

# SUPDET 2010 – DETECTION PROGRAM

**Tuesday, February 16, 2010**

**8:00** Welcome *Tampa Bay Ballroom*  
**Ronald K. Mengel Award**

**8:15** **Session I: Mass Notification**

8:15 **The Human Side of Mass Notification**  
Erica Kuligowski, National Institute of Standards and Technology

9:00 **Risk Analysis and Mass Notification**  
Ray Grill, Arup

**9:30** **Session II: Home Smoke Alarms**

9:30 **Smoke Alarm Presence and Performance in U.S. Homes Fires**  
Marty Ahrens, National Fire Protection Association

10:00 **Break**

10:30 **An Egress Analysis of the Smoke Alarm Sensitivity Study**  
Thomas Cleary, National Institute of Standards and Technology

11:00 **The Time of Activation of Smoke Alarms in Houses**  
Ian Thomas and Dorothy Bruck, Victoria University of Technology

11:30 **Smoke Alarms – Pilot Study of Nuisance Alarms Associated with Cooking**  
Arthur Lee, Danny Pineda, U.S. Consumer Product Safety Commission

**12:00 – 1:30** Lunch on own

**1:30** **Session III: Unique Applications**

1:30 **Assessment of Fire Safety Measures in Proscenium Theatres**  
Jaewook Kwon, Jarrod Alston, David Jacoby, Jim Niesel, Arup

2:00 **Effect of Ventilation Air Velocity on the Detection of Conveyor Belt Fires**  
Charles Litton, Eranda Perera, National Institute for Occupational Safety and Health

**2:30 Session IV: Testing**

2:30 **Development of Flaming, and Smoldering Polyurethane Test Fires and an Update on Other UL Standards Technical Panel Activities That Can Impact the Response of Smoke Alarms and Detectors to Non-Specific Fires**  
Paul Patty, Underwriters Laboratories Inc.

3:00 **Break**

3:30 **Video Image Detection – No Longer a Supplemental System**  
Bob Elliott, FM Approvals

4:00 **Detection Technology – a Comparative Performance**  
Faruk Meah, Anil Konjalwar, Tyco Safety Products

**5:00 – 6:30 Reception** *Tampa Bay Patio*

**Wednesday, February 17, 2010**

**9:00 Session V: Industrial Applications**

9:00 **Video Image Detection and Optical Flame Detection for Industrial Applications**  
Dan Gottuk, Joshua Dinaburg, Hughes Associates, Inc.

9:30 **Study of Video Image Fire Detection Systems for Protection of Large Industrial Applications and Atria**  
Geroge Hadjisophocleous, Carleton University  
Jun Ouyang, Guofeng Ding, InnoSys Industria Inc.  
Zhigang Liu, General Fire Technologies, Inc.

10:00 **Break**

10:30 **Comparative Testing of Detection Technologies in a High Bay Application (Warehouse)**  
James Lynch, axonX

11:00 **Open-Area Smoke Imaging Detection (OSID)**  
Ron Knox, Xtralis Pty. Ltd.

**11:30 Closing Comments, Feedback**

**1:30 – 6:00 Special Workshop for all SUPDET registrants**

*Innovative Fire Protection Concepts for High Challenge Warehouses*

*Tampa Bay Ballroom*

**Special Workshop for all SUPDET registrants  
Wednesday, February 17, 1:30 – 6:00 p.m.**

*Innovative Fire Protection Concepts for High Challenge Warehouses*  
*Tampa Bay Ballroom*

**SUPDET 2010 – SUPPRESSION PROGRAM**

**Thursday, February 18, 2010**

**8:00** Welcome *Tampa Bay Ballroom*

**William M. Carey Award**

**8:15** **Session I: High Challenge Warehouse Protection**

8:15 **New Approaches for High Challenge Warehouse Protection (workshop outcome)**  
Richard Gallagher, Zurich Services Corp.

9:00 **High Challenge Warehousing: Ammonium Nitrate as a Typical Case Study**  
Guy Marlair, Marie-Astrid Kordeck, Christian Michot, INERIS

**9:30** **Session II: Sprinkler Protection**

9:30 **High Challenge Commodity Fire Protection: Aerosol Packaging per NFPA 30B**  
Martin Pabich, Underwriters Laboratories Inc.

10:00 **Break**

10:30 **Assessment of the Effects of Air Movement Created by High Volume/Low Speed Ceiling Fans on Fire Sprinkler Operations**  
Peter Willse, XL Global Asset Protection Services

11:00 **Large-Scale Fire Testing of Cartoned Plastics**  
Seth Sienkiewicz, FM Global

11:30 **Evaluating Sprinkler Spacing Requirements for Residential Sprinklers on Sloped Ceilings and Sloped Ceilings with Beams**  
Jason Floyd, Haavard Boehmer, Josh Dinaburg, Ed Budnick, Hughes Associates, Inc.

**12:00 - 1:30** Lunch on own

**1:30** **Session III: Developments in Extinguishing Mechanisms**

1:30 **Effect of Bromine and Iodine on Methanol and Methane Flames**  
C. Luo, Z. Dlugogorski, E. Kennedy, University of Newcastle (Australia)

2:00 **Water Mist Fire Protection – Research on a Numerical Toolbox for Systems Effectiveness Assessment**  
Luca Iannantuoni, Giovanni Manzini, Politecnico di Milano – Department of Energy

(session continues on next page)

## Thursday, February 18, 2010 (continued)

### Session III: Developments in Extinguishing Mechanisms (cont.)

- 2:30 **Modeling Cup-Burner Minimum Extinguishing Concentration of Halogenated Agents**  
Shiling Liu, Meredith Colket, United Technologies Research Center
- 3:00 **Characteristic of Dry Chemical Powders using Reduced-Scale Fire Test Methodologies**  
Stephen Preece, Thierry Carriere, Norberto Lemcoff, Joshua Sheffel  
United Technologies Research Center

### **3:30 Break**

### 4:00 Session IV: Specialized Applications and Emerging Technologies

- 4:00 **Protection of Engine Enclosures Using Aerosol Generators**  
Eric Forssell, Joseph Scheffey, Hughes Associates, Inc.  
John Farley, Navy Technology Center for Safety and Survivability
- 4:30 **Wet Chemical Fire Suppression for Extreme Low-Temperature Vehicle Applications**  
Stephanie Thomas, Chad Powell, Brian Stumm, Kidde Fenwal Inc.  
Ann Regina, Kidde Fire Fighting
- (session to be continued Friday AM)

### **5:00 –6:30 Reception** *Tampa Bay Patio*

## Friday, February 19, 2010

### 8:00 Session IV: Specialized Applications and Emerging Technologies (cont.)

- 8:00 **Performance of Novec1230 in Electronic Facility Fire Protection**  
Andrew Kim, George Crampton, National Research Council of Canada
- 8:30 **Fire Extinguishing Agents for Protection of Occupied Spaces in Military Ground Vehicles**  
Steven Hodges, Alion Science and Technology  
Steven McCormick, Army TARDEC Ground Systems Survivability

**9:00 Session V: Featured Research at the U.S. Naval Research Laboratory**

**Effects of Droplet Size and Mass Loading on Water Mist Extinction**

Ramagopal Ananth, John Hoover, US Naval Research Laboratory

**Assessment of the Fire Suppression Properties of Mists of Aqueous Potassium Acetate**

James Fleming, Nicholas Jaffa, Ramagopal Ananth, US Naval Research Laboratory

**Break**

**Effects of Moving Boundary and Expansion Ratio of High Expansion (HiEx) Aqueous Foam on Fire Suppression**

Ramagopal Ananth, John Farley, US Naval Research Laboratory

**Regimes of Fire Spread Across an AFFF-Covered Liquid Pool**

Bradley Williams, Justin Taylor, Ronald Sheinson, US Naval Research Laboratory

**Developments of a TDLAS Diagnostic for Studying the Interaction of Fire and Aqueous High Expansion Fire Suppression Foams**

Eric Fallows, James Fleming, US Naval Research Laboratory

**12:00 Closing Comments, Feedback  
Adjourn**