

Technical Schedule Overview



Concrete Structures for Resilient Society



Tongji University



Concrete and Prestressed Concrete Institute of China Civil Engineering Society

Schedule Overview

Shanghai (GMT+8)	Lausanne (GMT+1)		С	ay 1, Novem	ber 22, Sunda	у
15:00 16:30	8:00 9:30	1:00 2:30	Opening Ceremony			
				Tea I	Break	
16:45 17:30	9:45 10:30	2:45 3:30	Keynote 1: Towards Resilient Concrete Structures in a Digitalized World by Professor Luc Taerwe			italized World
17:30 18:15	10:30 11:15	3:30 4:15	Keynote 2: Seismic Behavior of Shear-Critical RC Columns under Different Lateral Loading Directions by Professor Xianglin Gu			er Different Lateral
			Tea Break			
18:30 20:15	11:30 13:15	4:30 5:15	Room A, Session 1 Fibre reinforced concrete	Room B, Session 1 Assessment of existing structures	Room C, Session 1 Precast building structures	Room D, Session 1 Concrete deterioration and reinforcement corrosion



Schedule Overview

Shanghai (GMT+8)	Lausanne (GMT+1)	-	Day 2, November 23, Monday			ıy	
10:30 12:15	3:30 5:15	20:30(-1) 22:15(-1)	Room A, Session 2 Ultra high performance concrete	Room B, Session 2 Behavior of structural components(I)	Room C, Session 2 Precast bridge structures	Room D, Session 2 Resilient and sustainable construction	
				Tea E	Break		
12:30 14:15	5:30 7:15	22:30(-1) 00:15	Room A, Session 3 Recycled and self- compacting concrete	Room B, Session 3 Behavior of structural components(II)	Room C, Session 3 Precast structures and connectors	Room D, Session 3 Strctural monitoring and maintenance	
				Tea E	Break		
14:30 15:15	7:30 8:15	0:30 1:15		thening and Energy Up	is: the Challenge of the ograding of Existing Bu olo Negro		
15:15 16:00	8:15 9:00	1:15 2:00	Keynote 4: A Challenge to Non-metallic Bridges by Dr. Akio Kasuga				
		1	Tea Break				
16:15 18:00	9:15 11:00	2:15 4:00	Room A, Session 4 New and Special Concrete Materials (I)	Room B, Session 4 Long term behaviour	Room C, Session 4 Bridge structures	Room D, Session 4 Structural strengthening and retrofitting	
				Tea E	Break		
18:15 20:00	11:15 13:00	4:15 6:00	Room A, Session 5 New and Special Concrete Materials (II)	Room B, Session 5 Fire behavior and resistance	Room C, Session 5 Numerical model and analysis	Room D, Session 5 Strctural durability and reliability	
			Tea E	Break			
20:15 22:00	13:15 15:00	6:15 8:00	Room A, Session 6 fib-ACI Joint Special Session on FRC Applications	Network S	ession (Zoom Confere	nce Mode)	



Schedule Overview

Shanghai (GMT+8)	Lausanne (GMT+1)		Day 3, November 24, Tuesday			ay	
12:30 14:15	5:30 7:15	22:30(-1 00:15	Room A, Session 7 Textile reinforced and geopolymer concrete		Room C, Session 7 Tunnels and structural joints	Room D, Session 7 Fatigue behavior of structures	
				Tea E	Break		
14:30 16:15	7:30 9:15	0:30 2:15	Room A, Session 8 Shear and torsion of structural elements	Room B, Session 8 Behavior under impact and explosion	Room C, Session 8 Innovative technologies for construction	Room D, Session 8 Strctural repair and rehabilitation	
			Tea Break				
16:30 17:15	9:30 10:15	2:30 3:15	Keynote 5: Cor	ncrete and Climate Cha by Prof. Jean N	•	ve the Problem?	
17:15 18:00	10:15 11:00	"3:15 4:00"	Keynote 6: Concrete Crack Control Technology and its Application in Super-large Castin-situ Tunnel by Prof. Kunpeng Gu			n in Super-large Cast-	
18:00 19:00	11:00 12:00	4:00 5:00	Closing Ceremony				



Technical Schedule for Room A

Shanghai time		Room A, Session 1: Fibre Reinforced Concrete					
18:30	20:15		5	Session Chairs: Marco Di Prisco & Jiangtao Yu			
		Order	Presenter	Title			
18:30	18:45	1	Le Shen	EFFECT OF STEEL FIBER ON MECHANICS BEHAVIOR OF RPC UNDER COMBINED COMPRESSIVE AND SHEAR LOADING			
18:45	19:00	2	Soufiane el Yassari	FIBER REINFORCED CONCRETE UNDER CYCLIC LOADING: ANALITICAL MODEL AND EXPERIMENTAL VALIDATION			
19:00	19:15	3	Sabine Kruschwitz	EVALUATION OF ADVANCED NON-DESTRUCTIVE TESTING METHODS FOR MEASUREMENT OF FIBRE ORIENTATION IN CONCRETE			
19:15	19:30	4	Ladin Camci	CONFORMITY ASSESSMENT MODEL FOR CONSTRUCTIONAL STEEL PRODUCTS,			
19:30	19:45	5	Birgir Olafsson	FLEXURAL STRENGTH OF A FIBER-REINFORCED CONCRETE BEAMS			
19:45	20:00	6	Tobias Zircher	CALIBRATION OF STEEL FIBER DISTRIBUTION MODELS BASED ON OMPUTER TOMOGRAPHIC DATA			
20:00	20:15	7	Dawei Gu	SHEAR COMPONENTS OF REINFORCED ECC BEAMS			







Shanghai time		Room A, Session 2: Ultra High Performance Concrete				
10:30	12:15	Session Chairs: Xian Liu & Luca Sorelli				
10.50	,,,	Order	Presenter	Title		
10:30	10:45	1	Jörg Jungwirth and Andre Strotmann	RETROFITTING AND STRENGTHENING OF REINFORCED CONCRETE STRUCTURES BY USING THIN UHPFRC SHOTCRETE LAYERS: APPLICATIONS AREAS, DESIGN, DURABILITY, PROCESSING TECHNOLOGY		
10:45	11:00	2	Chi Zhang	MICRO SCRATCH TESTS OF REACTIVE AGGREGATES IN ASR DAMAGED CONCRETE		
11:00	11:15	3	Chen Feng	EXPERIMENTAL STUDY ON THE BOND BEHAVIOR BETWEEN ULTRA HIGH PERFORMANCE CONCRETE (UHPC) AND HIGH STRENGTH STEEL BAR REINFORCEMENT		
11:15	11:30	4	Gerius Moelich	SELF-HEALING OF PLASTIC CRACKS IN CONCRETE USING BACTERIA		
11:30	11:45	5	Hoang An Le	AN EXPERIMENTAL STUDY ON COMPRESSIVE STRENGTH, SPLITTING STRENGTH AND DIRECT TENSILE STRENGTH OF ULTRA-HIGH PERFORMANCE CONCRETE		
11:45	12:00	6	Pawel Sikora	EFFECT OF NANOSILICA ON HYDRATION, MICROSTRUCTURE AND MECHANICAL PERFORMANCE OF 3D PRINTED MORTAR		
12:00	12:15	7	Gieljan Vantyghem	"FEM MODELLING TECHNIQUES FOR SIMULATION OF 3D CONCRETE PRINTING"		

Shanghai time		Room A, Session 3: Recycled and Self-Compacting Concrete				
12:30	14:15	Session Chairs: Zhenhua Duan & Yue Geng				
		Order	Presenter	Title		
12:30	12:45	1	Jianzhuang Xiao	QUANTITATIVE JUSTIFICATION OF A RESISTANCE-BASED ENVIRONMENTAL IMPACT ALLOCATION FOR CONCRETE COMPONENT REUSE		
12:45	13:00	2	Yue Geng	NON-LINEAR CREEP MODELLING ON CIRCULAR RECYCLED CONCRETE- FILLED STEEL TUBULAR COLUMNS		
13:00	13:15	3	Tor Arne Martius- Hammer	PACKING OF CRUSHED SAND – INFLUNECE OF TEST METHOD, GRAIN SHAPE AND SIZE DISTRIBUTION		
13:15	13:30	4	Bowen Xu	MONOTONIC AND CYCLIC COMPRESSIVE PROPERTIES OF RUBBERISED CONCRETE		
13:30	13:45	5	Qiong Liu	FEASIBILITY STUDIES ON FRESH AND HARDENED PROPERTIES OF MORTAR WITH RECLAIMED SAND FROM WASTE CONCRETE		
13:45	14:00	6	Ludwig Hertwig	THE INFLUENCE OF THE GRANULOMETRY TO THE CAPILLARITY OF AGGREGATES		
14:00	14:15	7	Zengfeng Zhao	INFLUENCE OF RECYCLING PROCESS ON THE PROPERTIES OF RECYCLED AGGREGATES FROM THE CONSTRUCTION AND DEMOLITION WASTE		





Shanghai time		Room A, Session 4: New and Special Concrete Materials (I)				
16:15	18:00	Session Chairs: Jiafei Jiang & Zhiguang Zhou				
10115		Order	Presenter	Title		
16:15	16:30	1	Yaxin Tao	SQUEEZE FLOW TEST UNDER STEPWISE LOADS: A FEASIBLE METHOD TO MEASURE THE BUILDABILITY OF 3D PRINTABLE MORTARS		
16:30	16:45	2	Agathe Bourchy	BT-RING: ASSESSMENT OF CONCRETE CRACKING RISK AT EARLY AGE		
16:45	17:00	3	Bowen Xu	PERFORMANCE CHARACTERISTICS OF POLYMER CEMENT MORTARS		
17:00	17:15	4	Keisuke Nishijo	EXPERIMENTAL STUDY ON FAILURE MECHANISM OF FRESH 3D PRINTED MOTAR IN EXTRUSION BASED METHOD		
17:15	17:30	5	Jiafei Jiang	BASIC MECHANICAL PERFORMANCES OF CONCENTRATION SEAWATER-SEA SAND CONCRETE		
17:30	17:45	6	Suqin Liu	RECYCLED CONCRETE AGGREGATE USED IN DEWAR'S PARTICLE PACKING MODEL FOR CONCRETE MIX DESIGN		
17:45	18:00	7	Sufen Dong	MULTIFUNCTIONAL CONCRETE FOR SMART INFRASTRUCTURES		

Shanghai time		Room A, Session 5: New and Special Concrete Materials (II)				
18:15	20:00	Session Chairs: Sherif Yehia & Tao Ding				
10.15	20.00	Order	Presenter	Title		
18:15	18:30	1	Jialiang Wang	INVESTIGATING PORE STRUCTURE OF NANOFILLED REACTIVE POWDER CONCRETE WITH LOW-FIELD NMR		
18:30	18:45	2	Xinyue Wang	NANO-CORE EFFECT IN NANO-ENGINEERED CONCRETE		
18:45	19:00	3	Sherif Yehia	EVALUATION OF MECHANICAL PROPERTIES OF HYBRID CONCRETE MIXTURES		
19:00	19:15	4	Sherif Yehia	PERFORMANCE OF STEEL FIBER REINFORCED LIGHTWEIGHT CONCRETE EXPOSED TO ELEVATED TEMPERATURE		
19:15	19:30	5	Taku Matsuda	PROPERTIES AND HARDENING MECHANISM OF ULTRALOW SHRINKAGE AND HIGH STRENGTH ZERO-CEMENT-CONCRETE		
19:30	19:45	6	Zhaoxi Zhang	STUDY ON MECHANICAL PROPERTIES OF FOAMED CONCRETE BASED ON COCONUT FIBER		
19:45	20:00	7	Liangsheng Qiu	ANTIBACTERIAL/ANTIVIRAL CONCRETE FOR SMART AND SUSTAINABLE INFRASTRUCTURES		



Shanghai time		Roo	m A, Session 6:	fib-ACI Joint Special Session on FRC Applications	
20:15	22:15		Session Chairs: Giovanni Plizzari Marco Di Prisco David Lange		
			Presenter	Title	
20:15	20:30	1	Giovanni Plizzari	SESSION INTRODUCTION	
20:30	20:45	2	Barzin Mobasher	SERVICEABILITY BASED DESIGN WITH HYBRID FIBER REINFORCED CONCRETE	
20:45	21:00	3	Liberato Ferrara	FROM ULTRA HIGH PERFORMANCE FIBRE REINFORCED CONCRETE TO "ULTRA HIGH DURABILITY CONCRETE"	
21:00	21:15	4	Megan Weyers	EFFECT OF FIBRES ON THE FLEXURAL TENSILE STRENGTH OF UHPFRC BEAMS WITH DIFFERENT DEPTHS	
21:15	21:30	5	Jian ZHAN	CONSTRUCTIONAL METHOD OF UHPC ON STEEL DECK OF LONG SPAN SUSPENSION BRIDGE AND IN-SITE EXPERIMENTAL TEST	
21:30	21:45	6	Jiangtao Yu	FEASIBILITY OF USING STRAIN-HARDENING CEMENTITIOUS COMPOSITES IN CONSTRUCTION WITHOUT STEEL REINFORCEMENT	
21:45	22:00	7	Nemy Banthia	SURFACE ACTIVATED FIBERS FOR FIBER REINFORCED CONCRETE	
22:00	22:15	8	Marco Di Prisco	SESSION CONCLUSION REMARKS	





Shanghai time		Ro	om A, Session	7: Textile Reinforced and Geopolymer Concrete		
12:30	14:15		Session Chairs: Yifei Hao & Philipp Preinstorfer			
12.50	14.13	Order	Presenter	Title		
12:30	12:45	1	Philipp Preinstorfer	EXPERIMENTAL AND NUMERICAL INVESTIGATIONS ON THE SPLITTING FAILURE OF TEXTILE REINFORCED CONCRETE		
12:45	13:00	2	Ludwig Hertwig	THE BEHAVIOUR OF HIGH-PERFORMANCE FINE-GRAINED CONCRETES DURING INJECTION		
13:00	13:15	3	Tamás Mészöly	FLECTUAL BEHAVIOUS OF FIBRE/TEXTILE-REINFORCED ULTRA-HIGH PERFORMANCE CONCRETE PLATES		
13:15	13:30	4	Ann-Christine von der Heid	PRODUCTION AND PERFORMANCE OF SANDWICH ELEMENTS WITH TEXTILE REINFORCED FACINGS PRESTRESSED WITH CFRP		
13:30	13:45	5	Motohiro Ohno	SELF-HEALING CAPABILITY OF STRAIN-HARDENING FIBER REINFORCED GEOPOLYMER COMPOSITES		
13:45	14:00	6	Agathe Bourchy	MECHANICAL BEHAVIOUR OF GEOPOLYMERS EXPOSED TO HIGH TEMPERATURES		
14:00	14:15	7	Yifei Hao	AMBIENT-CURED GEOPOLYMER CONCRETE FOR STRUCTURAL AND NONSTRUCTURAL APPLICATIONS		





Shanghai time		Room A, Session 8: Shear and Torsion of Structural Element				
14:30	16:15		Session Chairs: Wouter De Corte & Liusheng He			
14.50	10.13	Order	Presenter	Title		
14:30	14:45	1	Vitalii Mitrofanov	HOW CAN THE SHEAR BEHAVIOR OF RC ELEMENTS BE FULLY UNDERSTOOD?		
14:45	15:00	2	Amal Wahbi	INFLUENCE OF AXIAL COMPRESSION ON THE SHEAR CAPACITY OF RC BEAMS WITHOUT STIRRUPS		
15:00	15:15	3	Alex Brodsky	EVALUATION OF THE SHEAR CAPACITY OF SHORT SPAN BEAMS USING SECTIONAL ANALYSIS		
15:15	15:30	4	Sung-Gul Hong	INTERFACE SHEAR STRENGTH BETWEEN ULTRA-HIGH PERFORMANCE FIBER REINFORCED CONCRETE AND NORMAL STRENGTH CONCRETE		
15:30	15:45	5	Alex Sousa	STRUCTURAL SYSTEM INFLUENCE ON SHEAR CAPACITY OF WIDE MEMBERS WITHOUT SHEAR REINFORCEMENT		
15:45	16:00	6	Deema Abu-Salma	PUNCHING SHEAR AT SLAB-EDGE COLUMN CONNECTIONS		
16:00	16:15	7	Jian Liu	KINEMATICS-BASED APPROACH FOR SHEAR STRENGTH OF PRESTRESSED CONCRETE DEEP BEAMS		



Technical Schedule for Room B

Shangh	Shanghai time		Room B, Session 1: Assessment of Existing Structures					
18:30	20:15		Session Chairs: David Fernández-Ordóñez & Zuanfeng Pan					
		Order	Presenter	Title				
18:30	18:45	1	Wouter Botte	LARGE SCALE LOADING TESTS ON 70-YEAR OLD POST-TENSIONED CONCRETE BEAMS				
18:45	19:00	2	Michele Win Tai Mak	EFFECTS OF ANCHORAGE DETERIORATION ON THE SHEAR BEHAVIOUR OF REINFORCED CONCRETE HALF-JOINT BEAMS				
19:00	19:15	3	Matthias Wild	STOCHASTIC METHOD FOR THE ASSESSMENT OF CONCRETE BRIDGES WITH SCC SENSITIVE PRESTRESSING STEEL				
19:15	19:30	4	Eline Vereecken	BAYESIAN UPDATING OF CORROSION PARAMETERS BASED ON STRAIN MEASUREMENTS OF A BEAM SUBJECTED TO BENDING				
19:30	19:45	5	Jan Cervenka	DIGITAL TWIN CONCEPT FOR DURABILITY AND RELIABILITY ASSESSMENT OF BRIDGES				
19:45	20:00	6	Omar Al-Mansouri	BEHAVIOR OF BONDED ANCHORS IN CRACKED CONCRETE AT HIGH TEMPERATURES				
20:00	20:15	7	Nicolas Bagneux	CRACKING OF THE REINFORCED CONCRETE CASING				





Shanghai time		Room B, Session 2: Behavior of Structural Components (I)			
10:30	12:15			Session Chairs: Yuanfeng Duan & Xian Lu	
10.50	12015	Order	Presenter	Title	
10:30	10:45	1	Dipti Ranjan Sahoo	INFLUENCE OF LENGTH-TO-DEPTH RATIO ON MONOTONIC COMPRESSION BEHAVIOUR CONCRETE-FILLED TUBULAR COLUMNS	
10:45	11:00	2	Dipti Ranjan Sahoo	MONOTONIC BEHAVIOR OF RC BEAMS WITH HIGH-STRENGTH STEEL SHEAR STIRRUPS	
11:00	11:15	3	Cancan Yang	ULTRA-HIGH-PERFORMANCE CONCRETE HOLLOW COLUMNS CONFINED WITH HIGH-STRENGTH STEEL	
11:15	11:30	4	Khubaib Khan	BEHAVIOUR OF ECC ENCASED CONCRETE-STEEL COMPOSITE COLUMNS WITH HIGH STRENGTH MATERIALS	
11:30	11:45	5	Henrik Matz	ROBUSTNESS OF REINFORCED CONCRETE COLUMNS	
11:45	12:00	6	Jae-Yeol Cho	FLEXURAL DUCILITY AND SERVICEABILITY OF RC MEMBERS WITH 700 MPA HIGH-STRENGTH REINFORCEMENTS	
12:00	12:15	7	Jun-long An	FLEXURAL BEHAVIOR OF REINFORCED CONCRETE BEAMS AT LOW TEMPERATURE	

Shanghai time		Room B, Session 3: Behavior of Structural Components (II)				
12:30	14:15	Session Chairs: Ying Zhou & Bin Wang				
12.50	14.15	Order	Presenter	Title		
12:30	12:45	1	Juan Sagaseta	DYNAMIC ANALYSIS OF DIAPHRAGM ACTION OF SPHERICALLY VOIDED CONCRETE SLABS FOR SEISMIC DESIGN		
12:45	13:00	2	Bin Wang	DEVELOPMENT OF A NOVEL SELF-CENTERING COUPLING BEAM FOR COUPLED RC WALL SYSTEMS		
13:00	13:15	3	Frederik Autrup	EXPERIMENTAL INVESTIGATION OF DOWEL ACTION IN RC BEAMS WITHOUT SHEAR REINFORCEMENT		
13:15	13:30	4	Boyan I. Mihaylov	MODELLING THE EFFECT OF FRP SHEETS ON THE COMPLETE BEHAVIOUR OF SHEAR-CRITICAL COUPLING BEAMS		
13:30	13:45	5	Dong Xiang	SHEAR CAPACITY EVALUATION OF STEEL FIBER REINFORCED CONCRETE COUPLING BEAM		
13:45	14:00	6	Guangchun Zhong	EXPERIMENTAL STUDY ON THE SEISMIC PERFORMANCE OF STEEL-POLYVINY ALCOHOL (S-PVA) HYBRID FIBER REINFORCED CONCRETE SHEAR WALLS		
14:00	14:15	7	Yu Zhang	CRACK WIDTH PREDICTION OF REINFORCED CONCRETE PANELS UNDER SHEAR		



Shanghai time		Room B, Session 4: Long Term Behaviour				
16:15	18:00	Session Chairs: George Fanourakis & Liangjiu Jia				
	10.00	Order	Presenter	Title		
16:15	16:30	1	George Fanourakis	EVALUATION OF THE CREEP COEFFICIENTS OF THE HONG KONG (HKBD) AND JAPANESE (JSCE) CODE CONCRETE CREEP PREDICTION MODELS		
16:30	16:45	2	Abdushalamu Aili	PREDICTION OF THE DELAYED DEFORMATIONS OF A NUCLEAR POWER PLANT USING MC2010 AND NEW EC2 RELATIONS FOR CONCRETE CREEP AND SHRINKAGE		
16:45	17:00	3	Johannes Berger	INVESTIGATION ON THE TIME DEPENDENT DEVELOPEMENT OF CONSTRAINT FORCES DUE TO IMPOSED DEFORMATIONS		
17:00	17:15	4	Chen Li	SULFATE ATTACK OF PORTLAND CEMENT-BASED MATERIALS IN THE PRESENCE OF APPLIED ELECTRIC FIELDS: EXPERIMENTAL RESULTS AND THERMODYNAMIC MODELING		
17:15	17:30	5	Sara Javidmehr	EVALUATION OF CONCRETE COMPRESSION FAILURE UNDER HIGH SUSTAINED LOADS		
17:30	17:45	6	Hao Zhao and Rong Liu	CREEP EFFECTS OF PERFORATED RIB SHEAR CONNECTORS UNDER SUSTAINED PUSH-OUT LOAD		
17:45	18:00	7	Nikola Tošic	NOVEL MODEL FOR SERVICEABILITY OF GRADED NATURAL AND RECYCLED AGGREGATE CONCRETE STRUCTURES		

Shanghai time		Room B, Session 5: Fire Behavior and Resistance				
18:15	20:00	Session Chairs: Yanbo Wang & Lingzhi Li				
10.15	20:00	Order	Presenter	Title		
18:15	18:30	1	Gyorgy L. Balazs	RATE OF TEMPERATURE DEPENDENCE OF CONCRETE		
18:30	18:45	2	Limin Lu	NUMERICAL SIMULATION ON FIRE PERFORMANCE OF REINFORCED CONCRETE BEAMS WITH VARIOUS END RESTRAINTS		
18:45	19:00	3	Martin Empelmann	30-MN TESTING MACHINE FOR QUASI-STATIC AND CYCLIC COMPRESSION AND TENSION TESTS		
19:00	19:15	4	Jin-Cheng Liu	AN INITIAL ATTEMPT TO PREDICT FIRE RESISTANCE OF RC COLUMNS BY MACHINE LEARNING METHODS		
19:15	19:30	5	Xavier Destree	FIRE RESISTANCE OF STEEL FIBRE R.C. ELEVATED SUSPENDED SLABS: ISO FIRE TESTS AND CONCLUSIONS FOR DESIGN		
19:30	19:45	6	Duc Toan Pham	EFFECT OF LOSS OF CONCRETE COVER DUE TO SPALLING ON RESPONSE OF SIMPLY SUPPORTED RC BEAM		
19:45	20:00	7	Chaojie Song	A COMPUTATIONAL MODEL FOR PREDICTING FIRE BEHAVIOUR OF PRESTRESSED CONCRETE BOX BRIDGE GIRDERS		





Shanghai time		Room B, Session 7: Performance Based Design			
12:30	14:15	Session Chairs: Gintaris Kaklauskas & Zheng Lu			
12.55		Order	Presenter	Title	
12:30	12:45	1	Tor Ole Olsen	IMPORTANT DUTIES OF MARINE CONCRETE STRUCTURES	
12:45	13:00	2	Gintaris Kaklauskas	CURVATURE ANALYSIS OF RC BEAMS: RECONSIDERING THE ASSUMPTIONS OF DESIGN CODE TECHNIQUES	
13:00	13:15	3	Jie Zhang	DEVELOPMENT AND APPLICATION OF PHC PILE IN CHINA	
13:15	13:30	4	Jiazeng Shan	NONLINEAR DAMAGE EVALUATION FOR SEISMICALLY EXCITED STRUCTURES REGARDING MODEL-REFERENCE CONCEPT	
13:30	13:45	5	Tsubasa Tani	VIBRATION CONTROL OF RC HIGH-RISE BUILDING WITH SOFT-STORY	
13:45	14:00	6	Federico Accornero	DUCTILE-TO-BRITTLE TRANSITIONS IN RC AND PC BEAMS: SCALE EFFECTS ON MINIMUM AND MAXIMUM REINFORCEMENT	
14:00	14:15	7	Edmond V. Muho	DEFORMATION DEPENDENT PEAK FLOOR ACCELERATION FOR THE PERFORMANCE BASED DESIGN OF NON-STRUCTURAL ELEMENTS	

Shanghai time		Room B, Session 8: Behavior Under Impact and Explosion			
14:30	16:15			Session Chairs: Hao Wu & Yifei Hao	
14.50	10.15	Order	Presenter	Title	
14:30	14:45	1	Juan Sagaseta	VALIDATION OF DYNAMIC PUNCHING SHEAR ASSESSMENT AFTER SUDDEN COLUMN REMOVAL	
14:45	15:00	2	Hyun Song Lee	A ROLE OF REINFORCING STEEL IN IMPACT RESISTANCE OF REINFORCED CONCRETE PANEL AGAINST LOCAL DAMAGES	
15:00	15:15	3	Assis Arano	HEATED REINFORCED CONCRETE SLABS SUBJECTED TO BLAST LOAD: EXPERIMENTAL AND NUMERICAL RESULTS	
15:15	15:30	4	Luchuan Ding	EVALUATION OF THE ENERGY-BASED METHOD FOR DYNAMIC ANALYSIS OF RC SLABS UNDER A SUDDEN COLUMN-REMOVAL SCENARIO	
15:30	15:45	5	Manuel Buitrago	TESTING OF FULL-SIZE CONCRETE BUILDING STRUCTURES UNDER SUDDEN COLUMN REMOVAL	
15:45	16:00	6	Darya Memon	LOW-VELOCITY IMPACT BEHAVIOUR OF REINFORCED CONCRETE BEAM STRENGTHENED WITH CFRP	
16:00	16:15	7	Zidong Zhao	DYNAMIC PROGRESSIVE COLLAPSE TEST ON BEAM-COLUMN CONCRETE SUBSTRUCTURES	

Technical Schedule for Room C

Shangh	Shanghai time		Room C, Session 1: Precast Building Structures			
18:30	20:15		:	Session Chairs: Feng Xiong & Zhiguang Zhou		
	20.13	Order	Presenter	Title		
18:30	18:45	1	Shan Kumar	INNOVATIVE PREFABRICATED CONSTRUCTION OF A 58 LEVEL BUILDING IN MELBOURNE AUSTRALIA		
18:45	19:00	2	Kaare K.B.Dahl	PORTLAND TOWER – HANGING OFFICES ON THE OUTSIDE OF AN EXISTING SILO		
19:00	19:15	3	Feng Xiong	EXPERIMENTAL STUDY ON SEISMIC BEHAVIOUR OF A NOVEL FULLY PREFABRICATED RC SHEAR WALL STRUCTURE WITH BOLTED CONNECTION		
19:15	19:30	4	Feng Xiong	NUMERICAL ANALYSIS OF PRE-CAST CONCRETE SHEAR WALL WITH HIGH STRENGTH BOLT-GUSSET PLATE CONNECTION		
19:30	19:45	5	Baofeng Huang	EXPERIMENTAL INVESTIGATION OF ENERGY EFFICIENT TRANSLUCENT CONCRETE PANEL FOR BUILDING ENVELOPE		
19:45	20:00	6	Jesper Sørensen	INVESTIGATION OF THE DEFORMATION CAPACITY OF PRECAST SHEAR WALL STRUCTURES BY FULL SCALE TESTS		
20:00	20:15	7	Yilin Liu	PROGRESSIVE COLLAPSE OF PRECAST CONCRETE BEAM-COLUMN SUBSTRUCTURES WITH WET CONNECTIONS		







Shanghai time		Room C, Session 2: Precast Bridge Structures					
10:30	12:15		Session Chairs: Bidhan Chandra Roy & Xu Jiang				
		Order	Presenter	Title			
10:30	10:45	1	Bidhan Chandra	ADVENT OF PRECAST STRUCTURES IN INDIA			
10:45	11:00	2	Robert Wheatley	PRECAST DECK PANELS FOR STEEL-CONCRETE COMPOSITE BRIDGES. IMPROVED DETAILING AND QUALITY CONTROL.			
11:00	11:15	3	Hirotsugu Taniguchi	PRECAST SEGMENTAL CONSTRUCTION OF BOX CULVERT ON RENEWAL PROJECT OF EXPRESSWAY			
11:15	11:30	4	Xiangyong Duanmu	EXPERIMENTAL STUDY ON SHEAR BEHAVIOR OF PRECAST SEGMENTAL BEAM WITH STEEL BARS ACROSS JOINTS			
11:30	11:45	5	Ziqi Xu	A GEOMETRY SIZE CHECKING METHOD OF PRECAST CULVERT SEGMENTS BASED ON 3-D NON-CONTACT MEASUREMENT			
11:45	12:00	6	Motoharu Miyashita	WATER RELATED DAMAGE TO PRE-STRESSED BOX GIRDER BRIDGE AND ITS PENETRATION PATH			
12:00	12:15	7	Sven Bosbach	MODULAR BRIDGE CONSTRUCTIONS MADE OF CFRP REINFORCED CONCRETE			

Shanghai time		Room C, Session 3: Precast Structures and Connectors				
12:30	14:15		Session Chairs: Wit Derkowski & Christoph Mahrenholtz			
12.50	17.13	Order	Presenter	Title		
12:30	12:45	1	Christoph Mahrenholtz	TESTS ON CHANNEL BOLTS INSTALLED IN CAST-IN ANCHOR CHANNELS SUBJECTED TO CRACK CYCLING		
12:45	13:00	2	Thomas Thienpont	EVALUATION OF THE ADDITIONAL LOAD BEARING CAPACITY OF PRESTRESSED HOLLOW CORE SLABS DUE TO MEMBRANE ACTION		
13:00	13:15	3	Olha Harkava	STRUCTURAL DEFORMABILITY OF CONCRETE		
13:15	13:30	4	Yuhan Lin	STUDY ON SEISMIC BEHAVIOR OF ASSEMBLED SHEAR WALLS WITH SLEEVE GROUTING DEFECTS		
13:30	13:45	5	Yusuke Nagai	FABRICATION AND ERECTION OF WAFFLE-SHAPED UHPFRC SLABS FOR HIGHWAY BRIDGES		
13:45	14:00	6	Aya Rima	STUDY OF THE BEHAVIOR OF POST INSTALLED FASTENERS IN CIVIL ENGINEERING STRUCTURES OF FRENCH NUCLEAR INSTALLATIONS		





Shanghai time		Room C, Session 4: Bridge Structures				
16:15	18:00	Session Chairs: Limin Sun & Hesheng Tang				
		Order	Presenter	Title		
16:15	16:30	1	Changjiang Wang	PRACTICE AND THINKING ON THE LARGE DIAMETER PILE OF YUSHAN BRIDGE		
16:30	16:45	2	Takashi Naka	DESIGN AND CONSTRUCTION OF STAY CABLES SYSTEM OF ONE PLANE SUSPENSION EXTRADOSED BRIDGE -IKUNO BRIDGE-		
16:45	17:00	3	Ao Wang	NUMERICAL SIMULATION OF TEMPERATURE EFFECT ON RC BRIDGE IN MOUNTAINOUS AREA		
17:00	17:15	4	Volha Sannikava	RESTRAINED STRAINS AND STRESSES IN SELF-STRESSED CONCRETE ELEMENTS UNDER 2D RESTRAINT CONDITIONS		
17:15	17:30	5	Mads E.M. Andersen	SOLID FINITE ELEMENT LIMIT ANALYSIS FOR MODELLING OF PILE CAPS		
17:30	17:45	6	Ruijuan Jiang	INFLUENCING FACTORS ON THE EFFECTIVE FLANGE WIDTH OF COMPOSITE BOX GIRDERS WITH CORRUGATED STEEL WEBS		
17:45	18:00	7	Tomotaka Fujita	EVALUATION OF WIND RESISTANCE PERFORMANCE OF PARALLEL PC EXTRADOSED BRIDGE (HIMIYUME OHASHI BRIDGE)		

Shanghai time		Room C, Session 5: Numerical Model and Analysis				
18:15	20:00	Session Chairs: Tamon Ueda & Bin Zhao				
10.15	20:00	Order	Presenter	Title		
18:15	18:30	1	Zhao Wang and Tamon Ueda	MULTI-SCALE ANALYTICAL APPROACH ON ASSESSING THE STRUCTURAL PERFORMANCE OF REINFORCED CONCRETE MEMBER UNDER THE EFFECT OF FROST DAMAGE		
18:30	18:45	2	Wouter De Corte	VERIFICATION OF A 3D NON-LINEAR FRICTION BASED FINITE ELEMENT MODEL FOR THE END ZONES OF PRETENSIONED CONCRETE GIRDERS		
18:45	19:00	3	Adam Sciegaj	WHAT CAN WE DO WITH MULTISCALE MODELLING OF REINFORCED CONCRETE STRUCTURES?		
19:00	19:15	4	Yi Xia	DOES STRUT-AND-TIE MODELLING BENEFIT FROM TOPOLOGY OPTIMIZATION?		
19:15	19:30	5	Khubaib Khan	NUMERICAL MODELLING OF ECC ENCASED CONCRETE-STEEL COMPOSITE COLUMNS WITH HIGH STRENGTH MATERIALS		
19:30	19:45	6	Daniel Vestergaard	EFFICIENT ELASTO-PLASTIC MODELING OF REINFORCED CONCRETE WALLS APPLYING CONVEX OPTIMIZATION		
19:45	20:00	7	Evan Bentz	SIZE EFFECTS IN REINFORCED CONCRETE CRACKING STRESS: AN EMPIRICAL MODEL		





Shanghai time		Room C, Session 7: Tunnels and Structural Joints				
12:30	14:15	Session Chairs: Yong Yuan & Shoji Ikeda				
12.50	1	Order	Presenter	Title		
12:30	12:45	1	Shoji Ikeda	SEISMIC DESIGN OF PRESTRESSED CONCRETE STRUCTURES BY UTILIZING NONLINEAR ELASTICITY FOR RESILIENT SOCIETY		
12:45	13:00	2	Maurizio Taliano	CRACKING ANALYSIS OF PARTIALLY PRESTRESSED CONCRETE TIES TAKING ACCOUNT OF THE EFFECT OF SECONDARY CRACKS		
13:00	13:15	3	Bijan Khaleghi	DESIGN, CONSTRUCTION AND OPERATION CHALLENGES OF SR-99 TUNNEL IN DOWNTOWN SEATTLE		
13:15	13:30	4	Qihao Sun	NUMERICAL MODELING AND PARAMETRIC STUDY OF HYBRID FIBER- REBAR REINFORCED CONCRETE TUNNEL LININGS		
13:30	13:45	5	Qi Fang	COMPRESSION-BENDING BAHAVIOUR OF GROUTED CONNECTIONS CONSIDERING AXIAL LOAD RATIO		
13:45	14:00	6	Yumeng Zhang	FULL-SCALE EXPERIMENTAL INVESTIGATION ON ULTIMATE BEARING CAPACITY OF STAGGER-JOINT SEGMENTAL LININGS		
14:00	14:15	7	Chengcheng Cao	NUMERICAL STUDY ON AXIAL LOADING PERFORMANCE OF GROUTED CONNECTIONS		

Shanghai time		Room C, Session 8: Innovative Technologies for Construction				
14:30	16:15	Session Chairs: Bo Fu & Liyu Xie				
50		Order	Presenter	Title		
14:30	14:45	1	Bo Fu	A MACHINE LEARNING PREDICTION APPROACH OF MODELLING HUMAN-INDUCED VIBRATION FOR CONCRETE FOOTBRIDGES		
14:45	15:00	2	Bo Fu	A MACHINE LEARNING-BASED PREDICTION MODEL FOR LIFE-CYCLE STRENGTH OF CORRODED RC BEAMS		
15:00	15:15	3	Gregor Strekelj	BIM AND STRUCTURAL ANALYSIS OF POST-TENSIONED CONCRETE BRIDGES IN ONE MODEL		
15:15	15:30	4	Yoshiyuki Wakabayashi	CONSTRUCTION PRODUCTIVITY IMPROVEMENT OF CONCRETE BRIDGE BY COMBINING BIM AND ICT		
15:30	15:45	5	Johannes Berger	CONSTRUCTION OF SHELLS BY ACTICE BENDING OF TEXTILE REINFORCED COCNRETE		
15:45	16:00	6	Christian Glaeser	EXTERNAL PREFABRICATED TENDONS FOR POST-TENSIONING OF HYBRID WIND TOWERS IN CHINA		
16:00	16:15	7	Miguel Fernandez Ruiz	A NEW VIEW IN THE UNDERSTANDING OF THE MECHANICAL RESPONSE OF STRUCTURAL CONCRETE BY MEANS OF REFINED MEASUREMENTS		

Technical Schedule for Room D

Shanghai time		Room D, Session 1: Concrete Deterioration and Reinforcement Corrosion				
18:30	20:15		Sess	sion Chairs: Ali Akbar Ramezanianpour & Jin Xia		
		Order	Presenter	Title		
18:30	18:45	1	Pooria Dashti	DURABILITY OF CONCRETES CONTAINING SILICA FUME IN FORMS OF BLENDED CEMENT AND SLURRY AGAINST CARBONATION AND CHLORIDE IONS ATTACKS		
18:45	19:00	2	Farnaz Bahman- Zadeh	EFFECT OF SUPPLEMENTARY CEMENTITIOUS MATERIALS ON CHLORIDE BINDING CAPACITY OF CEMENT PASTES		
19:00	19:15	3	Rasoul Banar	EFFECT OF SILICA FUME AS BLENDED CEMENT AND SLURRY ON DURABILITY AGAINST SULFATE ATTACK AND ASR		
19:15	19:30	4	Alex-W.Gutsch	INVESTIGATION OF BRIDGES WITH CRITICAL PRESTRESSING STELL CONCERNING HYDROGEN-INDUCED CRACKING (HIC)		
19:30	19:45	5	Jin Xia	INFLUENCE FACTORS ON STEEL CORROSION MORPHOLOGY IN CHLORIDE CONTAMINATED CONCRETE		
19:45	20:00	6	Nassim Timehadjelt	CORROSION INDUCED BY CARBONATION IN CRACKED MATERIALS - EFFICIENCY OF CONCRETE PROTECTION PRODUCTS		
20:00	20:15	7	Naser Alimrani	SHEAR INVESTIGATIONS ON FIBER REINFORCED CONCRETE AT ELEVATED TEMPERATURES USING PUSH-OFF MODEL		







Shanghai time		Room D, Session 2: Resilient and Sustainable Construction				
10:30	12:15	Session Chairs: Shi Yan & Jiazeng Shan				
10.50		Order	Presenter	Title		
10:30	10:45	1	Shi Yan	RESILIENT DEFORMATION PERFORMANCE ANALYSIS OF SMA- CONCRETE MEMBERS BASED ON OPENSEES		
10:45	11:00	2	Dawei Huang	LIFETIME ASSESSMENT OF METRO TUNNEL USING TIME-DEPENDENT RELIABILITY METHOD		
11:00	11:15	3	Chi Zhang	EFFECT OF THE RELATIVE HUMIDITY ON THE CREEP RATE AND RECOVERY OF ASR PRODUCTS BY MICROINDENTATION		
11:15	11:30	4	Ester Pujadas	REUSABLE REINFORCED CONCRETE FOUNDATION FOR A TRANSPORTABLE HYBRID ENERGY TOWER		
11:30	11:45	5	Andrew Minson	UNITED NATIONS SUSTAINABILITY DEVELOPMENT GOALS, RESILIENCE AND CONCRETE		
11:45	12:00	6	Wei Wang and Chaochao Quan	RESEARCH ON IMPROVING SEISMIC RESILIENCE OF URBAN OVERPASS BASED ON RESILIENCE THEORY		
12:00	12:15	7	Shan Wang and Shao-bo Kang	ANALYTICAL STUDY OF COMPRESSIVE ARCH ACTION AND CATENARY ACTION IN ONE-WAY BEAM-SLAB SUB-STRUCTURES		

Shanghai time		Room D, Session 3: Strctural Monitoring and Maintenance				
12:30	14:15	Session Chairs: Jiangpeng Shu & Jonatas Valença				
12.50		Order	Presenter	Title		
12:30	12:45	1	Jonatas Valença	PRESTRESSED CFRP LAMINTES TO SUPPORT HIGH PRECISION STRAIN MONITORING USING COMPUTER VISION		
12:45	13:00	2	Jonatas Valença	STRUCTURAL ANALYSIS IN REINFORCED CONCRETE MEMBERS USING IMAGE BASED TECHNIQUES		
13:00	13:15	3	Graham Webb	WATERLOO BRIDGE - FROM MONITORING RESULTS TO REMEDIAL WORKS		
13:15	13:30	4	Katsufumi Hashimoto	ELASTIC WAVE PROPAGATION IN CONCRETE WITH SIMULATED CRACK INDUCED BY STARCH-TYPE POLYSACCHARIDE		
13:30	13:45	5	Zhendong Shu	PROPOSAL ON RATIONALIZATION OF CONSTRUCTION MANAGEMENT AND MAINTENANCE OF RC EXTERIOR WALLS USING WETTING AND TEMPERATURE SENSORS		
13:45	14:00	6	Alinda Dey	DISTRIBUTED SENSING FIBER BRAGG GRATINGS AND STRAIN GAUGES FOR STRAIN MONITORING OF RC TENSILE ELEMENT		
14:00	14:15	7	Jiangpeng Shu	A CONTINUAL LEARNING-BASED CNN FRAMEWORK FOR CONCRETE STRUCTURAL DAMAGE RECOGNITION		





Shanghai time		Room D, Session 4: Structural Strengthening and Retrofitting				
16:15	18:00	Session Chairs: Randl Norbert & Xiaobin Song				
		Order	Presenter	Title		
16:15	16:30	1	Randl Norbert	EXTENSION OF MC2010 CONCRETE-CONCRETE-BOND DESIGN RECOMMENDATIONS TO HIGH PERFORMANCE MATERIALS		
16:30	16:45	2	Kagan Sogut	CYCLIC BEHAVIOUR OF REINFORCED CONCRETE T-BEAMS STRENGTHENED IN SHEAR WITH EMBEDDED CFRP BARS		
16:45	17:00	3	Brett Pielstick	PRACTICAL APPLICATION IN REPAIRING BRIDGE DECK CRACKING		
17:00	17:15	4	Osamu Sanada	QUALITY CONTROL OF CONCRETE STRUCTURE IN A SEIMIC STRENGTHENING OF ROCKING PIERS OF A ROAD BRIDGE		
17:15	17:30	5	Nina Serdar	SITE-CONDITIONED STRUCTURAL STRENGTHENING TECHNICS APPLIED ON THE EXISTING RC ARCH BRIDGE		
17:30	17:45	6	Hidechika Watanabe	EXPERIMENTAL STUDY ON FATIGUE STRENGTH RECOVERY METHOD FOR DETERIORATED REINFORCED FLOOR SLABS		
17:45	18:00	7	Tomohiko Nishihara	RETROFIT DESIGN AND CONSTRUCTION IN THE CONTINUATION OF THE GERBER HING AT THE METROPOLITAN EXPRESSWAY		

Shanghai time		Room D, Session 5: Strctural Durability and Reliability				
18:15	20:00	Session Chairs: Qianqian Yu				
10.15		Order	Presenter	Title		
18:15	18:30	1	Jan Laco	LOW MAINTENANCE MULTI-CELL BURIED STRUCTURE DESIGNED FOR LIFE		
18:30	18:45	2	Qianhui YU	THE INFLUENCE OF THE DEFORMATION CAPACITY AT FAILURE ON THE MODEL UNCERTAINTY OF STRUCTURAL CONCRETE		
18:45	19:00	3	Arash Zolfagharnasab	MECHANICAL PROPERTIES AND DURABILITY OF CONCRETES CONTAINING CALCINED CLAYS AND LIMESTONE POWDER		
19:00	19:15	4	François CUSSIGH	"MODEVIE" PROJECT: PROPOSAL OF NEW SERVICE-LIFE MODEL		
19:15	19:30	5	Jing Fang	MODELING THE EFFECT OF FATIGUE DAMAGE ON CHLORIDE DIFFUSION COEFFICIENT OF CONCRETE		
19:30	19:45	6	HOI TING TSANG	DURABILITY ASSESSMENT AND MAINTENANCE STRATEGIES OF THE MEGA-SCALE SEA CROSSING LINKS IN HONG KONG		
19:45	20:00	7	Alex-W. Gutsch	GOUTING OF POST-TENSIONING SYSTEMS – GROUT PROPBERITES AND EXPERIENCE ON SITE		





Shanghai time		Room D, Session 7: Fatigue Behavior of Structures				
12:30	14:15	Session Chairs: Wensheng Lu & Liangjiu Jia				
		Order	Presenter	Title		
12:30	12:45	1	Xian Wang	INTEGRATED FATIGUE PERFORMANCE STUDIES ON GROUTED CONNECTION IN OFFSHORE WIND TURBINE STRUCTURES		
12:45	13:00	2	Yasmin Lemcherreq	FATIGUE OF BOND: EXPERIMENTAL INVESTIGATION USING FIBRE- OPTIC MEASUREMENT AND DIC		
13:00	13:15	3	Niklas Schäfer	INFLUENCE OF AGGREGATE ON FATIGUE BEHAVIOR OF HIGH- PERFORMANCE CONCRETE UNDER CYCLIC LOADING		
13:15	13:30	4	Toshihiko Nagatani	FATIGUE DURABILITY EVALUATION METHOD FOR PC SLABS		
13:30	13:45	5	David Ov	HIGH-CYCLE FATIGUE BEHAVIOR OF STEEL FIBER REINFORCED HIGH PERFORMANCE CONCRETES FOR WIND TURBINES		
13:45	14:00	6	Thilo Froehlich	ULTRASONIC TESTS ON FASTENINGS UNDER FATIGUE LOADING		
14:00	14:15	7	Martin Markert	INFLUENCE OF THE COMPRESSIVE STRENGTH OF CONCRETE ON THE TEMPERATURE INCREASE DUE CYCLIC LOADING		

Shanghai time		Room D, Session 8: Strctural Repair and Rehabilitation				
14:30	16:15	Session Chairs: Randall Poston & Peizhen Li				
14.50		Order	Presenter	Title		
14:30	14:45	1	Fernando Stucchi	DIAGNOSTIC, REHABLITATION AND FLOOR LOAD OF THE VIADUCT T5, PINHEIROS RIVER, SAO PAULO		
14:45	15:00	2	Edo Vonk	REHABILITATION OF YEONGHEUNG CABLE-STAYED BRIDGE IN KOREA		
15:00	15:15	3	Oriol Pons Valladares	SPRAYED CEMENTITIOUS MORTARS FOR THE STRENGTHENING OF URBAN BUILDINGS. CASE STUDY IN BARCELONA, SPAIN		
15:15	15:30	4	Randall Poston	USE OF INNOVATIVE MATERIALS TO SOLVE TRADITIONAL CORROSION PROBLEMS		
15:30	15:45	5	Mohammad Ridduhan Natino	INFLUENCE OF ANTI-CORROSIVE COATINGS ON BOND BEHAVIOR OF CORRODED REBAR		
15:45	16:00	6	Masaaki Hamano	DEVELOPMENT OF PRECAST SLAB USING ULTRA HIGH STRENGTH FIBER REINFORCED CONCRETE FOR RENEWAL ON EXPRESSWAY		
16:00	16:15	7	Shinichi Mihara	RESTORATION OF ASO CHOYO-OHASHI BRIDGE DAMAGED BY THE 2016 KUMAMOTO EARTHQUAKE		