Safety Instructions

Department of Lithospheric Research

18.04.2023

Why an instruction?

• Austrian Protection of Employees Act (<u>ASchG §14</u>)

Employers are obliged to provide adequate information to workers about the dangers to safety and health, as well as about the measures to prevent risks.

- The responsibility lies with the head of the organizational unit or subunit.
- All groups of persons present in the laboratory have to follow the instructions.
- Information obligation: Employees have the duty to report known grievances to the responsible supervisor.
- The instructions must be given at least once a year.

Basics

- The content and basis for this documentation are the laboratory and workshop regulations of the University of Vienna (PDF).
- The laboratory regulations must be displayed clearly visible in all laboratories.
- The content and timing must be documented in writing and must be confirmed by the instructed person.
- This also applies to the instruction to students and guests in the laboratories of the Department of Lithospheric Research. (specific lab instructions!).

Laboratory and safety regulations

- The entering and working in the individual laboratories is forbidden without prior instruction in the general and special laboratory regulations by the respective laboratory management.
- Work diligently and ask if you have not understood something.
- Report safety deficiencies immediately to your supervisor.
- Only use work equipment in perfect condition and for its purpose.
- Look for slipping and tripping.
- Do not follow any Instructions that are detrimental to safety.
- Pay attention to the proper handling of work materials.
- Clean hands skin protection plan
- All laboratory rooms must be kept locked after completion of the work.

Working alone

- Whether working alone is permissible depends on the type of laboratory or workshop and the task completed.
- The laboratory or workshop manager lays down in writing which tasks can in principle be completed while working alone.
- When working outside of operation hours or during the weekends, effective safety precautions and measures ensuring supervision must be takentime". If this cannot be ensured, working alone is not allowed.
- Whenever anyone completes a task with an increased risk of accident that would require immediate first aid, another person must be within eye- and earshot. If this is not ensured, it is prohibited to work alone.
- For some risks, working alone is always prohibited as the maximum time by which aid must be provided is, at zero to a few minutes, extremely short (this applies to, e.g., risk of suffocation or losing consciousness upon exposure to chemical substances/gases, etc.).

Work on machinery, equipment and facilities

The training of workers before the first-time use of work equipment (machinery, equipment, facilities, tools, vehicles, etc.) must include at least:

- Commissioning and use
- If necessary, set up and dismantle
- Eliminate disturbances in the workflow of the work equipment,
- If necessary, set up the equipment (filling, loading)
- Protective equipment intended for the particular application
- Necessary protective measures (emergency stop switch)
- Read the operating instructions

Noise protection

Noise levels that can damage the hearing 80dB In these areas, an ear protection must be provided and used. (Employee Protection Act §65)

Handling of hazardous materials

- The respective regulations of chemicals as amended are part of these Laboratory Regulations and apply to all laboratories and workshops integrated in the organisational structure of the University of Vienna.
- Substances denote all materials, preparations and biological agents used for work.
- Hazardous substances can be solids, liquids or gases. The Laboratory Regulations furthermore also apply to dusts regardless of type and origin and to aerosols.
- Read the safety data sheets of the products!
- Overview of pictograms and markings (in the Intranet)

Hazard pictograms

Dangerous working materials: all materials that have at least one of these properties and are marked with the appropriate hazard symbols.

The marking must be clearly visible, legible and indelible on each package.



Handling of hazardous materials in the laboratories

- The suction of liquids into pipettes with the help of the mouth is forbidden.
- Use personal protective equipment (safety glasses, gloves, etc.).
- Chemical binders for chemical accidents.
- Eye wash bottles in each laboratory.
- Use fume hoods absolutely, in the case of volatile, explosive, flammable or toxic and foulsmelling chemicals. Defect fume hoods must not be used..
- For the transport of chemicals or liquid gases, carrier baskets or Dewar-vessels must be used.
- Leaked or spilled materials must be removed immediately.
- Chemicals are to be checked for the necessity to stay in the laboratory and, if appropriate, to dispose it.

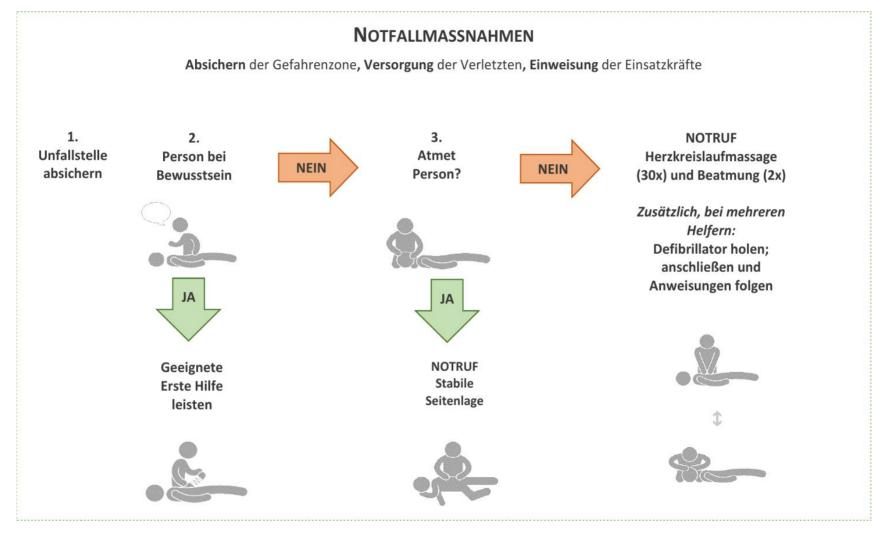
Disposal

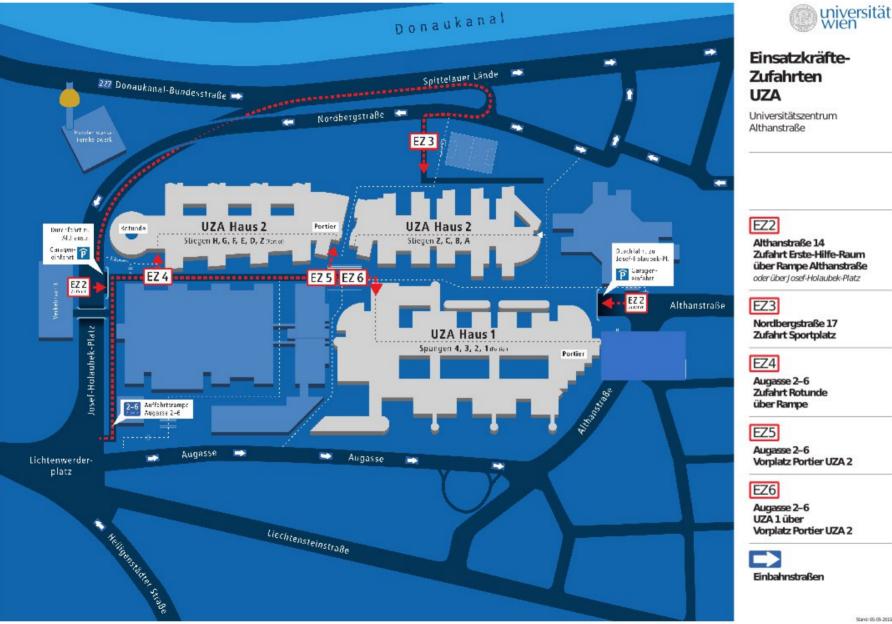
- Collect halogen-free and halogen-containing solvent waste separately in the fume hood with appropriate labeling and dispose of regularly.
- Collect and characterize acid mixtures separately.
- Collect the equipment (wipes, gloves, filter papers, etc.) in suitable labeled containers.
- Dispose of the silica gel waste separately.
- Dispose of objects contaminated with low-toxicity chemicals in such a way as to avoid any risk to health or injury to the cleaning staff when emptying the waste bins.
- Special waste must be disposed professionally.
- Dispose of glass waste separately. Not in the normal waste!
- Further information can be find in the safety data sheets.

General measures for laboratory incidents

- Keep calm get help observe self-protection stop devices / switch off power, ventilate the room if necessary.
- In the event of injuries, provide first aid, call for further help, call rescue services (144).
- Resuscitation with defibrillator (at the doorman, room 2Z 214)
- No treatment measures no medication!
- Loss of consciousness in case of cardiovascular or respiratory arrest: see next slide.
- In case of inhalation/swallowing or skin contact of hazardous substances: Vergiftungsinformationszentrale (Poison Control Center) (01/406 43 43)
- Skin contamination by liquid chemical substances or vapors, and fire wounds must be flushed with running water for at least 15 minutes.
- Eye Contamination: Rinse at least 10 to 15 minutes with an eyewash / eyewash bottle. Attention! Rinse water must not get into the healthy eye.
- Accident report: There is a notification obligation for accidents own forms (<u>Forms in the</u> <u>Intranet</u>).

Emergency measures





Fire safety

- Alarms and instructions for fire protection must be followed.
- Find out about the location of the fire extinguisher and how to deal with it.
- Keep traffic routes, emergency exits and escape routes always free.
- In the event of a hazard, please go to the meeting point.
- If you discover a fire yourself, you have to indicate:
 - Who is calling!
 - What happened?
 - How many persons are affected / injured?
 - Where is the place of emergency?
 - Wait for questions! Do not hang up!
- Keep calm!
- Immediately leave the building (do not use elevators!) on the designated escape routes.
- Wait for instructions at the meeting points.

General safety-related information (Intranet)

- Ergonomics und office workplace
- Illness / accident at work during a business trip
- <u>Climbing aids, ladders and steps</u>
- <u>Workplace health promotion</u>
 - e.g.: Medical investigations in laboratory work

Inform independently about the location (and handling) of:

- (Emergency) exits, escape routes
- Gathering places
- First Aid Kits
- Fire extinguishers / fire blankets
- Defibrillator
- Eye washers

Emergency information can be found on the walls in all corridors of the UZA 2 (Behavior in the event of an alarm or fire, First aid case, Driveways for emergency vehicles, Escape Route Orientation Plan).

General	Emergency numbers
Ambulance	144
Fire department	122
Police	133
Poison Information Center	01/406 43 43

University	Emergency numbers
Porter	+43-1-4277- 14966
<u>Secuity team</u> Univ Vienna	+43-1-4277- 777
Facility management (Mo-Fr 7am-6pm, otherwise porter)	+43-1-4277- 5999
Security officer	+43 676 32 55 300

Contacts at the department

Role	Person	Phone
First aider	Ilka Wünsche	54325
Safty officer	Franz Biedermann	53451
Fire warden	Peter Nagl	53365
Radiation protection officers	Dieter Mader	53305
	Peter Nagl	
Poison Control Agent	Toni Schulz	53482
Specialists in ladders	Marianne Schwarzinger	53426

This presentation does not replace reading the rules and regulations of the University of Vienna or the special laboratory regulations of the respective DfL laboratories.

Rules and regulations of the University of Vienna

- House Rules
- Fire regulations (<u>PDF</u>)
- General laboratory and workshop regulations (<u>PDF</u>)

More security information:

- Working safely (<u>Intranet</u>)
- <u>Studying safely</u>
- IT-News: Emergency SMS (in German)

The content and time of the instruction must be recorded in writing and must be confirmed by the signatures of those who have been instructed.

Thank you for your attention!

Franz Biedermann