

Prof. KAHRAMAN ÜNLÜ

Personal Information

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Education Information

Doctorate, University Of California, Davis, Department Of Land Air And Water Resources, Soil Physics, United States Of America 1984 - 1989

Post Graduate, Iowa State University, Agronomy Department, Soil Science, United States Of America 1982 - 1984

Under Graduate, Ankara Üniversitesi, Ziraat Fakültesi, Toprak Bölümü, Turkey 1972 - 1977

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Stochastic Analysis of Large Scale Transient Unsaturated Flow in Soil: Input Parameter Characterization and Model Output Evaluation, University Of California, Davis, Department Of Land Air And Water Resources, 1989

Post Graduate, Computer-Simulated Hydraulic Behaviors of Two Clarion Loam Soils, Iowa State University, Agronomy Department, 1984

Research Areas

Environmental Engineering, Environmental Technology, Soil and Groundwater Pollution and Control, Engineering and Technology

Academic Titles / Tasks

Professor, Middle East Technical University, Faculty of Engineering, Department of Environmental Engineering, 2000 - Continues

Associate Professor, Middle East Technical University, Faculty of Engineering, Department of Environmental Engineering, 1994 - 2000

Assistant Professor, Middle East Technical University, Faculty of Engineering, Department of Environmental Engineering, 1992 - 1994

Lecturer, Virginia Polytechnic Institute And State University, College Of Engineering, Center For Environmental And Hazardous Materials Studies, 1990 - 1992

Expert, University Of California, Davis, College Of Agricultural And Environmental Sciences, Department Of Land Air And Water Resources, 1989 - 1989

Professional Experience

Head of Department, Middle East Technical University, Faculty of Engineering, Department of Environmental Engineering, 2015 - 2018

Deputy Head of Department, Middle East Technical University, Faculty of Engineering, Department of Environmental Engineering, 1999 - 2002

Deputy Head of Department, Middle East Technical University, Faculty of Engineering, Department of Environmental Engineering, 1994 - 1997

Courses

Contaminated Site Remediation, Post Graduate, 2019 - 2020

Transport Processes in Environmental Engineering, Under Graduate, 2016 - 2017, 2018 - 2019

Advising Theses

Ünlü K., Determination of environmental quality standard-based discharge limits for Tersakan sub-basin of Yeşilirmak river, Post Graduate, S.ÇELEBİ(Student), 2019

ÜNLÜ K., Numerical model development for Güzelyurt aquifer, North Cyprus, Post Graduate, C.DEMİR(Student), 2018

ÜNLÜ K., Conceptual model development for Güzelyurt aquifer, North Cyprus, Post Graduate, D.FANTA(Student), 2015

ÜNLÜ K., Development of risk based soil quality standards for Turkey, Doctorate, H.MELTEM(Student), 2011

Aksoy A., Ünlü K., Development of a fuzzy rule based remedial priority ranking system for contaminated sites, Post Graduate, Ş.Polat(Student), 2009

ÜNLÜ K., A decision support tool for conceptual site model development at contaminated sites, Post Graduate, B.BÜYÜKER(Student), 2009

Yazıcı A., Ünlü K., Development of a decision support system for performance-based landfill design, Doctorate, B.ÇELİK(Student), 2008

ÜNLÜ K., A mathematical modeling study on the feasibility of disposing partially treated domestic waste water using soil pile systems, Post Graduate, H.ALTINOKLAR(Student), 2006

ÜNLÜ K., Laboratory investigation of the treatment of chromium contaminated groundwater with iron-based permeable reactive barriers, Post Graduate, B.UYUŞUR(Student), 2006

ÜNLÜ K., Assesment of quality and quantity of leachate from the municipal solid waste landfill of Bursa, Post Graduate, S.AKYOL(Student), 2005

ÜNLÜ K., The effects of aquifer heterogeneity on the natural attenuation rates of chlorinated solvents, Post Graduate, B.ÖNKAL(Student), 2005

ÜNLÜ K., Modeling natural attenuation of petroleum hydrocarbons (BTEX) in heterogeneous aquifers, Post Graduate, T.UÇANKUŞ(Student), 2005

ÜNLÜ K., Sanitary landfill design evaluation using geographic information systems (GIS) interfaced with system simulation models (SSM), Post Graduate, B.TARHAN(Student), 2003

ÜNLÜ K., Modeling chromium leaching from chromite ore processing waste, Post Graduate, S.YALÇIN(Student), 2003

ÜNLÜ K., Modeling contaminant transport and remediation at the AKSA acrylonitrile spill site, Post Graduate, S.SEVİNÇ(Student), 2002

ÜNLÜ K., Development of modeling approaches for landfill leachate management, Doctorate, E.DEMİREKLER(Student), 2001

ÜNLÜ K., YETİŞ Ü., Comparison of leaching tests for hazardous waste characterization, Post Graduate, N.ANBARYAPAN(Student), 2001

ÜNLÜ K., Treatment of domestic wastewater using soil aquifer treatment system, Post Graduate, K.GÜNGÖR(Student), 2001

ÜNLÜ K., Solidification/stabilization of hazardous, Post Graduate, O.YILMAZ(Student), 2000

ÜNLÜ K., A Model for optimal design and operation of land treatment systems for oily wastes, Post Graduate, S.KVANÇ(Student), 1998

ÜNLÜ K., Chromium leaching from chromite ore processing waste material, Post Graduate, S.HASKÖK(Student), 1998

ÜNLÜ K., Assesment of groundwater pollution potential due to nitrogen fertilizer applications in an irrigated agricultural basin, Post Graduate, G.ÖZENİRLER(Student), 1997

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- **Identification of waste management strategies and waste generation factors for thermal power plant sector wastes in Turkey**
Demir C., YETİŞ Ü., ÜNLÜ K.
WASTE MANAGEMENT & RESEARCH, vol.37, pp.210-218, 2019 (Journal Indexed in SCI)
- **Identification of management strategies and generation factors for spent lead acid battery recovery plant wastes in Turkey**
ÇELEBİ S., YETİŞ Ü., ÜNLÜ K.
WASTE MANAGEMENT & RESEARCH, vol.37, pp.199-209, 2019 (Journal Indexed in SCI)
- **A Fuzzy Rule Based Remedial Priority Ranking System for Contaminated Sites**
POLAT S., AKSOY A., ÜNLÜ K.
GROUNDWATER, vol.53, pp.317-327, 2015 (Journal Indexed in SCI)
- **Modeling contaminant transport and remediation at an acrylonitrile spill site in Turkey**
Sengor S. S. , ÜNLÜ K.
JOURNAL OF CONTAMINANT HYDROLOGY, vol.150, pp.77-92, 2013 (Journal Indexed in SCI)
- **Challenges in Development and Implementation of Health-Risk-Based Soil Quality Guidelines: Turkey's Experience**
KENTEL E., AKSOY A., Buyuker B., Dilek F. B. , Girgin S., Ipek M. H. , Polat S., YETİŞ Ü., ÜNLÜ K.
RISK ANALYSIS, vol.31, pp.657-667, 2011 (Journal Indexed in SCI)
- **Hazardous waste management in Turkey: current legislative requirements and future challenges**
YIGIT C., MADEN G., DISA N., YILMAZ O., OGUTVERİCİ A., ALP E., ÜNLÜ K., Gokcay C. F. , DİLEK F. B. , DOĞAN O., et al.
DESALINATION AND WATER TREATMENT, vol.26, pp.152-159, 2011 (Journal Indexed in SCI)
- **A decision support system for assessing landfill performance**
Celik B., Girgin S., YAZICI A., ÜNLÜ K.
WASTE MANAGEMENT, vol.30, pp.72-81, 2010 (Journal Indexed in SCI)
- **A Laboratory Column Investigation for the Treatment of Cr(VI) with Zero-Valent Iron**
Uyusur B., ÜNLÜ K.
ENVIRONMENTAL ENGINEERING SCIENCE, vol.26, pp.385-395, 2009 (Journal Indexed in SCI)
- **Effect of vadose zone on the steady-state leakage rates from landfill barrier systems**
ÇELİK B., Rowe R. K. , ÜNLÜ K.
WASTE MANAGEMENT, vol.29, pp.103-109, 2009 (Journal Indexed in SCI)
- **The effect of aquifer heterogeneity on natural attenuation rate of BTEX**
Ucankus T., ÜNLÜ K.
ENVIRONMENTAL GEOLOGY, vol.54, pp.759-776, 2008 (Journal Indexed in SCI)
- **Modeling chromium dissolution and leaching from chromite ore-processing residue**
Yalcin S., Unlu K.
ENVIRONMENTAL ENGINEERING SCIENCE, vol.23, pp.187-201, 2006 (Journal Indexed in SCI)
- **Performance-based landfill design: development of a design component selection matrix using GIS and system simulation models**
Tarhan B., Unlu K.
ENVIRONMENTAL GEOLOGY, vol.49, pp.133-147, 2005 (Journal Indexed in SCI)
- **Modelling leachate quality and quantity in municipal solid waste landfills**
Yıldiz E., Unlu K., Rowe R.
WASTE MANAGEMENT & RESEARCH, vol.22, pp.78-92, 2004 (Journal Indexed in SCI)
- **A model for optimal operation of land-treatment sites for oily wastes**
Unlu K., Kivanc S.
WASTE MANAGEMENT & RESEARCH, vol.19, pp.229-248, 2001 (Journal Indexed in SCI)
- **Treatability of chromite ore processing waste by leaching**

Unlu K., Haskok S.

WASTE MANAGEMENT & RESEARCH, vol.19, pp.217-228, 2001 (Journal Indexed in SCI)

- **Modeling water quality impacts of petroleum contaminated soils in a reservoir catchment**

Unlu K., Demirekler E.

WATER AIR AND SOIL POLLUTION, vol.120, pp.169-193, 2000 (Journal Indexed in SCI)

- **Nitrogen fertilizer leaching from cropped and irrigated sandy soil in Central Turkey**

Unlu K., Ozenirler G., Yurteri C.

EUROPEAN JOURNAL OF SOIL SCIENCE, vol.50, pp.609-620, 1999 (Journal Indexed in SCI)

- **A geochemical equilibrium modeling approach to assessing soil acidification impacts due to depositions of industrial air emissions**

Unlu K., Ilbeyi A., Soyupak S., Yurteri C.

WATER AIR AND SOIL POLLUTION, vol.113, pp.395-409, 1999 (Journal Indexed in SCI)

- **Transport of metals leaching from land-disposed oil field wastes**

Unlu K.

WASTE MANAGEMENT & RESEARCH, vol.16, pp.541-554, 1998 (Journal Indexed in SCI)

- **ASSESSING RISK OF GROUNDWATER POLLUTION FROM LAND-DISPOSED WASTES**

UNLU K.

JOURNAL OF ENVIRONMENTAL ENGINEERING-ASCE, vol.120, pp.1578-1597, 1994 (Journal Indexed in SCI)

Refereed Congress / Symposium Publications in Proceedings

- **Occurrence of micropollutants in the industrial wastewaters discharged to Yeşilırmak and Nilüfer Rivers in Turkey**

Küçük E., ERGÜVEN G. Ö. , Canlı O., PİLEVNELİ T., Aydın E., Oktem O., ASLAN S., KURT Z., ÜNLÜ K., DİLEK F. B. , et al.

5th International Congress on Water, Waste and Energy Management (WWEM - 19), Paris, France, 22 - 24 July 2019, vol.1, pp.90

- **Noktasal Kaynakların Yeşilırmak Havzası Alıcı Ortam Kalitesine Etkilerinin Belirlenmesi**

KÜÇÜK E., PİLEVNELİ T., ASLAN S., ERGÜVEN G. Ö. , OLGUN E. Ö. , CANLI O., KURT Z., ÇELİK MADENLİ E., ÜNLÜ K., DİLEK F. B. , et al.

1. Uluslararası İçmesuyu ve Atıksu Sempozyumu, 6 - 07 December 2018

- **Identification of river basin specific pollutants using hazard ranking and risk-ranking of chemicals**

EMRE e., KÜÇÜK E., TOLGA p., İPEK U., BALCI d., ÜNLÜ K., DİLEK F. B. , ÇELİK MADENLİ E., YETİŞ Ü.

2017 Int. Env. Eng. Conference and annual meeting of the Korean Society of Env. Engineers, 15 - 17 November 2017

- **Ranking of the remedial priority of contaminated sites using a fuzzy rule based system**

AKSOY A., POLAT s., ÜNLÜ K.

NGWA Groundwater Summit 2016, 24 - 27 April 2016

- **Endüstriyel kaynaklı kirlenmiş sahalar için çevre yönetim sistemi**

ÜNLÜ K., GÜVENER m., GİRGİN s., YETİŞ Ü., DİLEK F. B. , AKSOY A., BÜYÜKER b., POLAT ş.

EKK 08, İstanbul, Turkey, 11 - 13 June 2008, pp.9-26

- **Use of GIS as a supporting tool for environmental risk assessment and emergency response plans**

Girgin S., Unlu K., Yetis U.

NATO Advanced Research Workshop on Comparative Risk Assessment and Environmental Decision Making, Rome, Italy, 13 - 16 October 2002, vol.38, pp.267-274

- **Optimal design and operation of land-treatment systems for petroleum hydrocarbons**

Kivanc S., Unlu K.

5th International In Situ and On-Site Bioremediation Symposium, California, United States Of America, 19 - 22 April 1999, pp.81-86

- **Risk based remedial investigations for polychlorinated biphenyl (PCB)-contaminated soil sites**

Unlu K.

4th International In Situ and On-Site Bioremediation Symposium, Louisiana, United States Of America, 28 April - 01

Supported Projects

ÜNLÜ K., DEMİR C., Project Supported by Higher Education Institutions, Kuzey Kıbrıs Türk Cumhuriyeti (KKTC) Güzelyurt Akiferi'nin Sayısal Modellenmesi, 2016 - 2019

KALAYLIOĞLU AKYILDIZ Z. I. , AKKAYA A., ÜNLÜ K., Project Supported by Higher Education Institutions, ODTÜ Kampüsünde Çöp Toplama Sistemi Dışında Kalan Evsel Katı Atıkların Analizi ve Çözüm Önerileri, 2016 - 2016

Citations

Total Citations (WOS):117

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