

## What Happened?

Researchers were seated at their desks near the site of an explosion. They heard an abrupt, extremely loud noise and turned to find a battery on the floor with flames reaching approximately 1-1.5 feet high. The smoke triggered the lab's smoke detectors, subsequently activating the building's fire alarm systems.

One researcher quickly retrieved a fire extinguisher and put out the fire. However, the battery started popping again, reigniting the flames. They extinguished the second fire, closed the fire doors upon exiting, and left the building via the staircase. Firefighters arrived on the scene a few minutes later.

### Lessons Learned and action items:

1. **Safety Equipment:** The lab will invest in fire and explosion-proof battery boxes for use during the charging of lithium batteries. This will help isolate batteries from personnel and flammable materials, adhering to Nemo Tools safety guidelines.
2. **Training:** Incorporate lithium battery charging safety discussions into the lab-specific training orientation. Ensure all lab members are knowledgeable about extinguishing small lithium battery fires using appropriate methods, which may include:

- ★ ABC or Class D fire extinguishers

- ★ Dirt or sand as smothering agents

- ★ Following manufacturer's guidance <https://nemopowertools.com/important-safety-instructions-for-nemo-chargers-and-batteries/>

Photos:







Photos: October 15, 2024. After cleaning; day of incident follow-up.

