Workshop on Structure Ignition in Wildland-Urban Interface (WUI) Fires
Sponsored by ASTM International Committee E05

June 18-19, 2015
Marriott Anaheim
Anaheim, CA

Workshop Chairmen: Samuel L. Manzello
National Institute of Standards and Technology, (NIST)
Gaithersburg, MD, USA

Stephen Quarles
Insurance Institute for Business & Home Safety
Richburg, SC, USA

THURSDAY, JUNE 18, 2015

1:00 PM
Introduction to Workshop
Samuel L. Manzello, Workshop Chairman

1:10 PM
Are Existing Building and Fire Codes Providing Adequate Protection for Communities Exposed to Wildland-Urban Interface Fires - An Overview of Existing Wildland-Urban Interface Fire Codes
Nelson Bryner, Fire Research Division, National Institute of Standards and Technology (NIST), Gaithersburg, MD USA

2:30 PM
Review of Pathways to Fire Spread in the Wildland Urban Interface
Michael J. Gollner, Raquel Hakes, Sara Caton and Kyle Kohler, Department of Fire Protection, Engineering, University of Maryland, College Park, MD, USA

3:00 PM Break

3:30 PM
Role of Event-Based Data in Wildland-Urban Interface Fire Mitigation – Limitations of Incident-based Data
Nelson Bryner and Alexander Maranghides, Fire Research Division, National Institute of Standards and Technology (NIST), Gaithersburg, MD, USA
4:00 PM
EcoSmart Fire as Structure Ignition Model in WUI: Predictions and Validations
Mark A. Dietenberger and Charles R. Boardman, USDA Forest Products Laboratory, Madison, WI, USA

4:30 PM
Firebrand Generation and Impact on Wooden Constructions in the Wildland-Urban Interface
Kamila Kempna, Mohamad El Houssami, Eric Mueller, Jan C. Thomas, Rory Hadden, and Albert Simeoni, Fire Safety Engineering Department, University of Edinburgh, Edinburgh, UK

5:00 PM   End for the Day

FRIDAY, JUNE 19, 2015

8:00 AM
Upgrading Heritage Buildings to Resist Exterior Fire Exposure by Sympathetic Means and a Method to Assess Aggregate Envelope Performance
Geir Jensen, Tobias Jarnskjold, Thomas Haavi, COWI AS, Trondheim, Norway

8:30 AM
Fire Hazard in Camping Park Areas
Miguel Almeida, Luís Mário Ribeiro and Domingos Viegas, Center for Forest Fire Research ADAI – LAETA, Coimbra, Portugal; José Raul Azinheira, Alexandra Moutinho, João Caldas Pinto, IDMEC/CSI – LAETA, Universidade de Lisboa, Lisbon, Portugal; Jorge Barata, Kouamana Bousson and Jorge Silva, AEROG – LAETA, Universidade da Beira Interior, Covilhã, Portugal; Marta Martins, INEGI – LAETA, Instituto de Engenharia Mecânica e Gestão Industrial, Porto, Portugal; and Rita Ervilha and José Carlos Pereira, IDMEC/LASEF – LAETA, Universidade de Lisboa, Lisbon, Portugal

9:00 AM
Firebrand Production from Building Components with Siding Treatments Applied
Sayaka Suzuki, National Research Institute for Fire and Disaster (NRIFD), Chofu, Tokyo, Japan; and Samuel L. Manzello, National Institute of Standards and Technology (NIST), Gaithersburg, MD, USA

9:30 AM
Accumulation Patterns of Wind-blown Embers around Buildings
Stephen L. Quarles and Murray J. Morrison, Insurance Institute for Business & Home Safety (IBHS), Richburg, SC USA

10:00 AM   Break
10:30 AM  
**Fire Performance of Exterior Wood Decks in Wildland-Urban Interface**  
Laura E. Hasburgh and Samuel L. Zelinka, US Forest Products Laboratory, Madison, Wisconsin USA; and Donald S. Stone, Materials Science and Engineering, University of Wisconsin, Madison, Wisconsin USA

11:00 AM  
**Spot Fire Ignition of Natural Fuel Beds of Different Characteristics by Hot Aluminum Particles**  
James L. Urban, Casey D. Zak and Carlos Fernandez-Pello, Department of Mechanical Engineering, University of California Berkeley, Berkeley, CA USA

11:30 AM  
**Experimental Investigation on Building Component Ignition by Mulch Beds Ignited by Firebrand Showers**  
Samuel L. Manzello, Fire Research Division, National Institute of Standards and Technology (NIST), Gaithersburg, MD, USA; Sayaka Suzuki, National Research Institute of Fire and Disaster (NRI FD), Chofu, Tokyo, Japan; and Daisaku Nii, Building Research Institute (BRI), Tsukuba, Ibaraki, Japan

12:00 PM  
**End of Workshop**