Laboratory and Workshop Code of TU Vienna

(online 6.2.2015)

• § 1 Objectives
• § 2 Definitions
• § 3 Scope of application
• § 4 Familiarisation / display / instruction
• § 5 Personal Protective Equipment (PPE)
• § 6 Monitoring of safety-related facilities
• § 7 Hazard sources
• § 8 Definition of hazardous materials
• § 9 Behaviour in case of disturbances and accidents, reporting obligations
• § 10 Safety regulations
• § 11 Basic rules for use of TU Vienna’s laboratories
• § 12 Operation of technical facilities and equipment
• § 13 Working hours
• § 14 Non-compliance with the Laboratory and Workshop Code

§ 1 Objectives

(1) The Laboratory and Workshop Code of Vienna University of Technology serves general safety and guarantees proper conduct of work processes required in all laboratory and workshop divisions.

§ 2 Definitions

(1) The concept of “laboratory” or “laboratory room” comprises all scientific-technical rooms in which experimental research and teaching are conducted and all workshops as well as the corresponding ancillary rooms.

(2) “Laboratory director” means the supervisor appointed by the director of the organisational unit for the relevant laboratory room. If a teaching class is being held in the relevant laboratory room, the person in charge of the teaching session will assume the responsibilities of a laboratory director for the duration of the teaching session and for the area used.

§ 3 Scope of application

(1) This Laboratory and Workshop Code applies in all laboratory rooms of TU Vienna; it must be complied with by all members of TU Vienna, i.e. scientific and general service staff and students, as well as by visitors and external staff.

(2) Due to a diversity of types of laboratories, additional guidelines to be approved by the Office of the Rector may be issued for the laboratories and workshops of the institutes, such as
(a) Guidelines for work in chemical laboratories

(b) Guidelines for work in biochemical laboratories

(c) Guidelines for work in technology laboratories

(d) Guidelines for work in measurement engineering laboratories

(e) Guidelines for work in workshops

(3) For persons who are entitled to access to the laboratory rooms for conducting specific work or operations and who are without the corresponding specialised knowledge, such as cleaning or security staff, the TU Vienna office charged by the Rector with this will in consultation with the laboratory director provide appropriate written instructions. For staff speaking foreign languages those instructions will be written in the corresponding language.

(4) Should due to specific work tools, work materials or operations that are not included in the Laboratory and Workshop Code and the supplemental guidelines more precise or detailed safety precautions be required then they will be arranged for by the laboratory director in operational instructions. The latter must be approved by the director of the organisational unit.

§ 4 Familiarisation / display / instruction

(1) All members of TU Vienna working in laboratory rooms must demonstrably have this Laboratory and Workshop Code and the relevant guidelines as well as any eventually applicable operational instructions brought to their attention. The documents cited must additionally be published on the website of TU Vienna or made available in the organisational units. Familiarisation with this Laboratory and Workshop Code must be confirmed in writing.

(2) All employees must be instructed accordingly by the director of the organisational unit or by a person designated by the director of the organisational unit. They must obligate themselves to comply with the Laboratory and Workshop Code and to abide by technical safety instructions.

(3) Members of TU Vienna may only enter the laboratory rooms after having been familiarised with the Laboratory and Workshop Code and the required guidelines as well as operational instructions.

§ 5 Personal Protective Equipment (PPE)

(1) For the specific types of laboratories the PPE required will be additionally determined in the guidelines in general and in operational instructions.

(2) Employees must be outfitted by TU Vienna with adequate Personal Protective Equipment.

(3) Employees who have been given work clothes (laboratory coats, trousers, shoes, etc.) or PPE from TU Vienna are obliged to wear them.
(4) Students as well as visitors and external staff must provide their own basic PPE; special PPE will be provided by TU Vienna.

(5) All persons present in a laboratory room are obliged to use the PPE specified.

§ 6 Monitoring of safety-related facilities

(1) For the structural safety-related facilities a monitoring plan is to be drawn up and conducted by the TU Vienna office designated to do so by the Rector’s Office. That plan serves to ensure completeness and functional adequacy of the concrete safety-related facilities.

(2) For monitoring the functional adequacy of the safety-related laboratory facilities the laboratory directors must draw up and conduct a monitoring plan which must be made available if requested by the director of the organisational unit.

§ 7 Hazard sources

(1) Laboratories must be labelled in accordance with their hazard sources. A non-exhaustive listing of conventional symbols can be seen in Annex 1.

§ 8 Definition of hazardous materials

(1) Hazardous materials are materials or preparations having the properties designated in Annex 2 or which are carcinogenic, inflammable, teratogenic, harmful to reproduction or sensitising as well as materials having other chronically toxic properties or which in manufacturing or use produce hazardous or explosive materials or preparations or may release such materials or preparations.

(2) Materials whose non-hazardous nature is not clearly established must be handled like hazardous materials.

(3) Waste products must be separately collected according to regulations. Disposal must be done according to the guidelines of the Rector’s Office or of the person appointed to do this.

§ 9 Behaviour in case of disturbances and accidents, reporting obligations

(1) In case of malfunctioning of technical facilities, these must be taken out of service. Commissioning may only occur after their full functional adequacy has been restored. Care must be taken that repair of malfunctioning is done by specialised staff responsible for it and trained to do so. Where technical facilities of the building infrastructure are involved, the malfunctioning must be reported immediately to the TU Vienna office designated by the Rector’s Office for this.

(2) In case of emergency events such as fire or the leaking of gases, rescuing people has first priority. After leaving the site of the event the emergency services must be notified. If necessary, an evacuation of the areas or building sections must be arranged for.

(3) There is an obligation to report all unusual events. Irregularities (such as missing safety facilities and damages to buildings and facilities as well as defects or damaged equipment,
machinery or apparatuses) must be reported to those in charge and to the director of the organisational unit. Accidents, near-accidents and any consulting of a physician must be immediately reported to the laboratory director and to the occupational medical service.

§ 10 Safety regulations

(1) Fire doors should normally be kept closed. An exception to this are automatically closing fire doors which may not under any circumstances be obstructed by storing objects near them.

(2) When an alarm sounds or in case of emergency, work must cease. If possibilities allow, hazard-related equipment in use must be turned off. The laboratory room should be vacated via the escape routes provided.

(3) Escape routes must at all times be kept free and may not be used improperly as storage space. Likewise, the accessibility of safety facilities (fire extinguishers, first-aid kits) must be guaranteed at all times.

(4) Moving of hazardous materials may only occur in containers provided for this purpose. Under no circumstances may the elevator be used together with hazardous materials. In explosion-vulnerable areas, the electrically operated transport equipment provided should be used.

§ 11 Basic rules for use of TU Vienna's laboratories

(1) In laboratory rooms order and cleanliness must be maintained.

(2) Persons not directly involved in daily laboratory operations and who are entitled to demand access to the laboratory room must report to the laboratory director. They must be instructed about existing hazards, must wear Personal Protective Equipment and must be supervised for the duration of their presence.

(3) For pregnant women, the areas of work and presence allowed must be coordinated with the occupational medical service where a corresponding obligation to report must be complied with. Female employees and students must be instructed about potential hazards and employment restrictions on pregnant women. Everyone must have their attention drawn explicitly to mutagenic materials and hazardous materials that are harmful to reproduction. Findings from maternity protection evaluation must be taken into account in fitting out and furnishing laboratory rooms.

(4) Persons from outside are to be asked the reason for their presence. The instructions of laboratory staff present must be followed. Unauthorised persons must be immediately asked to leave the laboratory.

(5) Equipment and plant may only be used as intended.

(6) Storing, consuming or using foodstuffs, beverages or tobacco or cosmetics is prohibited unless being used as examination material or explicitly allowed under the guidelines for specific laboratories.

(7) The storage and setup spaces of the first-aid kits, extinguisher blankets and fire extinguishers as well as other rescue facilities (escape filter masks, eye baths, etc.) must be well visible and clearly labelled, and emergency-related telephone numbers must be visible.
(8) Persons obviously under the influence of alcohol, drugs or medication must be barred by the laboratory director from further use of the laboratory.

(9) Prior to handling hazardous materials, the hazard potential must be determined and possible protective measures must be adopted from the perspective of proportionality.

(10) The storage of hazardous materials may not under any circumstances be done in containers which could lead to confusing them with foodstuffs.

(11) All vessels must be marked according to their contents.

(12) Gas bottles must be stored secured against falling over. For moving gas bottles, the corresponding vehicles must be used and the bottles must be appropriately secured. Any moving may only occur with completely fastened sealing caps. Moving gas bottles with a reducing valve attached is strictly prohibited. Pressurised gas bottles may only be parked in work rooms and not in corridors, stairways or escape routes.

§ 12 Operation of technical facilities and equipment

(1) Prior to start-up, knowledge must be obtained about functioning and operation (operating instructions). For this purpose, the operating instructions must be kept at the equipment’s permanent station or there must be an indication there of where those documents can be inspected.

(2) Prior to start-up, a check must be conducted for any eventual damages or defects.

(3) All facilities, equipment, machinery and other work aids may only be turned on, used and turned off when in proper specified condition, after being instructed and properly trained in operating them.

(4) The statutorily specified test intervals must be met and maintenance and functional testing must be carried out regularly as required. For this purpose a test plan must be kept. It is incumbent upon the director of the organisational unit to appoint a person to be in charge of introducing and servicing the test plan.

(5) Technical facilities that come into contact with special gases must be suitable for them in regard to their material properties and must be regularly checked.

(6) Shut-off valves must be opened slowly (in order to prevent pressure surges). Unintended pressure increases in closed vessels should be avoided. Only fully intact piping may be used and its connections must be secured.

§ 13 Working hours

(1) Students, interns and apprentices may not work in the laboratory room without being supervised by persons assigned to do so by the laboratory director or by the person in charge of the teaching session.

(2) The times when a laboratory room must be kept open on working days for having students, interns and apprentices carry out laboratory work must be set, either in general in the guidelines for specific laboratories or, where this is not stipulated there, by the director of the laboratory. Work in laboratories outside of those hours requires the consent of the laboratory director.
(3) In the laboratory rooms of TU Vienna, a prohibition on working alone applies according to the Employee Protection Act. Where there is minor endangerment potential or where appropriate technical or organisational countermeasures are used, this prohibition may be lifted by the director of the organisational unit in consultation with the respective laboratory director.

(4) For permanent experiments (operation of equipment overnight and on weekends), corresponding regulations should be issued in any eventual guidelines for specific laboratories.

§ 14 Non-compliance with the Laboratory and Workshop Code

(1) For improper behaviour discovered by the director of the organisational unit, by the director of the laboratory or by a Safety Steward, there is an obligation to report it (employment record book, etc.). In case of repeated failure to comply with the Laboratory and Workshop Code, the director of the organisational unit will decide on how to proceed further.

(2) In cases of justified need, the director of the laboratory is entitled to order persons failing to comply with the Laboratory and Workshop Code to leave the laboratory room.
Annex 1a: Symbols for hazard sources / labels for the Laboratory and Workshop Code

Annex 1b: Symbols for mandatory signs / labels for the Laboratory and Workshop Code
### Guidelines for materials and preparations

<table>
<thead>
<tr>
<th>Combustion enhancing: Organic peroxides</th>
<th>CLP- Regulation</th>
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<tbody>
<tr>
<td>Type B organic peroxides (Type B organic peroxides are to be labelled both with the exploding bomb and with the flame as well)</td>
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<tr>
<td>Type C, D, E or F organic peroxides</td>
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<tr>
<td>Flammable without a hazard symbol</td>
<td>Flammable liquids Category 3</td>
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<tr>
<td>No equivalent</td>
<td>Gases under pressure</td>
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<tr>
<td>No equivalent</td>
<td>Self-heating materials and compositions</td>
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<tr>
<td><strong>No equivalent</strong></td>
<td><strong>Corrosive in relation to metals</strong></td>
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<tr>
<td>Acutely lethal effect Xn</td>
<td>Acute toxicity Category 4</td>
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<tr>
<td>Irreversible non-lethal effects: T+ and T Serious chronic effects: T</td>
<td>Specific organ toxicity (one-off exposure or repeated exposure) Category 1</td>
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<tr>
<td>Irreversible non-lethal effects: Xn Serious chronic effects: Xn</td>
<td>Specific organ toxicity(one-off exposure or repeated exposure) Category 2</td>
</tr>
<tr>
<td>Aspiration hazard Serious chronic effects: Xn</td>
<td>Aspiration hazard Category 1</td>
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<td>Skin sensitisation</td>
<td>Skin sensitisation</td>
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<td>Sensitisation of the respiratory tract</td>
<td>Sensitisation of the respiratory tract</td>
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<td>Serious eye damage hazard</td>
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<tr>
<td>Skin irritant Eye irritant irritation of the respiratory tract</td>
<td>Skin irritant Eye irritant Irritation of the respiratory tract</td>
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<tr>
<td>Narcotic effect</td>
<td>without a hazard symbol</td>
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<tr>
<td>Hazard to the ozone layer</td>
<td>![image]</td>
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Decision of the Rector's Office dated 22 April 2013
Decision of the Senate dated 6 May 2013