

University of Illinois
F. Seitz Materials
Research Lab (MRL)

August 2018



Important Dates and Reminders

Hands On Fire Extinguisher Training:

- Held at MRL - Put on by the Urbana Fire Department
- 9:30am on September 14th
- Location: Grassy area on south side (back) of ESB, by generator/ESB loading dock
- Email [Maisie Kingren](#) to reserve your spot

REMINDERS

- Use buddy system when working in labs
- Do not leave labs unlocked
- Be aware of your surroundings
- Remove lab PPE before leaving lab spaces. PPE is not allowed in public areas

Safety Newsletter

This month, the newsletter covers appropriate laboratory attire and basic personal protective equipment (PPE).

Appropriate Laboratory Attire

Appropriate laboratory clothing provides the basic protection against skin exposure in a lab environment. It is important to wear the appropriate clothing in the lab at all times, even during the hot summer months. We have had a higher number of proper lab attire violations in recent weeks. If you are going to be coming to the lab in shorts or sandals, you **MUST** bring long pants and appropriate shoes to change into before entering the lab.

Lab users **MUST** always wear footwear that completely covers the feet. Sandals and open/holed shoes are not allowed. Lab users **MUST** be wearing clothing that covers the legs should always be worn in a laboratory. Loose clothing and long hair should be confined. Loose clothing and long hair could easily come in contact with chemicals, catch on fire, or even become caught in machinery.

In addition to the appropriate laboratory attire, basic personal protective equipment (PPE) must be worn. Basic PPE is considered to be lab coats, safety glasses, and gloves. These should be worn in the laboratory when there is a potential for exposure to hazards. Additional PPE that may be required for certain procedures include a face shield, apron, acid smock, or shoe covers.

The PI/laboratory supervisor shall determine which PPE is required to protect laboratory personnel from the hazards they are exposed to and provide such equipment without cost to the personnel. DRS can assist with the selection. It is important to review the safety data sheets (SDS) before working with chemicals to know what PPE is required while handling it.

All protective clothing should be removed and left in the laboratory before entering non-lab areas. All protective clothing is either disposed of by the lab or laundered, it should never be taken home by personnel.



Useful Contacts

MRL Safety Committee
safety@mrl.illinois.edu

MRL Safety Engineer
Maisie Kingren
mlswans2@illinois.edu
217-244-8637

Division of Research Safety
drs@illinois.edu
217-333-2755
www.drs.illinois.edu

Safety and Compliance
fsserviceoffice@illinois.edu
217-333-0340
www.fs.illinois.edu/services/safety-and-compliance

Personal Protective Equipment

Personal Protective Equipment (PPE) is a temporary defense barrier against exposure to hazardous material. It is important to understand its limitations and how PPE works. By reading safety data sheets and consulting with safety professionals, you can find the appropriate PPE for you lab work.

Lab Coats

Lab coats should be chosen based on the hazard present. Protective lab coats should be worn by personnel while in the laboratory. Certain lab coat materials are better suited for fires, aqueous splashes, biological agents, or solvent splashes.

Chemically resistant aprons and smocks provide better protection against chemical splashes than lab coats. They should be worn for chemicals with a high dermal toxicity (e.g., hydrofluoric acid), when handling large amounts of corrosive chemicals, or when splashes are likely to occur.

Hand Protection

Gloves should be worn for performing any procedure that requires the handling of hazardous materials, contaminated surfaces, or equipment. Disposable gloves should not be washed, reused, or sprayed with chemical solvents such as ethanol. Gloves should not be worn when touching clean surfaces like keyboards, cell phones, and door knobs.

Glove materials vary widely in effectiveness in protecting against specific hazards. There are disposable gloves, reusable gloves, fire-retardant gloves, thermal gloves, cut resistant gloves, and leather gloves. Refer to a chemical resistance chart, a glove manufacturer, or contact [Maisie Kingren](#) or [DRS](#) for assistance in appropriate selection.

Safety Glasses

Safety glasses must be ANSI Z87.1 certified to offer the desired protection. However, do not rely solely on this certification; safety eyewear must be chosen to specifically address the hazards (e.g., chemical splash, flying projectile, etc.). There are safety glasses, goggles, and face shields. It is important to know which is appropriate for the working you're doing in the lab.

Prescription glasses are not substitutes for safety glasses unless approved prescription safety glasses are purchased. Goggles and face shields should be worn when an elevated splash hazard is present.

Respiratory Protection

The use of respirators should be avoided by using engineering controls. If engineering controls are physically impossible or insufficient, a respirator may be required. **Contact [Maisie Kingren](#) and [Safety and Compliance \(S&C\)](#) for an assessment of the work and potential exposure.** If a respirator is required, compliance with the UIUC Respiratory Program administered by S&C is mandatory. The program includes a medical assessment, fit testing, and instructions on proper use.

More details on proper PPE, and pictures, can be found on the DRS webpage following this [link](#).