

SAFETY GUIDELINES
IN
PHYSICS LABORATORIES
(SGPL)



Danger
High voltage



WARNING
HIGH
TEMPERATURE

DANGER



RADIATION HAZARD



LASER IN USE

Risks of working in physics laboratories

- Electric shocks resulting from handling uninsulated electrical wires and improper switches.
- Unsuitable electrical connections for electrical capacities.
- Exposure or direct contact with radioactive materials without using appropriate tweezers.
- Loss or damage to vision as a result of direct exposure to laser beams.
- Exposure to burns as a result of contact with hot surfaces.
- The risk of poisoning or illness as a result of handling chemicals without knowledge in the laboratory.



Guidelines for security and safety in physics laboratories

- **Do not tamper with the electric switches, gas or water valves.**
- **Do not touch the devices until you are sure they are safe.**
- **Make sure that the current or electrical power of the source is suitable for the device before using it.**
- **Do not connect any electrical circuit directly without the presence of the supervisor.**
- **In the event of any emergency, inform the supervisor directly.**
- **Do not touch the surfaces directly until after checking their temperature.**
- **Ensure that radioactive materials are cleared in their cabinets and do not handle them without appropriate tweezers.**

Laboratory Safety Rules in Physics Department

- ❖ Suitable fire extinguishers are available in a prominent place in every physics laboratory, and they are tested periodically.
- ❖ There are smoke detectors in the laboratories for the early detection of fire.
- ❖ A first aid kit is available in every laboratory, and some necessary medicines and medical supplies are insured in it.
- ❖ Each physics lab contains two doors to distribute students 'exit during emergencies.
- ❖ Lab-Benches and Lab-Workstation are made of heat and electrically insulating epoxy.
- ❖ Student facilities are equipped with a circuit breaker to cut off the power quickly when students at risk.
- ❖ Each laboratory is equipped with an electric switchboard with a circuit breaker to cut off the electricity completely from any devices.
- ❖ Department has spacious, adequate ventilation and lighting laboratories taking into account the distribution of students in the laboratories.
- ❖ Each laboratory is provided with safety signs and indicative panels to ensure the safety of students and staff.
- ❖ At the beginning of the semester, students receive an intensive lecture on security and safety procedures in the laboratory.