

Res. Asst. PhD GAMZE ÖZÇAKIR

Personal Information

Office Phone: [+90 228 214 2161](tel:+902282142161)

Email: gamze.ozcakir@bilecik.edu.tr

Web: <https://avesis.bilecik.edu.tr/gamze.ozcakir>

International Researcher IDs

ScholarID: 276WOY4AAAAJ

ORCID: 0000-0003-0357-4176

Publons / Web Of Science ResearcherID: IZE-0478-2023

ScopusID: 58763001800

Yoksis Researcher ID: 286379

Education Information

Doctorate, Bilecik Seyh Edebali University, Fen Bilimleri Enstitüsü, Kimya Mühendisliği (Dr), Turkey 2019 - 2025

Postgraduate, Ankara University, Fen Bilimleri Enstitüsü, Kimya Mühendisliği (Yl) (Tezli), Turkey 2016 - 2018

Undergraduate, Ankara University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, Turkey 2010 - 2016

Foreign Languages

English, C1 Advanced

Research Areas

Chemical Engineering and Technology, Engineering and Technology

Academic Titles / Tasks

Research Assistant, Bilecik Seyh Edebali University, Mühendislik Fakültesi, Kimya Mühendisliği, 2018 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

- Unveiling activity of ZIF-8/ nickel loaded alumina aerogel catalyst in glycerol carbonate production from CO₂ and glycerol**
Özçakir G., Açikgöz Ç.
RESEARCH ON CHEMICAL INTERMEDIATES, vol.50, no.12, pp.5655-5678, 2024 (SCI-Expanded)

Articles Published in Other Journals

- Carbon Fiber and Its Composites: Synthesis, Properties, Applications**
Özçakir G.

Sinop Üniversitesi Fen Bilimleri Dergisi, vol.9, no.1, pp.240-265, 2024 (Peer-Reviewed Journal)

- II. **Life Cycle Assessment For Packaging Of An One Bottle Of Wine**
Özçakır G.
TECHNIUM: ROMANIAN JOURNAL OF APPLIED SCIENCES AND TECHNOLOGY, vol.14, pp.138-141, 2023 (Peer-Reviewed Journal)
- III. **Effect of Nanofluids on Heat Transfer in Milk and Tomato Juice Production: An Optimization Study with ANCOVA**
Özçakır G.
Biology and Life Sciences Forum, vol.26, no.1, pp.68, 2023 (Peer-Reviewed Journal)
- IV. **Green Synthesis of Zinc Oxide Nanoparticles by Using Pomegranate Peels: An Overview**
Özçakır G.
Engineering Proceedings, vol.56, no.1, 2023 (Peer-Reviewed Journal)
- V. **Efficiency of Sulfonated UiO-66 on Biodiesel Production from Oleic Acid: An Optimization Study with ANCOVA**
Özçakır G.
Engineering Proceedings, vol.56, no.1, 2023 (Peer-Reviewed Journal)
- VI. **Performance of Boron Nitride Nanosheets in Dye Adsorption: a Mini-Review**
Özçakır G.
Bartın University International Journal of Natural and Applied Sciences, vol.6, no.1, pp.35-39, 2023 (Peer-Reviewed Journal)
- VII. **Co-Pyrolysis of Waste Polystyrene Foam and Microalgae at Low Temperatures**
Ormancı E. G., Özçakır G., Karaduman A.
Engineering proceedings, vol.37, no.1, 2023 (Peer-Reviewed Journal)
- VIII. **Applications of Nanomaterials in Food Industry: A Review**
Özçakır G.
Materials Proceedings, vol.14, no.1, pp.22, 2023 (Peer-Reviewed Journal)
- IX. **APPLICATION OF COVALENT ORGANIC FRAMEWORKS (COFS) IN CYCLIC CARBONATE PRODUCTION BY A GREEN WAY: AN OVERVIEW**
Özçakır G.
Materials Proceedings, vol.14, pp.24, 2023 (Peer-Reviewed Journal)
- X. **Co-pyrolysis of Heavy Aromatic Waste and Polystyrene: Analysis of Liquid Product via GC-MS**
Ardıç M., Özçakır G., Karaduman A.
Nevşehir Bilim ve Teknoloji Dergisi, vol.10, no.2, pp.92-100, 2021 (Peer-Reviewed Journal)
- XI. **Bio-oil production from microalgae by pyrolysis: A mini-review**
Özçakır G., Karaduman A.
JOURNAL OF ENGINEERING RESEARCH AND APPLIED SCIENCE (JERAS), vol.10, no.1, pp.1640-1649, 2021 (Peer-Reviewed Journal)
- XII. **EFFECT OF METAL DOPED ZSM-5 CATALYST ON AROMATIC YIELD AND COKE FORMATION IN MICROALGAL BIO-OIL PRODUCTION**
Özçakır G., Karaduman A.
Bartın University International Journal of Natural and Applied Sciences, vol.4, no.1, pp.20-32, 2021 (Peer-Reviewed Journal)
- XIII. **Detecting chemicals with high yield in pyrolytic liquid of spirulina sp. microalgae via GC-MS**
Özçakır G., Karaduman A.
International Journal of Energy Applications and Technologies, vol.7, no.4, pp.107-114, 2020 (Peer-Reviewed Journal)
- XIV. **CHEMICAL RECOVERY FROM POLYSTYRENE AND LOW DENSITY POLYETHYLENE VIA CONVENTIONAL PYROLYSIS**
Özçakır G.
Eskişehir Osmangazi Üniversitesi mühendislik ve mimarlık fakültesi dergisi (online), vol.28, no.2, pp.155-163, 2020 (Peer-Reviewed Journal)

- XV. **CHEMICAL RECOVERY FROM POLYSTYRENE WASTE AND LOW DENSITY POLYETHYLENE VIA CONVENTIONAL PYROLYSIS**
Özçakır G., Karaduman A.
Eskişehir Osmangazi Üniversitesi mühendislik ve mimarlık fakültesi dergisi (online), vol.28, no.2, pp.155-163, 2020
(Peer-Reviewed Journal)
- XVI. **Adsorption of Cu(II) from aqueous solution by using pyrolytic bio-char of Spirulina**
Özçakır G.
İğdır Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.10, no.1, pp.73-83, 2020 (Peer-Reviewed Journal)
- XVII. **Obtaining Hydrocarbon Rich Bio-Oil Via Catalytic Co-Pyrolysis of Plastic Wastes And Spirulina Sp. Microalgae**
Özçakır G., Karaduman A.
International Journal of Research in Engineering and Science (IJRES), vol.7, no.4, pp.12-22, 2019 (Peer-Reviewed Journal)

Papers Published in Refereed Scientific Meetings

- I. **COMPUTATIONAL LIFE CYCLE ASSESSMENT FOR PRODUCTION OF WATERMELON AND APPLE JUICE**
Özçakır G.
DEU INTERNATIONAL SYMPOSIUM SERIES ON GRADUATE RESEARCHES-2023, İzmir, Turkey, 21 - 22 December 2023, pp.566-569
- II. **Green Synthesis of Zinc Oxide Nanoparticles by Using Pomegranate Peels: an Overview**
ÖZÇAKIR G.
The 4th International Electronic Conference on Applied Sciences (ASEC2023), Basel, Switzerland, 27 October - 10 November 2023
- III. **Efficiency of Sulfonated UiO-66 on Biodiesel Production from Oleic Acid: An Optimization Study with ANCOVA**
ÖZÇAKIR G.
The 4th International Electronic Conference on Applied Sciences (ASEC2023), Basel, Switzerland, 27 October - 10 November 2023
- IV. **Effect of Nanofluids on Heat Transfer in Milk and Tomato Juice Production: An Optimization Study with ANCOVA**
ÖZÇAKIR G.
The 4th International Electronic Conference on Foods (FOODS2023), Basel, Switzerland, 12 October 2023
- V. **Life cycle assessment for bioethanol production from microalgae**
ÖZÇAKIR G.
NEW TRENDS IN CHEMISTRY RESEARCH 2023, Timisiora, Romania, 21 - 22 September 2023
- VI. **UV-VIS Detection of Algae Based Gold Nanoparticles: A Mini-Review**
ÖZÇAKIR G.
3rd Global Conference on Engineering Research (GLOB CER'23), Balıkesir, Turkey, 13 - 16 September 2023
- VII. **Application of Metal-Organic Frameworks (MOFs) in Pipette-Tip Solid-Phase Extraction: A Mini Literature Review**
ÖZÇAKIR G.
3rd Global Conference on Engineering Research (GLOB CER'23), Balıkesir, Turkey, 13 - 16 September 2023
- VIII. **Life Cycle Assessment For Packaging Of An One Bottle Of Wine**
ÖZÇAKIR G.
11th International Conference on Thermal Equipment, Renewable Energy and Rural Development, Bükreş, Romania, 8 - 10 June 2023
- IX. **OPTIMIZATION STUDY FOR STYRENE CARBONATE PRODUCTION ON METAL ORGANIC FRAMEWORKS BY GREEN WAY**
ÖZÇAKIR G.

15th Green Chemistry Postgraduate Summer School, Venedik, Italy, 2 - 07 July 2023

- X. **Evaluation of Hydrogen Production From Sodium Borohydride on ZIF Catalysts With ANCOVA Analysis**
ÖZÇAKIR G.
The Seventh International Hydrogen Technologies Congress (IHTEC-2023), Elazığ, Turkey, 10 - 12 May 2023
- XI. **Co-pyrolysis of Waste Polystyrene Foam and Microalgae at Low Temperatures**
ORMANCI E. G., ÖZÇAKIR G., KARADUMAN A.
The 2nd International Electronic Conference on Processes Process Engineering - Current State and Future Trends, Basel, Switzerland, 17 - 31 May 2023
- XII. **APPLICATION OF COVALENT ORGANIC FRAMEWORKS (COFS) IN CYCLIC CARBONATE PRODUCTION BY A GREEN WAY: AN OVERVIEW**
ÖZÇAKIR G.
The 4th International Online Conference on Nanomaterials, Basel, Switzerland, 5 - 19 May 2023
- XIII. **Applications Of Nanomaterials in Food Industry: A Review**
ÖZÇAKIR G.
The 4th International Online Conference on Nanomaterials, Basel, Switzerland, 5 - 19 May 2023
- XIV. **Applications of ZIF-8 nanomaterial as photocatalyst in bisphenol a removal: a mini-review**
ÖZÇAKIR G.
MOL2NET'22, Conference on Molecular, Biomedical & Computational Sciences and Engineering, 8th ed. (NANOBIOMAT-08), Faro, Portugal, 01 January 2023
- XV. **SYNTHESIS PROPERTIES AND APPLICATIONS OF SILICA AEROGELS A REVIEW**
ÖZÇAKIR G.
6th International Conference on Engineering Technologies (ICENTE'22), Konya, Turkey, 17 - 19 November 2022
- XVI. **CHEMICAL RECOVERY FROM CO-PYROLYSIS OF NAPHTHALENE AND POLYSTYRENE**
ÖZÇAKIR G., KARADUMAN A.
6th International Conference on Engineering Technologies (ICENTE'22), Konya, Turkey, 17 - 19 November 2022
- XVII. **Synthesis and characterization of Nickel loaded ZIF-8/Silica Aerogel hybrid material**
ÖZÇAKIR G., AÇIKGÖZ Ç.
16th NANOSCIENCE & NANOTECHNOLOGY CONFERENCE (NanoTR-16), Ankara, Turkey, 5 - 08 September 2022
- XVIII. **Room temperature synthesis and characterization of ZIF-8**
ÖZÇAKIR G., AÇIKGÖZ Ç.
5 th International Conference on Nanomaterials Science and Mechanical Engineering (icnmsme2022), Aveiro, Portugal, 5 - 08 July 2022
- XIX. **Synthesis of ambient pressure-dried hydrophobic silica aerogel**
ÖZÇAKIR G., AÇIKGÖZ Ç.
5 th International Conference on Nanomaterials Science and Mechanical Engineering (icnmsme2022), Aveiro, Portugal, 5 - 08 July 2022
- XX. **Bisfenol-A'nın Sudan Adsorpsiyonunda Çeşitli Malzemelerin Etkinliklerinin Karşılaştırılması: Kısa-derleme**
ÖZÇAKIR G.
14. Ulusal Kimya Mühendisliği Kongresi (UKMK2020), Turkey, 10 - 12 June 2021
- XXI. **Islak emdirme metoduyla H-ZSM-5 katalizöre Ni/Co yüklenmesi ve katalizörlerin karakterizasyonu**
ÖZÇAKIR G., KARADUMAN A.
14. Ulusal Kimya Mühendisliği Kongresi (UKMK2020), Turkey, 10 - 12 June 2021
- XXII. **Examination Of Microalgal Pyrolytic Bio-Char Properties**
ÖZÇAKIR G., KARADUMAN A.
3rd BIOENERGY STUDIES SYMPOSIUM, Turkey, 20 - 21 May 2021
- XXIII. **Pyrolysis of Spirulina sp. Microalgae: Effect of Temperature on Chemical Compositions of Bio-Oil and Aqueous Phase**
ÖZÇAKIR G., KARADUMAN A.

16th International Conference on Environmental Science and Technology - CEST2019, Greece, 4 - 07 September 2019

XXIV. Co-Pyrolysis of Plastic Wastes: Effects of Temperature and Feedstock Ratio on Chemical Composition of Liquid Product

ÖZÇAKIR G., KARADUMAN A.

16th International Conference on Environmental Science and Technology -CEST 2019, Greece, 4 - 07 September 2019

XXV. Obtaining aromatic compounds with co-pyrolysis of microalgae and plastic wastes

ÖZÇAKIR G., KARADUMAN A.

1st International Balkan Chemistry Congress (IBCC-2018), Edirne, Turkey, 17 - 20 September 2018

XXVI. Co-pyrolysis of Microalgae with Plastic Wastes over ZSM-5

ÖZÇAKIR G., KARADUMAN A.

Ancon-International Congress on Chemistry and Materials Science, Ankara, Turkey, 5 - 07 October 2017

XXVII. Kontrol Amaçlı Proses Modelleme Uygulaması

ÖZÇAKIR G., ERTUNÇ S.

3. Ulusal Kimya Mühendisliği Öğrenci Kongresi (UKMÖK-3), Turkey, 2 - 04 May 2015

Supported Projects

Özçakır G., Açıkgöz Ç., Project Supported by Higher Education Institutions, Yeni ZIF-8/Silika Aerojel Kompozitlerin Çevre-Dostu Yolla Propilen Karbonat Sentezinde Katalitik Etkisinin İncelenmesi, 2022 - 2024

AÇIKGÖZ Ç., ÖZÇAKIR G., Project Supported by Higher Education Institutions, Yüksek Saflıkta Hidrojen Eldesi İçin Nikel Yüklü İnorganik Aerojel ve Zeolitik İmidazolat Kafes Yapısı Katkılı İnorganik Aerojel Katalizörlerin Sentezi ve Karakterizasyonu, 2021 - 2022

Özçakır G., Açıkgöz Ç., Project Supported by Higher Education Institutions, Yüksek Saflıkta Hidrojen Eldesi İçin Nikel Yüklü İnorganik Aerojel ve Zeolitik İmidazolat Kafes Yapısı Katkılı İnorganik Aerojel Katalizörlerin Sentezi ve Karakteri, 2021 - 2022

Özçakır G., Karaduman A., Project Supported by Higher Education Institutions, Mikro alglerin plastik atıklarla (PS/AYPE) ZSM-5 üzerinde eşpirolizi, 2017 - 2019