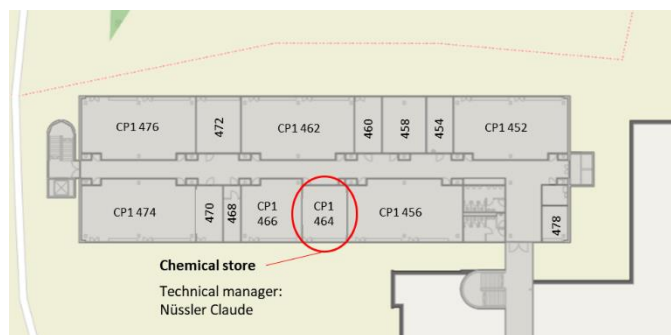
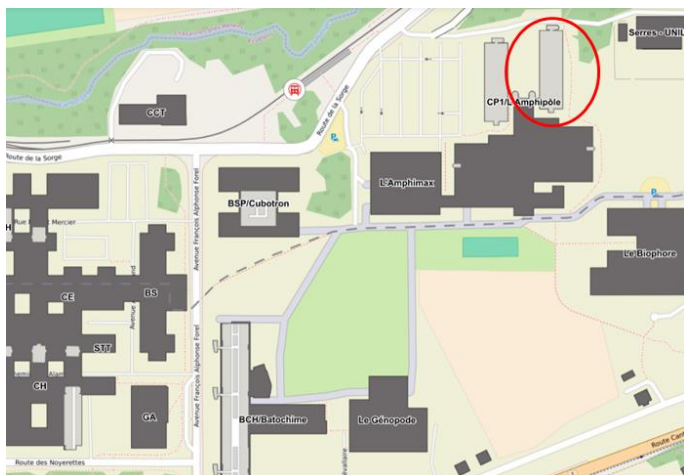


General organization of organic chemistry practical work

Amphipôle, level 4

This document is intended for all assistants responsible for a practical work in organic chemistry taking place at the Amphipôle.

Location



Waste

In each laboratory there are available:

- Some tanks for the recuperation of:
 - Non-halogenated solvent
 - Halogenated solvent
 - Concentrated acids pH < 3
 - Concentrated bases pH > 10
- A yellow container **only for broken glass** (contaminated or not)
- Gray bags for **chemically contaminated non-cutting material** (glove, weighing boat, household paper, etc.).
Gloves are considered contaminated only if they have been in direct contact with a product requiring the use of gloves.
- Some bucket for the recuperation of:
 - Silica
 - MgSO₄
- Some trash cans for **household waste**.
For material that is not contaminated and / or contaminated with a chemical that does not require specific disposal.
No cutting object should be thrown in!
- A collection container for syringes and needles.

All containers full during the day or at the end of the session must be removed from the laboratory and replaced.

- The full Tanks / buckets of recuperation are to put in the closet of the corridor named "déchet".

Some empty tanks are available in the corridor, ask the technical manager if you have a specific need to obtain an adequate container.

- The full gray bags for **chemically contaminated non-cutting material** are deposited in the Eurobox provided for this purpose in laboratory 458.
New bags are in the same place.

Compounds and reagents

In each laboratory there are available:

- Some usual salt and some stock solutions (only for 2nd and 3rd years) which are located above the benches (ex: MgSO₄, NaHCO₃, HCl 2 M, etc).
- Some concentrated acid, usual solvent, deuterated solvent which are located in their respective closet or fridge.
 - These empty products/solvents/solutions are brought back to the chemical store and exchange for a full ones.
 - These started products/solvents/solutions are returned to their places after use.
- Never throw away empty commercial bottle or flask, **bring them back to the chemical store.**

For the **1st year chemist** practical work:

- Compounds and specific reagents are in the first closet of laboratory 458. It's up to you to bring them to the laboratory and then put them back in place at the end of the session.
- Synthesized products by the students are to put in a snap cap and then disposed in the second closet of laboratory 458. It's up to you to verify the correct labelling of the snap caps (the labels are in each laboratory).

For the **2nd and 3rd year chemist** practical work:

- Compounds and reagents are in the yellow closet of the corridor (one stair per lab, free access), or at the chemical store (see document given at the beginning of the course by the technical manager), or at the total expense of the TP assistant. The store products should be requested from the technical manager:
 - By the assistant in charge of the practical work
 - By the students with the sheet of paper correctly filled with the MSDS of the compound (this sheet of paper are available in the lab or at the chemical store)
- **All the compounds and reagents return in the yellow closet or at the chemical store depending where they come from.**
- Synthesized products by the students are to put in a snap cap and then disposed in the third closet of laboratory 458. It's up to you to verify the correct labelling of the snap caps (the labels are in each laboratory).

For all **other** practical work:

- The assistant in charge of the practical work picks up the products at the store.
- The products are returned to the technical manager at the end of the session.
- Synthesized products by the students are to put in a snap cap and brought back to the store. It's up to you to verify the correct labelling of the snap caps (the labels are in each laboratory).

Ice and water

- There is no desionized water in tap.
- There is two 50 liter tank of desionized water per lab.
- The ice machines (normal water) are in the corridor.

Laboratory apparatus

- Scales, UV light, melting point, rotary evaporators, vacuums, and refractometer are under **the responsibility of the assistants of each lab**. Those apparels have to be clean and operational.
- Use **only ethanol** to clean a laboratory device
- On the side of the scale, there is some weight accessories and a pencil for cleaning.
- The door of the analytical scale have to be close every time (excepted during the measurement).
- **At the start of the lab session**, have the students empty the lab washing machine. Remember to run the machine program before leaving the lab at the end of the day.
- **Never put sand in a DrySin[®]** but use suitable round bottom flasks

Safety

- During the first session of your practical work, **do a little reminder of all the security rules**.
- A free access to the emergency exit have to be always keep.
- The both doors of the lab have to be always open during your practical work.
- **Turn on the ventilation** (speed = 2) switches are next to each door of the lab.
- Turn on the lights of the lab and the hood.
- There is a first aid kit available next to the chemical store.
- At the end of your daily session, you have to **do the checklist** that the technical manager have given to you. File it, put the date and sign it, then give it back to the technical manager or in the red box named "courrier pour le préparateur" at the store.
- If the Professor responsible of your practical work is in the building, announce that you have finish your session and you leave.
- There is some Handbook and other books on the table of the corridor, they stay on this table and **do not go to the laboratories**.
- For safety reasons, **no liquid chemical products are taken using a syringe and a needle** except in the use of septum (anhydrous, inert, etc.)

Divers

- A benchtop NMR 60 MHz is accessible for students in room 468 **only after they have received the specific training including in their class**, ask the technical manager for tube which will be returned clean after use.
In case of any problem, students / assistants refer to the technical manager.
- Two FTIR are accessible for students in room 470 **only after they have received the specific training including in their class**.
In case of any problem, students / assistants refer to the technical manager.
- Room 478 is a computer room open on request. It is only uses for accessing MSDS and processing NMR spectra.
- Room 454 is a **room reserved for assistants and a classroom**.

You will find a key box in which are the numbered keys of the lockers present at the exit of the room. If you use a locker during your practical work for your personal belongings, please release it at the end of the session and put the key back in the box.

You can use this room as a classroom with your students. Thank you for registering the reservation on the sheet next to the door of the room.

Please **keep the room clean and tidy**, many assistants use this room every day.

- For the assistants of first year students (TP1 and TP2), there is a coffee machine at the third level of the building (room 356), you have one coffee for each half day of practical work.
- For the other assistants there is a coffee machine in room 454 at the fourth level of the building.
- Be careful, you have the responsibility of your group, so don't let them alone more than necessary, ask one of your colleague to keep an eye on them if you leave the lab.
- At the last session, give the key back of the laboratories to the technical manager.
- If students work in pair or have a number assigned be careful that they respect their place in function of their number.

Golden rules

- **All empty chemicals are to be returned to the store.** You didn't eliminate anything.
- Immediately **replace any broken glassware** at the store.
- **Report any equipment or building malfunction** to the Technical Authority.

For all complement, you can ask the technical manager.

We are grateful for the application of these directives for the good management of practical sessions of organic chemistry