



Environmental Research & Technology

<http://dergipark.gov.tr/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: <http://dergipark.gov.tr/ert/>  
E-mail: [ert@yildiz.edu.tr](mailto:ert@yildiz.edu.tr)

---



## Environmental Research & Technology

<http://dergipark.gov.tr/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)



## **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

<http://dergipark.gov.tr/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

<http://dergipark.gov.tr/ert>



### TABLE OF CONTENTS

Title	Pages
<b>Research Articles</b>	
The state of the art of nuclear energy and its bibliometric analysis DOI: <a href="https://doi.org/10.35208/ert.840369">https://doi.org/10.35208/ert.840369</a> Elanur Adar	102-107
Recycling of cotton dust for organic farming is a pivotal replacement of chemical fertilizers by composting and its quality analysis DOI: <a href="https://doi.org/10.35208/ert.815322">https://doi.org/10.35208/ert.815322</a> Md. Ashik Ahmed, Pranta Roy, Md. Hakimuzzaman Shah, Debabrata Paul Argha, Debbrata Datta, Riyadul Hashem Riyad	108-116
A study on evaluation of site selection in sanitary landfill with regard to urban growth DOI: <a href="https://doi.org/10.35208/ert.841200">https://doi.org/10.35208/ert.841200</a> Benan Yazıcı Karabulut, Perihan Derin, Mehmet İrfan Yeşilnacar, Mehmet Ali Çullu	117-125
Waste management and zero waste practices in educational institutions DOI: <a href="https://doi.org/10.35208/ert.887751">https://doi.org/10.35208/ert.887751</a> Asude Hanedar, Burak Gül, Elçin Güneş, Gül Kaykioğlu, Yalçın Güneş	126-133
Treatment of landfill leachate by anaerobic baffled reactor (ABR) DOI: <a href="https://doi.org/10.35208/ert.834186">https://doi.org/10.35208/ert.834186</a> Kevser Cırık, Serdar Göçer, Ahmet Duyar, Melike Kozak	134-139
Investigation of microalgal treatment for poultry slaughterhouse wastewater after the dissolved air flotation unit DOI: <a href="https://doi.org/10.35208/ert.845761">https://doi.org/10.35208/ert.845761</a> Meryem Aksu, Pınar Nazire Tanattı, Büşra Erden, İsmail Ayhan Şengil	140-144
Lead removal from soil by phytoremediation method DOI: <a href="https://doi.org/10.35208/ert.890573">https://doi.org/10.35208/ert.890573</a> Fatma Ekmekyapar Torun, Şahset İrdemez, Sinan Kul, Yaşar Nuhoglu	152-156
Comparison of incineration and autoclave methods in the treatment of medical wastes through life cycle assessment: A case study for Istanbul DOI: <a href="https://doi.org/10.35208/ert.913039">https://doi.org/10.35208/ert.913039</a> Özge Kılıç, Sadullah Levent Kuzu	157-164

---

Single-step pyrolysis for producing activated carbon from sucrose and its properties for methylene blue removal in aqueous solution 165-175

DOI: <https://doi.org/10.35208/ert.910576>

*Ömer KAZAK*

---

Application of IWA standard water balance in strategic water loss analysis: Benefits and problems 176-183

DOI: <https://doi.org/10.35208/ert.886829>

*Salih Yılmaz, Özgür Özdemir, Mahmut Fırat*

---

Performance evaluation of a non-odorous compost barrel for household purposes 184-189

DOI: <https://doi.org/10.35208/ert.848129>

*Marcelino Jr Lunag, Melissa May Boado*

---

***Review Articles***

---

The effects of endocrine disruptors on fish 145-151

DOI: <https://doi.org/10.35208/ert.860440>

*Pınar Arslan, Saniye Cevher Özeren, Begüm Yurdakök Dikmen*

---