## Curriculum Vitae



Personal Information:

Mohammad Norouz Oliaei Assistant Prof. of Civil Eng. (Geotechnics) Address: Office 6-609, Civil Eng. Dep., Tarbiat Modares University, Tehran Tel: +98-21-82884395 E-mail: M.Olyaei@modares.ac.ir

#### **Education:**

#### PhD:

Civil Eng. (Geotechnics), Sharif University of Technology, 2007, GPA: 17.6/20, 1st Rank.

### MSc:

Civil Eng. (Geotechnics), Tarbiat Modares University, 2000, GPA: 18.4/20, 1<sup>st</sup> Rank. Awarded by Iran Prime Minister (Dr. Habibi).





BSc:

Civil Eng., Isfahan University of Technology, 1998, GPA: 15.7/20, Ranked Top 10%.

### Diploma:

Mathematics-Physics., Imam High School, 1994, GPA: 19.3/20, 3<sup>rd</sup> Rank in Isfahan Province, 1<sup>st</sup> Rank in Natanz City.

### Academic Courses:

Tarbiat Modares University (Since 2008)

### PhD:

Advanced Numerical Methods in Geomechanics Advanced Soil Mechanics II

## MSc:

Finite Element Method Advanced Soil Mechanics Marine Geotechnics Advanced Engineering Mathematics

Sharif University of Technology (2001-2005)

## BSc:

Soil Mechanics Laboratory Foundation Engineering (T.A.) Soil Mechanics (T.A.)

**Research interests:** 

**PhD Supervisor:** 

1-Heisam Heidarzadeh (New Generalized Constitutive Model- Prediction of Soil Monotonic and Cyclic Behavior) 2-Erfan Karimian (Coupled Modeling of Frictional Penetration-SFEM)

PhD Advisor:

1-Omid Naeimifar (Clayey Sand Behavior-Undrained Conditions)

MSc Supervisor:

1-Ehsan Manafi (Tunnel-DEM)
2-Mohammad Heidarpour (Oil Contaminant Propagation-Remediation)
3-Milad Souri (Tunnels under Ground Water Table)
4-S Mohammad Amin Ghotbi (Large Diameter Pile-Liquefaction)
5-Saeid Kouzegaran (Road Embankment & Foundation Bed-Geocell)
6-MirEbad Hoseini (NanoClay-Clayey Sand)
7-Narjes Hesbirad (Pile-Lateral Load)
8-Behnam Norouzi (Excavation-Meshless)
9-Saman Mansouri (Pile Raft-Deep Mixing)
10-Arash Saeidi (Slope-Anchorage)
11-Sajjad Najmaei (Oil Well- HM Analysis)
12-Amir Reza Behzadian (Excavation-Nail Bond Resistance)
13-Hamid Reza Jafari (Excavation under Ground Water Table-Diaphragm Wall)
14-S. Mahdi Ghazi MirSaeid (Oil Well-THM Analysis)
15-Amir Hosein Sorourifar (Stone Column-Encased Geosynthetics)

MSc Advisor:

1-Komail Khakpour (Liquefaction-Pile)
2-Zohreh Khalili (Numerical Modelling-Sand Triaxial Test)
3-Mohammad Mirzapour (Rock Slope-DEM)
4-Emad Zolghadr (Excavation-Nailing)
5-Reza Sadeghzadegan (Soil Reinforcement-Seismic Performance)
6-Asieh Naeimi (Excavation-Nailing)
7-Sina Taymourzadegan (Excavation-Tunnel)

# Other activities:

Sabbatical in Cambridge University (2005-2006) supported by the scholarship from Iranian Ministry of Science, Research and Technology; Cambridge University; British Council (SHELL).

Presentation of Plaxis Software in Channel 4 of IRIB TV (2003).

Receiving of Gold Honor Medal of Young Elite in Natanz City (2009).

PhD Thesis: Coupled Numerical Modelling of Hydraulic Fracture in Saturated Soil and Rock using EFG-Meshless Method, Sharif University of Technology, 2007.

MSc Thesis: Development of a DEM Computer Code for Analysis of Discontinuum Media, Tarbiat Modares University, 2000.

Books:

M. Oliaei, M. Sasani, K. Khakpour, Foundation Engineering, F.I. Publications, 2012.

- M. Oliaei, K. Khakpour, M. Sasani, S. Mamani, Soil Mechanics, F.I. Publications, 2012.
- S. Sh. Yasrebi, M. Oliaei, S. Tabarsaz, E. Zolghadr, H. Momeni, Modern Excavation, F.I. Publications, 2017.

International Journal Papers:

- 1. Oliaei, M. and Pak, A., (2009), Element Free Galerkin mesh-less method for fully coupled analysis of consolidation process, *Scientia Iranica: International Journal of Science and Technology*, 16, 65-77.
- 2. Oliaei, M., Soga, K. and Pak, A., (2009), Some numerical issues using Element Free Galerkin mesh-less method for coupled hydro-mechanical problems, *Int. J. Num. Ana. Meth. Geomech.*, 33, 915-938 (*Special Accept*).
- 3. Asgari, A., **Oliaei, M.** and Bagheri, M., (2013), Numerical simulation of improvement of a liquefiable soil layer using stone column and pile-pinning techniques, *Soil Dynamics and Earthquake Engineering*, 51, 77-96 (*Hot Paper*).
- 4. Oliaei, M., Pak, A. and Soga, K., (2014), A coupled hydro-mechanical analysis for prediction of hydraulic fracture propagation in saturated porous media using EFG mesh-less method, *Computers and Geotechnics*, 55, 254-266 (*Hot Paper*).
- 5. Oliaei, M. and Manafi, E., (2015), Static Analysis of Interaction between Twin-Tunnels using Discrete Element Method (DEM), *Scientia Iranica: International Journal of Science and Technology*, 22, 1964-1971.
- 6. Oliaei, M. and Alitalesh, M., (2015), Ground Motion Amplification due to Underground Cavities Subjected to Incident SV and P In-Plane Waves, *Scientia Iranica: International Journal of Science and Technology*, 22, 1703-1711.
- 7. Oliaei, M. and Heidarpoor, M., (2015), Oil contamination propagation patterns in soils and efficiency evaluation of pumping in-situ remediation method, *Iranian Journal of Science and Technology*, *Trans. Civil Eng.*, 39, 379-384.
- 8. Zolqadr, E., Yasrobi, Sh. and **Oliaei, M.**, (2016), Analysis of soil nail walls performance Case study, *Geomechanics* and *Geoengineering: An International Journal*, 11, 1–12.
- 9. Heidarzadeh, H., **Oliaei, M.** and Latifi, M., (2016), Applying an Appropriate Cap in an Elastoplastic Model with Open Bounding and Yield Surfaces at High Pressures, *Indian Journal of Science and Technology*, 9, 1-7.
- 10. Oliaei, M. and Kouzegaran, S., (2017), Efficiency of cellular geosynthetics for foundation reinforcement, *Geotextiles* and *Geomembranes*, 45, 11-12.
- 11. Oliaei, M. and Ghotbi, S.M.A., (2017), Dynamic behavior of large-diameter piles considering liquefaction under clay layer, *Scientia Iranica: International Journal of Science and Technology*, 24, 2665-2683.

# Iranian Journal Papers:

Oliaei et al.: 14 published papers in Iranian journals of science and technology.

### International Conference Papers:

- 1. Ghotbi, A., **Oliaei, M.**, Yasrebi, Sh. and Mosallanejad, M., Dynamic soil-pile behavior in liquefiable sand overlaid with soft clay, 18<sup>th</sup> Int. Con. on Soil Mechanics and Geotechnical Engineering, Sep. 2013, Paris.
- 2. Oliaei, M., Kouzegaran, S. and Behzadian, A.R., A Real Approach for Numerical Analysis of the Road Embankments Reinforced by Geocell, *6th European Geosynthetics Congress*, Sep. 2016, Ljubljana.
- 3. Oliaei, M., Ghazi Mirsaeed, S.M. and Torkaman, M., The effects of temperature on oil wellbore stability in rocks using coupled THM numerical simulation, *6th Int. Con. on Coupled THMC Processes in Geosystems*, Jul. 2017, Paris.

### Iranian Conference Papers:

Oliaei et al.: 27 published papers in International/National Iranian conferences.

**Research Projects:** Oliaei et al.: 3 finalized research projects. **Professional Experience:** 

Project Manager, P.O.R Consulting Engineers Co., 2007-2014 Chief Engineer, Moshanir Consulting Engineers Co., 2002-2007

**Professional Membership:** Member, Organization for Engineering Order of Building-Tehran Member, Iranian Geotechnical Society (IGS)