

## Prof. HASAN YAZICIGİL

### Personal Information

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### International Researcher IDs

ScholarID: [g\\_ICjdMAAAAJ](https://orcid.org/0000-0003-3808-6981)

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Publons / Web Of Science ResearcherID: AAT-2055-2021

ScopusID: 7003835060

Yoksis Researcher ID: 118141

### Education Information

Doctorate, Purdue University, Su Kaynakları Sistem Mühendisliği, United States Of America 1977 - 1980

Postgraduate, Iowa State University of Science and Technology, Su Kaynakları, United States Of America 1975 - 1977

Undergraduate, Middle East Technical University, Faculty of Engineering, Department of Geological Engineering, Turkey 1969 - 1974

### Academic Titles / Tasks

Professor, Middle East Technical University, Graduate School of Natural and Applied Sciences, Graduate School of Natural and Applied Sciences, 2019 - Continues

Professor, Middle East Technical University, Faculty of Engineering, Department of Geological Engineering, 1992 - 2019

Associate Professor, Middle East Technical University, Faculty of Engineering, Department of Geological Engineering, 1990 - 1992

Assistant Professor, Southern Illinois University Carbondale, Department Of Geology, 1981 - 1982

Expert, Southern Illinois University at Carbondale, Coal Extraction And Utilization Research Center, 1980 - 1981

Lecturer, Purdue University, School Of Engineering, 1977 - 1980

### Supervised Theses

Yazıcıgil H., Assessment of the impacts of future climatic variations and anthropogenic activities on Burdur lake levels, Doctorate, H.KILIÇ(Student), 2023

YAZICIGİL H., Assessment of performance of horizontal drains and pit lake formation for çöpler gold mine, Erzincan-Turkey, Doctorate, Ç.ARGUNHAN(Student), 2021

YAZICIGİL H., Hydrogeological characterization of a mine site in Eastern Anatolia, Postgraduate, D.Tayyar(Student), 2020

YAZICIGİL H., Assessment of dewatering / depressurization requirements for the Çeltikçi Coal Basin, Ankara - Turkey, Doctorate, A.Peksezer(Student), 2019

YAZICIGİL H., Hydrogeological investigation and characterization of Alpu sector-a coal field in Eskisehir-Turkey, Postgraduate, T.KAAN(Student), 2018

YAZICIGİL H., Hydrogeological characterization of the alpu coal mine exploration site in Eskisehir-Turkey, Postgraduate, M.ONURSAL(Student), 2016

YAZICIGİL H., Numerical modeling of groundwater flow at a coal exploration site in Eskişehir – Turkey, Postgraduate, H.KILIÇ(Student), 2016

YAZICIGİL H., Optimum cover design for waste rock storage areas, Postgraduate, Ç.ARGUNHAN(Student), 2014

YAZICIGİL H., Hydrogeological characterization and investigation of the Çeltikçi coal basin in Central Anatolia /, Postgraduate, C.Kahraman(Student), 2014

YAZICIGİL H., Hydrogeological characterization and investigation of the Çeltikçi Coal Basin in Central Turkey, Postgraduate, C.KAHRAMAN(Student), 2014

YAZICIGİL H., Hydrogeological characterization of the northern part of the Kışladağ gold mine area, Postgraduate, E.Firat(Student), 2013

YAZICIGİL H., Assessment of open pit dewatering requirements and pit lake formation for Kışladağ Gold Mine, Uşak-Turkey, Doctorate, B.ÜNSAL(Student), 2013

YAZICIGİL H., Hydrogeological characterization of the northern part of the Kışladağ Gold-Mine, Uşak, Turkey, Postgraduate, E.FIRAT(Student), 2013

YAZICIGİL H., Assessment of dewatering requirements for Çaldağ nickel mine in Western Turkey, Postgraduate, Ç.CANKARA(Student), 2011

YAZICIGİL H., Artificial recharge of groundwater in Küçük Menderes river basin, Turkey, Postgraduate, A.PEKSEZER(Student), 2010

YAZICIGİL H., Assessment of water supply impacts for a mine site in Western Turkey, Postgraduate, E.AĞARTAN(Student), 2010

YAZICIGİL H., Modeling and development of a groundwater management plan for Ulubey aquifer system, Uşak-Turkey, Postgraduate, B.ÜNSAL(Student), 2008

YAZICIGİL H., Investigation of the recharge and discharge mechanisms of a complex aquifer system by using environmental isotopes and noble gases, Doctorate, Ş.ARSLAN(Student), 2008

YAZICIGİL H., Modeling of Mogan and Eymir lakes aquifer system, Doctorate, Ö.YAĞBASAN(Student), 2007

YAZICIGİL H., Optimal storage of freshwater in saline aquifers, Postgraduate, D.KÜSTÜ(Student), 2005

YAZICIGİL H., Investigation of the safe and sustainable yields for the sandy complex aquifer system in Ergene river basin, Postgraduate, Ş.ÖKTEN(Student), 2004

YAZICIGİL H., Dewatering plan and prediction for pit lake flooding for a quarry site, Postgraduate, U.DURU(Student), 2004

YAZICIGİL H., Groundwater management policy development for the Küçük Menderes River Basin aquifer system, Postgraduate, J.Şakıyan(Student), 2001

YAZICIGİL H., Groundwater management policy development for the Küçük Menderes river basin, Postgraduate, J.ŞAKIYAN(Student), 2001

YAZICIGİL H., Groundwater recharge estimation for Küçük Menderes river basin aquifer system, Postgraduate, A.GÜNDOĞDU(Student), 2000

YAZICIGİL H., Optimal dewatering of the collector line in Aksaray organized industrial district Aksaray-Turkey, Postgraduate, M.Tokgöz(Student), 1999

YAZICIGİL H., Characterization of the Küçük Menderes River basin aquifer system, Postgraduate, K.KAMİL(Student), 1999

YAZICIGİL H., Geostatistical characterization of Erzin plain aquifer system Hatay-Turkey, Postgraduate, Ö.Eroğlu(Student), 1997

YAZICIGİL H., Geostatistical characterization of Erzin Plain aquifer system, Hatay-Turkey, Postgraduate, Ö.EROĞLU(Student), 1997

YAZICIGİL H., Optimal waste containment strategies in groundwater pollution studies, Postgraduate, F.MISIRLI(Student), 1994

YAZICIGİL H., Optimal management of Erzin plain aquifer system Hatay-Turkey, Postgraduate, K.HALLAJI(Student), 1994

YAZICIGİL H., Optimal expansion of capacity in multi-aquifer system., Postgraduate, H.Başağaoğlu(Student), 1993

YAZICIGİL H., Optimal expansion of capacity in multi-aquifer systems, Postgraduate, H.BAŞAĞAOĞLU(Student), 1993

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

- I. **Hydrogeological characterization of low permeability medium for conceptualization of a mine site in Eastern Turkey**  
TAYYAR D., EKMEKÇİ M., YAZICIGİL H.  
Bulletin of Engineering Geology and the Environment, vol.83, no.6, 2024 (SCI-Expanded)
- II. **Assessment of Dewatering Requirements and Dewatering Well Design for an Open Pit Coal Mine in Central Anatolia**  
PEKSEZER SAYIT A., YAZICIGİL H.  
MINE WATER AND THE ENVIRONMENT, vol.41, no.3, pp.748-763, 2022 (SCI-Expanded)
- III. **Assessment of performance of horizontal drains in an open pit mine in eastern Turkey**  
ARGUNHAN ATALAY Ç., Yazicigil H., EKMEKÇİ M.  
Environmental Earth Sciences, vol.80, no.3, 2021 (SCI-Expanded)
- IV. **Trend Analyses of Meteorological Variables and Lake Levels for Two Shallow Lakes in Central Turkey**  
YAĞBASAN Ö., Demir V., YAZICIGİL H.  
WATER, vol.12, no.2, 2020 (SCI-Expanded)
- V. **Groundwater**  
YAZICIGİL H., EKMEKÇİ M.  
WATER RESOURCES OF TURKEY, vol.2, pp.159-201, 2020 (SCI-Expanded)
- VI. **Modeling and Performance Assessment of Alternative Cover Systems on a Waste Rock Storage Area Argunhan-Atalay Ç., YAZICIGİL H.**  
MINE WATER AND THE ENVIRONMENT, vol.37, no.1, pp.106-118, 2018 (SCI-Expanded)
- VII. **Impacts of climatic variables on water-level variations in two shallow Eastern Mediterranean lakes**  
Yagbasan O., YAZICIGİL H., Demir V.  
ENVIRONMENTAL EARTH SCIENCES, vol.76, no.16, 2017 (SCI-Expanded)
- VIII. **Assessment of Open Pit Dewatering Requirements and Pit Lake Formation for the KA +/- Ayladag Gold Mine, UAYak, Turkey**  
UNSAL B., YAZICIGİL H.  
MINE WATER AND THE ENVIRONMENT, vol.35, no.2, pp.180-198, 2016 (SCI-Expanded)
- IX. **Assessment of Dewatering Requirements and their Anticipated Effects on Groundwater Resources: A Case Study from the Caldag Nickel Mine, Western Turkey**  
Peksezer-Sayit A., Cankara-Kadioglu C., YAZICIGİL H.  
MINE WATER AND THE ENVIRONMENT, vol.34, no.2, pp.122-135, 2015 (SCI-Expanded)
- X. **Analysis of groundwater dynamics in the complex aquifer system of Kazan Trona, Turkey, using environmental tracers and noble gases**  
ARSLAN S., Yazicigil H., Stute M., Schlosser P., Smethie W. M.  
HYDROGEOLOGY JOURNAL, vol.23, no.1, pp.175-194, 2015 (SCI-Expanded)
- XI. **Assessing the impacts of climate change on sustainable management of coastal aquifers**  
UNSAL B., Yagbasan O., Yazicigil H.  
ENVIRONMENTAL EARTH SCIENCES, vol.72, no.6, pp.2183-2193, 2014 (SCI-Expanded)
- XII. **Environmental isotopes and noble gases in the deep aquifer system of Kazan Trona Ore Field, Ankara, central Turkey and links to paleoclimate**  
ARSLAN S., YAZICIGİL H., Stute M., Schlosser P.  
QUATERNARY RESEARCH, vol.79, no.2, pp.292-303, 2013 (SCI-Expanded)
- XIII. **Environmental isotopic evaluation of the springs located in Kazan Trona basin in Central Turkey**  
ARSLAN S., YAZICIGİL H.  
JOURNAL OF THE GEOLOGICAL SOCIETY OF INDIA, vol.80, no.5, pp.707-714, 2012 (SCI-Expanded)
- XIV. **Assessment of Water Supply Impacts for a Mine Site in Western Turkey**  
AGARTAN E., YAZICIGİL H.  
MINE WATER AND THE ENVIRONMENT, vol.31, no.2, pp.112-128, 2012 (SCI-Expanded)

- XV. **Assessment of artificial aquifer recharge potential in the Kucuk Menderes River Basin, Turkey**  
Sayit A. P., YAZICIGİL H.  
HYDROGEOLOGY JOURNAL, vol.20, no.4, pp.755-766, 2012 (SCI-Expanded)
- XVI. **Assessing the impact of climate change on Mogan and Eymir Lakes' levels in Central Turkey**  
Yagbasan O., YAZICIGİL H.  
ENVIRONMENTAL EARTH SCIENCES, vol.66, no.1, pp.83-96, 2012 (SCI-Expanded)
- XVII. **Effects of solution mining on groundwater quality in the Kazan trona field, Ankara-Turkey: model predictions**  
Yazıcıgil H., Er C., Ates J. S., Çamur M. Z.  
ENVIRONMENTAL GEOLOGY, vol.57, pp.157-172, 2009 (SCI-Expanded)
- XVIII. **Sustainable management of Mogan and Eymir Lakes in Central Turkey**  
Yagbasan O., Yazıcıgil H.  
ENVIRONMENTAL GEOLOGY, vol.56, no.6, pp.1029-1040, 2009 (SCI-Expanded)
- XIX. **Susceptibility indexing method for irrigation water management planning: Applications to K. Menderes river basin, Turkey**  
Pusatli O. T., Camur M. Z., Yazıcıgil H.  
JOURNAL OF ENVIRONMENTAL MANAGEMENT, vol.90, no.1, pp.341-347, 2009 (SCI-Expanded)
- XX. **Modeling of lithology induced chemical anomalies in the aquifer systems of the Kazan Trona deposit area, Ankara, Turkey**  
Çamur M. Z., Er C., Yazıcıgil H.  
ENVIRONMENTAL GEOLOGY, vol.54, pp.777-789, 2008 (SCI-Expanded)
- XXI. **Effects of compaction parameters on heavy metal mass transport in Ankara clay liner: Experimental approach**  
Çamur M. Z., Canpolat F., Yazıcıgil H.  
TURKISH JOURNAL OF EARTH SCIENCES, vol.16, pp.97-107, 2007 (SCI-Expanded)
- XXII. **Effects of the planned ephesus recreational canal on freshwater-seawater interface in the Selcuk sub-basin, Izmir-Turkey**  
Camur M. Z., Yazıcıgil H.  
ENVIRONMENTAL GEOLOGY, vol.48, pp.229-237, 2005 (SCI-Expanded)
- XXIII. **Investigation of safe and sustainable yields for the Sandy Complex aquifer system in the Ergene River basin, Thrace Region, Turkey**  
OKTEN S., Yazıcıgil H.  
TURKISH JOURNAL OF EARTH SCIENCES, vol.14, no.2, pp.209-226, 2005 (SCI-Expanded)
- XXIV. **Laboratory determination of multicomponent effective diffusion coefficients for heavy metals in a compacted clay**  
Çamur M. Z., Yazıcıgil H.  
TURKISH JOURNAL OF EARTH SCIENCES, vol.14, pp.91-103, 2005 (SCI-Expanded)
- XXV. **Sustainable development and management of an aquifer system in western Turkey**  
SAKIYAN J., Yazıcıgil H.  
HYDROGEOLOGY JOURNAL, vol.12, no.1, pp.66-80, 2004 (SCI-Expanded)
- XXVI. **Perspectives on Turkish ground water resources**  
Yazıcıgil H., EKMEKÇİ M.  
GROUND WATER, vol.41, no.3, pp.290-291, 2003 (SCI-Expanded)
- XXVII. **Optimal aquifer dewatering schemes for excavation of collector line**  
TOKGOZ M., Yilmaz K. K., YAZICIGİL H.  
JOURNAL OF WATER RESOURCES PLANNING AND MANAGEMENT-ASCE, vol.128, no.4, pp.248-261, 2002 (SCI-Expanded)
- XXVIII. **Hydrogeochemical evaluation of heavy metal loadings to waters and sediments by leachate: A case study from Gölbaşı waste disposal site, Ankara, Turkey**  
Canpolat F., Çamur M. Z., Yazıcıgil H.  
International Geology Review, vol.43, pp.930-944, 2001 (SCI-Expanded)

- XXXIX. **Hydrogeochemical modeling of waters in Mogan and Eymir lakes special environmental protection area, Ankara, Turkey**  
Camur M. Z., Yazicigil H., ALTINBİLEK D.  
WATER ENVIRONMENT RESEARCH, vol.69, no.6, pp.1144-1153, 1997 (SCI-Expanded)
- XXX. **Gölbaşı atık sahası yeraltısularının hidrojeokimyası: İlk bulgular**  
Canpolat F., Çamur M. Z., Yazicigil H.  
Agenda, vol.50, pp.47-51, 1997 (AHCI)
- XXXI. **Optimal Ground Water Pollution Plume Containment with Fixed Charges**  
MISIRLI F., YAZICIGİL H.  
Journal Of Water Resources Planning And Management-Asce, vol.123, pp.2-14, 1997 (SCI-Expanded)
- XXXII. **Numerical simulation of saltwater intrusion in a groundwater basin**  
EMEKLİ N., Karahanoglu N., Yazicigil H., DOYURAN V.  
WATER ENVIRONMENT RESEARCH, vol.68, no.5, pp.855-866, 1996 (SCI-Expanded)
- XXXIII. **Optimal management of a coastal aquifer in southern Turkey**  
HALLAJI K., YAZICIGİL H.  
Journal of Water Resources Planning and Management, vol.122, no.4, pp.233-244, 1996 (SCI-Expanded)
- XXXIV. **OPTIMAL CAPACITY-EXPANSION PLANNING IN MULTIAQUIFER SYSTEMS**  
BASAGAOLU H., YAZICIGİL H.  
JOURNAL OF WATER RESOURCES PLANNING AND MANAGEMENT-ASCE, vol.120, no.6, pp.836-856, 1994 (SCI-Expanded)
- XXXV. **Optimal Planning and Operation of Multiaquifer System**  
YAZICIGİL H.  
Journal Of Water Resources Planning And Management-Asce, vol.116, pp.435-454, 1990 (SCI-Expanded)
- XXXVI. **Numerical Modeling of a Multi Aquifer System in Eastern Saudi Arabia**  
RASHEEDUDDIN M., YAZICIGİL H., ALLAYLA R. I.  
Journal Of Hydrology, vol.107, pp.193-222, 1989 (SCI-Expanded)
- XXXVII. **Scenario Planning for Water Resources A Saudi Arabian Case Study**  
DEJONG R. L., YAZICIGİL H., ALLAYLA R. I.  
Water International, vol.14, pp.6-12, 1989 (SCI-Expanded)
- XXXVIII. **Optimization Model for Groundwater Management in Multi Aquifer Systems**  
YAZICIGİL H., RASHEEDUDDIN M.  
Journal Of Water Resources Planning And Management-Asce, vol.113, pp.257-273, 1987 (SCI-Expanded)
- XXXIX. **DAILY OPERATION OF A MULTIPURPOSE RESERVOIR SYSTEM**  
YAZICIGİL H., HOUCK M. H., TOEBES G. H.  
WATER RESOURCES RESEARCH, vol.19, no.1, pp.1-13, 1983 (SCI-Expanded)

## **Books**

- I. **Surface Mining Environmental Monitoring and Reclamation Handbook**  
SENDLEIN L. V., YAZICIGİL H., CARLSON C. C.  
Elsevier Science Publishing Co, 1983
- II. **Geology**  
YAZICIGİL H., SENDLEIN L. V.  
in: In Surface Mining Environmental Monitoring and Reclamation Handbook, , Editor, Elsevier Science Publishing Co, 1983

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

- I. **Application of Soil and water Assessment Tool (SWAT) Model to Estimate Water Budget in a Mine**

## **Area in Western Turkey**

ARGUNHAN Ç., YAZICIGİL H., YILMAZ K. K.

European Geosciences Union General Assembly (EGU), 9 - 13 April 2018

- II. **Temporary Dewatering of Groundwater at İzmir-Çiğli Waste Water Treatment Plant Construction Site**  
YAZICIGİL H., DURU B.  
IV. International Water Congress, Turkey, 2 - 04 November 2017, pp.543-554
- III. **Dewatering Design for an Open Pit Coal Mine and Assessment of Anticipated Impacts on the Groundwater Resources**  
YAZICIGİL H., PEKSEZER SAYIT A.  
44th IAH Congress: Groundwater Heritage and Sustainability, 25 - 29 September 2017, pp.200
- IV. **Water Resources Management for Water Security in the Future**  
YAZICIGİL H.  
2nd IWA Regional Symposium on Water, Wastewater and Environment, 22 - 24 March 2017
- V. **Analyses of Lakes Mogan and Eymir Water Level Variations: Causes and Consequences**  
YAĞBASAN Ö., YAZICIGİL H.  
IWA 2nd Regional Symposium on Water, Wastewater and Environment, İzmir, Turkey, 22 - 24 March 2017, pp.765-773
- VI. **Progressive Sinkhole Occurrence Induced by Dewatering Activities in a Large Lignite Mine SE Turkey**  
EKMEKÇİ M., YAZICIGİL H.  
International Mine Water Association 2016 -Mining Meets Water - Conflicts and Solutions, Leipzig, Germany, 11 - 15 July 2016, pp.486-493
- VII. **Assessment of Performance for Alternative Cover Systems on a Waste Rock Storage Area**  
ARGUNHAN Ç., YAZICIGİL H.  
AGU Fall Meeting 2015, 14 - 18 December 2015
- VIII. **Groundwater Impact assessment of Tailings Storage Facility Western Turkey**  
PEKSEZER SAYIT A., YAZICIGİL H.  
AGU Fall Meeting 2015, 14 - 18 December 2015
- IX. **Kazan Trona Sahası sığ akifer sistemi yeraltısuyu dinamiğinin çevresel izotoplar ve asal gazlar ile incelenmesi**  
ARSLAN Ş., YAZICIGİL H., STUTE M., SCHLOSSER P.  
4. Ulusal Hidrolojide İzotop Teknikleri Sempozyumu, Turkey, 5 - 09 October 2015, pp.57-62
- X. **Leakage of Mantle Helium into Groundwater of Kazan Trona Basin Ankara Turkey**  
ARSLAN Ş., YAZICIGİL H., STUTE M., SCHLOSSER P., SMETHİE W. M.  
42nd International Association of Hydrogeologists (IAH) Congress, 13 - 18 September 2015
- XI. **Investigation of recharge and discharge mechanisms of a multi aquifer system using environmental isotopes**  
ARSLAN Ş., YAZICIGİL H., SCHLOSSER P., STUTE M.  
4th annual G@GPS International Workshop, Paleogroundwater from past and present glaciated areas, 5 - 09 July 2015
- XII. **Feasibility Assessment of İçyenice Subsurface Dam Çankırı Using Mathematical Model**  
APAYDIN A., DURU B., KAYA S., YAZICIGİL H.  
68th Geological Congress of Turkey, Turkey, 6 - 10 April 2015, pp.196-197
- XIII. **Potential Impacts of Climate Change on Turkish Water Resources: A Review**  
YILMAZ K. K., YAZICIGİL H.  
NATO Advanced Research Workshop on Effect of Climate Change on Water Resources - Issues of National and Global Security, İzmir, Turkey, 1 - 04 September 2010, pp.105-114
- XIV. **Impacts of Decreasing Recharge Rates on Sustainable Groundwater Management**  
YAZICIGİL H., YILMAZ K. K., ERDEMLİ B. U., Yağbasan O.  
NATO Advanced Research Workshop on Effect of Climate Change on Water Resources - Issues of National and Global Security, İzmir, Turkey, 1 - 04 September 2010, pp.43-44

- XV. **Geological and Geotechnical Evaluation of the Yenişehir Settlement Area Bursa Turkey**  
DOYURAN V., TOPAL T., YAZICIGİL H., KARAHANOĞLU N., TOPRAK v., SÜZEN M. L., YESİLNACAR e.  
Int. Symposium of the IAEG on "Engineering geological problems of urban areas, 30 July - 02 August 2001
- XVI. **Experimental determination of hydrodynamic dispersion coefficients of heavy metals using compacted clay**  
Çamur M. Z., Yazıcıgil H.  
International Association of Hydrological Sciences Symposium, Maastricht, Netherlands, 18 - 27 July 2001, no.269, pp.283-286
- XVII. **Contamination risk assessment for the aquifer in the K. Menderes River Basin, İzmir, Turkey**  
Pusathı Ö. T., Çamur M. Z., Yazıcıgil H.  
International Association of Hydrological Sciences Symposium, California, United States Of America, 18 - 27 April 2000, no.272, pp.425-430
- XVIII. **Leachate hydrogeochemistry at Gölbaşı municipal waste disposal area, Ankara, Turkey**  
Canpolat F., Çamur M. Z., Yazıcıgil H.  
International Symposium on Geology and Environment, İstanbul, Turkey, 1 - 05 September 1997, pp.38

## Expert Reports

- I. **Keçelipınar Mevkii'ndeki kaynak suyunun Mengen Belediyesi'ne içme suyu olarak kullanılmak üzere tahsisi**  
YAZICIGİL H., ÇAMUR M. Z., Kurtulmuş İ.  
Danıştay 8. Daire, pp.10, Ankara, 2007

## Metrics

Publication: 66  
Citation (WoS): 341  
Citation (Scopus): 347  
H-Index (WoS): 10  
H-Index (Scopus): 10

## Non Academic Experience

PURDUE UNIVERSITY, INSTRUCTOR IN RESEARCH  
Iowa State University Engineering Research Institute, Project Assistant  
General Directorate of Highway, Soil Survey Project Engineer