# Lab Guide

## **Basic rules / Grundregler**

- Please clean up after yourself ©!
- If you use up something please make sure it is refilled or restocked.
- You are not allowed to bring food or drinks into the lab.
- You are not allowed to use earphones (høretelefoner) in the lab.

## **Cleaning / Rengøring**

#### **Glassware/ Glasvarer**

Most of the glassware can be cleaned in the dish washer.

NB! Before you put the glassware beside the sinks, it has to be rinsed.

Rinse the glassware for chemicals/biological waste by washing with the appropriate solvent/buffer. Dispose of the waste in the appropriate flask or bucket.

When you wash it yourself:

- 1. Rinse the glassware for chemicals/biological waste by washing with the appropriate solvent/buffer. Dispose of the waste in the appropriate flask or bucket.
- 2. Wash with soap and water.
- 3. Wash with deionized water
- 4. Wash with ethanol and hang to dry.
- 5. When the glass ware is dry put it back in the cupboard  $\odot$

Dish washer		
Blue cap bottles + lits	Roundbottom flask / rundbundede kolber	
Beakers	20ml glass vials	
Measuring beakers	Glass funnels / glastragte	
Conical flasks / koniske kolber	sks / koniske kolber Small volumetric flasks / små målekolber	
	Spoons and spatulas / skeer og spatler	

#### The Scales / Vægtene

Brush spills of the scale with the brush found by the scale.

Dry up any spills around the scale – only you know what has been spilled.

If you need to clean the scale turn it off and dry it off with water and then 70% ethanol on a tissue.

## Waste disposal/ Affaldshåndtering

What goes where:

Regular trash can	White/Yellow buckets	Yellow trash boxes	Small yellow pot (bøtte)
Gloves, paper towels/ tissues and plastic syringes with NO toxic waste. Wrapping(emballage)	Tips Used Eppendorf tubes Gloves, paper, falcon tubes, towels/tissues with TOXIC or biological waste on them. Gels	The yellow buckets are emptied into one of these boxes for Clinical hazardous waste (klinisk risikoaffald). Here we also dispose of disposable items (engangs ting) with biological material on them such as petri dishes, inoculation needles and falcon tubes.	Small sharp objects: Needles without protection cap. Small pieces of glass.

#### Glass waste

Vials or broken glassware goes into the glass buckets found in the drawers by the sink.

The glass waste has to be rinsed (skyldet af) before it is put in the glass buckets.

Rinse the glassware for chemicals/biological waste by washing with the appropriate solvent/buffer. Dispose of the waste in the appropriate flask or bucket.

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Often used waste groups (for this lab)

В	С	Н	Х
DMSO, chloroform, solutions with halogens and sulfur/ opløsninger med halogener og svovl	Ethanol, acetone, Methanol		

Liquid biological waste has to be autoclaved, before it can be poured out.

## **Chemicals**

The chemicals are stored in the cupboards, refrigerator and freezer marked with the symbol below.



If you cannot find a chemical look it up on <u>www.kemibrug.dk</u>. Log in using your SDU log in, then you can see the location of the chemical you are searching for.

When removing chemicals from refrigerator or freezer let it reach room temperature before you open it. This is to avoid moisture inside the container.

#### Labeling / Mærkning

All chemicals and solutions have to be labeled with content, date and name, concentration, pH and pictograms, H- & P-sentences.

## Safety / Sikkerhed

#### Lab coat/kittel:

All ways wear a lab coat, when you are in the lab. Take it off when you leave the lab.

#### Gloves/handsker

Can be found on the tables in the lab. When you empty a box take a new one from the cup board  $\odot$ 

Nitrile gloves (green) – are used when you work with organic or inorganic solvents or when you need to protect your material from yourself.

You should only use gloves when it is needed, otherwise it will become a false security.

NB! Remember to have a glove free hand for operating instruments and computers.

Do NOT! Open doors with gloved hands.

#### Safety glasses/ sikkerhedsbriller og skærm

Can be found in a drawer in the lab.

Should be used when there is a risk of getting corrosive (ætsende) or irritating (irriterende) compounds in your eyes or if there is a risk of explosion.

#### Fume hoods / Stinkskab

All work with volatile liquids, flammable, toxic, irritating or corrosive compounds is done in a fume hood.

#### Pressure bottles and liquid nitrogen

Get an instruction before you start using it.

#### Emergency shower / Nødbrusere

Emergency showers are placed outside the labs a little down the hall way. But there are also eye-washingshowerheads at some of the sinks in the lab, which can be used as emergency showers.

#### Eye-washing-flasks / Øjenskylleflasker

Eye-washing-flasks or eye-washing-showerhead are found by all sinks.

#### Fire-fighting equioment / Brandslukningsudstyr

There is a CO<sub>2</sub> extinguisher and a fire blanket



#### Laser safety

1. Wear protective eyewear at all times

2. Maintain a high ambient light level in the laser operation area. This keeps the eye's pupil constricted, thus reducing the possibility of eye damage.

3. Avoid looking at the output beam; even diffuse reflections are hazardous.

4. Avoid wearing jewelry or other objects that may reflect or scatter the beam while using the laser.

5. Use an infrared detector or energy detector (IR viewer) to verify that the laser beam is off before working in front of the laser.

6. Operate the laser at the lowest beam intensity possible, given the

requirements of the application.

- 7. Expand the beam whenever possible to reduce beam power density.
- 8. Avoid blocking the output beam or its reflection with any part of your body.
- 9. Establish a controlled access area for laser operation. Limit access to those trained in the principles of laser safety.
- 10. Set up the laser so the beam is either above or below eye level.
- 11. Provide enclosures for beam paths whenever possible.
- 12. Set up shields to prevent specular reflections.
- 13. Set up an energy absorbing target to capture the laser beam, preventing unnecessary reflections or scattering.

### General remarks / Generelle bemærkninger

Read the emergency plan for BMB on: <u>http://www.sdunet.dk/Enheder/Institutter/bmb/Beredskabsplan.aspx</u>

So you know what to do in case of an emergency or fire.