

## **Department Environment & Biodiversity**

Laboratory Unit:	Chemical Ecology
Rooms:	D-1.008, D-1.006, D-1.017, D-1.013, D-1.014,
	E-1.017, D-E.041A, D-E.041C, D-E.041D
Responsible:	Stefan Dötterl
Co-Responsible:	Karin Gross
Technician responsible for this area:	Roman Fuchs (RF)
Consultation prior to work:	Stefan Dötterl or Karin Gross
Latest update:	12.Mai.2023

## Local Safety Rules for Chemical Ecology Labs (Botany)

- The use of the labs is **only allowed after approval** by the responsible persons (Stefan Dötterl, Karin Gross)
- The lab rooms are equipped with gas or other hazardous chemicals, please adhere to any signs on the door.
- To keep the lab going smoothly, we have to be informed at least **two months before project start**. For larger projects funded by agencies, the lab management must be asked before project submission. We ask the lab users regularly to provide a short project report, an overview of activities planned in the lab and a rough budget estimation.
- The correct protective clothing <u>must always</u> be worn (i.e. lab coat, goggles, gloves, rubber apron etc.).
- Eating, drinking, smoking and application of cosmetics is forbidden in all lab areas.
- All procedures and substances must be assessed under GHS and CLP before commencing any work. A copy of any Specific Assessments must be filed with the FB administration (Silja Parke) and another copy kept with the lab notes.
- Chemicals must be handled according to the instructions on the data sheets (SDS) or by the lab managers. All chemicals must be labelled unambiguously (chemical name, concentration, date of preparation, name of user) and stored according to the instructions on the data sheet.
- Alone work is permitted provided training has taken place and relevant documents are filled correctly.
- No persons are allowed to perform chemical procedures before 8:00 and after 17:00 weekdays or during periods of holidays and weekends when laboratory technicians are absent.
- For laboratory work (not measurements) running overnight and over the weekend, an up to date permit must be put on the outside door. Permits must be completed by researcher and supervisor filed with the FB administration (Silja Parke).

- USE **GLOVES**! Gloves protect yourself and should also protect your samples from contaminations. Avoid touching anything with gloves OUTSIDE the lab. Avoid walking around in the building with contaminated gloves.
- All waste (also liquids), which has been in touch with organisms falling within the S1rules have to be disposed of in special autoclavable bags or containers and have to be autoclaved prior to disposal. (Autoclaved waste has to be collected in the corresponding bin in room D-1.073). Surplus solvents are collected in 2 categories unhalogenated (incl. pentane, hexane, methanol, acetone) and halogenated (DCM, chloroform). For this purpose, there are two labelled containers in the solvent storage cabinet in room D-1.008.
- Work with toxic VOLATILE CHEMICALS (e.g., chloroform, dichlormethane, hexane, acetonitrile, mercaptoethanol) MUST be performed in the FUME HOODS.
- Keep the fume hoods closed when unused and close it as far as possible while using them!
- Used tips and other materials are disposed into the bags on the benches. These containers are emptied to the normal trash. Everything contaminated with toxic substance has to be collected as **special waste** and MUST BE LABELLED ACCORDINGLY.
- All users MUST **CLEAN** the bench, fill emptied tip boxes, and wash glassware IMMEADIATLY AFTER USE. Wipe with water and with 70% Ethanol.
- For general use, de-ionized "Permeat"-water, produced in room D-1.025? (Spül- & Trockenraum), is used in the lab. The hydrogen generator must be filled with Millpore-water from room D-E.007 (AG Tenhaken)
- ALL lab users (students and researchers) have to be introduced by one of the lab managers (Stefan Dötterl, Karin Gross, or Roman Fuchs) to the lab guidelines and security aspects of the lab BEFORE project start. It is NOT ALLOWED to work in the lab without being instructed by the scientific and technical lab managers. If you have any questions regarding security and good practice in the lab, please ask the lab managers!
- Solvents have to be kept in the yellow security cabinet next to the fume hood in room D-1.008. Even the smallest necessary amount of solvents should be used and stored in the fume hood. Use clean glass funnels to transfer liquids into smaller bottles and vials (e.g., 20ml with ND20 white caps). Take care to close the door of the yellow cabinet properly!
- Pipette tips, Pasteur pipettes and glass vials containing substances without acute toxicity (GHS06) or health risks (GHS08) are to be discarded in specific containers labelled "scent trash / Duftabfall". Toxic waste must be stored in sealed containers and labelled specifically (What? What amount? Which GHS-Class?).
- Carrier gases (Nitrogen, Helium) for the GC are stored in specifically secured gas bottle cabinets, keep the doors always closed and locked unless gas pressure has to be checked or gas bottles have to be changed (Anyway, inform the lab technician (RF) if there are issues.)
- The GC-units are only allowed to be used after being instructed by the scientific and technical lab managers! Always take care during operation that there are heated parts (>200°C) posing a risk of burn injuries.

- In general, lab spaces, especially the benches, are free to use for every user unless labelled specially. Some areas are reserved for certain activities/projects and marked accordingly. These must not be accessed/used by unauthorized personnel!
- Some shelves, drawers in freezers, and fridge areas are for general use and unlabelled or labelled with the tag 'LAB' or 'general'. Each project/person has its own spaces provided by the lab managers, which should be labelled by the project acronym or by names.
- Space in freezers and fridges is limited. It is not allowed to store unlabelled volatile chemicals in freezers and fridges.
- Lab space and equipment that remain unlabelled or labelled with 'lab' can be used by all lab-users. If you do not want that your own things are for general use, label them and keep them in 'your' areas.
- Some pipette sets are reserved for certain activities and are labelled accordingly. Do never use them for other purposes. If a pipette is contaminated, clean it. If a pipette is not calibrated, tell the technical lab manager about it and mark it. Pipettes are labelled and should NEVER be transferred from one lab to another one!
- Lab instruments and equipment must never be used without having been instructed by an experienced user or the lab managers. Manuals for all machines are available in the labs or in the office of RF.
- All users of the lab must cooperate to maintain a high quality and clean working environment. Help each other, especially less experienced users and be aware that YOU ARE NOT ALONE IN THE LAB.
- All users must participate in the lab meetings, which take place regularly.
- Label your samples, substances etc. with a name also in fridges and freezers. Unlabelled things will be thrown away from time to time!
- All users must participate in re-filling pipette boxes and glasses with Eppendorf tubes (and similar) for autoclaving. USE GLOVES when doing this and always remove old tape and labels from the boxes.
- Used glassware is stored in a plastic container in room D1.008. If full, glasses can be washed with the labware dishwasher in room D1.025 of the Molecular biology group (Contact: RF, Anja Hörger, Andreas Tribsch or Matthias Affenzeller). There is also an autoclave available if necessary. Please, be aware that you have to be instructed for the use of those machines.
- Broken, but uncontaminated glass is collected in a black bucket beneath the fume hood in room D-1.008
- General accessories of the lab are stored in the storage room D1.038 and in several cupboards. GC reference standards are stored in the freezer in room D1.038, all safety data sheets (SDS) are available via intranet (<u>\\shares\gfs\_obio-pfl\duft\SDS</u>). Every lab user can take tips, Eppendorf tubes, glass vials etc. from there. Please inform the technical lab manager (RF), when something is used up.

## Emergency



Building manager: ext 6821 Fire: 0 – 122 Ambulance: 0 – 144 Info Poisoning Treatment: 01-4064343

User: I confirm that I have read and understood the above Local Safety Rules

Date \_\_\_\_\_ Signature \_\_\_\_\_

Laboratory Responsible:

I confirm that above named person was trained on the basis of the Local Safety Rules.

Date \_\_\_\_\_

Signature \_\_\_\_\_

I confirm that above named person has been instructed to work in the following labs: Room D-1.008: GCMS-"Holger / GC-EAD Franz" \_\_\_\_

Room D-1.008: GCMS-"Susi"/ Z-Nose "Mimi"