

Contact

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Date of Birth

September 21, 1983.

Languages

Farsi

English

Hadi Sayyadpour Sisakht Assistant Professor of Civil Engineering Department of Civil Engineering, Yasouj University, Iran.

Education

Ph.D.:

Isfahan University of Technology PhD in Civil Engineering – Specialization: Geotechnical Earthquake Engineering and Soil-Structure Interaction (2016) Dissertation subject: The Near-Field Method for Soil-Structure Interaction Analysis of Building Structures Resting on Shallow Foundations.

M.Sc.:

Isfahan University of Technology M.Sc. in Civil Engineering (2009) Thesis Subject: *Investigating Lateral Monotonic Response of Tapered Battered Piles Considering Nonlinear Soil-Pile Interaction*.

B.Sc.:

Isfahan University of Technology B.Sc. in Civil Engineering (2006)

Awards and Achievements

 \square Ranked **130th** among more than 120000 applicants of the national university entrance exam for B.Sc. degree in 2002.

□ Recognised as Talented Student during B.Sc. degree (Isfahan University of Technology)

 \Box Ranked **3rd** among the civil engineering department students),

□ Distinguished Student Scholarship Award (2003-2004)

M.Sc. Admission Award for Distinguished Students of Isfahan
University of Technology: Exemption from the national entrance
exam for M.Sc. degree (2006).

□ Ranked 1st entrant in Isfahan University of Technology Ph.D. program entrance exam (2009).

□ Awarded the highly competitive PhD scholarship of Iran's Department of Science, research and Technology (2012)

 \Box PhD graduation with an excellent grade (2016).

□ Specialised Military Service Award of the National Elites

Foundation of Iran (2017).

□ Housing Purchase/ Construction Facility Award of the National Elites Foundation of Iran (2018).

- □ Awarded **research grant No. 40708** from the Road and Urban Development General Directorate of Kohgiluyeh and Boyerahmad Province (2018)
- Awarded research grant No. 266016 from the Management and Planning Organization of Kohgiluyeh and Boyerahmad Province (2021), (see Contract_2.pdf). (6,470,000,000 IRR)
- □ Honored as the director of the **best research project** of Yasouj University in 2019, selected by the Department of Science, Research and Technology, Iran (2020).
- □ Registered **professional engineer and instructor** of the Construction Engineering Organisation (since 2009).
- Director and manager of several national and regional research projects, (since 2010),

□ Employed as Academic Staff at Department of Civil Engineering, Yasouj University, Iran (2016).

□ Membership in **Excavation and Geotechnics Committee** of the Construction Engineering Organization of Kohgilouyeh and Boyer Ahmad province, (since 2015).

□ Representative of Yasouj University in the **Special Earthquake and Landslide Workgroup** of Kohgilouyeh and Boyer Ahmad province, (since 2018).

 $\hfill\square$ Published several research papers in prestigious and high-quality journals and conferences.

Research Interests

- □ Geotechnical Earthquake Engineering
- □ Underground Structures
- □ Soil-Structure Interaction
- □ Nonlinear Soil Modeling
- □ Numerical Methods in Engineering
- □ Structural Dynamics
- □ Seismic assessment and rehabilitation of structures

Journal Papers

1) Behnamfar F. and **Sayyadpour H.**, (2016), "The near-field method: a modified equivalent linear method for dynamic soil-structure interaction analysis. Part I: Theory and methodology", *Bulletin of Earthquake Engineering*, 14(8), pp. 2361-2384. DOI 10.1007/s10518-016-9935-2.

2) **Sayyadpour H.**, Behnamfar F., M. Hesham El Naggar, (2016), "The near-field method: a modified equivalent linear method for dynamic soil-structure interaction analysis. Part II:

Verification and example application", *Bulletin of Earthquake Engineering*, 14(8), pp. 2385-2404. DOI 10.1007/s10518-016-9871-1.

3) Farahani, D., Behnamfar, F., & **Sayyadpour, H.** and Ghandil, M., (2019), "Seismic impact between adjacent torsionally coupled buildings." *Soil Dynamics and Earthquake Engineering*, 117, pp.81-95.

4) Eftekhari, S.N., Kowsari, M. and **Sayyadpour, H.**, (2019) "Sensitivity analysis of the seismicity parameters to input assumptions and variables in probabilistic seismic hazard analysis", *Asas Journal*, 20, 53, 51-64.

5) Farahani, D., Behnamfar, F., & **Sayyadpour, H.**, (2019), "Effect of pounding on nonlinear seismic response of torsionally coupled steel structures resting on flexible soil", Engineering Structures, 195, 243-262.

6) Eftekhari, S.N., Kowsari, M. and **Sayyadpour, H.**, (2021), "An artificial neural network for predicting the near-fault directivity-pulse period", *Journal of Earthquake Engineering*. pp.1-20.

7) **Sayyadpour, H.**, Eftekhari, S.N. and Kowsari, M., (2020), "Comparing different data- driven ranking methods and selecting appropriate GMPEs for performing PSHA in Zagros zone", *Journal of Iranian Society of Civil Engineering (ASAS)*, 22(58), 35-46.

8) Behnamfar, F., **Sayyadpour, H.**, Mohammadi, A. and Omidi, M., (2021), "Evaluation of the nonlinear static behavior of unstiffened steel plate shear walls with/without openings", *Sharif Journal of Civil Engineering*, 37.2(1.1), 23-33. doi: 10.24200/j30.2020.54704.2662.

9) Eftekhari, S.N., **Sayyadpour, H.** and Kowsari, M., (2021), "A Near-fault probabilistic seismic hazard assessment for Yasouj city, located in the midst of the Kazerun fault system, Southwestern of Iran", *Natural Hazards*, 105, 1945–1961. https://doi.org/10.1007/s11069-020-04384-z.

10) Behnamfar, F., Sayyadpour, H. and Eslami, Sh., (2021), "Evaluation of the YPS method for Regular RC Buildings Designed Based on the Iranian Standard 2800", *AUT Journal of Civil Engineering*, 53(8).

11) Behnamfar, F., Nooraie, M., Pirasteh, S. and **Sayyadpour, H.**, (2021) "Spectral characteristics of 2011 East Tohoku and New Zealand earthquakes to determine corresponding response of a typical steel structure", *Earthquake Engineering and Engineering Vibration*. (Under Review).

12) **Sayyadpour, H.** and Bazyar, M.H., (2022) "Site response analysis considering underground structures effects", *Bulletin of Earthquake Science and Engineering*.

(Under Review).

13) Sayyadpour, H., (2022), "An Equivalent Linear method for dynamic soil-structure interaction analysis including inertial interaction effects." *Bulletin of Earthquake Engineering*. (Under Review)

Conference Papers

1) **Sayyadpour H.**, Halabian A. M., "The Effect of liquefaction on The Seismic response of Pile Groups", 4th National Congress on Civil Engineering, 6-8 May 2008, Tehran University, Tehran, Iran. (in Persian).

2) Halabian A. M., **Sayyadpour H.**, "Evaluating Buried Steel Gas Pipelines of Isfahan City under Liquefaction", 8th International Congress on Civil Engineering, 11-13 May 2009, Shiraz University, Shiraz, Iran. (in Persian).

3) **Sayyadpour H.**, Behnamfar F., "Near-Field's Dynamic Properties for Dynamic Soil- Structure Interaction Analysis", 2nd International congress on Structure, Architecture and Urban Development, Tabriz, Iran, 2014.

4) **Sayyadpour H.**, Behnamfar F., "Parametric Study of Inertial Soil-Structure Interaction Effects", 2nd International congress on Structure, Architecture and Urban Development, Tabriz, Iran, 2014.

5) **Sayyadpour H.**, Behnamfar F., "The near-field method: a modified equivalent linear method for dynamic soil-structure interaction analysis", 16th World Conference on Earthquake Engineering, Santiago, Chile, 2017.

6) **Sayyadpour H.**, Tabatabaie A., Pourlak M., "Prefabrication of Substructure Elements of Concrete Highway Bridges", 5th International Congress on Civil engineering, Architecture and Urban Development, 26-28 December 2017, Shahid Beheshti University, Tehran, Iran. (in Persian)

7) **Sayyadpour H.**, Eftekhari, S.N., "Sensitivity Analysis of Seismic Response of Concrete Box-Girder Bridge to Geometrical and Mechanical Specifications", 11th National Congress on Civil Engineering, 30 May & 1 April 2019, Shiraz University, Shiraz, Iran. (in Persian).

8) Eftekhari, S.N., **Sayyadpour H.**, "Seismic Hazard Based Ground Motion Selection for Sadr Elevated Bridge, Considering Near-Fault Earthquake Directivity Effects", 11th National Congress on Civil Engineering, 30 May & 1 April 2019, Shiraz University, Shiraz, Iran. (in Persian).

9) **Sayyadpour H.**, Eftekhari, S.N., "Evaluating seismic hazard for Shahid Beheshti hospital site located in Yasouj city", The First International Conference on Improving Resilience of Healthcare and Critical Facilities, 29-30 Sep. 2019, Road, Housing and Urban Development Research Center, Tehran, Iran. (in Persian).

10) **Sayyadpour H.**, Eftekhari, S.N., "Evaluating earthquake-induced collapse probability for the Yasouj city hospitals", The First International Conference on Improving Resilience of Healthcare and Critical Facilities, 29-30 Sep. 2019, Road, Housing and Urban Development Research Center, Tehran, Iran. (in Persian)

11) Saberi, H., Hosseini, S.J. and **Sayyadpour H.**, "Investigating frequency modes in the membrane structures", 5th National Conference on Applied Researches in Civil and Architectural Engineering and Urban Development, 03 & 04 Jan. 2018, K. N. Toosi University of Technology, Tehran, Iran. (in Persian)

12) Abiari "Evaluating Seismic Fragility of Concrete Box-Girder Bridge with Shape-Memory Alloy Connections", 12th National Conference on Civil Engineering, 28 & 29 May, 2020, Sahand University of Technology, Tabriz, Iran. (in Persian)

Research Projects

- 1) Member of the team on "Evaluating seismic behavior of Isfahan city gas network under strong ground motions".
- 2) Member of the team on "Investigating damage reasons and proposing strengthening design for Saba Steel Complex slag ponds".
- 3) Manager of two of the working teams on the project "Seismic Evaluation & Strengthening of EsfahanPower Plant and Shahrekord Power House".
- 4) Manager of the working team on the project "Seismic Evaluation and Strengthening of Isfahan historical bazaars and case study of Hassan Abaad Bazaar".
- 5) Manager of the working team on the project "Investigating the liquefaction hazard and estimating shear wave velocity in Kohgilouyeh and Boyer Ahmad province".
- 6) Manager of the working team on the project "Study on Seismic Vulnerability and Crisis Management of Gas Supply Network of Yasouj City Against Earthquake".
- 7) Manager of one of the working teams on the project "Seismic Evaluation & Strengthening of masonry schools of Kohgilouyeh and Boyer Ahmad province".
- 8) Director of the project "Seismic microzonation of Yasouj city based on the progressive near-fault probabilistic seismic hazard analysis approach". (2018, 620,000,000 IRR)

9) Director of the project "Seismic microzonation of Kohgilouyeh and Boyer Ahmad province". (2021, 6,470,000,000 IRR)

10) Manager of the working team on the project "Probabilistic Seismic Hazard Analysis of Ahvaz City Considering Directivity Effects"

11) Manager of the working team on the project "Seismic Vulnerability of Gas Supply Network of Behbahan City Against Earthquake".

Teaching Experience

□ **Undergraduate**: Statics, Dynamics, Strength of Materials, Structural Analysis, Matrix Analysis, Soil Mechanics, Steel Structures, Concrete Structures, Earthquake Engineering.

□ **Graduate**: Theory of Elasticity, The Finite Element Method, Advanced Steel Structures, Inelastic Analysis of Structures, Soil Dynamics, Structural Dynamics, Geotechnical Earthquake Engineering, Soil- Structure Interaction, Continuum Mechanics.

Professional Experience

- □ Designer of various geotechnical and structural projects, 2005 till now.
- □ Member of the peer reviewer team: rehabilitation of the schools of Isfahan province, 2006-2012.
- □ Registered professional engineer and instructor of the Construction Engineering Organization, since 2009 till now.
- □ Member of Excavation and Geotechnics Committee of the Construction Engineering Organization of Kohgilouyeh and Boyer Ahmad province, since 2015 till now.
- □ Academic staff at Faculty of Technology and Mining, Yasouj University, Iran, since 2016 till now.

- □ Representative of Yasouj University in the Special Earthquake and Landslide Workgroup of Kohgilouyeh and Boyer Ahmad province, since 2018 till now.
- □ Member of laboratory equipment advisory council of Yasouj University, since 2018 till now.
- \Box Reviewer of several journals.
- □ Manager and director of several national and regional research projects, since 2010 till now.

Software Skills

$\Box ABAQUS$
$\Box OpenSees$
□ Perform3D
□ DeepSoil
□ <i>SHAKE2000</i>
Seismosoft softwares
\Box ETABS
□ SAP2000
\Box SAFE
\Box AUTO CAD
\Box MATLAB
\Box Plaxis
Plaxis 3D Tunnel
\Box FLAC

- \Box FLAC 3D
- \Box Mathematica
- \Box Visual C++
- \Box Office,...