

# LSR Orientation Training

# Outline

- Who is HSE?
- Roles and Responsibilities of LSRs
- Salute Introduction
- Navigating HSE Webpage
- Key Resources



# Who are we

- The Health, Safety, and Environment Department is composed of the following sections:
  - Environmental Protection
  - Community Health and Safety
  - Fire & Emergency Services
  - Research Safety

## Health, Safety and Environment Department



HSE webpage: <https://hse.kaust.edu.sa>

# Who are we

- The Health, Safety, and Environment Department is composed of the following sections:
  - Environmental Protection
  - Community Health and Safety
  - Fire & Emergency Services
  - **Research Safety**
- Research Safety provides programs to help laboratories manage risks and implement the appropriate hazard controls.

## Health, Safety and Environment Department



HSE webpage: <https://hse.kaust.edu.sa>

# The Research Safety Team

*By the numbers*



## Who we are and what we do

~3000	KAUST Employees Covered
200 / 60,000	Laboratories / m <sup>2</sup> lab space
~200	Principal Investigators
4 / 4 / 11	COEs / Platforms / Core Labs (BESE, CEMSE, PSE, Core Labs, RPIC)
~200	Lab Safety Representatives (LSR's)
500 / 300	Risk Consultations / Inspections



### 17 Expert Staff:

- 1 Head, Research Safety
- 1 Lab Safety & Design Specialist
- 2 Biological Safety Specialists
- 2 Industrial Hygienist
- 1 Chemical Safety Specialist
- 1 Radiation Safety Specialist
- 1 Laser Safety Specialist
- 1 Occupational Health Specialist
- 1 Dive & Boat Safety Manager
- 4 Dive Safety Specialist
- 2 Dive Safety Technicians

**Protecting what matters most through our HSE expertise, partnerships and world-class collaborations.  
We work closely with our research partners to build resiliency into our research!**

# The Barrier Experts

## KAUST's Research Safety Team



### Marcos Aguilar

- RST Lead
- Lab Safety & Design
- 12+ years experience at KAUST
- Certified Safety Professional & Safety Management Systems



### Hattan Matar

- BS Systems Engineering
- MS Risk Control
- Certified Industrial Hygienist
- Certified Safety Professional
- Extensive oil & gas expertise



### Rodion Gorchakov

- Biological Safety Lead
- PhD Epidemiology
- MS Molecular Bio
- BSL-3 Expertise
- Biological Safety Officer
- Certified Biological Safety Professional



### Mohamad Bahmaid

- Radiation Safety Officer
- Certified Rad Safety Officer
- Eng. Degree Nuclear Engineering Sciences
- MS Health & Med. Physics
- BS Nuclear Physics



### Kee Mei Leong

- Head, Research Safety
- MSc Safety, Health and Environmental Technology
- BSc Biochemistry
- High containment & animal facilities



### Sujata Haydu

- Biological Safety Specialist
- MSc Microbiology & Infectious Diseases
- HIV Research background
- Alternate Biological Safety Officer



### Moustafa Elsubki

- Laser Safety Specialist
- PEM Specialist
- BS Physics
- MSc Medical Physics
- Non-Ionizing Radiation Safety Specialist



### Gianluca Barco

- Chemical Safety Specialist
- PhD Chemistry
- NEBOSH IGC
- Safety Auditor ISO 45001
- Laboratory Waste Specialist

# The Barrier Experts – New Additions

## KAUST's Research Safety Team



### Wafa Salem

- Occupational Health Specialist
- 25+ years experience Occ. Health
- Well-being, disability management



### Augusto Montbrun

- Dive & Boat Safety Manager
- 30 years dive ops & marine conservation experience
- 3,000 + dives
- Past life Dive Ops Mgr. Buddy Dive Resort in Bonaire



### Krasimir Todorov

- Dive Safety Specialist (Dive Locker)
- Certified Chamber Operator & Cylinder Visual Inspector



### M. Zahid Iqbal

- Lead Senior Lab Safety Specialist
- Certified Industrial Hygienist
- Canadian Registered Safety Professional



### Beatrice Rivoira

- Dive Safety Specialist/ Assistant Dive Safety Officer
- MSc in Marine & Oceanographic Biology
- CCR and O/C technical diving instructor
- 20+ in diving industry



### Muhammad Imran

- Dive Safety Technician
- 20+ years as Navy Clearance Diver Technician.
- Skilled in diving instruction, equipment repair & technical diving



### Francis Uy

- KCRI Dive Safety Specialist
- 15 + years as DSO in Middle East, 16 years PADI Course Director
- ADCI Air-Diving Supervisor
- NEBOSH IGC, BS Physical Therapy



### Imogen Danks

- Dive Safety Specialist
- Dive supervising, safety diving, equipment mgt.
- High profile projects like BBC, AppleTV+/BBC
- Joined Apr. 15/24



### Khurram Shahzad

- Dive Safety Technician
- 20 + yrs as Navy Dive Master
- Specializes in complex dive ops and ensuring strict safety protocols
- Certified in dive equipment/safety mgt.

# Safety Programs

## Lab Life Cycle

- Lab design
- Assessments
- Lab safety
- Lab clearance

## Biosafety

- BSL-1 and BSL-2
- Biosafety cabinet certification
- Biological registration
- KAUST Committee (IACUC and IBEC)

## Chemical Safety

- Acid, base, corrosive, flammable, and oxidizer
- Fume hood testing
- Compressed gas and cryogenics
- Experiment review



# Safety Programs

## Industrial Hygiene

- Respiratory protection
- Possible exposure
- PPE
- Hearing conservation
- Heat illness prevention
- Mold prevention and remediation
- Office ergonomics

## Laser Safety

- Registration of lasers (Class 3B & Class 4)
- Laser lab design
- Hazard assessment

## Radiation Safety

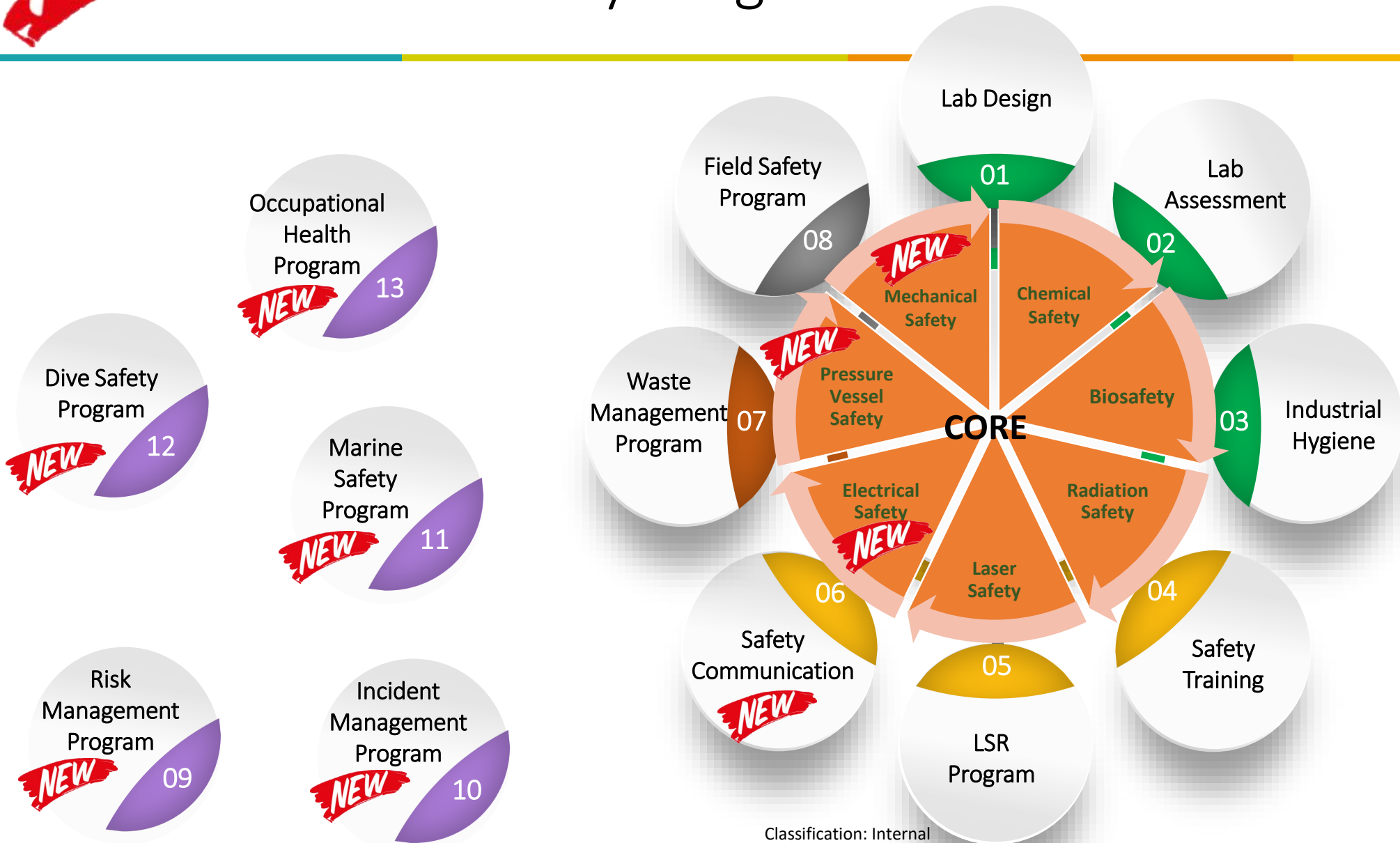
- Registration of X-ray equipment
- Registration of radioactive substances
- KAUST Committee IRSC



Classification: Internal

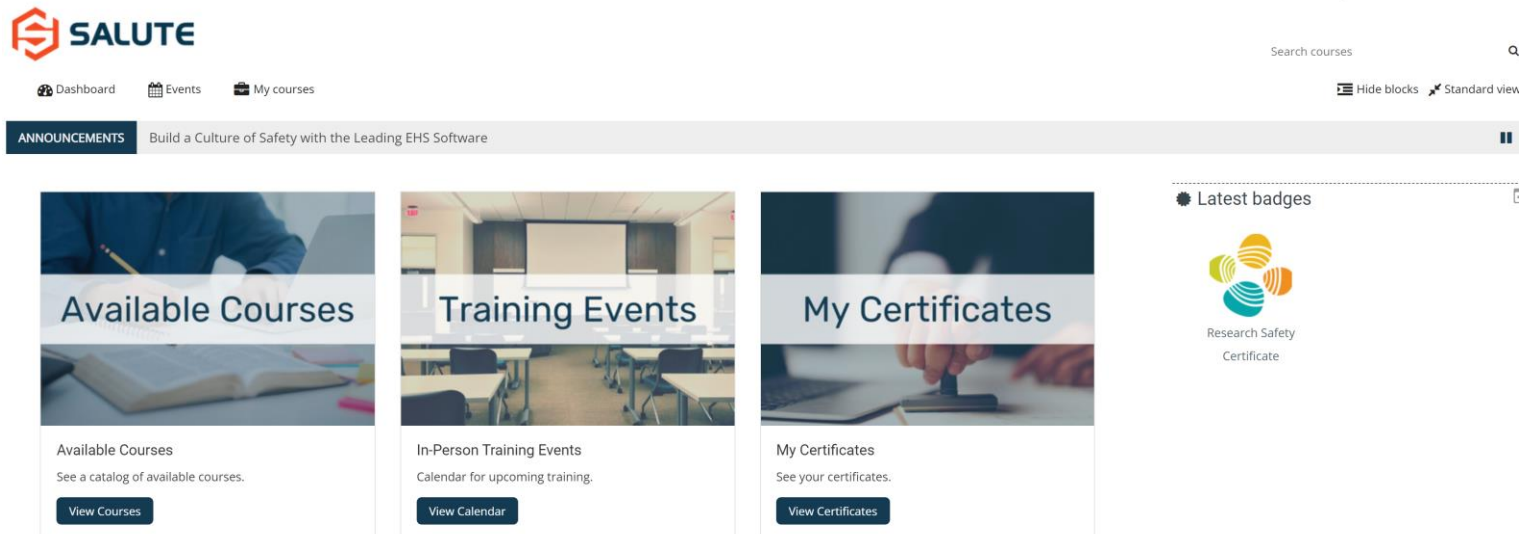
**NEW**

# Research Safety Programs



# Trainings

- All training is completed or booked via Salute
  - Take the training directly online
  - Book for live courses
  - Arrange on-demand courses
  - View/Access your certificates



- Radiation Safety
- Laser Safety
- Laboratory Safety
- Emergency Preparedness
- Chemical Safety
- Biosafety
- Research Safety Classroom Trainings

# KAUST Committee

[Research Compliance](#) coordinates the University's regulatory framework for research safety and ethics review via four faculty-led committees:

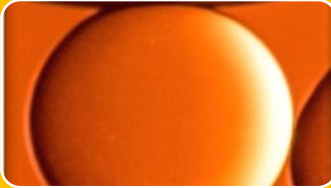
- Institutional Animal Care and Use Committee ([IACUC](#))
- Institutional Biosafety and Bioethics Committee ([IBEC](#))
- Institutional Radiation Safety Committee ([IRSC](#))
- Dive Control Board ([DCB](#)) for scientific diving



Research Compliance also promotes policies and activities pertaining to the responsible conduct of research.

# KAUST Committee

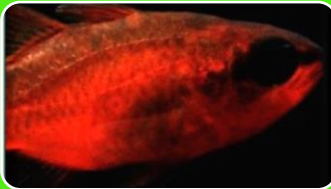
## Institutional Biosafety and Bioethics Committee (IBEC)



Research that involves the use of:

- Recombinant or synthetic nucleic acids,
- Infectious agents,
- Biological toxins,
- Biohazardous agents (Risk Group 2),
- Research involving human subjects.

## Institutional Animal Care and Use Committee (IACUC)



Care and use of live animals in:

- Research
- Teaching
- Testing activities

## Institutional Radiation Safety Committee (IRSC)



Research conducted at or sponsored by KAUST that involves the use of:

- Radioactive substances
- Radiation-producing equipment (including SEM, TEM, hand-held x-ray, etc.)

## Dive Control Board



- Research conducted at or sponsored by KAUST that involves scientific diving.

# KAUST Committee

## Institutional Biosafety and Bioethics Committee (IBEC)

Reviews all research conducted at or sponsored by KAUST that involves the use of:

- Recombinant or synthetic nucleic acids,
- Infectious agents,
- Biological toxins,
- Biohazardous agents (Risk Group 2),
- Research involving human subjects.

## Institutional Animal Care and Use Committee (IACUC)

Reviews all research conducted at or sponsored by KAUST that involves the care and use of live animals in:

- Research.
- Teaching
- Testing activities.

## Dive Control Board

Reviews all research conducted at or sponsored by KAUST that involves scientific diving.

## Institutional Radiation Safety Committee (IRSC)

Reviews all research conducted at or sponsored by KAUST that involves the use of:

- Radioactive substances
- Radiation-producing equipment (including SEM, TEM, hand-held x-ray, etc.)

# LSR Role & Responsibilities

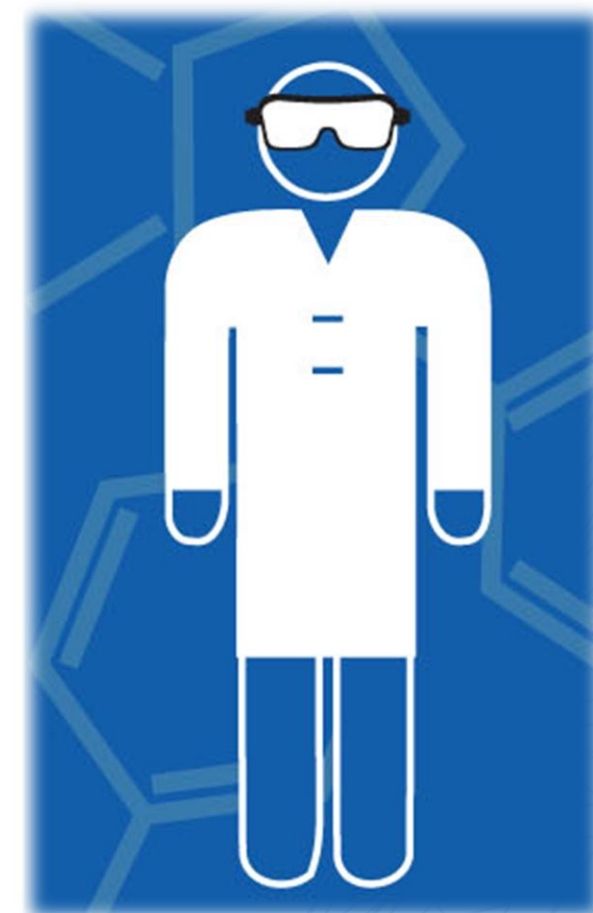
*LSR assists faculty to promote a safe work ethic and safe work environment.*

# Roles and Responsibilities

Laboratory Safety Representatives (LSR) provide an essential link between the lab and Health, Safety & Environment (HSE).

LSRs are the catalyst for driving a strong safety culture and a safe work environment in the lab with the support of the faculty.

LSRs help to improve lab safety, identify hazards, and provide support to prepare for and deal with emergency situations.



# Interventions



# Lead by Example

- Discuss your role with your faculty and the need for their support to promote a strong safety culture.
- Outline resources and support needed to be an effective LSR.
- Obtain all the required training related to the hazards present in the areas you represent.
- Be aware of all the relevant programs that apply to research conducted in your lab (<https://hse.kaust.edu.sa/safety/laboratory-safety>).
- Monitor the safe and unsafe behaviors in the lab area and address any safety concerns.
- If you have questions or need assistance, please contact [hse@kaust.edu.sa](mailto:hse@kaust.edu.sa).

**LSRs should be driven, proactive, responsible, and result-oriented to improve the safety culture in the lab.**

# New LSR or Alternate LSR

Once you have been appointed as LSR or alternate LSR by your faculty, you should:

- Notify HSE ([HSE@kaust.edu.sa](mailto:HSE@kaust.edu.sa)) that you have been appointed LSR so that HSE can include you in the LSR email list and notify you of any update related to lab safety.
- Establish who is the HSE building point of contact.
- Discuss your responsibilities with your faculty and the possibility to nominate an alternate LSR.
- Update the following documents to include your contact details:
  - Lab Safety Plan (LARA)
  - SOPs
  - Lab door sign
  - Organizational flip chart
- Attend the LSR Orientation Training (live session)

# Restructuring Building Contact Person

## HIGHLIGHT

- Dedicated single point of contact



### Building 1

- Marcos Aguilar (excluding Core Labs)



### Building 2

- Rodion Gorchakov (excluding Core Labs)



### Building 3

- Gianluca Barco (excluding Core Labs)



### Building 4

- Mohammad Bahmaid (excluding Core Labs)



### Building 5

- Moustafa Elsoubki



### Building 6

- Zahid Iqbal



### Building 7

- Moustafa Elsoubki (excluding Core Labs)



### Building 9

- Marcos Aguilar



### Building 22 (RPIC)

- Nadir Aljudaibi



### Building 23 (RPIC)

- Nadir Aljudaibi



### Building 24 (RPIC)

- Nadir Aljudaibi



### Building 25

- Zahid Iqbal



### Building 26

- Zahid Iqbal



### Building 27

- Zahid Iqbal



### Building TKS

- Mohammad Bahmaid



### Building 33

- Zahid Iqbal



### Building 35 (KRTP)

- Nadir Aljudaibi



### Building 38 (DOW)

- Nadir Aljudaibi



### NEO

- Zahid Iqbal



### Aramco

- Nadir Aljudaibi



### Building 41

- Zahid Iqbal



### Building 45

- Nadir Aljudaibi



### HMSB

- Mohammad Bahmaid

# Hazard Identification and Risk Control

- **Lab Safety Plan (LSP)** – Prepare/review the Lab Safety Plan (future LARA) to identify all the hazards present in the lab and ensure that safety controls are available and operational to minimize the risks (e.g., fume hood, biosafety cabinets, enclosures, etc.).
  - LSP must be read, understood and signed by everyone working in your lab
  - LSP available to all lab personnel
  - LSP must be reviewed annually
  - A template is available on our webpage
- **Standard Operating Procedures (SOPs)** - Assist lab members to develop written SOPs for hazardous operations, equipment, or specific experiment.
  - Ensure that SOPs are reviewed regularly (or yearly)
  - A template SOP is available on our webpage
  - Have all lab members read and sign the SOPs that apply to their work
  - Ensure lab-specific SOPs are available (either paper copies available in the lab or electronic copies accessible while in the lab)

# Hazard Identification and Risk Control

- **Chemical Inventory** - Help maintain the chemical inventory up to date using the online chemical inventory system (Salute). To obtain access to the chemical inventory you must first complete the Chemical Inventory training.
- **Hazardous Waste** - Manage hazardous waste and satellite accumulation areas (SAA)
  - Ensure the hazardous waste bags and containers are segregated appropriately and labeled or tagged as per the hazardous waste guide.

**SATELLITE ACCUMULATION AREA**  
**4 - 4830**

KAUST chemical hazardous waste must meet the following:

- ALL containers (bottles, bags, boxes) must be labeled with a completed and legible KAUST Hazardous Waste Tag.
- All chemical names must be spelled out legibly in English. Do not use abbreviations, formulas, or structures.
- All containers (bottles, bags and boxes) must be securely closed with a proper fitting lid / cap. Tape boxes shut.
- No visible contamination on the outside of the container.
- Ensure there are no leaking containers and all spills have been cleaned up.
- Bagged waste must be securely closed with no free liquids and no protruding or sharp objects inside.
- Keep incompatible wastes separated from each other.
- Unknown, unlabeled, bulging or suspected unsafe wastes will not be collected.
- "Empty" containers must be rinsed and be emptied of any free liquid. "Empty" containers with free liquid will not be collected.

For questions contact [researchsafety@kaust.edu.sa](mailto:researchsafety@kaust.edu.sa)

**HAZARDOUS WASTE**

Date: \_\_\_\_\_

Contents:	Amount	Units

If mixture, what is pH: \_\_\_\_\_

**HAZARDS (check all that apply)**

<input type="checkbox"/> Corrosive: Acid	<input type="checkbox"/> Air Reactive	<input type="checkbox"/> Flammable/Combustible
<input type="checkbox"/> Corrosive: Base	<input type="checkbox"/> Water Reactive	<input type="checkbox"/> Other/Non-Hazardous
<input type="checkbox"/> Biohazardous	<input type="checkbox"/> Toxic/Poisonous	<input type="checkbox"/> Oxidizer

**Hazardous Waste Generator Information**

Building & Room Location (FLOC): \_\_\_\_\_

Full Name: \_\_\_\_\_

Email: \_\_\_\_\_

## Key Points Hazardous Waste Management

- All chemical containers must be labeled with a completed KAUST Hazardous Waste Label:
  - Must be in English and include all constituents
  - No abbreviations
  - No chemical formulas
  - No chemical structures
- Containers must be securely closed with a properly fitted cap/lid.
- Ensure that there is no contamination on the outside of containers.
- Keep incompatible wastes separated.
- Unknown/unlabeled containers will not be collected.

[hse.hazwastepickup@kaust.edu.sa](mailto:hse.hazwastepickup@kaust.edu.sa)

# Personal Protective Equipment and Safety Supplies

- Ensure availability of adequate personal protective equipment (PPE) for each lab member. [PPE standard for KAUST Laboratories](#).
- Encourage/support lab personnel to use and maintain PPE.
- Identify required protective equipment needed (gloves, goggles, respirators, etc.).
- Ensure all [safety supplies](#) (first aid kits, spill kits, etc.) and equipment required for the management of hazardous waste are available.



lassification: Internal

## Key Points of Required PPE in the Lab

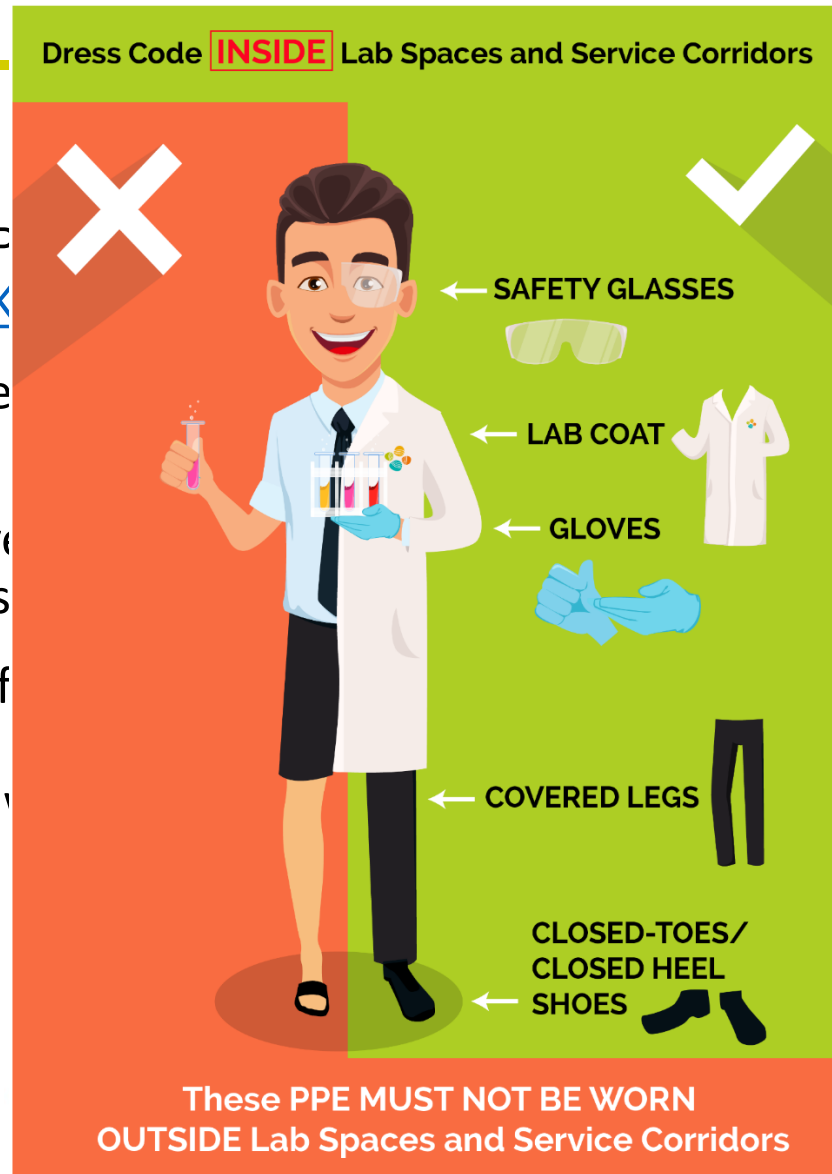
- Wear minimum PPE when in the lab
  - Eyewear – worn at all times when entering the lab (working or passing through the lab)
  - Lab coat buttoned – worn when working with or around hazards
  - Gloves – worn when working directly with hazards
- Wear additional PPE based on the lab activities
  - Special gloves (cryogenics, hot surfaces, etc.)
  - Face shield (cryogenics, UV, etc.)
  - Special eyewear (UV, lasers, etc.)
  - Respirators – require a risk assessment from IH and enrollment in respiratory protection program (even N95)
- Users must wear PPE correctly when in the lab
- **NO PPE WORN OUTSIDE THE LAB**

# How to Dress for the Lab



# Personal Protective Equipment and Safety Supplies

- Ensure availability of protective equipment (PPE) for all lab members. [PPE standard for KUST](#)
- Encourage/support lab personnel to maintain PPE.
- Identify required protective equipment (gloves, goggles, respirators, etc.)
- Ensure all [safety supplies](#) (first aid kit, etc.) and equipment management of hazardous materials



## Points of Required PPE in the lab

Minimum PPE when in the lab

Safety glasses – worn at all times when entering the lab (working or passing through the lab)

Lab coat buttoned – worn when working with or around hazards

Gloves – worn when working directly with hazards

Additional PPE based on the lab activities

Special gloves (cryogenics, hot surfaces, etc.)

Face shield (cryogenics, UV, etc.)

Special eyewear (UV, lasers, etc.)

Respirators – require a risk assessment from IH and enrollment in respiratory protection program (even N95)

Must wear PPE correctly when in the lab

Do not wear PPE outside the lab

**PPE MUST NOT BE WORN OUTSIDE THE LAB**

# Safety Supplies List

<https://hse.kaust.edu.sa/safety/laboratory-safety/safe-research/safety-supplies>



Gloves



Eye protection



Other PPE



First Aid and Kits



Electrical Safety



Others



Bags



Containers



Sharps and Broken  
Glass



Secondary  
Containers



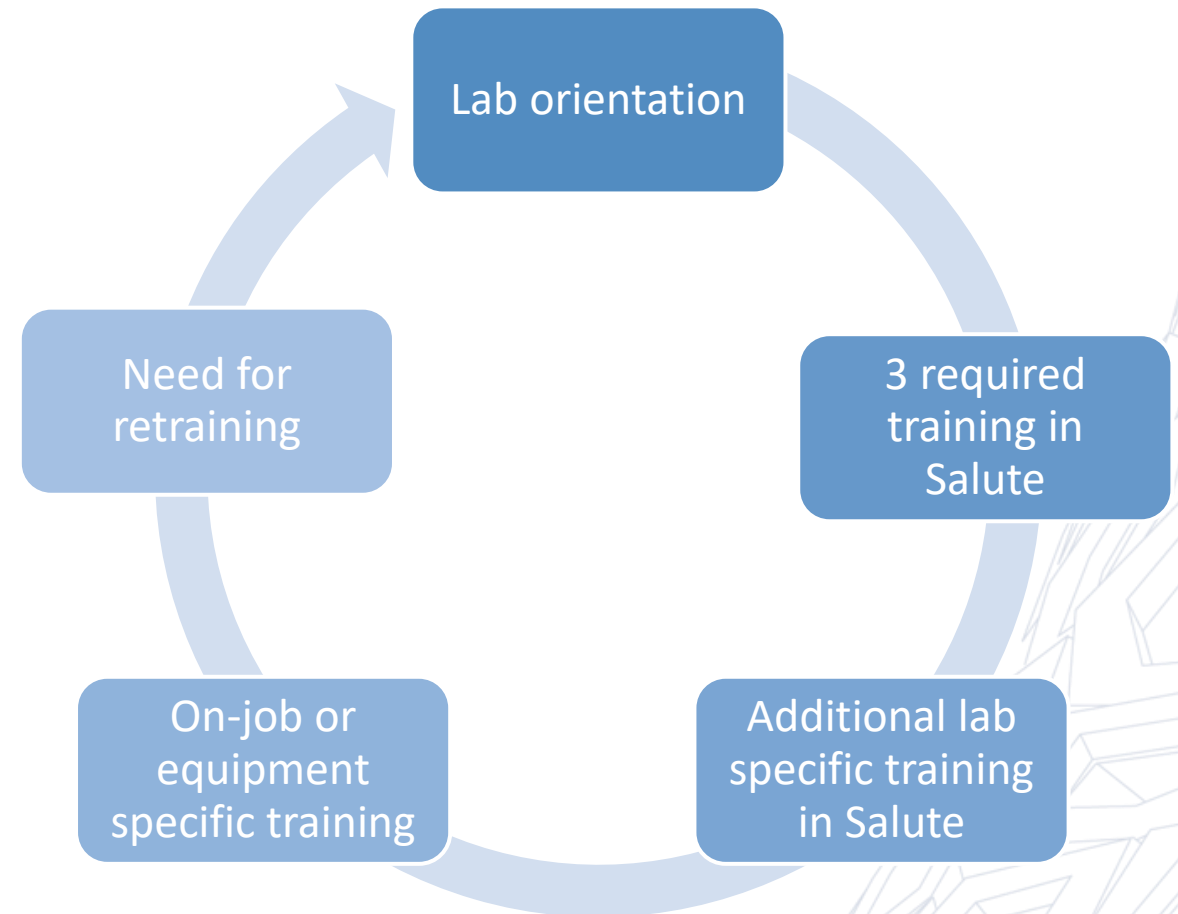
COVID-19 Safety  
Items

# Training

- Ensure everyone who works in the lab is competent to carry out their duties.
  - Lab Orientation Checklist (*recommendation*)
  - Notify HSE if additional safety-related training is needed for the lab group.

## Training requirements:

- Lab Safety Training (online or live classes available)
- Hazardous Waste Training
- Emergency and Incident Preparedness Training
- Any additional online training identified in LSP
- LSR Orientation Training (LSR and alternate LSR only)
- First Aid Training (recommend 2 people)
- Fire Extinguisher Training (recommend 2 people)



# Communication

- Connection between HSE and your lab - point of contact for all health and safety matters arising within your lab.
- Attend the Lab Safety Forum (or send a designated representative if you cannot attend).
- Communicate with all team members relevant outcomes from the Lab Safety Forum and other emails received via the LSR distribution list.
- All presentations for previous forums can be found on the [LSR webpage](#).
- Report any safety hazard observed, near-miss, accident, incident, or occupational disease by creating a new event in Salute. [Click here to raise an event](#).
- Assist in the investigation of all incidents that occurred in your lab.

# Safety Assessment Program



Safety Assessment Program adopts a framework which progressively integrates the capability of self-regulation among Laboratory Safety Representatives (LSRs) and independent assessments by Health, Safety and Environment (HSE) Research Safety Team (RST).

The objectives of the Safety Assessment Program are to **improve safety culture** and to **enhance safety best practices** in KAUST research environment in a collaborative manner.

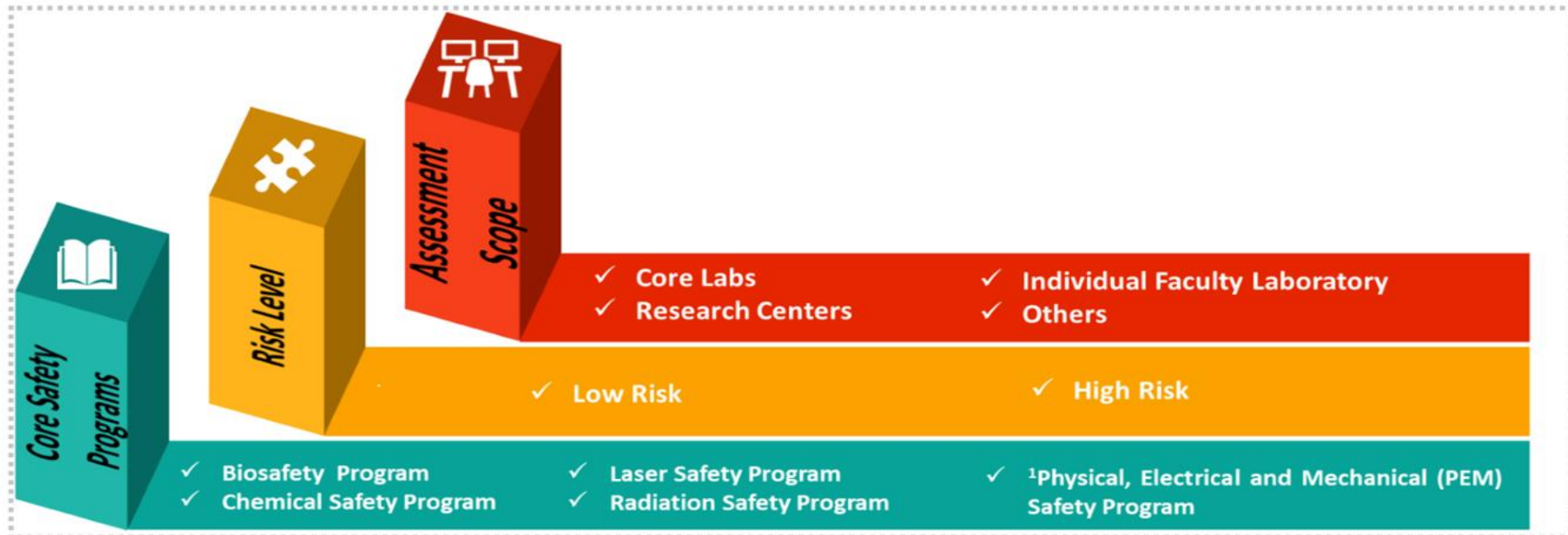
Safety Assessment Program serves as a shared tool in integrating the Plan-Do-Check-Act Cycle of continuous improvement in research safety.



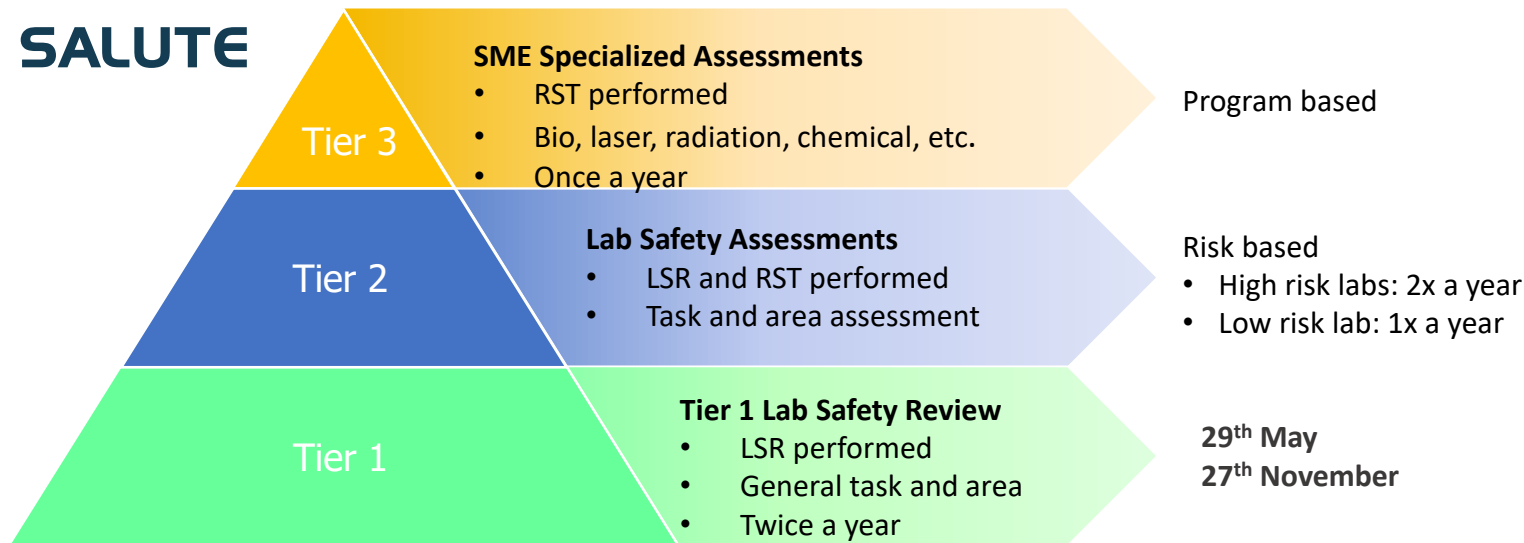
# Safety Assessment Program

Laboratory spaces are broadly classified according to the 3 assessment classification criteria below:

- Assessment Coverage – applicable for Tier 1, Tier 2 and Tier 3 assessments.
- Risk Level – Applicable to Tier 2 assessment only.
- Core Safety Program – Applicable to Tier 3 assessments only.



# Assessments



- LSR or lab user perform Tier 1 Lab Safety Review at least twice a year .
  - Simple checklist – no finding added.
  - Help the laboratory to validate controls.
- Enables the lab users to conduct safety readiness reviews, prevent safety issues, and keep a record of continuous safety improvements.

<https://hse.kaust.edu.sa/SALUTE/Assessments>

Checklist and Survey

**Engineering Controls**

Are biosafety cabinets, fume hoods, glove boxes, laminar flow hoods and other safety engineering controls functioning and ready for operation? \*

**Administrative Controls**

SDSs available \*

Signage reflects hazards \*

Appropriate type of clothing in place \*

**Personal Protective Equipment (PPE)**

Required PPE is available \*

Number of times when PPE is not used effectively \*

**Storage and Housekeeping**

General housekeeping issues in the lab \*

Service Corridor Issues \*

Excessive storage issues \*

Issues with heavy items stored too high \*

Issues with tripping or slipping hazards \*

**General Safety**

Issues with materials (bio, chem, rad) are not labelled, stored, and segregated properly \*

Issues with bench-top samples are not labelled and stored properly \*

Issues with gas cylinders are not secured and labeled properly \*

Electrical safety issues: (Power strips not elevated from the floor; exposed wiring or damaged electrical cords; overloaded circuitry) \*

Hazardous waste issues (Containers are not closed, not labeled and stored correctly) \*

**Emergency Readiness**

Spill kits are available, right type & free of obstructions \*

Eye wash stations are checked & free of obstructions \*

First Aid kits are available

Sharps and broken glass containers are available

Proper fire extinguisher is available & checked

# Lab Member Departure

- ***Student departure:*** Completed by LSR to ensure that the lab space occupied is free from hazards and that chemicals and samples have been disposed of or transferred to another lab member (remember to check the fridge and freezers).
- ***Post-doc, Researcher departure:*** Completed by RST to ensure that the lab space occupied is left hazard free and that all chemicals/samples have been disposed of or transferred. You are required to attend the visit or nominate a delegate.

# Emergency Preparedness

- The LSR assists the faculty and ensures emergency preparedness measures are in place:
  - Two persons trained for first aid and fire extinguisher
  - Identify risks in your area (Lab Safety Plan and SOPs)
  - Establish emergency procedures specific to your lab (can be added to the Lab Safety Plan) include:
    - Safe shutdown of experiments and equipment
    - Safe handling of hazardous spills
    - Triggering of alarm systems
    - When and how to escalate an incident
  - Organize and execute regularly small emergency drills (e.g., simulate a small spill, walkthrough the evacuation procedure with your team, etc.)

# Emergency Situations & Lessons Learned

- Lesson Learned following a near-miss or incident should always be shared
  - Not always the result of human mistakes, can be the failure of an instrument or facility
  - Use it as a learning tool
  - Don't use the names of people involved
  - Don't try to embarrass or blame.
- Listen to safety concerns or complains
  - Listen and take it seriously
  - Thank them!
  - Respond quickly
  - Involve employees
  - Follow-up and contact HSE if necessary

**An emergency is any situation that requires IMMEDIATE attention such as fire, or medical response to preserve life or property**

- Call 911 from a Campus phone
- Call **012 808 0911** from a cell phone
- Be part of assistance during emergency and met with the first responder if necessary
- Later raise a Report/Event in Salute
- Work with HSE on investigation and corrections

# Summary

## Hazard Identification & Risk Control

Lab Safety Plan & SOP  
Lab door sign, PPE and Safety Supplies List  
Chemical inventory  
Hazardous Waste Management

## Training

3 required training as well as lab specific training  
On-job trainings and need for retraining  
Coordinate on-demand trainings

## Assessment

Conduct Tier 1 Lab Safety Review  
Assist with Tier 2 and Tier 3 assessments  
Departure clearance

## Communication

Attend Lab Safety Forum  
Forward applicable safety information sent by RST to lab users  
Promote safety culture in the lab

## Emergency Preparedness

Establish location of the assembly point, fire extinguishers, and fire pull station  
Create emergency checklist  
Organize drills to ensure lab members are prepared

# Research Safety& LSR Service Certificates



## Research Safety Certificate



Available to all lab members.



Recognize the efforts and reward their commitment to safety.



### How to obtain it:

Take 5 required courses  
Take 9 additional courses offered by HSE



## LSR Service Certificate



Awarded to LSRs for their support and collaboration with HSE.



Certificate.



### How to obtain it:

Complete at least two years of service as an LSR  
Obtain the Research Safety Certificate  
Attend 75% of Lab Safety Forum during service

# Introduction to Salute



Dashboard

Findings

Violation Findings

Assessments

Safety Trainings

Employee Roster

Chemical Safety

Drills

Request/Report

Documents

(GMT+03:00) Asia/Riyadh

Delphine Dari... ^

## Dashboard



**You have no open items**

All tasks assigned to you will appear here

Safety Summary Report

### Recent activity

Sarah Alsawaf 5 days ago

Your **Finding #1110000697** has been resolved

[View](#)

Delphine Darios 6 days ago

You have been assigned to **Finding #1110000697** as a Creator

[View](#)

Krishna Raja Dharmarajan 13 days ago

Your **Assessment #1070000907** has been resolved

[View](#)

Krishna Raja Dharmarajan 13 days ago

You have been assigned to receive updates on **Assessment #1070000907**

[View](#)

Krishna Raja Dharmarajan 13 days ago

Your **Assessment #1070000899** has been resolved

[View](#)

Krishna Raja Dharmarajan 13 days ago

You have been assigned to receive updates on **Assessment #1070000899**

[View](#)

Tadd Truscott 13 days ago

[Support@Salute](#)


[Switch To Salute Portal](#)

[Settings](#)

[Sign Out](#)

Delphine Dari... v

# Trainings

جامعة الملك عبد الله  
للعلوم والتقنية  
King Abdullah University of  
Science and Technology

Dashboard

Findings

Violation Findings

Assessments

Safety Trainings

Employee Roster


Chemical Safety

Drills

Request/Report

Documents

(GMT+03:00) Asia/Riyadh

 Delphine Dari... ^

[Go to LMS](#)

## Available Courses

### Available Courses

See a catalog of available courses.

[View Courses](#)

## Training Events

### In-Person Training Events

Calendar for upcoming training.

[View Calendar](#)

## My Certificates

### My Certificates

See your certificates.

[View Certificates](#)

How to view if users have done trainings

# Assessments

## Tier 1 Lab Safety Review to be performed in [Community Portal](#)

- **Assigned** – Assessments that you have been assigned and that need to be completed before a particular date.
- **Draft** – Assessments that you have started but not finalized
- **Finalized** – Assessments that have been completed and finalized (Tier 1, Tier 2, and Tier 3).

### Assessments

Create New Assessment

Assigned

Draft 9

Finalized

Q Search here...

#### Lab Review Self Assessment

✓ Finalized

Inspector ?

CP User KAUST

Space

Interfacial Lab

Space Type

N/A

Related Assessment Queue

N/A

# Assessments

## Tier 1 Lab Safety Review to be performed in Community Portal

### Overview

Assessment ID

N/A

Created By

Delphine Darios

User Group\*

KAUST

Assessment Date

07/13/2022

Responsible Person\*

Delphine Darios

Also Notified People

Dwight Stevenson

Inspector

Delphine Darios

Assessment Type\*

Tier 1 Lab Safety Review

### Assessment Object

Object Type\*

Space

Object\*

4, 4-0250

Object Details

PI First Name & PI Surname

Select Location

Campus

Building

Floor

Space

Select Equipment

General Equipment

Portable Fire Extinguisher

Select Other

Permits

Construction Project

Biological Safety

Department

Safe Work Authorization

Incident

Accident

Classification: Internal

# Assessments

## Use [LabMapper](#) to find the correct space to enter in the Tier 1 Lab Review Assessment

### LabMapper

LabMapper provides the floor map information to assist with defining borders of designated laboratory spaces for each lab in KAUST as related to the laboratory safety assessments. The indicated FLOC numbers are used in the Tier 1, Tier 2 and Tier 3 assessments and correspond to the areas defined in LabMapper.

*Note.* Service corridor areas are not covered in LabMapper, but are included in the tiered assessments.

### Laboratory Floor Plans

**Building 1** (pdf)  
Download (1586 KB)

**Building 2** (pdf)  
Download (2889 KB)

**Building 3** (pdf)  
Download (2813 KB)

**Building 4** (pdf)  
Download (2396 KB)

**Building 5** (pdf)  
Download (1717 KB)

**Buildings 6, 41** (pdf)  
Download (321 KB)

**Building 7** (pdf)  
Download (588 KB)

**Building 9** (pdf)  
Download (612 KB)

**Buildings 15, 22, 38, 39, 45, NEO, DAB-ADP-KSA, WWTP** (pdf)  
Download (529 KB)

**Buildings 23, 24, 35** (pdf)  
Download (2216 KB)

**Buildings 25-28, 33, R/V Thuwal** (pdf)  
Download (1017 KB)

# Assessments

## One Assessment per colored space

B2 L3  
North Side



Assessment Space	Lab Name	PI	LSR	Alternate LSR	Comments
2-3610	Environmental Epigenetics Lab	Valerio Orlando	Amira Eltally	Peng Liu	
2-3620	Stem Cells and Diseases Lab	Antonio Adamo	Veronica Astro	Manuela Carrella	
2-3630	Laboratory of Synthetic Genome Biology	Christian Froekjaer Jensen	Ramatoulaye Balde		
2-3650	Laboratory of Chromatin Biochemistry	Wolfgang Fischle	Albina Mukhambetova	Karthik Eswara	
2-3710	Structural Biomolecular Engineering Group	Stefan Arold	Huma Khurram	Afaq Momin	
2-3720	Comparative Genomics and Engineering	Takashi Gojobori	Mohammed Alarawi	Marwa Abdelhakim	
2-3730	CBRC Shared Area	Takashi Gojobori/Stefan Arold	Huma Khurram	Marwa Abdelhakim	
2-3740A	Naschberger Lab	Andreas Naschberger	Andreas Naschberger		
2-3740B	Cryo-EM and DNA Replication Lab	Alfredo De Biasio	Hadiza Aliyu		
2-3750	Distributed Systems and Autonomy	Shinkyu Park	Nurzhay Yesmagambet		

# Findings

## Findings

Open

Complete

Search here...

### Hazardous Material Management

Due Date

Jan 31, 2022

Keep hazardous waste containers closed except when adding.

Finding ID

1110000162

Location

Building B5, Floor 4 (B5), Space 4710

Responsible Person

CP User KAUST

Website Info

N/A

Object

Space (4710)

Related Assessment

1070000163

### Storage and Housekeeping

Due Date

Jan 31, 2022

Cleanup and organize benchtop.

Finding ID

1110000161

Location

Building B5, Floor 4 (B5), Space 4710

Responsible Person

CP User KAUST

Website Info

N/A

Object

Space (4710)

Related Assessment

1070000163

Classification: Internal

Findings/Actions from any  
assessment carried out

- Tier 2 and Tier 3 findings
- Incident investigation findings

# Findings

جامعة الملك عبد الله  
للعلوم والتقنية  
King Abdullah University of  
Science and Technology

Dashboard

Findings

Violation Findings

Assessments

Safety Trainings

Employee Roster

Chemical Safety

Drills

Request/Report

Documents

(GMT+03:00) Asia/Riyadh

Delphine Dari... ^

< Back Export Resolve

### Corrective Actions Required

Keep hazardous waste containers closed except when adding.

Initiated Due Date  
DEC 30, 2021 JAN 31, 2022

### Corrective Actions Taken

Enter Corrective Actions Taken...

### Upload Attachments or Photos

Upload Attachment or Photo

### Links

Add Link

Name	Link
No records available	

Save

### Finding Details

Open hazardous waste containers.

Finding ID 1110000162	Object Space	Object Details 4710
Location Building B5, Floor 4 (B5), Space 4710	Responsible Person CP User KAUST	Website Info N/A

### Finding Attachments

No Attachments Available

### Links

Name	Link
No records available	

### Related Assessment #1070000163

Inspection Date 12/29/2021 12:00:00 AM	Inspection Type Lab Review Self Assessment	Status Finalized	Responsible Person CP User KAUST
---	---	---------------------	-------------------------------------

# Request/Report

Community Portal – raise a concern, notify of incident or accident

It will be triaged and directed to the correct HSE group

## Request/Report

New Request/Report

Open

Completed

## New Request/Report

Select Request/Report Type

Attention! This is not for use in an emergency. In case of emergency please contact 911



### Report Event

Report Incident, Accident, or Safety Event

## Report Event

Submit

Attention! This is not for use in an emergency. In case of emergency please contact 911

### Overview

Building*	Floor	Space / Room
<input type="text"/>	<input type="text"/>	<input type="text"/>
Location Details		
<input type="text"/>		
Also Notified People	Follow-up Contact	
<input type="text"/>	<input type="text"/>	
Date of Occurrence*	Time of Occurrence*	
07/16/2022	12:00 AM	
Time of Occurrence Zone		
(GMT+03:00) Riyadh		

### Event

Event Type*
<input type="text"/>
This field is required.
Event Issue *
<input type="text"/>
This field is required.

### Report Attachments



Upload Attachment or Photo

### Links

Add Link

# Chemical Inventory

In Community Portal – Check **your** inventory and access SDS for all chemicals available in KAUST

Library tab shows all the chemicals  
available on KAUST

Inventories <span>Library</span>						
<input type="text" value="Search here..."/>						<a href="#">+ New Library Item</a>
ID	Chemical	CAS	HHOP Types	Storage Group	GHS	SDS
1130035568	< 2.3% NITRIC OXIDE In ARGON	N/A	N/A	N/A	N/A	<a href="#">SDS</a>
1130035567	N-(tert-butoxycarbonyl)-L-proline	15761-39-4	N/A	N/A	N/A	<a href="#">SDS</a>
1130035566	2-Thienylmercaptan	6258-63-5	N/A	N/A	N/A	<a href="#">SDS</a>
1130035565	amoxapine	14028-44-5	N/A	N/A	H302, H361, H400	<a href="#">SDS</a>
1130035564	4-(N-Octyloxy)Phenol	3780-50-5	N/A	N/A	N/A	<a href="#">SDS</a>

Inventory tab shows all the chemicals  
inventories you are the owner of.

### Chemical Safety

InventoriesLibrary

**Jensen, Christian 2-3630**

Building [B2] - IBN Al Haytham Building, KAUST Thuwal	Floor 3 (B2)	Space / Room 3630	Location Comments 2-3630
Chemicals (High Hazard) 176 (0)	Status Requires Update	Owner(s) Christopher Motter, Ramatoulaye Balde, Christian Froekjaer Jensen	Inventory Comments N/A

# Chemical Inventory

جامعة الملك عبد الله  
للعلوم والتقنية  
King Abdullah University of  
Science and Technology

- Dashboard
- Findings
  - Violation Findings
  - Assessments
- Safety Trainings
- Employee Roster
- Chemical Safety
- Drills
- Request/Report
- Documents

(GMT+03:00) Asia/Riyadh

Delphine Dari... ^

### Chemical Inventory - Jensen, Christian 2-3630

#### Overview

ID	Last Updated	Building
1140000181	08/11/2021 8:35:19 PM	[B2] - IBN Al Haytham Building, KAUST Thuwal
Floor	Space / Room	Location Comments
3 (B2)	3630	2-3630

#### Inventory Status

Status	Approval Date	Inventory Comments
Requires Update	N/A	N/A

#### Inventory Items

Move Print Label Export + New Chemical

Search here...

<input type="checkbox"/>	ID	Chemical Name	Quantity	CAS No.	Storage Code	Manufacturer	Manufacturer ID	Expiration Date
<input type="checkbox"/>	1150174599	NP-40 Surfact-Amps detergent	0.05 Milliliters	N/A	N/A	Thermo Scientific	N/A	N/A
<input type="checkbox"/>	1150173109	FORMAMIDE, FOR MOLECULAR	0.5 Milliliters	75-12-7	N/A	FISHER SCIENTIFIC-UK	N/A	N/A

On each individual inventory, you are the owner of you can access the following information:

- Salute ID for this inventory
- Last time it was updated
- Building / Floor / Space
- Inventory status (Pending EHS Review, Incomplete, Complete, Closed, Require Update)
- Possibility to export the inventory on an excel spreadsheet
- View all the chemicals included in this inventory

# Chemical Inventory

The screenshot displays the 'FORMAMIDE (1150173107)' entry in the Chemical Inventory system. The interface includes a sidebar with navigation options: Dashboard, Findings, Violation Findings, Assessments, Safety Trainings, Employee Roster, Chemical Safety (highlighted), Drills, Request/Report, and Documents. The main form for the chemical entry includes the following fields:

- Chemical\***: FORMAMIDE
- Quantity\***: 0.1
- Unit\***: Milliliters
- Container Count\***: 1
- Building**: IBN Al Haytha...
- Floor**: 3 (B2)
- Space / Room**: N/A
- Location Comment**: 2-3630/LFO-71 (LFO70) Barcode(1194372)
- Manufacturer**: SIGMA ALDRICH
- Manufacturer ID**: (empty field)
- Expiration Date**: Select Date
- Last Printed Label Date**: (empty field)
- Last Printed Label Time**: (empty field)

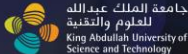
Buttons at the top of the form include: Print Label, Move, Create Similar, Get SDS on Email, and Save.

Click on one of the chemicals and you can access the following information:

- Print a label
  - Move to a different chemical inventory
  - Obtain the SDS for that chemical
  - See the quantity and the location
  - At the bottom, you can remove that chemical from the inventory
- The LSR decides who can be an owner of the chemical inventory for the lab (the owner can view and change the inventory)
  - The LSR must take the chemical inventory training before being granted access
  - Check the naming convention for the chemical inventory on our webpage

# HSE Webpage

# HSE Webpage



Health, Safety and Environment

## Health, Safety and Environment

KAUST is committed to protecting the health and safety of all members of the University community and to protecting the environment.

All members of the University community, including students, faculty, staff, visiting faculty and researchers and contractors, are expected to be aware of and conform to University policies and procedures and share the responsibility for eliminating substantive risk to health, safety and the environment.

### Latest News

[View All >](#)

Emergency Notifications now on the KAUSTCentral App  
Keeping KAUST Safe

24 September, 2024

**Emergency Notifications on the KAUSTCentral App**

To better serve our community, Health, Safety, and Environment (HSE) in collaboration with KAUST Smart, developed new emergency features now...

[Read More >](#)



Promoting a Safe and Healthy Workplace:  
Responsible Practices with  
Cats/Dog on Campus

19 September, 2024

**HSE Campus Safety Update: Promoting a...**

We in HSE would like to recognize KAUST's pet friendly culture but to also recognize the health risks and unintended consequences...

[Read More >](#)



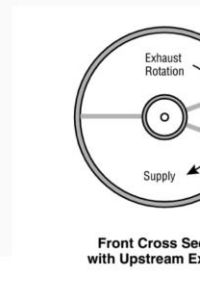
Keeping KAUST Safe  
Pulse Survey 2024

1 September, 2024

**Your voice matters: Complete the Keepin...**

We invite you to take part in the "Keeping KAUST Safe Pulse Survey 2024," organized by the Health, Safety & Environment (HSE) department.

[Read More >](#)



Exhaust Rotation  
Supply


**Front Cross Section with Upstream Exhaust**

8 August, 2024

**Energy Wheel**

Energy wheels, or rotary heat exchangers, sensible or latent energy (or both) to exhaust air and the incoming outside air.

[Read More >](#)



KAUST WEATHER

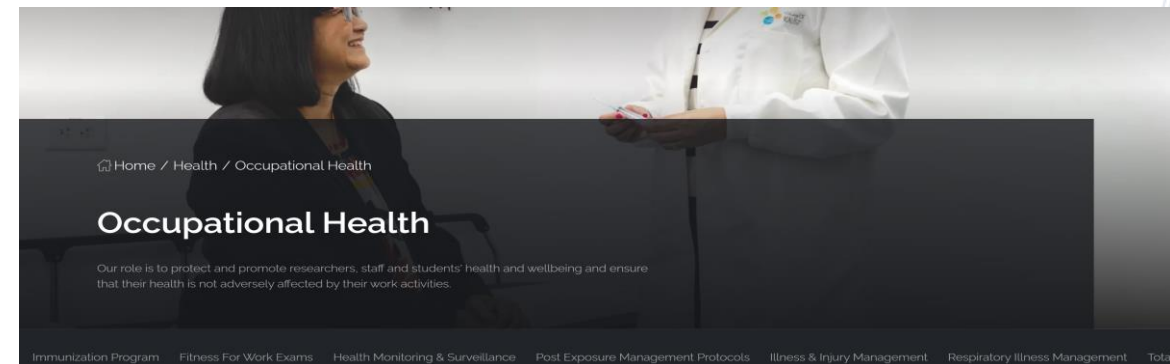
31°

AIR QUALITY INDEX: 48

## KAUST Weather

KAUST Weather provides current and up to date information on outdoor local weather conditions at KAUST using the university's own weather stations.

[Read More >](#)




Home / Health / Occupational Health

## Occupational Health

Our role is to protect and promote researchers, staff and students' health and wellbeing and ensure that their health is not adversely affected by their work activities.

Immunization Program   Fitness For Work Exams   Health Monitoring & Surveillance   Post Exposure Management Protocols   Illness & Injury Management   Respiratory Illness Management   Total



Health, Safety and Environment

About HSE	Health	Safety	Environment	Additional Resources
<a href="#">Home</a>	<a href="#">Public Health</a>	<a href="#">Overview Safety</a>	<a href="#">Overview Environment</a>	<a href="#">Policies And Procedures</a>
<a href="#">Mission, Vision, Values</a>	<a href="#">Occupational Health</a>	<a href="#">Community Safety</a>	<a href="#">Biodiversity</a>	<a href="#">Salute Training</a>
<a href="#">Message From The Director</a>	<a href="#">Illness And Injury Management</a>	<a href="#">Workplace Safety</a>	<a href="#">Management System</a>	<a href="#">Accredited Training Center</a>
<a href="#">Meet The Team</a>	<a href="#">Health Monitoring &amp; Surveillance</a>	<a href="#">Laboratory Safety</a>	<a href="#">Operation Controls</a>	<a href="#">News</a>
<a href="#">Contact Us</a>		<a href="#">Fire &amp; Emergency Services</a>	<a href="#">Publications</a>	<a href="#">FAQs</a>
		<a href="#">Field Safety</a>	<a href="#">Environmental Protection Training</a>	

# RST Webpage



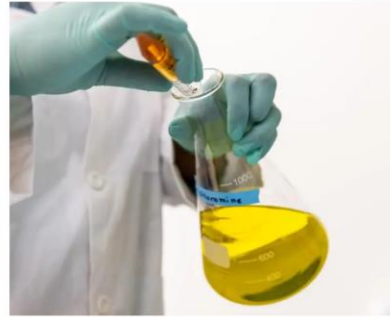
### Safe Research

Working safety is about building defences or barriers. Our Safe Research resources explain the many tools, techniques and behaviors necessary in the research environment to build the...



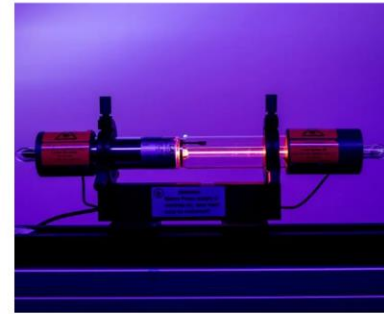
### Biological Safety

KAUST's Biosafety Program has been developed to protect the research community, the general public and the environment from exposure to hazardous biological agents or materials.



### Chemical Safety

Chemicals are used across KAUST for both research and teaching applications. These chemicals have different hazards associated with them (e.g. fire or caustic, etc.) that can have the...



### Laser Safety & Non-Ionizing Radiation

Lasers, Ultraviolet (UV), Infrared (IR), Electromagnetic Fields (EMF) including Radiofrequency (RF) and Microwaves (MW), are categorized as Non-Ionizing Radiation (NIR)



### Industrial Hygiene

Our Industrial Hygiene (IH) efforts focus on identifying and controlling a number of hazards and exposures. IH's can provide respirator training and fit testing, perform risk assessments and...



### Radiation Safety

Radiation Safety Program was developed to facilitate and ensure the safe use of ionizing radiation at KAUST. The program provides the technical support necessary, professional guidance...



### Research Safety Training

All KAUST faculty, staff, and students who work in labs with chemical, biological, radiological and/or physical hazards are required to attend the HSE Emergency Incident Preparedness...



### Lab Hazardous Waste

Every lab generates some form of waste, so it is important that the requirements for the proper identification, safe storage, handling, and accumulation of hazardous chemical waste are...



### PME

Physical, mechanical and electrical hazards.



### Lab Emergency preparation

For any emergency, including fires, chemical spills, injuries, accidents, explosions, and medical emergencies, dial 911 from any KAUST landline, including blue-light phones located in...



### Research Safety Team

The KAUST Research Safety team makes every effort to keep our scientists, students and faculty members safe on campus and in the laboratory. We develop policies, procedures, bulletin...

# Important Content

- [LSR webpage](#)
- [KAUST Evacuation Plans](#)
- [LabMapper for Assessments](#)
- [Lab Safety Plan template](#)
- [SOP template](#)
- [Safety Supplies List](#)
- [ASEPC](#)
- [Equipment Surplus](#)
- **Chemical Reuse Program** - Contact [WHSOrder@kaust.edu.sa](mailto:WHSOrder@kaust.edu.sa)
- **Consumables Reuse Program** - Contact [WHSOrder@kaust.edu.sa](mailto:WHSOrder@kaust.edu.sa)



