Curriculum Vitae

Personal information

Forename: *Saeid*

Surname: *Hojati*

Father name: *Reza*

Birthday: 1979

Nationality: *Iranian*

Marital status: *Married with two children*

Contact address:

Department of Soil Science, College of Agriculture, Shahid Chamran University,

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Education

- **Ph.D.** Soil Science (Genesis and Classification of Soils), Isfahan University of Technology (IUT), Isfahan, Iran.

- **Thesis title: Distribution pattern, genesis and stability of fibrous clay minerals in soils and associated Tertiary sediments in central Iran and Zagros regions.**

- **M.Sc.** Soil Science (Soil Biochemistry), Isfahan University of Technology (IUT), Isfahan, Iran.

- **Thesis title**: **Residual and cumulative effects of organic amendments on microbial biomass index, β-glucosidase, L-glutaminase, alkaline phosphatase and arylsulfatase activities in a calcareous soil.**

- **B.Sc.** Soil Science, Isfahan University of Technology (IUT), Isfahan, Iran.

Positions Held

- **E**ditorial Board, Journal of Agricultural Engineering, Shahid Chamran University January 2016-January 2018.
- **V**ice Dean, Education, Faculty of Agriculture, Shahid Chamran University of Ahvaz, Nov. 2016- September 2018.
- **E**xecutive Secretary, the First International Conference on Dust, Ahvaz, March 2-4, 2016.
- **A**ssociate Professor, Shahid Chmaran University of Ahvaz, October 2015-Now.
- **M**anager, University Journals System, Shahid Chamran University of Ahvaz (June 2013-March 2016).
- **M**anaging Director, Journal of Agricultural Engineering, Shahid Chamran University of Ahvaz, January 2013-January 2015.
- **A**ssistant Professor, Shahid Chmaran University of Ahvaz, January 2012-October 2015.

Training Abroad

- Fellowship, Department of Agricultural Sciences and Technology, *Technical University of Cartagena, Murcia, Spain* (March 2009-September 2009).

Membership

- Soil Science Society of America (2005-2006)
- Iranian Society of Soil Science (Since 2014)
- Iranian Society of Mineralogy and Crystallography (Since 2009)
- Mineralogical Society of England and Ireland (2010-2011)
- Clay Minerals Society (2010-2011)

Honors and awards

- **D**istinguished Agricultural Ph.D. thesis in Isfahan University of Technology (2012).
- **D**istinguished researcher in Agriculture and Natural Resources in 2016, Shahid Chmaran University of Ahvaz, Iran.
- **W**inner of fellowship from Isfahan University of Technology (IUT) in 2003.
- **D**istinguished student, the second- best student in qualifying examination to higher education in 2002 (The exam is annually held by Ministry of Science, Research and Technology in Iran).
- **D**istinguished student, the first- best student of Soil Science, Isfahan University of Technology (IUT) in B.Sc. degree.

Teaching Experiences

Undergraduate level

- Soil Genesis and Classification
- Soil Survey
- Land Evaluation

- Geomorphology
- Introduction to Soil Science

Graduate level

- Advanced Topics in Soil Genesis, Classification and Land Evaluation
- Land Suitability
- Geostatistics
- Optical Mineralogy
- Methodology in Research

Research Interests

- Interactions of clay minerals with organic and inorganic pollutants.
- Digital soil mapping and digital soil morphometric
- Spatial variability of soil properties.
- Effects of land use and management practices on soil quality attributes.
- Strategies for remediation of petroleum polluted soils.
- Paleoclimate interpretation of clay minerals in soils and weathering profiles.
- Application of stable isotope and micromorphology techniques in studies of soil evolution.
- Application of submicroscopic techniques (SEM, TEM, HRTEM) in studies of clay minerals formation under arid conditions.
- Determination of the origin of dust particles in arid and semi-arid regions based on mineralogical compositions and physicochemical characteristics.

Major Skills

Experienced with **Soil Mineralogy and Micromorphology** techniques including:

- X-Ray diffraction (XRD),
- Polarized microscopes,
- Magnetic susceptibility (MS),
- Scanning and Transmission Electron Microscopy (S&TEM)
- Ion Chromatography (IEC),
- Thermogravimetric Analysis (DSC and TGA),
- Infrared Spectroscopy (FTIR),
- Inductively coupled plasma- Mass spectrometry (ICP-MS)
- Atomic absorption spectrometry (AAS).

Invited Journals Reviewer
a. (International Journals)

- Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy
- Spectroscopy Letters
- Arid Land Research and Managements
- The Korean Journal of Chemical Engineering
- Research on Chemical Intermediates
- Chemical Industry and Chemical Engineering Quarterly
- Arabian Journal of Chemistry

- Chemosphere
- Applied Clay Science
- Archives of Agronomy and Soil Science
- Aeolian Research

b. (Domestic Journals)

- Agricultural Engineering (Soil Science and Agricultural Machinery)
- Soil Management and Sustainability
- Journal of Soil and Water Conservation
- Journal of Science and Technology in Agriculture and Natural Resources
- Iranian Journal of Water Research
- Irrigation and Water Sciences
- Iranian Journal of Soil and Water Researches

Books Translated

Hojati, S., Landi, A., 2016. Visual Soil Assessment Field Guide: Annual Crops. Iran Agricultural Sciences Press, Tehran, 53 pages.

Hojati, S., 2016. Visual Soil Assessment Field Guide: Wheat. Jahad University Press, Sari, 75 pages.

Book Chapters Published

Hojati, S. and H. Khademi. 2011. Genesis and Distribution of Palygorskite in Iranian Soils and Sediments. *In* Galan, E. and A. Singer (eds.), Developments in Palygorskite-Sepiolite Research: A New Look at These Nanomaterials. Elsevier, Amsterdam, pp. 201-218.

Theses Supervised (Selected Topics)

a. (Ph.D. level)

1) **Saheb Khodehbin.** Digital mapping of carbon storage and emission of carbon gases in soils of different land uses in Behbahan city (ongoing).

2) **Vahid Moradinasab.** Soil Evolution in relation to geomorphology and parent materials in parts of Roodzard Basin, east of Khuzestan Province (ongoing).

3) **Alireza Owji.** Effects of climate and grazing management on carbon balance and characteristics of soils in selected pastures of Khuzestan Province (Completed).

b. (M.Sc. level)

1) **Mousa Gharibzadeh.** Predicting chemical forms of phosphorous using topography and soil characteristics by statistical and intelligence models in Dehdez region, Khuzestan Province (ongoing).

2) **Sanaz Mousavi.**. Adsorption behavior, fractionation and speciation of zinc in selected diagnostic horizons of soils in Khuzestan Province (ongoing).

3) **Maryam Biniaz.**. Effect of Zn- enriched zeolite, sepiolite and polygorskite addition on chemical forms of zinc and its uptake by wheat in a calcareous soil (ongoing).

4) **Samira Alvani.** 2018. Effects of sepiolite and palygorskite micro- and nano-particles on sorption of Cu and Pb from multi-ionic solutions and their leaching from contaminated soils (Completed).

5) **Mansoureh Malhan.** 2018. Effects of palygorskite addition in a Ni contaminated soil on nitrification process (Completed).

6) **Ahmad Ali Rouhaninezhad**. 2017. Effects of ionic strength and humic acid on the kinetics and adsorption isotherms of Cr (IV) from aqueous solutions by palygorskite nanoparticles (Completed)

7) **Faranak Ghasemi.** 2016. Effects of *Glomus Mosseae* mycorrhizal symbiosis on Mg uptake and weathering of sepiolite and palygorskite in rhizosphere of sorghum (Completed).

8) **Zahra Savari.** 2016. Digital mapping of soil salinity in Khuzestan Province using regression kriging (Completed).

9) **Parisa Heidari.** 2016. Effects of land use changes on micromorphological and biological indicators of soil quality in part of Rakaat and Khodabakhshi watershed, east of Khuzestan Province (Completed).

10) **Davoud Shariari Geraei.** 2016. Effect of land use on status and various forms of organic carbon in selected soils of Khuzestan Province (Completed).

11) **Zeinab Jenagh.** 2015. Laboratory evaluation of factors affecting release of elements from sepiolite, palygorskite and bentonite clay minerals (Completed).

12) **Neda Haghighatkhah.** 2014. Effects of burning of crop residues on mineralogical composition and different forms of carbon in selected soils of Khuzestan Province (Completed).

13) **Meysam Farzadian.** 2014. Alleviation of soil water repellency in two soil samples contaminated by oil and its derivatives (oil based mud) by application of different treatments including clay minerals, oil-decomposing bacteria and aeration (Completed).

14) **Reza Beitlefteh.** 2013. Characterization of dust particles in southwest of Khuzestan Province and the role of drying of Hourolazim wetland on increasing dust events (Completed).

International Journal Papers

a. ISI Journals

1) Alvani, S., **Hojati, S.,** Landi, A., Effects of sepiolite nanoparticles on Pb and Cu removal from aqueous solutions and their leaching from soil columns. *Geoderma* (Under Review). (***IF = 3.740***)

2) **Hojati, S.** Use of spatial statistics to identify hotspots of lead and copper in selected soils from north of Khuzestan Province, southwestern Iran. *Archives of Agronomy and Soil Science*. (Accepted). (***IF = 2.254***)

3) **Hojati, S.** 2018. Pollution assessment and source apportionment of arsenic, lead and copper in selected soils from Khuzestan Province, southwestern Iran. *Arabian Journal of Geosciences*. 10:523. (***IF = 0.860***)

4) Mehrab, N., Chorom, M., **Hojati, S.** 2016. Effect of Raw and NH_4^+- enriched zeolite on nitrogen uptake by wheat and nitrogen leaching in soils with different textures. *Communication in Soil Science and Plant Analysis*, 47 (10): 1306-1316. (***IF = 0.540***)

5) Sharifipour, F., **Hojati, S**., Landi, A., Faz Cano. A. 2015. Kinetics and thermodynamics of lead adsorption from aqueous solutions onto Iranian sepiolite and zeolite. *International Journal of Environmental Research*, 9 (3): 1001-1010. (***IF = 1.019***)

6) **Hojati, S.**, and Landi, A. 2015. Removal of zinc from a metal-plating wastewater using an Iranian sepiolite: determination of optimum conditions. *Desalination and Water Treatment*, 53 (8): 2117-2124. (***IF = 1.631***)

7) **Hojati, S.**, and Landi, A. 2015. Kinetics and thermodynamics of zinc removal from a metal plating wastewater by adsorption onto an Iranian sepiolite. *International Journal of Environmental Sciences and Technology*, 12 (1): 203-210. (***IF = 2.037***)

8) Ramezanpour Esfahani, A., **Hojati, S.**, Azimi, A., Alidokht, L., Khataee, A., and M. Farzadian. 2014. Enhanced Hexavalent Chromium Removal from Aqueous Solutions Using a Sepiolite-Stabilized Zero Valent Iron Nanocomposite: Impact of Operational Parameters and Artificial Neural Network Modeling. *Journal of the Taiwan Institute of Chemical Engineers*, 49: 172-182. (***IF = 3.849***)

9) **Ramezanpour** Esfahani, A., **Hojati, S.**, Azimi, A., Alidokht, L., Khataee, A., and M. Farzadian. 2014. Reductive removal of hexavalent Cr from aqueous solutions using sepiolite-stabilized zero-valent Iron nanoparticles: Process optimization and kinetic studies. *Korean Journal of Chemical Engineering*, 31 (4): 630-638. (***IF = 2.199***)

10) **Hojati, S**. and H. Khademi. 2013. Cadmium sorption from aqueous solutions onto an Iranian sepiolite: kinetics and isotherms. *Journal of Central South University*, 20 (12): 3627-3632. (***IF = 0.761***)

11) **Hojati, S**., Khademi, H., Faz Cano, A., Ayoubi, S. and A. Landi. 2013. Factors affecting the occurrence of palygorskite in central Iranian soils developed on Tertiary sediments. *Pedosphere*, 23 (3): 359-371. (***IF = 2.430***)

12) **Hojati, S.**, Khademi, H., Arocena, J. M., Faz Cano, A. and S. Ayoubi. 2012. Chronostratigraphic distribution and genesis of palygorskite in Tertiary sediments of the Isfahan region, central Iran. *Clay Minerals*, 47(1): 11-29. (***IF = 0.874***)

13) **Hojati, S.**, Khademi, H., Faz Cano, A. and A. Landi. 2012. Characteristics of dust deposited along a transect between central Iran and the Zagros Mountains. *Catena*, 88: 27-36. (***IF = 3.256***)

14) **Hojati, S.**, Khademi, H. and A. Faz Cano. 2010. Palygorskite formation under the influence of a saline and alkaline groundwater in central Iranian soils. *Soil Science*, 175 (6): 303-312. (***IF = 1.387***)

15) **Hojjati, S.** and F. Nourbakhsh. 2007. Effects of cow manure and sewage sludge on the activity and kinetics of L-glutaminase in soil. *Biology and Fertility of Soils*, 43:491–494. (***IF = 3.808***)

b. Other Journals

1) Ghazi, A.R., Karimi, A.R., Haghnia, G.H., and **Hojati, S.** 2018. Grain size characteristics, mineralogy and origin for sandy sediment in southwestern Iran. *Desert* (Accepted).

2) Shahriari Geraei, D., **Hojati**, **S**., Landi, A., Faz Cano. A. 2016. Total and labile forms of organic carbon as affected by land use change in southwestern Iran. *Geoderma Regional*, 7(1): 29-37.

3) Nazari Khorasgani, Z., Khodayar, M.J., Namdar, F., **Hojati**, **S**., Landi, A., Alamolhoda, S., 2016. Removal of Ametryn from aqueous solutions with zeolite nanoparticles optimized using Box-Behnken design. *Jundishapur Journal of Natural Pharmaceutical Products*, 11 (2): e28749.

4) Kalantari, H., Norouzian, B., **Hojati, S.,** Landi, A., Nazari Khorasgani, Z., 2015. Removal paraquat from aqueous solutions with zeolite nanoparticles optimized using the Box-Behnken design. *International Journal of Current Research in Chemistry and Pharmaceutical Sciences*, 2(9): 41-54.

5) **Hojati, S.** and H. Khademi. 2013. Thermal behavior of a natural sepiolite from northeastern Iran. *Journal of Sciences, Islamic Republic of Iran*, 24(2): 129-134.

6) **Hojati, S.** and F. Nourbakhsh. 2009. Distribution of β-glucosidase activity within aggregates of a soil amended with organic fertilizers. *American Journal of Agricultural and Biological Sciences*, 4 (3): 179-186.

7) **Hojati, S.** and F. Nourbakhsh. 2006. Enzyme Activities and Microbial Biomass Carbon in a Soil Amended with Organic and Inorganic Fertilizers. *Journal of Agronomy*, 5 (4): 563-569.

Selected Papers in Domestic Journals (with English Abstract)

1. Heidarpour, N., Bahrami, H., Mansouri, Y. and **S. Hojati**. 2018. Feasibility Study of Determination of Planting Areas for Wheat and Canola using GIS (Case Study: Maroon Basin of Khuzestan Province). *Journal of Agroecology*, 10(2): 473-489.

2. Pourkeihan, S., Landi, A., Chorom, M., **Hojati, S.** and S. Jafari. 2018. Study of Study of the effects of land **use** change and construction of sugarcane fields on physicochemical, mineralogical and **micromorphological** characteristics of soil in southern Khuzestan province. *Journal of Soil Management and Sustainable Production*, 8(2): 43-61.

3. Savari, Z., **Hojati, S.**, and R. Taghizadeh Mehrjerdi. 2016. Assessing the ability of kriging methods for mapping surface soil salinity in Ahvaz County. *Journal of Water and Soil Sciences*, 20 (77): 127-143.

4. Haghighat Khah, N., **Hojati, S.**, Landi, A. and H. Motamedi. 2016. Effects of burning of sugarcane and maize residues on different forms of carbon in some soils of Khuzestan Province. *Journal of Water and Soil Studies*, 25 (4): 129-143.

5. Jenagh, Z., **Hojati, S.** and A. Landi. 2016. Effects of organic acids on release of elements from sepiolite and palygorskite minerals in saline conditions. *Journal of Water and Soil Conservation Studies, 22 (4), 47-65.*

6. Beitlefteh, R., Landi, A., **Hojati, S.,** Sayyad, Gh. 2015. Deposition rate, mineralogy and size distribution pattern of dust particles collected around the Houralazim marshland, Khuzestan Province. *Journal of Water and Soil*, 29 (3): 695-707.

7. Farzadian, M., **Hojati, S.**, Sayyad, G.A. and N. Enayati Zamir. 2015. Decreasing water repellency in a petroleum contaminated soil using zeolite. *Journal of Sciences and Technologies in Agriculture and Natural Resources*, 19 (72): 57-67.

8. Shahrifipour, F., **Hojati, S.**, Landi, A. and A. Faz Cano. 2015. Removal of Lead from Aqueous Solutions Using Iranian Sepiolite: Effects of Contact Time, Temperature, pH, Dose of Sorbents, and Preheating. *Journal of Irrigation and Water Sciences*, 38 (1): 135-147.

9. Mohamadjafari, F., Landi, A. and **S. Hojati**. 2015. Factors Affecting Mg Release from Sepiolite Treated with Two Organic Acids. *Iranian Journal of Crystallography and Mineralogy*, 23 (2): 321-330.

10. **Hojati, S.** and A. Landi. 2015. Kinetics and Thermodynamics of Zinc Removal from a Metal-Plating Wastewater Using Firouzkouh Zeolite. *Journal of Environmental Studies*, 40 (4): 901-912.

11. Mehrab, N., Chorom, M. and **S. Hojati.** 2014. The Effects of NH_4-Zeolite on Growth Characteristics of Wheat and Water Use Efficiency in Two Soil Textures. *Journal of Agricultural Engineering*, 37 (1): 1-13.

12. **Hojati, S.** and H. Khademi. 2014. Physicochemical and Mineralogical Characteristics of Sepiolite Deposits of Northeastern Iran. *Ulum-I-Zamin***,** 90:

165-174.

13. Bartina, H., Sayyad, G., Matinfar, H.R. and **S. Hojati**. 2014. Enhancement of Middle East Dust Plumes Based on Spectral Data of MODIS Sensor. *Quarterly Journal of Natural Geography Research*, 45 (4): 73-84.

14. Hashemian Ghahfarrokhi, S.S., Landi, A., Khademi, H. and **S. Hojati**. 2014. Removal of Cd and Pb from Aqueous Solutions Using Iranian Natural Zeolite and Sepiolite. *Journal of Environmental Studies*, 40 (1): 189-198.

15. **Hojati, S.**, Landi, A. and H. Alekasiri. 2013. Assessment of Sepiolite Ability to Reduce Pb and Zn Leaching from Soil Columns. *Journal of Agricultural Engineering*, 36 (1): 13-22.

16. Khademi, H. and **S. Hojati**. 2010. Distribution and genesis of palygorskite in selected Tertiary deposits of Central Iran. *Iranian Journal of Crystallography and Mineralogy*, 18(1) 113-124.

17. **Hojati, S.,** Nourbakshsh, F. and K. Khavazi. 2006. Microbial Biomass Index, Enzyme Activities and Corn Yield in a Soil Amended with Sewage Sludge. *Journals of Soil and Water Sciences*, 20 (1):83-92.

Selected Conference presentation

1) **Hojati, S.** 2016. Application of natural Iranian sepiolite and zeolite for removal of tin from some industrial wastewaters. 5th EUROSOIL International Congress, Istanbul, Turkey, July 17-22.

2) Haghighatkhah, N., **Hojati, S.,** Landi, A. 2016. Effects of burning of sugarcane and maize residues on different forms of carbon in some soils of Khuzestan Province, southwestern Iran. 5th EUROSOIL International Congress, Istanbul, Turkey, July 17-22.

3) Shahriari, D., **Hojati, S.,** Landi, A., Faz Cano, A. 2016. Total and labile forms of soil organic carbon as affected by land use change in southwestern Iran. 5th EUROSOIL International Congress, Istanbul, Turkey, July 17-22.

4) Farzadian, M., **Hojati, S.,** Sayyad, G. 2016. Decreasing water repellency in a petroleum-contaminated soil using sepiolite. 5th EUROSOIL International Congress, Istanbul, Turkey, July 17-22.

5) Heidari, P., **Hojati, S.,** Enayatzamir, N. and A. Rayatpisheh. 2015. Effects of deforestation on some indicators of soil quality in East of Khuzestan Province, Iran. Eurasian Soil Congress 2015, Sochi, Russia, 19-23 October.

6) Zare, M., Ferdosifar, G., Landi, A. and **S. Hojati.** 2012. Land resource assessment in part of Helle River Basin in Bushehr Province, southwestern Iran. 8th International Soil Science Congress on "Land Degradation and Challenges in Sustainable Soil Management". Cesme-Izmir, Turkey, May 15-17.

7) **Hojati, S.,** Khademi, H. 2012. Cadmium sorption from aqueous solutions onto

an Iranian sepiolite: kinetics and isotherms. 8th International Soil Science Congress on "Land Degradation and Challenges in Sustainable Soil Management". Cesme-Izmir, Turkey, May 15-17.

8) **Hojati, S.,** Khademi, H., Faz Cano, A. 2010. Palygorskite distribution and genesis in central Iranian Soils. Trilateral Meeting on Clays, Seville, Spain, June 6-11.

9) **Hojati, S.,** Khademi, H., Faz Cano, A. 2010. Palygorskite formation under the influence of groundwater in central Iranian soils. International Soil Science Congress on "Management of Natural Resources to Sustain Soil Health and Quality". Samsun, Turkey, May 26-28.

10) **Hojati, S.,** Mehnatkesh, A., Ayoubi, S. 2008. Micromorphological features as potential indicators of soil quality in overgrazed soils. 13th international conference on soil micromorphology, Chengdu, China, September 11-16.

11) **Hojati, S.,** Nourbakhsh, F. 2007. Distribution of β-glucosidase activity within aggregate sizes in an organic fertilizer-amended calcareous soil. 3rd Iinternational Conference of Enzymes in the Environment. Viterbo, Italy.

12) **Hojati, S.,** Nourbakhsh, F. 2005. Functional biodiversity in a calcareous soil amended with sewage sludge, cow manure and chemical fertilizer. Human Impacts on Soil Quality Attributes international conference, Isfahan, Iran.

13) **Hojjati, S.,** Nourbakhsh, F., 2004. Kinetic parameters of L- glutaminase activity in a calcareous soil treated with cow manure, sewage sludge and chemical fertilizer. Abstracts of EUROSOIL international conference, Freiburg, Germany.

14) **Hojjati, S.,** Nourbakhsh, F., Afyuni, M., 2004. Biological Index of Nitrogen Availability (BINA) and L- glutaminase activity in a calcareous soil treated with sewage sludge and cow manure. 4th international Iran and Russia Conference in "Agriculture and Natural Resources". Shahrekord, Iran

15) **Hojati, S.,** Nourbakhsh, F., Afyuni, M., and Rezaei Nejad, Y. 2004. L-glutaminase, arylsulfatase, alkaline phosphatase, β-glucosidase activities and soil microbial biomass in a calcareous soil amended with sewage sludge. Abstracts of Science Conference, Sanaa, Yemen.

Projects

1) **Title:** Application of Sepiolite and Zeolite for Removal of Selected Heavy Metals from Some Industrial Wastewaters.
Years: 2012-2014.
Granted by: Iran National Science Foundation (Project No. 90001065)

2) **Title:** Spatial Variability of Selected Heavy Metals in Surface Soils of Northern Khuzestan Province.
Years: 2015-2018

Granted by: Iran National Science Foundation (Project No. 93021034)