



**Implementing Innovative Ideas in Structural Engineering and Project Management**  
**The Eighth International Structural Engineering and Construction Conference (ISEC-8)**

**Parramatta, NSW- November 23 - 28, 2015**



*Monday, Nov 23, 2015*

<b>17:00 - 19:00</b>	Registration	Parramatta City Town Hall
<b>17:00 - 19:00</b>	Icebreaker & Welcome Reception - <i>Drinks, Pupus (Appetizers), and Light Australian Music</i>	Parramatta City Town Hall



*Tuesday, Nov 24, 2015*

<b>07:00 - 18:00</b>	<b>Registration</b> ( <i>The registration desk will be open during conference hours</i> )	EA G 10	
<b>08:30 - 09:15</b>	<b>Conference Briefings/Opening Session</b>	Western Sydney University Parramatta Campus Room EA G 18	
	Welcome and Introductions <i>Swapan Saha, Conference Chair</i>		3 Min.
	Welcome to Country		12 Min.
	Welcome to the School of Computing, Engineering and Mathematics (SCEM) <i>Simeon Simoff, Dean - SCEM, WSU</i>		5 Min.
	Welcome to Western Sydney University <i>Barney Glover, Vice Chancellor - Western Sydney University</i>		5 Min.
	Welcoming Remarks <i>Amarjit Singh, ISEC Society President</i>		5 Min.
	Announcements Nicolle Fowler/Swapan Saha		5 Min.
<b>09:15 - 10:00</b>	<b>Keynote: Sidney Newton</b> , University of NSW, Australia  "Situational eLearning with Immersive Technologies"		

*Tea & Coffee Break 10:00 - 10:30 (EAG Foyer)*



## Technical Session 1 - Tuesday, Nov 24, 2015; 10:30 - 12:30

Session Chair: Hans De Backer EA.G. 34 I-1: Structural Analysis and Structures Under Seismic Loading	Session Chair: Bijan Samali EA.G. 36 I-2: Concrete Structures	Session Chair: Vanissorn Vimonasit EA.G. 32 I-3: Mechanical Properties of Concrete Materials	Session Chair: Mary Hardie EA.G. 38 I-4: Sustainable Housing Development and Construction	Session Chair: Yingbin Feng EA.G. 33 I-5: Modern Construction Safety Techniques
Design of DSCT Wind Turbine Tower Considering Large Displacement Effect <i>Taek Hee Han, Deokhee Won, Jin-Hak Yi, Gil-Lim Yoon</i>	Reinforced Concrete Beams Using Locally Manufactured Steel Bars: Investigation of Flexural Behavior <i>Shehab Mourad, Abdelhamid Charif, and Iqbal Khan</i>	Reducing Bug-Holes on Tunnel Lining Concrete by Using Covering Sheets <i>Sari Harada, Tomoyuki Maeda, Masayuki Hirano, and Isamu Yoshitake</i>	Price Pressure on Planners' Fees and its Impact on the Planning Quality <i>Bernhard Bauer and Detlef Heck</i>	An Artificial Neural Network Model for Predicting Fatigue of Construction Workers in Humid Environments <i>Wen Yi and Albert P. C. Chan</i>
An Experimental Study of In-Plane, Arch-Shaped Flexural Damper <i>Yen-Po Wang, Di-Hung Chen, and Chien-Liang Lee</i>	Energy Dissipation in Post-Tensioned Self-Centering Precast Concrete Connections with a Friction Device <i>Takeaki Koshikawa</i>	Aggregate Multi-Inclusions Interaction and Interface Influence on Concrete Compression Behavior <i>Aylie Han, Buntara Sthenly Gan, and Yanuar Setiawan</i>	New Drafts for the Integration of Modern Technologies and Methods in Education and Training <i>Anica Meins-Becker, Agnes Kelm, Lars Laußat, and Manfred Helmus</i>	Review and Adopt a Tool for Measuring Safety Climate in International Construction Projects <i>Ran Gao, Albert P. C. Chan, Wahyudi P. Utama, and Hafiz Zahoor</i>
Seismic Behavior of Anchorage in Diverse Liquid Storage Steel Tanks by Added-Mass Method <i>Kamyar Kildashti and Neda Mirzadeh</i>	Evaluation on Elongation of Rebar by using Image Processing Method <i>Chi-Young Jung, Tae-Ryun Woo, Da-Woon Yoon, Dong-Uk Park, Jin-Hwan Cheung</i>	Fundamental Study on Compression Component of Half Precast Concrete <i>Takeshi Sato, Hiroki Suyama, Koji Takasu, and Hidehiro Koyamada</i>	Wind Pressure Distribution on Low-Rise Buildings with Cylindrical Roofs <i>Astha Verma and Ashok Kumar Ahuja</i>	Towards Zero Construction Fatalities, Injuries, and Diseases <i>John Smallwood and Fidelis Emuze</i>
Seismic Assessment of Non-Ductile Reinforced Concrete C-Shaped Walls <i>Ryan D. Hault, Helen M. Goldsworthy, and Elisa Lumantarna</i>	Experiment on Shear of Post-Tensioned Connection between Concrete and Cast Iron Plate having Shear-Key <i>Kiyoka Kinoshita, Yusuke Maida, Hiroyasu Sakata, Kazushi Shimazaki, Eiichiro Saeki, Yukio Kitada, and Keiichiro Shibuta</i>	Proposed Buried Weight Test as Method of Testing for Setting Time of Concrete Mixtures <i>Ikko Maenaga, Hiroki Suyama, Koji Takasu, and Hidehiro Koyamada</i>	Sustainable Construction Practices for Affordable Housing <i>Deepa G. Nair</i>	Experiment on the Slack in Lifelines Used for Roof Work <i>Hiroki Takahashi, Yasumichi Hino, and Katsutoshi Ohdo</i>
Time-History Analysis Results of RC Frames for Different Ground Accelerations <i>Hak Sub Kwon, Kyung Jae Shin, Sung Hyun Park, Gi Yo Min, and Joon Sub Lee</i>	Experimental Study on Shear Resistance of Concrete Encased Steel Column Used Welding Wire Mesh <i>Atsunori Kitano</i>	Bond Strength Recovery of Fire-Damaged Concrete after Post-Fire-Curing <i>Zhuguo Li and Yasuhiro Ryuda</i>	Philosophical Basis for Housing Development <i>Clinton Aigbavboa and Wellington Thwala</i>	Building Information Modeling and Operating Of RFID Technology to Improve Occupational Safety in Construction Industry <i>Agnes Kelm, Manfred Helmus, and Anica Meins-Becker</i>
Seismic Performance Evaluation of Assembled O-Stable Panel Walls <i>Shiming Chen, Bingrui Zhuang, and Ping Gu</i>	Experimental Study on Flexural Behavior of Steel-Concrete Composite Beam Comprising Precast Composite Slabs <i>Hetoo Hou, Xiang Liu, Mingyuan Feng, Lu Geng, Lei Chen, and Haining Liu</i>	Study on Properties of Fly Ash Removed Unburned Carbon by Flotation Method <i>Yuta Niimura, Koji Takasu, Hiroki Suyama, and Hidehiro Koyamada</i>	An Assessment of the Evolution of Housing Policy Framework <i>Clinton Aigbavboa</i>	Excavation Risk in Sites <i>Renato Laganà</i>
Structural Response Due to Wave Impacts on a Coastal Protection <i>Hans De Backer, Amelie Outtier, and Ken Schotte</i>	Structural Behavior of R/C Shell Considering the Position of Edge Beam <i>Takashi Hara</i>	Kinetic Model to Predict Ultimate Mortar Expansion <i>Mohammad S. Islam and Syed F. Ahmad</i>	Evaluation of the Economic Efficiency of Honeycomb Girders of Roofs of Industrial Steel Framed Buildings <i>Tobias Petersen, Manuel Krahwinkel, and Matthias Behren</i>	Time Reduction during Restoration of the Exterior of a Historical Building <i>Renato Laganà</i>
Refurbishment of the Masonry Arch on Merxem Street Bridge <i>Amelie Outtier, Bart De Pauw, Philippe Van Bogaert, and Hans De Backer</i>				Emergency Evacuation Simulation Visualized by Mobile Mapping System <i>Osamu Tsujihara, Hideyuki Ito, and Terumasa Okamoto</i>

**Lunch 1: 12:30 - 13:30 (EB· G· 02)**



## Technical Session II: Tuesday, Nov 24, 2015; 13:30 - 15:30

Session Chair: Sofia W. Alisjahbana EA.G. 34  II-1: Dynamic Behavior of Structures	Session Chair: Bradford Russell EA.G. 36  II-2: Steel Structures	Session Chair: Vivian Tam EA.G. 32  II-3: Recycled Concrete and Supplementary Cementing Materials	Session Chair: Klaus Holschemacher EA.G. 33  II-4: Bridge Structures	Session Chair: Peter Wong EA.G. 38  II-5: Cost Control and Project Management Systems
Design S-N Curves for T-, K-, and X-Concrete-Filled Steel Tubular Joints <i>I. Musa, F. R. Mashiri, and X. Zhu</i>	Effects of Vertical Slotted Hole on Cold Formed Steel Z-Shape Lapped Purlins <i>L. Xu, J. Liu, S. Fox, and Y. Liu</i>	The Shear Strength of 50 MPa Concrete Beams Made using Recycled Concrete Coarse Aggregates <i>Khaloud Rahal and Yazzan Alrefaei</i>	Design of Isolated Bridges Using Polynomial Friction Pendulum Isolator <i>T. Y. Lee, L. Y. Lu, and K. J. Chung</i>	New Organization Forms to Improve the Working Life of Construction Site Managers <i>Martina Schneller</i>
Cyclic Test Results of Beam-to-Column Connection Using SHN490 Steel <i>So-Yeong Kim, Kyung Jae Shin, Swoo-Heon Lee, Sung-Young Park, and Da-Som Chu</i>	Behavior of Stainless Steel Lipped Channel Sections Subjected to Eccentric Compression <i>Mohammad Anwar-Us-Saadat, Shameem Ahmed, and Mahmud Ashraf</i>	An Investigation into the Techniques for Improving the Properties of Crumb Rubber Concrete <i>Stephanie Somerville, Remadevi Dhanasekar, Travis Frame, and T. G. Suntharavadivel</i>	Dynamic Analysis of Bridges with Plastic Hinges under Extreme Earthquakes <i>T. Y. Lee and K. J. Chung</i>	Cost Calculation in Prefabricated Timber Construction: Methodology of Assessment and General Requirements <i>Joerg Koppelhuber, Dieter Schlagbauer, and Detlef Heck</i>
Dynamic Response of Rigid Roadway Pavement under Moving Traffic Loads <i>Sofia W. Alisjahbana and Wiratman Wangsadinata</i>	Repairability and Recovery of Repaired Steel Framed Structures Experiencing Ultimate State <i>Takumi Ito, Kenjiro Mori, and Takeshi Matsumoto</i>	Construction Potential of Recycled Masonry for Lightweight Concrete <i>Daniela Ionescu, Bandita Mainali, Joe Petrolito, Haider Al Abadi, Simon Davies, and Braidy Dickens</i>	Measurement of Residual Stress by Coring and Material Testing of Minute Test Pieces <i>Tomohiro Ninomiya, Yasuo Suzuki, and Kunitomo Sugiura</i>	Cost Calculation in Prefabricated Timber Construction: Process Analysis on Site and Applicability for Future Projects <i>Joerg Koppelhuber, Dieter Schlagbauer, and Detlef Heck</i>
Effect of the Fluid on the Impact Force of the Wet Missile <i>Duc-Kien Thai and Seung-Eock Kim</i>	Innovative Design and Erection Solution for Portal Frame Industrial Steel Building Roofs <i>Maz Mahzari and Mandar N. Panvelkar</i>	Properties of Cement Treated Tire Crumb and Oil Palm Fruit Fiber Mortars <i>Farah Nora Aznieta Abdul Aziz, Sani Mohammed Bida, Noor Azline Mohd Nasir, and Mohd Saleh Jaafar</i>	Renovation of Corroded Girder End in Plate Girder Bridge with Resin and Rebars <i>Hiroshi Ogami, Katashi Fujii, Tomoyuki Yamada, and Hatsumi Iwasaki</i>	Multiple-Actor Cost Control and Management System: The UML Blueprint <i>Hany Leon, Maged Georgy, and Moheeb Ibrahim</i>
Free Vibration of Linearly Tapered Timoshenko Beam Using Consistent Shape Functions <i>Huong Thanh Trinh, Kien Nguyen Dinh, T. Hibino, and Buntara S. Gan</i>	Compression Capacity of Slender Stainless Steel Cross-Sections <i>Shameem Ahmed and Mahmud Ashraf</i>	Experimental Study on Recycled Concrete with Steel Fibers as a Sustainable Building Material <i>Olivia Mirza, Dane Wigg, Won Hee Kang, Sepani Senaratne, and Vivian Tam</i>	Determining Residual Stresses in Welded Connections of Orthotropic Steel Bridge Decks with a Hole-Drilling Technique <i>Wim Nagy, Philippe Van Bogaert, and Hans De Backer</i>	Issues in the Construction Procurement Process <i>Olanrewaju Abdul Lateef and Paul Anave Junior</i>
Change of Vibration Characteristics of Wooden Buildings under Construction Based on Micro-Tremor Measurements <i>Mitsuhiro Miyamoto</i>	Experimental Study on Slip Coefficient of High Strength Bolted Joint with Metal Sprayed Contact Surface <i>Yusuke Nakanishi, Kunitaro Hashimoto, Yasuo Suzuki, and Kunitomo Sugiura</i>	Study on Flexural Behavior of Recycled Aggregate Concrete Beams using Glass Fibers <i>V. Bhikshma and K. Pradeep Kumar</i>	Experimental Evaluation of Pipe-Shape Shear Connectors for Multi-Beam Box Girder Bridges <i>Won-Ho Heo, Chi-Young Jung, Hyun-Min Lee, and Sang-Hyo Kim</i>	Effect of Design Management on Cost Performance of Construction Projects <i>Anita and Hemanta Doloi</i>
Human Sensory Evaluation of Vibrations Inside Tall Buildings <i>Chihiro Suzuki and Takashige Ishikawa</i>		Recyclability of Fly Ash Concrete Pavement Made with Limestone Aggregate <i>Isamu Yoshitake, Takeo Ishida, Sunao Fukumoto</i>	Live-Load Distribution Factors and Service Response of Missouri Bridge A7957 <i>E. S. Hernandez and J. J. Myers</i>	Non-Linearities in the Calculation of Construction Costs <i>Markus Kummer</i>

**Tea & Coffee Break 15:30 - 16:00 (EAG foyer)**



## Technical Session III: Tuesday, Nov 24, 2015; 16:00 - 18:00

Session Chair: Remadevi Dhanasekar EA.G. 34	Session Chair: Takashi Hara EA.G. 36	Session Chair: Shiming Chen EA.G. 32	Session Chair: John Myers EA.G. 33	Session Chair: Maged Georgy EA.G. 38
III-1: Numerical Analysis And Computation	III-2: Building Structures and Infrastructure	III-3: Fiber Reinforced Cementitious Composites	III-4: Damage Detection and Structure Retrofit	III-5: Risk Analysis and Disaster Management
Finite Element Investigation of Thin-Webbed Plate Girders with Inclined Stiffeners <i>M. Y. M. Yatim, A. Esa, Y. L. Lau, M. A. P. A. Agus, and N. F. N. Sazali</i>	3-D Lumped Mass Method of Dynamic Analysis for High-Rise Building <i>Zorigt Tumurbaatar and Haruyuki Yamamoto</i>	Long-Term Mechanical Behavior of a Green Cementitious Composite <i>H. Tian and Y. X. Zhang</i>	Structural Damage Detection by Multi-Scale Cross-Sample Entropy <i>Jui-Chang Liang, Ming-Jing Wang, and Tzu-Kang Lin</i>	Predictions of Damage to Buildings by Debris <i>Nelson Lam and Emad Gad</i>
Nonlinear Finite Element Analysis of FRP Strengthened RC Beams <i>Prabin Pathak and Y. X. Zhang</i>	Module Segment Connection for Composite Hollow RC Submerged Floating Tunnels <i>Deokhee Won, Sang Hun Han, Woo Sun Park, Jihye Seo, and Taek Hee Han</i>	Effect of Natural Sands on the Tensile Behavior of SHCC under Different Strain Rates <i>M. Iqbal Khan, Shehab Mourad, Galal Fares, and Wasim Abbass</i>	Early Warning and Failure Detection in Bridge Using Wireless Vibration Sensor <i>A. F. Fardheny, P. Suprobo, and Faimun</i>	Explicit Probabilistic Demand and Consequence Models for Seismic Risk Prediction <i>Mehdi Kia and Mehdi Banazadeh</i>
Numerical Analysis of Fence Type Support of Apple Tree <i>Il-Min Kang, Kyung-Jae Shin, Young-Ju Lee, Yu-Hyun Lee, Hyu-Min Shin, and Seoung-Hee Kim</i>	The Effects on Shape-Modeling of Concrete Gravity Dams in Earthquake Response Analyses <i>Tatsuo Nishiuchi</i>	Influence of Calcined Nano clay on Fracture Toughness of NaOH-Treated Hemp Fabric Reinforced Cement Nanocomposites <i>A. Hakamy, F. U. A. Shaikh, and I. M. Low</i>	Base Isolation for Seismic Retrofitting of Damaged Buildings <i>Marco Mezzi and Paolo Petrella</i>	Earthquake Disaster Preparedness and Life of Homestay System Evacuees in High-Rise Condominiums <i>Akie Hisagi and Takashige Ishikawa</i>
Shear Strain Sampling Points of Plate Element from Desirable Displacement Fields and Mixed Finite Elements <i>Teerapon Kowsuwan and Vanissorn Vimonsatit</i>	Seismic Response Control of Super High-Rise RC Buildings Utilizing Buckling Restrained Braces <i>Yusuke Maida, Toshio Maegawa, Toshihiko Demizu, Makoto Hamada, Zhe Qu, Shoichi Kishiki, Hiroyasu Sakata, and Akira Wada</i>	Steel Fiber-Reinforced Self-Compacting Concrete Subjected to Concentrated Loads <i>Hao Zhang, Alessandro P. Fantilli, Bernardino Chiaia, Lumin Wang, and Zhenqing Wang</i>	Trial Construction for Seismic Retrofit by CFT Brace on an Isolated Island <i>Hiroyuki Nakahara and Yukiko Ashida</i>	Influence of Mean Daily Temperature on the Selection of the Construction Start Date <i>Markus Kummer and Christian Hofstadler</i>
A Numerical Parametric Study on the Load Carrying Behavior under Bending of Honeycomb Girders <i>Tobias Petersen and Manuel Krahwinkel</i>	Quantifying global seismic performance factors in dual systems with buckling restrained braced frames for high rise steel buildings <i>SipanYavarian and Rais Ahmad</i>	Effect of Mixing Proportion on Compressive Strength of Fly-Ash Based Geopolymer Paste and Mortar Using Taguchi's Method <i>Sajid Khan Afridi, and Vanissorn Vimonsatit</i>	Structural Performance of Damaged Open-Web Type SRC Beam-Columns with Bolt-Connected Batten Steel Plates after Retrofitting <i>Takahiro Kume, Takashi Fujinaga, and Yuping Sun</i>	Mitigating and Managing Risks in Mobile Telecom Projects <i>M. Mostafa Eid, Maged Georgy, Hesham Osman, and Moheeb Ibrahim</i>
Numerical Investigation of Elastic Wave Propagation in Functionally Graded Materials <i>Peter Lendrum, Lin Ye, and Chunhui Yang</i>		Strength Properties of Bacterial Concrete Containing Fly Ash <i>Ravande Kishore and Archana Penchala</i>		Fast Procedure to Assess the Risk of Losses from Earthquake in R/C Buildings <i>Marco Mezzi, Fabrizio Comodini, and Alessandra Fulco</i>
				An Approach for Safety Cost Estimation of Building Constructions <i>Senem Bilir and G. Emre Gurcanli</i>

**End of Day 1 Sessions**

**Evening Reception: Tuesday, Nov 24, 2015- 18:00 - 19:45 @ Building EEa, Janice Reid Pavilion**

*Light Pupus (Appetizers) and Beverages*

*Entertainment: Aboriginal Cultural Performance*



Wednesday, November 25, 2015

07:15 - 17:15

Registration

08:30 - 09:15

Keynote: Kenny Kwok, Western Sydney University

"Detrimental Effects of Wind-Induced Building Motion on Occupant Work and Task Performance"

EA G 18

Tea & Coffee Break 09:15- 09:45 (EAG Foyer)



Technical Session IV: Wednesday, November 25, 2015; 09:45 - 11:45

Session Chair: Richard Yang EA.G. 34 IV-1: Durability and Corrosion	Session Chair: Kenny Kwok EA.G. 36 IV-2: Geotechnical and Water Engineering Solutions	Session Chair: Andrew White EA.G. 38 IV-3: Engineering and Construction Education	Session Chair: Syed M Ahmed EA.G. 32 IV-4: Construction Performance
Long-Term Corrosion Behavior of Concrete Structures in Chloride-Based Industrial Environment: Case Studies <i>Ioan Peparar</i>	Analysis of Empirical Compression Index Equations Using the Liquid Limit <i>Amir W. Al-Khafaji, Krishnanand Y. Maillacheruvu, Matthew Sainz, and Rebecca Neuman</i>	How to Write an ISEC Paper <i>Amarjit Singh</i>	Methodological Framework to Improve PPP Projects <i>Arie Gottfried, Antonio C. Devito, Bruno Daniotti, Alberto Pavan, and Maria A. Chiozzi</i>
Damage Process and Pattern of an RC Structure Affected by Combined Frost and Salt Actions <i>Maki Mizuta, Akinori Shimata, and Tetsuji Ohta</i>	Direct Method to Model Seepage for an Embankment with a Drain <i>Amir W. Al-Khafaji, Krishnanand Y. Maillacheruvu, Matthew Sainz, and Rebecca Neuman</i>	Single Capstone or Multiple Cornerstones? Distributed Model of Capstone Subjects in Construction Education <i>Mehrdad Arashpour, Amrit Sagoo, Dallas Wingrove, Tayyab Maqsood, and Ron Wakefield</i>	Trenchless Construction: Uses and Potentials <i>Essam Zaneldin</i>
Concrete Crack Modeling due to Non-Uniform Corrosion using Smear Approach <i>I Ketut Hartana, Wahyuniarsih Sutrisno, and Priyo Suprobo</i>	Quantification of Installation Inaccuracies and Their Effect on the Design of Segmental Tunnel Linings <i>Ken Schotte, Alain De Wulf, Philippe Van Bogaert, and Hans De Backer</i>	Effective Implementation of Contemporary Principles on Learning and Teaching a Fundamental First-Year Engineering Course <i>Y. X. Zhang and C. Yang</i>	Performance Challenges of Mega Projects <i>George Jergeas and Jim Lozon</i>
Relationship between Corrosion and Element Severity Score for Reinforced Concrete Beams <i>Fin O'Flaherty, Elena Browne, Pol Mangat, and Paul Lambert</i>	Structural Design of New Lining for Diversion Tunnels: Rogun Dam and HPP Project <i>Idin Ebrahimi, Niloofar Binazadeh, and Abolfazl Mehinrad</i>	Practical Education of Mixture Design for Young Engineers at Ready-Mixed Concrete Plants <i>Junichi Hirayama, Isamu Yoshitake, and Mamoru Inoue</i>	Influence of Temperature on Labor Productivity in Shuttering Works <i>Christian Hofstadler</i>
Corrosion Behavior of Friction Plate Surfaces Connected by High-Strength Bolts <i>S. Yamashita, T. Shimosato, Y. Arizumi, M. Tai, and T. Yabuki</i>	Position Control of Bearing Sleeves Locks and Dams with the Use of Innovative Solution <i>Wojciech Anigacz</i>	Curricula Development in Civil and Structural Engineering Education <i>Ulrike Quapp and Klaus Holschemacher</i>	Influence of Temperature on Labor Productivity in Masonry Works <i>Christian Hofstadler</i>
Analysis of Deterioration in Reinforced Concrete Bridge Girders Damaged by Chloride Deterioration and Fatigue <i>H. Honda, T. Shimosato, and Y. Arizumi</i>	Analytical Study of Piled-Raft Foundations Considering Plan Geometry and Nonlinear Behavior of Ground <i>Haruyuki Yamamoto and He Huang</i>	Experiment System by Virtual Shaking Table Using Accelerometer <i>Terumasa Okamoto and Osamu Tsujihara</i>	Labor Productivity in Off-Site Construction: A Literature Review and Implications for Future Research <i>Faisal Alazzaz and Andrew Whyte</i>
Proposal of Evaluation Method for Residual Axial Force of Corroded High-Strength Bolts <i>M. Tai, T. Shimosato, Y. Arizumi, S. Yamashita, and T. Yabuki</i>		Improving Graduates' Attributes through Laboratory Teamwork <i>Daniela Ionescu, Joe Petrolito, Bandita Mainali, and Haider Al Abadi</i>	Managing the Impacts of Forex Fluctuations on Construction Business Performance: An Organizational Capabilities Perspective <i>Mahd Amizan Bin Mohamed, Melissa Te, Stephen Kajewsk, and Bambang Trigunaryah</i>

Free Time 11:45 - 12:00

Lunch 2: 12:00 - 13:00 (EB G 02)



## Technical Session V: Wednesday, November 25, 2015; 13:00 - 15:00

Session Chair: Syed Faiz Ahmad EA.G. 34 V-1: Structural Analysis, Optimization, and Design	Session Chair: Christian Hofstadler EA.G. 36 V-2: Innovation in Infrastructure Design	Session Chair: George Jergeas EA.G. 38 V-3: Sustainable Construction Process	Session Chair: Sidney Newton EA.G. 32 V-4: Procurement Method and Dispute Management
Tabu Search Algorithm for Optimizing Pile Foundation Layout on Footing of Residential House  <i>Takahiro Hara and Buntara S. Gan</i>	Prefabrication as a Sustainable Model in Rail Construction: A Research Enquiry  <i>Arash Ahmadi, Maged Georgy, Malik Khalfan, and Tayyab Maqsood</i>	An Introduction to 4-D Decoding Method of Development Project Reports  <i>Vahid Khadje Anvary and Hamideh Karimi Yazdi</i>	Perceived Risks, Obligations and Uncertainties: Antecedents of Unpaid Contractors' Intention to Suspend Works against Non-Payment  <i>Chia-Kuang Lee, Tak-Wing Yiu, and Sai-On Cheung</i>
An Enhanced Imperialist Competitive Algorithm for Optimum Design of Steel Frames  <i>Mahmoud R. Maheri and M. Talezadeh</i>	A New Method for Strengthening Concrete Structures using Prestressed FRP Laminates  <i>Reza Haghani, Mohammad Al-Emrani, and Robert Kliger</i>	Industrial Bridge Construction: Need for a More Effective Bridge Construction Process  <i>Daniel Ekström, Rasmus Rempling, and Mario Plos</i>	Review of Construction Dispute Resolution Practices in the Middle East: Causes and Methods  <i>Boushra Barakat, Rita Awwad, and Carol Menassa</i>
Use of a Phenomenological Model to Capture the Nonlinear Behavior of Bracing Members  <i>Mojtaba Farahi and Saeed Erfani</i>	Experimental Evaluation of Misaligned Tie Bar Effects on PCC Pavement Longitudinal Joints  <i>Nadim Wehbe and Walker Olson</i>	Developing an Uncertainty Analysis Model for Off-Site Building Production  <i>Mehrdad Arashpour and Ron Wakefield</i>	Craft Skills Acquisition: Challenges in Construction  <i>Ezekiel M. Aew, Paul Stephenson, and Alan Griffith</i>
Load Bearing Structural Assembly  <i>Bradford Russell</i>	Image Analysis Based Finite Strain Measurement of Local Deformation under Uniaxial Load using Natural Strain  <i>Yasuyuki Kato</i>	An Observational Study on the Productivity of Formwork in Building Construction  <i>Naoto Mine, Soon Han Wai, and Ting Chuan Lim</i>	Toward Effective and Efficient Process in Project Validation  <i>Arie Gottfried and Paolo Piantanida</i>
Design of Steel I-Beams with Web Openings  <i>Luis Calado</i>	Effects of Highway Geometric Elements on Accident Modeling  <i>Ujjal Chattaraj and Mohita Mohan Garnaik</i>	Benefits of BIM in Construction Projects  <i>Vanissorn Vimonsatit and Alex Chai Mui Foo</i>	The Italian Legislation on Project Validation  <i>Arie Gottfried, Antonio Cosimo Devito, Paolo Piantanida</i>
The Seismic Response of the Columns of Special Moment Frames under Axial and Lateral Loading Cycles  <i>Mojtaba Farahi and Saeed Erfani</i>		Towards Greening Construction Management Tertiary Education  <i>Fidelis Emuze and John Smallwood</i>	Subcontracting Management in an EPC Project: A Case Study of Delay Risks  <i>Puti Farida Tamin, Dian Perwitasari, and Rizal Tamin</i>
		Teaching Innovation in Construction <i>S. O. Cheung, K. Y. Chan, and P. T. Chow</i>	

**Tea & Coffee Break 15:00 - 15:30 (EAG Foyer)**



## Technical Session VI: Wednesday, November 25, 2015; 15:30 - 17:00

Session Chair: Olivia Mirza EA.G. 34 VI-1: Composite Structures	Session Chair: Vankudothu Bhikshma EA.G. 36 VI-2: Testing and Application of New Construction Materials for Infrastructure	Session Chair: Sepani Senaratne EA.G. 38 VI-3: Energy and Climate Control in Construction	Session Chair: John Smallwood EA.G. 32 VI-4: Facilities and Asset Management
Hydrothermal Durability of Adhesively Bonded FRP/Steel Joints  <i>Mohsen Heshmati, Reza Haghani, and Mohammad Al-Emrani</i>	Effect of Accelerated Curing on Abrasion of High Volume Supplementary Cementitious Material Self Consolidating Concrete  <i>Hayder H. Alghazali and John J. Myers</i>	Developing a Conceptual Framework of Carbon Reduction Research in Construction  <i>Peter S. P. Wong, Francesco Imperatori, Christian Kakavoules, Stefan Polastri, and Alessio Acquaro</i>	Design Phase Maintenance Checklist for Structural Durability  <i>Mohammad A. Hassanain, Abdul-Mohsen Al-Hammad, and Fady Fatayer</i>
Experimental Study on Shear Resistance Evaluation of Perfibond Strip without Penetrating Rebar  <i>Nguyen Minh Hai and Nakajima Akinori</i>	Experimental Tests on Local Damage Detection Using Optical FBG Sensors  <i>Jin-Hak Yi</i>	Development of Green Construction Assessment Model for Building Construction Project <i>Biemo W. Soemardi and Wulfram Ervianto</i>  <i>Biemo W. Soemardi and Wulfram Ervianto</i>	Development of Maintenance Management Standards for Facilities of Large Public Organizations  <i>Abdul-Mohsen A. Al-Hammad, Mohammad A. Hassanain, Salih O. Duffuua, and Saleh A. Ben Lasad</i>
Flexural Behavior and Shear Connection of Shallow Cellular Composite Floor Beam  <i>Shiming Chen, Toi Limacei, and Ping Gu</i>	Effectiveness of Concrete Filled FRP Tubes under Axial Loading  <i>Huigyeong Kim, T. G. Suntharavadevel, and Kai Duan</i>	Optimizing Building Upgrades to Minimize Energy and Water Consumption  <i>Moatassem Abdallah, Khaled El-Rayes, and Caroline Clevenger</i>	Asset Levels of Service-Based Decision Support System for Municipal Infrastructure Investment: A Framework  <i>Vishal Sharma and Mohamed Al-Hussein</i>
Dynamic Testing of Soil-Steel Composite Railway Bridge  <i>Damian Beben</i>	Can the Accelerated Prism Test Evaluate Alkali-Silica Reactivity?  <i>Mohammad S. Islam and Syed F. Ahmad</i>	Comparison of LEED's Energy and Atmosphere Standards for Some Developing Countries  <i>Ruveyda Komurlu, David Arditi, and Asli Pelin Gurgun</i>	Examination of Medium and Long Term Expressway Management Policy for Implementation  <i>Y. Yamada, K. Obama, and K. Kaito</i>
Experimental Breaking of a Prestressed Concrete Bridge Girder Reinforced with Bonded FRP  <i>Adrien Houel, Christophe Aubagnac, Didier Germain, and Jean-Philippe Mahierault</i>	Mechanical Strength of Sealed-Cured Neat Cement-Paste  <i>Sean Walker, Miguel Picornell, Ram Mohan, Sameer Hamoush, and Wongchang Choi</i>	Proposed Cooling Wall System: A Lesson from Nature  <i>M. Salim Ferwati and Saud Ghani</i>	Identify the Sub-Task Pattern, in Particular Specifications and Requirements, in Terms of Quality Deviations and Construction Defects  <i>Abdullah Almusharraf and Andrew Whyte</i>
Bond Behavior of Reinforcement in Lightweight Fiber Reinforced Concrete  <i>Klaus Holschemacher, Ahsan Ali, and Shahid Iqbal</i>			

**Free Time 17:00 - 19:00**

## Conference Banquet: Wednesday, November 25, 2015 - 19:00 - 21:45

*Dinner Banquet Function @ Novotel Hotel, Parramatta*

*Entertainment: Samba Dance*

**Technical Tours: Thursday, November 26, 2015 from Parramatta Novotel Lobby**

<i>Technical Tour 1 (TT1) - 1 Parramatta Square Building Site</i>	[09:00-14:00]
<i>Technical Tour 2 (TT2) - Sydney Metro Northwest Construction Project</i>	[09:00-14:00]
<i>Technical Tour 3 (TT3a) - The Institute for Infrastructure Engineering Lab at Penrith</i>	[09:00-14:00]

**Accompanying Persons Tours from the WSU Paramatta Campus : 5 Person Minimum Required**

<i>Accompanying Person Tour 1 (APT1) - <b>November 24, 2015</b> : Half Day Featherdale Park Tour (Australian Animal)</i>	[10:00 - 15:00]
<i>Accompanying Person Tour 2 (APT2) - <b>November 25, 2015</b> : Half Day Tour in Sydney Central Business District (CBD)</i>	[09:00 - 15:00]

**Cultural Tours from the Parramatta Novotel Lobby: 8 Person Minimum Required**

<i>Cultural Tour 1a (CT1a) - <b>November 27, 2015</b> : : Blue Mountains Tour</i>	[09:00 - 17:00]
<i><del>Cultural Tour 1b (CT1b): <b>November 27, 2015</b> : Hunter Valley</del></i> <b><u>CANCELLED</u></b>	<del>[08:00 - 18:00]</del>
<i>Cultural Tour 2 (CT2): <b>November 28, 2015</b> : Sydney Harbour Cruise &amp; Dinner</i>	[15:00 - 23:00]