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 Civil Engineering Department
 Faculty of Engineering
 Bu-Ali Sina University
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Personal information:
 Year of birth: 1965
 Location of birth: Malayer-Iran
 Marital status: Married with two children

Education:

Ph.D	Ecole Centrale de Lyon-France	1998	Civil Engineering	Thesis title: Modélisation hiérarchisée du comportement des sols
D.E.A	Ecole Centrale de Lyon-France	1994	Civil Engineering	Thesis title: Comportement viscoplastique des sols
M.Sc	Amirkabir University of Technology (Tehran polytechnic)	1991	Civil Engineering	Thesis title: Critical state model and its application in tunneling
B.Sc	Iran University of Science and Technology	1988	Civil Engineering	

Teaching and Research positions:

Associate professor	2010	Bu-Ali Sina University
Assistant professor	1999	Bu-Ali Sina University
Lecture	1991	Bu-Ali Sina University

Executive Positions

Vice dean of Faculty in Education	1999-2002	Bu-Ali Sina university/Faculty of Engineering
Dean of Faculty	2002-2006	Bu-Ali Sina university/Faculty of Engineering
Dean of Faculty	2012- to be continued	Bu-Ali Sina university/Faculty of Engineering

The offered courses:

Undergraduate students	Graduate students
1. Soil Mechanics	1. Continuum Mechanics
2. Foundation Engineering	2. Constitutive modeling of soil
3. Principals of Dam Engineering	3. Geotechnical Earthquake Engineering
4. Tunneling	4. Advanced Soil Mechanics
5. Excavation: Design and construction methods	5. Unsaturaed Soil Mechanics

Field of Interests in Research and Technology

Research Interests:

- ✓ Development in constitutive modelling of geomaterial
- ✓ Experimental studies on unsaturated soils
- ✓ Time dependent behavior of geomaterial
- ✓ Static and dynamic soil-structure interaction

Technical Interests:

- ✓ Determination of soil properties and constitutive models parameters for sites with geotechnical complex conditions.
- ✓ Design of deep excavation systems

Supervision of MS.c thesis

- Peyman Zarei (2016): Experimental study of viscoplastic behavior of asphalt mixtures used in Hamedan city.
- Farzam Bagheri Moghaddam (2016): Geometry effect of alluvium layer on the dynamic interaction of soil-gas pipeline.
- Mohammad Golamzadeh (2016): Footing and ground geometry effect on the bearing and settlement grid shallow foundation.
- Ali Reza Ashkan Mehr (2016): Investigation on behavior of a silty sand under static and cyclic loadings.
- Mohammad Hosein Shojaei Mehr (2016): Curing time and temperature effect on time-dependent behavior of sand grouted with cement metakaolin mixture.
- Hasan Pouyan (2015): Development of an existing constitutive model for unsaturated soils and its validation based on the laboratory stress paths.
- Amir Hosein Iravani (2015): Failure and post-failure behavior of unsaturated over-consolidation fine soils.
- Mohammad Amin Farahpour (2015): Application of Metakaolin in optimizing additive materials in cement grouting of sandy soils.
- Behnam Yousefi (2014): Effect of stress path on wetting and collapse behavior of unsaturated soils.
- Mahdiye Darabi (2014): Post-Earthquake behavior of embankment dam with special regard on geometry of dam section.
- Elham Jadidi (2014): Effective stress relationships validation of unsaturated soils based on the laboratory stress paths.
- Ehsan Asgarilou (2013): Effect of physical parameters on undrained behavior of unsaturated sand-plastic fine mixture.
- Mohammad Hashem Bathayian (2013): Failure state in cementd geomaterial.
- Syede Amneh Hoseini Nikravesh (2013): Performance evaluation of truss bracing system in excavation supporting.
- Mohammad Amin Nozari (2013): Stability of tunnel face in unsaturated media using limit analysis method.
- Majid Shahi Karijani (2012): Study on stress-deformation behavior of unsaturated silty sand with special regard to application of critical state concept.

- Ghafar Karami (2012): Investigation behavior of unsaturated compacted soils exposed to moisture increase during time.
- Atefe Heidari Delgarm (2012): Dynamic interaction of shallow tunnel-adjacent building in soft and liquifiable ground.
- Mina Hosseini Tayyebi (2012): Study of embankment dams settlement during the first impounding.
- Hesamodin Aminpour (2012): Validation of soil constitutive models in shallow tunnel analysis in soft ground.
- Meisam Bayat (2011): Experimental study on unsaturated silty sand in low confining pressure.
- Mohsen Mousivand (2011): Application of an elastoplastic-viscoplastic constitutive model in time-dependent behavior of shallow tunnel in soft ground.
- Salman Bakhtiari Kashkajani (2010): Factors affecting creep behavior of sand grouted with cement.
- Sajad tavakoli (2009): factor affecting mat foundation settlement with special attention on distribution and estimation of stiffness springs in analyses.
- Mohammad Ali Seif Zadeh (2009): Dynamic soil-structure interaction with considering soil behavior as elastoplastic.
- Saeed Mirzaei (2009): Time-dependent behavior of deep excavation in urban area.
- Saeed Tahernia (2009): Effect of physical parameters on undrained shear strength of sand-non plastic fine mixture under cyclic loading.
- Ali Derakhshan (2009): Experimental study on time-dependent behavior of clayey soil of a region of south of Tehran.
- Hosein Sereshteh (2008): Effect of stiffness, weight, and geometry of adjacent structure of ground movement due to tunneling.
- Mehrdad Khatami (2006): anisotropy effect on face tunnel stability in soft ground.
- Mohammad Reza Salmani (2006): Ground displacement field estimation due to tunneling by NATM; case study: fifth section of line 1 of Tehran Metro.
- Mehdi Marzban (2006): experimental and theoretical studied for failure state of sand in low confining pressure.
- Ahad Ehsani (2005): Choice of soil constitutive model in embankment dam analysis.
- Mohsen Beiti (2005): Determination of practical relationships in analysis and design of excavation in urban area.
- Vahid Molsaghi (2004): Induced anisotropy modelling for sands.
- Amir Ata Alavi (2004): Numerical analysis of rock fill dams in first impounding stage; case study: Masjed Soleyman dam.
- Farrokh Ansari (2003): Choice of soil constitutive model for tunnel analysis in urban plane with considering influence on adjacent structures.
- Bahador Baei (2003): Numerical analysis for evaluation of ground movement due to deep excavation in urban area.

Book

Application of elastoplasticity theory in soil (2005), Bu-Ali Sina Publication

Patent

Maleki, M & Derakhshan, A. (2008): Apparatus for creep measurement of soils in triaxial conditions, 38708330 IR.

Honors & Awards

- Premier researcher of the year of Faculty of engineering, award from Bu-Ali Sina University (2006)
- Premier researcher of the year of Civil Engineering Department, award from Bu-Ali Sina University (2009)
- Premier professor of year in education (2009) Civil Engineering Department, Bu-Ali Sina University.

- Premier professor of year in education (2013) Civil Engineering Department, Bu-Ali Sina University.

Completed research projects

- An elastoplastic model for soil and its application in dynamic analysis of embankment dams, Bu-Ali Sina University (2006)
- Development in elastoplastic-viscoplastic modeling for clayey soils. Bu-Ali Sina University (2008)
- Practical relationships in analysis and design of excavation in urban areas, Management and planning organization of Iran (2009).
- Experimental study of viscoplastic behavior of asphalt mixtures used in Hamedan city, Hamedan city council (2016).
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Selected Journal Papers

Maleki, M., Pouyan, H. (2016), A kinematic hardening based model for unsaturated soils considering different hydraulic conditions, *International Journal for Numerical and Analytical Methods in Geomechanics*, 40(16), 2271-2290.

Khanlari, G., Maleki, M., Hydari Torkemani, R., Alipour, S. and Naseri F. (2015), Estimation of Surface Settlement in Niayesh Subway Tunnel Using Empirical, Numerical Methods and Actual Settlements, *Journal of Engineering Geology, Kharazmi University*, Vol. 9, No. 3.

Maleki, M., Mousivand, M., (2014), Safety evaluation of shallow tunnel based on elastoplastic-viscoplastic analysis, *Scientia Iranica. Transactions A* 23(15), 1480-1491.

Maleki, M., Nozari, M.A. (2014), Application of limit analysis method for evaluation of tunnel face stability in unsaturated media, *Tunneling and underground space engineering*, Vol. 3, No.1, 1-17.

Maleki, M., Bayat, M., (2012), Experimental evaluation of mechanical behaviour of unsaturated silty sand under constant water content condition, *Elsevier, Engineering Geology* 141–142 (2012) 45–56.

Maleki, M., Bayat, M., Mirzaei, A. (2012), Effects of Matric Suction on Mechanical Behavior of Clayey Silty Sand at Low Effective Confining Stress, *The Modarres Journal of Civil Engineering*, No. 12, pp: 77-89.

Maleki, M., and Tavakoli, S. (2012), “Numerical Analysis for Prediction of Shallow Foundation Settlement Based on Plate Load Test Results”, *Journal of Civil and Environmental Engineering, Tabriz University*, Vol. 24, No. 22, pp 67-75.

Maleki, M., Ezzatkhan, A., Bayat, M., Mousivand, M. (2011), “Effect of physical parameters on static undrained resistance of sandy soil with low silt content” *Soil Dynamics and Earthquake Engineering, Elsevier*, 31 (2011) 1324–1331.

Maleki, M., Sereshteh, H., Mousivand, M., Bayat, M. (2011), “An equivalent beam model for the analysis of tunnel-building interaction”, *Tunnelling and Underground Space Technology*, Vol. 24, Issue 4, Elsevier.

Maleki, M. (2010), "An elastoplastic-viscoplastic model for soils". *Sharif Journal of Science & Technology*, Vol. 26-2, N. 2. pp 29-39.

Maleki, M., and Haghayegh, A. (2010), " Failure state of sandy soils in low confining stress". Sharif Journal of Science & Technology, Vol. 26-2, N. 2, pp: 99-107.

Maleki, M., Baei, B., Beiti, M. (2010), " Interaction between excavation and its adjacent structure", Ferdowsi University Journal of Science & Technology, Vol.21, No.2, pp:25-41.

Maleki, M., Cambou, B., Dubujet, Ph. (2009)," Development in modeling cyclic loading of sands based on kinematic hardening", International Journal for Numerical and Analytical Methods in Geomechanics", 33:1641-1658.

Maleki, M., Cambou, B. (2009),"A cyclic elastoplastic-viscoplastic constitutive model for soils", Geomechanics and Geoengineering: an International Journal, Vol. 4, No. 3, 209-220.

Maleki, M. (2008), "A constitutive model for sands" Esteghlal (Journal of Esfahan University of Technology), Vol. 27, No. 1, pp 51-65.

Maleki, M., Alavifar, A. (2007), "Numerical Analysis of Earthfill Dams During First Stage Impounding-Case Study of Masjed Soleyman Rockfill Dam" Journal of Faculty of Engineering, Tabriz University. Vol. 34, No. 3. pp 55-67.

Maleki, M., Derakhshan, A., (2007), Numerical Analysis for Determination of Strip Surcharge Effects on Retaining Walls and Evaluation of Classical Methods, Geotechnics & Strength of Materials Journal, Vol. 24-No. 110, pp 34-44.

Maleki, M., Molsaghi, V. (2005), Elastoplastic Analysis of Reinforced Concrete Retaining Walls with load reducer plates, Geotechnics & Strength of Materials Journal, No. 110, pp 46-53.

Maleki, M., Dubujet, Ph., Cambou, B.,(2000), "Modelisation hierarchisee du comportement des sols", Revue Francaise de Genie Civil: vol.4 n. 7-8 PP.895 – 928.

Mirhosseini, S.M., Maleki, M.(1995), The Parameters of Critical State Model for Tehran Clay and Evaluation of Their Changes in The Soil Strength. Amirkabir (Journal of Amirkabir University of Technology).

Selected Conference Papers

Maleki, M., Karami, Q, Makarchian, M., Shahi Karijani, M. (2012), "Wetting behaviour of an unsaturated compacted clayey-silty-sand under anisotropic stress state", ACEM'12, COEX, Seoul, Korea.

Maleki, M., Bayat, M. (2012), "Mechanical behavior and critical state parameters of an unsaturated dense silty sand", 5th Asia-Pacific Conference on Unsaturated soils, Thailand.

Maleki, M., Bayat, M., Shahi Karijani, M. (2012), Evaluation of unsaturated soil behavior based on consolidated-drained and constant water content tests results, 9th International Congress on Civil Engineering, May 8-10, 2012 Isfahan University of Technology (IUT), Isfahan, Iran.

Maleki, M., Mousivand, M. (2012), Application of an elastoplastic-viscoplastic constitutive model for time-dependent analysis of shallow tunnels , 9th International Congress on Civil Engineering, May 8-10, 2012 Isfahan University of Technology (IUT), Isfahan, Iran

Maleki, M., Tahernia, S. (2012), Physical parameters effect on liquefaction resistant of sand-non plastic fine mixture, 9th International Congress on Civil Engineering, May 8-10, 2012 Isfahan University of Technology (IUT), Isfahan, Iran.

- Maleki, M., Ezzatkhan, A., Bayat, M., Mousivand, M.**, (2011), "An experimental study concerning the effects of non plastic fine and physical parameters on the liquefaction resistance", 6th International Conference on Seismology and Earthquake Engineering.
- Maleki, M., Bayat, M.** (2011), "Critical state behavior of an unsaturated silty sand", 6th International Conference on Seismology and Earthquake Engineering.
- Maleki, M., Bayat, M.** (2011), "Mechanical behavior of an unsaturated silty sand in the framework of critical state soil mechanics" 6th National Conference on Civil Engineering, Semnam Iran.
- Maleki, M., Bakhtiari, S.**, (2011), "Factors affecting time-dependent behavior of grouted sand", 6th National Conference on Civil Engineering, Semnam Iran.
- Maleki M., Seif Zadeh A.** (2010), "Dynamic soil-structure interaction using connection of SAP and FLAC codes", 5th National Congress on Civil Engineering, Mashhad Iran.
- Maleki M., Mirzaee S.** (2010), "Implementation of an elastoplastic-viscoplastic in Flac code and its application in prediction of excavations behaviour" 5th National Congress on Civil Engineering, Mashhad Iran.
- Maleki M., Haghayegh A.** (2010), "Parametric study of Barcelona constitutive model in evaluation of volumetric variation behaviour of unsaturated soil", 5th National Congress on Civil Engineering, Mashhad Iran.
- Maleki M., Haghayegh A.** (2010), "Development in constitutive modelling of unsaturated soils", 5th National Congress on Civil Engineering, Mashhad Iran.
- Maleki M., Derakhshan A.** (2009), "Water content effect on creep behaviour of unsaturated soils", 8th International Congress on Civil Engineering, Shiraz, Iran.
- Maleki M., Tavakoli S., Derakhshan A.** (2009), "Width and depth effects on shallow foundations settlement", 8th International Congress on Civil Engineering, Shiraz, Iran.
- Maleki M., Haghayegh A.** (2009), "Validation of a unsaturated constitutive model under laboratoy stress paths", 8th International Congress on Civil Engineering, Shiraz, Iran.
- Maleki M., Sereshteh H.** (2009), " Effect of stiffness, geometry and weight of adjacent building on ground movement due to tunnelling", 8th International Congress on Civil Engineering, Shiraz, Iran.
- Maleki, M & Marzban, M.** (2007), "Experimental and theoretical study of sandy soils failure surface in low confinement stress" 3NCCE, Tabriz Iran.
- Maleki, M & Khatami, M.** (2007), " Anisotropy effect on the analysis of tunnel front" 3NCCE, Tabriz-Iran.
- Maleki, M. & Salmani, M.R.** (2006), "3D analysis for verification of the influence of excavation patern in NATM- Case study: Fifth section of northern extension of Tehran metro line 1, 7th International Conference on Civil Engineering, Tehran- Iran.
- Maleki, M & Ehsani A.** (2006), "Validation of constitutive models in dynamic analysis of rockfill dams" 5th International Conference on Civil Engineering, Tehran-Iran.
- Maleki, M. & Salmani, M.R.** (2006), " 3D analysis for estimation of displacement field in front of tunnel excavated by NATM" 7th Iranian Tunneling Conference, Tehran Iran.
- Maleki, M & Khatami, M.** (2006), "3D analysis for limit analysis methods validation in estimation of front tunnel stability" 7th Iranian Tunneling Conference, Tehran Iran.

Maleki M. and Alavifar, A. (2004), "Safty evaluation of Masjed-e-Solyman rockfill dam during construction and first stage impounding", 73 rd annal meeting of ICOLD Tehran Iran.

Maleki, M. & Alavifar, A. (2004), "Validation of an elasto-perfect-plastic model on rockfill dam, case study: Masjed Solyman dam", NCCE Tehran Iran.

Maleki, M. and Ansari, F. (2003), " Validation of the Constitutive Models on Shallow Tunnels Analysis in Urban Area", NCCE , Tehran – Iran.

Maleki, M. & Ansari, F., (2003) " Tunnel–Foundation of Adjacent Structure Interactian Analysis in Urban Area", 6th Iranian Tunneling Conference , Tehran – Iran.

Maleki, M. (2001), "Choice of the constitutive model in analysis and design of tunnels" 5th Iranian Tunneling Conference , Tehran Iran.

Maleki, M.(2000) "Correlation between the physical parameters and the elastoplastic constitutive Model parameters in soils " , 5th International Conference on Civil Engineering, Mashhad – Iran.

Maleki M, & Cambou, B ..(1999), "An elastoplastic–viscoplastic model for Soils NUMOG VII, Pande, Pietruszczak, Austria.

Maleki, M.& Cambou, B. & Dubujet, Ph. (1997), "Modélisation hierarchisée du comportement des sols", 4th Reunion annuelle de Geo France.

Maleki, M. Cambou, B. (1996), "Modélisation adaptée au comportement des sols 3eme Runion annuelle de Geo. France.

Maleki, M. & Cambou, B. (1996), "Choix et identification d'un Modele de comportement en geotechnique" 4th Colloque des Doctorants des Ecols Centrales, Lille – France.