

SAFETY REGULATIONS

in Student Laboratories of the Institute of Physics

at Lodz University of Technology

1. General rules

- 1.1. Before any laboratory activities, each student must undergo safety training informing them about possible threats that may be exposed while performing laboratory classes and about the procedures ensuring safe participation in the activities.
- 1.2. All attendants must know and comply with this instruction and laboratory exercises per detailed instructions for each measurement set-up.

2. Sources of hazards at the laboratory:

- 2.1. Sources of electricity.
- 2.2. Objects at a temperature significantly different from the temperature of the human body, for example, heat, hot oil or liquid nitrogen cooling element.
- 2.3. Chemicals.
- 2.4. The moving masses, e. g. when working with a centrifuge or weights.
- 2.5. Harmful electromagnetic radiation, for example, spectral lamp, laser or microwave radiation sources.
- 2.6. Ionizing radiation such as α , β , and γ .
- 2.7. Strong magnetic field, e. g. near large permanent magnet poles.
- 2.8. Glass objects, e.g. lenses, glass vacuum cells, etc.

3. In the laboratory, it is prohibited to:

- 3.1. Enter the laboratories without the teacher's permission.
- 3.2. Turn on any equipment without the permission of a teacher or other person entitled.
- 3.3. Supply electrical power to the equipment in a manner disabling an emergency shut-down of the electric current.
- 3.4. Work without the recommended safety measures when they are required.
- 3.5. Enter marked danger zones.
- 3.6. Arbitrarily remove information signs.
- 3.7. Remove laser radiation sources and other devices spreading harmful radiation from the designed handles.
- 3.8. Arbitrarily change the location of the instruments.
- 3.9. Operate devices in different locations than the assigned benches.
- 3.10. Go beyond the specified limit parameters of the equipment.
- 3.11. Leave unattended electric heaters and other electrical equipment.
- 3.12. Block communication passages and lock any doors.
- 3.13. Change the location of fire extinguishers.
- 3.14. Obstruct access to emergency power switches.
- 3.15. Remove, blur or displace any informational and warning signs.
- 3.16. Eat, drink or smoke.
- 3.17. Shout or speak in a loud voice.
- 3.18. Run or perform any sports activities, enter the stools, or rock in one's chair.

4. Participants are obliged to:

- 4.1. Comply with all the manuals of the laboratory equipment.
- 4.2. Comply with all the warning signs and respond to instructions printed on the information signs.
- 4.3. Inform the teacher of the technical staff about the possible adverse effects of laboratory equipment or procedures on the health of the student, e. g., if the existing implant is sensitive to strong magnetic fields.
- 4.4. Immediately notify the teacher of any accident or other unexpected events that give rise to the slightest suspicion that they may pose a threat to people or laboratory equipment.
- 4.5. Execute commands of the teacher and other persons entitled.
- 4.6. Keep the laboratory set-up clean and tidy.

5. Means for first aid and fire protection:

- 5.1. First aid kit.
- 5.2. Fire extinguisher.

6. Dealing with a failure, accident or fire:

- 6.1. Ensure one's own safety and one of the other people, for example by:
 - a) cutting-off of electricity from the scene,
 - b) removal of the casualties from the danger zone.
- 6.2. Immediately notify a teacher or anyone of the technical staff and – where necessary – professional emergency services.
- 6.3. Submit to the decisions of the teacher
- 6.4. Provide first aid to the casualties as needed (remember your own safety, for example, in the case of possible contact with blood through the establishment of disposable gloves).
- 6.5. If possible, prevent the spreading of the event.

7. Emergency telephone numbers:

- ❖ Ambulance: **999**
- ❖ Fire Brigade: **998**
- ❖ Police: **997**
- ❖ Emergency number from a mobile phone: **112**
- ❖ The number of LUT health care: **42 631 2884**