Civil and Environmental Engineering

Year 2013

Conference Papers

Mwafy, A.M., 2013, "Efficient and cost-effective seismic design using inelastic analysis procedures and overstrength", Proceedings of the Second Conference on Smart Monitoring, Assessment and Rehabilitation of Civil Structures (SMAR 2013), Sep. 9-11, Istanbul, Turkey.

Mwafy, A.M., Hussain, N. and El-Sawy, K., 2013, "Impact of high-strength material on seismic design response factors and economics of multi-story buildings", Proceedings of the Second Conference on Smart Monitoring, Assessment and Rehabilitation of Civil Structures (SMAR 2013), Sep. 9-11, Istanbul, Turkey.

Mwafy, A.M., 2013, "Seismic risk assessment of buildings in the highly populated earthquake-prone areas of the UAE", Proceedings of the Second International Conference on Engineering Geophysics, 24-27 November, Al Ain, United Arab Emirates.

Alwaeli, W., Mwafy, A.M., Pilakoutas, K. and Guadagnini, M., 2013, "Seismic loss assessment framework for rc high-rise wall buildings: Dubai case study", Proceedings of the Second International Conference on Engineering Geophysics, 24-27 November, Al Ain, United Arab Emirates.

A.S. El-Dieb, "Durability characteristics of ultra-high-strength fiber-reinforced self-compacted concrete", Second Conference on Smart Monitoring, Assessment and Rehabilitation of Civil Structures (SMAR 2013)", Istanbul, Turkey, Sep. 9-11, 2013.

A.S. El-Dieb, A.F.B. Oan, M.M. Abdelwahab and S.H. Okba "Chloride induced corrosion and bond strength in relation to concrete cover and bar diameter", Second Conference on Smart Monitoring, Assessment and Rehabilitation of Civil Structures (SMAR 2013)", Istanbul, Turkey, Sep. 9-11, 2013. (Corresponding Author)

El-Maaddawy, T. and Chekfeh, Y., "Retrofitting of Concrete T-Girders Pre-Damaged in Shear with CFRP Composites and Mechanical End Anchorage", FRPRCS-11 – 11th International Symposium on Fiber Reinforced Polymer for Reinforced Concrete Structures, 26-28 June, Guimarães, Portugal, 2013.

Nurul Hassan, M., and Hawas, Y. (2013) "An Experimental Research on the Factors of Transit Stop Consolidation", proceedings of the 3rd International Conference on Urban Transportation Systems (ICUTS2013), Paris, France (17-20 November 2013).

Ahmed, F. and Hawas, Y. (2013) "A Fuzzy Logic Model for Real-Time Incident Detection in Urban Road Network", proceedings of the 5th International Conference on Agents and Artificial Intelligence (ICAART), Barcelona, Spain (15-18 February 2013).

Chowdhury, R. K. (2013) A Stochastic model of domestic water consumption and greywater generation in the Al Ain city. In Piantadosi, J., Anderssen, R.S. and Boland, J. (eds) MODSIM2013, 20th International Congress on Modelling and Simulation. Modelling and Simulation Society of Australia and New Zealand, December 2013, pp. 3148-3154, ISBN: 978-0-9872143-3-1.

Rashid, M.M., Beecham, S. and Chowdhury, R. (2013) Simulation of extreme rainfall from CMIP5 in the Onkaparinga catchment using generalized linear model. In Piantadosi, J., Anderssen, R.S. and Boland, J. (eds) MODSIM2013, 20th International Congress on Modelling and Simulation. Modelling and Simulation Society of Australia and New Zealand, December 2013, pp. 2520-2526, ISBN: 978-0-9872143-3-1.

- Chowdhury, R. K. (2013) Potable Water Saving by Reusing Greywater in the Al Ain City, 11th IWA Conference on Small Water and Wastewater Systems and Sludge Management, Harbin, China, 27-31 October 2013, pp 1-8 (in USB).
- Rashid, M. M., Beecham, S. and Chowdhury, R. K. (2013) Modelling of Extreme Rainfall in South Australia using a Generalised Linear Model, 4th International Conference on Water and Flood Management, Bangladesh University of Engineering and Technology, Dhaka, Bangladesh, 4-5 October, pp 105-111.
- Chowdhury, R. K. (2013) Water Sensitive Urban Design (WSUD) A Measure of Climate Change Adaptation, 21st Joint GCC-Japan Environmental Symposium, Japan Cooperation Centre, Petroleum (JCCP), 4-6 February 2013, Doha, Qatar, pp 1-13.
- Mwafy, A.M., Hussain, N. and El-Sawy, K., "Impact of high-strength material on seismic design response factors and economics of multi-story buildings", 2nd Conference on Smart Monitoring, Assessment and Rehabilitation of Civil Structures, Istanbul, Sept. 9-11, 2013.
- Alhadid, M.M.A, Sweedan, A.M.I. and El-Sawy, K.M. (2013) "Testing of Steel Beams Externally Reinforced using Anchored Hybrid FRP Composites", Proceedings of the Second Conference on Smart Monitoring, Assessment and Rehabilitation of Civil Structures SMAR 2013, Paper 98, September 9–11, 2013, Istanbul, Turkey.
- M. Mohamed. "A Decision Support System for Groundwater Sustainability in the Arid Eastern Abu Dhabi Emirate". Proceedings of the 8th International European Water Resources Association (EWRA) Water Resources Management Conference, Porto, Portugal, June 26-29, 2013.
- M. Mohamed and M. Maraqa "Assessment of Environmental Engineering Education in the United Arab Emirates" Proceedings of the 13th International Conference on Environmental Science and Technology (CEST2013) Athens, Greece, September 5-7, 2013.
- S. AlQuraan and M. Mohamed, Least Cost Mapping: An Improved approach for Artificial Recharge site selection, proceedings of the 2013 Geospatial Scientific Summit, Sharjah, 27-28 November 2013.
- M. Mohamed. "Development of a Water Budget Model for Groundwater Sustainability in Abu Dhabi" Proceedings of the 13th International Conference on Environmental Science and Technology (CEST2013) Athens, Greece, September 5-7, 2013.
- S. El-Mahdy and M. Mohamed, Application of SAR Data to the Mapping of Paleodrainages underneath Sand Sheets in the United Arab Emirates, proceedings of the 2013 Geospatial Scientific Summit, Sharjah, 27-28 November 2013.
- Mohamed, M. Assessment of Water Resources Sustainability in Al-Ain City. The 2nd International Conference on "Global Warming: Sustainable Cities Conference, Ras Al Khaimah, UAE. May 5-7, 2013.
- M. Mohamed. "Modeling Bioremediation of Oil Spills in Contaminated Groundwater Aquifers Using Slow-Releasing Oxygen Sources", Proceedings of the 21st joint GCC-Japan Symposium GCC-JCCP conference, Doha, Qatar, 2013.
- Mauga, T. Extension of AASHTO Model for Horizontal Sightline Offset to Apply to Beginnings and Ends of Simple Horizontal Curves. Presented at the 92nd Annual Meeting of the Transportation Research Board, CD-ROM, 2013, Washington, DC.
- Mauga, T, M. Ghanma, and K. Ahmed. Roadside Clearance Limit on Horizontal Curves with Transition Arcs: Sites with Circular Arcs Shorter than Sight Distance. Presented at the 92nd Annual Meeting of the Transportation Research Board, CD-ROM, 2013, Washington, DC.

Ahmed, K; Zoubi, K., and Zaneldin, E. (2013) "Evaluation of Effectiveness of Portable Variable Message Signs in Reducing Speed on Rural Highway in Abu Dhabi Emirate". In proceedings of the 92nd Annual Transportation Research Board meeting, DC, USA

Abu-Lebdeh, G. and Ahmed, K. (2013) "A Neural Network Approach for Mechanistic Analysis of Jointed Concrete Pavement". In the proceeding of the Eastern Asia Society for Transportation Studies, Vol 9, ISSN: 1881-1132.

Abu-Lebdeh, G. and Ahmed, K. (2013) "Performance Comparison of AIMSUN2 and CORSIM for Congested and Uncongested Freeway Traffic Conditions". In the proceeding of 3rd IASTED Asian Conference on Modeling, Identification, and Control (AsiaMIC 2013).

Ghanim, M., Abu-Lebdeh, G., and Ahmed, K. (2013) "Modeling Historical Traffic Data using Artificial Neural Networks". In proceedings of the 5th International Conference on Modeling, Simulation and Applied Optimization (ICMSAO 2013), Hammamet, Tunisia.

Ghanim, M., Abu-Lebdeh, G., and& Ahmed, K. (2013) "Microscopic Simulation Study of Transit Signal Priority Implementation Along an Arterial Corridor". In proceedings of the 5th International Conference on Modeling, Simulation and Applied Optimization (ICMSAO 2013), Hammamet, Tunisia.

Walid Elshorbagy (Invited Speaker). Impact of refinery wastewater on drinking water produced from nearby desalination plants in UAE and potential relevant applications. Water Management Technology for Petroleum Industry Seminar organized by ADNOC and JCCP, AbuDhabi, UAE (June 2013).

Abubaker Awad ElHakeem and Walid Elshorbagy (Speaker), Long-term Estimates of Temperature and Precipitation for Sustainable Planning in UAE, 2nd International Conference on "Global Warming: Sustainable Cities", Ras Al Khaima, UAE, May 2013.

Abubaker Awad ElHakeem and Walid Elshorbagy (Speaker), Future of desalination industry in the Arabian Gulf given the long term environmental and ongoing anthropogenic impacts, 2nd International Conference on "Global Warming: Sustainable Cities", Ras Al Khaima, UAE, May 2013.

Conference - Panel Discussions: Invitation to a Panel Discussions: As Abu Dhabi Lead Scorer of Assessment of Higher Education Learning Outcomes (AHELO) tests in Abu Dhabi, UAE, El-Ariss, Bilal participated in and contributed to a panel discussions on the "AHELO Feasibility Study Conference and Symposium," March 11-13, 2013, Organization for Economic Cooperation and Development (OECD) Headquarter, Paris, France

Books

McIntosh, B.S., Hodgen, M., Aryal, S., Laredo, L., Wolf, L., Gardner, T., Chowdhury, R. and Maheepala, S. (2013). Ripley Valley – an Application of GIS Based Runoff Modelling to Strategic Stormwater Harvesting Assessment. Urban Water Security Research Alliance Technical Report No. 109, CSIRO, Australia. Available at: http://www.urbanwateralliance.org.au/publications/UWSRA-tr109.pdf

McIntosh, B.S., Aryal, S., Ashbolt, S., Sheldon, F., Maheepala, S., Gardner, T., Chowdhury, R., Gardiner, R., Hartcher, M., Pagendam, D., Hodgson, G., Hodgen, M. and Pelzer, L. (2013). Urbanisation and Stormwater Management in South East Queensland – Synthesis and Recommendations. Urban Water Security Research Alliance Technical Report No. 106., CSIRO, Australia. Available at: http://www.urbanwateralliance.org.au/publications/UWSRA-tr106.pdf

Edited Books

El-Shorbagy, W. and Chowdhury, R. K. (Eds.) (2013) Water Treatment, ISBN 978-953-51-0928-0, Published by InTech, Total Chapters 15, Number of Pages 380, DOI: 10.5772/2883. Available at: http://www.intechopen.com/books/water-treatment

Book Chapters

Chowdhury, R. K. and El-Shorbagy, W. (2013) Informatics, Logistics and Governance in Water Treatment Processes, Chapter 1 In Water Treatment, El-Shorbagy, W. and Chowdhury, R. K. (Ed.), ISBN: 978-953-51-0928-0, InTech, pp 3 - 12, DOI: 10.5772/54386. Available at: http://www.intechopen.com/books/water-treatment/informatics-logistics-and-governance-in-water-treatment-processes

Patents