## **Laboratory Safety Training Check List**

| Name of Trainee  |
|--|
| Prof. Ronald Cohen   |
| Principal Investigator   |
| Chemistry  |
| Department   |
| SECTION 1. GENERAL SAFETY FOR ALL LAB MEMBERS  Note, all members of the Cohen Research Team must be trained in this section.   |
| I have reviewed the College of Chemistry Health & Safety Manual binder and I know the location where the binder is stored (B49 Hildebrand). I know I can access an up-to-date version is located online ( <a href="http://ccehss.berkeley.edu/">http://ccehss.berkeley.edu/</a> ). |
| I have completed the EH&S 101 Fundamentals of Laboratory Training(Trainer/Date)  |
| I have been informed about ergonomics in the laboratory and in the office. I know I can ask for new office equipment (i.e., chairs, keyboards, monitors, etc.) to make working in the office healthier for me(Trainer/Date)  |
| I will review my research at the beginning of each academic year and consult with Ron Cohen and the safety officer about any new training I may need or practices that I am no doing anymore(Trainer/Date)   |
| <b>SECTION 2. GENERAL EMERGENCY INFORMATION FOR ALL LAB MEMBERS</b> <i>Note, all members of the Cohen Research Team must be trained in this section.</i>   |
| I have been informed about the Injury and Illness Prevention Program (IIPP), Hazard Communication Program (HazCom), and the Emergency Response Program. (Trainer/Date)   |
| I have the contact information for others in my laboratory in the case of an emergency(Trainer/Date)   |
| I have been informed of the location of the laboratory's assembly point in case of emergency(Trainer/Date)   |
| I understand the standards for door locking/security(Trainer/Date)   |

November 2013

|      | I know the phone number to call in case of an emergency (2-9090). (Trainer/Date)  |
|------|---|
|      | I know location of the nearest fire alarm pull station (near room B39 near breezeway doors)(Trainer/Date)   |
|      | I know the locations of the phones in my office and laboratory(Trainer/Date)  |
|      | I have been informed about the Campus Emergency Notification System (Warn Me)(Trainer/Date)   |
|      | I have been informed about my group's procedure during a Shelter-in-Place(Trainer/Date)   |
| SECT | TION 3. GENERAL LABORATORY SAFETY INFORMATION.  Note, information for people that work in the laboratory. If you do not work in the laboratory, you may skip reading this information. However, do not that you may not work in the laboratory until you have undergone the training below. |
|      | I know where to find the Material Safety Data Sheet (MSDS) for the chemicals I will use (B49 Hildebrand), and I have been trained as to how to read them. I have a link on my web browser(Trainer/Date)   |
|      | I know where to find the group's Standard Operating Procedures (SOPs; B49 Hildebrand) and will become familiar with the pertinent information before performing a specific outlined task(Trainer/Date)  |
|      | I know where to find the group's Chemical Hygiene Plan (CHP; B49 Hildebrand) and have been trained about each section in the CHP. (Trainer/Date)  |
|      | I understand that it is my responsibility to know the hazards associated with the chemicals I use, and to protect my lab mates from those hazards. (Trainer/Date)   |
|      | I have been shown that there are no food safe areas in the laboratory and that all food and drink must be consumed outside the laboratory. (Trainer/Date)   |
|      | I have been informed of the lab policy regarding the importance of wearing proper lab attire (long pants, closed toe shoes), safety glasses and protective gloves, as well as the importance of keeping long hair tied back.  (Trainer/Date)  |

|      | I know how to determine what hazards each laboratory room contains. (Trainer/Date)   |
|------|--|
|      | I know that when someone is working in the fume hood, I cannot walk within 5 feet of the hood unless I have a laboratory coat on. (Trainer/Date)   |
|      | I understand I must discuss with the safety officer prior to buying new chemical compounds to check if a new SOP is required. Also, I understand I should inform the safety officer after I emptied a chemical to ensure the chemical inventory stays current.                                 |
| SECI | TON 4. INFORMATION CONCERNING EMERGENCIES IN LABORATORY  Note, this section is about emergencies in the laboratory. If you do not work in the laboratory, you do not have to read this section. But do note that you may not do work in the laboratory until you have undergone this training. |
|      | I have been shown the locations of the fire alarm activation box and the fire extinguishers closest to the labs.   |
|      | (Trainer/Date)   |
|      | I have been shown the location of the safety shower and eye wash closest to the lab and know how to use it. (Trainer/Date)   |
|      | I have been informed of the emergency evacuation routes from the laboratory and know our lab's emergency assembly point. (Trainer/Date)  |
|      | I have been shown the location of the first aid kits(Trainer/Date)   |

## SECITON 5. SPECIFIC LABORATORY SAFETY INFORMATION.

Note, this section is subdivided into the specific practices that are done in our laboratory. Read the appropriate sections for the research you are doing. Sections that you do not sign indicate you will not do that type of research until you have been trained.

## SUBSECTION 5.1. SAFETY INFORMATION FOR NON-GAS CHEMISTRY

Note, this section is for people that use liquid and solid chemical compounds for their research (e.g., standards, synthesis, fertilizers, etc.). I understand the importance of cleanliness and chemical hygiene in the lab. I recognize that all chemical spills, regardless of how seemingly insignificant, must be cleaned up immediately. I also recognize that it is very important to inform my lab mates of the spill so that they are protected from exposure. (Trainer/Date) I understand that I must renew my Hazardous Materials Spill Response Online Training once a year, and the safety officer will send a reminder at the beginning of the Spring Semester to renew the training. After completion, I will report to the safety officer that the training has been completed. \_\_\_\_\_(Trainer/Date) I have been informed of the lab policy regarding when to wear a lab coat. Also, I have been informed of the labe policy regarding when to wear splash goggles and gloves. (Trainer/Date) I have been informed of proper procedures for disposing of Hazardous Waste and know how to manage chemical waste: http://ehs.berkeley.edu/component/content/article/136hm/hazardous-waste-program-hwp/279-new-hazardous-waste-program-hwp.html. This includes liquid, solid, lab packs and silica gel waste. \_\_\_\_\_(Trainer/Date) I have been trained regarding the proper storage of solvents, the use of the flammables cabinets. I also have read which chemicals are incompatible with other chemicals in the SOPs located in Hildebrand B49. (Trainer/Date) I understand that I should never do synthesis alone. (Trainer/Date) SUBSECTION 5.2. SAFETY INFORMATION CONCERNING EQUIPMENT IN LABORATORY Note, not all the equipment listed below will be equipment that you may use in your research. You can only use the equipment you are trained on. I have been trained in the safe use of the fume hoods. (Trainer/Date) I have been trained in the safe use of the Teflon sealer. (Trainer/Date) I have been trained how to safely solder and that I should not solder alone. (Trainer/Date)

| If you | are a laser user,  |  |  |  |
|--------|--|--|--|--|
|        | I have undergone the laser safety training and laser eye exam prior to using a laser in the laboratory(Trainer/Date)   |  |  |  |
|        | I know the location of the laser SOPs (B49 Hildebrand)(Trainer/Date)   |  |  |  |
|        | I have been showed where the warning light for exposed lasers are located, how to turn the light on, and how to proceed safely during procedures that require the laser beam to be exposed(Trainer/Date) |  |  |  |
|        | I understand that I should never align a laser alone(Trainer/Date)   |  |  |  |
| If you | are not a laser user (note, you cannot use the lasers if you sign in this area),   |  |  |  |
|        | I have been showed where the warning light for exposed lasers are located and understand when the light is on, I should not be in the room. (Trainer/Date)   |  |  |  |
|        | SUBSECTION 5.3. SAFETY INFORMATION FOR GAS CHEMISTRY Note, this section is for people that use pressurized gas cylinders in their research.  |  |  |  |
|        | I have been trained in the safe use of pressurized gas cylinders(Trainer/Date)   |  |  |  |
|        | I understand that oxygen cylinders should not be stored within 20 feet of carbon monoxide cylinders(Trainer/Date)  |  |  |  |
|        | I understand that I must wear safety glasses whenever I am using a gas cylinder(Trainer/Date)  |  |  |  |
| If you | are making pressurized gas cylinder standards,   |  |  |  |
|        | I have read the SOP concerning the making of a pressurized gas cylinder standard. I have also been trained how to make the pressurized gas cylinder standard. (Trainer/Date)                             |  |  |  |

## 6. STANDARD OPERATING PROCEDURES – CHEMICAL CLASSES (UCLA SETTLEMENT)

| <ul> <li>2-Nitrobenzaldehyde</li> <li>Particularly Hazardous Substances—Nitrobenzene, Ozone, Isoprene, 1,3-</li> <li>Acutely Toxic Gases—Carbon Monoxide,</li> <li>Butadiene diepoxide, petroleum ether d-chloroform, laser dye, methacrolein</li> </ul> | the |
|--|-----|
| o Acutely Toxic Gases—Carbon Butadiene diepoxide, petroleum ether  |     |
| diacetate  | er, |
| <ul> <li>Peroxide Forming Chemicals—Diethyl ether</li> <li>Nitrogen Dioxide and Nitric Oxide</li> </ul>  |     |
| <ul> <li>Strong Corrosives—Nitric Acid,</li> <li>Sodium hydroxide</li> <li>Strong Oxidizing Agents—Oxygen,</li> </ul>  |     |
| Strong Acids—sulfuric acid   |     |

By checking or initialing each of the items above and signing this document, I acknowledge that I have received training regarding each of the above items. I acknowledge that the appropriate group member will train me prior to using any of the equipment or performing a task listed above. I acknowledge that safety is an important responsibility to which each member of the lab must commit. I also recognize that unsafe practices in the lab will not be tolerated and can lead to my dismissal from the group.

| Name of trainee (printed)                         | Signature of trainee |
|---|----------------------|
| I have reviewed these trainings with Ronald Coher | ı.                   |
| Name of PI (printed)                              | Signature of PI      |