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International Researcher IDs

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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

Advising 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 Çeltikci 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.Fırat(Student), 2013

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

 $YAZICIG\dot{I}L~H.,~Hydrogeological~characterization~of~the~northern~part~of~the~Ki\$lada\S~Gold-Mine,~U\$ak,~Turkey,~AZICIG\dot{I}L~H.,~Hydrogeological~characterization~of~the~northern~part~of~the~Ki\$lada\S~Gold-Mine,~U\$ak,~Turkey,~AZICIG\dot{I}L~H.,~Hydrogeological~characterization~of~the~northern~part~of~the~Ki\$lada\S~Gold-Mine,~U\$ak,~Turkey,~AZICIG\dot{I}L~H.,~Hydrogeological~characterization~of~the~northern~part~of~the~Ki\$lada\S~Gold-Mine,~U\$ak,~Turkey,~AZICIG\dot{I}L~H.,~Hydrogeological~characterization~of~the~northern~part~of~the~Ki\$lada\S~Gold-Mine,~U\$ak,~Turkey,~AZICIG\dot{I}L~H.,~Hydrogeological~characterization~of~the~northern~part~of~the~Ki\$lada\S~Gold-Mine,~U\$ak,~Turkey,~AZICIGIL~hydrogeological~characterization~of~the~northern~part~of~the~Nishada~characterization~of~the~northern~part~o$

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 basın 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 charactrization 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.HALLAJİ(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

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., Yazicigil 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., Yazicigil 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., Yazicigil 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., Yazicigil 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., Yazicigil H.

HYDROGEOLOGY JOURNAL, vol.12, no.1, pp.66-80, 2004 (SCI-Expanded)

XXVI. Perspectives on Turkish ground water resources

Yazicigil 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., YAZICIGIL 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)

XXIX. 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., Yazıcıgil 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

EMEKLI 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

BASAGAOGLU H., YAZICIGIL 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 & Book Chapters

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., ERDEMLI B. U., Yagbasan 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., YAZICIĞİL 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 Pusatlı 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. Keçelipinar 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

Iowa State University Engineering Research Institute
General Directorate of Highway