



# KÜBRA ALTUNTAŞ

## ASSOC. PROF.

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: V-9724-2017

ScopusID: 57203820030

Yoksis Researcher ID: 206339

### Learning Knowledge

Doctorate 2011 - 2018	Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Turkey
Postgraduate 2008 - 2011	Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Turkey
Undergraduate 2003 - 2007	Yildiz Technical University, Faculty Of Civil Engineering, Turkey

### Foreign Languages

English, A1 Beginner

German, B2 Upper Intermediate

Italian, B1 Intermediate

### Academic Titles / Tasks

Associate Professor 2022 - Continues	Istanbul Technical University, İnşaat, Çevre Mühendisliği
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Assistant Professor 2019 - 2022	Universita Degli Studi di Padova, Department of Chemical Sciences
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Research Assistant 2009 - 2019	Yildiz Technical University, Faculty Of Civil Engineering, Department Of Environmental Engineering
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Research Assistant  
2013 - 2013

Technische Universitaet Braunschweig, Faculty of Life Sciences, Institute of  
Environmental and Sustainable Chemistry

Research Assistant  
2010 - 2011

Universita Degli Studi di Catania, Faculty of Engineering, Chemical Engineering  
Department

## Supported Projects

1. Altuntaş K., Çetinkaya A. Y., Horizon Europe Project, EmpOweR Students as the agents of cHangE, 2023 - 2026
2. Altuntaş K., Yalçıntepē Güneştutar L., Erdağ D., Toprak M., TÜBİTAK International Bilateral Joint Cooperation Program Project, Soğuk Plazma ve Pulse Manyetik Alan Kombinasyonu ile Salinomisin ve Kurkumin Yüklü Fonksiyonel Manyetik Nanoparçacıkların Meme Kanseri Hücrelerinde Antikanser İnovatif Yaklaşımı, 2023 - 2025
3. Altuntaş K., TÜBİTAK - AB COST Project, Therapeutic applications of Cold Plasmas - PlasTHER, 2021 - 2025
4. Altuntaş K., TÜBİTAK - AB COST Project, Plasma Applications for Smart and Sustainable Agriculture-Plagri, 2020 - 2024
5. Altuntaş K., Debik E., İlhan F., Manav Demir N., Newton Programme Project, UK-Turkey capacity building for wastewater treatment integrated with renewable energy and safer reuse for sustainable communities, 2021 - 2022
6. Altuntaş K., H2020 Project, Perfluorinated Organic Compounds (PFCs) Degradation using Non-Thermal Plasma Enhanced by Boron Doped Graphene Oxide as Catalyst, 2020 - 2022
7. Altuntaş K., TUBITAK Project, Investigation of Perfluorinated Organic Compounds (PFCs) Degradation by Cold Plasma as an Innovative Technology, 2019 - 2022

## Scholarships

Marie Skłodowska-Curie Grant, European Commission, 2020 - 2022

## Published journal articles indexed by SCI, SSCI, and AHCI

1. **Emerging pollutants removal in full-scale biological treatment plants: A case study**  
Altuntaş K., Manav-Demir N., İLHAN F., Gelgor H. B., Huddersman K., Tiwary A., DEBİK E.  
Journal of Water Process Engineering, vol.51, 2023 (SCI-Expanded)
2. **Electrochemically activated persulfate and peroxymonosulfate for furfural removal: optimization using Box-Behnken design**  
CAN GÜVEN E., İLHAN F., Altuntaş K., YAZICI GÜVENÇ S., VARANK G.  
Environmental Technology (United Kingdom), vol.44, no.9, pp.1251-1264, 2023 (SCI-Expanded)
3. **Iron-Copper Bimetallic Nanoparticle for the Removal of Disinfection By-products: Optimization, Kinetic Study, and Life Cycle Assessment**  
Altuntaş K., El Hadki A., Bilgili L., KUZU S. L., ÇETINKAYA A. Y., DEBİK E.  
WATER AIR AND SOIL POLLUTION, vol.233, no.7, 2022 (SCI-Expanded)
4. **Electrocatalytic degradation of oxytetracycline using three-dimensional electrode and optimization via fuzzy logic modeling**  
Altuntaş K., El Hadki A., İLHAN F., Zrineh A., El Hadki H., Kabbaj O. K., Dahchour A., DEBİK E.  
SEPARATION SCIENCE AND TECHNOLOGY, vol.57, no.3, pp.454-464, 2022 (SCI-Expanded)
5. **Degradation of oxytetracycline in aqueous solution by heat-activated peroxydisulfate and peroxymonosulfate oxidation**  
Altuntaş K., YAZICI GÜVENÇ S., CAN GÜVEN E., İLHAN F., VARANK G.  
ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH, vol.29, no.6, pp.9110-9123, 2022 (SCI-Expanded)

6. **Atmospheric plasma-based approaches for the degradation of dimethyl phthalate (DMP) in water**  
Altuntaş K., Saleem M., Tomei G., Marotta E., Paradisi C.  
JOURNAL OF ENVIRONMENTAL MANAGEMENT, vol.301, 2022 (SCI-Expanded)
7. **Removal of oxytetracycline by graphene oxide and Boron-doped reduced graphene oxide: A combined density function Theory, molecular dynamics simulation and experimental study**  
El Hadki A., Altuntaş K., El Hadki H., ÜSTÜNDAĞ C. B., Kabbaj O. K., Dahchour A., Komiha N., Zrineh A., DEBİK E.  
FLATCHEM, vol.27, 2021 (SCI-Expanded)
8. **Biodegradation of emerging pharmaceuticals from domestic wastewater by membrane bioreactor: The effect of solid retention time**  
Alobaidi R. A. K., Altuntaş K., Mhemid R. K. S., MANAV DEMİR N., ÇINAR Ö.  
International Journal of Environmental Research and Public Health, vol.18, no.7, 2021 (SCI-Expanded)
9. **Effect of visible light on the removal of trichloromethane by graphene oxide**  
Altuntaş K., DEBİK E., ÜSTÜNDAĞ C. B., Guven M. D., Gocen K. A.  
Diamond and Related Materials, vol.106, 2020 (SCI-Expanded)
10. **Dechlorination of dichlorodiphenyltrichloroethane (DDT) by Fe/Pd bimetallic nanoparticles: Comparison with nZVI, degradation mechanism, and pathways**  
Altuntaş K., DEBİK E.  
Frontiers of Environmental Science and Engineering, vol.14, no.1, 2020 (SCI-Expanded)
11. **Modelling and optimization of dye removal by Fe/Cu bimetallic nanoparticles coated with different Cu ratios**  
Altuntaş K., KUZU S. L.  
Materials Research Express, vol.6, no.11, 2019 (SCI-Expanded)
12. **Removal of humic substances by nano zero-valent iron supported on activated carbon and implementation of response surface methodology**  
Altuntaş K.  
Desalination and Water Treatment, vol.166, pp.230-236, 2019 (SCI-Expanded)
13. **Electrocoagulation process for the treatment of metal-plating wastewater: Kinetic modeling and energy consumption**  
İLHAN F., Altuntaş K., AVŞAR Y., KURT U., SARAL A.  
Frontiers of Environmental Science and Engineering, vol.13, no.5, 2019 (SCI-Expanded)
14. **Treatability of raw textile wastewater using Fenton process and its comparison with chemical coagulation**  
İLHAN F., Altuntaş K., Dogan C., KURT U.  
Desalination and Water Treatment, vol.162, pp.142-148, 2019 (SCI-Expanded)
15. **Dichloro-diphenyl-trichloroethane removal via nano zero-valent iron: Determination of degradation mechanism using response surface methodology**  
Altuntaş K., DEBİK E., Arslan Z. B.  
Desalination and Water Treatment, vol.143, pp.197-207, 2019 (SCI-Expanded)
16. **Adsorption of copper ion from aqueous solutions by well-crystallized nanosized hydroxyapatite**  
Altuntaş K., Uzun H. I., ÜSTÜNDAĞ C. B., DEBİK E.  
Materials Research Express, vol.6, no.12, 2019 (SCI-Expanded)
17. **Enhancing Biodegradability of Textile Wastewater by Ozonation Processes: Optimization with Response Surface Methodology**  
Altuntaş K., İLHAN F.  
Ozone: Science and Engineering, vol.40, no.6, pp.465-472, 2018 (SCI-Expanded)
18. **Borohydride method modification in synthesizing nano zero valent iron and its application in DDT removal**  
Altuntaş K., DEBİK E.  
Environmental Science and Pollution Research, vol.25, no.30, pp.30110-30121, 2018 (SCI-Expanded)
19. **Nano zero-valent iron supported on activated carbon: Effect of ac/nzvi ratio on removal of nickel ion from water**

- Altuntaş K., DEBİK E., Gungor S.  
Global Nest Journal, vol.20, no.2, pp.424-431, 2018 (SCI-Expanded)
20. **Single and binary adsorption of copper and nickel metal ions on nano zero valent iron (nZVI): A kinetic approach**  
Altuntaş K., DEBİK E., Yoruk I., Kozal D.  
Desalination and Water Treatment, vol.93, pp.274-279, 2017 (SCI-Expanded)
21. **Evaluation of operational parameters and its relation on the stoichiometry of Fenton's oxidation to textile wastewater Procena radnih parametara i njihov odnos sa stehiometrijom fenton oksidacije otpadne vode tekstilne industrije**  
İLHAN F., YETİLMEZSOY K., Kabuk H. A., Altuntaş K., Coskun T., Akoglu B.  
Chemical Industry and Chemical Engineering Quarterly, vol.23, no.1, pp.11-19, 2017 (SCI-Expanded)
22. **Comparative study of electrochemical wastewater treatment processes for bilge water as oily wastewater: A kinetic approach**  
Altuntaş K., KURT U.  
Journal of Electroanalytical Chemistry, vol.747, pp.104-111, 2015 (SCI-Expanded)
23. **Determination of Biological Treatability Processes of Textile Wastewater and Implementation of a Fuzzy Logic Model**  
Kabuk H. A., AVŞAR Y., KUZU S. L., İLHAN F., Altuntaş K.  
International Journal of Photoenergy, vol.2015, 2015 (SCI-Expanded)
24. **Electrocoagulation Process Application in Bilge Water Treatment Using Response Surface Methodology**  
Ulucan-Altuntas K., Kabuk H. A., Ilhan F., Kurt U.  
INTERNATIONAL JOURNAL OF ELECTROCHEMICAL SCIENCE, vol.9, no.5, pp.2316-2326, 2014 (SCI-Expanded)
25. **Comparison of pH Adjustment and Electrocoagulation Processes on Treatability of Metal Plating Wastewater**  
Kabuk H. A., AVŞAR Y., İLHAN F., Altuntaş K.  
Separation Science and Technology (Philadelphia), vol.49, no.4, pp.613-618, 2014 (SCI-Expanded)
26. **Combining adsorption and coagulation for the treatment of azo and anthraquinone dyes from aqueous solution**  
Karadag D., Tok S., Akgul E., Ulucan-Altuntas K., Evden H., Kaya M.  
INDUSTRIAL AND ENGINEERING CHEMISTRY RESEARCH, vol.45, no.11, pp.3969-3973, 2006 (SCI-Expanded)

## Articles Published in Other Journals

1. **Bisphenol a removal by graphene oxide applied in different processes**  
DEBİK E., Altuntaş K., Hadki A. E.  
Journal of Engineering and Technological Sciences, vol.52, no.3, pp.413-423, 2020 (ESCI)
2. **Adsorption of copper metal ion from aqueous solution by Nanoscale Zero Valent Iron (nZVI) supported on activated carbon**  
Altuntaş K., DEBİK E., Kozal D., Yoruk I. I.  
Periodicals of Engineering and Natural Sciences, vol.5, no.1, pp.61-64, 2017 (Scopus)

## Patent

Altuntaş K., Debik E., Noberi C., Kaya C., Üstündağ C. B., Nano boyutta demir oksit (hematit)ile sinterlenmiş zeolit yatak malzemesi, Patent, CHAPTER C Chemistry; Metallurgy, The Invention Registration Number: TR 2013 06737 A2 , Standard Registration, 2016

## **Research Areas**

Waste Water Collection and Treatment, Water Supply and Treatment, Catalysis and Catalytic Processes, Gases, Plasmas and Electrical Discharges Physics