



Resume



First name: Hossein

Last name: Rahnama

Academic title: Assistant professor

Area of Specialty: Geotechnical Earthquake

Area of Interest: Geotechnical & Geophysical Investigation of site, Underground Imaging, Hazard Analysis, Environmental Impact Assessment, Structural Health Monitoring

Projects & Research Activities:

Recent Published Papers

- 1) Reza Bahmanbijari, **Hossein Rahnama** , (2024) ,Structural Damage Detection of 3-D Truss Structure Using Nodal Response Analysis, Journal of Civil Structural Health Monitoring
- 2) **Hossein Rahnama**, Fateme Hajari , Mohammad Momeni, Sohrab Mirassi,(2023) , Investigating effective factors in dynamic analysis of foundations resting on saturated porous media using the cone model method, Amirkabir J. of Civil Engineering, pp 1057-1080
- 3) Mohammad Mehdi Moradi, **Hossein Rahnama**, Sohrab Mirassi , (2022), Evaluation the impact of weak layer in layered soil media using MASW method
- 4) Fateme Hajari, **Hossein Rahnama** ,(2023), Prediction of Horizontal and Torsional Vibrations of Foundations Resting on Saturated Porous Media Using Cone Model, Indian Geotechnical Journal, pp 154-169
- 5) **Hossein Rahnama**, Mehdi HashemiJokar, Mohammad Momeni, Sohrab Mirass ,(2022)Cavity effect on vertical and horizontal components of Rayleigh wave using 2D and 3D simulation models
- 6) Ali Johari, Zahra Heydari, **Hossein Rahnama** , (2022), Reliability analysis of consolidation settlement by geostatistical method considering borehole location, 8th International Congress on Civil Engineering, Architecture and Urban Development, Tehran, Iran
- 7) Sohrab Mirassi, **Hossein Rahnama**, Mohammad Mehdi Moradi , (2022),Detecting the depth and thickness of weak layer in soil media using phase velocity spectrum and theoretical dispersion curve of Rayleigh wave; "Iranian Journal of Geophysics"
- 8) Sohrab Mirassi,**Hossein Rahnama**, Mahmood Rasekh ,(2021), Effect of subsurface cavity length on Rayleigh wave propagation to identify near and far boundary of the cavity [Journal of Structural and Construction Engineering
- 9) Sohrab Mirassi, **Hossein Rahnama**, (2020), Deep cavity detection using propagation of seismic waves in homogenous half-space and layered soil media, Asian Journal of Civil Engineering, PP 1431-1441

Book:

- 10) Hossein Rahnema, Sohrab Mirassi ,(2023) , Subsurface cavity & sinkhole detection using seismic waves (P, R & L)

Projects:

Projects subject	Employer (Year)
Investigating the seismic vulnerability of TBS stations of Shiraz gas network	Fars Gas Company(2013)
"Executive Research Plan of Using Geothermal Energy of Shiraz University of Technology"	2013
"Improving the quality of asphalt in Shiraz"	Shiraz Municipal Civil Organization(2012)
Analyzing the physical and chemical properties of sand industry waste with the aim of studying and introducing existing technologies for its recycling in Fars province.	Organization of Fars Chamber of Commerce (2022)
Studying and investigating sand and industrial wastes and identifying solutions to reduce the production of these wastes in sand production industries in Fars province.	Organization of Fars Chamber of Commerce(2022)
Designing the new site of the Shiraz soil and refuse burial site located on Khorameh Road	Waste Management Organization of Shiraz Municipality (2024)
Investigating the increase of the capacity of the Shiraz landfill site located in Kian Abad	Waste Management Organization of Shiraz Municipality (2012)
Investigating the current situation of the landfill site located in Kian Abad, Shiraz, and providing suitable solutions for the site's stabilization (scientific, executive and economic).	Waste Management Organization of Shiraz Municipality (2017)
Investigating the current situation of the landfill site located in Kian Abad, Shiraz, and providing suitable solutions for the site's stabilization (scientific, executive and economic).	Waste Management Organization of Shiraz Municipality (2017)
Research, design and construction of multi-storey parking space structure by Khaled Brin	Management of Shiraz Municipality's partnership bonds (2012)
Design and construction of Khaled Brin park astronaut structure	Shiraz Municipality (2012)
"Laboratory and theoretical investigation of the behavior of road bed and pavement layers under traffic load"	Fars Department of Roads and Urban Development (2012)
Stabilization of Jahrom quarry rocks	Organization of technical heritage and tourism (2011)

Reinforcement and geotechnical studies of Jahrom Quarries Cave	Organization of technical heritage and tourism(2016)
Research project to identify the causes of ground subsidence in Mobin Assalouye Petrochemical and provide a solution to prevent the failure of water transmission pipes	Mobin Petrochemical (2010)
Industrial design in Asalouye Petrochemical (Thrust Block design related to water transmission line with 3000 mm diameter pipes for cooling petrochemical facilities)	Jam Petrochemical (2003)
Studies to determine the depth of underground water in Kamfiroz plain	Mass builders employer center (2013)
<p>- Studying and consulting in various fields of civil engineering and geotechnics as follows:</p> <ul style="list-style-type: none"> • Consultant in geotechnical fields for more than 200 private, cooperative and government sector projects in Fars, Kohgiluyeh, Hormozgan, Bushehr province. • Studying and designing more than 80 cases of excavation and retaining walls in urban areas • Designing a significant number of steel structures for buildings • Design and implementation of more than 15 space structures • Designing the body and spillway of dams (including the design and stability calculations of the location of the Izdkhasat dam in Fars, Sarzab Dam in Sistan and Baluchistan and Hanna Dam). • Designing more than 6 bridges in Kohgiluyeh and Boyer Ahmad provinces. • Road design (designing the rural road of Imamzadeh Bibi Hekmeh in the province of Kohgiloueh and Boyer Ahmad) • Designing the improvement of the roadbed for gas pipeline against unstable and landslides in Noorabad, Fars • Designer and implementer of more than 20 soil improvement and land stabilization projects 	(from 1995 up to now)

8- Invention

1- "A new Large-scale direct shear apparatus for soil test "

Year of invention 2013

2- "Seismic wave data recording device"

Year of invention 2014

3-"A new device for producing controlled seismic vibrations"

Year of invention 2014