Curriculum Vitae

Name & Surname: Ahmad Farrokhian Firouzi

Date of Birth: 25/07/1977

Address, Suburb, State, Postcode: Department of Soil Science and Engineering, Faculty of Agriculture, Shahid Chamran University of Ahvaz, Khuzestane Province, Ahvaz, Iran & Postal Code: 6135743311

Phone/Mobile Number: +98 61 3336 4054

E-mail address: a.farrokhian@scu.ac.ir

PROFESSIONAL PROFILE:

- 2015 to present, Associate Professor, Department of Soil Science and Engineering, Shahid Chamran University of Ahvaz.
- From 2010 to 2015, Assistance Professor, Soil Science Dept., Shahid Chamran University of Ahvaz.
- From Oct. 2007 to Aug. 2009, visiting researcher, Forschungszentrum Jülich GmbH, Wilhelm-Johnen Str., 52428 Jülich, Germany.
- From 2010 to present, Main Supervisor of 21 M.Sc. students, Co-supervisor of 4 M.Sc. students, and advisor of 7 M.Sc. students.
- From 2013 to 2014 Member of the research council of Environmental Technologies Research Center, Ahvaz Jundishapur University of Medical Sciences, Iran
- From 2010 to present, Coordinator of several research projects.

- In 2019, Member of Scientific Committee at "The First National Conference on Agricultural and Environmental Sciences, Ramin Agriculture and Natural Resources University", Iran, February 30, 2019.
- In 2018, Member of Scientific Committee at "The 5th National Conference on Irrigation and Drainage Networks Management and 3rd National Congress on Iran's Irrigation and Drainage", Ahvaz, Iran on March 12-14, 2018.
- In 2016, Member of Scientific Committee and Jury Board at "The First International Conference on Dust", Shahid Chamran University of Ahvaz, Iran, on March 2-4, 2016.
- In 2014, Member of Scientific Committee at "The 13th Iranian Soil Science Congress", Shahid Chamran University of Ahvaz, Ahvaz, Iran on Jan 28-30, 2014.
- From 2012 to 2017 Member of the Graduate Council of the Faculty of Agriculture at Shahid Chamran University of Ahvaz.

EDUCATION BACKGROUND:

Ph.D.: Soil Physics and Conservation (2008), Tarbiat Modares University, Tehran, Iran.

Dissertation Title:

"Bacteria transport and retention in Calcareous soils under saturated and unsaturated conditions."

M.Sc.: Agricultural Engineering- Soil Science (2002), Tarbiat Modares University, Tehran, Iran.

Thesis Title:

"Derivation of Hydraulic Functions of Gypsiferous Soils Using Pedo-Transfer Functions."

B.S.: Agricultural Engineering- Soil Science (2000), Shahid Chamran University of Ahvaz, Iran.

TEACHING AND TRAINING EXPERIENCE:

Undergraduate Courses:

Soil Physics, Soil and Water Conservation, Soil water and plant relationships, Soil Management in Sustainable Agriculture, General Soil Science, Watershed Management, Biophysics, Soil Erosion and Conservation, Proficiency, Internship, Project, and Agricultural Operation.

Graduate Courses:

Advanced Soil Physics, Soil Mechanics, Hydrology, Application of Mathematical Models in Soil Physics and Conservation, Sustainable Soil Management, Hydrology, Research Methodology, Agricultural Soil Mechanics, Seminar.

HONOURS AND AWARDS:

- 7th Rank, Nationwide M.Sc. entrance exam in Soil Science of Iranian Universities (Obtaining rank 7 among 625 participants in Master of Science Degree Program examination (Agricultural Engineering- Majoring in Soil Science) held in 2000.
- 3th Rank, Nationwide PhD entrance exam in Soil Science of Tarbiat Modares University, Iran.
- PhD scholarship award by Ministry of Science, Research and Technology (Iran).

INTERESTS AND RESEACH FIELDS:

- Land degradation and sustainable land use for productive agriculture
- Soil and water management in arid and semiarid regions
- Soil erosion by water and wind: predictive factors, processes, and biological alternatives for effective conservation
- Watershed-based water management and conservation under both rain-fed and irrigated agriculture
- Numerical Modeling of Water Flow and Solute Transport in Soil
- Microorganism Fate and Transport in Porous Media
- Transport Processes with Various Equilibrium and Non-Equilibrium Solutes in Variably, Saturated Porous Media
- Fate and Transport of Nanoparticles in Subsurface Environment
- Soil Digital Mapping
- Modeling coupled water, salt, and heat transport in soil

RESARCH ACTIVITIES:

PUBLICATIONS

Papers in international peer-review journals:

1. Parsaie, F., Farrokhian Firouzi, A., Mousavi, S.R., Rahmani, A., Sedri, M.S., Homaee, M. 2021. Large scale digital mapping of soil surface total nitrogen using machine learning models and associated uncertainty map. Environmental Monitoring and Assessment. 193(4); 1-15. (Impact factor=2.273, Q2).
   https://link.springer.com/article/10.1007/s10661-021-08947-w

2. Yusefi, A., Farrokhian Firouzi, A., Aminzadeh, M. B. 2020. The effects of shallow saline groundwater on evaporation, soil moisture, and temperature distribution in the presence of straw mulch. Hydrology Research, 51 (4): 720-738. (IF=2.012) https://iwaponline.com/hr/article/51/4/720/75285/The-effects-of-shallow-saline-groundwater-on
3. Ramazanpour Esfahani, A., Farrokhian Firouzi, A., Sayyad, Gh., Kiasat. 2018. Highly efficient removal of cadmium from aqueous solution using polymer-stabilized zerovalent iron nanoparticles equilibrium, kinetic and thermodynamic studies. Environmental Engineering and Management Journal. 17(8): 1841-1854. (IF=1.186) http://www.eemj.icpm.tuiasi.ro/issues/vol17/vol17no8.htm
4. Koohiyan Afzal, M.T., Farrokhian Firouzi, A., Taghavi, M. 2017. Synthesis of bare and four different polymer-stabilized zero-valent nanoparticles and their efficiency on hexavalent chromium removal from aqueous solutions. Journal of Water and Environmental Nanotechnology, 2(4): 278-289. http://www.jwent.net/article_28434.html
5. Ramazanpour Esfahani, A., Farrokhian Firouzi A. 2016. Synthesis and application of zero-valent iron nanoparticles for hexavalent chromium removal in saturated sand columns: experimental and modeling studies. Desalination and Water Treatment, 57(33): 15424-15434. (IF=1.631) https://www.tandfonline.com/doi/full/10.1080/19443994.2015.1072842
6. Farhadi, A., Enayatizamir, N., Farrokhian Firouzi A., Howeizeh, H. 2016. Effect of arbuscular mycorrhize fungi inoculation on blue panic grass (Panicum antidotale) growth under water-deficit condition. Crop Research, 51(1-3): 78-85. (IF=1.2) https://www.indianjournals.com/ijor.aspx?target=ijor:cr1&volume=51&issue=1to3&article=013
7. Farrokhian Firouzi., A., Homaee, M., Klumpp, E., Kasteel, R., Tappe, W. 2015. Bacteria Transport and Retention in intact calcareous soil columns under saturated Flow conditions. Journal of Hydrology and Hydromechanics, 63 (2): 102–109. (IF=2.011) https://sciendo.com/article/10.1515/johh-2015-0020
8. Babaei, A. A., Bahrami, M., Farrokhian Firouzi, A., Ramazanpour, A. E. Alidokht, L. 2015. Adsorption of cadmium onto modified nanosized magnetite: kinetic modeling, isotherm studies, and process optimization. Desalination and Water Treatment. 56 (12): 3380-3392. (IF=1.631) https://www.tandfonline.com/doi/abs/10.1080/19443994.2014.972986
9. Farrokhian Firouzi, A., Babaei, A.A., Hosseini, M., Heidarzadeh, F. 2015. Adsorption of copper (II) by modified magnetite nanoparticles: adsorption efficiency, equilibrium, kinetic and reusability. Fresenius Environmental Bulletin, 24 (9): 2815-2823. (IF=0.553) https://www.prt-parlar.de/download/

10. Ramazanpour Esfahani, A., Farrokhian Firouzi, A., Sayyad, Gh., Kiasat, A., Alidokht, L. and A.R. Khataee. 2014. Pb(II) removal from aqueous solution by polyacrylic acid stabilized zero-valent iron nanoparticles: process optimization using response surface methodology. Research on Chemical Intermediates, 40: 431–445. (IF=2.262, Q2) https://link.springer.com/article/10.1007/s11164-012-0975-1
11. Ramazanpour Esfahani, A., Farrokhian Firouzi, A., Sayyad, Gh., and A.R. Kiasat. 2014. Transport and retention of polymer-stabilized zero-valent iron 3 nanoparticles in saturated porous media: Effects of initial particle 4 concentration and ionic strength. Journal of Industrial and Engineering Chemistry, 20 (5): 2671-2679. (IF=5.278, Q1) https://www.sciencedirect.com/science/article/abs/pii/S1226086X13005340
12. Ramazanpour Esfahani, A., Farrokhian Firouzi A., Sayyad, G.A., and A., Kiasat. 2013. Lead removal from aqueous solutions using polyacrylicacid-stabized zero-valent nanoparticle. Research Journal of Environmental and Earth Science, 5(9): 458-555. https://maxwellsci.com/jp/mspabstract.php?doi=rjees.5.5685
13. Ramazanpour Esfahani, A., Farrokhian Firouzi A., Sayyad, G.A., and A., Kiasat. 2013. Isotherm Study of Cadmium Adsorption onto Stabilized-Zerovalent Iron Nanoparticles. International Journal of Agronomy and Plant Production. 4 (12), 3444- 3454. (IF=0.47)
14. Ahmadi, M., Alipour, Z. T. and Farrokhian Firuzi, A. 2013. Investigation of the Possibility of Phytoremediating a Soil Contaminated with Anthracene. Journal of Chemical Health Risks, 3(3): 69-76. http://www.jchr.org/article_544039.html
15. Bahrami, M., Boroomandnasab, S., Kashkuli, H. A., Farrokhian Firoozi, A., and A. A. Babaei. 2012. Removal of Cd (II) From Aqueous Solution Using Modified Fe3O4 Nanoparticles. Report and Opinion. 4(5): 31-40. (IF=2.71) http://www.sciencepub.net/report/report0405/
16. Homaee, M. and Farrokhian Firouzi, A. 2008. Deriving point and parametric pedotransfer functions of some gypsiferous soils. Australian Journal of Soil Research, 46: 219-227. (IF=1.61) https://www.publish.csiro.au/sr/sr07161

Papers in national journals (in Persian with English abstract):

1. Kouhiyan Afzal, M.T., Farrokhian Firouzi, A., Taghavi, M. 2021. Simulation transport of biodegradable and green zerovalent iron nanoparticles in sandy soil under saturated steady state flow conditions. J. of Water and Soil Conservation, 27(5): 47-67. https://jwsc.gau.ac.ir/article_5344.html?lang=en

2. Shafiefar, S. Farrokhian Firouzi, A., Khademalrasoul, A. 2021. Estimation of electrical conductivity of saline-sodic soils during leaching process using HYDRUS-1D. Water and Soil Science. (Accepted Paper).
   https://water-soil.tabrizu.ac.ir/article_12252.html?lang=en
3. Yusefi, A., Farrokhian Firouzi, A., Aminzadeh, M. B. 2020. Effect of Mulch on Soil Moisture, Temperature and Heat Flux Variation in the Presence of Shallow Groundwater. Iranian Journal of Soil and Water Research, 50(9): 2213-2225. (IF=0.139)
   https://ijswr.ut.ac.ir/article_71715.html
4. Yusefi, A., Farrokhian Firouzi, A., Aminzadeh, M. B. 2020. Numerical Simulation of Moisture Distribution in Soil as Affected by Mulch and Shallow Saline Groundwater. Applied Soil Research, 8(3): 172-187. (IF=0.029)
   http://asr.urmia.ac.ir/article_120961.html
5. Nooralivand, F., Farrokhian Firouzi, A. 2020. Investigation of Modified Biochar, Nanoclay and Polyvinyl Acetate on Soil Stabilization and Wind Erosion Control of Sandy and Loamy Sand Soils. Iranian Journal of Soil and Water Research, 51(4): 923-935. (IF=0.139)
   https://ijswr.ut.ac.ir/article_74516.html?lang=en
6. Nooralivand, F., Farrokhian Firouzi, A. 2020. Investigation the Effect of Polyvinyl Acetate Polymer, Acid Biochar and Wheat Straw Cellulose Hydrogel on Water Retention Capacity in a Sandy Soil. Applied Soil Research, 8(3): 144-159. (IF=0.029)
   http://asr.urmia.ac.ir/article_120958_en.html
7. Nooralivand, F., Farrokhian Firouzi, A. 2020. The Effect of Time and Cycles of Wet and Drying on Durability of Mulchs in Soil to control Wind Erosion. Soil Management and Sustainable Production. (Under Review).
8. Zadmehr, H., Farrokhian Firouzi, A. 2020. Estimating Soil Temperature from Metrological Data Using Extreme Learning Machine, Artificial Neural Network and Multiple Linear Regression Models. Iranian Journal of Soil and Water Research, 51(4): 895-906. (IF=0.139)
   https://ijswr.ut.ac.ir/article_74574.html
9. Hosseinalipour, B., Rahnama, A., Farrokhian Firouzi, A. 2020. Effect of drought stress on wheat root growth and architecture at vegetative growth stage. Iranian Journal of Field Crop Science. 51(1): 63-75.
   https://ijfcs.ut.ac.ir/article_76290.html
10. Chatrenour, M., Landi, A., Farrokhian Firouzi, A., Noroozi, A., Bahrami, H.A. 2020. Investigation of absorbance characteristics of soil organic carbon using laboratory spectroscopy

in dust sensitive areas of Khuzestan province, Iran. Soil Management and Sustainable Production, 10(1): 65-81.
https://ejsms.gau.ac.ir/article_4979.html?lang=en

11. Chaternour, M., Landi, A., Farrokhian Firouzi, A., Noroozi, A., Bahrami, H.A. 2020. Application of Hyperspectral Images in Quantification of Soil Gypsum in Center Areas of Khuzestan Province Prone to Dust Generation. Applied Soil Research, 8(3): 1-13. (IF=0.029)
http://asr.urmia.ac.ir/article_120963_en.html
12. Shahpouri Arani, M., Farrokhian Firouzi, A., Enayatizamir, N., Rahnama, A. 2020. Effect of Soil Compaction and Organic Matter Application on some Soil Biological Characteristic under Wheat Cultivation in Greenhouse Conditions. Iranian Journal of Soil Research, 33(4): 485-496. (IF=0.171)
https://srjournal.areeo.ac.ir/article_121220.html?lang=en
13. Chatrenour, M., Landi, A., Farrokhian Firouzi, A., Noroozi, A., Bahrami, H.A. 2019.Investigating soil Properties in susceptible areas of dust production in Khuzestan province by visible and wave-near infrared spectroscopy. Watershed Engineering and Management, 12(3): 670-685.
https://jwem.areeo.ac.ir/article_120285_en.html
14. Chatrenour, M., Landi, A., Farrokhian Firouzi, A., Noroozi, A., Bahrami, H.A. 2019. Spectral behavior modeling of soil texture over dust center of Khuzestan Province using hyperspectral images and Random Forest (RF) model. Journal of Advanced Applied Geology. 9(4): 466-479.
https://aag.scu.ac.ir/article_15080.html?lang=en
15. Lohrasbi, H., Khademalrasoul, A., Farrokhian Firouzi, A. 2019. Effects of Biochar and Zeoplant on Physical and Mechanical Properties of Erodible Soils (Case Study: Bostan). Journal of Water and Soil, 33(5): 723-737. (IF=0.176)
https://jsw.um.ac.ir/article_38764.html?lang=en
16. Chaternour, M., Landi, A., Farrokhian Firouzi, A., Noroozi, A., Bahrami, H.A. 2019. Modeling Soil Salinity in Khuzestan Lands Susceptible for Dust Production Using Visible-Near Infrared Spectroscopic Method. Iranian Journal of Soil and Water Research, 50(8): 1951-1962. (IF=0.139)
https://ijswr.ut.ac.ir/article_70964.html
17. Hosseini Chamani, F., Farrokhian Firouzi, A., Amerikhah, H. 2019. Pedotransfer Function (PTF) for Estimation Soil moisture using NDVI, land surface temperature (LST) and normalized moisture (NDMI) indices. Journal of Water and Soil Conservation. 26(4): 239-254. (IF=0.149)
https://jwsc.gau.ac.ir/article_4769.html

18. Kouhiyan Afzal, M.T., Farrokhian Firouzi, A., Taghavi, M. 2019. Transport Study and Efficiency of Stabilized Nanoscale Zerovalent Iron Particles for Hexavalent Chromium Removal from Sand Column. Journal of Water and Soil, 31(1): 147-161. (IF=0.176)
    https://jsw.um.ac.ir/article_38723.html?lang=en
19. Sadeghian, A., Sayyad, Gh.A., Farrokhian Firouzi, A., Norouzi Masir, M. 2019. Effect of Different Agronomic Management on Some Physical Indicators of Soil Quality. Journal of Soil and Water, 33(2): 275-288. (IF=0.176)
    https://jsw.um.ac.ir/article_38732.html?lang=en
20. Kouhiyan Afzal, M.T., Farrokhian Firouzi, A., Taghavi Zahedkolaei, M. 2019. Nitrate Removal from Aqueous Solutions using Green and Biodegradable Zerovalent Iron Nanoparticles. Journal of Environmental Health Engineering, 6(3): 311-325 .
    https://jehe.abzums.ac.ir/article-1-646-en.html
21. Farrokhian Firouzi, A., Amiri, M.J., Hamidifar, H., Bahrami, M. 2018. Breakthrough Curves of SDS Stabilized Magnetite Nanoparticles in Two Coarse Textured Soils. Iranian Journal of Soil Research, 31(4): 573-587. (IF=0.171)
    https://srjournal.areeo.ac.ir/article_115897.html?lang=en
22. Sadeghian, A., Sayyad, Gh.A., Farrokhian Firouzi, A., Norouzi Masir, M. 2018. Effect of agronomic management on some chemical and biological indicators of soil health. Journal of Water and Soil Conservation. 25(3): 269-280. (IF=0.149)
    https://jwsc.gau.ac.ir/article_4247.html
23. Azadifar, A., Moazed, H., SoltaniMohammadi, A., Farrokhian Firouzi, A. 2017. The Effect of Soil Texture and Transmission Distance on The Nitrate Dispersivity in Sandy Soil Using Brigham, Fried-Combernous Models and CXTFIT code. Irrigation Sciences and Engineering, 39: 147-157.
    https://jise.scu.ac.ir/article_12503.html?lang=en
24. Azadifar, A., Moazed, H., SoltaniMohammadi, A., Farrokhian Firouzi, A. 2017. The Study of Nitrate Dispersivity in Sandy Soil Using HYDRUS-1D Model. Iranian Journal of Soil and Water Research, 47(4): 765-774. (IF=0.139)
    https://ijswr.ut.ac.ir/article_59983_en.html
25. Arzaghi F., Farrokhian Firouzi, A., Enayatizamir, N., Khalilimoghaddam, B. 2017. Effect of Polyacrylamide Polymer on Wind Erosion Control of Sandy Soil in Azadegan Plain. Journal of Water and Soil, 31(4): 1070-1082.
    https://jsw.um.ac.ir/article_38575.html?lang=en

26. Farrokhian Firouzi, A., Amiri, M. J., Hamidifar, H., Bahrami, M. 2017. Cadmium Immobilization in Soil using Sodium Dodecyl Sulfate Stabilized Magnetite Nanoparticles. Journal of Water and Soil, 31(1): 241-253. https://jsw.um.ac.ir/article_38513.html?lang=en
27. Farhadi, A., Enayati Zamir, N., Farrokhian Firouzi A., Howeizeh, H. 2017. The Effect of Arbuscular Mycorrhizal Fungi and Drought Stress on Glomalin Content and Some Physical and Mechanical properties of Soil under Blue Panic Grass Cultivation (Panicum antidotal). J. of Water and Soil Conservation, 23(5): 267-280. https://jwsc.gau.ac.ir/article_3381.html
28. Farrokhian Firouzi, A., Amiri, M.J., Hamidifar, H., Bahrami M. 2016. Transport Modeling of Modified Magnetite Nanoparticles with Sodium Dodecyl Sulfate in a Saturated Sandy Soil. Journal of Water and Soil, 30(3): 842-856. https://jsw.um.ac.ir/article_38398.html?lang=en
29. Moghadam, E., Mahmoodi, Sourestani, M., Ramazani, Z., Farrokhian Firouzi, A., Eskandari, F. 2016. Effects of iron foliar application on the number and size of glandular trichomes and essential oil content and composition of holy basil (Ocimum sanctum L.) at first and second harvests. Iranian Journal of Medicinal and Aromatic Plants, 32, (1): 174-188. https://ijmapr.areeo.ac.ir/article_106146.html?lang=en
30. Behnam, H., Farrokhian Firouzi, A., Moezzi, A.A. 2016. Effect of sugarcane bagasse biochar and compost on some soil mechanical properties. J. of Water and Soil Conservation, 23(4): 235-250. https://jwsc.gau.ac.ir/article_3288.html?lang=en
31. Nooralivand, F., Farrokhian Firouzi, A., Chorom, M. Kiasat, A. and Babaei, A. A. 2015. Effect of Stabilized Zero-Valent Iron Nanoparticles on Nitrate Removal from Sandy Soil. Journal of water and soil, 29 (4): 1018-1032. https://jsw.um.ac.ir/article_38173.html?lang=en
32. Nooralivand, F., Farrokhian Firouzi, A., Chorom, M. and A. A., Babaei. 2015. Comparison of the Efficiencies of Zero-Valent Iron Nanoparticles and Stabilized Iron Nanoparticles for Nitrate Reduction from Polluted Waters. Journal of water and wastewater, 26(5): 56-64. http://www.wwjournal.ir/article_11287.html?lang=en
33. Aalipour Shehni, M. S., Farrokhian Firouzi, A., Koraie, A. and H. Motamedi. 2015. Effect of plant roots on chloride transport in a soil under saturated condition. Journal of Agricultural engineering. 38(1): 95-107. https://agrieng.scu.ac.ir/article_11277.html

34. Aalipour Shehni M, Farrokhian Firouzi A., Motamedi H, Koraei A. 2015. Effects of Growing and Decaying Corn Plant Roots on Escherichia Coli Transport in Soil under Saturated Condition. Water and Soil science (Journal of Science and Technology of Agriculture and Natural Resoueces), 19 (71): 163-177. https://jstnar.iut.ac.ir/article-1-3006-en.html
35. Moghadam, E., Mahmoodi Sourestani, M., Farrokhian Firouzi, A., Ramazani, Z., Eskandari F. 2015. The effect of foliar application of iron chelate type on morphological traits and essential oil content of holy basil (Ocimum sanctum L.). Agriculture Crop Management. 17(3): 595-606. https://jci.ut.ac.ir/article_54372.html?lang=en
36. Arzaghi, F., Farrokhian, Firouzi. A., Enayatizamir, N., Khalilimoghadam, B. 2015. Consideration the effect of Thrichoderma harzianum on windy erosion control of Azadegan plain sandy soil at laboratory and wind tunnel. Soil Management and Sustainable Production, 5(2): 239-251. https://ejsms.gau.ac.ir/article_2646.html?lang=en
37. Yusefi, A., Farrokhian Firouzi, A., Khalili Moghaddam, B. 2014. Evaluation of temporal variation of splash erosion in different slopes and agricultural and forest land uses. Water and Soil Resources Conservation, 3(3): 11-20. https://wsrcj.srbiau.ac.ir/article_3113.html?lang=en
38. Yusefi, A., Farrokhian Firouzi, A., Khalili Moghaddam, B. 2014. Experimental investigation of the aggregate breakdown and splash erosion in different conditions intensity and rainfall duration in selected soil of Dashtegol watershed of Masjed Soleyman. Journal of Water and Soil Conservation, 22(2): 175-189. https://jwsc.gau.ac.ir/article_2452.html
39. Ramezanpour Esfahani, A., Farrokhian Firouzi A., Sayyad, G.A., and A., Kiasat. 2014. Investigation of Pb(II) Removal from Aqueous Solutions Using Modified Nano Zero-Valent Iron Particles. Journal of water and wastewater, 25(2): 68-76. http://www.wwjournal.ir/article_4572.html?lang=en
40. Hosseini, M., Farrokhian Firouzi, A., Babaei, A.A., Heidarzadeh, F. 2013. Removal of Cu (II) from Aqueous Solution by Modified Tea Waste with Magnetic Nanoparticles. Journal of water and wastewater, 24(4): 112-119. http://www.wwjournal.ir/article_3198.html?lang=en
41. Bahrami, M., Boroomandnasab, S., Kashkuli, H. A., Farrokhian Firouzi, A., and Babaei, A. A. 2013. Synthesis of Magnetite Nanoparticles (Fe3O4) and its Efficiency in Cadmium Removal from Aqueous Solutions. Journal of water and wastewater, 24(3): 54-62. http://www.wwjournal.ir/article_3109.html?lang=en

42. Bahrami, M., Boroomandnasab, S., Kashkuli, H. A., Farrokhian Firouzi, A., and Babaei, A. A. 2013. 2013. Cadmium Removal from Aqueous Solutions Using Modified Magnetite Nanoparticles. Iran. J. Health & Environ., 6(2): 221-232. https://ijhe.tums.ac.ir/article-1-5191-en.html
43. Farrokhian Firouzi, A., Homaee, M., Klumpp, E., Kasteel, R., Sattari, M. 2012. Modeling Microbial Contaminant Transport and Deposition in Calcareous Soils under Saturated Conditions. Journal of Water and Soil Science, 15 (58): 53-68. https://jstnar.iut.ac.ir/article-1-2045-en.html
44. Farrokhian Firouzi, A., Homaee, M., Klumpp, E., Kasteel, R., Sattari, M. 2010. Bacteria Transport and Deposition in Calcareous Soils Under Unsaturated Flow Conditions. Water and Soil, 24 (3): 439-452. https://jsw.um.ac.ir/article_32446.html?lang=en
45. Farrokhian Firouzi., A., Homaee, M. Sattari. 2009. Quantitative Study of Microbial Contaminant Attachment and Detachment in Calcareous Soil. Environmental science, 8(1): 23-38. https://envs.sbu.ac.ir/article_94662.html
46. Farrokhian, Firouzi, A. and M. Homaee. 2008. Predicting Water Retention Curve of Gypsiferous Soils Using the Derived Point Pedotransfer Functions. Journal of Agriculture Engineering Research. 6 (24): 129-143. https://idser.areeo.ac.ir/article_102621.html?lang=en
47. Farrokhian, Firouzi, A. and M. Homaee. 2003. Parametric Estimation of Hydraulic Properties of Gypsum Soils Using Pedotransfer Functions. Journal of Agriculture Engineering Research. 4 (12): 57-72.

CONFERENCE PRESENTATIONS:

1. Sayyad, G. A., Sadeghiyan, A., Sharifi, M., Farrokhian Firouzi, A., Norouzi Masir, M. 2019. Soil Health Assessment of Three Wheat-Based Cropping Systems in Southwestern Iran Using a Fuzzy Logic Knowledge-Based Model. Soil Science Society of America, International Soils Meeting, Jan. 6-9, 2019, Sandiego, CA.
2. Sadeghian, A., Sayyad, Gh.A., Farrokhian Firouzi, A., Norouzi Masir, M. 2018. Assessment soil quality index based on Dexter Index Under the influence of different cropping system. 5th International Conference on Applied Research in Agricultural Sciences, Tehran, Iran, April 1, 2018, pp. 1-7.

3. Sadeghian, A., Sayyad, Gh.A., Farrokhian Firouzi, A., Norouzi Masir, M. 2018. The effect of crop residue management on the concentration of soil heavy metals (Zn, Mn and Fe). 5th International Conference on Applied Research in Agricultural Sciences, Tehran, Iran, April 1, 2018, pp. 1-7.
4. Moghadam, E., Mahmoodi, Sourestani, M., Ramazani, Z., Farrokhian Firouzi, A. 2014. The effect of foliar application of Nano-iron chelate and iron chelate on the essential oil content and yield of holy basil (Ocimum sanctum) at first and second harvests. 3rd National Congress on Medicinal Plants, Ferdowsi University of Mashhad, Mashhad, Iran, May 15, 2014.
5. Moghadam, E., Mahmoodi, Sourestani, M., Ramazani, Z., Farrokhian Firouzi, A. 2016. The effect of foliar application nano-iron chelate and iron chelate on the photosynthesis parameters and chlorophyll content of holy basil (Ocimum sanctum). 3rd National Congress on Medicinal Plants, Ferdowsi University of Mashhad, Mashhad, Iran, May 15, 2014.
6. Farrokhian Firouzi, A. and M. Homaee. 2008. Parametric estimation of water retention for gypsiferous soils using Pedotransfer functions. Eurosiol congress, 25 - 29 August 2008, Vienna, Austria.
7. Farrokhian Firouzi, A. and M. Homaee. 2008. Predicting water retention curve of gypsum soils using point Pedotransfer functions. Eurosiol congress, 25 - 29 August 2008, Vienna, Austria.
8. Farrokhian Firouzi, A. and M. Homaee. 2004. Estimating hydraulic functions of gypsiferous soils. In: Nicole Whrle and Maik Scheurer (Eds.). 2004. EuroSoil 2004 Abstracts. Pp 303. International Conference, September 4-12, Freiburg, Germany.
9. Valikhani, A.H., Asakereh, A., Farrokhian Firoozi, A. 2020. Biochar and its applications in increasing soil fertility. 12th National Congress on Biosystems Engineering and Agricultural Mechanization Ahvaz, Iran, 5-7 February 2020, pp.1-11.
10. Chatrenour, M., Landi, A., Farrokhian Firouzi, A. Noroozi, A., Bahrami, H.A. 2019. Determination of the key wavelength of soil salinity in dust center of Khuzestan province using hyperspectral image. 16th Soil Sciences Congress, University of Zanjan, Iran, August 27-29, 2019, pp.1-7.
11. Chatrenour, M., Landi, A., Farrokhian Firouzi, A. Noroozi, A., Bahrami, H.A. 2019. Determination of key wavelengths of soil gypsum in sensitive centers of dust production in Khuzestan province. 16th Soil Sciences Congress, University of Zanjan, Iran, August 27-29, 2019, pp.1-8.
12. Lohrasbi, H., Khademalrasoul, A., Farrokhian Firouzi, A. 2019. Effects of biochar and Zeoplant on dust control in erosional hotspots. 16th Soil Sciences Congress, University of Zanjan, Iran, August 27-29, 2019, pp.1-7 .

13. Kouhiyan Afzal, M.T., Farrokhian Firouzi, A., Taghavi, M. 2018. The efficiency of zerovalent iron nanoparticles for pollutant removal from aqueous solutions. he Second Iranian Congress of Water and Wastewater Science and Engineering and the Second National Conference on Drinking and Sanitation Water Supply, Isfahan University of Technology, Iran, November 13-15, 2018, pp.1-8.
14. Salehi, R., Farrokhian Firouzi, A. Mesgarbashi, M. 2014. Determination of least limit water rang for Vigna unguiculata growth. 10th National Conference on Sustainable Agriculture and Natural Resources, Tehran, Iran, November 12, 2014. pp. 1-8.
15. Hosseini Chamani, F., Farrokhian Firouzi, A., Amerikhah, H. 2018. Estimation Drought Indices using The Standardized Precipitation Index (SPI), Case Study: Dehdez. The first national conference on sustainable development in agricultural sciences and natural resources with a focus on environmental culture, Tehran, July 11, 2018. pp. 1-9.
16. Arvaneh, M., Farrokhian Firouzi, A., Khademalrasoul, A. 2017. Effect of irrigation water salinity on wheat chlorophyll content under field condition. The First International Congress on Specialized Researches in Sciences, Engineering and Academic-Industrial Technologies, Shiraz, Iran, June 15, 2017. Pp. 1-4.
17. Arvaneh, M., Farrokhian Firouzi, A., Khademalrasoul, A. 2017. Effect of irrigation water salinity on solute concentration of wheat textures under field condition. The First International Congress on Specialized Researches in Sciences, Engineering and Academic-Industrial Technologies, Shiraz, Iran, June 15, 2017. Pp. 1-5.
18. Sadeghian, A., Sayyad, Gh.A., Farrokhian Firouzi, A., Norouzi Masir, M. 2018. Investigation the effect of different agronomic management on the parameter of the van Genuchten equation. International Congress on Water, Soil and Environmental Sciences, Shahid Beheshti University, Tehran, Iran, March 02, 2018. Pp. 1-8.
19. Sadeghian, A., Sayyad, Gh.A., Farrokhian Firouzi, A., Norouzi Masir, M. 2018. Investigation of the Effect of Different Agricultural Managements on Some Biological Characteristics of Soil Health. 15th Iranian soil science congress, Isfahan University of Technology, August 30, 2017. Pp. 1-6.
20. Amirinejad Tork S., Moezzi, A., Khademalrasoul, A., Farokhiyan Firouzi, A. 2017. Effect of pyrolysis temperature on some characteristics of date palm by product made biochar and its Cadmium adsorption capacity. 15th Iranian soil science congress, Isfahan University of Technology, August 30, 2017. Pp. 1-6.
21. Amirinejad Tork S., Moezzi, A., Khademalrasoul, A., Farokhiyan Firouzi, A. 2017. Study the effects of pyrolysis temperature on chemical characteristics of biochar produced from Cane

sewage. 15th Iranian soil science congress, Isfahan University of Technology, August 30, 2017. Pp. 1-6.

22. Hosseinalipour, B., Rahnama, A., Farrokhian Firouzi, A. 2016. Root growth response of two bread wheat cultivars under drought Stress conditions. 2th international and 14th national Iranian crop science congress. Rasht, Iran, September 01, 2016. Pp. 1-4.
23. Behnam, H., Farrokhian Firouzi, A., Moezzi, A.A. 2016. Effect of sugarcane bagasse biochar on different soil water status. 2016. The second national conference on environment and soil resources sustainable management. Shahid Bahonar University of Kerman, Iran, September 08, 2016. Pp. 1-5.
24. Behnam, H., Farrokhian Firouzi, A., Moezzi, A.A. 2015. Effect of biochar and compost of sugarcane on soil organic carbon and soil consistency limits 14th Iranian Soil Science Congress, Rafsanjan, Kerman, September 09, 2015. Pp. 1-5.
25. Hosseinalipour, B., Rahnama, A., Farrokhian Firouzi, A. 2015. Study of some physiological traits of bread wheat under osmotic stress. 1st international congress on the development of agricultural science and natural resources, Poland, December 07, 2015. Pp. 1-7.
26. Farhadi, A., Enayati Zamir, N., Farrokhian Firouzi A., Howeizeh, H. 2015. Effect of arbuscular mycorrhizal fungi inoculation on some growth indicators of panicum. National conference on new findings of research in agriculture and natural resources, Mianeh, IranDecember 06, 2015. Pp. 769-769 .
27. Azadifar, A., Moazed, H., SoltaniMohammadi, A., Farrokhian Firouzi, A. 2015. Evaluation of nitrate dispersion in sandy soil using CXTFIT model. 2nd National Conference on Water, Human, Earth, Isfahan, Iran, September 17, 2015. Pp. 1-9.
28. Azadifar, A., Moazed, H., Soltani Mohammadi, A., Farrokhian Firouzi, A. 2015. Evaluation of nitrate dispersion in coarse and fine sandy soil at different transfer distance. 2nd National Conference on Water, Human, Earth, Isfahan, Iran, September 17, 2015. Pp. 1-7.
29. Salehi, R., Farrokhian Firouzi, A., Mesgarbashi, M. 2014. The effect of soil moisture and soil compaction on Vigna unguiculata L. morphologic properties in green house conditions. Second Global Conference on Sustainable Agriculture and Natural Resources, Thehran, Iran, September 10, 2014. Pp. 1-8.
30. Yaghutnezhd, M., Farrokhian Firouzi, A., Enayatizamir, N. 2015. Bacterial (E. coli) transport in sand soil columns with different particle size distribution. 2nd National Conference on Applied Researches in Agriculture Sciences, University of Tehran, Iran, March 05, 2015.

31. Fadavipour, E., Farrokhian Firouzi, A., Roshanfekr, H., Sheikhdavoodi, M.J. 2014. The effect of different tillage methods on total wheat nitrogen at different stages of growth. 2nd national conference of Medical Herbs and Stable Agriculture, Hamedan, Iran, August 23, 2014.
32. Fadavipour, E., Farrokhian Firouzi, A., Roshanfekr, H., Sheikhdavoodi, M.J. 2014. the effect of different tillage methods on Chlorophyll Index at different stages of wheats growth. 2nd national conference of Medical Herbs and Stable Agriculture, Hamedan, Iran, August 23, 2014.
33. Yaghutnezhd, M., Farrokhian Firouzi, A., Enayatizamir, N. 2015. Bacterial (E. coli) retention in sand soil columns with different particle size distribution. 2nd National Conference on Applied Researches in Agriculture Sciences, University of Tehran, Iran, March 05, 2015. Pp. 1-5.
34. Fadavipour, E., Farrokhian Firouzi, A., Roshanfekr, H., Sheikhdavoodi, M.J. 2014. The effect of different tillage management on total soil layers' nitrogen under wheat cultivation. 2nd national conference of Medical Herbs and Stable Agriculture, Hamedan, Iran, August 23, 2014.
35. Moghadam, E., Mahmoodi, Sourestani, M., Ramazani, Z., Farrokhian Firouzi, A. 2016. The effect of foliar application of Nano-iron chelate and iron chelate on the essential oil content and yield of holy basil (Ocimum sanctum) at first and second harvests. 3rd National Congress on Medicinal Plants, Ferdowsi University of Mashhad, Mashhad, Iran, May 15, 2014.
36. Aalipour Shehni M, Farrokhian Firouzi A., Motamedi H, Koraei A. 2015. 2014. The effect of decayed plant root on the bacterial filtration in loamy sand soil column. 13th Iranian Soil Science Congress, Shahid Chamran University of Ahvaz, Iran. Pp. 1-4 .
37. Nooralivand, F., Farrokhian Firouzi, A., Chorom, M. 2015. 2014. Transport of carboxymethyl cellulose-stabilized zero-valent iron nanoparticles in porous media. 13th Iranian Soil Science Congress, Shahid Chamran University of Ahvaz, Iran. Pp. 1-4 .
38. Ramazanpour Esfahani, A., Farrokhian Firouzi, A., Sayyad, Gh., Kiasat, A.R. 2014. Numerical simulation of nanoparticle transport in sand soil column under steady state saturation condition. 13th Iranian Soil Science Congress, Shahid Chamran University of Ahvaz, Iran. Pp. 1-4.
39. Asadian, Z., Moazed, H., Boroomandnasab, S., Farrokhian Firouzi, A. 2014. Effect of industrial wastewater irrigation and using of Zeolite on transport and retention of nitrate in loamy sand soil. 13th Iranian Soil Science Congress, Shahid Chamran University of Ahvaz, Iran. Pp. 1-4.
40. Arzaghi, F., Farrokhian, Firouzi. A. Enayatizamir, N., Khalilimoghadam, B. 2013. Investigating the impact of different levels of poly acrylamide and time of application on soil resistance. Second National Congress of Sustainable Development of Agriculture and Healthy Environment, Hamedan, Iran, September 12, 2013.

41. Ahmadi, M., Alipour, Z. T. and A. Farrokhian Firouzi. 2013. Studying the Possibility of Phytoremediation of Soil Contaminated with Total Petroleum Hydrocarbons. National Conference of Passive Defense in Agriculture, Qeshm, Hormozgan, Iran, November 20, 2013.
42. Ramazanpour Esfahani, A., Farrokhian Firouzi, A., Bahrami, M. Aalipour, M. 2011. Effect of physicochemical properties on zero-valent iron nanoparticle transport in soil: A review. The First National Conference on Economic Jihad in The Field of Agriculture and Natural Resources, Qom, Iran, December 16, 2011.
43. Yusefi, A., Farrokhian Firouzi, A., Khalili Moghaddam, B. 2013. Determination of splash erosion using Multiple Splash Set. Second National Congress of Sustainable Development of Agriculture and Healthy Environment, Hamedan, Iran, September 12, 2013.
44. Yusefi, A., Farrokhian Firouzi, A., Khalili Moghaddam, B. 2013. The effect of duration-rainfall intensity on splash erosion using Multiple Splash Set. National Conference on the Environmental Research of Iran, October 31, 2013.
45. Bahrami, M., Boroomandnasab, S., Kashkuli, H. A., Farrokhian Firouzi, A., and Babaei, A.A. 2012. Stabilization of heavy metals in polluted soils using nanoparticles. 11th National Conference on Irrigation and Evaporation Reduction, Shahid Bahonar University of Kerman, Iran, February 09, 2012.
46. Shahin, H. Farrokhian Firouzi, A., Monshi, A. 2012. The effect of hematite nanoparticles on seed germination, root and steam growth of Wheat and sorghum-Sudangrass. The first national conference on abiotic stresses, Isfahan University, Iran, November 01, 2012.
47. Aalipour, M. S., Farrokhian Firouzi, A., Koraie, A. and H. Motamedi. 2013. Simulation Transport and deposition of Biological Contaminants into Groundwater. 9th international seminar of River Engineering, Shahid Chamran University of Ahvaz, Iran, January 24, 2013.
48. Nooralivand, F., Farrokhian Firouzi, A., Kiasat, A.R., Chorom, M. 2012. Nitrate removal from aqueous solution using zero valent iron nanoparticles. 6th National Conference and Exhibition on Environmental Engineering, University of Tehran, November 21, 2012.
49. Nooralivand, F., Farrokhian Firouzi, A., Kiasat, A.R., Chorom, M. 2012. Nitrate reduction in water using carboxymethyl cellulose stabilized iron nanoparticles. 6th National Conference and Exhibition on Environmental Engineering, University of Tehran, November 21, 2012.
50. Boroomandzadeh, H., Farrokhian Firouzi, A., Jaafarzadeh, A.R., Papan, P. 2012. Assessment of spatial variability saturated hydraulic conductivity of soils in west of Karoun river. The first Agriculture Conference in Hard Environmental Conditions, Ramhormoz, Iran, May 09, 2012.
51. Ramazanpour Esfahani, A., Farrokhian Firouzi, A., Sayyad, Gh., Kiasat, A. 2012. Kinetic studies of Cadmium removal from aqueous solution using Zero-valent iron nanoparticles. 6th National

Conference and Exhibition on Environmental Engineering, University of Tehran, November 21, 2012.

52. Ramazanpour Esfahani, A., Farrokhian Firouzi, A., Sayyad, Gh., Kiasat, A. 2012. Transport of Polyvinylpirrolidone-stabilized Zero-valent iron nanoparticles in saturated porous media. 6th National Conference and Exhibition on Environmental Engineering, University of Tehran, November 21, 2012.
53. Yazdipour, A., Sharifi Hosseini, S., Farrokhian Firouzi, A. 2010. Evaluation the effect of water and fertilizers management on wheat yield under saline conditions. The First National Conference On Consumption Pattern Reforms In Agriculture, Natural Resources And Veterinary Medicine, Zabol University, Iran, March 05, 2010.
54. Bahrami, M., Boroomandnasab, S., Kashkuli, H. A., Farrokhian Firouzi, A., Hosseini, M. 2012. Application of nanoparticls for heavy metals removal from water and wastewater. 11th National Conference on Irrigation and Evaporation Reduction, Shahid Bahonar University of Kerman, Iran, February 09, 2012.
55. Hosseini, M. S, Farrokhian Firouzi, A., Babaei, A. A., Heidarizadeh, F., Bahrami, M. 2012. Magnetic Nanoparticle Impregnated onto Tea waste for the Removal of Copper(II) from Aqueous Solution. 11th National Conference on Irrigation and Evaporation Reduction, Shahid Bahonar University of Kerman, Iran, February 09, 2012.
56. Hosseini, M., Bahrami, M., Boroomandnasab, S., Kashkuli, H. A., Farrokhian Firouzi, A. 2011. Application of nanoparticles for immobilization of heavy metals in contaminated soils. The First National Conference on Economic Jihad in the Field of Agriculture and Natural Resources, Qom, Iran, December 16, 2011. Pp. 1-4.
57. Cheloei, M., Chorom, M., Mptamedi, H., Farrokhian Firouzi, A. 2011. Isolation and identification of the most resistant bacteria to cadmium and zinc in sewage sludge. 5th National Seminar of Chemistry and Environment, Shahid Chamran University of Ahvaz, Iran, December 23, 2011.
58. Loveimiasl, SH., Sayyad, G. A., Jaafarzadeh, A.R., Farrokhian Firouzi, A. 2011. Comparison of ANFIS and MLR models in estimating soil saturated hydraulic conductivity. 3rd Irrigation and Drainage Network Management National Conference, Shahid Chamran University of Ahvaz, Iran, Feb 20, 2011.

RESEARCH PROJECTS:

1. The effect of shallow groundwater and mulch on coupled heat, moisture and saline dynamics in different soils texture during evaporation process. (Funded by: Iran National Science Foundation).

2. Quantitative Study Effect of Magnetite Nanoparticles on Immobilization, Transport and Bioavailability of Copper in Soil. (Funded by: Environmental Technologies Research Center).
3. Study the Effect of carboxymethyl cellulose stabilized Iron Nanoparticles on Transport and Reduction of Nitrate in Soil. (Funded by: Environmental Technologies Research Center).
4. Study Effect of Magnetite Nanoparticles on Removal of Cadmium from Aqueous Solution and Its transport in Soil. (Funded by: Environmental Technologies Research Center).
5. The Feasibility of Using the Some of Chemical, Mineral and Organic Mulches on Wind Erosion Control. (Funded by: Dust Research Center, Shahid Chamran University of Ahvaz).
6. Investigating the effect of Soil Bioaugmentation and biostimulation on wind erosion control. (Funded by: Dust Research Center, Shahid Chamran University of Ahvaz).

PROFESSIONAL MEMBERSHIPS:

- Soil Science Society of Iran

LANGUAGES:

Persian (native)

English (medium)

German (B1)