Majid Mohammadi

Associate Professor, Structural Engineering Research Center, International Institute of Earthquake Engineering and Seismology (IIEES), Iran



Academic Degree

PhD: Earthquake Engineering, Sharif University, Tehran, I.R.Iran Dissertation: "Improvement of Mechanical Properties of Infill panels"

Thesis: "Investigation of some ATC-43 criteria for seismic design of bridges"

■ **BSc.**: Civil Engineering, **Sharif University**, I.R.Iran

Contact

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Languages

Persian (Mother tongue), English (Fluent)

Main Engineering Career:

- Design reviewer of structures & foundations of Shariati Combined Cycle Power Plant, in Moshanir Company
- Design reviewer of structures & foundations of Shahid Rajaei Combined Cycle Power Plant, in Moshanir Company
- Design reviewer of structures & foundations of Fajr Power Plant, in Moshanir Company
- Designer of structures and equipment foundations of Tabriz Petrochemical new phase,
 Sadra Company
- Designer of Bridges and RP Decks of South Pars, Phase 12 & 13, in Doris Engineering Company.
- Head of Civil engineering group, Pireco, Sadra
- Director of Technical office, Organization for Development, Renovation and Equipping Schools of IR. Iran.

Administrations in IIEES:

- Director of Research affairs, up to now
- Manager of the International Affairs Offices, 2009.
- Manager of the Presidency Office, 2008.
- Manager of International Bulletin of Earthquake Engineering and Seismology, IIEES, 2007

Teaching Experience

- Finite Element Analysis
- Dynamics of Structures
- Earthquake Engineering
- Control of Structures
- Seismic Design of Buildings

Inventions

- Engineered Infilled frame having adjustable sliding Fuse, Invention No. 63669, confirmed by National Elites Foundation, 2009.
- Pinned Connections for concrete buildings, Invention No. 74176, 2012.

Grants and Externally Founded Programs

- Influence of bay number, vertical load and connection rigidity of the frame on the behavior of masonry infilled frames, supported by Organization for Development, Renovation and Equipping Schools of IR. Iran.
- Instructions for Seismic Evolution and Rehabilitation of Existing School Buildings with Infill Panels, supported by Organization for Development, Renovation and Equipping Schools of IR. Iran.
- A Macro- Model to Consider Local and Global Effects of Infill Panels in Building Frames, Having Pinned Connections, supported by Iran National Science Foundation.
- Experimental Investigation of Cyclic Behavior of Center Filled Battened Column, supported by Iran National Science Foundation.
- Buildings' debris maximum length, caused by earthquakes for Tehran, supported by Tehran Urban Research and Planning Center.

- Mohammadi, Majid, and Sayed Mohammad Motovali Emami. "Multi-bay and pinned connection steel infilled frames; an experimental and numerical study." Engineering Structures 188 (2019): 43-59.
- Pashaie, Mohammad Reza, and Majid Mohammadi. "Estimating the local and global effects of infills on steel frames by an improved macro-model." Engineering Structures 187 (2019): 120-132.
- Emami, Sayed Mohamad Motovali, Majid Mohammadi, and Paulo B. Lourenço. "Equivalent Diagonal Strut Method for Masonry Walls in Pinned Connection and Multi-Bay Steel Frames." Journal of Seismology and Earthquake Engineering19.4 (2018): 299-311.
- Mohammadi, Majid, and Bahram Kordbagh. "Quantifying panel zone effect on deflection amplification factor." The Structural Design of Tall and Special Buildings 27.5 (2018): e1446.
- Kordbagh, Bahram, and Majid Mohammadi. "Influence of Panel Zone on Progressive Collapse Resistance of Steel Structures." Journal of Performance of Constructed Facilities 32.3 (2018): 04018014.
- Radmanesh, Hadi, and Majid Mohammadi. "Evaluating Performance of Concrete Special Moment Resisting Frames with Different Seismic Coefficients Using Endurance Time Method." Civil Engineering Journal 4.1 (2018): 93-106.
- Mohammadi, Majid, and Bahram Kordbagh. "Quantifying panel zone Effect on Deflection Amplification Factor." The Structural Design of Tall and Special Buildings (2017).
- Yekrangnia, Mohammad, and Majid Mohammadi. "A new strut model for solid masonry infills in steel frames." Engineering Structures 135 (2017): 222-235.
- Najarkolaie, Kaveh Faraji, Majid Mohammadi, and Nader Fanaie. "Realistic behavior of infilled steel frames in seismic events: experimental and analytical study." Bulletin of Earthquake Engineering 15.12 (2017): 5365-5392.
- Mohammadi, M. "Modification Factor and Ultimate Strength of Infilled Frames, Rehabilitated by Concrete Covers." International Journal of Civil Engineering 15.4 (2017): 599-610.
- Mohammadi, M. "State of the art on the maximum strength of masonry infilled frames." Scientia Iranica. Transaction A, Civil Engineering 24.3 (2017).
- Mohammadi, Majid. "Optimum engineered infilled frames and the influence of openings." Proceedings of the Institution of Civil Engineers-Structures and Buildings 170.5 (2017): 354-361.

- Izadi, Mohammad Mehdi, and Majid Mohammadi. "A hybrid neural network method for simulating spatial variation in earthquake ground motion." Journal of the Chinese Institute of Engineers 39.8 (2016): 962-970.
- Izadi, Mohammad Mehdi, and Majid Mohammadi. "1996. Simulation of spectrum-correspondent accelerogram by using artificial neural networks." Journal of Vibroengineering 18.3 (2016).
- Mohammadi, Majid, and Kamyar Reza Riazi. "Stiffness and strength of the engineered fused infilled frame." Proceedings of the Institution of Civil Engineers-Structures and Buildings168.1 (2015): 26-39.
- Mohammadi, Majid, and Aran Naserpour. "Modification Factor of Masonry Infills, Required in Seismic Rehabilitation; A Preliminary Study Based on Experimental Results." Journal of Seismology and Earthquake Engineering 16.3 (2014): 199.
- Mohammadi, M., and R. M. Ghazimahalleh. "Effects of vertical load and retrofitting on the behaviour of newly proposed fused infill panels." Int J Civil Eng 11.3 (2013): 182-188.
- Mohammadi, Majid, and Reza Mohammadi Ghazi Mahalleh. "A new infilled steel frame with engineering properties." Proceedings of the Institution of Civil Engineers-Structures and Buildings 165.1 (2012): 15-25.
- Mohammadi, Majid, and Farzad Nikfar. "Strength and stiffness of masonry-infilled frames with central openings based on experimental results." Journal of Structural Engineering 139.6 (2012): 974-984.
- Mohammadi, M., and V. Akrami. "An engineered infilled frame: Behavior and calibration." Journal of Constructional Steel Research 66.6 (2010): 842-849.
- Mohammadi, M., V. Akrami, and R. Mohammadi-Ghazi. "Methods to improve infilled frame ductility." Journal of Structural Engineering 137.6 (2010): 646-653.
- Mohammadi-Gh, M., and V. Akrami. "Application of frictional sliding fuse in infilled frames, fuse adjustment and influencing parameters." Structural Engineering and Mechanics 36.6 (2010): 715-727.
- Mohammadi, M., V. Akrami, and R. Mohammadi. "Experimental and analytical studies on the infilled frames with frictional sliding fuses." Journal of Seismology and Earthquake Engineering 11.4 (2010): 205.

National Codes

Appendix 6 of Standard No. 2800 4th Edition, Seismic Design of Nonstructural Architectural Components of Buildings, Ministry of roads & Urban Development, Islamic Republic of Iran, 2019.

■ Instructions for Seismic Evolution and Rehabilitation of Existing School Buildings with Infill Panels, Code 398, Office of Deputy for Technical and Infrastructure Development Affairs Department of Technical and Execution, Management and Planning Organization, Islamic Republic of Iran, 2015.

Books

- Mohammadi Majid, Influences of Infills on Building Structures, Sharif University Press, 2017.
- Mohammadi Majid, **Infills and Their Effects on Structures**, Fadak Isatis Press, 2011.
- Moghadam H., Mohammadi M., Khalili K., Behavior of Single and Multilayer Infill Steel Frame, Building and Housing Research Center, Publication No. R-555, 2010.