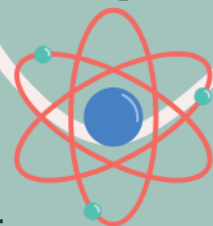


General Laboratory Safety Rules

At CeNS, we are committed to maintaining a safe, responsible, and sustainable research environment. All members, visitors, and students must strictly adhere to the following laboratory safety rules and protocols.



1. General Conduct

- Work in the laboratory only after proper authorization and training.
- Never work alone during hazardous experiments or outside regular working hours.
- Report all accidents, spills, or unsafe conditions immediately to the laboratory supervisor or safety officer.
- Maintain a clean and organized workspace; clutter increases the risk of accidents.
- Eating Food & Drinking beverages should be strictly avoided.

2. Personal Protective Equipment (PPE)

- Laboratory coat, safety goggles, and appropriate gloves must be worn at all times.
- Closed-toe shoes are mandatory; sandals or open footwear are not permitted.
- Long hair must be tied back, and loose clothing or jewelry should be avoided.
- Additional PPE (e.g., face shield, respirator, or heat-resistant gloves) must be used when required.



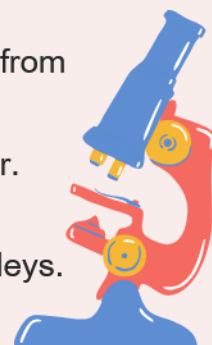
3. Chemical Handling and Storage

- Label all containers clearly with chemical name, concentration, hazard symbols, and date.
- Store chemicals according to compatibility:
 - Acids, bases, flammables, oxidizers, and toxics must be segregated.
- Never return unused chemicals to stock bottles to avoid contamination.
- Handle volatile or toxic substances only inside fume hoods with proper ventilation.
- Dispose of chemical waste only in designated containers following CeNS waste management protocols.



4. Handling Compressed Gas Cylinders (N₂, O₂, Ar, H₂, etc.)

- All cylinders must be securely fastened to a wall or support stand using appropriate clamps or chains.
- Use only approved regulators and fittings compatible with the gas type.
- Hydrogen and other flammable gases must be used in well-ventilated areas away from ignition sources.
- Do not tamper with cylinder valves, safety devices, or identification labels.
- When not in use, close cylinder valves and release line pressure from the regulator.
- Store cylinders upright in designated storage areas, segregated by gas type:
- Fuel gases (e.g., H₂) separate from oxidizers (e.g., O₂).
- Transport cylinders only with safety caps in place and using approved cylinder trolleys.



5. Electrical and Instrumental Safety

- Inspect all electrical equipment and cords before use. Do not use damaged cables or plugs.
- Turn off instruments after use or when unattended for long periods.
- Avoid overloading electrical circuits and using unauthorized extension cords.
- Report any instrument malfunction immediately to technical staff or supervisors.





CENTRE FOR NANO AND SOFT MATTER SCIENCES

Autonomous Institute under the Dept. of Science and Technology, Govt. of India

General Laboratory Safety Rules

6. Fire Safety

- Know the location and operation of fire extinguishers, fire blankets, and emergency exits.
- Do not block exits or access to safety equipment.
- In case of fire:
 - a. Stop work immediately and alert nearby personnel.
 - b. Evacuate the area.
 - c. Call for assistance (security/safety officer).

7. Waste Disposal

- Segregate chemical, biological, and solid waste as per CeNS disposal guidelines.
- Label waste containers with contents and hazards before disposal.
- Do not pour chemicals or solvents into sinks.

8. Emergency Procedures

- Familiarize yourself with emergency exits, safety showers, eyewash stations, and first aid kits.
- In case of exposure or injury:
 - a. Flush affected area with water for at least 15 minutes (for chemical exposure).
 - b. Seek immediate medical assistance.
 - c. Always inform the supervisor / any faculty immediately available

9. Environmental and Ethical Responsibility

- Practice minimum-waste and energy-efficient research methods.
- Dispose of all materials responsibly to minimize environmental impact.
- Respect shared facilities and ensure proper handover of instruments and spaces after use

10. Compliance

- All researchers, students, and visitors are expected to comply with these rules and institutional safety policies.
- Repeated non-compliance may lead to suspension of laboratory access.

Individual labs:

- Safety rules and procedures have been displayed in individual labs, including Physics, Chemistry labs and Other Labs

Dr. Goutam Ghosh
9007873603

Coordinator for Safety, Health and Conservation (SHC)

Mr. Raghavendra: Lab In charge - 9590281277
Usha S R: Safety Executive - 9945849486

