

# Prof. HÜLYA BOYACIOĞLU

## Personal Information

**Email:** hulya.boyacioglu@deu.edu.tr

**Web:** <https://avesis.deu.edu.tr/hulya.boyacioglu>

## International Researcher IDs

ORCID: 0000-0002-2577-8236

Publons / Web Of Science ResearcherID: P-4320-2019

ScopusID: 14041321700

Yoksis Researcher ID: 171153

## Education Information

Doctorate, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Çevre Teknolojileri (Dr), Turkey 1999 - 2007

Postgraduate, Universitat Karlsruhe, Germany 2004 - 2006

Postgraduate, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Çevre Teknolojisi (YI) (Tezli), Turkey 1995 - 1999

Undergraduate, Dokuz Eylul University, Mühendislik Fakültesi, Çevre Mühendisliği Bölümü, Turkey 1991 - 1995

## Foreign Languages

English, C1 Advanced

## Dissertations

Doctorate, Assessment of water quality by total maximum daily load (TMDL) analysis, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Çevre Teknolojileri (Dr), 2007

Postgraduate, Development of Universal Water Quality Index and environmetric analysis in surface water quality assessment with field implementation and validation, Universitat Karlsruhe, 2006

Postgraduate, Dry and semi-dry flue gas desulfurization with charged injection of hydrated lime, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Çevre Teknolojisi (YI) (Tezli), 1998

## Research Areas

Engineering and Technology

## Academic Titles / Tasks

Professor, Dokuz Eylul University, Mühendislik Fakültesi, Çevre Mühendisliği Bölümü, 2019 - Continues

Associate Professor, Dokuz Eylul University, Mühendislik Fakültesi, Çevre Mühendisliği Bölümü, 2013 - 2019

Assistant Professor, Dokuz Eylul University, Mühendislik Fakültesi, Çevre Mühendisliği Bölümü, 2011 - 2013

Research Assistant, Dokuz Eylul University, Mühendislik Fakültesi, Çevre Mühendisliği Bölümü, 1998 - 2011

## Academic and Administrative Experience

Deputy Director of the Center, Dokuz Eylul University, Rektörlük, Deü Çevre Araştırma Ve Uygulama Merkezi, 2024 - Continues  
Dokuz Eylul University, 2015 - 2018  
Dokuz Eylul University, 2015 - 2017  
Dokuz Eylul University, 2014 - 2016

## Courses

Su kalitesi kontrolü, Undergraduate, 2021 - 2022  
Çevre Sistemleri Analizi, Undergraduate, 2020 - 2021  
Çevresel Taşınım Süreçleri, Undergraduate, 2020 - 2021  
İstatistiğe Giriş, Undergraduate, 2019 - 2020  
Environmental Data Management, Postgraduate, 2017 - 2018

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

- I. **IMPUTING MISSING DATA IN A SWAT WATER QUALITY MODELLING STUDY USING STATISTICAL METHODS**  
Boyacıoğlu H., Kaya Uyar M., Boyacıoğlu H.  
ENVIRONMENTAL ENGINEERING AND MANAGEMENT JOURNAL, vol.23, no.3, pp.579-586, 2024 (SCI-Expanded)
- II. **New approach to domestic grey water footprinting: country-scale accounting using statistical methods in Türkiye**  
Boyacıoğlu H., Boyacıoğlu H.  
WATER SCIENCE AND TECHNOLOGY: WATER SUPPLY, vol.24, no.4, pp.983-994, 2024 (SCI-Expanded)
- III. **Impact of climate change and land cover dynamics on nitrate transport to surface waters.**  
Boyacıoğlu H., Gunacti M. C., Barbaros F., Gul A., Gul G. O., Ozturk T., Kurnaz M. L.  
Environmental monitoring and assessment, vol.196, no.3, pp.270, 2024 (SCI-Expanded)
- IV. **Attribution of changes in the water balance of a basin to land-use changes through combined modelling of basin hydrology and land-use dynamics**  
Günaçtı M. C., Aydın Kandemir F., Najar M., Kuzucu A., Uyar M., Barbaros F., Boyacıoğlu H., Onuşluel Gül G., Gül A.  
JOURNAL OF WATER AND CLIMATE CHANGE, vol.13, no.11, pp.4087-4104, 2022 (SCI-Expanded)
- V. **Spatiotemporal analysis of meteorological drought over Kucuk Menderes River Basin in the Aegean Region of Turkey**  
Eriş Duman E., Cavus Y., Aksoy H., Burgan H. İ., Aksu H., Boyacıoğlu H.  
THEORETICAL AND APPLIED CLIMATOLOGY, vol.142, pp.1515-1530, 2020 (SCI-Expanded)
- VI. **Ecological Water Quality Index associated with factor analysis to classify surface waters**  
BOYACIOĞLU H., BOYACIOĞLU H.  
WATER SUPPLY, vol.20, no.5, pp.1884-1896, 2020 (SCI-Expanded)
- VII. **Internal (blue) water footprint of municipal consumption: a case study for Turkey**  
BOYACIOĞLU H.  
ENVIRONMENTAL MONITORING AND ASSESSMENT, vol.190, no.7, 2018 (SCI-Expanded)
- VIII. **Application of environmetric methods to investigate control factors on water quality**  
BOYACIOĞLU H., BOYACIOĞLU H.  
ARCHIVES OF ENVIRONMENTAL PROTECTION, vol.43, no.3, pp.17-23, 2017 (SCI-Expanded)
- IX. **INDEX AND STATISTICAL METHODS IN WATER MANAGEMENT. A CASE STUDY FROM THE MESOPOTAMIAN MARSHES, IRAQ**  
Almaarofi S. S., Douabul A. A. Z., BOYACIOĞLU H., BOYACIOĞLU H.  
ENVIRONMENT PROTECTION ENGINEERING, vol.43, no.3, pp.21-37, 2017 (SCI-Expanded)
- X. **SPATIAL DIFFERENTIATION OF WATER QUALITY BETWEEN RESERVOIRS UNDER ANTHROPOGENIC**

## **AND NATURAL FACTORS BASED ON STATISTICAL APPROACH**

Boyacioglu H.

ARCHIVES OF ENVIRONMENTAL PROTECTION, vol.40, no.1, pp.41-50, 2014 (SCI-Expanded)

- XI. **Investigation of priorities in water quality management based on correlations and variations**  
BOYACIOĞLU H., KOÇOĞLU GÜNDOĞDU V., BOYACIOĞLU H.  
MARINE POLLUTION BULLETIN, vol.69, pp.48-54, 2013 (SCI-Expanded)
- XII. **EFFICIENCY OF WATER QUALITY INDEX APPROACH AS AN EVALUATION TOOL**  
Boyacioglu H., KOÇOĞLU GÜNDOĞDU V.  
ECOLOGICAL CHEMISTRY AND ENGINEERING S-CHEMIA I INZYNIERIA EKOLOGICZNA S, vol.20, no.2, pp.247-255, 2013 (SCI-Expanded)
- XIII. **Modeling the impacts of climate change on nitrogen retention in a 4th order stream**  
Boyacioglu H., Vetter T., Krysanova V., Rode M.  
CLIMATIC CHANGE, vol.113, no.3-4, pp.981-999, 2012 (SCI-Expanded)
- XIV. **UTILIZATION OF ENVIRONMETRIC & INDEX METHODS AS WATER QUALITY COMPARATIVE ASSESSMENT TOOLS FOCUSING ON HEAVY METAL CONTENT**  
Boyacioglu H.  
ARCHIVES OF ENVIRONMENTAL PROTECTION, vol.38, no.3, pp.17-28, 2012 (SCI-Expanded)
- XV. **Heavy metal fingerprinting in surface water using chemometrics**  
BOYACIOĞLU H., BOYACIOĞLU H.  
KUWAIT JOURNAL OF SCIENCE & ENGINEERING, vol.38, pp.125-139, 2011 (SCI-Expanded)
- XVI. **Utilization of the water quality index method as a classification tool**  
Boyacioglu H.  
ENVIRONMENTAL MONITORING AND ASSESSMENT, vol.167, no.1-4, pp.115-124, 2010 (SCI-Expanded)
- XVII. **Detection of seasonal variations in surface water quality using discriminant analysis**  
BOYACIOĞLU H., Boyacioglu H.  
ENVIRONMENTAL MONITORING AND ASSESSMENT, vol.162, no.1-4, pp.15-20, 2010 (SCI-Expanded)
- XVIII. **Utilization of statistics based classification approach to investigate water supply profile of Turkey**  
BOYACIOĞLU H., Boyacioglu H.  
ENVIRONMENTAL MONITORING AND ASSESSMENT, vol.152, no.1-4, pp.403-411, 2009 (SCI-Expanded)
- XIX. **Total maximum daily load (TMDL) based sustainable basin growth and management strategy**  
Boyacioglu H., ALPASLAN M. N.  
ENVIRONMENTAL MONITORING AND ASSESSMENT, vol.146, no.1-3, pp.411-421, 2008 (SCI-Expanded)
- XX. **Investigation of temporal trends in hydrochemical quality of surface water in western Turkey**  
Boyacioglu H., BOYACIOĞLU H.  
BULLETIN OF ENVIRONMENTAL CONTAMINATION AND TOXICOLOGY, vol.80, no.5, pp.469-474, 2008 (SCI-Expanded)
- XXI. **Water pollution sources assessment by multivariate statistical methods in the Tahtali Basin, Turkey**  
Boyacioglu H., BOYACIOĞLU H.  
ENVIRONMENTAL GEOLOGY, vol.54, no.2, pp.275-282, 2008 (SCI-Expanded)
- XXII. **Surface water quality assessment by environmetric methods**  
Boyacioglu H., Boyacioglu H.  
ENVIRONMENTAL MONITORING AND ASSESSMENT, vol.131, no.1-3, pp.371-376, 2007 (SCI-Expanded)
- XXIII. **Development of a water quality index based on a European classification scheme**  
Boyacioglu H.  
WATER S A, vol.33, pp.101-106, 2007 (SCI-Expanded)
- XXIV. **Development of a water quality index based on a European classification scheme**  
Boyacioglu H.  
WATER SA, vol.33, no.1, pp.101-106, 2007 (SCI-Expanded)
- XXV. **Surface water quality assessment using factor analysis**  
Boyacioglu H.  
WATER SA, vol.32, no.3, pp.389-393, 2006 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Exploratory confirmatory factor analysis for water quality fingerprinting.**  
BOYACIOĞLU H., BOYACIOĞLU H.  
Online Journal of Veterinary Research, vol.27, no.12, pp.687-694, 2023 (Peer-Reviewed Journal)
- II. **Küçük Menderes Havzası Örneğinde Su Kalitesinde Mevsimselliğin Parametrik Olmayan İstatistiksel Yöntemlerle Değerlendirilmesi**  
BARBAROS F., ONUŞLUEL GÜL G., BOYACIOĞLU H.  
Süleyman Demirel Üniversitesi Fen Bilimleri Enstitüsü Dergisi, no.2, pp.195-207, 2021 (Peer-Reviewed Journal)
- III. **Airport Water Consumption Footprinting**  
Vurmaz M. Ö., BOYACIOĞLU H.  
Environment and Ecology Research, vol.6, no.6, pp.519-524, 2018 (Scopus)
- IV. **Environmental Determinants of Surface Water Quality Based on Environmetric Methods**  
BOYACIOĞLU H., BOYACIOĞLU H.  
Environment and Ecology Research, vol.6, no.2, pp.120-124, 2018 (Scopus)
- V. **New Approach to Municipal Grey Water Footprint Estimation: A Case Study for Aegean Region Cities in Turkey**  
BOYACIOĞLU H.  
Environment and Ecology Research, vol.6, no.2, pp.125-129, 2018 (Scopus)
- VI. **İçme suyu arıtımında kimyasal süreçler**  
BOYACIOĞLU H., DÖLGEN D., ALPASLAN M. N.  
Turckhem – Chemicals, Laboratory, Technology – Dergisi, pp.46-48, 2011 (Peer-Reviewed Journal)
- VII. **İçme suyundan kimyasal yöntemlerle arsenik giderimi**  
ALPASLAN M. N., DÖLGEN D., BOYACIOĞLU H., SARPTAŞ H.  
itüdergisi/e su kirlenmesi kontrolü, vol.20, no.1, pp.15-25, 2010 (Peer-Reviewed Journal)
- VIII. **Application of factor analysis in the assessment of surface water quality in Buyuk Menderes River Basin**  
BOYACIOĞLU H., BOYACIOĞLU H., GÜNDÜZ O.  
Eurepean Water, vol.9, no.10, pp.43-49, 2005 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **Factor Analysis Assisted Water Quality Assessment and Source Identification Process**  
Boyacioğlu H., Boyacioğlu H.  
in: Advances in Environmental Research, Justin A. Daniels, Editor, NOVA Science Publishers Inc. , Illinois, pp.1-15, 2022
- II. **Grey water footprint accounting Tier 1 supporting guidelines**  
Nicolas F., Boyacioğlu H., Arjan H.  
Value of Water Research Report Series No. 65, UNESCO-IHE, Delft, the Netherlands., Amsterdam, 2013

## Refereed Congress / Symposium Publications in Proceedings

- I. **Drought Indices and Intensity-Duration-Frequency Curves for Kucuk Menderes River Basin**  
ÇAVUŞ Y., BURGAN H. İ., AKSOY H., AKSU H., Selek B., ERİŞ E., BOYACIOĞLU H.  
14th International Conference on Hydrosience and Engineering, İzmir, Turkey, 26 - 27 May 2022, pp.561-573
- II. **Application of Multivariate Statistical Methods in Water Pollution Footprinting**  
BOYACIOĞLU H., BOYACIOĞLU H.  
DAGStat 2019, 5. JOINT STATISTICAL MEETING, Munich, Germany, 18 - 22 March 2019, pp.146
- III. **Environmental Determinants of Surface Water Quality Basedon Environmetric Methods**

BOYACIOĞLU H., BOYACIOĞLU H.

15th International Conference on Environmental Science and Technology, 31 August - 02 September 2017

- IV. **New Approach to Municipal Grey Water Footprint Estimation:A Case Study for Aegean Region Cities in Turkey**  
BOYACIOĞLU H.  
15th International Conference on Environmental Science and Technology, 31 August - 02 September 2017
- V. **Environmetric Index Methods in Water Quality Assessment**  
BOYACIOĞLU H., BOYACIOĞLU H.  
"Water Quality in Europe: Challenges and Best Practice" UNESCO-IHP European Regional Consultation Meeting, Koblenz, Germany, 1 - 04 December 2015
- VI. **Cooling Water Discharge Impacts to an Ephemeral Stream a Heat Transport Modeling Study**  
Elçi A., Elçi Ş., Boyacıoğlu H.  
11th International Conference on Hydrosience & Engineering, Hamburg, Germany, 28 September - 02 October 2014, pp.881-888
- VII. **Models for the Prediction of Landfill Gas Models A Comparison**  
SARPTAŞ H., EKER S., SEYFİOĞLU R., BOYACIOĞLU H., DÖLGEN D., ALPASLAN M. N.  
International Conference on Recycling and Reuse, İstanbul, Turkey, 4 - 06 June 2012, pp.76
- VIII. **Models for the prediction of landfill gas potential – A comparison.**  
SARPTAŞ H., EKER S., SEYFİOĞLU R., BOYACIOĞLU H., DÖLGEN D., ALPASLAN M. N.  
International Conference on Recycling and Reuse, İstanbul, Turkey, 1 - 03 June 2012
- IX. **Altyapı tesisleri için çevre yönetim planı (ÇYP) hazırlanması.**  
DÖLGEN D., ALPASLAN M. N., BOYACIOĞLU H., SARPTAŞ H.  
9. Ulusal Çevre Mühendisliği Kongresi, Turkey, 1 - 02 October 2011, pp.311-317

## Supported Projects

- Gül A., Onuşluel Gül G., Çetinkaya C. P., Barbaros F., Günaçtı M. C., Özgenç Aksoy A., Boyacıoğlu H., Doğan M., Zammit E., Doğanlar O. C., et al., Horizon Europe Project, TRANSFORMING ADVANCED WATER SKILLING THROUGH THE CREATION OF A NETWORK OF EXTENDED REALITY WATER EMULATIVE CENTRES, 2022 - 2025
- Oral H. V., Dölgen D., Boyacıoğlu H., Alpaslan M. N., Alkaya E., TUBITAK Project, Döngüsel Su Yönetim Olanaklarının Multisektörel (Kent, Endüstri ve Tarım) Ölçekte Geliştirilmesi: Küçük Menderes Nehir Havzası Örneği), 2022 - 2024
- Boyacıoğlu H., Gül A., Onuşluel Gül G., Barbaros F., Günaçtı M. C., TUBITAK Project, İklim değişikliği etkisinde sürdürülebilir su yönetimi için hidrolojik riskler ve su kalitesi değişimi (İKLİM-RİSK ), 2018 - 2021
- BOYACIOĞLU H., Project Supported by Higher Education Institutions, Yapısal Eşitlik Modellemesi Yöntemi İle Su Kalitesi Verilerinin Değerlendirilmesi, 2015 - 2017
- BOYACIOĞLU H., Project Supported by Other Private Institutions, DEMİR NATUREL ZEYTİN VE ZEYTİNYAĞI KONSERVE İMALATI TARIM VE GIDA ÜRÜNLERİ İMALATI İTHALAT VE İHRACAT SANAYİ TİC LTD ŞTİ ZEYTİNYAĞI FABRİKASI LAGÜN TASARIM PROJESİ, 2016 - 2016
- Elçi A., Elçi Ş., Boyacıoğlu H., Project Supported by Other Private Institutions, AKSA enerji üretim A Ş Manisa doğalgaz çevrim santrali soğutma suyu deşarjı termal modelleme, 2011 - 2011
- Onuşluel Gül G., Çetinkaya C. P., Barbaros F., Fıstkoğlu O., Özkul S., Boyacıoğlu H., Gül A., Harmancıoğlu H. N., Other International Funding Programs, Institutional Support Systems Project the Turkey Activity, 1999 - 2000

## Metrics

Publication: 46

Citation (WoS): 550

Citation (Scopus): 657

H-Index (WoS): 10

H-Index (Scopus): 11