

Lect. PhD Hüseyin Özdemir

Personal Information

Email: ozdemirhuseyin@itu.edu.tr

Web: <https://avesis.itu.edu.tr/ozdemirhuseyin>

Address: Avrasya Yer Bilimleri Enst., Istanbul Teknik Üniversitesi, 34469, Maslak, Istanbul

International Researcher IDs

ORCID: 0000-0002-3166-6513

ScopusID: 36170067000

Yoksis Researcher ID: 122357

Education Information

Post Doctorate, Aarhus Universitet (University of Aarhus), Environmental Science, Atmospheric Modelling Section, Denmark 2018 - 2019

Doctorate, Marmara University, Institute For Graduate Studies In Pure And Applied Sciences, Department Of Environmental Engineering (Eng), Turkey 2007 - 2013

Postgraduate, Istanbul University, Institute Of Graduate Studies In Sciences, Mühendislik Fakültesi Bölümü, Turkey 2003 - 2006

Undergraduate, Marmara University, Faculty Of Engineering, Environmental Engineering, Turkey 1998 - 2002

Dissertations

Doctorate, Investigation of the impact of urbanization on climate and air quality: A case study over Turkey, Marmara University, Institute For Graduate Studies In Pure And Applied Sciences, Department Of Environmental Engineering (Eng), 2013

Postgraduate, İstanbul atmosferindeki troposferik ozon konsantrasyonunun yapay sınır ağ teknikleri ile modellenmesi, Istanbul University, Institute Of Graduate Studies In Sciences, Mühendislik Fakültesi Bölümü, 2006

Research Areas

Environmental Engineering, Air Pollution and Control

Academic Titles / Tasks

Lecturer PhD, Istanbul Technical University, Avrasya Yer Bilimleri Enstitüsü, İklim Ve Deniz Bilimleri, 2022 - Continues
Assistant Professor, Bahcesehir University, Faculty Of Engineering, Department Of Environmental Engineering, 2013 - 2016

Lecturer PhD, Bahcesehir University, Faculty Of Engineering, Department Of Environmental Engineering, 2010 - 2013

Research Assistant, Bahcesehir University, Faculty Of Engineering, Department Of Environmental Engineering, 2007 - 2010

Courses

Effect of Air Pollution on Human Health, Postgraduate, 2022 - 2023

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Ambient air quality assessment at the airports based on a meteorological perspective**
Birinci E., Denizoglu M., Ozdemir H., Ozdemir E. T., Deniz A.
ENVIRONMENTAL MONITORING AND ASSESSMENT AN INTERNATIONAL JOURNAL DEVOTED TO PROGRESS IN THE USE OF MONITORING DATA IN ASSESSING ENVIRONMENTAL RISKS TO MAN AND THE ENVIRONMENT, vol.195, no.1542, pp.1-17, 2023 (SCI-Expanded)
- II. **An urban air quality assessment based on a meteorological perspective**
Kaya İ., Ozdemir H., Capraz Ö., ATMACA E., Türkel V., Deniz A., Demir G., Ünal A.
Environmental Monitoring and Assessment, vol.195, no.9, 2023 (SCI-Expanded)
- III. **Analysis and sampling of atmospheric particles of precipitation sub-events in Istanbul, Turkey**
Bahauddin M., Oruc I., Baltaci H., Ozdemir H., AKKOYUNLU B. O.
International Journal of Environmental Science and Technology, vol.19, no.7, pp.5985-5998, 2022 (SCI-Expanded)
- IV. **Impact of heating season on the soil pollution in Kırklareli province of Turkey**
Turhan S. B., Oruc I., Ozdemir H.
ENVIRONMENTAL MONITORING AND ASSESSMENT, vol.193, no.4, 2021 (SCI-Expanded)
- V. **Seasonal variation of carbonaceous PM_{2.5} in an Istanbul traffic site**
FLORES RANGEL R. M., Ozdemir H., AKKOYUNLU B. O., Ünal A., TAYANÇ M.
ATMOSPHERIC POLLUTION RESEARCH, vol.11, no.12, pp.2110-2118, 2020 (SCI-Expanded)
- VI. **Black carbon and size-segregated elemental carbon, organic carbon compositions in a megacity: a case study for Istanbul**
KUZU S. L., YAVUZ E., Akyüz E., SARAL A., AKKOYUNLU B. O., ÖZDEMİR H., Demir G., Ünal A.
AIR QUALITY ATMOSPHERE AND HEALTH, vol.13, no.7, pp.827-837, 2020 (SCI-Expanded)
- VII. **A high-time resolution study of PM_{2.5}, organic carbon, and elemental carbon at an urban traffic site in Istanbul**
FLORES RANGEL R. M., Mertoglu E., ÖZDEMİR H., AKKOYUNLU B. O., Demir G., Ünal A., TAYANÇ M.
ATMOSPHERIC ENVIRONMENT, vol.223, 2020 (SCI-Expanded)
- VIII. **Mitigation impact of roadside trees on fine particle pollution**
Ozdemir H.
SCIENCE OF THE TOTAL ENVIRONMENT, vol.659, pp.1176-1185, 2019 (SCI-Expanded)
- IX. **Statistical evaluation and predicting the possible sources of particulate matter in a Mediterranean metropolitan city**
Summak G., Ozdemir H., Oruc I., Kuzu L., Saral A., Demir G.
GLOBAL NEST JOURNAL, vol.20, no.2, pp.173-180, 2018 (SCI-Expanded)
- X. **Spatial and temporal analysis of black carbon aerosols in Istanbul megacity**
Ozdemir H., Pozzoli L., Kindap T., Demir G., Mertoglu B., Mihalopoulos N., Theodosi C., Kanakidou M., Im U., Ünal A.
SCIENCE OF THE TOTAL ENVIRONMENT, vol.473, pp.451-458, 2014 (SCI-Expanded)
- XI. **Case study of PM pollution in playgrounds in Istanbul**
Ozdemir H., Mertoglu B., Demir G., DENİZ A., Toros H.
THEORETICAL AND APPLIED CLIMATOLOGY, vol.108, no.3-4, pp.553-562, 2012 (SCI-Expanded)
- XII. **Quantification of the urban heat island under a changing climate over Anatolian Peninsula**
Ozdemir H., UNAL A., Kindap T., TURUNCOGLU U. U., DURMUSOGLU Z. O., KHAN M., Tayanc M., KARACA M.
THEORETICAL AND APPLIED CLIMATOLOGY, vol.108, no.1-2, pp.31-38, 2012 (SCI-Expanded)
- XIII. **FEATURE SELECTION FOR THE PREDICTION OF TROPOSPHERIC OZONE CONCENTRATION USING A WRAPPER METHOD**
Sakar C. O., Demir G., Kursun O., Ozdemir H., Altay G., Yalcin S.
INTELLIGENT AUTOMATION AND SOFT COMPUTING, vol.17, no.4, pp.403-413, 2011 (SCI-Expanded)
- XIV. **Quantification of atmospheric particle number concentration for selected children playgrounds: a**

case study in istanbul

Borucu G., Ozdemir H., Demir G., YİĞİT HUNCE S., ÖZCAN H. K.

Journal of Residuals Science and Technology, vol.7, no.3, pp.147-152, 2010 (SCI-Expanded)

XV. Elemental concentrations of atmospheric aerosols and the soil samples on the selected playgrounds in Istanbul

Demir G., YİĞİT HUNCE S., Ozdemir H., Borucu G., SARAL A.

Journal of Residuals Science and Technology, vol.7, no.2, pp.123-130, 2010 (SCI-Expanded)

XVI. An Artificial Neural Network Based Model For Short Term Predictions of Daily Mean PM10 Concentrations

Özdemir H.

JOURNAL OF ENVIRONMENTAL PROTECTION AND ECOLOGY, vol.11, no.3, pp.1163-1171, 2010 (SCI-Expanded)

XVII. Prediction and evaluation of tropospheric ozone concentration in Istanbul using artificial neural network modeling according to time parameter

Demir G., Altay G., Sakar C. O., Albayrak S., Ozdemir H., Yalcin S.

Journal of Scientific and Industrial Research, vol.67, no.9, pp.674-679, 2008 (SCI-Expanded)

XVIII. Prediction of Tropospheric Ozone Concentration by Employing Artificial Neural Networks

Ozdemir H., Demir G., Altay G., Albayrak S., Bayat C.

ENVIRONMENTAL ENGINEERING SCIENCE, vol.25, no.9, pp.1249-1254, 2008 (SCI-Expanded)

Articles Published in Other Journals

I. NOKTASAL KAYNAKLAR İÇİN ULUSAL HAVA KİRLİLİĞİ EMİSYON FAKTÖRLERİ VE ENVANTERİNİN BELİRLENMESİ: METAL SEKTÖRÜ İÇİN ÖRNEK BİR ÇALIŞMA

ÖZDEMİR H., AKTAŞ M. A., Yalçın İ. E., ALYÜZ ÖZDEMİR Ü., ÖKTEN H. E., ÖZCAN H. K., Köksal C. E., ÇETİNTÜRK GÜLTEPE İ., DEMİR G., ÜNAL A.

International Journal of Advances in Engineering and Pure Sciences, vol.33, no.3, pp.337-346, 2021 (Peer-Reviewed Journal)

II. Seçilmiş Bir Termik Santralde ESF Uygulamaları ve Verim Artırıcı Yöntemlerin İncelenmesi
Kurt B., ÖZDEMİR H., DEMİR G.

International Journal of Advances in Engineering and Pure Sciences, vol.33, no.3, pp.398-405, 2021 (Peer-Reviewed Journal)

III. Yol Kenarlarındaki Ağaçların Trafik Kaynaklı Karbon Aerosollerini Üzerindeki Etkisi

AKTAŞ M. A., ÖZDEMİR H., ÇEKER A. O., ÖZCAN H. K., DEMİR G.

European Journal of Science and Technology, vol.0, no.27, pp.479-488, 2021 (Peer-Reviewed Journal)

IV. Deposition of heavy metals on coniferous tree leaves and soils near heavy urban traffic

TURAN Ö., ÖZDEMİR H., DEMİR G.

Frontiers in Life Sciences and Related Technologies, vol.1, no.1, pp.35-41, 2020 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

I. UZUN MESAFELİ TOZ TAŞINIMININ HAVALİMANLARINA OLAN ETKİLERİNİN İNCELENMESİ: 29 KASIM 2021 OLAYI

Birinci E., Özdemir H., Özdemir E. T.

V. METEOROLOJİK UZAKTAN ALGILAMA SEMPOZYUMU, Antalya, Turkey, 14 November - 17 December 2023, pp.261-275

II. Sectoral contributions of anthropogenic emissions within the Nordic countries: pollution levels, health impacts and associated costs

İm U., Christensen J. H., Sand M., Nielsen O., Geels C., Rasmussen L. M. F., Brandt J., ÖZDEMİR H., Makkonen R.

European Geosciences Union General Assembly 2019, Viyana, Austria, 7 - 12 April 2019

- III. **Black Carbon Evaluation in an Urban Side of Istanbul Atmosphere during Spring and Summer Seasons**
KUZU S. L., YAVUZ E., AKYÜZ E., SARAL A., AKKOYUNLU B. O., ÖZDEMİR H.
18th World Clean Air Congress, İstanbul, Turkey, 23 - 27 September 2019, vol.1, pp.483-491
- IV. **Distribution Of SVOCs in Fine and Coarse Particulate Matter in a Traffic Site in the Megacity Of Istanbul**
FLORES RANGEL R. M., ÖZDEMİR H., AKKOYUNLU B. O., ÜNAL A., TAYANÇ M.
18th World Clean Air Congress 2019, 23 - 27 September 2019
- V. **Seasonality of PM 2.5 and its organic fraction in a traffic site in Besiktas, Istanbul**
FLORES RANGEL R. M., MERTOĞLU E., ÖZDEMİR H., AKKOYUNLU B. O., ÜNAL A., TAYANÇ M.
18th World Clean Air Congress 2019, 23 - 27 September 2019
- VI. **Black Carbon Evaluation in an Urban Side of Istanbul Atmosphere During Spring and Summer Seasons**
KUZU S. L., YAVUZ E., AKYÜZ E., SARAL A., AKKOYUNLU B. O., ÖZDEMİR H.
18th World Clean Air Congress 2019, İstanbul, Turkey, 23 - 27 September 2019, pp.483-490
- VII. **A STUDY OF METALIC COMPOSITION IN THE DAILY PM2.5 SAMPLES AT KIRKLARELI, TURKEY**
N ORUÇ H., ÖZDEMİR H., FLORES RANGEL R. M., SEZEN İ., AKKOYUNLU B. O., DEMİR G., ÜNAL A., TAYANÇ M.
18th WORLD CLEAN AIR CONGRESS 2019, 23 - 27 September 2019
- VIII. **Quantifying the Effects of Air Pollution on Human Health and Economy in Turkey using the EVA Modelling System**
ÖZDEMİR H., İm U., Christensen J. H., Geels C.
18th World Clean Air Congress 2019, İstanbul, Turkey, 23 - 27 September 2019
- IX. **Diurnal and seasonal variations of primary and secondary organic carbon at an urban traffic site in Istanbul**
FLORES RANGEL R. M., MERTOĞLU KAMALI E., Pursa A., ÖZDEMİR H., AKKOYUNLU B. O., DEMİR G., ÜNAL A., TAYANÇ M.
European Geosciences Union General Assembly 2019, Viyana, Austria, 7 - 12 April 2019
- X. **Quantification of the Impact of Air Pollution on Human Health and Economy in Turkey using the EVA System**
ÖZDEMİR H., İm U., Christensen J. H., Geels C.
European Geosciences Union General Assembly 2019, Viyana, Austria, 07 April 2019
- XI. **PM2.5 Analysis and the Determination of PAH Constituents at a Densely Populated Area of Istanbul**
FLORES RANGEL R. M., ÖZDEMİR H., AKKOYUNLU B. O., DEMİR G., ÜNAL A., TAYANÇ M.
10th Better Air Quality Conference 2018, Malaysia, 14 - 16 November 2018
- XII. **Study of Particulate Matter in Kırklareli, Turkey with Meteorological Factors**
FLORES RANGEL R. M., ÖZDEMİR H., AKKOYUNLU B. O., DEMİR G., ÜNAL A., TAYANÇ M.
10th Better Air Quality Conference 2018, 14 - 16 November 2018
- XIII. **PM 2.5 Analysis and the Determination of PAH Constituents at a Densely Populated Area of Istanbul**
FLORES RANGEL R. M., ÖZDEMİR H., AKKOYUNLU B. O., DEMİR G., ÜNAL A., TAYANÇ M.
10th Better Air Quality Conference 2018, 14 - 16 November 2018
- XIV. **Characterization of Semi-Volatile Organic Compounds in Fine Atmospheric Particles**
MERTOĞLU KAMALI E., FLORES RANGEL R. M., Pursa A., ÖZDEMİR H., AKKOYUNLU B. O., DEMİR G., ÜNAL A., TAYANÇ M.
3rd International Mediterranean Science and Engineering Congress, Turkey, 24 - 26 October 2018
- XV. **Diurnal Variation of Semi-Volatile Organic Compounds associated to PM2.5 in a traffic-influenced area in Istanbul**
FLORES RANGEL R. M., Nafie Y., MERTOĞLU KAMALI E., ÖZDEMİR H., AKKOYUNLU B. O., DEMİR G., ÜNAL A., TAYANÇ M.
European Geosciences Union General Assembly 2018, 8 - 13 April 2018
- XVI. **Evaluation of a thermal desorption method for complete characterization of semi-volatile organic compounds in atmospheric aerosols**

Gök A., FLORES RANGEL R. M., ÖZDEMİR H., AKKOYUNLU B. O., DEMİR G., ÜNAL A., TAYANÇ M.
8th Atmospheric Science Symposium, Istanbul Technical University, İstanbul, Turkey, 1 - 04 November 2017,
pp.158-171

- XVII. **EVALUATION OF A THERMAL DESORPTION METHOD FOR COMPLETE CHARACTERIZATION OF ORGANIC AEROSOLS**
GÖK A. E., FLORES RANGEL R. M., ÖZDEMİR H., AKKOYUNLU B. O., DEMİR G., ÜNAL A., TAYANÇ M.
8th Atmospheric Sciences Symposium, 1 - 04 November 2017
- XVIII. **Semi-volatile Organic Aerosol Composition in High-Time Resolved Ambient Air PM_{2.5} Samples: Preliminary Results**
Gök A., FLORES RANGEL R. M., ÖZDEMİR H., AKKOYUNLU B. O., DEMİR G., TAYANÇ M.
2nd International Conference on Civil and Environmental Engineering, Nevşehir, Turkey, 8 - 10 May 2017
- XIX. **Heavy metal concentrations of selected public parks of Istanbul City**
DEMİR G., ÖZCAN H. K., ÖZDEMİR H., Pektaş A. O., ORUÇ İ., Büyükyıldız M.
ICCMP, 2nd International Conference on Chemical Materials and Process, Denmark, 11 - 13 March 2016
- XX. **Developing Air Pollution Early Warning System for the Marmara Region in Turkey**
ÖZDEMİR H., DEMİR G., Karahan Y.
2015 6th International Conference on Environmental Science and Technology, Amsterdam, Netherlands, 14 - 16 February 2015
- XXI. **Comparative Cost Analysis of Paper Production: Traditional vs. Recycling**
ÇORUM A., ÖZDEMİR H., DEMİR G.
12th Eurasia Business and Economics Society (EBES) Conference, Singapore, 9 - 11 January 2014
- XXII. **A Study Of High Particulate Matter Concentrations Episodes In The Megacity Of Istanbul Using A Fine Resolution CMAQ Air Quality Modelling Simulation**
ÖZDEMİR H., DEMİR G., İm U., Kanakidou M., Katragkou E., Markakis K., Marougianni G., Melas D., Poupkou A., POZZOLI L., et al.
MESAEP, 17th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region, 28 September - 01 October 2013
- XXIII. **Environmental, Energy, and Economic Comparison of Mineral and Traditional Paper Production**
ÖZDEMİR H., ÇORUM A., Yoruk C., Yalçın İ. E., DEMİR G.
2nd International Renewable Energy and Environment Conference, IREEC-2013, Kuala-Lumpur, Malaysia, 04 July 2013 - 06 March 2023
- XXIV. **Online Detection and Analysis System for Air Pollution Hot Spots in Turkey**
Özkan E., ÖZDEMİR H., ŞAKAR C. O., DEMİR G., ÜNAL A., KINDAP T.
2nd International Conference on Biotechnology and Environment Management. IPCBEE, Singapore, 5 - 06 May 2012
- XXV. **Spatial and Temporal Analysis of Black Carbon Aerosols in Istanbul**
ÖZDEMİR H., KINDAP T., Pazzoli L., ÜNAL A., İm U., DEMİR G., Kanakidou M., KARACA M.
UAQCC, Urban Air Quality and Climate Change, Joint workshop of WMO and KlimaCampus, University of Hamburg, 16 - 18 August 2011
- XXVI. **Measurements and Analysis of Black Carbon Aerosols in the Mediterranean Megacity.**
ÖZDEMİR H., ÜNAL A., KINDAP T., DEMİR G., KARACA M., Khan M.
AGU – American Geophysical Union, 13 - 15 December 2010
- XXVII. **Partiküler Maddeler ve İklim Değişikliği Üzerine Etkilerinin Değerlendirilmesi. 2. Türkiye İklim Değişikliği Kongresi**
Yiğit S., ÖZDEMİR H., ÇOBAN A., DEMİR G., Borucu G., Ak N.
Partiküler Maddeler ve İklim Değişikliği Üzerine Etkilerinin Değerlendirilmesi. 2. Türkiye İklim Değişikliği Kongresi, İstanbul, Turkey, 16 - 18 June 2010
- XXVIII. **Impacts of Istanbul emissions on regional air quality: Quantification using model-3 framework and trajectory analysis.**
ÖZDEMİR H., İm U., Kostandinos M., AĞAÇAYAK T., ÜNAL A., KINDAP T., Khan M.
8th annual CMAS Conference, New York, United States Of America, 19 - 21 October 2009

- XXIX. **Türkiye’de Tehlikeli Atık Yönetimi ve Bertaraf Seçeneği Olarak Yakma Yönteminin İncelenmesi**
Borucu G., ÖZDEMİR H., DEMİR G.
Türkay, Yıldız Teknik Üniversitesi, İstanbul, Turkey, 15 - 17 June 2009
- XXX. **Küresel Isınma ile Kuraklık Arasındaki İlişkilerin Değerlendirilmesi ve Geleceğe Yönelik Su Tasarrufu Projeksiyonu**
Ak N., ÖZDEMİR H., DEMİR G.
Konya Kapalı Havzası Yeraltısuyu ve Kuraklık Konferansı, Konya, Turkey, 11 - 12 September 2008
- XXXI. **Hava Kirliliği Modellenmesinde Yapay Sinir Ağları Kullanımının Genel Bir Değerlendirilmesi**
ÖZDEMİR H., DEMİR G.
Çevre Sorunları Sempozyumu, Kocaeli Üniversitesi, 14 - 17 May 2008
- XXXII. **HAVA KİRLİLİĞİ MODELLENMESİNDE YAPAY SİNİR AĞLARI KULLANIMININ DEĞERLENDİRİLMESİ**
ÖZDEMİR H., DEMİR G.
Çevre Sorunları Sempozyumu, Kocaeli, Turkey, 14 - 17 May 2008

Supported Projects

Özdemir H., EU Supported Other Project, Technical Assistance for Improving Air Quality and Raising Public Awareness in Cities in Turkey - CITYAIR (in line with CAFE Directive), 2018 - 2021

Memberships / Tasks in Scientific Organizations

European Geosciences Union, Member, 2018 - Continues, Turkey
The Society of Environmental Toxicology and Chemistry , Member, 2008 - Continues, United States Of America
Çevre Mühendisleri Odası, Member, 2002 - Continues, Turkey

Metrics

Publication: 56
Citation (WoS): 94
Citation (Scopus): 181
H-Index (WoS): 8
H-Index (Scopus): 9