

HSE LAB-TOUR PROCEDURE

Extent

The procedure applies to all laboratories belonging to MTP unless otherwise stated.

Implementation

Supervisors are responsible for introducing students to the requirements for access to the lab, including the HSE Lab Tour. The tour is arranged by the supervisor in collaboration with the room manager. Individual laboratories have special characteristics to be presented on the HSE lab tour, together with the general rules.

Requirements for Access to Laboratories

Before access to laboratories is granted, the following requirements must be met:

Requirements for lab access	
Online HSE course	
HSE – safety room tour	
Specific equipment training (if re	elevant)
Approved and signed risk assess	ment

Informasjon på HMS-Romomvisning

Information	on H	SF i	room	tour
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DRESS CODE:

ALWAYS wear protective glasses and lab coat in the labs.

Use shoes that cover your foot (no sandals, flipflops, etc.), and covering pants.

Use gloves only when necessary.

Long hair needs to be secured away (ponytail/bun/braid/etc.).

Contact lenses should be avoided. You can borrow protective glasses that fit over normal glasses.

GENERAL INFO:

Opening hours: 08:00-16:00

Extended access can only be granted after a written application

All entry and exit must take place via the specified entrance

No food and drink in the laboratory, including chewing gum and tobacco products – Important!

Backpacks, bags, etc., is not allowed into the labs. Notebook and pen/pencils are ok.

Keep the lab tidy! The area is no storage space – Clean up after you when you're done!

It is not allowed to bring guests into the laboratory – Important!

When you use your access card, it is your responsibility to ensure that only authorized individuals enter the area.

If you break something, tell someone!

Nearest sink for hand wash, and paper tissue

Toilet facilities is on the second floor

ROOM ACCESS:



Access to rooms does not provide automatic access to the use of any equipment, only entrance to the room

Use of equipment requires equipment-specific training

The main rule for all other things in the room: stay away and do not touch.

Breaking of the rules may lead to you loosing access to the labs.

FIRE PROTECTION:

Location of fire extinguishing equipment

Information on the highest risk of fire in the area

EVACUATION

Emergency exits

Meeting place during evacuation: parking space on the east side of the building

FIRST AID:

Location of First aid kit

Location of emergency eye wash and shower

Emergency numbers: Ambulance - 113. Fire department - 110. Police - 112

RISK ASSESSMENT

All work you do must be covered by a risk assessment! It is your responsibility that you have this risk assessment completed and signed.

Use the applicable risk assessment form: https://www.ntnu.no/wiki/display/mtp/Laboratories

NOTE:

- Are there activities around you that could be a danger?
- Could what you do endanger others?
- Consider how you can reduce the probability and/or the consequence of hazards.
- Can you, for example, do the job in a different way? Use different chemicals?

Yellow value of risk assessment: Measures should be considered

Red value of the risk assessment: Measures *must* be implemented before the work can start!

The risk assessment is signed by you, you send it to your supervisor for approval. The supervisor passes it on to the room manager before it eventually ends up with the lab manager for final approval.

- It will take some time to get all the signatures, so start well in advance

The signed risk assessment must be available for presentation upon request when working in the lab.

CHEMICALS:

All chemicals entering the laboratory **must** be pre-approved by the room manager. Information on available chemicals and their safety data sheets (SDS) is accessible through NTNU's Chemical Database (see Innsida).

The recommendations given in safety data sheets should be followed, requirements must be followed

ALWAYS mark containers you use with the contents, concentration, and your initials. Use a waterproof pen. Wash them after use, dry and put them back in the cabinets.

Some chemicals must be stored in ventilated and/or fireproof cabinets. See Safety Data Sheets.

Fume hoods, location and safe use

All use of chemicals must be described in risk assessment – Be careful, include all hazards!

Disposal of chemicals requires special treatment – described in safety data sheets.

It is your responsibility to know how to dispose of the chemicals you use and include this in the risk assessment.



For chemicals that require special disposal, gather the waste in a suitable container that you label with "WASTE," indicating the contents, concentration, and your name. Contact the chemical manager for collection and disposal.

If you have doubts about what to do, ask!

Are you pregnant or planning to become pregnant? Please notify the chemical manager to ensure the safety of all parties involved.

SUPPLIES AND EQUIPMENT TO BE USED

Talk to your supervisor to provide the equipment you need. DO NOT use other things that are in the lab. If in doubt, ask!

Some of what you need for the lab may need to be ordered. Book well in advance via the room manager or supervisor. Note: You'll need a project number to pay for what you order

REGISTRATION OF HOURS

Always record your time in the lab in BookitLab.

Make sure you have a project number to record the time. You get this from your supervisor.

APPARATUS CARDS

All main equipment has machine cards It describes the main purpose, the main dangers and the person responsible for the machine. Note: You still need a risk assessment for your use of the equipment.

If you do not know the equipment and are not trained to use it, do not touch it. Contact the person responsible for the machine to get help.

In the risk assessment, each individual should check the box indicating that they have participated in the HSE room tour for the laboratory they are seeking access to.



Signatures from the participants:



Safe laboratory conduct

At MTP, the laboratories are shared by individuals with varying academic backgrounds, laboratory experience, and norms of behaviour. To ensure a unified and safe environment, we are establishing a set of rules applicable to all users.

Many of the rules outlined below relate to correct use of gloves. This aspect is especially crucial in labs in Fiberbygget (previously PFI), where we regularly interact with dangerous substances, some of which possess carcinogenic properties or the potential to harm pregnancy. It is essential to recognize that your responsibility extends not only to yourself but also to your colleagues. Be mindful that your lab peers may have undisclosed health concerns or plans for pregnancy that you should consider and strive to accommodate.

<u>These rules apply to all Material sciences laboratories</u> at MTP, and anywhere where you would handle chemicals.

An **exception** from these glove use rules is when operating rotating machinery, always follow instructions from your machine instructor!

Rule 1: Only use gloves when you need to and remove them immediately after completing the task.

Gloves are not a substitute for proper hand hygiene and should only be worn when necessary, such as when handling hazardous chemicals. When you are done handling chemicals, remove the gloves immediately to prevent inadvertent spreading of contamination.

Rule 2: Never ever exit the lab wearing gloves

Gloves worn in the lab shall never leave the lab, even if you know that they are clean. Anything leaving the lab must be clean enough to carry with bare hands anyways. Others watching you do not know if your gloves are clean or not, think of the message you are sending.

Rule 3: Change gloves often.

Gloves are not a solid barrier; all chemicals will leak through given enough time (se SDS). When a chemical is spilled on gloves, the clock starts ticking for when it will leak through to your skin. The length of time is different for each chemical. The rating for a "Good glove" is that the spilled chemical seeps through after just 10 minutes!

Rule 4: Gloves used in fume hood shall be removed when you step away from the fume hood.



We use fume hood for chemicals that needs to be contained. We do not want to spread these chemicals by contaminated gloves.

Rule 5: <u>Do not</u> use gloves on communal surfaces or objects that are likely to be touched with bare hands, and vice versa.

This includes, but is not limited to, objects such as your **phone**, keyboards, computer mouses, notebooks, touch displays, keypads, cupboards, drawers, door handles, etc. Such surfaces should only be touched with clean bare hands.

Even if your gloves are clean, refrain from touching communal surfaces and objects. This fosters a positive work culture by considering your colleagues' perceptions and promoting a sense of safety. Consider the signal you might be sending to colleagues that do not know that your gloves are clean.

Rule 6: Lab coats stay in the lab.

Avoid wearing lab coats outside the lab (even though it looks cool). Lab coats may carry potentially harmful chemicals and wearing them in shared areas poses a risk to others.

Even if your coat appears clean, refrain from wearing it in hallways or common areas. Consider the message it might send to colleagues who are unaware of the cleanliness status of your lab coat—prioritize safety and leave the lab coats in the designate laboratory space.

Rule 7: Send your lab coat to be washed regularly (at least every semester).

The department provides laundry services for lab coats. Do not wash your lab coat at home!

To have your lab coat washed, place in the white plastic bag around the corner to the left of Metallography lab. The laundry service operates on a bi-weekly schedule, usually picking up on Mondays and returning the coats one week later. Borrowed coats may also be submitted.

Rule 8: Always wash your hands before leaving the lab.

Wash your hands to remove any trace of chemicals that might have gotten onto your skin. This step is required regardless of glove use.

There will be done regular checks to make sure the rules are followed. Thank you for your cooperation!