



April 23-24, 2018 – Seminars | April 25-27, 2018 - Conference

PRE-CONFERENCE ACTIVITIES

Monday, April 23		
0800-1700	SFPE Seminar: Advanced Fire Dynamics Simulator	Iolani 5
0800-1700	SFPE Seminar: Fire and Life Safety Design of Very Tall Buildings: Challenges and Strategies	Iolani 7
0800-1730	Board Meeting	Honolulu 1
1830-2100	Board Dinner	
Tuesday, April 24		
0800-1700	SFPE Seminar: Advanced Fire Dynamics Simulator	Iolani 5
0800-1700	SFPE Seminar: Performance-Based Design and Codes	Iolani 7
0900-1700	Board Meeting	Honolulu 1
1400-1700	Registration	Palace Lounge
1500-1700	Expo Setup	Tapa 1
1700-1900	Fire Museum Open House (optional tour – registration required)	

Registration

Palace Lounge

Available daily on 25-27 April 2018 from 0700 to 1700.

Exhibit Hours

Tapa 1

Wednesday, Thursday, and Friday during breakfasts, breaks, and lunches.

Poster Session

Tapa 1

Exciting topics displayed throughout the exhibit area with their authors available to discuss.

Day 1 - Wednesday, April 25		
0715-0755	Breakfast in Exhibit Area (Tapa 1)	
General Session - Tapa 2		
0800-0805	Welcome and Introductions – Nicole Boston	
0805-0820	Welcome Remarks and Conference Kick-Off - JC Harrington, Sam Dannaway, Peter Johnson, and Brian Meacham	
0820-0855	Marco Polo High Rise Fire, Prevention, Preparedness, and Response - Manuel Neves	
0900-1000	Track A in Tapa 2 - New Research Moderator: Peter Senez	Track B in Tapa 3 - Performance-Based Design Applications Moderator: Paul Hart
0900-0925	<u>x-ONE Fire Experiment in a Very Large and Open-Plan Compartment</u> - Egle Rackauskaite & Nieves Fernandez Anez	<u>Performance Based Design in Support of an Alternative Method for Laundry Chute Ventilation</u> – Steven Whitman & Scott Knight
0925-0950	<u>Fire Characteristics in a Tilted Tunnel</u> – WK Chow	<u>Fire Engineering Challenges during Redevelopment of Existing Shopping Centers</u> – Alexander Alexandrovski
0950-1000	Q&A Discussion	Q&A Discussion
1000-1030	Morning Coffee Break in Exhibit Area	
1030-1230	Track A in Tapa 2 – Building Facades – Moderator: Sam Dannaway	Track B in Tapa 3 – Probabilistic Methods – Moderator: Jonathan Barnett
1030-1055	<u>Evaluation of Fire Performance of ACM Wall Assemblies</u> – Yi Wang & Richard Davis	<u>A Quantified Risk-Based Framework for Life Safety</u> – Ijsbrand Van Straalen & Brian Meacham
1055-1120	<u>Encounter Media Façade: Performance-Based Fire Hazard Analysis of Exterior Video Cladding Wall</u> – Frank Wang	<u>A Holistic Approach to Fire Risk Assessment: How to Combine Bow-Ties of Standard Fire Scenarios to Develop a Creative Yet Robust, Barrier Based, Fire Safety Strategy</u> – Luca Fiorentini
1120-1145	<u>Identifying Hazards in Building Facades Containing Combustible Components</u> – Matthew Bonner	<u>Risk-Informed Airport Fire Engineering Solutions of Operational Continuity</u> – David Charters & Alan Sheach
1145-1210	<u>A Performance-Based Approach to Fire and Life Safety for the New International Terminal at Calgary International Airport</u> – Peter Senez	<u>New Anglo-Polish Methodology for Fire Risk Index Evaluation for Fire Strategies</u> – Dorota Brzezinska & Paul Bryant
1210-1230	Q&A Discussion	Q&A Discussion
1230-1330	Networking Lunch in Exhibit Area Sponsored by  JENSEN HUGHES Advancing the Science of Safety	
General Session – Tapa 2		
1330-1415	A Tribute to Margaret Law – Jose Torero	
1415-1455	Case Study: Hospital Fire Protection – Moderator: Ijsbrand Van Straalen <ul style="list-style-type: none"> Case Study – Finland 	
1455-1525	Afternoon Break in Exhibit Area	
General Session – Tapa 2		
1525-1605	(Cont'd) Case Study: Hospital Fire Protection – Moderator: Ijsbrand Van Straalen <ul style="list-style-type: none"> Case Study – Italy 	
1605-1700	Case Study Panel Discussion – Hospital Fire Protection	
1700	Day 1 Wrap Up - TBD	
1700-1830	Networking Reception in Exhibit Area	

Day 2 – Thursday, April 26		
0715-0755	Breakfast in Exhibit Area	
General Session in Tapa 2		
0800-0810	Welcome and SFPE Foundation - Peter Johnson, Brian Meacham, & Peter Senez	
0810-0845	Fire Safety in Tall Buildings—a Fire Service Perspective - Kevin Hughes	
	Track A in Tapa 2 - Working within Building Regulations Moderator: Ijsbrand Van Straalen	Track B in Tapa 3 - Fire Protection Systems Moderator: Jose Torero
0850-0915	Are Verification Methods the Answer to Improved Application of Performance-Based Codes? Be Careful What You Wish For - Peter Johnson & Nate Lobel	Performance-Based Design: Testing of CPVC Sprinkler Piping for Concealed Spaces in a High Rise Historical Building - John Crompton
0915-0940	Identifying Implicit Risk in the National Building Code of Canada - Keith Calder	Using BIG Data for Automatic Fire Alarm System Response Strategies - Böðvar Tómasson, Sveinn Björnsson, & Björn Karlsson
0940-1005	When Can Deemed-to-Satisfy Solutions Make Unsafe Buildings - Jonathan Barnett	Smoke Management in Detention Facilities - Steven Dannaway
1005-1020	Q&A Discussion	Q&A Discussion
1020-1050	Morning Coffee Break in Exhibit Area	
	Track A in Tapa 2 - Structures and Fire Protection Moderator: Joseph Vaughn	Track B in Tapa 3 - Human Behavior Moderator: Samuel Dannaway
1050-1115	Connection Behavior in Contemporary Canadian Buildings Subjected to Real Fires - John Gales	Walking Speed in Smoke: Representation in Life Safety Verifications - Karl Fridolf
1115-1140	Fire Dynamics Simulations for Performance-Based Fire Safety Design of Steel Structures in Large Enclosures - Chao Zhang, Hong-Xia You, & Lisa Choe	Beyond ASET vs RSET: Performance-Based Fire and Crowd-Flow Safety Design of Large Scale Stadiums - Yoshikazu Minegishi
1140-1205	Performance-Based Fire Resilience Evaluation for a Tall Building Structure - Jenny Sideri	Practicalities and Limitation of Coupling FDS with Evacuation Software - Daniel Blixt & Daniel Rådemar
1205-1220	Q&A Discussion	Q&A Discussion
1220-1320	Networking Lunch in Exhibit Area	
General Session in Tapa 2		
1320-1405	Evolution of the Building Code: From First Principles Design to Verification Methods - Christine Duncan	
	Track A in Tapa 2 - Implementing Performance-Based Design Moderator: David Charters	Track B in Tapa 3- CFD Modeling Moderator: Paul Hart
1405-1430	The Case for Performance-Based Design for Fire Safety - Marianne Foley	Accounting for Uncertainty in Computational Fluid Dynamics Modelling of Fully-Developed Compartment Fires - Vinny Gupta
1430-1455	Performance-Based Fire Safety Design for Dongao Tunnel - Wei-Ting Chung & Kuang-Chung Tsai	A CFD Study to Identify Methods to Increase Maximum Velocity of Make-up Air for Atrium Smoke Control - Christine Pongratz
1455-1520	Taking a Performance-Based Approach to the Protection of a Membrane Roof Aircraft Hanger--A Case Study - Craig Vesely	Fire Safety Upgrades of Underground Railway Systems - Felix Gamon
1520-1535	Q&A Discussion	Q&A Discussion
1535-1605	Afternoon Break in Exhibit Area	
General Session in Tapa 2		
1605-1725	Case Study: Cross-Laminated Timber (CLT) High-Rise - Moderator: Chris Jelenewicz	
1605-1645	<ul style="list-style-type: none"> • Case Study – Japan 	
1645-1725	<ul style="list-style-type: none"> • Case Study – New Zealand 	
1725-1730	Day 2 Wrap Up - TBD	
1800-2000	Hawaiian Dinner on the Great Lawn	

Day 3 – Friday, April 27		
0715-0755	Breakfast in Expo Area	
General Session - Tapa 2		
0800-0840	Fire Safety Standards – The Need for Global Consistency - Gary Strong	
0840-1000	Case Study: Cross-Laminated Timber (CLT) High-Rise - Moderator: Chris Jelenewicz	
0840-0920	<ul style="list-style-type: none"> Case Study – USA at UNC Charlotte 	
0920-1000	<ul style="list-style-type: none"> Case Study – Hong Kong 	
1000-1030	Morning Coffee Break in Exhibit Area	
General Session - Tapa 2		
1030-1130	Case Study Panel Discussion – CLT High-Rise Fire Protection - Moderator: Chris Jelenewicz	
	Track A in Tapa 2 - Engineered Wood Moderator: Kiyoshi Fukui	Track B in Tapa 3- Software Tools Moderator:
1135-1200	<u>A Performance-Based Approach for the Design of Engineered Timber in Buildings in the Australian Context</u> - Mario Lara Ledermann & Nathan White	<u>Fire Safety Engineering and Building Information Modelling--Now and in the Future</u> - Andrej Cebela & Judith Schulz
1200-1225	<u>The Role of Wood Chemistry in Determining the Charring Rates of Timber under Realistic Fire Conditions</u> - Franz Richter	<u>Smart Building Systems, Real-Time Data Collection and the Use of a Hierarchical Temporal Memory Continuous Learning Algorithm for Fire State Determination</u> – John Crompton
1225-1235	Q&A Discussion	Q&A Discussion
1235-1330	Networking Lunch in Exhibit Area	
	Track A in Tapa 2 - Engineered Wood / Green Roofs Moderator: Kiyoshi Fukui	Track B in Tapa 3 - Facing Fire Protection Challenges Moderator: Armelle Muller
1330-1355	<u>Performance-Based Design of Fire Safety in High-Rise CLT Buildings</u> - Robert Jönsson & Carl Pettersson	<u>Evaluation of the Fire Resistance for Simple Beams Built with TMC Fire Resistant Steels Using Fire Engineering Techniques</u> - In-Kyu Kwon
1355-1420	<u>Finite Element Modelling of Post-Tensioned Timber Beams Under Fire Conditions</u> - John Gales & Hailey Quiquero	<u>Space Familiarity and Exit Familiarity for Emergency Egress</u> - Haejun Park
1420-1445	<u>Green Roof, A Fire Problem?</u> - Jennie Forslund & Daniel Hakansson	<u>The Birmingham Gateway Project- Managing Construction Fire Safety within Highly Complex and Densely Occupied Infrastructure Projects</u> - Reece Walker
1445-1500	Q&A Discussion	Q&A Discussion
General Session - Tapa 2		
1500-1540	<u>Situation with Performance-Based Codes and Fire Safety Design in Seven Countries</u> - Brian Meacham	
1540-1600	Conference Wrap Up - Peter Johnson & Brian Meacham	

Schedule Revised April 24, 2018; Still subject to speaker changes

Poster Session

During the networking reception on Day 1 and the breaks during Day 2, meet the authors of the posters with additional topics in the exhibit area. SFPE is thrilled that these additional subjects will be available for discussion during the conference.

Title of Poster	Author(s)
Roadmap for Incorporation of Risk Criteria and Analysis in Building Regulatory Decisions	B.J. Meacham and IJ.J. van Straalen
A Tool for Analysis Cost Benefits with Fire Sprinkler Installation in the Design of Building without Sprinkler Requirement	Anna Martensson & Matilda Bjalkefur
Evaluation of the Fire Resistance for Simple Beams Built with TMC Fire Resistant Steels Using Fire Engineering Techniques	In-Kyu Kwon
When and Where Prescriptive Codes and Design Solutions are the Most Appropriate Approaches	Jon Roberts
Irrigation Systems for Life Safety? - Design and Approval of a 60M Green Wall in an Internal Office Atrium	Nate Lobel & Chris Chennel