

**Seminar Series** presentations are considered a supplement to firefighter and Fire Officer classes offered by the Connecticut Fire Academy. Classes provided by the Connecticut Fire Academy comply with NFPA standards and best practices of the fire service. Seminar Series are also based on these standards and practices but can and often do include opinions of the subject matter experts that are delivering the presentation. Attending any number of the Seminar Series will allow the student to, not only add to their existing training; but also encourage the student to choose from the opinions of different speakers to develop their own style of strategies and tactics at emergency scenes, as well as inspire them to acquire more knowledge on fire service subjects.



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Department of Emergency Services and Public Protection  
Commission on Fire Prevention and Control  
**Connecticut Fire Academy**  
34 Perimeter Road  
Windsor Locks, CT 06096-1069  
860-627-6363, In-State Toll Free: 877-528-3473,  
Fax: 860-654-1889



**2017 Seminar Series • Fire Dynamics: Applications on the Fire Ground**



## Fire Dynamics: Applications on the Fire Ground



**Saturday, November 18, 2017**

**8:30am - 4:30pm**

An Affirmative Action/  
Equal Employment Opportunity Employer

## Fire Dynamics: Applications on the Fire Ground

It is not uncommon to hear that structure fires are hotter today than they were years ago. How do furnishings and ventilation affect the fire and the temperature inside the structure? Does the type and movement of the hose stream matter when fighting a structure fire? This presentation will discuss how building geometry, materials, furnishings, ventilation and firefighting tactics can influence fire growth and spread leading to untenable conditions for firefighters. Fire behavior will be reviewed in basic terms to provide the building blocks to characterize and describe the thermal environment that firefighters may be exposed to. This presentation will examine video and data, from a wide range of fire experiments to examine the thermal and toxic gas conditions that are present in structure fires. Case studies will be used to help put the significance of the test results in fire ground context for the fire service. The importance of size-up and the coordination of suppression and ventilation tactics will be discussed.



**Instructor Biography -**  
Daniel Madrzykowski, P.E.  
UL Firefighter Safety Research  
Institute, Columbia, MD

UL FSRI's mission is improving firefighter safety and effectiveness. Dan has been conducting research in the areas of fire suppression, large fire measurements, fire investigation and fire fighter safety for more than 30 years. His focus is on the transfer of research results into practice. Dan is a member of the ISFSI and he was named their Instructor of the Year in 2009. Dan holds the rank

of Honorary Battalion Chief with the FDNY and received the IFSTA Granito Award for Excellence in Fire Leadership in 2012. In 2013 Dan was invited to the White House in honor of receiving a Service to America Medal. He received a President's Award from the IAFC for his firefighting research in 2014. Dan has a PhD in Fire Engineering from the University of Canterbury.



# Student Application Form

A separate application is required for each course.

Please print/type and mail/fax with payment to:

**CFPC**  
**34 Perimeter Road,**  
**Windsor Locks, CT 06096-1069**

**Fax number: (860)654-1889**

Last Name \_\_\_\_\_ First \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_ Zip \_\_\_\_\_

Phone (Home) \_\_\_\_\_

Work \_\_\_\_\_

Cell \_\_\_\_\_ Pager \_\_\_\_\_

Fire Dept./Organization \_\_\_\_\_

Email \_\_\_\_\_

☐ Check box if you would like to subscribe your email address to the CFPC listserv.

Are you 18 years of age or older? ☐ Yes ☐ No  
(No one under 18 is allowed to participate in hands-on programs)

#### Returned Check Policy

A \$25.00 fee will be assessed to all returned checks (insufficient funds, stop payment, etc.). In order to complete your registration after the receipt of a returned check, you must submit cash, money order, or a bank check including the amount of tuition and the returned check fee to the registrar.

Please insert your ID number below:

ID Number \_\_\_\_\_ - \_\_\_\_\_

Your ID consists of the first (3) letters of your last name and the last (4) numbers of your social security number.

Example: John Adams - SS# 000-00-5555  
The new ID # will be ADA-5555

As Chief of the **(Fire Department)**:

or as Supervisor of the **(Organization)**:

Print **Name**:

I hereby authorize the above applicant to participate in the program below and, therefore, understand that the above-named individual will be covered by my organization's Worker's Compensation Insurance while participating in such training, and that the Commission on Fire Prevention and Control, its commissioners, officers, agents or employees shall not be liable for any injuries sustained during such training. This applicant is considered by my department's standards to be physically and emotionally fit to perform firefighting evolutions without special considerations, and where applicable, to meet the 29 CFR 1910.134 standard for the use of respirators (Self-Contained Breathing Apparatus).

Chief or Supervisor (Signature): \_\_\_\_\_

No application will be accepted without tuition, authorized signature and proof of prerequisite (if required).

Register me for the following course:

Course Title **Fire Dynamics: Applications on the Fire Ground**

Course # **18115** Time **8:30am - 4:30pm**

Date **Saturday, November 18, 2017** Tuition **FREE due to a generous donation by UL**

**Method of Payment - Payment is required at time of registration. Do not send cash.**

**Faxes must include Credit Card or Purchase Order #.**

☐ Check made payable to CFPC

☐ Purchase Order # \_\_\_\_\_

☐ VISA or MC Card # \_\_\_\_\_

Expiration Date: \_\_\_\_\_

Card Holder's Name: \_\_\_\_\_

Card Holder's Signature: \_\_\_\_\_