

Research Methodology in Chemistry

Edited by
Fiona N.-F. How, Ph.D



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RESEARCH METHODOLOGY IN CHEMISTRY

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CHAPTER – 1

GENERAL LABORATORY SAFETY PRACTICES

Nurziana Ngah

The purpose of this guide is to promote safety awareness and encourage safe work practices in the laboratory. These are guidelines; they should serve as a reminder of things you can do to work more safely. Although these guidelines are applicable to all research, teaching and academic laboratories, your lab may require more specialized rules that apply to specific materials and equipments. Please see laboratory supervisor (LS) or principal investigator (PI) for more information before begin work in the lab.

Awareness

1. Be alert to unsafe conditions and actions, and call attention to them so that corrections can be made as soon as possible.
2. Label all storage areas, refrigerators, etc., appropriately, and keep all chemicals in properly labeled containers.
 - Date of chemicals when received and when opened.
 - Note the expired date on chemicals.
 - Note the special storage conditions
3. Be familiar with the appropriate protective measures when exposed to the following classes of hazardous materials. Information is available from your lab supervisor and MSDS.
 - Flammables
 - Compressed gases
 - Corrosives
 - Biohazards
 - Toxics
 - Carcinogens
 - Reactive
4. Segregate chemicals following the compatibility groups for storage.