

## **Assoc. Prof. MURAT AY**

### **Personal Information**

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### **International Researcher IDs**

ORCID: 0000-0002-7222-7912  
ScopusID: 55453467300  
Yoksis Researcher ID: 20091

### **Education Information**

Doctorate, Erciyes University, Fen Bilimleri Enstitüsü, İnşaat Mühendisliği (Dr), Turkey 2010 - 2014  
Postgraduate, Sivas Cumhuriyet University, Fen Bilimleri Enstitüsü, İnşaat Mühendisliği (Yl) (Tezli), Turkey 2007 - 2010  
Undergraduate, Celâl Bayar Üniversitesi, Mühendislik Fakültesi, İnşaat Mühendisliği Bölümü, Turkey 2002 - 2006

### **Foreign Languages**

English, C1 Advanced

### **Dissertations**

Doctorate, Su kalitesi parametrelerinin yapay zekâ yöntemleri ile değerlendirilmesi, Erciyes University, Fen Bilimleri Enstitüsü, İnşaat Mühendisliği (Dr), 2014  
Postgraduate, Sulama suyu kalitesinin kümelemeye dayalı bulanık sistem ile sınıflandırılması, Sivas Cumhuriyet University, Fen Bilimleri Enstitüsü, İnşaat Mühendisliği (Yl) (Tezli), 2010

### **Research Areas**

Civil Engineering, Hydraulic, Surface Water Engineering, Hydrology, Engineering and Technology

### **Academic Titles / Tasks**

Associate Professor, Yozgat Bozok University, Mühendislik-Mimarlık Fakültesi, İnşaat Mühendisliği, 2022 - Continues  
Assistant Professor, Yozgat Bozok University, Mühendislik-Mimarlık Fakültesi, İnşaat Mühendisliği, 2014 - Continues  
Research Assistant, Yozgat Bozok University, Mühendislik-Mimarlık Fakültesi, İnşaat Mühendisliği, 2008 - 2014

### **Academic and Administrative Experience**

Yozgat Bozok University, 2016 - Continues  
Deputy Head of Department, Yozgat Bozok University, 2019 - 2022

## Courses

MÜHENDİSLİK İSTATİSTİĞİ, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015  
HİDROLİK, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015  
İNŞAAT MÜHENDİSLİĞİ ARAŞTIRMA PROJESİ, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018,  
2016 - 2017, 2015 - 2016, 2014 - 2015  
SU YAPILARI 2, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017  
AKIŞKANLAR MEKANIĞI, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 -  
2016, 2014 - 2015  
BİTİRME ÖDEVİ, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 -  
2015  
TEZ ÇALIŞMASI, Postgraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016  
UZMANLIK ALAN DERSİ, Postgraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016  
SU YAPILARI 1, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017  
HİDROLOJİ, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015  
Hidrolojide İstatistik Yöntemler, Postgraduate, 2019 - 2020  
YAPAY SİNİR AĞLARININ İNŞAAT MÜHENDİSLİĞİNDE UYGULAMALARI, Undergraduate, 2018 - 2019  
YAPAY ZEKA TEKNİKLERİNİN PORGRAMLANMASI 1, Doctorate, 2017 - 2018  
YAPAY SİNİR AĞLARININ İNŞAAT MÜHENDİSLİĞİNDE UYGULAMALARI, Postgraduate, 2017 - 2018, 2016 - 2017, 2015 -  
2016, 2014 - 2015  
BULANIK MANTIĞIN İNŞAAT MÜH. UYGULAMALARI, Postgraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015  
YAPAY ZEKA TEKNİKLERİNİN PORGRAMLANMASI 2, Doctorate, 2017 - 2018  
BARAJLAR, Undergraduate, 2015 - 2016  
TEMEL BİLGİ TEKNOLOJİLERİ, Undergraduate, 2015 - 2016, 2014 - 2015  
MESLEKİ YABANCI DİL, Undergraduate, 2015 - 2016, 2014 - 2015

## Advising Theses

AY M., Sivas 4 Eylül Barajının yıkılma senaryolarına göre taşın analizi ve taşın tehlike raporunun hazırlanması,  
Postgraduate, B.KARATAŞ(Student), 2019  
AY M., İç Anadolu Bölgesinde sıcaklık ve yağış değişkenlerinin eğilim analizi, Postgraduate, S.ÖZYILDIRIM(Student), 2019

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

- I. Trend of minimum monthly precipitation for the East Anatolia region in Turkey  
AY M.  
THEORETICAL AND APPLIED CLIMATOLOGY, vol.148, no.1-2, pp.603-615, 2022 (SCI-Expanded)
- II. Trend tests on maximum rainfall series by a novel approach in the Aegean region, Turkey  
AY M.  
METEOROLOGY AND ATMOSPHERIC PHYSICS, vol.133, no.4, pp.1041-1055, 2021 (SCI-Expanded)
- III. Trend and homogeneity analysis in temperature and rainfall series in western Black Sea region, Turkey  
AY M.  
THEORETICAL AND APPLIED CLIMATOLOGY, vol.139, pp.837-848, 2020 (SCI-Expanded)
- IV. Estimation of dissolved oxygen by using neural networks and neuro fuzzy computing techniques  
AY M., Kisi O.  
KSCE JOURNAL OF CIVIL ENGINEERING, vol.21, no.5, pp.1631-1639, 2017 (SCI-Expanded)
- V. Trend Analysis of Streamflows at Some Gauging Stations Over the Kizilirmak River

- AY M., Kisi O.  
TEKNIK DERGI, vol.28, no.2, pp.7779-7794, 2017 (SCI-Expanded)
- VI. **Investigation of trend analysis of monthly total precipitation by an innovative method**  
AY M., Kisi O.  
THEORETICAL AND APPLIED CLIMATOLOGY, vol.120, pp.617-629, 2015 (SCI-Expanded)
- VII. **Comparison of Mann-Kendall and innovative trend method for water quality parameters of the Kizilirmak River, Turkey**  
Kisi O., AY M.  
JOURNAL OF HYDROLOGY, vol.513, pp.362-375, 2014 (SCI-Expanded)
- VIII. **Modelling of chemical oxygen demand by using ANNs, ANFIS and k-means clustering techniques**  
AY M., Kisi O.  
JOURNAL OF HYDROLOGY, vol.511, pp.279-289, 2014 (SCI-Expanded)
- IX. **Modeling of Dissolved Oxygen Concentration Using Different Neural Network Techniques in Foundation Creek, El Paso County, Colorado**  
AY M., Kisi O.  
JOURNAL OF ENVIRONMENTAL ENGINEERING, vol.138, no.6, pp.654-662, 2012 (SCI-Expanded)

### **Articles Published in Other Journals**

- I. **Modeling of Asphalt Pavement Surface Temperature for Prevention of Icing on the Surface**  
Akbulut H., ATILGAN GEVREK L., AY M.  
Turkish Journal of Civil Engineering, vol.35, no.2, pp.1-21, 2024 (Scopus)
- II. **Artificial intelligence (AI) studies in water resources**  
AY M., Özyıldırım S.  
Natural and Engineering Sciences, vol.3, no.2, pp.187-195, 2018 (Peer-Reviewed Journal)
- III. **Yozgat ili için aylık doğal gaz tüketiminin modellenmesi ve eğilim analizi**  
AY M.  
Uludağ Üniversitesi Mühendislik Fakültesi Dergisi, vol.23, no.1, pp.1-16, 2018 (Peer-Reviewed Journal)
- IV. **Comparison of Mann-Kendall and Sen's innovative trend tests on measured monthly flows series of some streams in Euphrates-Tigris Basin**  
AY M., KARACA Ö. F., YILDIZ A. K.  
Erciyes Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.34, no.1, pp.78-86, 2018 (Peer-Reviewed Journal)
- V. **Trend Analysis of Monthly Total Rainfall and Monthly Mean AirTemperature Variables of Yozgat in Turkey**  
AY M., ÖZYILDIRIM S.  
Çukurova Üniversitesi Mühendislik-Mimarlık Fakültesi Dergisi, vol.32, no.2, pp.65-76, 2017 (Peer-Reviewed Journal)
- VI. **Debi ve sediment değişkenlerinin trend analizi**  
AY M., KİŞİ Ö.  
Dicle Üniversitesi Mühendislik Fakültesi Mühendislik Dergisi, vol.7, no.2, pp.169-180, 2016 (Peer-Reviewed Journal)
- VII. **Modelling COD concentration by using different artificial intelligence methods**  
AY M., KİŞİ Ö.  
Journal of Selçuk University Natural and Applied Sciences, vol.2, pp.477-489, 2013 (Peer-Reviewed Journal)
- VIII. **Betonarme dolgu duvar etkisinin incelenmesi**  
MUHAMMED D. T., ERHAN A., AY M.  
Celal Bayar Üniversitesi Fen Bilimleri Dergisi, vol.3, no.1, pp.95-104, 2007 (Peer-Reviewed Journal)

## **Supported Projects**

Ay M., Yıldız A. K., Karaca Ö. F., Project Supported by Higher Education Institutions, 2015 - 2017

## **Metrics**

Publication: 17

Citation (WoS): 352

Citation (Scopus): 546

H-Index (WoS): 6

H-Index (Scopus): 6

## **Non Academic Experience**

ÖZBELSAN İnşaat Şirketi, Sivas/Merkez

FERNAS Şirketler Grubu