

**Inspection Report
Full Report**

Type:	Lab Inspection EHS	Date:	Feb 11, 2019
Room:	ACMAL Shared Facility	Organization:	College of Engineering Materials Science and Engineerin
Inspector:	David Dixon	Department:	Shared Facility: Applied Chemic
		Facility:	

Roster	
David Dixon	EHS
Owen Mills	Laboratory Supervisor / PI

Inspection Notes
Confocal microscope room chem sci SB012a
Question Responses
1. 1. General Safety
1.1 A current Michigan Tech emergency response poster is posted at the entrance to the laboratory. Selection: Yes
1.2 Hazard symbols and warnings are posted as required for radiation, biohazard, high voltage, laser, unattended operations, and other hazards. Selection: N/A
1.3 Doors controlling access to the laboratory are closed at all times and locked when the laboratory is not occupied. Access is limited to individuals authorized to work in the laboratory. Selection: Yes
1.4 A hazard/risk assessment has been conducted to identify potential risks associated with laboratory equipment, materials and procedures. Methods to minimize those risks have been implemented. Selection: Yes
1.5 All employees that work in areas with hazardous materials or chemicals have completed Michigan Tech's online (PureSafety) course "Hazard Communication Michigan Tech." Selection: N/A
1.6 A laboratory-specific safety manual defining laboratory policies, safe practices, and procedures is available and accessible to everyone in the lab. Individuals working in the laboratory agree to follow laboratory defined policies, practices, and procedures. Selection: Yes
1.7 Appropriate personal protective equipment is worn in the laboratory. Gloves, lab coats, and other potentially contaminated PPE are removed before leaving the laboratory. Selection: N/A
1.8 All reusable PPE that is exposed to skin is disinfected prior to being used by another person. Selection: N/A
1.9 Laboratory has appropriate ventilation for the work being performed (chemical fume hood, snorkel, canopy hood, biosafety cabinet, etc.). Selection: N/A
1.10 A sink is available for hand washing in areas where hazardous materials are used. Selection: N/A

1.11 All laboratory furniture (chairs, shelves, benches, cabinets, etc.) is in good condition, is appropriate for use in the laboratory, and is capable of supporting anticipated loads.	Yes
Selection:	Yes
1.12 Work areas are well lit with all lights in working order.	Yes
Selection:	Yes
1.13 All laboratory refrigerators, freezers, and microwaves are labeled with appropriate hazard signage. Food storage and preparation are prohibited.	N/A
Selection:	N/A
1.14 A First Aid kit is available to deal with minor injuries that may be sustained in the laboratory. Contents are in date. No aspirin or other pain relievers.	Not Observed
Selection:	Not Observed
2. 2. Housekeeping	
2.1 The laboratory is well maintained, with work and storage areas clean and organized for safe and efficient use.	Yes
Selection:	Yes
2.2 Access to exits and safety equipment is unobstructed. Floors aisles, work areas, and entry/exits routes are uncluttered with no tripping hazards.	Yes
Selection:	Yes
2.3 If necessary, an appropriate container is available for the disposal of broken glass.	Yes
Selection:	Yes
2.4 If necessary, an appropriate container is available for the disposal of sharps. Containers are sent for disposal every 90 days in the sharps collection.	Yes
Selection:	Yes
2.5 Universal wastes are collected in containers that prevent a release to the environment, are labeled according MDEQ rules, dated with the date the first item was placed in the container, and are sent for recycling within 365 days of the date.	N/A
Selection:	N/A
3. 3. Fire Safety	
3.1 Are flammable materials stored in the laboratory?	No
Selection:	No
3.2 Paper, boxes, and other combustible materials are properly stored and not in excessive amounts.	N/A
Selection:	N/A
3.3 Are open flames utilized in the laboratory or shop?	No
Selection:	No
3.4 Fire sprinkler heads are unobstructed. All furniture and other materials (including cardboard boxes) must be at least 18 inches below the the plane of the sprinkler heads.	Yes
Selection:	Yes
4. 4. Electrical Safety	
4.1 Electrical panels have a 36 inch clearance in front of the panel. Breakers and disconnects are labeled.	N/A
Selection:	N/A
4.2 Electrical outlets within 6 feet of sinks and other wet areas are protected by a ground fault circuit interrupter.	Yes
Selection:	Yes
4.3 Power cords on equipment and tools are in good condition (no exposed wires or frayed cords). Electrically powered tools and equipment are grounded or double insulated.	Yes
Selection:	Yes
4.4 Extension cords are used appropriately and only for temporary applications.	N/A
Selection:	N/A

4.5 Battery terminals are protected to prevent electrical shocks or potential shorts.	
Selection:	N/A
4.6 Power strips are only used with computers or other low amperage equipment. Power strips are not "daisy chained" or plugged into an extension cord.	
Selection:	Yes
4.7 All concerns about electrical safety have been addressed.	
Selection:	Yes
5. 5. Chemical Safety	
5.1 Are chemicals used in the laboratory?	
Selection:	N/A
5.2 Does the laboratory require a Chemical Hygiene Plan?	
Selection:	N/A
5.3 All concerns about chemical safety have been addressed (also see section 7. Chemicals Requiring Special Precautions).	
Selection:	Yes
6. 6. Compressed Gases and Cryogenic Liquids	
6.1 Cryogenic liquids are used in the laboratory.	
Selection:	N/A
6.2 Chemicals in the gas phase are used in the facility (supplied by cylinders, gas generators, or storage tanks).	
Selection:	N/A
6.3 All concerns about compressed gases and cryogenic liquids have been addressed.	
Selection:	Yes
7. 7. Chemicals Requiring Special Precautions	
7.1 Hydrofluoric acid is used in the laboratory.	
Selection:	N/A
7.2 Peroxide forming chemicals are used in the laboratory.	
Selection:	N/A
7.3 Controlled substances are used in the laboratory.	
Selection:	N/A
7.4 Concentrated phenol is used in the laboratory.	
Selection:	N/A
7.5 Perchloric acid is used in the laboratory.	
Selection:	N/A
7.6 Ethidium bromide is used in the laboratory.	
Selection:	N/A
7.7 Elemental mercury (including thermometers, barometers, or other mercury containing devices) is present in the laboratory.	
Selection:	N/A
7.8 Pyrophoric chemicals are used in the laboratory	
Selection:	N/A
8. 8. Biological Safety	
8.1 Biological materials are used in this laboratory.	
Selection:	N/A
8.2 This a biosafety level 2 (BSL-2) laboratory.	
Selection:	N/A
8.3 All biological safety concerns are covered by the questions in this section.	
Selection:	Yes

9. 9. Equipment Safety

9.1 Confined spaces are properly identified and labeled.

Selection: N/A

9.2 Is there any noise hazard producing equipment?

Selection: N/A

9.3 Pinch points, rotating shafts, and other mechanical hazards are appropriately guarded.

Selection: N/A

9.4 All ladders are in good condition and rated for the weight of the user and their equipment. Ladders used for servicing equipment are fiberglass.

Selection: N/A

9.5 Are respirators used in the facility? This includes N95 respirators and dust masks.

Selection: No

9.6 Written lockout procedures are available or referenced when repairing and servicing equipment. Employees who perform these tasks can verbally explain where to find the written lockout policy.

Selection: N/A

9.7 Compressed air nozzles are equipped with a safety tip that reduces dead end pressures below 30 PSI.

Selection: N/A

9.8 Are any of the following stationary power tools present: table saw, band saw, grinder, or drill press?

Selection: No

9.9 All equipment safety concerns are covered by the questions in this section.

Selection: Yes