

* Updated 07/14/06.

Description of the group responsibilities

Argon

Argon responsibilities include:

1. Check argon levels routinely (Several Times/Week) and every Friday ~midday
2. Change argon tanks as needed (Both labs: 3225 & 3235)
3. Stock extra tanks when possible
4. Always stock extra tanks before long weekends or holidays
5. Train all lab members on appropriate argon usage!!!

*** Glovebox argon and still argon are separate responsibilities

Chemical Bulk Orders

Bulk order responsibilities include:

1. Maintain a list of all laboratory "bulk-items"
 - this includes periodically searching for the best pricing
 - keep track of group bulk supply usage
2. Make sure the lab has an adequate supply of all items on the group bulk supply list.
3. Keep track of group dry ice usage:
 - Keep record of dry ice deliveries (receipt book)
 - Submit new blanket purchase order as needed. (~yearly)

[Rigoli Dry Ice]
1983 Potrero Grande Drive
Monterey Park, CA 91755
(626) 573-0242
FAX (626) 573-5754
4. Ensure that all bulk items are in plentiful supply before long holidays or vacations.

Chemical Inventory

Responsibilities:

1. Maintain an inventory of all non – "bulk-order" chemicals in the lab.

*****New inventory will be created on 7/15/06*****

After this point:

- a. all received chemicals will be added to an appropriate list posted by the group computer
 - b. all emptied chemicals will be added to a list posted by the group computer
2. Update chemical inventory with the information on the "received" and "emptied" lists
 3. Keep updated inventory on the group computer (update at least bi-weekly)

4. Email lab members & Dr. Kwon updated (and dated) inventory (at least bi-monthly)
5. Train all lab members on procedures for:
 - receiving new chemicals
 - using up existing chemicals
 - moving chemicals around the lab!

Cleanliness of Common Areas

CLEANLINESS ON COMMON AREAS IS AN INDIVIDUAL'S RESPONSIBILITY!!!

BE RESPECTFUL TO YOUR LABMATES!

However, certain areas of the lab tend to accumulate a mess. These areas include: rotovaps, balance, backroom and inorganic cabinet areas.

Cleanliness supervisor's responsibility is to maintain cleanliness in shared laboratory areas by either:

1. Routinely cleaning these areas
2. Assigning others to clean the area

Contact Info & Group Meeting Schedule

Responsibilities:

1. Maintain group contact information sheet and group meeting schedule. Post both sheets clearly in the lab.
2. Distribute group responsibilities to new group members
3. Distribute group training list to new group members

Environmental Health and Safety

1. Assist in promoting and maintaining a safe working environment!
2. Coordinate with Mark Mandel (UCLA – chemical safety officer) during safety inspections.

Glass Repair

GLASS REPAIR IS AN INDIVIDUAL'S RESPONSIBILITY!

If any group member breaks (or finds broken) important (in common use) glassware it is their responsibility to do the following:

1. If the item can be repaired make sure it is submitted to TG Scientific Glass on the next glass pickup day.
 - Submitting the item to glass repair includes securing a processed LVO from the business office in the week following submission.
 - For assistance with glass repair see the **glass repair supervisor**
2. If the item cannot be repaired order a replacement ASAP!

- For assistance with ordering replacement glassware see the bulk order person.

Glass repair supervisor:

1. Train all group members on submitting broken glassware to TG Scientific glass
2. Train all group member on the proper use of common use glassware (bumptraps!!!/rotovaps/etc)

Glovebox

1. Person in charge of the glove box must approve of all new chemicals that enter the glove box. This person is also in charge of removing any chemical that could damage the dry train system.
2. Person in charge of the glove box is responsible for training people in the proper procedure to use the glove box.
3. Person in charge of the glove box must replace the argon gas tank when it needs it.
4. Person in charge of the glove box must regenerate the oxygen removing catalyst at least once every eight (8) months.
5. Person in charge of the glove box must make sure the glove box remains fairly clean and uncluttered.
6. Person in charge of the glove box must approve of any reactions or exotic experiments involving the glove box.

If you have any questions or comments please feel free to contact Reymundo Villa in MSB 3225.

Group Computer

Responsibilities:

1. Approve and/or install all software for the group computer
2. Perform routine maintenance on group computer (virus scan, etc)
3. Instruct all lab members on rules for group computer usage.
4. Maintain a list of installed software & user licenses

Name Reaction

In consultation with Dr. Kwon please assign a brief literature topic or exercise to each group member in advance of group meeting.

Solvent Stills

1. It is imperative that the still be monitored at least two (2) times a day. This is because certain stills can go bad over a period of several hours.
2. Part of still responsibility includes taking care of the argon supply that feeds the stills. This supply must be checked on a daily basis. On Fridays, or before holidays, it is essential that there be an extra tank available in case the argon runs out.
3. Part of still responsibility includes ordering and pre-treating the solvents

- that will be used in the stills.
4. Part of still responsibility includes training new people on the proper use of all the different stills.
 5. Frequent upkeep of the stills involves refilling the different solvents before they get to dangerously low levels or quenching if necessary.
 6. If you are away from the lab for several days you must ask someone to take over still responsibilities while you are gone.

If you have any questions or comments please feel free to Reymundo Villa in MSB 3225.

Vacuum Pump Repair

VACUUM PUMP REPAIR IS AN INDIVIDUAL'S RESPONSIBILITY!

If any group member finds that their vacuum pump is in need of repair it is their responsibility to submit it to Joe in Shipping and Receiving for prompt repair!

Vacuum repair supervisor:

1. Train all group members on submitting broken vacuum pumps to shipping and receiving.
2. Train all group members on the proper use and maintenance of vacuum pumps.

Waste Disposal

WASTE DISPOSAL GUIDELINES – The following wastes must be segregated from one another and must be label properly at the time the chemical is first added to the waste container. All containers must have a 10% empty volume for safe disposal.

HAZARDOUS WASTES: Stored in a RED 20L drum until disposal.

Wastes allowed in a RED 20L drum include all common solvents, and residual chemicals in flasks

NOT ALLOWED IN THE HAZARDOUS WASTE CONTAINER include acids, bases, compounds containing amine (including DMF), heavy metal wastes, oil, and oxidizer.

No more than 20% of water waste allow in the drum.

Solvent should not be above the bottom of the filter cap.

STRONG ACID WASTES (pH < 6): 4L brown bottle below the Rotavap hood 3235.

Wastes include all acids with a pH < 6, including sulfuric acid, hydrochloric acid, nitric acid, phosphoric acid, etc... These wastes must be disposed properly and separately.

STRONG BASE WASTES (pH > 8): 4L brown bottle below the Rotavap hood 3225.

Wastes include sodium hydroxide, lithium hydroxide, potassium hydroxide, triethylamine, etc... Any compounds with pH > 8. These wastes must be disposed properly and separately.

HEAVY METAL WASTES: 4L brown bottle below the Rotavap hood 3235.

Transition metals containing compounds are typically defined as heavy metals. These metals include chromium, osmium, ruthenium etc... These wastes must be disposed properly and separately.

DRY WASTES: 25 kg silica drum in 3235A.

Dispose in a 25 kg Silica drum. Wastes allowed in the drum include silica, sand, celite, filter paper, and un-reactive solids.

SHARP WASTES: Stored in a 1L glass bottle 3235 next to the balance.

Include disposable needles, syringe needles and blades.

HARZADOUS OIL WASTES:

These include vacuum pump oil, mineral oil, and silicon oil.

EMPTY CONTAINER:

Any 20L solvent drum that is empty must be dried, labels must be defaced, and then put it in the hallway. All empty containers (containing chemicals) must be triple rinsed with solvents that dissolved them and container labels must either be defaced or the word EMPTY must be written on the label.

GLASS WASTES:

Any pipettes, test tubes, small glass bottles (after triple rinsed). When filled, use duct tapes to seal the waste and leave it in the hallway.

MERCURY WASTES:

Any mercury spills including thermometers and manometers that contain mercury sources must contact Mark Mandel or Yang Tran for proper clean up procedures and proper disposal of mercury.

Any questions or comments please contact

YANG TRAN

MSB 3235

yangtran@chem.ucla.edu

INDIVIDUAL RESPONSIBILITY FOR CERTAIN WASTES DISPOSAL

1. Glass waste disposal – Taped and sealed glass waste box with duct tape and leave it in the hallway
2. 20L solvent drum (metal can) must be dried when empty, and mark with EMPTY on the tag or deface the tag, then leave them in the hallway

3. Throw away caps and miscellaneous trash in the still room in the trash
4. Triple rinse used chemical container and dry them
 - a. Small bottles go into the glass wastes
 - b. 4L brown bottle should only be accumulated in MSB3235 under the rotavap hoop
5. Stench chemicals (including thiols and phosphines) should first be quenched inside individual hood with 5% bleach, and/or 5–10% aqueous NaOH solution then triple rinse the glassware, and dispose them properly as mentioned above.
6. Reactive chemical should be quenched with appropriate procedures and chemicals before disposal of the glassware, such chemicals include *n*-BuLi, TiCl₄, and other reactive chemicals in the lab (any question regarding quenching certain chemicals should ask for advice from senior members in the group for proper quenching procedures).

WASTE MANAGER RESPONSIBILITIES

1. Print tags for wastes that are ready to be dispose
2. Dispose of group wastes properly (first floor on Tuesday and Friday at 9:00 am)
3. Dispose of glass wastes 4L brown bottle
4. Training new members with proper waste disposal procedures
5. Responsible for making sure individual group members follow the guidelines

Any questions or comments please contact
YANG TRAN
MSB 3235
yangtran@chem.ucla.edu