Day 1		
	Main Room	Room 2
08:30-09:30	Registration and Networking	
09:30-09:40	Welcome and Opening	
	Plenary Session - All Composite Structures	
09:40-10:10	Keynote 1 - Floating on Glass: Audacious FRP Applications for Lightweight Roof Structures <u>Luke McEwen</u> and Catherine Anne McCarroll Gurit Composite Engineering	
10:10-10:30	Fibre Reinforced Polymer Structures: Design Guidance or Guidance for Designers Toby Mottram University of Warwick	
10:30-10:50	Effects of Lap Thickness and Joint Geometry on Failure of Pultruded Composite Single-lap Bolted Tension Joints Geoff Turvey University of Lancaster	
10:50-11:30	Break and Networking	
	All Composite Structures	Long Term Performance of FRP
11:30-11:50	Convenient and Inexpensive Test Methods for Pultruded GFRP Composite Materials Tianqiao Liu - Daniel Cardoso - Janine Vieira - <u>Kent A. Harries</u> University of Pittsburgh	Durability of Extracted In-Service GFRP Bars in RC Subjected to Field Exposure Wei Wang - John J. Myers Missouri University of Science and Technology
11:50-12:10	Flexural Stability of Pultruded GFRP I- sections <u>Kent A. Harries</u> - J. D. Vieira - T. Q. Liu University of Pittsburgh	Service Life Prediction of Pultruded Glass Fibre Reinforced Polymer Composites for Building Construction <u>Valter Carvelli</u> - Guglielmo Carra Politecnico di Milano
12:10-12:30	Joining Fiberglass to Outperform Steel <u>Mark Singleton</u> - John Hutchinson Startlink Systems	Gaps Between Short Term and Long Term Design for Internal FRP Reinforcement André Weber Schoeck Bauteile
12:30-12:50	Influence of Length and End-Conditions on the Local Buckling of Pultruded GFRP I-section Columns Gisele G. Cintra - <u>Daniel C. T. Cardos</u> o - Janine D. Vieira Pontifícia Universidade Católica do Rio de Janeiro (PUC-Rio)	Investigation of Tension Stiffening in GFRP RC Tensile Members Exposed to Severe Environments Under Strained Load <u>Hamed Fergani</u> - Maurizio Guadagnini - Matteo Di Benedetti - Cyril Lynsdale - Cristina Mias

12:50-13:10	Effect of Temperature on the Short-term and Long-term Behaviour of Single-Pin-Bearing Connections in Pultruded FRP Composites	Long-term-performance of Loaded GFRP Bars in Alkaline Environment
	David Scott	M. L. Keller - M. Pahn - M. Kopietz - B. Wetzel
	Georgia Institute of Technology	University of Kaiserslautern
13:10-14:30	Lunch and Networking	
	Strengthening with FRP	FRP at Elevated Temperatures
14:30-14:50	Optimum Shear Strengthening of Reinforced Concrete Beams using an Un-bonded CFRP Strap Shear Retrofitting System <u>Maithree Kurukulasuriya, Hasini Ratnayake</u> and Hiran Yapa <u>University of Peradeniya</u>	Experimental Behaviour of RC Slabs Strengthened with EB CFRP Strips Subjected to Fatigue Loading at Elevated Temperature Juan Manuel Gallego - Christoph Czaderski - Julien Michels Empa, Swiss Federal Laboratories for Materials Science and Technology
14:50-15:10	Large-scale Reinforced Concrete T-beams Strengthened in Shear with Embedded GFRP Bars <u>Samir Dirar</u> and Marios Theofanous University of Birmingham	Flexural Strength Enhancement of Steel I-sections with Fibre-Reinforced Intumescent Fire Protection Coatings <u>Zafiris Triantafyllidis</u> , Luke Bisby and Tim Stratford University of Edinburgh
15:10-15:30	Effectiveness of the Deep Embedment (DE) Technique for the Shear Strengthening of Reinforced Concrete Continuous T-beams <u>Vesna Raicic</u> - Prof Tim Ibell - Dr Antony Darby - Dr Mark Evernden - Dr John Orr University of Bath	Modelling of the Flexural Behaviour of FRP Strengthened Beams at Elevated Temperatures <u>Alessandro Proia</u> - Stijn Matthys Ghent University
15:30-15:50	An Upper-bound Plastic Approach to the Capacity of Reinforced Concrete Slab-on-beam Structures Strengthened in Shear with Externally Bonded CFRP Robert M Foster - Chris T Morley - Janet M Lees University of Queensland	Fire Safety Scenarios for FRP Strengthened RC Beams as a Function of the Strengthening Ratio Stijn Matthys Ghent University
15:50-16:20	Break and Networking	
16:20-17:30	ECR Poster Competition Presentations 5min presentations x 10	
17:30 - 19:30	ECR Poster Competition and Drinks Reception, Sponsored by Tony Gee & Partners and Construction Composites	

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	Main Room	Room 2
09:00-09:30	Registration and Networking	
	Plenary Session - Applications	
09:30-10:00	Keynote 2 - Design and Production of the World's Largest Carbon Fibre Reinforced Architectural Structure Mark Hobbs Premier Composite Technologies	
10:00-10:30	Keynote 3 - Design and Fabrication of Church Bridge Lee Canning Jacobs	
10:30-10:50	Material Testing, Design & Construction of a Laboratory-Scale FRP Composite Footbridge Paul Archbold - <u>Brian Mullarney</u> Athlone Institute of Technology	
10:50-11:30	Break and Networking	
	Textile Reinforced Mortars	Composite Panels
11:30-11:50	An Innovative Structural and Energy Retrofitting System for Masonry Walls Using Textile Reinforced Mortars Combined With Thermal Insulation Thanasis Triantafillou - Kyriakos Karlos - Kalliopi Kefalou - Eirini Argyropoulou University of Patras	Fatigue Performance of a Connection for GRC Cladding Panels Marco Dona University of Cambridge
11:50-12:10	On the Effectiveness of Textile Reinforced Mortars for Retrofitting of Masonry Arches Florentia Kariou - Savvas Triantafyllou - Dionysios Bournas University of Nottingham	Bending Performance of Glass Fibre reinforced Polymer Sandwich Panels Subjected to Combined Thermal Cycling and Load Isabelle Paparo University of Cambridge
12:10-12:30	Concrete walls with openings strengthened using FRCM composites <u>Cristian Sabau</u> , Cosmin Popescu, Gabriel Sas, Thomas Blanksvärd and Björn Täljsten <u>Luleå University of Technology</u>	Flexural Behaviour of Thin GFRP-reinforced Concrete Slabs With Reduced Concrete Cover as a Part of Pre-cast Sandwich Panels Marcin M. Haffke - Matthias Pahn Technische Universitaet Kaiserslautern
12:30-12:50	Effectiveness of TRM Versus FRP in flexural strengthening of RC beams <u>Saad M. Raoof</u> - Lampros N. Koutas - Dionysios A. Bournas University of Nottingham	Estimation of Capacity and Energy Absorption of FRP-to-Steel Bolted Connections M. Dakhel - T. Donchev - H. Hadavinia - M. Limbachiya Kingston University
12:50-14:00	Lunch and Networking	
	Textile Reinforced Mortars	FRP for RC Structures
14:00-14:20	Shear Capacity of RC Beams Strengthened with TRM Jacketing <u>Zoi C. Tetta</u> - Dionysios Bournas - Thanasis Triantafillou University of Patras	Structural Performance of Flexibly Formed Concrete T Beams with Wound FRP Reinforcement <u>Yuanzhang Yang</u> - John Orr - Tim Ibell - Saverio Spadea

		University of Bath
14:20-14:40	Effect of Shear Span-to-depth Ratio in Concrete Beams Strengthened in Shear with	Experimental Study on the DIC Setup for the Analysis of FRP RC
	Textile-Reinforced Mortar (TRM)	Members
	Zoi C. Tetta - Lampros N. Koutas - Dionysios A. Bournas	<u>Matteo Di Benedetti</u> - Javier Gómez - Cristina Barris - Maurizio Guadagnini -
	University of Patras	Lluís Torres
		University of Sheffield
14:40-15:00	Evaluation of External Transversal Reinforcement Strains of RC Beams	Punching Shear of Concrete Flat Slabs Reinforced With Fibre
	Strengthened in Shear With FRCM Composites	Reinforced Polymer Bars
	J.H. Gonzalez-Libreros - T. D'antino - L.H. Sneed - C. Pellegrino	<u>Abdulhamid Al Ajami</u> - Abdulhamid A Q Al Ajami - Ashraf Ashour - Dennis
	University of Padua	Lam - Therese Sheehan
		University of Bradford
15:00-15:20	Evaluating the Confining Effects of Steel-Reinforced Grout Jacketing: An	Mechanical Behaviour of Concrete Beams Reinforced With CFRP
	Experimental Study	U-channels
	<u>Georgia Thermou</u> - Iman Hajirasouliha	<u>Mithila Achintha</u> - Fikri Alami - Sian Harry - Alan Bloodworth
	University of Sheffield	<u>University of Southampton</u>
15:20-15:40	Experimental Investigation on Anchorage Systems for Enhancing the Mechanical	Shear Behaviour of FRP RC Beams: Does Size Matter?
	Performance of FRCM Composites in Retrofitting RC Structural Beams	<u>Szymon Cholostiakow</u> - Matteo Di Benedetti - Emanuele Zappa - Maurizio
	Zena R. Aljazaeri - Micheal Janke - John J. Myers	Guadagnini
	Missouri University of Science and Technology	University of Sheffield
15:40-16:10	Break and Networking	
	Confinement with FRP	FRP for RC Structures
16:10-16:30	Effect of Cylinder Size on the Behaviour of FRP-confined Rubberised Concrete with	Bend-strength of Wound Carbon Fibre Reinforced Polymer Shear
	High Rubber Content	Reinforcement
	<u>Samar Raffoul</u> - David Escolano Margarit - Reyes Garcia - Maurizio Guadagnini - Kypros	<u>Kristin Ivanova</u> - John Orr - Saverio Spadea
	Pilakoutas	University of Bath
	University of Sheffield	
16:30-16:50	Proof-of-concept Testing of FRP Confined Rubberised Concrete Coupling Beams	First Certified GFRP Thermal Break for Concrete Cantilever Balconies
	<u>David Escolano-Marqarit</u> - Zhao Wang - Maurizio Guadagnini - Kypros Pilakoutas	André Weber
	University of Sheffield	Schoeck Bauteile
16:50-17:10	FRCM Systems for Strengthening Masonry Structures	Bond Strength of Sand-coated GFRP Re-bars in High-strength
	G. Amato - J.F. Chen - <u>J. D'anna</u> - L. La Mendola - G. Minafò	Concrete
	Queen's University Belfast	<u>Najia Saleh</u> - A. F. Ashour - Dennis Lam - Therese Sheehan
		University of Bradford

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		Main Room

09:00-09:30	Registration and Networking
	Bond and Anchorages
09:30-09:50	Bond Strength of GFRP Rebars in Concrete at Elevated Temperature <u>Sándor Sólyom</u> - Matteo Di Benedetti - Emanuele Zappa - Maurizio Guadagnini - György L. Balázs Budapest University of Technology and Economics
09:50-10:10	Bond Performance of Helically Wrapped GFRP Bars in High-strength Concrete Najia Saleh - A. F. Ashour - Dennis Lam - Therese Sheehan University of Bradford
10:10-10:30	Experimental Measurements and Numerical Modelling of Bond Between GFRP Bars and Concrete <u>Ana Velikovic</u> - Mohammadali Rezazadeh - Valter Carvelli Politecnico di Milano
10:30-10:50	Effect of Sustained Load and Environmental Conditions on the Bond Between NSM FRP Strips and Concrete <u>Mohamed Emara</u> , Marta Baena, Lluis Torres, Cristina Barris, Mohamed Moawad and Ricardo Perera University of Girona
10:50-11:10	Test Standardisation for FRP-to-Concrete Bond Characterisation <u>Andreea Serbescu</u> - Maurizio Guadagnini - Kypros Pilakoutas Sheffield Hallam University
11:10-11:40	Break and Networking
	Strengthening with FRP
11:40-12:00	Estimation of Pull-out and Shear Strength of FRP Spike Anchors <u>Villanueva Llauradó Paula</u> - Ibell Tim - Fernández Gómez Jaime - González Ramos Francisco J Technical University of Madrid
12:00-12:20	Thermoplastic FRP Laminates for Strengthening Concrete <u>Michal Staskiewicz</u> - Chris Hare NetComposites
12:20-12:40	Flexural and Shear Response Predictions of Statically Determinate and Indeterminate RC Structures Strengthened With Fibre Reinforced Polymer <u>Honeyeh Ramezansefat</u> - Mohammadali Rezazadeh - Joaquim Barros University of Minho
12:40-13:00	Sustained Loading Effects on NSM Strengthened RC Beams With Different CFRP Ratios Mohamed Moawad - <u>Lluis Torres</u> - Cristina Barris - Marta Baena - Mohamed Emara - Ricardo Perera University of Girona
13:00-14:30	Lunch & Networking