

University of Illinois Materials Research Lab (MRL)

February 2019



Important Dates and Reminders

IMPORTANT DATES:

Nano Safety Workshop

- February 28, 2019
- 1:00pm-4:30pm
- 190ESB
- FREE Registration: go.illinois.edu/NanoSafety
- Coffee and Cookie Break

Mandatory Lab Safety Contact Meeting:

- Pre-DRS lab safety audit meeting
- March 12, 2019
- 10:00am-10:50am
- 190ESB

DAILY 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's topics are laboratory safety plans and 2019 DRS lab safety audit information.

Laboratory Safety Plan (LSP)

Laboratory safety plans must be lab specific and accessible to everyone who works in the lab. They should provide information on the specific hazards to the lab and how to control possible exposures. There should be training information and records found in the lab safety plan. The [DRS layout for a lab safety plan](#) satisfies the OSHA requirement for a chemical hygiene plan. There are four elements every lab safety plan should have. These include:

Safety Management Procedures:

- Safety contacts - One or more individuals that are selected by the PI to assist with SOP's, training, waste disposal, monthly fire extinguisher checks, and weekly eyewash testing.
- Laboratory Hazard Profile - The hazard profile outlines the hazards found in the labs and that are addressed by SOP's and training. Once it is created you can go back in and edit it as your lab hazards change.

To start a laboratory hazard profile, complete this [DRS chemical hazard assessment](#) and send it to DRS. You can also send them your chemical inventory list for them to help build your laboratory hazard profile.

- Annual Review - It is required by OSHA to have the laboratory safety plans evaluated annually. New hazards, new policies, SOPs, and training should be reviewed throughout the year. It should be documented once the annual review has been completed, even if there are no changes made to the lab safety plan.
- Laboratory Safety Audits - DRS completes the Lab Safety Audit for University of Illinois labs once a year. You can view the audit findings and address them by logging into the [DRS website](#).
- Laboratory Door Signs - These are created once you complete the [laboratory hazard profile](#) on the DRS website. The sign includes emergency contacts and summary of hazards present in the lab. These should be done annually or when safety contacts or hazards change. To request a new door sign, you can email labsafety@illinois.edu.

Standard Operating Procedures (SOP):

- Risk Assessment - Before completing an SOP, you need to perform a risk assessment. This process helps identify the specific hazards in your lab and safety issues associated with your experiment procedures. Risk Assessment worksheets for both chemical and biological experiments can be found on this [DRS Webpage](#).
- SOP Format - You can have SOPs for types of chemicals (flammable, acidic, HF, etc.), individual SOPs for each procedure, or you may have procedures that have common risks that can be covered in one SOP.

Elements that need to be incorporated into an SOP include: Scope/Synopsis, Hazard identification/Risk Assessment Summary, Procedure/Techniques, Disposal/Cleanup, Emergency Response, and Training Documentation.

Below are two available templates. However, you may write your SOP in a different format that better suits your procedures and trainings in your lab.

DRS SOP template, [here](#).

College of Engineering SOP template, [here](#).

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

Laboratory Safety Guide:

- This guide provides the basic safety information and expectations for laboratories here on campus. [This guide](#) must be printed out and put in your LSP. You are required to have the most up-to-date copy of this document in your lab safety plan or on a desktop computer in your lab. DRS updates this document annually.
- If working at Biosafety Level 2, print out [this guide](#) for your LSP.

Safety Training Checklist:

- **Minimum Training requirements** - Minimum training requirements for lab personnel list by DRS include: Read the laboratory safety guide, take DRS online training for Laboratory Safety, review the location and use of safety equipment, Review hazards and SOPs, review lab specific information and policies, and participate in ongoing training.
- **Checklist Format** - Using a template is not required, however you MUST have documentation that lists the required trainings for the lab and documents who took them and when the training was completed. You can find a DRS training checklist template on this [DRS Webpage](#).

DRS Audit Information

This year's DRS lab safety audit for MRL will take place towards the end of March. There will be a mandatory lab safety contact meeting **Tuesday March 12th at 10am**. If a lab safety contact cannot make it, another member from the group must be present.

A few tips/reminders:

- Have regular group lab clean up days
- Review the audit findings from previous audits and make sure they were addressed
- Use the DRS audit checklist as a reference while cleaning up labs. If you don't have one, see Maisie Kingren
- Send out old chemicals and chemicals that are no longer being used, through the DRS waste system
- Check your fume hoods to make sure they have been certified in the last 12months
- Fire extinguishers must be checked monthly
- Eye washes must be checked weekly

Nano Safety Workshop 2019 - Free Registration!

1:15 Maisie Kingren, MRL Safety Engineer & a DRS Safety Professional

How we currently handle Nano Safety on Campus

1:30 Laura Hodson, CIH, FAIHA, Coordinator of NIOSH's Nanotechnology Research Center

Risk Management and Best Practices for Handling Engineered Nanomaterials

2:15 Prof. Cathy Murphy, Chemistry, MRL Associate Director

Nanoparticles and the Environment: The Good, the bad, and the Ugly

3:00 Cookies and Coffee Break

3:30 David Wasescha, Labconco Product Manager

Nano Containment

4:00 Dr. Edward Chainani, Safety Engineer, College of Engineering

Control Banding Nanotool

4:30 Closing Remarks



Nano Safety Workshop
February 28, 2019
1:15 - 4:50
190 ESB

Register:
go.illinois.edu/NanoSafety

ILLINOIS
 Materials Research Laboratory
 COLLEGE OF ENGINEERING