Technical employees

Personal protective equipment (PPE)

PPE include equipment accessories the employee must wear to prevent exposure to hazardous materials.

Nevertheless, PPE does not eliminate safety risks, but rather assists in protection, lowering potential exposure.

- Long-sleeved laboratory coats must always be worn when working in a chemical and/or biological laboratory.
- Nitrile or latex gloves must always be worn when working in a chemical and/or biological laboratory. Latex gloves supply high sensitivity, enabling maximum control of touch and gentle motor skills; nitrile gloves do not contain the latex protein. They are more durable to shearing and chemicals but they can cause oxidation of silver and highly-reactive metals, which can react with Sulphur.
- ➤ Designated protective goggles must always be worn while sharpening, welding, etching, cleaning with air pressure, etc. to protect your eyes.
- ➤ Designated protective goggles or a face mask must always be worn while using acids and/or glues and/or other chemical substances. Wear gloves and a long-sleeved lab coat.
- ➤ While working in noisy conditions, always wear earplugs or hearing protectors during your work or presence in the noisy area.
- ➤ When welding, transporting, or carrying heavy materials, maintenance, or working in hazardous areas to your feet, wear standard safety shoes with a protective cape (S3 working shoes).

Conduct

- > Concentrate on your work and do not get distracted or distract your work colleagues. Distraction is liable to cause an accident.
- Remove tools and equipment from passageways; they are liable to cause an accident.
- > Be attentive and courteous to your colleagues; avoiding tensions prevents accidents.
- Keep the Technion and your workstation clean and do no throw out waste except in designated bins or areas.
- ➤ Do not perform the work of another employee or work you are not certified to perform without being qualified to do so. You are liable to jeopardize yourself and those around you.

Tools

- > Do not operate machines, facilities, tools or processes before you are familiar with the operating and safety instructions and certified to do so.
- ➤ Hammer or chisel blows are liable to spray shards, endangering your eyes.
- A broken tool handle (hammer, screwdriver, file) is liable to cause injury.
- Files, screwdrivers, etc. with no handle are liable to cause injury.
- > Open plier jaws are liable to cause an accident.
- > Do not use
 - A file as a lever or its tip as a borer.
 - A wrench that does not fit the bolt.
 - A pipe to extend a wrench.
 - Blunt cutters that are liable to slip.
 - Keep tools in pouches or toolboxes, or in your pants pockets or belt.
- ➤ Keep tools in good shape. Send your tools for repair or replace them on demand.

Ladders - working at height

- ➤ Technion employees may work at height or on ladders following training, pursuant to the Work at Height Safety Regulations, 5767-2007, and with the approval of the Safety & Radiation Unit.
- ➤ Use appropriate equipment for the work and make sure that you are properly fastened and secure.
- ➤ Use standard and intact equipment, such as safety harnesses, fall brakes, and hard hats with straps or a chin strap.
- ➤ Always use an intact ladder or scaffold.
- Avoid climbing on chairs, pipes, tables and other improvisations.
- When ascending and descending a ladder, always face the ladder.
- Lean on the ladder at a suitable angle and ensure that you are not about to slip. If necessary, obtain the help of another employee.

Lifting and carrying loads

- ➤ If you must lift any load, do so properly: bend your legs and use your leg muscles, not your back muscles. Keep your back straight.
- > Only lift what you can. If necessary, ask for help or use available lifting equipment.
- ➤ Lift loads only when your view is unrestricted.
- lifting equipment is tagged by a permitted work load sign. Do not overload it.
- ➤ Avoid places where cargos are being lifted.
- > Protect your hands with gloves and your feet with safety shoes.
- ➤ When using lifting gear (chains, cables, etc.), verify that the gear is valid (by a certified lifting equipment inspector), intact and properly harnessed.
- ➤ You may only operate a lifting machine if you are certified to do so and you are familiar with its use and safety instructions.
- ➤ All lifting and carrying of materials must be undertaken slowly and carefully, considering the cargo, environs and other employees in the area.

Machinery and equipment

- Your work may well involve machinery. Do not operate a machine or device if you are not authorized to do so.
- > Do not work with or operate tools or a machine without the assembled shields or guardrails.
- Never dismantle a shield or guardrail from a machine. Only an eligible person may dismantle shields or guardrails, after the machine is turned off and disconnected from its power source (electricity, air, etc.).
- > Concentrate on your work and avoid distractions.

Compressed Gases

- ➤ Compressed gases are usually supplied through a fixed gas pipeline system or via single gas cylinders, which could be toxic, flammable, oxidative, corrosive or inert. Leakage of compressed gases could be dangerous.
- ➤ All compressed gas cylinders whether empty or full must be stored in an upright position.
- Compressed gas cylinders must be secured. It is strictly forbidden to knock over or slam cylinders. Towing or rolling compressed gas cylinders is strictly forbidden.
- ➤ Shuttling of compressed gas cylinders will always be executed with their protective caps on.

- ➤ Leakage of a compressed gas, such as acetylene or hydrogen, also poses an explosion risk. Therefore, proper ventilation should be maintained around the laboratory and gas detectors with alarm mechanisms should be administered.
- > Smoking is strictly forbidden as is the use of open fire (except in a designated hood).

Electricity

- An electrical appliance or device is unsafe if used incorrectly. Leave the repair work to a certified electrician. Avoid improvised electrical arrangements and do not try to make repairs if you are not certified to do so.
- The "do-it-yourself" rule does not apply to electricity. If your electrical device is not working properly, immediately unplug it, notify your superior, and send it for repair. This is especially true for mobile electrical devices (drills, sharpeners, etc.) Verify that the connections and isolation are intact.
- ➤ Place electricity cords so that they will not create an obstacle to the movement of people or equipment.
- If you see a crack, break or flaw in a tool, stop your work and notify your superior.
- ➤ If you get a shock, immediately stop work and disconnect the power supply.
- ➤ <u>Do not carry out electrical work</u> replacing light bulbs, repairing sockets or plugs, etc. unless you are a certified and authorized electrician. Only a person certified by the Technion may replace a light bulb.

Working with heat

➤ Do not work with heat (welding, cutting and soldering), except in accordance with Safety Procedure No. 07-118.

When working with thinners, flammable gases or acetone, take extra caution when positioning the containers, connecting them to systems, closing them after use and preventing leaks and spills.