

NUANCE Tech A/B Laboratory Safety Protocol: Chemicals Use in Laboratory

Chemical Experiments in NUANCE Lab

Chemical experiments are not allowed in the NUANCE A/B AG76 lab without prior approval by the NUANCE Lab Safety Officers. If chemicals (solid or liquid) are needed in order to use a NUANCE instrument, users AND staff must fill out [THIS FORM](#).

All users and staff using chemicals in the lab will be assigned a working space and will go through a one-on-one training with Lab Safety Officers (LSO) before they will be allowed to perform the work. Once these have been completed, the users will be allowed to continue with the experiment.

Users and Staff must complete the following (minimum) ORS safety courses before performing any chemical experiments in the NUANCE A/B Lab:

1. [Hazardous Chemical Waste Management Course](#)
2. [Laboratory Safety](#)
3. [Personal Protective Equipment](#)

The **MINIMUM PPE** requirement when using chemicals in the lab are **(1) safety glasses, (2) lab coat, and (3) gloves.**

***NOTE:** The use of Hydrofluoric Acid is strictly forbidding in any NUANCE Laboratory

NUANCE A/B Wing Laboratory Safety Officers (LSO)

Primary

Secondary

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Chemical Inventory and Approval

The NUANCE Lab keeps an inventory of all chemicals that are used and stored in the lab. All chemicals stored in the lab must be approved by LSO listed above. The user or staff member must provide an MSDS as a PDF that will be stored in our database, as well as in the MSDS binder in the lab. Any chemicals or samples stored in the lab must have the proper labeling. Labels can be found in the lab with the waste supplies. *IF You cannot find a label, please contact one of the LSO listed above. The label should contain the following information:

| |
|--|
| NAME: _____ |
| PI NAME: _____ |
| TODAYS DATE: _____ |
| CONTENTS: <i>(if different from manufacturers label)</i> |

****Any chemical or container that is not properly labeled WILL BE REMOVED without question**

All chemicals entering the lab must have an MSDS on site in the MSDS binder and in our online chemical inventory database.

All work with chemicals should be done within hood and wearing appropriate PPE. Contact LSO if correct PPE is not available.

Chemical Storage

Cabinets and Fume Hood: NUANCE does not allow chemicals or samples to be stored in the AG76 unless permission is explicitly given by an LSO. Any chemicals stored in the vented cabinets or fume hood will be disposed of if they are not approved. All cabinets are locked and require a manager to access. If you are storing a chemical in the AG76 lab, please be sure to coordinate with an LSO or NUANCE lab manager to acquire your chemicals

Refrigerator: The refrigerator is for staff use ONLY. If you need to use the refrigerator, you must contact a LSO for approval.

Chemical Transport

Any chemical being transported into and out of NUANCE must be transported in an ORS approved container (see example below). Containers should be able to hold twice the volume of transported chemical. Chemicals must come into the lab in a sealed primary container or a sealed (twist top) secondary container. If a spill occurs, notify LSO and staff immediately.

****Transport containers MUST BE APPROVED by LSO BEFORE entering the lab. Failure to follow this rule will result in IMMEDIATE loss of laboratory access.**



*****If your lab does not have a transport container, please contact an LSO or NUANCE Manager to borrow one from the A/B wing laboratory.**

Chemical Use

All users and staff must go through an in-person training before doing any chemical experiments.

All chemical experiments **MUST** be performed in a fume hood, not on the lab bench. **The MINIMUM PPE requirement when using chemicals in the lab are (1) safety glasses, (2) lab coat, and (3) gloves.**

NUANCE can provide the minimum PPE if the user or staff does not have their own. If additional safety supplies are needed, [please visit the ORS supply page to see if they supply what you need](#). If they do not supply what you need, you can visit the Fisher store.

All users must familiarize themselves with the location of the safety shower and eye wash station, as well as the spill kit and first aid kit location (see map on page 5). Users must demonstrate they have appropriate containers, glassware, and other equipment used for the experiment.

Chemical Waste

All users and staff performing chemical experiments in the Tech A/B AG76 lab must take the ORS [Hazardous Chemical Waste Management Course](#). Chemical and solid waste must be disposed of following the procedures in this training module. All waste containers that are started in the lab must have the proper label:

Chemical Waste

Principal Investigator: _____

Contact Person: _____

Accumulation Start Date: _____

NO ABBREVIATIONS OR FORMULAS

| | Full Name of Chemical | Amount or % |
|----|-----------------------|-------------|
| 1. | _____ | _____ |
| 2. | _____ | _____ |
| 3. | _____ | _____ |
| 4. | _____ | _____ |

NO RADIOACTIVE WASTE - NO BIOWASTE

READY FOR PICK UP! pH of Contents _____

pH of liquid waste _____

****Ensure you have the correct type of waste container:** some chemical mixtures can be explosive if left in a sealed, polyethylene waste container and require a glass waste container with a pressure release top. If you are unsure if your mixture falls into this category, you must check with ORS or the NUANCE LSO. [Special waste containers can be found on the ORS website](#). ***Dispose of all chemical waste when container is $\frac{3}{4}$ full or is 6 months old. DO NOT leave a waste container in the fume hood without the pH or READY FOR PICK UP checked.

All chemical waste containers should be left in the appropriate designated chemical waste accumulation area (Fume Hood #2). Waste should be separated by type into different secondary containers and only stored with compatible waste. When you have generated chemical waste, you must:

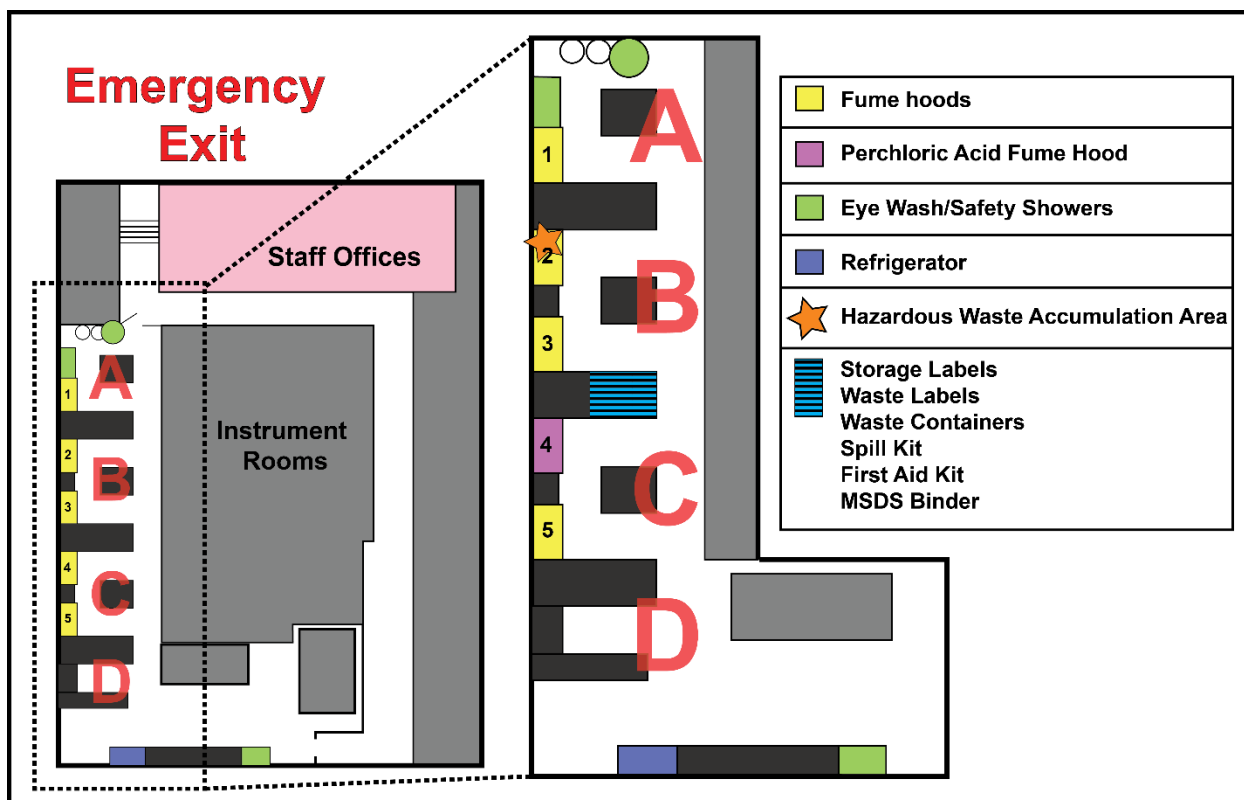
1. Check the box on the container to indicate it is ready for pick up
2. Ensure the pH of any liquid waste is listed
3. Email one of the listed LSO

Lab Safety Equipment Locations

All users must go through an in-person training to identify the location of all of the following:

1. Chemical Waste Labels
2. Chemical Waste Containers
3. Hazardous Waste Accumulation Area
4. Spill Kit
5. First Aid Kit
6. MSDS Binder
7. Eye Wash Stations and Emergency Showers

MAP OF A/B WING AG76 LAB



EMERGENCY CONTACT INFORMATION

Fire, Explosion, Police, Ambulance

For emergencies dial **911**

Non-emergencies on campus dial **456**

Off Campus Evanston: **847-491-3456**

Off Campus Chicago: **312-503-3456**

Hazardous Material Response

Chemical, Biological, or Radiation: **1-5581**

Chicago Campus: **3-8300**

Poison Control Center: **1-800-222-1222**

After hours, weekends, holidays (non-emergency) **456**

Emergencies only **911**

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