



MBARARA UNIVERSITY OF SCIENCE & TECHNOLOGY  
**Faculty of Applied Sciences and Technology**

Laboratory Safety Rules and Procedures



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## A. Accessing the Laboratories

- a) Unauthorized entry into laboratories is strictly prohibited. No entry into the labs will be granted after closing hours and before opening hours
- b) Entry and use of any laboratory and/or equipment is subject to availability, and timetabled practical sessions take precedence over personal work.
- c) The lab technician reserves the right to refuse entry and access to the laboratory or to certain sections of the lab.
- d) No equipment or furniture should be carried out of the laboratory without authorisation.
- e) Vandalising and damaging lab equipment and furniture is strictly prohibited. Any such reckless activity will lead to the invocation of serious disciplinary action.
- f) Strictly no food or drinks should be taken into the laboratory
- g) Emergency exits should be kept clear at ALL times.

## B. Laboratory Rules and Safety

### 1. Before the Lab Session

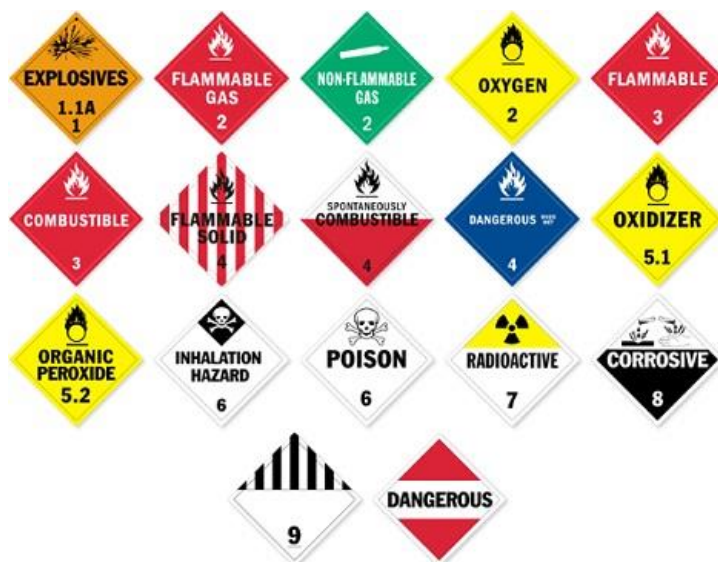
- a) Always wait for instructions from your instructor before proceeding with the lab exercise
- b) Risk assessment and identifying hazardous material: always assess the riskiness of equipment and materials by studying the danger and warning labels.

Always read identification labels

- What is it?
- What harm can it cause?
- Basic precautions for storage, handling, and use

Never handle any substance, unless:

- You know what it is
- You know how to handle it



- c) Compressed air
  - Hoses under pressure have to be secured.
  - Only use appropriate air nozzles with relief valves
  - Improper nozzles can inject air into the skin
  - Air can enter blood stream, reach the heart, and cause heart failure and/or death

## 2. During the Lab Session

- a) Turn off and unplug equipment before removing the protective cover to clear a jam, replace a part, adjust or troubleshoot. Always as a qualified person to open equipment if this will create exposure to energized parts operating at 50 volts or more.
- b) Ensure that the power is OFF before you start connecting up a circuit. Get your circuit diagram approved by the instructor first, and then connect up the circuit strictly as per the approved circuit diagram.
- c) Do not use an electrical outlet or switch if the protective cover is ajar, cracked or missing.
- d) Only use DRY hands and tools and stand on a DRY surface when using electrical equipment, plugging in an electric cord, etc.
- e) Never put conductive metal objects into energized equipment. Avoid wearing metallic, loose jewellery such as rings, watches, neck chains, bracelets, etc.
- f) Always pick up and carry portable equipment by the handle and/or base. Carrying equipment by the cord damages the cord's insulation.
- g) Unplug cords from electrical outlets by pulling on the plug instead of pulling on the cord.
- h) Re-route electrical cords or extension cords so they are not run across the floor, under rugs or through doorways, etc. Stepping on, pinching, or rolling over a cord will break down the insulation and will create shock and fire hazards.
- i) Do not overload extension cords, multi-outlet strips and wall outlets.
- j) Heed the warning signs, barricades and/or guards that are posted when equipment or wiring is being repaired or installed or if electrical components are exposed.
- k) Always wear closed, rubber-soled flat shoes in the laboratory. Restrain long hair and refrain from wearing loose clothing.
- l) Only handle volatile chemicals under a fume hood and use mechanical transfer devices for toxic chemicals.
- m) In case you notice any abnormal condition in your circuit (like insulation heating up, resistor heating up, etc.) switch off the power to your circuit immediately and inform the instructor immediately
- n) Always keep hot soldering irons in their designated holders when not in use.

## 3. After the Lab Session

- a) Clean up all workspaces and properly dispose of waste in the waste bins
- b) Return any equipment and apparatus to their designated storage positions
- c) Lock/tag out any equipment found to be defective
- d) Turn off:
  - Water, gas, and power supplies
  - Heating apparatus
  - Lights
- e) Lock the door upon exiting

## C. Handling Emergencies

- a) Ensure that you know the location of all emergency exits, and keep these clear at all times
- b) In case of a fire, exit the laboratory and building immediately. Do not attempt to put out the fire using materials other than the fire extinguisher.
- c) Contact your instructor/lab technician immediately in case of any injuries or accidents