August 2008 SCS Safety Newsletter

Topics covered in this issue:
- SCS Safety Training Requirements
- Laboratory Glassware Waste Disposal
- Laser Safety

SCS Safety Training Requirements:

The start of the fall semester is quickly approaching and along with the new semester, many new students and laboratory employees will join the SCS. In order to comply with federal regulations all employees must complete certain SCS Safety Training Requirements PRIOR to commencing research work in the SCS. The purpose of the Code of Federal Regulations (CFR) part 1910.1200, Hazard Communication, is to ensure that all chemical hazards in a given work place are evaluated and that all information concerning the hazards of these chemicals is transmitted to employers and employees. CFR 1910.1200 states that PRIOR to beginning work with hazardous chemicals, employees must be provided applicable information and trained on the hazards associated with their work environment.

To comply with this regulation, ALL employees in SCS Laboratories (i.e.; research assistant, graduate student, undergraduate research assistant, teaching assistant, etc.) are required to read the School of Chemical Sciences Chemical Hygiene Plan and pass the SCS Safety Exam PRIOR to beginning any laboratory work. The purpose of this requirement is to provide necessary safety information and confirm that employees understand this information.
The SCS Chemical Hygiene Plan can be located at:

Instructions for the SCS Safety Exam can be located at:
http://safety.scs.uiuc.edu/safety_exam.php

ALL INDIVIDUALS WORKING IN SCS LABORATORIES MUST COMPLETE THESE REQUIREMENTS PRIOR TO STARTING ANY LABORATORY WORK. Contact the SCS Safety Coordinator at eduvall@uiuc.edu with any questions regarding this training.

Laboratory Glassware Waste Disposal:

The SCS Safety Office has been informed by the Division of Research Safety that there is often confusion regarding laboratory glassware waste disposal. Laboratory Glassware Waste and SHARPS are NOT the same waste stream. SHARPS disposal instructions were mentioned in the May 2008 SCS Safety Newsletter (http://safety.scs.uiuc.edu/news_letter/Newsletter5-08.pdf). Non-biologically contaminated laboratory glassware DOES NOT need to be disposed in a SHARPS container. Laboratory Glassware Waste includes:

- Intact or broken laboratory containers such as flasks, beakers, bottles, etc.
- Small, empty glass containers, ampoules, test tubes, vials
- Plastic pipettes and micropipette tips (glass pipettes are considered a sharp)
- Thin-layer chromatography (TLC) plates, watchglasses

The disposal method for laboratory glassware waste depends on whether the item for disposal is contaminated with a hazardous material, the type of contaminate(s) and whether or not the glassware can be sufficiently decontaminated. After sufficiently decontaminating laboratory glassware, (for decontamination instructions consult: http://www.ehs.uiuc.edu/css/guidesplans/wasteguide/chapter9.aspx?tbID=f6) the waste may be collected in a puncture proof box, sealed, and labeled "Clean Laboratory Glass - Trash." The box may then be placed in the dumpster.

If the laboratory glassware cannot be decontaminated or has ANY chemical residue or odor, the glassware must be disposed of through the Division of Research Safety. Contact the SCS Chemical Safety Coordinator at eduvall@uiuc.edu to obtain disposal instructions for contaminated laboratory glassware.

Laser Safety:

All class 3b and 4 lasers are required to be registered with DRS. For more information contact SCS Safety Personnel regarding this requirement. When working with lasers, the following safe working practices should be followed:

- Know the hazards associated with the laser(s) with which you are working.

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• Warning signs should be posted at all entrance doorways to areas containing optical light hazards. NOTE: not all laser light or other potentially dangerous light can be seen by the human eye.

• Intense laser light paths should be marked. Before adding or removing optical components, anticipate and examine projected light paths.

• Always wear specially designed protective glasses or goggles when working with optical light hazards. Eyes and skin must be protected when operating open UV light sources (including UV absorbance, LC detector, and hollow cathode lamps).

• Reflective jewelry should be removed before working with lasers. NOTE: laser light reflected off a ring can permanently blind you.

• Laser beams should be kept at or below chest height.