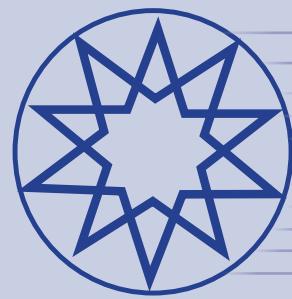


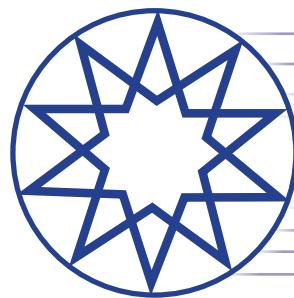
ISSN 2636-8498



Environmental Research & Technology

Year 2022
Volume 5
Number 2

www.ert.yildiz.edu.tr



Environmental Research & Technology

Volume 5 Number 2 Year 2022

EDITOR-IN-CHIEF

Ahmet Demir, Yildiz Technical University, Istanbul, Turkey

Mehmet Sinan Bilgili, Yildiz Technical University, Istanbul, Turkey

ACADEMIC ADVISORY BOARD

Adem Basturk

Mustafa Ozturk

Lutfi Akca

Oktay Tabasaran

Ahmet Demir

SCIENTIFIC DIRECTOR

Ahmet Demir, Yildiz Technical University, Istanbul, Turkey

ASSISTANT EDITOR

Hanife Sari Erkan, Yildiz Technical University, Istanbul, Turkey

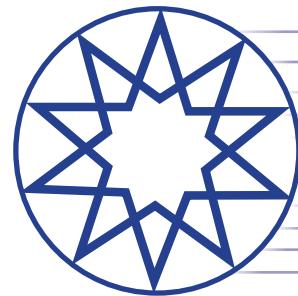
LANGUAGE EDITOR

Güleda Engin, Yildiz Technical University, Istanbul, Turkey

EDITORIAL BOARD

Andjelka Mihajlov, Serbia; Artur J. Badyda, Poland; Aysegul Pala, Turkey; Aysen Erdinclar, Turkey; Azize Ayol, Turkey; Bulent Keskinler, Turkey; Didem Ozcimen, Turkey; Erwin Binner, Austria; Eyup Debik, Turkey; F. Dilek Sanin, Turkey; Gulsum Yilmaz, Turkey; Hamdy Seif, Lebanon; Hanife Buyukgungor, Turkey; Ilirjan Malollari, Albania; Ismail Koyuncu, Turkey; Jaakko Puhakka, Finland; Lucas Alados Arboledas, Spain; Mahmoud A. Alawi, Jordan; Marcelo Antunes Nolasco, Brazil; Martin Kranert, Germany; Mehmet Emin Aydin, Turkey; Mesut Akgun, Turkey; Mukand S. Babel, Thailand; Mustafa Odabasi, Turkey; Mufide Banar, Turkey; Mustafa Okutan, Turkey; Mufit Bahadir, Germany; Neslihan Dogan Saglamtimur, Turkey; Nihal Bektas, Turkey; Nurdan Gamze Turan, Turkey; Osman Arikan, Turkey; Osman Nuri Agdag, Turkey; Omer Akgiray, Turkey; Ozer Cinar, Turkey; Pier Paolo Manca, Italy; Recep Boncukcuoglu, Turkey; Saim Özdemir, Turkey; Sameer Afifi, Palestine; Serdar Aydin, Turkey; Timothy O. Randhir, United States; Ülkü Yetis, Turkey; Victor Alcaraz Gonzalez, Mexico; Yaşar Nuhoğlu, Turkey

Environmental Research & Technology



Volume 5 Number 2 Year 2022

CO-EDITORS (AIR POLLUTION)

Arslan Saral, Turkey; Mohd Talib Latif, Malaysia; Nedim Vardar, Puerto Rico; Sait Cemil Sofuoğlu, Turkey; Wina Graus, Netherlands

CO-EDITORS (ENVIRONMENTAL ENGINEERING AND SUSTAINABLE SOLUTIONS)

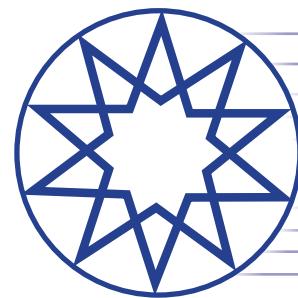
Bulent Inanc, Turkey; Guleda Engin, Turkey; Hossein Kazemian, Canada; Raffaella Pomi, Italy; Yilmaz Yildirim, Turkey; Zenon Hamkalo, Ukraine

CO-EDITORS (WASTE MANAGEMENT)

Bestami Ozkaya, Turkey; Bulent Topkaya, Turkey; Kahraman Unlu, Turkey; Mohamed Osmani, United Kingdom; Pin Jing He, China

CO-EDITORS (WATER AND WASTEWATER MANAGEMENT)

Ayşe FİLİBELİ, Turkey; Baris CALLİ, Turkey; Marina PRİSCIANDARO, Italy; Selvam KALİYAMOORTHY, Japan; Subramanyan VASUDEVAN, India



Environmental Research & Technology

Volume 5 Number 2 Year 2022

CONTENTS

Research Articles

- 111** Production of liquid fuel from co-pyrolysis of jatropha cake with tyre waste
Sulaiman Abubakar BABAJO
- 119** Reverse osmosis treatment system for landfill leachate: Operation conditions, advantages and challenges
Aysun Derya TOPAL, Ayşe Dilek ATASOY
- 128** Investigation of synergetic effect of adsorption and photocatalysis for the removal of tetracycline by BiFeO₃ immobilized on copolymer seeds
Esra BİLGİN ŞİMŞEK, Zeynep BALTA
- 137** Degree of Pb stabilization in MSWI fly ash using size-fractionated natural fishbone hydroxyapatite
Mitali NAG, Amirhomayoun SAFFARZADEH, Takayuki SHIMAOKA, Hirofumi NAKAYAMA
- 148** Characterisation study of solid wastes: A case of districts in Tekirdağ
Elçin GÜNEŞ, Kübra GÜMÜŞ BAYINDIR, Nesli AYDIN, Deniz İzlen ÇIFÇİ
- 155** Assessing the efficiency of drinking water treatment plant and the impact of broken distribution systems on water quality of Wukari-Ibi plant
Ezekiel SAMAILA, Williams Abel GIN, Williams Kwari JOSHUA
- 165** Principal component analysis in long term assessment of total viable plate count of municipal water distribution network system in healthcare facility
Mostafa ESSAM EISSLAA, Engy REFAAT RASHED, Dalia ESSAM EISSLAA
- 172** Indoor air CO₂ concentrations and ventilation rates in two residences in İzmir, Turkey
Aybuke TAŞER, Sedef UÇARYILMAZ, İlgin ÇATAROĞLU, Sait Cemil SOFUOĞLU
- 181** Degradation and mineralization of tetracycline by Fenton process
Engin GÜRTEKİN, Murat ÇELİK, Ekrem AYDIN, Aytekin ÇELİK
- 188** Calculation of rainwater harvest in greenhouses for semi-arid and continental climate zones
Abdullah Nafi BAYTORUN, Zeynep Binnaz ZAI MOĞLU, Fatma Elçin ERKURT, Behzat BALCI, Hasan Kivanç YEŞİLTAŞ