Conference Program

10th International Conference on Structures in Fire

Ulster University, FireSERT, June 5 - 8, 2018

Tuesday, June 5, 2018						
18:00 - 20:00	**Registration and Opening Reception (Belfast Centre Campus)**	**Sponsored by the Faculty of Engineering, Built Environment and Innovation Office, Ulster University**				
Wednesday, June 6, 2018						
07:00 - 08:00	**Registration and Continental Breakfast (The Bridge, Floor 6, Titanic Belfast)**					
08:00 - 08:30	**Opening (Titanic Suite Floor 5, Main Conference)**					
08:30 - 09:30	**Session 1-A: Experimental Research and any Other & Numerical Modelling (Titanic Suite) Co-Moderators: To be announced**			**Paper ID**	**Proceeding Page**	**Conference Theme**
8:30 - 8:45	EFFECT OF COMBINED POLYPROPYLENE AND STEEL FIBRES ON PORE-PRESSURE DEVELOPMENT IN ULTRA-HIGH-PERFORMANCE CONCRETE IN FIRE	Ye Li, Pierre Pimienta, Nicolas Pinoteau, **Kang Hai Tan**		**36**	**869**	Experimental Research and any Other
8:45 - 9:00	DISCUSSION ON A SYSTEMATIC APPROACH TO VALIDATION OF SOFTWARE FOR STRUCTURES IN FIRE	Joao Ferreira, Thomas Gernay, **Jean-Marc Franssen**		**61**	**317**	Numerical Modelling
9:00 - 9:15	SEISMIC PERFORMANCE OF REINFORCED CONCRETE FRAMES AFTER FIRE	**Ling-zhi Li**, Xin Liu, Zhou-dao Lu, Kai Wei		**90**	**909**	Experimental Research and any Other
9:15 - 9:30	VIRTUAL TEST OF FIRE-RESISTANCE OF A TIMBER BEAM	**Kamila Cabova**, Filip Zeman, Martin Benýšek, Stanislav Šulc, Vít Šmilauer, František Wald		**154**	**391**	Numerical Modelling
9:30 - 10:00	**Coffee Break / Poster Session (Gallery Outside: Britannia floor 5 & The Bridge floor 6)**					
10:00 - 11:45	**Session 1-B.1: Experimental Research and any Other (Titanic Suite) Co-Moderators: To be announced**			**Paper ID**	**Proceeding Page**	**Conference Theme**
10:00 - 10:15	PERFORMANCE ASSESSMENT OF A STRUCTURE THROUGH HYBRID (NUMERICAL- EXPERIMENTAL) SIMULATION	*Xuguang Wang, Robin Kim,* ***Oh-Sung Kwon****, In-Hwan Yeo, Jae-Kwon Ahn*		**4**	**853**	Experimental Research and any Other
10:15 - 10:30	A PI-CONTROLLER FOR HYBRID FIRE TESTING IN A NON-LINEAR ENVIRONMENT	***Elke Mergny****, Guillaume Drion, Thomas Gernay, Jean-Marc Franssen*		**6**	**861**	Experimental Research and any Other
10:30 - 10:45	RADIATIVE FLUX AFFECTING VERTICAL STEEL ELEMENT AWAY FROM THE FIRE – SIMPLIFIED METHOD LOCAFI	***Camille Sautot****, François Hanus, Christophe Thauvoye, Giacomo Erez, Aurélien Thiry*		**71**	**885**	Experimental Research and any Other
10:45 - 11:00	EVALUATING UNCERTAINTY IN STEEL-COMPOSITE STRUCTURE RESPONSE UNDER FIRE – APPLICATION OF THE ME-MDRM	***Ruben Van Coile****, Thomas Gernay, Negar Elhami Khorasani, Danny Hopkin*		**74**	**893**	Experimental Research and any Other
11:00 - 11:15	EXPERIMENTAL INVESTIGATION OF LIQUID POOL BURNING BEHAVIOUR AND FAÇADE FIRES IN CORRIDOR-LIKE ENCLOSURES	***Kostantinos Chotzoglou****, Eleni Asimakopoulou, Jianping Zhang, Michael Delichatsios*		**82**	**901**	Experimental Research and any Other
11:15 - 11:30	MONITORING SPALLING OF HEATED CONCRETE USING LASER DISTANCE METRE	***Jin-Cheng Liu,*** *Kang Hai Tan*		**92**	**917**	Experimental Research and any Other
11:30 - 11:45	EXPERIMENTAL STUDIES ON EARLY WARNING APPROACHES OF THE COLLAPSE OF STEEL PORTAL FRAME STRUCTURES IN FIRE	**Ya-Qiang Jiang**, Bo Zhong, Guo-Biao Lou, Jun-Jun Liu, Jian-Zhong Rong		**108**	**925**	Experimental Research and any Other
10:00 - 11:45	**Session 1-B.2: Numerical Modelling (Olympic Suite) Co-Moderators: To be announced**			**Paper ID**	**Proceeding Pages**	**Conference Theme**
10:00 - 10:15	A STOREY-BASED STABILITY ANALYSIS APPROACH FOR PREDICTING OF THE WORST-CASE FIRE SCENARIO OF UNBRACED STEEL FRAMES	*Terence Ma,* ***Lei Xu***		**43**	**309**	Numerical Modelling
10:15 - 10:30	BRANCH-SWITCHING PROCEDURE FOR BUCKLING PROBLEMS OF SLENDER STEEL ELEMENTS IN FIRE	***Luca Possidente****, Nicola Tondini, Jean-Marc Battini*		**64**	**325**	Numerical Modelling
10:30 - 10:45	TWO-DIMENSIONAL MODELLING OF THERMAL RESPONSES OF GFRP PROFILES EXPOSED TO ISO-834 FIRE	***Lu Wang,*** *Lingfeng Zhang, Weiqing Liu*		**93**	**333**	Numerical Modelling

10:45 - 11:00	CFD ANALYSES USED TO EVALUATE THE INFLUENCE OF COMPARTMENT GEOMETRY ON THE POSSIBILITY OF DEVELOPMENT OF A TRAVELLING FIRE	***Marion Charlier**, Antonio Gamba, Xu Dai, Stephen Welch, Olivier Vassart, Jean-Marc Franssen*	**114**	**341**	Numerical Modelling
11:00 - 11:15	NUMERICAL MODELLING OF THE FIRE BEHAVIOUR OF RESTRAINED CELLULAR BEAMS USING A HYBRID SIMULATION APPROACH	***Mustesin Ali Khan,** Dr. Liming Jiang, Dr. Katherine A. Cashell, Prof. Asif Usmani*	**115**	**349**	Numerical Modelling
11:15 - 11:30	FRACTURE SIMULATION FOR STEEL SHEAR TAB CONNECTIONS AT ELEVATED TEMPERATURE	***Wenyu Cai,** Mohammed A. Morovat, Michael D. Engelhardt*	**121**	**359**	Numerical Modelling
11:30 - 11:45	CONTRIBUTION TO THE NUMERICAL Modelling OF THE THERMOMECHANICAL BEHAVIOR OF STEEL-REINFORCED CONCRETE BEAMS EXTERNALLY REINFORCED WITH TEXTILE REINFORCED CONCRETE (TRC)	***Najib Douk**, Amir Si Larbi, Xuan Hong Vu, Maxime Audebert*	**123**	**375**	Numerical Modelling
11:45 - 13:00	**Lunch (The Bridge Floor 6 & Britannia Room Floor 5)**				
13:00 - 14:45	**Session 1-C.1: Experimental Research and any Other (Titanic Suite)** **Co-Moderators: To be announced**		**Paper ID**	**Proceeding Pages**	**Conference Theme**
13:00 - 13:15	INSTANTANEOUS STIFFNESS CORRECTION FOR HYBRID FIRE TESTING	*Ramla Qureshi, **Negar Elhami-Khorasani***	**116**	**933**	Experimental Research and any Other
13:15 - 13:30	EXPERIMENTAL INVESTIGATION OF THERMOMECHANICAL BEHAVIOR OF THE CARBON TEXTILE REINFORCED CONCRETE: EFFICIENCY COEFFICIENT OF CARBON TEXTILE AT ELEVATED TEMPERATURES	***Manh Tien Tran**, Xuan Hong Vu, Emmanuel Ferrier*	**124**	**941**	Experimental Research and any Other
13:30 - 13:45	AN EXPERIMENTAL APPROACH FOR EVALUATING RESIDUAL CAPACITY OF FIRE DAMAGED CONCRETE MEMBERS	*Ankit Agrawal, **Venkatesh Kodur***	**126**	**949**	Experimental Research and any Other
13:45 - 14:00	EVALUATION METHOD OF THERMAL ELONGATION OF STEEL BEAMS DURING FIRE BASED ON ACTUAL SCALE TESTS	***Tomohito Okazaki,** Mamoru Kohno*	**129**	**959**	Experimental Research and any Other
14:00 - 14:15	EXPERIMENTAL STUDY ON THERMAL AND STRUCTURAL RESPONSES OF A FULL-SCALE STEEL STRUCTURE UNDER NATURAL FIRE	***Bo Zhong**, Ya-Qiang Jiang, Guo-Biao Lou*	**153**	**975**	Experimental Research and any Other
14:15 - 14:30	FIRE RESISTANT GFRP FAÇADE SYSTEMS	***Kate Nguyen**, Priyan Mendis, Tuan Ngo*	**160**	**981**	Experimental Research and any Other
14:30 - 14:45	HYBRID FIRE TESTING OF A SINGLE DEGREE-OF-FREEDOM LINEAR SYSTEM	***Ana Sauca**, Chao Zhang, Artur Chernovsky, Mina Seif*	**192**	**997**	Experimental Research and any Other
13:00 - 14:45	**Session 1-C.2: Numerical Modelling (Olympic Suite)** **Co-Moderators: To be announced**		**Paper ID**	**Proceeding Pages**	**Conference Theme**
13:00 - 13:15	A NUMERICAL METHODOLOGY TO PREDICT THE GAS/SOLID INTERACTION IN FIRE RESISTANCE TESTS	***Rene Prieler**, Markus Mayrhofer, Markus Eichhorn-Gruber, Günther Schwabegger, Christoph Hochenauer*	**151**	**383**	Numerical Modelling
13:15 - 13:30	REDUCED-ORDER THERMAL ANALYSIS OF FIRE EFFECTS ON COMPOSITE SLABS	*Jian Jiang, Joseph Main, Jonathan Weigand, **Fahim Sadek***	**161**	**399**	Numerical Modelling
13:30 - 13:45	NUMERICAL INVESTIGATION OF FIRE AND POST-FIRE PERFORMANCE OF CFT COLUMNS IN AN OPEN CAR PARK FIRE	***Wojciech Szymkuć**, Adam Glema, Michał Malendowski, Aleksandra Mielcarek, Piotr Smardz, Adrian Poteralski*	**168**	**407**	Numerical Modelling
13:45 - 14:00	ANALYSIS OF THE INFLUENCE OF VENTILATION IN THE STRUCTURAL RESPONSE OF A CUT-AND-COVER TUNNEL UNDER FIRE.	***Juan Pagan-Martinez,** Ignacio Paya-Zaforteza, Antonio Hospitaler, Toni Hospitaler*	**194**	**415**	Numerical Modelling
14:00 - 14:15	REVERSE ENGINEERING OF STANDARD TEMPERATURE CURVES TO OBTAIN THE HRR OF THE FIRE IN VARIOUS ENCLOSURE CONFIGURATIONS - WHAT CAN WE LEARN FROM THAT ?	*Piotr Tofilo, Wojciech Wegrzynski, **Michał Malendowski***	**195**	**423**	Numerical Modelling
14:15 - 14:30	FRAGILITY OF REINFORCED CONCRETE STRUCTURE SUBJECTED TO ELEVATED TEMPERATURE	*Ranjit Chaudhary, Tathagata Roy, **Vasant Matsagar***	**200**	**431**	Numerical Modelling
14:30 - 14:45	ADVANCE HEAT TRANSFER ANALYSIS AND CAPACITY CURVES ACCOUNTING FOR THE EFFECT OF SPALLING	***Hitesh Lakhani**, Jan Hofmann*	**211**	**439**	Numerical Modelling
14:45 - 15:15	**Coffee Break / Poster Session (Gallery Outside: Britannia floor 5 & The Bridge floor 6)**				

15:15 - 16:45	Session 1-D.1: Experimental Research and any Other, Numerical Modelling & Composite Structures (Titanic Suite) Co-Moderators: To be announced		Paper ID	Proceeding Pages	Conference Theme
15:15 - 15:30	EXPERIMENTAL TESTS AND SUBSEQUENT ANALYSIS OF LOCALIZED POOL FIRES IMPACTING STEEL COLUMNS AND BEAMS WITH WEB OPENINGS IN A COMPARTMENT.	***Ali Nadjai,*** *Francois Hanus, Olivier Vassart, Sanghoon Han*	**193**	**1005**	Experimental Research and any Other
15:30 - 15:45	FIRE RESISTANCE OF CONCRETE SLABS ACTING IN COMPRESSIVE MEMBRANE ACTION WITH VARIOUS BOUNDARY CONDITIONS	***Tom Molkens***	**218**	**447**	Numerical Modelling
15:45 - 16:00	STRUCTURAL IMPLICATIONS DUE TO AN EXTENDED TRAVELLING FIRE METHODOLOGY (ETFM) FRAMEWORK USING SIFBUILDER	***Xu Dai,*** *Stephen Welch, Asif Usmani*	**220**	**455**	Numerical Modelling
16:00 - 16:15	ELEVATED-TEMPERATURE TENSION STIFFENING MODEL FOR REINFORCED CONCRETE STRUCTURES UNDER FIRE	***Jason Martinez****, Ann Jeffers*	**221**	**463**	Numerical Modelling
16:15 - 16:30	LOAD-BEARING FIRE TESTS OF UNPROTECTED COMPOSITE BEAMS PINNED WITH STEEL GIRDERS	***Robert Dwiputra****, Naoya Yotsumoto, Takeo Hirashima, Fuminobu Ozaki, Yukio Murakami, Kei Kimura*	**137**	**561**	Composite Structures
16:30 - 16:45	METHODS TO ASSESS THE BEARING CAPACITY OF CONCRETE-FILLED HOLLOW SECTION COLUMNS IN FIRE	***Alberto Compagnone,*** *Antonio Bilotta, Emidio Nigro*	**199**	**593**	Composite Structures
15:15 - 16:45	**Session 1-D.2: Concrete Structures & Timber Structures and Fire Protection Materials (Olympic Suite) Co-Moderators: To be announced**		**Paper ID**	**Proceeding Pages**	**Conference Theme**
15:15 - 15:30	STRUCTURAL BEHAVIOUR OF R/C BEAMS EXPOSED TO NATURAL FIRES	***Nataša Kalaba****, Venkatesh Kodur, Ankit Agrawal, Patrick Bamonte*	**175**	**139**	Concrete Structures
15:30 - 15:45	RESIDUAL STRENGTH OF ULTRA-HIGH PERFORMANCE FIBRE REINFORCED CONCRETE	***Charles Kahanji,*** *Faris Ali, Ali Nadjai*	**177**	**147**	Concrete Structures
15:45 - 16:00	STUDY OF FIRE RESISTANCE OF RC COLUMNS WITH VARYING SHEAR REINFORCEMENT	***Hemanth Kumar Chinthapalli,*** *Anil Agarwal*	**178**	**157**	Concrete Structures
16:00 - 16:15	ON THE PULL-OUT CAPACITY OF POST-INSTALLED BONDED ANCHORS AND REBARS DURING FIRE	***Hitesh Lakhani,*** *Jan Hofmann*	**182**	**165**	Concrete Structures
16:15 - 16:30	DESIGN OF POST TENSIONED CONCRETE STRUCTURES EXPOSED TO TRAVELLING FIRES	*Chloe Jeanneret,* ***John Gales****, Panagiotis Kotsovinos, Guillermo Rein*	**189**	**173**	Concrete Structures
16:30 - 16:45	PARAMETRIC STUDIES ON BEAM-TO-COLUM STEEL-O-TIMBER DOWELLED CONNECTIONS EXPOSED TO FIRE	***Pedro Palma****, Andrea Frangi*	**2**	**183**	Timber Structures and Fire Protection Materials
17:30 - 19:00	**Participants are offered 50% discount to visit the Titanic Galleries**				
Thursday June 7, 2018					
07:00 - 08:00	**Registration and Continental Breakfast (The Bridge, Floor 6, Titanic Belfast)**				
08:00 - 09:30	**Session 2-A: Short Presentations (Titanic Suite) Co-Moderators: To be announced**		**Paper ID**	**Proceeding Pages**	**Conference Theme**
08:00 - 08:06	SCALING APPROACH FOR STUDYING FIRE RESPONSE OF STEEL BEAMS	***Mahmood Yahyai****, Abbas Rezaiean, Peter Chang*	**42**	**877**	Experimental Research and any Other
08:06 - 08:12	EXPERIMENTAL INVESTIGATION OF STAINLESS STEEL BOLTS A2-70 DURING AND AFTER FIRE	***Ying Hu****, ShengLin Tang, George Adomako Kumi*	**142**	**967**	Experimental Research and any Other
08:12 08:18	TIMBER AND THE FIRE RESISTANCE FURNACE – A COMPARATIVE STUDY OF THE CONDITIONS IN A FIRE RESISTANCE FURNACE WHEN TESTING COMBUSTIBLE AND NON-COMBUSTIBLE CONSTRUCTION	***David Lange****, Johan Sjöström, Joachim Schmid, Daniel Brandon*	**170**	**989**	Experimental Research and any Other
08:18 08:24	NUMERICAL Modelling OF THERMAL BEHAVIOUR OF CFRP REINFORCED CONCRETE STRUCTURE EXPOSED TO ELEVATED TEMPERATURE	***Phi Long Nguyen****, Xuan Hong Vu, Emmanuel Ferrier*	**122**	**367**	Numerical Modelling
08:24 08:30	BEHAVIOUR OF STEEL FRAME STRUCTURES UNDER LOCALISED FIRE INCLUDING PROGRESSIVE COLLAPSE DURING COOLING	*Thomas Gernay,* ***Antonio Gamba***	**31**	**633**	Steel Structures
08:30 08:36	FIRE TESTS OF LOAD BEARING DOUBLE STUD LSF WALLS	***Harikrishnan Magarabooshanam****, Anthony Ariyanayagam, Mahen Mahendran*	**32**	**641**	Steel Structures
08:36 08:42	STUDY ON TEMPERATURE DISTRIBUTION OF WELDED TUBULAR SQUARE JOINTS	***Jolanta Bączkiewicz****, Mikko Malaska, Sami Pajunen, Markku Heinisuo*	**49**	**679**	Steel Structures

	08:42	08:48	RESEARCH ON POST-FIRE LOAD-BEARING CAPACITY ASSESSMENT OF AXIAL RESTRAINED HIGH-STRENGTH STEEL COLUMNS	***Guo-Qiang Li**, Jia-Rong Miao*	**100**	**741**	Steel Structures
	08:48	08:54	FIBRE REINFORCED SHOTCRETE – PRESENCE OF SYNTHETIC MACRO FIBRES AFTER FIRE	***Cristian Maluk**, Todd Clarke, Andrew Ridout*	**155**	**117**	Concrete Structures
	08:54	09:00	RELATIONSHIPS BETWEEN DESTRUCTIVE AND NON-DESTRUCTIVE METHODS FOR NORMAL STRENGTH LIMESTONE CONCRETE AFTER EXPOSURE TO HIGH TEMPERATURES	***Urška Dolinar**, Gregor Trtnik, Tomaž Hozjan*	**172**	**133**	Concrete Structures
	09:00	09:06	MODELLING NON-METALLIC TIMBER CONNECTIONS IN FIRE	***Ranim Dahli,** Martin Gillie, John Gales*	**134**	**275**	Timber Structures and Fire Protection Materials
	09:06	09:12	INFLUENCE OF GAS TEMPERATURE DURING COOLING PHASE ON LOAD-BEARING PERIOD OF STRUCTUAL GLUED LAMINATED TIMBER BEAMS EXPOSED TO FIRE	***Takeo Hirashima,** Yusuke Katakura, Moto Ichikawa, Shungo Ishii*	**207**	**291**	Timber Structures and Fire Protection Materials
	09:12	09:18	FIRE BEHAVIOUR OF SLENDER CONCRETE-FILLED STEEL TUBULAR COLUMNS UNDER BIAXIAL BENDING	***Ana Espinós,** Vicente Albero, Manuel L. Romero, Maximilian Mund, Patrick Meyer, Peter Schaumann, Inka Kleiboemer*	**138**	**569**	Composite Structures
	09:18	09:24	NUMERICAL ANALYSIS OF THE THERMAL BEHAVIOUR OF STEEL-TIMBER HYBRID BEAMS IN FIRE SITUATION	*Antoine Bereysia, **Maxime Audebert,** Sébastien Durif, Abdelhamid Bouchaïr*	**171**	**577**	Composite Structures
	09:24	09:30	**Interaction**				
09:30	**-**	**10:00**	**Coffee Break/Poster Session (Gallery Outside: Britannia room floor 5 & The Bridge floor 6)**				
10:00	**-**	**11:45**	**Session 2-B.1: Steel Structures (Titanic Suite)** **Co-Moderators: To be announced**		**Paper ID**	**Proceeding Pages**	**Conference Theme**
10:00	-	10:15	PERFORMANCE OF BEAM-COLUMN SUBASSEMBLAGES OF MULTI-STORY STEEL STRUCTURES WITH CONTINUOUS COLUMNS IN SEVERE FIRES	***Chia Mohammadjani,** Charles Clifton, Anthony Abu*	**10**	**611**	Steel Structures
10:15	-	10:30	FAILURE MECHANISM OF STEEL FRAMES SUBJECTED TO POST-EARTHQUAKE FIRES	***Gabriel-Victor Risco,** Luisa Giuliani, Varvara Zania*	**173**	**803**	Steel Structures
10:30	-	10:45	INFLUENCE OF FIRE ON THE SHEAR CAPACITY OF STEEL-SHEATHED COLD-FORMED STEEL FRAMED SHEAR WALLS	***Matthew Hoehler,** Blanca Andres*	**19**	**625**	Steel Structures
10:45	-	11:00	PRELIMINARY STUDY ON QUANTITATIVE DETERMINATION OF COLLAPSE PROCESS OF STEEL PORTAL FRAMES IN FIRE	***Guobiao Lou,** Chenghao Wang, Jian Jiang, Guo-Qiang Li*	**39**	**655**	Steel Structures
11:00	-	11:15	STEADY-STATE AND TRANSIENT-STATE TESTS ON S355 TO S500 STEEL GRADES	***François Hanus,** Nicolas Caillet, Sylvain Gaillard, Olivier Vassart*	**40**	**663**	Steel Structures
11:15	-	11:30	ESTIMATION OF CHARPY IMPACT VALUES FOR STEEL WELDED CONNECTIONS AT HIGH TEMPERATUREAND AFTER HEATING AND COOLING PROCESSES	***Ye Kai,** Fuminobu Ozaki*	**46**	**671**	Steel Structures
11:30	-	11:45	NUMERICAL PARAMETRIC STUDY OF COLD-FORMED STEEL C-SHAPED COLUMNS EXPOSED TO FIRE	***Luís Laím,** João Paulo C. Rodrigues, Leroy Gardner*	**60**	**695**	Steel Structures
10:00	**-**	**11:45**	**Session 2-B.2: Concrete Structures (Olympic Suite)** **Co-Moderators: To be announced**		**Paper ID**	**Proceeding Pages**	**Conference Theme**
10:00	-	10:15	EXPERIMENTAL STUDIES ON SHEAR BEHAVIOUR OF DEEP PRESTRESSED CONCRETE HOLLOW CORE SLABS UNDER FIRE CONDITIONS	***Hang T. N. Nguyen,** Kang Hai Tan*	**24**	**51**	Concrete Structures
10:15	-	10:30	EXPERIMENTAL STUDY AND NUMERICAL SIMULATION OF FIRE RESISTANCE OF TWO-WAY RESTRAINED PRECAST CONCRETE COMPOSITE SLABS	***Qingfeng Xu,** Lingzhu Chen, Xiangmin Li, Chongqing Han, Yang Zhang, Yongchang Wang, Weichen Xue*	**29**	**61**	Concrete Structures
10:30	-	10:45	THE EFFECT OF EXPLOSIVE SPALLING ON PUNCHING SHEAR RESISTANCE OF CONCRETE SLABS EXPOSED TO FIRE	***Fangxia Lu**, Roland Baertschi, Safak Arslantürkoglu, Johann van der Merwe, Mario Fontana*	**53**	**77**	Concrete Structures
10:45	-	11:00	ROLE OF POLYMER FIBERS IN THE PREVENTION OF EXPLOSIVE SPALLING IN ULTRA-HIGH PERFORMANCE CONCRETE	***Dong Zhang**, Kanghai Tan, Aravind Dasari*	**58**	**85**	Concrete Structures
11:00	-	11:15	ROLE OF LOAD ECCENTRICITY AND TRANSVERSE REINFORCEMENT IN FIRE RESISTANCE OF REINFORCED CONCRETE COLUMNS	*Shujaat Buch, **Umesh Sharma***	**73**	**93**	Concrete Structures
11:15	-	11:30	VERIFICATION OF A TABULATED METHOD OF EUROCODE FOR CONCRETE COLUMNS USING A RESPONSE SURFACE AND ADVANCED METHODS	***Marcus Achenbach,** Thomas Gernay, Guido Morgenthal*	**107**	**101**	Concrete Structures
11:30	-	11:45	FIRE PERFORMANCE OF CONCRETE FLAT SLABS	*Pasindu Weerasinghe, **Priyan Mendis,** Kate Nguyen, Tuan Ngo*	**157**	**125**	Concrete Structures

11:45 - 13:00		**Lunch (The Bridge Floor 6 & Britannia Room Floor 5)**				
13:00 - 14:45		**Session 2-C.1: Steel Structures (Titanic Suite)** **Co-Moderators: To be announced**		**Paper ID**	**Proceeding Pages**	**Conference Theme**
13:00 - 13:15		AN EQUIVALENT STRESS METHOD FOR CONSIDERING LOCAL BUCKLING IN BEAM FINITE ELEMENTS IN THE FIRE SITUATION	***Chrysanthos Maraveas,*** *Thomas Gernay, Jean-Marc Franssen*	**67**	**703**	Steel Structures
13:15 - 13:30		BEHAVIOUR OF BOLTED CONNECTIONS COMPONENT UNDER ELEVATED TEMPERATURES	*Ioan Both, Ioan Marginean, Florea Dinu, Calin Neagu,* ***Raul Zaharia***	**77**	**711**	Steel Structures
13:30 - 13:45		BEHAVIOUR OF FULL HIGH STRENGTH STEEL EXTENDED ENDPLATE CONNECTIONS AFTER FIRE	***Xuhong Qiang,*** *Xu Jiang, Frans Bijlaard*	**87**	**717**	Steel Structures
13:45 - 14:00		DIRECT METHOD FOR CRITICAL TEMPERATURE OF A STEEL MEMBER SUSCEPTIBLE TO STABILITY LOSS	***Teemu Tiainen,*** *Timo Jokinen, Jolanta Baczkiewicz, Mikko Salminen*	**95**	**725**	Steel Structures
14:00 - 14:15		ANALYTICAL DETERMINATION OF TEMPERATURE DISTRIBUTION IN STEEL CABLES CONSIDERING CAVITY RADIATION EFFECT	*Yong Du,* ***Liang Li,*** *Jian Jiang, Guo-Qiang Li*	**98**	**733**	Steel Structures
14:15 - 14:30		DEVELOPMENT OF AN ANALYTICAL METHOD FOR THE FIRE RESISTANCE CALCULATION OF ANGELINA BEAMS	*Olivier Vassart, François Hanus,* ***Jérôme Randaxhe***	**104**	**755**	Steel Structures
14:30 - 14:45		TESTS ON CREEP BUCKLING OF HIGH STRENGTH STEEL COLUMNS AT ELEVATED TEMPERATURES	***Weiyong Wang,*** *Linbo Zhang, Hongyang Zhou, Venkatesh Kodur*	**110**	**763**	Steel Structures
13:00 - 14:45		**Session 2-C.2: Applications of Structural Fire Safety Engineering Timber Structures and Fire Protection Materials (Olympic Suite)** **Co-Moderators: To be announced**		**Paper ID**	**Proceeding Pages**	**Conference Theme**
13:00 - 13:15		CALCULATING FIRE-INDUCED HEAT FLUX CONTOURS ON CONCRETE TUNNEL LINERS TO EVALUATE STRUCTURAL CONSEQUENCES	*Kyle Root, Qi Guo,* ***Spencer Quiel,*** *Clay Naito*	**190**	**17**	Applications of Structural Fire Safety Engineering
13:15 - 13:30		PROGRESSIVE COLLAPSE MECHANISMS OF STEEL-FRAME BUILDINGS DUE TO MOVING FIRES	***Erica Fischer,*** *Amit Varma*	**191**	**25**	Applications of Structural Fire Safety Engineering
13:30 - 13:45		FIRE-INDUCED PROGRESSIVE COLLAPSE OF PLASCO BUILDING IN TEHRAN	*Amir Saedi Daryan, Hesam Ketabdari,* ***Mahmood Yahyai,*** *Mohammed Ali Morovat, Michael Engelhardt*	**197**	**33**	Applications of Structural Fire Safety Engineering
13:45 - 14:00		COLLAPSE ANALYSIS OF THE PLASCO TOWER USING OPENSEES	***Hamzeh Hajiloo****, Liming Jiang, Asif Usmani, Mark Green*	**214**	**41**	Applications of Structural Fire Safety Engineering
14:00 - 14:15		DESIGN FIRES FOR PERFORMANCE-BASED FIRE ENGINEERING OF BRIDGES	***Jiayu Hu,*** *Xu Dai, Asif Usmani, Ricky Carvel*	**83**	**3**	Applications of Structural Fire Safety Engineering
14:15 - 14:30		STRUCTURAL DESIGN OF TALL BUILDINGS UNDER MULTI-STOREY FIRES	***Graeme Flint,*** *Panagiotis Kotsovinos, Yavor Panev, Peter Woodburn*	**181**	**11**	Applications of Structural Fire Safety Engineering
14:30 - 14:45		EXPERIMENTAL FIRE-SIMULATORFOR POST-FLASHOVER COMPARTMENT FIRES	***Daniel Brandon****, Joachim Schmid, Joseph Su, Matthew Hoehler, Birgit Östman, Amanda Kimball*	**217**	**299**	Timber Structures and Fire Protection Materials
14:45 - 15:15		**Coffee Break/Poster Session (Gallery Outside: Britannia room floor 5 & The Bridge floor 6)**				
15:15 - 17:00		**Session 2-D.1: Steel Structures (Titanic Suite)** **Co-Moderators: To be announced**		**Paper ID**	**Proceeding Pages**	**Conference Theme**
15:15 - 15:30		DEVELOPING FRAGILITY CURVES & ESTIMATING FAILURE PROBABILITIES FOR PROTECTED STEEL STRUCTURAL ELEMENTS SUBJECT TO FULLY DEVELOPED FIRES	***Danny Hopkin,*** *Ruben Van Coile, Ian Fu*	**135**	**771**	Steel Structures
15:30 - 15:45		STABILITY CHECK OF TAPERED STEEL BEAMS IN FIRE	*Carlos Couto,* ***Élio Maia,*** *Paulo Vila Real, Nuno Lopes*	**149**	**779**	Steel Structures
15:45 - 16:00		EFFECTIVENESS OF STIFFENERS ON THE SHEAR CAPACITY OF STEEL WEB PLATES AT AMBIENT AND ELEVATED TEMPERATURES	*Veronica Boyce,* ***Jonathan Glassman,*** *Maria Garlock*	**166**	**796**	Steel Structures
16:00 - 16:15		EXPERIMENTAL ANALYSIS OF THE INFLUENCE OF CREEP ON FIRE-EXPOSED STEEL AND ALUMINIUM COLUMNS	***Neno Torić,*** *Ivica Boko, Vladimir Divić, Ian W. Burgess, Marko Goreta*	**18**	**619**	Steel Structures
16:15 - 16:30		THERMO-MECHANICAL BEHAVIOUR OF STRUCTURAL STAINLESS STEEL FRAMES IN FIRE	*MIAN ZHOU, Rui Cardoso, Hamid Bahai,* ***Asif Usmani***	**225**	**843**	Steel Structures
16:30 - 16:45		CROSS-SECTION RESISTANCE OF SLENDER STAINLESS STEEL I PROFILES IN CASE OF FIRE	***Nuno Lopes,*** *Carlos Couto, Jorge Azevedo, Paulo Vila Real*	**186**	**819**	Steel Structures

16:45 - 17:00	IMPLICATION OF THE END CONNECTION TYPE OF STEEL BEAMS ON THE CRITICAL/LIMITING TEMPERATURE EQUATIONS	***Jashnav Pancheti,*** *Arul S Jayachandran*	**196**	**827**	Steel Structures
15:15 - 17:00	**Session 2-D.2: Steel Structures & Composite Structures (Olympic Suite)** **Co-Moderators: To be announced**		**Paper ID**	**Proceeding Pages**	**Conference Theme**
15:15 - 15:30	DIRECT STRENGTH METHOD FOR CALCULATING DISTORTIONAL BUCKLING RESISTANCE OF COLD-FORMED THIN-WALLED STEEL BEAMS WITH NON-UNIFORM ELEVATED TEMPERATURES	***Mutiu Alabi-Bello,*** *Yong Wang*	**204**	**835**	Steel Structures
15:30 - 15:45	CHARACTERISING THE THERMOMECHANICAL RESPONSE OF COLUMNS SUBJECT TO LOCALISED FIRES	***Yavor Panev,*** *Teodor Sofroniev, Luke Bisby, Panagiotis Kotsovinos, Graeme Flint*	**184**	**811**	Steel Structures
15:45 - 16:00	PROGRESSIVE COLLAPSE OF BRACED STEEL FRAMED STRUCTURES EXPOSED TO FIRE	*Jian Jiang,* ***Guo-Qiang Li***	**52**	**687**	Steel Structures
16:00 - 16:15	SHEAR ANALYSIS OF CLIPPED STEEL WEBS IN FIRE AND AMBIENT CONDITIONS	*Veronica Boyce,* ***Maria Garlock***	**164**	**787**	Steel Structures
16:15 - 16:30	EFFECTS OF TOPCOAT ON INSULATION OF INTUMESCENT COATING FOR FIRE PROTECTION OF STEEL STRUCTURES	***Qing Xu,*** *Guo-Qiang Li, Xiao Zhao, Xing-Yuan Zhao*	**103**	**747**	Steel Structures
16:30 - 16:45	PERFORMANCE OF INTUMESCENT FIRE PROTECTION COATINGS ON STEEL TENSION ROD SYSTEMS	*Mai Häßler,* ***Dustin Häßler****, Sascha Hothan, Simone Krüger*	**38**	**649**	Steel Structures
16:45 - 17:00	FIRE PERFORMANCE OF LONG-SPAN COMPOSITE BEAMS WITH GRAVITY CONNECTIONS	***Lisa Choe,*** *Selvarajah Ramesh, Mina Seif, Matthew Hoehler, William Grosshandler, John Gross, Matthew Bundy*	**206**	**601**	Composite Structures
19:00 - 22:00	**Dinner (City Hall Belfast)**				
	Friday, June 8, 2018				
07:00 - 08:00	**Continental Breakfast (The Bridge, Floor 6, Titanic Belfast)**				
08:00 - 09:15	**Session 3-A: Timber Structures and Fire Protection Materials, Concrete Structures & Composite Structures (Titanic Suite)** **Co-Moderators: To be announced**		**Paper ID**	**Proceeding Pages**	**Conference Theme**
08:00 - 08:15	BEHAVIOR OF CIRCULAR CONCRETE-FILLED DOUBLE-SKIN, DOUBLE-TUBE AND INNER RING TUBULAR COLUMNS SUBJECTED TO FIRE	*Aline Camargo,* ***João Paulo Rodrigues,*** *Ricardo Fakury, Tiago Pires*	**48**	**521**	Composite Structures
08:15 - 08:30	NUMERICAL MODEL FOR FIRE RESISTANCE EVALUATION OF STEEL REINFORCED POLYMER STRENGTHENED CONCRETE BEAMS	*Pratik Bhatt,* ***Venkatesh Kodur,*** *Rami Haweeleh, Nasser Al-Nuaimi, Jamal Abdalla*	**127**	**107**	Concrete Structures
08:30 - 08:45	FIRE TESTS TO ASTM E119 ON FULL-SIZE GLULAM BEAM TO COLUMN CONNECTIONS	***David Barber***	**56**	**209**	Timber Structures and Fire Protection Materials
08:45 - 09:00	PERFORMANCE OF INTUMESCENT FIRE PROTECTION COATINGS ON STEEL TENSION ROD SYSTEMS	*Mai Häßler,* ***Dustin Häßler****, Sascha Hothan, Simone Krüger*	**38**	**649**	Steel Structures
09:00 - 09:15	FIRE SAFETY CHALLENGES OF TALL WOOD BUILDINGS: LARGE-SCALE CROSS LAMINATED TIMBER COMPARTMENT FIRE TESTS	***Matthew Hoehler,*** *Joseph Su, Pier-Simon Lafrance, Matthew Bundy, Amanda Kimball, Daniel Brandon, Birgit Östman*	**84**	**249**	Timber Structures and Fire Protection Materials
9:15 - 9:45	**Coffee Break (Gallery Outside: Britannia room floor 5 & The Bridge floor 6)**				
9:45 - 11:00	**Session 3-B.1: Timber Structures and Fire Protection Materials (Titanic Suite)** **Co-Moderators: To be announced**		**Paper ID**	**Proceeding Pages**	**Conference Theme**
9:45 - 10:00	THERMAL CHARACTERISATION AND FIRE PERFORMANCE OF PCM-PLASTERBOARDS	***Sayilacksha Gnanachelvam,*** *Mahen Mahendran, Anthony Ariyanayagam, Poologanathan Keerthan*	**33**	**193**	Timber Structures and Fire Protection Materials
10:00 - 10:15	FIRE-RETARDANT COATINGS FOR CONCRETE SUBSTRATE: A COMPARSION BETWEEN ONE-DIMENSIONAL AND TWO-DIMENSIONAL HEAT TRANSFER	***Yan Hao Ng****, Aravind Dasari, Kang Hai Tan*	**50**	**201**	Timber Structures and Fire Protection Materials
10:15 - 10:30	A METHODOLOGY FOR QUANTIFYING FIRE RESISTANCE OF EXPOSED STRUCTURAL MASS TIMBER ELEMENTS	*David Barber, Lizzie Sieverts,* ***Robert Dixon,*** *Jarrod Alston*	**57**	**217**	Timber Structures and Fire Protection Materials
10:30 - 10:45	NUMERICAL MODEL FOR THE FIRE PROTECTION PERFORMANCE OF INTUMESCENT COATINGS EXPOSED TO NATURAL FIRES	***Waldemar Weisheim,*** *Peter Schaumann, Lisa Sander, Jochen Zehfuß*	**65**	**225**	Timber Structures and Fire Protection Materials
10:45 - 11:00	FIRE RESISTANCE OF TIMBER FRAME ASSEMBLIES WITH CAVITIES PARTIALLY FILLED BY INSULATION MATERIALS	***Mattia Tiso****, Alar Just*	**76**	**233**	Timber Structures and Fire Protection Materials

9:45	**-**	**11:00**	**Session 3-B.2: Composite Structures (Olympic Suite)** **Co-Moderators: To be announced**		**Paper ID**	**Proceeding Pages**	**Conference Theme**
9:45	-	10:00	EXPERIMENTAL AND NUMERICAL INVESTIGATIONS ON THE LOAD BEARING BEHAVIOUR OF AN INNOVATIVE PRESTRESSED COMPOSITE FLOOR SYSTEM UNDER A NATURAL FIRE SCENARIO	*Peter Schaumann,* ***Patrick Meyer****, Martin Mensinger, Suet Kwan Koh*	**136**	**553**	Composite Structures
10:00	-	10:15	FIRE PERFORMANCE OF STEEL REINFORCED ULTRA HIGH TOUGHNESS CEMENTITIOUS COMPOSITES BEAM	***Chaojie Sun,*** *Qinghua Li, Junfeng Lu, Shilang Xu*	**21**	**481**	Composite Structures
10:15	-	10:30	NUMERICAL AND EXPERIMENTAL INVESTIGATION OF THE STRUCTURAL BEHAVIOR OF PERFORATED BEAMS EXPOSED TO HYDROCARBON FIRES IN OFFSHORE PLATFORMS	***Hooman Atefi,*** *Ali Nadjai, Faris Ali*	**25**	**489**	Composite Structures
10:30	-	10:45	EXPERIMENTAL STUDY OF A STEEL-CONCRETE COMPOSITE BRIDGE UNDER FIRE	*José Alós-Moya,* ***Ignacio Paya-Zaforteza,*** *Antonio Hospitaler*	**26**	**497**	Composite Structures
10:45	-	11:00	EXPERIMENTAL INVESTIGATION OF POST-TENSIONED CONCRETE BRIDGE BEAMS EXPOSED TO HYDROCARBON FIRE	***Xi Qiang Wu,*** *Francis Tat Kwong Au, Jing Li*	**27**	**505**	Composite Structures
11:00	**-**	**11:30**	**Coffee Break (Gallery Outside: Britannia room floor 5 & The Bridge floor 6**				
11:30	**-**	**12:30**	**Session 3-B.3: Timber Structures and Fire Protection Materials (Titanic Suite)** **Co-Moderators: To be announced**		**Paper ID**	**Proceeding Pages**	**Conference Theme**
11:30	-	11:45	THE USE OF FURNACE TESTS TO DESCRIBE REAL FIRES FOR TIMBER STRUCTURES	***Joachim Schmid,*** *David Lange, Johan Sjöström, Daniel Brandon, Michael Klippel, Andrea Frangi*	**81**	**241**	Timber Structures and Fire Protection Materials
11:45	-	12:00	INVESTIGATION OF DIFFERENT TEMPERATURE MEASUREMENT DESIGNS AND INSTALLATIONS IN TIMBER MEMBERS AS LOW CONDUCTIVE MATERIAL	***Reto Fahrni,*** *Joachim Schmid, Michael Klippel, Andrea Frangi*	**99**	**254**	Timber Structures and Fire Protection Materials
12:00	-	12:15	COMPARISON OF FIRE RESISTANCE OF DAMAGED FIRE PROOFED STEEL BEAMS UNDER HYDROCARBON POOL FIRE AND ASTM E119 FIRE EXPOSURE	***Mustafa Mahamid,*** *Ataollah Taghipour Anvari, Ines Torra-Bilal*	**131**	**265**	Timber Structures and Fire Protection Materials
12:15	-	12:30	IMPROVEMENTS TO THE COMPONENT ADDITIVE METHOD	***Katrin Nele Mäger,*** *Alar Just, Andrea Frangi*	**156**	**283**	Timber Structures and Fire Protection Materials
11:30	**-**	**12:30**	**Session 3-B.4: Composite Structures & Concrete Structures (Olympic Suite)** **Co-Moderators: To be announced**		**Paper ID**	**Proceeding Pages**	**Conference Theme**
11:30	-	11:45	FIRE BEHAVIOUR OF STEEL REINFORCED CONCRETE FILLED STAINLESS STEEL TUBULAR (SRCFSST) COLUMNS WITH SQUARE HOLLOW SECTION	***Qinghua Tan****, Leroy Gardner, Bin Chen, Linhai Han, Yaoyuan Zhang*	**44**	**513**	Composite Structures
11:45	-	12:00	BEHAVIOR OF CFRP-CONCRETE BOND SYSTEM AT ELEVATED TEMPERATURES	*Thiago Brazeiro,* ***João Paulo Rodrigues***	**47**	**69**	Concrete Structures
12:00	-	12:15	NUMERICAL AND EXPERIMENTAL TESTS ON CONCRETE FILLED SQUARE AND RECTANGULAR HOLLOW COLUMNS SUBJECTED TO FIRE	***Luís Laím,*** *João Paulo C. Rodrigues, Venkatesh K.R. Kodur*	**62**	**529**	Composite Structures
12:15	-	12:30	INVESTIGATION OF PARTIAL CONNECTION THEORY ON COMPOSITE BEAMS UNDER FIRE EXPOSURE	***Sven Brunkhorst,*** *Jochen Zehfuß, Samuel Pfenning, Martin Mensinger*	**113**	**537**	Composite Structures
12:30	**-**	**13:45**	**Lunch (The Bridge Floor 6 & Britannia Room Floor 5)**				
13:45	**-**	**15:15**	**Session 3-C: Timber Structures and Fire Protection Materials & Composite Structures (Titanic Suite)** **Co-Moderators: To be announced**		**Paper ID**	**Proceeding Pages**	**Conference Theme**
13:45	-	14:00	KEY GOVERNING FACTORS THAT DEFINE THE FIRE PERFORMANCE OF STRUCTURAL INSULATED PANELS USED IN FLOOR SYSTEMS	***Aaron Bolanos,*** *Jose L. Torero, Cristian Maluk*	**130**	**545**	Composite Structures
14:00	-	14:15	STUDY ON THE USE OF CENOSPHERE-BASED ULTRA-LIGHTWEIGHT CEMENT COMPOSITE FOR ENHANCING FIRE PERFORMANCE OF CONCRETE-FILLED TUBULAR COLUMNS	***Wojciech Szymkuć,*** *Piotr Tokłowicz, Adam Glema, Hélder Craveiro*	**174**	**585**	Composite Structures
14:15	-	14:30	EXPERIMENTAL AND ANALYTICAL INVESTIGATION ON THERMAL PERFORMANCE OF SLIM FLOOR BEAMS WITH WEB OPENINGS IN FIRE	***Naveed Alam,*** *Ali Nadjai, Faris Ali, Olivier Vassart, Francois Hanus*	**12**	**473**	Composite Structures
14:30	**-**	**16:00**	**Closing Ceremony (Titanic Suite)**				

	POSTERS		Paper ID	Proceeding Pages	Conference Theme
1	SCALING APPROACH FOR STUDYING FIRE RESPONSE OF STEEL BEAMS	*Mahmood Yahyai, Abbas Rezaiean, Peter Chang*	**42**	**877**	Experimental Research and any Other
2	EXPERIMENTAL INVESTIGATION ON THE POST-FIRE MECHANICAL PROPERTIES OF STAINLESS STEEL BOLTS A2-70 AND A4-80	*Ying Hu, ShengLin Tang, George Adomako Kumi*	**142**	**967**	Experimental Research and any Other
3	TIMBER AND THE FIRE RESISTANCE FURNACE – A COMPARATIVE STUDY OF THE CONDITIONS IN A FIRE RESISTANCE FURNACE WHEN TESTING COMBUSTIBLE AND NON-COMBUSTIBLE CONSTRUCTION	*David Lange, Johan Sjöström, Joachim Schmid, Daniel Brandon*	**170**	**989**	Experimental Research and any Other
4	NUMERICAL Modelling OF THERMAL BEHAVIOUR OF CFRP REINFORCED CONCRETE STRUCTURE EXPOSED TO ELEVATED TEMPERATURE	*Phi Long Nguyen, Xuan Hong Vu, Emmanuel Ferrier*	**122**	**367**	Numerical Modelling
5	BEHAVIOUR OF STEEL FRAME STRUCTURES UNDER LOCALISED FIRE INCLUDING PROGRESSIVE COLLAPSE DURING COOLING	*Thomas Gernay, Antonio Gamba*	**31**	**633**	Steel Structures
6	FIRE TESTS OF LOAD BEARING DOUBLE STUD LSF WALLS	*Harikrishnan Magarabooshanam, Anthony Ariyanayagam, Mahen Mahendran*	**32**	**641**	Steel Structures
7	STUDY ON TEMPERATURE DISTRIBUTION OF WELDED TUBULAR SQUARE JOINTS	*Jolanta Bączkiewicz, Mikko Malaska, Sami Pajunen, Markku Heinisuo*	**49**	**679**	Steel Structures
8	RESEARCH ON POST-FIRE LOAD-BEARING CAPACITY ASSESSMENT OF AXIAL RESTRAINED HIGH-STRENGTH STEEL COLUMNS	*Guo-Qiang Li, Jia-Rong Miao*	**100**	**741**	Steel Structures
9	FIBRE REINFORCED SHOTCRETE – PRESENCE OF SYNTHETIC MACRO FIBRES AFTER FIRE	*Cristian Maluk, Todd Clarke, Andrew Ridout*	**155**	**117**	Concrete Structures
10	DETERMINATION OF RESIDUAL STRENGTH OF NORMAL STRENGTH CONCRETE AFTER THE FIRE	*Urška Dolinar, Gregor Trtnik, Tomaž Hozjan*	**172**	**133**	Concrete Structures
11	MODELLING NON-METALLIC TIMBER CONNECTIONS IN FIRE	*Ranim Dahli, Martin Gillie, John Gales*	**134**	**275**	Timber Structures and Fire Protection Materials
12	INFLUENCE OF GAS TEMPERATURE DURING COOLING PHASE ON LOAD-BEARING PERIOD OF STRUCTUAL GLUED LAMINATED TIMBER BEAMS EXPOSED TO FIRE	*Takeo Hirashima, Yusuke Katakura, Moto Ichikawa, Shungo Ishii*	**207**	**291**	Timber Structures and Fire Protection Materials
13	FIRE BEHAVIOUR OF SLENDER CONCRETE-FILLED STEEL TUBULAR COLUMNS UNDER BIAXIAL BENDING	*Ana Espinós, Vicente Albero, Manuel L. Romero, Maximilian Mund, Patrick Meyer, Peter Schaumann, Inka Kleiboemer*	**138**	**569**	Composite Structures
14	NUMERICAL ANALYSIS OF THE THERMAL BEHAVIOUR OF STEEL-TIMBER HYBRID BEAMS IN FIRE SITUATION	*Antoine Bereysia, Maxime Audebert, Sébastien Durif, Abdelhamid Bouchaïr*	**171**	**577**	Composite Structures

*** A prize will be awarded to the best poster (£100 sponsored by FireSERT)**
**** A prize will be awarded to the best short presentation (£100 sponsored by FireSERT)**