

# Industrial Safety & Health Department (ISHD)

Industrial Safety & Health Department (ISHD) is one of the vital departments of TICI. ISHD started its training activities from January, 2011. At the inception of this department, it possessed only 1 (one) laboratory known as “Safety Laboratory” with a very little amount of general safety equipment and a few demonstration setups.

In view of national safety & risk awareness status, there needed to be established more practice-oriented laboratories under this department. For this, the department took an expansion program on different fields of safety & risk aspects by imparting more and more up to date training programs. To cope with the International Standard training programs in the field of Industrial Safety, Occupational Health & Hygiene, Process Risk Management, and Disaster Management & Rescue Operation, various laboratory facilities are now incorporated with this department.

This department comprised of the following labs-

- 01. Industrial Safety Laboratory**
- 02. Occupational Health & Hygiene Laboratory**

## 01. Industrial Safety Laboratory



▲ A view of Industrial Safety Laboratory

Industrial Safety Laboratory is equipped with demonstration models and equipment to demonstrate and carry out experiments on safety aspects. In this Lab, Practice classes are conducted using various kinds of Personal protective equipment and Rescue equipment. Trainees achieve practical knowledge about firefighting, industrial safety and Rescue operation. The laboratory is furnished with the following general safety instruments and several demonstration setups:

- Fire Alarm Training System
- Thermal Imaging Camera (TIC)
- Heat & Smoke Detector Tester
- Combustible Gas Detector
- Portable Fire Extinguisher Level Tester
- USAR Task Force Kit
- Back firing experimental set-up
- Liquid Vapor Explosion Simulator
- Confined Space Explosion Simulator
- Fire hazard simulator related to vapor density of liquid
- Static electricity generation set-up
- Hazardous Gas Exhaust System, etc.

**Fire Alarm Training System:**

A training system with which participants will learn sufficiently about the installation of a number of devices working together to detect and warn people through visual and audio appliances when smoke, fire, carbon monoxide or other emergencies are present. ▶



**Thermal Imaging Camera (TIC):**

the camera allows firefighters to see areas of heat through smoke, darkness, or heat-permeable barriers. ▶



## 02. Occupational Health & Hygiene Laboratory

The laboratory is furnished with Occupational Health & Hygiene related experimental & monitoring setups such as Noise Dosimeter, ATP Hygiene Monitoring System, Carbon Monoxide Meter and Combustible Gas Detector. Here Trainees acquire practical knowledge about Chemical Hazards, Toxicity of chemicals, Radiation Hazard, Acoustic Hazards and Audiometric tests. The laboratory is equipped with the following experimental & monitoring setups and equipment:

- ATP Hygiene Monitoring System
- Noise Dosimeter
- Carbon Monoxide Meter
- Sound Level Meter (Digital)
- Light Meter
- Thermo Anemometer
- Grain Moisture Meter
- Explosive Gas detector (Methane)
- Radiation Alert Monitor
- Drager's Gas detector
- Combustible Gas indicator, etc.



▲ A view of Occupational Health & Hygiene Laboratory



**Some important Occupational Health and Hygiene related hazard detecting and monitoring meters**

## Technical Service offered by ISHD

Industrial  
Safety &  
Occupational  
Health  
Services

- Identifying causes of the fire incident and advising for improving the existing fire extinction system.
- Advising on the prevention of industrial hazards, HAZAN and HAZOP study.
- Advising on the improvement of the existing personnel safety system.
- Formulation of safety standards of process industries.