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Major: Sciences and Engineering of Watershed Management

Department: Rangeland and Watershed Management

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Educational Information

Grade	Graduated At	Major	University
BSc	2003	Engineering of Natural Resources-Rangeland and Watershed Management	University of Tehran
Title: Investigation of Applied Geology (Varkash Sangan Basin)			
MSc	2005	Engineering of Natural Resources- Watershed Management	University of Kashan
Title: Investigation of Muskingum and Modified Att-Kin Method Efficiency in River Flood Routing (Case Study: Babolroud River)			
Ph.D	2010	Sciences and Engineering of Watershed 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, Hydrogeology, Geohydrology
- Integrated Water Resources Management
- Flood Control, River Engineering, River Training
- Hydroclimate
- Climate Change
- 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 Thesis Award at Iran,s Top Thesis Festival** (Prof. Hessabi Special Award, Second Round) for thesis of Ph.D Students in Watershed Sciences and Engineering (Mohammad Mirzavand, Elhan Davoodi).

PUBLICATIONS

Some Journal Papers

1. M. Rezaei, H. Ghasemieh, Khodayar Abdollahi, 2021. Simplified Version of the METRIC Model for Estimation of Actual Evapotranspiration, International Journal of Remote Sensing, <https://doi.org/10.1080/01431161.2021.1925991>.

2. S.M.R. Mirhosseiny, H. Ghasemieh, Khodayar Abdollahi, 2021. Prediction of Monthly Potential Evapotranspiration under RCP Scenarios in Future Periods (Case Study: Golpayegan Basin), ECOHYDROLOGY, 8 (1): 205-220 (In Persian).
3. M. Mirzavand, H. Ghasemieh, S.J. Sadatinejad. R. Bagheri, 2020. Groundwater Dating Using Radioisotopes of ^{3}H and ^{14}C in Kashan Plain Aquifer, ECOHYDROLOGY, 6 (4): 1099-1108.
4. M. Mirzavand, H. Ghasemieh, S.J. Sadatinejad, R. Bagherid, 2020. Delineating the source and mechanism of groundwater salinization in crucial declining aquifer using multi-chemo-isotopes approaches, Journal of Hydrology, 586, 124877.
5. S.J. Sadatinezhad, L. Nazari, H. Ghasemiyyeh, S. Arefkhane kalate, 2020. Comparing Empirical Methods in Evapotranspiration Estimation based on Lysimeter Data: A Case Study of Kashan plain, Desrt Ecosystem Engineering Journal, 9 (27): 93-106 (In Persian).
6. M. Rezaei, H. Ghasemieh, Kh. Abdollahi, 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.
7. O. Rahmati, H. Ghasemieh, M. Samadi, Z. Kalantari, J. P.Tiefenbacher, O. Asadi Nalivan, A. Cerdà, S.S. Ghiasi, H. Darabi, A. Torabi Haghighi, D. Tien Bui, 2020. TET: An automated tool for evaluating suitable check-dam sites based on sediment trapping efficiency, Journal of Clean Production, <https://doi.org/10.1016/j.jclepro.2020.122051>.
8. Z. Nazeri Tahroudi, H. Ghasemieh, Kh. Abdollahi, 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.

9. M. Soleimani-Motlagh, H. Ghasemieh, A. Talebi, Kh. Abdollahi, W. Dragoni, 2019. Groundwater budget deficit caused by drought and overexploitation, *Water Supply*, 20 (2): 621–632.
10. A. Seif, H. Ghasemieh, H. Zeinivand, M. Zand, 2019. Simulation of land use map in 2026 using CLUE-s model in Rahim-Abad Basin, *Watershed Engineering and Management*, 12 (4): 1102-1121.
11. M. Mirzavand, H. Ghasemieh, S.J., Sadatinejad, R. Bagheri, 2020. An overview on source, mechanism and investigation approaches in groundwater salinization studies, *Int. J. Environ. Sci. Technol.* 17, 2463–2476 (2020). <https://doi.org/10.1007/s13762-020-02647-7>.
12. E. Omidvar, Z. Hajizadeh, H. Ghasemieh, 2019. Sediment Yield, Runoff and Hydraulic Characteristics in Straw and Rock Fragment Covers, *Soil and Tillage Research*, DOI: 10.1016/j.still.2019.104324.
13. M. Rezaei, H. Ghasemieh, 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 (In Persian).
14. M. Mirzavand, H. Ghasemieh, S.J. Sadatinejad, R. Bagheri, I.D Clark, 2018. Mechanism of N- Nitrate Pollution of Kashan Plain Aquifer, *ECHOHYDROLOGY*, 5 (3): 917-929 (In Persian).
15. M. Mirzavand, H. Ghasemieh, S.J. Sadatinejad, R. Bagheri, I.D. Clark, 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.
16. E. Davoodi, H. Ghasemieh, Kh. Abdollahi, O. Batelaan, 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 (In Persian).

17. E. Davoodi, H. Ghasemieh, O. Batelaan, Kh. Abdollahi, 2017. Spatial-Temporal Simulation of LAI on Basis of Rainfall and Growing Degree Days, *remote sensing*, 9 (12): 2-17.
18. M. Ahmadi, B. Ghermez Cheshmeh, H. Ghasemiyyeh, 2017. Uncertainty Analysis of the Statistically Downscaling Precipitation and Temptation on the Quran-Talar, *Journal Management System*, 10 (34): 11-24 (In Persian).
19. M. Soleimani Motlagh, H. Ghasemieh, A. Talebi, Kh. Abdollahi, 2017. Identification and Analysis of Drought Propagation of Groundwater During Past and Future Periods, *Water Resources Management*, 31(1): 109-125.
20. S. Babaei, G. Hamdami, H. Ghasemieh, 2017. Identify the Effective Wells in Determination of Groundwater Depth in Urmia Plain Using Principle Component Analysis, *Journal of Water and Soil*, 31 (1): 40-50 (In Persian).
21. N. Dehghani, H. Ghasemieh, S.J. Sadatinejad, Kh. Ghorbani, A. Besalatpour, 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 (In Persian).
22. A. Nazari Samani, A. Tavakoli Fard, H. Ghasemieh, N Mashhadi, M. Rahdari, 2017. Integration of Anemometers Data and Geomorphology of Sand Dunes in Kashan Erg, *Iranian Journal of Rangeland and Desert Research*, 24 (10): 67-79 (In Persian).
23. E. Davoodi, H. Ghasemieh, M. Soleimani Motlagh, M. Moeinzadeh, 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 (In Persian).

24. H. Ghasemiyeh; O. bazrafshan; K.Bakhshayesh Manesh, 2017. Artificial Neural Network for Monthly Rainfall Forecasting Using Teleconnection Patterns (Case Study: Central Plateau Basin of Iran), Journal of EARTH AND SPACE PHYSICS, 43 (2): 405-418 (In Persian).
25. N. Dehghani; H. Ghasemieh; S.J Sadatinejad; Kh. Ghorbani, 2017. Evaluating the Impact of Climate Change on Runoff using Hydrological Model (Case study: Bazoft-Samsami Watershed), ECOHYDROLOGY, 4 (1): 89-102 (In Persian).
26. S.H. Alavinia, S.J. Sadatinejad, A. Malekian, H. Ghasemieh, 2016. The Impact of Rainfall Fluctuations and Uncontrolled Exploitation on Groundwater Systems and Hydrogeological Drought, Biological Forum – An International Journal, 8 (2): 274-284.
27. S.H. Sadeghi, H. Ghasemieh, J. Moemeni Damaneh, S.H. Mosavi, 2016. Irrigation and Municipal Water Quality Zoning by GIS, Journal of Irrigation and Water Engineering, 6 (4): 128-137 (In Persian).
28. M. Soleimani Motlagh, H. Ghasemieh, A. Talebi, 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 (In Persian).
29. Z. Feyzi, A.R. Keshtkar , A. Malekian, H. Ghasemieh, 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 (In Persian).

30. R. Imani, H. Ghasemieh, A. Esmali Ouri, 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 (In Persian).
31. M. Mirzavand, H. Ghasemieh, A.A. Nazari Samani, A. Vali, S.J. Sadatinejad, 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 (In Persian).
32. S. H. Sadeghi , H. Ghasemieh, S. J. Sadatinegad, 2015. Simulation of Streamflow using a Hydrological Model-Distributed WetSpa (Case study: Navrud Basin), Journal of Water and Soil Science, 19 (73): 23-33 (In Persian).
33. S. H. Sadeghi, H. Ghasemieh , S.J. Sadatinegad, 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 (In Persian).
34. M. Mirzavand, H. Ghasemieh, S.J Sadatinejad, M. Akbari, 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 (In Persian).
35. A.A Tavakkoli Fard, H. Ghasemieh, A.A. Nazari Samani, N. Mashhadi, 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 (In Persian).
36. A. Tavakkolifard, A. Nazari Samani, N. Mashhadi, H. Ghasemieh, M. Hodayi Arani, 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.

37. M. Mirzavand, R. Ghazavi, S.J. Sadatinejad, H. Ghasemieh, A. Vali, 2014. Investigation of Kashan Aquifer Situation Using Electric Resistance Method with Shelomberje Arrangement, Desert Ecosystem Engineering Journal, 3(4):43-56 (In Persian).
38. A. Tavakkoli Fard, A.A. Nazari Samani, H. Ghasemieh, N. Mashhadi, 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.
39. M.R. Shekari, J. Sadatinejad, A.Vali, H. Ghasemiye, R. Ghazavi, 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 (In Persian).
40. A. Tavakkolifard, H. Ghasemieh, A. Nazari Samani, N. Mashhadi, 2013. Determining the Risk of Sand Transportation to Residential Areas around Kashan Erg using Anemometry Data Analysis, DESERT, 18 (2): 163-172.
41. Y. Yazdani Moghaddam, S.J. Sadatinejad, A.A. Nazari Samabi, H. Ghasemieh, 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.
42. A. Tavakkoli Fard, H. Ghasemiehb, A.A. Nazari Samanic, N. Mashhadid, M. Mirzavand, 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.

Other Articles

43. R. Imani, H. Ghasemieh, M. Mirzavand, 2014. Determining and Mapping Soil Erodibility Factor (Case Study: Yamchi Watershed in Northwest of Iran), Open Journal of Soil Sciences, 4: 168-173.
44. M. Mirzavand, S.J. Sadatinejad, H. Ghasemieh, R. Imani, M. Soleymani Motlagh, 2014. Prediction of Ground Water Level in Arid Environment using a Non-Deterministic Model, Journal of Water Resources and Protection, 1-9.
45. M. Mirzavand, S.J. Sadatinejad, H. Ghasemieh, M. Akbarid, H. Motamed Shariati, 2014. Groundwater Level Fluctuation Forecasting Using Artificial Neural Network in Arid and Semi-Arid Climate Condition, Journal of Applied Hydrology, 1 (2): 43-52.
46. 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.
47. M. Mirzavand, H. Ghasemieh, A. Vali, 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 (In Persian).
48. H. Ghasemieh, F. Panah, M. Mohseni Saravi, M. Daghestani, 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.

Conference Papers

1. 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.
2. 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.

3. 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.
4. 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.
5. 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
6. 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 opportunities ahead, Isfahan University of Technology (IUT), Isfahan, Iran.
7. 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.

8. 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.
9. M. Soleimani Motlagh, Kh, Abdollahi, H. Ghasemieh, 2019. Introduction of WetSpss-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.
10. 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.
11. 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.
12. 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.
13. 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.
14. 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.

15. 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.
16. 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.
17. 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.
18. 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.
19. 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.
20. 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.

21. 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-Block-e- Anbarabad, The 1st Annual Iranian Agriculture Research Conference, 22 July, Kharazmi High Institute of Science & Technology, Shiraz, Iran.
22. M. Darehroudi, H. Ghasemieh, 2015. Methods of Rain Water Harvesting for Use in Green Space, 5-6 May, University of Kashan and Parks & Green Space Organization in Municipality of Kashan, Kashan, Iran.
23. 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), 5-6 May, University of Kashan and Parks & Green Space Organization in Municipality of Kashan, Kashan, Iran.
24. 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.
25. 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.
26. H. Ghasemieh, L. Nazari, S.J. Sadatinejad, S. Arefkhaneh, 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.

27. 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.
28. 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.
29. 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.
30. 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.
31. 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.

32. 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.
33. 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.
34. 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.
35. 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.
36. 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.
37. R. Imani, A.A. Imani, H. Ghasemieh, A. Alebouali, 2014. Evaluation of Water Quality and Hydrochemical Type in Balikhchay River for Drinking and Agriculture using Graphical Methods, The 1 st National Conference on Environmental Pollutions, 27 April, Ardebil, Iran.
38. L. Nazari, S. Arefkhaneh, H. Ghasemieh, S.J. Sadatinejad, M. Abdollahi, 2014. 1st National Conference on Agriculture & Environment Sciences, 6 March, Ardabil, Iran.
39. M. Pajuanmanesh, 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.

40. 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, 18-19 February, Shahid Beheshti University, Tehran, Iran.
41. 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.
42. 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 Boyer-Ahmad Province), 5th Iranian National Conference on Water Resources Management, 18-19 February, Shahid Beheshti University, Tehran, Iran.
43. Fazeli Farsani, H. Ghasemieh, 2013. Investigation of the Accuracy of Rainfall-Runoff Modeling in Estimating Extreme Events (Case Study: Beheshtabad Sub-Basin), National Conference on Flood Management, 13-14 May, Research Institute of Natural Disasters, Tehran, Iran.
44. 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.

45. 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, 15-16 September, Islamic Azad University (Arak Branch), Arak, Iran.
46. A. 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.
47. A. 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.
48. A. 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, 15-16 September, Islamic Azad University (Arak Branch), Arak, Iran.
49. M. Mirzavand, S. Farazmand, H. Ghasemieh, Y. Yazdani 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.
50. M. Mirzavand, A. Mohammadian Bebahani, H. Ghasemieh, A. Nazari Samani, Y. Yazdani Moghaddam, 2012. Investigating the Usability of Geological Formation Properties Prioritizing Watershed Management Plans (Case Study: Chamran Basin), 01st National Desert Conference, 16-17 June, International Desert Research Center, University of Tehran, Tehran, Iran.

51. 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.
52. 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.
53. 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.
54. 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.
55. 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.
56. 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.
57. A. 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			
Title of Project	Place of Work	Date	
		From	To
Identifying of the Effective Wells for Groundwater Depth Determination in Urmia Plain (From 2015 January 5 to 2015 September)	University of Kashan	21/03/2015	20/01/2016
Research Project Partner			
Title of Project	Place of Work	Date	
		From	To
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 of 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		07/09/2020

A. THESES UNDER SUPERVISION

A.1. Master of Science (MSc)

1. **Mohsen Moeinzadeh**, 2019. Evaluation of Climate Change Effects on Meteorological Drought under RCP Scenarios (Case Study: Selected Stations in Isfahan Province).
2. **Roya Ahmadi**, 2019. Evaluating Temporal and Spatial Variations of Drought for Identification of Groundwater Potential Zone (Case Study: Qom-Kahak Plain).
3. **Mohammad Amin Khosravi**, 2019. Evaluation the Impact of Land Use Changes on Water Balance Components in Farsan Basin.

4. **Farzaneh Nozarian**, 2018. Spatial Variation of Intrinsic and Fractal Properties of Soil in Kashan Plain.
5. **Shadab Hoseinpour, 2017.** Evaluation Loss of Runoff, Sediment and Soil Nutrients under Different Conditions of Rainfall Simulation.
6. **Zeinab Hajizadeh**, 2017. Investigation the Effects of Differents Soil Cover on Runoff Hydraulic Characteristics and Sediment Generation under Simulated Rainfall Conditions.
7. **Hadise Khorshidi**, 2016. Siahrood River Water Quality Parameters Prediction using Artificial Network.
8. **Zahra Pourzarin, 2016.** River Flow Simulation using Intelligent Models and Time Series (Case Study: Kashkan Basin).
9. **Zahra Heshmatian**, 2016. Evaluating the Impact of Different Complexity Levels in the Performance of Hydrological Models (Case Study: Hanifaghan Basin).
10. **Behnam Aram**, 2015. Investigating the Effects of Climates Phenomenon on Quantitative Fluctuations (Case Study: Ardestan Plain).
11. **Moslem Moradi Goozalaki**, 2015. Positioning of Suitable Areas for Flood Spreading using AHP, FAHP and GCA Methods in Shahrekord Plain.
12. **Mahmoud Darehroudi**, 2015. Suitable Site Selection for Rainwater Harvesting using GIS and Decision Support Systems (Case Study: Hosseinabad-e-Block-e-Anbarabad Basin).
13. **Rasool Imani**, 2014. Hydrological Simulation Using WetSpa and Intelligent Neural Models (Case Study: Balikhluchay Watershed, Ardabil Province).
14. **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).
15. **Mehdi Ahmadi**, 2014. Analyzing Impact of Climate Change on Annual Discharge in Qorantalar Watershed.
16. **Nima Ahmadaghaei**, 2014. Regional Flood Frequency Analysis using Linear Movements and Wavelet Transform (Case Study: Tehran Province).
17. **Mostafa Taheri Heravi**, 2014. Investigating the Effects of Landuse Changes and Urban Development on Hydrological Response of Watersheds (Case study: Torghabeh and Dehbar Watersheds).

18. **Mohammad Pazhouhanmanesh**, 2014. Investigation of Drought Effects on Groundwater Fluctuations Using Modflow Model (Case Study: Kashan Plain).
19. **Alireza Karimi Zafarabadi**, 2014. Evaluation of Flood Routing Methods in Kashkan River.
20. **Kobra Bakshayeshmanesh**, 2013. Evaluating the Relationship between Effective Teleconnection Patterns with Precipitation and SPI (Case Study: Central Plateau Basin of Iran).
21. **Leila Nazari**, 2013. Estimating Evapotranspiration using Lysimeter and its Comparison with Simulated Data in Artificial Neural Network (Case Study: Kashan).
22. **Asghar Tavakkolifard**, 2012. Investigation of Sand Dunes Morphology and Its Relation to Wind Regime (Case Study: Kashan Erg).
23. **Mohammad Mirzavand**, 2012. Qualitative and Quantitative Simulation of Groundwater in Kashan Plain Using Artificial Neural Network.
24. **Mahin Nazari, 2012.** Rainfall- Runoff Modeling Using Artificial Neural Network (Case Study: Babolrud).
25. **Aboolfazl Birjandi**, 2012. Positioning of Underground Dams in Biarjomand Basin.

A.2. Philosophical Doctrine (PhD)

1. **Seyyed Mohammadreza Mirhosseini Tabaei Zavareh, 2020.** Evaluating the Effect of Climate Change and Land Use on Groundwater Recharge (Case Study: Golpayegan Basin).
2. **Ali Seif, 2020.** Evaluating the Impacts of Climate and Land Use Changes on River Flow in Seilakhor Basin, Lorestan Province
3. **Maryam Rezaei, 2020.** Estimation of Actual Evapotranspiration using METRIC and Simplified METRIC models based on the Soil Moisture Criterion.
4. **Zahra Nazeri, 2019.** Design of Groundwater Monitoring Network and Determine of Recharge Potential Area using Entropy Theory in Jiroft Plain.
5. **Navid Dehghani, 2019.** Frequency Analysis of Hydrological Drought of Bazoft-Samsami Basin under Climate Change Scenarios.
6. **Elham Davoodi, 2018.** Evaluation of relationship between Leaf Area Index and spatial and temporal variability of soil moisture (Case study: Behesht-Abad watershed)

7. **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).
8. **Mahdi Soleimani Motlagh, 2017.** Evaluation of Groundwater Budget with Emphasis on the Separation of Deficit Caused by Drought and Overexploitation of Aquifer (Case Study: Alashtar Plain).

B. ADVISOR:

1. **Zahra Feizi,** 2015. FAHP Application for Flood Spreading (Case Study: Southern Part of Kashan Plain).
2. **Narges Saghzadeh,** 2014. Rain Gauge Design in Central Part of Iran using Geostatistical and Artificial Intelligent.
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. **Yaghoub 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

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

GRADUATE AND UNDERGRADUATE COURSES

M.S. Course

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

Ph.D. Course

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

COMPUTER SKILLS

- **General software:** M.S.-Office package (Word, Excel, Powerpoint, ...)
- **Geographic Information Systems:** ARC GIS
- **Surveying & mapping:** GS+, Surfer
- **Hydrology:** HEC-HMS, WetSpa, SMADA, HYFA, DIP (Drought Indices Package), DIC
- **Statistics:** SPSS, MINITAB, Easy Fit, XLSTAT
- **Climate Change:** LARS-WG, SDSM

LANGUAGE SKILLS

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