

The International Federation for Structural Concrete 5th International fib Congress 2018
Monday 8 October 2018 - Thursday 11 October 2018
Melbourne Convention and Exhibition Centre

Monday 8 October 2018

Monday 8 October 2018						
07:00	REGISTRATION Main foyer 2 & 3					07:00
Plenary 3						
08:30	Chairperson: Stephen Foster OPENING CEREMONY					08:30
09:45	"THE ART AND SCIENCE OF DESIGNING AND BUILDING THE TALLEST BUILDINGS IN THE WORLD" Dr Andy DAVIDS					09:45
10:30	MORNING TEA Main foyer 2 & 3					10:30
	Plenary 3	Room 215	Room 216	Room 217	Room 218	Room 219
	BRIDGES Sponsored by ACRS	SHEAR & TORSION	REINFORCEMENT & PRESTRESS	CONCRETE MATERIALS	MODEL CODES & STANDARDS	SUSTAINABILITY
	Chairperson: Jim Forbes	Chairperson: Aurelio Muttoni	Chairperson: John Fenwick	Chairperson: Frank Dehn	Chairperson: Ian Gilbert	Chairperson: Petr Hajek
11:00	213: BRIDGES STRUCTURES ON HIGH SPEED RAILWAY LINES IN GERMANY Mr Chongjie KANG	14: RECENT IMPROVEMENTS OF THE CRITICAL SHEAR CRACK THEORY FOR PUNCHING SHEAR DESIGN AND ITS SIMPLIFICATION FOR CODE PROVISIONS Prof Aurelio MUTTONI	380: fib BULLETIN 75 RECOMMENDATION ON POLYMER-DUCT SYSTEMS FOR INTERNAL BONDED POST-TENSIONING – NEW SYSTEM PERFORMANCES AND VALIDATION FULL SCALE TESTS Mr Tommaso CICCONE, Mr Luca CIVATI	438: THE EFFECT PARTICLE SHAPE AND GRADING OF MANUFACTURED SANDS ON THE PLASTIC AND HARDENED PROPERTIES OF CONCRETE Mr Roy BUTCHER	434: fib MODEL CODE 2020 AND EXISTING CONCRETE STRUCTURES Dr Stuart MATTHEWS	ESSENCE OF SUSTAINABILITY AND ITS INCORPORATION INTO fib MODEL CODE 2020 Prof Koji SAKAI
11:15	205: DESIGN OF RAILWAY BRIDGES FOR HIGH-SPEED TRAFFIC Mr Sebastian SCHNEIDER	256: ADVANCED SHEAR STRENGTHENING TECHNIQUES FOR RC MEMBERS Prof Norbert RANDL	39: EXPERIMENTAL INVESTIGATION ON HIGH-STRENGTH MORTAR GROUT FOR AN INTERNAL STRENGTHENING SYSTEM WITH POST-TENSIONING TENDONS Mr Takafumi MIHARA	392: CARBONATION OF CONCRETE USING FERRONICKEL SLAG Mr Quang Dieu NGUYEN		
11:30	238: EXPERIMENTAL STUDY ON THE TENSILE CAPACITY OF BRIDGE DECK LOOP CONNECTIONS WITH SHEAR KEYS Dr Henrik Broener JOERGENSEN	154: SHEAR TESTS AT THE INNER SUPPORT OF CONTINUOUS POST-TENSIONED CONCRETE BEAMS Mr Tobias HUBER	373: SADDLES FOR STAY CABLES: DESIGN, TESTING AND DEVELOPMENTS Mr Tommaso CICCONE, Mr Andrea CASTIGLIONI, DI CARONNO	263: EXPANDED SLATE LIGHTWEIGHT AGGREGATE FOR HIGH PERFORMANCE STRUCTURAL CONCRETE Dr Reid CASTRODALE	227: PREDICTION ACCURACY OF CODE PROVISIONS FOR THE CALCULATION OF CRACK WIDTHS Dr Martin EMPELMANN	403: AN ATTEMPT TO USE OF WASTE HORTICULTURAL MINERAL WOOL AS AN ADDITIVE IN CEMENT COMPOSITES Prof Jerzy HOLA
11:45	324: ON THE ADVANTAGE OF EXTERNAL PRESTRESSING IN STRENGTHENING COMPOSITE CONCRETE – OPEN WEB EXPANDED STEEL BEAMS Prof Nazar OUKAILI	170: STIFFNESS BASED APPROACH TO DETERMINE THE SHEAR-CAPACITY OF REINFORCED CONCRETE BEAMS Mr Thomas HERTLE	50: DEVELOPMENT AND TESTING OF EXTRA-BONDED 10-WIRE PC STRAND Dr Lev ZARETSKY	202: INVESTIGATING THE SELF-HEALING POTENTIAL OF CRACKED CONCRETE UNDER VARIABLE LOADS IN REAL AND LABORATORY SCALE Dr Nico HERRMANN	506: PUNCHING SHEAR OF LIGHTWEIGHT AGGREGATE CONCRETE FLAT SLABS Dr Michal GOJNYN	447: USE OF WASTE GLASS IN CONSTRUCTION MATERIALS Dr Ali BAGHERI
12:00	420: PARALLEL STRAND SYSTEM - 40 YEARS OF EXPERIENCE AND DEVELOPMENT – STATE OF THE ART FROM EARLY DAYS AND CHALLENGES FOR FUTURE DEVELOPMENTS Mr Ivica ZIVANOVIC	217: A SHEAR STRENGTH MODEL FOR SHORT FRC COUPLING BEAMS Dr Boyan MIHAYLOV	375: ELECTRICALLY ISOLATED TENDONS FOR A DURABLE BRIDGE STRUCTURE Dr Christian GLAESER	264: BENEFITS OF STRUCTURAL LIGHTWEIGHT CONCRETE ... OTHER THAN REDUCED DENSITY Dr Reid CASTRODALE	150: EXPERIMENTAL INVESTIGATIONS ON TENSION LOADED ANCHOR GROUPS OF ARBITRARY CONFIGURATIONS Ms Boglarka BOKOR	480: THE USE OF LOW-CARBON-FOOTPRINT MULTI-SIZED FILLERS IN HIGH-PERFORMANCE CONCRETE Mr Saad BINHOMMAL
12:15	432: DESIGN OF IHSANIYE VIADUCT OF NORTHERN MARMARA MOTORWAY, TURKEY Mr Marco NOVARIN	591: SHEAR DEFORMATION AND FAILURE OF FRP REINFORCED CONCRETE BEAMS WITHOUT STIRRUPS Prof Renata KOTYNIA	80: UTILISATION OF CARBON FIBRE REINFORCED POLYMERS CAPACITY IN STRENGTHENING CONCRETE STRUCTURES A/Prof Katarina GAJDOSOVA	396: THE EFFECT OF WASTE GLASS POWDER ON MICROSTRUCTURAL BEHAVIOUR WHEN USED AS A PARTIAL CEMENT REPLACEMENT Miss Nafisa TAMANNA	463: HISTORY OF CONCRETE CODES/STANDARDS IN AUSTRALIA Mr John WOODSIDE	594: SUSTAINABLE CONSTRUCTION BY UTILIZING BUILDING RESOURCE STOCKS TO BE CONSIDERED RESILIENCE SITUATION Dr Masaki TAMURA
12:30	449: ASSESSMENT AND BEHAVIOUR OF PRESTRESSED CONCRETE BRIDGE BEAMS IN SHEAR WITH LESS THAN MINIMUM SHEAR REINFORCEMENT Mr Matthew HOURIGAN	73: PUNCHING SHEAR STRENGTH OF RC INTERIOR SLABS WITH UHPC OVERLAY Prof Sung-Gul HONG	597: STRENGTH AND DUCTILITY OF HIGH-STRENGTH CONCRETE COLUMNS REINFORCED WITH HIGH-STRENGTH STEEL Mr Stephen FOSTER		67: ON THE RELATION BETWEEN THE MEAN COMPRESSIVE STRENGTH AND THE CHARACTERISTIC ONE. Mr Jean Michel TORRENTI	563: SUSTAINABLE APPLICATIONS OF MUNICIPAL WASTES IN CONCRETE Dr Ali KASHANI
12:45	320: STRENGTH AND SERVICEABILITY OF PARTIALLY PRESTRESSED CONCRETE BEAMS EXPOSED TO LIMITED REPEATED LOADING Prof Nazar OUKAILI	188: DEVELOPMENT OF CSMM BASED SEISMIC FRAGILITY CURVES OF RC HOLLOW RECTANGULAR BRIDGE PIERS Mr Vijay Kumar POLIMERU	561: FIBRE COMPOSITE REBAR: AN EMERGING CONSTRUCTION TECHNOLOGY FOR CONCRETE STRUCTURES IN AUSTRALIA Prof Brahim BENMOKRANE	248: LIGHTWEIGHT AGGREGATES FOR INTERNAL CURING Prof Sherif YEHIA	304: SLENDER CONCRETE COLUMNS AT THE LOSS OF STABILITY Prof Vladimir BENKO	
13:00	LUNCH Main foyer 2 & 3					13:00
	Plenary 3	Room 215	Room 216	Room 217	Room 218	Room 219
	ULTRA HIGH PERFORMANCE	FIRE	PREFABRICATED & PRECAST	AAC & GEOPOLYMERS	MODEL CODES & STANDARDS	SUSTAINABILITY
	Chairperson: Priyan Mendis	Chairperson: Stephen Foster	Chairperson: Wit Derkowski	Chairperson: Jay Sanjayan	Chairperson: Jan Vitek	Chairperson: Koji Sakai
14:00	74: NUMERICAL MODELLING OF FIBER-REINFORCED ULTRA-HIGH PERFORMANCE CONCRETE Ms Ingrid Lande LARSEN	502: INSIGHT INTO FIRE INDUCED SPALLING FROM HYGRO-THERMO-MECHANICAL MODELLING Dr James DE BURGH	511: SHAKE TABLE TEST ON SEISMIC BEHAVIOR OF MODULAR PRECAST COMPOSITE SHEAR WALL STRUCTURE Prof Bin ZHAO, Mr Qirui CAI, Prof Xilin LU	36: OPTIMIZING THE MIXING PROCEDURE FOR ALKALI-ACTIVATED BINDERS BASED ON THEIR RESPONSE TO AGGRESSIVE CHEMICALS Mr Swaraj PATIL	522: A STRUCTURAL RELIABILITY BASED EVALUATION OF SAFETY FORMATS FOR NONLINEAR FINITE ELEMENT ANALYSIS OF REINFORCED CONCRETE STRUCTURES – ILLUSTRATION EXAMPLES Dr Arpad ROZSAS	SPECIAL PAPER ON SUSTAINABILITY Mr Petr HAJEK
14:15	593: PRELIMINARY RESULTS OF FIRST PURE SHEAR TEST ON UHPFRC Prof Evan BENTZ	418: POST-FIRE SEISMIC BEHAVIOR OF THE RC BEAM-COLUMN JOINTS Mr Xin LIU, Dr Ling-Zhi LI	356: INNOVATIVE PREFABRICATED HIGH-RISE MODULAR BUILDING Dr Shan KUMAR	294: SQUARE GEOPOLYMER CONCRETE COLUMNS REINFORCED WITH GFRP BARS SUBJECTED TO CONCENTRIC AND ECCENTRIC AXIAL LOADING Dr Mohamed ELCHALAKANI	564: COMPARATIVE STUDY ON RELIABILITY OF DUCTILITY AND STRENGTH LIMIT STATES IN DESIGN OF REINFORCED CONCRETE BEAMS IN fib MODEL CODE Prof Hamid Reza RONAGH	
14:30	555: PROPERTIES OF MATRIX-AGGREGATE TRANSITION ZONE IN ULTRA HIGH STRENGTH CONCRETE Prof Priyan MENDIS	81: EFFECT OF FIRE DAMAGE ON THE RESIDUAL PRESTRESS AND LOAD CARRYING CAPACITY OF PRE-TENSIONED PRESTRESSED CONCRETE BRIDGE GIRDERS Prof Susumu INOUE	378: THE DYWIDAG DUCTILE CONNECTOR - AN INGENIOUS CONNECTION METHOD FOR PRECAST STRUCTURES IN HIGHLY SEISMIC ZONES Mr Jannik GAWLISTA	295: BEHAVIOUR AND DESIGN OF RECTANGULAR GEOPOLYMER CONCRETE COLUMNS REINFORCED WITH GFRP BARS Dr Mohamed ELCHALAKANI	582: INTRODUCTION OF NEW JSCE GUIDELINE FOR INTERVENTION OF EXISTING CONCRETE STRUCTURES Prof Takumi SHIMOMURA	462: FUNDAMENTAL PROPERTY OF MORTAR USING CEMENT CLINKER AS FINE AGGREGATE Dr Shintaro MIYAMOTO
14:45	222: LOAD-BEARING CAPACITY OF PROFILED DRY JOINTS BETWEEN ADJACENT UHPFRC PRECAST ELEMENTS Dr Vincent OETTEL	125: EXPLOSIVE SPALLING BEHAVIOR AND LOAD CAPACITY OF PRESTRESSED CONCRETE MEMBERS EXPOSED TO FIRE Mr Kentaro FUJIMOTO	185: DEVELOPMENT OF PRECAST CONCRETE BARRIERS FOR REPLACEMENT IN METROPOLITAN EXPRESSWAYS Mr Yosuke ISHIHARA	199: INVESTIGATION OF ONE-PART HYBRID ALKALINE CEMENT WITH HEAT-TREATED ALUMINOSILICATE ACTIVATOR Mrs Wiwik Dwi PRATIWI	383: TOWARD fib MODEL CODE 2020: PARTIAL SAFETY FACTOR FOR RESISTING MODEL UNCERTAINTIES IN PLANE STRESS NL-FEM ANALYSIS OF RC SYSTEMS Prof Giuseppe MANCINI	515: CASE STUDY - THE CARES SUSTAINABLE CONSTRUCTION STEEL CERTIFICATION SCHEME FOR STEEL REINFORCEMENT IN CONCRETE Mr Lee BRANKLEY
15:00	566: SUBSTITUTION OF STEEL BY UHPC Prof Nguyen Viet TUE	135: DESIGN OF THE CUT AND COVER TUNNELS ON WESTCONNEX 1B FOR HYDROCARBON FIRES Mr Jarrod HITCHCOX	552: PROBABILISTIC ANALYSIS OF LOCAL FAILURE IN PRECAST BUILDINGS DUE TO ACCIDENTAL LOADINGS Mr Qazi Amjad Ali PATHAN	207: THE INFLUENCE OF FLY ASH PROPERTIES ON STRENGTH AND STRUCTURE OF GEOPOLYMER PASTE Mrs Triwulan TRIWULAN	331: OVERVIEW OF AASHTO LRFD DESIGN SPECIFICATIONS FOR CONCRETE BRIDGE REINFORCED WITH GLASS FRP BARS Mr Steven NOLAN	538: REUSED RECYCLED AGGREGATE CONCRETE (RRAC) Mr Mohammed ABED
15:15	402: PREFABRICATED UHPC COMPOSITE ELEMENT FOR PUNCHING SHEAR ENHANCEMENT Prof Norbert RANDL	497: MECHANICAL FRACTURE PARAMETERS OF CONCRETE EXPOSED TO HIGH TEMPERATURES RELATED TO APPROXIMATION OF TEMPERATURE FIELD IN EXPERIMENTAL PANELS Ms Iva ROZSYPALOVA	483: EXPERIMENTAL INVESTIGATION INTO TENSION-FREE PIN SHEAR CONNECTORS IN PUSH-OUT TESTS Mr Zhiyuan HU		466: fib MC2010 SHEAR ENHANCEMENT METHOD FOR POINT LOADED NON-SLENDER MEMBERS A/Prof Almia UZEL	427: SUSTAINABILITY ANALYSIS OF TRANSPORTATION CORRIDORS UNDER CONSTRUCTION IN AN URBAN ENVIRONMENT Mr Shishir BANSAL
15:30	58: EFFICIENT USE OF FIBERS IN UHPC – A STRUCTURED SCOPING REVIEW Ms Ingrid Lande LARSEN	21: MULTI-LEVEL ASSESSMENT OF A FULL-SCALE TESTED BRIDGE DECK SLAB Dr Jiangpeng SHU	203: A STUDY ON THE RATIONAL JOINT FOR PRECAST MEMBER Mr Kazumasa OKUBO		CIA Z7/02 EXPOSURE CLASSIFICATION Mr Rodney PAULL	
15:45	AFTERNOON TEA Main foyer 2 & 3					15:45
	Plenary 3	Room 215	Room 216	Room 217	Room 218	Room 219
	RESILIENCE & ROBUSTNESS	UNDERGROUND & FOUNDATIONS	FIBRE REINFORCED CONCRETE	AAC and GEOPOLYMER	ARCHITECTURAL CONCRETE	CONCRETE DETERIORATION METHODS
	Chairperson: Ted Neff	Chairperson: David Millar	Chairperson: Avraham Dancygier	Chairperson: Craig Heidrich	Chairperson: Hugo Corres	Chairperson: Frank Papworth
16:15	412: STAY CABLE HARDENING & PROTECTION - NEW DEVELOPMENTS ON BLAST, FIRE AND ICE PROTECTIONS Mr Ivica ZIVANOVIC	266: FEASIBILITY ANALYSIS OF CROSS-SECTION CULVERT COMPOSED OF 3 RADIUS CIRCLE WITH REDUCED WALL THICKNESS Prof Mounir Khalil EL DEBS	194: MATERIAL FATIGUE OF STEEL FIBER REINFORCED HIGH PERFORMANCE CONCRETE FOR ON- AND OFFSHORE WIND TURBINES Mr David OV	62: EFFECTS OF STORAGE PERIOD ON THE MECHANICAL PROPERTIES OF CONCRETE WITH ALKALI-ACTIVATED BINDERS Mr Ajinkya NARINGE	379: FORMS FOLLOWS ENVIRONMENT – THE DEVELOPMENT OF SMART AND ECO-FRIENDLY CARBON CONCRETE COMPOSITE BUILDING ELEMENTS Mr Dominik SCHLÜTER	405: SIMULATION OF NON-UNIFORM FROST DAMAGE ACCUMULATION IN RC BEAMS UNDER VARIOUS HEAT & MOISTURE EXPOSURE CONDITIONS Dr Fuyuan GONG
16:30	197: ELASTIC ENERGY BALANCE CONCEPT FOR THE DESIGN OF RESILIENT PRESTRESSED CONCRETE STRUCTURES AGAINST REPETITIVE SEVERE EARTHQUAKES Prof Shoji IKEDA	407: INTEGRATED WELL-PILE FOUNDATION OF A CABLE STAYED BRIDGE Mr Shishir BANSAL	57: TENSILE LOAD BEARING AND BOND BEHAVIOR OF CARBON REINFORCED CONCRETE UNDER CYCLIC LOADING Ms Juliane WAGNER	134: ULTRA-LOW SHRINKAGE AND HIGH STRENGTH CONCRETE WITHOUT PORTLAND CEMENT Dr Taku MATSUDA	109: BIM AS A TOOL FOR SUSTAINABLE DESIGN Mr Christian K SANDVIK, Mr Fredrik FOUIGNER	443: EFFECT OF ALKALI SILICA REACTION ON BOND STRENGTH AND LOAD CAPACITY OF REINFORCED CONCRETE STRUCTURES Dr Nadarajah GOWRIPALAN
16:45	71: BOND STRENGTH OF EMBEDDED STEEL REINFORCEMENT AT HIGH STRAIN RATES Dr Shao-Bo KANG	335: INVESTIGATION OF DYNAMIC RESPONSE OF RECTANGULAR TUNNEL LINING STRUCTURES UNDER BLAST LOADING Mr Le XIE	362: MECHANICAL PROPERTIES AND DURABILITY OF FRC WITH GLASS-POLYMER COMPOSITE FIBER Prof Vyacheslav FALIKMAN	332: EFFECTS OF TYPE OF ACTIVATOR ON FIBRE-MATRIX INTERFACE PROPERTIES AND TENSILE PERFORMANCE OF STRAIN-HARDENING GEOPOLYMER COMPOSITES Dr Behzad NEMATOLLAHI	301: CONCRETE FRAME SYSTEM FOR SUSTAINABLE AND RESILIENT BUILDINGS Mr Petr HAJEK	509: FREEZE-THAW RESISTANCE OF NORMAL AND HIGH STRENGTH RECYCLED AGGREGATE CONCRETE Dr Enzo MARTINELLI
17:00	177: SEAWALLS, SEACON, RESILIENCE AND SUSTAINABILITY Mr Steven NOLAN	6: CRITICAL P19 & P23 FOUNDATIONS FOR SIGNATURE BRIDGE AT DELHI Mr Venkatramana Narayan HEGGADE	144: STATIC, CYCLIC AND IMPACT MECHANICAL CHARACTERISTICS OF STEEL FIBRE REINFORCED CONCRETE BASED ON WASTE CERAMIC AGGREGATE A/Prof Jacek KATZER	296: DURABILITY OF GEOPOLYMER CONCRETE MADE OF FLY ASH AND SLAG Dr Mohamed ELCHALAKANI	494: HERITAGE COMPLEX ARCH BRIDGES: MERGING STRUCTURE WITH ARCHITECTURE Mr Alok PANDAY	261: EXPLANATION OF VERY LOW CARBONATION DEPTH FOUND AT TWO, MORE THAN A 100 YEARS OLD CONCRETE BRIDGES. A/Prof Peter PAULIK
17:15		614: HOW CONCRETE TECHNOLOGY HAS HELPED PILING DIAPHRAGM WALLS Mr Chris PRICE	611: EXPERIMENTAL REPAIR OF RC COLUMNS WITH FRCC Dr Marta DEL ZOPPO	440: CARBONATION AND CHLORIDE INDUCED STEEL CORROSION RELATED ASPECTS IN FLY ASH/SLAG BASED GEOPOLYMERS - A CRITICAL REVIEW Ms Tran Huyen VU	OVERVIEW OF SONG SCHOOL Mr John WOODSIDE	490: INFLUENCE OF CHLORIDE ION CONCENTRATION GRADIENT IN HARDENED CONCRETE ON CHLORIDE ION PENETRATION UNDER FREEZING-THAWING ENVIRONMENT Dr Yuki SAKOI
17:30	WELCOME RECEPTION Main foyer 2 & 3					17:30

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Tuesday 9 October 2018

REGISTRATION
Main foyer 2 & 3

Plenary 3

Chairperson: Hugo Corres
NEW INSIGHTS INTO THE DURABILITY PROPERTIES OF GEOPOLYMER CONCRETES
Prof Frank DEHN

HYGRO-MECHANICS BASED DESIGN AND PERFORMANCE ASSESSMENT OF STRUCTURAL CONCRETE
Prof Koichi MAEKAWA

MORNING TEA
Main foyer 2 & 3

Plenary 3							Room 215	Room 216	Room 217	Room 218	Room 219
BRIDGES							SHEAR & TORSION	MODELS FOR DURABILITY	CONCRETE MATERIALS	MODELLING & DESIGN	MONITORING & CONDITION ASSESSMENT
Chairperson: Akio Kasuga							Chairperson: Mikael Braestrup	Chairperson: Frank Papworth	Chairperson: Tor Am Martius-Hammer	Chairperson: Jean Michel Torrenti	Chairperson: Stuart Matthews
11:00	510: BUILDING BRIDGES USING THIN-WALLED CONCRETE ELEMENTS AND POST-TENSIONING Mr Stephan FASCHING						500: COMBINED YIELD CRITERIA FOR SHEAR-BENDING IN NUMERICAL LIMIT ANALYSIS OF SLABS Mr Thomas Westergaard JENSEN	573: DURABILITY DESIGN EARLY AGE CRACK CONTROL - DIFFERENTIAL TEMPERATURE IMPACT ON CONCRETE Mr Rodney PAULL	240: EXPERIENCE OF A LOW-PH CONCRETE FOR DEPOSITION TUNNELS Mr Alexandre MATHERN	136: RESPONSE SIMULATION OF UHPFRC MEMBERS Prof Serhan GUNER	37: FIELD TEST OF WIDE-RANGE-ULTRASONIC TESTING (WUT) TO DETECT UNFILLED GROUT IN POST-TENSIONING PRESTRESSED CONCRETE BRIDGES Mr Kuniharu FUKUSHIMA
11:15	411: DEVIATION SADDLES FOR CABLE BRIDGES: NEW DEVELOPMENTS ON SADDLE CONCEPTION Mr Ivica ZIVANOVIC						245: ANALYZATION OF THE SHEAR LOAD BEARING BEHAVIOUR OF THIN WALLED CFRP REINFORCED UHPC STRUCTURES Dr Benjamin KROMOSER	60: FEEDBACK GATHERED DURING 2-YEAR MEASUREMENT OF DURABILITY INDICATORS FOR THE NEW COASTAL ROAD ON REUNION ISLAND (FRANCE) MAJOR PROJECTS Mr Lionel LINGER	400: THREE-DIMENSIONAL PARAMETERS TO CHARACTERIZE AND DESCRIBE THE SIZE AND SHAPE OF AGGREGATES BASED ON COMPUTED TOMOGRAPHY Mrs Bianca DORNISCH-BUND	504: CRACKING ANALYSIS OF A CONCRETE TIE REINFORCED WITH TWO DIAMETER BARS: COMPARISON WITH EXPERIMENTAL RESULTS Dr Maurizio TALIANO	19: STUDY ON CONSERVATION FOR STAY CABLE SYSTEMS OF CABLE-STAYED BRIDGES Dr Hideaki SAKAI
11:30	404: I. CROSS LINKS : AN INNOVATIVE HIGH-PERFORMANCE CABLE DAMPING SOLUTION Mr Julien-Erdem ERDOGAN, Mr Ivica ZIVANOVIC						523: SHEAR TESTS ON REINFORCED CONCRETE BEAMS WITH EXTREMELY LOW AMOUNTS OF STIRRUPS Dr Nguyen Duc TUNG	489: A GENETIC ALGORITHM TO IDENTIFY THE OPTIMAL CONCRETE MIX FOR THE ELEMENTS SUBJECT TO RISK OF EARLY AGE THERMAL CRACKING Ms Maryam GHAREHCHAEI	78: BEST MIXING PROCEDURES OF CRUMB RUBBER CONCRETE Dr Osama YOUSSEF	251: AN INVESTIGATION OF THE STRAIN PROFILE OVER THE COVER IN REINFORCED CONCRETE ELEMENTS SUBJECTED TO TENSION Mr Reingard TAN	42: FIELD VIBRATION TESTING AND VIBRATION CALCULATION & EVALUATION OF OVER-TRACK BUILDING INDUCED BY SUBWAY Mr Ligang BAI
11:45	262: FROM ALCANTARA ROMAN BRIDGE TO THE NEW HSR VIADUCT OVER RIVER ALMONTE Mr Jose BERRAZUETA						159: PUNCHING RESISTANCE OF FLAT SLABS WITH OPENINGS Prof Jaroslav HALVONIK	5: EARLY AGE EXPOSURE TO CHLORIDES: THE CASE OF THE MARITIME INFRASTRUCTURE OF THE MONACO SEA EXTENSION Dr Christian CREMONA	49: EXPERIMENTAL STUDY ON THE MECHANICAL PROPERTIES OF LIGHTWEIGHT RUBBERIZED CONCRETE Dr Osama YOUSSEF	368: EVALUATION OF THERMAL STRESS DEVELOPMENT IN EARLY AGE CONCRETE Mr Aocheng ZHONG	127: LOWER WATER-TO-CEMENT-RATIO MAY INDUCE HIGHER DETERIORATION WHEN CONCRETE IS CRACKED - EXPERIMENTAL INVESTIGATION AND MECHANISM Dr Satoshi FUJIMOTO
12:00	40: TESTING OF STAY CABLE SYSTEMS Dr Alex-W. GUTSCH						514: CALIBRATION OF THE SHEAR STOP CRITERIA BASED ON CRACK KINEMATICS OF REINFORCED CONCRETE BEAMS WITHOUT SHEAR REINFORCEMENT Prof Dick A. HORDIJK	316: DURABILITY PLANS FOR MAJOR PROJECTS Mr Sean WINDRED	215: PERFORMANCE OF ANCHORS IN EARLY-AGE CONCRETE WITH SUPPLEMENTARY CEMENTITIOUS MATERIAL Dr Jessej LEE	98: ANALYSES FOR A REASONABLE SHEAR REINFORCEMENT DESIGN IN BRIDGE PIER CAP Mr Jae-Hyun PARK	437: CONCRETE NDT DATA IN "R", AN OPEN SOURCE STATISTICS AND GRAPHICS PROGRAMMING ENVIRONMENT Mr William WARD
12:15	351: CABLE STAYED VIADUCT ON THE RAILWAY LINE 13 - GUARULHOS INTERNATIONAL AIRPORT Mr Fernando STUCCHI						247: SHEAR STRENGTH OF LIGHTWEIGHT CONCRETE BEAMS WITHOUT WEB REINFORCEMENT Prof Sherif YEHA	441: SHRINKAGE INDUCED CRACKING IN CONCRETE: A COMPARISON OF EXISTING MODELLING APPROACHES Dr Inam KHAN	524: ANCHORAGE LENGTHS OF CAST-IN AND POST-INSTALLED REINFORCING BARS IN AUSTRALIA, NEW ZEALAND, THE USA, AND EUROPE Dr Christoph MAHRENHOLTZ	540: DECREASING THE MAGNITUDE OF SHEAR RATES IN THE FLOWCYL Mrs Elisabeth Leite SKARE	576: EVALUATION OF THE PC STEEL MATERIAL BREAKAGE CAUSED BY CORROSION USING AE METHOD Mr Yusuke TOYOTA
12:30	175: ADVANCING SMALL BRIDGES (DOWN UNDER - FLORIDA) Mr Steven NOLAN						546: A MECHANICAL APPROACH TO MODELING THE CRACK DEVELOPMENT AND SHEAR FAILURE OF REINFORCED CONCRETE BEAMS WITH LOW AMOUNTS OF SHEAR REINFORCEMENT Dr Nguyen Duc TUNG	104: INFLUENCE OF ENVIRONMENTAL POLLUTION ON CORROSION MAPS IN SLOVAKIA A/Prof Peter KOTES	553: ALKALI LIMIT IN CEMENT WITH SUPPLEMENTARY CEMENTING MATERIALS - A REVIEW Miss Cibele SANCHEZ ROBOREDO	282: A SIMPLE EXPRESSION TO EVALUATE BENDING CAPACITY AND COMPRESSION ZONE HEIGHT OF RECTANGULAR RC WALL SECTIONS A/Prof Avraham DANCYGIER	381: INSPECTION AND MONITORING OF STAY CABLES Mr Werner BRAND
12:45	568: DESIGN AND CONSTRUCTION OF BRIDGES FOR MOUNTAIN RAILWAYS Mr Neil BANERJEE						77: COMPARISON OF RC BEAMS STRENGTHENED WITH PBO-FRPM COMPOSITE WITH DIFFERENT TYPES OF ANCHORAGE Mrs Dorota MARCINCZAK	89: USE OF RESISTIVITY AS A CONCRETE QUALITY ROUTINE CONTROL TOOL. OUTCOMES OF RECORDS GATHERED DURING 2-YEAR FOR THE NEW COASTAL ROAD ON REUNION ISLAND (FRANCE) OFFSHORE VIADUCT Mr Lionel LINGER	258: TORSION OF REINFORCED CONCRETE ELEMENTS - BEHAVIOUR AND MODELLING Prof Jan VITEK	193: APPLICATION OF ACOUSTIC EMISSION ANALYSIS FOR EVALUATION OF STATIC AND DYNAMIC EXPERIMENTS Prof Jens MINNERT	
13:00 LUNCH Main foyer 2 & 3											
Plenary 3							Room 215	Room 216	Room 217	Room 218	Room 219
ULTRA HIGH PERFORMANCE							SHRINKAGE & CREEP	PREFABRICATED & PRECAST	NEW MATERIALS	DESIGN & CONSTRUCTION	REINFORCEMENT CORROSION
Chairperson: Evan Bentz							Chairperson: Harald Muller	Chairperson: David Fernandez-Ordenez	Chairperson: Dick Hordijk	Chairperson: Ehab Hamed	Chairperson: Rodney Paull
14:00	350: SUSTAINABLE ULTRA-HIGH PERFORMANCE CONCRETE INCORPORATING GROUND GRANULATED BLAST-FURNACE SLAG AND FLY ASH Dr Padmaja KRISHNAN						54: NOVEL TESTS AND IMPROVED UNDERSTANDING OF CONCRETE PERFORMANCE FROM VERY EARLY AGES Mr Liang LI	450: PREFABRICATION / PRECAST - BENDIGO HOSPITAL Mr Peter HEALY	596: DEVELOPMENT OF A HIGH MOD-E, VERY HIGH STRENGTH, HIGH PERFORMANCE, SUPER-WORKABLE LOW CARBON CONCRETE Mr Stephen FOSTER	516: FLOATING CONCRETE STRUCTURES Mr Tor Ole OLSEN	311: ANATOMY OF GROUTED POST-TENSION TENDON FAILURES Dr Randall POSTON
14:15	519: CONSTRUCTION OF LARGE UHPC STRUCTURES - EXPERIENCE FROM A SLIPFORMING MOCK-UP TEST Dr Tor Arne MARTIUS-HAMMER						66: MODELLING OF THE LONG TERM BEHAVIOUR OF THE PRESTRESSED CONTAINMENT OF NPFS Mr Jean Michel TORRENTI	448: DEVELOPMENT OF A NOVEL PRESTRESSED JOINT SYSTEM FOR PRECAST SLAB Mr Masami KOSHISHI	397: BOND PROPERTIES BETWEEN PRINTABLE CONCRETE AND ROCK Mr Zhiyuan HU	61: CRITERIA FOR THE MAXIMAL ADMISSIBLE THERMAL DIFFERENTIAL WITHIN A MASS CONCRETE ELEMENT Mr Laurent BOUTILLON	38: GALVANIZED STEEL REINFORCEMENT Prof Stephen YEOMANS
14:30	239: BENDING BEHAVIOUR OF FILIGREE STRUCTURAL ELEMENTS MADE OF TEXTILE REINFORCED UHPC Mr Philipp PREINSTORFER						569: EXPERIMENTAL INVESTIGATION OF CREEP RECOVERY OF T-SHAPED RC BEAMS AND VALIDATION OF CREEP AND CREEP RECOVERY MODELS Mr Nicky REYBROUCK	293: TWO-BEAM MODEL - NEW METHOD FOR DETERMINING SHEAR CAPACITY OF HOLLOW CORE SLABS IN SLIM FLOORS A/Prof Wit DERKOWSKI	444: SEEBECK EFFECT IN CARBON NANOTUBE-REINFORCED CEMENT PASTES Dr Alastair MACLEOD	115: DESIGN AND CONSTRUCTION OF THE YOBASAN VIADUCT Mr Ryo OYAGI	2: SIGNIFICANCE OF CRACKS IN DURABILITY DESIGN AND ASSESSMENT OF HYDRAULIC CONCRETE STRUCTURES DUE TO REINFORCEMENT CORROSION Dr Amir RAHIMI
14:45	69: IMPROVEMENT OF REINFORCED CONCRETE VOID SLAB BRIDGES BY USING ULTRA HIGH PERFORMANCE FIBRE REINFORCED CEMENT-BASED COMPOSITES (UHPC): AN ANALYTICAL INVESTIGATION Dr Tohru MAKITA						499: ADVANTAGES OF CHEMICALLY POST-TENSIONED STEEL FIBRE REINFORCED CONCRETE SLABS ON GRADE AND SUSPENDED SLABS: FROM DESIGN STAGE TO APPLICATION Mr Xavier DESTREE	463: HISTORY OF CONCRETE CODES/STANDARDS IN AUSTRALIA Mr John WOODSIDE	274: POLYUREA AS A MATERIAL TO REINFORCE THE SURFACE AND INCREASE THE WATERPROOFING OF CONCRETE Dr Marek MAJ	306: 3D-PRINTED CONCRETE OFFICE BUILDING IN DUBAI Dr Musa ALAWNEH	122: MECHANICAL BEHAVIOUR OF POST-TENSIONED PC GIRDERS HAVING RUPTURED TENDONS Prof Hiroshi MITSUYOSHI
15:00	83: CONTROL OF THE ULTRA-HIGH PERFORMANCE FIBRE REINFORCED CONCRETE (UHPC) CONCERNING TO POST-CRACKING PERFORMANCE Miss Lufan LI						27: EXPERIMENTS ON DRYING, SELF-DESICCATION AND SHRINKAGE OF CONCRETE WITH DIFFERENT WATER CEMENT RATIO Dr Marek VINKLER	581: A NOVEL NON-COMBUSTIBLE LIGHTWEIGHT CORE FOR PREFABRICATED SANDWICH PANELS Dr Ailar HAJIMOHAMMADI	352: DEVELOPMENT OF MULTIFUNCTIONAL SANDWICH PANELS FOR INTEGRATED REHABILITATION OF RC-BUILDINGS: CHARACTERIZATION OF THE COMPONENTS Enzo Martinelli	172: CONFINEMENT IN BENDING OF LIGHTWEIGHT AGGREGATE CONCRETE BEAMS Mr Jan Arve ØVERLI	157: EFFECT OF CORRODED REBAR SHAPE, RUST AROUND REBAR AND CRACK DUE TO CORROSION ON BOND BEHAVIOUR Ms Yizhou YANG
15:15	308: EXPERIMENTAL AND NUMERICAL SIMULATION INVESTIGATION OF UHPC CONCRETE BEAM-COLUMN JOINT IN UNDERGROUND STRUCTURES Dr Xuesong CAI						283: COMPARISON OF CREEP AND SHRINKAGE STRAINS OF LARGE CONCRETE SPECIMENS WITH THEORETICAL MODELS Mr Dominik SUZA	344: A SIMPLIFIED METHOD FOR THE FLEXURAL ANALYSIS OF PREFABRICATED CONCRETE SANDWICH PANELS MADE WITH DIAGONAL BAR CONNECTORS Mr Qian HUANG	507: MECHANICAL PROPERTIES AND DURABILITY PERFORMANCE OF POLYMER-MODIFIED CONCRETE Dr Farhad NABAHI	584: DESIGNING SERVICE LIFE INTO THE TENDER DOCUMENTS FOR HIGH PERFORMANCE CONCRETE CONSTRUCTION Mr Stuart CURTIS	503: QUANTIFICATION AND PROPAGATION OF UNCERTAINTIES OF MODELS FOR CORRODED REINFORCEMENT IN STRUCTURAL ANALYSIS Dr Árpád Rózsás
15:30	431: HIGH RESISTANCE STAY CABLES AND UHPFRC DECK TO SPAN 1100 METERS Mr Marco NOVARIN						79: ENTIRE DISPLACEMENT DISTRIBUTION OF REINFORCED CONCRETE BOX CULVERT IN THE DAMAGING PROCESS SUBJECTED TO HORIZONTAL LOAD Dr Yoshinori MIYAGAWA			33: ONE GIRDER OF ONE AND HALF KM LONG BRIDGE ON RIVER BRAHMAPUTRA Mr Venkatramana Narayan HEGGADE	243: EXPERIMENTAL AND ANALYTICAL STUDY ON LONG TERM PERFORMANCE OF RC BEAMS SUBJECTED TO SUSTAINED LOADS AND CHLORIDE ENVIRONMENT Dr Ding NIE
15:45 AFTERNOON TEA Main foyer 2 & 3											
Plenary 3							Room 215	Room 216	Room 217	Room 218	Room 219
LARGE CHALLENGING PROJECTS							FIRE	REINFORCEMENT & PRESTRESS	FIBRE REINFORCED CONCRETE	DESIGN & CONSTRUCTION	CONCRETE DETERIORATION METHODS
Chairperson: Brett Pielstick							Chairperson: Priyan Mendis	Chairperson: Randall Poston	Chairperson: Vyacheslav Falikman	Chairperson: Tor Ole Olsen	Chairperson: Amir Rahimi
16:15	426: POST-TENSIONED CONCRETE WIND TOWERS AND "EOLIFT" SYSTEM Mr Marco NOVARIN						374: RESIDUAL CAPACITY OF CONCRETE PREPARED WITH POROUS AGGREGATE EXPOSED TO ELEVATED TEMPERATURE Prof Sherif YEHA	161: DIFFERENCES IN BENDING BEHAVIOUR OF STEEL AND GFRP REINFORCED BEAMS A/Prof Viktor BORZOVIC	433: ANALYTICAL CORRELATION BETWEEN MONTEVIDEO TEST (MVD) AND THREE-POINT BENDING TEST FOR FIBRE REINFORCED CONCRETE (FRC) Prof Luis SEGURA-CASTILLO	35: CHECKING OF STRUCTURAL SAFETY - EXPERIENCES WITH LARGE-SCALE STRUCTURES Prof Robert HERTLE	76: INVESTIGATION OF THE INFLUENCE OF LOADING FREQUENCY ON THE FATIGUE RESISTANCE OF HIGH STRENGTH CONCRETE Mr Sebastian SCHNEIDER
16:30	338: VIADUCTS OF THE TOLUCA-MEXICO INTERCITY TRAIN Mr Jordi REVOLTOS						501: ARE SYNTHETIC FIBRES EFFECTIVE ON FIRE RESISTANCE IN ALL STRENGTH CLASSES? Mr Mohammed ABED	305: EXPERIMENTAL AND THEORETICAL ANALYSIS OF SLENDER G-FRP REINFORCED SLABS Prof Vladimir BENKO	428: ENHANCED ENERGY DISSIPATION IN STEEL FIBER REINFORCED CONCRETE BARRIERS Dr Mi CHORZEPA	326: REDUCTION OF SHEAR RESISTANCE IN BUBBLEDECKS WITH OPENINGS Prof Nazar OUKAILI	158: BOND BEHAVIOR IN REINFORCED CONCRETE UNDER HIGH CYCLE FATIGUE PUSH-IN LOADING Mr Abedulgader BAKTHEER
16:45							343: FIRE PERFORMANCE LIGHTWEIGHT AERATED CONCRETE AND STEEL COMPOSITE WALL PANELS Mr Ali AL-DUJAILI, Mr Ehsan NEGBAN	364: NUMERICAL AND EXPERIMENTAL VALIDATION OF FRP REINFORCEMENTS USED IN EMBEDDED THROUGH-SECTION STRENGTHENING METHOD Mrs Haifa SALEH	113: EXPERIMENTAL LOADING TESTS OF STEEL-FIBRE REINFORCED CONCRETE (SFRC) SLAB IN INTERACTION WITH SUBSOIL Prof Radim CAJKA	200: STRUCTURAL PERFORMANCE OF SCREW ANCHORS OF DIFFERENT TYPES UNDER THE TENSILE LOADING Dr Alireza MOHYEDDIN	160: NUMERICAL AND EXPERIMENTAL INVESTIGATIONS OF CONCRETE FATIGUE BEHAVIOR EXPOSED TO VARYING LOADING RANGES Mr Abedulgader BAKTHEER
17:00	408: YAVUZ SULTAN SELIM BRIDGE CABLE TECHNOLOGY - AN IMPORTANT MILESTONE ON LONG SPAN CABLE STAYED STRUCTURE DEVELOPMENT Mr Julien-Erdem ERDOGAN						556: FIRE PERFORMANCE OF AERATED ALKALI ACTIVATED SLAG FOR UNITS FACADE SYSTEMS Dr Kate Tq NGUYEN	572: EXPERIMENTAL STUDY ON MECHANICAL BEHAVIORS OF SELF-BALANCED PRESTRESSED BAR Mr Pengfei XIE	482: EVALUATION OF ANCHORAGE CAPACITY OF HEADED BARS IN STEEL FIBRE REINFORCED CONCRETE EXTERIOR BEAM-COLUMN JOINT Mr Seunghwa LEE	44: INFLUENCE OF THE DESIGN REVIEW PROCESS ON THE DESIGN REVIEW ENGINEER DUE TO HUMAN FACTORS Prof Robert HERTLE	204: EXPERIMENTAL INVESTIGATION OF SIZE EFFECT ON FATIGUE BEHAVIOR OF HIGH STRENGTH CONCRETE Mr Vivian FREI
17:15	271: SLAB REPLACEMENT OF A STEEL BRIDGE WITH FULL UTILIZATION OF THE ROAD SPACE Dr Osamu SANADA						535: INTEGRITY OF INDUSTRIAL PORTAL FRAMES SUBJECTED TO TYING FORCES COMING FROM FIRE OR ACCIDENTAL ACTIONS Mr Tom MOKKENS	590: BOND BEHAVIOR OF FRP REINFORCEMENT TO CONCRETE - EXPERIMENTAL TESTS Prof Renata KOTYNIA	359: FAILURE MODE OF STEEL FIBRE REINFORCED EXTERIOR BEAM-COLUMN JOINTS ACCORDING TO DEFORMATION CAPACITY Mr Dong-Hee SON	471: STUDY ON BASIC CHARACTERISTICS OF REGROUT MATERIALS FOR PC TENDONS Mr Kazuaki TOBITA	406: BOND BEHAVIOUR OF REINFORCED CONCRETE UNDER HIGH CYCLE FATIGUE PULL-OUT LOADING Mr Marc KOSCHEMANN
19:00 CONGRESS DINNER Melbourne Olympic Park											

The International Federation for Structural Concrete 5th International *fib* Congress 2018
Monday 8 October 2018 - Thursday 11 October 2018
Melbourne Convention and Exhibition Centre

Wednesday, 10 October 2018

Wednesday, 10 October 2018						
07:30	REGISTRATION Main foyer 2 & 3					07:30
Plenary 3						
09:00	Chairperson: Tor Ole Olsen IN QUEST OF THE HOLY GRAILS OF CONSTRUCTION Prof Campbell R. MIDDLETON					09:00
09:45	ALKALI-SILICA REACTION: EIGHTY YEARS ON Dr Michael THOMAS					09:45
10:30	MORNING TEA Main foyer 2 & 3					10:30
	Plenary 3	Room 215	Room 216	Room 217	Room 218	Room 219
	BRIDGES	SEISMIC	REINFORCEMENT & PRESTRESS	fib AWARDS WINNERS	MODELLING & DESIGN	COMPOSITE AND HYBRID
	Chairperson: Johann Kollegger	Chairperson: Alessandro Palermo	Chairperson: Ian Gilbert	Chairperson: Jim Forbes	Chairperson: Shan Kumar	Chairperson: Riadh Al-Mahaidi
11:00	312: STUDY ON THE AERODYNAMIC PERFORMANCE AND CABLE DESIGN METHOD OF AN EXTRADOSED AND SUSPENSION HYBRID BRIDGE WITH 800M SPAN OF BUTTERFLY WEB GIRDER Mr Hiroyuki UCHIBORI	SPECIAL SESSION - SEISMIC	360: THIN CONCRETE PANELS PRESTRESSED WITH CARBON TEXTILE REINFORCEMENT: FLEXURAL TESTING Mrs Katarzyna ZDANOWICZ	CASE STUDIES - AWARD WINNERS	358: A PUNCHING SHEAR MECHANICAL MODEL FOR REINFORCED CONCRETE SLABS WITH AND WITHOUT PUNCHING REINFORCEMENT Prof Antonio MARI	453: INFLUENCE OF CONCRETE MODULUS ON THE AXIAL BEHAVIOUR OF PULTRUDED FIBRE REINFORCED POLYMER TUBE COLUMNS Prof Thiru ARAVINTHAN
11:15	365: NORTHLINK WA: COLLIER RD SPUI BRIDGE - INNOVATION IN DESIGN Mr Andreas KERKOVIVS		259: CARBON FIBRE TENDONS FOR A DURABLE BRIDGE STRUCTURE Dr Christian GLAESER		196: NUMERICAL AND EXPERIMENTAL INVESTIGATIONS OF LARGE SCALE FATIGUE TESTS Prof Steffen MARX	168: SMALL-SCALE TESTING ON BOND BEHAVIOR OF PROFILED STEEL REINFORCED CRC COMPOSITE SLABS Miss Ou YI
11:30	110: STUDY FOR CAUSAL INFERENCE ABOUT CRACKS FOUND IN THE WEBS OF A PRESTRESSED CONCRETE BRIDGE Mr Taizan KAWATANI	414: THE BASE ISOLATION OF THE NEW TRIESTE HARBOR LOGISTIC PLATFORM Mr Julien-Erdem ERDOGAN	41: LARGE SCALE TESTING ON STRUCTURAL REINFORCED ELEMENTS AND STAY CABLE SYSTEMS Dr Alex-W. GUTSCH	83: RESIDUAL PROPERTIES OF SLABS THAT DID NOT FAIL DURING A FIRE EVENT A/Prof Avraham DANCYGIER	99: EXPERIMENTAL STUDY ON UNBONDED PRESTRESSED CONCRETE BEAM-COLUMN SUBASSEMBLAGES Mr Daiki HINATA	
11:45	118: INNOVATIVE SHIP IMPACT PROTECTION FOR THE MERSEY GATEWAY BRIDGE Dr Kenneth C. KLEISSL	355: GROUP BEHAVIOUR OF DOUBLE HEADED ANCHORED BLIND BOLTS UNDER CYCLIC LOADING Dr Tilak POKHAREL	461: EVALUATION TESTS FOR NEW APPLYING OF ULTRA-HIGH STRENGTH PC STRAND Mr Rei KASAHARA			121: EFFECTS OF CONFINEMENT ON THE BOND BEHAVIOUR BETWEEN REBAR AND HIGH STRENGTH CONCRETE Prof Ana Lucia H C EL DEBS
12:00	491: ENHANCING PERFORMANCE AND AESTHETICS OF CURVED BRIDGES Mr Alok PANDAY	165: SEISMIC RETROFIT OF CONCRETE SLAB-COLUMN CONNECTIONS USING FLEXIBLE SHEAR REINFORCEMENTS Prof Maria Anna POLAK	267: DURABILITY OF POST TENSIONING TENDONS: REVIEW OF PAST AND PRESENT PRACTICES AND FUTURE TRENDS TO PROTECT POST TENSIONING TENDONS AGAINST CORROSION Dr Max Ernst MEYER	84: EVALUATION WAYS OF DEFLECTIONS OF BEAMS AND ONE-WAY SLABS A/Prof Avraham DANCYGIER	114: CONSTRUCTION OF A STEEL-CONCRETE HYBRID RIGID-FRAME BRIDGE Mr Kenichi KATA	
12:15	464: MONITORING OF EXISTING LONG SPAN BRIDGES - RESULTS, NUMERICAL SIMULATION, MATHEMATICAL MODELS FOR LONG TERM PREDICTION Prof Lukas VRABLIK	225: IMPLEMENTATION OF STEEL CONSTITUTIVE MODEL INCLUDING BUCKLING IN PARC_CL 2.1 CRACK MODEL Prof Beatrice BELLETTI	214: EXPERIMENTAL STUDY ON REINFORCED CONCRETE MEMBERS USING BAMBOO AND PP-BAND AS REINFORCEMENT Dr Masakazu TERAI			88: INTERNAL FORCES DUE TO IMPOSED DEFORMATION IN REINFORCED CONCRETE Dr Johannes BERGER
12:30	25: ELASTOMERIC BEARINGS ARRANGEMENT FOR PRECAST "U" SECTION CONCRETE BEAM BRIDGES IN OBLIQUE RAILWAY UNDERPASSES Mr Agustin BLANCO	97: THREE-DIMENSIONAL SEISMIC ANALYSIS OF UNDERGROUND REINFORCED CONCRETE BOX CULVERT WITH L-JUNCTION Mr Tsuguhiro SHIMABATA	32: CONSTRUCTION OF AN ICONIC SIGNATURE BRIDGE AT DELHI Mr Venkatramana Narayan HEGGADE	181: CYCLIC LOADING TEST OF RC COLUMNS WITH BOND-SLIP CONNECTORS ON LONGITUDINAL BARS Mr Keita UEMURA	167: APPROACH SLAB AND ITS STRUCTURAL BEHAVIOUR DURING WHOLE SERVICE LIFE A/Prof Viktor BORZOVIC	101: INVESTIGATION OF ANCHORING COMPOSITE DOWELS UNDER DYNAMIC LOADS FOR USE IN WIND TURBINE TOWERS Prof Jens MINNERT
12:45	32: CONSTRUCTION OF AN ICONIC SIGNATURE BRIDGE AT DELHI Mr Venkatramana Narayan HEGGADE	181: CYCLIC LOADING TEST OF RC COLUMNS WITH BOND-SLIP CONNECTORS ON LONGITUDINAL BARS Mr Keita UEMURA				280: THREE-DIMENSIONAL FORCE TRANSFER BETWEEN REINFORCEMENT AND CONCRETE Mr Chris HENDY
13:00	LUNCH Main foyer 2 & 3					13:00
	Plenary 3	Room 215	Room 216	Room 217	Room 218	Room 219
	EXISTING STRUCTURES	SEISMIC	FIBRE REINFORCED CONCRETE	fib NATIONAL REPORTS	DESIGN & CONSTRUCTION	MODELS FOR DURABILITY
	Chairperson: Jim Forbes	Chairperson: Koichi Maekawa	Chairperson: Marco di Prisco	Chairperson: Tor Ole Olsen	Chairperson: Christian Glaeser	Chairperson: Stuart Matthews
14:00	562: EMPIRICAL SHEAR STRENGTH MODEL AND NONLINEAR MODELING OF UNREINFORCED BEAM-COLUMN RC JOINTS WITH PLAIN BARS Dr Maria Teresa DE RISI	419: A MULTI-FUNCTIONAL SOLUTION FOR ALIBEYKOY AND KAGITANE VIADUCTS Mr Julien-Erdem ERDOGAN	387: TIME-DEPENDENT BEHAVIOUR OF FIBRE REINFORCED CONCRETE Prof Ian GILBERT	fib NMG - UAE	395: THE USE OF GOPOLYMER CONCRETE AND GFRP MATERIALS FOR AN INNOVATIVE WHARF STRUCTURE Mr Thomas GLASBY	272: LONG-TERM DURABILITY OF TEXTILE REINFORCED CONCRETE Mr Arne SPELTER
14:15	270: PERFORMANCE EVALUATION OF RC BEAMS WITH STIRRUP CORROSION AND RUPTURE Mr Shinya IKEHATA	220: A NEW BUCKLING MECHANISM OF LONGITUDINAL REBAR RELATED TO HORIZONTAL CRACK PROPAGATION IN BEAM CROSS SECTION UNDER CYCLIC LOADINGS Prof Hikaru NAKAMURA	94: NONLINEAR FE ANALYSIS OF STEEL FIBRE REINFORCED CONCRETE CONTINUOUS BEAMS Mr S M Faisal MAHMOOD	fib NMG - BRAZIL fib NMG - CZECH REPUBLIC	17: FIELD DRIVING TESTS OF PRECAST CONCRETE PILES REINFORCED WITH GLASS FRP BARS AND TIES Prof Brahim BENMOKRANE	460: KINGSFORD SMITH DRIVE PROJECT BRISBANE - DURABILITY ASSESSMENT AND PLANNING EXPERIENCES Mr Warren GREEN
14:30	452: FATIGUE LIFE ASSESSMENT OF INITIALLY AND TIME-DEPENDENTLY DETERIORATED RC DECKS BY DATA ASSIMILATION Dr Yuya TAKAHASHI	417: ISOLATED LONG OVERHEAD VIADUCTS: A SOLUTION FOR IMPROVE CITIZENS' MOBILITY IN HIGH SEISMIC COUNTRIES Mr Julien-Erdem ERDOGAN	349: ASSESSING THE EFFECT OF SYNTHETIC FIBRES ON THE MECHANICAL PROPERTIES OF HIGH STRENGTH CONCRETE Dr Estela GARCEZ	fib NMG - FRANCE fib NMG - HUNGARY	56: FIXING SYSTEMS FOR THIN, TEXTILE REINFORCED CONCRETE FACADES LEAD TO A RENEWAL OF ESTABLISHED DESIGN RULES Dr Matthias ROIK	526: DETERMINING MINIMUM REINFORCEMENT BASED ON THE DEFORMATION COMPATIBILITY Prof Nguyen Viet TUE
14:45	303: SAFETY OF PRECAST PRESTRESSED CONCRETE STRUCTURES AFTER DESIGN LIFE PERIOD A/Prof Wit DERKOWSKI	309: SEISMIC RESPONSE OF DEEP-BURIED SHIELD TUNNEL CONSIDERING INTERNAL-STORED RAINWATER Dr Xiao YAN	65: SHEAR CAPACITY OF HIGH STRENGTH REINFORCED CONCRETE BEAMS WITH STEEL FIBER Mr Narawit HEMSTAPAT	fib NMG - IRAN	59: PERFORMANCE-BASED REQUIREMENT IN DESIGN-BUILD CONTRACTING IN HIGHWAY CONSTRUCTION AND MAINTENANCE Prof Johan SILFVERBRAND	391: EXPERIMENTAL STUDY ON FATIGUE DURABILITY OF ULTRA HIGH DURABLE SLAB Mr Masato FUKUDA
15:00	230: INTERACTION BETWEEN LONGITUDINAL BENDING MOMENT AND TRANSVERSAL SHEAR STRENGTH IN RC DECK SLABS OF HOLLOW BOX BRIDGE Prof Beatrice BELLETTI	201: EXPERIMENTAL STUDY ON THE SEISMIC RETROFIT OF PLAIN CONCRETE PIERS USING THE MOVEMENT RESTRAINING DEVICES FOR THE CONSTRUCTION JOINT Mr Kazuhiro SAKAOKA	169: STEEL FIBRE-REINFORCED RUBBERISED CONCRETE BARRIERS AS FORGIVING INFRASTRUCTURE Dr Thomaïda POLYDOROU	fib NMG RUSSIA fib NGM - JAPAN	103: APPLICATION OF THE NEW MEASURING METHOD OF FIBRE-OPTIC STRAIN MEASUREMENT ON REINFORCED CONCRETE COLUMNS WITH BUTT JOINT Prof Jens MINNERT	4: DURABILITY CRITERIA OF THE MARITIME INFRASTRUCTURE OF THE MONACO SEA EXTENSION Dr Christian CREMONA
15:15	96: ULTIMATE SHEAR STRENGTH OF STEEL REINFORCED CONCRETE MEMBERS WITH LOW-STRENGTH CONCRETE Ms Kju Kju NWE	187: ULTIMATE DEFORMATION CAPACITY OF REINFORCED CONCRETE COUPLING BEAMS Mr Yong LI	359: FAILURE MODE OF STEEL FIBER REINFORCED EXTERIOR BEAM-COLUMN JOINTS ACCORDING TO DEFORMATION CAPACITY Mr Dong-Hee SON	fib NMG - NEW ZEALAND fib NMG - SPAIN	126: REMOVAL AND RECONSTRUCTION OF EXISTING PIERS UNDER LONG-TERM TEMPORARY SUPPORT UNDER TRAFFIC SERVICE Mr Dan SAITO	454: DURABILITY OF REINFORCED CONCRETE MARINE STRUCTURES UP TO 109 YEARS Miss Jemma EHSMAN
15:30				fib NMG - SWITZERLAND	610: FRAGILITY ANALYSIS OF A POST-EARTHQUAKE CFRP-REPAIRED LIMITED DUCTILITY RC BUILDING USING HYBRID SIMULATION Mr Ali Y. AL-ATTRAQCHI	221: FATIGUE LIFE OF CURVED TENDONS IN POST-TENSIONED CONCRETE STRUCTURES Mr Jörn REMITZ
15:45	AFTERNOON TEA Main foyer 2 & 3					15:45
	Plenary 3	Room 215	Room 216	Room 217	Room 218	Room 219
	BRIDGES	EXISTING STRUCTURES	AAC and GEOPOLYMER	REPAIR & REHABILITATION	DESIGN & CONSTRUCTION	CONCRETE DETERIORATION METHODS
	Chairperson: Jim Forbes	Chairperson: Chris Hendy	Chairperson: Frank Dehn	Chairperson: Lionel Linger	Chairperson: Tuan Ngo	Chairperson: Nadarajah Gowripalan
16:15	SPECIAL SESSION ON EXISTING BRIDGES. SERVICE LIFE AND CHALLENGES FOR THE FUTURE A discussion on service life and challenges for the future with some prominent <i>fib</i> people. A number of the existing bridges were designed and built decades ago under very different design codes and load conditions than today. As the evolution of knowledge in the design and the changes in regulations and load requirements for bridges have evolved, there is a need to rethink on how to deal with the maintenance and use of existing bridges. Recent accidents like the Genova Polcevera Bridge show how important it is to have this discussion.	521: SEISMIC PERFORMANCE OF RC BEAMS WITH CURTAILED SECOND LAYER LONGITUDINAL REINFORCEMENT Dr Susumu KONO	297: EXPERIMENTAL INVESTIGATION OF BOND BETWEEN GEOPOLYMER CONCRETE AND GFRP BARS Dr Mohamed ELCHALAKANI	16: DURABILITY OF PLAIN AND FIBRE REINFORCED SHOTCRETE PILE REPAIRS IN A TROPICAL MARINE ENVIRONMENT Dr Marita ALLAN BERNDT	557: MITIGATION OF EARLY AGE THERMAL & SHRINKAGE CRACKS IN PRESTRESSED CONCRETE WALLS OF CONTAINMENT ZONE OF INTERNATIONAL CENTER FOR FOOT AND MOUTH DISEASES AT BHUBANESWAR, INDIA Mr Umesh RAJESHIRKE	307: RESONANT FATIGUE TEST FACILITY FOR LARGE SCALE BENDING TESTS Mr Raif HERRMANN
16:30		22: COST-BENEFIT ANALYSIS OF ALTERNATIVE RETROFIT OPTIONS FOR PILOTIS-TYPE REINFORCED CONCRETE (RC) FRAME BUILDINGS Prof Donatello CARDONE	574: MITIGATING ALKALI SILICA REACTIONS IN THE ABSENCE OF USING SCMS: A REVIEW OF EMPIRICAL STUDIES. Miss Elsie NSIAH-BAAFI	587: REHABILITATION AND CFRP STRENGTHENING OF ASR AFFECTED CONCRETE BRIDGE PIERS Dr Reza SALAMY	363: BEHAVIOR OF JOINTS IN BETWEEN FILIGREE PLANK PROFILES SUBJECTED TO BENDING: AN EXPERIMENTAL STUDY Mr Tom MOLKENS	70: AGE OF STRUCTURES/DAMS THROUGH THE DETERIORATION OF CEMENT CONCRETE IN FLOWING WATER DUE TO SEEPAGE & CEMENT LOSS Mr Kulwant Singh SINGH
16:45		211: EXPERIMENTAL STUDY ON REMAINED FATIGUE LIFE OF DAMAGED REINFORCED CONCRETE BRIDGE SLAB Mr Takashi KURODA	618: DEVELOPMENT & APPLICATION OF HIGH DENSITY GEOPOLYMER CONCRETE FOR BREAKWATER ARMY UNITS Mr Aziz Hasan Mahmood	250: REPLACEMENT METHODS OF PARTIALLY OR FULLY COLLAPSED EXTERNAL BONDED TENDONS Dr Christian GLAESER	341: TEST METHOD FOR CURVATURE-DEPENDENT TENSILE STRENGTH REDUCTION OF TEXTILE REINFORCED CONCRETE (TRC) Mr Dennis MESSERER	543: DAMAGE REASONS ANALYSIS OF PT CABLES BLISTER IN A ROAD BRIDGE Dr Piotr GWOZDZIEWICZ
17:00			130: EVALUATION OF THE BEHAVIOR OF REINFORCED CONCRETE WITH ALKALI ACTIVATED BINDERS EXPOSED TO SEVERELY HIGH TEMPERATURES Miss Kruthi Kiran RAMAGIRI	45: REPLACEMENT OF FLOOR SLAB OF THE STEEL BRIDGE WITH NIGHT ROAD CLOSED AND TRAFFIC CONTROL Mr Hidekazu HAYASHI	18: EXPERIMENTAL STUDY ON STRUCTURAL MEMBERS USING ULTRA-HIGH-STRENGTH ECM CONCRETE Mr Hiroto TAKATSU	570: LIFE CYCLE COST ANALYSIS OF SHORT AND MEDIUM SPAN CONCRETE BRIDGE IN THE NORTH OF CHINA Ms Qi XU
17:15	Participants: Hugo Corres, <i>fib</i> President, (Spain) Marco di Prisco (Italy) Aurelio Muttoni (Switzerland) Akio Kasuga (Japan) John Fenwick (Australia)			208: DESIGN OF UHPFRC DECK SLAB FOR REPLACEMENT OF DETERIORATED CONCRETE SLAB Mr Kimio SAITO		254: PREMATURE FAILURE OF HIGH-STRENGTH GROUT IN FATIGUE TESTS DUE TO THE WARMING OF SPECIMEN DURING CYCLIC LOADING Mrs Corinne OTTO

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Thursday, 11 October 2018

REGISTRATION Main foyer 2 & 3							
Plenary 3	Room 215	Room 216	Room 217	Room 218	Room 219		
BRIDGES Sponsored by DSI	POSTERS	AAC & GEOPOLYMER	REPAIR & REHABILITATION	MODELLING & DESIGN	STRUCTURAL STRENGTHENING		
<i>Chairperson: Michel Moussard</i>	<i>Chairperson: David Fernandez-Ordonez</i>	<i>Chairperson: Craig Heidrich</i>	<i>Chairperson: Norbert Randl</i>	<i>Chairperson: Tamon Ueda</i>	<i>Chairperson: Riadh Al-Mahaidi</i>		
07:30						07:30	
08:30	112: DESIGN AND CONSTRUCTION OF A PRESTRESSED CONCRETE COMPOSITE BRIDGE OVER A ROAD, A RAILWAY AND A RIVER Mr Ryoichi KAWANAKA		265: STRATEGIES FOR USING STRUCTURAL LIGHTWEIGHT CONCRETE FOR BRIDGE REHABILITATION Dr Reid CASTRODALE	424: THERMAL CRACKING ANALYSIS OF MASSIVE CONCRETE INFRASTRUCTURE Dr Mi CHORZEPA	119: SHEAR RESISTANCE OF DECK SLABS SUBJECTED TO CONCENTRATED LOAD Prof Jaroslav HALVONIK	08:30	
08:40		223: EXPERIMENTAL VERIFICATION OF CONCRETE RESISTANCE AGAINST LOW-PH ENVIRONMENT Mr Stanislav REHACEK	DELIVERY OF GEOPOLYMER CONCRETE TO THE MARKETPLACE – CASE STUDIES Mr Thomas GLASBY			08:40	
08:45			236: A CASE STUDY ON RESTORATION OF LARGE SPAN BALANCE CANTILEVER TYPE BRIDGE STRUCTURE ACROSS RIVER NARMADA ON CHANDOD POICHA ROAD, GUJARAT, INDIA Mr Sureshchandra PATEL, Mr Jitendrakumar PATEL	102: FEASIBILITY EVALUATION OF BRIDGE PIER CAP DESIGN BY COMPARING CURRENT DESIGN CODES Mr Junlong AN	329: FAILURES AND REHABILITATION OF SLOVAK FIRST GENERATION PRECAST BRIDGE ERECTED BY BALANCED CANTILEVER METHOD Prof Martin MORAVCIK	08:45	
08:50	186: AN AUSTRALIAN FIRST SOLUTION TO DELIVER KEY INFRASTRUCTURE IN CHALLENGING RAIL ENVIRONMENTS Mr George MAKRAKIS	323: EXPERIMENTAL STUDY ON THE REINFORCED CONCRETE PILE-CAP WITH A PILE, EXTERIOR COLUMN AND FOUNDATION BEAM Prof Shinji KISHIDA				08:50	
09:00						09:00	
09:10	486: CABLES FOR EXTRADOSED BRIDGES IN INDIA Mr Werner BRAND	382: THE USAGE OF THE ACOUSTIC EMISSION METHOD FOR THE EXPERIMENTAL DETERMINATION OF THE DAMAGE PROGRESS IN THE FINE-GRAINED CEMENTITIOUS COMPOSITES SUBJECTED TO LOADING Miss Michaela HODULÁKOVÁ	DOES GEOPOLYMER CONCRETE HAVE A ROLE IN SUSTAINABLE CONSTRUCTION? A/Prof James ALDRED	330: CONCRETE TO CONCRETE BOND – A CRITICAL REVIEW ON METHODS FOR BOND STRENGTH DETERMINATION Prof Norbert RANDL	95: FUNDAMENTAL STUDY ON BOND PROPERTIES USING FIBER-OPTIC STRAIN SENSOR Mr Atsushi SHIBAYAMA	385: INFLUENCE OF COATING THE STEEL TUBE ON THE BOND STRESS BETWEEN THE STEEL TUBE AND CONCRETE Mr Peter GANDY	09:10
09:15		314: RESISTANCE OF CONCRETE WITH STYRENE-ACRYLATE ADDITIVE IN LOW-PH ENVIRONMENT Dr Daniel DOBIAS		354: EXPERIMENTAL AND NUMERICAL STUDY OF BOND BEHAVIOUR BETWEEN NSM CFRP LAMINATE AND CONCRETE EXPOSED TO HIGH TEMPERATURE Dr Kamiran ABDUKA	116: NUMERICAL SIMULATION OF CRACK PROPAGATION USING RANDOMLY DISTRIBUTED MATERIAL PARAMETERS Mr Marcel MEINHARDT		09:15
09:20	481: GORI NADI BRIDGE: A UNIQUE UNSYMMETRICAL BRIDGE IN INDIA Mr Alok PANDAY	133: PROPERTIES OF CONCRETE OBTAINED FROM RC BUILDING CONSTRUCTED AT 1971 Prof Hideo ARAKI	FIELD MONITORING OF GEOPOLYMER STRUCTURES Dr Kirubajiny PASUPATHY			284: SHORT-TERM BRIDGE STRENGTHENING METHOD Mr Dominik SUZA	09:20
09:30	156: CABLE STAYS – NEW FUNCTIONALITIES, AESTHETICS AND PROTECTION Mr Rachid ANNAN	86: EXPERIMENTAL EXAMINATION OF LOAD-CARRYING CAPACITY FOR A FATIGUED CONCRETE BEAM REINFORCED WITH ROUND REBAR Mr Hiroshi HAYASHIDA	FIRE DESIGN IN GEOPOLYMER CONCRETE STRUCTURES Prof Jay SANJAYAN	162: COMPARISON OF FRP-TO-CONCRETE ANCHORED JOINTS DESIGNED FOR FRP SHEAR-STRENGTHENED RC T-BEAMS Dr Ahmed GODAT	558: NUMERICAL SIMULATION OF PRECAST CONCRETE PANEL FOR AIRFIELD PAVEMENT Dr Josef NOVAK	319: SHEAR CAPACITY EVALUATION OF UNBONDED PRECAST PRESTRESSED CONCRETE BEAM-COLUMN JOINTS CAUSED VOLUME LOSS BY SHEATH TUBES Mr Yuji TAJIMA	09:30
09:40							09:40
09:45							09:45
09:50	218: IN-SITU SHEAR TESTS ON A 64 YEAR OLD ROADBRIDGE Mr Sebastian GEHRLIN	206: PERFORMANCE IMPROVEMENT OF LIGHT TRANSPARENT CONCRETE Prof Byoungil KIM	PERFORMANCE SPECIFICATION FOR MECHANICAL AND MATERIALS PROPERTIES OF GEOPOLYMER CONCRETE Prof Stephen FOSTER	586: BONDING BEHAVIOUR OF MINERAL COMPOSITE IN METAKAOLIN VARIED CFRP RETROFIT Mr Raghavendra VASUDEVA UPADHYAYA	493: NUMERICAL INVESTIGATIONS ON THE BEHAVIOUR OF CIRCULAR ANCHOR GROUPS Ms Nilde MISHAXHIU	345: STRENGTHENING OF CANTILEVER DECKING OF BRIDGES - AN INDIAN EXPERIENCE Mr Padmakar MANJURE	09:50
10:00		275: MODEL FOR DESCRIBING SILO WALL DISPLACEMENTS INDUCED BY SELF-EXCITED VIBRATIONS Prof Andrzej UBYSZ	OPEN DISCUSSION OF THE FUTURE OF GEOPOLYMER CONCRETE AND SESSION CLOSING REMARKS Mr Craig HEIDRICH		289: AN EMBEDDED STRONG DISCONTINUITY APPROACH BASED ON LOCAL DEGREES OF FREEDOM FOR MODELLING FRACTURE IN CONCRETE STRUCTURES Mr Marcelo CARVALHO	216: STRENGTHENING OF STEEL CONCRETE COMPOSITE GIRDER BRIDGE USING THE EXTERNAL PRESTRESSING TENDON (YUMIFURIGAWA BRIDGE) Mr Kotaro IKEGAMI	10:00
10:15	512: NEW METHOD FOR THE PRODUCTION OF DECK SLABS OF STEEL-CONCRETE-COMPOSITE BRIDGES Prof Johann KOLLEGGGER	357: OPTIMISING THE MIXTURE PROPORTIONING OF HIGH VOLUME FLY ASH SELF-COMPACTING CONCRETE Miss Zhiyuan ZHOU, Dr Massoud SOFI, Prof Priyan MENDIS		143: EXPERIMENTAL STUDY AND APPLICABILITY AGAINST METHOD DEVELOPED FOR REPAIR OF SALT-DAMAGED RC SLABS LOCATED IN SNOW COLD DISTRICTS Mr Hiroaki KAMEDA	313: CLOSED FORM ADAPTIVE EFFECTIVENESS FACTOR FOR NUMERICAL MODELS Dr Morten HERFELT	583: COMPARISON OF THE SEISMIC PERFORMANCE OF SLENDER AND SQUAT T-SHAPED RC WALLS Dr Jiaying MA	10:15
10:30	MORNING TEA Main foyer 2 & 3					10:30	
Plenary 3	Room 215	Room 216	Room 217	Room 218	Room 219		
CONCRETE MATERIALS	POSTERS	REPAIR & REHABILITATION	DESIGN & CONSTRUCTION	MODELLING & DESIGN			
<i>Chairperson: Nico Hermann</i>	<i>Chairperson: David Millar</i>	<i>Chairperson: Fernando Stucchi</i>	<i>Chairperson: Jay Sanjayan</i>	<i>Chairperson: Andreas Sjaastad</i>			
11:00	183: MECHANICAL AND THERMAL PROPERTIES OF CONCRETE PAVEMENT USING EAF SLAG FINE AGGREGATE Mr Sushanta ROY	361: EXPERIMENTAL INVESTIGATION OF THE MATERIAL CHARACTERISTICS OF YOUNG FINE-GRAINED CEMENT-BASED COMPOSITES Mrs Barbara KUCHARCZYKOVÁ	300: REPAIR OF MAJOR CRACK IN 4 SPAN CONTINUOUS MODULE OF BRIDGE AT VARSOVA ON NH-48, NEAR MUMBAI, INDIA Mr Dhananjay BHIDE	451: CONSTRUCTION SPEED AND POUR STRIPS Dr David MCDONALD	142: APPLICATION OF DIFFERENT PROBABILISTIC METHODS FOR STRUCTURAL RELIABILITY OF REINFORCED CONCRETE HYDRAULIC STRUCTURES Mr Arslan TAHIR	11:00	
11:10		131: MAGNETIC PROBE TO TEST SPATIAL DISTRIBUTION OF STEEL FIBRES IN UHPFRC BEAMS Miss Lufan LI				11:10	
11:15	46: THERMAL STRESS MITIGATION IN MASS CONCRETE FOR P23 WELL CAP IN SIGNATURE BRIDGE DELHI Mr Venkatramana Narayan HEGGADE	336: INVESTIGATION OF TEMPERATURE EFFECTS OF LARGE DIAMETER CONCRETE SILOS EXPOSED TO SOLAR RADIATION Mr Le XIE	394: RESEARCH ON THE INTEGRAL LATERAL RELOCATION TECHNIQUE OF CURVED CONTINUOUS BRIDGE Mr Hui GAO	249: ADVANCED TENDON FEATURES FOR POST-TENSIONING OF WIND TOWERS Dr Christian GLAESER	163: FINITE ELEMENT INVESTIGATION ON THE EFFECT OF COLUMN RECTANGULARITY ON PUNCHING SHEAR STRENGTH OF CONCRETE SLABS Prof Maria Anna POLAK	11:15	
11:20		106: EXPERIMENTAL MEASUREMENT OF REINFORCEMENT CORROSION Dr Miroslav BRODNAN				11:20	
11:30	10: APPLICATION OF CONCRETE INCORPORATING 25% FLY ASH BY WEIGHT OF CEMENT (THE "25% FLY ASH CEMENT") TO THE CONSTRUCTION OF A PRE-TENSIONED PRESTRESSED CONCRETE GIRDER Mr Yosuke AZUMA	292: INNOVATIVE ELEMENTS AND STRUCTURES MADE FROM ULTRA HIGH – PERFORMANCE FIBRE REINFORCED CONCRETE Mr David CITEK	536: FLEXURAL TEST OF CONCRETE ELEMENTS BONDED WITH POLYMER FLEXIBLE JOINT: EXPERIMENTAL AND NUMERICAL ANALYSIS Mr Lukasz ZDANOWICZ	212: TENSILE CAPACITY OF SCREW ANCHORS FAILING DUE TO THE PULL-OUT FAILURE MODE Dr Ailreza MOHYEDDIN	191: DESIGN OF THE PARRAMATTA ROAD VENTILATION FACILITY ON WESTCONNEX 1B Mr Daniel THOMY	11:30	
11:40		75: SIMULATION ANALYSIS OF PCAPC THREE STORY SHAKING-TABLE TEST Prof Makoto MARUTA				11:40	
11:45			31: PERFORMANCE EVALUATION BY WHEEL LOAD RUNNING TEST AFTER REINFORCEMENT COMPARING DETERIORATION DEGREE OF ROAD BRIDGE RC SLABS Mr Toshihiko NAGATANI	195: HIGH STRENGTH REINFORCEMENT – NEW CONCEPTS FOR HIGH RISE STRUCTURES Mr Torsten VOSS	328: BOND SPLITTING BEHAVIOUR OF POST-INSTALLED AND CAST IN REINFORCING BARS Prof Norbert RANDL	11:45	
11:50	550: CATENARY ACTION IN BEAM COLUMN CONNECTIONS: A REVIEW Mr Qazi Amjad Ali PATHAN	528: MECHANICAL FRACTURE PARAMETERS OF SELECTED MORTARS BASED ON ALKALI-ACTIVATED BINDER AND NATURAL FIBERS Dr Hana SIMONOVA				11:50	
12:00	178: STANDARDIZATION OF FLY ASH CONCRETE IN THE HOKURIKU REGION AND ITS APPLICATION TO PRESTRESSED CONCRETE BRIDGES Mr Tuan Minh HA		123: WHEEL RUNNING FATIGUE TEST OF UHPFRC DECK SLAB FOR HIGHWAY BRIDGES Mr Yuki YOKOTA	182: CONSTRUCTION OF INTERMEDIATE SUPPORT OF A LARGE EXTRADOSED BRIDGE BY INCREMENTAL LAUNCHING METHOD Dr Manabu HOSOTANI	291: POTENTIAL OF THE RIGID FINITE ELEMENT METHOD IN REINFORCED CONCRETE BEAMS CALCULATIONS Dr Michal MUSIAL	12:00	
12:15				164: CONCRETE TEMPERATURE MANAGEMENT BY ALTERNATIVELY USING POST-COOLING OR PRE-COOLING (LIQUID NITROGEN) DURING CONSTRUCTION OF THE "PUENTE DEL ATLANTICO" IN PANAMA Mr Lionel LINGER	376: NUMERICAL INVESTIGATION ON PROGRESSIVE COLLAPSE RESISTANCE OF MULTI-STORY PLANAR RC FRAMES STRENGTHENED BY STEEL BRACES A/Prof Jun YU	12:15	
Plenary 3							
Chairperson: Stephen Foster CLOSING CEREMONY							
12:30							
LUNCH Main foyer 2 & 3							
13:00						13:00	