Lithium Ion Battery/General Battery Safety

Data centers use large batteries 'in series'—connected together—to provide what's called Uninterrupted Power Supply (UPS). Should a data center experience a power outage entire rooms of batteries act like a backup battery you might have at home —they automatically kick in to provide somewhere around 15 minutes of continuous power until larger diesel generators can fire up and take over production of power. But if batteries are not properly maintained they can become dangerous hazards with the potential for chemical fires and leaking corrosive materials.

Lithium-ion batteries are most commonly used in personal electronic devices and in electric vehicles; most are rechargeable, but some are not. Lithium-ion battery fire hazards are associated with high energy cells coupled with flammable organic electrolyte. Studies have shown that physical damage, electrical abuses such as short circuits and overcharging, and exposure to elevated temperatures (like leaving your phone on your car dashboard) can cause *thermal runaway*—this refers to rapid self-heating from an exothermic chemical reaction that can result in rapid (runaway) heating in adjacent battery cells.

So, where do we fit in?
- We don't charge batteries
- We don't work in or clean battery rooms
- We do not provide batteries for devices
- We do not handle batteries

Bottom line: We. Don't. Do. Batteries. But be aware that batteries, large and small, do carry potential hazards. Always be mindful of your surroundings and devices or objects in it.

If for some reason you are ever asked about cleaning in a battery room always ask your supervisor **before doing anything**.