



TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO

ID CODE: 4915

I the undersigned asks to participate in the public selection, for qualifications and examinations, for the awarding of a type B fellowship at **Dipartimento di Scienze Agrarie e Ambientali - Produzione, Territorio, Agroenergia**

Scientist- in - charge: Professor Claudio Gandolfi

Farshid Jahanbakhshi

CURRICULUM VITAE

PERSONAL INFORMATION

Surname	Jahanbakhshi
Name	Farshid
Date of birth	27/06/1989

PRESENT OCCUPATION

Appointment	Structure
Project Manager, Comprehensive management plan for Aliabad watershed (Climate, Physiography, Soil, Vegetation cover, Hydrology)	Faculty of Natural Resources, Yazd University, Iran

EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement of the degree
PhD	Watershed Science and Engineering	Yazd University	2018
Master of Science	Watershed Management Engineering	Yazd University	2014
Bachelor Degree	Natural Resources Engineering -Range and Watershed Management	Shiraz University	2012

REGISTRATION IN PROFESSIONAL ASSOCIATIONS

Date of registration	Association	City
2013	Watershed Management Society of Iran	Tehran
2014	Iranian Rainwater Catchment Systems Association	Mashhad



FOREIGN LANGUAGES

Languages	level of knowledge
English	Advanced (C1)
Turkish	Native
Persian	Native

AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
2016	Outstanding student of Yazd University, honored and awarded by the university president.
2017	Scholarship by Ministry of Science, Research, and Technology of Iran to carry out research at Swiss Federal Institute of Aquatic Science and Technology, Switzerland.
2017	Excellent student of Yazd University, honored and awarded by the university president.
2018	Outstanding student of Yazd University, honored and awarded by the university president.

TRAINING OR RESEARCH ACTIVITY

<p>-2014-2018, PhD Thesis: Identification of best management practices for soil and water conservation with an optimal control model under climate change conditions. Ranked 1st among PhD students.</p> <p>-2012-2014, MSc in Watershed Management Engineering, Yazd University, Yazd, Iran. Thesis: Investigation of sediment production and runoff generation thresholds on different rock formations and rainfall intensities by using rainfall simulator. Thematic priorities: Hydrology, Climate Science, Soil Science, Flood, Water Resource Management. Graduated in the top ten percent of class.</p> <p>-2014-2015, Laboratory Instructor and Teaching assistant, Yazd University. Courses: Advanced hydrology, Simulation in watershed, Soil erosion models, Geomorphology, Sediment production of geological formations.</p> <p>-2015-2017, Research assistant, research group of Professor MR Ekhtesasi, Faculty of Natural resources, Yazd University, Iran.</p> <p>-2017-2018, Professor Karim Abbaspour's group, Department of Systems Analysis, Integrated Assessment and Modelling, EAWAG (Swiss Federal Institute of Aquatic Science and Technology), Switzerland.</p> <p>-2017, Searching and Managing Scientific Information Course, Dubendorf, Switzerland.</p> <p>-3 May 2020. Short course on hydrological modelling. University of Zurich.</p> <p>23 February 2017, Short course on Models for change detection and forecasting of land cover/use changes based on satellite images (CA-Markov-LCM). Islamic Azad University.</p> <p>-October 2010-January 2011, Training course in Geographic Information System, Remote Sensing Center of Shiraz University.</p> <p>-During my study time in the watershed science field, I have acquired a thorough knowledge of hydrologic modelling range from measuring at plot scale to simulating at large scales. Most recently, I modelled the hydrologic cycle of a catchment with the SWAT program. Furthermore, by coding in the Matlab, I linked the model with an optimization algorithm to identify the Best Management Practices in agricultural lands under climate change scenarios. plenty of technical skills in data analysis, GIS, programming, model parameterization in hydrology.</p>



PROJECT ACTIVITY

Year	Project
2020	Comprehensive management plan for Aliabad watershed, Yazd province, Iran (Physiography, Soil, Agriculture, Rangeland, and Hydrology studies), project manager
2020	Design and construction of a pair of wind erosion and dust monitoring stations in Iran, Arid Land and Desert Research Institute, Yazd University.
2018	Effects of climate change on the hydrological cycle in Sattarkhan catchment, East Azerbaijan, Iran.
2017	Design and construction of a wind erosion and dust monitoring station, No. 961.10.4409. Shiraz University.

CONGRESSES AND SEMINARS

Date	Title	Place
6-7.11.2020	Participation in 18 th Swiss Geoscience Meeting 2020	Zürich (Online)
6-7 & 9.6.2018	Attended Latsis Symposium 2018	ETH Zürich
February 2013	Instructor of 1 st workshop on models and tools for estimating and measuring wind erosion.	Yazd University, Iran
February 2017	Organiser and co-lecturer in 4 th workshop on models and tools for estimating and measuring wind erosion	Shiraz University, Iran
16.12.2015	Member of executive committee in the 1 st national workshop on integrated watershed management	Menarid International Project, Yazd, Iran
30-31 October 2013	Member of executive committee in the 9 th National conference on Watershed Science and Engineering	Yazd, Iran
15-16 January 2014	Member of executive committee in 3 rd National conference on Wind Erosion and Dust Storms	Yazd, Iran

PUBLICATIONS

Book
Ekhtesasi, M.R. & Jahanbakhshi, F. 2016. Models and tools for estimating and measuring wind erosion and dust storms. Yazd University Publication, Yazd, Iran ISBN: 978-600-6309-63-7 (in Persian).
Published Articles
7- Vaghefi, S.A., Keykhai, M., Jahanbakhshi, F., Sheikholeslami, J., Ahmadi, A., Yang, H. & Abbaspour, K. 2019. The future of extreme climate in Iran. Scientific Reports 9:1464.
6- Sepehri, M., Malekinejad H., Jahanbakhshi, F., Ilderomi, A.R., Chezgi, J., Ghorbanzadeh, O., Naghipour, E. 2020. Integration of interval rough AHP and fuzzy logic for assessment of flood prone areas at the regional scale, Acta Geophysica: 1-17.
5- Jahanbakhshi, F. & Ekhtesasi, M.R. 2019. Performance evaluation of three image classification methods (Random Forest, Support Vector Machine, and Maximum Likelihood) in land use mapping. Water and Soil Sciences 22(4): 1-13 (in Persian).
4- Jahanbakhshi, F., Ekhtesasi M.R., Talebi A. & Piri, M. 2018. Investigation of sediment production and runoff generation on rock formations of Shirkooh slopes of Yazd by using a rainfall simulator. Water and Soil Sciences 22(2): 287-299. (in Persian).



3- Chezgi, J., Soheili E., Niazi, Y. & Jahanbakhshi, F. 2018. Locating and prioritizing suitable areas for construction of gabion check dams using ANP model. <i>Extension and Development of Watershed Management</i> 5(19): 11-17, (in Persian).
2- Zahedi, E., Jahanbakhshi, F. & Talebi, A. 2016. Investigating suitable areas for flood spreading using fuzzy logic and Analytic Network Process (ANP). <i>Science and Technology of Agriculture and Natural Resources</i> 20 (77), doi: 10.18869/acadpub.jstnar.20.77.185 (in Persian).
1- Ekhtesasi, M.R., Jahanbakhshi, F. & Kousari, M.R. 2015. Evaluating the trend of precipitation in 32 synoptic stations in Iran with nonparametric method and moving summation of data for the period of 1970 to 2005 with ranks of 1 to 48 months. <i>Iran-Water Resources Research Journal</i> 11(2), (in Persian).
Articles in review and prepration
2- Mehdi Sepehri, Farshid Jahanbakhshi , Ali Reza Ilderomi, Jesus Rodrigo Comino (In review). Impact of roof rain water harvesting on runoff capture and house hold consumes, <i>Environmental Science and Pollution Research</i> (Submitted to the journal on January 2021).
1- Bahareh Kamali, Farshid Jahanbakhshi , Diana Dogaru, Delaram Houshmand Kouchi, Jörg Dietrich, Claas Nendel, Amir AghaKouchak. Probabilistic modeling of crop loss risk under drought: a spatially showcase for Sub-Saharan Africa. Ready to submit to <i>Scientific Reports Journal</i> .
Congress proceedings
11- Jahanbakhshi F. , Abbaspour, K.C. & Ekhtesasi, M.R. 2018. Prediction of sediment yield under climate change uncertainties - case study: Sattarkhan catchment. The 13 th National Conference on Watershed Science and Engineering, Ardebil, Iran.
10- Jahanbakhshi F. & Ekhtesasi, M.R. 2017. Comparison of Neural Network with Hybrid Training and Support Vector Machine Classifiers for Land Use Mapping. The 12 th National Conference on Watershed Science and Engineering, Malayer, Iran.
9- Jahanbakhshi F. , Ekhtesasi, M.R. & Soheili, E. 2017. Portable rainfall simulator systems used in water and soil studies in Iran. 4 th International Conference on Environmental Planning & Management, Tehran, Iran.
8- Ekhtesasi, M.R., Saremi, M.A., Jahanbakhshi, F. , Mirnejad, O. 2018. Introduction and comparison of adsorption efficiency of aeolian sand trapper Siphon.v3. The 4 th National conference on wind erosion and dust storms. Yazd, Iran.
7- Jahanbakhshi F. , Ekhtesasi, M.R., Talebi, A. & Piri, M. 2016. Investigation of permeability on three rock formations in varying rainfall intensities, using a rainfall simulator. The 11 th National Conference on Watershed Science and Engineering, Yasouj, Iran.
6- Jahanbakhshi F. , Ekhtesasi, M.R., Talebi, A. & Piri, M. 2016. Calibration of a portable rainfall simulator for runoff, erosion and sedimentation studies. The 11 th National Conference on Watershed Science and Engineering, Yasouj, Iran.
5- Ekhtesasi M.R., Kousari, M.R., Jahanbakhshi, F. & Jalizi, S. 2015. An Investigation of spatial minimum annual air temperature trends in Iran during 1960 -2005. The 10 th National Conference on Watershed Science and Engineering, Birjand, Iran.
4- Hemati, Y., Rahimpour, T., Rostan Zadeh, H. & Jahanbakhshi, F. 2014. GIS Based Soil Erosion Estimation Using EPM Model, Songor watershed, Iran. National Conference on New Topics in Agricultural Sciences, Tehran, Iran.
3- Fakhar, F., Jahanbakhshi, F. , Karimian A.A. 2014. Understanding of socio-economic conditions is necessary to achieve sustainable development. The 1st National Conference on Agricultural Engineering and Management, Hamedan, Iran.



2- Ekhtesasi, M.R., **Jahanbakhshi, F.**, Rezaeian, F. & Afzali, S.F. 2014. Estimation of wind erosion in fallow lands of Yazd plain Using WEPS, RWEQ and IRIFR2 models. The 3rd National Conference on Wind Erosion and Dust Storms, Yazd, Iran.

1- **Jahanbakhshi F.**, Teymourian, S. & Sodayizadeh, H. 2014. Underground dams, new strategy to improve water resources management and combating desertification. The 5th National Conference on Iran Water Resources Management. Tehran, Iran

OTHER INFORMATION

Technical Background:

- Programming (Python, MATLAB)
- Planning scientific field campaign (Rainfall simulation, Soil moisture and river water quality sampling)
- Modelling environmental processes
- Climate data analysis
- Remote sensing (e.g., Land use/ Land cover mapping)

Software knowledge:

ArcGIS, QGIS, SAGA-GIS, Envi/IDL, Idrisi, SPSS, HEC-HMS, EPIC: Environmental Policy Integrated Climate crop model, SWAT: Soil and Water assessment Tool, SWAT-Cup

Co-advisor of Master thesis:

- Mahshid Taherpour (2021). Assessment of IHACRES and SWAT+ models for runoff simulation of Bvanat River. Yazd University.
- Zahra Rezaie (2021). Evaluating the effects of check dams on flooding and inundation in Sanich basin. Yazd University.
- Masood Gheysari (2020). Comparison of two aeolian sand trappers' efficiency, Big Spring Number Eight (BSNE) and Siphon.v3. Yazd University.

Contact References:

• Dr. Karim Abbaspour

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Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR n. 445/2000.

The present curriculum does not contain confidential and legal information according to art. 4, paragraph 1, points d) and e) of D.Lgs. 30.06.2003 n. 196.

Place and date: Tehran, 3/14/2021

SIGNATURE

Farshid Jahanbakhshi
