

This new shared service, open to the staff of iSm2, will initially allow routine analyses of low-resolution flash mass spectrometry.

Users will have the possibility to perform, on request, separations and mass analyzes of mixtures by:

- * high performance liquid chromatography with both detection (UV diode array and ESI / APCI mass spectrometry)
- * by gas chromatography with FID detection and Mass Spectrometry (IE Electronic Impact)

EQUIPMENTS

- Hitachi HPLC chain (reverse phase separation)
- Advion Mass Spectrometer: MS and LC-MS flash
- Agilent GC-MS Chain 5977B

The service is located at service 452 (lab 113-114, team Chirosciences) and is managed by Ms. Virginie HÉRAN (IGE AMU) and Ms. Sabine CHEVALLIER (IGE CNRS).

MANAGEMENT

The administrative and financial management and the general organization of the use of equipments and the maintenance of the apparatus are under the responsibility of the two engineers.

The purchases are financially supported by the institute and the teams using the facilities. Repair specifications, equipment purchase (excluding current consumables, solvents, filters, syringes, flasks, gloves ...) will be presented in advance for validation.

A balance sheet of equipments utilization and the balance of purchases will be communicated twice a year to the team leaders.

ORGANIZATION

The procedures and good practices are established by the engineers. The use of equipments and the laboratory must be done in compliance with health and safety rules.

For safety reasons, you must wear your personal protective equipment (PPE), use the fume cupboard for any handling of products and solvents.

At no time should you intervene on the devices outside the recommendations of the tutorial. The engineers reserve the right to grant or not the access and the use of the equipments in autonomous, right conditioned by the follow-up and the validation of the acquired ones during the initial formation.

Users are responsible for the use of the equipments and their cleaning after use. Misuse of equipments that may lead to degradation will result in the exclusion of non-compliant users.

Apart from the routine use by the users, any particular requests (Development of separation methods by HPLC-MS and GC-MS) must be planned and carried out by the engineers in charge of the service.

In these special cases, the engineers might be considered as collaborators in the research work and appear as co-authors of the resulting publications.

OPERATION

The analyses service will be opened from Monday to Friday from 9h-12h and from 13h-17h30. Outside these hours, please consult the engineers.

The engineers will be there to ensure the proper functioning of the service. In case of problems, please inform one of the two engineers immediately. The maintenance of equipments will be carried out on the slots of use.

The service will be potentially closed during certain periods of holidays planned and communicated in advance.

The users after initiation will be able to access the service after checking that they comply with the procedures, the instructions transmitted and displayed.

Reservations are made on the GRR reservation platform, from which you will have received the registration link.

Each user may reserve a maximum of two slots of 15 minutes per day (consecutive or non-consecutive) on the established schedule. An agreement to pass a series of several samples must first be asked to the engineers and may be granted depending on the availability of equipments.

The reservation implies the commitment of use: it is not correct for other users to block devices without using them. In case of abuse, the following bookings of users in question will be automatically limited.

PREPARATION, ANALYSIS AND STORAGE OF SAMPLES

The laboratory of the service (and in particular the fume cupboard) is not a place of storage of samples beyond the time of preparation and analysis.

Each analysis requires several steps on site:

1. the preparation of the precisely weighed sample (solubilization, dilution without exceeding the maximum permitted concentration, filtration),
 2. the conduct of the experiment (preheating time, injection, visualization of the result),
 3. the cleaning of the workstation, the syringe, the injection loop,
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4. registration and transfer of data,
5. disconnecting and pausing the system
6. disposal of solid and liquid waste in containers (black bucket, flasks)

All the protocol is described on the tutorial and will have to be scrupulously respected.

RECOVERY AND DATA ANALYSIS

Users will be able to connect only to ENT AMU (desktop shortcut) to retrieve the results. USB keys and website consultation are not allowed on the computer of the service. Users must imperatively complete the logbook located on the table to enter the requested information, before leaving the premises.

CONCLUSION

Anyone wishing to have access to the mass spectrometry service must first have signed the charter of use and acknowledge having read this regulation.

For subcontracting staff (doctoral students, postdoctoral fellows, ATER, trainees ...), this charter must also be signed by their scientific officer.

The latter is responsible for compliance with the preparation protocol applied to his samples, as well as for the use of the equipments of the service by himself or by the persons he supervises.

Virginie HÉRAN & Sabine CHEVALLIER, the engineers of the service

I, the undersigned,

in quality of

on the team

under the supervision of

Acknowledges having read the rules of the iSm2's shared analysis service.

By signing this charter, I accept and agree to respect the terms. In case of non-compliance with the rules, my access rights will be suspended.

Date:

Signature preceded by "read and approved" of the user and his supervisor.