健康、安全及环境处 DEPARTMENT OF HEALTH SAFETY AND ENVIRONMENT 实验设施与安全管理办公室 OFFICE OF IAB FACILITES AND SAFETY



Fire Accident Caused By Temperature Control Failure of Bake Oven

Accident

A postgraduate student, Tang, was conducting a scientific research experiment in the laboratory. He set the oven at 80°C and then put in a centrifuge tube for drying process. The student then left the laboratory and locked the door of the room. Fifteen minutes later, the building administrator noticed the smoke detector alarm and went upstairs to check it out. Through the observation window, he saw smoke and fire coming from the oven in the lab. The administrator contacted Tang through students near the laboratory. Tang rushed back to the laboratory, disconnect the oven power, using the fire extinguisher in the laboratory, and entered the room to extinguish the fire.

Reason

The direct cause of the accident was the failure of the oven temperature control system, which ignited the materials inside the oven after a sustained temperature rise.

In addition, the unattended nature of the experimental process was also an indirect cause of the increase in fire intensity.

Photograph



Experience

1. The quality of bake oven is a guarantee of safety. Recently, multiple universities have identified batch of ovens and hightemperature equipment with substandard quality. Please pay close attention to them in each laboratory. If there is any involvement, please report to HSE:

- Suppliers of undesirable ovens:浙江DN自动化技术有限公司、绍兴市SB仪器有限公司(Key Models: 101-4B、202-0、101-4B)
- Suppliers of undesirable oil baths:上海LCBX科技有限公司、上海QY仪器设备有限公司、上海YY仪器有限公司(Key Models: DF-101S)

2. Each laboratory should regularly maintain oven and check the temperature to ensure that the oven is in good working condition.