

Detailed CV - OZGUR KISI

PERSONAL INFORMATION

Date of Birth: January 28, 1976
Marital Status: Married
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EDUCATIONAL INFORMATION

PhD: 1999-2003 Istanbul Technical University (ITU), Institute of Science and Technology, Hydraulics Division.
The title of the thesis is '*Modeling of suspended sediment yield in a river cross-section using fuzzy logic*'.

MSc: 1997-1999 Erciyes University (EU), Institute of Science and Technology, Hydraulics Division.
The title of the thesis is '*Ten-stage discrete flood routing for dams having gated spillways*'.

BSc: 1993-1997 Cukurova University (CU), Engineering Faculty, Department of Civil Engineering
1992-1993 Intensive English School of CU for undergraduate students

WORKING EXPERIENCE

2021- : Post. Doc., University of Applied Sciences Lübeck, Dept. of Civil Eng.
2017- : Prof. Dr., Ilia State University, School of Technology, Dept. of Civil Eng.
2025- : Adjunct Prof., Korea University, South Korea.
2012-2016 : Prof. Dr., Basari University, Dean of the Faculty of Architectural and Eng.
2011-2012 : Prof. Dr., Erciyes University, Head of Civil Eng. Dept.
2005-2011 : Assoc. Prof. Dr., Erciyes University
2003-2005 : Asst. Prof. Dr., Erciyes University
1999-2003 : Research assistant, Institute of Science and Technology, ITU
Teaching assistant at fluid mechanics course (Summer, 2000)
Teaching assistant at hydrology course (Spring, 2002)
Teaching assistant at hydrology course (Spring, 2003)
Teaching assistant at fluid mechanics course (Summer, 2003)
1998-1999 : Research assistant, Institute of Science and Technology, EU
1997 : Analysis of floors and beams with finite elements method and the comparison with the classical methods used in practice, final project of undergraduate education
1996 : Civil engineering office training, OZIMKO Co, Adana (summer training)
1995 : Civil engineering work site training, OZIMKO Co, Adana (summer training)

BSc LECTURES GIVEN

Calculus
Introduction to Civil Engineering
Fluid Mechanics
Hydraulics
Hydrology
Hydraulic Structures
Computer Programming
Computer Applications in Engineering Hydrology
Fuzzy Logic and Civil Engineering Applications
Artificial Neural Networks and Civil Engineering Applications
Introduction to Artificial Intelligence

MSc AND PhD LECTURES GIVEN

Artificial Neural Networks and Engineering Applications
Fuzzy Logic and Engineering Applications
Programming with Soft Computational Techniques
Programming with Artificial Intelligence Techniques
Machine Learning in Water Engineering
Research Methodology

RESEARCH FIELDS

His research primarily focuses on advancing water resources engineering through the development of innovative modeling and prediction techniques. This includes suspended sediment, streamflow, groundwater, water quality, flood and drought modeling, and novel trend analysis methods. He employs advanced statistical and machine learning (ML) approaches, including explainable ML and deep learning, combined with remote sensing data, empirical mode decomposition, and wavelet analysis. Additionally, he explores spatial and temporal hydroclimatic patterns using cutting-edge graphical trend methods, such as innovative trend analysis, innovative polygon trend analysis and wavelet analysis. He also integrates wavelet analysis, remote sensing, and machine learning with metaheuristic optimization techniques to address global challenges in these domains.

PUBLICATIONS

Journal Papers (SCI / SCIE)

Kim, S., Alizamir, M., Heddami, S., Chang, S.W., Chung, I.M., Kisi, O., Kullu, C. Development of the machine learning and deep learning models with SHAP strategy for predicting groundwater levels in South Korea, *Scientific Reports*, (accepted for publication).

Sekhon, K.S., Kaur, A., Thaman, S., Gupta, N., Malik, A., Bishnoi, C., Kisi, O., Salem, A., Mattar, M.A. Sustaining Grape Yield and Soil Health Under Saline—Sodic Irrigation Through Amendments and Canal Water Application, *Water*, (accepted for publication).

Singh, J., Singh, M.C., Mathur, A., Kumar, S., Malik, A., Dewidar, A.Z., Mattar, M.A., Kisi, O. Evaluating Reservoir Capacity and Sedimentation Rates Using Geospatial Techniques: A Case Study of Chohal Dam Reservoir, *Environmental Earth Science*, (accepted for publication).

Vishwakarma, D.K., Heddiam, S., Gaur, A., Tiwari, R.K., Kisi, O., Malik, A., Bishnoi, C., Alataway, A., Dewidar, A.Z., Mattar, M.A. Improving Streamflow Forecasting Efficiency Using Signal Decomposition Approaches, *Water Resources Management*, (accepted for publication).

Cengiz, T.M., Kisi, O., Vishwakarma, D.K., Sankalp, S., Bassukas, D., Kulls, C. Spatial-Temporal Variation of Precipitation in Niedersachsen, Germany Using Statistical and Graphical Trend Methods Considering Climatic Drivers, *Hydrol. Sci. J.*, (accepted for publication).

Daif, N., Nunno, F.D., Granata, F., Difi, S., Kisi, O., Heddiam, S., Kim, S., Adnan, R.M., Zounemat-Kermani, M. Forecasting maximal and minimal air temperatures using explainable machine learning: Shapley additive explanation versus local interpretable model-agnostic explanations, *Stoch Environ Res Risk Assess.*, (accepted for publication).

Alsulamy, S., Kumar, V., Kisi, O., Kedam, N., Rathnayake, N. Enhancing Water Level Prediction Using Ensemble Machine Learning Models: A Comparative Analysis, *Water Resources Management*, (accepted for publication).

Piri, J., Kahkha, M.R.R., Oveisi, A.R., Sahragard, H.P., Kisi, O. Hybrid machine learning approach integrating GMDH and SVR for heavy metal concentration prediction in dust samples, *Environmental Science and Pollution Research*, (accepted for publication).

Merabet, K., Daif, N., Di Nunno, F., Granata, F., Difi, S., Kisi, O., Heddiam, S., Kim, S., Zounemat-Kermani, M. 2025. Improving the Prediction of Global Solar Radiation Using Interpretable Boosting Algorithms Coupled SHAP and LIME Analysis: A Comparative Study, *Theoretical and Applied Climatology*, 156, 292. <https://doi.org/10.1007/s00704-025-05507-x>.

Khan, Y., Kumar, V., Gacem, A., Satpathi, A., Setiya, P., Surbhi, K., Nain, A.S., Vishwakarma, D.K., Obaidullah, A.J., Yadav, K.K., Kisi, O. 2025. Comparative Evaluation of Hybrid and Individual Models for Predicting Soybean Yellow Mosaic Virus Incidence, *Scientific Reports*, 15, 15790. <https://doi.org/10.1038/s41598-025-99427-5>.

Samani, S., Vadiati, M., Kisi, O. 2025. Predicting Groundwater Levels in Coastal Aquifers Using Deep Learning Models: A Comparative Study of Sedimentary and Metamorphic Aquifers in Nova Scotia, *Earth Science Informatics*, 18, 389. <https://doi.org/10.1007/s12145-025-01856-3>.

Adnan, R.M., Wang, M., Masood, A., Kisi, O., Shahid, S., Zounemat-Kermani, M. 2025. Applications of Advanced Optimized Neuro Fuzzy Models for Enhancing Daily Suspended Sediment Load Prediction, *Computer Modeling in Engineering & Sciences*, 143(1), 1249-1272. <https://doi.org/10.32604/cmes.2025.062339>.

Kisi, O., Heddham, S., Parmar, K., Petroselli, A., Kulls, C., Zounemat-Kermani, M. 2025. Integrating Gaussian Process Regression with K-means Clustering for Enhanced Short-Term Rainfall-Runoff Modeling, *Scientific Reports*, 15, 7444. <https://doi.org/10.1038/s41598-025-91339-8>.

Merabet, K., Di Nunno, F., Granata, F., Kim, S., Adnan, R.M., Heddham, S., Kisi, O., Zounemat-Kermani, M. 2025. Predicting Water Quality Variables using Gradient Boosting Machine: Global versus Local Explainability using SHapley Additive Explanations (SHAP), *Earth Science Informatics*, 18, 298. <https://doi.org/10.1007/s12145-025-01796-y>.

Allam, M., Zhang, L., Sun, X., Kisi, O., Kushwaha, N.L., Yongxin, L., Menenti, M., Heddham, S. 2025. Enhancing Chlorophyll-a Predictions Using Optimal Machine Learning Models and Field Spectral Reflectance, *Earth Science Informatics*, 18, 384. <https://doi.org/10.1007/s12145-024-01658-z>.

Adnan, R.M., Mo, W., Ewes, A.A., Heddham, S., Kisi, O., Zounemat-Kermani, M. 2025. Enhancing Streamflow Prediction Accuracy: A Comprehensive Analysis of Hybrid Neural Network Models with Runge-Kutta with Aquila Optimizer, *International Journal of Computational Intelligence Systems*, 17, 293 (2024). <https://doi.org/10.1007/s44196-024-00699-y>.

Zounemat-Kermani, M., Kermani, S.G., Fadaee, M., Aldallal, A., Kisi, O., Ramezani-Charmahineh, A. 2025. Modeling river water dissolved organic matter using ensemble computing and genetic programming techniques, *Ecohydrology & Hydrobiology*, 25(2), 292-303. <https://doi.org/10.1016/j.ecohyd.2024.04.003>.

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Al-Janabi, A.M.S., Dibs, H., Sammen, S.S., Yusuf, B., Ikram, R.M.A., Alzuhairy, S.H., Kisi, O. 2025. Comparison Analysis of Seepage Through Homogenous Embankment Dams Using Physical, Mathematical and Numerical Models. *Arabian Journal for Science and Engineering*, 50, 8143–8152. <https://doi.org/10.1007/s13369-024-09224-x>.

Mirkhorli, P., Bagherzadeh, M., MohammadNezhad, H., Ghaderi, A., Kisi, O. 2025. Energy Dissipation Prediction for Trapezoidal–Triangular Labyrinth Weirs Based on Soft Computing Techniques: A Comparison, *ACS&EST Water*, 5, 3, 1453–1468. <https://doi.org/10.1021/acsestwater.4c01192>.

Ismail M.A., Taki, A.G., Kumar, S., Sammen, S.S., Amari, A., Bongale, A., Kisi, O., Salem, A. 2025. Effectiveness of waste-derived MIL type MOFs in removing PFOA and PFAS pollutants for environmental remediation, *Scientific Reports*, 15:9439. <https://doi.org/10.1038/s41598-025-93854-0>.

Shabbir, M., Chand, S., Iqbal, F., Kisi, O. 2025. A Novel Hybrid Approach for River Inflow Modelling: Case Study of Indus River Basin, Pakistan, *ASCE J. of Hydrologic Eng.*, 30(3): 04025006. <https://doi.org/10.1061/JHYEFF.HEENG-6368>.

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Pourebrahim, S., Ehteram, M., Hadipour, M., Chen, J.E., Kisi, O., El-Shafie, A., Ahmed, A.N. (2024). Advancements in Evaporation Measurement: Introducing the GRU-MKELM-GPR Model, *Environmental Sciences Europe*, 36:202. <https://doi.org/10.1186/s12302-024-01028-y>.

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Aliyu, U.S., Cavusoglu, B., Hassanie, S., Abba, S.I., Sammen, S.S., Kisi, O. (2024). Food, energy, and water security sustainability; an asymmetric approach for achieving sustainable development goals, *Discover Sustainability*, 5:417 | <https://doi.org/10.1007/s43621-024-00557-z>.

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Adnan, R.M., Keshtegar, B., Abusurrah, M., Kisi, O., Alkabaa, A.S. (2024). Enhancing Solar Radiation Prediction Accuracy: A Hybrid Machine Learning Approach Integrating Response Surface Method and Support Vector Regression, *Ain Shams Engineering Journal*, 15(11), 103034. <https://doi.org/10.1016/j.asej.2024.103034>.

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Tripathi, S., Kaur, A., Brar, A.S., Sekhon, K.S., Singh, S., Malik, A., Kisi, O. (2024). Optimizing yield and water productivity in summer mung bean (*Vigna radiata L.*) through crop residue management and irrigation strategies, *BMC Plant Biology*, 24, 1012. <https://doi.org/10.1186/s12870-024-05640-1>.

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Morovati, R., Kisi, O. 2024. Utilizing Hybrid Machine Learning Techniques and Gridded Precipitation Data for Advanced Discharge Simulation in Under-Monitored River Basins, *Hydrology*, 11(4), 48. <https://doi.org/10.3390/hydrology11040048>.

Kisi, O., Azamathulla, H.M., Cevat, F., Kulls, C., Kuhdaragh, M., Fuladipannah, M. 2024. Enhancing river flow predictions: Comparative analysis of machine learning approaches in modeling stage-discharge relationship, *Results in Engineering*, 22, 102017. <https://doi.org/10.1016/j.rineng.2024.102017>.

Samani, S., Vadiati, M., Kisi, O., Ghasemi, L., Farajzadeh, R. (2024). Qanat discharge prediction using a comparative analysis of machine learning methods, *Earth Science Informatics*, 17, 4597–4618. <https://doi.org/10.1007/s12145-024-01409-0>.

Idowu, M., Kulls, C., Kisi, O. (2024). A new method for monthly streamflow prediction using multi-source data: Range Dependent Multivariate Adaptive Regression Splines-Genetic Algorithm, *Hydrological Sciences Journal*, 69(13), 1860–1880. <https://doi.org/10.1080/02626667.2024.2394639>.

Ullah, S., Ali, U., Rashid, M., Haider, S., Kisi, O., Vishwakarma, D.K., Raza, A., Alataway, A., Dewidar, A.Z., Mattar, M.A. (2024). Evaluating land use and climate change impacts on Ravi river flows using GIS and hydrological modeling approach, *Scientific Reports*, 14, 22080. <https://doi.org/10.1038/s41598-024-73355-2>.

Boudjerda, M., Touaibia, B., MihouBi, M.K., Kisi, O., Ehteram, M., El-Shafie, A. (2024). Optimization of reservoir operation by sine cosine algorithm: A case of study in Algeria, *Sustainable Computing: Informatics and Systems*, 44, 101035. <https://doi.org/10.1016/j.suscom.2024.101035>.

Gupta, S.K., Kumar, P., Kishore, G., Ali, R., Al-Ansari, N., Vishwakarma, D.K., Kuriqi, A., Pham, Q.B., Kisi, O., Heddiam, S., Mattar, M.A. (2024). Sensitivity of Daily References Evapotranspiration to Weather Variables in Tropical Savanna: a modelling framework based on neural network, *Applied Water Science*, 14, 138. <https://doi.org/10.1007/s13201-024-02195-2>.

Shabbir, M., Chand, S., Iqbal, F., Kisi, O. (2024). Hybrid Approach for Streamflow Prediction: LASSO-Hampel Filter Integration with Support Vector Machines, Artificial Neural Networks, and Autoregressive Distributed Lag Models, *Water Resources Management*, 38, 4179–4196. <https://doi.org/10.1007/s11269-024-03858-0>.

Mahtabi, G., Kisi, O., Mozaffari, S., Taran, F. (2024). Predictive Modeling of Daily Precipitation Occurrence Using Weather Data of Prior Days in Various Climates, *Earth Science Informatics*, 17, 2381–2397. <https://doi.org/10.1007/s12145-024-01289-4>.

Heidari, S., Vadiati, M., Nejad, S.A.G., Sarhadi, J., Kisi, O. (2024). Modeling Zn availability and uptake by citrus plants using easily measured soil characteristics, *Environmental Modeling & Assessment*, 29, 883–900. <https://doi.org/10.1007/s10666-024-09962-0>.

Karbasi, M., Ghasemian, M., Jamei, M., Malik, A., Kisi, O. (2024). Developing Extended and Unscented Kalman Filter Based Neural Networks to Predict Cluster Induced Roughness in Gravel Bed Rivers, *Water Resources Management*, 38, 3023–3048. <https://doi.org/10.1007/s11269-024-03803-1>.

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Kisi, O., Ozturk, O., 2007. Forecasting River Flows and Estimating Missing Data Using Soft Computing Techniques, *International Congress on River Basin Management*, 22-24 March, Antalya, Turkey, p.655.

Kisi, O. 2006. Modeling Evaporation Using Multi-layer Perceptron and Radial Basis Neural Networks, *Seventh International Congress on Advances in Civil Engineering*, Yildiz Technical University, 11-13 October, Istanbul, p.341.

Aydin, K., Kisi, O. 2006. Estimate of Daily Evaporation through Sugeno Fuzzy System, *Seventh International Congress on Advances in Civil Engineering*, Yildiz Technical University, 11-13 October, Istanbul, p.334.

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Kisi, O., 2005. Modelling evaporation by artificial neural networks using meteorological data, *Symposium on Modern Methods in Science (BMYS'2005)*, 16-18 November, Kocaeli, Turkey, 790-797.

Kisi, O., 2005. Determination of stage-discharge relationship of Kızılırmak River by multi-layer neural networks, Symposium on Water Resources Engineering II, 11-24 October, Izmir, Turkey, 725-735.

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Kisi, O., 2004. Prediction of Filyos Stream's flows using neural networks and regression techniques, Fourth Hydrology Congress, 23-25 June, Istanbul, Turkey, 347-353.

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Kisi, O., Partal T., 2003. Wind velocity forecasting using artificial neural networks and autoregressive models, Symposium on Atmosphere Science III, Istanbul Technical University (ITU), Istanbul, Turkey, 166-172.

Kisi, O., 2002. River sediment yield modeling using artificial neural networks, *ASCE's First Virtual World Congress for Civil Engineering*, June-September, Web-site: <http://www.ceworld.org/ceworld/Presentations/WaterandEnvironment/Kisi.cfm>.

Toprak, Z. F., Kisi, O., Aytek, A., Savcı, M. E., 2002. The determination of the monthly crop water requirement by fuzzy logic approach, *Fifth International Congress on Advances in Civil Engineering*, Istanbul Technical University, 25-27 September, Istanbul, Turkey, 1203-1212.

Kisi, O., Aytek, A., Toprak, Z. F., 2002. River suspended sediment forecasting using artificial neural networks, *Fifth International Congress on Advances in Civil Engineering*, Istanbul Technical University, 25-27 September, Istanbul, Turkey, 1271-1280.

Kisi, O., 2002. The prediction of hourly mean wind velocities with artificial neural networks, *Fourth National Renewable Energy Symposium, (UTES'2002)*, October, Istanbul, Turkey, 429-436.

Kisi, O., Aydın, S., 2001. Modeling of Goksudere River flow by using artificial neural networks, *International Symposium on Water Resources and Environmental Impact Assessment*, July, Istanbul, Turkey, 377-388.

Kisi, O., 2001. An application about streamflow forecasting, *Symposium on Modern methods in Engineering (MMYS'2001)*, September, Istanbul, Turkey, 137-144.

Kisi, O., Unes, F., Cengiz, M. T., 2001. Flood frequency analysis of Antalya extreme precipitations, *First Water Congress*, Ocak, Istanbul, Turkey, 197-206.

Kara, H. B., Kaya, Z., Kisi, O., 1999. An investigation of Aşağı Beyçayır(Sarız-Kayseri) landslide, *Landslide Symposium*, May, Adana, Turkey.

Kara, H. B., Ardichoglu, M., Kisi, O., Aktas, O., 1998. Slope stability analysis in soil filled dams; case: Bahçelik Dam, *The Seminars of Soil Mechanics Problems in Water Structures*, Turkey Water Works (DSİ), TAAK, September, Balıkesir, Turkey, 117-129.

Projects

Identifying the impact of hydro-environmental data and large climate signals on groundwater dynamics in Jordan / developing prediction models using remote sensing tools, wavelet analysis, innovative polygon trend analysis and range-dependent deep learning approach (revised version was submitted to DFG).

Investigation of temporal and spatial variability of precipitation, evaporation and streamflow of Germany using innovative trend analysis methodologies, *Alexander von Humboldt-Stiftung, Philipp Schwarz Initiative*, 2021-2023.

River sediment load modelling using fuzzy-neuro approach, *The Scientific and Technical Research Council of Turkey*, Project Code: 106Y191, 2006-2008.

Development of a computer package program for the frequency analysis and depth-duration-recurrence relations of 14 sequential-duration recorded annual rainfall peaks series from 5 minutes to 24 hours, *The Scientific and Technical Research Council of Turkey*, Project Code: 106Y192, 2006-2008.

Determination of discharge-stage relationship and estimation of streamflow by using artificial neural networks, *Erciyes University (EU)*, Project Code: MFA-04-04, 2004-2006.

Long and short-term streamflow prediction and missing data infilling using soft computing techniques, *Erciyes University (EU)*, Project Code: FBA-06-26, 2006-2008.

Estimating suspended sediment load in natural rivers using artificial intelligence methods, *Erciyes University (EU)*, Project Code: FBT-07-30, 2007-2008.

Determination of river stage-discharge relationship using multi-layer neural networks, *Erciyes University (EU)*, Project Code: FBT-07-31, 2007-2008.

Modeling lake level fluctuation using artificial neural networks combined with wavelet, *Erciyes University (EU)*, Project Code: FBT-1042, 2009-2010.

Wavelet neural networks for estimating short-term and long-term streamflows, *Erciyes University (EU)*, Project Code: FBT-1040, 2009-2010.

PROFESSIONAL ACTIVITIES

Editorial Board:

Associate Editor of Journal of Hydrologic Engineering (ASCE), (2015-).

In Editorial Board for Hydrology Research, (2019-).

In Editorial Board for Hydrological Sciences Journal, (2021-).

In Editorial Board for KSCE Journal of Civil Engineering, (2023-).

In Editorial Board for Int. J. of Numerical Methods for Calculation and Design in Eng., (2025-)

In Editorial Board for International J. of Hydrology Science and Technology, (2023-).

In Editorial Board for J. of Water and Land Development, (2022-).

Associate Editor of J. of Korea Water Resources Association, (2023-).

Editorial Board of Larhyss Journal, (2018-).

Associate Editor of Eastern-European J. of Enterprise Technologies, (2023-).

In Editorial Board for KSCE J. of Civil and Environmental Eng. Research, (2023-).

Associate Editor of ISH Journal of Hydraulic Engineering, (2015-).

Associate Editor of Arabian Journal of Geosciences (AJGS), (2017-).

Associate Editor of Knowledge-Based Engineering and Science, (2023-).

Associate Editor of Water and Soil Management and Modeling, (2024-).

Associate Editor of AUIQ Technical Engineering Science, (2024-).

Guest Editor for Special Issue on Hydrological Hazards in a Changing Environment-Early Warning, Forecasting, and Impact Assessment (Advances in Meteorology), 2015.

Guest Editor for Special Issue on Machine Learning with Metaheuristic Algorithms for Sustainable Water Resources Management (Sustainability), 2021.

Guest Editor for Special Issue on Sustainable Management of Water and Environment with the Aid of Advanced Computing Methods (Sustainability), 2022.

Reviewer for SCI(E) indexed journals:

Journal of Hydrology (47 times).

Hydrological Sciences Journal (IAHS) (33 times).

Hydrology Research (24 times).

Water Resources Management (22 times).

Journal of Hydroinformatics (21 times).

Journal of Hydrologic Engineering (ASCE) (19 times).

Advances in Engineering Software (18 times).

Hydrological Processes (15 times).

Computers and Electronics in Agriculture (14 times).

Theoretical and Applied Climatology (10 times).

Water Resources Research (8 times).

Irrigation Science (8 times).

Neural Computing & Applications (8 times).

Engineering Applications of Computational Fluid Mechanics (8 times).

Journal of Irrigation and Drainage Engineering (ASCE) (8 times).

Water and Environment Journal (7 times).

Natural Hazards (7 times).

Stochastic Environmental Research and Risk Assessment (5 times).

Environmental Fluid Mechanics (4 times).

Applied Soft Computing (4 times).

Science of the Total Environment (4 times).

Agricultural Water Management (4 times).

Water Research (4 times).

Journal of Environmental Management (3 times).

Journal of Water and Climate Change (3 times).

Remote Sensing (3 times).

Journal of Earth System Science (2 times).

Int. J. of River Basin Management (2 times).

Scientific Research and Essays (2 times).

Canadian Journal of Civil Engineering (2 times).

Expert System (2 times).

Water Science and Technology (2 times).

CLEAN – Soil, Air, Water (2 times).

Kuwait J. of Sci. and Engineering (2 times).

Journal of Urban and Environmental Engineering (2 times).

Soft Computing (2 times).

Journal of Climatology (2 times).

Journal of the American Water Resources Association (2 times)

Journal of Computing in Civil Engineering (ASCE) (2 times).

Journal of Hydro-environment Research (2 times).

Applied Mathematical Modelling (2 times).

Energy (2 times).

Renewable Energy (2 times).

Environmental Pollution (2 times).

Reviewer for Computers and Concrete (2 times).

Arabian Journal of Geosciences (AJGS) (2 times).

Water (2 times).

Environmental Monitoring and Assessment (2 times).

Ocean Engineering (2 times).

Pure and Applied Geophysics (2 times).

Ecological Informatics (2 times).

Acta Geophysica (2 times).

Energy Reports (2 times).

Journal of Contaminant Hydrology (2 times).

International Journal of Sediment Research (2 times).

Groundwater for Sustainable Development.

Environmental Technology & Innovation.

Journal of Agricultural Water Management.

Environmental Modelling & Software.

Environmental Modelling and Assessment.

Advances in Water Resources.

Journal of Engineering Research of Kuwait University.

Surveys in Geophysics.

Earth Science Informatics.

Expert Systems With Applications.

Environmetrics.

Environmental Earth Sciences.

Journal of the Geological Society of India.

TEKNIK DERGI (IMO).

Computers & Geosciences.

Journal of Mountain Science.

International J. of Natural Resources and Marine Sciences.

ASCE J. of Energy Engineering..

Journal of Hydraulic Engineering (ASCE).

Flow Measurement and Instrumentation.

Water SA.

Environmental Engineering Science.

Journal of Environmental Informatics.

Scientia Agricola.

International Journal of the Physical Sciences.

KSCE Journal of Civil Engineering.

Meteorological Applications.

Nondestructive Testing and Evaluation.

Computers and Electronics in Agriculture.

Gazi University Isı Bilimi ve Tekniği Dergisi.

Journal of the Faculty of Engineering and Architecture of Gazi University.

Geo-Marine Letters.

Journal of Coastal Conservation.

River Research and Applications.

Indian Journal of Engineering & Materials Sciences.

CMES, Computer Modeling in Engineering & Sciences.

Computers & Fluids.

CATENA.

Journal of Coastal Research.

Neurocomputing.

International Journal of Global Warming.

Fire Safety Journal.

Desalination and Water Treatment.

Journal_of_Agricultural Science.

Environmental Engineering and Management Journal.

Reviewer for Journal of Hydrology and Hydromechanics.

Reviewer for Journal of Agricultural Science and Technology.

Reviewer for Meteorology and Atmospheric Physics.

Reviewer for International Journal of Sustainable Society.

Reviewer for Computers and Concrete.

Reviewer for Solar Energy.

Reviewer for Measurement.

Reviewer for Civil Engineering Infrastructures Journal.

Engineering Structures.

IEEE Transactions on Reliability.

Engineering with Computers.

Scientia Iranica.

Journal of African Earth Sciences.

Polish Journal of Environmental Studies.

Engineering Geology.

Engineering Failure Analysis.

Sustainability.

PLOS ONE.

Reviewer for University of Nis Faculty of Civil Engineering and Achitecture, Serbia (monograph evaluation), on October, 2008.

Expert for the evaluation of international projects:

Expert for the project proposal entitled ‘Advanced Engineering Platform for Proactive Risk Mitigation through Holistic Monitoring and Data Analysis’ (TSFGuard), SPPW/TSFGuard/0126/2025 by Paweł Stefaniak, National Centre for Research and Development (Poland), on July, 2025.

Expert for the project proposal entitled ‘A Multimodal Foundation Model for Environmental Analysis and Forecasting’, CCEC02-0220-250086 by Dr. AbdlMonem H. Beitelmal, Qatar Natuinal Research Fund, 298,650 USD budget, on April, 2025.

Expert for the project proposal entitled ‘Integration of numerical modelling and machine learning in prediction of the environmental impacts of outfalls in Qatar under a changing climate’, CCEC02-0214-250060 by Dr. Hazim Qiblawey, Qatar Natuinal Research Fund, 299,200 USD budget, on April, 2025.

Expert for the project proposal entitled ‘Integrating Ai For Real-Time Groundwater Monitoring and Water Quality Assessment in Qatar Basin Using Scalable IoT and Edge Computing’, DAR01-1110-24309 by Dr. Ravi RAngarajan, Qatar Natuinal Research Fund, 199,999 USD budget, on January, 2025.

Expert for the project proposal entitled ‘Sustainable Construction Material Choices in Qatar: A Comprehensive Evaluation of Concrete vs Wood for Environmental, Social, Economic, and Energy Efficiency Impact’, CCEC01-1017-230065 by Dr. Ahmad Diraki, Qatar Natuinal Research Fund, 595,998 USD budget, on January, 2024.

Expert for the project proposal entitled ‘Upcycling Construction Waste Materials for Sustainable Infrastructure’, CCEC01-1005-230028 by Dr. Eyad Masad, Qatar Natuinal Research Fund, 599,532 USD budget, on January, 2024.

Expert for the project proposal entitled ‘Development of Sustainable Asphalt Mixtures Incorporating Recycled Carbonated Aggregates’, ARG01-0429-230026 by Dr. Eyad Masad, Qatar Natuinal Research Fund, 739,683 USD budget, on July, 2023.

Expert for the project proposal entitled ‘Developing Digital Twin Technologies for Infrastructure Asset Management using Smart Sensor Networks’, ARG01-0531-230430 by Dr. Usama Ebead, Qatar Natuinal Research Fund, 739,367 USD budget, on July, 2023.

Expert for the project proposal entitled ‘REPURPOSE-REPURPOSing building fit-out elements by digital dEsign for circularity’, ARG01-0604-230497 by Dr. Djamel Boussaa, Qatar Natuinal Research Fund, 705,844 USD budget, on July, 2023.

Expert for the evaluation of Ph.D. Thesis:

Expert for the evaluation of Ph.D. Thesis of Chalachew Muluken Liyew, a candidate for the award of Ph.D. Degree, in Modeling and Data Science, University of Torino, on July, 2025.

Expert for the evaluation of Ph.D. Thesis of Loh Wing Son, a candidate for the award of Ph.D. Degree, on Engineering, Universiti Tunku Abdul Rahman, on June, 2025.

Expert for the evaluation of Ph.D. Thesis of Dhasarathan S, a candidate for the award of Ph.D. Degree, on Engineering, Anna University Chennai, India, on December, 2024.

Expert for the evaluation of Ph.D. Thesis of Tan Yi Xun, a candidate for the award of Ph.D. Degree, on Engineering, UCSI University, Malaysia, on April, 2024.

Expert for the evaluation of Ph.D. Thesis of Wei Yaxing, a candidate for the award of Ph.D. Degree, on Engineering, University of Malaya, on March, 2024.

Expert for the evaluation of Ph.D. Thesis of Nazirul Mubin Bin Zahari, a candidate for the award of Ph.D. Degree, on Engineering, Universiti Tenaga Nasional, on January, 2024.

Expert for the evaluation of Ph.D. Thesis of Shah Shalaka Sanjay, a candidate for the award of Ph.D. Degree, on Science and Technology, Savitribai Phule Pune University, on July, 2023.

Expert for the evaluation of Ph.D. Thesis of Tan Woon Yang, a candidate for the award of Ph.D. Degree, on Engineering, University of Malaya, on July, 2023.

Expert for the evaluation of Ph.D. Thesis of Vivien Lai Mei Yen, a candidate for the award of Ph.D. Degree, on Engineering, Universiti Tunku Abdul Rahman, on March, 2023.

Expert for the evaluation of Ph.D. Thesis of Nishant Kumar, a candidate for the award of Ph.D. Degree, Electrical and Instrumentation Engineering Department, Thapar Institute of Engineering & Technology, on September, 2021.

Expert for the evaluation of Ph.D. Thesis of Pavitra Kumar, a candidate for the award of Ph.D. Degree, Faculty of Engineering, University of Malaya, on March, 2021.

Expert for the evaluation of Ph.D. Thesis of Zacarias Gulliver Acevedo, a candidate for the award of Ph.D. Degree in "Fluvial Dynamics and Hydrology Research Group, Department of Agronomy", University of Cordoba, on December, 2020.

Expert for the evaluation of Ph.D. Thesis of Mozafar Ansari, a candidate for the award of Ph.D. Degree in "Water Resources Engineering", University of Malaya, on September, 2020.

Expert for the evaluation of Ph.D. Thesis of Taher J. M. Abunama, a candidate for the award of Ph.D. Degree in "Hydrology", Savitribai Phule University of Malaya, on March, 2019.

Expert for the evaluation of Ph.D. Thesis of Maryam Hamouleh Kheirollahpour, a candidate for the award of Ph.D. Degree, Institute for Advanced Studies, University of Malaya, on November, 2018.

Expert for the evaluation of Ph.D. Thesis of Kh. Mahfuz Ud Darain, a candidate for the award of Ph.D. Degree, Faculty of Engineering, University of Malaya, on October, 2016.

Expert for the evaluation of Ph.D. Thesis of Pradnya R. Dixit, a candidate for the award of Ph.D. Degree in "Hydrology", Savitribai Phule Pune University, on September, 2016.

Expert for the evaluation of Ph.D. Thesis of Patil Amit Prakash, a candidate for the award of Ph.D. Degree in "Hydrology", National Institute of Technology Karnataka, on July 2016.

Expert for the evaluation of Ph.D. Thesis of Nandita Singh, a candidate for the award of Ph.D. Degree in "Department of Earth Sciences", Indian Institute of Technology, on March 2014.

Expert for the evaluation of Ph.D. Thesis of Anil Kumar Kar, a candidate for the award of Ph.D. Degree in "Civil and Environmental Technology", Indian Institute of Technology, on September 2011.

Expert for the evaluation of Ph.D. Thesis of Anil Kumar Lohani, a candidate for the award of Ph.D. Degree in "Hydrology", Indian Institute of Technology, on March, 2008.

Thesis supervision:

MSc

Lijin Zhou, "Investigating Spatial-Temporal Variation of Precipitations in Schleswig-Holstein District Using Statistical and Graphical Based Trend Methods", Lübeck University of Applied Science, 2024.

Mariam Idowu, "Investigating the relationships between streamflow and climatic variables in northern Germany and developing prediction model by improved machine learning methods using ground- and satellite-based data", Lübeck University of Applied Science, 2023.

Vahdettin Demir, "Flood hazard mapping by using geographic information system and hydraulic model: Mert River, Samsun, Turkey", Canik Basari University, 2015.

Halil İbrahim Fedakar, “River suspended sediment concentration modelling using fuzzy genetic approach”, Erciyes University, 2012.

Ersin Yaşlı, “Wavelet neural networks for estimating short-term and long-term streamflows”, Erciyes University, 2010.

Yasin Kılıç, “Modeling evapotranspiration using artificial neural networks and comparison with empirical methods”, Erciyes University, 2010.

Mehmet Güneş, "Modeling lake level fluctuations of Sultan Sazligi using wavelet neural networks", Erciyes University, 2010.

Fatih Cevat, "Determination of river stage-discharge relationship using artificial intelligence methods", Erciyes University, 2009.

Necmiye Nas, "River sediment load modelling using artificial intelligence techniques", Erciyes University, 2008.

Selcan Afşar, "Pan evaporation estimation using artificial neural networks and fuzzy logic approaches", Erciyes University, 2008.

PhD

Levent Latifoglu, “Hydrologic forecasting using Hilbert Huang transform”, Erciyes University, 2017.

Murat Ay, “Modeling water quality parameters using artificial intelligence techniques, 2014.

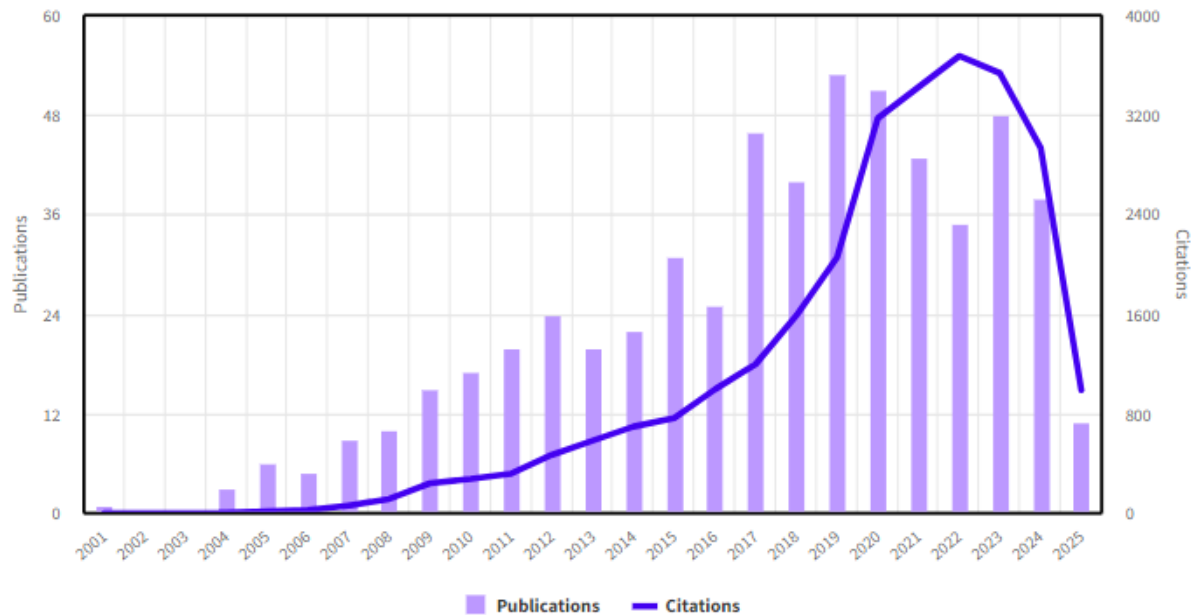
Ömer Bilhan, “Prediction of lateral outflow over triangular labyrinth side weirs using soft computing approaches”, Firat University, 2011.

Citation statistics:

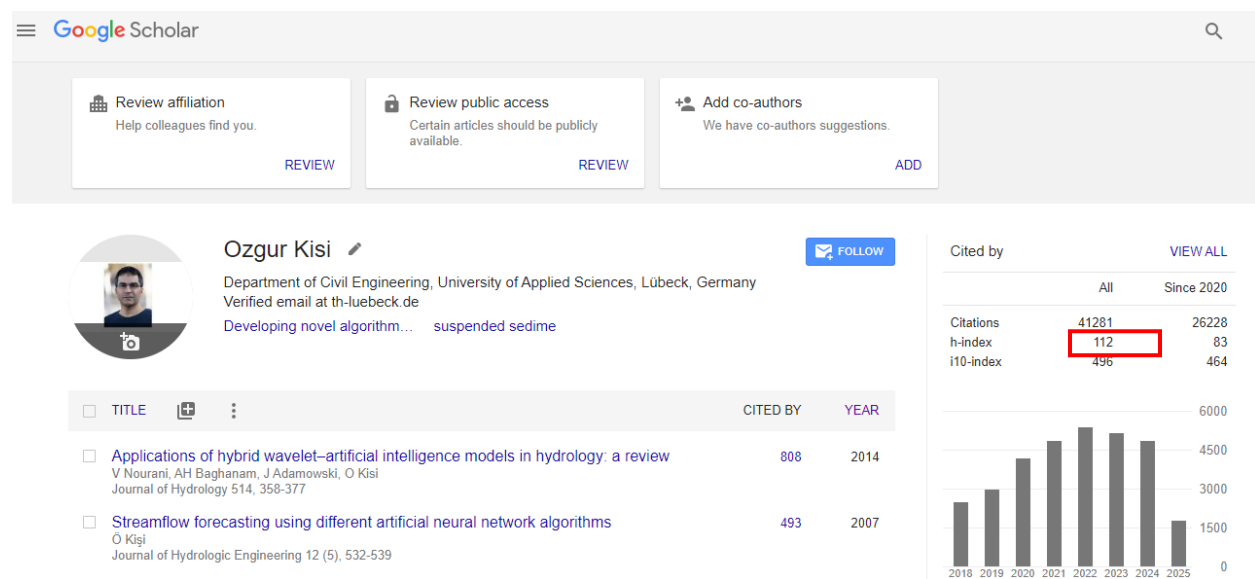
According to the Web of Science (h-index: 91)

H-Index

Times Cited and Publications Over Time



According to the Google Scholar (h-index: 112)



AWARDS

- 2006 Tison Award (given by the International Association of Hydrological Sciences (IAHS), URL: <https://iahs.info/About-IAHS/Awards/Tison-Award/Tison-Award-winners/>)
- 2006 Popular Science Award (given by the Popular Science Journal)
- Scientific Encouragement Award (Erciyes University President), 2006.
- Scientific Publication Honour Award for 2006 (Erciyes University Engineering Faculty)
- Distinguished Young Scientist Award, (FABED, Fevzi Akkaya Foundation for Scientific Research, URL: https://www.fabed.com/sonuclar.php?p=2007_basari), 2007.
- Scientific Publication Honour Award for 2007 (Erciyes University Engineering Faculty)
- Scientific Publication Honour Award for 2008 (Erciyes University Engineering Faculty)
- Scientific Publication Honour Award for 2010 (Erciyes University Engineering Faculty)
- Scientific Publication Honour Award for 2011 (Erciyes University Engineering Faculty)
- Scientific Publication Honour Award for 2014 (Basari University)
- Scientific Publication Honour Award for 2015 (Basari University).
- Best Reviewer Award given by Hydrological Sciences Journal, 2020.
- Distinguished Scientist Award (golden medal), Ilia State University, 2021.
- He was selected as the highly cited researcher by the Clarivate in 2021 (https://recognition.webofscience.com/awards/highly-cited/2021/?utm_campaign=EM1_Highly_Cited_Researchers_SAR_Global_2021_Recipients_EN&utm_medium=email&utm_source=Eloqua).
- 2023 Best Discussion Award (EWRI-ASCE).
- In 2020–2025, Dr. Kisi was recognized among the top 2% of scientists worldwide according to a global ranking by Stanford University, (<https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/8>).

LANGUAGE

Turkish, native language
English (good)
German (B1 level)

COMPUTER EXPERIENCE

Operating systems: Windows.
Software: MS Excel, MS Word, MS Power Point, Matlab.
Programming languages: MATLAB (good), Python

PROFESSIONAL MEMBERSHIPS

Principal member of Turkish Academy of Science (selected in 2012)
American Society of Civil Engineers
IAHS (International Association of Hydrological Sciences)
IAMG (International Association for Mathematical Geosciences)
Fuzzy Logic and Technology Club in ITU.

HOBBIES

Gymnastics
WingTsun (kung fu)
Swimming
Chess
Draughts

REFERENCES

Andrea Petroselli, Associate Professor of Hydrology and Hydraulics, Rector Delegate for Sustainability Department of Economy, Engineering, Society and Business (DEIM), Tuscia University, Viterbo, Italy. Tel: +39 0761 357348 (direct), fax: +39 0761 357250, e-mail: petro@unitus.it

Vijay Singh, Distinguished Professor and Regents Professor, Caroline & William N. Lehrer Distinguished Chair in Water Engineering, Email: vsingh@tamu.edu

Latif Kalin, Professor, School of Forestry & Wildlife Sciences, Associate Director, Center for Environmental Studies at the Urban-Rural Interface, Auburn University, Auburn, USA. kalinla@auburn.edu

Celso A. G. Santos, Professor, Department of Civil and Environmental Engineering, Federal University of Paraíba, Brazil. +55-83 32167684 / 27. celso@ct.ufpb.br

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Ibrahim Demir, Professor, Hydroinformatics Lab, RCSE, ByWater, Tulane University, USA. 319-335-5780. ibrahim-demir@uiowa.edu

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Tefaruk Haktanir, Professor, Department of Civil Engineering, Hydraulics Division, Erciyes University, Kayseri, Turkey. + 90-352 437 4937 / 32325. thaktan@erciyes.edu.tr

Ravinesh Deo, Senior Lecturer, School of Agricultural, Computational and Environmental Sciences, University of Southern Queensland, Australia. +61 7 3470 4430 / 4430. Ravinesh.Deo@usq.edu.au