

Supplemental Information: Interview Questions

Interview protocol (informed by Creswell, 2009)

Place: Participants' offices

Interviewers: Researchers (Author 1 & 3)

Interviewees: Laboratory personnel working in chemistry labs at the Main Campus and Education Campus at the University under study.

Instructions to follow/remember:

- i. Greet the participants.
- ii. State the importance of the interviews.
- iii. Ask the interview questions: remember where necessary, to use probes to understand or delve deeper into what the participant is saying.
- iv. Be neutral and maintain eye contact through-out the interviews.
- v. Do not ask leading questions.
- vi. Thank the participants for their time & willingness to participate in interviews.

Interview Questions

RQ-1: What are the laboratory personnel's views on chemical safety and security?

Chemical safety	Chemical security
1. Do you know the term 'chemical safety'? If yes, please provide your definition.	1. Do you know the term 'chemical security'? If yes, please provide your own definition.
2. Do you think chemical safety is important? Explain.	2. Do you think chemical security is important? Explain.

RQ-2: According to the laboratory personnel, what chemical safety and security practices are employed in their laboratories?

Chemical safety	Chemical security
1. Which chemical safety practices do you maintain in your laboratories? Explain (Refer to the list provided, Supplemental Information) .	1. Which chemical security practices do you maintain in your laboratories? Explain (Refer to the list provided, Supplemental Information) .
2. Which of the following chemical safety practices do you prioritize? Explain (Refer to the list provided, Supplemental Information)	2. Which of the following chemical security practices do you prioritize? Explain (Refer to the list provided, Supplemental Information)

RQ-3: What are the laboratory personnel's views regarding ways in which the current chemical safety and security practices can be improved?

1. In what ways, if any, do you think the current chemical safety practices employed in your laboratories could be improved?
2. In what ways, if any, do you think the current chemical security practices employed in your laboratories could be improved?
3. In what ways do you think the chemical safety and security training workshops that you attend can be improved?

Supplemental Information: List of Chemical Safety Practices¹

1. Proper Handling of chemicals
2. There should be adequate ventilation
3. Appropriate use of Personal Protective Equipment (PPE)
4. Proper storage of chemicals based on their physical and chemical properties
5. Proper disposing of chemical waste
6. Chemical labelling is necessary
7. Guidelines detailing procedures to follow in case of chemical spillage
8. Guidelines detailing procedures to follow in case of emergencies
9. Eating and drinking in the laboratory must be prohibited
10. Reporting of accidents in the laboratory is mandatory
 - a. Posting contact numbers for staff in case of emergencies
11. Signage showing:
 - a. Access to all major exists including emergency exits
 - b. Cleansing stations such as eye wash stations and safety showers
 - c. Fire extinguishers and fire hose reels
12. All trip hazards must be removed.
13. Availability of the MSDS document in the laboratory
14. Inventory tracking of chemicals

¹ a) Engida, T. (2011). Chemical safety in laboratories of African universities. *African Journal of Chemical Education*, 1(2), 35-49.
b) <https://www.ehs.washington.edu/system/files/resources/prvaslbchklst.pdf>

Supplemental Information: List of Chemical Security Practices²

1. Limited laboratory access
 - a. Establishing access permissions
 - b. Who is authorized to use the chemicals and equipment?
 - c. Who can have key access?
2. Ensuring that the cameras installed are in good working condition
3. Equipment control: assigning of asset numbers to laboratory apparatus and equipment
4. Laboratories to be locked when not in use.
5. Chemicals of Concern (COCs) should be locked in cabinets.
6. Reporting all suspicious activity.
 - a. Reporting of suspicious behaviour, theft, or vandalism.
7. Prohibiting unauthorized use of laboratory materials and facilities.
8. Chemical Waste Destruction Request (CWDR) should be completed to aid in security of chemicals when they are being transported

² a) Engida, T. (2011). Chemical safety in laboratories of African universities. *African Journal of Chemical Education*, 1(2), 35-49.
b) <https://www.ehs.washington.edu/system/files/resources/prvaslbchklst.pdf>

