their use therefore requires care and diligence. All users agree to comply with the instructions governing the use of the spectrometers and the equipment and facilities made available to them.

- Before approaching the spectrometers, remove and leave behind all metal objects and magnetic cards in your possession.
- Use NMR tubes in good condition, with a minimum length of 18 cm. Tubes must not be broken or chipped. The outer diameter must be 4.97 ± 0.05 mm, and the tube curvature must not exceed 0.06 mm.
- Always clean the outside of the NMR tube before use.
- Do not load or remove tubes while the sample changer is moving.
- If any problem occurs, immediately inform the staff responsible for the spectrometers.
- Tubes must not be given priority on the sample changer without prior approval from a member of the team responsible for the spectrometers.

IV . Usage schedule and information

a) <u>Open-access spectrometers</u>

- AvanceNEO 300 MHz liquid « **300A** » et Nanobay Avance III 300 MHz « **300B** » equipped with a BBFO- type multi-nuclei probe. Routine daytime use **8 A.M. to 8 P.M. – Night from 8 P.M., with reservation via the university's digital portal (ENT) for overnight analyses (maximum of 3 hours of analysis time per user).**
- AvanceNEO 400 MHz liquid equipped with a BBFO- type multi-nuclei probe. Routine daytime use **8 A.M. to 7.30 P.M. – Night from 7.30 P.M., with reservation via the university's digital portal (ENT) for overnight analyses (maximum of 6 hours of analysis time per user).**

- The routine spectrometers are equipped with programmable sample changers controlled by the ICON-NMR software. **Usage is limited to 20 consecutive minutes and/or a maximum of**

3 tubes per user, unless an exemption has been agreed upon, scheduled, and signed off with the CESAMO for daytime experiments.

Two sessions are available each day:

- 9.15 A.M. for « day » analysis
- 4 P.M. for « day » analysis and for « night » analysis

b) Reasearch NMR spectrometer

These research spectrometers are equipped with cooling systems that allow experiments to be performed over a temperature range of −80°C to +110°C. Access to these instruments is available upon request for analysis.

- Bruker AvanceNEO 400 MHz liquid, equipped with a BBFO- type multi-nuclei probe et solid probe CPMAS
- Bruker Avance III 600 MHz liquid, Cryo-probe Prodigy BBO-BB/H&F

c) Data Transfer

NMR data are automatically transferred from the acquisition computer to the corresponding processing computer and are also copied to the server. Each user can retrieve their data on their own computer using FileZilla or access them from the data processing workstations located in room 2N29a. Users are therefore asked **not to process their spectra on the acquisition computers**, but to use the dedicated data processing workstations provided for this purpose.

V . Failure to comply with the rules

To protect the spectrometers and ensure the smooth operation of the facility for the benefit of all users, failure to comply with these instructions will result in a **one-week suspension of access to the self-service spectrometers**. The user's supervisor or laboratory head will also be notified.

A responsible and respectful attitude towards the equipment, the working environment, and fellow users will help ensure the efficient and smooth operation of the spectrometers in a pleasant working environment.

- Copy to be retained -

Contact :

Portable CESAMO : 06 20 30 71 53

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CESAMO Analytical Facility
NMR user guidelines

For all spectrometer use and analysis requests

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- NEO 400 liquid ^{1}H/X including ^{19}F, probe : BBFO. Routine daytime use **8 A.M. to 7.30 P.M. – Night from 7.30 P.M., with reservation via the university's digital portal (ENT) for overnight analyses (maximum of 6 hours of analysis time per user).**

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These research spectrometers are equipped with cooling systems that allow experiments to be performed over a temperature range of −80°C to +110°C. Access to these instruments is available upon request for analysis.

- Bruker NEO 400 MHz liquid, probe BBFO (^{1}H/X including ^{19}F) et solid probe CPMAS
- Bruker Avance 600 MHz liquid, Cryo-probe Prodigy (occasionally BBI (^{1}H/X) or HRMAS ^{1}H/^{13}C)

f) Data Transfer

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- Copy to be submitted to CESAMO --

User's full name and signature:

.....

.....

Supervisor's signature:

.....

Contact :

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