

## Res. Asst. PhD Cenk Sezen

### Personal Information

**Email:** cenk.sezen@omu.edu.tr

**Web:** <https://avesis.omu.edu.tr/cenk.sezen>

### International Researcher IDs

ScholarID: CF72pu0AAAAJ

ORCID: 0000-0003-1088-9360

Publons / Web Of Science ResearcherID: AAA-3312-2022

ScopusID: 57207685341

Yoksis Researcher ID: 248551

### Education Information

Post Doctorate, Technische Universitaet Dresden, Germany 2023 - Continues

Doctorate, Ondokuz Mayis University, Lisansüstü Eğitim Enstitüsü, İnşaat Mühendisliği (Dr), Turkey 2018 - 2022

Postgraduate, Ondokuz Mayis University, Fen Bilimleri Enstitüsü, İnşaat Mühendisliği (YI) (Tezli), Turkey 2016 - 2018

Undergraduate, Istanbul Technical University, İnşaat Fakültesi, İnşaat Mühendisliği Bölümü, Turkey 2009 - 2014

### Foreign Languages

English, C1 Advanced

German, B1 Intermediate

### Dissertations

Doctorate, Türkiye'nin farklı havzalarında kavramsal ve kavramsal-veri güdümlü hibrit modeller ile yağış-akış modellemesi, Ondokuz Mayis University, Lisansüstü Eğitim Enstitüsü, İnşaat Mühendisliği (Dr), 2022

Postgraduate, Küresel atmosferik indislerin Türkiye'deki sıcaklık ve yağış verilerine olan etkisi, Ondokuz Mayis University, Fen Bilimleri Enstitüsü, İnşaat Mühendisliği (YI) (Tezli), 2018

### Research Areas

Hydrology-Hydrometeorology, Civil Engineering, Hydraulic

### Academic Titles / Tasks

Research Assistant, Ondokuz Mayis University, Mühendislik Fakültesi, İnşaat Mühendisliği Bölümü, 2016 - Continues

### Published journal articles indexed by SCI, SSCI, and AHCI

1. Improving the simulations of the hydrological model in the karst catchment by integrating the

#### **conceptual model with machine learning models**

Sezen C., Sraj M.

THE SCIENCE OF THE TOTAL ENVIRONMENT AN INTERNATIONAL JOURNAL FOR SCIENTIFIC RESEARCH INTO THE ENVIRONMENT AND ITS RELATIONSHIP WITH MAN, no.926, pp.171684, 2024 (SCI-Expanded)

- II. **Hourly rainfall-runoff modelling by combining the conceptual model with machine learning models in mostly karst Ljubljana River catchment in Slovenia**  
Sezen C., Sraj M.  
STOCHASTIC ENVIRONMENTAL RESEARCH AND RISK ASSESSMENT, no.38, pp.937-961, 2024 (SCI-Expanded)
- III. **Pan evaporation forecasting using empirical and ensemble empirical mode decomposition (EEMD) based data-driven models in the Euphrates sub-basin, Turkey**  
Sezen C.  
EARTH SCIENCE INFORMATICS, vol.16, pp.3077-3095, 2023 (SCI-Expanded)
- IV. **A new wavelet combined innovative polygon trend analysis (W-IPTA) approach for investigating the trends in the streamflow regime in the Konya Closed Basin, Turkey**  
Sezen C.  
THEORETICAL AND APPLIED CLIMATOLOGY, vol.151, pp.1523-1565, 2023 (SCI-Expanded)
- V. **New hybrid GR6J-wavelet-based genetic algorithm-artificial neural network (GR6J-WGANN) conceptual-data-driven model approaches for daily rainfall-runoff modelling**  
Sezen C., Partal T.  
NEURAL COMPUTING & APPLICATIONS, vol.34, no.20, pp.17231-17255, 2022 (SCI-Expanded)
- VI. **Two integrated conceptual-wavelet-based data-driven model approaches for daily rainfall-runoff modelling**  
Sezen C., Partal T.  
JOURNAL OF HYDROINFORMATICS, vol.24, no.5, pp.949-975, 2022 (SCI-Expanded)
- VII. **The utilisation of conceptual and data-driven models for hydrological modelling in semi-arid and humid areas of the Antalya basin in Turkey**  
Sezen C., Partal T.  
ACTA GEOPHYSICA, vol.70, no.2, pp.897-915, 2022 (SCI-Expanded)
- VIII. **The effects of Mediterranean oscillation on temperature and precipitation data in Turkey**  
Cenk S., Turgay P.  
JOURNAL OF WATER AND CLIMATE CHANGE, vol.11, no.3, pp.722-743, 2020 (SCI-Expanded)
- IX. **Wavelet combined innovative trend analysis for precipitation data in the Euphrates-Tigris basin, Turkey**  
Sezen C., Partal T.  
HYDROLOGICAL SCIENCES JOURNAL-JOURNAL DES SCIENCES HYDROLOGIQUES, vol.65, no.11, pp.1909-1927, 2020 (SCI-Expanded)
- X. **Investigation of Rain-On-Snow Floods under Climate Change**  
Sezen C., Sraj M., Medved A., Bezak N.  
APPLIED SCIENCES-BASEL, vol.10, no.4, 2020 (SCI-Expanded)
- XI. **The impacts of Arctic oscillation and the North Sea Caspian pattern on the temperature and precipitation regime in Turkey**  
Sezen C., Partal T.  
METEOROLOGY AND ATMOSPHERIC PHYSICS, vol.131, no.6, pp.1677-1696, 2019 (SCI-Expanded)
- XII. **Hydrological modelling of karst catchment using lumped conceptual and data mining models**  
Sezen C., Bezak N., Bai Y., Sraj M.  
JOURNAL OF HYDROLOGY, vol.576, pp.98-110, 2019 (SCI-Expanded)
- XIII. **The utilization of a GR4J model and wavelet-based artificial neural network for rainfall-runoff modelling**  
Sezen C., Partal T.  
WATER SUPPLY, vol.19, no.5, pp.1295-1304, 2019 (SCI-Expanded)
- XIV. **Wavelet-based analysis of global index effects in air temperature and precipitation data of the Black**

## **Sea coast**

Partal T., Sezen C.

JOURNAL OF WATER AND CLIMATE CHANGE, vol.10, no.2, pp.402-418, 2019 (SCI-Expanded)

## **Articles Published in Other Journals**

- I. **Utilization of Stochastic, Artificial Neural Network, and Wavelet Combined Models for Monthly Streamflow**  
SEZEN C., PARTAL T.  
Bilecik Şeyh Edebali Üniversitesi Fen Bilimleri Dergisi, vol.8, no.1, pp.228-240, 2021 (Peer-Reviewed Journal)
- II. **The Influences of Arctic North Atlantic Oscillations on Temperature and Precipitation Data of Eastern and Northern Marmara**  
SEZEN C., PARTAL T.  
Turkish Journal of Water Science and Management, vol.3, no.2, pp.16-27, 2019 (Peer-Reviewed Journal)
- III. **Hydrological modelling of the karst Ljubljana river catchment using lumped conceptual model**  
Sezen C., Bezak N., Šraj M.  
Acta Hydrotechnica, vol.31, no.55, pp.87-100, 2018 (Scopus)

## **Refereed Congress / Symposium Publications in Proceedings**

- I. **Daily rainfall-runoff modelling by Support Vector Regression, Symbolic Regression and GR4J Models**  
SEZEN C., PARTAL T.  
The 11th Eastern European Young Water Professionals Conference, 1 - 05 October 2019
- II. **The Different Methods for the Design of Reservoir Capacity at Gazipaşa Gökçeler Dam**  
ÖZKOCA T., SEZEN C., ÜLKE A.  
5th International Symposium on Dam Safety, 27 October - 01 November 2018, vol.1
- III. **The Comparison of Wavelet Based Artificial Neural Network (WANN) and GR4J Model for Rainfall-Runoff Modelling**  
SEZEN C., PARTAL T.  
10th Eastern European Young Water Professionals Conference, Croatia, 7 - 12 May 2018, pp.159-166
- IV. **THE COMPARISON OF ARCTIC OSCILLATION (AO) AND NORTH ATLANTIC OSCILLATION (NAO) IN TERMS OF THEIR INFLUENCES ON TEMPERATURE AND PRECIPITATION REGIME OF MARMARA REGION IN TURKEY**  
SEZEN C., PARTAL T.  
Uluslararası Su ve Çevre Kongresi, 22 - 24 March 2018
- V. **The Application Of Monthly Hydrological Conceptual Model For Rainfall-Runoff Modeling**  
SEZEN C., PARTAL T.  
Uluslararası Su ve Çevre Kongresi, 22 - 24 March 2018
- VI. **THE RELATION OF NORTH ATLANTIC OSCILLATION (NAO) AND NORTH SEA CASPIAN PATTERN (NCP) WITH CLIMATE VARIABLES IN MEDITERRANEAN REGION OF TURKEY**  
SEZEN C., PARTAL T.  
International Conference on Technology, Engineering and Science (IConTES), 26 October 2017
- VII. **A WAVELET TRANSFORMATION-GENETIC ALGORITHM-ARTIFICIAL NEURAL NETWORK COMBINED MODEL FOR PRECIPITATION FORECASTING**  
SEZEN C., PARTAL T.  
International Conference on Technology, Engineering and Science (IConTES), 26 - 29 October 2017
- VIII. **A GENETIC ALGORITHM-WAVELET TRANSFORM-ARTIFICIAL NEURAL NETWORK- COMBINED MODEL FOR PRECIPITATION FORECASTING**  
SEZEN C., PARTAL T.

International Conference on Technology, Engineering and Science (IConTES), 26 - 29 October 2017

**IX. The Effects of North Sea Caspian Pattern Index on the Temperature and Precipitation Regime in the Aegean Region of Turkey**

SEZEN C., PARTAL T.

World Academy of Science, Engineering and Technology International Journal of Environmental, Chemical, Ecological, Geological and Geophysical Engineering, Netherlands, 14 - 15 May 2017, vol.11, pp.356-360

## **Scholarships**

TÜBİTAK 2219, TUBİTAK, 2023 - Continues

İTÜ Vakfı, University, 2013 - 2014

Birkökler Vakfı Bursu, University, 2010 - 2013