

TECHNICAL PROGRAM

*The Fourth Australasia and South-East Asia Structural Engineering
and Construction Conference*

**ASEA SEC 4
3-5 December 2018
USQ SPRINGFIELD, AUSTRALIA**



WELCOME

Dear All,

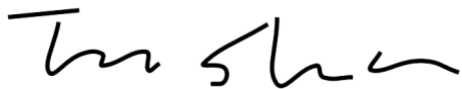
Greetings and a warm welcome to all of you to the 4th Australasia and South East Asia Conference in Structural Engineering and Construction, ASEA-SEC-4. As the Chairs of the local organizing committee, we are pleased to be here at the beautiful campus of University of Southern Queensland in Brisbane, Australia.

The conference program is set to run during 3 – 5 December 2018. The program is designed to provide opportunities to researchers and practitioners to share their ideas, knowledge, and experiences, and to get feedback from peers and colleagues who have similar interests. Participants can also expand their networking through our technical/networking tours.

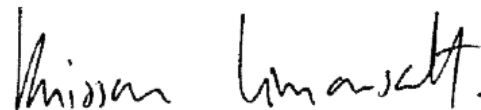
Once again, we welcome all of you to the beautiful and sunny Brisbane. Our local team has received a great support from the School of Civil Engineering and Surveying, Faculty of Health, Engineering and Sciences at University of Southern Queensland, and ISEC's Organizing Committee, to ensure that all participants will have a wonderful experience throughout the conference!

We look forward to meeting all of you in person!

Kind regards,



Conference Chair
Jim Shiau
University of Southern Queensland, Australia



Co-Chair
Vanissorn Vimonsatit (Sorn)
Curtin University, Western Australia



The Fourth Australasia and South-East Asia Structural Engineering and Construction Conference (ASEA SEC 4)

Implementing Innovative Ideas in Structural Engineering and Project Management

USQ Springfield, QLD, Australia

December 3 - 5, 2018

Monday, December 3, 2018 (Riverside Hotel, Brisbane)

17:00-19:00	Welcome cocktail party	Riverside Hotel, Brisbane
	Early Registration	

Tuesday, December 4, 2018 (University of Southern Queensland, Springfield Campus)

08:00 - 08:30	Registration (The registration desk will be open during conference hours)	USQ Springfield, Building B, Room A
	<i>Opening and welcome address</i>	
08:30 - 09:00	Dr Jim Shiau, Conference Chairman Dean and Head of School of Civil and Surveying, Faculty of Health, Engineering and Sciences, University of Southern Queensland, Australia	
	Professor Amarjit Singh, ISEC Society President	
	<i>Keynotes</i>	
09:00 - 09:30	Keynote 1: Dr. Stephen Buttlng, Principal, National Geotechnical Consultants, QLD, Australia	
09:30 - 10:00	Keynote 2: Prof. Karu Karunasena, Discipline Leader in Civil Engineering & Construction, School of Civil Engineering & Surveying, USQ, Australia	

Morning tea: 10:00-10:30 (Outdoor Patio Area, Level 6, Building A)



Tuesday, December 4, 2018, 10:30-12:30
Technical session I (USQ Springfield, Building A, Level 6)

Room B	Room C	Room D
Session Chair: Takashi Hara Architecture, Architectural Engineering & Composites	Session Chair: Frank Yazdani Pavements and Infrastructure	Session Chair: Ifte Choudhury Cost and Project Management and Construction
DESIGN AND PLANNING OF SCAFFOLDING SYSTEM <i>Takashi Hara, Katsukiyo Shimomura</i>	DESIGN OF FLEXIBLE PAVEMENT USING MARBLE DUST IN SUBGRADE SOIL <i>Rajesh Pathak, Shubham Moudgil</i>	TENDER EVALUATION: MCDM TECHNIQUES <i>Somya Agarwal, Keyur A. Kapadia, Rajiv Gupta</i>
MATHEMATICAL MODEL AND SIMULATION OF VEHICLE PLATOON OVERTAKING OTHER VEHICLE <i>Eisuke Kita, Hiroki Sakamoto</i>	CALIBRATION OF RUTTING AND ROUGHNESS DISTRESS MODELS OF HDM-4 FOR DEVELOPING PAVEMENT MAINTENANCE MANAGEMENT SYSTEM <i>Tanuj Chopra, Aditya Singh</i>	COOPERATIVE PROJECT DEVELOPMENT - INFLUENCE OF PARTICIPANTS ON SUCCESS FACTORS OF REAL ESTATE PROJECTS <i>Edwin Harrer, Bernhard Bauer, Gottfried Mauerhofer</i>
RELIABILITY BASED MULTI-OBJECTIVE OPTIMIZATION OF CONCRETE MIX PARAMETERS USING NSGA II <i>Mahesh Sharma, Rachna Agarwal, Rajendra Sharma, Maneek Kumar</i>	UTILIZING PLASTIC FOR PRETREATING RECYCLED CONSTRUCTION AGGREGATE TO ELIMINATE BINDER ABSORPTION IN ASPHALT MIXTURE <i>Farzaneh Tahmoorian, John Yeaman</i>	EDUCATION: A CHANGE AGENT FOR PROJECT FAILURE? <i>Ann Stewart, Ayman Nassif, Andrew Stewart Obe</i>
EFFECTS OF THE INITIAL DEFLECTION SHAPE ON THE MOMENT AMPLIFICATION FACTOR OF BEAM-COLUMNS <i>Haruna Utsunomiya, Masayuki Haraguchi, Masae Kido, Keigo Tsuda</i>	MECHANICAL PROPERTIES OF WARM MIXED USING POLYMER RECLAIMED ASPHALT WITH NEW AGGREGATE (PRAP-WARM MIX) <i>Weerakaset Suanpaga</i>	ROLE OF FINANCIAL CAPABILITY IN MANAGING IMPACTS OF FOREX FLUCTUATIONS ON CONSTRUCTION BUSINESS <i>Mohd Amizan Bin Mohamed, Melissa Teo, Stephen Kajewski, Bambang Trigunarsyah</i>
ULTIMATE SLIP STRENGTH OF PERFOBOND STRIP CONFINED BY CONCRETE COVER <i>Shintaro Tani, Katashi Fujii, Ryo Isuda</i>	INVESTIGATION OF TEMPERATURE RISING MECHANISM IN LONG TUNNEL BY NUMERICAL SIMULATION <i>Haeyoung Kim, Hitoshi Yamada, Hiroshi Katsuchi, Soichiro Nakamura</i>	SCHEDULE RISK ANALYSIS OF RAILWAY PROJECTS USING MONTE CARLO SIMULATION FOR IMPROVED PROJECT MANAGEMENT <i>Motlatso Mabeba, Jan Harm C Pretorius, Leon Pretorius</i>
ULTIMATE SLIP BEHAVIOR OF PERFOBOND-STRIP UNDER THE LATERAL CONFINEMENT PARALLEL TO THE PBL PLATES <i>Ryo Isuda, Shintaro Tani, Katashi Fujii</i>	COMPARATIVE ASSESSMENT OF TRANSPORTATION SUSTAINABILITY RATING SYSTEMS <i>Oluwatobi Oluwalaiye, Mehmet E. Ozbek</i>	BUSINESS SURVIVAL RATE IN CONSTRUCTION INDUSTRY IN RELATION TO OTHER INDUSTRIES: A COMPARATIVE ANALYSIS <i>Ifte Choudhury</i>
COMPILATION AND INNOVATION OF TECHNICAL SPECIFICATION OF ELECTROCHEMICAL TECHNOLOGY FOR DURABILITY OF CONCRETE STRUCTURES <i>Weiliang Jin, P. Z. Wang, J. Xia, J. H. Mao, W. J. Fan, X. Song</i>	DESIGN FEATURES FOR IMPROVED CONSTRUCTABILITY OF MARINE PIER PROJECTS <i>Panagiotis Mitropoulos, Victor Tajima</i>	CONCEPTUAL BUSINESS MODELS OF STRATEGIC LOGISTIC SERVICES FOR SMALL-SIZED CONTRACTORS <i>Muhamad Abduh</i>
MANAGEMENT RELATED CRITICAL SUCCESS FACTORS FOR THE ADMINISTRATION OF BUILDING PROJECTS <i>Osei Yaw Safo-Kantanka, Clinton Ohis Aigbavboa, Wellington Didibhuku Thwala</i>	THREE FACE ATTACHMENT RETROFIT AGAINST FATIGUE CRACKING AT STEEL GIRDER WEB PENETRATION <i>Chihiro Sakamoto, Masahiro Sakano, Hideyuki Konishi, Takashi Fujii</i>	ASSIGNMENT OF RESPONSIBILITY AND ROLE TO CONSTRUCTION CLIENT IN OCCUPATIONAL SAFETY AND HEALTH SYSTEM <i>Jeong-Hun Won, Nam-Gwon Jang, Sang-Seom Ko, Tae-Sang Kim</i>

Lunch break : 12:30-13:30 (Outdoor Patio Area, Level 6, Building A)



Tuesday, December 4, 2018, 13:30-15:30
Technical session II (USQ Springfield, Building A, Level 6)

Room B Session Chair: Yoichi Mimura Concrete and Construction Materials	Room C Session Chair: Hossein Askarinejad Concrete and Pres-stressed Concrete	Room D Session Chair: Haeyoung Kim Building Structures and Vibration
SUSTAINABILITY IMPLICATIONS OF THE USE OF HYBRID POLYVINYL ALCOHOL FIBRE-REINFORCED FERROCEMENT AND FLY ASH <i>Vanissorn Vimonsatit, Wahidul K. Biswas</i>	PRESTRESSED CONCRETE TECHNOLOGY IN UNDERDEVELOPED COUNTRIES <i>Sevgi Lokce, Mustafa Ersan Goksu</i>	NOISE REDUCTION DUE TO VIBRATION DAMPING ESTIMATED BY MEASUREMENT OF PARTICLE VELOCITY <i>Masaaki Hiroe, Nozomu Taniguchi</i>
A STUDY ON INTENSITY DISTRIBUTION OF CONCRETE IN STRUCTURE WITH DIFFERENT BUILDING AGES <i>Ryota Umebayashi, Hidehiro Koyamada, Koji Takasu, Hiroki Suyama</i>	BOND STRESS-SLIP OF STRAND IN PRESTRESSED CONCRETE SLEEPERS <i>Hossein Askarinejad, Weiwo Xie, Son Le, Thuraichamy Suntharavadivel</i>	SEISMIC DAMAGE PREDICTION FOR JAPANESE-STYLE WOODEN HOUSE BASED ON STRUCTURE DAMAGE IN THE 2016 KUMAMOTO EARTHQUAKE <i>Tomiya Takatani, Hayato Nishikawa</i>
A STUDY ON THE FLUIDITY OF MORTAR WITH FINE AGGREGATE ADJUSTED GRAIN-SIZE AND POWDERS <i>Shohei Koizumi, Kouji Takasu, Hidehiro Koyamada, Hiroki Suyama</i>	REMAINING STRENGTH EVALUATION OF FERRY BRIDGE CORRODED LOCALLY <i>Fumiya Takami, Katashi Fujii</i>	BEHAVIOR OF NONSTRUCTURAL COMPONENT SUPPORTED BY HANGER BOLTS UNDER SEISMIC EXCITATIONS BY SHAKING TABLE TEST <i>Haeyoung Kim, Kunio Mizutani, Syojiro Motoyui</i>
STUDY ON REDUCTION OF UNIT WATER AMOUNT OF CONCRETE WITH WASTE GYPSUM <i>Atsushi Shimabukuro, Keiji Kuwajima</i>	INFLUENCE OF INITIAL DEFLECTIONS ON COUPLED BUCKLING STRENGTH OF UNSTIFFENED SQUARE BOX SECTION COLUMNS <i>Xiang Chen, Shozo Nakamura, Toshihiro Okumatsu, Takafumi Nishikawa</i>	EXPERIMENTAL STUDY OF INNOVATIVE COMPOSITE BUCKLING-RESTRAINED FUSE FOR CONCENTRICALLY BRACED FRAMES UNDER CYCLIC LOAD <i>Masoud Mohammadi, Mohammad Ali Kafi, Ali Kheyroddin, Hamid Reza Ronagh</i>
UNBURNT CARBON REMOVED FROM FLY ASH BY FLOTATION METHOD <i>Rintaro Takehara, Hiroki Suyama, Koji Takasu, Hidehiro Koyamada</i>	RETROFITTING OF RC BEAMS USING ULTRA HIGH PERFORMANCE FIBER REINFORCED CONCRETE <i>Varun Garg, Prem Pal Bansal, Raju Sharma</i>	HYSTERESIS CHARACTERISTICS OF SQUARE CFT COLUMNS SUBJECTED TO AXIAL FORCE AND BENDING MOMENT <i>Kouta Jyouzaki, Masae Kido</i>
EXPLANATION OF CONCRETE FILLING DEFECT ON MORTAR LOSS MODEL <i>Hiroaki Oku, Hiroki Suyama, Koji Takasu, Hidehiro Koyamada</i>	FLEXURAL STRENGTH OF SQUARE CFT BEAM COLUMNS WHEN DAMAGED WITH CONCRETE CRACKS <i>Daijiro Fujioka, Masae Kido, Mao Liu, Hiroki Ikeda</i>	YIELD STRESS BASED ON NATURAL STRAIN THEORY UNDER CYCLIC TENSION-COMPRESSION LOAD AFTER LARGE SIMPLE SHEAR <i>Yasuyuki Kato, Hiroki Uchida</i>
DURABILITY AND POZZOLANIC REACTION OF FLY ASH CONCRETE EXPOSED TO VARIOUS OUTSIDE ENVIRONMENTS <i>Yoshitaka Ishikawa</i>	BEHAVIOUR OF REINFORCED CONCRERE SLABS UNDER ACCIDENTAL IMPACTS <i>Shamsoon Fareed</i>	

Afternoon refreshment : 15:30-16:00 (Outdoor Patio Area, Level 6, Building A)



Tuesday, December 4, 2018, 16:00-17:30
Technical session III (USQ Springfield, Building A, Level 6)

Room B	Room C	Room D
Session Chair: Weerakaset Suanpaga Mechanical Properties of Concrete	Session Chair: Fadhil Asadi Geotechnical and Foundation Engineering	Session Chair: John Smallwood Construction, Delay Analysis, and Dispute Resolution
STUDY ON THE INFLUENCE OF CURING TEMPERATURE ON MECHANICAL PROPERTIES OF MODIFIED FLY ASH MORTAR <i>Hiroataka Matsuo, Koji Takasu, Hidehiro Koyamada, Hiroki Suyama</i>	GROUND STRENGTHENING METHOD BY MULTISTAGE LOCAL CONSOLIDATION <i>Ryunosuke Matsunaga, Haruyuki Yamamoto</i>	PRACTICAL VALIDATION MEASUREMENTS OF A PHYSIOLOGICAL STATUS MONITORING SENSOR IN REAL CONSTRUCTION ACTIVITIES <i>Ammar S.M. Moohialdin, Bambang Suhariadi, Mohsin Siddiqui</i>
MECHANICAL PROPERTIES AND SHRINKAGE PROPERTIES OF THE CONCRETE WITH RECYCLED FINE AGGREGATE AND ADMIXTURE <i>Yuji Nakata, Koji Takasu, Hidehiro Koyamada, Hiroki Suyama</i>	CRUSHING CHARACTERISTICS OF SOIL PARTICLE ON THE EFFECT OF STRESS PATH <i>Keigo Fukuda, Haruyuki Yamamoto</i>	CASE STUDIES: DISPUTE RESOLUTIONS SELECTION IN CONSTRUCTION <i>Amarjit Singh, Xi Song</i>
EXPERIMENTAL STUDY ON COMPRESSIVE YOUNG'S MODULI AND TENSILE YOUNG'S MODULUS OF FLY ASH CONCRETE <i>Yoichi Mimura, Vanissorn Vimonsatit, Yuki Watanabe, Itaru Horiguchi, Isamu Yoshitake</i>	ENGINEERING CHARACTERISTICS AND EARTHQUAKE RESPONSE ANALYSIS OF GROUND <i>Haruyuki Yamamoto, Munkhunur Togtokhbuyan</i>	A GRAPHICAL USER INTERFACE (GUI) FOR FORENSIC ANALYSIS OF DELAY AND DISRUPTION <i>Ageliki Valavanoglou, Danijel Rebolj, Dettlef Heck</i>
TENSILE CREEP OF FLY ASH CONCRETE AT EARLY AGE CONSIDERING THE EFFECT OF TENSILE YOUNG'S MODULUS DEVELOPMENT <i>Yoichi Mimura, Vanissorn Vimonsatit, Yuki Watanabe, Itaru Horiguchi, Isamu Yoshitake</i>	AN EFFICIENT VOLUME REDUCTION APPROACH FOR WATER DREDGED SOIL BY ULTRASONIC WAVE <i>Kosuke Takahashi, Shunji Ue, Keiji Kuwajima, Yasushi Fukuda, Mitsunori Ouchi</i>	DESIGN AND BUILD - A DELAY REDUCTION METHOD FOR CONSTRUCTION PROJECTS <i>Kurt Crossman, Annlize L Marnewick, Innocent Musonda, Jan Harm C Pretorius</i>
INFLUENCE OF SAND PERCENTAGE TO FRESH CONCRETE PROPERTIES <i>Takuji Gennai, Takahiro Tamura, Atsushi Shimabukuro</i>	A SIMPLE CONSTITUTIVE MODEL FOR UNDRAINED SHEAR CHARACTERISTICS OF SANDY SOILS <i>Yang Wu</i>	A CONCEPTUAL FRAMEWORK FOR IDENTIFYING CONSTRUCTION ACTIVITY INTENSITY IN HARSH WEATHER CONDITIONS <i>Ammar S.M. Moohialdin, Fiona Lamari, Marc Miska, Bambang T. Suhariadi</i>
IMPRESSION EVALUATION OF CONCRETE SURFACE USING BYPRODUCTS <i>Daiki Nakayama, Koji Takasu, Hiroki Suyama, Hidehiro Koyamada</i>		FINANCIAL PROVISION FOR CONSTRUCTION HEALTH AND SAFETY <i>Roxy Malan, John Smallwood</i>
		PLANT, ROAD CONSTRUCTION, TRAFFIC, AND GENERAL HEALTH AND SAFETY: PERSPECTIVES OF GENERAL CONTRACTORS <i>John Smallwood, Lance Wentzel</i>

Conference Dinner: 18:00 - 20:00 Tuesday, December 4, 2018
Venue: Hog's Australia's Steakhouse, Orion Springfield Central
(Wait at the ground floor of Building A; we will all walk together to the restaurant from 5:45 pm)

*Transport after Dinner: A bus will wait outside the restaurant to bring guests back to Riverside Hotel.
The bus will stop over Mt. Cootha for Brisbane Night Scenic View (Tour A).*



Conference Tour B – Wednesday, December 5

On Wednesday, Dec 5, 2018, there will be a one-day tour to the beautiful Sunshine Coast beaches:

- Mooloolaba
- Maroochydore
- Coolum
- Noosa Heads

CANCELED

Depart from Riverside Hotel at 8 am; Return to Riverside hotel at 6 pm; Cost per person: \$65
Only Advance Registration is acceptable. Minimum registration pax required.

*** Tour bookings are recommended in private through the Concierge desk at Riverside Hotel.**



Bus Services

Tuesday, December 4, 2018

1. Pickup 7:15am from Riverside Hotel to USQ Springfield (1 x big bus [48 seats] and 1 x small bus [22 seats])
2. [For those going to the dinner banquet](#): Pickup 8:00 pm from Hogs Breathe Café, Springfield Central to Riverside Hotel via Mt Cootha for Tour A, 30 mins (1 x big bus)
3. [For those not going to the dinner banquet, but wanting to go back to Riverside Hotel](#): Pickup 5:45pm from USQ Springfield back to Riverside Hotel (1 x small bus)

Wednesday, December 5, 2018

1. Pickup 8:00am from Riverside Hotel to Sunshine Coast beaches.
2. Return to Riverside Hotel before 6 pm.
3. Maximum capacity is 22 Seats.
4. Minimum number of tour participants is 12 pax.
5. Tour participants to pay for their own lunch and drinks.
6. **Full Commentary provided**

CANCELED

MEMO