



دکتر عیسی شوش پاشا

Dr. Issa Shooshpasha

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Faculty of Civil Engineering

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Scientific Degrees

- **B.Sc. Tabriz University. Tabriz, Iran, 1987**
- **M.Sc. McGill University, Montreal, Canada, 1993**
- **Ph.D. McGill University, Montreal, Canada, 1996**

سوابق تحصیلی

- B.Sc. Tabriz University. Tabriz, Iran, 1987
- M.Sc. McGill University, Montreal, Canada, 1993
- Ph.D. McGill University, Montreal, Canada, 1996

موضوعات تحقیقاتی مورد علاقه

- Bearing Capacity of Sallow and Deep Foundation
- Slope Stability
- Liquefaction
- Seepage
- Soil Improvement
- Unsaturated Soil

افتخارات کسب شده

- Scholarship from Ministry of Science and Higher Education for M.Sc. and Ph.D. Studies
- Tuition Fee Waiver from McGill University
- Research Fellowship from McGill University

عضویت در شوراهای و انجمن ها

- National Tunneling Association
- Civil Engineers Association
- Geotechnical Engineers Association

سوابق تدریس

- Soil Mechanic
- Foundation Engineering
- Advanced Foundation Engineering
- Advanced Soil Mechanic
- Soil Dynamic
- Groundwater and Seepage
- Short Course on Deep Foundation for Civil Engineers of Ministry of Power, 2003
- Short Course on Importance of Geotechnical Studies in Structural Design for Civil Engineers of Water and Wastewater Co. 2004
- Short Course on Fundamentals of Foundation, for Civil Engineers of Housing Foundation of Islamic Revolution, 2005
- Short Courses on Braced Cofferdams for Excavation, for Civil Engineers of Engineers Association of Mazandaran. 2007

تالیفات

مقالات ژورنالی

- **Shooshpasha, I.**, (1996), "Performance of unsaturated clay based barrier under opposing thermal and hydraulic gradient", Ph.D. Eng. Thesis, Dept. of Civil Engineering and Applied Mechanics, McGill University, Montreal, Canada, P. 196.
- **Shooshpasha, I.** (1993). "Performance of unsaturated bentonite based buffer material used for nuclear fuel waste disposal vault". M. Eng. Thesis, Dept. of Civil Engineering and Applied Mechanics, McGill University, Montreal, Canada, P. 156.

• Journal papers

- 1- Mohamed, A.M.O., **Shooshpasha, I.** and Yong, R.N. (1996) "Boundary layer transport of metal ions in frozen soil" International Journal for Numerical and Analytical Methods in Geomechanics" 22 Refs, pp. 693-713.
- 2- Young, R. N., Mohamed, A. M. O., **Shooshpasha, I.** and Onofrei, C., (1997), "Hydro-thermal performance of unsaturated bentonite-sand buffer material" Engineering Geology Journal, 47, pp – 351.
- 3- Mohamed, A.M.O., **Shooshpasha, I.** and Yong, R.N. (1997), "Diffusion of metal ions in frozen capillary barriers" Engineering Geology Journal, 28 Refs, pp. 1-15.
- 4- **Shooshpasha, I.** (2002), "Soil water characteristics of the unsaturated clay based barrier" Journal of Technical Engineering of Mazandaran University, Iran, Vol. 1, pp. 23-41.
- 5- Mohamed A.M.O and **Shooshpasha I.** (2003) "Hydro-thermal performance of multilayer capillary barriers in arid lands" Geotechnical and Geological Engineering Journal. Kluwer Academic Publishers, pp.1-24.
- 6- **Shooshpasha, I.** (2003). "Study on local volume change induced by moisture flow in unsaturated sand-bentonite" International Journal of Civil Engineering, Vol.1, No.2, pp.114.
- 7- **Shooshpasha, I.** and Farhadi, Ali ((2004) "A study on permeability of silty clay with different density" School of Engineering Journal Ferdowsi University of Mashhad. Vol. 16, No. 1 (in Persian)
- 8- Taghavi J., Aghajani M. G. and **Shooshpasha I.** (2006) "A study on determining the effect of different parameters on flood in north of Iran (a case study on Babol river)" Journal of Agricultural Sciences and Nature Resources (Mazandaran University), Vol. 4.
- 9- **Shooshpasha, I.**, Bagheripour, M. H. and Afzalyrad, M. (2008), "Assessing a relation between the results of standard penetration tests and probability of liquefaction using reliability analysis" Journal of Science and Technology Sharif, No. 42, pp. 13-20 (in Persian)
- 10- Tamasbipor A., Norzad R., **Shooshpasha I.** and Barari A. (2010) "A parametric study of stability of geotextile-reinforced soil above an underground cavity" Arabian Journal of Geosciences, Springer, DOI 10.1007/s12517-010-0188-0
- 11- Afzali Rad M., Bagheripour M.H., **Shooshpasha I.** and Gholapour, S, (2010) "Evaluating the probability of liquefaction using reliability method and NCEER suggestions" Tabriz Journal of Civil and Environmental Engineering. Vol. 39, No. 4 (in Persian)
- 12-

Conference papers

- 1- **Shooshpasha I.** and Mohamed A.M.O. (2002) "Capillary Barrier Development for Water Conservation in Arid Lands: I. Experimental Evaluation" Proceedings of the

- Second Conference on Geotechnical, Geoenvironmental Engineering and Management in Arid Lands (Geo2002), 6-9 King Saud University, Riyadh, Saudi Arabia.
- 2- Navainia B. and **Shooshpasha, I.** (2002) "Rock foundation effect on non-linear response of the concrete gravity dams subjected to earthquake" Proceedings of the Second Conference on Geotechnical, Geoenvironmental Engineering and Management in Arid Lands (Geo2002), 6-9 King Saud University, Riyadh, Saudi Arabia.
 - 3- Mohamed A.M.O and **Shooshpasha I.** (2002) "Capillary barrier development for water conservation in arid lands: II. Determination of Coupled Heat and Moisture Diffusivity Parameters" Proceedings of the Second Conference on Geotechnical, Geoenvironmental Engineering and Management in Arid Lands (Geo2002), 6-9 King Saud University, Riyadh, Saudi Arabia.
 - 4- **Shooshpasha, I.**, and Mohamed, A.M.O. (2000). "A numerical method for evaluating diffusion parameters of the heat and moisture flow in unsaturated soil", Proceedings of the First Conference on Geotechnical, Geoenvironmental Engineering and Management in Arid Areas (Geo2000), Alain, United Arab Emirates, November 4-7, pp. 283-289.
 - 5- **Shooshpasha I.**; Mohamed A.M.O. and Yong R.N. (2000); "Coupled heat and moisture flow in unsaturated sand-bentonite buffer material under opposing thermal and hydraulic gradients" Proceedings of the First Conference on Geotechnical, Geoenvironmental Engineering and Management in Arid Areas (Geo2000), Alain, United Arab Emirates, November 4-7, pp. 291-297.
 - 6- **Shooshpasha, I.** and Mohamed, A.M.O. (2000) "Soil water potential and hydraulic conductivity of unsaturated clay based buffer material" Proceedings of the Fifth International Conference on Civil Engineering, Ferdowsi University of Mashhad, May 8-10, Mashhad, Iran, pp. 93-108.
 - 7- **Shooshpasha, I.**, Mohamed, A.M.O. and Yong, R.N., (1996). "A methodology for evaluating coupled heat and moisture flow coefficients in unsaturated soil", Proceedings of Conference on Civil Engineering by Iranian Student in Canada, pp. 126-134.
 - 8- **Shooshpasha, I.**, Mohamed, A.M.O., Yong, R.N. and Onofrei, C. (1996). "Effect of swelling pressure on local volume change in unsaturated sand-bentonite buffer material", Material Research Society Symposium proceeding, Vol. 426, pp. 627-635.
 - 9- Mohamed, A.M.O., Yong, R.N., and **Shooshpasha, I.** (1995) "Validation of the performance of buffer and backfill materials subjected to isothermal and thermal conditions", Progress Report, Prepared for Atomic Energy of Canada Limited, Pinawa, Manitoba.
 - 10- Yong, R.N., Mohamed, A.M.O. and **Shooshpasha, I.**, (1994). Thermal and moisture diffusivity in buffer material due to temperature and hydraulic gradients" Progress Report, Prepared for Atomic Energy of Canada Limited, Pinawa, Manitoba.
 - 11- Mohamed, A.M.O., **Shooshpasha, I.**, Yong, R.N., and Onofrei, C.I., (1994), "Moisture movement in clay based buffer material under isothermal conditions", Material Research Society, Symposium Proceeding Vol. 333, pp. 925-932, Boston, U.S.A.

- 12- **Shooshpasha, I**, Khoshneviszadeh, M. and Morshedi, M. (2003)“A study on liquefaction phenomena in south cost of Caspian sea” Proceedings of the sixth International Conference on Civil Engineering, Esfahan Industrial University, May 3-5, Esfahan, Iran, pp. (in Persian).
- 13- **Shooshpasha, I**, Mirzagoltabar R. A. and Barimani H.(2004) “Evaluation of Meyerhof experimental equation in determining soil bearing capacity based on results of standard penetration tests” Proceedings of the First National Conference on Civil Engineering, Sharif Industrial University, May 12-14, Tehran, Iran, pp. 168-181 (in Persian).
- 14- Taghavi, J. and **Shooshpasha, I**. (2004) “A study on parameters causing flood in north of Iran (a case study on Babol river)” Proceedings of the First National Conference on Civil Engineering, Sharif Industrial University, May 12-14, Tehran, Iran, pp. 346-357 (in Persian).
- 15- **Shooshpasha, I.**, Farhadi, Ali and Barjaseh M. (2004) “Tixotropy and sensitivity of silty clay” Proceedings of the First National Conference on Civil Engineering, Sharif Industrial University, May 12-14, Tehran, Iran, pp. 210-221 (in Persian).
- 16- Mirzagoltabar R. A. and **Shooshpasha, I**. (2004) “Experimental study of underground pipe network subjected to vibration” Proceedings of the First National Conference on Civil Engineering, Sharif Industrial University, May 12-14, Tehran, Iran, pp. 346-357 (in Persian).
- 17- Dadashzadeh S. A. Farhadi, Ali and **Shooshpasha, I** (2004) “Application of tensiometer in studying the behavior of the Talon tunnel” Proceedings of the Sixth National Conference on Tunnel, Science and Technology of Iran University, Jan. 27-29, Tehran, Iran, (in Persian).
- 18- Dadashzadeh S. A. Farhadi, Ali and **Shooshpasha, I** (2004) “Stability analysis of Talon tunnel (in Tehran- Mazandaran highway) using information obtained from instruments” Proceedings of the Sixth National Conference on Tunnel, Science and Technology of Iran University, Jan. 27-29, Tehran, Iran, pp. (in Persian).
- 19- **Shooshpasha, I.**, and Mosazadeh M. R. (2006) “Assessing soil density around driven pile” Proceedings of the Seventh National Conference on Civil Engineering, Tarbiat Modares University, May 8-10, Tehran, Iran, pp. (in Persian).
- 20- Bagheripor, M.H., Gholampor S., **Shooshpasha, I.**, and Afzalirad, M. (2006) “Liquefaction hazard zoning of Babolsar based on reliability method” Proceedings of the First International Conference on Improving Quality and Development in Civil Engineering, Azad University of Gorgan, May 8-10, Gorgan, Iran, pp. (in Persian).
- 21- Bagheripour, M.H., **Shooshpasha, I.**, and Afzalirad, M. (2006) “Liquefaction potential evaluation of sandy soil using reliability method based on NCEER(1998)” Proceedings of the Third National Conference on Civil Engineering, Tabriz University, May 1-3, Tabriz, Iran, pp. (in Persian).

- 22- **Shooshpasha, I.**, Khatibi K. and Afzalirad, M. (2006) "A study on load capacity of driven steel pipe pile" Proceedings of the Third National Conference on Civil Engineering, Tabriz University, May 1-3, Tabriz, Iran, pp. (in Persian).
- 23- **Shooshpasha, I.**, Bagheripor, M.H. and Afzalirad, M. (2006) "Liquefaction potential evaluation of sandy soil using reliability method based on SPT" A Paper Submitted to Journal of School of Engineering Ferdowsi University of Mashhad (in review).
- 24- Bagheripour, M. H., **Shooshpasha, I.** and Afzalirad, M. (2007), "Assessing the relationship of probability of liquefaction occurrence, SPT and cyclic shear stress in sandy soil using reliability method" Proceedings of the Fifth International Conference on Earthquake, Earthquake Research Center, May 1-3, Tehran, Iran, (in Persian).
- 25- **Shooshpasha, I.**, Khatibi K. and Afzalirad, M. (2007), "Evaluation of static and dynamic methods in calculating load capacity of driven steel pipe pile" A Paper Submitted to Journal of Science and Technology of Tarbiat Modares University (in review).
- 26- **Shooshpasha, I.**, and Afzalirad, M. (2007) "Effect of driven pile on soil liquefaction" Proceedings of the Third National Conference on Civil Engineering, Tabriz University, May 1-3, Tabriz, Iran, pp. (in Persian).
- 27- **Shooshpasha, I.**, and Kord A. (2008) "A study on bearing capacity of strip footing placed adjacent to slope using classical and numerical methods" Proceedings of the Forth National Conference on Civil Engineering, Tehran University, May 2-5, Tehran, Iran, (in Persian).
- 28- **Shooshpasha, I.**, and Askaribizaky F. (2008) "A study on foundations of adjacent buildings with different stories" Proceedings of the Forth National Conference on Civil Engineering, Tehran University, May 2-5, Tehran, Iran, (in Persian).
- 29- **Shooshpasha, I.**, Afzalirad, M., and Ghaseminejad V. (2008) "A study on parameters effecting instability of slopes in Savadko rejoin" Proceedings of the Forth National Conference on Civil Engineering, Tehran University, May 2-5, Tehran, Iran, (in Persian).
- 30- **Shooshpasha, I.**, Norzad R., and Rodgar A.H. (2008) "Comparison of seepage through embankment dam with vertical and inclined cores resulted by three and two dimensional analysis" Proceedings of the Forth National Conference on Civil Engineering, Tehran University, May 2-5, Tehran, Iran, pp. (in Persian).
- 31- **Shooshpasha, I.**, Mohamednejad A., and Afzalirad, M. (2008) "A study of bearing capacity of pile in liquefied and unliquefied layers" Proceedings of the Forth National Conference on Civil Engineering, Tehran University, May 2-5, Tehran, Iran, (in Persian).
- 32- Latifi. N., Usefni pasha A. and **Shooshpasha, I.** (2008) "The effect of liquefaction on coastal sheet pile walls" Proceedings of the Fourteen Word Conference on Earthquake Engineering, Beijing, Oct. 12-17, China.
- 33- **Shooshpasha, I.**, and Kord A. (2009) "A study of bearing capacity coefficients of footing adjacent to slope" Proceedings of the Eighth International Conference on Civil Engineering, Shiraz University, May 11-13, Shiraz, Iran, (in Persian).

- 34- Norzad R., Tahmasbipour G.A. and **Shooshpasha, I.** (2009) "Stability of soil reinforce with geotextail over an underground hole" Proceedings of the Eighth International Conference on Civil Engineering, Shiraz University, May 11-13, Shiraz, Iran, (in Persian).
- 35- Norzad R., **Shooshpasha, I.** and Ghaseminejad V., (2009) "Dynamic analysis of embankment dams based on seismic characteristics of Mazandaran Province" Proceedings of the 5th National Conference on Civil Engineering, Mashhad University, May 4-6, Mashhad, Iran, (in Persian).
- 36- **Shooshpasha, I** and M. Bagheri (2010) "The effect of surcharge on soil liquefaction" Proceedings of the 4th European conference on earthquake engineering august 30- September 3 Ohrid, Macedonia.