

## Res. Asst. PhD BARAN ÖZYURT

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: AAH-3347-2020

ScopusID: 56042159200

Yoksis Researcher ID: 111929

### Education Information

Doctorate, Ankara University, Fen Bilimleri Enstitüsü, Kimya Mühendisliği (Dr), Turkey 2012 - 2019

Postgraduate, Ankara University, Fen Bilimleri Enstitüsü, Kimya Mühendisliği (YI) (Tezli), Turkey 2009 - 2012

Undergraduate, Ankara University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, Turkey 2005 - 2009

### Foreign Languages

English, C1 Advanced

### Certificates, Courses and Trainings

IT, MATLAB Fundamentals, Figes A.Ş., 2010

IT, MATLAB Programming Techniques, Figes A.Ş., 2009

### Dissertations

Doctorate, Evsel ve endüstriyel atık suların birleşik elektrokoagülasyon ve elektro-oksidasyon prosesi ile arıtılması, Ankara University, Fen Bilimleri Enstitüsü, Kimya Mühendisliği (Dr), 2019

Postgraduate, Karanlık fermentasyon ile biyohidrojen üretiminde pH kontrolü, Ankara University, Fen Bilimleri Enstitüsü, Kimya Mühendisliği (YI) (Tezli), 2012

### Research Areas

Environmental Chemistry, Waste Water Collection and Treatment, Water Supply and Treatment, Electrochemical Processes, Environmental Chemistry and Technology, Catalysis and Catalytic Processes, Process Control

### Academic Titles / Tasks

Research Assistant, Ankara University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 2011 - Continues

## Courses

Chemical Engineering Laboratory II, Undergraduate, 2020 - 2021

Bilgisayar Programlama, Undergraduate, 2019 - 2020

Computer Programming, Undergraduate, 2019 - 2020

Computer Programming, Undergraduate, 2019 - 2020

KİMYA MÜHENDİSLİĞİ LABORATUVARI III, Undergraduate, 2018 - 2019, 2015 - 2016, 2014 - 2015, 2013 - 2014

SAYISAL YÖNTEMLER, Undergraduate, 2018 - 2019, 2015 - 2016, 2014 - 2015

HEAT TRANSFER, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017

KİMYA MÜHENDİSLİĞİ LABORATUVARI I, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2012 - 2013, 2011 - 2012

ISI AKTARIMI, Undergraduate, 2015 - 2016

AKIŞKANLAR MEKANİĞİ, Undergraduate, 2013 - 2014, 2011 - 2012

PROSES KONTROL, Undergraduate, 2013 - 2014, 2012 - 2013, 2011 - 2012

MALZEME BİLGİSİ, Undergraduate, 2012 - 2013

PROSES KONTROL UYGULAMALARI, Undergraduate, 2011 - 2012

ÖLÇME VE KONTROL TEKNİKLERİ, Undergraduate, 2011 - 2012

## Research Infrastructure Information

Özyurt B., Camcioğlu Ş., Hapoğlu H., Elektrokimyasal Arıtım Laboratuvarı, March 2016

Özyurt B., Ortak Alan (Saf Su Laboratuvarı), March 2016

## Education Infrastructure Information

Özyurt B., Camcioğlu Ş., Bilgisayar Laboratuvarı A, March 2016

Özyurt B., Camcioğlu Ş., Bilgisayar Laboratuvarı B, March 2016

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

- I. **Heterogeneous electro-Fenton treatment of chemotherapeutic drug busulfan using magnetic nanocomposites as catalyst**  
CAMCIOĞLU Ş., ÖZYURT B., Oturan N., Portehault D., Trellu C., Oturan M. A.  
Chemosphere, vol.341, 2023 (SCI-Expanded)
- II. **Fast and Complete Destruction of the Anti-Cancer Drug Cytarabine from Water by Electrocatalytic Oxidation Using Electro-Fenton Process**  
CAMCIOĞLU Ş., ÖZYURT B., Oturan N., Trellu C., Oturan M. A.  
CATALYSTS, vol.12, no.12, 2022 (SCI-Expanded)
- III. **Treatment of sunflower oil industry wastewater by coagulation-flocculation and electro-Fenton methods**  
ÖZYURT B., CAMCIOĞLU Ş., Karatokus T., Yuksek C., HAPOĞLU H.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.36, no.1, pp.275-290, 2021 (SCI-Expanded)
- IV. **Evaluation of electro-Fenton method on cheese whey treatment: optimization through response surface methodology**  
Camcioglu Ş., Özyurt B., Sengul S., Hapoglu H.  
DESALINATION AND WATER TREATMENT, vol.172, pp.270-280, 2019 (SCI-Expanded)
- V. **Boron removal from industrial wastewaters by means of optimized sequential chemical precipitation**

#### **and coagulation processes**

ÖZYURT B., CAMCIOĞLU Ş., FIRTIN M., ATEŞ C., HAPOĞLU H.

DESALINATION AND WATER TREATMENT, vol.172, pp.292-300, 2019 (SCI-Expanded)

- VI. **An efficient dark fermentative hydrogen production by GMV control of pH**  
ÖZYURT B., SOYSAL F., YILMAZER HİTİT Z., CAMCIOĞLU Ş., AKAY B., ERTUNÇ S.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.44, no.36, pp.19709-19718, 2019 (SCI-Expanded)
- VII. **Real-time experimental generalized minimum variance control of operating parameters in an electrocoagulation process**  
CAMCIOĞLU Ş., ÖZYURT B., HAPOĞLU H.  
DESALINATION AND WATER TREATMENT, vol.139, pp.305-318, 2019 (SCI-Expanded)
- VIII. **Enclosed coastal waters quality monitoring with bacterial indicator phase-plane analysis**  
HAPOĞLU H., CAMCIOĞLU Ş., ÖZYURT B., YILDIRIM P., YILMAZ N., BALAS L.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.33, no.4, pp.1419-1431, 2018 (SCI-Expanded)
- IX. **Determination of suitable operating conditions for biohydrogen production from potato production medium by dark fermentation and kinetic analysis**  
ÖZYURT B., YILMAZER HİTİT Z., SOYSAL F., CAMCIOĞLU Ş., AKAY B., ERTUNÇ S.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.33, no.4, pp.1475-1491, 2018 (SCI-Expanded)
- X. **Application of response surface methodology as a new PID tuning method in an electrocoagulation process control case**  
Camcioglu Ş., ÖZYURT B., DOĞAN I. C., Hapoğlu H.  
WATER SCIENCE AND TECHNOLOGY, vol.76, no.12, pp.3410-3427, 2017 (SCI-Expanded)
- XI. **Effect of process control on optimization of pulp and paper mill wastewater treatment by electrocoagulation**  
CAMCIOĞLU Ş., ÖZYURT B., HAPOĞLU H.  
PROCESS SAFETY AND ENVIRONMENTAL PROTECTION, vol.111, pp.300-319, 2017 (SCI-Expanded)
- XII. **MIMO control application for pulp and paper mill wastewater treatment by electrocoagulation**  
CAMCIOĞLU Ş., ÖZYURT B., HAPOĞLU H.  
DESALINATION AND WATER TREATMENT, vol.93, pp.200-213, 2017 (SCI-Expanded)
- XIII. **A consecutive electrocoagulation and electro-oxidation treatment for pulp and paper mill wastewater**  
ÖZYURT B., CAMCIOĞLU Ş., HAPOĞLU H.  
DESALINATION AND WATER TREATMENT, vol.93, pp.214-228, 2017 (SCI-Expanded)
- XIV. **Experimental application of one step ahead advanced pH control to water-based paint wastewater treatment**  
CAMCIOĞLU Ş., ÖZYURT B., ZEYBEK Z., HAPOĞLU H.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.31, no.3, pp.656-665, 2016 (SCI-Expanded)
- XV. **Self-Tuning GMV Control of Glucose Concentration in Fed-Batch Baker's Yeast Production**  
YILMAZER HİTİT Z., BOYACIOĞLU H., ÖZYURT B., ERTUNÇ S., HAPOĞLU H., AKAY B.  
APPLIED BIOCHEMISTRY AND BIOTECHNOLOGY, vol.172, no.8, pp.3761-3775, 2014 (SCI-Expanded)
- XVI. **Biological hydrogen production: effects of inoculation and production media**  
ÖZYURT B., YILMAZER HİTİT Z., ERTUNÇ S., HAPOĞLU H., AKAY B., DEMİRTAS G. F.  
INTERNATIONAL JOURNAL OF GLOBAL WARMING, vol.6, no.2-3, pp.350-365, 2014 (SCI-Expanded)

#### **Articles Published in Other Journals**

- I. **Optimization and PID Control of pH and Temperature in an Electrocoagulation Process**  
CAMCIOĞLU Ş., ÖZYURT B.

Journal of the Turkish Chemical Society Section B: Chemical Engineering, vol.71, no.1, pp.13-24, 2024 (Peer-Reviewed Journal)

**II. Discrete-time dynamic water quality index model in coastal water**

Hapoglu H., Camcioglu Ş., Ozyurt B., Yildirim P., Balas L.

GLOBAL JOURNAL OF ENVIRONMENTAL SCIENCE AND MANAGEMENT-GJESM, vol.7, no.2, pp.197-210, 2021 (ESCI)

**III. ELEKTROKOAGÜLASYON YÖNTEMİYLE KAĞIT ATIK SUYU ARITIMINDA pH KONTROLÜ**

Camcioglu Ş., Özyurt B., Hapoğlu H.

Anadolu Üniversitesi Bilim ve Teknoloji Dergisi :A-Uygulamalı Bilimler ve Mühendislik, vol.16, no.2, pp.107, 2015 (Peer-Reviewed Journal)

## Books & Book Chapters

**I. Applications of Combined Electrocoagulation and Electrooxidation Treatment to Industrial Wastewaters**

ÖZYURT B., CAMCIOĞLU Ş.

in: Wastewater and water quality, Yonar, Taner, Editor, Intechopen, Londrina, pp.71-88, 2018

**II. The Application of System Identification and Advanced Process Control to Improve Fermentation Process of Baker's Yeast**

YILMAZER HİTİT Z., ÖZYURT B., ERTUNÇ S.

in: Yeast-Industrial Applications, , Editor, InTechOpen, pp.153-177, 2017

## Refereed Congress / Symposium Publications in Proceedings

**I. AKTİF KARBON DESTEKLİ  $Fe_3O_4$  KATALİZÖRÜN KULLANILDIĞI HETEROJEN ELEKTRO-FENTON PROSESİ İLE AMOKSİSİLİN MİNERALİZASYONU**

ÖZYURT B., CAMCIOĞLU Ş.

6. ULUSLARARASI MARMARA BİLİMSEL ARAŞTIRMALAR VE İNOVASYON KONGRESİ, İstanbul, Turkey, 7 - 08 October 2023

**II. Degradation and mineralization of methyl orange by advanced oxidation processes**

ÖZYURT B.

6th International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2023), Ankara, Turkey, 11 - 13 October 2023

**III. BOYAR MADDELERİN SUCUL ORTAMLARDAN HETEROJEN FOTOELEKTRO-FENTON PROSESİ İLE GİDERİMİ**

ÖZYURT B.

15. Ulusal Kimya Mühendisliği Kongresi, Çanakkale, Turkey, 4 - 07 September 2023

**IV. DEGRADATION AND MINERALIZATION OF CYCLOHEXIMIDE IN AQUEOUS SOLUTION BY ADVANCED OXIDATION PROCESSES: A COMPARATIVE STUDY**

Oturan N., Özyurt B., Camcioglu Ş., Trellu C., Oturan M. A.

31st International Materials Research Congress 2023, Cancun, Mexico, 13 - 18 August 2023, pp.28-29

**V. CATALYTIC ACTIVITY OF HETEROGENEOUS ELECTRO-FENTON PROCESSES: A COMPARATIVE STUDY FOR DEGRADATION OF CYTARABINE**

Camcioglu Ş., Özyurt B., Oturan N., Portehault D., Trellu C., Oturan M. A.

31st International Materials Research Congress 2023, Cancun, Mexico, 13 - 18 August 2023, pp.3

**VI. APPLICATION OF  $rGO-Fe_3O_4-TiO_2$  NANOCOMPOSITE AS A HETEROGENEOUS CATALYST FOR THE DEGRADATION AND MINERALIZATION OF HERBICIDE DALAPON BY PHOTOELECTRO-FENTON PROCESS**

Özyurt B., Camcioglu Ş., Oturan N., Portehault D., Trellu C., Oturan M. A.

- VII. **Simultaneous reduced graphene oxide production and chemical oxygen demand removal from domestic wastewater**  
SOYSAL F., ÇIPLAK Z., ÖZYURT B., CAMCIOĞLU Ş., HAPOĞLU H., YILDIZ N.  
3rd International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2020), Turkey, 19 - 20 March 2020
- VIII. **Boron removal from industrial wastewaters by means of optimized sequential chemical precipitation and coagulation processes**  
ÖZYURT B., CAMCIOĞLU Ş., FIRTIN M., HAPOĞLU H.  
4th International Conference on Recycling and Reuse, İstanbul, Turkey, 24 - 26 October 2018
- IX. **Optimization of combined electrocoagulation/electrooxidation process for treatment of sunflower oil industry wastewater**  
ÖZYURT B., CAMCIOĞLU Ş., FIRTIN M., HAPOĞLU H.  
4th International Conference on Recycling and Reuse, İstanbul, Turkey, 24 - 26 October 2018
- X. **Evaluation of electro-Fenton method on cheese whey treatment: Optimization through Response Surface Methodology**  
ÖZYURT B., CAMCIOĞLU Ş., FIRTIN M., HAPOĞLU H.  
4th International Conference on Recycling and Reuse, İstanbul, Turkey, 24 - 26 October 2018
- XI. **Process parameters optimization of graphite-graphite electro-Fenton system for the treatment of sunflower oil refining industry**  
ÖZYURT B., CAMCIOĞLU Ş., FIRTIN M., HAPOĞLU H.  
4th International Conference on Recycling and Reuse, İstanbul, Turkey, 24 - 26 October 2018
- XII. **Reaction Kinetics of Electrochemical Sunflower Oil Refinery Wastewater Treatment**  
ÖZYURT B., CAMCIOĞLU Ş., FIRTIN M., HAPOĞLU H.  
International Congress on Chemistry and Material Sciences, Ankara, Turkey, 5 - 07 October 2017
- XIII. **Chemometric Evaluation of Effective Process Parameters on Electrocoagulation Treatment of Pulp and Paper Mill Wastewater**  
CAMCIOĞLU Ş., ÖZYURT B., FIRTIN M., HAPOĞLU H.  
International Congress on Chemistry and Material Sciences, Ankara, Turkey, 5 - 07 October 2017
- XIV. **Effect of Initial pH on Boron Removal from Industrial Wastewater by Means of Consecutive Chemical and Electrochemical Coagulation**  
ÖZYURT B., ATEŞ Ç., CAMCIOĞLU Ş., HAPOĞLU H.  
International Congress on Chemistry and Material Sciences, Ankara, Turkey, 5 - 07 October 2017
- XV. **Experimental Treatment of Sunflower Oil Refinery Wastewater by Means of Electrochemical Methods**  
CAMCIOĞLU Ş., ÖZYURT B., FIRTIN M., HAPOĞLU H.  
International Congress on Chemistry and Material Sciences, Ankara, Turkey, 5 - 07 October 2017
- XVI. **NARX Model Based Nonlinear Dynamic System Identification of an Electrocoagulation Process Using Artificial Neural Networks**  
ÖZYURT B., CAMCIOĞLU Ş., HAPOĞLU H.  
RandR, 2016, 3rd International Conference on Recycling and Reuse, 28 - 30 September 2016
- XVII. **Application of response surface methodology as a new PID tuning method in an electrocoagulation process control case**  
CAMCIOĞLU Ş., Doğan İ. C., ÖZYURT B., HAPOĞLU H.  
3rd International Conference on Recycling and Reuse, 28-30 September 2016, İstanbul Turkey, İstanbul, Turkey, 28 - 30 September 2016
- XVIII. **MIMO control application for pulp and paper mill wastewater treatment by electrocoagulation**  
CAMCIOĞLU Ş., ÖZYURT B., HAPOĞLU H.  
3rd International Conference on Recycling and Reuse, İstanbul, Turkey, 28 - 30 September 2016
- XIX. **A consecutive electrocoagulation and electro oxidation treatment for pulp and paper mill wastewater**  
ÖZYURT B., CAMCIOĞLU Ş., HAPOĞLU H.

3rd International Conference on Recycling and Reuse, İstanbul, Turkey, 28 - 30 September 2016

- XX. **NARX model based nonlinear dynamic system identification of an electrocoagulation process using artificial neural networks**  
ÖZYURT B., CAMCIOĞLU Ş., HAPOĞLU H.  
3rd International Conference on Recycling and Reuse, İstanbul, Turkey, 28 - 30 September 2016
- XXI. **Elektrokoagülasyon Yöntemiyle Kağıt Atık Suyu Arıtımında pH Kontrolü**  
CAMCIOĞLU Ş., ÖZYURT B., HAPOĞLU H.  
11. Ulusal Kimya Mühendisliği Kongresi, Eskişehir, Turkey, 2 - 05 September 2014
- XXII. **Effect of MIMO pH and temperature control in pulp and paper mill wastewater treatment with electrocoagulation process**  
CAMCIOĞLU Ş., ÖZYURT B., HAPOĞLU H.  
2nd International Conference on Recycling and Reuse, 4 - 06 June 2014
- XXIII. **Biyohidrojen Üretiminde pH in PID Kontrolü**  
meta s., ÖZYURT B., AKAY B.  
2. Ulusal Kimya Mühendisliği Öğrenci Kongresi - UKMÖK2, Turkey, 04 May 2013 - 06 May 2012
- XXIV. **Experimental multi input multi output MIMO control of a process control simulator**  
ALDEMİR A., akpınar a., pekel karabay l. c., ÖZYURT B., HAPOĞLU H.  
20th International Congress of Chemical and Process Engineering - CHISA 2012 15th Conference on Process Integration, Modelling and Optimisation for Energy Saving and Pollution Reduction -PRES 2012, 25 August - 29 June 2012
- XXV. **Effects of Stirrer Speed and Inoculation Ratio on Biohydrogen Production Yield**  
YILMAZER HİTİT Z., ÖZYURT B., ERTUNÇ S., HAPOĞLU H., mustafa a., AKAY B.  
International Conference on Recycling and Reuse, 4 - 06 June 2012, vol.1, pp.366-367
- XXVI. **Effects of Different Growth Media on Biohydrogen Production**  
ÖZYURT B., Fırat G., YILMAZER HİTİT Z., ERTUNÇ S., HAPOĞLU H., AKAY B.  
International Conference on Recycling and Reuse (R&R2012), İstanbul, Turkey, 4 - 06 June 2012, pp.40
- XXVII. **Effects of Stirrer Speed and Inoculation Ratio on Biohydrogen Production**  
HİTİT Z., ÖZYURT B., ERTUNÇ S., HAPOĞLU H., Alpbaz M., AKAY B.  
International Conference on Recycling and Reuse (R&R2012), İstanbul, Turkey, 4 - 06 June 2012, pp.366
- XXVIII. **Dynamic Analysis and Linear Modeling of pH Behaviour in Biohydrogen Production Using RLS Estimation Method**  
YILMAZER HİTİT Z., ÖZYURT B., ERTUNÇ S., ALPBAZ M., AKAY B.  
EMCC7, 7th Chemical Engineering Conference for Collaborative Research in Eastern Mediterranean Countries, Corfu, Greece, 27 April - 01 May 2012
- XXIX. **Dynamic Analysis and Linear Modeling of pH Behavior in Biohydrogen Production Using RLS Estimation Method**  
HİTİT Z., ÖZYURT B., ERTUNÇ S., Alpbaz M., AKAY B.  
7th Chemical Engineering conference for Collaborative Research in Eastern Mediterranean Countries (EMCC7), Corfu, Greece, 27 April - 01 May 2012, pp.42
- XXX. **pH Control in Biohydrogen Production: A Theoretical and Comparative Study**  
ÖZYURT B., HİTİT Z., ERTUNÇ S., HAPOĞLU H., AKAY B.  
7th Chemical Engineering conference for Collaborative Research in Eastern Mediterranean Countries (EMCC7), Corfu, Greece, 27 April - 01 May 2012, pp.44
- XXXI. **Application of Generalized Minimum Variance GMV Control to Fed batch Fermentation**  
AKAY B., ERTUNÇ S., HİTİT Z., ÖZYURT B., HAPOĞLU H., Alpbaz M.  
2nd European Conference on Process Analytics and Control Technology (EuroPact2011), Glasgow, United Kingdom, 26 - 29 April 2011, pp.134
- XXXII. **A Novel Approach for Prediction of Dissolved Oxygen Concentration and pH Values in a Yeast Fermentation**  
AKAY B., ERTUNÇ S., ÖZYURT B., HİTİT Z., HAPOĞLU H., Alpbaz M.  
2nd European Conference on Process Analytics and Control Technology (EuroPact2011), Glasgow, United

## Scientific Refereeing

JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING, SCI Journal, March 2024

JOURNAL OF ENVIRONMENTAL MANAGEMENT, SCI Journal, June 2023

CLEAN - SOIL, AIR, WATER, SCI Journal, June 2023

JOURNAL OF ENVIRONMENTAL MANAGEMENT, SCI Journal, January 2023

JOURNAL OF ENVIRONMENTAL MANAGEMENT, SCI Journal, December 2022

JOURNAL OF ENVIRONMENTAL MANAGEMENT, SCI Journal, July 2022

## Mobility Activity

Post Doc, Post Doc, Université de Marne-La-Vallée, France, 2022 - 2023

## Metrics

Publication: 53

Citation (WoS): 112

Citation (Scopus): 125

H-Index (WoS): 6

H-Index (Scopus): 7

## Congress and Symposium Activities

6th International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2023), Attendee, Ankara, Turkey, 2023

6. INTERNATIONAL MARMARA SCIENTIFIC RESEARCH AND INNOVATION CONGRESS, Attendee, İstanbul, Turkey, 2023

15. Ulusal Kimya Mühendisliği Kongresi (UKMK-15), Attendee, Çanakkale, Turkey, 2023

31st International Materials Research Congress (IMRC2023), Invited Speaker, Cancun, Mexico, 2023

31st International Materials Research Congress (IMRC2023), Attendee, Cancun, Mexico, 2023

31st International Materials Research Congress (IMRC2023), Attendee, Cancun, Mexico, 2023

## Invited Talks

Novel Materials for (Photo)Catalytic and (Photo)Electrocatalytic Wastewater Treatment and Valorization, Conference, Materials Research Society, Mexico, August 2023

## Scholarships

2219 YURT DIŞI DOKTORA SONRASI ARAŞTIRMA BURS PROGRAMI , TUBITAK, 2022 - 2023

## Awards

Özyurt B., Camcioğlu Ş., Hapoğlu H., Best Poster Presentation Award, International Conference On Recycling And Reuse, September 2016

**Non Academic Experience**

Teknis İleri Arařtırma Sistemleri Ltd. řti  
Company, Teknis İleri Arařtırma Sistemleri, Satıř