

CEM OHSE NEWSLETTER

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Green Labs



There are several simple steps we can take to transform our laboratories into eco-friendly green labs!



Saving Electricity

- First and foremost, make sure to power off all equipment like ovens, hot plate/stirrers, heating mantles, rotavaps, and chillers when not in use. You'd be amazed at how much electricity can be saved by simply flipping a switch! Don't forget to unplug to protect against power surges. Consider switching over to using Digital Timer Plugs @ around R280/plug. You can use it to automatically switch equipment off in afternoon and on to be ready for use when you arrive in the morning.
- Remember to switch off all lights, including UV and FH lights, before leaving the lab. This small action can make a big impact on energy consumption.
- Regularly defrosting of fridges and freezers is crucial to maintaining efficiency. Ice and frost buildup can cause appliances to work harder, consuming more energy and potentially causing damage. Setting fridges and freezers to a slightly higher temperature helps saving even more electricity.
- Don't forget to clean the backside of the freezer to remove dust buildup, which can improve the compressor's efficiency.
- Keep the FH sash down to ensure optimal performance and prevent unnecessary strain on the scrubber motor causing less energy consumption.
- When finished in FH switch damper off, it further reduces strain on scrubber motor and improves extraction in other FHs when part of a series.



Saving Water

- Save water by using waterless condensers or fish pumps that recycle water.



Reduce, Reuse and Recycle

- When ordering solvents and chemicals, only purchase what you need and consider sharing with others to minimize waste.
- Lastly, remember to reuse items like ice packs and recycle glass and plastic bottles to reduce waste to landfill.

By implementing these practices, we can all contribute to making our research labs more energy efficient and overall, environmentally friendly. So, let's all do our part and start making a difference today!



The importance of SOPs

In order to ensure the safety and efficiency of every procedure and piece of equipment, it is imperative to adhere to a standard operating procedure (SOP). This detailed guide outlines each step that must be taken, including protocols for emergencies and considerations for health and safety. The chemistry department's SOPs can be accessed on the CEM OHSE unit website through the following link.

<https://science.uct.ac.za/departments-chemistry/sops>

It is crucial to thoroughly review the SOP before utilizing any equipment or conducting a procedure to familiarize yourself with the necessary steps. Remember, shortcuts must never be taken, as this is when disasters can strike. SOPs must be promptly updated following any incidents to prevent similar occurrences in the future. Stay vigilant, stay informed, and always follow the procedures to ensure a safe and successful outcome.

What is a near-miss incident and why should they be reported

A near miss is an incident where no injuries, losses, or property damage occur. It is a well-known fact that there are more near misses leading to minor incidents than major ones. Shockingly, many near misses go unreported, lurking in the shadows, waiting to strike. In an environment as volatile as a chemistry department, it is crucial to report all near miss incidents. This allows for the updating of Standard Operating Procedures (SOPs) or Hazard Identification and Risk Assessments (HIRAs) to prevent these near misses from escalating into catastrophic disasters.

A few examples of near misses:

1. Leaving ovens and UV lamps on overnight,
2. Water spilling onto a heating mantle and tripping the electricity to sockets
3. Plugs overheating and melting into sockets,
4. A high vacuum pump left running without a liquid nitrogen dewar

These are just a few of the near miss incidents that have happened recently. Thank you to those vigilant persons that reported these.

Be assured, there are countless more lurking in the shadows, waiting to pounce. It is imperative that you are that person who reports near misses, no matter how small, to prevent a major incident from occurring. Remember, major incidents can happen in the blink of an eye. Please report near misses by scanning the QR codes scattered throughout the department. Your vigilance could save lives and are appreciated by the CEM OHSE Unit.

<https://forms.office.com/r/KFD4PTm2J>

