Laboratory Safety Emergency Plan

In order to effectively reduce and control the hazards of safety accidents, deal with possible major accidents, and ensure the safe operation of the laboratory, this plan is formulated in accordance with the production safety law of the people's Republic of China, the fire protection law of the people's Republic of China, the regulations on the safety management of hazardous chemicals and the specific requirements of the school on safety, combined with the actual situation of the laboratory.

1, Organization and division of responsibilities

1.1 Laboratory safety leading group

Group leader: Tang kexuan;

Members: Miao Zhiqi, Zhao Jingya, Wang Yuliang, pan Qifang, Wang Guirong, Li Ling, Qian Hongmei

1.2 Division of responsibilities

We should adhere to the principles of "prevention first" and "personal safety first". The leading group of laboratory safety work is the first person in charge of accident emergency disposal, and all laboratory personnel are responsible for accident disposal.

2. Emergency measures

No matter what kind of safety accident happens, the personnel who find it should report to the person in charge of the laboratory safety work leading group in time and quickly, and call the relevant management department of the school and the public security fire department (119) according to the situation. When giving an alarm, the location of the accident, the type and cause of the accident (the type, quantity and fire situation of the fire, the cause of explosion), the accident situation, the injured situation, the name of the alarm person, telephone number and other details shall be explained as soon as possible.

In case of serious personal injury accident, in addition to taking appropriate rescue measures quickly, contact medical (120) emergency rescue immediately.

After receiving the report, the person in charge of the laboratory shall ensure the timely arrival of medical, security and safety firemen according to the situation, and rush to the scene to organize and command. And set up a warning line at the scene to maintain the normal order of the rescue site, command the teachers and students to leave the scene until the accident investigation or emergency repair work is completed, and there is no potential accident on the scene.

2.1 Fire

- 2.1.1 In case of fire, the power supply shall be cut off immediately or the relevant department shall be informed to cut off the power supply. According to the principle of "first personnel, then materials, first key points, then general", rescue trapped personnel and valuable materials, evacuate personnel in a planned and organized way, wear protective equipment during rescue, pay attention to their own safety, and prevent accidents.
- 2.1.2 According to the type of fire, different fire-fighting equipment should be used. The types of portable fire extinguisher used in the laboratory include ordinary solid material fire, oil fire, combustible gas fire and electrified electrical fire. Usage: first pull out the safety pin, and then aim the nozzle at the root of the fire source and press the pressing handle to spray.

2.2 Explosion

- 2.2.1. In case of explosion, the personnel on site should immediately lie down and lie on the ground without moving, or squat down quickly with hands holding head, or seek shelter nearby with the help of other objects. If the explosion causes fire and smoke, it is necessary to take appropriate protection. Try not to inhale smoke and dust to avoid burning respiratory tract. Lower the body as much as possible and climb to a safe place with hands and feet touching the ground.
- 2.2.2. After the explosion, non professional personnel should not go to the previous area to prevent new injury accidents.

2.3 Chemical injury

- 2.3.1. In case of mild acid-base burns, wash with plenty of clean water or 2% dilute boric acid. Use faucets, eye washers, emergency sprinklers, etc. as appropriate. If chemicals are splashed on your eyes, do not rub them with your hands, but wash them with an eye washer immediately. When washing, avoid direct water flow to the eyes. There are one eye washer and one emergency sprinkler in room 3xx and room 326 of the material building.

 2.3.2. Hydrofluoric acid burn is very serious. It is necessary to wash it repeatedly with a large amount of water quickly, and then wrap it with gauze soaked in 5% sodium carbonate and send to the hospital for diagnosis and treatment.
- 2.3.3. In case of gas poisoning, personnel should be organized to open windows for ventilation immediately, and teachers and students should be evacuated from the laboratory to a safe place. If the poisoning is serious and comatose, artificial respiration should be performed immediately by personnel with general knowledge of artificial respiration, and the hospital should be contacted immediately for treatment.
- 2.3.4. In case of entrance poisoning, appropriate treatment methods should be taken according to the type of poison. Acid and alkali corrosive substances should first drink a lot of water, then take milk or egg white; other poisons should first induce vomiting and then pour milk. Vomiting can be induced by extending fingers into the throat to promote vomiting.

2.4 electric shock

- 2.4.1. In case of electric shock, the power supply shall be cut off immediately or the power plug shall be pulled out. If it is too late to cut off the power supply, insulating materials (metal or damp materials shall not be used) can be used to separate the wires. Before cutting off the power supply, do not use your hands to pull an electric shock. Analyze the degree of leakage. If it is serious, inform the school electrician immediately after cutting off the power supply.
- 2.4.2. In case of electric shock, the first few seconds of electric shock is the key time for successful rescue. When the electric shock is light and comatose, but not completely unconscious, the person with electric shock can be carried on the back or carried to the air circulation place for rest. In winter, attention should be paid to keeping warm. In case of shock, artificial respiration should be carried out immediately and the hospital should be contacted immediately for treatment.

2.5 Trauma

- 2.5.1. When suffering from sharp object trauma in the laboratory, the wound can not be touched by hand or washed with water. For slight injury, it can be coated with purple medicinal liquid (iodine), band aid and bandage if necessary. In case of glass trauma, the broken glass should be picked out from the wound.
- 2.5.2. When the object causing the wound is rusty, after simple treatment of the wound, the patient should go to the hospital in time and inject tetanus vaccine according to the situation.

3. Patients with severe trauma should contact the hospital immediately.

2.6 Scald

- 2.6.1. When scalded, do not wash the wound with cold water. When the skin of the wound is not broken, you can apply saturated sodium bicarbonate solution or paste it with sodium bicarbonate powder. You can also apply badger oil, scald cream or toothpaste to reduce the burning pain. After relief, wipe dry and apply antibacterial and anti-inflammatory drugs; if the skin of the wound has been broken, you can apply some purple medicine solution or 1% potassium permanganate solution.
- 2.6.2. When scalded by molten metal, immediate measures should be taken to keep the injured away from the source of injury, keep the respiratory tract unobstructed, protect the injured surface, contact the hospital for treatment immediately, and report to the safety leading group members of the college at the same time.
- 2.6.3. After being frostbitten by liquid nitrogen, do not rub the frozen wound. Take off the clothes splashed with liquid nitrogen immediately and send them to the nearest hospital for rescue.

Plant Biotechnology Research Centre

Attachment: frequently used telephone Fire alarm: 119 first aid: 120 alarm: 110