EH&S Welcomes New Director

Otu Inyang joined the University of Texas at Arlington as the Director of Environmental Health and Safety (EH&S) in March 2022. Otu comes to UTA from the University of Houston where he served as Safety Manager, Radiation and Laser Safety Officer. During his time, he led the implementation of information management system to promote the efficient and effective implementation of Environmental Health and Safety programs and service delivery.

“We are excited to have Otu assume the leadership of EH&S here at UTA,” said John Hall, Vice President of Administration and Campus Operations. “His background, experience and leadership will impact EH&S programs, services and relationships with campus stakeholders which are all critically important. Otu will lead an incredible team of EH&S professionals, all with the goal of serving our campus and adding value in carrying out the EH&S mission and supporting the university’s Strategic Plan.”

Inyang currently serves as the co-Chair of the Scholarship Committee for the Campus Safety Health and Environmental Management Association — a national organization focused on serving EHS professionals in higher education. He is also an Executive Board Member of the State of Texas Chapter of the Health Physics Society—a professional society advancing the science and practice of radiation protection. He holds a Doctor of Public Health degree in Environmental Health from the UTHealth School of Public Health, Houston and is a Certified Safety Professional with the Board of Certified Safety Professionals.

We are excited to welcome Otu to the EH&S family. We look forward to his leadership and guidance as we continue to serve the UTA community.

Stormwater Systems - Storm Drains

Stormwater systems are designed to carry rainwater off streets during heavy storms to help prevent flooding. Water flows off the streets, parking lots, yards and driveways into storm drains and then discharges into local waterways.

Unfortunately, these systems also carry trash, debris, chemicals and bacteria along with the runoff water. Storm water is never treated at a treatment plant before it enters local waterways, so we all must do our part to prevent waste from entering the storm drains.

What You Can Do

- Never dump anything down the storm drain.
- Keep yard clippings out of the street. Sweep them for compost or dispose as trash.
- Use fertilizers sparingly and sweep excess fertilizer from driveways and sidewalks after application.
- When applying pesticides and other chemicals to your yard, use the least toxic materials in the lowest quantities as possible.
- Wash your car at a car wash instead of your driveway. Car washes are required to treat water that is used, while water that flows from your driveway into the storm drain is not treated.

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Leah Hoy retired from her position as Director of EH&S in December 2021. Leah had been with UTA for 28 years and was the EH&S Director for 11 years. Leah made a great impact on EH&S and we wish her well in retirement.

Robert Smith also retired from his position as Associate Director of EH&S in December 2021. Robert supervised the Fire and Life Safety Program at EH&S. Robert started his journey with UTA in December 2000. He was the Associate Director for 12 years. We wish him great health and happiness in retirement.

Donald Telfair joined EH&S in February 2022 as a Safety Specialist. Donald comes to UTA from UT Southwestern. He will be a great asset to EH&S.

Leah Hoy, Robert Smith, and Donald Telfair were among the employees who retired, retired, or joined EH&S.

David Doerr became the new Associate Director of EH&S in January 2022. David was the Construction Project Coordinator before becoming Associate Director. David was a valuable asset in his former position and has proven to be the same in his new position.

J. Darren Byington has returned to EH&S as the Construction Project Coordinator. Darren held this position at EH&S several years ago and has brought his expertise back to our department. Welcome back, Darren!

Welcome aboard to our new employees, congratulations to those promoted and good luck to our recent retirees!

Laura Warren discusses COVID-19 impact on UTA Radiation Safety

Laura Warren, EH&S Safety Specialist III, was featured in The Bulletin, the Official Newsletter of the State of Texas Chapter of the Health Physics Society. In the article, Laura discussed the impact of COVID-19 on Radiation Safety Programs and highlighted UTA’s Radiation Safety Program successes during the pandemic. Laura also discussed the many additional duties EH&S took on during that time including waste pickups from student housing’s quarantine and isolation rooms, providing masks to all classrooms on campus and maintaining the stock of these masks through daily inspections, restocking as needed, and delivery of masks to laboratories and other administrative offices.

Stormwater Systems - Storm Drains

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- Check your car often for leaks and recycle your used motor oil at a local oil changing service center.
- Pick up after your pet.
- Drain swimming pools and spas into a sanitary sewer outlet, never into the street.
- Don’t litter. Keep your truck bed clean to prevent unintentional littering.

To learn more about stormwater, watch the Stormwater to Drinking Water video and Freddy the Fish Teaches About Stormwater video.
Grilling Safety

There’s nothing like outdoor grilling. It’s one of the most popular ways to cook food. But, a grill placed too close to anything that can burn is a fire hazard. They can be very hot, causing burn injuries. Follow these simple tips and you will be on the way to safe grilling.

SAFETY TIPS

- Propane and charcoal BBQ grills should only be used outdoors.
- The grill should be placed well away from the home, deck railings and out from under eaves and overhanging branches.
- Keep children and pets at least three feet away from the grill area.
- Keep your grill clean by removing grease or fat buildup from the grills and in trays below the grill.
- Never leave your grill unattended.
- Always make sure your gas grill lid is open before lighting it.

CHARCOAL GRILLS

- There are several ways to get the charcoal ready to use. Charcoal chimney starters allow you to start the charcoal using newspaper as a fuel.
- If you use a starter fluid, use only charcoal starter fluid. Never add charcoal fluid or any other flammable liquids to the fire.
- Keep charcoal fluid out of the reach of children and away from heat sources.
- There are also electric charcoal starters, which do not use fire. Be sure to use an extension cord for outdoor use.
- When you are finished grilling, let the coals completely cool before disposing in a metal container.

PROPANE Grills

- Check the gas tank hose for leaks before using it for the first time each year. Apply a light soap and water solution to the hose. A propane leak will release bubbles. If your grill has a gas leak, by smell or the soapy bubble test, and there is no flame, turn off both the gas tank and the grill. If the leak stops, get the grill serviced by a professional before using it again. If the leak does not stop, call the fire department. If you smell gas while cooking, immediately get away from the grill and call the fire department. Do not move the grill.
- If the flame goes out, turn the grill and gas off and wait at least 8 minutes before re-lighting it.

FACTS

- July is the peak month for grill fires.
- Roughly half of the injuries involving grills are thermal burns.
Earth Day Fair

The Earth Day Fair at UTA was held on April 20, 2022 at the University Center mall to highlight and celebrate sustainability on our campus. Many students engaged with EH&S and discovered how we are helping to create and foster a more sustainable UTA.

EH&S Assistant Director Ramon Ruiz, staff member Rose Hall and student worker Kimberly Villarreal engage with UTA students at Earth Day fair.
PEROXIDE FORMING CHEMICALS POSE DANGER IN LABORATORIES

It is important to identify and monitor chemicals which form potentially explosive peroxides. Peroxides are highly reactive materials and may be extremely shock-sensitive; they are prone to violent decomposition which can be initiated by heat, light, introduction of oxygen, loss of an inhibitor, mechanical shock, or friction.

Simply moving or just screwing the cap off a bottle that is contaminated with peroxides can lead to an explosion, injury and/or death.

In general, the more volatile the compound, the greater its hazard, since the evaporation of the compound allows the peroxide to concentrate. Organic peroxide forming materials can form shock-sensitive organic peroxide crystals over time or upon exposure to air. Check each material’s Safety Data Sheet (SDS) to determine if a chemical can form peroxides, and to check for other hazards-most are highly irritating to skin, eyes, and mucous membranes. Minimize exposure to these chemicals.

Appearance of crystals in/on chemical bottles:

There are inorganic and organic peroxide forming chemicals. Some inorganic peroxide formers are generally okay to handle but pose serious incompatibility issues when used with organic chemicals. Examples are:

Potassium metal (K); Potassium amide (KNH₂); Sodium amide (NaNH₂)

Organic peroxidizables are among the most hazardous substances handled in the lab. Examples are:

Isopropyl ether (C₆H₁₄O)
Tetrahydrofuran (C₄H₈O)

Refer to SDS before use!

Most are highly flammable and extremely sensitive to shock, heat, spark, friction, impact, and ultraviolet light. They are also very sensitive to contamination (especially heavy metal compounds, strong acids, and even dust and dirt). The presence of these materials can initiate rapid, uncontrolled decomposition of peroxides and possible fire or explosion. Once withdrawn, the peroxide must never be returned to its storage container.

Peroxides can form in virtually any kind of organic chemical, however, certain chemicals are particularly prone to peroxide formation and pose special hazards, such as Peroxide Forming Solvents. These compounds produce organic peroxides that are significantly less volatile than the solvent in which they are formed. As a result, evaporative concentration or distillation can produce dangerous levels of peroxides.

Inorganic and organic peroxide forming chemicals, because of their exceptional reactivity and oxidative potential, are widely used in research laboratories, and many are being used and/or stored here at UT Arlington. PIs/Chemical Owners and laboratory users should be knowledgeable of the hazards and safety issues associated with laboratory use, handling, and storage of peroxide forming compounds. In addition these types of chemicals must be tested for peroxide level upon opening and every three (3) months thereafter. They must be properly disposed of if the peroxide concentration is greater than or equal to 100 ppm, or when the maximum storage time is reached, whichever occurs first (refer to SOP - Peroxide Forming Chemicals).

Storage and Handling:

All peroxide forming chemicals should be stored away from light and heat with tightly secured caps and labeled with the date of receipt and date of opening. A laboratory routine should be established to test all peroxide forming chemicals when opened and every 3 months thereafter.

Example of a label:

<table>
<thead>
<tr>
<th>Peroxide Forming Chemical</th>
<th>Date Received</th>
<th>Date Opened</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>11/27/2021</td>
<td>1/27/2022</td>
<td></td>
</tr>
<tr>
<td>Date/ Test Results</td>
<td></td>
<td></td>
<td>0 ppm</td>
</tr>
<tr>
<td>Date/ Test Results</td>
<td>4/20/2022</td>
<td>50 ppm</td>
<td></td>
</tr>
<tr>
<td>Date/ Test Results</td>
<td>7/15/2022</td>
<td>100 ppm</td>
<td></td>
</tr>
</tbody>
</table>

All peroxide forming solvents should be checked for the presence of any peroxides prior to distillation or evaporation. Solvents with an inhibitor, such as Butylated Hydroxytoluene (BHT), should be used whenever the presence of this stabilizer does not interfere with intended application. Uninhibited materials should be stored with care and frequently checked for peroxide formation. Peroxide-forming solvents should be purchased in limited quantities

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PEROXIDE FORMING CHEMICALS POSE DANGER IN LABORATORIES
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and older material in inventory should be used first. BE AWARE that when purchasing chemicals from the list in Table A: Severe Peroxide Hazard (as shown in SOP-Peroxide Forming Chemicals), they must be discarded 3 months after opening. When purchasing uninhibited chemicals from Table C: Shock and Heat Sensitive, they must be discarded within 24 hours of opening. These chemicals can spontaneously decompose and become explosive after exposure to air, even without concentration. Substitute a more stable solvent if possible.

Peroxide Detection:

There are a variety of methods suitable for the detection of peroxides. The test strips method is the easiest to perform. In all cases, run a blank sample (one you know doesn't form peroxides such as n-hexane) so you know what a negative result looks like. If possible, also run a blank sample that you have spiked with some hydrogen peroxide so you will recognize a positive test result.

For more information on testing refer to SOP-Peroxide Forming Chemicals.

Never under any circumstances touch or attempt to open a container of a peroxide-forming liquid if there are whitish crystals around the cap and/or in the bottle. The friction of unscrewing the cap could detonate the bottle with disastrous results. DO NOT TOUCH OR MOVE THE SUSPECT BOTTLE YOURSELF FOR ANY REASON. CALL EH&S at 817-272-2185.

EH&S TRAINING COURSES

Online safety training is located on the EH&S training management website: https://uta-ehs.org

Bloodborne Pathogens for Laboratory Research Personnel  
Bloodborne Pathogens (Non-Research)  
BioSafety Level 2  
On-Site Biohazardous Waste Management  
Vaccinia Virus  
Laser Safety  
Radiation Awareness  
Radiation Producing Machine  
Hazard Communication & Waste Mgmt- Academic  
Hazard Communication & Waste Mgmt- Non-Academic  
Fire Alarm Device  
Back Injury Prevention  
Confined Space Entry Awareness  
Hand & Power Tool Safety  
Hearing Conservation  
Lockout/Tagout  
Respiratory Protection  
Class C Underground Storage Tank  
Defensive Driving Awareness  
12 & 15 Passenger Van  
Powered Industrial Truck (Forklift)  
Hot Work Safety

Call us at 817-272-2185 to schedule specific trainings not available online:

Radioactive Materials  
Fire Extinguisher  
Respirator Fit Testing  
Hands On PIT (Forklift)

The Great Escape with Fire Extinguisher Training and Evacuation Chair in person trainings are offered on a bimonthly basis. Click here for the schedule. Please call to sign up for a date.

DRIVING UTA VEHICLES

Defensive Driving Awareness - This online course must be completed every 3 years to remain an authorized driver of UTA vehicles. Additionally, an individual driving record check (MVR) must be updated annually.

12 & 15 Passenger Van Training: Take the online course first. A behind-the-wheel driving test is also required and will be conducted at the EH&S office, 500 Summit Ave. Drivers must have already passed the Defensive Driving Course and have a current approved driving record check (MVR) to attend. Click the link below to schedule a date and time.

EH&S Booking Site for 12 & 15 Passenger Van Training