



Modern Methods and Advances in Structural Engineering and Construction
The Seventh International Structural Engineering and Construction Conference (ISEC-7)
Honolulu, Hawaii - June 18 - 23, 2013



Tuesday, June 18, 2013

15:00 - 18:00	Registration	Campus Center Ballroom
17:00 - 19:00	Icebreaker & Welcome Reception - <i>Drinks, Pupus (Appetizers), and Light Hawaiian Music</i>	Campus Center Ballroom



Wednesday, June 19, 2013

07:00 - 17:00	Registration (<i>The registration desk will be open during conference hours</i>)	Campus Center Ballroom
08:00 - 08:40	Conference Briefings/Opening Session	Campus Center Ballroom
	Welcome and Introductions <i>Amarjit Singh, Conference Chair</i>	
	Traditional Prayer and Dance <i>Tihati Productions Ltd.</i>	
	Welcome to College of Engineering <i>Peter Crouch, Dean - College of Engineering, UH-Manoa</i>	
	Welcome to University of Hawaii at Manoa <i>Tom Apple, Chancellor - University of Hawaii at Manoa</i>	
	Welcoming Remarks <i>Frank Yazdani, ISEC Society</i>	
	Announcements <i>Amarjit Singh, Conference Chair</i>	
08:40 - 09:15	Keynote: Stojan Kravanja , University of Maribor, Slovenia "Cost Optimization of Structures in Civil Engineering"	

Tea & Coffee Break 09:15 - 09:45 (Campus Center Ballroom)



Technical Session I - Wednesday, June 19, 2013; 09:45 - 11:45

Session Chair: Takashi Hara CC307 I-1: Seismic & Structures	Session Chair: Jimmy Kim CC308 I-2: Concrete Structures	Session Chair: Vanissorn Vimonsatit CC309 I-3: Mechanical Behavior of Cement-Based Materials	Session Chair: Paul Stephenson CC310 I-4: Building Information Modelling	Session Chair: Edward Minchin CC203E I-5: Construction Performance & Safety	Session Chair: Cindy Menches CC Exec. Dining Room I-6: Planning & Development
Two Directional Seismic Response Evaluation of Buildings Which Do Not Have Well-regulated Plane Shapes <i>Yoshina Takahashi and Hisato Hotta</i>	Preliminary Results of a Shaking Table Tests on a 3-storey Building Realized with Cast in Place Sandwich Squat Concrete Walls <i>Gialda Gasparini, Tomaso Trombetti, Stefano Silvestri, Ilaria Ricci, Salvador Ivorra Chorro, Dora Foti</i>	Recycled Concrete as an Aggregate in the Concrete Mix <i>Matthew Nipperess, T. G. Suntharavadeivel, Kai Duan, Patrick Rosayro</i>	Efficient Project Delivery with Data Integration and Use of BIM <i>Max Shoura and Sunitha Jain</i>	Change in Output Performance Due to Prolonged Work <i>Dieter Schlagbauer and Detlef Heck</i>	Performance Comparison Of Two Project Delivery Techniques <i>John Kuprenas and Scotty Galloway</i>
Time-History Analysis on Seismic Performance of Gangue Concrete-Filled Steel Tubular Frame <i>Guochang Li, Chen Fang, Tang Mu, Qing Sun</i>	Shear Capacity of Rectangular RC Beams with Continuous Spiral Shear Reinforcement <i>Matthias Wild and Oliver Fischer</i>	Finite Element Analysis of FRP-Reinforced Concrete Beams with Bond-Slip Under Fire Conditions <i>Xiaoshan Lin and Y. X. Zhang</i>		Biophilic Workplace Design: Improving Construction Ergonomics and Workers' Performance Through Enhanced Sustainable and Psychosocial Value of the Worksite <i>Rita Obiozo and John Smallwood</i>	Valuing Flexibility in Infrastructure <i>David Carmichael and Maria Balatbat</i>
Seismic Performance of Six- and Twelve-Story Staggered Wall Structures with Middle Corridor <i>Joonho Lee and Jinkoo Kim</i>	Structural Behaviour of Continuous Shear Connectors in thin UHPC-Panels under Shear and Transverse Loading <i>Thomas Lechner, Oliver Fischer, Gunter Seidl</i>	Aggregate Interlock Push-Off Test Results of Self-Consolidating Concrete (SCC) for Use in Infrastructure Elements <i>Eric Sells, John Myers, Jeffery S Volz</i>	Knowledge Representation in Bim for Evaluating Sustainability of a Building Design <i>Tang-Hung Nguyen and Shahabodin G. Toroghi</i>	Safety Balanced Scorecard (BSC) Framework for Benchmarking the Safety Performance of Saudi Schools <i>Turki Alolah, Rodney Anthony Stewart, Kriengsak Panuwatwanich, Sherif Mohamed</i>	Concession Award for Indonesian Toll Roads - A Comparison Analysis <i>Reini Wirahadikusumah, Betty Susanti, Safitri, Biemo Soemardi</i>
Seismic Analysis of Masonry Infill Buildings Based on Experimental Hysteresis Responses <i>Shichun Zhao, Hongyan Liu, Qiwang Su, Shiling Pei</i>	Behavior of Reinforced Concrete Members Using Mechanical Splices at the Same Cross Section <i>Dac Phuong Nguyen, Hiroshi Mutsuyoshi, Takuya Ohno, Takaomi Gotou</i>	Aggregate Interlock Characteristic of Palm Kernel Shell Concrete and its Contribution to Shear Strength <i>U. Johnson Alengaram, B. A. Al. Muhit and Mohd Zamin Jumaat</i>	Building Information Modelling (BIM) and Integrated Project Delivery (IPD): Workplace Utilisation in Western Australia <i>A. Whyte and M. Luca</i>	Study on Strength of the Vertical Frame Corresponding to Fall Protection Method <i>Hiroki Takahashi, Katsutoshi Ohdo, Seiji Takanashi</i>	Roadmap For The Assessment Of Megaprojects (Ramp): Four Cases From Lebanon <i>Issam Srour, M. Asem Abdul-Malak, Mona Harb, Rikaz El-Bsat, Mona Itani</i>
Low-cost Method for Seismic Retrofitting by CFT braces <i>Hiroyuki Nakahara, Sunao Akamatsu, Tatsuya Hanada, Yoichi Onomiya</i>	Experimental Study on Influence of Bending Radius of Main Tensile Bars on Stress Transmission in Reinforced Concrete Knee Joints <i>Tuvshin Batjargal and Hisato Hotta</i>	Influence of Pozzolanic Materials on 0-3 Cement-Based Piezoelectric Composites <i>Huang Hsing Pan, Dung-Hung Lin and Ren-Hau Yeh</i>	Developing a New Categorization for Information Modeling in the Architecture, Engineering, and Construction (AEC) Industry <i>Hamed Moradi and Reza Dehghan</i>	Reducing the Risk of Alcohol and Other Drugs in Construction: An Australian National Assessment <i>Herbert Biggs and Amy Williamson</i>	The Rigor of Negotiation; Why Public Private Partnerships are Effective <i>William Maddex and Allan Chasey</i>
Liquid Slosh Dynamics of Liquid Filled Baffled-Tank Under Harmonic and Seismic Excitations <i>Kishore Biswal and Santosh Kumar Nayak</i>			Building Information Model for Selecting Environmental Building Materials <i>Mohamed Marzouk, Mohamed Hisham, Mohamed Elsheikh Khalid Al-Gahtani</i>	Study on Fall Protection Method for System Scaffolds During Assembling and Dismantling Works <i>Katsutoshi Ohdo, Yasumichi Hino, Seiji Takanashi, Hiroki Takahashi</i>	Investigating The Execution of Formal Pre-Project Planning Processes In The Industrial Sector <i>Samer Samara, Issam Srour, M. Asem Abdul-Malak</i>
Seismic Analysis and Design of High Rise Buildings in Different Base Profiles <i>Liaqat Qureshi, Nasiruddin, N.S. Janjua, Usman Rasool</i>	Behaviour of the Concrete Filled FRP 'Cans' Under Axial Loading <i>J. Bobadilla, H. Kim, T. G. Suntharavadeivel, K. Duan</i>	Image Characterization of Aggregate Interlock Interface of Self-Consolidating Concrete (SCC) Push Off Specimens <i>Eric Sells, John J Myers, Jeffery S Volz</i>	Early Onset Structural Simulation Strategies to Inform Architectural Design Through Building Information Modeling (BIM) <i>Keith Hedges and David Beach</i>	New Fall Prevention Methods for Disaster Repair Works of Slate Roof <i>Yasumichi Hino</i>	Conceptual Framework For Strategic Planning By Engineering Consulting Firms <i>M. Asem Uthman Abdul-Malak, Isam Srour, Vivian Jreig</i>
Cyclic Behavior of Steel Braces Buckled In-Plane <i>Cheng-Chih Chen and Wei-Chien Tang</i>	An Optimized Nonlinear Finite Element Design for Continuous RC Deep Beams <i>S M Shahidul Islam and Amar Khennane</i>	Utilization of Industrial Wastes for the Sintered Artificial Aggregate Production Technology <i>Vit Cerny, Rostislav Drochytka, Bozena Vacenovska</i>	Adoption of Building Information Modelling as a Project Management Tool <i>Swapan Saha, Mary Hardie, Xiao-Hua Jin, Sean Braid</i>	Multi-level Gray Evaluation Model for Assessing Health and Safety Practices in Hot Weather <i>Wen Yi and Albert Chan</i>	Mapping 'Rework' related Findings in South Africa <i>Fidelis Emuze and John Smallwood</i>

Lunch 1: 11:45 - 13:15 (Campus Center Ballroom)

Luncheon Speaker: Jeffrey Chang, "Airports New Day Work Projects" 12:40 -13:15



Technical Session II: Wednesday, June 19, 2013 - 13:30 - 15:30

Session Chair: Yixia Zhang CC307 II-1: Dynamic Behavior	Session Chair: Stojan Kravanja CC308 II-2: Steel Structures	Session Chair: Richard Fellows CC309 II-3: Asphalt, Concrete, and Cementitious Composites	Session Chair: Frank Yazdani CC310 II-4: Bridge & Frame Structures	Session Chair: Thomas Korman CC203E II-5: Construction Cost & Contracting	Session Chair: Mahabir Panda CC Exec. Dining Room II-6: Geotechnical & Foundation Engineering
Dynamic Characteristics of Subsurface Ground Identified Using Earthquake Ground Motions <i>Osamu Tsujihara, Kotaro Miyamoto, Terumasa Okamoto, Yoshitaka Mitsuiwa</i>	Material Properties and Structural Design Recommendations for Steel Framed Buildings using High Strength Steel <i>Uksun Kim and Anhduong Le</i>		Controls on Structure Execution: Acceptance Conditions and Types of Inspection for Cast on Site Reinforced Concrete <i>Arie Gottfried, Giuseppe M. Di Giuda, Valentina Villa, Paolo Piantanida</i>	Fuzzy Time-Cost Optimization Problem using Genetic Algorithm and Particle SWAM <i>VSS Kumar, Manal Osman, Vikram Bodu</i>	Comparison of 2D and 3D Finite Element Analysis of Underground Water Tanks Based on Soil-Structure Interaction Using GTS <i>Liaqat A. Qureshi, Kashif Amin, N. S. Janjua, Fayyaz Tahir</i>
Shear Wave Velocity Profile from Soil Resistivity Measurements in Geotechnical Characterizations <i>Zamri Chik and S.M. Taohidul Islam</i>	Comparison of Design Formulas of Steel Beam-Columns Prescribed by Architectural Institute of Japan <i>Misato Kamijo and Masanori Kobayashi</i>	Evaluation of the Effects of Recycled Asphalt Shingle on Binder Rheological Properties Using the Wet Process <i>Saman Salari, Mostafa Elseifi, Louay Mohammad</i>	Monitoring During Construction Projects of Movable Bridges and Harbour Locks <i>Hans De Backer, Amelie Outtier, Philippe Van Bogaert</i>	Life-Cycle Cost Analysis of Infrastructure Pavement Applications in Western Australia <i>A. Whyte and L. Gayner</i>	Using Chemical Grout to Control Groundwater <i>Jim Gentry and Daniel Magill</i>
Dynamic Response of an Infinite Beam on a Pasternak Foundation Under a Moving Load <i>Nagehan Evcan and Abdul Hayir</i>	Behavior of Damaged Steel Truss Bridges Repaired with Composite Tendons <i>Garrett Brunell and Yail Jimmy Kim</i>	Characterization of Asphalt Concrete and Asphalt Binder for Moisture Damage Using Nanoscale Testing <i>Md Arifuzzaman and Rafiqul Tarefder</i>	A Study on a Grout Joint for Precast Prestressed Concrete Slab Bridges <i>Hyeong-Yeol Kim, Sang-Yoon Lee, Jae-Joon Song</i>	Payment Retention in United Arab Emirates (UAE) Construction Projects <i>Tarek Labban, Salwa Beheiry, Micheal Obeid, Mohamed Ali</i>	Experiments on Constructing an Artificial Reef Using Electrolysis <i>Conor Hyland</i>
An Engineering Approach to Particle Physics <i>Matthew Cepkauskas</i>	Next Generation Steel Moment Frame Connections for Integrated Seismic Resistance in Wood Structures <i>Steven E. Pryor and Thomas M. Murray</i>	Nanomechanical Characterization of Asphalt Binder <i>Rafiqul A. Tarefder and Hasan M. Faisal</i>	The Combined Deterioration of Prestressed Concrete Bridge Girders Caused by Alkali-Silica Reaction and Chloride Induced Steel Corrosion <i>Masahiro Asada, Kouji Ishii, Kazuyuki Torii</i>	Performance-Based Bidding Decisions For Egyptian Road Contractors <i>Maged Georgy and Rania Eldin</i>	Strengthening Method of Soft Grounds by Staged Local Consolidation <i>Haruyuki Yamamoto and He Huang</i>
Dynamic Finite Element Analysis of a Rockfall Protective Wire-Rope Fence <i>Phuc Tran Van, Koji Maegawa, Saiji Fukada</i>	Impact Response Analysis of Steel Portal Frames Under Falling Weight Impact Loading <i>Masato Komuro, Norimitsu Kishi, Wai-Fah Chen</i>		Performance Evaluation of Reinforced Concrete Bridge Decks Strengthened with FRP Laminates <i>Neda Bozorgi and Alireza Khaloo</i>	Underrun of Required Crane Capacity – Losses of Productivity during Reinforcing Works <i>Christian Hofstadler</i>	Numerical Simulation of Ground Displacement Behaviors due to Unsteady Seepage Flow <i>Lingyu Meng, Haruyuki Yamamoto</i>
Acoustic Vibrations of Piping Systems <i>Matthew Cepkauskas</i>	Research of the Connection Configuration Between Rectangular CFT Column and Steel Beam: The State of the Art <i>Zhuhua Chen, Ying Qin, Ning Han, Yuan Yang</i>		Reconstruction of Northern State Parkway and Route 110 Interchange <i>Henry Hessing</i>	Modeling and Forecasting Fluctuation of Asphalt Cement Price Index <i>B. Ashuri, M. Ilbeigi, Y. Hui and S. M. Shahandashti</i>	Predicting the Effect of Excavation Sequence on Settlement During Tunneling Using NATM Through FEM <i>A. Marto, H. Sohaei, M. Hajihassani, E. Namazi</i>
Analytical Developments and Shaking Table Tests on Dynamic Behavior of Squat Silos Containing Grain-Like Material <i>Tomaso Trombetti, Gialda Gasparini, Stefano Silvestri, Dora Foti, Salvador Ivorra</i>	Evaluation of Buckling Mode Number and Compression-to-tension Strength Ratio of Buckling-restrained Braces <i>Tetsuhiro Asari, Mamoru Iwata, Mitsumasa Midorikawa, Masatoshi Murai, Yasutaka Tanaka</i>	Dynamic Material Properties of a High Performance Hybrid-fiber Reinforced Cementitious Composites <i>J. Li, H. X. Yang and Y. S. Huang</i>	Numerical Analysis of PcaPC Frame Structure with MILD-PRESS-JOINT <i>H. Sakata, T. Suyama, A. Wada, Y. Matsuzaki</i>	Critical Success Factors for the Delivery of Construction Projects <i>Mahdi Mohamed Albdulsamad Ali, Paul Stephenson, Alan Griffith</i>	Seismic Soil-Structure Interaction in Fully Integral Abutment Bridges with HP Steel Piles <i>Yu Bao and Andrew Rietz</i>
New Method of Calculation of the Foundations Vibrations <i>Alexey Kolesnikov and V.N. Popov</i>	Basal Study on Reliability Improvement of Thickness Measuring Result by Applying Portable Ultrasonic Thickness Gauge to Corrode Plate <i>Tatsumasa Kaita, Hiroki Nishioka, Yasuki Sugiyama, Koji Nakazawa, Katashi Fujii</i>	Strength Properties of Fly-Ash Concrete Mixed with Limestone Powder <i>Isamu Yoshitake, Yuya Tokikuni, Hiroki Komure, Sunao Fukumoto</i>	Distribution of Longitudinal Shear in Composite Steel and Concrete Bridge Trusses <i>Josef Machacek and Martin Charvat</i>	Design Buildings Optimally: A Lifecycle Assessment Approach <i>Ossama Hosny and Ahmed Elhakeem</i>	Artificial Neural Networks Compared to Finite Element Technique for Prediction of Longitudinal Surface Settlement Induced by NATM Tunneling <i>A. Marto, M. Hajihassani, H. Sohaei, F. Kasim</i>

Tea & Coffee Break 15:30 - 16:00 (Campus Center Ballroom)



Technical Session III: Wednesday, June 19, 2013 - 16:00 - 18:00

Session Chair: S.M. Shahidul Islam CC307 III-1: Nonlinear Behavior	Session Chair: Lewei Tong CC308 III-2: Building Structures	Session Chair: Natalie Lloyd CC309 III-3: Pavement & Concrete Mix Designs	Session Chair: Andrew Whyte CC310 III-4: Infrastructure & Bridges	Session Chair: Issam Srour CC203E III-5: Education & Regulation	Session Chair: Lilita Ozola CC Exec. Dining Room III-6: Energy & Environment
Modeling of Fatigue Type Processes with Damage Mechanics <i>Andrew Reberg, Siamak Yazdani, Svenn Borgersen, Mijia Yang, Yail J. Kim</i>		Influence of Recycled Aggregates on Horizontal Cracking in Continuously Reinforced Concrete Pavements <i>Hans De Backer and Amelie Outtier</i>	Reducing Bumps at Pavement-Bridge Interface <i>AKM Anwarul Islam and Amar Shukla</i>	Embedding Leadership Development in Construction Courses <i>Suat Gunhan</i>	
Finite Strain Measurement Based on Image Analysis Using Natural Strain <i>Yasuyuki Kato and Masahiro Futami</i>	Dual Acting Structural Timber-Boxed Concrete System and Metal Stud Stiffened Timber-Box Walls – A Conceptual Development <i>John Mander and Madhu Karthik</i>	Comparison of Two Mixing Methods for Producing 100 MPa High Performance Concrete Rice Husk Ash <i>Hilmi Bin Mahmud and Syamsul Bahri</i>	Behavior of Tubular Metallic Composite Columns Filled with Recycled Aggregate Concrete <i>P.K. Gupta, Heaven Singh and A. Ahuja</i>	Dilemmas of Ethical Practice: A study of Responsible Engineering <i>Anna Yan</i>	Identification of Bottle Neck in Road Network by Using Traffic Simulator <i>Eisuke Kita, Wataru Nanya, Yukiko Wakita</i>
Bracing for Columns with Initial Deformation Subjected to Varying Axial Forces in a Staircase Pattern <i>Liu Mao and Kido Masae</i>	Searching Effective Structural Forms: Evolutionary Structural Optimisation vs Structural Concepts <i>Xiaoye Yu and Tianjian Ji</i>	Development of Highway Pavement Concrete Mixtures for Enhanced Workability and Durability <i>Nadim Wehbe and Jason Stripling</i>	Experimental and Numerical Analysis of Minimum Backfill Cover of Buried Concrete Pipes According to Local Practice of Iraq <i>Abbas Oda Dawood</i>		Perceived Air Quality vs Performance and Productivity <i>Ingrid Senitkova and Miroslav Badida</i>
Vibration Test in a Building Named "Chisuiikan" Using Three-Dimensional Seismic Isolation System <i>Tetsuya Tomizawa, Osamu Takahashi, Junji Suhara, Keiichi Okada, Yasuo Tsuyuki, Takafumi Fujita</i>	A Case for Incorporating Construction Engineering into the Design Process <i>Carlos Banchik and Robert Naples</i>	Fracture Properties of Geopolymer Concrete Cured in Ambient Temperature <i>Pradip Nath and Prabir Kumar Sarker</i>		Computer Supported Distribution and Assessment of Homework Assignments in Mechanics <i>Bostjan Harl, Marko Kegl, Dejan Dinevski</i>	BIM-Based Integration of Energy Saving and Cost Effectiveness for Building Envelopes <i>Po-Han Chen, Long Chan, Yu-Chieh Lee</i>
Development of Nonlinear Transfer Matrix Method for Continuous Beam <i>Minho Kwon, Jinsup Kim, Hyunsu Seo, Wooyoung Jung</i>	Design of Viscous Dampers for the Seismic Retrofit of Plan-Asymmetric Structures <i>Luca Landi, Pier Paolo Diotallevi, Giulia Castellari</i>	The Effect of Coarse Aggregate Saturation Condition on the Properties of Concrete <i>Chee Khoon Ng, Yik Kok Wong, Delsye Ching Lee Teo</i>	Girders with Structured Web – Ongoing Research <i>Harmut Pasternak and Susanne Bartholome</i>	Regulatory Control of Civil and Structural Engineering Education <i>Klaus Holschemacher and Ulrike Quapp</i>	New Waterwheel Blades for Power Generation in Kuroshio <i>Huang Hsing Pan, Po-Chang Lee, Chuan-Tsung Lee, Pou-Sz Lin</i>
Elasto-Plastic Behavior of Offset Beam-to-Column Connection Panels with Exterior Diaphragms <i>Shintaro Matsuo, Takuro Oyamada, Masaki Ozono</i>	NFPA Code Provisions and Fire-Retardant-Treated Wood <i>David Bueche</i>	Effects of Aggregates to the Electrical Resistivities of Concrete <i>Tsung-Chin Hou and Van Kien Nguyen</i>	Structural Performance and Design of Shear Connector and Coupler System of Full-Depth Precast Deck Panel System <i>Young Hoon Kim and David Trejo</i>	Fulfillment of the Engineer's Role under the Construction Contract <i>M. Asem Uthman Abdul-Malak, Isam Srour, Layal Naeem</i>	
On the Modelling of Residual Stress in Advanced Analysis of Steel Frames <i>S. Shayan, K. J. R. Rasmussen and H. Zhang</i>		Fly Ash Based Geopolymer Concrete: A Review <i>Pradip Nath and Prabir Kumar Sarker</i>	Service Life Assessment of a Bridge from Dynamic Response Collected using Wireless Sensors <i>A. K. M. Anwarul Islam, A. B. M. Rahman and Frank Li</i>	Reactions to Emotive Language In Contract Clauses <i>Cindy Menches and Lawrence Dorn</i>	Application Effects of Eco Value Engineering Support System for Urban Regeneration Projects <i>Hong-Won Park, Jong-Hyeob Kim, Chang-Taek Hyun, Sang-Wan Han, Kyung-Ho Yang</i>
Three-Dimensional Elasto-Plastic Analysis of Thick Laminated Composite Plates Using Hybrid-Interface Elements <i>Abhay Bambole and Yogesh Desai</i>	A Study on the Techniques Ofstrain Estimation Toevaluate the States of Building Structures <i>Yunah Shin, Jihoon Lee, Yousok Kim, Hyo Seon Park</i>	Water Absorption Capacity of Latex Modified Concrete <i>Brajkishor Prasad</i>	Widening of an Existing Concrete Girder Railway Bridge with an Asymmetric Steel Section for an Additional Track <i>Amelie Outtier, Bart De Pauw, Hans De Backer, Philippe Van Bogaert</i>	Extreme Service-Learning: Engaging a University Design-Build Course with a Broadcast Network Television Show in the Aftermath of the Joplin Tornado <i>Traci Dawn Sooter, Nancy Chikaraishi, Keith Hedges</i>	Evaluation of Indoor Environmental Quality for Subways in Egypt Using BIM <i>Mohamed Marzouk and Ahmed Abdelaty</i>

End of Day 1 Sessions

Evening Reception: Wednesday, June 19, 2013 - 18:15 - 19:45

Light Pupus (Appetizers) and Beverages

Entertainment: Taiko Endo Drum Dance

Campus Center Ballroom



Thursday, June 20, 2013

07:15 - 17:15

Registration

Campus Center Ballroom

08:00 - 08:45

Keynote: Makarand Hastak, Purdue University, USA
"Effective Debris Management for a Resilient Community"

Campus Center Ballroom

Tea & Coffee Break 08:45 - 09:15 (Campus Center Ballroom)



Technical Session IV: Thursday, June 20, 2013 - 09:15 - 11:15

Session Chair: Alexey Kolesnikov CC307 IV-1: Fatigue & Stability	Session Chair: Svenn Borgersen CC308 IV-2: Strengthening of Structures	Session Chair: Arie Gottfried CC309 IV-3: High-Strength & Pre-Stressed Concrete	Session Chair: Klaus Holschemacher CC310 IV-4: Damage Detection & Retrofit	Session Chair: John Smallwood CC203E IV-5: Best Value & Benchmarking	Session Chair: Indubhushan Patnaikuni CC Exec. Dining Room IV-6: Sustainable Solutions for Environment & Climate
	Silyl Modified Polymer for Steel Members Strengthened with CFRP <i>J. Kim, T. Siriwardanage, I. Yoshitake, S. Yazdani, and M. Yang</i>	High Strength High Volume Fly Ash Concrete <i>Indubhushan Patnaikuni, Sujeeva Setunge, Mochamad Solikin, Xiao Ling, Bindu Boina</i>	Deformability of Concrete Beams Reinforced with Embedded CFRP Plates <i>Rachael Ohu, Mohd Jaafar, Farah Aznieta, Ahmed Al-wathaf</i>	Challenges to Apply Best Value in Malaysia Construction Industry <i>Dean Kashiwagi, Abraham Kashiwagi, Isaac Kashiwagi</i>	
Buckling Analysis of Stiffened Plates With Closed-Section Longitudinal Stiffeners Under Axial Compression <i>Byung Choi</i>	Strengthening Concrete Beams Using Fibre Reinforced Polymer <i>Alan Richardson and Daniel Tarbox</i>	Flexural Behavior of Composite Girders Consisting of Hybrid FRP and Precast Ultra High-Strength Fiber-Reinforced Concrete Slabs <i>S.V.T. Janaka Perera and Hiroshi Mutsuyoshi</i>	Small Hidden Object Identification Through Bridge Weigh-In-Motion Data for Security Purposes <i>Mijia Yang and Lutfur Akand</i>	Best Practices For Inspection Of Underground Pipe Construction <i>Edward Minchin, Lourdes Ptschelinzew, Raymond Issa</i>	Design Solutions to Reduce the Carbon Emissions of Existing Residential Buildings in Hong Kong <i>S. Thomas Ng and Pui Yuen Kwan</i>
Stability of R/C Solar Updraft Towers <i>Takashi Hara</i>	Bond Properties of CFRP Strips and Steel Under Low Temperature <i>Isamu Yoshitake, Hisatsugu Tsuda, Junpei Itose, Nobuhiro Hisabe, Yail Jimmy Kim</i>	Shear Behavior of Reinforced High-Strength Concrete Beams Without Web Reinforcement <i>S.V.T. Janaka Perera, Hiroshi Mutsuyoshi</i>	Repair of GFRP-RC Bridge Barrier <i>Ehab El-Salakawy and Mohammad Rubiat Islam</i>	Best Practices In Design Process Development For Accelerated Construction Project Delivery <i>Edward Minchin, Giovanni Migliaccio, Kenneth Atkins, Gregg Hostetler, Thomas Warne, Gregory Nettuno</i>	Assessment Of Indoor Environmental Quality For Leed Certification In Developing Countries <i>Ruveyda Komurlu, Alsi Pelin Gurgun, David Ardit</i>
Verifying the Stability of Unconventional Cable Stayed Bridges with an Innovative Approach <i>Ieva Misiunaite and Algirdas Juozapaitis</i>	Shear Strength Behavior of Infill Walls Strengthened by Carbon Fiber Reinforced Cementitious Matrix <i>Mehmet Okten, Cemil Ozkan, Mustafa Gencoglu, Kadir Guler</i>	Comparison between Brazilian and French Code Specifications of Verification of Bonded and Unbonded Prestressed Concrete Members <i>Paula Manica Lazzari, Am érico Campos Filho, Francisco Simões Lopes Gastal</i>	Possible Solutions for Realizing the Retrofitting Design of the Asinelli Tower in Bologna, Italy, Using Different Temporary Structures <i>Gialda Gasparini, Tomaso Trombetti, Stefano Silvestri</i>	Understanding Best Management Practice for Integrated High Performance Civil Engineering & Science Teams <i>Simon Clubley</i>	Assessment Of Leed Requirements For Water Efficiency In Developing Country-Based Certification <i>Asli Pelin Gurgun, Ruveyda Komurlu, David Ardit</i>
Fatigue Test of Steel Reinforced Concrete Girders in High-Speed Railway Station <i>Lewei Tong, Qingjun Xian, Liying Zhou, Yiyi Chen</i>	Behavior of Reinforced Concrete Beam-to-Column Connections Strengthened with CFRP Laminates <i>Rania Khattab, Sherif Safar, Magdy El-Sheikh, Nabil Yehia</i>	Environmental Impact Assessment of Post Tensioned and Conventional Reinforced Concrete Slab Design <i>Dane Miller, Jeung-Hwan Doh, Tim Peters</i>	The Effect of Reinforcement on Early-Age Cracking of Bridge Deck Slabs Reinforced with GFRP Bars <i>Ehab El-Salakawy and Amir Ghatfar</i>	Strengths, Weaknesses, and Value of Project Management Implementation: A Project Management Assessment Tool <i>Antonio Sanjuan and Thomas Froese</i>	
Experimental Research on Corrosion Fatigue of GFRP Bar Lightweight Aggregate Concrete Beam <i>Guochang Li, Lei Tian, Tao Liu</i>	Effect of Seismic Retrofitting by CFT Braces on Existing RC Building <i>Hirayuki Nakahara, Sunao Akamatsu, Tatsuya Hanada, Yoichi Onamiya</i>	Comparative Analysis of the Ultimate Stress in Bonded and Unbonded Tendons <i>Paula Manica Lazzari, Am érico Campos Filho, Francisco Simões Lopes Gastal</i>	Construction Usage of Reinforced Steel and Non-Destructive Testing <i>Chen Ming-Chen and Shu-Ping Chang</i>	Managing Value in Realising Construction Projects Through Co-Creational Sensemaking <i>Richard Fellows, Anita Liu, Colin Storey</i>	Bayesian Network Model of Passenger's Injury Due to Traffic Accident <i>Eisuke Kita, Hiroki Kato, Yukiko Wakita</i>
Fatigue Behavior of the Steel Girder Flange with Misaligned Butt Welded Joints <i>Masahiro Sakano, Daisuke Yamaoka, Tetsuya Mizuno</i>	The Resistance Function of FRP-Jacketed RC Columns: Experimental Investigation and Modeling <i>Chung-Sheng Lee</i>	An Experimental study on the Flexural Behavior of Pretensioned Concrete Beams with CFRP Tendons <i>Woo-Tai Jung and Young-Hwan Park</i>	Application of Fuzzy Logic as an Innovative Tool for Structural Health Monitoring of a Model Bridge <i>Mohammad Azarbayejani and Luis Galvan</i>	Schedule Performance Analysis for Integrated Project Delivery <i>Mounir El Asmar and Awad Hanna</i>	Leed Certification: A Comparison Of Contractors' Perspectives <i>Sevgi Zeynep Dagan, Suat Gunhan, Bilge Gercek, David Ardit</i>
Development of Seismic Damage Evaluation Method on Stability of Concrete Gravity Dams <i>Tatsuo Nishiuchi</i>	Sustained Intensities and Cold Temperature Exposure on Flexure of Damaged Steel Beams Strengthened with Composite Sheets <i>Amer Hmidan, Jimmy Kim, and Siamak Yazdani</i>	Experimental Study on the Fire Behavior of High Strength CFT Square Columns Without Fire Protection <i>Kyungsoo Chung, Inrak Choi, Jinho Kim</i>		Construction Strategy Formulation and Assessment <i>Ngoc Tran, Alan Russell, Sheryl Staub-French</i>	Consideration of Greenhouse Warming Potential in Infrastructure Planning <i>Julia Sauer, Sonja Xalter, Oliver Fischer, Stephan Freudenstein</i>

Free Time 11:15 - 11:30

Lunch 2: 11:30 - 13:00 (Campus Center Ballroom)



Technical Session V: Thursday, June 20, 2013 - 13:00 - 15:00

Session Chair: Guochang Li CC307 V-1: Concrete & Concrete-Like Materials (I)	Session Chair: Swapan Saha CC308 V-2: Building Systems I	Session Chair: Thomas Froese CC309 V-3: Creep & Vibration Studies	Session Chair: Henry Hessing CC310 V-4: Analysis of Structures	Session Chair: Suat Gunhan CC203E V-5: Procurement, Delivery & Risk Management	Session Chair: Makarand Hastak CC Exec. Dining Room V-6: Project Management
Geopolymer Concrete Sulphate Resistance <i>Dafiq Sahouryeh and Natalie Lloyd</i>	Innovative Beam-to-Column Joint Design of Moment Resisting Steel Frames in Seismic Regions <i>Mijia Yang, Francisco J. Cantu, Frank Yazdani, Jimmy Kim</i>	Mitigation of Content Damage for Tall Cross Laminated Timber (CLT) Buildings During Earthquake Events <i>Shiling Pei, John W. van de Lindt, Hongyan Liu</i>	Parametric Study of Wind Loads on Canopy Roofs <i>Ashok Kumar Ahuja and Amrit Kumar Roy</i>	The Solution Behind the Revolutionizing of the Dutch Construction Industry <i>Dean Kashiwagi, Jacob Kashiwagi, Abraham Kashiwagi, Kenneth Sullivan</i>	Emotional Quotient (EQ) and Managing Construction Projects <i>John Smallwood, Fidelis Emuze, Charissa Bloomberg</i>
Toughness Tests on Mix-Designed HRC and HSFRC Specimens Performed with Volcanic Aggregate <i>Laura Anania, Antonio Badala, Giuseppe D'agata</i>	Dual Confinement of Circular Concrete Columns by CFRP Sheets and Lateral Steel Reinforcement <i>Klaus Holschemacher and Stefan Kaseberg</i>	Relationships in Creep Development of Timber Beams Under Natural Environmental Conditions <i>Lilita Ozola and Aivars Brokāns</i>	Reconfiguration and Destructibility Design for Industrial Furnace Retrofit <i>Tim Hogue and David E. Stanley</i>	Modeling and Managing Construction Risk <i>Alan Russell and Diego Orozco</i>	Critical Success Factors for LSTK Projects: The Contractors' Perspective <i>Sadi Assaf, Mohammad Hassanain, Khalaf Al-ofi, Hussain Al-Rukhaimi</i>
Properties of Fly Ash and Slag Blended Geopolymer Concrete Cured at Ambient Temperature <i>Partha Sarathi Deb, Pradip Nath, Prabir Kumar Sarker</i>	Structural Design of Freeform Tall Buildings <i>Kyoung Sun Moon</i>	Error Propagation Analysis of Hybrid Simulation for Seismic Hazard Mitigation <i>Cheng Chen and Frank Sanchez</i>	Seismic Retrofit of Existing Buildings with Viscous Dampers: A Direct Procedure for the Determination of the Required Supplemental Damping <i>Pier Paolo Diotallevi, Luca Landi, Simone Lucchi</i>	Contingency Planning During Project Life Cycle <i>Ye Zhang and Ali Touran</i>	A Case Study in Complex Project Management: T-REX <i>Carla Lopez Del Puerto, Jennifer Shane, Douglas Gransberg</i>
Effect of Curing Method and Curing Period on Characteristic of Compressive Strength for Ca Concrete <i>Atsushi Shimabukuro and Ken-Ichi Hashimoto</i>	Structural Design of Building Using Directly Connected Method with Steel Tube Column and Pile Head <i>Akifumi Takeda and Haruyuki Yamamoto</i>	High Velocity Impact Responses of Engineered Cementitious Composite Panels <i>Y.X. Zhang, Khin Soe, L.C. Zhang</i>	Composite Concrete/GFRP Slabs Under Concentrated Loads <i>Roberto C Pinto, Daniel Vieira V, Henriette L Larovere</i>	The True Effect of Correlation in Risk Assessment of Large Construction Projects <i>Eduardo Gamez and Payam Bakhshi</i>	EWB: Constructing a Bridge in Nicaragua <i>Roger Tamaru, Conor Hyland</i>
High Strength Concrete with Carbon Nanotubes <i>Rudolf Hela, Lenka Bodnarova, Ales Florian, Lenka Sevelova</i>	Modeling of Steel Angle Braces Behavior and its Utilization in Frame Design using Advanced Analysis <i>Anna Maria Barszcz and Marian Antoni Gizejowski</i>		Effects of Coupling Ratios on the Behavior of Coupled Walls <i>Chung-Chan Hung and Wei-Ting Lu</i>	A Balanced Risk Treatment For Construction Projects <i>Maged Georgy, Nael Zabel, Moheeb Ibrahim</i>	Exploring Construction Management Students' Preferences Regarding Employer Organizational Culture <i>Carla Lopez del Puerto and Evie Chenhall</i>
Structural Engineering and Testing Fiber Reinforced Concrete Material Properties <i>Clifford MacDonald</i>	Problems of Behaviour and Analysis of Glass Structural Members with Respect to Their Application in Construction <i>Jindrich J. Melcher and Marcela Karmazinová</i>	Dynamic Response Analyses for Human-Induced Lateral Vibration on Congested Pedestrian Bridges <i>Masahiro Yoneda</i>	Critical Buckling Moment in Plate Girders with Stiffeners, Discrete Lateral Torsional Restraints and a Combination of Both <i>Ayman Y. Nassif and Antonio J. A. Naveira</i>		Project Alliances in the Australian Construction Industry - Transaction Attributes and Costs <i>Gang Chen, Guomin Zhang, Yi-Min Xie</i>
Quick Method for Evaluating Concrete Carbonation Suppressive Performance of Coating Materials <i>Yasuharu Kawamura and Kenji Motohashi</i>	Diagnostics of Existing Steel Roof Structures of Winter Stadiums <i>Marcela Karmazinova, Jindrich J. Melcher, Lubomir Vitek</i>		Seismic Retrofit of Soft-Story Wood-frame Buildings using Cross Laminated Timber <i>John van de Lindt, Pouria Bahmani, Mikhail Gershfeld, Giraj Kumar Kandukuri, Shiling Pei</i>	Owner Controlled Delivery of Construction Degrades Quality and Value <i>Dean Kashiwagi, Jacob Kashiwagi, Jake Smithwick, Isaac Kashiwagi, Abraham Kashiwagi</i>	Analysis and Definition of Spatial Temporal Measures <i>Abdel Hady Hosny, Khaled Nassar, Ossama Hosny</i>
Compressive and Splitting Tensile Strength of Autoclaved Aerated Concrete (AAC) Mixed Perlite Under High Temperatures <i>Borvorn Israngkura Na Ayudhya and Yothin Ungkoon</i>	Experimental Evaluation of Strength and Stiffness of Innovative Concrete/Cold-Formed Steel Composite Beam <i>Nadim Wehbe and Pouria Bahmani</i>	Experiences From the Reconstruction After the 2009 L'Aquila Earthquake: Damage, Vulnerability, Retrofitting <i>Marco Mezzi and Paolo Petrella</i>	Some Considerations for Safety and Robustness of Structures <i>Lilita Ozola</i>	Should the Trend from Traditional Design/BID/Build Project to More Negotiated and/or Design/Build Projects Affect Construction Project Planning and Control Systems? <i>Thomas Korman, Hal Johnston, Lonny Simonian, Na Lu</i>	

Tea & Coffee Break 15:00 - 15:30 (Campus Center Ballroom)



Technical Session VI: Thursday, June 20, 2013 - 15:30 - 17:00

Session Chair: Ali Touran CC307	Session Chair: Alan Russell CC308	Session Chair: Mijia Yang CC309	Session Chair: Brajkishor Prasad CC310	Session Chair: Kishore Biswal CC203E	Session Chair: Max Shoura CC Exec. Dining Room
VI-1: Concrete & Concrete-Like Materials (II)	VI-2: Building Systems II	VI-3: Modeling & Optimization	VI-4: Facilities & Housing	VI-5: Concrete Systems	VI-6: Construction Processes & Transaction
Recycled Concrete and Demolition Waste Aggregate in Concrete <i>Natalie Lloyd, Katarina Van Der List, Natalie Re</i>	Structural Systems for Tapered Tall Buildings <i>Kyoung Sun Moon</i>	From Affordability to Sustainability and Durability: Earthen Masonry for Hot and Humid Regions <i>Esther Obonyo</i>	A Study of Building Foundations in Perth CBD, Western Australia <i>Vinod Ravji Rupalia and Vanissorn Vimsatit</i>		Implementation of a Real-Time Information System for a Roofing Manufacturer <i>Dean Kashiwagi, Dhaval Gajjar, Jake Smithwick, Jacob Kashiwagi</i>
A Laboratory Study on Use of Waste Polyethylene in Bituminous Concrete Mix <i>Mahabir Panda, Biswanath Prusty, Ujjal Chattaraj</i>		Damage Localization of Structures Identified with Deterministic-Stochastic Models Using Seismic Data <i>Yen-Po Wang, Tzu-Kang Lin, Kung-Chung Lu, Yi-Ting Lin, Ming-Lian Chang</i>	Active Control of Across-Wind Responses of Tall Building <i>Y. M. Kim, K. P. You, J. Y. You</i>		Transaction Formalism Protocol In The Domain Of Infrastructure Management <i>Jehan Zeb and Thomas Froese</i>
Effects of a Hydrogel on the Material Properties of Mortars <i>Kung-Chung Hsu and Yi-Ting Chou</i>	Numerical Analysis on Direct Connection With Steel Tube Column and Pile Head <i>Akifumi Takeda and Haruyuki Yamamoto</i>	Hybrid Genetic Algorithm for Optimal Seismic Design <i>Se Woon Choi, Yousok Kim, Hyo Seon Park</i>	Development of a Radiant Barrier Residential Roof Energy Saving Calculator for Southern US Climatic Conditions <i>Somayeh Asadi and Marwa Hassan</i>	Flexural Behavior of Concrete Beams Reinforced with High Volume Steel Fibers <i>Alireza Khaloo, Hooman Sedaghat Jahromi, Armita Mohammadian</i>	A Framework for a Carbon Management System For Large-Scale Construction Projects <i>Hyunwoo You, Kang-Wook Lee, Woosik Jang, Ja Bum Lee, Seung-Heon Han, Kyeong-Hee Jeong</i>
Development of Green High Strength Lightweight Concrete in Malaysia <i>Hilmi Bin Mahmud, Payam Shafiqh, Mohd Zamin Jumaat</i>	Experimental Study on Flexural Strength of Beam web of H-Shaped Steel Beam Web with Slabs Connected to Circular CFT Columns <i>Sha Li and Masae Kido</i>	Topology Optimization by Using a Level Set Function and Design Elements <i>Marko Kegl, Bostjan Harl, Dejan Dinevski</i>	Sensitivity Analysis of Attic Radiant Barrier Performance to Climate and Local Environmental Variables in the United States <i>Somayeh Asadi and Marwa Hassan</i>		Optimal Fleet Selection for Earthmoving Operations <i>Jiali Fu, Erik Jenelius, Haris N. Koutsopoulos</i>
Effectiveness of Ceramic Waste as Fine Aggregate in Mortar <i>Hiroshi Higashiyama, Manote Sappakittipakorn, Kiyoshi Yamauchi, Osamu Takahashi</i>		Study on Integrated Computer Aided Design Method for Series of Steel Roof Truss Based on Genetic Algorithm <i>W. Punurai, W. Nantayatron, N. Pholdee</i>	Accounting for Stakeholder Perceptions in Sustainable Retrofits of Existing Buildings using House of Quality Approach <i>Carol Menassa and Bradley Baer</i>	Structural Analysis and Design of Replacement Water Columns for Boilers <i>L. David Wilson, Jason C. Merritt and B. David Gibson</i>	Enhancing Schedule Compression Process Using Evolutionary Optimization Techniques <i>Kamran Hazini, Reza Dehghan, Janaka Ruwanpura</i>
Effects of Segregation on Test Results of Mechanical Properties of Concrete <i>Zhuguo Li</i>	A Dismantleable Prefabricated Reinforced Concrete Building System with Controlled Joint Properties for Multi-Storey Buildings <i>Jiri Witzany, Tomas Cejka, Radek Zigler</i>	Unconditionally Stable Explicit Integration Algorithms with Controllable Numerical Damping for Real-Time Hybrid Simulation <i>Cheng Chen and Neli B. Avramova</i>	A Steel Bridge Rust Discrimination Approach Combining Support Vector Machine and Neural Networks <i>Po-Han Chen, Heng-Kuang Shen, Luh-Maan Chang</i>		Uncertain and Real-Time Construction Logistic Data for Proactive-Reactive Simulation-Based Scheduling <i>Lars Laussat and Manfred Helmus</i>

Free Time 17:00 - 19:00

Conference Banquet: Thursday, June 20, 2013 - 19:00 - 21:45

Dinner Banquet Function

Entertainment: Tihati Productions Ltd.

Campus Center Ballroom

Technical Tours: Friday, June 21, 2013

<i>Technical Tour 1 (TT1) - Waste Energy: HPOWER, Waste Management, Hawaiian Earth Products</i>	[07:45-16:15]
<i>Technical Tour 2 (TT2a) - HECO (Hawaiian Electric Company): Bio-Fuel (CIP) Plant, Kahe Power Plant</i>	[11:45-16:15]
<i>Technical Tour 2 (TT2b) - HECO (Hawaiian Electric Company): Kahe Power Plant, Bio-Fuel (CIP) Plant</i>	[11:45-16:15]
<i>Technical Tour 3a (TT3a) - AECOM Military Construction Project & H-3 Control Room (Group 1)</i>	[08:15-13:00]
<i>Technical Tour 3a (TT3a) - AECOM Military Construction Project & H-3 Control Room (Group 2)</i>	[10:15-15:00]
<i>Technical Tour 3b (TT3b) - Kawailoa Wind Farm (Bus 1)</i>	[9:45-15:30]
<i>Technical Tour 3b (TT3b) - Kawailoa Wind Farm (Bus 2)</i>	[9:45-15:30]



Accompanying Persons Tours: 5 Person Minimum Required

<i>Accompanying Person Tour 1 (APT1) - June 19, 2013 : Arizona Memorial, Chinatown, Ala Moana Shopping Center</i>	[09:30 - 16:45]
<i>Accompanying Person Tour 2 (APT2) - June 20, 2013 : Circle Island - Diamond Head, Hanauma Bay, Blowhole, Makapu`u, Sunset Beach, Haleiwa Town, Dole Pineapple Plantation</i>	[08:45 - 16:00]

Cultural Tours: 8 Person Minimum Required

<i>Cultural Tour 1 (CT1) - June 22, 2013: Polynesian Cultural Center</i>	[12:00 - 22:45]
<i>Cultural Tour 2 (CT2) - June 23, 2013: Ali`i Kai Dinner Cruise</i>	[12:00- 21:30]