31st Annual Conference



February 17th -19th, 2023





This Years Topic:

Solar and Battery

Storage Systems

Bits, Bytes, Flights and More

Meeting the Training Topics The Investing Topics The Investing Topics The Investigation of th

on the JPR'S

2023 Featured Speakers



Todd Metzger



Steve Riggs



Ben Fischer

All Sessions are Tested and Sanctioned by IL-IAAI

Location: Holiday Inn and Suites Peoria at Grand Prairie 7601 N. Orange Prairie Peoria, IL









Who Should Attend

- * Fire/Arson Investigators, Public and Private Sector
- * Insurance Industry
- * Fire Department First Responders
- Law Enforcement Officers/Investigators/Detectives
- Prosecutors
- * Federal State, County, or Local Level Investigators
- * Military Investigators
- * Engineers, consultants and anyone else who is tasked with the duty of Investigating fires.

Why Should Investigators Attend

- In today's investigations it is imperative the investigator can demonstrate that he/she is following and in compliance with the standards of the fire investigation industry, for the purpose of this class NFPA® 1033 Professional Qualifications for Fire Investigator.
- * When you testify or are required to participate in depositions the expert may be required to present an up to date and accurate curriculum vitae that includes compliance documentation with regard to the requirements of the NFPA® 1033 standard.
- Fire investigators have been familiar with NFPA® 921, Guide for Fire and Explosion Investigators for many years. Today as an investigator, the question must be asked, can I assure the court, opposing counsel, and my agency or company, that I meet the requirements of NFPA® 1033, Professional Qualifications for Fire Investigator, Especially in the area of the post-secondary education requirements.





Fridays Conference Schedule
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Hospitality Room Sponsored by



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Conference Schedule—Friday, February 17th

11 AM - 1 PM Sign-in and Registration / Ticket for Raffle

1 - 2:45 PM **Ben Fischer, P.E.**

Solar and Battery Storage Systems

Presentation will cover the basics of design and installation methods of grid tied and battery backup equipped solar systems, discussion of the different types of equipment and battery systems that may be encountered, evaluation of various battery chemistries and features, as well as discussion of emerging industry trends, code changes, and new technology in this rapidly evolving field. Presentation includes safety and best practices for inspection and investigation of fires involving solar arrays and will include hands-on evaluation of commonly used components.

2:45 - 3:00 PM Break

3:00 - 5 PM **Ben Fischer, P.E.**

"Continued Solar and Battery Storage Systems"

7 - 11 PM Hospitality Room



Saturday Conference Schedule

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Saturday Lunch Sponsored by



OF PEORIA

Hospitality Room Sponsored by



www.SchaeferEng.com

Conference Schedule Saturday, February 18th

7 - 8 AM Sign-in and Registration / Ticket for Raffle

8 - 8:15 AM **Opening Introductions**

8:15 - 9:45 AM **Todd Metzger P.E.**

Bits, Bytes, Flights, and More

Mr. Metzger's course will provide information and resources related to new technologies available for use by the fire investigator for conducting investigations, documenting scenes, and more. These new resources to be discussed include 3D laser scanning, aerial photography, drone usage, LiDAR, and photogrammetry among other items.

9:45 - 10 AM **Break**

10:00 - Noon Bits, Bytes, Flights, and More (Continued) by Todd

Metzger

Noon - 1 PM Lunch Provided

1 - 3 PM Steve Riggs

You will be given the opportunity to meet the training

requirements of Topics on the JPR for 1033

3 - 3:15 PM **Break**

3 - 5 PM Steve Riggs

You will be given the opportunity to meet the training

requirements of Topics on the JPR for 1033

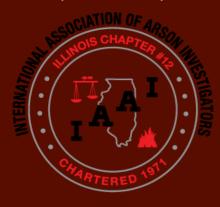
7 - 11 PM Hospitality Room

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Sunday Conference Schedule

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Conference Schedule Sunday, February 19th

7-8 AM **Sign – in**

8-8:15 AM Opening Introductions and Announcements

8:15-10 AM Steve Riggs

You will be given the opportunity to meet the training requirements of Topics on the JPR for 1033

10-10:15 AM Break

10:15-11:30 Steve Riggs

You will be given the opportunity to meet the training requirements of Topics on the JPR for 1033

Questions and Answers

Post Test

*Note all listed times are approximately and may slightly vary due to questions, class studies, or special interest subject matter being extended in any particular section.











Featured Speaker



Ben Fischer, P.E. Mechanical Engineer

Representative Service Areas

- Fire and Explosion Causation
- Product and System Evaluation
- Accident Investigation and Reconstruction

Professional Registrations and Certifications

- Licensed Professional Engineer
- Certified Fire and Explosion Investigator (NAFI-CFEI)
- Certified Vehicle Fire Investigator (NAFI-CVFI)
- FAA Part 107 Certified sUAS remote drone pilot
- Bosch CDR Tool Technician
- Asbestos Operations and Maintenance (OSHA)
- Certified Aerial Lift Operator (OSHA)
- MO Registered Safety Consultant

Ben graduated with a Mechanical Engineering Degree from the Missouri University of Science and Technology in 2007 and is a licensed Professional Engineer in several states. Upon obtaining his engineering degree, Ben filled numerous roles spanning process engineering, mechanical and electrical equipment design, research and development, and product failure evaluation while working for over a decade in the heavy electrical manufacturing industry at various companies.

Since joining Schaefer Engineering in 2017, Ben has worked with equipment failures, building & vehicular fires, explosion cases, as well as automotive investigations and crash reconstruction.

Ben is a Certified Fire and Explosion Investigator (NAFI-CFEI) and a Certified Vehicle Fire Investigator (NAFI-CVFI). In addition, he is a FAA Licensed Part 107 Drone Pilot (FAA Airman Certificate, Remote Pilot, Small Unmanned Aircraft System). Ben is also a member of SAE, ASME, NAFI, IAAI, and is a Missouri registered safety engineer.

Other engineering areas in which Ben has expertise include solar system design and installation, having operated a solar installation company for many years, a background in automotive racing through Formula SAE, as well as decades of automotive restoration, repair, and rebuilding experience.



Featured Speaker



Steve Riggs

After working in law enforcement and in the fire service in Oklahoma for 22 and ¾ years, I have taught nationally for the past twenty-five years in several areas of fire investigation. I am the Director at National Fire Arson Investigation Training Institute, a division of Legal Liability and Risk Management Institute.

I still actively examine fire scenes, I am a subject matter expert in defending law enforcement and fire service litigation issues for Legal Liability and Risk Management Institute.











Featured



Todd Metzger, P.E. Mechanical Engineer

Representative Service Areas

- Product and System Evaluation
- Component and System Failure Analysis

Professional Registrations and Certifications

- Licensed Professional Engineer
- Certified Fire Investigator (IAAI-CFI)
- Certified Fire and Explosion Investigator (NAFI-CFEI)
- Certified Fire Investigator (Missouri Division of Fire Safety)
- FAA Part 107 Certified sUAS remote drone pilot
- Asbestos Operations and Maintenance (OSHA)
- Certified Aerial Lift Operator(OSHA)

Todd graduated with a Mechanical Engineering Degree from the University of Missouri – Rolla in 2001 and is a licensed professional engineer in several states. Upon obtaining his engineering degree, Todd designed and manufactured hydraulic and pneumatic couplings. Todd then moved into engineering consulting with a St. Louis-based design firm specializing in engineering and construction of industrial projects such as metals refining, chemical processing, cement production and consumer products. Todd's experience includes operation and design of heavy industrial equipment, design of process piping systems, process development, and on-site construction engineering. Other mechanical engineering fields in which Todd has expertise include industrial process equipment, product/machine design, and manufacturing processes.

Todd is a Certified Fire and Explosion Investigator (NAFI-CFEI) and Certified Fire Investigator (IAAI-CFI). He is also a Licensed Private Fire Investigator in the State of Missouri. Todd is a member of the American Society of Mechanical Engineers (ASME), the Society of Automotive Engineers (SAE), the National Society of Professional Engineers (NSPE), the International Association of Arson Investigators (IAAI), the National Association of Fire Investigators (NAFI) and the National Fire Protection Association (NFPA). Additionally, Todd has hands-on training and experience as a firefighter and law enforcement officer.

Todd is also a FAA Licensed Part 107 Drone Pilot having received his Federal Aviation Administration Airman Certificate, Remote Pilot, Small Unmanned Aircraft System.



RESTORATION SERVICES

Recovery Starts with One Call

When your property is damaged, emergency response time is vital. Minutes can make the difference between recovery and total loss. BluSky's trained specialists are positioned to respond to your needs at any time, day or night, within minutes.

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- Moisture detection with infrared technology
- ✓ Temporary power distribution
- ✓ Water extraction and pumping
- ✓ Monitored structural drying
- Sewage clean-up, sanitization and disposal
- ✓ Disinfection and odor neutralization
- ✓ Total reconstruction



- ✓ Immediate action
- Emergency board up & temporary roof cover
- ✓ Structural shoring & bracing
- ✓ Temporary power distribution
- ✓ Fast track demolition & clean-up
- ✓ Smoke & soot removal
- ✓ Total reconstruction



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- ✓ 24-hour air quality monitoring
- ✓ Lead and asbestos removal
- Total reconstruction

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FIRE CAUSATION

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- Commercial Kitchen Fires
- Fire Suppression Systems

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- Fuel-Gas & Dust Explosions
- Failure Analysis
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 - o Mechanical
 - o Electrical
 - o Metallurgical & Materials



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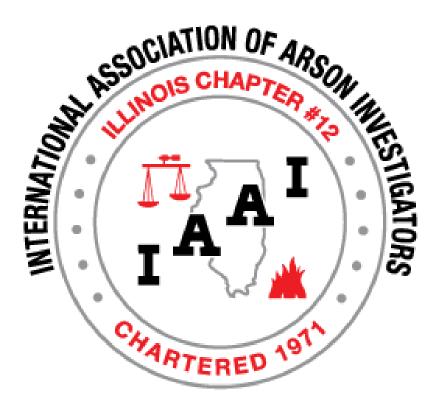
An Industry Leader for Over 25 Years



FireTech, **Inc.** provides fire investigation and consulting services, while working with forensic engineers, to all types of clients. Our fire experts, with a combined total of over 160 years of experience and handling over 15,000 cases, are able to provide superior technical depth in analyses that are rooted in established scientific principles. We offer fire investigation services related to residential fires, commercial fires, vehicle fires, agricultural equipment fires, marine fires, and isolated product related fires throughout the Midwest including Illinois, Wisconsin, Indiana, Iowa, and Missouri.

FireTech, Inc. is the largest fire investigation company in the Midwest

The Illinois Chapter of the IAAI proudly supports the CIFIA and a successful 2022 Annual Conference.



IL-IAAI Mission Statement

The mission of the Illinois Chapter of the International Association of Arson Investigators:

- To unite for mutual benefit public officials, private persons, and associations who are engaged in the investigation of the origin and cause of fires.
- To provide, develop and support the establishment of training, educational programs and educational materials to improve the quality of fire investigations.
- To support and sponsor legislation which will improve the quality of fire investigations and reduce the incidents of Arson.
- To develop programs and implement strategies and initiatives to increase public awareness of Arson and its impact on our communities.
- To encourage high professional standards of conduct among fire investigators and continually strive to eliminate all factors that interfere with the investigation of the origin and cause of fires.

Hazard, Keefe and Leane Engineering proudly supports the CIFIA and a successful 2022 Annual Conference.

HAZARD, KEEFE & LEANE ENGINEERING

HKL investigates fire, explosion, and carbon monoxide asphyxiation occurrences involving fuel burning equipment and appliances. Those investigations focus on gas supply equipment, gas distribution systems (both underground and within structures), and gas-fueled equipment, such as furnaces, boilers, water heaters, stoves/ranges/ovens, fireplaces, clothes dryers, gas grills, and various industrial equipment. Fire extinguishing systems are also analyzed to assess their involvement in fire spread.



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- Mold Mitigation and Remediation
- Catastrophic Storm Response
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Cleaning:

- Air Ducts and HVAC
- Biohazard, Crime Scene and Vandalism
- Carpet, Upholstery, Drapes and Blinds
- Ceilings, Walls and Hard Floors
- Deodorization
- Services vary by location

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Room Rate: \$98 per night

A limited number of rooms are available at this rate. Please call and reserve your room as soon as possible.

Contact the hotel directly for reservations.

To ensure discounted rate, please indicate you are with the Central Illinois Fire Investigators Association conference.





Hotel Facilities

Welcome to the new Holiday Inn and Suites Peoria at Grand Prairie! Peoria's newest Holiday Inn Hotel is situated amongst the beautiful and upscale Grand Prairie Development in north Peoria, IL. Surrounded by popular shopping, fine dining, casual eateries and the Louisville Slugger Sports Complex, this location is sure to entice both business and leisure travelers alike. Travel is easy and convenient being located just minutes away from the General Wayne Downing Peoria International Airport, I-74, and HWY 150/War Memorial Drive. Our non-smoking hotel is the perfect location when visiting Caterpillar, Peoria Civic Center, Illinois Eye Center, Louisville Slugger Sports Complex, Illinois Cancer Center, Monarch Music Hall or Bradley University's Renaissance Coliseum. Hotel guests may enjoy a plethora of amenities including an Indoor Saline Pool, Fully Equipped Fitness Center, Casually Exquisite Restaurant and Bar, Swift Room Service, Family Friendly Accommodations, and Market24 – an onsite 24 hour food mart. With just over 6000 square feet of banquet space available, let our attentive, expert staff help you plan your next corporate meeting, wedding, award banquet or other social event. With state of the art audio visual equipment, excellent lighting and exceptional catering, your event is sure to WOW.

Amenities

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Kitchenette Cocktail Lounge Restaurant

Accessibility

Number of Accessible Rooms: 7 Service Animals Permitted

Pet Info

Pet Fee Per Night: \$75.00

Parking

Car Parking Available

Health & Fitness Center

Health/Fitness Center On-Site

Internet Access

Free Internet



Register online at www.cifia.org

Registration Fee

Active (Current) CIFIA Members \$150.00

Non- Members \$175.00

If Paying by Credit Card Please Contact

Charlie Perrin at (309) 494-8735 or cperrin@peoriagov.org

Price includes all breaks and lunch on Saturday

No cancellation. Registration can be transferred when notice is sent in writing to CIFIA.



For more information, please contact:

Brad Pierson

(309) 494-8734 bpierson@peoriagov.org

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Name		
Address		CIFIA P.O. Box 2631
City, State, Zip		East Peoria, IL 61611
Agency		Please make checks payable to CIFIA
Cell Phone		Conference Date: February 17-19 2023
Work Phone (Optional) Email		NOTE: Registrations must be postmarked by February 15, 2022 If mailing to Box Office
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