## LAB POLICIES

# FOR THE ECE CHEMICAL PREPARATION LAB (ECERF 6-078)

#### **INTRODUCTION**

The Chemical Preparation (Chem-Prep) lab is located in ECERF room 6-078; it is a department resource available to research groups for use when using chemicals that need a fume hood.

#### LAB ACCESS

All authorized users will be given card access to enter the lab with their ONEcard.

No-one is allowed in the lab without authorization.

To become an authorized user, the research group must have been approved, through the application process. Also each individual user must have completed the mandatory training courses.

#### **TRAINING**

All users are required to take the following training:

- Laboratory Safety, Chemical Safety, and WHMIS (all three are online through EH&S) http://www.ehs.ualberta.ca/Training.aspx
- 2. Chem-Prep Lab Orientation (Offered in house by the ECE safety co-ordinator)

In addition, the users must complete Lab/Experiment specific training (to be done by PI for each group)

#### **CHEMICAL STORAGE & HANDLING**

You are expected to follow the UofA Laboratory Chemical Safety Manual which can be found here: <a href="http://www.ehs.ualberta.ca/DocumentsandProcedures/ManualsandCodesofPractice.aspx">http://www.ehs.ualberta.ca/DocumentsandProcedures/ManualsandCodesofPractice.aspx</a>

#### **Chemical Labels**

As this is a shared lab, please pay special attention to chemical storage. In addition to the standard WHMIS labeling, labels must clearly indicate the PI/group in addition to the real user, and must have a date.

#### **Chemical Storage**

Secondary containers are strongly recommended in this lab, even for chemicals that don't strictly require it.

Chemicals are not to be stored in this laboratory indefinitely. This lab is intended to be a temporary work space for your team, please make sure to remove chemicals that are no longer actively needed.

#### **Chemical Disposal**

Disposal of all waste is the individual user's (or group's) responsibility. Instructions for waste disposal are in the chemical safety manual.

Last update: June 5 2014 Page 1 of 4

#### **Freight Elevator**

All Lab users have card access to the freight elevator for the purpose of transporting chemicals between the loading dock area and the lab; chemicals must never be taken in the regular elevator.

#### **FUME HOOD USAGE**

Standard instructions for using a fume hood can be found here:

http://www.ehs.ualberta.ca/EHSDivisions/OccupationalHygieneandChemicalSafety/ChemicalSafetyManagement.aspx

#### Of particular note:

- Do not mix incompatible chemicals in a fume hood EVER! Separate hoods must be used for acids and solvents so that no accidental mixing happens.
- Keep the fume hood clean and uncluttered. Apparatus and chemicals should normally be kept in the fume
  hood only if they are a component of the operation for which the hood is being used. Fume hoods should
  not be used for long term storage of chemicals or apparatus.
- Minimize foot traffic around the fume hood. A person walking past a fume hood can create turbulence, causing vapours to flow out.

# ALWAYS CHECK THAT YOUR FUME HOOD IS WORKING PROPERLY BEFORE PROCEEDING WITH ANY CHEMICAL WORK.

#### **EQUIPMENT**

All major or permanent equipment (i.e. Fridges, ovens, fixed experiment set-ups) must be approved as part of the application process. If your needs change, you will need to get your new equipment approved, and discuss appropriate placement.

There is no communal equipment in the lab. You need permission to use anything that does not belong to your group.

#### **SUPPLIES**

The department does not provide any supplies in this lab, other than the infrastructure. You are expected to supply your own lab ware, gloves, goggles lab coat etc..

#### LABELLING YOUR WORKSPACE

If you are ever to leave your experiment unattended (even for a minute) you must leave a sign with your workspace. Your sign must include your name, contact, the date and the hazards/chemicals.

It is good practice to ALWAYS label your workspace; even if you don't plan to leave (you never know when the fire alarm will ring, or even the call of nature!). It is also good practice to label even if you feel there are no hazards (i.e. you are working with water) since many dangerous chemicals are indistinguishable from water by sight alone.

Last update: June 5 2014 Page 2 of 4

Your sign should look like this:

Work in progress! April 10, 2013

Chemicals in use: Acetone (Solvent)

Contact: John Johnson (123-1234)

#### **REPORTING INCIDENTS & NEAR MISSES**

All Incidents should be reported to the department safety coordinator immediately (Contact information can be found at the end of this document). Please use the university incident & investigation report form. If you are unsure how to complete the form the safety rep can assist you.

The form is located here: http://www.ehs.ualberta.ca/ReportanInjuryIncidentorConcern.aspx

#### **Chemical Spills**

Chemical spills must be reported using the above form. In addition, you need to be aware of how to respond to a spill. A spill kit is available in the lab, if you are able to safely clean up the spill please do so, otherwise please rope off the area and report the spill immediately. More information is available here:

http://www.ehs.ualberta.ca/ReportanInjuryIncidentorConcern/SpillorEnvironmentalRelease.aspx

#### **BEST PRACTICES FOR SAFETY**

#### **Hazard Assessments**

Before starting work (Every day) you should complete a hazard assessment, which should only take a minute if done frequently. Instructions and a template can be found here:

http://www.ehs.ualberta.ca/EHSDivisions/SafetySystemsAndStandards/HazardManagement.aspx

#### **Material Safety Data Sheets (MSDS)**

Although legislation allows for electronic copies of MSDS (and access to a computer & printer), we strongly recommend that you have paper copies on hand for the chemicals you are actively using. In an emergency this can save valuable time as no-one needs to run & print off the info before taking the injured party to the hospital. Note, MSDSs must be less than 3 years old.

#### **Working Alone & Working off hours**

Both working alone and working off hours are considered hazards. Be sure that you are aware of the lab working alone procedure (posted in lab) and also that you are aware of emergency contacts and procedures. You should also have a friend or colleague know where you are working and when to check on you.

Wear your PPE at all times in the lab. Inspect and replace you PPE if needed. Remove your gloves before touching the phone or door handle.

Page 3 of 4 Last update: June 5 2014

#### Housekeeping

Keep the lab clean and uncluttered. Clean up work areas upon completion of an operation or at the end of each work day.

#### LAB CONTACTS

#### Wendy Barton (Department Safety Officer)

Email: <a href="mailto:bartonw@ualberta.ca">bartonw@ualberta.ca</a>; Office: **780-248-1568** (internal 8-1568); Cell: 780-993-9770 (emergencies only!)

### Rick McGregor

Wendy on Mat leave till 2015, Rick Acting Department Safety Officer till she gets back.

Email: <u>ecestore@ualberta.ca</u>; Office: 780-492-2075 (internal 2-2075), Available Monday to Friday 8:00am till 4:00pm.

Last update: June 5 2014 Page 4 of 4