

**Place of birth:** Kadıköy

**Office Phone:** [+90 212 383 5399](tel:+902123835399)

**Fax Phone:** [+90 212 383 5355](tel:+902123835355)

**Web:** <https://avesis.yildiz.edu.tr/kulucan>

## Education Information

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- I. Doctorate, Yıldız Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Çevre Mühendisliği, Turkey 2011 - 2018
- II. Post Graduate, Yıldız Teknik Üniversitesi, Graduate School of Natural and Applied Sciences, Çevre Mühendisliği, Turkey 2008 - 2011
- III. Under Graduate, Yıldız Teknik Üniversitesi, Faculty of Construction, Çevre Mühendisliği Bölümü, Turkey 2003 - 2007

## Foreign Languages

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- I. German, B1 Intermediate
- II. English, C1 Advanced
- III. Italian, B1 Intermediate

## Research Areas

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Electrochemical Processes, Environmental Chemistry and Technology, Nanomaterials, Gases, Plasmas and Electrical Discharges Physics, Physics of Plasmas, Chemometry

## Academic Titles / Tasks

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- I. Assistant Professor, Università Degli Studi di Padova, Dipartimento di Scienze Chimiche, 2019 - Continues
- II. Research Assistant PhD, Yıldız Technical University, Faculty of Construction, Çevre Mühendisliği, 2017 - Continues
- III. Research Assistant, Yıldız Teknik Üniversitesi, Faculty of Construction, Çevre Mühendisliği, 2009 - 2017
- IV. Other, Technische Universität Braunschweig, Institut Für Ökologische Chemie Und Abfallanalytik, Ökologischen Chemie, 2013 - 2013
- V. Other, Università Degli Studi Di Catania, Facoltà Di Ingegneria., Dipartimento Di Ingegneria Meccanica, Chimica E Dei Materiali, 2010 - 2011

## Courses

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- I. Biological Unit Operations, Under Graduate, 2018 - 2019
- II. Chemical Unit Operations, Under Graduate, 2017 - 2018, 2018 - 2019

## Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

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- I. **Effect of visible light on the removal of trichloromethane by graphene oxide**  
Ulucan-Altuntas K., DEBİK E., ÜSTÜNDAĞ C. B. , Guven M. D. , Gocen K. A.  
Diamond and Related Materials, vol.106, no.107814, 2020 (Journal Indexed in SCI)
- II. **Dechlorination of dichlorodiphenyltrichloroethane (DDT) by Fe/Pd bimetallic nanoparticles: Comparison with nZVI, degradation mechanism, and pathways**  
Ulucan-Altuntas K., DEBİK E.  
FRONTIERS OF ENVIRONMENTAL SCIENCE & ENGINEERING, vol.14, 2020 (Journal Indexed in SCI)
- III. **Adsorption of copper ion from aqueous solutions by well-crystalized nanosized hydroxyapatite**  
Ulucan-Altuntas K., Uzun H. I. , ÜSTÜNDAĞ C. B. , DEBİK E.  
MATERIALS RESEARCH EXPRESS, vol.6, no.125545, 2019 (Journal Indexed in SCI)
- IV. **Modelling and optimization of dye removal by Fe/Cu bimetallic nanoparticles coated with different Cu ratios**  
Ulucan-Altuntas K., Kuzu S. L.  
MATERIALS RESEARCH EXPRESS, vol.6, 2019 (Journal Indexed in SCI)
- V. **Electrocoagulation Process for Metal Plating Wastewater: Kinetic Modelling and Energy Consumption**  
İlhan F., Ulucan-Altuntaş K., Avşar Y., Kurt U., Saral A.  
Frontiers of Environmental Science & Engineering, vol.13, no.0, pp.73-81, 2019 (Journal Indexed in SCI)
- VI. **Treatability of raw textile wastewater using Fenton process and its comparison with chemical coagulation**  
İLHAN F., Ulucan-Altuntas K., Dogan C., KURT U.  
DESALINATION AND WATER TREATMENT, vol.162, pp.142-148, 2019 (Journal Indexed in SCI)
- VII. **Removal of humic substances by nano zero-valent iron supported on activated carbon and implementation of response surface methodology**  
Ulucan-Altuntas K.  
Desalination And Water Treatment, vol.0, no.0, 2019 (Journal Indexed in SCI)
- VIII. **Dichloro-diphenyl-trichloroethane removal via nano zero-valent iron: determination of degradation mechanism using response surface methodology**  
Ulucan-Altuntaş K., Debik E., Arslan Z. B.  
DESALINATION AND WATER TREATMENT, vol.143, pp.197-207, 2019 (Journal Indexed in SCI)
- IX. **Optimization of raw acrylic yarn dye wastewater treatment by electrochemical processes: kinetic study and energy consumption**  
İlhan F., Ulucan-Altuntas K., Dogan C., Kurt U.  
GLOBAL NEST JOURNAL, vol.21, pp.187-194, 2019 (Journal Indexed in SCI)
- X. **Enhancing Biodegradability of Textile Wastewater by Ozonation Processes: Optimization with Response Surface Methodology**  
Ulucan-Altuntas K., İLHAN F.  
OZONE-SCIENCE & ENGINEERING, vol.40, pp.465-472, 2018 (Journal Indexed in SCI)
- XI. **Borohydride method modification in synthesizing nano zero valent iron and its application in DDT removal**  
Ulucan-Altuntas K., Debik E.  
ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH, vol.25, pp.30110-30121, 2018 (Journal Indexed in SCI)
- XII. **Nano zero-valent iron supported on activated carbon: Effect of AC/nZVI ratio on removal of nickel ion from water**  
ULUCAN-ALTUNTAS K., DEBİK E., GUNGOR S.  
GLOBAL NEST JOURNAL, vol.20, pp.424-431, 2018 (Journal Indexed in SCI)
- XIII. **Single and binary adsorption of copper and nickel metal ions on nano zero valent iron (nZVI): a kinetic approach**  
Ulucan-Altuntas K., DEBİK E., Yoruk I. I. , KOZAL D.  
DESALINATION AND WATER TREATMENT, vol.93, pp.274-279, 2017 (Journal Indexed in SCI)
- XIV. **EVALUATION OF OPERATIONAL PARAMETERS AND ITS RELATION ON THE STOICHIOMETRY OF FENTON'S OXIDATION TO TEXTILE WASTEWATER**

- İlhan F., Yetilmezsoy K., Kabuk H. A. , Ulucan K., Coskun T., Akoglu B.  
CHEMICAL INDUSTRY & CHEMICAL ENGINEERING QUARTERLY, vol.23, pp.11-19, 2017 (Journal Indexed in SCI)
- XV. **Comparative study of electrochemical wastewater treatment processes for bilge water as oily wastewater: A kinetic approach**  
Ulucan K., Kurt U.  
JOURNAL OF ELECTROANALYTICAL CHEMISTRY, vol.747, pp.104-111, 2015 (Journal Indexed in SCI)
- XVI. **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., Ulucan K.  
INTERNATIONAL JOURNAL OF PHOTOENERGY, 2015 (Journal Indexed in SCI)
- XVII. **Electrocoagulation Process Application in Bilge Water Treatment Using Response Surface Methodology**  
Ulucan K., Kabuk H. A. , İlhan F., Kurt U.  
INTERNATIONAL JOURNAL OF ELECTROCHEMICAL SCIENCE, vol.9, pp.2316-2326, 2014 (Journal Indexed in SCI)
- XVIII. **Comparison of pH Adjustment and Electrocoagulation Processes on Treatability of Metal Plating Wastewater**  
Kabuk H. A. , Avşar Y., İlhan F., Ulucan K.  
SEPARATION SCIENCE AND TECHNOLOGY, vol.49, pp.613-618, 2014 (Journal Indexed in SCI)
- XIX. **Combining adsorption and coagulation for the treatment of azo and anthraquinone dyes from aqueous solution**  
Karadag D., TOK S., AKGUL E., Ulucan K., EVDEN H., KAYA M. A.  
INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH, vol.45, pp.3969-3973, 2006 (Journal Indexed in SCI)

#### Articles Published in Other Journals

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- I. **Fluidized Electrooxidation Process Using Three-Dimensional Electrode for Decolorization of Reactive Blue 221**  
Ulucan-Altuntaş K.  
Akademic Platform Journal of Engineering and Science, vol.1, pp.1, 2021 (International Refereed University Journal)
- II. **Comparison of Chemical and Electrochemical Treatment Processes for Wool Yarn Dyeing Effluents**  
Altuntaş K., İlhan F., Dogan C., Kurt U.  
Sigma Journal of Engineering and Natural Science, vol.38, no.2, pp.623-636, 2020 (Journal Indexed in ESCI)
- III. **Bisphenol-A Removal by Graphene Oxide Applied in Different Processes**  
Debik E., Altuntaş K., El Hadki A.  
Journal of Engineering and Technological Sciences, vol.52, pp.1-13, 2020 (Journal Indexed in ESCI)
- IV. **Adsorption of copper metal ion from aqueous solution by Nanoscale Zero Valent Iron (nZVI) supported on activated carbon**  
Altuntaş K., Debik E., Kozal D., Yoruk I. I.  
Periodicals of Engineering and Natural Sciences, vol.5, pp.61-64, 2017 (Refereed Journals of Other Institutions)
- V. **Disinfection By Products Removal by Nanoparticles Sintered in Zeolite**  
Kübra U., Noberi C., Coşkun T., Üstündağ C. B. , Debik E., Kaya C.  
Journal of Clean Energy Technologies, vol.1, pp.120-123, 2013 (Refereed Journals of Other Institutions)
- VI. **Sızıntı Sularının Evsel Atıksularla Birlikte Elektrokoagülasyon Prosesiyle Arıtılabilirliğinin İncelenmesi**  
Kurt U., İlhan F., Birben C., Ulucan K., Gönüllü M. T.  
Sigma Journal of Engineering and Natural Sciences, vol.3, pp.55-64, 2011 (National Refreed University Journal)

## Books & Book Chapters

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### I. **Nanoscale Zero-Valent Iron for Water Treatment**

Ulucan-Altuntas K.

in: Aquanotechnology: Applications of Nanomaterials for Water Purification, Kamel Abd-Elsalam, Muhammad Zahid, Editor, Elsevier Science, Oxford/Amsterdam, Oxford, pp.200-220, 2020

### II. **Binary Adsorption of Copper and Nickel Metal Ions on Nano Zero Valent Iron Supported on Activated Carbon (AC-nZVI)**

Debik E., Ulucan-Altuntas K., Yörük İ. İ., Kozal D.

in: Solutions to Water Challenges in MENA Region Proceedings of the Regional Workshop, Zeinab Abou-Elnaga; Mehmet Emin Aydin, Editor, Cuvillier Verlag, Göttingen, pp.146-152, 2016

## Refereed Congress / Symposium Publications in Proceedings

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### I. **DEGRADATION OF BISPHENOL-A BY GRAPHENE OXIDE UNDER VISIBLE LIGHT**

Debik E., Altuntaş K., El Hadki A.

Expert Workshop on Microplastics in the Water Environment, Surat-Thani, Thailand, 18 - 22 August 2019, vol.1, no.1, pp.1

### II. **Optimization of Disinfection By-Products Removal from Aqueous Solution by Fe/Cu Bimetallic Nanoparticle**

El Hadki A., Altuntaş K.

4th Eurasian Conference on Civil and Environmental Engineering (ECOCEE), İstanbul, Turkey, 17 - 18 June 2019, pp.542-549

### III. **Implementation of Fuzzy Logic Model on Textile Wastewater Treatment by Electrocoagulation Process**

Altuntaş K., İlhan F., Kasar C., Gönüllü M. T.

4th Eurasian Conference on Civil and Environmental Engineering (ECOCEE), İstanbul, Turkey, 17 - 18 June 2019, pp.550-557

### IV. **Optimization of electro-oxidation process for the treatment of reactive blue 221 using response surface methodology**

Yıldırım G. B., İlhan F., Ulucan-Altuntaş K., Cemanovic A., Çınar Ö.

5th International Conference on Engineering and Natural Science, Praha, Czech Republic, 12 - 16 June 2019, pp.664-669

### V. **Kinetic Study for Nitrate Removal by Nano Zero Valent Iron**

UZUN H. İ., ARSLAN Z. B., ALTUNTAŞ K., DEBİK E.

Regional Workshop on "Water-Energy-Food-Nexus in MENA Region", Aswan, Egypt, 11 November 2018, pp.1

### VI. **Recent advances in metal doped graphene nanoparticles**

ALTUNTAŞ K.

International Conference on Application in Chemistry and Chemical Engineering, Belgrad, Serbia And Montenegro, 10 October 2018, pp.1

### VII. **Optimization of Electrochemical Processes for the Treatment of Raw Woollen Yarn Dye Wastewater**

ALTUNTAŞ K., İLHAN F., Doğan C., KURT U.

International Conference on Application in Chemistry and Chemical Engineering, Belgrade, Serbia And Montenegro, 10 - 14 October 2018

### VIII. **SPATIAL DISTRIBUTION OF OCPS IN SOILS OF ISTANBUL**

KISTAUBAYEVA A., SARAL A., KUZU S. L., ULUCAN-ALTUNTAS K.

International Science and Technology Conference, Paris, France, 18 July 2018, pp.1

### IX. **DDT Removal by Nano Zero Valent Iron: Influence of pH on Removal Mechanism**

ALTUNTAŞ K., DEBİK E.

International Conference on Technology, Engineering and Science, 26 October - 29 January 2017

- X. **Binary Adsorption of Copper and Nickel Metal Ions on Nano Zero Valent Iron Supported on Activated Carbon (AC/nZVI)**  
DEBİK E., ALTUNTAŞ K., YÖRÜK İ. İ. , KOZAL D.  
Solutions to Water Challenges in MENA REGION Regional Workshop, Kahire, Egypt, 25 - 30 April 2017, vol.1, pp.146-152
- XI. **Adsorption of Copper Metal Ion from Aqueous Solution by Nanoscale Zero Valent Iron nZVI Supported on Activated Carbon**  
ALTUNTAŞ K., DEBİK E., Kozal D., Yörük İ. İ.  
3rd INTERNATIONAL SYMPOSIUM ON ENVIRONMENT AND MORALITY, 4 - 06 November 2016, pp.504-511
- XII. **Single and Binary Adsorption of Copper and Nickel Metal Ions on Nano Zero Valent Iron (nZVI)**  
ALTUNTAŞ K., DEBİK E., Kozal D., Yoruk İ. İ.  
3rd International Conference on Recycling and Reuse, İstanbul, Turkey, 28 September 2016, pp.250-255
- XIII. **INVESTIGATION OF THE ESTROGENIC STEROID HORMONES' REMOVAL BY ? -Fe<sub>2</sub>O<sub>3</sub> NANOPARTICLES IN ADSORPTION PROCESS**  
ALTUNTAŞ K., DEBİK E., KOLB M., Bahadır A. M. , NOBERİ C., KAYA C.  
2nd International Symposium on Environment and Morality, Adıyaman, Turkey, 01 January 2014, pp.1
- XIV. **Disinfection By Products Removal by Nanoparticles Sintered in Zeolite**  
Ulucan K., NOBERİ C., COŞKUN T., ÜSTÜNDAĞ C. B. , DEBİK E., KAYA C.  
3 rd International Conference on Future Environmnet and Energy, 24 - 25 February 2013
- XV. **Treatability of diluate solution from electro dialysis process by aerobic sequencing batch reactor**  
ERKAN H., İLHAN F., YAZICI GÜVENÇ S., ALTUNTAŞ K., APAYDIN Ö.  
International Conference on Recycling and Reuse, 4 - 06 July 2012
- XVI. **Treatability of Diluate Solution from Electrodialysis Process by Aerobic Sequencing Batch Reactor International Conference on Recycling and Reuse**  
SARI ERKAN H., İLHAN F., YAZICI S., ALTUNTAŞ K., APAYDIN Ö.  
International Conference on Recycling and Reuse., 4 - 06 June 2012
- XVII. **Treatment of Bilge Water By Electrocoagulation/Electroflotation Process**  
ALTUNTAŞ K., İLHAN F., ÇIKARANOĞLU S., YAZICI GÜVENÇ S., ERKAN H., KURT U.  
eurasia 2011, 14 - 16 November 2011
- XVIII. **Fouling of Ion Exchange Membranes in Electrodialysis Process for Recovery of Leachate Compounds**  
YAZICI S., İLHAN F., ERKAN H., Ulucan K., aydın y., KURT U.  
Eurasia 2011 Waste Management Symposium, 14 - 16 November 2011
- XIX. **Fouling of Ion Exchange Membranes in Electrodialysis Process for Recovery of Leachate Compounds**  
YAZICI S., İLHAN F., SARI ERKAN H., ALTUNTAŞ K., KURT U.  
Euraisa Waste Management Symposium, 10 - 11 November 2011
- XX. **Treatment of Bilge Water By Electrocoagulation Electroflotation Process Optimization With Response Surface Method**  
ALTUNTAŞ K., İLHAN F., YAZICI S., SARI ERKAN H., KURT U.  
Euraisa Waste Management Symposium, 10 - 11 November 2011

## Supported Projects

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- I. Altuntaş K., Debik E., Manav Demir N., Öz E., Newton Programme Project, UK-Turkey capacity building for wastewater treatment integrated with renewable energy and safer reuse for sustainable communities, 2021 - 2022
- II. Altuntaş K., H2020 Project, Perfluorinated Organic Compounds (PFCs) Degradation using Non-Thermal Plasma Enhanced by Boron Doped Graphene Oxide as Catalyst, 2020 - 2022
- III. Altuntaş K., TUBITAK Project, Investigation of Perfluorinated Organic Compounds (PFCs) Degradation by Cold Plasma as an Innovative Technology, 2019 - 2020

- IV. Altuntaş K., Apaydın Ö., Technopark, Setaş Kimya Sanayi'nin Boyarmadde ve Kimyasal Üretiminden Kaynaklı Atıksuları İçin Ekonomik Entegre Arıtma Alternatiflerinin Araştırılması, 2018 - 2019
- V. Altuntaş K., Debik E., Project Supported by Higher Education Institutions, Treatability of Persistent Organic Pollutants in Aqueous Solution by Nanoparticles, 2015 - 2018
- VI. Kurt U., İlhan F., Altuntaş K., Project Supported by Other Official Institutions, Sızıntı Sularının Evsel Atıksularla Birlikte Hızlı ve Ekonomik Bir Yöntem Olan Elektrokoagülasyonla Arıtılabilirliğinin İncelenmesi, 2008 - 2009

## Patent

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- I. Debik E., Altuntaş K., Kaya C., Üstündağ C. B. , Noberi C., Nanoboyutta Hematit ile sinterlenmiş Zeolit Yatak Malzemesi, Patent, CHAPTER C Chemistry; Metallurgy, Registration in Multiple Countries, 2016, 2015

## Scientific Refereeing

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- I. Desalination And Water Treatment, SCI Journal, August 2020
- II. MATERIALS RESEARCH EXPRESS, SCI Journal, May 2020
- III. International Journal Of Environmental Analytical Chemistry, SCI Journal, May 2020
- IV. JOURNAL OF HAZARDOUS MATERIALS, SCI Journal, June 2018

## Citations

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- I. Total Citations (WOS): 128
- II. h-index (WOS): 6

## Scholarships

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- I. Marie Skłodowska Curie Individual Fellowship (MSCA-IF), European Commission, 2020 - Continues
- II. 2219 - International Postdoctoral Research Fellowship Program for Turkish Citizens, TUBITAK, 2019 - 2020
- III. 2211C - National PhD Scholarship Program on Priority Areas, TUBITAK, 2014 - 2017
- IV. Forschungskurzstipendium, Official Institutions of Foreign Countries, 2013 - 2013

## Awards

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- I. Ulucan-Altuntas K., Academical Encouragement Certificate (for achieving the third weighted rank among all academicians in Civil Engineering Faculty have the highest academic record in 2019), Yıldız Teknik Üniversitesi, July 2020
- II. Ulucan-Altuntas K., Academical Encouragement Certificate (for achieving the third weighted rank among all academicians in university have Intellectual and industrial property rights in 2016), Rectorship Of Yıldız Technical University, May 2018