

## Hadi Ahmadi

Assistant Professor (Ph.D. in Geotechnical Engineering)

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### Education ↴

Ph.D. in Geotechnical Engineering, University of Guilan, 2016

M.Sc. in Geotechnical Engineering, University of Guilan, 2007

B.Sc. in Civil Engineering, University of Guilan, 2004

### Thesis ↴

Ph. D. (2016): Settlement of sand under monotonic and cyclic loading considering soil improvement; Case study: Anzali sand

Supervisor: Dr. Abolfazl Eslami – Dr. Mahyar Arabani

M. Sc. (2007): Evaluation of constitutive models for partially saturated soils; Application in road embankments

Supervisor: Dr. Farzin Kalantary – Dr. Mahyar Arabani    Advisor: Dr. Abolfazl Eslami

## Publications ↴

- **H. Ahmadi**, A. Eslami and M. Arabani, (2017) "Mitigating the seismic settlement of foundations on sand by ground improvement techniques, Volume 170 Issue 2, pp. 72-80
- **H. Ahmadi**, A. Eslami and M. Arabani, (2017) "Experimental Study on the Settlement of Marine Deposits of Anzali under Cyclic Loading by Laminar Box Apparatus", Marine Georesources & Geotechnology, VOL. 35, NO. 3, pp. 330–338
- **H. Ahmadi**, S.F. Sizkow (2017) Numerical Modelling of Size Effect on Subgrade Reaction Modulus Using DEM, Computational Research Progress in Applied Science & Engineering (CRPASE) 3 (3)
- **H. Ahmadi**, A. Eslami, M. Arabani (2015) Characterization of sedimentary Anzali sand for static and seismic studies purposes, International Journal of Geography and Geology 4 (10), 155
- Ahmadi H, Eslami A, Arabani M , Dynamic settlement considerations in design of footings resting on uniform Fine Sand, 2nd International conference on Geotechnical and Urban earthquake engineering. Tabriz, Iran, 2015.
- Ahmadi H, Eslami A and Arabani M, "Laminar box apparatus of the University of Guilan: Commissioning", 2nd International conference on Geotechnical and Urban earthquake engineering. Tabriz, Iran, 2015.
- **H. Ahmadi**, A. Eslami and M. Araban, Effect of soil improvement by grouting on settlement of Anzali sand under seismic loading. 1st National Conference of Soil Mechanics and Foundation Engineering, Tehran, Iran, 2014.
- A. Eslami, H. Modaraei, **H. Ahmadi** (2007) Investigation of inclined retaining walls (located on slopes) performance against static and earthquake loads, Esteghlal Journal, Isfahan University of Technology 26 (2), 17-31
- **H. Ahmadi**, F. Kalantary, M. Arabani (2007) A hyperbolic behaviour model for partially saturated fine soils, Proc. of the 9th WSEAS Int. Conf. on Mathematical and Computational Methods in Science and Engineering, Trinidad and Tobago, pp 14-20, November 5-7 , 2007.
- A.K. Haghi, M. Arabani, **H. Ahmadi** (2006) Applications of expanded polystyrene (EPS) beads and polyamide-66 in civil engineering, Part One: Lightweight polymeric concrete, Composite Interfaces 13 (4-6), 441-450

### Reviewer for ↴

Geotechnical and Geological Engineering, Springer

Proceedings of the Institution of Civil Engineers - Ground Improvement, ICE Publishing, Institution of Civil Engineers

### Fields of Interest ↴

Physical Modelling of Sands

Dynamic Settlement of Sands

Ground Improvement

Marine Geotechnics

Distinct Element Method (DEM)

### Master Theses (Supervisor/ Advisor) ↴

- Effect of soil improvement by cement grouting on subgrade reaction modulus for oil-contaminated soil; case study on Anzali sand, M. Fallahpour, Higher Education Institute, 2017 (Supervisor)
- Numerical modelling of settlement of Anzali sand by Finite Volume Method (FVM), N. Hafezi Koldare, Pouyandegan, Higher Education Institute, 2017 (Supervisor)
- Numerical modelling of size effect on Volumetric changes of uniform sand using discrete element method (DEM), S. Mirza Aghazadeh, Pouyandegan Higher Education Institute, 2017 (Supervisor)
- Numerical modelling of liquefaction of Chamkhaleh sand by smoothed particle hydrodynamics (SPH), M. Asadi, Pouyandegan Higher Education Institute, 2017 (Supervisor)
- Experimental study of shape effect on subgrade reaction modulus of sands, F. M. Moghadam, Pouyandegan, Higher Education Institute, 2017 (Supervisor)
- Study of effective parameters on settlement of Concrete face rock- fill dam (CFRD); Case study on Shahr-e-bijar dam, I. Hamdami, Islamic Azad University, 2018 (Supervisor)
- Effect of soil-structure interaction on design of micropiles–raft (MPR) foundation system in sandy soils, M. Lahouti, Islamic Azad University, 2018 (Supervisor)
- Numerical modeling of effective parameters on subgrade reaction modulus of clean fine sands using FEM; Case Study on sands of the southern coast of the Caspian sea, H. Rouhani, Islamic Azad University, 2018 (Supervisor)
- Effect of Nano-magnesium on plasticity and swelling of Rasht clay, M.T. Barazandeh, Islamic Azad University, 2018 (Supervisor)
- Comparison of Micro- and Nano-silica Performance in Changing Physical Conditions of Clay, O. Shafiei Chirani, Islamic Azad University, 2018 (Supervisor)

- Effect of Nano-magnesium addition on stabilization of silty soils, M. Kamalpour, Islamic Azad University, 2018 (Supervisor)
- Numerical analysis of ground improvement using jet grouting method; Case study of Anzali wharf, S. Kamiab, Islamic Azad University, 2018 (Supervisor)
- Effect of nanopowders addition on the settlement of clayey sand, S.M. Mortazavi, Islamic Azad University, 2018 (Supervisor)
- Effect of nanopowders addition on the stiffness of fine grain sands: Case study on Anzali sand, M. Davaran, Islamic Azad University, 2018 (Supervisor)
- Numerical modelling of cementation effect on settlement of uniform sand under cyclic loading using discrete element method (DEM), F. Mirabootalebi, Higher Education Institute, 2018 (Supervisor)

## Teaching Experiences ↴

Soil mechanics (B.Sc. - University of Guilan)  
 Foundation engineering (B.Sc. - University of Guilan)  
 Computer applications in geotechnical engineering (B.Sc. - University of Guilan)  
 Mechanics of materials 1 (B.Sc. - University of Guilan)  
 Construction procedures (B.Sc. - University of Guilan)  
 Engineering geology (B.Sc. - University of Guilan)  
 Pavement engineering (B.Sc. - University of Guilan)  
 Advanced soil mechanics (M.Sc. - Islamic Azad University)  
 Advanced foundation engineering (M.Sc. - Islamic Azad University)  
 Ground improvement (M.Sc. – Pouyandegan Higher Education Institute)  
 Continuum mechanics (M.Sc. – Pouyandegan Higher Education Institute)  
 Marine geotechnics (M.Sc. – Pouyandegan Higher Education Institute)  
 Soil dynamics (M.Sc. – Islamic Azad University)