Curriculum Vitae (CV)

Dr. Morcos Farid Samaan El-Rashidi

Personal Information:

Academic Rank: Associate Professor

Department: Civil Engineering

Specialization: Structural Engineering

Position: Associate Professor of Structural Analysis

Google Scholar:

https://scholar.google.com/citations?view_op=list_works&hl=ar&hl=ar&user=PSaoyiQAAAAJ&sortby=pubdate

Research Gate: https://www.researchgate.net/profile/Morcos-Samaan

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Education:

Degree	Discipline	Institution	Year
Ph.D.	Structural Enginnering	Cairo university	2007
M.Sc.	Structural Enginnering	Cairo university	2000
B.Sc.	Civil Engineering	Cairo university	1994

Academic Experience:

Institution: **Higher Technological Institute**

Rank: **Associate Professor**

Dates: **2025-till now.**

Rank: **Assistant Professor**

Dates: **2008-2025.**

Institution: **Higher Technological Institute**

Rank: **Research Assistant (PhD student)**

Dates: **2002-2008**

Institution: **Higher Technological Institute**

Rank: **Teaching Assistant**

Dates: **1995-2002**

Research interests:

- Reliability of Structures
- Overall Buildings Statically Reliability.
- Reliability of Solid and Flat Slabs.
- Dynamic Analysis for Tall Buildings
- Pushover Analysis Under Lateral Loads.
- Boundary and Finite Elements
- Dynamics (Free and Forced Vibrations).
- Computations (FMM, GPU).
- Strengthening concrete elements with FRP.

Publications:

1- Samaan, M. F. (2024). Dual reciprocity boundary element method: Methodology and applications in structural engineering. Computers & Structures, 298. https://doi.org/10.1016/j.compstruc.2024.107367.

- Attia, M.M.,Khalil, A.H.H.,Mohamed, G.N., Samaan, M.F., & Katunský, D. Nonlinear behavior of bonded and unbonded two-way post-tensioned slabs pre-strengthened with CFRP laminates. Buildings 2023,13(35). https://doi.org/10.3390/buildings13010035.
- Attia, M. M., El-Shaer, M. A. A., Shawky, S. M. M., & Samaan, M. F. (2022). Replacement efficiency of steel reinforcement with FRB bars in RC beams under flexure load: experimental and FE study. Innovative Infrastructure Solutions, 7(5). https://doi.org/10.1007/s41062-022-00879-9.
- Mohamed, G.N.; Khalil AH, H.; Samaan, M.F.; Hadad, S.H. Effect of pre-compression ratio on the flexural behavior of two way bonded post tensioned slabs pre- strengthened with external CFRP strips. Researcher 2020,12(10),16-23. doi:10.7537/marsrsj121020.04.
- Mohamed, G.N.; Khalil AH, H.; Samaan, M.F.; Hadad, S.H. The flexural behavior of two way post tensioned slabs pre-strengthened with external CFRP laminates. N. Y. Sci. J. 2019, 12, 14–22. doi: 10.7537/marsnys120419.04.
- El-Shaer, M. A., & Samaan, M. F. (2018). Experimental and numerical investigation of flexural behaviour of new DSG reinforced concrete mixes reinforced with GFRP bars. Ain Shams Engineering Journal, 9(4), 3437–3449. https://doi.org/10.1016/j.asej.2018.07.002.
- Samaan, M. F., Nassar, M. E., & Rashed, Y. F. (2015). Taylor series fast multipole boundary element method for solution of Reissner's shear deformable plate bending problems. Engineering Analysis With Boundary Elements, 59, 23–35. https://doi.org/10.1016/j.enganabound.2015.04.004.
- Samaan, M. F., and Rashed. Y.F. (2009), "Internal Stress DRM Integral Equation for Transient Dynamics ", Advanced materials for applications for acoustics and vibrations, Cairo.

- Samaan, M. F., Ahmed, M. A., and Rashed. Y.F. (2007a), "The Dual Reciprocity Method Applied to Free Vibrations of 2D Structures using Compact Supported Radial Basis Functions", Computational Mechanics, 41(1).
- Samaan, M. F., and Rashed. Y.F. (2007b), "BEM for Transient 2D Elastodynamics Using Multiquadric Functions", Int. J. Solids Structures, 44.
- Samaan, M. F., and Rashed. Y.F. (2007c), "Free Vibration Multiquadric Boundary Elements Applied to Plane Elasticity", Appl. Math. Modeling, 33.
- Samaan, M. F., Ahmed, M. A., and Khalil, A. B., (2003), " Mechanism Generation for Solid Rectangular Reinforced Concrete Slabs", Proceedings of the tenth International Colloquium on Structural and Geotechnical Engineering, Ain Shams University, Cairo.
- Samaan, M. F., Ahmed, M. A., and Khalil, A. B., (2003), " Reliability Analysis of Solid Rectangular Reinforced Concrete Slabs", Proceedings of the tenth International Colloquium on Structural and Geotechnical Engineering, Ain Shams University, Cairo.

Certifications or Professional Registrations:

Honors and Awards:

- Visiting Scholar, Lawrence Technological University (LTU) – Southfield, MI, USA. Sponsored by USAID, Apr.2022 –July2022.
- Professional Structural Engineer, Skill Level 1, PE, Engineers Australia, 2016
- Consultant of Reinforced Concrete Design, Egyptian Syndicate of Engineers, Egypt, 2013.

Teaching Experience:

Over twenty five years of academic experience in the fields of structural analysis engineering; teaching various courses including structural analysis and mechanics, design of concrete and steel structures, implementation of software programs into structural modeling…etc.

Courses taught:

- Structural Analysis and Mechanics I.
- Structural Analysis and Mechanics II.
- Structural Analysis and Mechanics III.
- Structural Analysis and Mechanics IV.
- Structural Analysis and Mechanics V.
- Selective Courses in Structural Analysis and Modelling.
- Selective Courses in Plastic Analysis.
- Computer Programming with FORTRAN.
- Structural Engineering Software Application with SAP, Etabs.