Dr. Ali PAk

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EDUCATION

- Ph.D. in Geotechnical Engineering, 1997, Department of Civil and Environmental Engineering,The University of Alberta, Edmonton, Canada
- M.Sc. in Soil Mechanics and Foundation Engineering, 1989, Amir Kabir University of Technology, Tehran, Iran
- B.Sc. in Civil Engineering, 1984, Iran University of Science and Technology, Tehran, Iran

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Employment History

Date	**Position**	**Place**
2005-present	Professor	Department of Civil Engineering, Sharif University of Technology
2005-2009	Associate professor	Department of Civil Engineering, Sharif University of Technology
1997-2005	Assistant professor	Department of Civil Engineering, Sharif University of Technology
1996-1997	Software developer	PISA Inc.
1990-1991	Lecturer	Sharif University of Technology
1990-1991	Design Engineer	Sazeh Pardazi Consulting Engineering Company
1989-1990	Lecturer	Amir Kabir University of Technology
1989-1990	Design Engineer	Pooya Tarh Consultants
1986-1987	Design Engineer	SANO Consulting Engineering Company
1984-1986	Project Engineer	Ports and Shipping Organization

Teaching

1. Professor at Sharif University of Technology (1997-present)
2. Sessional lecturer at the University of Alberta, Edmonton, Canada (1996)
3. Lecturer at Sharif University of Technology, Tehran, Iran (1990-1991)
4. Lecturer at Amir Kabir University of Technology, Tehran, Iran (1989-1990)

Graduate Courses:

•Numerical Methods in Geotechnical Engineering

•Advanced Computational Geomechanics

•Environmental Geotechnics

•Site Investigation and Field Monitoring

Undergraduate Courses:

•Foundation Engineering

•Soil Mechanics

•Engineering Analysis

•Mechanics of Materials I and II

•Fluid Mechanics

•Soil Mechanics Laboratory

Research

RESEARCH INTERESTS

•Computational Geomechanics

•Petroleum Geomechanics

•Liquefaction Modeling

•Hydraulic Fracturing

•Ground Improvement

•Environmental Geotechnics

RESEARCH PROJECTS

1. Numerical Analysis of Stress-Deformation in Earth Dams under Construction, considering Compressibility of Pore Water Pressures , M.Sc. thesis of M.Heydari, Department of Civil Engineering, Sharif University of Technology, 1998

2. Numerical Modeling of Initiation of Hydraulic Fracturing in Two-phase Cohesive Materials, M.Sc. thesis of A.Nouri,Department of Civil Engineering, Sharif University of Technology, 1998

3. Analysis of Landfill Leachate Volume and its Effects on the Design of Linear System, M.Sc. thesis of H.Sootoodeh Manesh, Department of Civil Engineering, Sharif University of Technology, 1999

4. Nonlinear Analysis of Pile Behaviour Subjected to Lateral Loads, M.Sc. thesis of M. Ebrahimi, Department of Civil Engineering, Sharif University of Technology, 1999

5. Nonlinear Analysis of Interaction Between Displacements and Pore Pressuresin a Medium Saturated with Compressible Fluid, M.Sc. thesis of Lotfi Azad, Department of Civil Engineering, Sharif University of Technology, 1999

6. Numerical Analysis of the Effect of non-linear Compressibility of Pore Fluid on the Behaviour of Unsaturated Core of Earth Dams, M.Sc. thesis ofM.Zamani Nezhad, Department of Civil Engineering, Sharif University of Technology, 2000

7. Classification of Industrial Solid Waste of Gilan Province for landfilling, Ministry of Industries and Mines, 2001

8. Numerical Modeling of Liquefaction Phenomenon Using a Fully Coupled Dynamic Approach, M.Sc. thesis of Hadi Shahir, Department of Civil Engineering, Sharif University of Technology, 2001

9. Numerical Modeling of Earth Dam behavior under Construction, considering the Core in Unsaturated State, Water Resources Management Organization, Ministry of Energy, 2002

10.Numerical Analysis of Interaction between Flexible Retaining Wall and Sand Backfill considering the Effect of Water Table, M.Sc. thesis research of M.R. Shakeri, Department of Civil Engineering, Sharif University of Technology, 2002

11. Numerical Simulation of Reinforced Embankments Constructed on Soft Soil,M.Sc. thesis of A. Sharghi, Department of Civil Engineering, Sharif University of Technology, 2002

12. Evaluation of Liquefaction Phenomenon in Dam Foundation by Numerical Modeling,Water Resources Management Organization, Ministry of Energy, 2003

13. Study of the Performance of Liner Systems to Seal the Foundation of Copper Extraction Site by Heap Leaching Method, M.Sc thesis of H. Ghiabi, Department of Civil Engineering, Sharif University of Technology, 2003

14. Numerical Modeling of Liquefaction Using a Two-Surface Critical State Plasticity Model for Sands, M.Sc. thesis of M. Taiebat, Department of Civil Engineering, Sharif University of Technology, 2003

15. Study the effects of Applying Large Strain Formulation in the Numerical Analysis of Single –Phase soil media, M.Sc. thesis of M. Ghafghazi, Department of Civil Engineering, Sharif University of Technology, 2004

16. Solar Energy's Effects on Mechanical Properties of Tailings and Stability of Tailing Dams,M.Sc. thesis of Abdolreza Osouli, Department of Civil Engineering, Sharif University of Technology, 2004

17. Numerical Modeling of Soil Improvement by Dynamic Compaction, M.Sc. thesis of A. Ghassemi, Department of Civil Engineering, Sharif University of Technology, 2004

18. Numerical Study of the Interaction Between Flexible Retaining Walls and Saturated ClayeyBackfills in Drained and Undrained Conditions, M.Sc. Thesis of A. BazrAfshan, Department of Civil Engineering, Sharif University of Technology, 2005

19. Application of a Critical State Plasticity Model with Fabric Effects for Modeling theBehavior of Sandy Soils Under Static and Dynamic Loads, M.Sc. Thesis of A. Nabizadeh, Department of Civil Engineering, Sharif University of Technology, 2005

20.Modeling of Hardening and Softening Behavior of Rock Masses under Shear using Multilaminate Model. Ph.D. thesis of R. Mahin Roosta, (Advisor), Department of Civil Engineering, Sharif University of Technology 2005

21.Bearing Capacity Analysis of Semi-Deep Foundations(Short Compacted Stone Columns) by Numerical Modeling, M.Sc. Thesis of M. Sharafinia, Department of Civil Engineering, Sharif University of Technology ,2006

22.Study and Analysis of Seepage Through Tailings Dams using Numerical Modeling, M.Sc. Thesis of M. Nabi pour, Department of Civil Engineering, Sharif University of Technology ,2006

23.Numerical Modeling of Drained and Undrained Behavior of Sands Using NORSAND, M.Sc. Thesis of F. Eskandari, Department of Civil Engineering, Sharif University of Technology ,2006

24.Coupled Numerical Modeling of Hydraulic Fracture Propagation in Dry and Saturated Soils Using EFG Meshless Method, Ph.D. Thesis of M. Norouz Oliaei, Department of Civil Engineering, Sharif University of Technology ,2007

25.Numerical Modeling of Self-Weight Consolidation and Desiccation of Ultra Soft Soils, M.Sc. Thesis of S. Samimi, Department of Civil Engineering, Sharif University of Technology, 2007

26.Experimental Investigation of Dynamic Characteristics of Clay – Cement Mixture using Bender Element Apparatus, M.Sc. Thesis of M. Bahador, Department of Civil Engineering, Sharif University of Technology ,2007

27.Comparison the Performance of Constitutive Models in Numerical Simulation of the Behavior of Unsaturated Soils, M. Sc. Thesis of M. Zarin far, Department of Civil Engineering, Sharif University of Technology ,2007

28.Analytical and Numerical Analysis of Saturated and Unsaturated Soils under Thermo-hydro-mechanical Conditions, M.Sc. Thesis of F. Arfaei Malekzadeh, Department of Civil Engineering, Sharif University of Technology ,2008

29.Experimental Investigation of Performance of Geotextiles in Filtration and Drainage of Dams, M.Sc. Thesis of Z. Zahmatkesh, Department of Civil Engineering, Sharif University of Technology ,2008

30.Study of Bearing Capacity and Settlement of Semi-deep Foundations (Rammed Aggregate Piers) using Numerical Modeling, M.Sc. Thesis of S. Dashtara, Department of Civil Engineering, Sharif University of Technology ,2009

31.Study of the effect of Densification on Improvement of Saturated Sand Deposits for Mitigating Liquefaction based on Performance levels of Shallow Foundation, Ph.D. Thesis of H. Shahir, Department of Civil Engineering, Sharif University of Technology ,2009

32.Analysis of Dynamic Behavior of Piles in liquefiable Soils, M.Sc. Thesis of A. Rahmani, Department of Civil Engineering, Sharif University of Technology, 2009

33.Numerical Modeling of Dynamic Compaction Operations in Sandy Soils for Proposing Print Spacing Pattern,M.Sc. Thesis of G. Jahangiri, Department of Civil Engineering, Sharif University of Technology, 2009

34.Study of the Behavior of Pile Groups in Clayey Soils Subjected to Lateral Loads, M.Sc. Thesis of A. Koohsari, Department of Civil Engineering, Sharif University of Technology, 2009

35.Comparison of the Performance of Different Boundary Conditions in Numerical Analysis of Dynamic Behavior of Earth Dams, M.Sc. Thesis of M. Emadi, Department of Civil Engineering, Sharif University of Technology, 2009

36.Dredging Code of Practice based on Environmental Considerations in Iran, Research Project for TransportationResearchCenter, Ministry of Roads and Transportations, Iran, 2009

37.Numerical Modeling of Ground Displacement due to Liquefaction-induced Lateral Spreading, M.Sc. thesis of Omid Ghassemi Fare, Department of Civil Engineering, Sharif University of Technology, 2010

38.Numerical Study of the effectiveness of Stone Columns on Increasing Bearing Capacity of the Ground, M.Sc. thesis of Ali Akbar Golestani, Department of Civil Engineering, Sharif University of Technology, 2010

39.Experimental Study of the Effect of Zeolite in bottom Clay Liner of Landfills for Absorbing Heavy Metals from Leachate, M.Sc. thesis of Seyed Ali Shodjaei, Department of Civil Engineering, Sharif University of Technology, 2010

40.Numerical Study of Laminar and Turbulent Fluid Flow in Fractured Porous Media, M.Sc. thesis of Reza Nayyer, Department of Civil Engineering, Sharif University of Technology, 2010

41.Numerical Modeling of Improvement of Saturated Ground using Dynamic Compaction Method, M.Sc. thesis of Saber Dadizadeh, Department of Civil Engineering, Sharif University of Technology, 2011

42.Applying a Temperature-dependent Constitutive Model for Coupled THM analysis of Saturated Soils, M.Sc. thesis of Kumars Afshari, Department of Civil Engineering, Sharif University of Technology, 2011

43.Modeling of Two-Phase Flow in Porous Media using Lattice-Boltzman Method, M.Sc. thesis of Bahman Sheikh, Department of Civil Engineering, Sharif University of Technology, 2012

44.Numerical Study of Sand Production in Oil Wells, M.Sc. Thesis of Babak Abbasi, Department of Civil Engineering, Sharif University of Technology, 2012

45.Parametric Study of Lateral Spreading Phenomenon in Liquefiable Sand Layers, M.Sc. Thesis of Sahand Seify, Department of Civil Engineering, Sharif University of Technology, 2012

46.Study of the Stability of Rubble Mound Breakwater Armor Units by Numerical Modeling, M.Sc. Thesis of Mohammad Sarfaraz, Department of Civil Engineering, Sharif University of Technology, 2012

47. Study of the Behavior of Circular Tunnel Linings subjected to Seismic Shear Waves, M.Sc. Thesis of Mohammad Motalebnejad, Department of Civil Engineering, Sharif University of Technology, 2012

48.Comparison among Constitutive Models for Numerical Simulation of Liquefaction Phenomenon, M.Sc. Thesis of Mohammad Ali Iranmanesh, Department of Civil Engineering, Sharif University of Technology, 2013

49.Numerical Study of the effects of Soil Lateral Spread on Coastal Structures, M.Sc. Thesis of Mahsa Khosrowjerdi, Department of Civil Engineering, Sharif University of Technology, 2013

50.Experimental and Numerical Study of Hydro-mechanical Behavior of Saturated Fine –

grained Soils Subjected to EKG phenomenon, M.Sc. Thesis of Mohammad Shahsavand, Department of Civil Engineering, Sharif University of Technology, 2013

51.Numerical Analysis of Pile Dynamic Behavior in Liquefiable Layered Soils, M.Sc. Thesis of Omid Ghaffari-pour, Department of Civil Engineering, Sharif University of Technology, 2013

52.Investigating the Effects of the location of Phreatic Line on the Stability of Tailings Dams, M.Sc. Thesis of Nikoo Azimi, Department of Civil Engineering, Sharif University of Technology, 2013

53.Evaluation of efficiency of RK chromodynamic model for simulation of two-fluid flow in porous media, M.Sc. Thesis of Mohammad Sadeghi, Department of Civil Engineering, Sharif University of Technology, 2013

54.Numerical Simulation of the Behavior of Unsaturated Soils Using BBM in Flac Software, M.Sc. Thesis of Hojjat Mohammadi, Department of Civil Engineering, Sharif University of Technology, 2014

55.Numerical Modeling of the Liquefaction-induced Settlement of Shallow Footing Rested on non-Homogeneous sub-soil Strata, M.Sc. Thesis of Peyman Ayoubi, Department of Civil Engineering, Sharif University of Technology, 2014

56.Numerical Modeling of Hydro-fracture Stimulation of Oil/Gas wells using a fully coupled EFG-based analysis of two-phase fluid flow in the deformable reservoir. Ph.D. thesis of Soodeh Samimi, Department of Civil Engineering, Sharif University of Technology, 2014

57. Parametric Study of the behavior of Geosynthetic-Reinforced Soil Walls with Concrete

Face using FLAC, M.Sc. Thesis of Amin Selseleh, Department of Civil Engineering, Sharif University of Technology, 2016

58. Study of the Variation of Maximum Shear Modulus of Unsaturated Soils under wetting/drying paths using Bender Element Test, M.Sc. Thesis of Parisa Shahbazan, Department of Civil Engineering, Sharif University of Technology, 2016

59. Numerical Study of the Effects of Silty interbedded layers on Liquefaction of Saturated Sandy Deposits, M.Sc. Thesis of Babak Moghaddam Ranjbaran, Department of Civil Engineering, Sharif University of Technology, 2017

60.Numerical study on the effects of geo-mechanical parameters on hydraulic fracture characteristics in oil reservoirs, M.Sc. Thesis, of Navid Chiti, Department of Civil Engineering, Sharif University of Technology, 2017

61.Evaluating the causes of Mont Polley tailings dam failure using numerical modeling, M.Sc. Thesis of Kasra Salemi, Department of Civil Engineering, Sharif University of Technology, 2017

62.Analytical Solution for partial differential equations governing 1D. Thermo-Hydro-Mechanical problems, M.Sc. Thesis of Davoud Yazdani Cherati, Department of Civil Engineering, Sharif University of Technology, 2017

HONORS AND AWARDS

1. Teaching excellence Award, Sharif University of Technology, 2011
2. Omar Khayyam Research Excellence Award, Scientia Iranica Journal, Sharif University of Technology, 2009
3. Teaching excellenceAward, Sharif University of Technology,2003

4. Teaching excellence Award, Sharif University of Technology, 2000

5. J. Gordin Kaplan Graduate Student Award from the University of Alberta, 1996

6. Ph.D. Scholarship Award from Ministry of Culture and Higher Education of Iran, 1992

MEMBERSHIP

1. International Society of Soil Mechanics and Geotechnical Engineering

2. Iranian Geotechnical Society

3. Iranian Hydraulic Society

CONSULTING EXPERIENCES

1. Project Manager of Marine Spatial Planning of the Hormuzgan province marine territories

2. Project Manager of Scrutinizing of ICZM plan for Hormuzgan province

3. Project Manager of Coastal Bypass Road Project of Ramsar

4. Project Manager of "Parsian Industrial Port" Design

5. Project Manager of "Kish Island Coastal Zone and Environment Management Study"

6. Project Manager of “Integrated Coastal Zone Management Studies in Iran”, phase I

7. Project Manager of 10 Small Hydroelectric Power Plants

8. Project Manager of Bahmanshir upstream and downstream Dams

9. Project Manager of “Karoun Waterway: Training and Navigation”

10. Project Manager of “Qumrood River Training”

11. Project Manager of Assaluyeh Petrochemical Port (conceptual design phase)

12. Project Manager for increasing the capacity of Shahid Rajaee port for accepting Panamax and Cape size ships

13. Design engineer for QUAEN cement factory project (heavy stone crusher and connected buildings)

14. Design engineer for Defense Ministry administrative building project (Electronic Industries Division)

15. Design engineer for fishing harbors projects

16. Private consultant for designing of fire station, library building and retaining walls

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TECHNICAL EXPERIENCES

1. Supervision of design and construction of harbors in executive department of ‘Ports and shipping organization’

2. Site engineer for Sharif housing complex

3. Site engineer for installation of sea water desalting plant project

4. Geotechnical studies for OROUMIEH Residential Complex Project site

5. Developing Software for Geotechnical Stress and Deformation Analysis

6. Member of the Committee for providing “Iranian Design Manual for Maritime Structures”

BOOKS

1.Dredging (Vol. 1 Technical and Operational Issues, Vol. 2 Environmental Impacts), Transportation Research Institute, Ministry of Roads and Urban Development, 2012

2.Environmental Geotechnics, Sharif University Press, 2014

PUBLICATIONS

1. A. Pak and D.H. Chan, (1996): A Fully Implicit Thermal-hydro-mechanical Fracture Finite Element Model for Modeling Hydraulic Fracturing in Oilsand, Proceedings of 47thATM, Petroleum Society of CIM, Calgary, Alberta, June 10-12, 1996

2. A. Pak, (1997): Numerical Modelling of Hydraulic Fracturing, Ph.D. Thesis, Department of Civil and Environmental Engineering, University of Alberta, Edmonton, Alberta, Canada, 1997

3. D.H. Chan and A. Pak, (1998): Numerical Modelling of Hydraulic Fracturing in a Porous Medium, International Conference on Geomechanics/ Ground Control in Mining and Underground Construction, Wollongong, Australia, 1998

4. A. Pak and a. Sheikh Ansawri, (1998): Role and Importance of Environmental issues in Dredging Projects, 3rdInternational Conference on Ports and Marine Structures, Tehran, Iran, 1998 (in Persian)

5. A. Pak, S.A. Sadrnezhad, and A. Nouri, (1999): Influence of the Effective Initial Principal Stresses on Hydraulic Fracture in Soils, Scientia Iranica, Vol.6, No. 3&4 , Fall 1999

6. A.Pak, and I. Ashayeri, (2000): A neural Network Based Model for Evaluation of Permeability of Cohesionless Soils, 5thInt. Conference on Civil Engineering, Mashad, Iran, 8-10 May, 2000

7. A. Pak, and F. Lotfi Azad, (2000): Interaction between Pore Pressures and Deformations in Saturated Porous Media with Compressible Solid and Fluid Phases , 5thInt. Conference on Civil

Engineering, Mashad, Iran, 8-10 May, 2000 (in Persian)

8. A. Pak, and M. Ebrahimi, (2000): The Effects of Layered Subsoil on P-Y Curves for Analysis of Piles under Lateral Loads, 5thInt. Conference on Civil Engineering, Mashad, Iran, 8-10 May, 2000 (in Persian)

9. A.Pak, (2000): Management of the Dredged Materials from the viewpoint of Environmental Geotechnics, 4th Int. Conference on Coasts, Ports and Marine Structures, Bandar Abbas, Iran, (In Persian)

10. S.M. Mousavi, B. Gatmiri , A. Pak, and M.H. El Naggar (2000): Analysis of Land Subsidence Due to Groundwater Withdrawal Considering Unsaturated Layers, Proc. 53rd Canadian Geotechnical Conference, Montreal, Quebec, Oct. 15-18, 2000, Vol.2, pp. 1153-1160

11. A. Nouri and A. Pak (2002): Numerical Evaluation of Hydraulic Fracturing Pressure in a Two-Phase Porous Medium, International Journal of Engineering, Vol.15, No.2, pp.125-134

12. A. Pak, and M. N. Oliaei (2001): Dredging Projects in Iran and Environmental management of the dredged Materials, Proceeding of the 5th International Conference on Coasts, Ports, and Marine Structures, Ramsar, Iran

13. A. Pak, and I. Ashayeri (2002): Predicting Compacted Clay's Hydraulic Conductivity by Neural Networks, Proceeding of the 2nd Canadian Specialty Conference on Computer Applications in Geotechnique, Winnipeg, Canada

14. A. Komakpanah, A. Nouri, A. Pak, H. Vaziri, and M.R. Islam (2002): Evaluation of Hydraulic Fracturing Pressure in a Porous Medium by using Finite Element Method, Energy Sources (Part A), vol.24, no.8, pp. 715-724

15. A. Pak, and H. Shahir (2002): Numerical Modeling of Dynamic Consolidation in Saturated Soils, Proceeding of the 1st Ground Improvement Conference", Tehran, Iran, (In Persian)

16. A. Pak, and I. Ashayeri (2002): Evaluation of the Hydraulic Conductivity Coefficient for Compacted Clay Liners,Proceeding of the 1st Ground Improvement Conference", Tehran, Iran, (In Persian)17. K. Moradi Hersini, and A.Pak (2002): Site selection for engineered Sanitary landfills in GilanProvince using regional Screening Method, Proceeding of the 6th conference of the Geological Society of Iran, Kerman, (In Persian)

18. H. Shahir and A. Pak (2002): Numerical Modeling of Liquefaction Phenomenon in the foundation of Dams, Proceeding of the 3rd International Conference on Geotechnical Engineering and Soil Mechanics of Iran, Tehran, (In Persian)

19. H. Shahir, A. Pak, and D. Chan (2002): Evaluation of Liquefaction Potential Using a Fully Coupled Dynamic Numerical Approach, Proceeding of the 55th Canadian Geotechnical Conference, Niagara Falls, Canada

20. A. Pak and H. Naghavi (2002): Study of the Dredging Alternatives for Karoun River for Inland Navigation, Proceeding of the 6th International Conference on River Engineering, Ahvaz, Iran, (In Persian)

21. A. Pak, and A. Sharghi (2003): Numerical Analysis of Geotextile Reinforced Silty Sand Embankment on Soft Clay, Proceeding of the 56th Canadian Geotechnical Conference, Winnipeg, Canada

22. A. Pak, and A. Sharghi (2003): The effect of Geometry on the Behavior of Geotextile reinforced Silty Sand Embankments, Proceeding of the International Workshop on Geotechnics of Soft Soils, Holland

23. A. Pak and M.R. Shakeri (2003): Analysis of the flexible Retaining Wall Behavior Considering its interaction with Non-cohesive backfill, Proceeding of the 6th International Conference on Civil Engineering, Isfahan, Iran, (In Persian)

24. A. Pak, and M. Zamani-Nejad (2003): Stress-Deformation Analysis in Unsaturated Soils considering the nonlinear behavior of pore fluid, Proceeding of the National Conference on Hydropower Plants of Iran'', Tehran, (In Persian)

25. A. Pak, and H. Ghiabi (2004) : Evaluation of the Performances of the Impermeable Liner Systems for Prevention of Environmental Damages of Copper Extraction by Heap Leaching Method, 1st National Congress on Civil Engineering, Sharif University of Technology, Tehran, Iran, (In Persian)

26. A. Pak and M. Taiebat (2004):A fully Coupled Dynamic Analysis of VELACS Experiment No.1 Using a Critical State Two-Surface Plasticity Model for Sand, Proceedings of the 13th World Conference on Earthquake Engineering, Vancouver, Canada

27. M. Taiebat and A. Pak, (2004): Application of a Two-Surface Critical State Plastic Constitutive Model for Liquefaction Modeling, 1st National Congress on Civil Engineering, Sharif University of Technology, Tehran, Iran, (In Persian)
28. S.S. Yasrobi, A.Pak, and R. Hooshmandan, (2004): Numerical modeling of Dynamic Compaction in Granular Soils, 1st National Congress on Civil Engineering, Sharif University of Technology, Tehran, Iran, (In Persian)
29. A.Pak and D.H. Chan (2004): A fully Implicit Single Phase T-H-M Fracture Model for Modelling Hydraulic Fracturing in Oil Sands, Journal of Canadian Petroleum Technology, Vol. 43, No.6, pp.35-44
30. M. Taiebat and A. Pak (2004): Liquefaction Modeling Using a Fully Coupled Dynamic Numerical Approach and a Two-Surface Critical State Plasticity Model for Sands, Proceedings of the International Conference on Geotechnical Engineering, Beirut
31. H. Ghiabi and A. Pak (2004): Numerical Study of Effective Factors on the Chemical Transport through Composite Liners, Proceedings of Numerical Models in Geomechanics-NUMOG IX- Pande &Pietruszczak (eds.), pp.375-380
32. A.Pak (2004): Integrated Coastal Zone Management, Necessities, World Status, and the Actions Taken in Iran, Proc. of the Sixth International Conference on Coasts, Ports, and Marine Structures (ICOPMAS), Tehran (In Persian)
33. A. Pak, H. Shahir, and A. Ghassemi (2005): Behavior of Dry and Saturated Soils Under Impact Load During Dynamic Compaction, Proceedings of 16ICSMGE (16th International Conference on Soil Mechanics and Geotechnical Engineering), Osaka, Japan
34. A. Azad, S.S. Yasrobi, A. Pak, (2005): Active Lateral Earth Pressure Distribution During Earthquake, Proceeding of the 58thCanadian Geotechnical Conference, GEOSASK 2005
35. M.R. Moslemi, M. Vossoughi, A. Pak, M.T. Jafarzadeh (2005): The Effects of Environmental Factors on Biological Remediation of Petroleum Hydrocarbon Contaminated Soil, Water and Wastewater, No. 55 (in Persian)
36. R. MahinRoosta, M.H. Sadaghiani, A. Pak, (2005): Strength Reduction Technique in Stability Analysis of Jointed Rock Slopes, Int. Journal of Civil Engineering, Vol. 3, No. 3 & 4, pp.152-166

37.A. Azad, S.S. Yasrobi, A. Pak, (2005): Lateral Earth Pressure on Geosynthetic Reinforced Soil Walls during Earthquake, Proceedings of International Conference on the Use of Geosyntheticsin Soil Reinforcement and Dynamics (Sep. 2004), pp. 479-487, Dresden, Germany

38. A. Pak, M. Farajzadeh, F. Majd (2005): Towards Integrated Coastal Zone Management in Iran, Proceedings of the 1st International Conference on Coastal Zone Management and Engineering, Dubai, UAE

39. R. Mahinroosta, M.H. Sadaghiani, A. Pak and Y. Saleh (2006): Rock Joint Modeling Using a Visco-plastic Multi-laminate Model at Constant Normal Load Condition, Journal of Geotechnical and Geological Engineering, vol.24, pp.1449-1468

40. A. Pak, M. Tajrishi, H. Taheri Shahraeini, (2006): Classification of Industrial Solid Wastes and its importance in Recycling and Selection of Landfill Type, Sharif Journal of Science and Technology, No.33, pp.55-66 (in Persian)

41. A. Pak, (2006): Challenges for Establishment of Integrated Coastal Zone Management (ICZM) along Iran's Coastlines, Proceedings of 7th International Conference on Coasts, Ports, and Marine Structures, Tehran (in Persian)

42. A. Pak and A. Nabizadeh (2006): Application of a Critical State Plasticity Constitutive Model with Fabric Effects, Proceedings of 7th International Civil Engineering Congress, Tarbiat Modares University, Tehran (in Persian)

43. A. Pak and A. Ghassemi, (2006): Numerical Modeling of Improvement of Dry and Saturated Soils by Dynamic Compaction, Proceedings of 7th International Civil Engineering Congress, Tarbiat Modares University, Tehran (in Persian)

44. A. Pak and A. BazrAfshan, (2006): Study of Interaction between Flexible Retaining Wall and Saturated Clayey Backfill in Undrained Condition, Proceedings of 7th International Civil Engineering Congress, Tarbiat Modares University, Tehran (in Persian)

45. A. Azad, S.S. Yasrobi, A. Pak, (2006):Effect of Flexibility of Cover on Dynamic Behavior of Reinforced-Soil Walls,Proceedings of 7th International Civil Engineering Congress, Tarbiat Modares University, Tehran (in Persian)

46. A. Azad, S.S. Yasrobi, A. Pak, (2006):Dynamic Behavior Assessment of Geosynthetic

Reinforced Soil Walls, Proceedings of Eight International Conference on Geosynthetics, Vol. 4, pp. 1503-1506,Yokohama, Japan

47. A. Bazrafshan, and A. Pak, (2006): Numerical Modeling of Interaction Between Flexible Retaining Wall and Saturated Clayey Soil in Undrained and Drained Conditions, Proceedings of Fourth International Conference on Soft Soil Engineering, Vancouver, Canada

48. M. Taiebat, H. Shahir, A. Pak, (2007): Study of Pore pressure Variation During Liquefaction Using Two Constitutive Models for Sands, Journal of Soil Dynamics and Earthquake Engineering, Vol.27, No.1, pp.60-72

49. A. Pak and S. Samimi, (2007): Numerical Modeling of Self-weight Consolidation of Slurry Soils Under Water, Proceedings of the Third National Civil Engineering Congress, Tabriz, Iran, (In Persian)

50. A. Pak and M. Nabi pour, (2007): Seepage Analysis and Design of Drainage Systems in Tailing Dams, Proceedings of the Third National Civil Engineering Congress, Tabriz, Iran, (In Persian)

51. A. Pak and M. Sharafinia, (2007): Bearing Capacity Analysis of Compacted Aggregate Piers by Numerical Modeling,Proceedings of the Third National Civil Engineering Congress, Tabriz, Iran, (In Persian)

52. M. Bahador and A. Pak (2007): Small Strain Shear Modulus of Cement Admixed Clays, Proceedings of the 1st International Conference of EACEF, Jakarta, Indonesia

53. A. Azad, S.S. Yasrobi, A. Pak, (2007): Seismic Active Earth Pressure Distribution History behind Rigid Retaining Walls, Journal of Soil Dynamics and Earthquake Engineering, vol. 28, 2008

54. A. Pak and M. Farajzadeh, (2007): Integrated Coastal Management in Iran, Persian Gulf, Oman Sea, and Southern Caspian Sea Coastlines, Ocean and Coastal Management, vol. 50, pp.754-773

55. R. Hooshmandan, S.S. Yasrobi, A. Pak, (2007): Prediction of Soil Improvement Depth in Dynamic Compaction Treatment Based on Tamper penetration Measurements, Modarres Technical & Engineering Journal, NO. 27 (In Persian)

56. A. Azad, S.S. Yasrobi, A. Pak, (2007): Pseudo-dynamic Analysis of Geosynthetic-Reinforced Soil Walls using Horizontal slice Methods, Amir Kabir journal, vol.18, J-67

57. A. Osouli, A. Pak (2008): Effects of Solar Energy on the Mechanical Properties of Tailings in

Tailing Dams, Proceedings of GeoCongress 2008, ASCE Geotechnical Special Publication NO. 179

58. A. Pak, A. Haj Momeni, F. Majd, (2008): Commencement of Integrated Coastal Management movement in Iran: Coastlines of Kish Island, 8th International Conference on Coasts, Ports, and Marine Structures, Tehran, 2008, (In Persian)

59. A. Pak and D.H. Chan (2008): Numerical Modeling of Hydraulic Fracturing in Oil Sands, Scientia Iranica, vol.15, NO. 5.60. A. Pak and S. Samimi (2009): Study of Clay Slurry Consolidation Process by Numerical Modelling, Sharif Research Quarterly, no.46/1 (In Persian)

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