



HEALTH AND SAFETY REGULATIONS in the PHYSICS LABORATORY II

During laboratory work in the Physics Laboratory II, the following life and health hazards may occur.

1. **Electric shock.**
2. **Irradiation with ionizing radiation.**
3. **Eye damage caused by UV or laser radiation.**
4. **Poisoning and irritation of the respiratory tract by ozone present in the air and reagents vapours.**
5. **Burns with liquid nitrogen.**
6. **Fire hazards.**

Health and safety notes regarding individual exercises can be found in the instructions for exercises and at workplaces, as well as discussed during the colloquium with the tutor.

In these regulations only the basic rules of dealing with the listed threats are given.

1. Switching on the device or the assembled electrical circuit to the voltage source can be done only **after checking the circuit by the tutor and in its presence**. Special caution should be maintained when working with electric circuits assembled independently by the student. Touching the elements of the built circuit is only allowed **after disconnecting the supply voltage**.
2. All metal bases and shields of electrical equipment are **zeroed and grounded**. It is forbidden **removing and opening the covers of electrical devices and making any repairs and alterations**.
3. In exercises in the field of nuclear physics, **radiation sources α , β and γ** are used. When joining the work with ionizing radiation, the student is obliged to conduct specialist medical examinations and become acquainted with provisions on radiological protection.
4. . The X-ray apparatus may be started **only in the presence of the tutor**, after familiarization with the regulations on the use the apparatus.

5. The sources of UV radiation are spectral lamps Hg and Hg-Cd. **Do not work with the lamps without safety goggles. You must not look directly on a spectral lamp burner.**
6. **Do not work with the laser light without safety goggles. Do not put your eye on the path of the laser beam.**
7. In rooms where laboratory exercises take place, you must not eat.
8. All operations with liquid nitrogen or toxic and corrosive substances may be performed by a student only **with the consent of the tutor and under his direct supervision.**
9. Operations with liquid nitrogen may only be carried out with safety glasses.
10. It is necessary to strictly follow the fire safety instructions.
11. In the case of exceeding the health and safety regulations, in relation to persons who violate them, they will be withdrawn consequences **to be removed from the laboratory at all.**
12. All students doing their exercises in the Physics Laboratory II confirm with their own signature the above regulations.