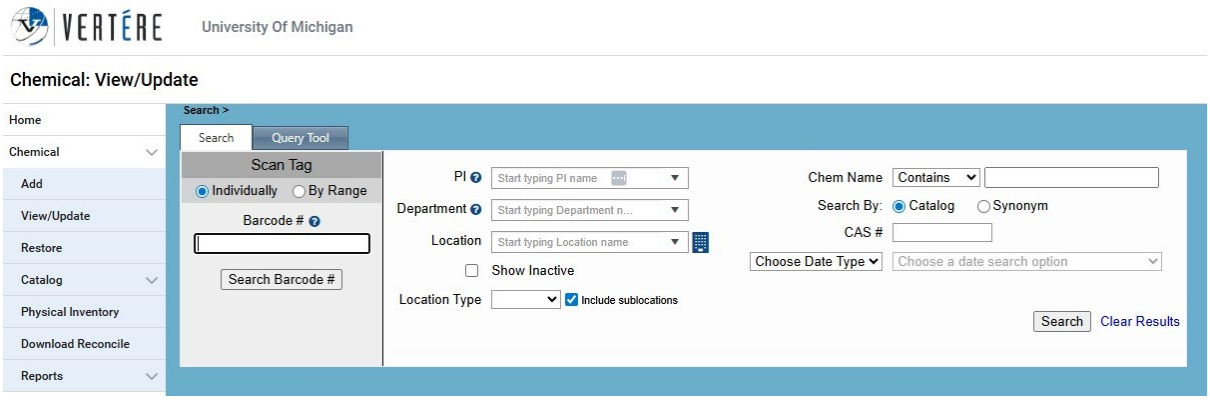
ISSUE 16

Safety first

BRINGING A SAFER WORKPLACE TO ALL MEMBERS OF THE CHEMISTRY BUILDING

Inventory System

Vertére's Chemical Inventory Management Module is a barcode enabled system that tracks chemicals from receipt to disposal, supporting safety, compliance, and risk reduction across laboratories.



We are actively working to improve chemical inventory accuracy in the Chemistry building and appreciate the labs that have completed their reconciliations with nine labs successfully finished theirs this year. Our current process makes full audits straightforward. If your lab would like to complete a reconciliation and update its chemical inventory, please contact Christopher Bluteau at **chrisblu@umich.edu** to schedule for 2026.

All users must have their own Vertére account and should not use anyone else's login. Creating an account is quick, requiring only a 10–15 minute training with Christopher Bluteau. This brief session covers how to search, transfer, and manage chemicals in the system. Individual accounts help maintain accurate inventories and meet federal and state requirements for chemical tracking. Keeping your login information secure also prevents audit discrepancies and protects you from compliance issues.

Lessons Learned

Needlesticks

Needlestick injuries remain the most common type of incident in our laboratory environment. Within our graduate laboratories, we experience an average of at least one such injury per month. Notably, most of these incidents occur during the opening and unsheathing of new, unused needles. While these situations do not carry the risk of chemical or biological contamination, the frequency of injury is still unacceptable. Our overall objective is to eliminate needlestick incidents entirely.

To reduce the likelihood of injury, all personnel should implement the following practices:

- Exercise heightened caution when opening and handling new needles, ensuring hands are positioned safely away from the needle tip at all times.
- Utilize blunt-tip needles whenever feasible. Although blunt tips do not eliminate the possibility of needlesticks, they substantially reduce the risk of skin penetration and can help mitigate the severity of injuries.

By consistently applying these measures, we can significantly improve safety outcomes and reduce preventable injuries across our laboratory spaces.

Lab Injuries

In recent months, we have observed an increase in near misses and injuries related to laboratory personnel attempting to move heavy or awkward equipment without proper preparation. These incidents highlight the importance of planning, communication, and the use of appropriate resources when handling large or cumbersome items.

Before initiating any move, please assess the weight, dimensions, and stability of the equipment to determine the level of support required. Ensure that a sufficient number of individuals are available, and confirm that you have the proper tools, such as carts, pallet jacks, dollies. Never attempt to lift or transport heavy equipment alone or without the correct equipment, as doing so significantly increases the risk of strains, crush injuries, and accidental damage to laboratory instruments.

Additionally, take time to clear pathways and remove potential tripping hazards prior to moving any equipment. Communicating your plan to coworkers in nearby areas can help prevent unexpected interactions or obstructions during the move.

If you require assistance, please remember that support staff are typically available at the loading dock during regular business hours. They can provide guidance, lend appropriate equipment, or assist the safe movement of large items. Seeking assistance when needed is a key part of maintaining a safe working environment for everyone.

Lessons Learned

Small Fire

During the opening preparations in one of our research labs, a student discovered evidence of a small fire inside one of the laboratory's waste pails. Upon opening the container, the student noticed scorch marks and partially melted weigh boats, indicating that a fire had occurred sometime overnight. Fortunately, the pail had been fully closed, which limited the supply of oxygen and prevented the fire from spreading beyond a small area within the container.

A preliminary assessment suggests that the incident may have been caused by a reactive material, specifically a metal chloride, coming into contact with a damp Kimwipe that had been used to clean the lab counter. Many metal chlorides can react vigorously with moisture, and even a small amount of residual water can be enough to generate heat or ignite nearby combustible materials.

The laboratory has already taken corrective actions to prevent similar incidents. Metal chlorides and other moisture-reactive chemicals will now be disposed of in a dedicated waste container clearly labeled for incompatible materials. This added separation will help ensure that reactive substances do not come into contact with wet materials or other waste streams that could trigger hazardous reactions.

This incident serves as an important reminder to all lab users to remain attentive when disposing of materials and to be aware of potential incompatibilities. Proper waste segregation is a critical component of maintaining a safe laboratory environment.

As a reminder, **all fires, even minor ones that self extinguish need to be reported to DPSS immediately** for state reporting. An officer or fire marshal may come out to take a look and get a statement but there is no punitive action for accidents. You can contact DPSS by calling 911 or their nonemergency number: (734) 763-1131.

Why Regular Glasses Aren't Enough in a Chemistry Lab

Prescription eyeglasses are made to improve vision—not to protect your eyes from laboratory hazards. They are **not a safe substitute for safety glasses** in a chemistry lab.

Regular glasses do not provide impact protection and can shatter if struck, increasing the risk of eye injury. They also leave gaps around the eyes, allowing chemical splashes, vapors, or particles to reach the eye. In some cases, liquid chemicals can become trapped behind lenses, making injuries worse.

Safety glasses and goggles are designed to resist impact and shield the eyes from all directions. For those who need vision correction, prescription safety glasses or safety goggles worn over regular glasses offer proper protection.

- **Bottom line:** Normal glasses help you see—safety glasses protect your sight. In the lab, protection is essential.

Upcoming Inspection

Always Be Ready!

In August 2025 EGLE conducted an inspection of campus including Central Campus where we are located. This inspection wasa success and they did not find any issues. Although we likely will not have another of EGLE inspections for a few years, we also have many other agencies (DEA, MiOSHA, EPA, etc) that may inspect our labs with little or no notice. Always keep your lab clean and safe.

FALL TERM, 2025

Classes begin .....Aug 25, Mon

Labor Day Holiday.....Sept 1, Mon

Fall Study Break..... Oct 13-14, Mon-Tues

Thanksgiving Recess ..... Nov 26-28, Wed-Fri

Classes End ..... Dec 8, Mon

Study Days……Dec 9, Tues & Dec 13-14, Sat-Sun

Examinations ……Dec 10-12, Wed-Fri & Dec 15-17, Mon-Wed

Commencement.....Dec 14, Sun

Dry Ice/LN2

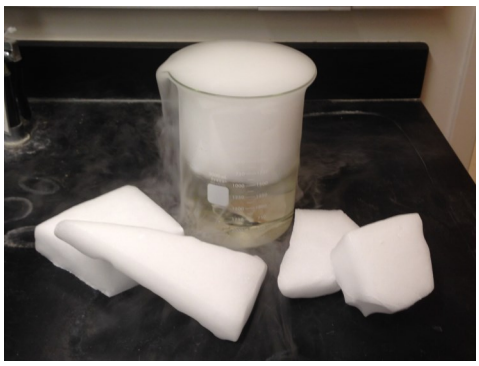
Dry Ice

Dry ice is available everyday from the cooler outside of room A602 in the basement.

Liquid Nitrogen

Department dewars are accessible 24 hours a day outside of room A602 for small (under 10L) liquid nitrogen quantities.

Large dewars of liquid nitrogen can be ordered by emailing chrpeter@umich.edu AND chrisblu@umich.edu by noon one business day before its needed.



Contact Information

Package Shipping
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Waste Issues
Kacey Vaughn— vkacey@umich.edu
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Safety Issues/Concerns
Christopher Peters—chrpeter@umich.edu
Phone—763-4527
Tracy Stevenson—steventi@umich.edu
Phone—764-7316

Chemical Inventory Questions
Christopher Bluteau—chrisblu@umich.edu
Phone—647-8932

Maintenance Requests
Routine Work Request Form on Chemistry Intranet