

(Curriculum Vitae)

Bagher Zahabioun (Bsc, MSc, PhD)

1. Personal Details

Mobile: +98 912 384 6246

Email: Bagher@iust.ac.ir

Date of Birth: Nov, 24 1950

Place of Birth: Isfahan, Iran

2. Education

1993-1999 Ph.D. in Water Resources Engineering, School of Civil and Geosciences Engineering, University of Newcastle, Newcastle upon Tyne, UK.

1988-1989 MSc. in Hydrology and Water Resources, University of Brussels, Brussels, Belgium.

1970-1974 B.Sc. in Civil Engineering, Amir Kabir University of Technology, Tehran, Iran.

3. Additional Courses Taken

One year, International Post Graduate Diploma Course in Hydrology, International Institute of Hydraulic and Environmental Engineering (IHE), Delft, Netherlands, 1986-1987.

Ten weeks, International Course in Urban Drainage, held by Germany and the Netherlands, Bangkok, Thailand, 1992.

Four weeks, International Course in River Engineering and Sediment, held by China and the Netherlands, Tehran Polytechnic University, Tehran, Iran, 1990.

Two weeks, International Workshop in Climate and Water affairs, Skopje, Macedonia, Held by Unesco and WMO, 2009

4. Occupational History

- a) **1999-2021** Associate Professor in Water & Environment Engineering, University of Science & Technology. Tehran, Iran. Involving in Supervising Student Projects as well as Supervising Water Projects in Various Water Companies in Iranian Industries.
- b) **2006-2008** Water Research Consultant in Iran Water and Power Development Company.
2004-2006 Training Director of Staff Members of Oil Industry Engineering Company (OIEC GROUP)
1999-2001 Vice Chancellor of Ershad Institute of Higher Education, Damavand, Iran

- c) **1991-1993** Director of Water Research Centre, affiliated to the Ministry for Construction, Tehran, Iran (Management of various departments including Hydrology & Water Resources Engineering, Hydraulics Engineering, Coastal Engineering, River Engineering, Instrumental Engineering & Mathematical Modelling)
- d) **1989-1991** Director of Hydrology and Water Resources Section in Water Research Centre, affiliated to the Ministry for Construction, Tehran, Iran (Participating, Consulting and Leading various teams each performing individual research projects, Responsible for financial & human resources administration)
- e) **1984-1986** Deputy Minister (Vice Minister) in Education, Ministry for Construction, Tehran, Iran (Proactively involved in the implementation of HR policies in training, education & development of staff members, Establishing, supervising & overseeing various training centres specifically targeting rural, remote & underdeveloped areas of the country, Established links with International Higher Education Institutes, offering support whether financial or otherwise to encourage staff members for postgraduates studies both abroad & within the country)
- f) **1982-1984** Head Deputy for Rural Planning and Design in Organisation of Rural Reconstruction for the five provinces of Azerbaijan, Kurdistan, Kermanshah, Ilam, and Khuzestan, Ministry of Interior Affairs, Tehran, Iran
- g) **1979-1980** Head of the Council for Development of Rural Areas in the Province of Kurdistan, Sanandaj, Iran
- h) **1974-1979** Supervisor, Designer, and Site Engineer in Engineering Companies, Iran

5. Publications

5.1 Journal Papers

Panahi, D.M., Sadegh Sadeghi Tabas, Zahra Kalantari, Carla Sofia Santos Ferreira and Bagher Zahabiyoun (2021). Spatio-Temporal Assessment of Global Gridded Evapotranspiration Datasets across Iran. *Remote Sens.*, 13, 1816. <https://doi.org/10.3390/rs13091816>

Khazaei, M.R., Hasirchian, M., & Zahabiyoun, B. (2021). An improved daily weather generator for the assessment of regional climate change impacts. *Theoretical and Applied Climatology* (146):475–487

Panahi, D.M., Tabas, S.S., Kalantari, Z., Ferreira, C.S.S., & Zahabiyoun, B. (2021). Spatio-temporal assessment of global gridded evapotranspiration datasets across Iran. *Remote Sens.*, 13, 1816.

Khazaei, M.R., Zahabiyoun, B. & Hasirchian, M., (2020). A new method for improving the performance of weather generators in reproducing low-frequency variability and in downscaling. *International Journal of Climatology*. <https://doi.org/10.1002/joc.6511>

Dehghanipour, A.H., Schoups G., Zahabiyoun, B., & Babazadeh, H. (2020). Meeting agricultural and environmental water demand in endorheic irrigated river basins: A simulation-optimization approach applied to the Urmia Lake basin in Iran. *Agricultural Water Management* (241). 1-15.

Khazaei, M.R., Zahabiyoun, & B. Hasirchian, M. (2020). Comparison of IWG and SDSM weather generators for climate change impact assessment. *Theoretical and Applied Climatology* (140). 859-870.

- Rahimi, A., Zonoozi, M., Rahimi, R. and Zahabiyoun, B. (2020). Photocatalytic activity of GO-doped bismuth-based photocatalyst for Methyl Orange decolorization under visible light irradiation. *DESALINATION AND WATER TREATMENT*. Vol. 180, 360-369. 10.5004/dwt.2020.25052.
- Dehghanipour, A.H., Zahabiyoun, B., Schoups G., & Babazadeh, H (2019). A WEAP-MODFLOW surface water-groundwater model for the irrigated Miyandoab plain, Urmia lake basin, Iran: Multi-objective calibration and quantification of historical drought impacts. *Agricultural Water Management* (223), 1-21.
- Zamanipour, M., Saadatpour M. and Zahabiyoun, B. (2018). Simulation-Optimization Approach Based on Meta-Model in Optimal Design of Inter-Basin Water Transfer System. *Iran-Water Resources Research Volume (IR-WRR)* 14(1), 198-215.
- Sadeghi-Tabas, S., Samadi, S.Z. and Zahabiyoun, B. (2017). Application of Bayesian Algorithm in Continuous Streamflow Modeling of a Mountain Watershed. *European Water* 57(1), 101-108, *E.W. Publications*.
- Hajian, F., Dykes, A.P., Zahabiyoun, B. and Ibsenc, M. (2016). Prediction of climate change effects on the runoff regime of a forested catchment in northern Iran. *HYDROLOGICAL SCIENCES JOURNAL*, VOL. 61, NO. 15, 2729–2739.
- Khazaei, M. R., Zahabiyoun, B., Saghafian, B., & Ahmadi, S. (2014). Development of an automatic calibration tool using genetic algorithm for the ARNO conceptual rainfall-runoff model. *Arabian Journal for Science and Engineering*, 39(4), 2535-2549.
- Sharafati, A., & Zahabiyoun, B. (2014). Rainfall Threshold Curves Extraction by Considering Rainfall-Runoff Model Uncertainty. *Arabian Journal for Science and Engineering*, 39(10), 6835-6849.
- Khazaei, M. R., Ahmadi, S., Saghafian, B., & Zahabiyoun, B. (2013). A new daily weather generator to preserve extremes and low-frequency variability. *Climatic change*, 119(3-4), 631-645.
- Sharafati, A., Zahabiyoun, B., (2013). Stochastic generation of storm pattern. *Life Science Journal* 10, 1575-1583.
- Zahabiyoun, B., Goodarzi, M.R., MassahBavani, A.R., Azamathulla, H.M., (2013). Assessment of climate change impact on the Gharesou river basin using SWAT hydrological model. *Clean-Soil, Air, Water* 41 (6), 601–609.
- Zahabiyoun, B., Goodarzi, M. R., & Bavani, A. R. (2012). Simulation of rainfall –runoff on Gharesou watershed using SWAT model. *Science Series Data Report*. 4(1), 28-37.
- Khazaei, M. R., Zahabiyoun, B., and Saghafian, B. (2012). “Assessment of climate change impact on floods using weather generator and continuous rainfall-runoff model.” *Int. J. Climatol.*, 32(13), 1997–2006.
- Zahabiyoun, B. (2007) Impact Assessment of Climate Change on Rainfall over a Small Catchment. *International Journal of Civil Engineering*, Vol.4, No. 1.
- Zahabiyoun, B. (2004). A Catchment Model Parameterisation to Account for Land-use Change. *International Journal of Engineering Science*, Vol.9, No. 3.

5.2 Conference Papers

Moshir Panahi, D., Aminjafari, S., & Zahabiyoun, B. (2020). Why water bodies of Iran have been dried up?. In *EGU General Assembly Conference Abstracts* (p. 17006).

Dehghanipour, A. H., Schoups, G., & Zahabiyoun, B. (2020). "Simulation–optimization model for optimum water allocation between environmental and agricultural demand using a coupled WEAP-MODFLOW model: Application in Miyandoab plain, Urmia basin, Iran", Online presented at EGU General Assembly 2020, Vienna, Austria.

Dehghanipour, A. H, Zahabiyoun, B., & Schoups, G. (2019). "Simulation–optimization modeling for sustainable conjunctive water management in irrigated agriculture: WEAP-MODFLOW application in the Miyandoab plain, Urmia basin, Iran", Poster session presented at EGU General Assembly 2019, Vienna, Austria.

Dehghanipour, A. H., Schoups, G., & Zahabiyoun, B. (2019). "A WEAP-MODFLOW model for conjunctive water management in the Urmia Lake Basin, Iran", Oral session. presented at the 5th Nederlands Aardwetenschappelijk Congres (NAC), Utrecht, The Netherlands.

Moshir Panahi, D., Zahabiyoun, B & T., Raziei (2018). An Investigation on the Effective Parameters of Climate Change Vulnerability in Iran. *EGUGA*, 11956.

Sadeghi-Tabas S., Samadi S.Z. and B. Zahabiyoun. (2017). Application of Bayesian algorithm in continuous streamflow modeling of a mountain watershed. 10th WORLD CONGRESS OF EWRA on Water Resources and Environment. 5-9 July 2017, Athens, Greece.

Merikhi, A .Shariatmadari, N. Saeidijam, S. & Zahabiyoun, B. (2012), the improvement of mechanical properties for soft clayey soils by electrokinetic geosynthetic (ekg) in Persian Gulf water condition, 10th International Conference on Coasts, Ports and Marine Structures, http://www.civilica.com/Paper-ICOPMAS10-ICOPMAS10_205.html.

Sharafati, a & Zahabiyoun, B. (2012), Uncertainty Analysis of Storm Pattern on Seymareh Catchment, 1st International and 3rd National Conference on Dams and Hydropowers, http://www.civilica.com/Paper-NCHP03-NCHP03_148.html.

Rajabi A. and B. Zahabiyoun (2010), "The Joint Probability Occurrence of Waves and Water Levels in Gulf of Oman using Desk Study Approach", Proceedings of the First Makassar International Conference on Civil Engineering (MICCE2010), March 9-10.

Zahabiyoun, B. & Sharafati, A. (2008), A model for estimating water equivalent of snow using Genetic Algorithm, EGU General Assembly.

Zahabiyoun, B. (2006), Climate Parameterization of a Rainfall Model for Climate Change Studies, 3rd inter. Conf. on water resources in Mediterranean basin. Tripoli, Lebanon.

Zahabiyoun. B. (2005). Problems Encountered in Stochastic Generation of Streamflow Series. STOCHASTIC HYDRAULICS 2005, 23 and 24 May 2005. Nijmegen - The Netherlands.

Zahabiyoun B. (2005), Impact Assessment of Climate Change on Rainfall over a Small Catchment. Meteorology and Climate over South China.

Zahabiyoun. B. (2002). "An Approach to Land-use Change Impacts on Water Resources", Hydroinformatics 2002: Proceedings of the Fifth International Conference on Hydroinformatics, Cardiff, UK.

Zahabiyoun. B. (2001). "An Investigation in Summer Flood Disaster of 2001 in Gulestan Province in Iran", in the "Proceedings of Design Flood Criteria for Dams' Safety", Tehran, Iran.

Zahabiyoun. B. (1999). Construction of Rainfall Scenarios due to Climate Change. Proceedings of 2nd International Regional Conference on Climate Change, Tehran, Iran.

Zahabiyoun. B. (1995). Stochastic Generation of Daily Streamflow Series Reflecting Climate and/or Land-use Change Effects. Proceedings of the First International Regional Conference on Water Resources. Isfahan University of Technology, Isfahan, Iran

B. Zahabiyoun, (1993). A sensitivity analysis of MULTSED due to overland & channel flow roughness on an agricultural catchment, 11th International Conference on Environmental Management, Wollongong, Australia.

Zahabiyoun. B. (1991). "An Examination of Different Spatial Rainfall Estimation in Mountainous Areas" in the "Proceedings of International Conference on Urban Drainage & New Technologies", held in Dubrovnik, Croatia (old Yugoslavia).

Zahabiyoun. B. (1990). "A Sensitivity Analysis of Sediment Yield Using Multsed Model with Respect to Channel and Overland Flow Roughness" in the First National Conference of River Engineering", Ahwaz, Iran.