Fire and Evacuation Modeling Technical Conference 2014

Day 1 – September 8, 2014

08:00	Check-In Continental Breakfast
08:30	Welcome and Introduction

Improvements in FDS 6 and Development Update
Kevin McGrattan, National Institute of Standards and Technology

Automated Testing Process for FDS 6
Kristopher Overholt, National Institute of Standards and Technology

Early to Break...

10:00	Morning Break

10:20 **Pyrolysis Parameterization and Validation for Polymeric Material**
Jing Li, University of Maryland

Influence of Input Parameters on the Fire Simulation
Corinna Trettin, University of Wuppertal

Interface Model to Fire-Thermo-Mechanical Performance-Based Analysis of Structures Under Fire Conditions
Julio C. Goncalves da Silva, Guest Researchser, National Institute of Standards and Technology

12:00	Lunch

13:20 **The Need for a Verification and Validation Protocol for Evacuation Models**
Enrico Ronchi, Lund University

The User's Guide to Evacuee Behavior
Steve Gwynne, National Research Council Canada

Lost in Abstraction: The complexity of Real Environments vs. the Assumptions of Models
Elisabetta Carattin, IUAV University of Venice

15:00	Afternoon Break

15:20 **Fire and Evacuation Simulation in a Low Ceiling Sport Arena**
Georges Guigay, Verkis Consulting Engineers

Developing a Swedish Best Practice Guideline for Proper Use of CFD Models when Performing ASET analyses
Daniel Rosberg, WSP Sverige AB

Study of the Dynamics of Fire and Smoke Control in Case of Evacuation in High Buildings, Based on Continuous Model FDS+EVAC
Aristides Lopes Silva, Universidade del Cabo Verde

Evacuation Modeling in Road Tunnel Fire Events – CFD Influencing Evacuation Results
Toby Sargant, Hatch Mott MacDonald

17:00	Reception

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Day 2 – September 9, 2014

08:00	Continental Breakfast

08:30 **Impact of Soot Particle Size and Agglomeration on Soot Deposition**
Jason Floyd, Hughes Associates | RJA Group

Performance Analysis and Shared Memory Parallelization of FDS
Lukas Arnold, Juelich Supercomputing Centre

Numerical Insights into the Parallel Solution of the FDS Pressure Equation: Scalability and Accuracy
Susanne Kilian, hhpberlin

10:00	Morning Break

10:20 **Defining a Crowd Safety Factor for the Designs of Assemblies**
Rodrigo Machado Tavares, RMT Fire and Crowd Safety

Use of Pathfinder in the Study of Occupant Movement in Stairwells
Chris Campbell, The Protection Engineering Group, Inc.

Egress from a Hospital Ward: A Case Study
Grazia Carbotti, Università Campus Bio-Medico di Roma

Effects of Exit Discharge Congestion on the Effective Evacuation Time in a Typical Underground Metro Station Design
Yulianto Sulistyo Nugroho, Fire Safety Engineering Research Group, Universitas Indonesia

12:00	Lunch

13:20 **Pathfinder Verification and Validation Tests**
Brian Hardeman, Thunderhead Engineering

Industry Accepted Design: A Case Study on Prescriptive vs. Performance-Based Design Criteria
Mackenzie Hill, Arup

Modeling of Carbon Monoxide Dispersion from Vehicle Exhaust in a Partially-Enclosed Roadway Using FDS
Haavard Boehmer, Hughes Associates | RJA Group

Approach to Define the Aerodynamic Free Area for Natural Smoke Vents in a CFD Simulation Environment
Lajos Gábor Takács, Budapest University of Technology

15:00	Afternoon Break

15:20 **A Partially-Stirred Batch Reactor Model for Under-Ventilated Fire Dynamics**
Craig Weinschenk, National Institute of Standards and Technology

Optimization of Smoke Ventilation Strategy in a Typical Underground Metro Station Fire
Yulianto Sulistyo Nugroho, Fire Safety Engineering Research Group, Universitas Indonesia

Integral Methodology for Fire Sprinkler System Design Following the Performance-Based Design Method
Juan Jose Zapata Franco, Universidad de los Andes

FDS Simulation of the Combined Use of Sprinklers and Water Mist Fire Extinguishing Systems
Csaba Szikra, Budapest University of Technology

17:00	Adjournment

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Day 3 – September 10, 2014 – PyroSim/Pathfinder Training Workshop

08:00	Workshop Check-In Continental Breakfast
08:30	**PyroSim Workshop**
10:00	Morning Break
10:20	**PyroSim Workshop**
12:00	Lunch
13:20	**Pathfinder Workshop**
15:00	Afternoon Break
15:20	**Pathfinder Workshop**
17:00	Adjournment