OHS GUIDELINES TO BE FOLLOWED IN THE CHEMICAL LABORATORY

PRELIMINARY REMARKS

The premises of the laboratory should fulfil requirements ensuring a safe and hygienic working environment.
In order to carry out work in the laboratory, you need to:

- have a valid medical statement certifying that there are no contraindications to performing work in a given workplace,
- be familiar with the laboratory's rules and regulations, and safety guidelines applicable to laboratory work.

In order to be fit for work, you need to be well-rested and sober, and wear protective clothing appropriate for the planned activities and necessary PPE.

BEFORE STARTING WORK

Before starting work, you should:

- become familiar with the schedule of activities to be performed,
- depending on the type of activities, prepare personal protective equipment (PPE) according to recommendations included in safety data sheets,
- after entering the laboratory premises, check the technical condition and operation of the general ventilation system, the fume hood exhaust system and other local exhaust systems,
- check the condition of general and local lighting,
- inspect the gas system for leaks.

GUIDELINES FOR MAINTAINING SAFETY OF WORK IN THE CHEMICAL LABORATORY

- Transfer all laboratory samples in special vessels, exercising caution especially while using stairs.
- Use a fume hood with an operating exhaust fan, and wear safety glasses, while preparing reagents and handling concentrated acids, caustic substances, concentrated ammonia, poisonous and highly harmful compounds.
- Use a dedicated enamelled tray for performing all assays of galvanic wastewater.
- Exercise caution during work.
- Use tools and equipment according to their intended purpose and follow safe operating instructions.

ON THE PREMISES OF THE LABORATORY YOU MUST NOT:

- use flammable solvents on the premises and under the fume hood without exercising special caution (if possible, use small amounts, be careful not to make spills, do not use open flame at the same time, heat only in the water bath, etc.),
- switch on the exhaust fan when handling ethyl ether under the fume hood,
- evaporate ether over open fire or using an electric cooker,
- draw solutions into pipettes by mouth,
- spill galvanic wastewater solutions on tables and hands (when gloves are not used),
- perform distillation of galvanic wastewater to determine the content of cyanides without a fume hood,
- store food utensils in the laboratory sink or have meals on the laboratory table,
- allow unauthorized persons to stay on the laboratory premises.

AFTER FINISHING WORK

- Leave your workplace tidy and clean.
- Return PPE to its place of storage.
- After completing assays, rinse laboratory ware thoroughly, and then clean it.
- After completing wastewater assays, wash the tables thoroughly and wipe them with denatured alcohol.
- Collect remains of hazardous substances into dedicated containers.

FINAL REMARKS

- Always treat the chemicals in the laboratory as hazardous.
- Use special caution when handling flammable substances.
- Make sure you are thoroughly familiar with the fire safety manual and know how to use fire-extinguishing equipment.
- The laboratory should be equipped with operational fire-extinguishing equipment.
- Samples from hard-to-reach or confined locations should be collected by two persons.
- The laboratory should be equipped with a first aid kit.
- Laboratory personnel should be able to administer first aid in cases of poisoning or chemical burn.
- **If an accident occurs, notify your superior immediately. Do not touch or disturb anything in the workplace in which the accident has occurred.**
- If there are any doubts regarding the safety of working conditions, you are entitled to interrupt work and refer to the superior to clarify the situation.