



Monday, 09 September 2019				
09:00	Opening Ceremony			
09:45	Keynote Presentation 1: Anne Ellis "The Innovation Imperative"			
10:30	Morning Tea Break			
11:00	<b>New Concrete Materials</b>	<b>Concrete Materials for D&amp;C</b>	<b>Standards &amp; Codes</b>	<b>Case Studies</b>
11:00	Invited Speaker - Andreas Tselibidis, BASF (USA), "Engineering the impossible - building a sustainable future"	29: Features, benefits and challenges of air entrained pavement concrete mixes using fly ash <b>Mr Bruce PERRY</b>	83: Introducing the revised CIA Recommended Practice Z11 on in situ concrete strength assessment <b>Mr Jonathon DYSON</b>	64: Case study of structural performance of low-grade profiled-steel reinforced CRC composite slabs <b>Miss Ou YI</b>
11:20		59: The use of a proprietary geopolymers concrete in sewer infrastructure applications <b>Mr Thomas GLASBY</b>	97: From Cylinders to Cores - What does it mean for design? <b>Dr David MCDONALD</b>	112: Interaction of variable fly ash with superplasticisers <b>Mr Scott STEVENSON</b>
11:40	153: Effect of Geogrid Reinforcement on the Properties of Concrete <b>A/Prof Muhammad HADI</b>	93: Strength modelling of 3D-printed boron-based geopolymers via machine learning techniques <b>Dr Ali BAGHERI</b>	43: Performance of fasteners in thin concrete shells <b>Dr Tilak POKHAREL</b>	90: The Design of the Parramatta Road Ventilation Facility, WestConnex, Sydney, Australia <b>Mr John MERRICK</b>
12:00	175: Behaviour of reinforced crumbed rubber concrete beams under various structural loads <b>Dr Safat AL-DEEN</b>	137: Achieving Superior Abrasion-Erosion Resistance for Enhanced Durability <b>Mr Alireza BIPARVA</b>	186: Response of reinforced concrete shear walls with various detailing of reinforcement <b>Prof Manicka DHANASEKAR</b>	75: Investigating the effects of polymer and steel fibres in the concrete parking lots on mechanical properties and total costs <b>Mr Reza BANI ARDALAN</b>
12:20	38: Reinforced Crumb Rubber Concrete for Residential Construction <b>Prof Julie MILLS</b>	213: Mechanical properties of paste and concrete containing slag, seawater and sea sand <b>Dr Y.I. LI</b>	180: Recent Updates in Australian Standard Methods of Testing Concrete <b>Mr Bob MUNN</b>	141: Analyse and design of concrete elements in the cut and cover tunnels on WestConnex 1b under hydrocarbon fibres <b>Mr Jarrod HITCHCOX</b>
12:40	227: Blast and Impact Loading of Concrete: Extreme Cases <b>Prof Alex REMENNIKOV</b>	230: Emerging opportunities and challenges for natural and manufactured pozzolans: an Australian Perspective <b>Mr Craig HEIDRICH</b>	229: Concrete Drying Shrinkage - Test Methods and Specifications in Australia <b>Mr Duy NGUYEN</b>	217: Comparison of concrete drying rates in suspended slabs in a commercial building <b>Dr Michael CHALLENGOR</b>
13:00	Lunch			
14:00	<b>Reinforcement &amp; Prestressing Materials</b>	<b>Durability</b>	<b>Bridges</b>	<b>Construction</b>
14:00	17: Steel Fibre reinforced Concrete: Strengths, Weaknesses, Myths and Truths <b>Prof Stephen FOSTER</b>	174: Soft computing techniques for evaluation of elastic modulus of ASR affected concrete <b>Dr Yang YU</b>	Invited Speaker - Alessandro Palermo, University of Canterbury (NZ), "The Morendi Bridge Collapse - Lessons Learnt"	117: Effects of Elevated Temperature as a Means of Curing in Inkjet 3D Printed Mortar Specimens <b>Mr Pshtiwan SHAKOR</b>
14:20	120: Different Behaviours of Wire Mesh Confined Medium Strength Concrete under Axial Compression <b>Ms Hua ZHAO</b>	65: Different binders (OPC, CAC, GGBFS, Silica fume) for microbiologically induced corrosion resistant concrete: a mortar study <b>Dr Danilo PASSALACQUA</b>		198: Ellenbrook Water Tank <b>Dr James DE BURGH</b>
14:40	135: Assessment of steel fibre orientation in self-compacting concrete slabs of different aspect ratios while pouring <b>A/Prof Daniel DIAS-DA-COSTA</b>	176: The durability of geopolymer mortar under the coupled effects of hydrocarbon oils and high thermal cycles <b>Dr Safat AL-DEEN</b>	5: Waterproofing of Concrete Bridge Decks <b>Mr Fred ANDREWS-PHAEDONOS</b>	124: Technology Breakthrough - the use of Telemetry for admixture management in Concrete Plants <b>Mr Paul ROCKER, Mr Brad TALLON</b>
15:00	54: Comparison of reinforcing bar couplers and associated regulations <b>Mr Masoud HASHEMI</b>	212: Durability - the Arabian Peninsula experience <b>Mr Faiz KHAN</b>	114: Laboratory verification of long-term performance of pre-tensioned concrete bridge girders affected by Alkali Silica Reaction (ASR) <b>Dr Nadarajah GOWRIPALAN</b>	152: The effect of admixtures on maturity calibrations <b>Mr Daniel ROWLEY</b>
15:20	23: CARES Sustainable Constructional Steel Certification Scheme <b>Mr Lee BRANKLEY</b>	140: Utilizing Petrography to Identify Deterioration Mechanisms in Hardened Concrete <b>Mr Dan CUKIERSKI</b>	34: Time-variant Reliability Assessment of RC Bridge Structures Based on a Bayesian Updated Chloride-induced Corrosion Model <b>Mr Jahangir ALAM</b>	Quay Quarter Towers - John van Rooyen
15:40	Afternoon Tea			
16:10	<b>Alkali-Activated Concretes</b>	<b>Durability</b>	<b>Standards &amp; Codes</b>	<b>Structural Strengthening</b>
16:10	47: Effect of binder design on alkali-silica reaction in alkali-activated materials <b>Dr Maxim KOVTUN</b>	108: Assessment of ASR expansions using an ultra-accelerated test <b>Mr Jinsong CAO</b>	196: Reliability of extending AS1141.60.1 and 60.2 to determine ASR mitigation <b>Prof Vute SIRIVIVATNANON</b>	19: The 20-year history of sustainable structural solutions using FRP strengthening of concrete structures in Australia <b>Mr Andrew SARKADY</b>
16:30	179: Continuing Development of New Supplementary Cementitious Materials from Lithium Production Residues <b>Mr Bob MUNN</b>	106: Investigation of aggregate alkali thresholds in mortars incorporating fly ash through AMBT expansion and phase analysis <b>Mr Brendan BOYD-WEETMAN</b>	183: Design for Serviceability With the New Australian Concrete Codes <b>Mr Doug JENKINS</b>	62: Bringing Concrete to Life: Harnessing Biological Processes for Building Resilient Ports and Coastal Infrastructure <b>Dr Ido SELLA, Dr Shimrit PERKOL-FINKEL</b>
16:50	13: Workability and fresh properties of a low CO2 footprint concrete <b>Dr Andras FEHERVARI</b>	147: Influence of Alkali Concentration on the Alkali Silica Reaction (ASR) Behavior of Aggregates <b>Ms Elsie NSIAH-BAAFI</b>	156: Correct Specification of Fibre Reinforced Concrete <b>Mr Todd CLARKE</b>	177: Behavior of Circular RC Columns Strengthened with RPC Jacketing and FRP Wrapping under Concentric and Eccentric Axial Loads <b>A/Prof Muhammad HADI</b>
17:10	157: Hydration study of ternary magnesium-silicate-carbonate system <b>Dr Vineet SHAH</b>	173: Mechanical properties of ASR affected concrete: a review <b>Mr Thuc Nhu NGUYEN</b>	32: Bond performance of chemical anchors in high strength concrete <b>Dr Jessey LEE</b>	
17:30	Forum: "Concrete – An Industry Ripe for Disruption"			
18:30	Welcome Reception			
20:30				

Tuesday, 10 September 2019

09:00	<b>Keynote Presentation 2: Prof Christoph Gehlen</b> <i>Performance-Based Durability Design and Assessment of Structural Concrete Members</i>			
09:45	<b>Keynote Presentation 3: Michelle Wilson</b> <i>Standard Specifications for Concrete</i>			
10:30	Morning Tea Break			
11:00	<b>Durability</b>	<b>Alkali-Activated Concretes</b>	<b>Modelling &amp; Design</b>	<b>Case Studies</b>
11:00	195: Durability Design Early-age Crack Control - Concrete Restraint from Site Monitoring <b>Mr Rodney PAULL</b>	104: Performance-based specification for geopolymer concrete in chloride environments <b>A/Prof Arnaud CASTEL</b>	194: WHAM: a simple and transparent non-linear sectional analysis tool for RC walls and building cores <b>Dr Scott MENEGON</b>	Invited Speaker - Jeffrey Coleman, Coleman Law Firm (USA), "When is a crack a defect, and when is it acceptable?"
11:20	105: Effectiveness of End Product Assessment in Ensuring Good Quality and Durable Concrete <b>Dr Radheshyam KHATRI</b>	44: Application of geopolymer concrete for precast application: a review <b>Ms Sumita DANGOL</b>	55: Numerical Study on the Structural Behaviour of a Geopolymer Prestressed Concrete Beam <b>Mr Kamal NEUPANE</b>	
11:40	70: Durability predictions of precast concrete using performance-based testing <b>Dr James MACKECHNIE</b>	223: Effect of fineness and dosage of fly ash on selected properties of mortars <b>Dr Farzad MOGHADDAM</b>	162: A New Journey of Concrete Design with Scaling Relations: From Nano to Macro <b>Prof Priyan MENDIS</b>	88: The Design of the Underwood Road Ventilation Facility, WestConnex, Sydney Australia <b>Mr John MERRICK</b>
12:00	92: Relationship between delayed ettringite formation and expansion in mortars using low alkali content cements <b>Mr Yogesh Kumar RAMU</b>	68: High-Temperature Properties of Geopolymer Concrete <b>Dr Zhu PAN</b>	201: A simplified analytical model for predicting structural response to blast loading <b>Dr Indunil GALHENA</b>	91: Minimising the risk of joint spalling at the Martha Cove Boatyard <b>Ms Kate STORER</b>
12:20	96: Thirty Years of DEF - An overview <b>Dr David MCDONALD</b>	78: Strength optimization of clay based Geopolymer mortar <b>Mr Morteza TAHMASEBI YAMCHELOU</b>	52: A 3D numerical simulation model to identify optimal strategy to minimise the risk of early age thermal cracking of concrete <b>Dr Farzad MOGHADDAM</b>	209: Development of the U-Trough - Mernda Rail Extension Project Case Study <b>Mr Tim WARREN, Mr Liam INGRAM, Mr Javier SILLA</b>
12:40	36: Effect of heat curing on strength and durability properties of concrete containing supplementary cementitious materials <b>Mr Jason CHANDLER</b>	103: Mechanical and thermal properties of hybrid OPC-geopolymer concrete <b>Mrs Mahya ASKARIAN</b>		150: Trials of CP Systems for a Reinforced Concrete Wharf Structure <b>Mr Dymock DIBB</b>
13:00	Lunch			
14:00	<b>Reinforcement &amp; Prestressing Materials</b>	<b>New Concrete Materials</b>	<b>Modelling &amp; Design</b>	<b>Construction</b>
14:00	188: Guide to Historical Steel Reinforcement in Australia <b>Mr Scott MUNTER</b>	109: Carbon staining and its mitigation with admixtures <b>Dr Craig HOGAN</b>	154: Behaviour of Ultra-High Performance Geopolymer Concrete <b>Prof Chengqing WU</b>	Invited Speaker - Mike Schneider, Baker Concrete Construction (USA), "Challenging concrete construction case studies"
14:20	122: Time Dependent Deformation of Fibre Reinforced Concrete Members Under Sustained Axial and Bending Load <b>Mr Murray WATTS</b>	84: Mechanical Properties of Geopolymer Coarse Aggregate Concrete <b>Mr Charitha SENEVIRATNE</b>	184: Modelling In-Situ Temperature Rise of Fly Ash based Concrete at Early Ages <b>Dr Massoud SOFI</b>	
14:40	7: Crack Width Reduction in Conventionally Reinforced Members Using Fibres <b>Dr Erik BERNARD</b>	138: Self-sensing behaviors of cementitious composites containing layer-distributed conductive rubber fibers <b>Dr Wengui LI</b>	132: A Plastic-Damage Model for Concrete under Cyclic Loads <b>Mr Atila SARIKAYA</b>	95: Innovative nanotechnology admixture for post tension concrete <b>Mr Michael RACELA</b>
15:00	128: Modification and dispersion of 2D hybrid graphene-based nanomaterial to enhance ordinary Portland cement paste <b>Mr Junlin LIN</b>	182: New Developments in Structural Form <b>Mr Doug JENKINS</b>	24: Sequentially linear analysis and sawtooth approximation in discrete crack models <b>A/Prof Daniel DIAS-DA-COSTA</b>	85: Who is the Erection Design Engineer? <b>Mr Adam DAWSON</b>
15:20	67: Mechanical Properties of Engineering Cementitious Composites Made with Hybrid Polyvinyl Alcohol Fibres and Basalt Fibres <b>Prof Zhong TAO</b>	121: Investigation on the Influence of Run-of-Station Fly Ash on Concrete Pavement Construction <b>Dr Farzad MOGHADDAM</b>	40: Verification of a novel load distribution model for anchor channels in the experimental virtual lab <b>Mr Dustin KONERTZ</b>	231: Contemporizing Concrete Pumping Standards AS 2550.15: Getting pumped safely! <b>Mr Craig HEIDRICH</b>
15:40	Afternoon Tea			
16:10	<b>Invited Speaker Presentation 1: Dr Larry Sutter</b>			
16:40	<b>Concrete Materials for Design and Construction</b>	<b>Durability</b>	<b>ACI Technical Committee Updates</b>	<b>Underground &amp; Foundations</b>
16:40	126: Environmental Product Declarations a first for Readymix Concrete in Australia <b>Mr Paul ROCKER</b>	192: Chloride Durability and Future Maintenance of a 40+ Year Marine Structure <b>Mr Warren GREEN</b>	ACI & CIA Updates, John Glumb (ACI) and David McDonald (CIA)	18: Fundamental Mechanisms of Concrete Bleeding in Bored Piles <b>Dr Martin LARISCH</b>
17:00	125: Self-healing efficiency of encapsulated-based healing agent for cementitious materials <b>Dr Wengui LI</b>	123: Improving Corrosion Resistance of RC Beams Using Epoxy Treated Chopped Carbon Fibres <b>Dr Riyadh AL-AMERI</b>	ACI & CIA: A Consultants View, Rodney Paull (CIA) and Larry Sutter (ACI)	63: Design and construction of the permanent concrete lining of Sydney Metro's Victoria Cross Station cavern <b>Mr Strath CLARKE</b>
17:20	35: Mechanical Characteristics of Crumb Rubber Concrete for Practical Applications <b>Dr Osama YOUSSEF</b>	37: Durability assessment of envisia and other highly durable concrete mixes <b>Mr Jason CHANDLER</b>	ACI & CIA: An Academics View, Gianluca Ranzi (CIA)	66: Integrity of Concrete in Bored Piles - A comparison of Thermal Integrity Profiling (TIP) and Cross-hole Sonic Logging (CSL) <b>Mr Ross EVANS</b>
17:40	219: Investigation of in-service deterioration of precast concrete panels <b>Dr Ahmad SHAYAN</b>	16: Evaluating the effects of Bleeding and Shrinkage Cracks on Concrete Performance <b>Mr Ali AL-DUJAILI</b>	ACI & CIA: A Contractors View, Mike Schneider (ACI)	199: Why watertight concrete structures in the Middle East leak - Common causal factors and possible solutions <b>Dr Frank ALTMANN</b>



Wednesday, 11 September 2019

09:00	<b>Keynote Presentation 4: David Polkinghorne</b> <i>Challenges experienced with the design and construction of concrete on major projects</i>			
09:45	<b>Keynote Presentation 5: Em Prof Elizabeth Taylor, AO</b> <i>The Future of Engineering Education</i>			
10:30	Morning Tea Break			
11:00	<b>Durability</b>	<b>Concrete Materials for D&amp;C</b>	<b>Seismic</b>	<b>Precast</b>
11:00	228: Understanding the Durability of Alkali-activated and Geopolymer Materials <b>Mr Mahdi BABAEE</b>	20: Investigating a new technology for long term protection of concrete assets in harsh environments <b>Mr Andrew SARKADY</b>	74: How the mass of a dropping hammer can influence on the damage scenario of a reinforced concrete beam <b>Mrs Maryam NASIM</b>	87: Bracing of Precast Elements on Early Age Low Strength Concrete - Gaps within current standards and how the industry has adapted <b>Mr Vas HAITAS</b>
11:20	110: Early-Age Crack Modelling in Concrete- Available Approaches in the Literature and Current Development of FIB TG8.8 WP6 <b>Dr Inam KHAN</b>	146: Enhanced performance of concrete with use of Carbon Nanotube enriched liquid additive <b>Dr Allan GODSK LARSEN</b>	21: European seismic performance categories C1 and C2 for concrete anchors: A possible path also outside of Europe? <b>Dr Philipp MAHRENHOLTZ</b>	94: Innovative Prefabricated Concrete Construction-44 Level Student Accommodation Building in Melbourne <b>Dr Shan KUMAR</b>
11:40	107: Assessment of aggregate reactivity using slurry tests <b>Dr Paul THOMAS</b>	100: The development of wave shaped EMW absorbing concrete using 3D printing technology <b>Mr Junbo SUN</b>	42: Seismic prequalification and design of fasteners in Australia <b>Dr Tilak POKHAREL</b>	61: Testing of Prefabricated-Concrete Sandwich Panels made with Diagonal-Bar Shear Connectors <b>Mr Qian HUANG</b>
12:00	60: Experimental Investigation into the Mechanistic Role of SCM Composition in the Mitigation of ASR in Concrete <b>Ms Marie Joshua TAPAS</b>	189: Concrete confinement with textile reinforced cement for fire protection <b>Prof Patrice HAMELIN</b>	71: Design approach for transferring longitudinal loads in Anchor Channels for seismic conditions <b>Mr Andreas BOOMKAMP</b>	155: Durability Assessment of Self-Compacting Concrete in Comparison with Conventional Concrete in Precast Application <b>Dr Amin NOUSHINI</b>
12:20	12: A methodology for the experimental simulation of one-dimensional chloride diffusion in saturated cement paste <b>Ms Vandana PADMANABHAN</b>	133: Influence of the type of accelerators and organic fibers on the properties of ultra-high strength sprayed concrete <b>Mr Kei SATO</b>	72: Development of Alternative Systems to Improve the Seismic Performance of RC Wall-Type Apartments Through the Damage Control of Non-Bearing Wall <b>Ms Kyo Young MOON</b>	181: Recycling Foam Concrete as Lightweight Aggregates <b>Dr Ailar HAJIMOHAMMADI</b>
12:40	143: Passive re-alkalisation of carbonated concrete to prolong the life of existing structures <b>Dr Radheshyam KHATRI</b>	127: Utilization of Pulverized bone (PB) and Waste Marble Powder (WMP) as Substitute of Cement in Mortar <b>Mrs Zunaira NASEEM</b>	3: Seismic Assessment of a Thin Singly Reinforced U-shaped Wall Specimen <b>Dr Ryan HOULT</b>	130: Innovations in prefabricated concrete in Australia over the past 60 years <b>Mr John WOODSIDE</b>
13:00	Lunch			
14:00	<b>Alkali Activated Concrete</b>	<b>Standards, Codes &amp; Research Updates</b>	<b>Shrinkage, Creep, Shear &amp; Torsion</b>	<b>Repair &amp; Rehabilitation</b>
14:00	57: Quantification of the degree of reaction of glass powder <b>Mr Mehdi MEJDI</b>	Smartcrete Update	203: An experimental study on the shrinkage response of industrial pavements cast with Envisia and normal concrete <b>Prof Gianluca RANZI</b>	204: Concrete Pavements at 40 years: Retirement or just a Mid-life Crisis? <b>Mr Justin MOSS</b>
14:20	113: Assessing the Threshold Values of Corrosion Potential for Fly Ash/Slag based Geopolymer Concrete <b>Ms Tran VU</b>	Nanocomm Update	53: Shrinkage of high-performance concrete when using fine fillers <b>Mr Saad BINHOWIMAL</b>	215: Re-purposing of the AMP Centre at 50 Bridge Street Sydney <b>Mr Matthew OBST</b>
14:40	169: Alkali-activated Slag Stabilisation of Swelling Clay <b>Mr Van DOAN, Dr Zhu PAN</b>	AS3600 Update	116: Key Factors Affecting Early-Age Thermal Cracking in Structures Made of High-Performance Concrete <b>Mr G. Patrick Arosha DABARERA</b>	134: Effect of rapid-set binder system containing various types of accelerators on heat evolution and selected fresh and hardened properties of mortar and concrete mixes <b>Dr Farzad MOGHADDAM</b>
15:00	172: Development on the use of brown coal fly ash as a cement alternative for geopolymer concrete application <b>Mr Muhamed KHODR</b>	CIA Durability Guides	50: Comparison of design approaches for punching shear reinforcement using Headed Studs <b>Mr Sayed DAHER</b>	216: Re-purposing the Adina Hotel at 171 George Street, Brisbane <b>Mr James O'BRIEN</b>
15:20	Afternoon Tea			
15:40	<b>Forum - "Concrete 2030 - Surviving the Disruption"</b>			
16:40	<b>Closing Ceremony - Remarks From Concrete 2019 Chair and Concrete 2021 Chair</b>			

As at 05 September 2019