

## SAFETY REGULATIONS 2015/2016

Selected rules of behaviour obligatory on lab classes in the Department of Chemistry and Immunochemistry of Wrocław Medical University and Occupational Health and Safety (OHS) rules.

1. Students must stay in the laboratory strictly during lab classes hours only in lab coats.
2. Lab accidents happen mainly because of disregard of safety rules and regulations on keeping work place clean and in order. Taking this into account, one must absolutely obey the Assistant's recommendations concerning:
  - a) way of performing experiments and their documentation
  - b) general order obligatory in the lab room
  - c) work safety
3. Eating food, smoking cigarettes, chewing gum and using personal electronic devices are strictly prohibited in the lab room!

Students must wash their hands thoroughly before leaving the laboratory.

4. One must not turn on any lab equipment without the Assistant's consent. Students should handle available equipment with care and must not twist and turn devices' switches by force.

Proceed according to the Assistant's instructions or the written ones placed on or near the device.

5. One must perform centrifuging according to the rules: tubes must be balanced and put evenly in rotor. During the centrifuge start one must follow the Assistant's instructions or the ones placed on or near the device. If one of the tubes gets broken during centrifuging, the centrifuge must be turned off immediately.
6. When working with inflammable liquids (ether, alcohol, benzene) the gas burners should be turned off and electronic heaters (such as electric water baths) should be used instead.
7. During heating liquid in a tube directly in the burner's flame, the tube's mouth should be turned to open space and NEVER in the direction of other person. The tube's contents should be kept slightly shaken in order to avoid the liquid's overheating. Other lab glass is to be heated in water bath placed on the ceramic mesh or in the electric water bath.
8. All the bottles with concentrated acids and bases are always placed under **the fume hood!** Students are not allowed to take them out of the hood to the laboratory table!

One should take special precautions when working with concentrated acids and bases and obey the following rules:

- a) When pipetting concentrated acids and bases use glass pipettes inserted into the pipette pump. Pipetting directly with one's mouth is strictly prohibited!
  - b) One is not allowed to pour concentrated liquids directly into water or sinks; they should be diluted according to the Assistant's instructions or left in an appointed place.
9. Any injuries and burns should be reported to the Assistant immediately.
10. Acid and base burns should be washed thoroughly with tap water:
- a) An acid-burned spot is to be rinsed with 2-3% solution of sodium hydrogen carbonate ( $\text{NaHCO}_3$ );
  - b) A base-burned spot is to be rinsed with 1-2% solution of acetic acid ( $\text{CH}_3\text{COOH}$ ) or citric acid ( $\text{C}_6\text{H}_8\text{O}_7$ );
  - c) If one's eye gets burned, one should wash it heavily and go to the doctor immediately.
11. Students performing lab work should keep their place of work clean, that is:
- a) Use only clean lab glass;
  - b) Wash the used lab equipment with water and detergent, rinse with tap water and distilled water after the lab work is done;
  - c) Solid substances (paper scraps, blotting paper, matches) should be thrown away to the waste bins and not to the sink.
12. Students should use a new glass pipette to different solutions and change tips while using an automatic pipette. Do not use a pipette once used for the other reagents and do not transfer reagents to the other lab tables.
13. One should take special precautions when working with biological materials (plasma, blood):
- a) Use disposable gloves;
  - b) Liquid biological material should be measured with automatic pipettes;
  - c) After the work is done, pipette tips, Eppendorf tubes, other tube types and other lab glass with biological material are to be kept in an appointed place.  
The tube/glass contents must not be poured into sinks!
14. The solution once poured out of the bottle should not to be poured into the bottle again.
15. Students working in the laboratory are obligated to save gas, electric current and distilled water.