

## **Physics Laboratory Management Regulations**

**Article 1:** To effectively manage the laboratories of the Department of Physics (hereinafter referred to as "the Department") and to ensure safety and hygiene in teaching and research activities within the laboratories, these regulations are hereby established.

**Article 2:** For the purposes of these regulations, "laboratory" refers to all teaching and research laboratories belonging to the Department.

**Article 3:** The laboratory shall designate one faculty member as the responsible teacher, and their name must be displayed at the entrance of the laboratory.

The responsible teacher shall oversee and ensure that the laboratory complies with the standards of the university's environmental safety and health management system. They shall also maintain existing equipment in good condition, ensuring that the laboratory's instruments and equipment meet the needs of teaching and research.

**Article 4:** In accordance with Article 20 of the Occupational Safety and Health Act, laboratory personnel are obligated to undergo health examinations.

In accordance with Article 32 of the Occupational Safety and Health Act, laboratory personnel are obligated to receive safety and health education and training.

In accordance with Article 34 of the Occupational Safety and Health Act, laboratory personnel must strictly adhere to the safety and health work regulations (this regulation).

In accordance with Article 16 of the Ionizing Radiation Protection Act, radiation workers must provide a physical examination report for radiation work before engaging in radiation operations.

**Article 5:** To accurately monitor the activities and safety of department staff and students entering the laboratory for research and study, laboratory

access control measures shall be implemented. Access will be granted only with the approval of the responsible laboratory teacher and after meeting the laboratory access application requirements.

Those who violate the preceding provision will have their laboratory access privileges revoked.

**Article 6:** Laboratory personnel shall adhere to the following laboratory safety rules:

1. The laboratory is a high-risk environment, and unauthorized persons are not allowed to enter without permission.
2. Safety doors, passageways, entrances, and exits in the laboratory must remain clear of any obstructions to prevent hindering others' escape or causing accidents during the transportation of equipment.
3. Safety data sheets (SDS) for all chemicals used in the laboratory are available for reference.
4. Persons entering the laboratory should avoid wearing shorts, skirts, slippers, sandals, and contact lenses. When conducting experiments, appropriate personal protective equipment (PPE) such as lab coats, safety goggles, protective gloves, and face shields must be worn, and the methods for handling chemical hazards should be well understood.
5. Smoking, eating, throwing objects, playing, and loud noise are strictly prohibited in the laboratory.
6. Electrical equipment in the laboratory must not be overloaded, and the use of extension cords in series is prohibited.
7. All personnel must be aware of the locations of the nearest fire extinguishers, first aid kits, and emergency eyewash stations, as well as how to use them and the escape routes. They should also be mindful of the various danger signals and safety signs within the laboratory.

8. Before starting any experiment, conduct a thorough safety assessment to ensure that the equipment is in safe condition, understand the hazards and dangers of the chemicals used, and verify that the procedures are correct. Preventive methods and appropriate protective measures should be implemented for any potential hazards during the experiment.
9. General chemicals should be stored in negative-pressure chemical cabinets, while toxic chemicals must be stored separately in negative-pressure cabinets.
10. If corrosive chemicals come into contact with the skin, immediately rinse with plenty of water and seek medical treatment. If chemicals enter the eyes, hold the eyelids open with fingers and rinse with water for 15 minutes before seeking medical treatment.
11. Always cover and label containers of reagents to prevent vapor leakage or spills that could harm others. When heating liquids directly in a test tube, do not point the mouth of the tube towards anyone to avoid injuries in case of sudden boiling.
12. Chemical reactions that produce toxic, flammable gases, or odors must be conducted in a fume hood, and the fume hood door must remain closed during use.
13. Waste liquids must be classified and stored in ventilated waste storage cabinets and must not be poured down the sink. Hazardous or toxic chemicals should be labeled in accordance with hazard communication rules or relevant environmental regulations.
14. In the event of an accident, regardless of whether anyone is injured, it must be reported to the environmental safety officer. If injuries occur, the department head should be notified.
15. After the purchase of gas cylinders for the laboratory, their transportation and disposal must be handled by the supplier. Laboratory personnel are prohibited from performing these tasks

themselves, and gas cylinders must not be moved to other locations for use.

Laboratory personnel who violate the above provisions and fail to comply after being advised will have their laboratory access privileges revoked, and their supervisor will be notified in writing to formulate preventive measures.

**Article 7:** After completing experiments, laboratory personnel must thoroughly clean the laboratory equipment, ensure that all instruments are in good condition and returned to their proper place, and clean the work area before leaving.

**Article 8:** The laboratory will conduct an emergency response drill every year during the summer break.

**Article 9:** Hazardous waste and chemicals in the laboratory must be properly managed and stored according to their classification, and handled in accordance with relevant regulations.

**Article 10:** These regulations shall be implemented upon approval by the department council, and the same applies to any amendments.