



Health, Safety and Environment Office

Heads and Departmental Safety Officers Meeting 2024

Date : 27 Nov 2024 (Wed)

Time : 14:30 – 17:00

Venue : Lam Woo Lecture Theater (LTB)

Heads and Departmental Safety Officers Meeting 2024

Part 1 (Core Session)

- | | |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| 14:15 – 14:30 | Registration |
| 14:30 – 14:40 | Opening Remarks
Prof. Kar Yan TAM - Vice-President for Administration & Business |
| 14:40 – 14:50 | HSEO Strategic Goals, Progress and New Initiatives
Prof. Samuel YU - Director of HSEO |
| 14:50 – 15:10 | Introduction of HSEO Services, New Senior Managers and Field Team Organization Structure
Ms. Christine CHIU - Associate Director of HSEO |
| 15:10 – 15:20 | Accident Trend 2023/2024 and New Incident / Accident Report Form
Mr. Peter PANG - HSE Manager (Operation) |
| 15:20 – 15:30 | Q&A |
| 15:30 – 16:00 | Tea Break with Refreshment |

Heads and Departmental Safety Officers Meeting 2024

Part 2 (Laboratory and Research Safety Session)

- | | |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 16:00 – 16:25 | Central Delivery System (CDS) & Research Safety Management System (RSMS)
Pak IP - Head (Radiation and Biological Safety) |
| 16:25 – 16:45 | Good Practices Sharing: Lab Safety Representative System & CBE's Departmental
Safety Training

Mr Lee LEUNG - Senior Technical Officer |
| 16:45 – 16:55 | Q&A |
| 16:55 – 17:00 | Closing Remarks
Prof. Samuel YU - Director of HSEO |

Heads and Departmental Safety Officers Meeting 2024



Opening Remarks

Prof. Kar Yan TAM

Vice-President for Administration & Business

Opening Remarks by Prof Kar Yan TAM, VPAB

- AB offices, such as HSEO, are many times working behind the scenes
- COVID-19 Pandemic is a rare situation where HSEO took the lead in campus anti-pandemic efforts, but during "peace time" most of the health and safety efforts are not conspicuous
- Prevention is better than cure. If prevention is done right, there will not be accidents or incidents, so most people may not be aware of the importance of preventive efforts.
- Don't wait until an accident happens to realize the importance of safety, instead, remember to conduct risk assessment before any operations involving hazardous agents, HSEO is ready to help
- We appreciate Unit Heads and Departmental Safety Officers who have diligently implement health and safety measures in their units. Safety is everyone's responsibility, HSEO provides professional support and services, and monitor safety performance through inspections and audits
- Look forward to continuing close collaboration between campus units and HSEO

Heads and Departmental Safety Officers Meeting 2024



Progress and New Initiatives

Prof. Samuel YU

Director of HSEO

New Initiatives



SAFETY ALERT

OVERLOADING RESULTED IN BURNING OF AN ELECTRICAL SOCKET AND AN EXTENSION SOCKET UNIT



HSEO would like to bring to your attention a recent near-miss incident that occurred in a research lab. The incident involved power overload and the use of a substandard power extension unit. Fortunately, no injury or major damage occurred, but it serves as a vital reminder of the importance of electrical safety in our workplace. The research experiment has been suspended until all necessary rectification has been completed.

Investigations into the incident revealed that the root cause was the violation of general electricity safety rules. The power output capacity of the extension unit was insufficient for the load requirements and its design did not comply with the safety standards in Hong Kong. The plugs were burnt immediately due to the strong current induced when the research staff turned on multiple equipment with high power consumption.

SAFETY ALERT

IMPORTATION OF RADIOACTIVE SUBSTANCES INTO HONG KONG

Radioactive Source (Po-210) • SN-9085



QTY: 1

This radioactive source is mounted in a 2.5 cm diameter sealed plastic disk and requires no licensing.

Product Summary

This radioactive source is mounted in a 2.5 cm diameter sealed plastic disk.

The source is USNRC License Exempt (US only). Outside the US, consult local laws and regulations.

Below is the isotope, activity, half-life and type of radiation:

■ Po-210, 0.1 μ Ci, 138 days, alpha

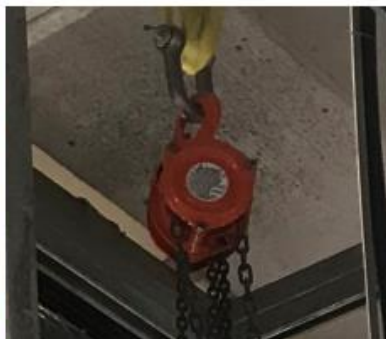
The use of radioactive materials for research is common but caution must be taken when purchasing such materials from overseas. It has come to our notice that some individuals may unknowingly acquire radioactive substances without realizing that they are in violation of Chapter 60K of the Import (Radiation) (Prohibition) Regulations.

SAFETY ALERT:

AN ACCIDENT INVOLVING LIFTING APPLIANCES AND LIFTING GEAR (LALG)

An accident involving lifting appliances and lifting gear (LALG) has recently occurred in a workshop at the university, prompting this safety alert. A technical staff suffered a hand injury that resulted in hospitalization and the discovery of a bone fracture. The accident is currently under investigation and it serves as a critical reminder for all laboratories and workplaces utilizing similar equipment to review their safety practices and ensure compliance with the safety requirements of the Labour Department (LD). In fact, this injury accident may result in an LD investigation and unannounced inspections of campus workplaces with LALG, therefore it is imperative that we double check to ensure compliance with relevant regulations.

The safety requirements for the initial inspection, regular examination, safe working load, operator training, and duties of the person-in-charge are summarized in a separate document for reference. If your department or unit has the following lifting appliances and lifting gear, please follow the safety guidelines to inspect, examine and test the equipment.



SAFETY ALERT

LACK OF INFORMATION HINDERED EMERGENCY RESPONSE

In recent weeks, our research laboratories experienced two chemical incidents involving the spillage of 2.5L acetone and the evolution of hazardous gases due to the improper disposal of strong oxidizing nitric acid in a waste container.



Upon detecting the incidents, the emergency ventilation system and siren were activated to alert nearby researchers. However, it is concerning that the responsible individuals evacuated without providing essential information to emergency responders.

RULES of Transporting Chemicals between laboratories



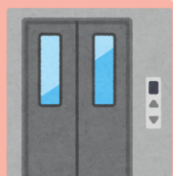
Use **robust secondary containment** (e.g., bottle carriers) for transporting chemicals and ensure caps are securely **tightened**.

1



Utility carts may be used to transport hazardous materials in secondary containment.

2



Use a **freight elevator** to transport chemicals between floors.

3



Keep **at least one hand free of gloves** and use the bare hand(s) to press lift buttons and open doors.

4



Update the chemical inventory to reflect the new storage location of chemicals.

5

LAB SAFETY REMINDERS



1 Conduct risk assessment and seek guidance on safety protocols from your supervisors.



2 Wear proper PPE like lab coat and closed shoes.



3 Use safety glasses and gloves during experiments.



4 Follow safe operating procedures.



5 Handle lab apparatus with care.



6 Don't eat, drink, or chew gum in the laboratory.



7 Clean your hands before leaving the laboratory.



8 If something goes wrong, call the security center by 8999.

Let's make our laboratory a safe place that fosters learning and research!

KNOW THE LOCATION OF AND HOW TO USE EMERGENCY EQUIPMENT

Chemical Spill Kits

Fire Fighting
Equipment

Emergency
Eyewash and
Shower Station

Call the
Security Emergency
Hotline:
ext.8999

Key Steps for Responding to a Hazardous Chemical Spill

in a Research Laboratory



1

Alert co-workers.



2
Press the Emergency
Ventilation button
(DO NOT activate this
button in case of fire).



4

Inform the Security
Control Centre by
dialling ext. 8999 or
23588999 from a
safe location.



3

Evacuate everyone
in the affected area.



5

Leave contaminated
clothing or articles
behind and close the
door.



6

Decontaminate
yourself at the nearest
emergency eyewash
and shower if needed.

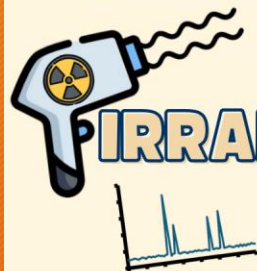


Please check the
QR code for details on
the emergency
procedures at HKUST.



7

If conditions allow,
stay to assist the
emergency
response team.



CONTROL OF IRRADIATING APPARATUS IN HONG KONG



To ensure safety and compliance in our research and education, HSEO urges you to:

01

Contact HSEO if you plan to use any irradiating apparatus, including X-ray and CT, in your teaching and research



02

Make sure you have a valid licence for the **import, export, possession and use** of irradiating apparatus

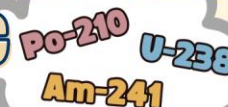
NON-COMPLIANCE CAN LEAD TO A MAXIMUM FINE OF **\$50,000** AND IMPRISONMENT UP TO **2 YEARS**



If you have any questions or need further guidance, please contact us at 2358 6099 or via email at radhseo@ust.hk.



CONTROL OF RADIOACTIVE SUBSTANCES IN HONG KONG



To ensure safety and compliance in our research and education, HSEO urges you to:

01

Contact HSEO if you plan to use any radioactive substances in your teaching and research



02

Make sure you have a valid licence for the **import, export, possession and use** of radioactive substances

NON-COMPLIANCE CAN LEAD TO A MAXIMUM FINE OF **\$50,000** AND IMPRISONMENT UP TO **2 YEARS**



If you have any questions or need further guidance, please contact us at 2358 6099 or via email at radhseo@ust.hk.

Biological Waste Disposal



Red Biohazard Waste Bag

Biological Contaminated Wastes
Culture tubes, Vials, Pipette tips,
Petri dishes, Dressing, and Swabs, etc.



Biohazard waste could be
disposed as municipal waste
if autoclaved



Yellow Clinical Waste Bag

Animal Wastes
Tissues, Organs, Body Parts



Keep these waste refrigerated
before disposal

Should be collected by licensed
waste collectors

Sharp Box

Used/Contaminated Sharps
Syringes, needles, Ampoules,
Scalpel blades, Razor blades



Do NOT overfill (max. 75% of its
capacity)

Do NOT reuse the sharp box

Remember!

NEVER mix **chemical or radioactive waste** with biological waste

Do NOT **overfill** the waste bag

Use the "Swan-Neck" method to
securely tie the waste bag



Contact HSEO for collection



For enquiry: 2358 7229 safety@ust.hk

DISPOSAL OF Laboratory Glassware



Dispose

Intact or broken laboratory containers
such as flasks, beakers and bottles



Small glass containers, ampoules,
test tubes and vials



Thin-layer chromatography (TLC) plates,
watchglasses



**DO NOT
Dispose**

Glass debris contaminated with biological,
chemical, or radioactive materials



Any sharp objects
or thermometers



Any container with
liquids or solids



Anything that is
emitting an odor



Large containers
(≥ 2.5 L)



REMINDER

The cardboard box
should NOT be filled more than **75%** of its capacity

For enquiry: 2358 6884 safety@ust.hk

7 WAYS

Work Safe with Lasers

When working with lasers, always ensure a safe working environment for yourself, your colleagues and visitors – think before you act!



01

ASSESS THE LASER HAZARD

A Laser Hazard Control Plan and Safe Operating Procedures for class 3B and 4 laser systems are essential for assessing risks and ensuring worker safety.



03

WEAR THE CORRECT TYPE OF LASER SAFETY GOGGLES

For class 3B and 4 laser systems, ensure you are wearing the appropriate laser safety goggles that match the specific wavelength and optical density.



05

NEVER LEAVE AN OPERATING LASER UNATTENDED

Before leaving the facility, switch off the laser.



07

NEVER WEAR WATCHES OR RELECTIVE JEWELRY DURING ALIGNMENT

Reflections from shiny surfaces can be hazardous. Remove watches and reflective jewelry to avoid accidental reflection during alignment.

02

REGISTER AS A LASER WORKER

Laser worker registration is required for class 3B and 4 laser systems. The laser worker has to attend laser safety training, laser safety briefing and has eye examination for registration prior to laser system operation.



04

NEVER LOOK INTO A LASER OR AT LASER LIGHT REFLECTIONS

Direct exposure to a high power laser beam can lead to permanent eye damage, including burns to the retina. Although a low power laser beam might not cause immediate harm, it is still not advisable to look at it directly.



06

KEEP LASER BEAM BELOW EYE LEVEL

Never put yourself in any position where your eyes approach the axis of a laser beam (even with eye protection on). Keep beam paths below eye level when standing or sitting.



More Information
to Laser Safety

https://hseo.hkust.edu.hk/sm_11

safety@ust.hk (general)

communal@ust.hk (safety training)

HEALTH, SAFETY AND ENVIRONMENT OFFICE

USING A FIRE EXTINGUISHER REMEMBER THE "PASS" TECHNIQUE

PULL THE PIN

1



AIM AT THE BASE OF THE FIRE FROM A SAFE DISTANCE

2



SQUEEZE THE LEVEL

3



SWEEP FROM SIDE TO SIDE




4



IF THE FIRE DOESN'T GO OUT, ACTIVATE THE FIRE ALARM BY PRESSING THE BREAKGLASS FIRE ALARM BUTTON AND REPORT TO THE SECURITY CONTROL CENTER BY DIALLING 8999

Safety First!

Select the Right Gloves for the Research

 Latex	<p>Advantages ✓</p> <ul style="list-style-type: none"> • Suitable to handle biological materials and water-based materials 	<p>Disadvantages ✗</p> <ul style="list-style-type: none"> • Poor for oils, greases and organic solvents • Can trigger latex allergies
 Nitrile	<p>Advantages ✓</p> <ul style="list-style-type: none"> • Good for oils, greases, acids, bases and aliphatic chemicals 	<p>Disadvantages ✗</p> <ul style="list-style-type: none"> • Poor for aromatics, ketones, esters and chlorinated solvents
 Butyl rubber	<p>Advantages ✓</p> <ul style="list-style-type: none"> • Good for peroxide, aldehydes, ketones, esters, polar organic solvents • Good for strong acids and bases 	<p>Disadvantages ✗</p> <ul style="list-style-type: none"> • Poor for aliphatic aromatics and halogenated solvents
 Neoprene	<p>Advantages ✓</p> <ul style="list-style-type: none"> • Good for oxidizing acids, bases, alcohols, oils, phenol and glycol ethers 	<p>Disadvantages ✗</p> <ul style="list-style-type: none"> • Poor for aromatic and halogenated solvents
 Silver Shield®	<p>Advantages ✓</p> <ul style="list-style-type: none"> • Good for a wide range of solvents such as aromatics, chlorinated, ketones, alcohols, esters, aliphatic solvents, acids and bases 	<p>Disadvantages ✗</p> <ul style="list-style-type: none"> • Poor dexterity, fit and grip

Remarks

1. Gloves should be worn solely to protect against chemical splashes. If there is any chemical exposure, remove the gloves immediately and replace them with a new pair
2. Consider using double gloves. The chemical protection lacking in one type of glove may be offered by the other.



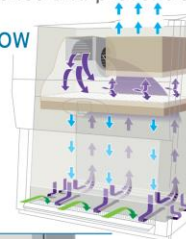
10 TIPS FOR WORKING SAFELY IN THE LABORATORY WITH YOUR NUAIRE BIOSAFETY CABINET

Good technique when working within a Class II Biosafety Cabinet (BSC) will minimize air turbulence and prevent splatter or unwanted spread of aerosols.

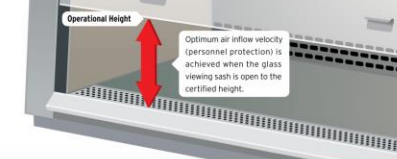
1 KNOW THE AIRFLOW

Biological Safety Cabinets provide personnel, product, and environmental protection through the use of HEPA-filtered air. Understanding air flow in, out, and through the cabinet is essential for maintaining a safe work environment.

- ➔ HEPA Filtered Air
- ➔ Contaminated Worksurface Air
- ➔ Contaminated Room Air

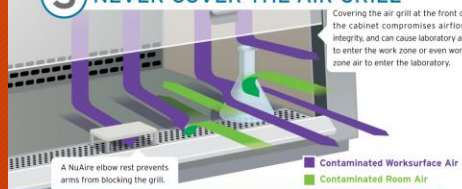


2 WORK AT THE PROPER SASH LEVEL



3 NEVER COVER THE AIR GRILL

Covering the air grill at the front of the cabinet compromises airflow integrity, and can cause laboratory air to enter the work zone or even work zone air to enter the laboratory.



4 MINIMIZE RAPID MOVEMENT

Rapid arm movement in a sweeping motion in and out of a BSC can disrupt the air barrier and may compromise containment.

Arms should move in and out slowly, perpendicular to the access opening of the cabinet, to reduce this risk. Other activities in the pharmacy (e.g., rapid movement, opening / closing doors, etc.) may potentially disrupt the air barrier.



5 REDUCE SPLATTER

Many common procedures conducted in Biological Safety Cabinets (BSC) may create splatter or aerosols. Techniques to reduce splatter and aerosol generation will minimize the potential for personnel exposure to infectious materials.

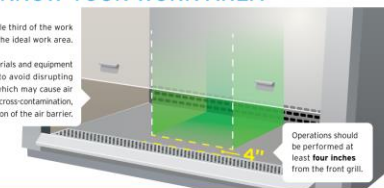
Class II cabinets are designed so that horizontally rebuffered spores will be captured by laminar air flow within 14 inches (35 cm) of travel. As a general rule, keeping clean materials a distance of at least 12 inches (31 cm) away from any activities which may generate aerosols minimizes potential cross-contamination.



6 KNOW YOUR WORK AREA

The middle third of the work surface is the ideal work area.

Place materials and equipment with care to avoid disrupting airflow, which may cause air turbulence, cross-contamination, and disruption of the air barrier.



7 WORK FROM CLEAN TO CONTAMINATED

Work should flow from clean to contaminated areas across the work surface. Limit the movement of dirty items over clean ones.



Distribute items evenly in the work area to help maintain uniform airflow. Supplies and equipment (especially aerosol generators such as vortex mixers or tabletop centrifuges) should be as close as practical to the rear of the work area, away from the front grill.

Bulky items such as biohazard bags, discarded pipette trays and suction collection flasks should be placed to the side of the work area.

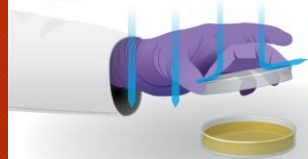
8 WORKING WITH TUBES

Open tubes or bottles should NOT be held in a vertical position. Bottle or tube caps should not be placed on the towelling. Items should be recapped or covered as soon as possible.



9 WORKING WITH PETRI DISHES

When working with petri dishes and tissue culture plates, hold the lid above the open sterile surface in order to minimize the impact of air downflow.



10 WORKING WITH ASPIRATOR BOTTLES OR SUCTION FLASKS

Aspirator bottles or suction flasks should be connected to an overflow collection flask containing appropriate disinfectant, and to an in-line HEPA (or equivalent) filter.

This combination provides protection for the facility vacuum system or vacuum pump, as well as to the personnel who service this equipment.



Outreaching to RPG at PG Orientation Day



Heads and Departmental Safety Officers Meeting 2024



Introduction of HSEO Services, New Senior Managers and Field Team Organization Structure

Ms. Christine CHIU

Associate Director of HSEO

Organization HSEO



Director



Associate Director

ANALYTICAL
LABORATORY SERVICE



**Susanne
Leung**

Manager

DG COMPLIANCE AND
CENTER OF LAB SUPPLIES



**Priscilla
Lee**

Head

LABORATORY AND
RESEARCH SAFETY



**Pak
Ip**

Head



**Sam
Tung**

Head

CAMPUS SAFETY



**Benny
Ng**

Head

FIELD OPERATION
SUPPORT



**Peter
Pang**

Manager

ADMINISTRATION



**Cartman
Chan**

Assistant
Manager

Introducing Our Team



Collaboration has no hierarchy. The Sun collaborates with soil to bring flowers on the earth.

- Amit Ray



Like I always say, it's a team effort. A lot of behind the scenes work goes in when we're at home.

— Jordan Spieth —

Our Multidisciplinary Field Team



Mechanical Engineering



Material Science & Engineering



Applied Physical Science



Environmental Science

Andy Fong	WP Yip	Cell Wong	Woo Chun Fai	Shirley Ng	Connie Lo	Suki Leung	Jimmy Li	Tony Ip	Mandy Ng
Assistant HSE Manager	Assistant HSE Manager	Assistant HSE Manager	Assistant HSE Manager	HSE Officer	HSE Officer	HSE Officer	HSE Officer	HSE Officer	HSE Officer
CMO (BS, BM, LS)	DSCI	DENG	LIFS	OCES OCRf HKBGML	CLS	CSE	ECE CKSRI	CDO	LIFS
CIVL	CHEM	AAF CBE MAE	LAF	ACCESS NAMI HKCND HKCCR	ENVR/IENV	EI	E2I, IEDA, ISD	CMO (FS, Landscape, Housing, Security)	LAF
DBM ACCT, ECON, FINA, ISOM, MARK, MGMT	PHYS	NFF	MTPC, OKT, OIR, OIRD, PURO	Staff/ Student Dental Clinics; Staff Medical Clinic	MCPF	MATH	AMC	CSO	BRI
DSTO	GSCI	FSC HKUSTGZ, FYTRI/FYTGS FRISM, SHCIRI, SRI EPACK	ARO, URAO		IAS, HSEO, EMIA	ITSC, LIB, GECO, RDC, RO	BDI, CAGS, CCSS, DAO, EC	C4AS	BioCRF
	PRVST, VPABO, VPIAO, VPRDO, VPDO		SUST		DHSS HUMA SOSC LANG/CEI	FO, HRO		IEMS, IPP, PPOL	
	OP (SAU)							LEGAL	
							AIS, HKGAI, IAO, ISO, OMA		



Chemistry



Virology



Biological Science



Marine Science

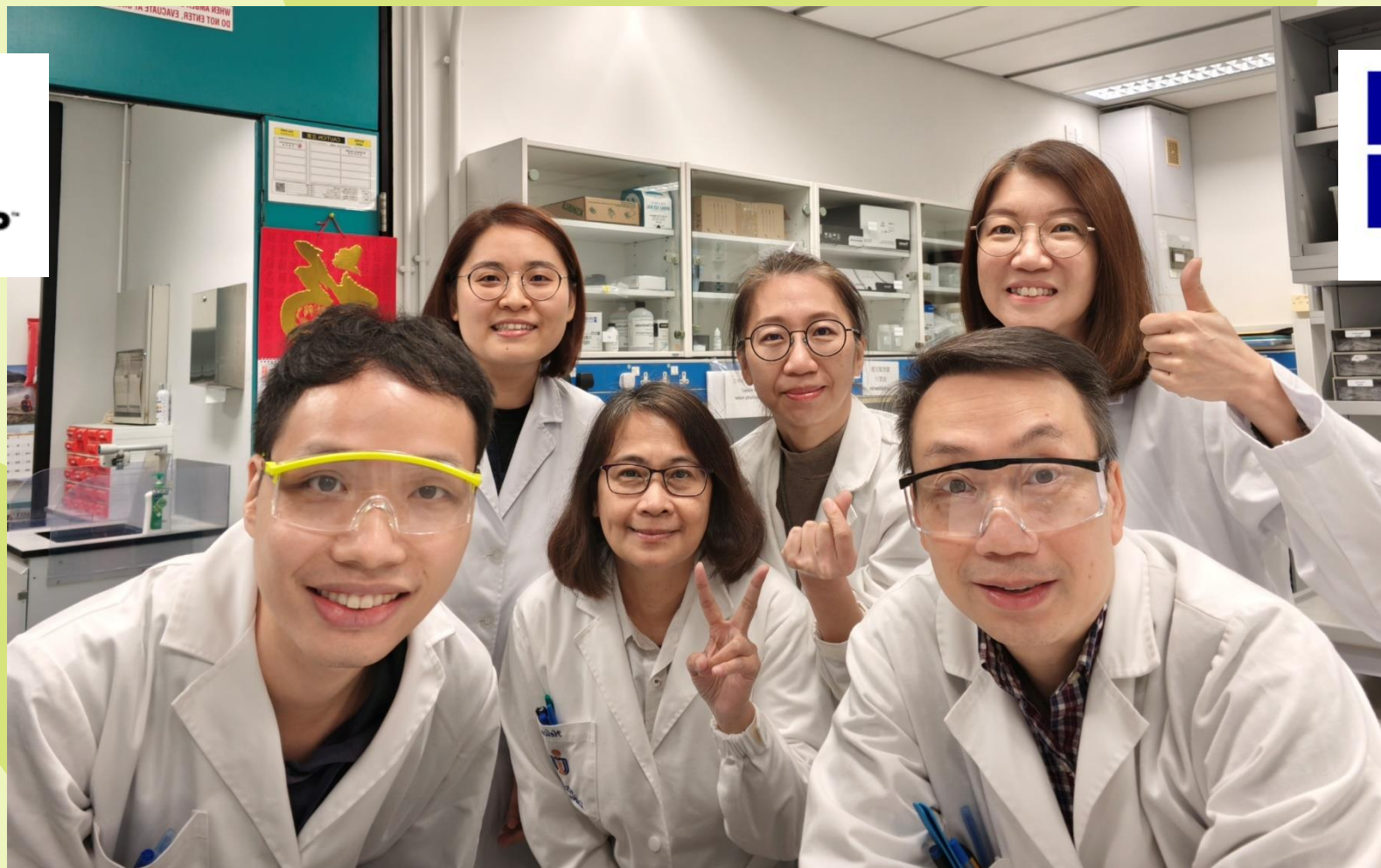
Our Cheerful Administration Team



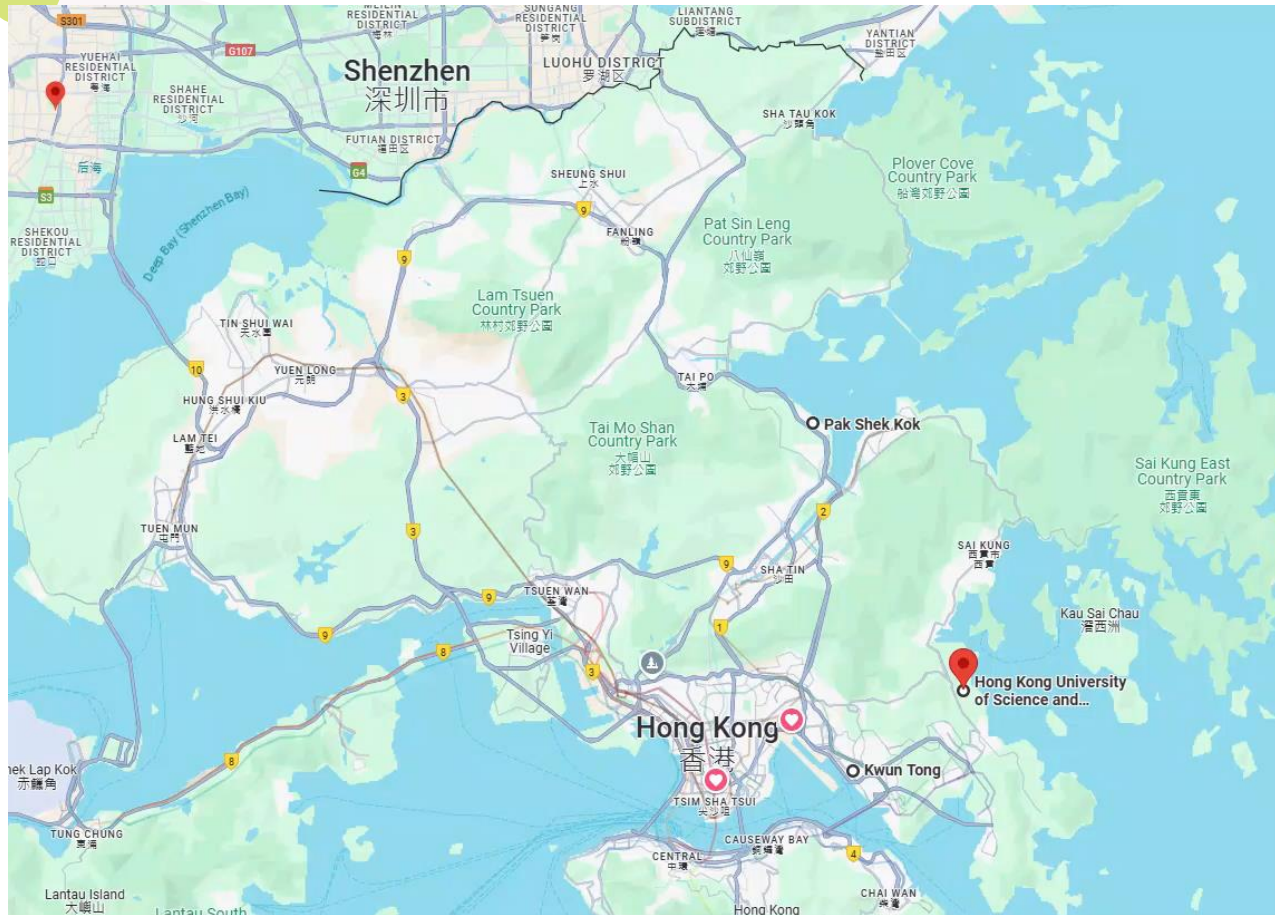
Our Pivotal DG and Lab Warehouse Team



Our Meticulous Analytical Testing Team



Our Team's Services



From Clearwater Bay to
GBA



We are continuously aiming for excellence!



Our Team's Services

Office

IAQ Assessment
Ergonomic Workstation

Research and Lab Safety

Research safety, lab safety,
emergency response...

Campus Facilities

Drinking water/Food hygiene
Swimming pool sanitation
Water Fountains

Campus Events

Information Day
Congregation Day, etc.

Off-Campus Research Ctr.

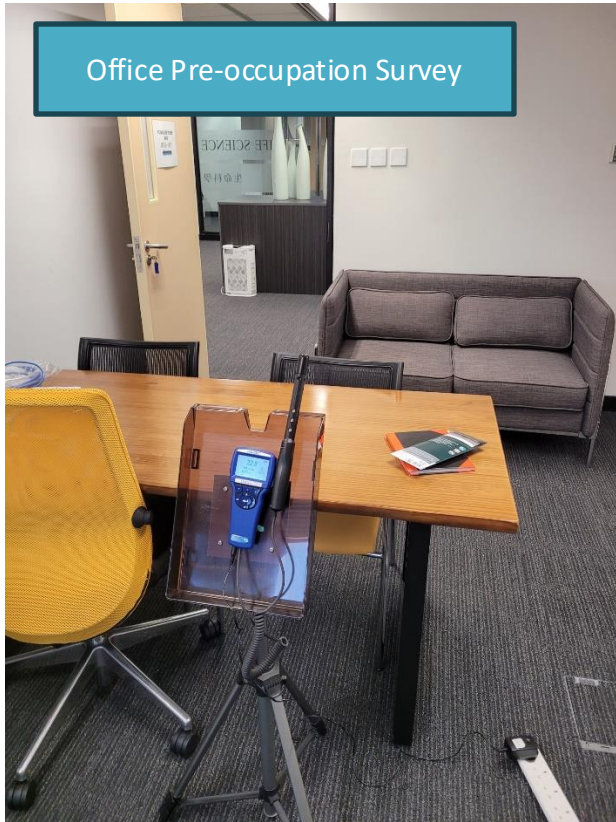
NAMI, HKCND and HKCRR at the Sci. Park
FYTRI and SZRI in Mainland China

We are continuously aiming for excellence!

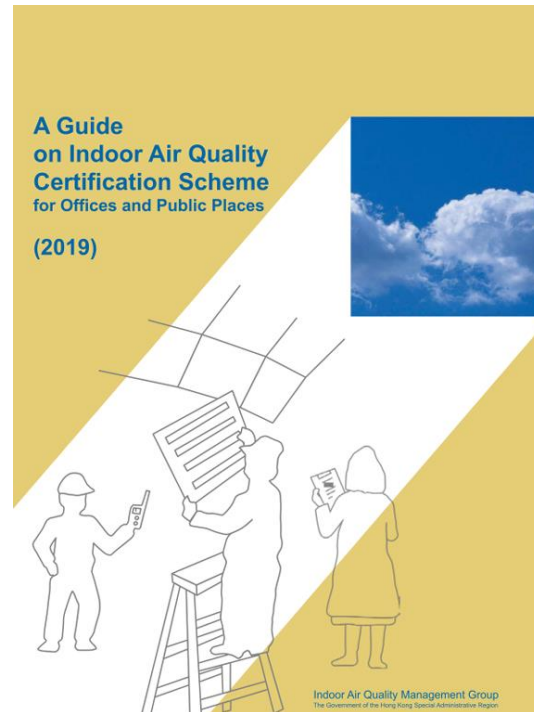
IAQ Assessment



Lecture Theatres IAQ Assurance



Office Pre-occupation Survey



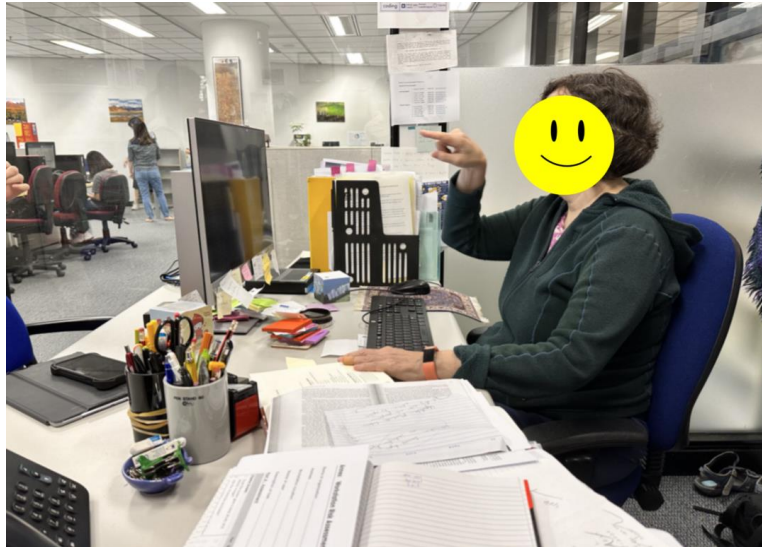
Report on Radon Survey

From Wing Ping YIP To Mr. Pak IP (CLS/HSEO)
Mr. Pak IP, Senior HSE Manager
Ref. _____ In _____
Date 15 August, 2020 Area _____

Memo

A radon survey was conducted in the management room GGT-Room G01 for one week to determine the overall average radon concentration.

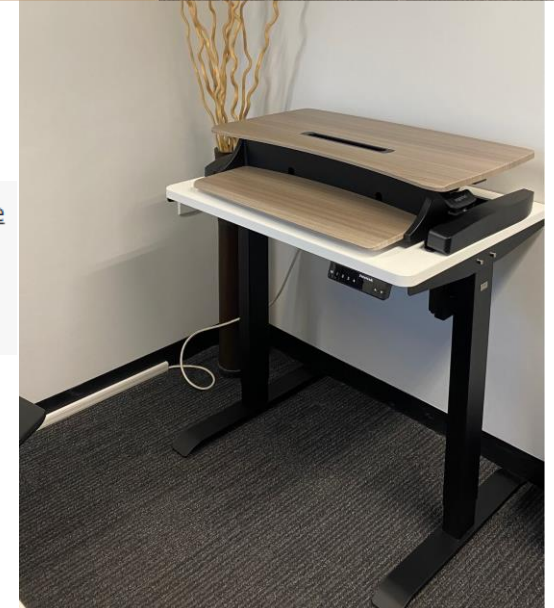
Ergonomic Workstation DSE Assessment



How to set up an ergonomic computer workstation



1. Room design: The workstation set-up makes all the difference
2. Desk and office chair: Adjustability is key
3. The right monitor
4. Correct positioning of the monitor and input devices

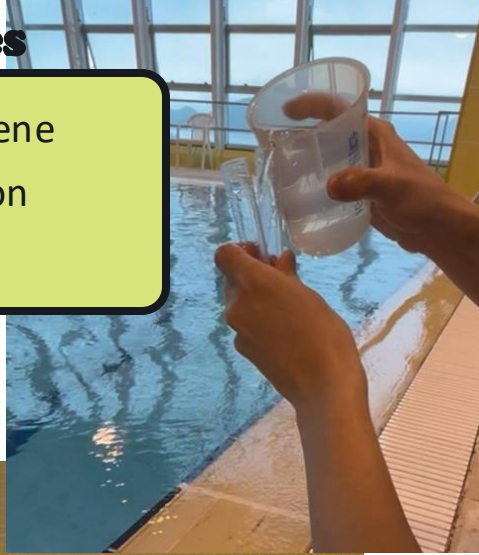


Campus Facilities

Drinking water/Food hygiene

Swimming pool sanitation

Water Fountains



Lab Analytical Services



American Industrial Hygiene Association (AIHA) Accredited Laboratory since 1996



- The Hong Kong Laboratory Accreditation Scheme (HOKLAS) Accredited Laboratory since 1999
- Environmental Compliance for the HKUST Community - Analyses of Effluent, Sea Water and NFF Samples
- Public Health Monitoring – Drinking Water, Swimming Pool Water, Decorative Fountain Water, Ice, Soil
- Occupational Hygiene Monitoring – Air Samples, Surface Wipe etc.
- HSEO and CHEM Jointly Owned Equipment - Support to CHEM UG and MSc Courses
- ENVR1030 Teaching Samples
- Research Samples on a fee basis

ENVIRONMENTAL MONITORING SAMPLES

1. Wastewater (WW)

Analysis	Analytical Method / Reference	Reporting limit	Unit
Physical Properties			
pH *	SAM035 / In-house Method (Site measurement)	N/A	pH units
Temperature *	SAM034 / APHA 21/e 2550 B	N/A	°C
Total Suspended Solids	SAM002 / APHA 17/e 2540 D	30	mg/L
Settleable Solids	SAM003 / APHA 19/e 2540 F	10	mg/L
Inorganic Non-metallic Constituents			
	SAM009 / In-house Method		

PUBLIC HEALTH SAMPLES

1. Potable Water (PW)

Analysis	Analytical Method/ Reference	Reporting limit	Unit
Physical Properties			
pH	SAM001 / In-house Method (Lab measurement)	N/A	pH units
Total Dissolved Solid	SAM004 / APHA 17/e 2540 C	30	mg/L
Turbidity	SAM006 / In-house Method	0.20	NTU
Inorganic Non-metallic Constituents			
Nitrate	SAM040 / APHA 21/e 4110 B	2.2	mg/L
Sulfate	SAM040 / APHA 21/e 4110 B	5.0	mg/L
Chloride	SAM040 / APHA 21/e 4110 B	0.20	mg/L
Biological Analysis			
Coliform Count	PAM003 / APHA 21/e 9215A, B		
	SAM051 / In-house Method / M...		

ORGANIC SOLVENTS BY GC/FID

Method Code	Method Reference	Instrumentation	Sampling Method
PAM002	NIOSH methods	GC/FID	Soil/vapour tube
PAM015	NIOSH methods	GC/FID	3M 3500 Organic Vapor Monitor
PAM015	NIOSH methods	GC/FID	3M 3520 Organic Vapor Monitor
Analyte List			
	Method Reference	Soil/vapour tube	
Acetone	NIOSH 1300	Asasorb CSC, SKC 2	
Benzene	NIOSH 1606	Asasorb CSC, SKC 2	
Chloroform	NIOSH 2530	Tenax TA	
	OSHA PV2022		

**Get to
know and
Touch
with us!**

Office: Room 2005-7, Lift 4

Email

safety@ust.hk

General Enquiry

23587229

Heads and Departmental Safety Officers Meeting 2024



Accident Trend 2023/2024 and New Incident / Accident Report Form

Mr. Peter PANG

HSE Manager (Operation)



Accident Trend 2023/24 & New Incident / Accident Report Form

27 November 2024

Peter PANG, HSE Manager (Operations)

Health, Safety and Environment Office












THE HONG KONG
UNIVERSITY OF SCIENCE
AND TECHNOLOGY

Accident Trend 2023/24

- Injury Incidents 2023/24
- Non-injury Incidents 2023/24
- Points to Note and Action



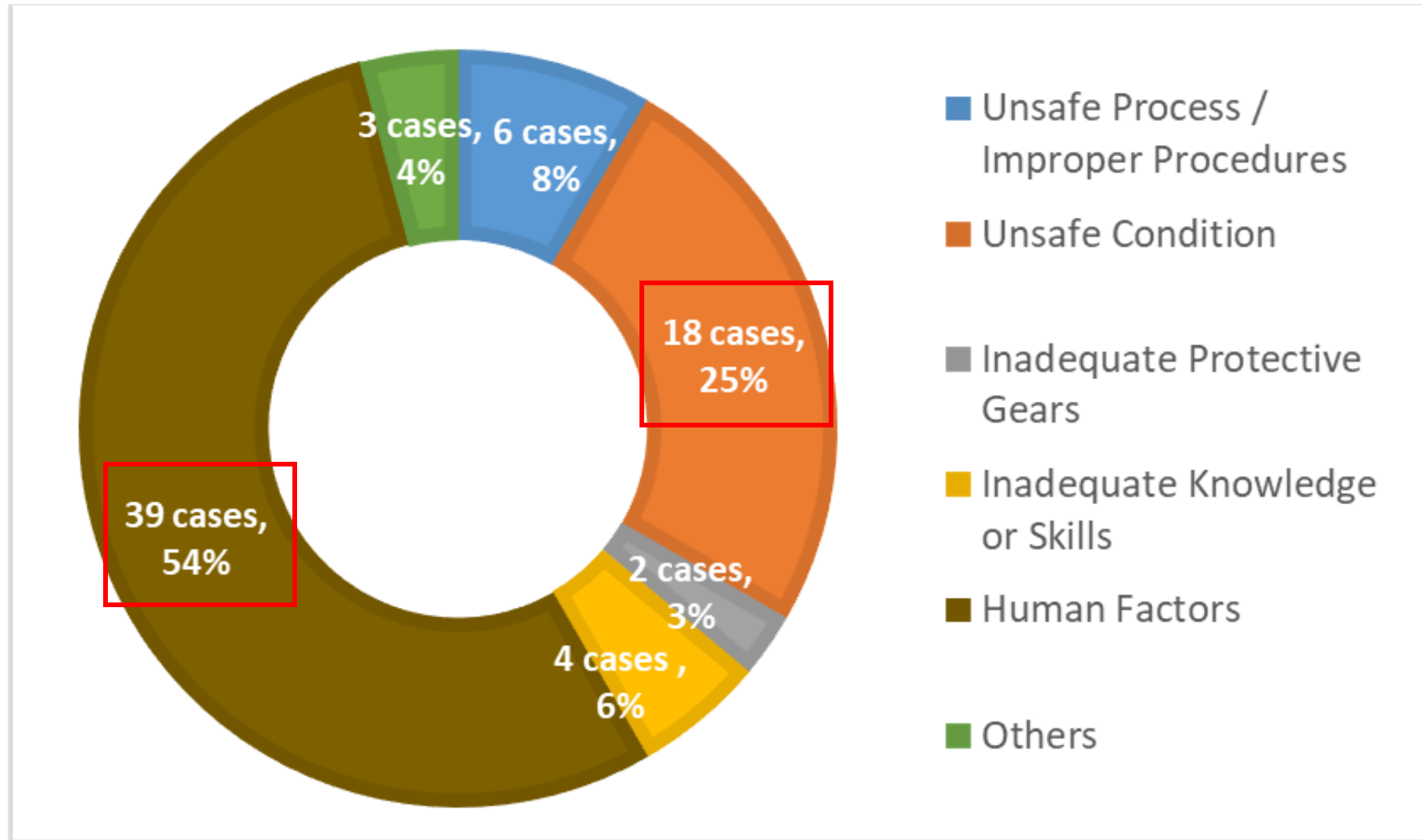
Injury Incidents 2023/24

Stakeholders	Performance	No. of cases		No. of cases in 2023/24 (TOP 5)				
		2023/24	2022/23					
Staff		30	27	14	3	1	1	3
Student		23	64*	6	4	5	5	0
Contractor		19	28	13	1	1	0	2
Total		72	119	33	8	7	6	5

*The number of student injury incidents was extraordinary in 2022/23 due to the recovery from the pandemic. The normal range has been 19-27 between 2018 and 2024, with a comparable number of 27 in 2018

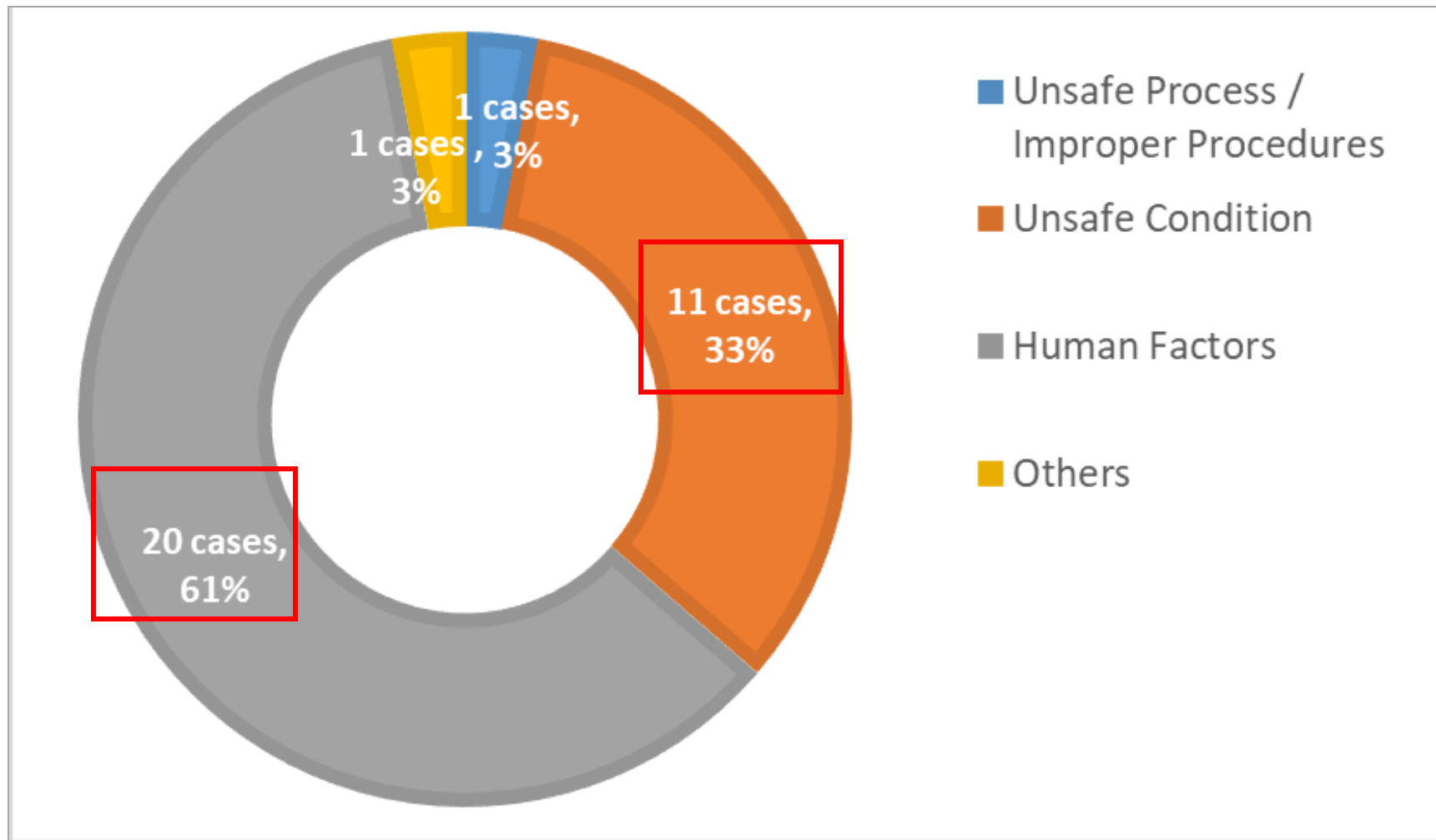


Injury Incidents 2023/24



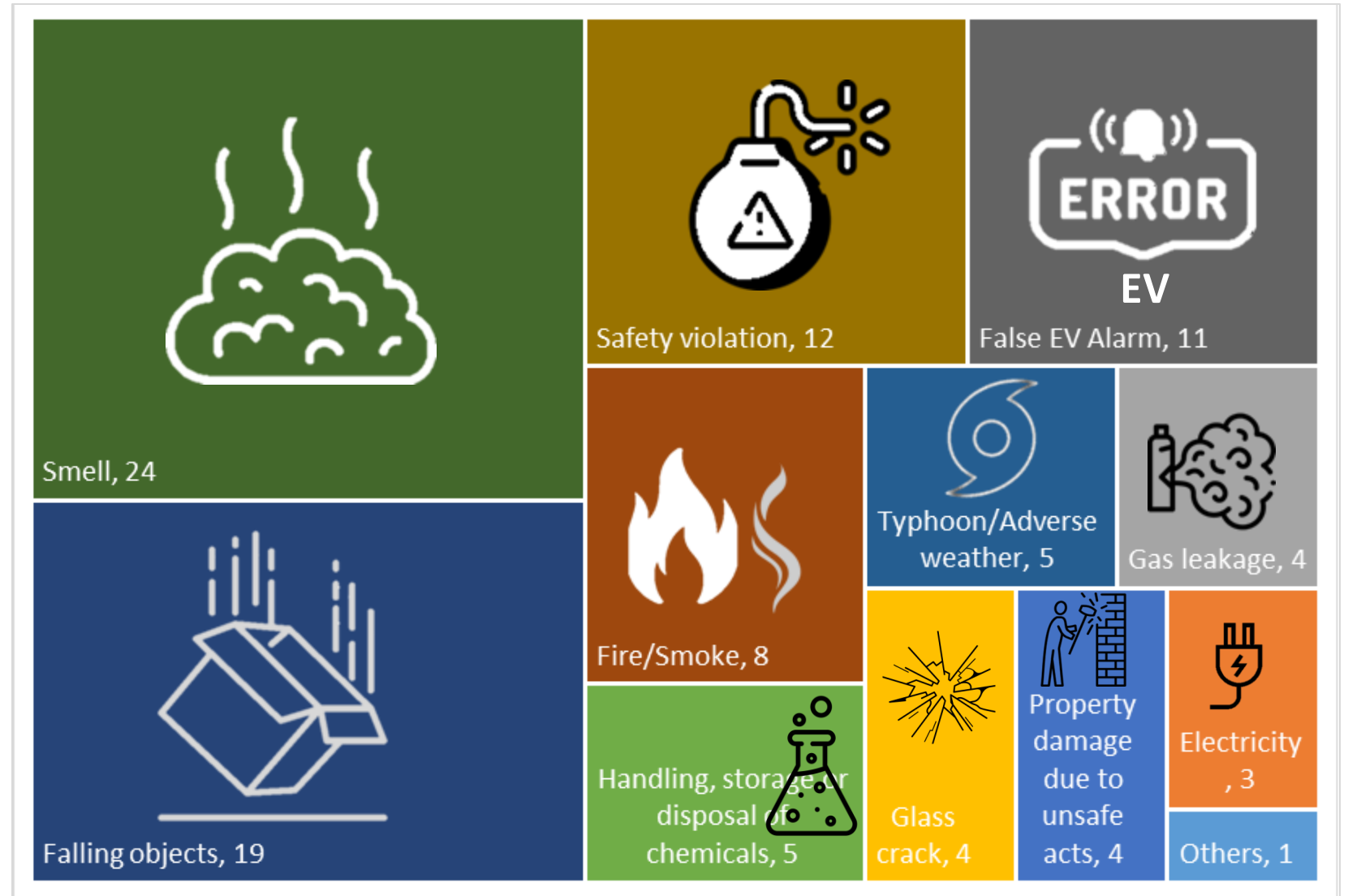
Injury Incidents 2023/24

- Slip/Trip/Fall Injury Incidents 2023/24



Non-injury Incidents 2023/24

Non-injury cases	No. of cases
2023/24	100
2022/23	75

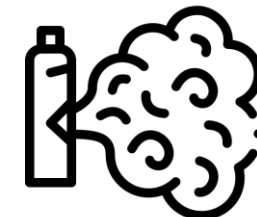
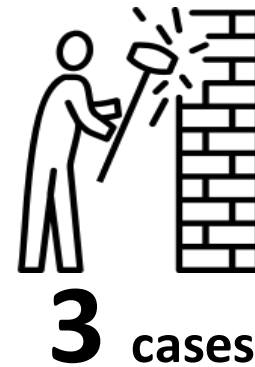
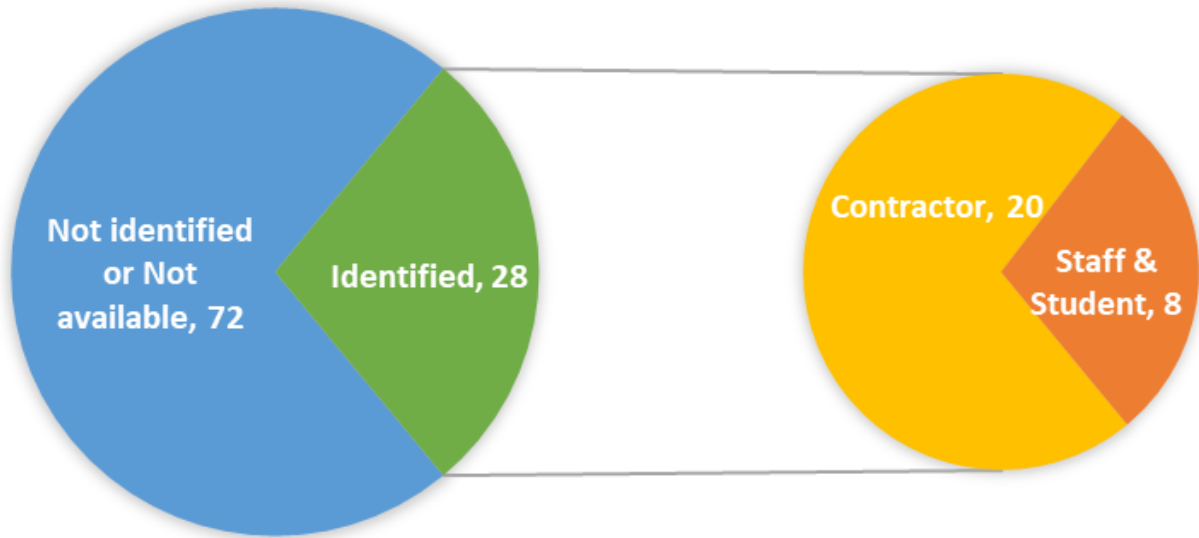


Safety violation includes the unacceptable situation/behaviours with imminent risk to public safety



Non-injury Incidents 2023/24

Types of Persons with Direct Responsibilities of Non-Injury Incidents



1 case



Points to Note and Action

Observations	Consequences	Actions by the Unit-in-charge
1. 'Slip/trip/fall' accounted for over 45% of work/ study/ research-related injuries.	Individuals injured in this type of accident usually require a longer recovery time.	<ul style="list-style-type: none">Place safety notices and increase the frequency of cleaning/ housekeeping at black spots
2. 'Unsafe condition' accounted for 25% of the accidents.	The accidents are likely or partially associated with HKUST liabilities.	<ul style="list-style-type: none">Adopt good housekeeping practices to ensure equipment/ facilities in good order and maintain safe environment on the campus
3. Most incidents caused by contractors are avoidable.	The consequences can be serious, leading to personal injury and property damages in the HKUST.	<ul style="list-style-type: none">Conduct regular safety meetings, joint/surprise safety inspections on contractors' work, and other means of contractor management, especially for high-risk operations

New Incident / Accident Report Form

- Objectives of the Change
- Reporting Procedures for Staff/Students
- Reporting Procedures for Non-staff/students
- Examples



Objectives of the Change

- Facilitate reporting to the Labour Department
- Make the report form more user friendly
- Follow the data privacy policy of the HKUST
- Streamline the working procedures required in the S&EP Manual

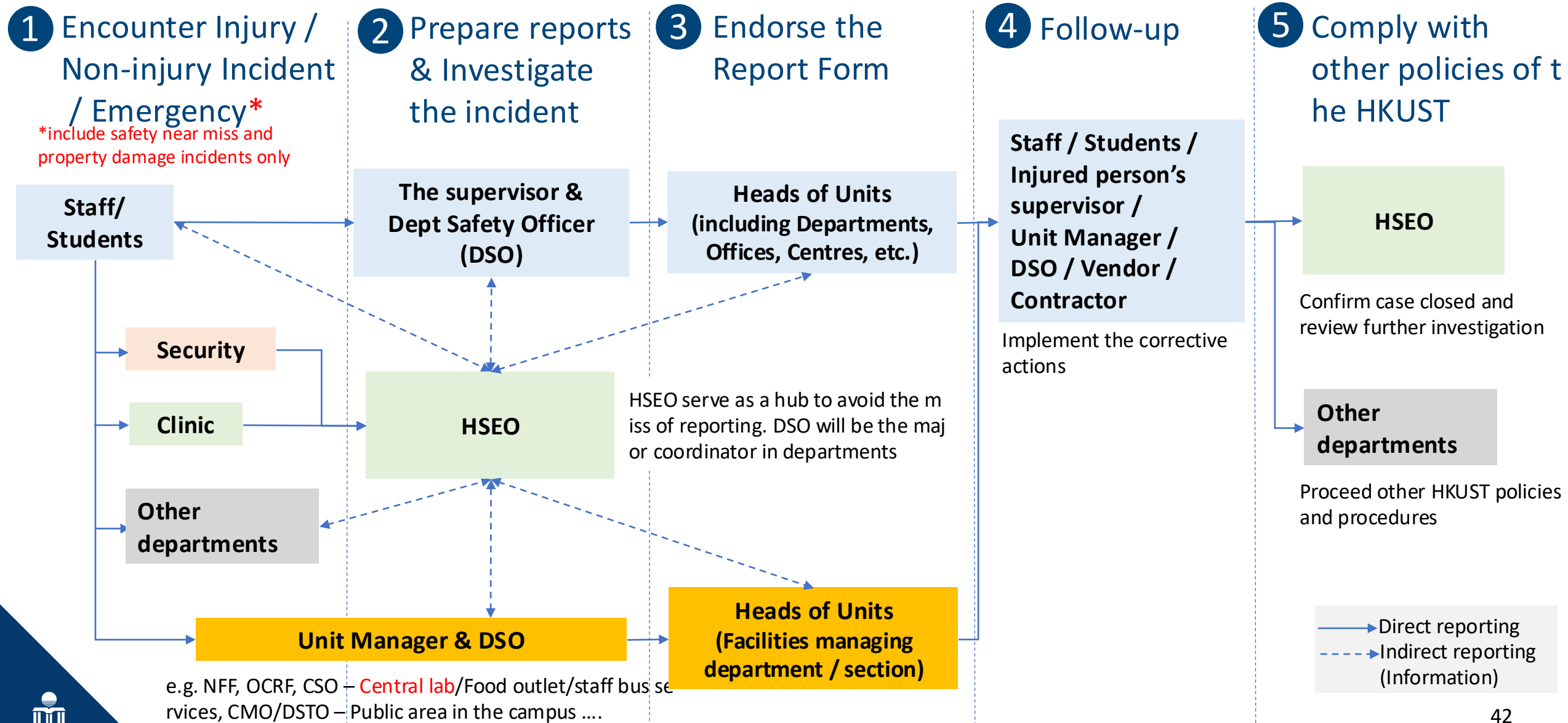
Effective on 5 Sep 2024

The image shows a screenshot of the 'URGENT HKUST INCIDENT / ACCIDENT REPORT FORM'. At the top left is the HKUST logo and name. A 'RESTRICTED' stamp is in the top right. Below that is a 'CA SE ID' box with checkboxes for 'Investigation by HSEO required?' and 'Received on:'. The form is divided into several sections:

- Notes:** Four numbered notes providing instructions on reporting procedures, data privacy, and handling multiple injuries.
- PART A General Information:** Fields for Nature of Incident, Required Operation, Date, Time, Location, and Person Involved (Student, Staff, Contractor, Resident, Visitor, or Not Applicable).
- PART B Injured Person (IP) Information:** Fields for Name of Injured, Gender, Contact No., Nature of Injury, Part of Body Injured, and Medical Arrangement(s).
- PART C Investigation:** Fields for Type of Incident, Supporting Evidence (Photo, Witness statement, CCTV Footage, Others), and Contributing Factors (Human Factors, Inadequate Knowledge or Skills, Unsafe Condition, Inadequate Protective Gears, Unsafe Process / Improper Procedures, Others).
- PART D Corrective Actions:** Fields for Immediate Actions Completed and Actions Planned for Prevention of Recurrence.
- PART E Confirmation:** Signature and Date fields for Supervisor/Principal Investigator/Person in Charge, Departmental Safety Officer, and Head of Department/Director.
- Report Sending To:** Checkboxes for HSEO (for all cases), HRO (for staff injury), DSTO (for student injury), and Others (Please specify).



Reporting Procedures for Staff/Students

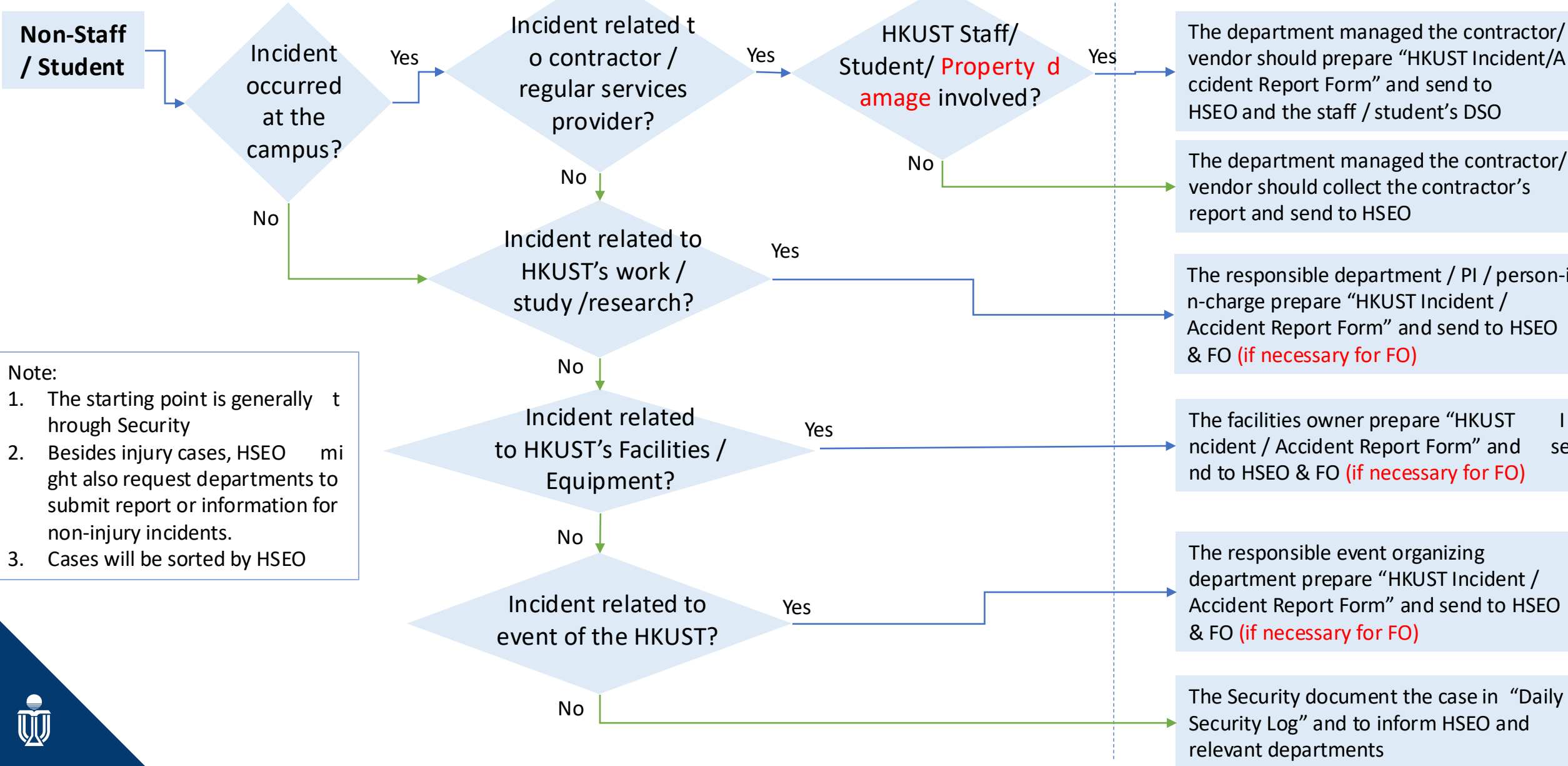


e.g. NFF, OCRF, CSO – **Central lab**/Food outlet/staff bus services, CMO/DSTO – Public area in the campus

Within 7 days of the incident reported to the staff/student's supervisor



Reporting Procedures for Non-staff/students



Note:

1. The starting point is generally through Security
2. Besides injury cases, HSEO might also request departments to submit report or information for non-injury incidents.
3. Cases will be sorted by HSEO



Example 1: Injury in Departmental Area

Example 1

Nature: Injury Case (staff)

Location: Indoor common area

Direct Reporting Line:

- 1 The injured staff →
- 2 Their supervisor & DSO →
- 3 HoD → 4 HSEO, HRO

Indirect Reporting Line:

- 1 The injured staff →
- 2 Clinic → 3 HSEO →
- 4 Their supervisor & DSO →
- 5 HoD → 6 HSEO, HRO



RESTRICTED

CASE ID: 2023-154
Further investigation by HSEO required:
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Received on: 9/7/2023 (FOR HSEO USE ONLY)

Example 1

URGENT
HKUST INCIDENT / ACCIDENT REPORT FORM

Notes:

- 1 In case of a student or staff injury, their supervisor, Principal Investigator (PI), or Person-in-charge must collect and complete Part A-D of this form within seven days from the date of the incident or notification. The Departmental Safety Officer (DSO) should notify their Department Head and HSEO to ensure prompt reporting of all accidents and incidents. For staff injury, the DSO should email a copy and send the original to the HRO as soon as possible to comply with the time limit specified in the Employees' Compensation Ordinance for notifying the Labor Department and Insurer. For student injury, the form should be sent to DSTO. Any reasons for late submissions should be provided to all relevant departments.
- 2 In the case of contractor staff injury, they may use their own form to document the incident/accident, unless there are no HKUST staff/students injured or property damaged. However, the responsible department/unit is still required to forward the relevant report or information to HSEO.
- 3 All personal data collected has been limited to the minimum required and to be handled in accordance with HKUST's Data Privacy Policy Statement. The information will only be used for investigation and related purposes within HKUST, ensuring strict confidentiality. Any requests for data access or correction can be sent to safety@ust.hk.
- 4 Each form should document the details of one injured person. In cases where multiple injuries result from a single incident, DSO should coordinate the submission of multiple forms. If the person involved in the incident is unknown or numerous, the DSO should provide further details.

PART A General Information			
1) Nature: Injury Incident ^{#a}	2) Required Operation Suspension? No ^{#b}	3) Returned to Work/School for the Injured Person? (by report date) Yes ^{#b}	
4) Date: 27/6/2023	5) Time: 15:18	6) Location: Indoor common area ^{#c}	7) Room No./Address: LG7 near lift 3
8) Person Involved:			
<input type="checkbox"/> Student Name: _____ Student ID: _____ Department: _____ Position: _____			
<input checked="" type="checkbox"/> Staff Name: CHAN Tai Man Staff ID: 12345678(7) Department: XXX ^{#d} Position: Technician			
<input type="checkbox"/> Contractor Name: _____ Company: _____ Position: _____			
<input type="checkbox"/> Resident Name: _____ Quarter: _____ Room No.: _____			
<input type="checkbox"/> Visitor/Public Name: _____ Visiting Purposes: _____			
<input type="checkbox"/> Not Applicable/Unknown/Numerous Details: _____			
9) Description of the Incident:			
<small>The situation of the Person, Equipment, Materials, Methods, Environment, Job Factors at the time of the incident e.g. what the person was doing, main function of the location, what factors leading to the incident, how the person was injured, etc..</small>			
The IP claimed that he was returning to workshop with the water vacuum cleaner when the accident occurred. One of the front wheels of the cleaner became wedged by the slot of the cast iron trench grate while he was pushing it (Photos 1 and 2). The IP stumbled his leg against the cleaner, resulting in a bruise injury to his right leg. He received first aid treatment in medical clinic and was granted one day sick leave. The water vacuum cleaner were installed with four wheels: two smaller swivelstyle front wheels and two large fixed-style rear wheels (Photos 3a and 3b). The width of the trench grate slots was found to be larger than the width of the front swivel wheels but smaller than the rear wheels of the water vacuum cleaner. The accident occurred when the two smaller front swivel wheels got stuck in the cast iron trench grate slots while the IP was pushing the cleaner forward. He returned to normal duty on 29 June 2023.			
10) Brief Description: (describe what happened in a few words) While returning the water vacuum machine to the workshop, the IP sustained a bruise injury on his right leg.			



Example 1: Injury in Departmental Area

PART B Injured Person (IP) Information
Notes: This part is only applicable for injury incidents.

11) Name of Injured: CHAN Tai Man 12) Gender: M 13) Contact No.: 9876 5432 14) Email: N/A

15) Nature of Injury: Contusion & bruise #e 16) Part of Body Injury: Foot #f Details: right leg

17) Medical Arrangement(s): First-aid Campus Clinic Hospital/ Other Clinic Details: None

PART C Investigation
Notes: This part provides preliminary investigation of the incident.

18) Type of Accident: Injured whilst lifting or carrying #g 19) Supporting Evidence: Photo Witness statement
 CCTV Footage Others

Details: Stumble right leg to the cleaner

20) Any Causes and Contributing Factors Concerned in this Case? *(can tick multiple options)*

Human Factors (e.g. negligence, skill-based errors, mistakes, violations, communication, health/drug issues, etc...)
 Inadequate Knowledge or Skills Unsafe Condition (e.g. poor housekeeping, insufficient maintenance, adverse weather, etc...)
 Inadequate Protective Gears Unsafe Process / Improper Procedures Others

Please specify:

PART D Corrective Actions

21) Immediate Actions Completed	Completed Date	22) Actions Planned for Prevention of Recurrence	Target Date
1. Revise the manual handling operations. Considering the sizes of the front and rear wheels on the water vacuum cleaner, as well as the width of the drain grate slots, the water vacuum cleaner trolley should be pulled while moving through the drain gate, instead of pushing.	30/6/2023	Nil	
2. Push the water vacuum cleaner on a flat ground or floor without drain grates or other similar obstructions	30/6/2023		

PART E Confirmation

23) Supervisor/Principal Investigator/Person-in-charge	24) Departmental Safety Officer	25) Head of Department/Director
Name: LAU Tai Man (Senior Manager)	Name: W Y CHAN	Name: CHEUNG Tai Man (Director)
Signature: LAU	Signature: <i>WY</i>	Signature: Cheung TM
Date: 7/7/2023	Date: 8/7/2023	Date: 8/7/2023

26) Report Sending To: a) HSEO (for all cases) b1) HRO (for staff injury) b2) DSTO (for student injury) c) Others (Please specify)



Example 2: Non-injury in Departmental Area

Example 2

Nature: **Non-injury Case**

Location: Laboratory

Direct Reporting Line:

- 1 The student involved →
- 2 Their supervisor & DSO →
- 3 HoD → 4 HSEO

Indirect Reporting Line:

- 1 The student involved →
- 2 Lab staff → 3 Security →
- 4 HSEO → 5 PI & DSO →
- 6 HoD → 7 HSEO



RESTRICTED

CASE ID:	2024-090
Further investigation by HSEO required:	
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No received on: _____
(FOR HSEO USE ONLY)	

URGENT
HKUST INCIDENT / ACCIDENT REPORT FORM

Notes:

- 1 In case of a student or staff injury, their supervisor, Principal Investigator (PI), or Person-in-charge must collect and complete Part A-D of this form within seven days from the date of the incident or notification. The Departmental Safety Officer (DSO) should notify their Department Head and HSEO to ensure prompt reporting of all accidents and incidents. For staff injury, the DSO should email a copy and send the original to the HRO as soon as possible to comply with the time limit specified in the Employees' Compensation Ordinance for notifying the Labor Department and Insurer. For student injury, the form should be sent to DSTO. Any reasons for late submissions should be provided to all relevant departments.
- 2 In the case of contractor staff injury, they may use their own form to document the incident/accident, unless there are no HKUST staff/students injured or property damaged. However, the responsible department/unit is still required to forward the relevant report or information to HSEO.
- 3 All personal data collected has been limited to the minimum required and to be handled in accordance with HKUST's Data Privacy Policy Statement. The information will only be used for investigation and related purposes within HKUST, ensuring strict confidentiality. Any requests for data access or correction can be sent to safety@ust.hk.
- 4 Each form should document the details of one injured person. In cases where multiple injuries result from a single incident, DSO should coordinate the submission of multiple forms. If the person involved in the incident is unknown or numerous, the DSO should provide further details.

PART A General Information			
1) Nature:	Non-injury Incident ^{#a}	2) Required Operation Suspension?	Yes ^{#b} / Not Applicable ^{#b}
3) Returned to Work/School for the Injured Person? (by report date)	Not Applicable ^{#b}		
4) Date:	8/5/2024	5) Time:	13:30
6) Location:	Laboratory ^{#c}	7) Room No./Address:	Room 3121
8) Person Involved:	<input checked="" type="checkbox"/> Student Name: CHAN Tai Man Student ID: 20123456 Department: XXX ^{#d} Position: PhD Student <input type="checkbox"/> Staff Name: Staff ID: Department: ^{#d} Position: <input type="checkbox"/> Contractor Name: Company: Position: <input type="checkbox"/> Resident Name: Quarter: Room No.: <input type="checkbox"/> Visitor/Public Name: Visiting Purposes: <input type="checkbox"/> Not Applicable/Unknown/Numerous Details:		
9) Description of the Incident:	<p><i>The situation of the Person, Equipment, Materials, Methods, Environment, Job Factors at the time of the incident e.g. what the person was doing, main function of the location, what factors leading to the incident, how the person was injured, etc..</i></p> <p>IP claimed that he was conducting experiments with RA in room 3121. At the time of the leakage, they were coughing but did not realize there were a leak until they smelled a weird burnt smell. They reported the situation to the laboratory technical staff and then left the scene. The emergency response process was initiated. When the HSEO emergency responders arrived, they noted that the ozone had spread to the corridor and was noticeable outside room 3107. The HSEO responders secured the situation, and the scene was cordoned off. IP claimed that they experienced breathing difficulties for about 30 minutes. They went to HKUST clinic around 4 pm on the same day and the doctor confirmed that their conditions were normal. The lockdown of room 3121 was in effect until 10:00 the next day.</p>		
10) Brief Description: (describe what happened in a few words)	Ozone leaked from one of the equipment in the lab		



Example 3: Injury in Common Area

Example 3

Nature: **Injury Case (student)**

Location: Canteen

Direct Reporting Line:

- 1 The injured student →
 - 2 Unit Manager (CSO) & DSO →
 - 3 HoD → 4 HSEO, DSTO,
- The injured student's HoD

Indirect Reporting Line:

- 1 The injured student →
- 2 Security → 3 HSEO →
- 4 Unit Manager (CSO) & DSO →
- 5 HoD →
- 6 HSEO, DSTO, The injured student's HoD



RESTRICTED

CASE ID:	2024-100
Further investigation by HSEO required:	
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No received on: 30/5/2024
(FOR HSEO USE ONLY)	

Example 3

URGENT
HKUST INCIDENT / ACCIDENT REPORT FORM

Notes:

- In case of a student or staff injury, their supervisor, Principal Investigator (PI), or Person-in-charge must collect and complete Part A-D of this form within seven days from the date of the incident or notification. The Departmental Safety Officer (DSO) should notify their Department Head and HSEO to ensure prompt reporting of all accidents and incidents. For staff injury, the DSO should email a copy and send the original to the HRO as soon as possible to comply with the time limit specified in the Employees' Compensation Ordinance for notifying the Labor Department and Insurer. For student injury, the form should be sent to DSTO. Any reasons for late submissions should be provided to all relevant departments.
- In the case of contractor staff injury, they may use their own form to document the incident/accident, unless there are no HKUST staff/students injured or property damaged. However, the responsible department/unit is still required to forward the relevant report or information to HSEO.
- All personal data collected has been limited to the minimum required and to be handled in accordance with HKUST's Data Privacy Policy Statement. The information will only be used for investigation and related purposes within HKUST, ensuring strict confidentiality. Any requests for data access or correction can be sent to safety@ust.hk.
- Each form should document the details of one injured person. In cases where multiple injuries result from a single incident, DSO should coordinate the submission of multiple forms. If the person involved in the incident is unknown or numerous, the DSO should provide further details.

PART A General Information			
1) Nature:	Injury Incident ^{#a}	2) Required Operation Suspension?	Not Applicable ^{#b}
3) Returned to Work/School for the Injured Person? (by report date)			No ^{#b}
4) Date:	20/5/2024	5) Time:	16:00
6) Location:	Canteen ^{#c}	7) Room No./Address:	American Diner
8) Person Involved:	<input checked="" type="checkbox"/> Student Name: Wang Ceci Student ID: 50001234	Department:	^{#d} Position:
	<input type="checkbox"/> Staff Name: Staff ID: Department: ^{#d} Position:		
	<input type="checkbox"/> Contractor Name: Company: Position:		
	<input type="checkbox"/> Resident Name: Quarter: Room No.:		
	<input type="checkbox"/> Visitor/Public Name: Visiting Purposes:		
	<input type="checkbox"/> Not Applicable/Unknown/Numerous Details:		
9) Description of the Incident:	A student slipped and fell on the second step of the American diner due to its slippery condition. She was escorted by security to the campus clinic and then transferred to the emergency department of Tseung Kwan O Hospital. The diagnosis revealed that I had three fractures in my tailbone (coccyx).		
10) Brief Description: (describe what happened in a few words)	A student slipped and fell on the stair.		



Example 4: Contractor's Report

Example 4

Nature: Injury Case (Contractor)

Location: Within Campus

Direct Reporting Line:

- ① The contractor →
- ② Their supervisor →
- ③ Responsible department →
- ④ HSEO

Indirect Reporting Line:

- ① The contractor →
- ② Security →
- ③ HSEO →
- ④ Responsible department →
- ⑤ HSEO

事件報告 服務有限公司			
事件報告編號:		GGT-IR-24-006	
Part A 報告人資料			
報告人姓名:	吳	職位:	SCSA
報告人簽署:			
日期:	2024 年 3 月 5 日	時間:	17:30
部門:	<input checked="" type="checkbox"/> 客戶服務部 <input type="checkbox"/> 工程部(BS) <input type="checkbox"/> 清潔部 <input type="checkbox"/> 保安部		
Part B 事件資料			
事件類別:	<input type="checkbox"/> 設施 / 物品損壞 <input type="checkbox"/> 財物損失 <input type="checkbox"/> 盜竊 <input type="checkbox"/> 火警 <input type="checkbox"/> 警鐘誤鳴 <input type="checkbox"/> 升降機故障 <input checked="" type="checkbox"/> 受傷 <input type="checkbox"/> 糾紛 / 爭吵 <input type="checkbox"/> 投訴騷擾 <input type="checkbox"/> 電力中斷 <input type="checkbox"/> 氣體洩漏 <input type="checkbox"/> 水浸 <input type="checkbox"/> 其他:		
當事人姓名:	陳	當事人聯絡電話:	
發生日期:	2024 年 3 月 5 日	發生時間:	14:30
詳細地點:	GGT 1/F A-C 翼方向近 A 翼對出走廊		
事件詳情:	服務員於樓層協助 CMO 跟進檢查工作時, 不慎滑倒在地上		
損失總值 (約港幣)	-		
Part C 跟進情況			
事件處理人姓名:	吳家亮	處理日期/時間:	5/3/2024 14:47
已通知部門/單位:	<input type="checkbox"/> 警方 <input type="checkbox"/> 消防 <input checked="" type="checkbox"/> 救護車 <input checked="" type="checkbox"/> 保安中心 <input type="checkbox"/> 清潔部 <input checked="" type="checkbox"/> 客戶服務部 <input type="checkbox"/> 工程部(BS) <input type="checkbox"/> 其他		
跟進詳情:	14:42 本人吳 高級客戶服務員接到同事 客戶服務員電話通知, 於帶領 CMO 同事及外判人員檢查 1/F 各露台安全掛勾工作時, 不慎滑倒, 現場地板因瀝漏導致十分濕滑, 陳 穿著波鞋, 在所處位置意外跌倒在地上, 傷及左手手腕及腰部感到痛楚。本人收到通知後, 馬上到達所述位置, 同時於 WHATSAPP 工作群組通知上司及 RLO, 到達現場時發現當時陳 清醒, 能對答, 但受傷位置有明顯痛楚, 未能自行起身, 事發時 CMO 同事及外判人員在現場及見到事發經過, 陳 在地上休息數分鐘後, 慢慢坐上膠椅繼續休息, 5 分鐘後本人陪同陳 到地下 MO 休息室。 約於 15:30 分, 陳 表示痛楚比之前嚴重, 本人隨即詢問是否需要召救護車到醫院, 確認需要。本人隨即通知保安中心及致電要求救護車服務。 15:34 校警 及 城市保安幫辦 到達現場, 本人帶兩位到 1/F 事發位置記錄。 15:38 救護車 A100 到達 GGT, 救護員與陳 了解狀況, 隨後陳 自己緩慢步行上救護車, 並於 16:00 離開 GGT 前往將軍澳醫院。 16:10 HSEO Andy 到 GGT 了解事發經過及到事發位置了解。		
附件:	<input checked="" type="checkbox"/> 相片 <input type="checkbox"/> 文件 <input type="checkbox"/> 其他 案件號碼: OB#		
申報保險:	<input checked="" type="checkbox"/> 是(工傷保險) <input type="checkbox"/> 否		副本呈交:
部門經理建議:			
部門經理簽署:			

事件報告 服務有限公司	
----------------	--

附件 (現場環境相片):

位置 - GGT 1/F A-C 翼方向近 A 翼對出走廊



Collaborators

HSEO Field Team Members

<https://hseo.hkust.edu.hk/system/files?file=internal/Field%20Team%20Organization%20Chart.pdf>

List of Departmental Safety Officers

https://hseo.hkust.edu.hk/system/files/documents/dso_list.pdf

Security Control Office	Emergency / Ambulance Service	2358 8999
	General	2358 6565
Human Resources Office	Enquiries	2358 6580





Thank you!

Heads and Departmental Safety Officers Meeting 2024

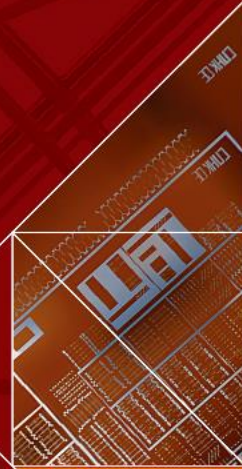


Central Delivery System & Research Safety Management System

Mr. Pak IP

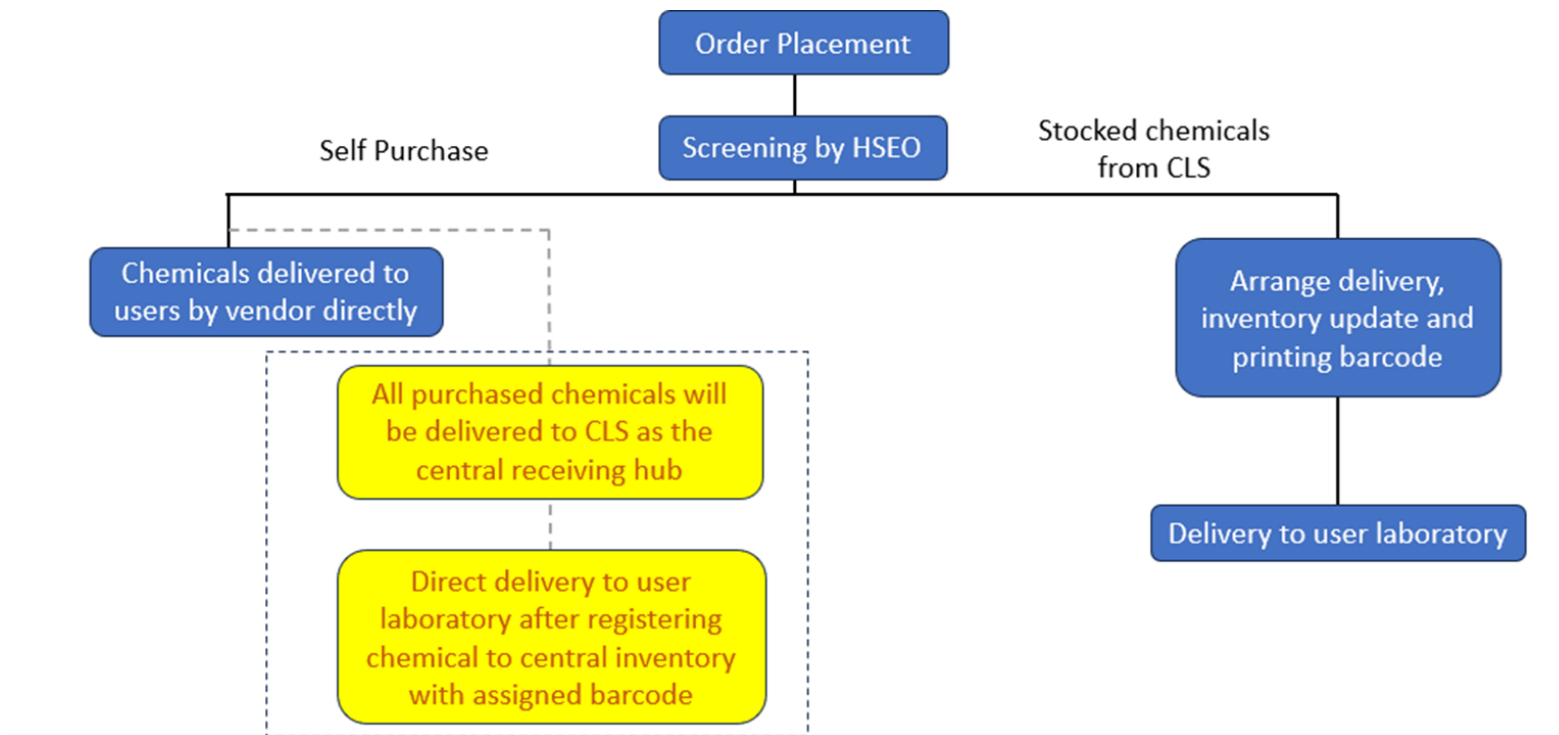
Head (Radiation and Biological Safety)

Central Receiving System and Research Safety Management System



Central Receiving System Development

- Allow for regulatory compliance and better controls of chemicals entering the campus



Development Process

- Conducted feasibility study with PURO and ISO to establish general requirements of the system
 - Involving development of a new Central Receiving Platform, modification of the ePro system and the Central Procurement Platform.
 - With reducing paper consumption as one of the goals as well.
- Facility

The screenshot displays the FMSPROD system interface for creating a requisition. The top navigation bar includes the logo of The Hong Kong University of Science and Technology and the text 'FMSPROD'. A search bar is located to the right of the logo. The main content area is titled 'Create Requisition' and features three steps: '1. Define Requisition', '2. Add Items and Services', and '3. Review and Submit'. The '1. Define Requisition' step is currently active. Below the steps, there are several input fields and checkboxes for defining the requisition details, including Business Unit (HKUST), Requisition Name, Requester (19000), Requesting Dept (Health, Safety & Envir Office), and PURO Buyer. A 'DPO' checkbox is checked, and a 'Priority' dropdown is set to 'Medium'. A 'Currency' dropdown is set to 'HKD'. A 'Safety & ITSC Cybersecurity Alert' section contains several checkboxes for material or service types: Radioactive/Irradiating apparatus/Laser*, Biological*, Chemical*, Cloud Service*, and None. A 'Continue' button is located at the bottom of the form. The bottom of the screenshot shows the 'Chemical & DG Unit' navigation bar with various menu items like Home, Inventory, Purchase Requests, etc. Below this is the 'CLS - PR Form' section, which includes a 'Lab Location' dropdown, a 'Subsidiary Project NO.' field, a 'Contact Number' field, a 'Search for ItemCatalog' section with a 'Stock List' table, and a 'Special Instructions or Requests' text area with 'SAVE AS DRAFT', 'SUBMIT', and 'CLEAR' buttons.

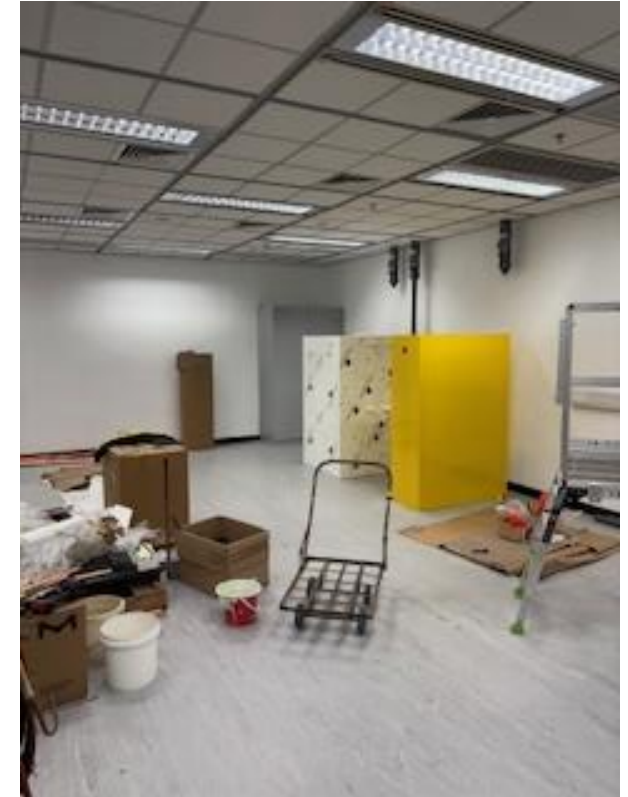


IT Platform Development

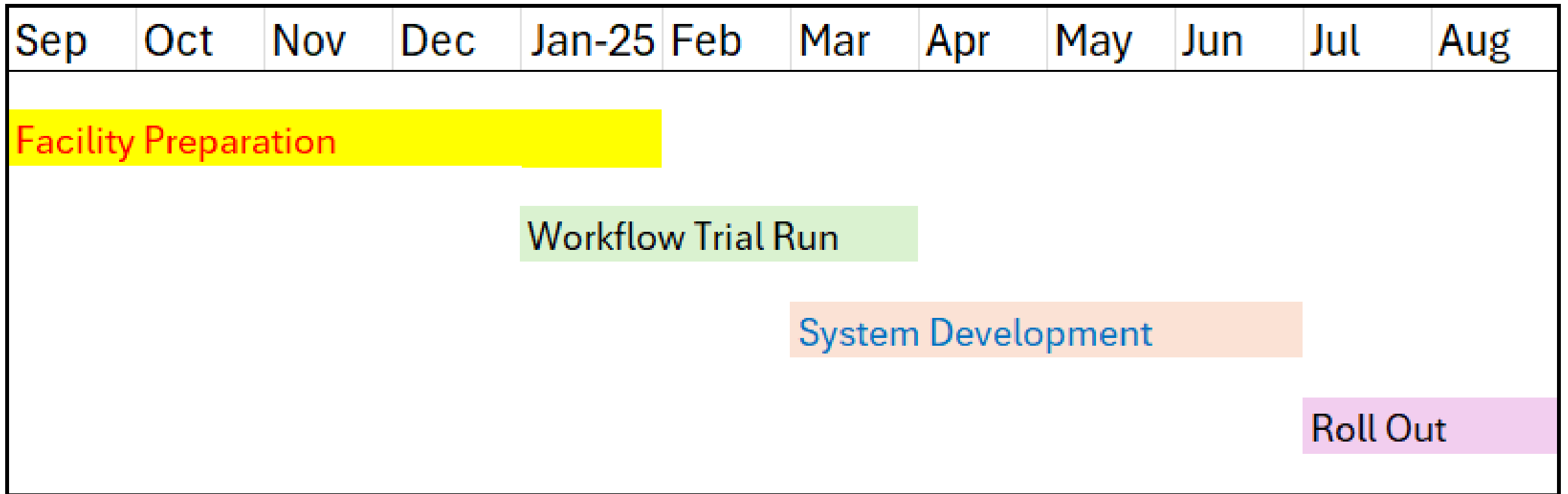
- Phase I: Bug fixing of the Central Procurement Platform before starting development of the Central Receiving Platform.
 - Engage laboratory users for trail run and confirmation of the central receiving workflow (proceed after completion CLS preparation room renovation).
- Phase II: Enhancement of Central Procurement Platform and development of the Central Receiving module (follow completion of Phase I)

Facility Preparation

- Renovation of the existing chemical receiving area to cater new demands



Schedule



Research Safety Management System



VPRD Policy

Overview

Research Units

Research Conduct & Practice

- > Research Conduct & Integrity
- > Animals
- > Human Participants
- > Artefacts
- > Research Safety
- > Research Compliance Review

Research Data & Output

- > Open Access
- > Publication & Data Management

Research Compliance Review Procedures for Research Involving Animals, Human Participants, Artefacts, and Safety Hazards

PDF

To ensure the University observes the highest standards in the ethical and responsible conduct of research, research practices at HKUST are subject to rigorous review by the sub-committees of the [Committee on Research Practices \(CRP\)](#), namely the [Animal Ethics Committee \(AEC\)](#), [Human and Artefacts Research Ethics Committee \(HAREC\)](#), and [Safety Panel](#).

The following procedures serve to guide Principal Investigators (PIs) and their team members on how to obtain appropriate ethical/safety clearance for their research projects, and their responsibilities and guiding principles on research practices, refer to:

- [Policy on the Care and Use of Animals](#)
- [Policy on Research Involving Human Participants](#)

5. Additional Procedures for Research Involving Safety Hazards

5.3 At the completion of a research project reviewed by the Safety Panel, the [Health, Safety and Environment Office \(HSEO\)](#) will assist the PI in compiling a safety completion report comprising the research group's safety records and those maintained by HSEO.

Research Safety Management System

- To facilitate the PIs to compile the **Safety Completion Report** in order to save PI's **time and works**
- Allow PIs to better manage the **research team, labs and projects** in order to address regulatory and compliance needs
- Allow PIs to systematically **keep track, keep record and retrieve record** of various safety programs and produce data analytics
- **Safety performance** at a glance by summarizing safety score, key information and outstanding items in a Dashboard





Launching of the RSMS Phase I

- The production site went through a initial launching for selected user groups.
- A training will be conducted in December for
 - PIs having active UGC funded project
 - PIs who are currently supervising a team of research staff and conducting research work in a designated laboratory.
- Information of the UGC funded projects will be imported into the system in January 2025.

RSMS Phase I

Research Group Profile

- 1) Project
- 2) Location
- 3) Personnel

Inspection

- 1) Self-inspection
- 2) HSEO inspection

Hazard Control Library

What will Happen When the RSMS Starts Operating

- PI with active UGC funded projects will receive email request for setting up location and a research team for specific funded project
 - PI may delegate the task to a PI delegate for any subsequent tasks associated with the project.
- Receive request for Safe Operating Procedures or document associated with the funded project requested by the Safety Committee Panel reviewer.

My Worklist

Location (52)

Personnel (49)

HC Document (16)

Inspection (37)

Review Locations

[01/11/2024] Pending decision for Ref#HSEORSMS20241104703. Pending for review of your locations in RSMS.
PI : istest110

✓ Do It Now

Setup your team for Project #20241125-02

[26/11/2024] Pending decision for Ref#HSEORSMS20241104827. Pending review, update and confirm for your team members for the project 20241125-02.
PI : istest110

✓ Do It Now

Set up location profile for project #20241125-02

[26/11/2024] Pending decision for Ref#HSEORSMS20241104825. Pending set up the location profile for project #20241125-02
PI : istest110

✓ Do It Now

Annual Update

- Submit self-inspection report for funded project is imported in (May and November)
- Receive request for annual update of Hazard Placard information of laboratory space(s) occupied by PI (November)

User Dashboard

THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY

Research Safety Management System

Prof

Funded Projects: 1

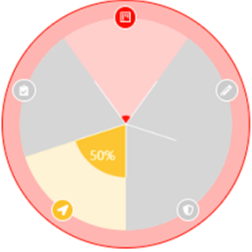
Team Members: 29

Team HCDs: 0

Total Locations: 1

Pending Inspection: 0

Safety Performance Rating



Final Score

Elements	Completed Tasks
Personnel	0 / 11 Annual Review 11 Task Left
HC Submissions & Review	Submissions Annual Review Done
HC Document Declarations	Team Declaration Publish / Update Done
Location	0 / 1 Annual Review 1 Task Left
Self Inspections	Inspection Checklist Completion Done

My Worklist

Location Personnel HC Document Inspection

No Task

My Worklist

Location (52) Personnel (49) HC Document (16) Inspection (37)

Review Locations

[01/11/2024] Pending decision for Ref#HSEORSMS20241104703. Pending for review of your locations in RSMS. PI: Istest110

[Do It Now](#)

Setup your team for Project #20241125-02

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[Do It Now](#)

Set up location profile for project #20241125-02

[26/11/2024] Pending decision for Ref#HSEORSMS20241104825. Pending set up the location profile for project #20241125-02. PI: Istest110


[Do It Now](#)

Team Structure



0 Staff
29 Student

Self-Inspection



0 Location

User Dashboard

THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY

Research Safety Management System

Prof I

Funded Projects: 1

Team Members: 10

Team HCDs: 0

Total Locations: 2

Pending Inspection: 0

Safety Performance Rating

Final Score

Elements	Completed Tasks
Personnel	Set Up, Annual Review, Done
HC Submissions & Review	Submissions, Annual Review, Done
HC Document Declarations	Team Declaration Publish / Update, Done
Location	Set Up, Annual Review, Done
Self Inspections	Inspection Checklist Completion, Done

Team Structure

0 Student, 10 Staff

Self-Inspection

0 Location

My Worklist

No Task

RSMS Phase II

- Development of RSMS Phase II will follow the launching of RSMS in January

Medical
Surveillance

Safety Training
Management

In Summary: RSMS is an IT enable, PI driven tool to assist PIs in fulfilling policy established by VPRD on research compliance.

Safety Alert Recap



- Overloading of a substandard power extension unit

FEBRUARY 2024 HEALTH, SAFETY AND ENVIRONMENT OFFICE

SAFETY ALERT

OVERLOADING
RESULTED IN
BURNING OF
AN
ELECTRICAL
SOCKET AND
AN EXTENSION
SOCKET UNIT



HSEO would like to bring to your attention a recent near-miss incident that occurred in a research lab. The incident involved power overload and the use of a substandard power extension unit. Fortunately, no injury or major damage occurred, but it serves as a vital reminder of the importance of electrical safety in our workplace. The research experiment has been suspended until all necessary rectification has been completed.

Investigations into the incident revealed that the root cause was the violation of general electricity safety rules. The power output capacity of the extension unit was insufficient for the load requirements and its design did not comply with the safety standards in Hong Kong. The plugs were burnt immediately due to the strong current induced when the research staff turned on multiple equipment with high power consumption.

- Purchasing radioactive substances without proper licence.

APRIL 2024

HEALTH, SAFETY AND ENVIRONMENT OFFICE

SAFETY ALERT

IMPORTATION OF RADIOACTIVE SUBSTANCES INTO HONG KONG

Radioactive Source (Po-210) • SN-9085



QTY: 1

This radioactive source is mounted in a 2.5 cm diameter sealed plastic disk and requires no licensing.

Product Summary

This radioactive source is mounted in a 2.5 cm diameter sealed plastic disk.

The source is USNRC License Exempt (US only). Outside the US, consult local laws and regulations.

Below is the isotope, activity, half-life and type of radiation:

• Po-210, 0.1 μ Ci, 138 days, alpha

The use of radioactive materials for research is common but caution must be taken when purchasing such materials from overseas. It has come to our notice that some individuals may unknowingly acquire radioactive substances without realizing that they are in violation of Chapter 60K of the Import (Radiation) (Prohibition) Regulations.

- Technical staff suffering from a bone fracture in an accident involving lifting appliances and lifting gear

JULY 2024

HEALTH, SAFETY AND ENVIRONMENT OFFICE

SAFETY ALERT

AN ACCIDENT INVOLVING LIFTING APPLIANCES AND LIFTING GEAR (LALG)

An accident involving lifting appliances and lifting gear (LALG) has recently occurred in a workshop at the university, prompting this safety alert. A technical staff suffered a hand injury that resulted in hospitalization and the discovery of a bone fracture. The accident is currently under investigation and it serves as a critical reminder for all laboratories and workplaces utilizing similar equipment to review their safety practices and ensure compliance with the safety requirements of the Labour Department (LD). In fact, this injury accident may result in an LD investigation and unannounced inspections of campus workplaces with LALG, therefore it is imperative that we double check to ensure compliance with relevant regulations.

The safety requirements for the initial inspection, regular examination, safe working load, operator training, and duties of the person-in-charge are summarized in a separate document for reference. If your department or unit has the following lifting appliances and lifting gear, please follow the safety guidelines to inspect, examine and test the equipment.



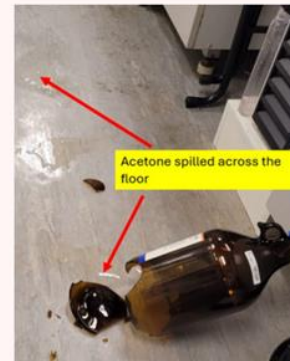
- Lack of details on accidents that emergency responders needed to handle.

NOVEMBER 2024 HEALTH, SAFETY AND ENVIRONMENT OFFICE

SAFETY ALERT

LACK OF INFORMATION HINDERED EMERGENCY RESPONSE

In recent weeks, our research laboratories experienced two chemical incidents involving the spillage of 2.5L acetone and the evolution of hazardous gases due to the improper disposal of strong oxidizing nitric acid in a waste container.



Upon detecting the incidents, the emergency ventilation system and siren were activated to alert nearby researchers. However, it is concerning that the responsible individuals evacuated without providing essential information to emergency responders.

Heads and Departmental Safety Officers Meeting 2024



Good Practices Sharing

Good Practices Sharing:

CBE Laboratory Safety Representative System &
Departmental Safety Training

Lee LEUNG



CBE's Current Safety Practices Sharing

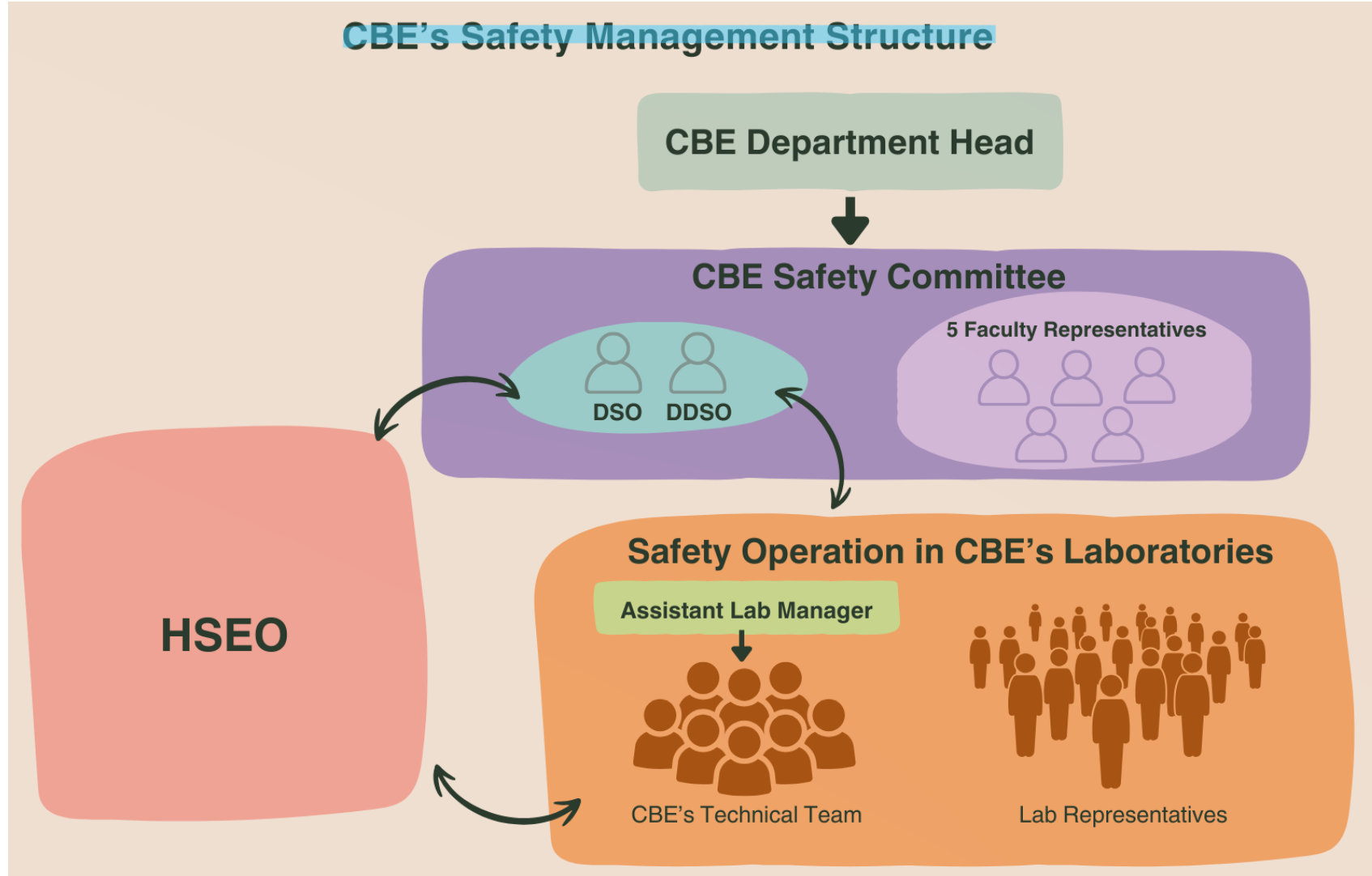
1. CBE safety
management
structure

2. Workplan system

3. Safety Reminders
and Standard
Operation
Procedure



1. CBE's safety management structure



Responsibility of Lab Representatives:

Safety communication

Assisting with safety orientation

Reviewing the work plans

Monitor the safety of the laboratory

Emergency contact point



Advantages of having Lab Representatives:

Enhanced Safety Management

Increased Safety Awareness

Support for Newcomers and Workload Reduction

Active Engagement in Safety Management



2. Work plan system

Work plan content:

1. Experiment /Project Description

2. Equipment List

3. Procedure Template

4. Risk Assessment Template

5. Chemicals List

6. Biological Agents List

7. Action in Case of Abnormal or Emergency Situations



3. Safety Reminders and Standard Operation Procedure



-General Laboratory Safety



-Electrical Safety



-Protocol for Handling Sharp Objects in Laboratories



-Chemical Safety



-SOP for Sodium Batteries



-Use of Hydrothermal Reactor



-Outdoor Experiment



Question and Answer



Heads and Departmental Safety Officers Meeting 2024

Q&A

Heads and Departmental Safety Officers Meeting 2024



Closing Remarks

Prof. Samuel YU

Director of HSEO