

- Support all beakers and flasks with clamps. Do not use cracked or chipped glassware

2. LABORATORY SAFETY EQUIPMENT

2.1 Fume Hoods

- When handling more volatile, odorous or flammable chemicals, you are required to work in a fume hood instead of your lab bench.

2.2 Safety Showers

- Safety showers are used to extinguish fire and wash off hazardous substances from the skin of personnel.



2.3 Eye Wash Stations

- Eye wash stations are used to flush the eyes if hazardous substances are splashed into them.



2.4 Fire Extinguishers

- Fire extinguishers are used to extinguish or control small-scale fires.

2.5 Fireproof Blankets

- Fireproof blankets are used to wrap a burning victim or to control small-scale fires in the lab.

3. EMERGENCY MANAGEMENT

3.1 In the event of fires or other emergencies, the following procedures apply:

- When your clothes or body are on fire:
 1. You should immediately either drop to the floor and roll over or run to the emergency shower
 2. Once the fire is extinguished, chill any burns with cool water and seek medical attention



- In case of a small-scale fire, use a fire extinguisher or fire blanket to extinguish or control it.



- In the event of a big fire/blaze in the lab:
 1. Shout "Fire" to alert others and evacuate the room through the nearest safe exit ASAP.

2. Call 9-1-1

3. When the fire alarm is triggered, proceed quickly to the nearest exit.
4. Do not return to the building until the "All Clear" is given by the security manager.

3.2 Chemical spills

- Establish what material has been spilled and what personal protective measures should be followed.
- Acids or Alkalis-first neutralize them and then absorb with a paper towel, cloth or mop
- Mercury-cover with sulfur then remove with a dustpan and place it in a sealed container

Chemistry Lab Safety



Safety matters

NJIT

**THE DEPARTMENT
OF
CHEMISTRY
&**

ENVIRONMENTAL SCIENCES

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Basic Lab Safety Guidelines is aimed to minimize or eliminate hazards in the labs of the Chemistry Department.



Knowing these guidelines before you enter the lab and abiding by them all times is critical!!!

1. PERSONAL SAFETY

1.1 Footwear and clothing

- Non-slip, closed-in footwear must be worn.
- Open footwear such as open-toed shoes is not allowed.
- Shorts or cutoffs must be covered.
- Thobe, ghutra and loose clothing are not allowed in the lab.
- Lab coats, aprons, and other protective clothing should be worn when working in the lab.



1.2 Eye protection

- Working in the lab would necessitate regular safety glasses or chemical safety goggles.



1.3 Hand protection

- Gloves are required to protect your hands against abrasions, cuts, punctures, snags,

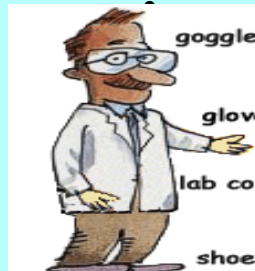
- chemical burns, thermal burns and temperature extremes in the work environment.



- Always wash your hands with soap and water before leaving the lab.



1.4 Chemical safety



Wear protective goggles and a lab coat whenever heating or pouring hazardous chemicals.

Do not undertake any work unless the appropriate safety precautions are adopted.



- Do not put your nose over the container waft the fumes toward your nose with one hand.



- Do not mouth pipette chemicals when transferring solutions. Instead, use a pipette bulb.



- Never taste any chemicals
- Never pour water into a concentrated acid. Acid should be poured slowly into water.



1.5 Heating safety

- Never look into a container as you are heating it.
- Never point the end of a test tube being heated at yourself or others
- Never heat in a closed container



1.6 Safe behavior

- Do not engage in horseplay, pranks or other acts of mischief in a chemistry lab.
- Never eat or drink in the lab

