

ICMS 8F

▶ Laboratory Safety Introduction

2024-2025



Area and functions of 8F

- ▶ Administrative Staff Office (8031)
- ▶ Quality Control and Testing (8047)
- ▶ Student study room (8002, 8006, 8010, 8011)
- ▶ General Chemistry Laboratory (8002a, 8006a, 8010a, 8011a)
- ▶ Cleanroom area
 - Solid Preparation Laboratory (8034)
 - Topical Preparation Laboratory (8043)
 - Liquid Preparation Laboratory (8046)



八樓平面圖

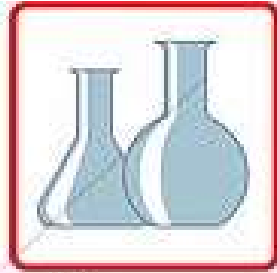
8F Laboratory Safety Introduction



Sharp instrument hazard



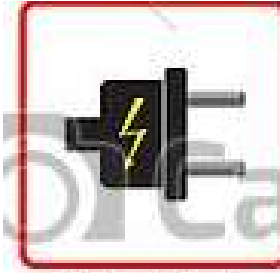
Heat hazard



Glassware hazard



Chemical hazard



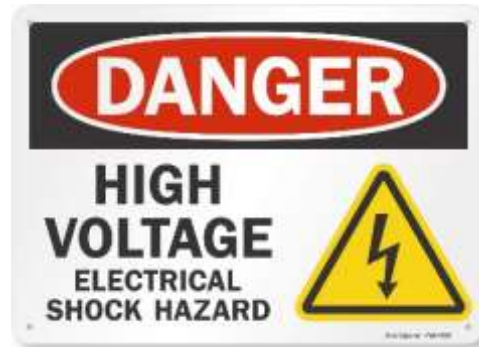
Electrical hazard



Eye & face hazard



Fire hazard

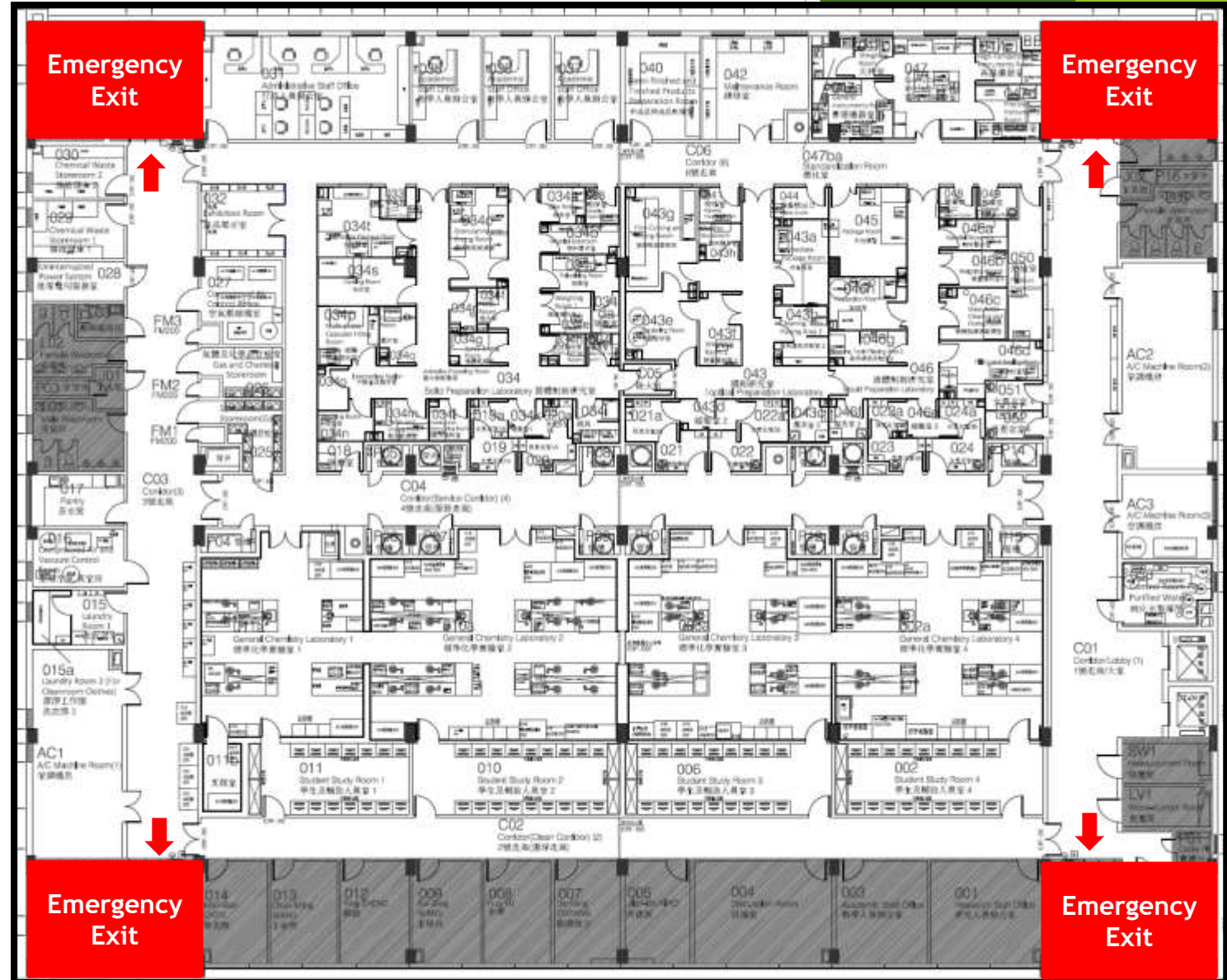


Personal Protective Equipment (PPE) requirement



Emergency Exit

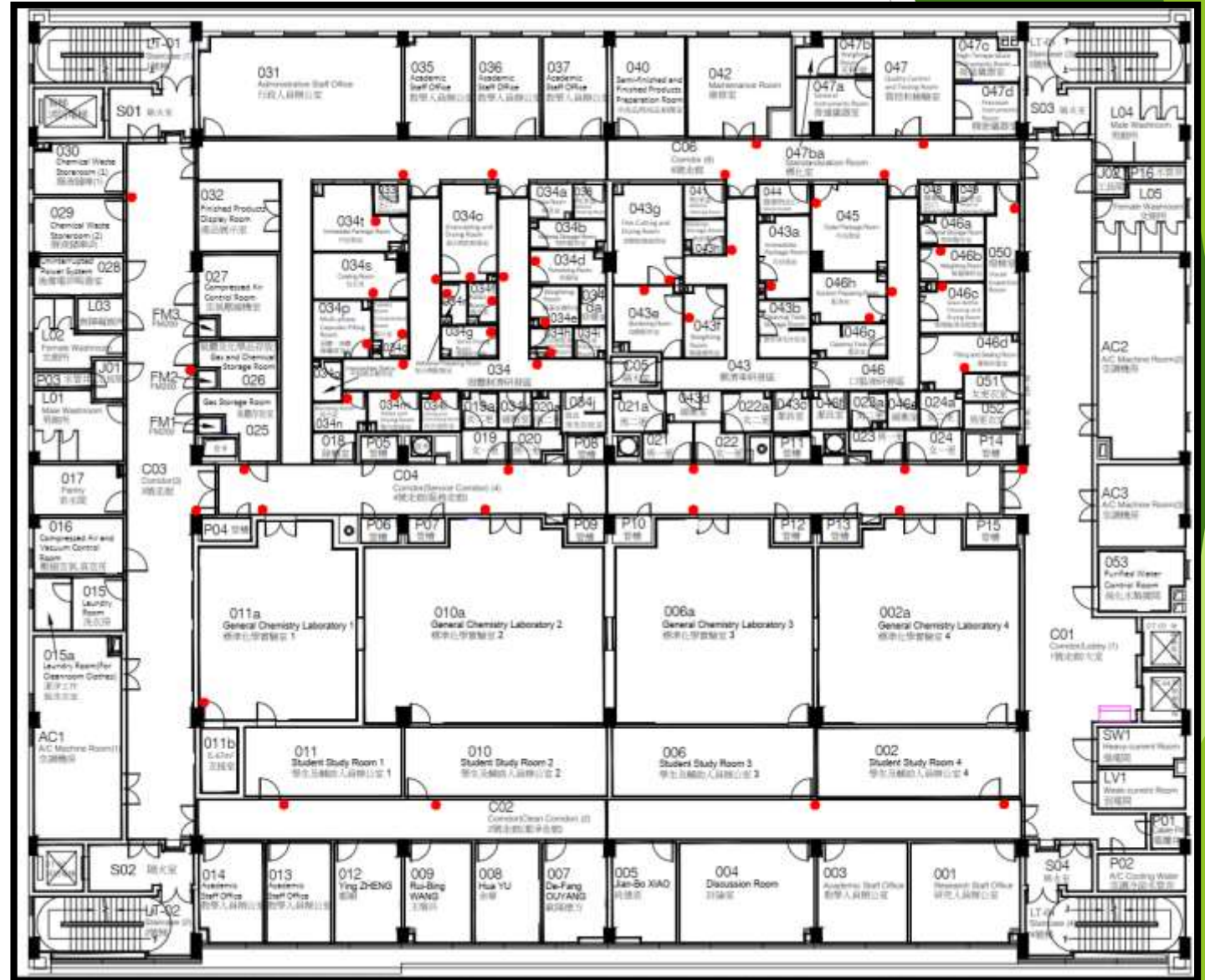
- ▶ There are emergency exit on all sides of 8F. In case of emergency, use the closest staircase for evacuation ;
- ▶ An evacuation floor plan of 8F is posted behind the door of each room, and please follow the instructions.
- ▶ Do not use the lifts in case of fire



Evacuation floor plan of 8F

Emergency buttons

- ▶ There are 53 emergency buttons on 8F. Pressing the buttons will activate the alarm to notify the entire floor of the evacuation and activate the emergency exhaust mode.
- ▶ The signal will be connected to the security center.



緊急按鈕位置平面圖

Emergency Safety Equipment

Equipment	Picture	Qty
Emergency Shower	 A photograph of an emergency shower station mounted on a wall. It features a vertical metal frame with a showerhead at the top and a control panel with a yellow emergency stop button.	3
Eyes Washer	 A photograph of an eye washer station. It shows a green plastic container with a white nozzle and a green hose, mounted on a wall.	8
First Aid Kits	 A photograph of a first aid kit. It is a green plastic container with a white cross symbol and the text 'FIRST AID KIT' on the front. The kit is mounted on a wall.	3
Spill Kit	 A photograph of a spill kit. It is a green plastic container with a yellow label that reads 'SPILL-KIT STATION'. The kit is mounted on a wall.	5

Emergency Safety Equipment location of 8F



Emergency Safety Equipment location

Rules for Storage of Chemical Reagents

MSDS

Material Safety Data Sheets

Document that contains information on the potential hazards (health, fire, reactivity and environmental) and how to work safely with the chemical product



Rules for Chemical storage

Corrosive Chemical Cabinet

User should not keep more than one week's supply of chemical



Organic Solvent Safety Cabinet

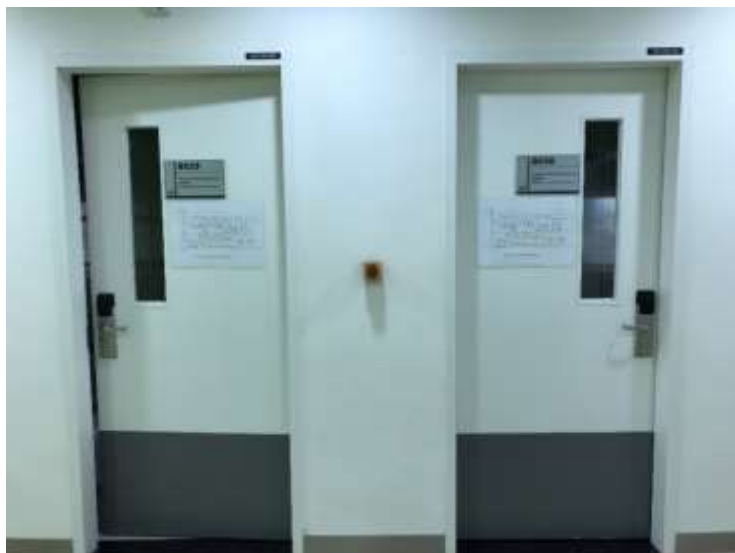


Strong Acid Chemical Cabinet

8F Chemical Waste Disposal

Each group should handle their own liquid waste disposal

8029 、 8030



Chemical waste,
Emptied waste
bottle

Broken glass disposal box



Sharp box



General waste



Solid Chemical Waste



Solid Waste

8F Chemical Waste Disposal - Liquid waste

Liquid Chemical Waste

- Liquid organic waste need to be disposed into designated collection bins at the waste room.
- Halogenated
- Non-halogenated
- Waste oil
- Heavy metal waste liquid (trace amount)

8029 、 8030



8F Chemical Waste Disposal-8029, 8030

- ▶ Fill in the Waste Disposal Form and submit to 8031
- ▶ Open time: Mon-Fri at 10am - 12 pm & 3pm - 5pm

Waste Disposal Form (N22-8th Floor)

User Information			
Name			Student ID / Staff ID
Group			Date
Waste information			
1. Liquid Waste – please identify type of waste (Halogenated, Non-halogenated, Heavy metal)			
2. Others			
Types of waste	Detail (must be filled)		
1. Liquid Waste	<input type="checkbox"/> Halogenated contains:	<input type="checkbox"/> Non-halogenated contains:	<input type="checkbox"/> Heavy metal contains:
	volume:	volume:	volume:
2. Others			
Below is for Lab Technician ONLY			
Room number	1. Liquid Waste : 2. Others :		
Barrel number (For liquid waste)	<input type="checkbox"/> Halogenated : <input type="checkbox"/> Non-halogenated : <input type="checkbox"/> Heavy metal :		

Staff Signature: _____ Date: _____

8F Chemical Waste Disposal

General Solid Waste

- ▶ Waste without chemical contamination
- ▶ Waste without biological contamination



8F Chemical Waste Disposal - Solid Waste

Solid Chemical Waste bin

- ▶ Chemical contaminated waste
- ▶ Gloves, tips, materials adsorbed with chemicals, etc.



8F Chemical Waste Disposal - Solid Waste



No needles or other objects are permitted

Broken glass disposal box

- No chemical and/or biological contaminated broken glass.
- If the box is 75% full, notify technician for replacement.



8F Chemical Waste Disposal - Solid Waste



Needles only

Sharp box

- Needles
- If the box is 75% full, notify technician for replacement.



8016



Vacuum and Compressed Air system

8027



N2 Gas cylinder
storeroom

8025



Purified Water
System

8053

**8F Functional rooms -
Centralised equipment**

8F Functional rooms - Centralized equipment



Vacuum and Compressed Air system



Compressed air outlet



Vacuum

8F Functional rooms - Centralized equipment



**Purified
Water
system**



Purified water outlet

Run the water for about 30s
to ensure the quality of water

8F Functional rooms - Centralized equipment

Output
pressure:
10bar



N2 Gas cylinder
storeroom

The corresponding
gas cylinder cabinet
number



N2 gas outlet

8F Electrical rules

- All labs has 220 V and 380V power sockets, do not remove or touch the safety label next to the 380V sockets
- Only electrical appliances with the standard British three pin plugs are allowed
- When using plugs and extension cords, be careful of overheating
- Do not touch any electrical appliances, sockets or switches with wet hands
- Equipment that is damaged or awaiting repair should be labelled properly and avoid using
- Before leaving the lab, computers, monitors and unnecessary equipment should be turned off.

8F Gas usage rules

- Consists of N2 from generators and high-pressure cylinders as well as compressed air
- Do not adjust any valves without permission or training
- Notify technician for gas cylinder replacement or if the pressure of the compressed air output is low °

Guidelines for 8F student study room

1. Register at 8031 for use
2. Cabinet keys can be borrowed and should not be shared or duplicated
3. Keep the environment quiet and clean, use headphones with audio
4. Do not stick notices or other items on walls
5. Food is strictly prohibited
6. Electronic products must comply with safety standards
7. Corridors should be kept clean
8. Individuals may be suspended or revoked in violation of the above

8F Equipment maintenance

Accessories :

Register at 8031 in advance and sign the borrowing record

Cleaning :

- Clean apparatus after each use and return to original position
- Remove, wash and dry accessories before reinstalling back to the apparatus

Damage :

- In case of abnormal operation, inform technician immediately and do not try to fix the equipment
- Do not dismantle the equipment without permission

Requester Information			
Name		Student No.	
E-mail		Tel./Ext.	
Office		P.L.	
Form Number (For internal use)			
Instrument Information			
Instrument Name			
Model			
Internal No.			
Location			
Justification			
Signature			
Date: Applicant	Date: Instrument Assistant	Date: Lab Technician	

Fill in by lab technician			
Application Received Date			
Training Person		Email	
Training Date		Training Time	
Examining Date		Examining Time	
Examination Result			
Follow-up			

備註：

- 申請者在使用實驗室內任何儀器前需經由培訓及通過考核方可獨立操作；
- 申請者填妥表格後交到技術員辦公室，由技術員安排培訓及考核時間，並會以電郵形式確認；
- 部分儀器將由研究助理或儀器負責人幫忙培訓，但仍須由技術員進行考核；
- 考核通過後按儀器預約程序進行預約，部分儀器採用紙本預約的形式，部分收費儀器則採用 LIMS 系統預約，詳細情況請向技術員查詢，未得批准前禁止擅自使用儀器。

Academic Equipment Log Book

Unit:	
Name of Equipment:	
Brand and Model:	
UM Asset Number:	
Person-in-Charge:	
Location:	
Initial Usage Date:	
Initial Training Date:	

Other Remarks:

1. Pass the training
2. Reserve on LIMS
3. Fill in the log book

Thank you for your attention!

► Technician office 8031

- Mon - Thurs: 9am - 1pm, 2:30pm - 5:45pm
- Friday: 9am - 1pm, 2:30pm - 5:30pm