

Principal Investigator:

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Secondary Contacts:

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Emergency Information:

Staff Member: 301-785-0687 / 301-229-2834

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Teresa Fornaro: 202-478-8967 / 202-569-9381

All other emergencies: 911

Purpose:

Multiuse chemistry and molecular analysis.

All laboratories and facilities on the Broad Branch Rd. campus are controlled areas. Specific training must be completed and documented before working in this laboratory / facility.

1. Chemicals Standard Operational Protocol:

Familiarize yourself with locations of the various chemicals, which are stored based on type, reactivity, and flammability, reported in the updated Chemical Compounds List located at the lab entrance.

Study MSDS sheets on all chemicals that you work with, which are located in the documentation drawer inside the lab.

Appropriate protection must be worn when transferring chemicals, including protective gloves, lab coat, and eyewear.

Date each chemical to record the day it was opened.

Only take what you need and do not return unused chemicals back to main reservoir.

All chemicals must be stored in appropriate cabinets. Acids and Bases should never be stored together.

Only dilute mineral acids may be discarded into marble chip baths. No chemicals should ever be poured into any sink or drain.

Chemicals that need to be disposed must be properly labeled and stored in appropriate cabinets until laboratory-wide storage removal is initiated (~ annually).

When purchasing chemicals, try to buy as little as possible to minimize waste.

All samples must be labeled in such a way as to be immediately identifiable. The use of notebook numbers or other schemes is not sufficient. Unlabeled vials constitute a serious offense and can lead to loss of laboratory privileges.

2. Instrument Standard Operational Protocol:

For all instruments training is required before use (ask to the responsible person).

3. Compressed Gases, storage, and disposal:

Appropriate regulators are required for compressed gasses.

3.1 Storage of new tanks:

All compressed tanks must be stored in the storage area. Unused tanks must have end-caps securely fastened.

3.2 Securing in-use tanks:

All in-use tanks must be securely attached to fixed bodies, e.g. bench top.

3.3 Return of empty or long-term non-use tanks:

Empty tanks are to be labeled “EMPTY” and returned to the loading dock storage area for pickup. Specialty gasses from suppliers other than Roberts or Airgas will require special arrangements for pickup.

4. Glassware Cleaning and Disposal:

4.1 Cleaning of glassware:

All re-useable glassware, including beakers, flasks, and funnels, should be emptied of chemicals using proper safety procedures (see Section 1 above), and then rinsed, washed, and ashed using standard protocols. Cleaned glassware should be covered with aluminum foil and stored in glass-front cabinets.

4.2 Disposable glassware:

All used disposable glassware, including vials and pipettes, should be emptied of chemicals (see Section 1 above) and discarded into an approved closed container for glassware disposal.

5. General Laboratory Safety Rules:

5.1 Eye-wear and hand protection:

Required at all times.

5.2 Protective clothing:

Required for: all chemical reactions, distillations, chemical transfer. Recommended for: sole-use operation of analytical instruments.

5.3 Off-hours Operation:

Any chemistry performed in the hoods or on the bench that involve reactive compounds (e.g. flammable liquids, metals, strong acids or bases, strongly exothermic reactions or the potential for explosion) should be performed during standard working hours to ensure that if an accident should occur proper response will be promptly initiated. In order to perform any chemical reactions that involve potentially reactive substances or products (see above) or have the potential for explosion (e.g. distillations or vacuum evaporation) after hours, it is necessary that a second person is in the building during such work, who must be clearly aware of the scope of the proposed work and the potential danger, and willing to check in at a frequency not less than once an hour to ensure safety.

5.3.2 Instruments:

The use of instruments after hours is not restricted. The repair of instruments after hours is subject to the same restrictions as after-hours chemical processing.

6. General Lab Safety Features:

Familiarize yourself with locations of:

Fire extinguisher (to be checked semi-annually for full charge);

Emergency Shower;

Eye wash;

Emergency Power Off Switch.

Note: Keep laboratory doors locked during off hours unless you are actively using the facility.



Laboratory User

I agree that I have thoroughly read and understood this laboratory safety document. I have access to this safety information at all times when I am working. I have been trained to be able to identify the hazards to which I may be exposed and to follow the work practices and procedures discussed in this document. I certify that I will conduct my research work safely and that I will be responsible for following stated safety policies.

User Name (Print)

User Signature

Date

Principal Investigator

I certify that the information presented in this safety document is accurate and complete. I agree to comply with all safety procedures and to fully train and supervise all researchers under my direction.

PI Signature

Date