

Chemistry Safety Newsletter

FUME CUPBOARD ESSENTIALS

Fume hoods or cupboards are the primary protection that a chemist has against dangerous substances. They should be treated with respect and any fault that is observed is reported as soon as possible.

It has come to light that this is not always the case. Some people in the building are ignoring alarms or have had no or little training in use of the hoods.

This behaviour is a risk to both their own health as well as those around them in the laboratory.

If you find a damaged fume hood report it and protect your working environment.

Further guidance can be found on the School intranet site.

P & M sheet 22

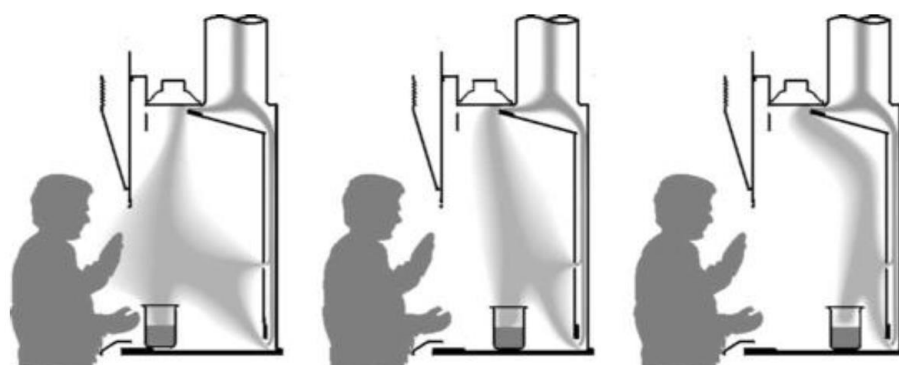
<https://goo.gl/2n3Ynf>

Here are the Top Tips for safe fume hood use:

1. Ensure fume hood is on before use and check air flow on the gauge.
2. Do not use if gauges indicates an air fail? (Audible Alarm)
3. On hoods with digital displays ensure the display reads "run" in the bottom right of the screen.
4. If there is any damage or warning light / audible alarm report them to the Safety office.
5. Keep the sash down when not in use and save energy and protect the environment.
6. Keep the sash below 0.5m open when working in the hood

For more information on fume hood safety, follow the link to the HSEs guidance.

<http://bit.ly/2mLRA19>



Bad placement of materials

Good placement of materials

Best placement of materials

CHEMICAL SECURITY

The security of chemicals is paramount. The School has an abundant supply of compounds which when combined with the correct knowledge can cause damage to society and infrastructure.

If you see any suspicious behaviour or notice irregularities in stock levels report it to the Safety Office immediately.

UPDATED P&M SHEETS THIS YEAR

"Operating procedures should be controlled documents, generally covered under the company's quality system and thus kept entirely up to date" – HSE Website

- P&M Sheet 22 Use of Fume Hoods
- P&M Sheet 12 Safe Destruction of Alkali metals

Follow the link to see the P & M Sheets

<http://bit.ly/2vb3Bkm>

WHAT IS RISK?

“risk is the chance, high or low, that somebody could be harmed by these and other hazards, together with an indication of how serious the harm could be” HSE - <http://bit.ly/2LOuB3z>



With the introduction of the new Chemical Risk Assessment (CRA) there have been new fields created to better reflect best practice. One of these fields is residual risk. This is the amount of risk remaining if with all control measures such as fume hoods and gloves.

Well, how do you measure risk? Risk is a balance between the consequences of the reaction going wrong versus the likelihood of it happening. The diagram below (right) will help visualize this.

If you take a standard experiment, where all the control measures possible are in place. Then the consequences and the likelihood will be low for both therefore a score of one. This then scores, using the table below, a low risk experiment.

Another example would be an experiment where only some of the control measures are in place and used. This would increase the likelihood and/or the consequence of an accident occurring and injuring a member of your research group.

As the level of risk increases so does the expectation upon you as the risk assessor to put in place adequate controls to minimize either the likelihood or consequences. Remember not all control measures affect both consequence and likelihood.

Further training on risk assessments are delivered by staff learning and development see:

IOSH managing safely
<http://bit.ly/2v5uO8T>

TLCO300 - Principles of Risk Assessment E-Learning
<http://bit.ly/2LM1cXT>

CURRENT PROJECTS WITHIN SCHOOL OF CHEMISTRY

The School has numerous projects either ongoing going below is a quick update on each.

LabCup – This is awaiting for stores to move into the new stores facility.

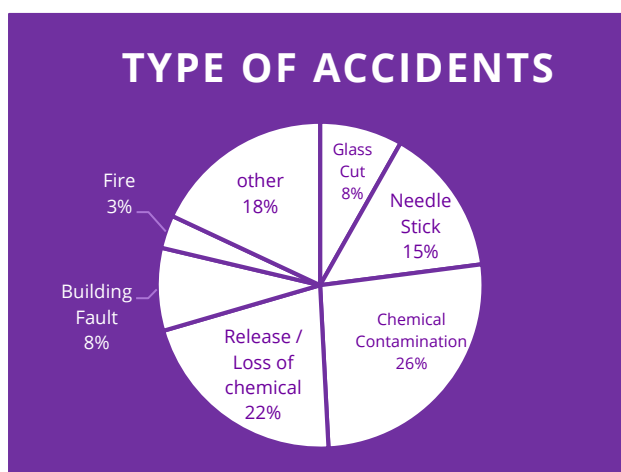
Stores Delivery - This is awaiting for stores to move into the new stores facility.

Long Term Maintenance – This is quickly approaching with the proposed start date of early 2019.

New Safety File Template – Written and awaiting for approval from health and safety committee.

New General Lab Risk Assessment – This is in the process of being written. Awaiting volunteers to help with technical information.

The STATS



OUTCOME	INSIGNIFICANT Minor injury or illness (no absence from work)	MINOR Injury causing short-term incapacity from work or illness causing short term ill health (e.g. up to 3 days off work)	MAJOR Injury causing intermediate incapacity from work or medium term ill health (e.g. more than 3 days off)
PROBABILITY			
VIRTUALLY IMPOSSIBLE	LOW RISK Adequate control	LOW RISK Adequate control	MEDIUM RISK Check controls, consider additional control measures if reasonably practicable
POSSIBLE (could happen, perhaps a few times a year)	LOW RISK Adequate control	MEDIUM RISK Check controls, consider additional control measures if reasonably practicable	HIGH RISK Stop work until controls checked, and additional measures introduced, Produce action plan to address risks.
LIKELY (likely to happen many times a year)	MEDIUM RISK Check controls, consider additional control measures if reasonably practicable	HIGH RISK Stop work until controls checked and additional control measures introduced. Produce Action plan to address risks	VERY HIGH RISK Stop work immediately. Seek advice from HSS. Do not proceed until additional control measures introduced.

The Health and Safety Office is located on the ground floor in room G29 D.

Please feel free to volunteer article ideas or better yet submit articles you have produced. Just ensure they are safety related.