



Name : Maha Moddather Hassan
Department : Engineering
Job Title : Associate Professor
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Dr. Maha Moddather joined UPM in Spring 2018 and is currently Associate Professor in Civil Engineering Department and Assistant Manager for Scientific Research and Graduate Studies at University of Prince Mugrin. She is also a Professor (On leave) at Structural Engineering Department at Cairo University. She teaches structural engineering courses including statics and dynamics, structural analysis, reinforced concrete design, steel design, and capstone project. Her research interests concern the structural behavior of various structural elements with a primary research focus on steel structures. She has more than 40 publications in the area. In addition to her research and teaching, Dr. Maha has considerable practical experience in leading consultation companies in addition to proven record of activities related to community service. Her passion lies in connecting practical and theoretical sides of engineering courses.

Qualification :

- TOT, DIES ProGRANT Academy, University of Cologne, Germany
- PhD in Structural Engineering, September 2013, Faculty of Engineering, Cairo University, Egypt.
- M.Sc. in Structural Engineering, November 2009, Faculty of Engineering, Cairo University, Egypt.
- B.Sc. in Civil Engineering, June 2007 (Distinction with Honor degree, 4.00 GPA), Faculty of Engineering, Cairo University, Egypt.”

Research Interest :

- Steel Structures.
- Composite Steel Concrete Structures
- Earthquake Engineering and Structural Dynamics.
- Experimental Testing of Small and Full-Scale Structures.
- Cold-Formed Steel Structures.
- Seismic Design of Light Frame Structures.”

Publications :

- [1] Omar A. Sediek, Maha M. Hassan and Sherif S. Safar, “Imperfect Tapered Plate Girder Web Under Shear”, International Journal of Steel Structures, April 2024. (DOI: <https://doi.org/10.1007/s13296-024-00826-7>)
- [2] Maha M. Hassan and Adel E. Abdelnaby, “Vibration Control of Offshore Steel Wind Turbines”, 2nd International Conference on Sustainability: Developments and Innovations (ICSIDI 2024), Riyadh, Saudi Arabia, February, 2024.
- [3] Maha M. Hassan, “Rehabilitation Applications for Vibration Problems of Steel Deck Floor Systems”, Ajman Journal for Studies and Research, 23(1), June, 2024.
- [4] Maha M. Hassan, Mamdouh, and Sherif A. Mourad, “EMPIRICAL FRAGILITY CURVES FOR BUILDINGS IN HISTORIC CAIRO”, The Eleventh Alexandria International Conference on Structural, Geotechnical Engineering And Management “AICSGE-11”, Alexandria, Egypt, November, 2023.
- [5] Adel E. Abdelnaby and Maha M. Hassan, “Performance of Composite Plate Girder Bridges with Full-depth Precast Concrete (FDPC) deck Systems”, Journal of Bridge Engineering (ASCE), October 2023. (DOI: 10.1061/JBENF2/BEENG-6190)
- [6] Ahmed Elyamani, Ahmad Reda, Mahmoud Abdel-Hafez, Sherif A. Mourad, Maha M. Hassan, “CHARACTERIZATION OF CONSTRUCTION MATERIALS OF THE HISTORIC STRUCTURES IN HISTORIC CAIRO: A CASE STUDY”, International Journal of Conservation Science, 14(2), pp. 599-616, 2023. (DOI: 10.36868/IJCS.2023.02.15)
- [7] Maha M. Hassan, Ibrahim M. Mustafa and Sherif A. Mourad, “PERFORMANCE OF CIRCULAR SPLICE CONNECTION UNDER LATERAL LOADS”, International Conference on Advances in Structural and Geotechnical Engineering (ICASGE’23), Hurghada, Egypt, 2023.
- [8] Dina Saad, Maha M. Hassan, Ahmed Elyamani, Ahmed Mamdouh, Sherif A. Mourad, and Tarek Hegazy, “PRIORITIZATION OF HERITAGE BUILDINGS FOR RESTORATION FUNDING”, International Conference on Advances in Structural and Geotechnical Engineering (ICASGE’23), Hurghada, Egypt, 2023.
- [9] Maha M. Hassan, “Shortage of healthcare facilities during COVID-19 Pandemic Outbreak”, 3rd Humanitarian Forum, Riyadh, Saudi Arabia, 2023 February 20-21.
- [10] Maha M. Hassan, Mahmoud SI, Serror MH and Hassan AF, “Elastic buckling of simply supported stiffened steel plates with circular opening”, Journal of Engineering and Applied Science, 69(1), pp.1-22, 2022.
- [11] Maha M. Hassan, Elyamani A, Mourad SA, “Seismic vulnerability assessment of buildings: case study of Al Khalifa district Fatimid Cairo”, SN Applied Sciences, 4(11),1-7, 2022.

[12] Maha M. Hassan, “State-of-the-art Review: Reduction Factor of Traditional Steel Moment Resisting, Braced or Eccentrically Braced Systems”, Structures Journal, 35, 734-747, 2022.

[13] Maha M. Hassan and Lujain Alkotami, ” Towards Smart Fire Management for Disabled People in High-rise Buildings”, First Scientific Conference For Smart Practice In Emergencies, 2022 Nov. 6-9.

[14] Hussein M.H. Abbas and Maha M. Hassan, ”Long-term deformation of segmented prestress bridges under harsh weather conditions: Case study of Exit 23 Interchange at Riyadh Ring Road”, InCurrent Perspectives and New Directions in Mechanics, Modelling and Design of Structural Systems 2022 Sep 2 (pp. 1230-1235). CRC Press.

[15] Hussein M.H. Abbas and Maha M. Hassan,” Rehabilitation applications of roadway structures”, InCurrent Perspectives and New Directions in Mechanics, Modelling and Design of Structural Systems 2022 Sep 2 (pp. 1949-1955). CRC Press.

[16] Maha M. Hassan, Mohamed A. Shafiq, and Sherif A. Mourad, “Experimental study on cracked steel plates with different damage levels strengthened by CFRP laminates”, International Journal of Fatigue, 142, 2021.

Rest of publications could be accessed through:

<https://scholar.google.com/citations?user=h0LTd3wAAAAJ&hl=en>

Other Accreditation:

- Member of Egyptian Syndicate for Engineers