

Rules Concerning Health, Safety and the Environment during Work with Dangerous Chemical Substances and Preparations

Everyone who handles dangerous chemical substances (both students and employees) must be demonstrably familiar with the laboratory equipment used, with the physical, chemical and biological characteristics of the substance with which they are working, the handling of dangerous substances, their storage, and the disposal of waste and with basic first aid methods necessary in the event of injury or poisoning.

Dangerous chemical substances:

- **Highly toxic**; these are substances or preparations which when inhaled, consumed or absorbed through the skin in very small quantities cause death or acute or chronic harm to health.
- **Toxic**; these are substances or preparations which when inhaled, consumed or absorbed through the skin in small quantities cause death or acute or chronic harm to health.
- **Caustic**; these are substances or preparations which when in contact with skin or other tissue may damage them.
- **Carcinogenic**; these are substances or preparations which when inhaled, consumed or absorbed through the skin cause cancer or increase its incidence.
- **Mutagenic**; these are substances or preparations which when inhaled, consumed or absorbed through the skin may induce hereditary genetic damage or increase its incidence.
- **Toxic for reproduction**; these are substances or preparations which when inhaled, consumed or absorbed through the skin may induce or increase the incidence of non-hereditary unfavourable effects on offspring or an impairment of male or female reproduction functions or abilities.
- **Dangerous to natural environment**; these are substances or preparations when released into the natural environment represent or may represent an instant or delayed hazard to one or more constituents of the natural environment.

General Principles of Work in a Chemical Laboratory

- laboratory work may be carried out only in a laboratory equipped, according to the nature of the work, with personal work safety clothing and equipment, fire extinguishers, first aid kits, water supply and emergency lighting.
- Laboratory receptacles may not be used for eating, drinking or in the storage of food and drink
- Food or drink may not be stored in refrigerators with chemicals.
- Eating, drinking and smoking is allowed only outside the laboratory.
- Every chemical substance must be properly marked according to risk level (symbol, in wording - S- or P- sentences, R- or H-sentences)
- it is forbidden to draw chemical substances into pipettes by mouth (safety pipettes, feeders and vacuum loading etc. should be used)
- Caustic substances which generate heat with reaction with water are to be dissolved or diluted gradually while stirred and under cooling.
- Spilt acids are to be diluted with water or neutralizing substances (e.g. soda)
- Spilt alkali is to be washed away with water
- The disposal of toxic substances and their waste is to be carried out in the approved manner and in accordance with the approved waste disposal plan.
- During direct handling with them, it is necessary to use safety clothing, gloves, breathing apparatus with an organic fume filter. During handling of caustic substances a safety screen or safety, goggles are to be used.
- Work with volatile, poisonous and irritant substances may only be carried out under good ventilation.

I hereby attest that I have been instructed in the principles of the handling of chemical substances according to the law (No. 350/2011 Code of Law, and any latest additions,, that I do understand them, and I will abide by them.

Student's first and last name
(Please print)

date

signature

The schooling was conducted by:
Helena Zahradnickova - specifically designated person



University of South Bohemia in Ceske Budejovice – Faculty of Science

University of South Bohemia Student Advisory concerning OSH and FS

Ensuring Occupational Safety and Health (OSH) and Fire Safety (FS) is one of the conditions for the proper implementation of education in this school. One of the basic requirements of the university and its management is to provide safe and health risk free environment. This requirement does not only concern the employees of the university, but it extends to the welfare of the students while attending classes and any activity associated with their education anywhere on the university premises or any premises associated with the university.

Since the particular knowledge varies with specific conditions and different locations, the students will be informed accordingly regarding specific safety and fire safety regulations.

In the interest of one's own health as well as the health of others the student is required:

- To adhere to safety regulations, such as fire safety regulations with which he/she were familiarized by the faculty (or the foreman of the premises) - for instance: fire alarm regulations, evacuation plans, rules of operation.
- Abide by rules of safe conduct in the common areas, in the classrooms, in the laboratories, in the workshops, in the field, in the hallways and staircases, in the cafeteria, etc.
- Submit to an examination in the area of rules and knowledge if it is required by safety or other rules, or by an increased risk factor.
- Report all facility deficiencies regarding work safety, or which could cause a fire to the proper authorities.
- Report without delay all injuries associated with school work or activities to the proper authorities.
- Do not use alcohol before or during lectures. Do not use other intoxicating-type drugs. Do not smoke in areas where smoking isn't allowed.

The student is not allowed to manipulate, turn on, turn off, or to operate any machinery, instruments, or equipment which have not been assigned to him/her and with which he/she has not been familiarized with. The student is required to report all health problems – transient, the worsening of chronic ones, or similar ones which could compromise the safety of the student or his/her environment. The student will not undertake any work in the laboratory, in the workshop, in the field, or similar places under the influence of alcohol, drugs, or other intoxicating substances.

I hereby attest that I have been instructed in the OSH and FS principles and about activities with the electrical equipment according to §3a4 order.50/1978Sb, that I do understand them, and I will abide by them.

Student's first and last name date signature
(please print)

The schooling was conducted by:

Václav Švejda - technician for OSH and FS FS USB

Vladimír Kopal - Electrical inspection techniques



