



Preliminary Programme

International Fire Safety Symposium 2025 (IFireSS 2025)

Ulster University, Belfast, UK, June 25 - 27, 2025



Tuesday, June 24, 2025

18:00 - 20:00

Registration and Opening Reception (Belfast Campus, Ulster University)

Hosted by Fire Safety Engineering Research and Technology Centre (FireSERT), Ulster University



Wednesday, June 25, 2025

08:00 - 08:45

Registration (Ulster University, Block BC, Lower Ground Level, Belfast Campus)

08:45 - 10:30

Opening and Keynote Session (Conference Theatre 1)

08:45 - 10:30

Session 1-A: Conference Welcome and Keynote Session I
Co-Moderators: TBA

Paper ID

Proceeding Page

Conference Theme

08:45 - 09:00

Conference Welcome

Professor Ali Nadjai

09:00 - 09:20

Fire Safety Design of Building Envelopes.

Dr Piergiacomo Cancelliere

120

TBA

Fire Safety Engineering

09:20 - 09:40

Cost-Benefit of Performance-Based Design for Structures in Fire

Professor Thomas Gernay

121

TBA

Performance-Based Design

09:40 - 10:00

The new fire models recently incorporated into the 2nd Generation of Eurocodes.

Professor Nicola Tondini

122

TBA

Fire Models

10:00 - 10:20

Anyone for a cocktail? Understanding the impact of toxic chemicals on exposure of firemen to post-fire condensate

Dr Svetlana Tretsiakova-McNally

123

TBA

Fire and Chemistry

10:20 - 10:30

Questions and Answers

10:30 - 11:00

Coffee Break (Lower Ground Floor & Ground Level)

11:00 - 12:30

Session 1-B.1: Timber/Timber Structures I (Conference Theatre 1)
Co-Moderators: TBA

Paper ID

Proceeding Page

Conference Theme

11:00 - 11:15

Exploring the Use of IBMB Parametric Fire Curves for Predicting Possible Fire Scenarios in a Compartment with Exposed Timber Soffit

Cristian Maluk, Edwin Ayala and Mark Davison

056

TBA

Timber/Timber Structures

11:15 - 11:30

The implementation of a risk-based approach to upgrading historic timber panel doors

David Brown

052

TBA

Timber/Timber Structures

11:30 - 11:45

Predicting External Flames Through Vertical Openings in a Compartment with an Exposed Timber Soffit

Edwin Ayala, Mark Davison and Cristian Maluk

043

TBA

Timber/Timber Structures

11:45 - 12:00

Numerical Modelling of Charring in Engineered Timber

Kathryn Chin and John Gales

057

TBA

Timber/Timber Structures

12:00 - 12:15

Thermal-structural behavior of wood truss floor assemblies under standard fire conditions

Syed Muhammad Shamaim Ali and Thomas Gernay

059

TBA

Timber/Timber Structures

12:15 - 12:30

Bending of an innovative timber-concrete composite floor system (BOBÉ) in fire situation

Seddik Sakji, Antoine Berezyiat and Manuel Manthey

060

TBA

Timber/Timber Structures

11:00 - 12:30

Session 1-B.2: Concrete/Concrete Structures I (Conference Theatre 2)
Co-Moderators: TBA

Paper ID

Proceeding Pages

Conference Theme

11:00	-	11:15	A study of the effects of incorporating polymeric components on the spalling behaviour of concrete	<i>Paul Joseph, Thathsarani Kannangara, Maurice Gurrieri and Sam Fragomeni</i>	001	TBA	Concrete/Concrete Structures
11:15	-	11:30	Thermal resistance and life cycle assessment of rubberised geopolymer concrete with recycled aggregates.	<i>Tawzia Manzoor, Asif Hussain Shah and Javed Bhat</i>	011	TBA	Concrete/Concrete Structures
11:30	-	11:45	Numerical analysis on the load influence for the crack opening on flat slabs exposed to fire	<i>Andreia Fanton, Luiz Carlos de Almeida and Leandro Trautwein</i>	015	TBA	Concrete/Concrete Structures
11:45	-	12:00	Validation of tensile membrane models against experimental fire tests	<i>Kaijie Zhu, G Charles Clifton and Fanqin Meng</i>	023	TBA	Concrete/Concrete Structures
12:00	-	12:15	Parent concrete resistance effects on the high-temperature resistance of recycled aggregate concrete	<i>Viktor Hlavička</i>	028	TBA	Concrete/Concrete Structures
12:15	-	12:30	Post-fire behavior of fiber and rebar reinforced concrete: a state-of-the-art review	<i>Ahmed Farhan Ahnaf Siddique and Katherine A. Cashell</i>	037	TBA	Concrete/Concrete Structures
12:30	-	13:45	Lunch (Lower Ground Floor & Ground Level)				
13:45	-	15:15	Session 1-C.1: Compartment Fires I (Conference Theatre 1)		Paper ID	Proceeding Pages	Conference Theme
			Co-Moderators: TBA				
13:45	-	14:00	Modelling challenges of peculiar compartment fire dynamics	<i>Tarek Beji</i>	006	TBA	Compartment Fires
14:00	-	14:15	Evaluating the effects of travelling fires on entire compartment spaces	<i>Naveed Alam and Ali Nadjai</i>	008	TBA	Compartment Fires
14:15	-	14:30	Performance-Based Fire Engineering Approach for Protecting a Bespoke Steel Flooring Assembly	<i>Shixiong Guo and Ahmed Allam</i>	009	TBA	Compartment Fires
14:30	-	14:45	Simulation of compartment fires utilizing heat release histories received from scaled- down models of experiments	<i>Zhongcheng Ma, Wei Lu and Jari Puttonen</i>	016	TBA	Compartment Fires
14:45	-	15:00	A comparison of species yields in ventilation-controlled and fuel-controlled fires using a medium scale compartment with measured global equivalence ratios	<i>Robert Bray, Svetlana Tretsiakova-Mcnally and Jianping Zhang</i>	017	TBA	Compartment Fires
15:00	-	15:15	Fire resistance alternative solution design of automated vertical warehouses (AVW)	<i>Chiara Crosti, Andrea Marino and Piergiacomo Cancelliere</i>	019	TBA	Compartment Fires
13:45	-	15:15	Session 1-C.2: Case Studies in Fire (Conference Theatre 2)		Paper ID	Proceeding Pages	Conference Theme
			Co-Moderators: TBA				
13:45	-	14:00	The contribution of tensile membrane behaviour in the collapse of world trade centre 7	<i>G Charles Clifton, Fan-Qin Meng, Steven Hale and Sioeli Kavinga</i>	024	TBA	Case Studies in Fire
14:00	-	14:15	Analysis on the impact of fire safety regulations on residential housing designs and trends: A Singapore case study	<i>Christopher Tan and Kok Hwa Lim</i>	027	TBA	Case Studies in Fire
14:15	-	14:30	Fire Investigation of Escalator used in Different Categories of Buildings.	<i>Nazareth Arasan Thatheus, Ali Nadjai, Manu Rajan and Ahmed Allam</i>	012	TBA	Case Studies in Fire
14:30	-	14:45	Navigating the Fire Engineering Challenges in Retrofit, Expansion, and Conversion	<i>Cristian Maluk and Mark Davison</i>	045	TBA	Case Studies in Fire
14:45	-	15:00	Design guidance for travelling fire in modern office buildings	<i>Marion Charlier, Ali Nadjai and Olivier Vassart</i>	038	TBA	Case Studies in Fire
15:00	-	15:15	Investigation on self-heating and self-ignition of biocarbon dusts	<i>Liang Wang, Jørn Bakken and Øyvind Skreiberg</i>	061	TBA	Case Studies in Fire
15:15	-	15:45	Coffee Break (Lower Ground Floor & Ground Level)				

15:45 - 17:00		Session 1-D.1: Tunnels and Bridges (Conference Theatre 1) Co-Moderators: TBA		Paper ID	Proceeding Pages	Conference Theme
15:45 - 16:00	Analysis of fire risk patterns in naturally ventilated road tunnels	<i>Imad Obadi and George Hadjisophocleous</i>		097	TBA	Tunnels
16:00 - 16:15	Predictive Framework for Fire Safety Assessment of Composite Bridges Using CFD, FE Simulations and ANN Modelling	<i>Mustesin Khan, Aatif Khan, Zhuojun Nan, Katherine Cashell and Asif Usmani</i>		090	TBA	Bridges
16:15 - 16:30	A framework for quantified risk assessment of bridge fire safety	<i>Yavor Panev, Anna Benoit, Eoin O'Loughlin and Graeme Flint</i>		071	TBA	Bridges
16:30 - 16:45	Structural behaviour of fiber reinforced concrete tunnels exposed to fire	<i>Nunzia Gragiulo, Donatella de Silva and Emidio Nigro</i>		036	TBA	Tunnels
16:45 - 17:00	A method to calculate heat transfer of cable systems in suspension bridges exposed to tanker fire	<i>Huseyin Saglik, Airong Chen and Rujin Ma</i>		026	TBA	Bridges
15:45 - 17:00		Session 1-D.2: Steel and Composite Structures I (Conference Theatre 2) Co-Moderators: TBA		Paper ID	Proceeding Pages	Conference Theme
15:45 - 16:00	Behaviour of restrained steel beam at elevated temperature – Part II	<i>Ahmed Allam and Ali Nadjai</i>		004	TBA	Steel Structures
16:00 - 16:15	Fire resistance of simple steel beam for differentiated safety requirements – Probability-based approach to evaluation	<i>Mariusz Maslak and Michal Pazdanowski</i>		010	TBA	Steel Structures
16:15 - 16:30	3D co-rotational beam element for nonlinear dynamic analysis of steel and composite steel-concrete frame structures in fire	<i>Piseth Heng and Bin Zhao</i>		029	TBA	Steel and Composite Structures
16:30 - 16:45	Behaviour of protected long span cellular beams exposed to elevated temperatures	<i>Klelia Petrou and Ali Nadjai</i>		005	TBA	Steel Structures
16:45 - 17:00	Fire Behaviour of Beam-Column Connections to CFT Columns with High-Strength Bar-Bundle in the Cores	<i>Constantin Schwendner, Shaghayegh Ameri, Jochen Zehfuß and Martin Mensinger</i>		050	TBA	Steel Structures
Thursday June 26, 2025						
08:00 - 09:00 Registration (Lower Ground Floor & Ground Level)						
09:00 - 10:30		Session 2-A.1: Wildfires (Conference Theatre 1) Co-Moderators: TBA		Paper ID	Proceeding Page	Conference Theme
09:00 - 09:15	Using artificial intelligence for wildfire prevention in Cyprus	<i>Pericles Cheng, Alexandros Papatheodoulou, Georgios Boustras, Andreas Pamboris, Nicolas Kyriakou, Giorgos Tsapparellas and Andreas Constantinides</i>		031	TBA	Wildfires
09:15 - 09:30	Simulation-Based Development of Evacuation Protocols for Small Urban Areas Under Wildfire Threats	<i>Shahab Mohammad Beyki, Aldina Santiago, António Gameiro</i>		035	TBA	Wildfires
09:30 - 09:45	Basic fire management suite for Cyprus & the region-setting the requirements under SEMEDFIRE project	<i>Klelia Petrou, George Boustras, Pierantonios Papazoglou and Cleo Varianou Mikellidou</i>		047	TBA	Wildfires
09:45 - 10:00	Education in Wildfire Behaviour as a driver for interagency collaboration to solve a growing wildfire problem: The case in the Southeastern Mediterranean.	<i>Carlos Walker-Ravena, Klelia Petrou, Nikolaos Kalogeropoulos, Pierantonios Papazoglou, George Boustras and Guillermo Rein</i>		063	TBA	Wildfires
10:00 - 10:15	Evaluating Impacts of Visibility in Smoke on Driving Behaviour in Wildfire Evacuations	<i>Hannah Carton, Timothy Young, John Gales and Eric B. Kennedy</i>		085	TBA	Wildfires
10:15 - 10:30	Wildfire spread modelling using distributed information through autonomous agents	<i>Fabio Alaimo Ponziani and Alberto Tinaburri</i>		105	TBA	Wildfires
09:00 - 09:15		Session 2-A.2: Steel and Composite Structures I (Conference Theatre 2) Co-Moderators: TBA		Paper ID	Proceeding Page	Conference Theme
09:00 - 09:15	Structural response of restrained columns under non-uniform heating during traveling fire scenarios	<i>Rabinder Kumar, Naveed Alam and Ali Nadjai</i>		007	TBA	Steel and Composite Structures

09:15	-	09:30	Fire resistance tests and analysis of plasterboard-encased steel columns under standard conditions	<i>Octavian Lulu, Tom Lennon and Thomas Gernay</i>	034	TBA	Steel and Composite Structures
09:30	-	09:45	Performance of CFT columns in fire: A comparative study of different steel cores	<i>Shaghayegh Ameri, Martin Mensinger and Jochen Zehfuß</i>	041	TBA	Steel and Composite Structures
09:45	-	10:00	Design of Bi-linear Steel Connectors For Fire Loading	<i>Chloe Jeanneret, Kathryn Chin, Matthew Smith, Panagiotis Kotsovinos and John Gales</i>	054	TBA	Steel and Composite Structures
10:00	-	10:15	Fire design of bolted braced steel connections using component-based finite element method	<i>Ouissam Yessad, Abdelhak Kada, Belkacem Lamri and Frantisek Wald</i>	062	TBA	Steel and Composite Structures
10:15	-	10:30	A Fire Engineering Approach for Addressing the Challenges with Steelwork Passing Through Compartment Lines	<i>Cristian Maluk and Mark Davison</i>	064	TBA	Steel and Composite Structures
10:30	-	11:00	Coffee (Lower Ground Floor & Ground Level)				
11:00	-	12:30	Session 2-B.1: Battery and Jet Fires (Conference Theatre 1) Co-Moderators: TBA		Paper ID	Proceeding Pages	Conference Theme
11:00	-	11:15	Predicting and Measuring Thermal Runaway Effects on CF-PEEK for Future Composite Battery Enclosures	<i>Margarita Etchegaray-Bello, Leo Heidemann, Klaus Drechsler</i>	002	TBA	Battery Fires
11:15	-	11:30	Assessing the Efficiency of Fire Extinguishers in Lithium-Ion Battery Fire Scenarios	<i>Edwin Bin Leong Ong, Sheik Anees, Dean Seah, Clarice Lee, Chiew Yung Yang, Justin Tan, Sze Sien Ho, Joyce Ng, Eugene Phng, Hong Haey Tong and Chin Chin Lim</i>	048	TBA	Battery Fires
11:30	-	11:45	Evaluating toxic and flammable gas generation during AMD-Fires via Full-Scale Fire Tests	<i>Sheik Anees, Dean Seah, Edwin Ong, Clarice Lee, Yang Chiew Yung, Justin Tan, Ho Sze Sien, Tong Hong Haey, Eugene Phng and Chin Chin Lim</i>	083	TBA	Battery Fires
11:45	-	12:00	Safety challenges in battery energy storage systems: historical analysis study and safety regulations	<i>Vahid Foroughi</i>	103	TBA	Battery Fires
12:00	-	12:15	Fire performance of a steel pipe-rack under jet fire scenarios	<i>Patrick Covi and Nicola Tondini</i>	065	TBA	Jet Fires
12:15	-	12:30	Thermal load on structural elements subjected to jet fires	<i>Giulia Mignemi, Mattia Bianchi, Marco Barozzi, Sabrina Copelli and Bruno Dal Lago</i>	088	TBA	Jet Fires
11:00	-	12:30	Session 2-B.2: Human Behaviour and Industrial Buildings (Conference Theatre 2) Co-Moderators: TBA		Paper ID	Proceeding Pages	Conference Theme
11:00	-	11:15	High-rise Residential Lift Evacuation Wait Time Study	<i>Isaac Tan, Oisín Roulstone, Mary Keen and Michael Kinsey</i>	044	TBA	Human Behaviour
11:15	-	11:30	Evacuation behaviours of children and adolescents during fire drills in school settings	<i>Javad Hashempour and Babak Bahrani</i>	094	TBA	Human Behaviour
11:30	-	11:45	Stadium Evacuation Egress Behaviour with Alcohol Consumption	<i>Giuseppina Alfarano and John Gales</i>	099	TBA	Human Behaviour
11:45	-	12:00	Using Systems-Theoretic Process Analysis (STPA) Hazard Analysis to Identify Unsafe Control Actions and Causal Scenarios in Pre-Evacuation	<i>Alvaro Gomes Ferreira, Brian J. Meacham, João Paulo C. Rodrigues and Aline Lopes Camargo</i>	100	TBA	Human Behaviour
12:00	-	12:15	Numerical study of the influence of steel purlins on fire resistance of protected warehouse structures under standard fire conditions	<i>Pegah Aghabozorgi, Luís Laím and Aldina Santiago</i>	030	TBA	Industrial Buildings
12:15	-	12:30	Influence of Horizontal Storage Spacing on Fire Dynamics in Rack Configurations	<i>Syed Hasnain, Seng-Kwan Choi and Jianping Zhang</i>	049	TBA	Industrial Buildings
12:30	-	13:45	Lunch (Lower Ground Floor & Ground Level)				
13:45	-	15:15	Session 2-C.1: Finite Element Modelling (Conference Theatre 1) Co-Moderators: TBA		Paper ID	Proceeding Pages	Conference Theme

13:45	-	14:00	Analysis of fire resistance performance of fire doors using thermo-mechanical model	<i>Bohyuk Lim, Seokwoo Hong, Donghwan Cho, Joowon Lee, Haeyeal Lee and Minkoo Kim</i>	013	TBA	Finite Element Modelling
14:00	-	14:15	Performance of seismically-compatible fin plate joints under fire conditions in a fully composite floor	<i>Fanqin Meng, G. Charles Clifton and Kaijie Zhu</i>	022	TBA	Finite Element Modelling
14:15	-	14:30	Study of the behaviour of RC shear wall subjected to fire	<i>Dravesh Yadav, Vimal Panara and Gaurav Srivastava</i>	032	TBA	Finite Element Modelling
14:30	-	14:45	Fire resistance of externally or near-surface mounted shear-reinforced concrete beam-like elements	<i>Tom Molken, Muhammad Arslan Yaqub and Stijn Matthijs</i>	055	TBA	Finite Element Modelling
14:45	-	15:00	Effect of local instabilities on the fire performance of high-strength concrete-filled double-skin steel tubular columns	<i>Svetha Venkatachari and Shahzada Junaid</i>	058	TBA	Finite Element Modelling
15:00	-	15:15	Fire performance of thermal-break precast panels	<i>Francesco Daniele and Bruno Dal Lago</i>	070	TBA	Finite Element Modelling
13:45	-	15:15	Session 2-C.2: CFD Modelling and Fire Fighting Systems (Conference Theatre 2) Co-Moderators: TBA		Paper ID	Proceeding Pages	Conference Theme
13:45	-	14:00	Recurrent Neural Network Surrogate Fire Model: BS8414 Forecasting	<i>Sai Pavan Kumar Balabomma, Bogdan Matuszewski and Eleni Asimakopoulou</i>	018	TBA	CFD Modelling
14:00	-	14:15	A new smoke ventilation strategy for smoke proof stair design in high-rise residential buildings	<i>Jianqiang Mai, Maulik Katkoria and Dharmit Nakroni</i>	020	TBA	CFD Modelling
14:15	-	14:30	Uncertainties in the application of flashover correlations in fire safety engineering	<i>David Morrisset, Andrea Franchini and Richard Emberley</i>	025	TBA	CFD Modelling
14:30	-	14:45	Safety distance study using CFD for high-pressure tanks	<i>Acsa Martins, Volodymyr Shentsov, Edson Bortoni, Lucia Garrido Rios, Marcia Baldissera and Jamil Haddad</i>	051	TBA	CFD Modelling
14:45	-	15:00	Comparison of natural fire simulations with cellulosic, plastic or liquid combustible fuel stored in a large industrial building	<i>Bruno Dal Lago, Mattia Bianchi, Alessandro Lucà, Andrea Nicora and Paride Tucci</i>	075	TBA	CFD Modelling
15:00	-	15:15	Firefighting systems in buildings: Integrating LIDAR and BIM in the optimization of safety projects with 'BIMSCIP'	<i>Marcelo Franco Porto, João Paulo Correia Rodrigues, Renata Maria Abrantes Baracho Porto and Gabrielle Fernanda Alves da Rocha</i>	046	TBA	Fire Fighting Systems
15:15	-	15:45	Coffee Break (Lower Ground Floor & Ground Level)				
15:45	-	17:00	Session 2-D.1: Timber Structures (Conference Theatre 1) Co-Moderators: TBA		Paper ID	Proceeding Pages	Conference Theme
15:45	-	16:00	Fire simulation and fire hazard analysis of historic timber buildings	<i>Yu Lu, Xiaobin Song, Baozhuang Zhang and Yunxiao Chen</i>	003	TBA	Timber Structures
16:00	-	16:15	Building a framework for the fire resilience of mass timber structures	<i>Anne Davidson, Kathryn Chin and John Gales</i>	066	TBA	Timber Structures
16:15	-	16:30	Large-scale thermomechanical fire tests on hybrid components made of steel and timber	<i>Jan-Gabriel Scheller and Jochen Zehfuß</i>	084	TBA	Timber Structures
16:30	-	16:45	Mechanical behaviour of Glulam samples subjected to thermal and moisture gradients	<i>Hussein Daher, Sabine Caré, Gilles Forêt and Loïc Payet</i>	087	TBA	Timber Structures
16:45	-	17:00	Performance of modular timber assembly in fire conditions	<i>Manu Rajan, Ali Nadjai and Nazareth Arasan Thatheus</i>	014	TBA	Timber Structures
15:45	-	17:00	Session 2-D.2: Other Steel Structures (Conference Theatre 2) Co-Moderators: TBA		Paper ID	Proceeding Pages	Conference Theme
15:45	-	16:00	Performance of steel frames with friction joints under fire	<i>Ana Francisca Santos, Aldina Santiago, Iolanda Vaz Moreno</i>	072	TBA	Steel Structures
16:00	-	16:15	Thermal and mechanical modelling of loadbearing LSF walls for fire resistance design under two-sided fire exposure	<i>Iziengbe Inerhunwa, Danny Hopkin and Ian Fu</i>	074	TBA	Steel Structures

16:15	-	16:30	Computational modelling of steel gravity frames with composite floor systems in fire	<i>Mohammed Morovat, Joseph Main, Jonathan Weigand, Fahim Sadek and Long Phan</i>	076	TBA	Steel Structures
16:30	-	16:45	Feasibility study of 3-D numerical modelling of mixed use multistorey building	<i>Donatella De Silva, Ali Nadjai and Ahmed Allam</i>	077	TBA	Steel Structures
16:45	-	17:00	Thermo-mechanical analysis of walling systems using advanced finite element method	<i>Ali Nadjai, Naveed Alam and Michael Gillespie</i>	079	TBA	Steel Structures
19:00 - 22:00 Conference Dinner, International Convention & Exhibition Centre (ICC), Belfast.							
Friday, June 27, 2025							
08:00 - 09:00 Registration (Lower Ground Floor & Ground Level)							
09:00 - 10:30 Session 3-A.1: Experimental Work (Conference Theatre 1)							
Co-Moderators: TBA							
09:00	-	09:15	Evolving Fire Loads: Implications for Ignition Times and Safety in Residential Settings Post-COVID-19	<i>Mostafa Jafarian and Simon Santamaria</i>	033	TBA	Experimental Work
09:15	-	09:30	Effectiveness of low carbon repair techniques for restoring the flexural and dynamic performance of fire-damaged reinforced concrete T-beams	<i>Muhammad Noman, Muhammad Yaqub, Naveed Alam, Muhammad Fahad</i>	039	TBA	Experimental Work
09:30	-	09:45	Experimental investigation on the combustion properties of PE blends incorporating different mineral fire retardant powders	<i>Linda Vitaloni, Diego Tirelli, Lucia Campanelli, Marcello Canavese and Bruno Dal Lago</i>	040	TBA	Experimental Work
09:45	-	10:00	Energy distribution in a large-scale structural fire test	<i>Xu Dai and Stephen Welch</i>	069	TBA	Experimental Work
10:00	-	10:15	Mechanical Properties of Gypsum Board Exposed to Thermal Loading	<i>Rafael Castillo, Alan Zhang and Richard Emberley</i>	073	TBA	Experimental Work
10:15	-	10:30	Characterization of combustion of composite cladding core materials through experimental and computer simulations	<i>Dharmit Nakrani, Tejas Wani, Gaurav Srivastava and Jianqiang Mai</i>	082	TBA	Experimental Work
09:00 - 10:30 Session 3-A.2: Machine Learning, Historic Buildings & Masonry Structures (Conference Theatre 2)							
Co-Moderators: TBA							
09:00	-	09:15	Comparative performance analysis of YOLOV3, YOLOV5, YOLOV8, and YOLOV11 for fire sign detection to optimize safety project modelling with "BIMSCIP"	<i>Marcelo Franco Porto, João Paulo Correia Rodrigues, Renata Baracho and Rafael Augusto de Souza</i>	042	TBA	Machine Learning
09:15	-	09:30	Machine Learning Driven Performance-Based Design for Structural Fire Analysis	<i>Amelia Parker, Annika Matherson, Aatif Khan, Zhoujun Nan and Mustesin Khan</i>	053	TBA	Machine Learning
09:30	-	09:45	Historical building pathologies after fire in Brazil	<i>Luana Ercan, João Paulo Rodrigues and Cynara Bremer</i>	067	TBA	Historic Buildings
09:45	-	10:00	Rehabilitation of historical buildings after fire in Brazil	<i>Luana Ercan, João Paulo Rodrigues and Cynara Bremer</i>	068	TBA	Historic Buildings
10:00	-	10:15	Lessons learnt from fire performance of historic timber structures	<i>Panagiotis Kotsovinos and Catherine Papanicolaou</i>	096	TBA	Historic Buildings
10:15	-	10:30	Multi-scale analysis of damage mechanisms in limestone masonry subjected to high temperatures	<i>Victor Tadie, Eleni Tsangouri, Javad Eslami, Anne Lise Beaucour and Albert Noumowe</i>	104	TBA	Masonry Structures
10:30 - 11:00 Coffee Break (Lower Ground Floor & Ground Level)							
11:00 - 12:30 Session 3-B.1: Green Roofs, Residential Fires, Case Studies & FEM (Conference Theatre 1)							
Co-Moderators: TBA							
11:00	-	11:15	Fire Safety of Green Roofs – A Review	<i>Marina Camello, João Paulo Rodrigues and Julieta Maria António</i>	080	TBA	Green Roofs
11:15	-	11:30	Fire Tests on Green Roof Solutions	<i>Marina Camello, João Paulo Rodrigues and Julieta Maria António</i>	081	TBA	Green Roofs
11:30	-	11:45	Residential Fires, Fatalities and Injuries in Ghana: The need for targeted Interventions	<i>Yahaya Abdulai, Nigel McConnell and Karen Boyce</i>	098	TBA	Residential Fires

11:45 - 12:00	Fire resistance of reinforced concrete structures utilising reinforcement couplers	<i>Ahmed Elsharkawi</i>	102	TBA	Case Studies &FEM
12:00 - 12:15	Probabilistic axial capacity assessment of short circular RC columns in fire	<i>Abdelraouf Kassem, Maged Youssef and Ričardas Zitikis</i>	089	TBA	Case Studies &FEM
12:15 - 12:30	Fire vulnerability assessment through fragility curves of protected steel industrial buildings	<i>Antonio Cibelli, Donatella de Silva, Andrea Miano and Emidio Nigro</i>	078	TBA	Case Studies &FEM
11:00 - 12:30	Session 3-B.2: Experimental Work, Case Studies and Design Guidance (Conference Theatre 2) Co-Moderators: TBA		Paper ID	Proceeding Pages	Conference Theme
11:00 - 11:15	Experimental investigation of fiber-reinforced concrete exposed to high-temperature	<i>Tejaswini Sudhakar Junghare, Eleni Toumpanaki and Adam Crewe</i>	101	TBA	Experimental Work
11:15 - 11:30	Thermal Response and Char Formation of Intumescent Coatings: An Experimental Study	<i>Emily Bond, Adrian Murphy and Scott Millen</i>	095	TBA	Experimental Work
11:30 - 11:45	Strategies for fire safety and emergency management in nuclear facilities: Challenges and opportunities	<i>Pablo Schuabb and Pedro Luiz Lanzillotta da Fonseca</i>	093	TBA	Case Studies and Design Guidance
11:45 - 12:00	Concrete degradation under thermomechanical loading	<i>Biswajit Pal and Ananth Ramaswamy</i>	092	TBA	Case Studies and Design Guidance
12:00 - 12:15	Background on the fire assessment of post-installed reinforcement bars with improved bond splitting behavior	<i>Fatima Ben Mouhou, Nicolas Pinoteau, Omar Al Mansouri, Sebastien Remond and Dashnor Hoxha</i>	086	TBA	Case Studies and Design Guidance
12:15 - 12:30	Façade fire performance outdoor tests in different environmental conditions. open issues and proposals	<i>Antonio Bonati, Giovanni Cavanna, Riccardo Di Ruzza, Gabriele Pisano, Fabio Alaimo Ponziani and Alberto Tinaburri</i>	108	TBA	Case Studies and Design Guidance
12:30 - 12:45	A proposal for the optimization of the weighing system in the new European method for façade fire reaction testing	<i>Antonio Bonati, Nicola Caterino, Riccardo Di Ruzza, Gabriele Pisano, Carlo Rainieri and Marta Ziccardi</i>	109	TBA	Case Studies and Design Guidance
12:45 - 14:00	Lunch (Lower Ground Floor & Ground Level)				
14:00 - 15:20	Session 3-C: Closing and Keynote Session II (Conference Theatre 1) Co-Moderators: TBA		Paper ID	Proceeding Pages	Conference Theme
14:00 - 14:20	Timber Towers? Enhancing Fire Safety and Sustainability in Modern High-Rise Buildings	<i>Professor Guillermo Rein</i>	124	TBA	Timber Structures
14:20 - 14:40	Burning and Learning – ensuring a fire-safe sustainable built environment through research	<i>Professor Grunde Jomaas</i>	125	TBA	Ultra Lightweight Concrete
14:40 - 15:00	Behaviour of steel-timber elements and connections in fire and normal situations	<i>Professor Abdel Bouchair</i>	126	TBA	Steel-Timber structures
15:00 - 15:20	Assessment and mitigation of hydrogen fuelled transport fire hazards in confined spaces	<i>Professor Dmitriy Makarov</i>	127	TBA	Hydrogen Safety
15:30 - 16:00	Closing Ceremony and Awards				

* A prize will be awarded to the best student presentation (£120 sponsored by FireSERT)

** A prize will be awarded to the best student scientific paper (£120 sponsored by FireSERT)