



Environmental Research & Technology

<https://dergipark.org.tr/en/pub/ert>



ACADEMIC ADVISORY BOARD

Prof. Dr. Adem Basturk (Yildiz Technical University)

Prof. Dr. Mustafa Ozturk (Yildiz Technical University)

Prof. Dr. Lutfi Akca (Istanbul Technical University)

Prof. Dr. Oktay Tabasaran (Stuttgart University)

Prof. Dr. Ahmet Demir (Yildiz Technical University)

SCIENTIFIC DIRECTOR

Prof. Dr. Ahmet Demir (Yildiz Technical University)

EDITOR IN CHIEF

Prof. Dr. Mehmet Sinan Bilgili (Yildiz Technical University)

ASSISTANT EDITOR

Assoc. Prof. Dr. Hanife Sari Erkan (Yildiz Technical University)

CONTACT

Yildiz Technical University
Environmental Engineering Department, 34220 Esenler
Istanbul – Turkiye
Web: <https://dergipark.org.tr/en/pub/ert>
E-mail: ert@yildiz.edu.tr



Environmental Research & Technology

<https://dergipark.org.tr/en/pub/ert>



Co-Editors (Air Pollution)

Prof. Dr. Arslan SARAL (Yildiz Technical University, Turkiye)
Prof. Dr. Mohd Talib LATIF (Universiti Kebangsaan, Malaysia)
Prof. Dr. Nedim VARDAR (Interamerican University of Puerto Rico, Puerto Rico)
Prof. Dr. Sait Cemil SOFUOGLU (Izmir Institute of Technology, Turkiye)
Prof. Dr. Wina GRAUS (Utrecht University, The Netherlands)

Co-Editors (Environmental Engineering and Sustainable Solutions)

Prof. Dr. Bulent Inanc (Istanbul Technical University, Turkiye)
Prof. Dr. Guleda ENGIN (Yildiz Technical University, Turkiye)
Prof. Dr. Hossein KAZEMIAN (The University of Northern British Columbia, Canada)
Prof. Dr. Raffaella POMI (Sapienza University of Rome, Italy)
Prof. Dr. Yilmaz YILDIRIM (Bulent Ecevit University, Turkiye)
Prof. Dr. Zenon HAMKALO (Ivan Franko National University of Lviv, Ukraine)

Co-Editors (Waste Management)

Prof. Dr. Bestami OZKAYA (Yildiz Technical University, Turkiye)
Prof. Dr. Bulent TOPKAYA (Akdeniz University, Turkiye)
Prof. Dr. Kahraman UNLU (Middle East Technical University, Turkiye)
Prof. Dr. Mohamed OSMANI (Loughborough University, United Kingdom)
Prof. Dr. Pin Jing HE (Tongji University, China)

Co-Editors (Water and Wastewater Management)

Prof. Dr. Ayse FILIBELI (Dokuz Eylul University, Turkiye)
Prof. Dr. Baris CALLI (Marmara University, Turkiye)
Prof. Dr. Marina PRISCIANDARO (University of L'Aquila, Italy)
Prof. Dr. Selvam KALIYAMOORTHY (Nagoya University, Japan)
Prof. Dr. Subramanyan VASUDEVAN (Central electrochemical Research Institute, India)



Environmental Research & Technology

<https://dergipark.org.tr/en/pub/ert>



Editorial Board

Prof. Dr. Andjelka MIHAJLOV (University of Novi Sad, Serbia)

Prof. Dr. Artur J. BADYDA (Warsaw University of Technology, Poland)

Prof. Dr. Aysegul PALA (Dokuz Eylul University, Turkiye)

Prof. Dr. Aysen ERDINCLER (Bogazici University, Turkiye)

Prof. Dr. Azize AYOL (Dokuz Eylul University, Turkiye)

Prof. Dr. Bulent KESKINLER (Gebze Technical University, Turkiye)

Prof. Dr. Didem OZCIMEN (Yildiz Technical University, Turkiye)

Prof. Dr. Erwin BINNER (University of Natural Resources and Life Science, Austria)

Prof. Dr. Eyup DEBIK (Yildiz Technical University, Turkiye)

Prof. Dr. F. Dilek SANIN (Middle East Technical University, Turkiye)

Prof. Dr. Gulsum YILMAZ (Istanbul Universtiy Cerrahpasa, Turkiye)

Prof. Dr. Hamdy SEIF (Alexandria University, Egypt)

Prof. Dr. Hanife BUYUKGUNGOR (Ondokuz Mayıs University, Turkiye)

Prof. Dr. Ilirjan MALOLLARI (University of Tirana, Albania)

Prof. Dr. Ismail KOYUNCU (Istanbul Technical University, Turkiye)

Prof. Dr. Jaakko PUHAKKA (Tampere University Finland)

Prof. Dr. Lucas Alados ARBOLEDAS (University of Granada, Spain)

Prof. Dr. Mahmoud A. ALAWI (University of Jordan, Jordan)

Prof. Dr. Marcelo Antunes NOLASCO (University of São Paulo, Brazil)

Prof. Dr. Martin KRANERT (University of Stuttgart, Germany)

Prof. Dr. Mehmet Emin AYDIN (Necmettin Erbakan University, Turkiye)



Environmental Research & Technology

<https://dergipark.org.tr/en/pub/ert>



- Prof. Dr. Mesut AKGUN (Yildiz Technical University, Turkiye)
- Prof. Dr. Mufide BANAR (Eskisehir Technical University, Turkiye)
- Prof. Dr. Mufit BAHADIR (Technische Universität Braunschweig, Germany)
- Prof. Dr. Mukand S. BABEL (Asian Institute of Technology, Thailand)
- Prof. Dr. Mustafa ODABASI (Dokuz Eylul University, Turkiye)
- Prof. Dr. Mustafa OKUTAN (Yildiz Technical University, Turkiye)
- Prof. Dr. Neslihan DOĞAN SAĞLAMTİMUR (Nigde Omer Halisdemir University)
- Prof. Dr. Nihal BEKTAŞ (Gebze Technical University, Turkiye)
- Prof. Dr. Nurdan Gamze TURAN (Ondokuz Mayıs University, Turkiye)
- Prof. Dr. Omer AKGIRAY (Marmara University, Turkiye)
- Prof. Dr. Osman ARIKAN (Istanbul Technical University, Turkiye)
- Prof. Dr. Osman Nuri AGDAG (Pamukkale University, Turkiye)
- Prof. Dr. Ozer CINAR (Yildiz Technical University, Turkiye)
- Prof. Dr. Pier Paolo MANCA (University of Cagliari, Italy)
- Prof. Dr. Recep BONCUKCUOGLU (Istanbul University Cerrahpasa, Turkiye)
- Prof. Dr. Saim OZDEMIR (Sakarya University, Turkiye)
- Prof. Dr. Sameer AFIFI (Islamic University of Gaza, Palestine)
- Prof. Dr. Serdar AYDIN (Istanbul Universtiy Cerrahpasa, Turkiye)
- Prof. Dr. Timothy O. RANDHIR (University of Massachusetts Amherst, U.S.A.)
- Prof. Dr. Ulku YETIS (Middle East Technical University, Turkiye)
- Prof. Dr. Victor ALCARAZ GONZALEZ (University of Guadalajara, Mexico)
- Prof. Dr. Yaşar NUHOGLU (Yildiz Technical University, Turkiye)



Environmental Research & Technology

<https://dergipark.org.tr/en/pub/ert>



TABLE OF CONTENTS

<i>Title</i>	<i>Pages</i>
Research Articles	
An experimental study on release mechanism of iron and manganese from sediments to the water column in reservoirs DOI: https://doi.org/10.35208/ert.833975 <i>Buse Vural, Şebnem Elçi, Hatice Eser Ökten</i>	190-198
Deposit refund system for beverage containers as a best practice example for recycling maximization DOI: https://doi.org/10.35208/ert.862611 <i>Erdem Görgün, Kardelen Adsal, Aybike Mısır, Eyüp Aydın, Çağdaş Ergün, Nihan Keskin, Aynur Acar, Şeyla Ergenekon</i>	199-205
Textile wastewater treatment by uv/fenton-like oxidation process using Fe-Cu doped pumice composite DOI: https://doi.org/10.35208/ert.872647 <i>Deniz İzlen Çifçi, Süreyya Meriç</i>	206-218
Undrained shear strength of polypropylene fiber reinforced alluvial clay DOI: https://doi.org/10.35208/ert.903408 <i>Eylem Arslan, İrem Düzen, Hasan Fırat Pulat, İnci Develioğlu</i>	219-229
Comparison of the meteorological drought indices according to the parameter(s) used in the Southeastern Anatolia Region, Turkey DOI: https://doi.org/10.35208/ert.912990 <i>Gözde Nur Akşan, Ülker Güner Bacanlı</i>	230-243
Assessment of strength and abrasion resistance of elasto-plastic fiber reinforced concrete using geopolymer based recycled aggregates DOI: https://doi.org/10.35208/ert.938010 <i>Abdelaziz Mohamed, Orhan Canpolat, Mukhallad M. Al-Mashhadani</i>	244-248
Effects of Saharan dust cloud water in the remediation of soil having high heavy metal content DOI: https://doi.org/10.35208/ert.945835 <i>Vildan Zülal Sönmez, Emine Elmaslar Özbaş</i>	249-258
Assessment of domestic water quality in coastal region of Ilaje Akoka, Lagos State DOI: https://doi.org/10.35208/ert.963915 <i>Adebola Daramola, Ese Ebhuoma, Victoria Akinyemi</i>	259-265

The evaluation of factors in utilizing the potential of solar energy: The case of Turkey DOI: https://doi.org/10.35208/ert.972541 <i>Ayşe Topal, Buket Özoğlu, Dilek Ekşioğlu</i>	266-276
Investigation of energy costs for sludge management: A case study from dairy industry DOI: https://doi.org/10.35208/ert.862116 <i>Pelin Yapıcıoğlu, Mehmet İrfan Yeşilnacar</i>	277-283
Insights to improve covered lagoon biodigesters through by-products recovery in pig farms DOI: https://doi.org/10.35208/ert.916126 <i>Larissa A. Nascimento, Raphael R. M. Oliveira, Izabelle De P. Sousa, Priscila S. Maradini, André P. Rosa</i>	284-292
