In the Name of God





Name: Hoda Ghasemieh

Major: Watershed Management Sciences and Engineering

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Educational Information

Grade	Graduated At	Major	University			
BSc	2003	Natural Resources Engineering- Rangeland and Watershed Management	University of Tehran			
Title: Inves	tle: Investigation of Applied Geology (Varkash Sangan Basin)					
MS.c	2005	Engineering of Natural Resources- Watershed Management	University of Mazandaran			
Title: Investigation of Muskingum and Modified Att-Kin Method Efficiency in River Flood Routing (Case Study: Babolroud River)						
Ph.D	2010	Watershed Management Engineering and Management	University of Tehran			
Title: Investigation of Muskingum and Modified Att-Kin Method Efficiency in River Flood Routing (Case Study: Babolroud River)						

Research Interests

- Watershed Management and Soil Conservation
- Hydrology, Geohydrology & Hydrogeology
- Integrated Water Resources Management
- Flood Control
- River Engineering & River Training
- Hydroclimate
- Climate Change & Drought

- Ecohydrology
- Simulation and Prediction in Hydrology
- GIS and RS in Natural Resources
- Urban Watershed Management

Awards and Honors

- 1. **Top Educational Assistant Professor** in Faculty of Natural Resources and Earth Sciences in 2012.
- 2. **Top Educational Assistant Professor** in Faculty of Natural Resources and Earth Sciences in 2014.
- 3. **Top Educational Associate Professor** in Faculty of Natural Resources and Earth Sciences in 2017.
- 4. **Top Educational Associate Professor** in Faculty of Natural Resources and Earth Sciences in 2023.
- 5. **Top Thesis Award at Iran's Top Thesis Festival** (Prof. Hessabi Special Award, Second Round) for the thesis of Ph.D. students in Watershed Sciences and Engineering (Mohammad Mirzavand).
- 6. **Top Thesis Award at Iran's Top Thesis Festival** (Prof. Hessabi Special Award, Second Round) for the thesis of Ph.D. students in Watershed Sciences and Engineering (Elhan Davoodi).
- 7. **Top Research Associate Professor** in the Faculty of Natural Resources and Earth Sciences in 2023.
- 8. **Executive of the best project on industry relations** in the Faculty of Natural Resources and Earth Sciences in 2023.

Publications

A. Journal Papers

- 1. Ghorbaniaghdam M, Khozeymehnezhad H, bilondi MP, Hoda Ghasemie, H. (2025). Application of modified two-point hedging policy in groundwater resources planning in the Kashan Plain Aquifer. Journal of Groundwater Science and Engineering, 13(1), 62-73. doi: 10.26599/JGSE.2025.9280039.
- 2. Ahmadi, R., Ghasemieh, H., & Ghazavi, R. (2025). Assessment of Meteorological and Hydrological Drought Situation (Case Study: Sub-Basins in the Central Plateau Basin). *Hydrogeomorphology*, 11(4), 87-114. doi: 10.22034/hyd.2024.62269.1746.
- 3. Davoodi, E., Abdollahi, K., & Ghasemieh, H. (2024). Investigating the Relationship Between Changes in Leaf Area Index and Soil Moisture Using Remote Sensing and Field Studies: A Case Study of the Beheshtabad Watershed. *Iranian Journal of Ecohydrology*, 11(2), 207-222. doi: 10.22059/ije.2024.378735.1831.
- 4. Mirzavand, M., Ghasemieh, H., Sadatineghad, S. J., & Bagheri, R. (2024). Estimation of Water Lost by Evaporation from Shallow Groundwater Resources and Kashan Playa using Isotopic Data (2H and 18O). *Iranian Journal of Ecohydrology*, *11*(1), 1-14. doi: 10.22059/ije.2024.377951.1827.

- 5. Lahoutinasab, S. F., & Ghasemieh, H. (2024). Application of DEMATEL-AHP and SVM in Identifying Flood-Prone Areas (Case Study: Barzak-e-Kashan Basin). *Iranian Journal of Soil and Water Research*, 55(10), 1939-1960. doi:10.22059/ijswr.2024.377663.669724.
- 6. Ghorbaniaghdam, M., Khozeymehnezhad, H., Pourreza Bilondi, M., & Ghasemieh, H. (2024). Management of Planning for the Use of Unconfined Aquifer by Using GMS Model. *Iranian Journal of Irrigation & Drainage*, 17(5), 953-965.
- 7. Sayyad, D., Ghasemieh, H., & Naserianasl, Z. (2024). Prioritization and Spatial Analysis of Flood Potential Based on FUZZY-AHP Approach (Case Study: Ghamsar Watershed). *Journal of Geography and Environmental Hazards*, 12(4), 139-159. doi: 10.22067/geoeh.2022.76678.1226.
- 8. Sayyad, D., Ghasemieh, H. & Naserianasl, Z. (2024). Preparation of waterway erosion sensitivity map using data mining integrated entropy-informational value model (IOE-IV) (Case Study: The Upper Watershed of Tajan River). *Quantitative Geomorphological Research*, *12*(4), 50-70. doi: 10.22034/gmpj.2023.419035.1456.
- 9. Ghorbaniaghdam, M., Khozeymehnezhad, H., Pourreza bilondi, M., & Ghasemieh, H. (2024). Operation Management of Kashan Plain Aquifer Using the Modified Two-Point Hedging Rule. *Hydrogeology*. 8(2), 144-157. doi: 10.22034/hydro.2024.60223.1310.
- 10. Hajizadeh, Z., Omidvar, E., & Ghasemieh, H. (2024). The Effect of Alfalfa Cover on Runoff Generation at the Scale of Erosive Plots Using a Rainfall Simulation. *Water and Soil Management and Modelling*, 4(4), 99-110. doi: 10.22098/mmws.2023.12800.1278.
- 11. Saniesales, F., Ghasemieh, H., Soltani, S., & Jafari, R. (2023). Evaluation of PDIR-Now Satellite-Based Precipitation Data in Chaharmahal and Bakhtiari Province. *Water and Soil Management and Modelling*, doi: 10.22098/mmws.2023.13436.1337.
- 12. Yarahmadi, Y., Ghazavi, R., & Ghasemiyeh, H. (2023). Evaluating the Efficiency of the Surface Drainage Network and Nodes in Order to Contain Urban Runoff Using SWMM Software in the West of Tehran's Sixth District. *Watershed Management Research*, 36(2), 104-120. doi: 10.22092/wmrj.2022.359788.1489.
- 13. Saghazadeh, N., Ghasemieh, H., Omidvar, E., & Maghsoudi, Y. (2023). Evaluating the Efficiency of Bivariate Models in Determining Subsidence Susceptibility of Kashan Plain Aquifer. *Journal of Geography and Environmental Hazards*, 11(4), 69-98. doi: 10.22067/geoeh.2022.75050.1168.
- 14. Khorasanizadeh, H., Ghasemieh, H., Soleimani Motlagh, M., & Mirzavand, M. (2023). Investigating Quantitative Status of Groundwater Resources in Kashan Plain, Perspective and Providing Appropriate Solutions. *Water Resources Engineering*, 15(55), 53-74. doi: 10.30495/wej.2023.27982.2313.
- 15. Mirzavand, M., Ghasemieh, H., Sadatinejad, S.J., Bagheri, R. & Walter, J. (2023). Investigating Salt Effect Correction for δ18O and δ2H in Saline/Brine Groundwater Samples. Desert Ecosystem Engineering, 12(Issue 10 in English), 81-88. doi: 10.22052/deej.2024.254493.1047.
- 16. Fahim, E., Ghazavi, R. G., Ghasemieh, H., & Omidvar, E. (2023). Optimizing Intensity-Duration-Frequency Curves in Consistency with Genetic and Particle Swarm Algorithms: A Case Study of Urmia Lake's Basin. *Desert Ecosystem Engineering*, 11(37), 43-54. doi: 10.22052/deej.2023.248676.1003.

- 17. Asadi Nalivan, O., Mousavi Tayebi, S.A., Mehrabi, M., & Scainoi, M., (2022). A Hybrid Intelligent Model for Spatial Analysis of Groundwater Potential Around Urmia Lake, Iran. *Stochastic Environmental Research and Risk Assessment*, 37(2), 1821-1838. DOI: 10.1007/s00477022-02368-y.
- 18. Alavinia, S. H., Sadatinejad, S. J., Malekiyan, A., & Ghasemieh, H. (2022). Analysis of the Balance of Groundwater Resources in order to Study the Stress on the Aquifer in Arid Areas. *Journal of Arid Regions Geographic Studies*, 10(38), 36-25.
- 19. Yarahmadi, Y., Ghazavi, R., & Ghasemiyeh, H. (2022). Evaluate the Performance of Urban Runoff Collection Network in Semi-Arid Areas Affected by Climate Change. *Iranian Journal of Ecohydrology*, 9(4), 783-795. doi: 10.22059/ije.2022.345568.1661.
- 20. Yarahmadi, Y., Ghazavi, R., & Ghasemiyeh, H. (2022). Evaluating the Efficiency of the SWMM Model in order to Investigate the Flooding Nodes of the Drainage Network under the Influence of Climate Change (Case study: East of Six District of Tehran Municipality). *Journal of Meteorology and Atmospheric Science*, 4(4), 326-338. doi: 10.22034/jmas.2022.360734.1185.
- 21. Sadatinezhad, S., Nazari, L., Ghasemiyeh, H., & Arefkhane Kalate, S. (2022). Comparing Empirical Methods in Evapotranspiration Estimation Based on Lysimeter Data: A Case Study of Kashan Plain. *Desert Ecosystem Engineering*, *9*(27), 93-106. doi: 10.22052/deej.2020.9.27.45.
- 22. Yarahmadi, Y., Qazavi, R., & Ghasemieh, H. (2021). Extraction of Intensity-DurationFrequency (IDF) Curves and Precipitation Change Process under the Impact of Climate Change (Case study: Mehrabad Synoptic Station, Tehran). *Journal of Arid Biome*, 11(1), 143-155. doi: 10.29252/aridbiom.2022.18543.1892.
- 23. Rezaei, M., Ghasemieh, H., & Abdollahi, Kh. (2021). Simplified Version of the of the METRIC Model for Estimation of Actual Evapotranspiration, *International Journal of Remote Sensing*, https://doi.org/10.1080/01431161.2021.1925991.
- 24. Mirhosseiny, S. M. R., Ghasemieh, H., & Abdollahi, K. (2021). Prediction of Monthly Potential Evapotranspiration under RCP Scenarios in Future Periods (Case Study: Golpayegan Basin). *Iranian Journal of Ecohydrology*, 8(1), 205-220. doi: 10.22059/ije.2021.312220.1399.
- 25. Mirzavand, M., Ghasemieh, H., Sadatinejad, & R. Bagherid, R. (2020). Delineating the Source and Mechanism of Groundwater Salinization in Crucial Declining Aquifer using Multi-ChemoIsotopes Approaches. *Journal of Hydrology*, 586, 124877.
- 26. Mirzavand, M., Ghasemieh, H., Sadatinejad, S.J., & Bagheri, R. (2020). An Overview on Source, Mechanism and Investigation Approaches in Groundwater Salinization Studies, *International Journal of Environmental Science and Technology*, 17, 2463–2476. https://doi.org/10.1007/s13762-020-02647-7.
- 27. Ghasemieh, H., Ghasemieh, M. & Bahremand, A. (2020). The introduction of landscape Evolution Models and their Applications with Emphasis on the CAESAR-Lisflood Hydrodynamic Model. Geographical Engineering of Territory, 4(1), 116-100. doi: JGET-2002-1153(R1).
- 28. Imani, R. & Ghasemieh, H. (2020). Determination of Groundwater Potential Using WetSpa Hydrological Model, GIS and RS Techniques and Analytical Hierarchy Process (Case Study: Balukhluchay Watershed, Ardabil). *Water and Soil Science*, 30(1), 123-137. doi: 20.1001.1.20085133.1399.30.1.10.6.
- 29. Rezaei, M., Ghasemieh, H., & Abdollahi, Kh. (2020). Utility of METRIC Model for Estimating Actual Monthly Evapotranspiration of Vanak Basin Using MODIS Sensor Images. *Journal of RS and GIS for Natural Resources*, 11 (3): 40-61.

- 30. Rahmati, O., Ghasemieh, H., Samadi, M., Kalantari, Z., P.Tiefenbacher, J., Asadi, O., Nalivan, Cerdà, A., Ghiasi, S.S., Darabi, H., Torabi Haghighi, A., & Tien Bui, D. (2020). TET: An Automated Tool for Evaluating Suitable Check-Dam Sites Based on Sediment Trapping Efficiency. *Journal of Clean Production*, 266. 122051.
- 31. Mirzavand, M., Ghasemieh, H., Sadatinejad, S. J., & Bagheri, R. (2019). Groundwater Dating Using Radioisotopes of 3H and 14C in Kashan Plain Aquifer. *Iranian journal of Ecohydrology*, *6*(4), 1099-1108. doi: 10.22059/ije.2020.286642.1178.
- 32. Nazeri Tahroudi, Z., Ghasemieh, H., & Abdollahi, Kh. (2019). The Qualitative and Quantitative Trend Analysis of Groundwater in Jiroft Plain Using Modified Mann Kendall Test. *Desert Ecosystem Engineering Journal*, 25 (1): 65-75.
- 33. Soleimani-Motlagh, M., Ghasemieh, H., Talebi, A., Abdollahi, Kh., & Dragoni, W. (2019). Groundwater Budget Deficit Caused by Drought and Overexploitation. Water Supply, 20 (2): 621–632.
- 34. Seif, A., Ghasemieh, H., Zeinivand, H., & Zand, M. (2019). Simulation of Land Use Map in 2026 Using CLUE-s Model in Rahim-Abad Basin. *Watershed Engineering and Management*, 12 (4): 1102-1121. https://doi.org/10.22092/ijwmse.2019.126961.1685.
- 35. Omidvar, E., Hajizadeh, Z., & Ghasemieh, H. (2019). Sediment Yield, Runoff and Hydraulic Characteristics in Straw and Rock Fragment Covers. *Soil and Tillage Research*, 194, 104324. DOI: 10.1016/j.still.2019.104324.
- 36. Rezaei, M., & Ghasemieh, H. (2019). Assessing the Impact of Climate Change on Rainfall and Temperature Variability (Case Study: Kashan and Khur and Biabank Stations). Arid Biom Scientific and Research Journal, 9(1), 81-99.
- 37. Mirzavand, M., Ghasemieh, H., Sadatinejad, S.J., & Bagheri, R. (2019). Groundwater Dating Using Radioisotopes of 3H and 14C in Kashan Plain Aquifer. Journal of Ecohydrology, 6(4), 1099-1108. doi: 10.22059/ije.2020.286642.1178.
- 38. Mirzavand, M., Ghasemieh, H., Sadatinejad, S.J., Bagheri, R., & Clark, I.D. (2018). Mechanism of N- Nitrate Pollution of Kashan Plain Aquifer, *Echohydrology*, 5 (3), 917-929.
- 39. Mirzavand, M., Ghasemieh, H., Sadatinejad, S.J., Bagheri, R., & Clark, I.D. (2018). Saltwater Intrusion Vulnerability Assessment Using AHP-GALDIT Model in Kashan Plain Aquifer as Critical Aquifer in a Semi-Arid Region, *DESERT*, 23 (2), 255-264.
- 40. Davoodi, E., Ghasemieh, H., Abdollahi, Kh., & Batelaan, O. (2018). Evaluation of Temporal-Spatial Variations of Soil Moisture Balance by Thorenthwaite Matter Method (Case Study: Behesht Abad Basin). *Journal of RS and GIS for Natural Resources*, 9(1), 72-92.
- 41. Davoodi, E., Ghasemieh, H., Batelaan, O., & Abdollahi, Kh. (2017). Spatial-Temporal Simulation of LAI on Basis of Rainfall and Growing Degree Days, *Remote Sensing*, 9, (12).
- 42. Ahmadi, M., Ghermez Cheshmeh, B., Ghasemiyeh, H. (2017). Uncertainty Analysis of the Statistically Downscaling Precipitation and Temptation on the Qoran-Talar. Journal Management System, 10 (34), 11-24.
- 43. Soleimani Motlagh, M., Ghasemieh, H., Talebi, A., & Abdollahi, Kh. (2017). Identification and Analysis of Drought Propagation of Groundwater During Past and Future Periods, *Water Resources Management*, 31(1), 109-125.

- 44. Babaei Hessar, S., Hamdami, Q., & Ghasemieh, H. (2017). Identify the Effective Wells in Determination of Groundwater Depth in Urmia Plain Using Principle Component Analysis. *Water and Soil*, 31(1), 40-50. doi: 10.22067/jsw.v31i1.48750.
- 45. Dehghani, N., Ghasemieh, H., Sadatinejad, S.J., Ghorbani, Kh., Besalatpour, A. (2017). Comparative Comparison of Data Mining Models in Downscaling Rainfall and Temperature (Case Study: Bazoft-e-Samsami Watershed), *Journal of Water and Soil Conservation*, 24(5), 227-240.
- 46. Nazari Samani, A., Tavakoli Fard, A., Ghasemieh, H., Mashhadi, N., & Rahdari, M. (2017). Integration of Anemometers Data and Geomorphology of Sand Dunes in Kashan Erg, *Iranian Journal of Rangeland and Desert Research*, 24(10), 67-79.
- 47. Davoodi, E., Ghasemieh, H., Soleimani Motlagh, M., & Moeinzadeh, M. (2017). Spatial and Temporal Analysis of Meteorological and Groundwater Droughts (Case Study: Northern Mahyar Plain of Esfahan), *Desert Ecosystem Engineering Journal*, 6(15), 101-114.
- 48. Ghasemiyeh, H., Bazrafshan, O., & Bakhshayesh Manesh, K. (2017). Artificial Neural Network for Monthly Rainfall Forecasting Using Teleconnection Patterns (Case Study: Central Plateau Basin of Iran), *Journal of the Earth and Space Physics*, 43(2), 405-418. doi: 10.22059/jesphys.2017.58913.
- 49. Dehghani, N., Ghasemieh, H., Sadatinejad, S.J., & Ghorbani, Kh. (2017). Evaluating the Impact of Climate Change on Runoff using Hydrological Model (Case study: Bazoft Samsami Watershed). *Journal of Ecohydrology*, 4 (1), 89-102.
- 50. Alavinia, S.H., Sadatinejad, S.J., Malekian, A., & Ghasemieh, H. (2016). The Impact of Rainfall Fluctuations and Uncontrolled Exploitation on Groundwater Systems and Hydrogeological Drought. *Biological Forum An International Journal*, 8 (2), 274284.
- 51. Sadeghi, S.H., Ghasemieh, H., Moemeni Damaneh, J., & Mosavi, S.H. (2016). Irrigation and Municipal Water Quality Zoning by GIS. *Journal of Irrigation and Water Engineering*, 6(4), 128137.
- 52. Soleimani Motlagh, M., Ghasemieh, H., & Talebi, A. (2016). Change of Storage Coefficient and Transmissivity of Aleshtar Plain Aquifer due to Drought and Groundwater Overexploitation. *Desert Ecosystem Engineering Journal*, 5(11), 93-104.
- 53. Feyzi, Z., Keshtkar, A.R., Malekian, A., & Ghasemieh, H., 2016. Fuzzy AHP Application for Flood Spreading Site Selection (Case Study: South of Kashan Plain). *Iranian Journal of Rangeland and Desert Research*, 20(76), 129-141.
- 54. Imani, R., Ghasemieh, H., & Esmali Ouri, A. (2016). Comparing the Performance of WetSpa Hydrological Model, Artificial Neural Network and Adaptive Neuro-Fuzzy System for Simulating River Flow Discharge (Case Study: Balukhluchay Watershed, Ardabil Province). *Water and Soil Science*, 26(1-1), 99-116.
- 55. Mirzavand, M., Ghasemieh, H., Nazari Samani, A.A., Vali, A., & Sadatinejad, S.J. (2015). Examining Meandering Pattern of River, Using the Indexes of Curvature Coefficient and Central Angle (Case Study: Babolrud and Sajjadrud Rivers). *Journal of Watershed Management Research*, 6(11), 152-161.
- 56. Sadeghi, S.H., Ghasemieh, H., & Sadatinegad, S.J. (2015). Simulation of Streamflow using a Hydrological Model-Distributed WetSpa (Case study: Navrud Basin). *Journal of Water and Soil Science*, 19(73), 23-33.

- 57. Sadeghi, S.H., Ghasemieh, H., Sadatinegad, S.J. (2015). Performance Evaluation of the IHACRES Hydrological Model in Wet Areas (Case Study: Navrud Basin, Gillan). *Journal of Water and Soil Science*, 19(73), 73-82.
- 58. Mirzavand, M., Ghasemieh, H., Sadatinejad, S.J. & Akbari, M. (2015). Comparison of Artificial Neural Network (ANN) and Multi Variable Regression Analysis (MRA) Models to Predict Ground Water Quality Changes (Case Study: Kashan Aquifer). *Journal of Water and Soil Science*, 25(2), 207-220.
- 59. Tavakkoli Fard, A.A., Ghasemieh, H., Nazari Samani, A.A., & Mashhadi, N. (2015). Investigation Morphology and Sand Dunes Activity in Different Parts based on Lancaster Index (Case Study: Kashan Erg). *Desert Ecosystem Engineering Journal*, 3(5), 37-48.
- 60. Tavakkolifard, A., Nazari Samani, A., Mashhadi, N., Ghasemieh, H., & Hodayi Arani, M. 2014. Investigation of Granulometry of Aeolian Sediments in relation of Sand Dune Morphology (Case study: Kashan Erg). *Journal of Range Land and Watershed Management*, 67(2), 189-202.
- 61. Mirzavand, M., Ghazavi, R., Sadatinejad, S.J., Ghasemieh, H., & Vali, A. (2014). Investigation of Kashan Aquifer Situation Using Electric Resistance Method with Shelomberje Arrangement. *Desert Ecosystem Engineering Journal*, 3(4), 43-56.
- 62. Tavakkoli Fard, A., Nazari Samani, A.A., Ghasemieh, H., & Mashhadi, N. (2014). Application of Aeolian Sediments Granulometry Characteristics to Determine the Morphology of Homogenous Sand Dunes through Multivariate Data Analysis (Case Study: Kashan Erg), *Desert Management*, 2, 13-26.
- 63. Shekari, M.R., Sadatinejad, S.J., Vali, A., Ghasemiyeh, H., & Ghazavi, R. (2014). Application of Two Methods of Artificial Neural Network MLP, RBF for Estimation of Wind of Sediments (Case Study: Korsya of Darab Plain), *Quarterly Journal of Environmental Erosion Researches*, 12, 1-16.
- 64. Tavakkolifard, A., Ghasemieh, H., Nazari Samani, AA., &. Mashhadi, N. (2013). Determining the Risk of Sand Transportation to Residential Areas around Kashan Erg using Anemometry Data Analysis. *DESERT*, 18(2), 163-172.
- 65. Yazdani Moghaddam, Y., Sadatinejad, S.J., Nazari Samani, A.A., & Ghasemieh, H. (2012). The Effectiveness of Multi-Criteria Decision Making in Flood Spread. Case Study: Kashan Plain, *Journal of Remote Sensing & GIS*, 4 (3(15)), 65-80.
- 66. Tavakkoli Fard, A., Ghasemieh, H., Nazari Samani, A.A., Mashhadid, N., & Mirzavand, M. (2012). Investigation of Role of Different Land Uses in the Sand Storm by using Wind Rose and Storm Rose (Case Study: Kashan), *Environmental Erosion Research Journal*, 2(2), 25-41.

B. Other Articles

- 1. Imani, R., Ghasemieh, H., & Mirzavand, M. (2014). Determining and Mapping Soil Erodibility Factor (Case Study: Yamchi Watershed in Northwest of Iran), *Open Journal of Soil Sciences*, 4, 168173.
- 2. Mirzavand, M., Sadatinejad, S.J., Ghasemieh, H., Imani, R., & Soleymani Motlagh, M. (2014). Prediction of Ground Water Level in Arid Environment using a Non- Deterministic Model, *Journal of Water Resources and Protection*, 1-9.
- 3. Mirzavand, M., Sadatinejad, S.J., Ghasemieh, H., Akbari, M., & Motamed Shariati, H., (2014).

Groundwater Level Fluctuation Forecasting Using Artificial Neural Network in Arid and Semi-Arid Climate Conditions. *Journal of Applied Hydrology*, 1 (2), 43-52.

- 4. M. Mirzavand, H. Ghasemieh, (2013). Analysis of Hydro Morphometric Characteristics using GIS and Statistical Analysis (Case Study: Maragh Basin, Esfahan Province, Center of Iran). *Advanced in Applied Science Research*, 4 (4), 22-29.
- 5. Mirzavand, M., Ghasemieh, H., & Vali, A. (2013). Using Stochastic Models to Predict Monthly Average Discharge using Time-Series Models (Case Study: Springs Sulaimaniyah Kashan), *Desert Ecosystem Engineering Journal*, 1(1), 51-58.
- 6. Ghasemieh, H., Panahi, F., Mohseni Saravi, M., & Daghestani, M. (2013). The Effect of Clear Cutting on Runoff Height (Case Study: Noshahr, Iran). *International Journal of Innovative Technology and Exploring Engineering (IJITEE)*, 3(6): 108-112.

Some Conference Papers

- 1. Z. Naserianasl, H. Ghasemieh (2024). 2D Hydrodynamic Modeling of Water Surface Elevation (WSE) in RAS Mapper Environment (Case Study: Tira River, Durood City). 23rd Iranian Conference on Hydraulics, Nov 20 & 21, Razi University of Kermanshah, Kermanshah, Iran
- 2. S. Gholizadeh Tehrani, H. Ghasemieh (2024). Hydrological drought and the need for water resources management, The Second Conference on Geography and Environmental Sustainability, Water Resources, Water Issues and its Prospect in Iran.
- 3. Z. Naserianasl, H. Ghasemieh, D. Sayyad (2024). Analysis and monitoring of hydrological drought using Streamflow drought index (SDI) (case study: Tire Dorud hydrometric station). 13th International Conference of Iranian Rainwater Catchment Systems, Nov 20-21, Gorgan University of Agricultural Sciences and Natural Resources, Iran.
- 4. R. Ahmadi, H. Ghasemieh, E. Omidvar (2024). Investigating the temporal changed of meteorologival drought in the Qom-Kahak Plain. 1 st National Conference on Governance of Natural Resources and Future Studuies of Sustainable Development, Lorestan University, Iran.
- 5. E. Davoodi, H. Ghasemieh, Kh. Abdollahi (2024). The practical role of remote sensing data in dynamic assessment of leaf area. index1 st National Conference on Governance of Natural Resources and Future Studuies of Sustainable Development, Lorestan University, Iran.
- 6. M. Moeinzadeh, H. Ghasemieh, E. Omidvar (2024). Evaluating the effect of climate change on monthly and annual rainfall (case study: Natanz station). 1 st National Conference on Governance of Natural Resources and Future Studies of Sustainable Development, Lorestan University, Iran.
- 7. M. Moeinzadeh, H. Ghasemieh, E. Omidvar (2024). Evaluating the Effect of Climate Change on Meteorological Drought Situation in Kashan Synoptic Station. 18h National Conference on Watershed Management Sciences and Engineering of Iran (Watershed Management & Rehabilitation and Restoration of Soil and Water Resources) Mar. 6-7, 2024, University of Kashan, Iran.
- 8. S. Gholizadeh Tehrani, H. Ghasemieh (2024). Analysis of the Hydrological Drought Trend in the Ab Merk River Basin. 18h National Conference on Watershed Management Sciences and Engineering of Iran (Watershed Management & Rehabilitation and Restoration of Soil and Water Resources) Mar. 6-7, 2024, University of Kashan, Iran.

- 9. H. Mohaghegpour, H. Ghasemieh (2023). Multi-Criteria Decision Making Methods in Hydrological Problems. Third National Conference on Natural Resources and Sustainable Development in Zagros papers, Lorestan University, Iran.
- 10. Z. Hajizade, E. Omidvar, H. Ghasemieh (2023). Effectiveness of runoff production from vegetation in laboratory plots. 17th National Conference on Watershed Management Sciences and Engineering of Iran (Watershed Management & Sustainable Food Security)- Feb. 28-29, 2023, University of Jiroft, Iran.
- 11. Z. Naserian, H. Ghasemieh, D. Sayyad (2022). Periodic Analysis of Meteorological Drought using Standardized Precipitation Index (Case study: Zayandeh Rood Dam Climatology Station). The Fifth National Conference of Soil Protection and Watershed Management, SCWMRI, Iran.
- 12. D. Sayyad, H. Ghasemieh, Z. Naserian (2022). The Application of Experimental Methods and Statistical Distributions in the Estimation of Maximum Instantaneous Flows (IPF) in Line with the Sustainable Security of the Basin. 16th National conference on Watershed Management Sciences and Engineering of IRAN, Shiraz University, Shiraz, Iran.
- 13. Z. Naserian, H. Ghasemieh, D. Sayyad (2022). Analysis and Recognition of the River Flow in the Direction of the Health and Sustainability of the Basin (case study: Silakhor River). 16th National conference on Watershed Management Sciences and Engineering of IRAN, Shiraz University, Shiraz, Iran.
- 14. Naserian, H. Ghasemieh, D. Sayyad (2022). Reviewing the Previous Researches of Gray Water and its Recovery Methods for Different Uses. The Second National Conference on Deficit Irrigation and the Use of Non-Conventional Water for Agriculture in Dry Regions, Ferdowsi University of Mashhad, Mashhad, Iran.
- 15. D. Sayyad, H. Ghasemieh, Z. Naserian (2022). Estimation of Basin Erodibility Factor Using Inherent Characteristics of FAO Soil Map. Sixth National Conference of Iranian Sedimentology Association, Shahid Chamran University of Ahvaz, Ahvaz, Iran
- 16. H. Khorasanizadeh, H. Ghasemieh, M. Soleimani, M. Mirzavand (2021). Study of the Effect of Continued Extensive Exploitation of Groundwater Aquifer in Kashan Forbidden Plain on Residual Water Quality. The First Congress of Isfahan Province and National Development, Challenges and Ppportunities Ahead, Isfahan University of Technology (IUT), Isfahan, Iran.
- 17. F. Karimi Zafarabadi, H. Ghasemieh, A. Sattarvand (2019). The Approach of Flood Warning System in Flood Prone Areas. 3rd Iranian National Conference on Hydrology, 17-19 September, University of Tabriz, Tabriz, Iran.
- A. Sattarvand, H. Ghasemieh, F. Karimi Zafarabadi (2019). Investigation of River Bank Erosion and its Management Using River Training Methods. 3rd Iranian National Conference on Hydrology, 17-19 September, University of Tabriz, Tabriz, Iran.
- 15. M. Soleimani Motlagh, Kh, Abdollahi, H. Ghasemieh (2019). Introduction of WetSpass-M Model. A Useful Tool for Estimating Groundwater Distributive Recharge, 3rd National Conference on Drought Effects and Management Solutions, 27 February, Agricultural and Natural Resources Research and Education Center of Lorestan, Khorramabad, Iran.
- 16. E. Abedini, H. Ghasemieh, S. Dokhani (2018). The Effects of Haloxylon Ammodendron on Soil Minerals (Case Study: Gachiabad-e-Varamin Areas). 13th National Conference on Watershed Management Science & Engineering of Iran & 3rd National Conference on Conservation of Natural Resources and Environment, 2-3 October, University of Mohaghegh Ardabili, Ardabil, Iran.

- 17. M. Darehroudi, H. Ghasemieh, S. Dokhani, R. Mirzaei (2018). Investigation of Runoff Production Potential Status using US Soil Conservation (SCS) Method in Watershed of Hosseinabad-e-Block-e-Anbarabad. 7th Iranian National Water Resources Management Conference, 25-26 April, Yazd University, Yazd, Iran.
- 18. H. Ghasemieh, Sh. Hosseinpour (2018). The Role of Passive Defense in Drought Crisis Management. 1th International Congress on Water, Soil and Environmental Sciences, 2-3 March, Shahid Beheshti University, Tehran, Iran.
- 19. Z. Hajizadeh, H. Ghasemieh (2018). A Review on the Introduction of Infiltration Models and Their Application in Various Studies. 1th International Congress on Water, Soil and Environmental Sciences, 2-3 March, Shahid Beheshti University, Tehran, Iran.
- 20. B. Faridgiglu, H. Ghasemieh (2017). Evaluation of Water Chemical Quality at Aq Qala Station Located in Gorganrood River of Golestan Province. 2nd National Conference on Water Resources Management in Coastal Plains, 12 October, Sari Agricultural Sciences and Natural Resources University, Sari, Iran.
- 21. Z. Hajizadeh, E. Omidvar, H. Ghasemieh (2017). Evaluation of the Effect of Rock Fragment Cover on Runoff in Experimental Areas under Simulation of Rain. 12th National Seminar on Watershed Management Sciences and Engineering of Iran, Watershed Management and Environmental Crisis, 10 October, Malayer University and Watershed Management Society of Iran, Malayer, Iran.
- 22. H. Ghasemieh, H. Jeyhooni (2017). Climate Change and its Effects on Water Resources. 2nd National Conference on Hydrology in Iran, 11-12 July, Shahrekord University and Iranian Association of Hydrology, Shahrekord, Iran.
- 23. M. Aghaei, H. Ghasemieh (2016). An overview of the Water Crisis Event and its Prospects in the Middle East Regional Conflict and its Solution. First National Conference on Passive Defense in Caspian Sea Basin, 14 December, University of Gilan, Rasht, Iran.
- 24. H. Ghasemieh, O. Asadi-e- Nilvan, T. Mohammadi, M. Selahshour, N. Saghazadeh, (2016). Dimensions and Challenges of Integrated Water Resources Management. 11th National Conference on Watershed Management Sciences and Engineering of Iran, 19-21 April, Ysouj University and Watershed Management Society of Iran, Yasouj, Iran.
- 25. H. Ghasemieh, N. Saghazadeh, (2015). Natural Disaster Management in the Cities with Emphasis on the Water Crisis. International Conference on Sustainable Development with a Focus on Agriculture, Environment and Tourism, 16-17 September, Tabriz, Iran.
- 26. M. Moradi Goozalaki, H. Ghasemieh, M. Pajuhesh (2015). Evaluation of Shahrekord Plain Properties for Flood Spreading and Artificial Recharge. International Conference on Sustainable Development with a Focus on Agriculture, Environment and Tourism, 16-17 September, Tabriz, Iran.
- 27. M. Darehroudi, H. Ghasemieh, R. Mirzaei, S. Dokhani (2015). Investigation of Soil Hydrological Groups and Curve Number to Estimate Runoff in Watershed of Hosseinabad-e-Blocke-Anbarabad. The 1st Annual Iranian Agriculture Research Conference, 22 July, Kharazmi High Institute of Science & Technology, Shiraz, Iran.
- 28. M. Darehroudi, H. Ghasemieh(2015). Methods of Rainwater Harvesting for Use in Green Space. 5-6 May, University of Kashan and Parks & Green Space Organization in Municipality of Kashan, Kashan, Iran.

- 29. M. Mirzavand, H. Ghasemieh, S.J. Sadatinejad, M. Akbari, A. Vali (2015). Assessment of Groundwater Quality Capability for Drinking and Agricultural Uses (Case Study: Kashan Aquifer). 1th National Conference on Low Water Green Space, 5-6 May, University of Kashan and Parks & Green Space Organization in Municipality of Kashan, Kashan, Iran.
- 30. H. Afshari, H. Ghasemieh (2015). Use of Unconventional Water in Green Space Irrigation. 1th National Conference on Low Water Green Space, 5-6 May, University of Kashan and Parks & Green Space Organization in Municipality of Kashan, Kashan, Iran.
- 31. M. Mirzavand, H. Ghasemieh, S.J. Sadatinejad (2015). Cluster Analysis and Cluster Validity Assessment to Regional Groundwater Quality Monitoring System. 1th National Conference on Low Water Green Space, 5-6 May, University of Kashan and Parks & Green Space Organization in Municipality of Kashan, Kashan, Iran.
- 32. H. Ghasemieh, L. Nazari, S.J. Sadatinejad, S. Arefhkhaneh (2015). Evapotranspiration Estimation of Grass Reference Plant and its Water Requirement Using Cropwat Model in Kashan Plain. The Second National Conference of Engineering & Agriculture Management, Environment and Stable Natural Resources, 11 March, Iran International Conference Center of Shahid Beheshti University, Tehran, Iran.
- 33. L. Nazari, M. Teimouri, S. Arefkhaneh, H. Ghasemieh (2014). Accuracy Evaluation of Experimental Methods for Estimating Potential Evapotranspiration in Arid and Desert Regions. 2nd National Conference on Desert Management and Approach on arid areas and Desert, 11-12 November, Semnan University, Semnan, Iran.
- 34. N. Saghazadeh, A. Fathzadeh, R. Taghizadeh, H. Ghasemieh, A.A Zolfaghari (2014). Precipitation Determination in Non-Statistics Years Using a Neural Network Model. 2nd National Conference on Desert Management and Approach on Arid Areas and Desert, 11-12 November, Semnan University, Semnan, Iran.
- 35. M. Ahmadi, H. Ghasemieh, B. Ghermezcheshmeh (2014). Investigation of Climate Change Effect on Annual Discharge of Quran-Talar Basin. Second National Conference on Water Crisis (Climate Change, Water, Environment), 9-10 September, Shahrekord University, Shahrekord, Iran.
- 36. M. Ahmadi, H. Ghasemieh, B. Ghermezchemeh (2014). Investigation of Statistical Downscaling, Seasonally and Annually in SDSM (Case Study: Babolsar Synoptic Station). Second National Conference on Water Crisis (Climate Change, Water, Environment), 9-10 September, Shahrekord University, Shahrekord, Iran.
- 37. M. Ahmadi, H. Ghasemieh, B. Ghermezcheshmeh (2014). Evaluation of Statistical Downscaling Methods for Atmosphere- Ocean Circulation Models (AOGCM) for Input of Rainfall-Runoff Models. Second National Conference on Water Crisis (Climate Change, Water, Environment), 9-10 September, Shahrekord University, Shahrekord, Iran.
- 38. M. Mirzavand, H. Ghasemieh (2014). Ecohydrology, An Interdisciplinary Approach to Solve Water, Environment and People Issues, National Conference on Water, Human, Earth, 28 August, Isfahan, Iran.
- 39. M. Taheri, H. Ghasemieh, M.T. Dastoorani (2014). Flood Analysis of Upstream Urban Basins (Case Study: Torqabeh and Hesar- Dehbar Basins). National Conference on Water, Human, Earth, 28 August, Isfahan. Iran.

- 40. N. Ahmadaghaei, H. Ghasemieh, H. Ghorbani (2014). Homogeneous Solutions of Hydrometric Stations for Regional Flood Frequency Analysis. National Conference on Water, Human, Earth, 28 August, Isfahan. Iran.
- 41. H. Ghasemieh, S. Arefkhaneh, L. Nazari (2014). Investigation of Ecotourism Potentials using GIS and Land Use Planning (Case Study: Gholam Sombar Basin). Iranian Conference of Geographical Sciences, 20 May, University of Tehran, Tehran. Iran.
- 42. N. Marzbani, M. Ghorbani, H. Ghasemieh, J. Attarha (2014). Groundwater Level Changes in the Northern Plains of the Hamadan Province (2001-2010). The 4th International Conference on Environmental Challenges and Dendrochronology, 11-15 May, Sari Agricultural and Natural Resources University, Sari, Iran.
- 43. R. Imani, A.A. Imani, H. Ghasemieh, A. Alebouali (2014). Evaluation of Water Quality and Hydrochemical Type in Balikhluchay River for Drinking and Agriculture using Graphical Methods. The 1 st National Conference on Environmental Pollutions, 27 April, Ardebil, Iran.
- 44. L. Nazari, S. Arefkhaneh, H. Ghasemieh, S.J. Sadatinejad, M. Abdollahi (2014). 1st National Conference on Agriculture & Environment Sciences, 6 March, Ardabil, Iran.
- 45. M. Pajuhanmanesh, H. Ghasemieh (2014). Investigation of Drought Process using Groundwater Resource Index (GRI) in Kashan Plain. First National Conference on Geography and Environmental Sustainability, 5 March, Razi University, Kermanshah, Iran.
- 46. Kh. Kianimehr, A. Vali, H. Ghasemieh (2014). Efficiency Evaluation of Neuro Fuzzy (CANFIS) and Stepwise Regression Methods in Modeling Rainfall-Runoff of Navroud Basin.5th Iranian National Conference on Water Resources Management, 1819 February, Shahid Beheshti University, Tehran, Iran.
- 47. M. Soleimani, H. Ghasemieh, S.J. Sadatinejad, M. Mirzavand (2014). Investigation of Hydrogeological Drought Effect on Groundwater Fluctuations using PSI Index. 5th Iranian National Conference on Water Resources Management, 18-19 February, Shahid Beheshti University, Tehran, Iran.
- 48. R. Imani, A. Alebouali, H. Ghasemieh (2014). Estimation of Runoff Height and Peak Discharge by Rational Method and Curve Number (Case Study: Ghale-bani Basin, Kohgiluyeh and BoyerAhmad Province). 5th Iranian National Conference on Water Resources Management, 18-19 February, Shahid Beheshti University, Tehran, Iran.
- 49. Fazeli Farsani, H. Ghasemieh (2013). Investigation of the Accuracy of Rainfall-Runoff Modeling in Estimating Extreme Events (Case Study: Beheshtabad SubBasin). National Conference on Flood Management, 13-14 May, Research Institute of Natural Disasters, Tehran, Iran.
- 50. H. Ghasemieh, M. Ahamai, F. Ebrahimi Azarkharan (2013). Use of Purified Water Resources for Different Water Uses for Sustainable Development (Case Study: Factory of Textile and Knitting Industries in West of Tehran). The 1st National Conference on Solutions to Access Sustainable Development in Agriculture, Natural Resources and the Environment, 10 March, Passive Defense General Administration (Ministry of Interior), Research Institute of Natural Disasters, Amu Institute, Tehran, Iran.
- A. Birjandi, H. Ghasemieh (2012). Ecotourism Potential in Iranian Desert Areas, Case Study: Iran Africa (Turan Protected Area). 03rd National Conference on Combating Desertification and Sustainable Development of Iran Desert Wetlands, 1516 September, Islamic Azad University (Arak Branch), Arak, Iran.

- B. Tavakkoli Fard, H. Ghasemieh, A. Nazari Samani, N. Mashhadi (2012). Prioritizing the Fight against Wind Erosion in Different Forms of Sand Dunes (Case Study: Kashan Erg). 03rd National Conference on Combating Desertification and Sustainable Development of Iran Desert Wetlands, 15-16 September, Islamic Azad University (Arak Branch), Arak, Iran.
- C. Tavakkoli Fard, H. Ghasemieh, A. Nazari Samani (2012). Investigating the Effect of Haloxylon Lands on Reduction of Dust Storms using Wind Rose and Storm Rose (Case Study: Kashan). 03rd National Conference on Combating Desertification and Sustainable Development of Iran Desert Wetlands, 15-16 September, Islamic Azad University (Arak Branch), Arak, Iran.
- 51. Birjandi, H. Ghasemieh, A. Tavakkolifard (2012). Survey of Stratigraphic Columns of Arid Regions, Case Study: Birjand Region. 03rd National Conference on Combating Desertification and Sustainable Development of Iran Desert Wetlands, 1516 September, Islamic Azad University (Arak Branch), Arak, Iran.
- 52. M. Mirzavand, S. Farazmand, H. Ghasemieh, Y. Yazadani Moghaddam (2012). Study of Vegetation in order to Improve Performance on Pastures (Case Study: Khaiez Catchment). 01st National Desert Conference, 16-17 June, International Desert Research Center, University of Tehran, Tehran, Iran.
- 53. M. Mirzavand, A. Mohammadian Bebahani, H. Ghasemieh, A. Nazari Samani, Y. Yazdani Moghadam (2012). Investigating the Usability of Geological Formation Properties Prioritizing Watershed Management Plans (Case Study: Chamran Basin). 01st National Desert Conference, 1617 June, International Desert Research Center, University of Tehran, Tehran, Iran.
- 54. M. Mirzavand, H. Ghasemieh (2012). Investigation of Types of Erosion, Geomorphological Facies and Hydrodynamic Properties of Geological Formations (Case study: Chehelkonar-e- Behbahan Sub-Basin). 01st National Desert Conference, 16-17 June, International Desert Research Center, University of Tehran, Tehran, Iran.
- 55. K. Bekhradipour, H. Ghasemieh (2012). Use of Unconventional Waters in Water Crisis Management (Case Study: Kashan Plain). Conference of Water Crisis in Kashan Plain, 19 January, University of Kashan, Kashan, Iran.
- 56. L. Nazri, S.K. Bakhshayeshmanesh, H. Ghasemieh (2012). Efficiency Evaluation of Flood Spreading System. Conference of Water Crisis in Kashan Plain, 19 January, University of Kashan, Kashan, Iran.
- 57. Kh. Kianimehr, H. Ghasemieh, (2012). Application of Satellite Imagery and RS Technology in Predicting the Flood Trend. Conference of Water Crisis in Kashan Plain, 19 January, University of Kashan, Kashan, Iran.
- 58. M. Mirzavand, H. Ghasemieh (2011). Investigation of Susceptibility to Erosion and Joint System in Geological Formation in order to Use in Watershed Plans (Case Study: Chelkonar Behbahan Sub-Catchment). 15th Symposium of Geological Society of Iran, 14-15 December, Tarbiat Moalem University, Tehran, Iran.
- A. Birjandi, H. Ghasemieh, S.J. Sadatinejad, S.A. Hashemi (2011). Investigation of Dust Particle Effects of Cement Factory in Arid Regions (Case Study: Biarjmand Cement Factory). 2nd National Conference on Combating Desertification and Sustainable Development of Iran Desert Wetlands (Relying on Meighan Desert Wetland), 14-15 September, Islamic Azad University (Arak Branch), Arak, Iran.

59. Fazeli Farsani, H. Ghasemieh, H. Esmaeili, A. Fazeli Farsani (2014). Investigation of Drought Temporal Changes Using Standardized Precipitation Index (Case Study: Behesht-abad Basin). First National Conference on Agriculture and Sustainable Natural Resources, 9 February, Tehran, Iran.

Performed Projects:

Research Project Manager			
True en : 4	Place of Work	Date	
Title of Project		From	То
Identifying of the Effective Wells for Groundwater Depth Determination in Urmia Plain (From 2015 January 5 to 2015 September)	University of Kashan	24/01/2015	07/12/2015
Research Project Partner			1
Title of Ducinet	Place of Work	Date	
Title of Project		From	То
Morphology and Granulometry Investigation of Active Sand Dunes of Kashan Erg in relation to Wind Regime	International Desert Research Center	10/12/2011	09/05/2013
The Investigation of Drought Effects on the Fluctuations of Supercritical Plains, Resources in Isfahan Province for Optimal Management of Water Resources Exploitation	University of Kashan	17/03/2013	18/09/2014
Environmental Impact Assessment of the National Observatory of Iran	University of Kashan	04/01/2017	05/03/2017
Studying the Latest Situation and Quantitative and Qualitative Changes in Kashan Plain Aquifer and Determining the Perspective of Drinking and Sanitary Water and Providing Appropriate Solutions	University of Kashan	15/10/2018	29/07/2020
Location studies of the best point to drill two water wells in the closest place to Kashan Special Economic Zone	University of Kashan	21/04/2021	17/10/2022

These under Supervision

A.1. Master of Science (MSc)

1. **Mehdi Mahroo (2024).** Investigation of Flooding Potential of Sub-basins and Determination of Flood-prone Areas (Case Study: Part of Kashan Basin).

- 2. **Faezeh Lahootinasab (2023).** Application of Maximum Entropy, Support Vector Machine and DEMATEL-AHP Models in Identifying Flood-Prone Areas (Case Study: Barzak Basin).
- 3. **Maryam Ahamadi Sarmouri (2023).** Comparison of Awareness and Participation of Local Stakeholders from Natural Resources Projects in Two Arias of Kashan and Shahrekord.
- 4. **Zarin Aminfar (2022).** Flood Prioritization in Basins using Morphometric Characteristics (Case Study: Boyerahmad).
- 5. **Zohre Akbari Assar (2021).** Feasibility of Urban Runoff Harvesting for landscape Development and Reducing Groundwater Consumption (Case study: Pardisan TOWN OF QOM)
- 6. **Mohsen Moeinzadeh (2019).** Evaluation of Climate Change Effects on Meteorological Drought under RCP Scenarios (Case Study: Selected Stations in Isfahan Province).
- 7. **Roya Ahmadi (2019).** Evaluating Temporal and Spatial Variations of Drought for Identification of Groundwater Potential Zone (Case Study: Qom-Kahak Plain).
- 8. **Mohammad Amin Khosravi (2019).** Evaluation the Impact of Land Use Changes on Water Balance Components in Farsan Basin.
- 9. **Farzaneh Nozarian (2018).** Spatial Variation of Intrinsic and Fractal Properties of Soil in Kashan Plain.
- 10. **Shadab Hoseinpour (2017).** Evaluation Loss of Runoff, Sediment and Soil Nutrients under Different Conditions of Rainfall Simulation.
- 11. **Zeinab Hajizadeh (2017).** Investigation the Effects of Differents Soil Cover on Runoff Hydraulic Characteristics and Sediment Generation under Simulated Rainfall Conditions
- 12. **Hadise Khorshidi (2016).** Siahrood River Water Quality Parameters Prediction using Artificial Network.
- 13. **Hossein Afshari (2016).** Investigation of Topographic Threshold for Gully Erosion in Cold Semi-Arid Climate of Zanjan Province
- 14. **Zahra Pourzarin (2016).** River Flow Simulation using Intelligent Models and Time Series (Case Study: Kashkan Basin).
- 15. **Zahra Heshmatian (2016).** Evaluating the Impact of Different Complexity Levels in the Performance of Hydrological Models (Case Study: Hanifaghan Basin).
- 16. **Behnam Aram (2015).** Investigating the Effects of Climates Phenomenon on Quantitative Fluctuations (Case Study: Ardestan Plain).
- 17. **Moslem Moradi Goozalaki (2015).** Positioning of Suitable Areas for Flood Spreading using AHP, FAHP and GCA Methods in Shahrekord Plain.
- 18. **Mahmoud Darehroudi (2015).** Suitable Site Selection for Rainwater Harvesting using GIS and Decision Support Systems (Case Study: Hosseinabad-e-Block-e- Anbarabad Basin).
- 19. **Rasool Imani (2014).** Hydrological Simulation Using WetSpa and Intelligent Neural Models (Case Study: Balikhluchay Watershed, Ardabil Province).
- 20. **Seyed Hadi Sadeghi** (2014). Hydrological Modeling Rainfall-Runoff Using IHACRES, Wetspa and HEC-HMS and Comparing their Results with Each Other (Case Study: Navrud Basin).
- 21. **Mehdi Ahmadi** (2014). Analyzing Impact of Climate Change on Annual Discharge in Qorantalar Watershed.
- 22. **Nima Ahmadaghaei** (2014). Regional Flood Frequency Analysis using Linear Movements and Wavelet Transform (Case Study: Tehran Province).

- 23. **Mostafa Taheri Heravi** (2014). Investigating the Effects of Landuse Changes and Urban Development on Hydrological Response of Watersheds (Case study: Torghabeh and Dehbar Watersheds).
- 24. **Mohammad Pazhouhanmanesh** (2014). Investigation of Drought Effects on Groundwater Fluctuations Using Modflow Model (Case Study: Kashan Plain).
- 25. Alireza Karimi Zafarabadi (2014). Evaluation of Flood Routing Methods in Kashkan River.
- 26. **Kobra Bakhshayeshmanesh**, (2013). Evaluating the Relationship between Effective Teleconnection Patterns with Precipitation and SPI (Case Study: Central Plateau Basin of Iran).
- 27. **Leila Nazari** (2013). Estimating Evapotranzpiration using Lysimeter and its Comparison with Simulated Data in Artificial Neural Network (Case Study: Kashan).
- 28. **Asghar Tavakkolifard** (2012). Investigation of Sand Dunes Morphology and Its Relation to Wind Regime (Case Study: Kashan Erg).
- 29. **Mohammad Mirzavand** (2012). Qualitative and Quantitative Simulation of Groundwater in Kashan Plain Using Artificial Neural Network.
- 30. **Mahin Nazari (2012).** Rainfall- Runoff Modeling Using Artificial Neural Network (Case Study: Babolrud). 28. **Aboolfazl Birjandi,** (2012). Positioning of Underground Dams in Biarjomand Basin.

A.2. Philosophical Doctrine (PhD)

- 1. **Roya Ahmadi (2024).** Assessment of Meteorological and Hydrological Drought Indices Affecated by Climate Change Using SSP Scenarios and Copula Functions in Arid and Semi-arid Regions
- 2. **Farnosh Saniesles (2024).** Efficiency Investigation of PDIR Precipitation Satellite Products on the Performance of Hydrological Models and Climate Change Effects.
- 3. **Emad Fahim (2022).** Optimization of Intensity-Duration-Frequency Curves with Genetics and Particle Swarm Algorithms in Urmia Lake Basin. (The second Supervisor)
- 4. **Narges Saghazadeh (2022).** Determine the Factors Affecting Subsidence with an Emphasis on Groundwater (Case Study: Kashan Plain).
- 5. Seyyed Mohammadreza Mirhosseini Tabaei Zavareh (2020). Evaluating the Effect of Climate Change and Land Use on Groundwater Recharge (Case Study: Golpayegan Basin). 5. Ali Seif, (2020). Evaluating the Impacts of Climate and Land Use Changes on River Flow in Seilakhor Basin, Lorestan Province.
- 6. **Maryam Rezaei (2020).** Estimation of Actual Evapotranspiration using METRIC and Simplified METRIC models based on the Soil Moisture Criterion.
- 7. **Ali Seif (2020).** Evaluating the Impacts of Climate and Land Use Changes on River Flow in Seilakhor Basin, Lorestan Province
- 8. **Zahra Nazeri Tahroudi (2019).** Design of Groundwater Monitoring Network and Determine of Recharge Potential Area using Entropy Theory in Jiroft Plain.
- 9. **Navid Dehghani (2019).** Frequency Analysis of Hydrological Drought of BazoftSamsami Basin under Climate Change Scenarios.
- 10. **Elham Davoodi (2018).** Evaluation of relationship between Leaf Area Index and spatial and temporal variability of soil moisture (Case study: Behesht-Abad watershed).

- 11. **Mohammad Mirzavand (2018).** Determine the Origin and Mechanism of Groundwater Salination in Kashan Plain using Isotopic and Hydro-geochemical Methods (Dr Hoda Ghasemieh, Dr Seyed Javad Sadatinejad).
- 12. **Mahdi Soleimani Motlagh (2017).** Evaluation of Groundwater Budget with Emphasis on the Seperation of Deficit Caused by Drought and Overexploitation of Aqifer (Case Study: Alashtar Plain).

B. ADVISOR:

- 1. **Zahra Feizi** (2015). FAHP Application for Flood Spreding (Case Study: Souther Part of Kashan Plain).
- 2. Narges Saghazadeh (2014). Rain Gauge Design in Central Part of Iran using Geostatistical and Artificial Intelligence.
- 3. Khadije Kiani Mehr (2013). Nero-fuzzy Modeling of Rainfall & Runoff time series in Navrud.
- 4. **Parvin Bakhshian (2013).** Fractal Analysis on Watershed Hydro Geomorphology Modeling.
- 5. **Yaghub Yazdani (2012).** Suitable Areas Selection of Flood Spreading with AHP Approach and GIS in Kashan Plain.
- 6. **Mohammad Reza Shekari (2011).** Application of Artificial Network for Aeolian Suspended Modeling (Case Study: Darab Plain).

Invited Reviewer for Journals

- o Environmental Sciences
- o Journal of Watershed Management Research
- o JOURNAL OF RANGELAND AND WATERSHED MANAGEMENT
- o Quarterly Journal of Environmental Erosion Research
- o Journal of Irrigation and Water Engineering
- Desert Ecosystem Engineering Journal
- Scientific Journals Management System
- Iranian Journal of ECOHYDROLOGY
- ECOPERSIA
- o Energy Engineering & Management
- Journal of Hydrology
- o Environmental Science and Pollution Research

Courses Taught in Different Academic Levels

A. Bachelor's (B.E) Course

- o General Hydrology, University of Kashan
- o Applied Hydrology, University of Kashan
- o General Hydraulic, University of Kashan
- o Water and Soil and Plant Relationship, University of Kashan
- o Cartography, University of Kashan
- o Cost Estimation of Watershed Management Project, University of Kashan

Statistics, University of Kashan

B. Master (M.S.) Course

- o Water Resource Management, University of Kashan
- o Flood Control, University of Kashan
- o River Engineering, University of Kashan
- o Short Dams, University of Kashan
- o Snow and Avalanche, University of Kashan
- Watershed Management, University of Kashan
- o Economic and Social Issues of Watersheds, University of Kashan
- o Geographic Information Systems (GIS), University of Kashan
- Water Resources Management in Desert Areas, University of Kashan
- o Economic and Social Development of Desert Areas, University of Kashan
- o Research Method, University of Kashan

C. Doctoral (Ph.D.) Course

- O Simulation in Watershed Management, University of Kashan
- o Advanced hydrogeology, University of Kashan
- o Advanced Hydrology, University of Kashan

Computer Skills

- o General software: M.S.-Office package (Word, Excel, Powerpoint, ...)
- o Geographic Information Systems: ARC GIS
- o Surveying & mapping: GS+, Surfer
- o **Hydrology:** HEC-HMS, WetSpa, SMADA, HYFA, DIP (Drought Indices Package), DIC,

DrinC

- o **Statistics:** SPSS, MINITAB, Easy Fit, XLSTAT
- o Climate Change: LARS-WG, SDSM

Language Skills

- o **o Persian:** Native
- o **english:** Good (English license, ILI, Karaj, Iran)