

**DEPARTMENT OF CHEMISTRY**  
**POLICIES AND PROCEDURES FOR PROPER MAINTENANCE AND UTILIZATION**  
**OF LABORATORY**

**LAB ATTIRE POLICY: To ensure all students are in proper attire and safety accessories while performing their laboratory experiments.**

- Cotton dress with long lab coats provided by the department, safety goggles or glasses, toe covered shoes must be worn while working in the laboratory
- Hand gloves to be used while handling chemicals
- Face mask to be used if necessary
- Long hair to be tied
- Loose sleeves must be rolled up

**FOOD AND DRINK POLICY: To ensure the prevention of direct and indirect entry of chemicals into the body.**

- Students must come to the lab after having their meal since carrying out experiments in a Chemistry laboratory with empty stomach is very dangerous to health
- No food or beverage is to be consumed in the laboratory
- Water bottle must not be taken to the working table
- Hands must be thoroughly washed using handwash liquid / soap immediately after the lab classes

**GLASSWARE AND CHEMICAL POLICY: To ensure the safe handling of chemicals and glassware.**

- Chemicals and glassware must not be taken out of the laboratory
- Glassware required for the experiments must be received after making entry in the student log book
- Chemical labels must be read carefully before usage
- Always chemicals or reagent bottles must be capped tightly after use
- Separate dropper or pipettes must be used for different chemicals to avoid contamination
- Broken glassware must be discarded in the bin labeled **disposable glassware**
- The used chemicals must not be disposed into the sinks or stock bottles
- Chemical waste must be segregated and collected in separate containers
- Chemicals must be disposed according to the instructions given by the instructors
- Containers with fuming chemicals must be opened and used in fume hood only

**ANALYTICAL EQUIPMENT AND INSTRUMENTS POLICY: To ensure proper usage and maintenance of equipment.**

- The analytical equipment and instruments must be used after making entry in the log book
- If any trouble shooting arises in the instrument, it must be reported to the teachers / lab assistants
- The instruments must be calibrated before taking the measurements
- Spillage of chemicals near the equipment and instruments must be avoided
- Instruments must be turned off properly
- The balance must be cleaned after weighing

**SAFETY POLICY: To ensure safe working in the laboratory.**

- Availability of fire extinguisher and the operating procedure must to be known
- First aid kit available in the laboratory must be used when required
- The students must be aware of the nature of chemicals before handling
- Appropriate first-aid measures must be known to the students in case of minor chemical accidents
- Any emergency must be reported immediately to the instructors
- Mouth pipetting of any solution is strictly prohibited and must use suction bulb to pipette
- LPG pipes must not be turned on unnecessarily. The knobs of gas pipes must be properly closed after use
- Use tongs and/or protective gloves to handle hot objects
- Never reach across an open flame or burner
- Always add acid to water and not the reverse
- Tasting or smelling of chemicals must be avoided
- Test tubes must be heated over the flame slowly and kept away from reach to avoid splashing of chemicals on hands or body
- Hands must be thoroughly washed after the laboratory class

**GENERAL LABORATORY BEHAVIOUR POLICY: To ensure appropriate lab ethics.**

- Students must come prepared with the procedures for the experiments to be performed
- Must listen to or read instructions carefully before attempting to do experiments in the lab
- Students must not sit on the floor in the laboratory
- Working area must be uncluttered
- Hot glassware must not be placed in water
- Chemicals must not be mixed together unless it is required in the procedure