

Procedures and Policies for Maintaining and Utilizing Laboratories of SBVR Degree College, Badvel

1. Introduction

This document outlines the procedures and policies for maintaining and utilizing the laboratories of SBVR Degree College, Badvel. The purpose of this document is to ensure the safety, integrity, and optimal use of laboratory facilities for academic and research purposes.

2. Scope

These procedures and policies apply to all faculty, staff, and students who use the laboratories of SBVR Degree College, Badvel. They cover a wide range of topics, including:

- Laboratory access and scheduling
- Laboratory safety procedures
- Use and care of equipment and chemicals
- Waste disposal
- Laboratory cleaning and maintenance
- Incident reporting

3. Laboratory Access and Scheduling

- Laboratory access is restricted to authorized personnel only. Authorized personnel include faculty, staff, and students enrolled in courses that require laboratory work.
- Laboratories will be available for use during designated times posted on the laboratory doors and online schedule.
- Prior booking is mandatory for using specific equipment or conducting experiments that require exclusive access. Booking can be done through the online booking system or by contacting the laboratory in-charge.
- Unauthorized use of laboratories is strictly prohibited.

4. Laboratory Safety Procedures

- Safety is the top priority in all laboratories. Everyone using the laboratories must adhere to the following safety procedures:
 - Wear appropriate personal protective equipment (PPE) such as lab coats, safety glasses, gloves, and closed-toe shoes at all times.

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- Familiarize yourself with the safety protocol and emergency procedures of each laboratory before starting any work.
- Attend mandatory laboratory safety training conducted by the college.
- Report any unsafe conditions or incidents immediately to the laboratory in-charge or faculty member present.
- Never eat, drink, or smoke in the laboratory.
- Wash your hands thoroughly before leaving the laboratory.

5. Use and Care of Equipment and Chemicals

- Laboratory equipment and chemicals are valuable resources and must be used and cared for properly. The following guidelines apply:
 - Use equipment only for its intended purpose.
 - Only trained personnel are authorized to operate specific equipment.
 - Handle chemicals with care and follow proper labeling and storage procedures.
 - Report any damaged or malfunctioning equipment immediately.
 - Clean and properly store equipment after use.

6. Waste Disposal

- Proper disposal of laboratory waste is essential for safety and environmental protection. The following guidelines apply:
 - Dispose of all waste, including chemicals, biological materials, and sharps, in accordance with designated procedures and containers.
 - Do not dispose of any hazardous waste down the drain or in the trash.
 - Label waste containers clearly and accurately.

7. Laboratory Cleaning and Maintenance

- Maintaining a clean and orderly laboratory is crucial for safety and efficiency. The following guidelines apply:
 - Clean up your work area before leaving the laboratory.
 - Report any spills or contamination immediately.
 - Do not block sinks, benches, or equipment.
 - Participate in cleaning activities organized by the laboratory in-charge.

8. Incident Reporting

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- Any accident, injury, or incident that occurs in the laboratory must be reported immediately to the laboratory in-charge, faculty member present, and college administration.
 - Provide a detailed account of the incident, including the cause and any injuries sustained.
 - Cooperate with any investigation into the incident.

9. Responsibilities

- Laboratory In-charge: Responsible for the overall safety, maintenance, and operation of the laboratory.
- Faculty Members: Responsible for ensuring that students in their classes follow safe laboratory practices.
- Students: Responsible for following all safety procedures, using equipment properly, and maintaining a clean work area.

10. Policy Review and Updates

- This policy will be reviewed and updated periodically to reflect changes in regulations, equipment, and best practices.

11. Additional Information

- For further information on laboratory safety procedures, please refer to the Laboratory Safety Manual and relevant Safety Data Sheets (SDS) available in each laboratory.

By following these procedures and policies, we can ensure that the laboratories of SBVR Degree College, Badvel remain safe, productive, and valuable learning environments for all.

Laboratory Safety Guidelines of SBVR Degree College

Introduction

Laboratories provide valuable opportunities for students to gain practical experience in science. However, they can also present potential hazards if proper safety precautions are not followed. These guidelines are intended to promote a safe and responsible environment for everyone working in the laboratories of SBVR Degree College.

General Guidelines

- Personal Protective Equipment (PPE): Always wear appropriate PPE, such as safety glasses, gloves, and lab coats, as dictated by the experiment being conducted.



safety glasses

- Food and Drink: Eating, drinking, and chewing gum are strictly prohibited in the laboratory. Food and drink can contaminate chemicals and experiments, and can also be a choking hazard if inhaled.
- Smoking and Electronic Devices: Smoking and the use of electronic devices, such as cell phones, are not permitted in the laboratory. These activities can create sparks or interfere with sensitive equipment.
- Cleanliness and Order: Keep your work area clean and organized to minimize clutter and prevent accidents. Clean up spills immediately and properly dispose of waste materials.
- Report Hazards: Report any safety hazards or concerns to your instructor or lab supervisor immediately. Do not attempt to handle hazardous situations yourself.

Chemical Safety

- Chemical Labeling: Always read and understand the labels of all chemicals before using them. Pay attention to hazard symbols and warnings.
- Chemical Handling: Handle chemicals with care and avoid contact with skin and eyes. Use appropriate tools and techniques for transferring and dispensing chemicals.

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- Chemical Storage: Store chemicals in their designated cabinets or containers and ensure they are properly labeled. Never store chemicals in food or drink containers.
- Chemical Disposal: Dispose of chemicals properly according to their safety data sheets (SDS). Do not pour chemicals down the drain or into trash cans.

Fire Safety

- Know the Location of Fire Exits: Familiarize yourself with the location of fire exits and emergency evacuation procedures.
- Report Fires Immediately: Report any fire, no matter how small, to your instructor or lab supervisor immediately. Do not attempt to fight a fire yourself unless you are trained to do so.
- Fire Extinguishers: Learn how to use a fire extinguisher in case of an emergency. Only use the appropriate type of extinguisher for the type of fire.

Electrical Safety

- Use Grounded Equipment: Only use electrical equipment that is properly grounded to prevent electrical shock.
- Do Not Overload Outlets: Do not overload electrical outlets by plugging in too many devices at once. This can cause overheating and fire hazards.
- Report Damaged Equipment: Report any damaged electrical equipment to your instructor or lab supervisor immediately. Do not use damaged equipment.

Emergency Procedures

- Know the Emergency Contact Information: Know the phone number for emergency services and the location of the nearest first aid kit.
- In Case of a Chemical Spill: If a chemical spill occurs, evacuate the area immediately and notify your instructor or lab supervisor. Do not attempt to clean up the spill yourself unless you are trained to do so.
- In Case of a Fire: If a fire breaks out, evacuate the area immediately and activate the fire alarm. Do not attempt to fight the fire yourself unless you are trained to do so.
- In Case of a Medical Emergency: If someone is injured or becomes ill, call for emergency services immediately and provide first aid if you are trained to do so.

By following these safety guidelines, we can help to ensure that the laboratories of SBVR Degree College are safe and productive learning environments for everyone. Remember, safety is everyone's responsibility.

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Chemical Inventory and Disposal Procedures for SBVR Degree College, Badvel

Chemical Inventory

Maintaining an accurate and up-to-date inventory of chemicals is crucial for safety, compliance with regulations, and efficient lab management. Here's how SBVR Degree College can manage its chemical inventory:

1. Initial Inventory:

- Conduct a physical inventory of all chemicals in the laboratories.
- Record each chemical's name, CAS number, quantity, storage location, and date of purchase.



CAS number on a chemical label

- Create a designated logbook or electronic database for inventory tracking.

2. Ongoing Updates:

- Update the inventory every time a new chemical is received or an existing one is used or disposed of.
- Record the amount used, date, and purpose for each chemical used.
- Regularly reconcile physical inventory with recorded entries to ensure accuracy.

3. Labeling:

- Ensure all chemicals are properly labeled with the following information:
 - Chemical name
 - CAS number
 - Concentration or percentage
 - Signal words and hazard symbols

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- Date of receipt
- Use durable labels that are resistant to chemicals and fading.

4. Storage:

- Store chemicals according to their hazard class and compatibility.
- Flammable liquids should be stored in safety cabinets away from heat sources.
- Acids and bases should be stored separately.
- Keep chemicals organized and easily accessible for authorized personnel.

Chemical Disposal

Improper disposal of chemicals can pose environmental and safety hazards. SBVR Degree College should follow these guidelines for safe and responsible chemical disposal:

1. Waste Minimization:

- Implement techniques to minimize waste generation, such as using smaller quantities of chemicals or performing microscale experiments.
- Consider using safer alternatives to hazardous chemicals whenever possible.

2. Segregation and Labeling:

- Segregate chemical waste based on its type and hazard class.
- Label waste containers clearly with the chemical name, concentration, and date of disposal.

3. Authorized Disposal Methods:

- Use authorized disposal methods for different types of chemical waste, such as:
 - Neutralization: For some acids and bases, neutralization with appropriate reagents can be done before disposal.
 - Chemical waste incineration: This method is suitable for certain hazardous chemicals under controlled conditions.
 - Waste collection services: Partner with licensed hazardous waste disposal companies for safe and legal disposal.

4. Documentation:

- Maintain records of all chemical waste disposal, including the type of waste, date of disposal, and disposal method used.

5. Training:

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- Provide training to faculty, lab assistants, and students on proper chemical inventory and disposal procedures.

By following these guidelines, SBVR Degree College can ensure the safe and responsible management of its chemical inventory and disposal, promoting a healthy and sustainable laboratory environment.