

Assoc. Prof. ÖZGE KERKEZ KUYUMCU

Personal Information

Office Phone: [+90 216 777 3705](tel:+902167773705)

Email: ozge.kuyumcu@marmara.edu.tr

Web: <https://avesis.marmara.edu.tr/ozge.kuyumcu>

Address: Marmara Üniversitesi Recep Tayyip Erdoğan Külliyesi Mühendislik Fakültesi M3 Binası Kimya Mühendisliği

International Researcher IDs

ScholarID: 046gQycAAAAJ

ORCID: 0000-0002-8991-273X

Publons / Web Of Science ResearcherID: D-2093-2011

ScopusID: 35776519700

Yoksis Researcher ID: 16507

Biography

Özge Kerkez Kuyumcu 1984 yılında İstanbul'da doğdu. 2002 Yılında Vefa Anadolu Lisesi'nden mezun oldu. 2006 Yılında İstanbul Üniversitesi Kimya Mühendisliği Bölümü'nden mezun oldu. 2008 Yılında İstanbul Üniversitesi Endüstri Müh. Bölümü'nde Yandal programını tamamladı. İstanbul Üniversitesi Fen Bilimleri Enstitüsü Kimya Müh. ABD Proses ve Reaktör Tasarımı programında yüksek lisans ve doktora mezuniyetini sırasıyla 2008 ve 2013 yıllarında almaya hak kazandı. 2009-2014 Yılları arasında Beykent Üniversitesi Kimya Müh. Bölümü'nde Araştırma Görevlisi olarak çalıştı. 2014 yılında aynı üniversitede Yrd. Doç. Dr. olarak atandı. Mayıs 2016 tarihinden beri Marmara Üniversitesi Kimya Müh. Bölümü'nde çalışmalarını sürdürmektedir. 23.01.2019 Tarihinde Doçent ünvanı almaya hak kazanmıştır.

Çalışma ve ilgi alanları genel olarak heterojen kataliz, fotokataliz, nanomalzeme sentezi ve karakterizasyonu, adsorpsiyon konularıdır.

Education Information

Doctorate, İstanbul University-Cerrahpaşa, Institute Of Graduate Education, Department Of Chemical Engineering, Turkey
2008 - 2013

Postgraduate, İstanbul University-Cerrahpaşa, Institute Of Graduate Education, Department Of Chemical Engineering,
Turkey 2006 - 2008

Undergraduate Minor, İstanbul University-Cerrahpaşa, Faculty Of Engineering, Department Of Industrial Engineering,
Turkey 2004 - 2008

Undergraduate, İstanbul University-Cerrahpaşa, Faculty Of Engineering, Department Of Chemical Engineering, Turkey
2002 - 2006

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Nanoboyutta şekilli karışık oksitlerin hazırlanması ve fotokatalitik aktivitelerinin incelenmesi, İstanbul University-Cerrahpaşa, Faculty Of Engineering, Department Of Chemical Engineering, 2013

Postgraduate, Nanoboyutlu epoksidasyon katalizörünün sentezi ve tanımlanması, İstanbul University-Cerrahpaşa, Faculty Of Engineering, Department Of Chemical Engineering, 2008

Research Areas

Chemical Engineering and Technology, Process and Reactor Design, Natural Sciences, Engineering and Technology

Academic Titles / Tasks

Associate Professor, Marmara University, Faculty of Engineering, Chemical Engineering, 2020 - Continues

Assistant Professor, Marmara University, Faculty of Engineering, Chemical Engineering, 2019 - 2020

Assistant Professor, Marmara University, Faculty of Engineering, Chemical Engineering, 2018 - 2018

Assistant Professor, Marmara University, Faculty of Engineering, Chemical Engineering, 2016 - 2018

Assistant Professor, Beykent University, Faculty Of Engineering-Architecture, Department Of Chemistry Engineering, 2014 - 2016

Research Assistant PhD, Beykent University, Faculty Of Engineering-Architecture, Department Of Chemistry Engineering, 2013 - 2014

Research Assistant, Beykent University, Faculty Of Engineering-Architecture, Department Of Chemistry Engineering, 2009 - 2013

Courses

Chemical Engineering Fluid Mechanics, Undergraduate, 2019 - 2020

Basic Chemistry, Undergraduate, 2019 - 2020

Numerical Methods, Undergraduate, 2019 - 2020

Kütle ve Enerji Denklikleri, Undergraduate, 2016 - 2017

Chemical Engineering Thermodynamics I, Undergraduate, 2015 - 2016

Kataliz ve Katalitik Reaktörler, Undergraduate, 2016 - 2017

Advising Theses

Koca A., KERKEZ KUYUMCU Ö., Synthesis and characterization of magnetic photocatalysts for hydrogen generation, Postgraduate, S.YILMAZ(Student), 2019

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Effect of Different Amounts of Pt on Fe₃O₄-TiO₂ for Photocatalytic H₂ Production Under Solar Light**
Firtina-Ertis I., KERKEZ KUYUMCU Ö.
ChemistrySelect, vol.8, no.27, 2023 (SCI-Expanded)
- II. **Synthesis of NiFe₂O₄/TiO₂-Ag+ S-scheme photocatalysts by a novel complex-assisted vapor thermal method for photocatalytic hydrogen production**
Firtina-Ertis I., KERKEZ KUYUMCU Ö.
Journal of Photochemistry and Photobiology A: Chemistry, vol.432, 2022 (SCI-Expanded)
- III. **Enhanced photoelectrochemical activity of magnetically modified TiO₂ prepared by a simple ex-situ**

route

Yilmaz S., KERKEZ KUYUMCU Ö., BAYAZİT Ş. S., Ayaz R. M. Z., Akyuz D., KOCA A.

JOURNAL OF SOLID STATE ELECTROCHEMISTRY, vol.26, no.1, pp.245-255, 2022 (SCI-Expanded)

- IV. **Chitosan grafted SiO₂-Fe₃O₄ nanoparticles for removal of antibiotics from water**
Danalioglu S. T., Kuyumcu Ö., Salam M. A., BAYAZİT Ş. S.
ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH, vol.25, no.36, pp.36661-36670, 2018 (SCI-Expanded)
- V. **Preparation of magnetic MIL-101 (Cr) for efficient removal of ciprofloxacin**
BAYAZİT Ş. S., Danalioglu S. T., Salam M. A., Kuyumcu Ö.
ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH, vol.24, no.32, pp.25452-25461, 2017 (SCI-Expanded)
- VI. **Efficient removal of antibiotics by a novel magnetic adsorbent: Magnetic activated carbon/chitosan (MACC) nanocomposite**
Danahoglu S. T., BAYAZİT Ş. S., Kuyumcu Ö., Salam M. A.
JOURNAL OF MOLECULAR LIQUIDS, vol.240, pp.589-596, 2017 (SCI-Expanded)
- VII. **Removal of ciprofloxacin from aqueous solution using humic acid- and levulinic acid- coated Fe₃O₄ nanoparticles**
Danalioglu S. T., BAYAZİT Ş. S., Kerkez Ö., Alhogbi B. G., Salam M. A.
CHEMICAL ENGINEERING RESEARCH & DESIGN, vol.123, pp.259-267, 2017 (SCI-Expanded)
- VIII. **Adsorptive removal of malachite green and Rhodamine B dyes on Fe₃O₄/activated carbon composite**
Datta D., Kuyumcu Ö., BAYAZİT Ş. S., Salam M. A.
JOURNAL OF DISPERSION SCIENCE AND TECHNOLOGY, vol.38, no.11, pp.1556-1562, 2017 (SCI-Expanded)
- IX. **Antibiotic amoxicillin removal from aqueous solution using magnetically modified graphene nanoplatelets**
Kerkez-Kuyumcu Ö., Bayazit S. S., Salam M. A.
JOURNAL OF INDUSTRIAL AND ENGINEERING CHEMISTRY, vol.36, pp.198-205, 2016 (SCI-Expanded)
- X. **Isolation of naproxen from wastewater using carbon-based magnetic adsorbents**
İlbay Z., ŞAHİN S., Kerkez Ö., Bayazit S. S.
INTERNATIONAL JOURNAL OF ENVIRONMENTAL SCIENCE AND TECHNOLOGY, vol.12, no.11, pp.3541-3550, 2015 (SCI-Expanded)
- XI. **A comparative study for removal of different dyes over M/TiO₂ (M = Cu, Ni, Co, Fe, Mn and Cr) photocatalysts under visible light irradiation**
Kerkez-Kuyumcu Ö., Kibar E., Dayioglu K., Gedik F., AKIN A. N., Ozkara-Aydinoglu S.
JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY A-CHEMISTRY, vol.311, pp.176-185, 2015 (SCI-Expanded)
- XII. **Photodegradation of Methylene Blue with Ag₂O/TiO₂ under Visible Light: Operational Parameters**
Kerkez Ö., Boz I.
CHEMICAL ENGINEERING COMMUNICATIONS, vol.202, no.4, pp.534-541, 2015 (SCI-Expanded)
- XIII. **Synergistic effect of Pt-0 and M²⁺ (Cu²⁺, Ni²⁺, Co²⁺) on photo(electro) catalytic activity of TiO₂ nanorod array thin films**
Kerkez-Kuyumcu Ö., Boz I.
JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY A-CHEMISTRY, vol.301, pp.32-39, 2015 (SCI-Expanded)
- XIV. **Hexavalent chromium adsorption on superparamagnetic multi-wall carbon nanotubes and activated carbon composites**
Bayazit S. S., Kerkez Ö.
CHEMICAL ENGINEERING RESEARCH & DESIGN, vol.92, no.11, pp.2725-2733, 2014 (SCI-Expanded)
- XV. **Magnetite decorated multi-walled carbon nanotubes for removal of toxic dyes from aqueous solutions**
Kerkez Ö., Bayazit S. S.
JOURNAL OF NANOPARTICLE RESEARCH, vol.16, no.6, 2014 (SCI-Expanded)
- XVI. **Photo(electro)catalytic Activity of Cu²⁺-Modified TiO₂ Nanorod Array Thin Films under Visible Light Irradiation**
Kerkez Ö., Boz I.

JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS, vol.75, no.5, pp.611-618, 2014 (SCI-Expanded)

- XVII. **Efficient removal of methylene blue by photocatalytic degradation with TiO₂ nanorod array thin films**

Kerkez Ö., Boz I.

REACTION KINETICS MECHANISMS AND CATALYSIS, vol.110, no.2, pp.543-557, 2013 (SCI-Expanded)

- XVIII. **A comparative study for adsorption of methylene blue from aqueous solutions by two kinds of amberlite resin materials**

Kerkez Ö., Bayazit S. S., Uslu H.

DESALINATION AND WATER TREATMENT, vol.45, pp.206-214, 2012 (SCI-Expanded)

- XIX. **Effects of boehmite synthesis conditions on the epoxidation of styrene**

Boz I., Kerkez Ö.

REACTION KINETICS MECHANISMS AND CATALYSIS, vol.100, no.1, pp.237-247, 2010 (SCI-Expanded)

Articles Published in Other Journals

- I. **Barium Ferrites Loaded TiO₂ Usage In Photocatalytic Degradation of Rhodamine B Under Visible Light**

Kerkez Kuyumcu Ö.

Hacettepe Journal of Biology and Chemistry, vol.45, no.3, pp.385-393, 2017 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **Synthesis and characterization of NiFe₂O₄-TiO₂ photocatalysts and their use for photocatalytic hydrogen production**

Fırtına Ertiş İ., Kerkez Kuyumcu Ö.

5th International Hydrogen Technologies Congress, Niğde, Turkey, 26 - 28 May 2021, pp.260-262

- II. **Synthesis of Magnetically Separable Visible Light Driven Photocatalysts for H₂ Generation**

YILMAZ S., KERKEZ KUYUMCU Ö., KOCA A., AKYÜZ ÇUBUKÇU D., AYAZ R. M. Z.

4th International Hydrogen Technologies Congress, IHTC, 20 - 23 June 2019

- III. **Photo(electro)catalytic Activity of Magnetically Modified TiO₂ Nanoparticles**

YILMAZ S., KERKEZ KUYUMCU Ö., KOCA A., AKYÜZ ÇUBUKÇU D., AYAZ R. M. Z.

International conference on sustainable energy and energy calculations, ICSEEC, 29 - 30 May 2019

- IV. **Synthesis and Characterization of PANI/TiO₂ Films for Photocatalytic Applications**

Kerkez Kuyumcu Ö., Ayan S., Toker M., Almasbekov A.

3rd Global Conference on Material Sciences, İstanbul, Turkey, 28 - 30 August 2017, pp.8

- V. **Removal of Antibiotics from Wastewater using Magnetically Modified Metal-Organic Frameworks (MIL-101)**

Bayazit Ş. S., Kerkez Kuyumcu Ö.

4th Nano Today Conference, Dubai, United Arab Emirates, 6 - 10 December 2015

- VI. **Ciprofloxacin Removal by Fe₃O₄/SiO₂/Chitosan Nanocomposites**

Kerkez Kuyumcu Ö., Bayazit Ş. S.

4th Nano Today Conference, Dubai, United Arab Emirates, 6 - 10 December 2015

- VII. **Photocatalytic degradation of Rhodamine B by BaFe₂O₄/TiO₂**

Kerkez Kuyumcu Ö.

4th NanoToday Conference, Dubai, United Arab Emirates, 6 - 10 December 2015

- VIII. **Effects of Single and Double Doping with Ni²⁺ and Pt⁰ on the Photo(electro)catalytic Activity of TiO₂ Nanorod Films**

Kerkez Kuyumcu Ö., Boz İ.

Turkish-German Conference on Energy Technologies , Ankara, Turkey, 13 - 15 October 2014, pp.103-104

- IX. **Isolation of Naproxen from Wastewater Using Magnetically Modified MWCNTs**
İlbay Z., Şahin S., Kerkez Kuyumcu Ö., Bayazit Ş. S.
10th Nanoscience and Nanotechnology Conference of Turkey , İstanbul, Turkey, 17 - 21 June 2014, pp.378
- X. **Co2+ Addition Effect on the Photocatalytic Activity of TiO2 Nanorod Thin Films**
Kerkez Kuyumcu Ö., Boz İ.
10th Nanoscience and Nanotechnology Conference of Turkey , İstanbul, Turkey, 17 - 21 June 2014, pp.340
- XI. **Effects of Hydrothermal Preparation Conditions of TiO2 Nanorod Film on the Photocatalytic Activity**
Kerkez Kuyumcu Ö., Boz İ.
IUPAC 44th World Chemistry Congress, İstanbul, Turkey, 11 - 16 August 2013, pp.844
- XII. **Hexavalent Chromium Adsorption on Superparamagnetic Multi-wall Carbon Nanotubes Composites**
Bayazit Ş. S., Kerkez Kuyumcu Ö.
IUPAC 44th World Chemistry Congress , İstanbul, Turkey, 11 - 16 August 2013, pp.843
- XIII. **Modifiye TiO2 Fotoelektrotların Sentezi ve Tanımlanması**
Kerkez Kuyumcu Ö., Boz İ.
10. Ulusal Kimya Mühendisliği Kongresi, İstanbul, Turkey, 3 - 06 September 2012
- XIV. **Visible light dye degradation in aqueous media with Ag modified TiO2 photocatalysts: Reaction parameters**
Kerkez Kuyumcu Ö., Boz İ.
15th International Congress on Catalysis , Munich, Germany, 1 - 06 July 2012
- XV. **ZnO Fotoelektrotların Sentezi ve Fotoelektrokatalitik Aktiviteleri Üzerine Ön İşlemin Etkisinin İncelenmesi**
Kerkez Kuyumcu Ö., Boz İ.
4th National Catalysis Conference, Kocaeli, Turkey, 21 - 24 March 2012, pp.158
- XVI. **Reactive Extraction Studies of Picolinic Acid with TOA and Different Solvents**
Tuyun A. F., Uslu H., Bayazit Ş. S., Kerkez Kuyumcu Ö.
8th European Congress of Chemical Engineering, Berlin, Germany, 25 - 29 September 2011
- XVII. **Efficient Removal of Methylene Blue from Waste Water by Adsorption with Low Cost Resin Adsorbents**
Kerkez Kuyumcu Ö., Bayazit Ş. S., Uslu H.
8th European Congress of Chemical Engineering , Berlin, Germany, 25 - 29 September 2011
- XVIII. **Boyar Maddelerin Mn, Fe, Ag Metal Oksitleri Katkılı TiO2 Katalizörleri ile Sulu Ortamda Degredasyonu**
Kerkez Kuyumcu Ö., Boz İ., Uslu H., Çavuş S.
9. Ulusal Kimya Mühendisliği Kongresi , Ankara, Turkey, 22 - 25 June 2010, pp.109-110
- XIX. **Boyar Maddelerin Ni, Cu, Ce Metal Oksitleri Katkılı TiO2 Katalizörleri ile Sulu Ortamda Degredasyonu**
Kerkez Kuyumcu Ö., Boz İ.
3th National Catalysis Congress , Zonguldak, Turkey, 28 April - 01 May 2010, pp.103
- XX. **Doğrudan Metanol Yakıt Hücreleri için PtCo VE PtNi Katalizörlerin Hazırlanması ve Tanımlanması**
Fırtına İ., Kerkez Kuyumcu Ö., Pozan Soylu G. S., Boz İ.
8. Ulusal Kimya Mühendisliği Kongresi, Malatya, Turkey, 26 - 29 August 2008, pp.391-392
- XXI. **Epoksidasyon Reaksiyonunda Kullanılmak Üzere Bohmit Sentezi ve Tanımlanması**
Kerkez Kuyumcu Ö., Fırtına İ., Pozan Soylu G. S., Boz İ.
8. Ulusal Kimya Mühendisliği Kongresi , Malatya, Turkey, 26 - 29 August 2008, pp.340-341

Supported Projects

Kerkez Kuyumcu Ö., TUBITAK Project, CdxZn1-xS/Farklı İkili Yardımcı Katalizörlerin Sentezi ve Fotokatalitik H2 Üretiminde Aktivitelerinin İncelenmesi, 2023 - 2024

Kerkez Kuyumcu Ö., Bayazit Ş. S., TUBITAK Project, Nanoşekilli manyetik çekirdek/yarı iletken kabuk yapısında Fe₃O₄/TiO₂, MFe₂O₄/TiO₂ ve türevlerinin sentezi, fotokatalitik H2 üretimi aktiviteleri, 2017 - 2021

Kerkez Kuyumcu Ö., Bayazit Ş. S., TUBITAK Project, Çeşitli Antibiyotiklerin Manyetik Nanoparçacıklar Üzerinde Adsorpsiyonunun ve Salımının İncelenmesi, 2014 - 2016

Scientific Refereeing

Water Science And Technology, SCI Journal, February 2018
RSC ADVANCES, SCI Journal, February 2018
PHYTOCHEMISTRY REVIEWS, SCI Journal, February 2018
ENVIRONMENTAL ENGINEERING SCIENCE, SCI Journal, August 2017
DESALINATION AND WATER TREATMENT, Journal Indexed in SCI-E, July 2017
RSC ADVANCES, SCI Journal, October 2016
RSC ADVANCES, SCI Journal, September 2016
RSC ADVANCES, SCI Journal, August 2016
JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING, Journal Indexed in SCI-E, May 2016
TURKISH JOURNAL OF CHEMISTRY, SCI Journal, May 2016
CHEMICAL ENGINEERING COMMUNICATIONS, SCI Journal, December 2015
JOURNAL OF WATER REUSE AND DESALINATION, Journal Indexed in SCI-E, November 2015
JOURNAL OF WATER REUSE AND DESALINATION, Journal Indexed in SCI-E, August 2015
FULLERENES NANOTUBES AND CARBON NANOSTRUCTURES, Journal Indexed in SCI-E, June 2015
MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS, SCI Journal, June 2015
DESALINATION AND WATER TREATMENT, Journal Indexed in SCI-E, May 2015
CHEMICAL ENGINEERING JOURNAL, SCI Journal, April 2015
JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY A-CHEMISTRY, SCI Journal, March 2015
JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY A-CHEMISTRY, SCI Journal, February 2015
MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS, SCI Journal, November 2014
TURKISH JOURNAL OF CHEMISTRY, SCI Journal, October 2014
NANO, Journal Indexed in SCI-E, August 2014
REACTION KINETICS MECHANISMS AND CATALYSIS, SCI Journal, January 2014
Environmental Engineering Science, SCI Journal, December 2013
Acs Applied Materials & Interfaces, SCI Journal, September 2013
Chemical Engineering Communications, SCI Journal, August 2013

Metrics

Publication: 41
Citation (WoS): 572
Citation (Scopus): 884
H-Index (WoS): 13
H-Index (Scopus): 14