

## **Working in a harmonious and safe environment**

- **Awareness** Complete risk assessments for all work not covered by Codes of Practice!
- **Attitude** Be respectful of others work.
- **Appreciation** Be grateful to those who helped you.
- **Responsibility** To ensure you and those working around you are safe.

# Where to start: Safety Induction

- Before you start in the lab, you must read the health and safety documents from the School of Engineering.
- <https://www.gla.ac.uk/schools/engineering/safety>

Those relevant to *most* of the work on level of the AB group are:

On the main page:

- Safety Handbook
- Chemical Safety
- Biological Safety

(more detailed information is available in other documents too)

On the Codes of Practice page, under the Advance Research Centre listing, these documents:

- Code of Practice
- Bioclass 1 areas
- Chemical Prep areas
- Workshop areas

+ others under the laser and Bio Class II sections, depending on what you will do.

# Continuous practice: risk assessments

- Before your experiments, make sure you know and understand the procedures for the use (and disposal) of chemicals, reagents, cells and any potentially hazard materials, as well as any equipment involved (incorrectly used equipment can be just as hazardous as chemicals!).
- For activities not covered by the general lab code or practice, or other codes of practice, you must complete risk assessment forms and submit them for the approval (discuss with your supervisor and/or the lab guardian first).

<https://www.gla.ac.uk/schools/engineering/informationforstaff/safety/risk%20assessment/>

(You need to have the VPN running to access this off campus)

# Frequent “offences”- inappropriate disposal of waste

**Do NOT dispose of gloves in the glass bin!**



This is for:

- Broken glassware
- PDMS devices (with glass)
- Microscope slides
- Pasteur pipettes

However, biologically contaminated glass and plasticware should always be placed in a clear autoclave bag, before disposal in a yellow biohazard bin.

**Do NOT dispose of glassware in the sharp bin!**



These are for:

- Needles (**do NOT** recap the needle for disposal)
- Scalpel blades
- Broken silicon wafer

DO NOT stuff things into an overfull bin so that part of the thing being disposed of is poking out of the top of the bin.

**Do NOT dispose of contaminated or toxic/hazardous waste in the black bin bags!**

These are for:

- Waste that does not require a specialist uplift, blue roll paper, dirty gloves etc.
- Non-toxic materials (e.g. cured PDMS slabs)

Note, the black bin liners are emptied by the cleaners, who usually expect nothing more harmful than paper and so should only be used for innocuous things;

Contaminated materials not suitable for landfill should be disposed of in the clear autoclave bags which are in the yellow biohazard bins, even if they are not ‘biohazards’.

# “DO NOT’s” and “DO’s”

- Do **NOT** bring food and drinks to the labs.
- Do **NOT** leave un-capped sharp needles lying around.
- Keep blunt-end needles in a container if there are no suitable caps.
- Do **NOT** leave unlabeled glassware/beakers with (or without) unknown materials in them, lying around.
- Do **NOT** use any chemical, substance or potentially hazardous equipment/procedure without completing Risk Assessment Forms.
- ❖ **DO** clean the bench after your experiments.
- ❖ **DO** refill empty water/solvent bottles and pipette tip boxes.
- ❖ **DO** let Andrew or your supervisor know if you find any equipment that is not working, or it breaks down – this is not a problem – it is more annoying to others to come and find things have been left in a broken state...



# Good Practices

- Wear Safety Glasses and Lab coat.
- Label all containers, beakers, tubes etc with your name, date and contents.
- Use fume-cupboards for processes involving volatile solvents/hazardous materials.
- Place waste chlorinated and unchlorinated solvents in the appropriate Winchesters or waste solvent drums.
- Display hazard notices for any unattended experiments.
- Tidy-up and remove deposits from glassware before putting it in the soak bath (or wash it up and put away).
- If you find abandoned materials of an uncertain nature, either find the owner and get them to dispose of them, or contact a responsible person.
- Please keep the materials/solutions stored in fridge/freeze to a minimum, and dispose of outdated ones regularly.
- Do NOT use the tissue culture lab until you are trained. Do NOT dispose of normal waste into the yellow disposal bins there. These are for biohazard waste only.

# Every one's duty

## Weekly lab cleaning

➤ Typical tasks include:

In the general labs, clean the bench; Check the pH meter; Fill the solvent bottles, tips and eppendorf tubes; Put abandoned glassware into the soak bath.

➤ Other labs. Frequent users take on the cleaning duties. Where necessary, one person to be in charge of the rota for that lab.

**DO NOT abuse Weekly lab cleaning activities. It can be a community–building exercise where you can see the immediate results of your efforts! (or also see how people are starting to look after the labs in a more caring way...).**

**It is your duty to clean your mess immediately after your experiments.**

**Please return any items (reticule, pipettes, chemicals etc) back to their original locations after use – a general layout plan of where things should be located will be produced shortly.**

# Questions and monitoring

We will monitor the safety of the working environment in the ARC and people's practices regularly.

If you have any questions and any concerns around you, please contact your supervisor or email us at:

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