FACULTY OF ENGINEERING & APPLIED SCIENCE

Undergrad SAFETY Newsletter December 2024

Upcoming Events:

Incident Reporting Health & Safety Survey
Open until end of day, Dec 23
(survey is very brief – please contribute!)

University Closure: Dec 25 to Jan 1 inclusive.
Engineering is also closed Dec 24. *Other departments and faculties may be closed that day as well.*

The Importance of Recharging Over the Holidays
Podcast, on-demand

Global Learning Centre Workshops:
SK Health Card Information: Jan 8, 9 & 17
Time Management & Organizational Skills: Jan 22
Midterms & Exams, What to Expect: Feb 5
Intercultural Awareness: Feb 7 & 14
and many more…

Chem & Lab Safety Workshops
Jan 16: 1:30 p.m. to 4:00 p.m.
(may be needed for some capstone projects - complete online training first)

Biosafety Workshops
Jan 21: 1:30 to 3:30 p.m.
(may be needed for some capstone projects - complete Chem/Lab Safety and online training first)

Local Safety Committee Meeting
Jan 23: 1:00 to 2:30 p.m.
(send your concerns/suggestions to your representative Muhammad Tariq at ress.universityaffairs@uregina.ca)

Safety Committee Inspections (Dry Labs, Shops, and Student Lounges):
All semester Winter 2025

Dialectical Behaviour Therapy (DBT) Skills Group
Psychology Training Clinic ($300 total cost)
Tuesdays Jan 14 to Apr 15, 4:30 to 6:30 p.m.
Email psychology.clinic@uregina.ca

Contacts:

Campus Protective Services:
306-585-4999 emergencies
306-585-4407 non-emergency

Emergency Services:
911

Engineering Safety Coordinator:
Engg.Safety@uregina.ca

Campus-Wide Health & Safety:
Health.Safety@uregina.ca

Resources:

Mental Wellness Hub
Support and resources for students

Online Therapy Unit
Free cognitive behaviour therapy

Health and Safety Policy
For all faculty, staff and students

(Ziti Cards)

Reminder:

The university is closed from **December 25 to January 1**.
The Engineering Office is also closed on **December 24.**
Other faculties and departments may be closed as well.

Enjoy the break! Take advantage of the time away from classes and projects to recharge and rest.
We look forward to seeing you in 2025.

Lithium-Ion Battery Safety: Health and Safety issued an advisory about electronic devices with lithium-ion batteries…

As the holiday season approaches, electronic devices (with lithium-ion batteries) will be very popular gifts. With the increasing use and availability of these devices in recent years, ***there has also been a dramatic increase in device related fires****. It is important to raise awareness about the potential risks and preventative measures of lithium-ion batteries.*

Lithium-ion batteries are found in many types of devices -- your smartphone, laptops, e-scooters/e-bikes, toys, and e-cigarettes. These batteries store a significant amount of energy in a small cell, and ***if not used correctly, may overheat, catch fire, and explode****. A lithium-ion battery fire* ***is very difficult to extinguish*** *and burns at very high temperatures while producing toxic gases.*

It is important to only purchase and use devices that are listed by a qualified testing laboratory (ex. ***CSA, UL****). Pay attention to your device and follow the manufacturer's instructions on how to properly charge the device.* ***STOP*** *using the device if you notice:*

- *an odor,*
- *a change in color,*
- *it becomes warm or hot; or,*
- *the battery changes shape or makes odd noises.*

If you live or work on campus and your device begins to show signs of deterioration (or ignites), please call ***9-1-1*** *immediately, then Protective Services at* ***306-585-4999*** *when you are a safe distance from the hazard. If you have lithium-ion batteries for recycling while on campus, please ensure they are not put in the trash -- they may be taken to UR Stores (RIC 110).*

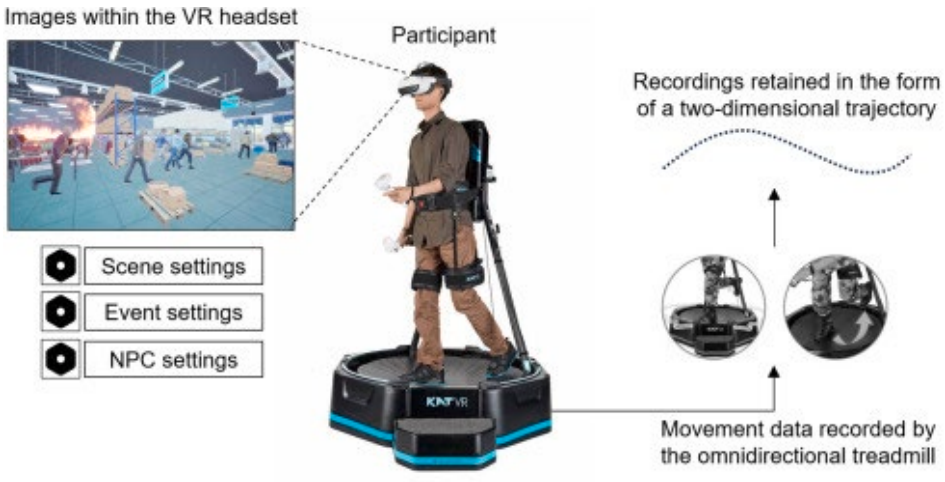
For more information, refer to the OSHA (USA) Safety and Health Information Bulletin, Preventing Fire and/or Explosion Injury from Small and Wearable Lithium Battery Powered Devices.

Safety Science: The latest editions of *Safety Science* have some articles that may be of special interest to engineering students:

Integrating deep learning model and virtual reality technology for motion prediction in emergencies

Article Number 106721

Meng Li, Pan Fanfan, Yan Zhang, Tao Chen, Hao Du



Research on data-driven coal mine environmental safety risk assessment system

Article Number 106727

Cheng Lu, Shuang Li, Kun Xu, Yi Zhang

Video see-through augmented reality fire safety training: A comparison with virtual reality and video training

Article 106714

Lorraine I. Domgue K, Daniel Paes, Zhenan Feng, Susan Mander, … Ruggiero Lovreglio

Leader psychopathy and workplace emotional exhaustion: An illustration of uneven distribution of psychosocial hazards within organisations

Article 106756

Heidi Wechtler, Christina Boedker, Julia Connell

Developing A new safety culture framework for aviation Maintenance: Preliminary results

Article 106729

Dothang Truong, Sang-A Lee

"The stronger (safety culture) scores among younger and less experienced AMTs suggest that training programs might need to focus more on reinforcing safety behaviors among more experienced technicians, who may have developed complacency over time"…."Similarly, the findings on overtime and working hours indicate that fatigue and overwork are potential risk factors that could be mitigated through adjusted scheduling and workload management policies.

Healthy Workplaces

10 HEALTHY HABITS for mental fitness

Schedule "me-time" daily

Reward yourself

Play to your strengths

Ask for help and offer to help

De-stress your diet

Choose a positive attitude

Practice relaxation techniques and get enough sleep

Set goals and stay on target with a journal

Get regular physical activity

Press pause once in a while – downtime is good

Effects of Mental Illness

Heart Problems

Aggression/ Conflicts

Back Pain

Cancers

Impaired Learning/ Memory

Substance Abuse

Infections

Other Injuries/ Illnesses

Reduced Adaptability

Increased Passivity

CCOHS.ca

Canadian Centre for Occupational Health and Safety

1-800-668-4284

Meet our Safety Team! Each month we will highlight people in our faculty who are "safety champions". These are people who truly care about your safety and can provide support for any safety, health, and wellness issues that may arise.

This month, we would like to highlight Sophia, our **Graduate Student Safety Lead** for the CETRI and PTRC buildings. Safety Leads help us meet our safety objectives, and most importantly, help ensure the safety of graduate students during their research activities. If you are active in our GG or PTRC research labs, you may come across Sophia. If you see her, please say hello!

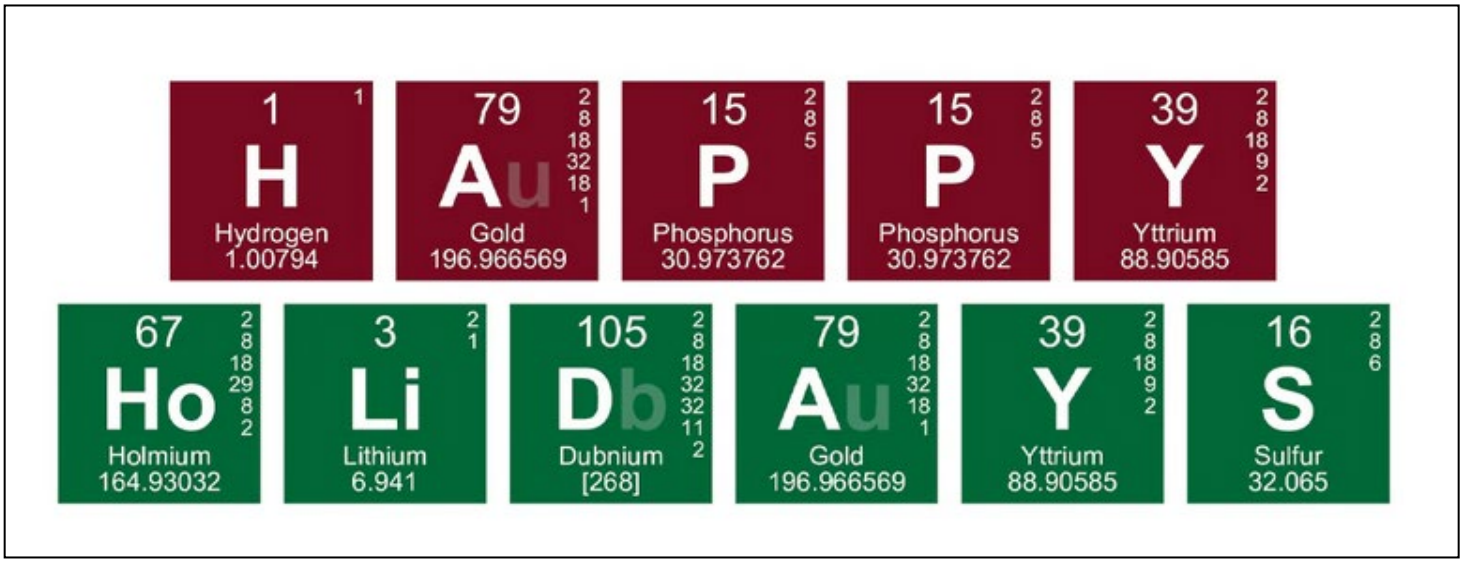
Sophia Emmanuel Ekanem *is a PhD candidate in the Department of Process Systems Engineering. She earned her bachelor's degree in Chemical Engineering from the prestigious Afe Babalola University, Ado-Ekiti, Nigeria (Great ABUAD students! Great!) and completed her master's degree at the University of Nottingham. Her current research aims to contribute to innovative solutions for a more sustainable, low-carbon future.*

When she's not dashing between lab experiments and Toastmasters meetings (P.S. you're invited—Thursdays at 12 noon, URSU Boardroom), Sophia can often be found at her desk in GG 314, refining her work or brainstorming new ideas. An avid reader, she holds two library cards and enjoys audiobooks on topics ranging from economics to fantasy fiction. She is currently reading ***Christina Van Starkenbur****g's Shadows of memory and stone.*

Sophia's journey as an engineer and budding academic has underscored the importance of safety in research. She is honored to be part of the team that ensures the safety and wellness of fellow researchers at the university. Beyond academics, she is passionate about mentoring young engineers and fostering inclusive spaces in STEM fields.

Have an idea for a future newsletter? Is there a safety issue you have been dealing with? Doing research with a safety focus? Email Engg.Safety@uregina.ca. We would love to hear from you!

Engineers hold paramount the safety, health and welfare of the public and protection of the environment and promote health and safety within the workplace (APEGS Code of Ethics).



(https://becausesciencedc.com/)