



GUIDELINES FOR OCCUPATIONAL HEALTH & SAFETY IN THE LABORATORY (Lab Management Department)

Section A: Introduction and scope of the Guidelines

These guidelines are applicable to all laboratories under supervision of Lab Management Department of UNIVERSITI TEKNOLOGI PETRONAS (UTP).

As laboratory users, **Students / Researchers / Visitors / Vendors** are responsible (and required) to:

1. Avoid, eliminate or minimize hazards of which they are aware;
2. Comply with all occupational health and safety instructions;
3. Make proper use of all safety devices and Personal Protective Equipment (PPE);
4. Not willfully place at risk the health and safety of themselves or any other person;
5. Seek information, advice or conduct HIRARC where necessary, or when in doubt, before carrying out new, unfamiliar work or non-routine task;
6. Wear proper protective clothing and footwear;
7. Be familiar with emergency and evacuation procedures;
8. Report and record all accidents and near miss incidents on the Injury, Illness to Laboratory Personnel.

Section B: The laboratory

A laboratory can be a place of specialized research, teaching and/or learning. Laboratories are commonly used in many engineering disciplines across the University ranging from fabrication, electrical & electronics, chemistry, environment, fluid mechanic, separation process & etc. The term laboratory may also equate with a workshop in some engineering areas.

Laboratory Safety Rules

Section C: General rules – Building

1. In an emergency and during practice evacuations, move quickly and carefully from the laboratory to the external stairwell or nearest emergency exit. Proceed to the designated assembly area (Graduate Assistant or Lab Technologist will advise) and wait there until permission is given to re-enter the building. Never run in the laboratory or along corridors.
2. Be aware of the position of exits from all work areas and from all levels of the building;
3. Smoking is prohibited in all buildings at the Universiti Teknologi Petronas.
4. Food and drink (including drinking from water bottles) must not be consumed in laboratories.

Section D: General rules – Laboratory

1. Students, Researchers, visitors and vendors are not permitted to enter any laboratory without approval from the laboratory personnel through iLab.
2. Unauthorized work in the laboratory is strictly forbidden. Any activities in the laboratory should be requested through iLab.
3. A proper attire and dress code shall be adhered at all time. This includes the wearing of Lab coat, Lab jacket, apron or whichever is applicable. NO wearing of slippers / sandals /flip flops exposing the toes is allowed. (Please consult the laboratory personnel for the requirements).

4. All laboratory users must be aware of the conditions required for the safe handling of hand tools, substances, chemicals, materials being handled. If in any doubt, seek guidance from the laboratory personnel.
5. Be aware of the safety facilities of the laboratory, i.e. location of safety showers, eyewash stations, fire extinguishers and emergency exits.
6. Working spaces are to be kept clean. Broken glass, sharp debris and laboratory waste must be placed in the marked bins in the laboratory. No waste shall be left in the sinks, and under no circumstances must a waste be placed below the sink, unless authorized to do so by the laboratory personnel.
7. Ensure that all equipment, gasses, and power utilities are properly off or shut down upon completion of work.
8. Disposable gloves should be placed into designated bins which are specifically marked.
9. No tools, chemicals or apparatus is to be removed from the laboratory without approval from the laboratory personnel through iLab.
10. Horse play is prohibited in the laboratory area.
11. Defective equipment or broken glassware must be reported to the laboratory personnel.
12. Radioactive sources (e.g. laser, UV radioactive substance or arc lamp) must only be used under the direction and supervision of the laboratory personnel.
13. **NO** jewelries or unnecessary accessories are allowed to be worn in the laboratory.
14. Long hair should be tied back to avoid injury.

Section E: Housekeeping

1. Work areas **MUST** be cleaned up following the completion of any operation or activities or experiments or at the end of the day.
2. All equipment **MUST** be cleaned and restored to its original condition as before the works started.
3. All containers and chemicals or materials or samples in use **MUST** be clearly labelled and stored properly; any unidentified / unlabeled containers and samples will be disposed.
4. Access to exit and emergency equipment and controls should never be blocked.
5. All personnel belongings should be placed at designated area.

Section F: First Aid

1. Report all injuries and illnesses to the graduate assistant and laboratory personnel. First aid will be administered by trained first aider.
2. Eye injuries, whether caused by chemicals or mechanical injury or splash with biological material are always serious. The treatment requires immediate and prolonged flushing with water (20 minutes minimum) at the eyewash station. Medical advice should be obtained for an eye injury. Safety Data Sheet (SDS) should be referred by student if necessary to seek medical treatment.
3. In the event of chemical or biological spills on skin, thoroughly wash the affected area with copious quantities of water. Notify graduate assistant and laboratory personnel immediately. Refer SDS to determine appropriate first aid. SDS should be referred by student if necessary to seek medical treatment.
4. Sharps injuries – Notify graduate assistant and laboratory personnel immediately. Wash the wound and encourage bleeding. Health Services should be visited.
5. Animal bites – Notify graduate assistant and laboratory personnel immediately. Wound must be rinsed well. Tetanus immunization will be personal responsibility;
6. If you are feeling unwell or dizzy when participating in an experiment, stop immediately, sit down and notify graduate assistant and laboratory personnel;
7. All accidents must be reported to the graduate assistant and laboratory personnel, including cuts and bruises and reported to Health, Safety & Environment Department. Non injury causing incidents such as spills, electrical faults, damage to equipment etc must also be reported to the graduate assistant and laboratory personnel.