

## Asst. Prof. Burcu Didem ÇORBACIOĞLU

### Personal Information

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### International Researcher IDs

ORCID: 0000-0002-8156-6094

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### Education Information

Doctorate, Yildiz Technical University, Faculty Of Chemical And Metallurgical Engineering, Department Of Chemical Engineering, Turkey 1994 - 2002

### Dissertations

Doctorate, Yakıt pillerinde elektrot performansının matematiksel modellemesi, Yildiz Technical University, FACULTY OF CHEMICAL AND METALLURGICAL ENGINEERING, Department of Chemical Engineering, 2002

Postgraduate, Yarı İletken Polimerlerin Elektrokimyasal Yöntemle Eldesi, Yildiz Technical University, FACULTY OF CHEMICAL AND METALLURGICAL ENGINEERING, 1993

### Research Areas

Chemical Engineering and Technology, Engineering and Technology

### Academic Titles / Tasks

Assistant Professor, Yildiz Technical University, Faculty Of Chemical And Metallurgical Engineering, Department Of Chemical Engineering, 2018 - Continues

Assistant Professor, Yildiz Technical University, Faculty Of Chemical And Metallurgical Engineering, Department Of Chemical Engineering, 2004 - 2018

### Courses

Yarı İletken Polimer Teknolojisi, Postgraduate, 2021 - 2022

Biyomalzeme Teknolojileri, Undergraduate, 2018 - 2019

Elektrokimyasal Prosesler, Undergraduate, 2019 - 2020

### Advising Theses

Çorbacioğlu B. D., POLİÜRE KAPLAMALI METAL LEVHALARIN MEKANİK ÖZELLİKLERİNİN İNCELENMESİ VE ZIRH MALZEMESİ OLARAK KULLANIMININ DEĞERLENDİRİLMESİ, Postgraduate, M.Yıldırım(Student), 2019

Çorbacioğlu B. D., Türkiye’de Azotlu Gübre Endüstrisinde Tozlaşma ve Kekleşme Sorunu Üzerine Alternatif Çözüm Yöntemleri, Doctorate, A.Ozan(Student), 2018

Çorbacioğlu B. D., Polietilen tereftalat (PET) atıklarının demir-çelik sektörü için değerlendirilmesi, Postgraduate, B.Çiçek(Student), 2015

Çorbacioğlu B. D., Cam elyaf-kalsit dolgulu polietilen ve geri dönüşüm PET polimer hibrit kompozit geliştirilemsi ve karakterizasyonu, Postgraduate, S.Karadağ(Student), 2014

Çorbacioğlu B. D., Kauçuktan yarı mamül üretim teknolojileri, Postgraduate, B.Boşnak(Student), 2010

Çorbacioğlu B. D., Akımsız nikel kaplama banyolarının karakteristiklerinin incelenmesi, Postgraduate, E.Çam(Student), 2009

Çorbacioğlu B. D., Nikel kaplama banyolarının karakteristiklerinin incelenmesi, Postgraduate, A.Ozan(Student), 2007

Çorbacioğlu B. D., Çinko-nikel alaşım kaplamalarının karakteristiklerinin incelenmesi, Postgraduate, E.Çetinkaya(Student), 2006

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

- I. **Development of a new ammonium nitrate composition: an attempt to prevent misuse of explosives for antisocial activities**  
Gezerman A. O., Çorbacioğlu B. D.  
JOURNAL OF THE CHINESE INSTITUTE OF ENGINEERS, vol.43, no.1, pp.101-110, 2020 (SCI-Expanded)
- II. **2-Mercaptobenzimidazole, 2-Mercaptobenzothiazole, and Thioglycolic Acid as Additives for Electrolytic Ni Plating**  
Gezerman A. O., Çorbacioğlu B. D.  
IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY TRANSACTION A-SCIENCE, vol.42, pp.465-475, 2018 (SCI-Expanded)
- III. **Effects of Mechanical Alloying on Sintering Behavior of Tungsten Carbide-Cobalt Hard Metal System**  
Gezerman A. O., Çorbacioğlu B. D.  
ADVANCES IN MATERIALS SCIENCE AND ENGINEERING, 2017 (SCI-Expanded)
- IV. **Effect of telluric acid addition on thermal behavior of cesium dihydrogen phosphate**  
Beyribey B., Günay E., Saygi B., Çorbacioğlu B., Saraç H.  
Main Group Chemistry, vol.15, pp.125-130, 2016 (SCI-Expanded)
- V. **Development of alternative environment friendly nickel and gold plating baths**  
GEZERMAN A. O., ÇORBACIOĞLU B. D.  
SURFACE ENGINEERING, vol.31, no.9, pp.641-649, 2015 (SCI-Expanded)
- VI. **EFFECTS OF SODIUM SILICATE, CALCIUM CARBONATE AND SILICIC ACID ON AMMONIUM NITRATE DEGRADATION AND ANALYTICAL INVESTIGATIONS OF THE DEGRADATION PROCESS ON AN INDUSTRIAL SCALE**  
Gezerman A. O., Çorbacioğlu B. D.  
CHEMICAL INDUSTRY & CHEMICAL ENGINEERING QUARTERLY, vol.21, pp.359-367, 2015 (SCI-Expanded)
- VII. **2-Mercaptobenzimidazole, 2-Mercaptobenzothiazole, and Thioglycolic Acid in an Electroless Nickel-Plating Bath**  
Gezerman A. O., Çorbacioğlu B. D.  
JOURNAL OF CHEMISTRY, 2015 (SCI-Expanded)
- VIII. **Use of nickel(II) acetylacetonate and dimethylgold(III) acetylacetonate in gold on nickel plating**  
Gezerman A. O., Çorbacioğlu B. D.  
SURFACE ENGINEERING, vol.30, pp.483-489, 2014 (SCI-Expanded)
- IX. **Effects of Number of Motors on Viscosity and Cooling Rate during Prilling Process**  
Gezerman A. O., ÇORBACIOĞLU B. D.  
PENSEE, 2014 (SSCI)

- X. **Effects of Calcium Lignosulfonate and Silicic Acid on Ammonium Nitrate Degradation**  
Gezerman A. O., Çorbacioğlu B. D.  
JOURNAL OF CHEMISTRY, 2014 (SCI-Expanded)
- XI. **Iron(II) acetylacetonate containing brightener and sulphur containing carrier in nickel plating**  
Gezerman A. O., Çorbacioğlu B. D.  
SURFACE ENGINEERING, vol.29, pp.516-521, 2013 (SCI-Expanded)
- XII. **Effects of Dipping Solutions on Air-Drying Rates of the Seedless Grapes**  
İsmail O., Keyf S., Beyribey B., Corbacioglu B.  
FOOD SCIENCE AND TECHNOLOGY RESEARCH, vol.14, pp.547-552, 2008 (SCI-Expanded)
- XIII. **The modification of bitumen with synthetic reactive ethylene terpolymer and ethylene terpolymer**  
Keyf S., Ismail O., Corbacioglu B. D.  
PETROLEUM SCIENCE AND TECHNOLOGY, vol.25, pp.561-568, 2007 (SCI-Expanded)

## Articles Published in Other Journals

- I. **The Study of Dehydration and Rehydration Kinetics of Phaseolus Vulgaris**  
Yalçın Z. G., ÇORBACIOĞLU B. D., Aydoğmuş E., Dağ M.  
Journal of Current Researches on Engineering, Science and Technology (JoCREST), vol.4, no.1, pp.1-18, 2018  
(Peer-Reviewed Journal)
- II. **DETONATION PROPERTIES OF AMMONIUM NITRATE CONTAINING CALCIUM CARBONATE, DOLOMITE, AND FLY ASH**  
Gezerman A. O., Çorbacioğlu B. D.  
INTERNATIONAL JOURNAL OF ENERGETIC MATERIALS AND CHEMICAL PROPULSION, vol.16, pp.295-307, 2017  
(ESCI)
- III. **Best available techniques in the fertilizer production industry: A Review**  
Gezerman A. O., ÇORBACIOĞLU B. D.  
European Journal of Chemistry, vol.7, no.2, 2016 (Peer-Reviewed Journal)
- IV. **Off-Design Operation and Exergy Analysis of Multi-Stage Compressors**  
Gezerman A. O., Çorbacioğlu B. D.  
International Journal of Modern Engineering Sciences, vol.2, no.1, pp.39-50, 2013 (Peer-Reviewed Journal)
- V. **KATI-SIVI EKSTRAKSİYON İŞLEMİ İLE JOJABA YAĞININ ELDESİ VE İŞLEM DEĞİŞKENLERİNİN YAĞ VERİMİ ÜZERİNE ETKİLERİ**  
Yalçın Z. G., Keyf S., Çorbacioğlu B. D., Beyribey Price D. B.  
YTU SİGMA, vol.31, pp.447-455, 2013 (Peer-Reviewed Journal)
- VI. **Effects of Nitrogenous Fertilizer Filling Material Particle Sizes on Fertilizer Particles**  
Gezerman A. O., Çorbacioğlu B. D.  
International Journal of Modern Chemistry, vol.3, no.2, pp.108-113, 2012 (Peer-Reviewed Journal)
- VII. **Triple Point Behavior of Ammonia under Compression**  
Gezerman A. O., Çorbacioğlu B. D.  
Research Journal of Chemical Sciences, vol.2, no.3, pp.58-60, 2012 (Peer-Reviewed Journal)
- VIII. **Use of uniform-sized balls to improve the manufacturing of CaCO<sub>3</sub> in ball mills**  
Gezerman A. O., Çorbacioğlu B. D.  
International Journal of Modern Chemistry, vol.1, no.3, pp.116-124, 2012 (Peer-Reviewed Journal)
- IX. **Influence of expansion valves on gasification in ammonia storage systems**  
Gezerman A. O., Çorbacioğlu B. D.  
Research Journal of Chemical Sciences, vol.2, no.1, pp.1-7, 2012 (Peer-Reviewed Journal)
- X. **Caking And Degradation Problem on Nitrogenous Fertiliser and Alternative Solution Processes**  
Gezerman A. O., Çorbacioğlu B. D.  
International Journal of Chemistry, vol.3, no.3, pp.123-133, 2011 (Peer-Reviewed Journal)
- XI. **A New Approach to Cooling and Prilling during Fertilizer Manufacture**

Gezerman A. O., Çorbacioğlu B. D.

International Journal of Chemistry, vol.3, no.2, pp.158-168, 2011 (Peer-Reviewed Journal)

**XII. Improvement of Surface Features of Nitrogenous Fertilisers and Influence of Surfactant Composition on Fertiliser Surface**

Gezerman A. O., Çorbacioğlu B. D., Çevik H.

International Journal of Chemistry, vol.3, no.2, pp.201-209, 2011 (Peer-Reviewed Journal)

**XIII. Analysis of the Characteristics of Nickel-Plating Baths**

Gezerman A. O., Çorbacioğlu B. D.

International Journal of Chemistry, vol.2, no.2, pp.124-137, 2010 (Peer-Reviewed Journal)

## **Books & Book Chapters**

**I. Effective Solutions to Pollution Mitigation for Public welfare**

Gezerman A. O., Çorbacioğlu B. D., Gurjar B. R. (Editor)

IGI GLOBAL, Pennsylvania, 2018

**II. Air pollution in Asia and its effect on human health: Air pollution in Asia**

Gezerman A. O., Çorbacioğlu B. D.

in: Effective Solutions to Pollution Mitigation for Public Welfare, Gezerman A.O, Corbacioglu B.D; Gurjar B.R, Editor, IGI Global, Pennsylvania, pp.19-43, 2018

**III. Assessment of the chemical precipitation process as a New approach for Industrial Emission Abatement Systems: Assessment of the chemical precipitation process**

Gezerman A. O., Çorbacioğlu B. D., Gurjar B. R.

in: Effective Solutions to pollution Mitigation for public welfare, Gezerman A.O, Corbacioglu B.D; Gurjar B.R, Editor, IGI Global , Pennsylvania, pp.30-43, 2018

**IV. Effects of Fertilizer Compositions Containing Calcium Lignosulfonate and Silicic Acid as an Alternative to Organic Fertilizers To Prevent Caking and Degradation**

Gezerman A. O., Çorbacioğlu B. D.

in: Fertilizer Technology II, Biofertilizers, Gezerman A.O, Corbacioglu B.D, Editor, Studium Press Llc, New-York, pp.424-451, 2015

## **Refereed Congress / Symposium Publications in Proceedings**

**I. INVESTIGATION OF MECHANICAL PROPERTIES OF POLYUREA COATED METAL PLATES**

Yıldırım M., Çorbacioğlu B. D.

International Natural Science, Engineering and Material Technologies Conference , İstanbul, Turkey, 9 - 10 September 2019, pp.139

**II. Poliüre kaplı metal levhaların mekanik özelliklerinin incelenmesi**

Yıldırım M., ÇORBACIOĞLU B. D.

13.Ulusal Kimya Müh. Kongresi (UKMK 2018), Van, Turkey, 03 September 2018, pp.250

**III. Elektronik Atıklardan Değerli Metallerin Geri Kazanımı**

Baka B., ÇORBACIOĞLU B. D., BASİT S.

9. Ulusal Atık Yönetimi Kongresi-UKAY 2018, Konya, Turkey, 09 May 2018, pp.1

**IV. Kesikli leaching işlemi ile jojoba yağının eldesi ve işlem değişkenlerinin yağ verimi üzerindeki etkileri**

YALÇIN Z. G., KEYF S., ÇORBACIOĞLU B. D., BEYRİBEY PRICE D. B.

1. INTERNATIONAL CHEMISTRY NAD CHEMICAL ENG. CONF., Baku, Azerbaijan, 17 - 21 April 2013, pp.143

**V. Hurda elektronik atıklardan altın va gümüşün geri kazanılması sözlü tam metin**

ÇORBACIOĞLU B. D., YALÇIN Z. G., BEYRİBEY PRICE D. B., KEYF S.

1. INTERNATIONAL CHEMISTRY AND CHEMICAL ENG. CONF., Baku, Azerbaijan, 17 - 21 April 2013, pp.308-319

- VI. **Jojoba Yağının Katı-Sıvı Ekstraksiyon Yöntemi ile Eldesi ve İşlem Parametrelerinin Yağ Verimi Üzerine Etkisi**  
KEYF S., ALTIN Z. G., ÇORBACIOĞLU B. D., BEYRİBEY B.  
1th International Chemistry and Chemical Engineering Conference, 01 April 2013
- VII. **Hurda Elektronik Atıklardan Altın ve Gümüşün Geri Kazanılması**  
KEYF S., ÇORBACIOĞLU B. D., ALTIN Z. G., BEYRİBEY B.  
1th International Chemistry and Chemical Engineering Conference, 01 April 2013

## Supported Projects

AKSAKAL B., ASLAN N., Aksoy M. E., ÇORBACIOĞLU B. D., ÜSTÜNDAĞ C. B., Project Supported by Higher Education Institutions, Nitinol ve paslanmaz çelik implantların EPD metodu ile HydroxyapatitBoron Biyokompozit kaplanarak biyolojik performansının artırılması, 2019 - 2021

ÇORBACIOĞLU B. D., Yıldırım M., Project Supported by Higher Education Institutions, Poliüre Kaplı Metal Levhaların Mekanik Özelliklerinin İncelenmesi Ve Zırh Malzemesi Olarak Kullanımının Değerlendirilmesi, 2018 - 2019

ÇORBACIOĞLU B. D., Project Supported by Higher Education Institutions, Polietilen Tereftalat (PET) Atıklarının Demir-Çelik Sektörü İçin Değerlendirilmesi, 2012 - 2015

Keyf S., Çorbacioğlu B. D., Gülten Yalcın Z., Project Supported by Higher Education Institutions, Beyaz altın takı kaplamalarında kullanılan rodyum ve türevlerinin kazanımı rafinasyonu ve geri dönüşümü, 2004 - 2006

## Scientific Refereeing

Development Agency, İSTKA, Turkey, April 2015  
Development Agency, İSTKA, Turkey, April 2014

## Metrics

Publication: 43  
Citation (WoS): 35  
Citation (Scopus): 60  
H-Index (WoS): 4  
H-Index (Scopus): 5

## Congress and Symposium Activities

International Sustainable Thermal Energy Management Conference, Attendee, Newcastle Upon Tyne, United Kingdom, 2015  
1st. International Chemistry and Chemical Engineering Conference, Attendee, Azerbaijan, 2013