

Assoc. Prof. NUR HANİFE ORAK

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: L-9971-2019

ScopusID: 57190947376

Yoksis Researcher ID: 184416

Biography

Nur H. Orak is an Associate Professor in the Department of Environmental Engineering at Marmara University. Prior to moving to Turkey Dr. Orak worked as a Postdoctoral Associate at The US Department of Energy-The National Energy Technology Laboratory and Carnegie Mellon University in the Department of Civil and Environmental Engineering, Pittsburgh. Orak is an environmental engineer with a multi-disciplinary research background. Her research interests include environmental statistics, mathematical modeling, environmental risk assessment, decision support, and environmental health.

Orak has a long history of leadership positions with several technical and non-technical NGOs in Turkey and the USA. Currently, she is the chair of the American Society of Civil Engineers-Environmental Water Resources Institute Students and Education Council and a board member of the New Professionals Council and Women-Water Nexus. She is serving as a member of ASCE-[EWRI Congress](#) Steering Committee and as the first international corresponding member of the [ASCE Convention](#).

Education Information

Post Doctorate, U.S. National Energy Technology Laboratory (NETL), United States Of America 2016 - 2017

Post Doctorate, Carnegie Mellon University, School of Engineering, Civil and Environmental Engineering, United States Of America 2016 - 2017

Doctorate, Carnegie Mellon University, School of Engineering, Civil and Environmental Engineering, United States Of America 2012 - 2016

Postgraduate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Environmental Engineering, Turkey 2010 - 2012

Undergraduate, Istanbul Technical University, Environmental Engineering, Turkey 2005 - 2010

Research Areas

Environmental Impact Assessment, Environmental Modeling, Environmental Risk Assessment, Environmental Health and Safety, Environmental Policies, Environmental Management

Academic Titles / Tasks

Associate Professor, Marmara University, Faculty of Engineering, Environmental Engineering, 2022 - Continues

Assistant Professor, Marmara University, Faculty of Engineering, Environmental Engineering, 2020 - 2022

Other, Marmara University, Faculty of Engineering, Environmental Engineering, 2019 - 2020

Research Assistant, Carnegie Mellon University, CIT, Civil and Environmental Engineering, 2012 - 2016

Research Assistant, Istanbul Technical University, 2012 - 2012

Academic and Administrative Experience

Deputy Head of Department, Marmara University, Faculty of Engineering, Environmental Engineering, 2021 - Continues

Courses

Statistics for Engineers, Undergraduate, 2023 - 2024

Engineering Economy , Undergraduate, 2023 - 2024

Environmental Impact Assessment, Undergraduate, 2023 - 2024

Academic Writing, Undergraduate, 2021 - 2022

Numerical Methods, Undergraduate, 2020 - 2021

Special Topics in Environmental Engineering II, Undergraduate, 2020 - 2021

Engineering Project II, Undergraduate, 2020 - 2021

Special Topics in Environmental Engineering I, Doctorate, 2021 - 2022

Environmental Engineering Ecology, Undergraduate, 2019 - 2020

Engineering Project I, Undergraduate, 2019 - 2020

Jury Memberships

Competition, Graduate Student Technical Paper Competition, ASCE EWRI, May, 2022

Competition, WSP Student Design Competition, ASCE EWRI, May, 2022

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Investigation of greenhouse gas emissions from municipal solid waste management practices using an economic input-output life cycle analysis approach**
Deniz R. F., Chen X., ORAK N. H.
Journal of Cleaner Production, vol.420, 2023 (SCI-Expanded)
- II. **Effect of ambient air pollution and meteorological factors on the potential transmission of COVID-19 in Turkey**
ORAK N. H.
ENVIRONMENTAL RESEARCH, vol.212, 2022 (SCI-Expanded)
- III. **Identifying and Quantifying Source Contributions of Air Quality Contaminants during Unconventional Shale Gas Extraction**
Orak N. H., Reeder M., Pekney N. J.
Atmospheric Chemistry And Physics, vol.21, pp.1-7, 2021 (SCI-Expanded)
- IV. **The impacts of COVID-19 lockdown on PM10 and SO2 concentrations and association with human mobility across Turkey**
Orak N. H., Ozdemir O.
Environmental Research, vol.21, pp.1-7, 2021 (SCI-Expanded)
- V. **Air pollution risk associated with unconventional shale gas development**

Orak N. H., Pekney N. J.

CARBON MANAGEMENT, vol.11, no.6, pp.645-651, 2020 (SCI-Expanded)

VI. **A Hybrid Bayesian Network Framework for Risk Assessment of Arsenic Exposure and Adverse Reproductive Outcomes**

Orak N. H.

ECOTOXICOLOGY AND ENVIRONMENTAL SAFETY, vol.192, 2020 (SCI-Expanded)

VII. **Effect of disinfection processes and anthropogenic pollutants on comparative formation of trihalomethanes and N-nitrosodimethylamine**

Orak N. H., Ozsenturk T., Topuz E., Aydın E., Gürel M., Genceli E. A., Pehlivanoğlu Mantaş E.

INTERNATIONAL JOURNAL OF ENVIRONMENTAL SCIENCE AND TECHNOLOGY, vol.16, no.8, pp.4083-4090, 2019 (SCI-Expanded)

VIII. **Bayesian network-based framework for exposure-response study design and interpretation**

Orak N. H., Small M. J., Druzdzel M. J.

ENVIRONMENTAL HEALTH, vol.18, 2019 (SCI-Expanded)

IX. **Implications of a statistical occurrence model for mixture toxicity estimation**

Orak N. H., Small M. J.

HUMAN AND ECOLOGICAL RISK ASSESSMENT, vol.23, no.3, pp.534-549, 2017 (SCI-Expanded)

X. **VISIBLE AND UV-A LIGHT-INDUCED PHOTOCATALYSIS OF FORMIC AND OXALIC ACIDS WITH S-DOPED, Fe-LOADED TITANIA**

Ölmez Hancı T., Orak N. H., Tetik A., Kabdaşlı N. I., Ohno T., Arslan-Alaton I., Tunay O.

FRESENIUS ENVIRONMENTAL BULLETIN, vol.23, pp.3366-3373, 2014 (SCI-Expanded)

Books & Book Chapters

I. **Yaşam Döngüsü Değerlendirmesi: Önemli kararlar için nicel yaklaşımlar**

Orak N. H.

Akademisyen , Ankara, 2020

Refereed Congress / Symposium Publications in Proceedings

I. **KENT ÖLÇEĞİNDE ÇEVRESEL PERFORMANSIN DEĞERLENDİRİLMESİ: İSTANBUL YEŞİL KENT İNDEKSİ GÜRSOY HAKSEVENLER B. H., ORAK N. H., AKPINAR A., Şengül Z.**

23. Uluslararası Kamu Yönetimi Forumu (KAYFOR), Kırıkkale, Turkey, 26 - 28 October 2023, pp.181-184

II. **A Case Study on Choosing Effective Nature Based Solutions for Climate Change Adaptation in Istanbul, Türkiye**

Şeker D., Orak N. H.

ASCE-EWRI World Environmental & Water Resources Congress, Nevada, United States Of America, 21 - 25 May 2023

III. **Comparison of municipal solid waste management systems using the economic input-output life cycle assessment method**

Deniz R. F., Chen X., Orak N. H.

SETAC EUROPE 32ND ANNUAL MEETING, Kobenhavn, Denmark, 15 - 19 May 2022, pp.545

IV. **The Impacts on Greenhouse Gases Emission during the COVID-19 lockdown in the US: An Economic Input-Output Life Cycle Assessment**

Orak N. H., Alshehri K., Chen X.

LCE, Leuven, Belgium, 4 - 06 April 2022, pp.25-30

V. **A Novel Method for Environmental Risk Assessment: A Case Study of Coarse Particulate Matter and Infant Birth Weight**

Orak N. H.

Supported Projects

Orak N. H., Project Supported by Higher Education Institutions, Kentsel Katı Atık Yönetim Sistemlerinin Ekonomik Girdi-Çıktı Yaşam Döngüsü Değerlendirmesi Yöntemiyle Karşılaştırılması, 2021 - 2022

Orak N. H., Pekney N., Project Supported by Private Organizations in Other Countries, Air quality impacts of unconventional shale gas well pad development, 2016 - 2017

Orak N. H., Clougherty J., Other International Funding Programs, Air Pollution Assessment Near Fayette Correctional Facility, 2016 - 2017

Activities in Scientific Journals

Frontiers In Sustainable Cities , Special Issue Editor, 2022 - Continues

Memberships / Tasks in Scientific Organizations

Society of Women Engineers, Member, 2015 - Continues, United States Of America

Society of Environmental Toxicology and Chemistry, Member, 2013 - Continues, United States Of America

ASCE Environmental & Water Resources Institute, Associate Member, 2013 - Continues, United States Of America

International Water Association, Member, 2012 - 2016, United States Of America

American Water Works Association, Member, 2012 - 2014, United States Of America

Tasks In Event Organizations

Orak N. H., World Environmental & Water Resources Congress, Scientific Congress, Nevada, United States Of America, Mayıs 2023

Orak N. H., ASCE Convention, Scientific Congress, United States Of America, Ekim 2022

Orak N. H., ASCE Convention, Scientific Congress, United States Of America, Ekim 2021

Metrics

Publication: 17

Citation (WoS): 14

Citation (Scopus): 13

H-Index (WoS): 2

H-Index (Scopus): 2

Congress and Symposium Activities

World Environmental & Water Resources Congress, Invited Speaker, Nevada, United States Of America, 2021

Awards

Orak N. H., Young Professional Best Paper Award for the Industrial, Government, and Public Services Group, The Air & Waste Management Association'S 110Th Annual Conference & Exhibition , June 2017

Orak N. H., Graduate Student Best Technical Paper Award, The American Society Of Civil Engineers-World Environmental & Water Resources Congress, May 2016

Representation and Promotion Activities

Institutional Representation, The Society of Women Engineers , United States Of America, District Of Columbia, 2022 - 2023

Institutional Representation, American Society of Civil Engineers, United States Of America, District Of Columbia, 2020 - 2023

Non Academic Experience

Carnegie Mellon University

The U.S. National Energy Technology Laboratory