

Post Graduate Department of Chemistry

Vimala College (Autonomous) Thrissur

Organizes

Bridge course on Lab Safety - Procedures and Protocols

For BSc I year students

1. Safety measures in the laboratory
 - a. Personal Protective Equipment (PPE)
 - i. Proper Attire (Eye/Face Protection, Lab Coats, Gloves, Respirators, Disposal/Removal of PPE)
2. Material Safety Data Sheet (MSDS) of chemicals
 - a. Toxic Hazards (Dose, Risk Assessment, Types of Toxins, Flammable Hazards, Flammability Characteristics, Flammability Classes, Causes of Ignition, Reactive Hazards, Explosives)
 - b. Health Effects Due to “Hazardous” Chemical Exposure (How Does One Determine the Hazards Associated with Specific Chemicals?, Exposure Routes, Toxicity Risk Assessment)
3. Fires
 - a. Fire extinguishing techniques and First-aid procedures in case of burns
4. Laboratory Equipment. I
 - a. Working with Electricity
 - b. Working with Water (liquid)-dependent Equipment (Hazards, Proper Use, Heating Baths)
 - c. Working with High Pressure/Vacuum
 - d. Working with Vacuum Pumps
 - e. Working with Stirring and Mixing Devices
 - f. Working with Heating Devices (Oil, Salt, Sand Baths, Hot-air Ovens)