

Personal Information

First name: Seyed Amin Last name: Mousavi Date of Birth: 06/07/1985
Nationality: Iranian E-mail: s.a.mousavi@ut.ac.ir Tel: 09192977477

Education

(2013-2017)-Ph.D., Earthquake Engineering, *School of Civil Engineering, University of Tehran*, Tehran, Iran.

(2008-2010)-M.Sc., Earthquake Engineering, *School of Civil Engineering, University of Tehran*, Tehran, Iran.

(2003-2008)- B.Sc., Civil Engineering, *Department of Civil and Environmental Engineering, AmirKabir University of Technology (Tehran Polytechnic)*, Tehran, Iran.

Honors

Member of Iran's National Elites Foundation

Ranked 1st among Ph.D. students in Earthquake Engineering program, School of Civil Engineering, University of Tehran, 2015.

Admitted in Ph.D. program as exceptionally talented student, School of Civil Engineering, University of Tehran, 2013.

Ranked 1st among M.Sc. students in Earthquake Engineering program, School of Civil Engineering, University of Tehran, 2010.

Professional experience

2011-to date: Chief R&D Officer and structural designer in Sabok-Sazane-Sarie Co., Tehran, Iran.

2014-2015: Design and manufacturing of cementitious laminate (fiber cement board), self-employed.

2015-to date: Structural supervisor in Farasazan Avijeh Co., Tehran, Iran.

Design skills

Design of typical buildings (masonry, steel, concrete, composite)

Design of nonstructural walls

Design of special structures (pile-supported wharf, highway bridge, etc.)

Design of seismic isolated structures

Design of structures with dampers

Design of modern industrialized structural systems (JK, CFT, ICF, etc.)

Computer Skills

Abaqus, Matlab, SimuLink, OpenSees, DEEPSOIL, IDARC, NSPECTRA, ETABS, SAP, SAFE, SeismoArtif, EERA, AutoCAD, Maya.

Research interests

- Earthquake engineering
- Energy dissipation devices
- Experimental studies
- Seismic design of steel, concrete, and composite structures
- Special structures, including highway bridges, offshore jacket platforms, and wind turbines
- Nonlinear Soil Dynamics

Publications

Refereed Journal Papers

1. **Mousavi SA**, Zahrai SM, Bargi K. (2012), "Optimum geometry of tuned liquid column-gas damper for control of offshore jacket platform vibrations under seismic excitation," *Earthquake Engineering and Engineering Vibration*, 11(4), 579-592.
2. **Mousavi SA**, Ghorbani-Tanha SA (2012), "Optimum placement and characteristics of velocity-dependent dampers under seismic excitation," *Earthquake Engineering and Engineering Vibration*, 11 (3), 403-414.
3. Zahrai SM, **Mousavi SA** (2012), "Suitable energy dissipation device for private typical buildings with poor seismic performance," *Journal of Seismology and Earthquake Engineering*, Vol. 14, No. 2.131-143.
4. **Mousavi SA**, Bargi K, Zahrai SM (2013), "Optimum parameters of tuned liquid column-gas damper for mitigation of seismic-induced vibrations of offshore jacket platforms," *Structural Control and Health Monitoring*, **20** (3), 422-444.
5. **Mousavi SA**, Bargi K, (2013), "Enhancing seismic capacity of pile-supported wharves using yielding dampers," *Journal of Structures*, Vol. 2013, Article ID 329130, doi:10.1155/2013/329130.
6. **Mousavi SA**, Bahrami-Rad A (2013), "JK panel, a novel three dimensional interconnected reinforcement for concrete shear walls," *Applied Mechanics and Materials*, Vols. 256-259, pp 629-634.
7. **Mousavi SA**, Zahrai SM, Bahrami-Rad A, (2014), "Quasi-static cyclic tests on super-lightweight EPS concrete shear walls," *Engineering Structures*, 65, 62-75.
8. **Mousavi SA**, Zahrai SM, Saatcioglu M. (2015), "Toward buckling free tension-only braces using slack free connections", *Journal of Constructional Steel Research*, 115, 329-345.
9. Dezvareh R, Bargi, K., **Mousavi SA**, (2015), "Control of wind/wave induced vibrations of jacket-type offshore wind turbines through tuned liquid column gas dampers," *Structure and Infrastructure Engineering*, DOI: 10.1080/15732479.2015.1011169.
10. Zahrai SM, Gholipour Khalili B, **Mousavi SA**, (2015), "Seismic behavior of steel frames with lightweight-low strength industrialized infill walls," *Earthquakes and Structures*, Vol. 9, No. 6, 1273-1290.

11. **Mousavi SA**, Zahrai SM. (2016), "Contribution of pre-slacked cable braces to dynamic stability of non-ductile frames; an analytical study", *Engineering Structures*, 117, 305-320.
12. Bargi K, Dezvreh R, **Mousavi SA**, (2016), "Contribution of tuned liquid column gas dampers on performance of offshore wind turbines under wind, wave, and seismic excitations," *Earthquake Engineering and Engineering Vibration*, 15(3), 551-561.
13. Zahrai SM, **Mousavi SA**, (2016), "Cable-pulley brace to improve story drift distribution of MRFs with large openings", *Steel and Composite Structures*, Vol. 21, No. 4, 863-882.
14. **Mousavi SA**, Bastami M, Zahrai SM. (2016), "Large-Scale Seismic Isolation (LSSI) through regulated liquefaction", *Earthquake Engineering and Engineering Vibration*, Vol. 15, No.4, 579-595.
15. Zahrai SM, **Mousavi SA**, Saatcioglu M (2017), "Analytical study on seismic behavior of proposed hybrid tension-only braced frames", *Structural Design of Tall and Special Buildings*, 26(3), DOI: [10.1002/tal.1310](https://doi.org/10.1002/tal.1310).
16. **Mousavi SA**, Zahrai SM. (2017), "Slack free connections to improve seismic behavior of tension-only braces: an experimental and analytical study", *Engineering Structures*, 136, 54-67.

Conference Papers

- C1. **Mousavi SA**, Bargi K, (2010), "Metallic Dampers for Retrofit of Pile-Supported Wharves", *The 9th International Conference on Coasts, Ports and Marine Structures (ICOPMAS 2010)*, Tehran, Iran.
- C2. **Mousavi SA**, Bahrami-Rad A, Karkuti A, (2013), "JK System, a New Structural System and Construction Technology", *The 4th National Conference on Earthquake & Structure*, Kerman, Iran, 71-80.
- C3. **Mousavi SA**, Zahrai SM, (2013), "Rebar Brace Equipped with Slack Free Connection to Reduce Seismic Vibration", *3rd International Conference on Acoustics and Vibration, ISAV2013*, Tehran Iran.

Guidelines

- G1. **Mousavi SA**, Bahrami-rad A, (2012), Design of JK structural system, Sabok Sazan Sarie, Tehran, Iran (In Farsi).
- G2. **Mousavi SA**, (2015), Design of nonstructural masonry walls, Farasazan Avijeh Co, Tehran, Iran (In Farsi).

Reviewer of the following journals

Engineering Structures

Journal of Earthquake Engineering

Earthquake Engineering and Engineering Vibration

The Structural Design of Tall and Special Buildings