

SAFETY REGULATION OF THE BIOCHEMICAL LABORATORY

1. Do not ignite a fire during the work with flammable substances (ether, petroleum ether, benzene, acetone, etc.)
2. All operations with concentrated acids, ammonia and bromine should be carried out under a well-functioning laboratory fume hood. Never pour water into the concentrated sulfuric acid, as the resulting mixture strongly warms up and can spatter!
3. Be especially careful when working with:
 - a) centrifuges (possibility of damage to upper limbs)
 - b) Electrophoresis device (possibility of electric shock)
 - c) devices emitting UV radiation (harmful to eyes and skin)
4. Do not pipette with your mouth. Use pipettes equipped with rubber pellets or burettes for this purpose. Pipette used to collect concentrated acids or bases should be rinsed with water. A drop of concentrated lye or acid that falls accidentally, eg. onto a laboratory table, should be wiped down immediately
5. When skin burns with acid or lye - rinse the area thoroughly under running water and wash with 2-3% sodium bicarbonate solution (after acid activation) or 1-2% acetic or citric acid solution (after lye activation). Cover the wound with a loosely hygroscopic gauze. If you burn your eyes - rinse them abundantly with water, leading a stream of water to the outer corners of the eyelid
6. When the acid or base gets into the mouth - rinse them immediately with a large amount of water and then with a suitably diluted solution of sodium bicarbonate, optionally acetic or citric acid. If an acid or base solution is ingested, drink a large amount of milk or water with egg white or olive oil
7. If you have thermal burns with first-degree symptoms (redness, swelling, pain) - rinse the surface with ethanol or a solution of picrotannin (violet gentian) or 10% solution of potassium permanganate. In case of severe burns (eg. with blisters), wipe the surrounding area with ethanol, cover it with a hygroscopic gauze.
8. A separate pipette should be used with each solution
9. Do not insert the pipette into reagent bottles, especially with standard and easily decomposing solutions. Never pour back into a bottle of solution taken from it
10. Use dilute pipettes and volumetric flasks when diluting the solutions
11. When measuring solutions - fill the pipette above the upper calibration line, wipe the pipette outside with tissue paper, drain the upper liquid meniscus (upper meniscus with color solutions) to the upper line and pour the desired volume of solution into the container
12. Save reagents and lab glass!

13. Use only properly washed glassware:
 - rinse the container with running water immediately after use;
 - wash with a warm detergent solution using a suitable clean brush;
 - rinse thoroughly with running water until the detergent is completely removed and then rinse at least 3 times with distilled water.

A chrome mixture should be used for cleaning the glass used for analytical purposes. Glass dishes washed with a detergent solution, running water and dry should be dipped in a chrome mixture for a few to several hours. After this time, wash the dishes thoroughly with running and distilled water
14. The pipettes should be rinsed immediately after use with running water and placed in a high vessel (with glass wool on the bottom) filled with a detergent solution. To wash out, connect the pipette with a rubber tube to the water pump and rinse it thoroughly with water and then - three times with distilled water. Micropipettes rinsed with distilled water should be rinsed with acetone three times and, after thorough evaporation of acetone, should be disconnected from the water pump
15. Solid waste (papers, matches, corks, etc.) should never be thrown into the sink, but into special stoneware or metal baskets
16. When it is necessary to pour concentrated acid or base into the sink, the tap should be unscrewed and the concentrated chemical should be diluted with a stream of water, followed by thoroughly rinsing the sink
17. Many reagents used in the biochemical laboratory are potential poisons. Therefore, you should wash your hands during work and strictly before leaving the laboratory

I agree with the rules outlined above and I agree to comply with them during the course of "Biological Basics of Pharmaceutical Sciences – Basics of Biochemistry"

Students signatures: