

## Asst. Prof. Başak SAVUN

### Personal Information

**Mobile Phone:** [+90 536 342 1487](tel:+905363421487)

**Office Phone:** [+90 212 440 0000](tel:+902124400000) Extension: 26050

**Email:** [basak.savun@istanbul.edu.tr](mailto:basak.savun@istanbul.edu.tr)

**Web:** <https://avesis.istanbul.edu.tr/basak.savun>

### International Researcher IDs

Publons / Web Of Science ResearcherID: AAG-1697-2019

Yoksis Researcher ID: 134905

### Education

Doctorate, Bogazici University, Institute Of Environmental Sciences, Department Of Environmental Technology, Turkey  
2011 - 2019

### Foreign Languages

English, C2 Mastery

### Research Areas

Environmental Engineering, Environmental Sciences, Environmental Technology, Marine Sciences and Technology,  
Coastal Sciences, Oceanography

### Journal articles indexed in SCI, SSCI, and AHCI

- I. **Material Design for Synergistic Advanced Oxidation Processes**  
SAVUN B., KORKMAZ N., AKSU A., TAŞKIN Ö. S., ÇAĞLAR N., Nurmanov S., Turabov N., Turaev K., Ruzimuradov O.  
Water, Air, and Soil Pollution, vol.235, no.7, 2024 (SCI-Expanded)
- II. **Optimization of wastewater treatment systems for growing industrial parks**  
SAVUN HEKİMOĞLU B., İşler Z., Hekimoğlu M., BURAK Z. S., Karlı D., Yücekaya A., Akpınar E., Ediger V. Ş.  
Science of the Total Environment, vol.905, 2023 (SCI-Expanded)
- III. **Occurrence and environmental risk assessment of antifouling paint biocides in the Golden Horn Estuary, Sea of Marmara, Turkey**  
KORKMAZ N., Kapudan T., TAŞKIN Ö. S., AKSU A., SAVUN HEKİMOĞLU B., Balkıs N. Ç.  
Regional Studies in Marine Science, vol.63, 2023 (SCI-Expanded)
- IV. **Occurrence, sources and environmental risk assessment of pharmaceuticals in the Sea of Marmara, Turkey**  
E. Korkmaz N., Savun-Hekimoğlu B., Aksu A., Burak Z. S., Caglar N. B.  
SCIENCE OF THE TOTAL ENVIRONMENT, vol.819, 2022 (SCI-Expanded)
- V. **Oxidative decomposition and mineralization of caffeine by advanced oxidation processes: The effect of hybridization**  
Ziylan-Yavas A., Ince N. H., ÖZÖN E., Arslan E., AVİYENTE V., Savun-Hekimoglu B., ERDİNÇLER A.

ULTRASONICS SONOCHEMISTRY, vol.76, 2021 (SCI-Expanded)

- VI. **Evaluation of water supply alternatives for Istanbul using forecasting and multi-criteria decision making methods**  
Savun-Hekimoglu B., Erbay B., Hekimoglu M., Burak S.  
JOURNAL OF CLEANER PRODUCTION, vol.287, 2021 (SCI-Expanded)
- VII. **Catalytic ozonation of caffeine with sepiolite: Effects of impregnation with zero-valent iron and ultrasound**  
Savun-Hekimoglu B., Eren Z., Ince N. H.  
ENVIRONMENTAL PROGRESS & SUSTAINABLE ENERGY, vol.40, no.2, 2021 (SCI-Expanded)
- VIII. **Photocatalytic Destruction of Caffeine on Sepiolite-Supported TiO<sub>2</sub> Nanocomposite**  
Savun-Hekimoglu B., Eren Z., Ince N. H.  
SUSTAINABILITY, no.24, 2020 (SCI-Expanded)
- IX. **Hydroxyl radical-mediated degradation of salicylic acid and methyl paraben: an experimental and computational approach to assess the reaction mechanisms**  
Arslan E., Hekimoglu B., Cinar S. A., Ince N., Aviyente V.  
ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH, vol.26, no.32, pp.33125-33134, 2019 (SCI-Expanded)
- X. **Optimization of methylparaben degradation by sonocatalysis**  
Savun-Hekimoglu B., Ince N. H.  
ULTRASONICS SONOCHEMISTRY, vol.58, 2019 (SCI-Expanded)
- XI. **Sonochemical and sonocatalytic destruction of methylparaben using raw, modified and SDS-intercalated particles of a natural clay mineral**  
Savun-Hekimoglu B., Ince N. H.  
ULTRASONICS SONOCHEMISTRY, vol.54, pp.233-240, 2019 (SCI-Expanded)
- XII. **Decomposition of PPCPs by ultrasound-assisted advanced Fenton reaction: A case study with salicylic acid (Reprinted from Ultrasonics Sonochemistry, vol 39, pg 243-249, 2017)**  
Savun-Hekimoglu B., Ince N. H.  
ULTRASONICS SONOCHEMISTRY, vol.40, pp.46-52, 2018 (SCI-Expanded)
- XIII. **Decomposition of PPCPs by ultrasound-assisted advanced Fenton reaction: A case study with salicylic acid**  
Savun-Hekimoglu B., Ince N. H.  
ULTRASONICS SONOCHEMISTRY, vol.39, pp.243-249, 2017 (SCI-Expanded)
- XIV. **Pretreatment of Sewage Sludge by Low-frequency Ultrasound**  
Savun B., Neis U., Ince N. H., Yenigun O.  
JOURNAL OF ADVANCED OXIDATION TECHNOLOGIES, vol.15, no.2, pp.374-379, 2012 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Multi-Criteria Decision-Making Analysis for the Selection of Desalination Technologies**  
Hekimoğlu M., Savun Hekimoğlu B., Erbay B., Gazioğlu C.  
International Journal of Environment and Geoinformatics, vol.9, no.4, pp.207-216, 2022 (Peer-Reviewed Journal)
- II. **Mucilage Problem in the Semi-Enclosed Seas: Recent Outbreak in the Sea of Marmara**  
Savun Hekimoğlu B., Gazioğlu C.  
International Journal of Environment and Geoinformatics, vol.8, no.4, pp.402-413, 2021 (Peer-Reviewed Journal)
- III. **A Comparative MCDM Analysis of Potential Short-Term Measures for Dealing with Mucilage Problem in the Sea of Marmara**  
Savun Hekimoğlu B., Erbay B., Burak Z. S., Gazioğlu C.  
International Journal of Environment and Geoinformatics, vol.8, no.4, pp.572-580, 2021 (Peer-Reviewed Journal)
- IV. **Comparison of Advanced Oxidation Processes (Sonication, Fenton Reaction and Ozone-Based Processes) for Water Decolorization**  
Savun Hekimoğlu B.

International Journal of Environment and Geoinformatics, vol.8, pp.166-171, 2021 (Peer-Reviewed Journal)

**V. On the Use of Mathematical Models for Wastewater Treatment: A Review and Analysis of Activated Sludge Models ASM1 and ASM3**

Savun Hekimoğlu B.

International Journal of Environment and Geoinformatics, vol.8, pp.1-18, 2021 (Peer-Reviewed Journal)

## Books

**I. PHARMACEUTICALS IN THE SEA OF MARMARA, TÜRKİYE**

Çağlar N., Aksu A., Korkmaz N., Savun B.

in: ECOLOGICAL CHANGES IN THE SEA OF MARMARA, Melek İşinibir, Ahmet Kideys, Alenka Malerj, Editor, İstanbul University Press, İstanbul, pp.297-339, 2024

## Papers Presented at Peer-Reviewed Scientific Conferences

**I. PRESENCE, SPATIAL DISTRIBUTION, AND RISK ASSESSMENT OF PHARMACEUTICAL COMPOUNDS IN THE SEA OF MARMARA, TURKEY**

Korkmaz N., Savun Hekimoğlu B., Aksu A., Burak Z. S., Çağlar N.

III. ULUSAL DENİZLERDE İZLEME VE DEĞERLENDİRME SEMPOZYUMU, Antalya, Turkey, 6 - 09 December 2022, pp.81-82, (Summary Text)

**II. Assesment of water quality of Lake Bafa in Turkey**

Ülker D., Savun-Hekimoğlu B., Burak Z. S.

IWA Digital World Water Congress, 24 May - 04 June 2021, pp.1, (Full Text)

**III. Sonocatalytic Destruction of PPCP's in Water Using Costless Clay Minerals**

İNCE H. N., SAVUN HEKİMOĞLU B.

16th Meeting of the European Society of Sonochemistry, Besançon, France, 15 - 19 April 2018, (Summary Text)

## Metrics

Publication: 23

Citation (WoS): 106

Citation (Scopus): 124

H-Index (WoS): 7

H-Index (Scopus): 6