**Teresa Arnold (to** **Organizer(s) Only****):**

12:54 PM: I always appreciate helpful documents

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

12:56 PM: Has anyone tried the thermometer in the centrifuge trick>

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

12:56 PM: ?

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

12:57 PM: Our heating/cooling method for reuniting method caused explosion.

**Karen Batchelder** **(to** **Organizer(s) Only****):**

12:57 PM: no. We usually use something hot or really cold to get rid of the separation.

**Victoria Sample** **(to** **Organizers and Panelists Only****):**

12:58 PM: And everyone else!!! :D

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

12:58 PM: I fully endorse the first whole paragraph on p. 87.

**Victoria Sample** **(to** **Organizer(s) Only****):**

12:59 PM: Hi Jim - Sorry - I don't have a mic or video at work :/

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

12:59 PM: If someone has a recommendation on most excellent non-mercury thermometers, I am all ears.

**Kathy Montz** **(to** **Organizers and Panelists Only****):**

1:01 PM: I have a problem with my non-mercury thermometers splitting.

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

1:01 PM: Kathy, Me too.  or not being accurate enough.

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

1:02 PM: I store them at an angle

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

1:02 PM: Its better, but not perfect

**Cecilia Schreyer** **(to** **Organizers and Panelists Only****):**

1:03 PM: we store them bulb down.  about 1/5 separate.  We tap them and other methods to close the split but it doesn't always work.  They also aren’t as accurate as Hg thermos

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

1:04 PM: Avoid inheriting legacy chemicals!

**Dave Ross** **(to** **Organizers and Panelists Only****):**

1:05 PM: Does anyone put their separated spirit thermometer in a centrifuge to fix them?

**Teal Atkinson** **(to** **Organizer(s) Only****):**

1:06 PM: yes!

**Cecilia Schreyer** **(to** **Organizers and Panelists Only****):**

1:06 PM: ooh that's an idea!

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

1:06 PM: We do some micro scale

**Cecilia Schreyer** **(to** **Organizers and Panelists Only****):**

1:07 PM: we do microscale organic

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

1:07 PM: Dave - I have not.  Does it work

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

1:08 PM: It was in the book

**Cecilia Schreyer** **(to** **Organizers and Panelists Only****):**

1:08 PM: microscale is pretty stinky too.  We have a1980s building and ventilation is ... 1970 level.

**Cecilia Schreyer** **(to** **Organizers and Panelists Only****):**

1:10 PM: we are just switching from microscale threaded to microscale ground glass.  We're hoping it'll be cheaper in the long run because the threaded connecters are expensive, lose their o-rings, and are not reparable

**Marlene Hensley** **(to** **Organizers and Panelists Only****):**

1:11 PM: Seems like green chem would have lots of benefits beyond using less toxic materials.

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

1:12 PM: I like the idea of using less solvents to clean glassware

**Mallika Sharma** **(to** **Organizers and Panelists Only****):**

1:12 PM: Green Chemistry can be at odds with established QA practices. Also, going micro can pose problems with uncertainty calculations.

**Mallika Sharma** **(to** **Organizers and Panelists Only****):**

1:13 PM: for meeting QA standards

**Marlene Hensley** **(to** **Organizers and Panelists Only****):**

1:13 PM: We're in the early stages of using an inventory system that would allow for transferring chems between departments.  Our challenge will be who's original budget did it come out of and are they ok sharing without recouping some of that cost.

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

1:14 PM: What happens when you need to move the chemicals across campus?

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

1:16 PM: What do people use for grungy glassware?  Sonicators?  Base Bath?  chromic acid?

**Mallika Sharma** **(to** **Organizers and Panelists Only****):**

1:17 PM: When going green and using micro established analytical Methods have to be validated to be QA compliant.

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

1:17 PM: Do you charge labs/PI budget for disposal of all their waste and excess (and are they informed of the costs)?

**Pamela SHAW** **(to** **Organizers and Panelists Only****):**

1:18 PM: Yes we are going to be moving our laboratory to another building about 5 blocks away.  I'm sure we'll be moving it ourselves.  What advice do you have?

**Cecilia Schreyer** **(to** **Organizers and Panelists Only****):**

1:18 PM: yes it definitely takes some convincing to get some faculty to change.  Some are amenable but many don't have time, nor want to rewrite their lab procedures

**Marlene Hensley** **(to** **Organizers and Panelists Only****):**

1:19 PM: Our waste costs are covered by the University so as to discourage improper disposal which has been a problem in the past.

**Jo Wagoner** **(to** **Organizers and Panelists Only****):**

1:20 PM: We use base baths, acid baths, and sodium carbonate for scrubbing soot.

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

1:20 PM: We have a waste budget as well.  I think some PI's need to learn the cost of their unwillingness to change to other methods.

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

1:20 PM: We don't sell the chemicals, so we can't add disposal costs, but its an excellent method for those that do.

**Jessica Diaz** **(to** **Organizers and Panelists Only****):**

1:21 PM: What is the best way to dispose of chemicals that are no longer being used?

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

1:21 PM: Jessica, I send them out with my lab pack.

**Marlene Hensley** **(to** **Organizers and Panelists Only****):**

1:22 PM: Jessica,

**Marlene Hensley** **(to** **Organizers and Panelists Only****):**

1:22 PM: Jessica, We send them out with our lab pack also.

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

1:23 PM: When I started 17 years ago, we put them in the back of a pick up truck and drove it across the border to another states disposal site.

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

1:24 PM: I quickly put a stop to that!  And I couldn't reach the petals of the old truck, anyway.

**Kirk Waterstripe** **(to** **Organizers and Panelists Only****):**

1:24 PM: Do you have a favorite provider for USDOT training?

**Jessica Diaz** **(to** **Organizers and Panelists Only****):**

1:25 PM: Thank you.

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

1:25 PM: I know some institutions did this in their basements.  Found years later during renovations.  Nice gift!

**Rebecca Hourihan** **(to** **Organizers and Panelists Only****):**

1:27 PM: What is the standard fashion for alphabetizing chemicals that are of course within the same hazard category.  ie. which chemical name to use.

**Marlene Hensley** **(to** **Organizers and Panelists Only****):**

1:27 PM: We got DOT training through our local chapter of the American Assoc. of Safety Professionals.  They brought in an outside trainer.

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

1:30 PM: always a struggle to find the right one

**Kathy Montz** **(to** **Organizers and Panelists Only****):**

1:30 PM: I thought it was a typo.

**Dave Ross** **(to** **Organizers and Panelists Only****):**

1:30 PM: We use digital thermometers for a 100 level lab.  They work great.

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

1:30 PM: Has anyone tried the Teflon coated mercury thermometers?

**Rebecca Hourihan** **(to** **Organizers and Panelists Only****):**

1:31 PM: chemicals have several types of names with

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

1:31 PM: Vernier has some good digital thermometers.

**Cecilia Schreyer** **(to** **Organizers and Panelists Only****):**

1:31 PM: we have an excel list that's searchable to find chemicals.  Like methylene chloride vs dichloromethane.

**Cecilia Schreyer** **(to** **Organizers and Panelists Only****):**

1:32 PM: searchable

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

1:32 PM: our inventory has a space for synonyms, so it searches that box as well.

**Cecilia Schreyer** **(to** **Organizers and Panelists Only****):**

1:32 PM: yes

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

1:32 PM: Some of our faculty have been through several naming paradigms

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

1:33 PM: For common confused chemicals, we write the synonyms on the label.  Saves time for others to go translate for them.

**Jo Wagoner** **(to** **Organizers and Panelists Only****):**

1:33 PM: I just use the name on the bottle, but don't consider the numbers or the p-, m-, etc.

**Cecilia Schreyer** **(to** **Organizers and Panelists Only****):**1:34 PM: I do the same as Jo

**Karen Batchelder** **(to** **Organizers and Panelists Only****):**

1:34 PM: I do the same as Jo.

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

1:34 PM: I have even had protocols changed to match the vendors name for chemicals, to avoid confusion.

**Pamela SHAW** **(to** **Organizers and Panelists Only****):**

1:35 PM: Can anyone reccomend a good inventory software program?

**Jo Wagoner** **(to** **Organizers and Panelists Only****):**

1:36 PM: Pam - we use Vertere

**Victoria Sample** **(to** **Organizer(s) Only****):**

1:36 PM: Quartzy is searchable also and I always add common names and synonyms too

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

1:36 PM: I use Quartzy

**Karen Batchelder** **(to** **Organizers and Panelists Only****):**

1:36 PM: We use Quartzy. Its pretty good for a free program.

**Kathy Montz** **(to** **Organizers and Panelists Only****):**

1:37 PM: We use Quartzy too

**Victoria Sample** **(to** **Organizers and Panelists Only****):**

1:37 PM: Meant to send to all - Quartzy is searchable also and I always add common names and synonyms too to aid searching

**Cecilia Schreyer** **(to** **Organizers and Panelists Only****):**1:37 PM: I use Chimera but it was imposed by management and is good at producing reports but a little clunky for me.  thus I maintain an Excel file separately.

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

1:37 PM: I have seen a demo of Chimera, its seems very cool

**Pamela SHAW** **(to** **Organizers and Panelists Only****):**

1:38 PM: Can you email it out?

**Pamela SHAW** **(to** **Organizers and Panelists Only****):**

1:38 PM: Sorry I don't see the documents box.

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

1:39 PM: I learned this semester that most of the faculty and students don't understand about immersion levels.  Weird eye opener

**Me** **(to** **All - Entire Audience****):**

1:40 PM: I just posted it under the "handouts" tab

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

1:40 PM: The document is just above the Chat, in my view

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

1:40 PM: I see it.

**Pamela SHAW** **(to** **Organizers and Panelists Only****):**

1:41 PM: how to I get it out

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

1:41 PM: I clicked on it and it downloaded on my desktop

**Teal Atkinson** **(to** **Organizer(s) Only****):**

1:41 PM: just double click and it downloads

**Lisa Hayashi** **(to** **Organizers and Panelists Only****):**

1:41 PM: I clicked on it and it went to my download folder on my desktop

**Dave Ross** **(to** **Organizers and Panelists Only****):**1:41 PM: Hi Teresa.  You are quite chatty today.

**Cecilia Schreyer** **(to** **Organizers and Panelists Only****):**

1:44 PM: For the most bang for my buck, for student thermos, I use
B60301-0200 H-B EASY-READ  GENERAL PURPOSE LIQUID-IN-GLASS THERMOMETER; -20 TO 110°C, 76MM IMMERSION, ENVIRONMENTALLY FRIENDLY

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

1:45 PM: Does anyone have an established protocol for how long to keep chemicals of various categories tey would like to share?

**Cecilia Schreyer** **(to** **Organizers and Panelists Only****):**

1:45 PM: they run $10-20 each.

**Jessica Diaz** **(to** **Organizers and Panelists Only****):**

1:45 PM: I also included a link to the SDS in my chemical inventory.

**Pamela SHAW** **(to** **Organizers and Panelists Only****):**

1:46 PM: We have daily use containers, secondary containers say with pipettes and the original container provided by the manufacturer.

**Marlene Hensley** **(to** **Organizers and Panelists Only****):**

1:47 PM: I love the work place terminology.  We're working as a team to change the way we refer to secondary container versus secondary containment.  It's going to take some time and the techs are working on it.

**Paul Weller** **(to** **Organizers and Panelists Only****):**

1:47 PM: I agree with Jim on the definition of secondary container being the outside containment container

**Teal Atkinson** **(to** **Organizer(s) Only****):**

1:47 PM: Chemical inspection is part of my annual inventory/purging

**Marlene Hensley** **(to** **Organizers and Panelists Only****):**1:48 PM: Disposal time in our CHP is 5 years.  If the containers have an expiration date less than 5 years, that's what is used.

**Paul Weller** **(to** **Organizers and Panelists Only****):**

1:49 PM: We use clear packing tape on all new containers as we inventory them

**Mallika Sharma** **(to** **Organizers and Panelists Only****):**

1:50 PM: Secondary "containment" for the tub/tray to transport chemicals seems to be a less confusing term than secondary container.

**Henrietta Hurst** **(to** **Organizer(s) Only****):**

1:50 PM: Some of the GHS guidelines that I have read use the words "secondary container" very loosely.  It often reads as any container that is not the original manufacturer container (ie dropper bottles, dispensing bottles etc).

**Pamela SHAW** **(to** **Organizers and Panelists Only****):**

1:51 PM: How do you dispose of existing mercury thermometers?

**Teal Atkinson** **(to** **Organizer(s) Only****):**

1:52 PM: send them out with lab pack

**Matthew Lowe** **(to** **Organizers and Panelists Only****):**

1:52 PM: I found this photo that shows the difference between the immersion levels

**Matthew Lowe** **(to** **Organizers and Panelists Only****):**

1:52 PM: <https://lh3.googleusercontent.com/proxy/X0V3WBBOE6llKsaWzeEK0QEwi3ZHlFBEFBRLmxHGmTnZVw-dWih4HIxsPio_aruC5-ZI3P0XAuEv8Rt08HL7_Tzcg7gBmelCQ5xhoWE5o34HZu3HA-A2zpRLjfJ2AihR4kEeZFLJjd2KLAnLKaOTGMqnxbiL8593g5vPtwbHeYorsI73xWa0nGzLlRIJ69n1f0JMm-WcZhnJWqwNKS2TJJni-sNoiYciGrsaUAvgXMxVZC_llelZPhTrUIHJ052nDJx4QDys-lo1zgT2afFw4R1smTNs9HSMowQf1cpfLWZoa1iuS36e93m3RywJKNE_wOfci9CZaPewLkBvLfN0B8I2epxixmh7df7vkAn1vM0MZNz6egDoIzyt-1oCnUM>

**Kirk Waterstripe** **(to** **Organizers and Panelists Only****):**

1:52 PM: I have given obsolete and broken thermometers to the folks who do the lab pack/ waste pickup.

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**1:54 PM: Matthew, it comes up as an error

**Rebecca Hourihan** **(to** **Organizers and Panelists Only****):**

1:54 PM: I use the Stanford hazard code system that Bio raft now owns to categorize my chemicals

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

1:56 PM: door stop?

**Karen Batchelder** **(to** **Organizers and Panelists Only****):**

1:56 PM: I have not seen that part on a flammable cabinet before.

**Paul Weller** **(to** **Organizers and Panelists Only****):**

1:57 PM: It is a fusible link.  It melts in a fire situation

**Jo Wagoner** **(to** **Organizers and Panelists Only****):**

1:57 PM: The handout did not load correctly, so I gave it a new name with the .xls extension, so then it did.

**Mary Toth** **(to** **Organizers and Panelists Only****):**

1:57 PM: Isn't it missing some links on it.

**Jo Wagoner** **(to** **Organizers and Panelists Only****):**

1:57 PM: doesn't it melt?

**Rebecca Hourihan** **(to** **Organizers and Panelists Only****):**

1:57 PM: keep door open

**Kathy Montz** **(to** **Organizers and Panelists Only****):**

1:57 PM: Fire safety

**Mary Toth** **(to** **Organizers and Panelists Only****):**1:57 PM: If it melts. then it shuts the doors.

**Kathy Montz** **(to** **Organizers and Panelists Only****):**

1:58 PM: It melts and closes the door

**Kathy Montz** **(to** **Organizers and Panelists Only****):**

1:58 PM: How do you replace that piece?  Ours is missing.

**Paul Weller** **(to** **Organizers and Panelists Only****):**

2:00 PM: <https://www.justrite.com/replacement-fusible-link-for-self-closing-safety-cabinets.html>

**Jessica Diaz** **(to** **Organizers and Panelists Only****):**

2:03 PM: Yes, please that would be great.

**Rebecca Hourihan** **(to** **Organizers and Panelists Only****):**

2:03 PM: I use the Stannford hazard code system that Bioraft now owns to categorize my chemicals. However I don't have acces to that anymore.  What is a good way to classify the hazard of a chemical on my own.  into their categories

# Marlene Hensley (to Organizers and Panelists Only):

2:04 PM: Ours go out with our waste.  We notify the hauler beforehand.

# Pamela SHAW (to Organizers and Panelists Only):

2:05 PM: There is a website with 3,400 sites across America

# Pamela SHAW (to Organizers and Panelists Only):

2:06 PM: thermostat recyclying

**Pamela SHAW** **(to** **Organizers and Panelists Only****):**

2:06 PM: thermostat-recycling.org

**Jessica Diaz** **(to** **Organizers and Panelists Only****):**

2:06 PM: Can someone remind me what how far each chemicals need to be when storing them?

**Jessica Diaz** **(to** **Organizers and Panelists Only****):**

2:07 PM: Yes

**Jessica Diaz** **(to** **Organizers and Panelists Only****):**

2:08 PM: Thank you.

# Mallika Sharma (to Organizers and Panelists Only):

2:08 PM: labelling very small workplace  container (5ML) to be GHS compliant; smallest font  & type one can use.

**Teresa Arnold** **(to** **Organizers and Panelists Only****):**

2:10 PM: Sometimes I turn the label into a 'flag' that extends from the wee bottle, so it does not cover original label

**Henrietta Hurst** **(to** **Organizer(s) Only****):**

2:10 PM: What are your thoughts on Flinn's chemical storage method?

**Cecilia Schreyer** **(to** **Organizers and Panelists Only****):**

2:10 PM: but each of those has 4 levels, Jim.  What if a chemical is 3 in 2 categories?

**Kathy Montz** **(to** **Organizers and Panelists Only****):**

2:11 PM: My tiny bottles have larger tags on them or the 'flag' idea.

**Jessica Diaz** **(to** **Organizers and Panelists Only****):**

2:13 PM: Who do we need to get in contact with so that we can have LSI help organize chemicals?

**Cecilia Schreyer** **(to** **Organizers and Panelists Only****):**

2:13 PM: yes