

Research, Development, and Practice in
**Structural Engineering
and Construction**

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RESEARCH, DEVELOPMENT, AND PRACTICE IN STRUCTURAL ENGINEERING AND CONSTRUCTION

Editors: Vanissorn Vimonsatit, Amarjit Singh and Siamak Yazdani

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Preface

Technological advancements in structural engineering and construction are the outcome of collective research, development and practical innovation from individuals, research communities, and industrial professionals. An international conference serves as an effective platform for bringing together the latest advancements in research, development, and practice.

The First Australasia and South East Asia Conference in Structural Engineering and Construction (ASEA-SEC-1) is an inaugural regional conference that is a branch of ISEC conferences aimed at bringing together academics and practitioners. The conference is held on the campus of Curtin University, Perth, Western Australia during 28 Nov – 2 Dec, 2012.

The structure of this book reflects the structure of the conference in that there are 32 sections that correspond to 32 sessions in the conference. There are 184 articles from 38 countries by 372 authors and co-authors. All the articles have been selected after a rigorous peer-review process of two stages – the abstract review and the full paper review. The 184 papers selected for the presentation in parallel technical sessions provide the focal discussion points on relevant and related topics.

This book covers a wide range of topics in the area of legal affairs and contracting, construction technology and innovation, facilities and asset management, project management and risk analysis, safety and quality, planning and development, analysis and design of structural systems, materials, pavement, architecture, water infrastructure and management, and education and sustainability, among many more.

We congratulate and thank the authors for their articles that are published in this book. Many thanks are due to members of the International Technical Committee and all the reviewers for their assistance in the review process. Special mention must be given to Curtin University, Bentley Campus, for providing the facilities which enable the conference to be organised.

Dr. Vanissorn Vimonsatit, *Curtin University, Bentley Campus, Perth*
Dr. Amarjit Singh, *University of Hawaii at Manoa, Honolulu*
Dr. Siamak Yazdani, *North Dakota State University, Fargo*
Editors

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Table of Contents

<i>Preface</i>	v
<i>Acknowledgements</i>	vi
<i>Committees</i>	vii
Keynote Paper	
Management Science Under the Lens of Chaos <i>Amarjit Singh</i>	3
Behavior of Structures Under Seismic Loading	
Seismic Performance Assessment of Steel Moment Frames with Generic Locally Reinforced Connections <i>S. A. Jalali and M. Banazadeh</i>	15
Impact of Near-Field Ground Motions on the Vulnerability of Multi-Story Buildings <i>Aman Mwafy</i>	21
Next Generation Partial Strength Steel Moment Frame Connections for Seismic Resistance <i>Steven E. Pryor and Thomas M. Murray</i>	27
Development of Modal Pushover Analysis Method of Unsymmetric-Plan of Reinforced Concrete Structures Under Major Earthquake Motion <i>Bambang Budiono and Lingga Kencana Octaviansyah</i>	33
Seismic Performance of Vertically Mass Irregular Reinforced Concrete Structures in the UAE <i>Samer Barakat and Helal Alsahi</i>	39
An Alternative Pushover Analysis Procedure to Estimate Seismic Displacement Demands for Irregular Bridges <i>Chang-Wei Huang, Hsiao-Hui Hung, Hao-Jen Liao and Kim-Kuo Jeng</i>	45
Behavior of Structures Under Seismic Excitation	
Earthquake Observation Record in the Building Using Three-Dimensional Seismic Base Isolation System <i>Tetsuya Tomizawa, Osamu Takahashi, Junji Suhara, Keiichi Okada, Yasuo Tsuyuki and Takafumi Fujita</i>	53
Vulnerability and Cost Assessment of Seismically Strengthened RC Buildings <i>Said Elkholy and Aman Mwafy</i>	59
Seismic Performance Evaluation of Nuclear Piping System Using Shaking Table <i>Jin Hwan Cheung, Hyung Suk Choi, Young Deuk Seo and In Tae Kim</i>	65

Out-of-Plane Earthquake Load on Slender Precast Concrete Wall Panels Connected to Steel Frames <i>Joo H. Cho</i>	71
Seismic Response of Steel Structures with Elastic Hinge Joint System Focussing on Fluctuating Axial Forces at Column Bases <i>Masahiro Ikenaga, Hiroshi Muto, Junichi Takahashi and Yasushi Uematu</i>	77
Seismic Performance Evaluation of Retrofitted Wooden-House by Collapsing Process Analysis <i>Tomiya Takatani and Hayato Nishikawa</i>	83
Nonlinear Behaviour of Structures (I)	
Numerical Analysis of the Load Bearing Capacities of R/C Wall Panel <i>Takashi Hara</i>	91
Numerical Simulation of Mechanical Behavior of Steel-Encased Concrete Filled FRP Tubes Column Under Unidirectional Eccentric Compression <i>Haixia Zhang and Pengpeng Cao</i>	97
Application of Finite-Element Model Updating in Damage Detection of Offshore Jacket Platforms Using Particle Swarm Optimization with Noisy Modal Data <i>Hassan Malekzhehtab, Ali Akbar Golafshani and Hamid Nikraz</i>	103
Comparisons of Two and Three Dimensional Nonlinear Dynamic Analyses Results of a Roller Compacted Concrete Dam <i>Baris Binici, Yalin Arici, Alper Aldemir and Altuğ Akman</i>	109
Second Order Analysis for Eurocode 3 Implementation at the National Level in Poland <i>Marian Gizejowski and Anna Barszcz</i>	115
Indicative Seismic Risk GIS-Based Maps for the City of Sharjah, UAE <i>S. Barakat, A. Shanableh and K. Abu-Dagga</i>	121
Nonlinear Behaviour of Structures (II)	
Shakedown Analysis of Layered Continuum <i>Jim Shiau</i>	129
Dynamic Analysis of Offshore Structures Under Wind and Wave Loads Using Finite Element Method <i>Anis A. Mohamad Ali and Jaffar A. Kadim</i>	135
Exterior Cast-in-Place and Welded Precast Concrete Frames Under Cyclic Loading <i>Chayanon Hansapinyo</i>	141
Parametric Finite Element Study of Longitudinal Plate-to-CHS X-Connections Under In-Plane Bending <i>Hee-Du Lee, Kyung-Jae Shin and Dong-Baek Kim</i>	147

Hysteresis Research of Gangue Concrete-Filled Circular Steel Tubular Pure-Bending Members <i>Li Guochang, Bai Ji and Fang Chen</i>	151
Elasto-Plastic Analysis for Finite Deformation Using Natural Strain (Shape of Yield Surface Obtained after Pre-Deformation of Uni-Axial Tension) <i>Yasuyuki Kato, Akihiro Kazama and Yuji Otsuka</i>	157
Building Structures	
Modelling Scaffold Support System for Linear Analysis <i>Bilal El-Ariss and Essam Zaneldin</i>	165
Deconstruction and Reuse of Building Material, with Specific Reference to Historic Structures <i>Andrew Whyte and Richard Laing</i>	171
Design Optimization of Industrial Portal Frame with Overhead Cranes <i>Mehdi Shokouhian and Reza Sadeghi</i>	177
Joint Model for Connection with Steel Tube Column and Pile Head <i>Akifumi Takeda and Haruyuki Yamamoto</i>	183
Estimations and Quality Assessments of Strain Parameters of a Deformation Field <i>Jenny Guo, Jen-Yu Han, Hui-Ping Tserng and Chih-Ting Lin</i>	189
The Use of Carbon Fiber Reinforced Polymer (CFRP) for Reinforcing Walls of Aerated Concrete Blocks in Buildings, Constructed in Seismic Regions <i>A. Granovskiy and B. Dzhamuev</i>	195
Strengthening of Structures	
Effective Shear Strengthening Method for Flexurally Strengthened RC Beams <i>M. A. Rahman, M. Z. Jumaat, Md. Safiuddin and M. A. Salam</i>	203
Seismic Strengthening with Externally Bonded FRP of Low-Rise, Single Span Reinforced Concrete Buildings <i>Chayanon Hansapinyo, Wara Sagolvitayanont and Manabu Matsushima</i>	209
A Discussion on Mechanisms for Achieving High Ductility of Repair Materials Patched on Concrete Substrate <i>Ayumi Satoh, Kanji Yamada and Yasuji Shinohara</i>	215
Questionnaire Investigation of Surface Deterioration of Lining-Concrete in NATM Tunnel <i>Isamu Yoshitake, Hiroki Komure, Masato Kakehi, Akinori Hiraoka and Yukihisa Inagawa</i>	221
A Simplified Load-Slip Model for Composite CFRP-GFRP Laminates Bolted to Steel Plates <i>Mohammed M. A. Alhadid, Amr M. I. Sweedan and Khaled M. El-Sawy</i>	227

- Application of High Performance Precast Steel Fiber Thin Plate to Strengthen Reinforced Concrete Beam 233
Farah N. A. Abdul Aziz

Concrete and Prestressed Concrete Structures

- Uncertain Creep Analysis of Concrete-Filled Steel Tubular Columns 241
Yong-Lin Pi and Mark Bradford

- Automatization of Design Procedures for Prestressed Concrete Members According to the Brazilian and French Code Specifications 247
Paula Manica Lazzari, Américo Campos Filho and Francisco De Paula Simões Lopes Gastal

- Determination of the Ultimate Stress in Flexural Elements with Unbonded Tendons 253
Paula Manica Lazzari, Américo Campos Filho and Francisco De Paula Simões Lopes Gastal

- An Innovative Construction Method for Precast Arch Bridge 259
Geem Eng Tan, Tai Boon Ong and Kok Keong Choong

- Shotcrete Prefabricated Ferrocement Panels by Using WA Mixture Materials 265
Nadim Abushawashi, Vanissorn Vimonsatit and George Hopkins

- Prestressed Steel – Concrete Composite Bridge 271
Pramod Kumar Singh, Vikash Khatri and R. K. Tyagi

Behavior of Concrete Structures

- Experimental Research on Regional Confined Concrete Columns Under Super-High Axial Compression Ratios 279
Cao Xinming, Yang Lilie, Liang Tao and Ran Qun

- Examination of Performance Limits for Shear Critical Reinforced Concrete Columns 285
K. Erguner, R. Ozcelik and B. Binici

- Experimental Study on Bond Performance of RC Beams Subjected to ASR Expansion 291
Maki Mizuta, I Gusti Made Shota Sattwa, Kazuhiro Kuzume and Takayuki Kojima

- Seismic Behavior of Concrete End Diaphragms in Straight Slab-Girder Bridges 297
Sheroin Maleki and Himan Hojat Jalali

- Experimental Verification of Automated Design for the Reinforcement in Deep Beams with Openings 303
S. M. Shahidul Islam and Amar Khennane

Steel Structures (I)

- Development of a New Shear Connector Using Burring Steel Plate 311
Teruhisa Tanaka and Junichi Sakai

- Capacity of Electrical Transmission Towers Under Downburst Loading 317
Ashraf El Damatty and Haitham Aboshosha

- Actual Steel Moment Frame Behavior and Computer Models 323
Muang-Sangop Seniwongse

- A Study on the Failure Behavior of Damaged TP 316 Stainless Pipe 329
Jin Hwan Cheung, Seong Do Kim, Man Soo Gae, Seock Jin Choi and In Tae Kim

- Experimental and Computational Studies on Steel Base Plates on Leveling Nuts 335
Abdul Wahab Kayani and Sami W. Tabsh

Steel Structures (II)

- Application of Proposed Stiffness Reduction Index on Cracked Steel Beam 343
Moatsem M. Fayyadh and Hashim Abdul Razak

- Effects of the Plate Slenderness Ratio on Built-Up Back-to-Back Channels Stub Columns 349
T. C. H. Ting and H. H. Lau

- Moment Optimization of Portal Frame Using Structural Members with Non-Uniform Section 355
M. Leekitwattana

- Cold Formed Steel in Construction – Review of Research, Challenges and Opportunities 359
Sreedhar Kalavagunta, Sivakumar Naganathan and Kamal Nasharuddin Bin Mustapha

- Assessment of Local Buckling Capacity of Steel Beams Bonded with GFRP Plates 365
M. A. A. Siddique and A. A. El Damatty

- Development of a Curved Bridge-Vehicle Interaction Model and Human Perception to Traffic-Induced Vibration 371
Md. Robiul Awall, Toshiro Hayashikawa, Takashi Matsumoto and Xingwen He

Behavior of Concrete and Concrete-Like Materials (I)

- Self-Consolidating Concrete 379
Muang-Sangop Seniwongse

- Quantifying the Whole Life Benefit of Preserving Concrete Pavements Using Silicon Reactive Lithium Densifier and Shotblasting – A Promising New Technology 383
Douglas D. Gransberg and Dominique M. Pittenger

Asphalt Concrete Mixtures Properties by Using Basalt Aggregates <i>Watcharin Witayakul, Somsak Chotichanatha Wewong and Weerakaset Suanpaga</i>	389	Influence of Concrete Surface Treatment on Chloride Induced Reinforcement Corrosion Rate <i>Amr S. El-Dieb, Ahmed F. B. Oan, Mona M. Abdelwahab and Samir H. Okba</i>	469
Design of Alkali Pozzolan Cement (APC): Early Compressive Strength <i>Chandana Kulasuriya, Vanissorn Vimonsatit and W. P. S. Dias</i>	395	Analysis of Chloride Diffusivity in Concrete Containing Red Mud <i>D. V. Ribeiro and M. R. Morelli</i>	475
A Study of the Osmotic Properties of Hardened Cementitious Materials with Waterproofing Materials <i>Sunghyun Lee, Sehoon Jeon and Myongshin Song</i>	401	A Critical Review on the Utilization of Fly Ash in Concrete Production <i>Salim Barbhuiya</i>	481
Utilization of Bagasse Ash as Fine Aggregate in Non-Autoclave Cellular Concrete <i>Patchara Onprom, Somchai Inthata and Raungrut Cheerarot</i>	407	Geopolymer Concrete	
Behavior of Concrete and Concrete-Like Materials (II)		Geopolymer from Alkali-Activated Metakaolin <i>Daniel A. Carneiro, Adriana G. Gumieri and Maria Teresa P. Aguilar</i>	489
Laboratory Evaluation of Polymer Modified Mortar Incorporating Waste Latex Paint Effluent <i>Mohammad Ismail, Muhammad Aamer Rafique Bhutta and Ainul Haezah Noruzman</i>	413	Determination on Strength Properties of Geopolymer Concrete <i>V. Bhikshma, T. Naveen Kumar and K. Swaraj</i>	495
Mechanical Properties of Oil Palm Shell Foamed Concrete – A Micro-Structural approach Using Sem <i>U. Johnson Alengaram and B. A. AL Muhit</i>	419	Extraction of Alkaline Solution from Cocoa Pod Husk for Synthesis of Geopolymer <i>Mohammad Bin Ismail and Taliat Ola Yusuf</i>	501
Evaluation of Chloride Penetration in Concrete Containing Ground Rice Husk Ash <i>Somchai Inthata and Raungrut Cheerarot</i>	425	Sulfate and Sulfuric Resistance of Fly Ash Geopolymer <i>T. Chareerat, K. Pimraksa, S. Hatanaka and P. Chindaprasit</i>	507
Use of Coal Fly Ash in Concrete Mix <i>T. G. Suntharavadivel, K. W. Chau, K. Duan and N. Ashwath</i>	431	Mechanical Characteristics of Geopolymer Concrete Using Bottom Ash and Fly Ash <i>G. S. Ryu, K. T. Koh, S. H. Kim, S. T. Kang and J. H. Lee</i>	513
Behaviour of High Strength Concrete with Recycled Aggregate and Fly Ash <i>K. Jagannadha Rao, Sastri V. S. S. Malladi and K. Sridhar</i>	437	Geotechnical and Foundation Engineering	
Carbonation of High Strength Concrete Containing Class F Fly Ash <i>Pradip Nath and Prabir Sarker</i>	443	Performance of Lightweight Geomaterials Reinforced with Geogrid for Bridge Approach Utilization on Soft Ground Area <i>Tawatchai Tanchaisawat, Dennes T. Bergado and Manop Kaewmorachareon</i>	521
Stength and Diffusivity of Concrete		An Insight into the Load-Bearing Capacity of Geosynthetic-Reinforced Foundations <i>Md. Monir Hossain and Sanjay Kumar Shukla</i>	527
Effect of Fly Ash on Datum Temperature for Concrete Strength Prediction <i>Suvimol Sujjavanich and Sawasdichai Jermtaisong</i>	451	Developing Numerical Models for the Design of Cantilever Sheet Pile Wall <i>Jim Shiau and Catherine Smith</i>	533
Effects of Palm Oil Fuel Ash on the Permeable Porosity and Water Absorption of High-Strength Concrete <i>Md. Safiuddin, M. Z. Jumaat, M. A. Salam and M. A. Rahman</i>	457	An Operational Solution to Overcome the Very Poor Subgrade Soil Condition of the Azadegan Freeway <i>Hossein Asadi, Behzad Ghadimi and Hamid Nikraz</i>	539
The Diffusivity of Lithium Compounds Through Cement Pastes and its Effects on ASR Mitigation <i>Oswaldo Andrade, Irfan Prasetya and Kazuyuki Torii</i>	463	The Effects of Compliance and Grain Size on the Outcome of Soil Pressure Measurement in Granular Soils <i>Mark L. Talesnick</i>	545
		Assessment of Geotechnical Properties of British Coal Measures Rocks for Construction <i>Haslinda Nahazanan, Afshin Asadi and Sam Clarke</i>	551

Geotechnical and Pavement Structures

- Effect of Stage Construction on Numerical Modeling of Layered Flexible Pavement System 559
Behzad Ghadimi, Hossein Asadi and Hamid Nikraz
- Impacts on Dynamic Response of the Pavement Structure Caused by Parameters Variation 565
Bu Jian-Qing and Zhang Da-Ming
- Estimation of Earthquake – Induced Ground Settlement 571
R. P. Sharma and A. Kumar
- Effect of Damping on Response of Pile Group 577
K. B. Ladhane, V. A. Sawant and S. K. Shukla
- Scattering of Rayleigh Waves by a Trapezoidal Canyon 583
S. Mohsen Haeri, Behzad Ghadimi and Hamid Nikraz

Structures Under Lateral and Fatigue Loadings

- Lateral Loading Test on Existing Three-Story Building 591
Hiroyuki Nakahara
- Development Study on Device to Reduce Seismic Response by Using Soil-Bags Assembles 597
Haruyuki Yamamoto and Hongyang Cheng
- Fatigue Strength of Misaligned Butt Welded Joints in the Bottom Flange 603
Masahiro Sakano, Daisuke Yamaoka and Tetsuya Mizuno
- Near-Fault Amplification Factor by Using Wavelet Method 607
Mohsen Tehranizadeh and Homa Shanehsazzadeh
- Wind Force Coefficients for Designing Porous Free-Standing Canopy Roofs 613
Yasushi Uematsu, Hiromichi Sakurai, Yukari Miyamoto and Eri Gavanski
- An Assessment of Below Water Table Retaining Wall Underpass Built with Heavy-Weight Concrete as Counterweight 619
Abul Kalam Azad and Saad Aiban

Analytical and Experimental Methods in Structures

- Measurements of Structural Vertical Displacement Using Digital Image Correlation Methods 627
Chih-Hung Chiang, Jiunnren Lai, Yi-Wen Chen and Yi-Fong Huang
- Proposal of Crack Detection Method for RC Beam by Digital Image Correlation Method 633
Yoshihiko Tsukuda, Shinichi Miyazato, Mikio Toshima and Michio Uneda
- Identification and Evaluation of Factors Affecting Pipe Spool Welding Productivity on Construction Job-Site 639
Mehdi Takabi, Rashid Seyedian and F. F. Alireza Ahmadian

- Load-Carrying Capacity of System Scaffold Structure Used in Construction 645
Jui-Lin Peng, Chi-Lin Pan, Ming-Hsiang Shih and Yeong-Bin Yang
- Experimental Study on Buckling of the Vertical Frame of Scaffolds Subjected to Eccentric Load 651
Hiroki Takahashi, Katsutoshi Ohdo and Seiji Takanashi
- Force Transfer Using Structural Adhesive Bonding between Timber and UHPFRC – A Push-Out Test to Choose the Adhesive 657
Georges Youssef, Louisa Loulou, Syloain Chataigner, Andre Flety, Christophe Aubagnac, Sabine Care and Robert Le Roy
- Performance of Structural Members and Connections**
- Structural Performance of Steel and Concrete Composite Columns Covered by Thin Steel Tube 665
Yo Kuratomi, Junichi Sakai and Teruhisa Tanaka
- Evaluation of Direct Tensile Behavior Characteristics of UHPC Using Both Hooked Long Fibers and Straight Short Fibers 671
K. T. Koh, G. S. Ryu, S. K. Ahn and S. T. Kang
- Flexure Behavior of Hybrid High Performance Concrete Construction 677
Abul Kalam Azad and Ibrahim Hakeem
- Flexural Behavior of PVA-Fiber Reinforced Lightweight Concrete 681
Klaus Holschemacher
- Numerical Study of Seismic Base Plate Connections 685
S. Maleki and M. H. Mollazeinal
- A Mechanical Model for Frame Structures with Column Splices 691
Shujin Duan, Kanhui Jin, Ran Wang, Yanqing Zhang and Zhe Geng
- Bridge and Structural Health Monitoring With Rehabilitation**
- Remaining Strength Evaluation Method of Corroded Steel Tube with In-Situ Measured Thickness 699
Toshiya Uemura, Katashi Fujii, Tatsumasa Kaita and Ryouichi Satake
- Application of Silane Impregnation in the Rehabilitation of Concrete Bridge Deteriorated by De-Icing Salts 705
Atsuo Ogawa, Yoshimori Kubo, Yoshituki Momiyama and Yasunori Hashizume
- Performance of RC Beams Strengthened with Mechanically-Fastened FRP System Under Corrosion Environment 711
Tamer El Maaddawy, Amna Nessabi and Amr El Dieb
- Inelastic Stability of Steel Liners with Local Imperfections 717
Khaled M. El-Sawy
- Tensile Strength of Corroded Plate Rehabilitated by Steel Cover Plates with Adhesive Under Cyclic Loading 723
Yuma Uemura, Katashi Fujii, Mitsuo Fukuda and Hisakazu Horii

A Generation Model of Artificial Surface Unevenness Imitating Actual Corrosion and its Application to Remaining Strength Analysis of Corroded Member <i>Taro Inoue, Katashi Fujii and Yasunori Yamashita</i>	729
Analysis of Structures Under Extreme Loads, Damage, and Vibrations	
A Study on the Change of Cement Hydrates and Residual Strength of Concrete due to Fire Exposure <i>Seungmin Kang, Hyunju Kang and Myongshin Song</i>	737
Thermal Modelling and Full-Scale Fire Testing of a Steel Door-Leaf Opening into a Standard Fire <i>Ayman Nassif</i>	743
Response of Orthotropic Plates to Localized Blast Load <i>Sofia W. Alisjahbana and Wiratman Wangsadinata</i>	749
Structural Damage Detection Using Finite Element Model Updating Using Particle Swarm Optimization with Noisy Modal Data <i>Hassan Malekzehtab, Ali Akbar Golafshani and Hamid Nikraz</i>	755
Measurement and Modeling of Traffic-Induced Ground Vibrations <i>Samo Lubej, Primož Jelušič, Andrej Ivanič, Marjan Lep and Sebastian Toplak</i>	761
Water Engineering and Hydrology	
Combined Wavelet-Neural Network Model for Intermittent Stream Flow Prediction <i>Honey Badrzadeh, Ranjan Sarukkalige and A. W. Jayawardena</i>	769
Sensitivity Analysis of Catchment Characteristics in Urban Stormwater Management Modeling <i>Amila Prasad Basnayaka and Priyantha Ranjan Sarukkalige</i>	775
Correlation of Soil Permeability and Particulate Size Distribution with Respect to Urban Stormwater Management <i>Dumal Kannangara and Ranjan Sarukkalige</i>	781
Drainage Design for a Freeway to Counter Water Infiltration Effects <i>Hossein Asadi, Alireza Asadi, Behzad Ghadimi and Hamid Nikraz</i>	787
Geotechnical Investigation of the Relationship Between Physical Properties and Saturated Hydraulic Conductivity by Using the Empirical Formulas <i>Dumal Kannangara, Ranjan Sarukkalige and Markus Botte</i>	791
The Hydrodynamics of Swan Estuary – Using a Numerical Approaches <i>M. Hajiani and P. R. Sarukkalige</i>	795

Sustainable Built Environments

Assessment of Embodied Energy and Carbon Emission of Building and Construction Processes in Malaysia Using Process-Based Hybrid Analysis <i>W. O. Wan Sabki, J. H. Doh, K. Panuwatwanich, A. Balasubramaniam, D. Miller and J. W. Kim</i>	803
Maintenance Oriented Approach – Technological Design to Ethic of Sustainability <i>Michele Di Sivo and Daniela Ladiana</i>	809
Mitigation of Environmental Impact with Ground Source Heat Pump System <i>Masatoshi Yamaguchi, Kiichi Numazawa, Yoshito Horino and Masahiko Katsuragi</i>	815
Study on Mine Wastes as Potential Resource for Brick Manufacturing in Western Australia <i>Francis Atta Kuranchie, Sanjay Kumar Shukla and Daryoush Habibi</i>	819
Sustainable Low Cost Housing Construction for a Better World <i>I. Patnaikuni</i>	825
Sustainable Facilities	
Critical Toll Road Infrastructure in Indonesia – A System Dynamics Perspective <i>Lukas B. Sihombing</i>	833
Strategies for the Contemporary Home <i>Michele Di Sivo and Cristiana Cellucci</i>	839
Analyzing Time and Cost of Onshore Wind Turbine Construction Methods Using Discrete Event Simulation and Wind Speed Forecasting <i>Hesham Osman, Dina Atef and Moheeb Ibrahim</i>	845
An Evaluation of Post-Occupancy of Sustainable Housing <i>Shamil Naoum, Karen Buckley and Daniel Fong</i>	851
Overview of Tall Buildings and their Sustainability Impact <i>Abbas Aminmansour</i>	857
Building Information Modelling and Facilities Management	
Integrating Teams for Built Asset Development and Management – A Hong Kong Perspective <i>Mohan Kumaraswamy, Kelwin Wong and Gangadhar Mahesh</i>	865
Safe Management in Design and Construction Site of Cultural Heritage Building Facade Appropriate Repair <i>Renato G. Lagana and Melanie Barbato</i>	871
BIM-Enabled Condition Assessment Tool for Building Maintenance Using Revit Architecture <i>Mamdouh Al-Gendy, Hesham Osman and Mahmoud Taha</i>	877

BIM Technology for Restoration Site Design <i>Marco L. Trani, Benedetta Bossi and Manuele Cassano</i>	883
Building Information Modelling (BIM) with 4D Technology – A Structural Engineer’s Perspective <i>Sreedhar Kalavagunta</i>	889
Addressing the Need to Reform Construction Public Procurement in Ireland Through the Implementation of Building Information Modelling <i>Barry Mcauley, Alan Hore, Roger West and Dermot Kehily</i>	895
Project Execution and Productivity	
Using Nose Tip Temperature to Monitor Crew’s Performance <i>Wen-Ta Hsiao, Hsian-Tang Wu, Tao-Ming Cheng and Hua-Nan Chang</i>	903
Lessons Learned from Execution of Oilsands’ SAGD Projects <i>Alnoor Halari and George Jergeas</i>	909
Towards Assessing Productivity in Off-Site Building Methods for Engineering and Construction Projects <i>Alazzaz Faisal and Andrew Whyte</i>	915
A Synthesis of Traditional Project Engineering Management in Construction Projects with Agile Approaches Towards Efficiency Gains <i>Albishri Abdulaziz and Andrew Whyte</i>	921
Workload and Work Performance – Analysis of Activities and Environmental Stress in Masonry and Concreting Work <i>D. Schlagbauer and D. Heck</i>	927
Construction Procurement	
Quantifying the Value of Construction Contractor Preconstruction Involvement <i>Nicola West and Douglas Gransberg</i>	935
Identifying Critical Success Factors for Minimizing Design Stage Transaction Costs in PPP Projects <i>Xiao-Hua Jin, Guomin Zhang and Jian Zuo</i>	941
A Guide for Selecting the Appropriate Procurement Method for the Project Based on Clients’ Criteria <i>Shamil Naoum, Medrdad Mohammad Pour and Daniel Fong</i>	947
Relationship-Based Procurement Methods Adopted in Infrastructure Development <i>Damien Spear, Xiao-Hua Jin and Swapan Saha</i>	953
Proposed Statutory Management System for Middle East Countries (Iraq as an Example) <i>Mohammed Najm</i>	959
Application Effects of I-PGMIS for Urban Regeneration Projects <i>Chang-Teak Hyun, Hyun-Jong Lee, You-Sang Yoon, Ji-Hoon Kim and Hyun-Chul Jung</i>	965

Quality and Cost Control

A Conceptual Model for Improving In-Situ Construction Techniques Using Triz and Six Sigma Approaches <i>Keuser Coşkun and M. Cem Altun</i>	973
A Spreadsheet Model for Time-Cost Tradeoff Analysis and Proect Control <i>Essam Zaneldin and Bilal El-Ariss</i>	979
Defects Prediction Towards Efficincy Gains in Construction Projects <i>Abdullah Almusharraf and Andrew Whyte</i>	985
Towards Improved Infrastructure Design & Construction in Rough Terrain & Inclement Environments <i>Sharif Malik and Andrew Whyte</i>	991
The Factors that Affect the Cost Estimation Activities in the Tender Preparation Process in the Malaysian Construction Industry <i>Normila Ahmad and N. Y. Osman-Schlegel</i>	997
Analysing the Potential Application of the Earned Value Management (EVM) in the Spanish Construction Industry – An Initial Review of the Dataset <i>Monty Sutrisna, Eugenio Pellicer, Miguel Picornell and Cristina Torres-Machí</i>	1003
Schedule, Risk, and Quality in Construction	
Factors Influencing Delay in Construction/Civil Engineering Projects in the Persian Gulf Countries <i>Maryam Alawi Toussi and Andrew Whyte</i>	1011
The UK Snagging Process – A Benchmark for Residential Construction <i>Funmilayo Eburn Rotimi, John Tookey and James Olabode Rotimi</i>	1015
Fuzzy Analytic Network Process Approach to Risk Assessment of Public-Private Partnership (PPP) Highway Projects in Developing Countries <i>A. R. Valipour, N. Yahaya, N. Md Noor and S. Sabetian Fard</i>	1021
Genetic Algorithm-Based Multi-Objective Model for Scheduling of Linear Construction Projects Under Extreme Weather Conditions <i>Ahmed B. Senouci and Saleh A. Mubarak</i>	1027
Role of Simulation in Construction Processes – Harmony in Capturing Resources <i>Mehrdad Arashpour, Ron Wakefield and Nick Blismas</i>	1033
Total Quality Management and Actual Workmanship Quality of Major Indonesian Contractors <i>Estika Ellizar, Fajar Susilowati and Puti Marzuki</i>	1039

Occupational Health and Safety in Construction

- The Evolution of Legislation on Health and Safety on Construction Site in Italy 1047
Arie Gottfried, Giuseppe M. Di Giuda, Valentina Villa and Paolo Piantanida
- Analysis of Accidents in the Construction Industry in Italy 1053
Arie Gottfried, Giuseppe M. Di Giuda, Valentina Villa and Paolo Piantanida
- Study on Safety Assembling and Dismantling Method for System Scaffolds by Using Safety Harness 1059
Katsutoshi Ohdo, Yasumichi Hino and Hiroki Takahashi
- The Application of Control Theory and Complex Systems Theory to Construction Safety — A Preliminary Study 1065
Brian Hongwei Guo and Tak Wing Yiu
- Developing Incident Causation Constructs for Managing Safety in Construction 1071
Yousef Al-Shehri, Francis Edum-Fotwe and Andrew Price
- The Knowledge of Previous Work in Identifying Potential Health and Safety Risks in the Restoration Sites 1077
Renato G. Lagana'

Construction Law and Organizational Behavior

- Understanding the Organisational Behaviours in Alliances 1085
Ling-Ye She, Hemanta Doloi and Anthony Mills
- Trust in Construction Contracting – An Exploratory Study in Shanghai 1091
P. T. Chow, S. O. Cheung and C. Ling
- The Power of Trust in Construction Contracting 1097
P. T. Chow, S. O. Cheung, C. H. Wong and M. Y. Ou
- Aspects of Building Contract Law and Professional Liability Under German Law 1103
Ulrike Quapp and Klaus Holschemacher
- Concurrent Delays – A Comparative Analysis of U.S. and Australian Construction Legal Environment 1107
Farrukh Arif, Ayman Morad and M. Emre Bayraktar

Education and Professional Ethics

- Thirteen Years of the Bologna Process – Lost Chances in Civil Engineering Education 1115
Ulrike Quapp and Klaus Holschemacher
- Embedding Knowledge Management within Organizational Learning & Continuous Improvement Cycles 1119
Paul Watson and Garry Workman

- Construction Educational Interdisciplinary Project-Work as an Antecedent for Improved Integration in BIM 1125
Andrew Whyte
- Preparing Thai Architectural Programs for the 2015 Asean Community 1131
Pimwadee Eomthurapote
- Questionnaire Survey of Engineering Education in Ready-Mixed Concrete Plants 1137
Junichi Hirayama, Isamu Yoshitake, Mamoru Inoue and Hyngmin Park
- Link Between Knowledge Management and Human Resource Management in Sustaining Intellectual Capital 1141
Nawaf Alshabri, Malik Khalfan and Tayyab Maqsood
- Author Index 1147