



PAAI ANNUAL TRAINING CONFERENCE **October 21-23, 2026**

The Penn Stater Hotel and Conference Center
215 Innovation Blvd., State College, PA 16803
814-863-5000, ext. 2

(PAAI ROOM RATE \$149.00/night + TAXES)

Call the hotel to make reservations.

You must use our Group Code “PAAI26A” when making your reservation
The deadline to reserve a room under the PAAI block is September 21, 2026

You can also use the link below for room reservations
<http://bookings.ihotelier.com/bookings.jsp?groupID=4996521&hotelID=9877123>

Wednesday October 21, 2026
08:00 to 12:00

Introduction to Residential Solar Systems and Fire Causes

4 hours

Bert Davis, Ph.D., P.E., CFI, CFEI
Romualdi, Davidson, and Associates (RDA)

This presentation will review the varied components of a residential solar system, how they function, and how they can fail. It will also review fire causes and investigations related to a residential solar system.

Wednesday October 21, 2026
13:00 to 17:00

Codes, Standards, and Fire Investigations

4 hours

Raymond Anthony, IAAI-CFI & ECT, NAFI- CFEI, Certified Fire Inspector

This presentation will explore and discuss the application of various Codes and Standards as they relate to building systems, fire safety requirements, building construction, occupancy certifications, licensing requirements, etc. to fire investigations. Additionally, the presentation will cover documentation of the scene so a proper Code analysis can occur. The information presented will be valuable to both the public and private sector fire investigators.



**Thursday October 22, 2026
08:00 to 12:00**

Fire Dynamics for Fire Investigators

4 hours

Daniel Madrzykowski, PhD, Senior Director of Research for the Fire Safety Research Institute, Fellow in the Society of Fire Protection Engineers, Member of the NFPA Technical Committee on Fire Investigations

The Fire Safety Research Institute (FSRI), a part of the UL Research Institutes, has conducted research examining the impact that changes in home construction materials, contents, size, and geometry have brought to residential structure fire growth and development. These changes in the built environment will impact the fire patterns that investigators will find. Today's fires are predominantly fueled by synthetic contents and commonly become ventilation limited. How and where the fire receives oxygen impacts the fire dynamics and subsequent fire patterns.

This presentation will examine the current structural fire environment and the basics of fire dynamics, especially related to ventilation-limited fires and flow paths. A section on flow paths has been added into the 2024 edition of NFPA 921. Data and videos from full-scale house experiments will be used to enable the understanding of the development of fire patterns relative to the changes in ventilation. The test structures include one-story ranch structures and two-story colonial structures. The test scenarios ranged from fires in the homes with no exterior ventilation, to room fires with flow paths that connected the fires with remote intake and exhaust vents throughout the structures. The impact of HVAC systems on fire development in homes will also be presented.

This presentation will also provide an overview of research results from ongoing research efforts. Featured results will include the recently released materials and products database and full-scale data repositories which are publicly available for use at no cost. Additionally, results from the post-fire exposure risks to fire investigators study and an example of a near miss analysis case will be shared.

**Thursday October 22, 2026
13:00 to 15:00**

Evidenced Based Tools for Fire Analysis

2 hours

Daniel Madrzykowski, PhD

This presentation will use case studies to demonstrate how tools such the FSRI Material and Products (MaP) Database, structural fire dynamics research results, firefighting tactics research results, and validated and verified computer-based fire models were used to develop insight into how the fire evolved. The case studies will include residential and commercial fires. This presentation will build on the earlier presentation on fire dynamics, especially related to ventilation limited fires and flow paths.



Thursday October 22, 2026
15:00 to 17:00

Lithium-Ion Battery Fire Awareness for Fire Investigators

2 hours

Daniel Madrzykowski, PhD

Lithium-Ion batteries (LiBs) are everywhere. They are in personal electronics, power tools, micro-mobility devices, electrical automobiles, and energy storage systems. Researchers around the globe have been working to characterize the hazards from LiBs generated during a thermal runaway. This presentation will examine the hazards from Li-Ion powered devices ranging from chemical and thermal exposures to explosions. Safe practices when investigating fire scenes where LiBs may be present will also be discussed.

Friday October 23, 2026
08:00 to 12:00

Fire Protection Failures: Engineering Case Studies for Fire Investigators

4 hours

Joon W. Yoo, PE, CFEI, CFII, CFPS
Owner of Columbia Fire Protection, LLC, Adjunct Associate Professor
at the University of Maryland Global Campus and Eastern Kentucky University

This presentation examines real-world failures involving sprinkler systems, fire alarm systems, standpipe systems, commercial kitchen hood suppression systems, and impaired water supplies. Through actual case studies, attendees will learn how fire protection system deficiencies, maintenance issues, and human factors can contribute to fire growth and property loss. The course incorporates NFPA 921 investigative principles and key concepts from NFPA 13, NFPA 25, NFPA 72, and NFPA 96 to help investigators evaluate system performance and identify factors that contributed to fire protection failures.



PAAI 2026 Annual Training Conference Schedule

Tuesday October 20, 2026

19:00 PAAI Board of Directors Meeting
19:00 Hospitality Room Open

Wednesday October 21, 2026

07:30 – 08:00 Registration
08:00 – 08:30 Opening Ceremony/President's Welcome Message/Announcements
08:30 – 12:00 Classroom Instruction
12:00 – 13:00 Lunch (Provided)
13:00 – 17:00 Classroom Instruction
18:00 IAAI ECT Practicum Must register with and be pre-approved by the IAAI
19:00 Hospitality Room Open

Thursday October 22, 2026

08:00 – 12:00 Classroom Instruction
12:00 – 13:00 Lunch (Provided)
13:00 – 17:00 Classroom Instruction
18:00 PAAI Annual General Meeting
Hospitality Room Open after the General Meeting

Friday October 23, 2026

08:00 – 12:00 Classroom Instruction
12:00 Closing remarks

Training CEU's 20 Hours (8 hrs. Wed., 8 hrs. Thurs., and 4 hrs. Fri.)

Online Class Testing will be announced at the start of the seminar



Cost for the seminar: \$400 for all THREE days

POST MARKED BY OCTOBER 15, 2026

Individual days - \$150.00/day

SEND COMPLETED REGISTRATION TO:

Nancy Love: 585 Firethorn Drive, Monroeville, PA 15146

Nancy.Love@AlleghenyCounty.US

NAME: _____ PAAI NO. _____

EMAIL: _____

ADDRESS: _____

PHONE NO. _____

COMPANY _____

____ I am attending all three days \$400.00

____ I wish to attend Wednesday \$150.00

____ I wish to attend Thursday \$150.00

____ I wish to attend Friday \$150.00

CHECK OR MONEY ORDER MADE OUT TO: PAAI –TRAINING

Those wishing to pay by Credit Card please see the PAAI website,
PAAI.org, for details.