
 NAZARBAYEV UNIVERSITY	Autonomous organization of education Nazarbayev University		
	Approving body:	Research Council	
Standard Operating Procedure (SOP) Template for laboratory equipment			
Date of approval:	29.01.2019	Date of entering into force	
Decision/Minutes No.:	No. 134		
Bylaw classification:	3. Research activities		
Initiator:	B. Abisheva Chief of staff		
Related documents	no related documents		

 NAZARBAYEV UNIVERSITY Department:	Standard Operating Procedure (SOP)	Revision date: DD/MM/YEAR
		Version: Indicate number
		Laboratory (number): Name (number)
		Prepared by: Name Surname / Signature
	Equipment name: Indicate full name and model	Approved by: Name Surname / Signature

1. Application of SOP and Brief Description

[Indicate to what employees and researchers the SOP is applied. Provide a brief description of the process people involved, required materials, concentrations, quantities (volume or mass), approximate required time, and work conditions (temperature, pressure, etc.)]

2. Potential Risks, Hazards and Associated Restrictions to Work

1) List of chemicals used (where applicable)

[Provide the list of all chemicals that will be used, including names, chemical formulas, and states.]

2) Describe the potential physical and health hazards that might be associated with materials used or procedures performed (where applicable)

[For example: carcinogens, toxic, irritants, sensitizers, radioactive, cryogen, high



temperature, electrical, compressed gas, UV light, laser, flammable or combustible, corrosive, oxidizer, explosive, etc.]

- 3) Determine route of exposure when exposure might occur (where applicable)
[For example: skin, inhalation, ingestion, injection]

Note: Pre-conducted Risk Assessment and Material Safety Data Sheet (MSDS) are examples of information sources

3. Required Training/Instructions/Reading

- 1) Workers conducted under this procedure must comply with the following training requirements:

Introductory health and safety instructions;

Workplace instructions;

General Equipment Operation Training or similar (where applicable)

- 2) Required Reading:

Other SOPs related to the procedures described in this document. [Indicate the full name of SOPs if applicable]

Note: Only workers who have passed all the training/instructions and have read all documents indicated above are allowed to work.

4. Engineering Controls

- 1) List engineering controls;

[Indicate the engineering controls that must be used to prevent or reduce employee exposure to hazards. For example: local exhaust ventilation, fume hood, interlocks on equipment, vented ovens, glove boxes, etc.]

- 2) If this is a new process and the appropriate engineering controls do not seem to be available in the lab, discuss with lab staff whether the process can be done and how to obtain what is needed.

- 3) If no engineering controls are needed please cite this fact.

5. Personal Protective Equipment (PPE)

Identify the required PPE for the process (where applicable)

- 1) Eye protection: goggles; glasses; face shields; other [Indicate]

- 2) Body protection: lab coat; lab coat for clean rooms; aprons; overalls; other [Indicate]

- 3) Respiratory protection: disposable respirators; chemical cartridge respirators; gas masks; supplied air respirators; other [Indicate]

- 4) Hearing protection: ear plugs; ear muffs; other [Indicate]

- 5) Head protection: hard hats and helmets; other [Indicate]

- 6) Foot protection: safety shoes and boots; other [Indicate]



7) Fall protection: safety belts; harnesses; lifelines; other [Indicate]

6. Handling, Storage, Waste Disposal of Hazardous Materials

- 1) Storage (where applicable) [Describe how and where the chemical will be safely stored]
- 2) Storage of hazardous substances (where applicable) [Describe storage requirements for hazardous substances (ex. containment devices, labelling, temperature requirements, storage areas or cabinets, chemical incompatibility, etc.)]
- 3) State the policy regarding access to hazardous substance(s) (where applicable)
- 4) Handling (where applicable) [Describe transportation strategy (use of secondary containers, travel through low-traffic hallways)]
- 5) Identify the types of waste generated and describe how waste will be collected and disposed (where applicable)

Note: Do not dispose of chemical wastes by dumping them down a sink, flushing in a toilet or discarding in regular trash containers, unless authorized by Lab Staff.

7. Step by Step Detailed Instructions

Describe the steps to follow in performing the procedures.

Step 1. [Describe the next step in the procedure]

Step 2. [Describe the next step in the procedure. Insert additional steps as needed]



Acknowledgment Sheet

Hereby, I have read and understand the SOP.

#	Name	NU ID #	Signature	Date	Access level*	Approved by**

* and ** to be filled by Department responsible staff.

* - Two types of access levels can be indicated: 1) Must be accompanied by Department responsible staff; 2) self-operating allowed.

** - Must be approved by Department responsible staff.

