**SEAS Peer Review Lab Inspection Form**

PI: Marko Loncar  
Date: 11/1/2013

Team Safety Officer Hosting Inspection: Wallace Hui

Building: McKay  
Rooms: 227, 225A, 225B

Inspection Team Number: 3  
Form Filled Out By: Mike Gerhardt

**EMERGENCY PREPAREDNESS**

- [x] ER Guide (flipchart) posted and filled out
- [x] Chemtracker door sign in place with current contact information
- [x] Exit signs in place and working
- [x] Exit accesses is clear
- [x] Evacuation routes posted in hallway
- [x] Emergency shower available with annual inspection sticker
- [x] Emergency eyewash available
- [x] Chemical spill kit available

**FIRE SAFETY**

- [ ] No storage within 18 inches of sprinkler head
  
  We didn’t see any fire sprinklers in the lab.
- [x] Horns and strobes in lab
- [ ] Fire doors closed (or self-closing, or open on magnetic-hold)

**COMPRESSED AND LIQUIFIED GASES**

- [x] Cylinders secured/upright/capped
- [x] Oxidizers stored 20 feet away from flammables
- [n/a] Toxic gases or flammable gases present?
  - Which ones? ____________________
  - Are they in ventilated cabinets or enclosures? _______

**CHEMICAL USE AND STORAGE**

- [x] All containers labeled
  - Peroxide forming chemicals present (ethers, THF, dioxane)
    - [ ] Dated
    - [ ] Disposed within a year
    - [ ] Perchloric acid in lab
    - [ ] Wash down hood available if being heated
    - [ ] HF in Lab
    - [ ] Calcium gluconate available and not expired
    - [ ] Picric Acid in lab
  - Nitric acid separated from organics
- [x] No glass bottles on floor without secondary containment
- [x] Appropriate segregation (acids from bases, acids from organics)
- [x] Refrigerated storage appropriately labeled NO FOOD
- [n/a] Rated refrigerator used for flammable storage
- [x] Approved flammable storage cabinet available

**CHEMICAL WASTE**

- [x] Chemical stocks and waste stored separately
- [x] SAA Posted
- [x] Containers in good condition
- [x] Containers capped
- [x] Secondary containment
- [x] Containers appropriately labeled
  - [x] Waste in words
  - [x] Hazard boxes checked
  - [x] Dated container not stored more than 3 days

**PPE**

- [x] Appropriate gloves available
- [x] Appropriate eye/face protection available
- [x] Lab coats available

If respirators used, what kind and why __________________________

**RADIATION SAFETY**

- [n/a] Radiation warning symbols posted
- [n/a] Radioactive waste labeled properly
  - (isotope, activity, RAM)
- [n/a] Radioactive waste appropriately capped/covered

**LASER SAFETY, NON-IONIZING RADIATION**

- [ ] Class 3B and 4 Laser system registered and has inspection sticker
  - One laser requires re-inspection.
- [n/a] Other devices (UV, NMR, RF, etc.) present
- [n/a] Evaluated
# ELECTRICAL SAFETY
- x Any automatic shutoffs in lab are clearly marked
- x Power cords in good condition
- x No extension cords for permanent use
- n/a GFCI used within 6 feet of sinks
- x Electrical cables and cords secured to prevent tripping
- x Electrical panels closed and unobstructed

# VENTILATION
- ___ Working flow indicator present on fume hoods
- x Operable flow alarms are in place
- x Fume hood has current certification (tested w/in year)
- x Fume hood not cluttered and fume hood exhaust not blocked
- x Fume hood sash lowered when hood not in use
- x Vacuum pumps appropriately ventilated or filtered

# GENERAL SAFETY
- x Housekeeping is adequate (i.e., no excessive clutter or contamination)
- x No indication of food/beverage in lab

# MISCELLANEOUS
- n/a Centrifuges inspected and used appropriately
- x Occupants know how to get to EH&S website (http://www.uos.harvard.edu/ehs/)
- x Occupants know how to obtain MSDSs. They should use Chemadvisor from EH&S website as first search choice http://www.chemadvisor.com/harvard/

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**COMMENTS**

Were there any general areas in need of improvement that were not covered by the items on this form?

We couldn’t find any fire sprinklers. The emergency shut-off button for the lab was positioned awkwardly behind some equipment, which made it difficult to reach, but still usable.

Are there best practices or solutions that you can recommend?

They used metal tracks hanging from the ceiling for cable management. The tracks allowed easy connection of electrical and optical equipment without getting in the way of researchers.

Did you notice any best practices being used by lab members during the inspection?