



36th Annual

MIDWEST

Hazardous Materials Response Conference



**FIRE • POLICE • MEDICAL
HAZ MAT • INDUSTRY • EMA**



MAY 2, 3 & 4, 2024

**NORTHBROOK HILTON HOTEL
2855 NORTH MILWAUKEE AVE
NORTHBROOK, IL**

***Pre-Conference
Workshop on
May 2, 2024***



The 36th Annual Midwest Hazardous Materials Response Conference features the very best in both formal and informal education. This conference is a premiere event for responders!

There are dynamic main program presentations and workshops presented by experienced instructors. You can choose your own schedule to match your interests.

Experience two full days packed with haz mat and terrorism response training! This is a unique opportunity to learn from the best instructors in the country. Enjoy first-class training in an interesting and informative environment!

REGISTRATION

The registration process can only be completed online at www.emerysafety.com. You can download the conference brochure and make your workshop selections before starting the registration process. Detailed instructions for paying your registration by either credit card or check are on the website.

The registration process has been updated so make sure that you read the online instructions carefully before you start your registration. You may also register and pay for groups online.

Please note that if you pay by check your registration will not actually be entered until payment is received. Make checks payable to **Emery & Associates, Inc.** All payments by check must be received by March 15, 2024. Registration forms cannot be accepted by mail, fax or email. The only way to register is online.

Early registration is only \$360.00 when paid before March 15, 2024 (\$390.00 if received on or after March 15, 2024). There is no registration at the door. Substitutions will be accepted in writing before April 1, 2024. There are NO REFUNDS for any reason after April 1, 2024 and no refunds for no-show registrants.

Confirmation is auto-generated during the online registration process. No confirmations will be mailed. The registration deadline is firm, so you must get your registration in on time.

Be sure to save a copy of your registration confirmation form because workshop assignments cannot be confirmed by telephone.

Some workshops will have class size limits that will close a class once the limit is reached but there may be a waiting list. Do not delay to get your first choice.

HOTEL INFORMATION

The Northbrook Hilton Hotel is a Four Diamond property with excellent amenities. Conference attendees will enjoy complimentary high-speed Internet access in their guest room. We have reserved a block of rooms to be held for conference participants until April 15, 2024 at the special conference rate of \$115.00 for a single or double/double room. After April 15, 2024, the normal room rates will apply. **The hotel fills up quickly so be sure to make your room reservations today.**

HOTEL RESERVATIONS

There are two ways to make your hotel guest room reservation. The best way is to use the complete URL below for the conference room block:

<https://www.hilton.com/en/attend-my-event/chinbhf-hm2024-65d32459-5294-4587-9fab-e92e0fca535c/>

Or, you can call the Northbrook Hilton directly at (847) 480-7500 with Group Code **HM2024**.

Northbrook Hilton Hotel
2855 North Milwaukee Avenue
Northbrook, IL 60062

TAX DEDUCTION

Tax law states certain education related expenses including tuition, travel, lodging and meals are tax deductible if incurred to maintain or improve professional skills required in employment. Check with your tax professional for more specific information.

HMEP GRANT FUNDING

This conference is eligible for HMEP grant funding. HMEP grant funding can pay for your registration, travel expenses and hotel. Contact your Local Emergency Planning Committee (LEPC) for information.

CERTIFICATES

Annual refresher training as required under CFR 1910.120 (q) can be achieved by attending conference courses. The employer is responsible for certifying that presentations qualify for refresher training. Over 12 hours of formal training are offered, plus all the important after-hours opportunities!

GROUND TRANSPORTATION

Contact American Taxi for "suburban" taxi service from O'Hare to the Hilton. Call (800) 244-1177 to prearrange your rides. **WARNING:** Using a "city" taxi from the taxi line at the airport could cost you two or three times more than American Taxi.

AIRPORT INFORMATION

The Northbrook Hilton is located just 8 miles north of O'Hare International Airport, which is served by all major airlines. Reasonable airfares are available on most airlines serving O'Hare. Car rental is readily available at O'Hare through all major rental companies.

MEALS

The registration fee includes all breaks, lunch buffet on Friday, complimentary dinner buffet at the Exhibitors' Party Friday night and lunch buffet Saturday.

The Friday night Exhibitors' Party is a conference highlight, featuring a great door prize drawing and special entertainment. Extra meal tickets will be available for a reduced fee at the conference registration desk.

2025 CONFERENCE DATES

The 37th Annual Midwest Hazardous Materials Response Conference will be held on May 1, 2 & 3, 2025. Mark your calendar now to join us for over three decades of outstanding hazardous materials training.

SCHEDULE

THURSDAY – MAY 2, 2024

8:30 AM

Pre-Conference Seminar (at the hotel)

Air Monitoring for First Responders "When Meters Matter"

Scott Russell & Dan Warchol - The Meter Guys

The Meter Guys is hands-on meter training program for Hazmat personnel and industrial workers. This class provides students with the skills and competencies needed to properly use a multi-gas meter, understand the readings, and interpret the implications of such during an emergency response. You will learn things you did not know about metering through actual hands-on chemical metering. Each student will have a meter in their hands versus huddling around a table looking at one meter. Correction factors, cross sensitivities, and poisoning of sensors will be explained. Students will get a street-smart chemical and physical properties foundation to enhance their metering capabilities. The hands-on and interactive nature of this class brings metering skills down to what the street-level responder needs to know.

NOTE: This is a free pre-conference workshop open to the first 30 conference attendees who register using the separate registration link that will be emailed to each individual after they have registered and paid for the conference.

4:00 PM

Registration desk opens in hotel lobby

7:00 PM

Welcome reception – Alpine Room

FRIDAY – MAY 3, 2024

7:00 AM Registration desk opens in hotel lobby

8:00 AM

Conference Opening

Rick Emery, Conference Chairman

CHEMTREC Scholarship Awards

CHEMTREC will award six full conference scholarships.

Energy Hazard Training

Chris Greene

Energy Hazards play a role in nearly every emergency we respond to and yet the American Fire Service is still struggling to acknowledge this training gap. Failing to identify energy hazards comes at a considerable cost to our members in the form of near misses and catastrophic injuries. The Fire Service must engage and coalesce on this challenge today to ensure safety for posterity.

US DOT PHMSA Update

Eddie Murphy

An update from the US DOT Pipeline and Hazardous Materials Safety Administration on current topics of interest, including 2024 Emergency Response Guidebook, HMEP news, Hazmat Roundtable, and rulemaking.

9:30 AM

Morning break. Exhibits open!

10:30 AM

Menominee Michigan Warehouse Fire Response

Paul Ruesch and Mike Maas

At about 11:00 PM on October 6, 2022, a large industrial fire broke out in a 560,000 square foot warehouse home to a large paper recycling, specialty chemicals and fire safety products tenants. The fire presented numerous unique challenges and consumed most of the structure, which was located adjacent to the Menominee River, which runs into Green Bay. The treatment plants for Menominee, Michigan, and Marinette, Wisconsin saw spikes in PFAS levels in drinking water drawn from Lake Michigan shortly after fire suppression began, resulting in extensive surface water and drinking water sampling & monitoring efforts to ensure the water was safe to drink. This session will provide an overview of the firefighting operations, which took nearly 2 weeks to extinguish, as well as the Unified Command organization formed to assist in managing the overall response effort.

11:30 AM

Lunch Buffet (Provided)

Allgauer's restaurant

1:00 PM

Workshop # 1

2:30 PM

Afternoon break

3:00 PM

Workshop # 2

5:00 PM

Exhibitors' Party

- Complimentary Buffet Dinner!
- Door Prizes!

8:00 PM

Hospitality Suite - Alpine Room

SATURDAY – MAY 4, 2024

8:00 AM

Workshop # 3

9:30 AM

Morning break

10:00 AM

Workshop # 4

11:30 AM

Lunch Buffet (Provided)

Allgauer's Restaurant

12:30 PM

Workshop # 5

2:30 PM

Afternoon break

3:00 PM

Workshop # 6

4:30 PM

Conference concludes

Certificates of Attendance awarded to all who attend the entire conference.



The National Institute of Environmental Health Sciences has provided a grant to help defray the cost of conference expenses. This grant helps keep your registration fee lower. The conference appreciates the support of NIEHS and thanks OAI, Inc. for administering this grant.

*Taping and flash photography of Main Programs and workshops is strictly prohibited.
Taping of displays and demonstrations permitted with a self-contained power supply.*

WORKSHOPS

WORKSHOP #1 1:00 PM FRIDAY

1A - Detection Of CWA, PBA, TICs and TIMs Using Flame Photometry (Sloan)

Flame photometry has the fastest response time and lowest detection limit for chemical warfare agents including fourth generation nerve agents. Come learn how the use of flame photometry can greatly aid you in the detection of gas, vapor, aerosol, liquid and solid threats including pharmaceutical based agents as well as common toxic industrial chemicals and materials. [90 minutes]

1B - Considerations for HAZMAT Teams: An Illinois OSHA Perspective (Kamarian)

This presentation is focused on public sector hazmat responders in Illinois and will provide an overview of considerations for HAZMAT teams and responders. We will review IL OSHA standards such as 1910.120 and discuss important considerations when responding to HAZMAT incidents. [90 minutes]

1C - Keeping First Responders Safe: Newest Safety Product Enhancements (Mayer)

This workshop will expose attendees, from the novice to those more experienced, to the latest in portable and area monitoring gas detection technologies. Available safety solutions deliver reliable connectivity, quick "drop and go" deployments, real-time visibility, and increased safety of all team members. Come learn about the newest product enhancements that shares alerts across devices within proximity of each other for advance warning of potentially dangerous hazards keeping first responders safe. Over the years, those in the fire and hazmat response community have seen many evolutions of gas detection instrumentation come and go. From the basic "beep and flash" devices to the typically more sophisticated wirelessly connected technologies, advanced technologies don't have to be complicated. In this hands-on workshop, you'll learn how the next generation of real-time connected devices have taken the pains out of your deployments. Now, with new features, you can stay safe because of shared alerts to devices within proximity of each other. We will conduct live demonstrations showcasing device operations, calibrations, device configurations, and ease of compliance record-keeping. Attendees will walk away with new insights into the flexible, quick deployment of solutions which offer greater peace of mind. [90 minutes]

1D - Railroad 101 (Herrera & Shanks)

This workshop is an introduction to responding to

railroad emergencies, focusing on topics all first responders should be familiar with when interacting with any railroad. We will touch on the basics of safety around rail property, shipping documents, locomotive/railcar identification, and incident response procedures. There is plenty to take away, including new technologies involved in our day-to-day movement of freight, as well as the vernacular of the railroad that differs from that of our counterparts in the trucking industry. [90 minutes]

1E - Energy Hazard Training for First Responders - Part 1 (Greene)

This course identifies and defines the eight (8) Energy Hazards categories that the fire service is tasked with addressing. It offers the first steps to help develop our member's "Energy Vision" for every emergency. From Substations to manhole fires to Lithium-Ion battery incidents...this course reveals the nexus hazards that connect all energy emergencies. The course offers real solutions as well as operational guardrails that will help guide the fire service through these energy hazards. Part 1 of a 2 part workshop. [90 minutes]

1F - Chicago Region Securing the Cities Program (Zilch & Hand)

Review of Radiological and Nuclear Prevention Program for the Chicago region of the DHS CWMD Securing the Cities Program. STC is a program that will be expanding in the coming years and would like regional agency involvement. This presentation will discuss how to become involved in the regional program. [90 minutes]

1G - First Due HazMat (Baxter)

This session will provide an overview of best practices fire departments can implement to empower first arriving personnel to take action at a hazardous materials emergency using the Hazard3 R.I.N.S.E.D™ guidelines. Topics will include realistic street-level decision making including establishing control zones, hot zone rescue, and emergency decontamination of victims. [90 minutes]

WORKSHOP #2 3:00 PM FRIDAY

2A - Matrix of Detection: Putting all the Pieces Together (Frost)

Technology! Today we have an entire suite of detection and identification tools from papers to GC/MS, and everything in between. But how do we put them all together in the field to get our answers? In this workshop, we will work our way through the matrix of tools available, leveraging



their strengths and weaknesses to come to a solution. There is no perfect tool with all of the answers, but by using what we have, we can get there. [90 minutes]

2B - Perfecting Your Pre-Entry Safety Briefing (Wiseman & Emery)

The pre-entry briefing is the single most important safety component of the mitigation process and will make (or break) an incident. Unfortunately, over 75% of pre-entry safety briefings are either incomplete or do not provide all the information required to mitigate an incident safely and effectively. This requires communicating a lot of critical information to entry team members and the backup team in a concise format. The list is robust, but an effective pre-entry briefing should not require more than a few minutes to relay all this information. The Incident Commander ensures a pre-entry briefing is presented prior to allowing personnel in the Hot Zone; the Haz Mat Officer identifies the procedures and the Safety Officer conducts the safety briefing for personnel performing the tactical operations. Each participating Technician must know how to identify the components of a pre-entry briefing because every one of these components is essential for a successful outcome. Bring your team's pre-entry briefing checklist to this workshop to compare. We will conduct simulated safety briefings based on scenarios and share what needs to be provided to the entry and backup team members. [90 minutes]

2C - Inside the Fenceline: Emergencies at Chemical Facilities (Silverman & Cullen)

TRANSCAER is a voluntary national outreach effort that focuses on assisting communities to prepare for and to respond to a possible hazardous material incident. Emergency responses to chemical plants

WORKSHOPS

that produce and store potentially hazardous chemicals can seem daunting and challenging. Typically, these are not your bread-and-butter calls. As a firefighter, you may not have the familiarity, experience, training, and/or equipment to feel you can safely and effectively handle them. This session will better prepare responders to handle incidents inside the fence line of chemical facilities. We will begin by learning how to size-up a chemical facility and then learn about some common activities, processes, and hazards that can be found inside the fence line. Lastly, we will cover strategy, tactics, and tips for handling incidents and rescues involving potentially hazardous materials. [90 minutes]

2D - US EPA Case Studies (Ruesch, Janick, Maguire & Reynold)

In January 2023, explosions and fire consumed a chemical plant in La Salle, Illinois manufacturing water treatment and pollution control chemicals, including permanganates, phosphates, polymers, and catalysts. A shelter-in-place order was issued while multiple departments and MABAS resources addressed the fire. The plant was adjacent to the Little Vermillion River. An overview of firefighting operations, decontamination challenges, and subsequent cleanup activities will be provided along with the command organization formed to manage the effort. The presentation will be followed by a panel discussion and question & answer session with fire chiefs and emergency response personnel from both the LaSalle incident and the Menominee Warehouse Fire (opening plenary). [90 minutes]

2E - Energy Hazard Training for First Responders - Part 2 (Greene)

This course identifies and defines the (8) Energy Hazards categories that the fire service is tasked with addressing. It offers the first steps to help develop our member's "Energy Vision" for every emergency. From Substations to manhole fires to Lithium-Ion battery incidents...this course reveals the nexus hazards that connect all energy emergencies. The course offers real solutions as well as operational guardrails that will help guide the fire service through these energy hazards. [90 minutes - Part 2 of a 2 part workshop]

2F - White Powder Response (Marinoff)

This workshop will focus on past, present, and future "white powder" response scenarios with lessons learned, as well as incorporation of ever-evolving field equipment. From the first Anthrax letters that started to arrive in September of 2001 to the recent influx of international shipments of

Fentanyl "white powder" runs have been one of the many threats to which Haz-Mat teams throughout the country have been called upon to respond. Going from a "low frequency - high risk" to a "high frequency - high risk" event and back again has proven a challenge that many departments face. We will discuss the need for readiness for threats previous, present, and emerging and the difficulty in incorporating technology and consumables for a range of material that falls under the "white powder" designation. Proficiency and readiness continue to pose unique challenges to remaining prepared for what's next and the lessons learned will provide a guide to the future. [90 minutes]

2G - Joint Hazard Assessment Teams (JHAT) (Sharp)

This presentation will outline the pre-deployment of special operations resources including HazMat teams at special events using the Joint Hazard Assessment Team (JHAT) concept of operations. Topics will include HazMat/CBRN planning and response considerations for large public events and mass gatherings including event/venue threat and risk assessments, dignitary security considerations, site surveys, and security pre-sweeps and rapid assessment guidelines. [90 minutes]

WORKSHOP #3 8:00 AM SATURDAY

3A - Compressed Gas Response (Nelson)

Discussion on compressed gas response. We will discuss effective strategies for compressed, liquefied, and cryogenic gases. [90 minutes]

3B - Enhanced Functionality in CBRN Environments (Day,)

Update on advancements in CBRN PPE and associated standards to meet evolving requirements. [90 minutes]

3C - HazMatIQ First Responder Offensive (Bigger)

This training incorporates the Above the Line/Below the Line size-up system to train those arriving first on scene if they can safely enter the Hot Zone. First Responder Offensive covers basic chemical physical properties, and the Stay Alive Five equipment (SAFe) Kit (radiation pager, F and pH papers, temperature gun, and LEL meter) to determine whether the responder can safely continue with recon or perform a rescue (Go/ Get-Out). [90 minutes]

3D - Your Detection and Identification Cache: Are You Keeping Up with the Joneses? (Parsons)

For many years, responders have purchased meters and detection equipment based on what neighboring departments have or to be a step ahead of similar agencies. That mentality has led to systemic problems with maintenance, support, funding, and procurement issues for items that the department didn't need in the first place. A detection and identification instrument cache should be based on the mission. Without a Threat and Hazard Identification and Risk Assessment (THIRA) to determine capability gaps, it is a lose/lose relationship and will eventually create sustainment problems when grants dry up. This often leads to an inability to acquire new equipment that is actually needed. This issue was evident after 9/11 as grants eventually ended and many items ended up in warehouses. This workshop will discuss what instruments you need based on your response objectives and how these meters and detectors complement each other. Get the information you need to respond correctly to your threats. [90 minutes]

3E - So, You Have a CNG Kit. Are You Ready to Use It? (Ferretti & Bednarek)

A dive into the world of alternate fueled vehicles and their unique challenges. Fuel characteristics, component identification, operations, and tips/tricks. With the experience of defueling hundreds of these vehicles, the presenters share their experience with the most common system configurations, as well as some of the more challenging systems encountered. Fully functional assemblies, configurations, and components will be utilized to show not only how they work, but also how readily available kits and tools function on these systems, their limitations and what is required to make them function as intended. [90 minutes]

3F - Instability, Uncontrolled Chemical Reactions, and the Release of Energy (Silverman & Cullen)

This workshop will explore the intrinsic ability of hazardous materials to release energy through a reaction with air, decomposition, self-reaction, or polymerization. Monomers may undergo runaway polymerization reactions. Organic peroxides inherently possess two or even three sides of the fire triangle and as a result may rapidly, exothermically, and sometimes explosively, disintegrate. Peroxidizable chemicals can react with oxygen in the air to form potentially explosive peroxides. The

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NFPA 704 system uses the yellow diamond to convey the instability hazard of materials to responders. The degree of instability helps responders understand the ease, rate, and quantity of energy that may be released. This aids responders in understanding if an area needs to be isolated or evacuated, if caution needs to be used in approaching or controlling a spill, and if a fire needs to be fought from a protected, defensive position. We will explore the chemistry of unstable materials and tactics for handling uncontrolled chemical reactions during an incident. [90 minutes]

3G - HazMat Officer Strategy and Tactics (Sharp)

This session will help prepare HazMat Officers to develop a quick, street-level, incident action plan (IAP) for small to large HazMat incidents. Participants will learn a simple, repeatable, process for IAP development that can be implemented by HazMat teams. Topics include gaining situational awareness, analyzing the incident, setting incident priorities, establishing response objectives, recommending a strategy to the IC, and selecting HazMat team tactics. [90 minutes]

WORKSHOP #4 10:00 AM SATURDAY

4A - HazMat by the Numbers (Hawley)

Have you ever wondered what the term vapor pressure actually means? In your HazMat technician class, you may have written down the definition and discussed it, but were you actually taught how to apply this term? This session focuses not only on what vapor pressure and other terms that relate to chemical and physical properties mean, but more importantly how they can impact your health and safety. By truly understanding some simple terms responders can make PPE decisions, isolation and evacuation decisions and determine the severity of the event. [90 minutes]

4B - MAYDAY - Part 1 (Wiseman & Emery)

This course is designed to challenge the Hazardous Materials Technician both mentally & physically when it comes to planning for a MAYDAY during a hazardous materials incident. Students will have a 360-degree view of the challenges associated with a hazmat MAYDAY event. These skills have been practiced and proven to decrease evacuation time and get your fellow Hazmat Tech to safety. Part 1 will cover the concepts and mechanics of the Mayday evolution. There is a lot of misinformation, myths and unproved methods out there that are just not practical or effective. The goal is to successfully remove a stricken haz mat team member as quickly

and safely as possible. Part 2 will allow participants hands-on experience packaging and removing a stricken member from the Hot Zone, rapid suit removal by the Rescue Team and resolving the Mayday. These best practices that have been carefully honed over 5 years of trials will make a believer out of you and help you improve your Mayday continuum. Part 1 of a two-part workshop. You must attend both parts. [90 minutes]

4C - BioTechIQ (Biggers)

BioTechIQ is a patent pending, sole source training program that trains responders to implement risk-based response tactics to safely, effectively, and efficiently respond to any biological agent, white powder or unknown. Developed by the creator of HazMatIQ; BioTechIQ follows the same responder centric approach to train responders on the Biological Response Guide – a proprietary Emergency Response Guide to Biologicals. [90 minutes]

4D - Building Realistic Simulation Training Exercises With Sims-U-Share (Lipski)

This interactive program provides attendees with the 10-step process they can use to plan, create, and deliver highly interactive incident simulation training exercises. These exercises can be run in person in the classroom setting, remotely via a web browser, or as stand-alone individual activities via email or a learning management system. Simulation training that is targeted in the response area, using the actual buildings and roads that members respond to provides an ultra-realistic training experience. You will receive direct training creating these types of scenarios quickly and easily. Attendees will also be provided with best practices to ensure their training sessions are as valuable as possible. For Hazmat responses specifically, attendees will learn how to directly incorporate ERG data and placards into any simulation exercise. This session will use real time examples of live exercises providing attendees with simulation training can be delivered in the classroom or online. Attendees will be provided a free trial of the software, as well as customized video tutorials, and prebuilt simulations to try out the system. [90 minutes]

4E - Looking Under the "Hood" of the EV Battery (Ferretti & Bednarek)

Digging into Electric and Hybrid vehicle batteries. Construction, chemistries, and what actually is underneath that thin metal casing. FSR's experience in dismantling these vehicles and modules will be brought into this presentation utilizing real

Li-ion cells and EV/Hybrid vehicle modules allowing attendees to see the configurations of the actual vehicle electrical components they will encounter during an EV/ HEV emergency. Limiting Thermal runaway propagation, li-ion extinguishing systems and tactics, tools, & trainings will be covered. [90 minutes]

4F - Inside the Chicago Fire Department Hazardous Materials Program (Schick)

This presentation will explain the Chicago Fire Department's hazardous materials program, including the structure of the CFD and how hazmat fits within that structure. Some of the history of CFD hazmat program will be discussed, including the people who helped develop and lead the program in 1985. This will be followed with a description of our mainline and auxiliary vehicles. The primary haz mat squads are 5-1-1 and 5-1-2, with support units 5-1-11, 5-1-1A, and 5-3-0. Photos and descriptions of both apparatus and equipment carried will be explained. We will also talk about staffing, training, and an overview of SOPs. There will also be discussion about past incidents in describing the emergency, what was done, what was learned, and what could have been done better. These incidents include ammonia leaks, natural gas explosions, white powder runs, and bomb threats. [90 minutes]

4G - Decon Unit Leader (Baxter)

This workshop will help prepare HazMat Technicians to serve as the Decontamination Unit Leader (Decon Officer) at a HazMat incident. Participants will learn to develop a decon plan including reviewing the properties of the chemical involved and selecting the most appropriate decontamination tactics including choosing between fan, wet, dry, and hybrid decon methods. [90 minutes]



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WORKSHOP #5 12:30 PM SATURDAY (120 minutes)

5A - Risk-Based Response to Gas Sampling (Russell & Warchol)

During the course of a hazardous materials incident, there are different phases of the incident. Response teams utilize different technologies to locate, determine the risk, and identify various leaks and hazards. During the course of this presentation, we will show how advances in technologies have shaped our current detection / metering plans. We will utilize the Chem Pro X's Ion Mobility Spectroscopy and its strength as a PID on steroids to locate the highest gas concentration during an incident. We couple the Chem Pro X with an Industrial Scientific MX4 to determine our immediate hazards present and confirm our PPE selection. For the final phase of a response, we have entered the day and age of instant identification utilizing Fourier Infrared Spectroscopy. A Redwave Xlporir can be deployed to provide instant feedback and identification of over 5500 gases. The various detection technologies will be demonstrated, with hands on practical exercises and an interactive discussion with the audience. With the advent of the new technologies there are new features including wireless communication suites and the availability of reach-back, that will also be discussed to assist with determining the metering plan. [120 minutes]

5B - MAYDAY Part 2 (Wiseman & Emery)

The second part of this workshop will allow participants hands-on experience packaging and removing a stricken member from the Hot Zone, rapid suit removal by the Rescue Team and resolving the Mayday. These best practices that have been carefully honed over 5 years of trials will make a believer out of you and help you improve your Mayday continuum. Part 2 of a two-part workshop. You must attend both parts. [120 minutes]

5C - BatteryIQ: Awareness and Operational Response to Li-ION Batteries (Bigger)

BatteryIQ provides students with a simplified system to understand, identify, respond, and mitigate to lithium-ion battery incidents, covering everything from cellphones and electric scooters/bikes to electric vehicle fires and energy storage system failures. Students will be provided with Battery Response Guides that allow them to quickly, effectively, and efficiently categorize battery-related emergencies based on battery type and failure

stage. These categories then guide students to determine the potential hazards, PPE, recommended equipment, and correct emergency operation tactics when arriving on scene of a Li-ION Battery Emergency. [120 minutes]

5D - Tank Car 101 (Herrera & Karcher)

This session is an introduction to Tank Car Anatomy that will focus on the major types of tank cars from Non-Pressure to Cryogenic. You will learn how to easily identify the different DOT Spec tank cars from a distance, which will help to quickly make actionable decisions, as well as get some hands-on time understanding and identifying the various valves, safety devices, and components on tank cars. This is a hybrid session that will consist of time spent inside reviewing a presentation followed by hands-on time outside on a training trailer becoming more familiar with protective housings on top of railcars. [120 minutes]

5E - Make Decon Suck Less (Roberts)

It's time to make decon suck less. Technology and techniques have taken leaps and bounds in just the past 5 years, and most of us are still stuck in the 1990s. Hybrid Decon is just the start of this shift, by utilizing FiberTect and Dahlgren Decon to make the most of the time we spend in the suit. Reducing waste, cost, and footprint are absolutely possible with the Enhanced Decon System and make your decon system work for YOU. No matter what environment you find yourself in, your capabilities do not diminish. Come by and learn how to make Decon Suck Less! [120 minutes]

5F - O'Hare International Airport: A Tour of CFD's HazMat 5-1-2 and Squad 7 - Part 1 (Schick)

Attendees will take a 15-minute bus ride to Chicago's O'Hare International Airport for an extremely rare opportunity to tour the Chicago Fire Department's Rescue 3 Firehouse. There, they will be met by members of Haz Mat 5-1-1, 5-1-2 and Squad 7 and will be given a tour of both rigs. They will be shown the equipment and be given descriptions of both company's hazardous materials, technical rescue, and firefighting capabilities. After the tour, attendees will reboard the bus and return to the conference hotel. The bus will leave the hotel promptly at 12:30 PM and return at 4:00 PM. This tour will be strictly limited to the first 30 registered conference attendees. Part 1 of a two-part workshop. You must attend both parts. [120 minutes]

5G - Scenario-Based Training: Running Out of Ideas? (Rudner)

Scenario-based training has become the most common way of training response teams to work together. However, the challenges that are always present include: the same ideas, little variation, lack of realism, and not setting attainable goals. Through a series of questions and discussions, the presenters will guide you through the obstacles described and help you develop more effective whole-skill exercises and drills to improve your team and the others that respond with you. [120 minutes]

WORKSHOP #6 3:00 PM SATURDAY

6A - Risk-Based Response (Hawley)

When confronted by a HazMat response you want to make quick response decisions. How do you determine your actions? How do you determine PPE? Isolation distances? How bad is the situation? Using basic devices and a basic risk assessment process responders can make safe, but quick decisions. The process focuses on fire, corrosive, toxic and radioactive hazards. If you were provided the on-scene detection readings how quickly could you make a response decision? After a short review of the process, scenarios will be discussed to apply the lessons learned. [90 minutes]

6B - Haz Mat Safety Officer (Zientek)

HAZWOPER requires the Incident Commander to assign a Safety Officer at every hazardous materials incident. The Safety Officer must be knowledgeable in the operations being implemented at the emergency response site, with specific responsibility to identify and evaluate hazards and to provide direction with respect to the safety of operations for the emergency at hand. NFPA 470 Chapter 18 is devoted to this essential position, but what type of skills, experience, and/or training does this person need to fulfill this role? What does this person need to focus on and what types of things can this person expect to address when assuming this role? We will answer all of the above questions and look at some critical real-world situations that required the Safety Officer to address the situation and make sure safety operating on this incident is adhered to. At the end of the class, we will put what we have discussed to the test with a scenario and examine areas where the Safety Officer can have input. [90 minutes]

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6C - Crazy Concoctions, Obnoxious Odors, and Colored Smoke: Emergencies in the Laboratory (Silverman & Cullen)

Emergency responses to incidents in the laboratory can be extremely challenging. The thought of wild-haired scientists in white lab coats holding colorful, bubbling beakers of chemicals only adds to the mystery and creates responder anxiety. Inexact science, hazardous chemicals, biologicals, radioactive materials, specialty gases, and complicated laboratory apparatus and instrumentation all pose special challenges. Additionally, the physical layout of laboratory facilities further complicates the response. This workshop helps take the mystery out of laboratory emergency response by enhancing situational assessment, risk-based decision-making, and responder safety. [90 minutes]

6D - Things That Go Boom! BHO Labs... (Frost)

With the growing availability of marijuana, the prevalence of hash oil labs is on the rise. In this workshop, we will look at some of the different methods of extraction and the hazards associated with them. With multiple ways to extract it, the more common and more hazardous method is the butane extraction method. From the simple "blasting" method to complex closed loop system, we will exam the processes, components, and develop monitoring and hazard mitigation strategies to handle these events. Others include alcohol, propane, hexane, CO2, and the list goes on. Knowing your equipment and the hazards present becomes critical in managing both illicit and legal operations. It is coming to a neighborhood near you, are you ready? [90 minutes]

6E - Battery Energy Storage System Safety (Rogers)

Battery Energy Storage Systems (BESS) are starting to proliferate in communities throughout the USA and the rest of the world. A lot of the BESS will be used to feed the grid and are located in unattended facilities. Owners/Operators of these systems will depend on the fire service to respond during failures. Since lithium-ion batteries will be the dominant chemistry associated with these installations, the presentation will focus primarily on this chemistry. This presentation will review the failure modes and the hazards associated with this type of chemistry. We will discuss recent BESS failure incidents and fire department response, along with the challenges during and after the fires. [90 minutes]

6F - O'Hare International Airport: A Tour of CFD's HazMat 5-1-2 and Squad 7- Part 2 (Schick)

Attendees will take a 15-minute bus ride to Chicago's O'Hare International Airport for an extremely rare opportunity to tour the Chicago Fire Department's Rescue 3 Firehouse. After the tour, attendees will reboard the bus and return to the conference hotel. The bus will return to the hotel at 4:00 PM. This tour will be strictly limited to the first 30 registered conference attendees. Part 2 of a two-part workshop. Everyone must ride on the bus both ways. No private cars will be allowed. [90 minutes]

6G - 27 Hours On I-95: Did We Do It Right? (Rudner)

Through a case study of an incident that closed a major interstate on the July 4th holiday week, this interactive program will discuss the incident, use of the ICS, Interagency Communication and Cooperation. The various components that helped make the decisions that ended with a long inquiry as to the actions of those involved in the planning, response, execution, mitigation and remediation of the incident. [90 minutes]



Certificates will be emailed to each attendee who completes the full conference. You must sign in to each class to receive full credit.

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WORKSHOP SCHEDULE & HOTEL INFORMATION

WORKSHOP	A	B	C	D	E	F	G
1 Friday 1:00 PM	Detection Using Flame Photometry (Sloan)	Illinois IDOL/OSHA (Kambarian)	Keeping First Responders Safe (Mayer)	Railroad 101 (Herrera & Shanks)	Energy Systems - Pt 1 (Greene)	Securing the Cities (Zilch & Hand)	First Due Haz Mat (Baxter)
2 Friday 3:00 PM	Matrix of Detection (Frost)	Pre-Entry Safety Briefing (Emery & Wiseman)	Inside the Fence Line (Silverman & Cullen)	LaSalle Fire (Ruesch, Janick & Reynolds)	Energy Systems - Pt 2 (Greene)	White Powder Calls (Marinoff)	JHAT (Sharp)
3 Saturday 8:00 AM	Compressed Gas Response (Nelson)	Enhanced Functionality in CBRN (Day)	First Responder Offensive (Bigger)	Your Detection & ID Cache (Parsons)	CNG kit (Ferretti & Bednarek)	Instability, Reactions... (Silverman & Cullen)	Haz Mat Officer Strategy & Tactics (Sharp)
4 Saturday 10:00 AM	HazMat by the Numbers (Hawley)	Mayday - Part 1 (Wiseman & Emery)	BioTechIQ (Bigger)	Realistic Simulations (Lipski)	Under the Hood of EV Battery (Ferretti & Bednarek)	CFD Haz Mat (Schick)	Decon Unit Leader (Baxter)
11:30 AM	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH
5 Saturday 12:30 PM	Gas Sampling (Russell & Warchol)	Mayday - Part 2 (Wiseman & Emery)	BatteryIQ (Bigger)	Tank Car 101 (Herrera & Karcher)	Decon Suck Less (Roberts)	CFD O'Hare Tour - Pt 1 (Schick)	Scenario-Based Training (Rudner)
6 Saturday 3:00 PM	Risk-Based Response (Hawley)	Haz Mat Safety Officer (Zientek)	Concoctions (Silverman & Cullen)	BHO Labs (Frost)	BESS Safety (Rogers)	CFD O'Hare Tour - Pt 2 (Schick)	I-95 Case Study (Rudner)

Two part sessions are shaded. You must attend both parts.



Hilton

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FREE Pre-Conference Workshop on May 2, 2024

*This **FREE** pre-conference workshop is only available to conference attendees. A separate registration link will be emailed to each individual after they register for the conference itself. This workshop will be strictly limited to the first 30 registrations.*

MAY 3 & 4, 2024
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