

School of Chemical Sciences Chemical Hygiene Plan

1. Purpose

The School of Chemical Sciences (SCS) Chemical Hygiene Plan (CHP) establishes the requirements and responsibilities necessary to maintain a safe and healthy laboratory environment for all faculty, staff, students, and visitors.

This document supplements the Division of Research Safety (DRS) Laboratory Safety Guide by providing laboratory safety expectations specific to SCS facilities. Together, these documents support compliance with the Occupational Safety and Health Administration (OSHA) Laboratory Standard (29 CFR 1910.1450), University policies, and other applicable federal and state regulations.

The CHP is reviewed annually by SCS Safety personnel. Proposed revisions are submitted to the SCS Director for review and approval before implementation.

2. School Facilities

The School of Chemical Sciences occupies five interconnected buildings on the University of Illinois Urbana-Champaign campus:

- Noyes Laboratory (NL)
- Chemistry Annex (CA)
- Davenport Hall (DH)
- Roger Adams Laboratory (RAL)
- Chemical and Life Sciences Laboratory (CLSL) Building A

Facility Maintenance Requests

Laboratory personnel should submit a work order through [Reaction](#) for non-emergency building or laboratory maintenance issues.

These include:

- Fume hood performance concerns
- Eyewash or safety shower concerns
- Electrical outlet and lighting concerns
- Plumbing concerns
- General facility maintenance requests

Questions regarding maintenance requests should be directed to the SCS Facilities and Safety team at scs-facilities@illinois.edu.

Facility Emergencies

For emergencies involving building infrastructure, including significant water flooding, passengers stuck in elevator or other afterhours and weekend emergency's, (4:30pm to 8am) contact Public Safety at 217-333-1216.

After contacting Public Safety, email the SCS Facilities and Safety team so they can assist with coordination and follow-up.

3. Roles and Responsibilities

3.1 Principal Investigators and Laboratory Supervisors

Principal Investigators (PIs) are responsible for ensuring that laboratory operations are conducted safely and that appropriate measures are in place to protect all individuals working in or entering their laboratories.

Faculty members, laboratory supervisors, and individuals with supervisory authority shall:

- Maintain a safe laboratory environment.
- Ensure compliance with university policies and applicable safety regulations.
- Develop, implement, and maintain a Laboratory Safety Plan.
- Identify laboratory hazards and establish appropriate controls.
- Ensure laboratory personnel receive required safety training before beginning work.
- Provide and enforce the use of appropriate personal protective equipment.
- Maintain laboratory equipment in safe operating condition.
- Maintain accurate laboratory information within DRS safety management systems.
- Review laboratory safety documentation annually and update it whenever laboratory operations change.

Laboratory Safety Officer

Each laboratory is encouraged to designate a Laboratory Safety Officer (LSO) or Laboratory Safety Contact to assist the Principal Investigator in implementing the laboratory safety program.

Typical responsibilities include:

- Maintaining [Standard Operating Procedures](#).
- Coordinating laboratory-specific training.
- Monitoring routine laboratory safety practices.
- Assisting during laboratory inspections and audits.
- Serving as the primary contact for SCS Safety and DRS.

Designation of an LSO does not relieve the Principal Investigator of responsibility for laboratory safety.

3.2 Laboratory Personnel

Every individual working in an SCS laboratory shares responsibility for maintaining a safe research environment.

Laboratory personnel are expected to:

- Complete all required safety training.
- Follow laboratory policies, procedures, and Standard Operating Procedures.
- Wear required personal protective equipment.
- Use engineering controls properly.
- Report hazards, incidents, injuries, unsafe conditions, and near misses immediately.
- Participate in maintaining a clean, organized, and safe laboratory.
- Stop work and seek guidance whenever uncertain about a procedure or hazard.

3.3 Joint Safety Team

The [Joint Safety Team \(JST\)](#) supports the School's commitment to continuous improvement in laboratory safety by:

- Promoting safe laboratory practices.
- Reviewing laboratory incidents and identifying trends.
- Recommending improvements to laboratory safety programs.
- Supporting departmental safety initiatives.
- Encouraging communication between researchers, faculty, and safety staff.

3.4 Division of Research Safety

The [Division of Research Safety](#) provides institutional oversight and technical support for laboratory safety programs by:

- Managing laboratory safety management systems.
- Providing hazardous waste collection and disposal services.
- Conducting annual laboratory safety audits.
- Investigating laboratory incidents and assisting with root cause analyses.
- Providing consultation, regulatory guidance, and safety training resources.

4. Laboratory Safety Plan

Each laboratory must maintain a current [Laboratory Safety Plan \(LSP\)](#) that identifies laboratory-specific hazards and documents the procedures used to minimize risk.

The Laboratory Safety Plan serves as the laboratory's Chemical Hygiene Plan under OSHA's Laboratory Standard and should reflect the actual operations performed within the laboratory.

The plan shall address hazards associated with:

- Hazardous chemicals
- Biological materials
- Recombinant or synthetic nucleic acids
- Radioactive materials
- Lasers
- Physical hazards
- Specialized equipment
- Other laboratory-specific operations

The Laboratory Safety Plan shall be reviewed at least annually and updated whenever personnel, procedures, equipment, or hazards change.

5. Training Requirements

No individual may perform laboratory work independently until all required safety training has been completed.

At a minimum, laboratory personnel shall:

- Read the [DRS Laboratory Safety Guide](#).
- Read the SCS Chemical Hygiene Plan.
- Pass the [SCS Safety Examination](#).

- Complete all required [DRS online safety training](#).
- Complete laboratory-specific safety training.
- Review laboratory Standard Operating Procedures.
- Review the [Building Emergency Action Plan](#).
- Demonstrate an understanding of applicable laboratory hazards before beginning work.

Training shall be appropriate to the hazards present and include instruction on:

- Hazard communication
- Chemical safety
- Biological safety
- Radiation safety
- Laser safety
- Physical hazards
- Engineering controls
- Emergency procedures
- Personal protective equipment
- Waste management
- Laboratory-specific operating procedures

Training must be documented and updated whenever laboratory hazards or responsibilities change.