

## **Civil and Environmental Engineering**

### **Year 2014**

#### ***Conference Papers***

Mwafy, A.M., Abou Khalifa, S. and El-Ariss, B., 2014, "Relative safety margins of code-conforming vertically irregular high-rise buildings", Proceedings of the Second European Conference on Earthquake Engineering and Seismology (2ECEES), 24-29 August, Istanbul, Turkey.

Ashry, A. and Mwafy, A.M., 2014, "3D vulnerability functions for contemporary buildings with varying structural systems and heights", Proceedings of the Second European Conference on Earthquake Engineering and Seismology (2ECEES), 24-29 August, Istanbul, Turkey.

Issa, A. and Mwafy, A.M., 2014, "Fragility assessment of pre-seismic code buildings and emergency facilities in the UAE", Proceedings of the Second European Conference on Earthquake Engineering and Seismology (2ECEES), 24-29 August, Istanbul, Turkey.

Alwaeli, W., Mwafy, A.M., Pilakoutas, K. and Guadagnini, M., 2014, "Framework for developing fragility relations of high-rise RC wall buildings based on verified modelling approach", Proceedings of the Second European Conference on Earthquake Engineering and Seismology (2ECEES), 24-29 August, Istanbul, Turkey.

A.S. El-Dieb, I.E. Shehab, "*Cementless Concrete Using Ceramic Waste Powder*", Submitted for publication in International Conference on Construction Materials and Structures (ICCMATS), Johannesburg, South Africa, Nov. 24-26, 2014. (Corresponding Author)

A.S. El-Dieb, T.A. El-Maaddawy, A. Al Sallamin, "*Microstructure and Durability Characteristics of Self-Curing Concrete*", Submitted for publication in International Conference on Construction Materials and Structures (ICCMATS), Johannesburg, South Africa, Nov. 24-26, 2014. (Corresponding Author)

A.S. El-Dieb, T.A. El-Maaddawy, O. Al-Rawashdah, "*Shear Behavior Ultra-High-Strength Steel-Fiber-Reinforced Self-Compacting Concrete Beams*", Submitted for publication in International Conference on Construction Materials and Structures (ICCMATS), Johannesburg, South Africa, Nov. 24-26, 2014. (Corresponding Author)

A.S. El-Dieb, T.A. El-Maaddawy, A. Al Sallamin, A.A. Mahmoud, "*Self-Cured Concrete: Performance Assessment and Material Characterization*", Concrete Innovation Conference CIC 2014", Oslo, Norway, June 11-13, 2014. (Corresponding Author)

A.S. El-Dieb, S.I. Abu-Eishah, M.S. Bedir, "*Production of Concrete Using Electric-Arc Furnace Slag (EAFS) as Aggregate*", Concrete Innovation Conference CIC 2014", Oslo, Norway, June 11-13, 2014. (Corresponding Author)

T.A. El-Maaddawy, A. Bouchair, A. Biddah, A.S. El-Dieb, "*Residual Strength of Aging Concrete T-Girders Strengthened with Near-Surface-Mounted Composite System*", Proceedings of the International Conference on Ageing of Materials & Structures (AMS'14), Delft 26 – 28 May 2014, The Netherlands, Paper No. 191205. (Corresponding Author)

A.S. El-Dieb, T. El-Maaddawy, A. Al Sallamin, A.A. Mahmoud, "*Self-Curing Concrete as New Construction Material*", the 1st International Conference on Infrastructure Management, Assessment and Rehabilitation Techniques, ICIMART'14, 4-6 March 2014, AUS, Sharjah, UAE. (Corresponding Author)

El-Maaddawy, T. and Sherif, E., "Finite Element Analysis of Reinforced Concrete Corbels: Parametric Study and Comparison with STM Predictions", Proceedings of the 1st International

Conference on Infrastructure Management, Assessment and Rehabilitation Techniques (ICIMART'14), 4-6 March, Sharjah, UAE, 2014

El-Maaddawy, T. and Sherif, E., "Numerical Modeling of Concrete Beams with Cut-Offs Strengthened in Shear with Externally-Bonded Composites", Proceedings of the 1st International Conference on Infrastructure Management, Assessment and Rehabilitation Techniques (ICIMART'14), 4-6 March, Sharjah, UAE, 2014

Zaneldin, E., Maraqa, M.A. and Sweedan, A.M.I. (2014) "Extent of Construction Safety in the Engineering Curricula from the Perspective of Practitioners in the MENA Region", Proceedings of the 121<sup>st</sup> Annual Conference, 360 Degrees of Engineering Education, ASEE 2014, Paper 8623, June 15 - 18, 2014 Indianapolis, Indiana, USA.

Mohamed, M. A Decision Support System for Groundwater Sustainability in the Arid Eastern Abu Dhabi Emirate. 6th IAHS-EGU International Conference on Integrated Water Resources Management, Bologna, Italy, June 4-6, 2014.

Mohamed M., K. Hatfield, and H. Klammler. In-Situ Bioremediation of Contaminated Groundwater Using Permeable Reactive Barriers and Slow-Release Source Techniques. XX. INTERNATIONAL CONFERENCE Computational Methods in Water Resources, Stuttgart, Germany. 10 - 13 June, 2014.

Mohamed, M. An iterative solution for the subsurface reactive-transport equations. XX. INTERNATIONAL CONFERENCE Computational Methods in Water Resources, Stuttgart, Germany. 10 - 13 June, 2014.

Samy I.E. and Mohamed M. 2014. Weighted Spatial Probability Modeling for groundwater potential zonation: a case study of Al Dhaid, UAE. Middle east Geospatial Forum, Dubai, UAE February 2-4, 2014.

Mauga, T. Maximum Height of Roadside Objects on Inside of Horizontal Curves. Presented at the 93<sup>rd</sup> Annual Meeting of the Transportation Research Board, CD-ROM, 2014, Washington, DC., pp 213.

Mauga, T. Horizontal Clearance Offsets to Objects Higher Than Sightlines. Presented at the 93<sup>rd</sup> Annual Meeting of the Transportation Research Board, CD-ROM, 2014, Washington, DC., pp 118.

Ahmed, K & Zoubi, K (2014) "Capacity Models for Multilane Roundabouts having Three Circulating and Three Entry Lanes". In proceedings of the 93<sup>rd</sup> Annual Transportation Research Board meeting, DC, USA.

Walid Elshorbagy and Abu Bakr Elhakeem (April 2014) Impact of the Coastal Intake Environment on the Operating Conditions of Thermal Desalination Plants: A Case Study in United Arab Emirates. International Conference on Desalination, Environment, and Marine Outfall Systems-ICDEMOS2014. Muscat, Oman.

Abu Bakr Elhakeem and Walid Elshorbagy (April 2014). Overview of Different Approaches Simulating the Long Term Response to Climate Change and Coastal Effluents in the Arabian Gulf. International Conference on Desalination, Environment, and Marine Outfall Systems-ICDEMOS2014. Muscat, Oman.

Gianfausto Salvadori, Giuseppe Roberto Tomasicchio, Felice D'Alessandro, Walid ElShorbagy, and Abu Baker El-Hakeem (June 2014). Multivariate Coastal and off Shore Design VIA Copulas at the Arabian Gulf". Accepted for presentation and inclusion in the proceedings of the 34th International Conference on Coastal Engineering - ICCE2014, Seoul, Korea.

**Books**

***Edited Books***

***Book Chapters***

Maraqqa M.A., Sweedan A.M.I, and Zaneldin E., Inclusion of construction safety in engineering programs in the MENA region: Assessment and potential enhancement, In: Engineering and Engineering Education in the Middle East: Status, Challenges, Role in Fostering Human and Economic Development, and Futuristic Transformations, Eds. Abdulwahed M., Hasna M.O., and Froyd J.E., Submitted June 2013.

Chowdhury, R. K. and Eslamian, S. (2014) Climate change and hydrologic modeling, in Eslamian, S. (ed) Handbook of Engineering Hydrology: Modeling, Climate Change and Variability (Vol 2), Chapter 5, pp 71-86, ISBN 978-1-4665-5246-3, CRC Press, Taylor & Francis Group (<http://www.crcpress.com/product/isbn/9781466552463>).

Chowdhury, R. K. and Eslamian, S. (2014) Statistical parameters used for assessing hydrological regime, in Eslamian, S. (ed) Handbook of Engineering Hydrology: Modeling, Climate Change and Variability (Vol 2), Chapter 26, pp 539-553, ISBN 978-1-4665-5246-3, CRC Press, Taylor & Francis Group (<http://www.crcpress.com/product/isbn/9781466552463>).

***Patents***