Chemistry Safety Notes

Volume 6, Issue 2 **March 2018**

"Chemistry Safety Notes" is published by the Chemistry Dept. Safety Committee, written & edited by Debbie Decker, Safety Mgr.

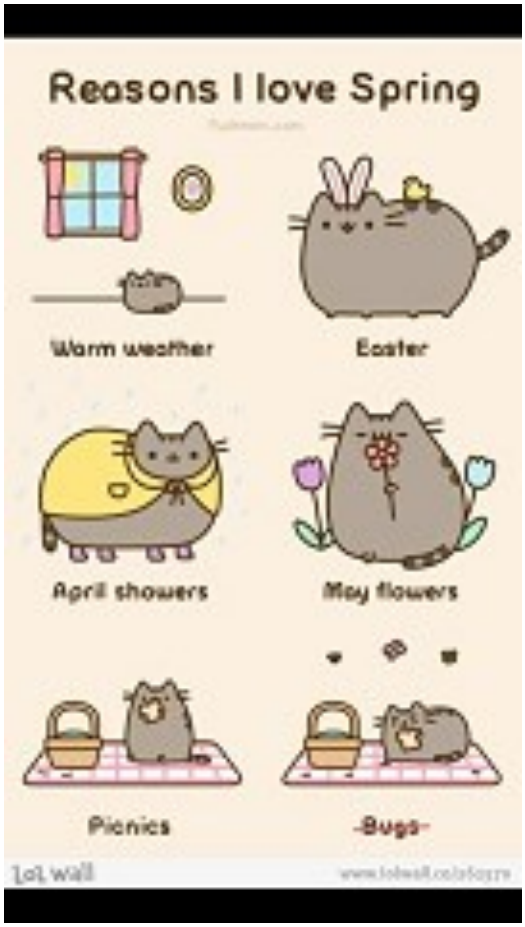
Fire Code Inspection—Feedback

We completed the Fire Code inspections yesterday with good compliance, all around. In the evolution of the Fire Code, there's increased focus on the materials of construction for delivering flammable or toxic gases. Tygon tubing will no longer be acceptable for delivering flammable gases so we'll need to make some changes in that regard.

With information from the Fire Marshal's office, I'm in the process of researching the appropriate materials that will be compliant and suit our needs. Stay tuned for those recommendations.

Additionally, a fair number of heat guns and hot plates where the cords are damaged or melted were discovered. Please inspect this equipment and repair or replace the damaged cords.

As soon as I get the report from the Fire Marshal's office, I'll send it along to PIs and safety representatives.



PPE Reminders

The new PPE laundry contract with Aramark seems to be working smoothly. But your lab coat can't come back to you if it isn't properly marked.

Please check in the collar of the coat and make sure the bar code says "Property of Aramark." If it doesn't, please use the duct tape hanging from the hamper to mark your coat inside the collar with "CHEM—PI Name." The coats come back and are sorted by PI. If it isn't marked, who knows where it might end up!

Now that the weather is starting to warm up a bit, covered legs and covered feet are always required in the laboratory. And don't forget your ankles!

CUPA Audits

As we've been working through the Fire Code inspections, I took the opportunity to look for potential CUPA issues around hazardous materials and hazardous waste management. I've already reached out to some of you about some tidbits to correct.

I didn't have time, though, to go through any documentation. Please review your training documents and make sure everyone is up to date on IIPP, EAP, Lab Safety Plan and Safety Net #13.

Audits will occur on Wednesday morning, starting 4/4, and continuing until the County is done inspecting the department. This includes dispensaries at SLB and EPS.

ChemTag Project

(Editor's note: additional information about the RFID project I mentioned last issue)

To help PIs and their staff maintain accurate chemical inventories and quickly reconcile their inventories, Environmental Health & Safety (EH&S) is collaborating with the Chemistry Department to initiate the ChemTag project, beginning in the next few months. ChemTag couples reliable Radio Frequency Identification (RFID) technology with the Risk and Safety Solutions (RSS) "Chemicals" application, to decrease the time needed to reconcile chemical inventories from a few days to a few hours (at most) based on proof-of-concept efforts in the Casey lab.

EH&S is working closely with Chemistry's leadership and subject matter experts to tailor this initiative to Chemistry's unique research/teaching activities and its chemical receiving operations.

The basic process will include entering chemical container information into the Chemicals application and applying a ChemTag to the container. For chemical containers already in your lab, teams of EH&S staff will apply ChemTags to commodity chemicals following this basic process: 1) pre-assess your lab to better understand your space and the unique challenges it may present when our staff enter to tag chemical containers, 2) an EH&S team (supervisor and student assistants) will begin applying ChemTags to commodity chemicals in your lab.

The tagging process may take several days and EH&S will provide daily progress updates and operate in the least disruptive manner possible. After the tagging, EH&S will provide lab personnel instructions and additional ChemTags to apply to containers that EH&S employees will not touch (e.g., lab-manufactured chemicals, desiccators, glove boxes, etc.).

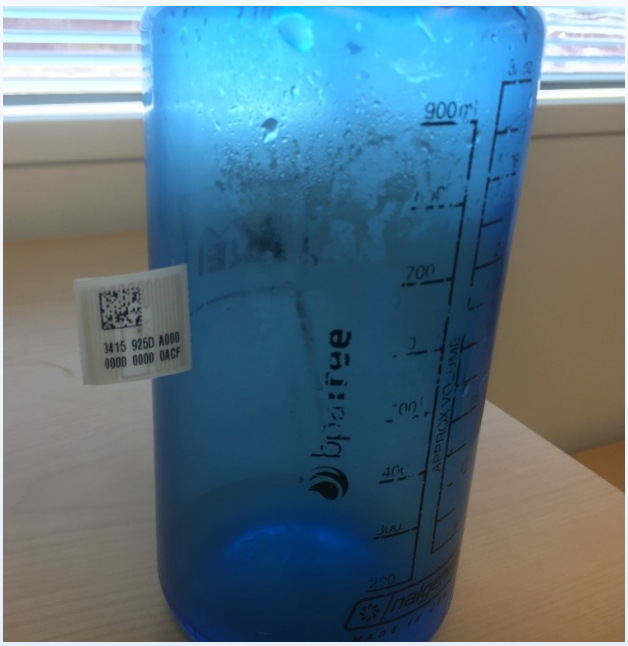


Figure 1: Example of a ChemTag affixed to a water bottle. Each tag is embedded with an RFID antennae for remote reading with a wand. Optical barcodes are also included to maintain current application functionality.

EH&S anticipates conducting the first lab pre-assessments in mid-May and deploying tagging teams shortly thereafter. Throughout the project, members of the project team will provide updates to faculty at their monthly meetings, followed by broader communications to their lab personnel. Likewise, regular updates will be posted in Chemistry Safety Notes.

Your questions and comments are always welcome at chemtag@ucdavis.edu.

Guinness World Record Attempt—Update

On April 30th, the Chemistry Club, the Education and Outreach Committee and the Department, among others, will attempt to break the Guinness World Record for the most simultaneous Elephant Toothpaste demonstrations.

An on-campus venue has been secured and logistics meetings have been scheduled. Stay tuned for the registration website to be publicized. You will have to be registered to participate. This is how Guinness certifies the record. We will need volunteers, in addition to participants, so if you wish to help with the event, please let me know.

Put it on your calendar—it will be glorious!

SOP Task Force Needs You!

Chemistry grad students: Are you looking for an opportunity to gain marketable skills outside the lab? Do you care about or are you involved in lab safety? Do you like free snacks? Consider joining the Standard Operating Procedure (SOP) Task Force! We are actively recruiting post-QE grad students (preferably with faculty endorsement) in all chemical disciplines, especially chemical biology.

The SOP Task Force is a pro-active group of chemistry grad students and chemical safety professionals charged by the Chemical and Laboratory Safety Committee (CLSC) to develop SOP templates for campus-wide distribution and use. We leverage our expertise to develop SOP templates that provide in-depth and accurate information on specific chemicals, chemical hazard classes, or process/equipment hazards. It's a big, highly-collaborative task, but we know how to make writing an SOP into a party.

What do you get out of this? Free snacks! Also highly marketable resume skills, safety experience that will impress future employers, and a letter of recommendation. Need another reason? Our former SOP Task Force members have an excellent track record of finding employment after grad school!

Questions? Interested? Contact Alexi Ball-Jones at aa-balljones@ucdavis.edu.