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Training

Visit www.ehso.emory.edu for registration information.

Shipping Training

July 16th at 9:00 am

Radiation Safety Training

2nd Tuesdays at 1:00 pm

Laboratory Safety Training

2nd & 4th Thursdays at 10:00 am



Eye Wash Testing

Someone in your lab should test the eye-wash station once a month.



Biosafety Cabinets / Chemical Fume Hoods Certifications are required annually.



PPE

Personal Protective Equipment

Choice to be based on potential exposures involved:

- **Eye:** Glasses, goggles & face shields
- **Gloves:** Appropriate for the type of procedure
- **Clothing:** Gowns, lab coats, aprons, coveralls
- **Respirators:** Appropriate for the type of procedure



Fire Extinguishers

Check fire extinguishers in your lab:

- A. Is it present and mounted in its proper location?
 - B. Is it readily accessible?
- If it appears to need servicing contact the Maintenance HELP line at 3-1500 or the Fire Dept at 3-5122.

Explosions in the Lab

What can be learned from the death of a young biochemist at UCLA?

A few days after Christmas of 2008, a young technician in a biochemistry laboratory at the University of California-Los Angeles began to transfer a tablespoon of **t-butyl lithium** from one container to another. T-butyl lithium is pyrophoric, meaning it ignites on contact with air, but Sheri Sangji wasn't wearing a lab coat. Instead, she was wearing a flammable synthetic sweatshirt. Somehow the material spilled onto her clothing, and she was engulfed in flames. Sangji died from her burns 18 days later, and UCLA officials bemoaned the "tragic accident."

A recent incident on Emory's campus...

A fire accident occurred on Emory's campus recently. The researcher was working with a Rotovap apparatus. While removing the flask (which contained **Ethyl acetate**) a few drops of the solvent dropped on a hot stir plate which then caught fire. The individual reacted, dropping the flask which erupted in flames. While one coworker extinguished the fire, another coworker rushed the individual to the safety shower and then to the emergency room. The researcher received minor burn injuries on their side, arm and face.

There are several lessons to be learned from this incident. Wear your PPE! Go to hands on fire extinguisher training offered by Emory Police Department. Make sure that the heat source has cooled or is removed before around a highly flammable liquid. Look for more on rotovap safety in upcoming Lab Rat news-

Areas of concern for safe Rotovap operation

Risk	Tips to follow
Implosion	Glass ware used should be free of cracks. Heavy walled vacuum flask should be used. Shatter proof collection bulb should be used. Safety netting around condenser should be used.
Explosion	Properties of compounds used should be thoroughly evaluated. Thermally unstable compounds like azides and peroxides should not be used in rotovap.
Hazardous waste	The condenser should be cooled always. The collection bulb should be emptied regularly.





Radiation Inspection - July 2009

The Department of Natural Resources has announced an inspection of Emory University's radioactive materials license scheduled for **July of 2009**. In order to maintain compliance please review the list of items below:

1) **Training:** All personnel working with radioactive materials must attend Radiation Safety Training for Laboratory Workers. **Refresher:** Radiation Safety Refresher Training is required every 3 years and is available online (www.esho.emory.edu). If you require training on PET, Fluoroscopy, X-Ray, or Irradiators contact Fran Dickens.

2) **Security/Storage of Radioactive Materials:** Laboratories authorized for radioactive materials use must remain locked when unattended. Stock vials must be secured in a lockable freezer, or lockbox within a freezer if sharing a suite with other P.I.'s. **Use/Store** radioactive materials only in your authorized locations posted with "**CAUTION RADIOACTIVE MATERIALS**" symbol.

3) **Personal Protective Equipment:** Lab coat, gloves, and closed toed shoes are the minimum PPE requirements when working with radioactive materials. Long pants and safety goggles are recommended.

4) **Dosimetry:** Assigned badges should be worn while working with radioactive materials. Store control badges outside of the HOT LAB. Return old badges to Radiation Safety immediately after receiving a new badge.

5) **ALARA Principles:** AS LOW AS REASONABLY ACHIEVABLE: Time, Distance, and Shield-

ing are methods to reduce exposure. (1) Reduce amount of time near a source, (2) Increase the distance from the source, (3) Use proper shielding between you and the source.

6) **Record Keeping:** Radiation records binder should be current with authorization, renewals, amendments, use logs, surveys, training certificates, and dosimetry reports. Record isotope use online with EHS Assistant.

7) **Surveys:** Contamination surveys must be completed and documented within the calendar week radioisotopes were used. Follow-up surveys must be completed if contamination exceeds 200dpm/100cm² or after a spill. Remember to survey yourself before leaving the hot lab (survey shoes, lab coat, and hands).

8) **Waste:** Radioactive waste must be divided by waste type (dry, liquid, liquid scintillation), and isotope (do not mix isotopes). **Do not** mix hazardous chemicals with radioactive materials. Use EHS Assist to generate radioactive waste inventory forms.

9) **Transfers:** Radioactive materials must be transferred through and transported by Radiation Safety. The radioactive materials transfer form is located at www.esho.emory.edu.

10) **NO EATING, DRINKING, SMOKING, APPLYING COSMETICS, OR FOOD STORAGE IN THE LAB**

EMERGENCIES & SPILLS (CALL 727-5922)

Chemical Waste

Waste drop-off locations are as follows:

Woodruff Building (WMB L302): Thursdays (1Pm - 4Pm)

Whitehead and Rollins (Whitehead G44): Thursdays (9 am- 12 noon)

Chemistry Department- Emerson 133

All other buildings: request pick up by calling (404) 727-7091

Lab Rat June 2009

Notice

- ◊ This newsletter is a tool to help fulfill a legal requirement for ongoing safety training.
- ◊ Supervisors are responsible for ensuring that individuals in their area have read and understood the information that applies to their area.
- ◊ The signed newsletter should be placed into the PIs EHSO Binder.

Signature indicates: I have read and I understand the information in the June 2009 Lab Rat Newsletter. Use an additional sheet of paper for more signatures, if needed and attach to this document.

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EPA Audit

Congratulations on a job well done during our EPA Peer Audit! On the behalf of EHSO, we would like to extend our sincere thanks to all of you for your participation in this process. Your hard work and cooperation were essential for the inspection to be a success, and we are very proud of your efforts. While there are items that we will need to be corrected, overall the peer auditors were very impressed with our performance. A report is currently being generated that will highlight any areas for improvement. We will receive this report in the near future, and that information will be shared with you. Once we have this information, it will be imperative to make all the necessary changes to achieve compliance. Again, we thank you for all that you have done during this process, and we look forward to working with you in the future!



Building Liaisons

Each building has been assigned an EHS Specialist to assist with any questions/concerns you may have. The Liaisons will also conduct a monthly walkthrough of each lab.

- **Dionna Thomas 404-727-4673**
Woodruff, Woodruff Extension, Winship & Rollins
- **Meagan Parrott 404-712-9480**
Dental, Clinic B, Pediatrics, North Decatur, Carlos Museum, Yerkes, Hope Clinic, Medical Office Tower, Crawford Long, Rollins & RSPH
- **Rodrick Esaw 727-1348**
Whitehead, Math & Science, Anthropology, Wesley Woods, Emerson, Briarcliff Campus, Atwood & Chemistry

You may also find updated information and forms at www.esho.emory.edu.