

SCOTT SKELTON, PHD, CIH

CO-FOUNDER,
PRINCIPAL EXPOSURE SCIENTIST



PROFILE

Dr. Scott Skelton is Co-Founder and a Principal Exposure Scientist at ONYX Exposure Science, LLC. As an Exposure Scientist, Scott formed his practice of 20 years in the emergency response, natural disaster, petrochemical, transportation, manufacturing, and maritime settings. Scott developed expertise in reducing occupational exposure for sophisticated chemical hazards while responding to large-scale hazardous material incidents. Certified in the practice of Industrial Hygiene (CIH), Scott has utilized exposure science techniques to tackle industry's most difficult challenges. Scott's PhD research focused on fire science, diffusion, and benzene exposure for large atmospheric crude oil tank fires.

EXPERIENCE

PRINCIPAL EXPOSURE SCIENTIST

ONYX Exposure Science, LLC.
2026 - Present

PRINCIPAL EXPOSURE SCIENTIST

CTEH, LLC.
2021 - 2026

SENIOR INDUSTRIAL HYGIENIST

CTEH, LLC.
2013 - 2021

DIRECTOR, TOXICOLOGY EMERGENCY RESPONSE PROGRAM

CTEH, LLC.
2010 - 2013

INDUSTRIAL HYGIENIST, TOXICOLOGY EMERGENCY RESPONSE PROGRAM

CTEH, LLC.
2006 - 2013

EDUCATION

PH.D. FIRE SCIENCE

Oklahoma State University, Stillwater, OK
2020 - 2025

M.S. INDUSTRIAL HYGIENE

Montana Tech University, Butte, MT
2008 - 2011

B.S. PRE-MEDICINE BIOLOGY

Arkansas State University, Jonesboro, AR
2000-2004

A.A. LIBERAL ARTS

Arkansas State University, Jonesboro, AR
1998-2000

EXPERTISE

- Chemical exposure prevention
- Chemical fire exposure analysis
- Fire/Explosion prevention
- Engineering controls
- Hazard assessment
- Emergency response
- Accident investigation
- Expert witness
- Hazard and Risk Communication



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Quitman, AR



CERTIFICATIONS & AWARDS

- Certified Industrial Hygienist (#10078)
- Radiation Safety Officer (MHTEX21320138290)
- CTEH *Alan Nye Scientific Distinction Award 2019*
- Governor Appointment to Arkansas' Petroleum Storage Tank Advisory Committee.

PUBLICATIONS

1. Huss, R. G.; Skelton, S. B.; Alvis, K. L., and Shane, L. A. Heat stress management program improving worker health and operational effectiveness: a case study. *Workplace Health Saf.* 2013 Mar; 61(3):128-33.
2. Skelton, S. B. Industrial Hygiene and Product Recovery: The Challenge of Protecting Workers Under Highly Variable Work Conditions. *Environmental Coastal and Offshore (ECO) Magazine.* 2013 Sept/Oct: 36-37.
3. Wnek, S., Skelton, S., Berg, M., Goad, P. Hazards after the Storm: Floodwater Drainage Pump Stations and Exposure to Hydrogen Sulfide. *Journal of Occupational and Environmental Hygiene.* AIHA & ACGIH.
4. Kliethermes, D., Skelton, S., Agnew, R., Park, H., Bikkina, P. (In Press). Persistence of benzene in post-fire crude oil: Implications for hazard communication.
5. Skelton, S., Kliethermes, D., Agnew, R., Park, H., Bikkina, P., Kubecki, M., (In press). Tank Fire Evolutions and Foam Extinguishment: A Novel Testing Apparatus Used to Confirm Benzene Persistence in Post-Fire (Heat Affected) Crude Oil.
6. Skelton, S., Kliethermes, D., Agnew, R., Park, H., Bikkina, P., Kubecki, M., (In press). Diffusion of aromatics in crude oil during crude oil tank fires: Exploring the contribution of liquid-phase diffusion on benzene persistence using a novel simulation method.
7. Kliethermes, D., Skelton, S., Kubecki, M., Park, H., Bikkina, P., Agnew, R. (In Press). Steam Injection Treatment of Benzene Precursors: A Novel Testing Apparatus Simulating Crude Oil Tank Fire Conditions.
8. Skelton, S. Temperature Influence on Benzene Behavior in Crude Oil During Tank Fires: Liquid-Phase Diffusion and Implication for Firefighter Exposure. Oklahoma State University. 2025

TECHNICAL PRESENTATIONS

1. "Crude Oil Derailment Response 101". American Industrial Hygiene Conference (AIHce). Baltimore, MD. 2016.
2. "An Industry Responder's 2015 Perspective on Oil Spill". Clean Gulf Conference, New Orleans. November 2015.
3. "Crude Oil Derailment Worker Protection". Bureau of Explosives' Hazardous Materials Seminar. Addison, TX. 2014.
4. "Development of Job Safety Analysis Aids for Top 40 Rail HAZMAT Commodities". Railroad Environmental Conference (RREC). Urbana-Champaign, IL. 2017.
5. "In Situ Burn Safety, Principle Hazards & Prevention". Clean Gulf Conference. New Orleans, LA. 2018
6. "Importance of Hazard Assessments for Oil Spill Safety Planning". Clean Waterways Conference. St. Louis, MO. 2018.
7. "IH Strategies for Emergency Response". Chevron Annual IH Conference. San Diego, CA. 2017

TECHNICAL PRESENTATIONS CONTINUED

8. "Crude Oil Derailments – How to Respond Safely and Effectively". Clean Gulf Conference. New Orleans, LA. 2017.
9. "Bolus Vapor Exposure." Phillips 66 Incident Management Assist Team (IMAT) Annual Conference. Galveston, TX. 2018.
10. "Decontamination Essentials". Phillips 66 Incident Management Assist Team (IMAT) Annual Conference. Galveston, TX. 2018.
11. "Sophisticated Chemical Hazards". Phillips 66 Incident Management Assist Team (IMAT) Annual Conference. Galveston, TX. 2018.
12. "PPE Selection for Emergency Responders". Phillips 66 Incident Management Assist Team (IMAT) Annual Conference. Galveston, TX. 2018.
13. "Protecting Workers During Crude Oil Derailment Response". International Oil Spill Conference Technical Seminar. Long Beach, CA. 2017.
14. "Effective Hazard Assessments for Chemical Response." Clean Gulf Conference. New Orleans, LA. 2019
15. "Advanced Industrial Hygiene for Emergency Response Course." Clean Pacific Conference. Vancouver, British Columbia. 2019
16. "COVID-19 Strategies for Emergency Response". Clean Events: Houston, TX. 2020
17. "MSRC Advanced Industrial Hygiene for Emergency Response". MSRC Corp. Herndon, VA. 2020.
18. "High-Consequence Chemical Safety". Ouray Hazardous Material Symposium. Denver, CO. 2023