## Safety instructions (modified: August 29, 2011)

As an institute of education we must be models as for occupational safety. Although the university level education and research are predominantly theoretical, there are a lot of activities with risks of accident and health hazard. The safety of oneself, colleagues, students, and third parties should be reckoned with in

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- lecture demonstrations,
- student exercise and projects,
- research, as well as
- in any other activities, such as in recruitment exhibitions.

Instructing students to industrial safety is also a natural part of a technology oriented degree programs.

Occupation safety is reached by proactive activity that is in accordance with laws and regulations. Safety is also a part of our quality system.

## The goal is zero accidents.

If, despite all the caution, an accident occurs or is close, one must report it to his/her superior.

## Comply with the following instructions:

- Keep a health attitude towards safety.
- Busyness is no reason to take risks.
- Evaluate risks and necessary precaution. Ask advice if you don't know or can.
- **Keep an eye on** the activities of your own and others. Interfere immediately if risky actions are taken.

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- Read manuals, such as:
  - o the security plan of Technobothnia,
  - o safety instructions of machines and robots, and
  - o regulations of chemicals.
- Observe the purpose of different facilities, and keep the facilities in order:
  - o use machines only at Technobothnia,
  - o some larger machines are available at the workshops of Technobothnia,
  - use chemicals only at Technobothnia, in fume chamber or biofuel laboratory when needed,
  - o soldering of electronics only at Technobothnia,
  - the use of instruments and safe devices is allowed according to the rating (e.g., IP class) of each apparatus.
- Working with fire is allowed ONLY for licensed persons in the particular places.
- Electrical installations are allowed ONLY when Extra Low Voltage (ELV) is concerned, unless you are licensed.
- A training is required before using industrial robots. It is prohibited to use robot alone, unless otherwise is agreed.
- ALWAYS use the necessary personal safety equipment:
  - o safety goggles when using machines, or chemicals that can spatter,
  - o laser safety goggles when using efficient lasers (classes (2), 3, and 4),
  - o appropriate **gloves** when handling sharp objects (such as metal sheet and drilling flakes), chemical, or objects with a hazard of infection,
  - Hearing protectors when using noisy machines.
  - Personal safety equipment can be found in TF4111 at Technobothnia.
- Do not climb!
- Do not lift heavy objects! If necessary, use fork-lifts and other aids, such a movable tables.
- Only tasks related to your work may be carried out at Technobothnia.