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Safety precautions for the work in the laboratories of the Institute of Physics at the Carl-von-Ossietzky Universität Oldenburg

The instructions listed below are based on the following regulations:

- I. <u>Deutsche Gesetzliche Unfallversicherung (DGUV): Richtlinien für Laboratorien, 1998</u>
- II. Laboratoriumsordnung für die physikalischen Labors der Universität Oldenburg, 15.6.96
- 1) Every person working in the laboratories is obliged to handle laboratory equipment and devices properly and diligently. Unfamiliar devices and instruments are not to be touched. Instruments and equipment may be used only in the presence of the supervisors of the course or technical assistants and with their permission.
- 2) Experiments in the laboratories or on the campus are never to be performed by a single person, there must be another person, at least within calling distance, who can help or call for help in case of an emergency.
- 3) It is forbidden to eat, drink or smoke in the laboratories.
- 4) Neatness and cleanliness are to be maintained by everyone working in the laboratories. Working places are to be left in the previous condition. In case of faulty conditions at the start of work, the supervisor of the course or the technical assistants must be informed.
- 5) Garments are to be hung on the coat racks, bags and other things are to be put down beside the racks.
- 6) Safety devices must not be put out of action.
- 7) The supervisors of the course or the technical assistants must be informed about any defects in the electric power or gas supply as well as about defects in safety devices or about any dangerous conditions in the laboratories immediately.
- 8) Red emergency control buttons have been installed in the laboratories. The electric power supply in the laboratory or in the respective energy panel is shut down, when those buttons are actuated.
- 9) Instruments are to be installed in a clear and tension-free arrangement. If stands are necessary, the latter are to be fixed safely.
- The beams of optical set-ups with lasers have to be guided so that any health hazard is excluded. Special care has to be taken that laser beams do not get directly into the eyes. The guide <u>Unfallverhütungsvorschrift Laserstrahlung</u> must be observed.
- 11) Flexible tubes and electric lines are to be laid in such a way that they will not be a source of danger.
- 12) Hazardous substances are to be kept or stored in such a way that neither human health nor the environment is endangered.
- 13) Chemicals must not be stored in jars commonly used for food and drink.
- 14) Chemicals are to be stored in vessels only which are made of materials resisting the expected strain and which are labeled according to their content.
- 15) In laboratories, storage flasks containing hazardous substances in amounts required for ordinary use are to be labeled stating at least the name of the substance, its preparation and components, as well as the hazard symbols together with the related designations.
- 16) Vessels containing hazardous substances may be stored in shelves, cupboards or other furniture only up to a height that allows them to be taken out or put down safely.

- 17) Poisons as well as preparations of such substances are to be kept under lock and key or are to be stored in a way that they are accessible to skilled or well-informed persons only.
- 18) Hazardous substances releasing injurious vapors are to be stored at places under continuous exhaust.
- 19) Wastes and solvents must not be poured away into sinks; they are to be collected in the suitable special collecting basins.
- 20) Suitable safety glasses and protective gloves have to be used during work involving special hazards to eyes and hands. Safety glasses, protective gloves, and clothing are available to students.
- The treatment of radioactive substances is subject to strict legal regulations
 (<u>Strahlenschutzverordnung</u>) which absolutely must be observed. Separate instructions
 have been issued for work with radioactive materials.
- 22) In case of fire, the fire brigade must be informed without delay. Until the firemen arrive the fire is to be fought with the available fire-fighting equipment, as far as this can be done without risk. Any persons not concerned with firefighting or rescue work must leave the danger area immediately.
- 23) All persons starting to work in the laboratories must inform themselves about the existence, position, and handling of fire extinguishers, fire-fighting rugs, emergency sprinklers, the fire-alarm system, and dressing material).
- 24) There are fire-alarm boxes at the fire hydrants in the staircases as well as in some floors in other sections of the building, which directly call the fire brigade and caretakers.
- 25) Any cases of injury, burn, poisoning or electric shock must be reported to the supervisors of the course or to the technical assistants without delay.