

## Res. Asst. PhD Gülce ÇAKMAN

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: ABD-8667-2020

ScopusID: 57205605969

Yoksis Researcher ID: 119582

### Education Information

Doctorate, Gazi University, Fen Bilimleri Enstitüsü, Kimya Mühendisliği (Dr), Turkey 2017 - 2023

Postgraduate, Ondokuz Mayıs University, Fen Bilimleri Enstitüsü, Kimya Mühendisliği (YI) (Tezli), Turkey 2014 - 2017

Postgraduate, Gazi University, Fen Bilimleri Enstitüsü, Kimya Mühendisliği (YI) (Tezli), Turkey 2012 - 2016

Undergraduate, Gazi University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, Turkey 2007 - 2012

### Dissertations

Postgraduate, Düzenli mezogözenekli karbon nanomalzemelerin sentezi ve uygulama alanları, Ondokuz Mayıs University, Fen Bilimleri Enstitüsü, Kimya Mühendisliği (YI) (Tezli), 2017

Postgraduate, PCL/halloysit film hazırlanması ve karakterizasyonu, Gazi University, Fen Bilimleri Enstitüsü, Kimya Mühendisliği (YI) (Tezli), 2016

### Research Areas

Chemical Reaction Engineering, Catalysis and Catalytic Processes, Material Characterization

### Academic Titles / Tasks

Research Assistant, Ondokuz Mayıs University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 2014 - Continues

### Courses

KMB 470 Kataliz ve Katalitik Prosesler, Undergraduate, 2023 - 2024

KMB 492 Bitirme Projesi, Undergraduate, 2023 - 2024

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

- I. **Pyrolysis of Euphorbia Rigida: A study on thermal characterizations, kinetics, thermodynamics via TG-FTIR analysis**  
ÇAKMAN G.  
Journal of Environmental Management, vol.357, 2024 (SCI-Expanded)
- II. **Catalytic Deoxygenation of Oleic Acid over Synthesized Ni@CMK-3 Catalyst using Analytical Py-GC/MS and TG-FTIR**  
Cakman G., Ceylan S., BALCI F. S.  
JOURNAL OF POROUS MATERIALS, vol.30, no.3, pp.899-909, 2023 (SCI-Expanded)
- III. **Prediction of higher heating value of biochars using proximate analysis by artificial neural network**  
ÇAKMAN G., Gheni S., Ceylan S.  
BIOMASS CONVERSION AND BIOREFINERY, 2021 (SCI-Expanded)
- IV. **Pyrolysis of oil extracted safflower seeds: Product evaluation, kinetic and thermodynamic studies**  
Tahir M. H., Mahmood M. A., ÇAKMAN G., Ceylan S.  
BIORESOURCETECHNOLOGY, vol.314, 2020 (SCI-Expanded)
- V. **A modified DAEM: To study the bioenergy potential of invasive Staghorn Sumac through pyrolysis, ANN, TGA, kinetic modeling, FTIR and GC-MS analysis**  
Ahmad M. S., Liu H., Alhumade H., Tahir M. H., ÇAKMAN G., YILDIZ A., Ceylan S., Elkamel A., Shen B.  
ENERGY CONVERSION AND MANAGEMENT, vol.221, 2020 (SCI-Expanded)
- VI. **Investigation of ordered mesoporous carbon potential as CO<sub>2</sub> adsorbent**  
Cakman G., Ceylan S., Topcu Y., Geyikci F.  
GLOBAL NEST JOURNAL, no.1, pp.102-108, 2020 (SCI-Expanded)
- VII. **Investigation of pyrolysis kinetics and thermal behavior of Invasive Reed Canary (Phalaris arundinacea) for bioenergy potential**  
Alhumade H., Gomes da Silva J. C., Ahmad M. S., ÇAKMAN G., YILDIZ A., Ceylan S., Elkamel A.  
JOURNAL OF ANALYTICAL AND APPLIED PYROLYSIS, vol.140, pp.385-392, 2019 (SCI-Expanded)
- VIII. **Demonstrating the suitability of canola residue biomass to biofuel conversion via pyrolysis through reaction kinetics, thermodynamics and evolved gas analyses**  
Tahir M. H., ÇAKMAN G., Goldfarb J. L., Topcu Y., Naqvi S. R., Ceylan S.  
BIORESOURCETECHNOLOGY, vol.279, pp.67-73, 2019 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Preparation and Physical Thermal Properties of Polycaprolactone m Halloysite Nanocomposite**  
ÇAKMAN G., DİLSİZ N.  
Journal of Multidisciplinary Engineering Science Studies, vol.2, no.9, pp.842-848, 2016 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Enhancement of Direct Methanol Fuel Cell Performance by Adding SBA-3 Silica Material to Nafion Membrane**  
UÇAR N. Ö., ÖZBAŞ İ. G., ÇAKMAN G., FIÇICILAR B.  
European Fuel Cell Conference and Exhibition (EFC19), Naples, Italy, 9 - 11 December 2019
- II. **Synthesis and Characterization of SBA-3 Silica Material**  
Uçar N. Ö., ÇAKMAN G., FIÇICILAR B.  
3rd International Porous Powder Materials Symposium and Exhibitions, Kuşadası, Turkey, 12 - 15 September 2017
- III. **Synthesis and Characterisation of SBA-3 Mesoporous Silica Material**  
UÇAR N. Ö., ÇAKMAN G., FIÇICILAR B.  
3rd International Porous Powder Materials Symposium & Exhibition, Kuşadası, Turkey, 12 - 15 September 2017

- IV. **Synthesis and Characterization of CMK 3 and Activated Carbon Based Catalysts**  
ÇAKMAN G., NARİN N., GEYİKÇİ F.  
NCC6- The 6 th Catalysis Conference, 27 - 30 April 2016
- V. **CMK 3 Carbon based electrocatalysts for use in rejenerative fuel cells**  
GEYİKÇİ F., ÇAKMAN G., NARİN N., FIÇICILAR B.  
International Porous and Powder Materials, 15 - 18 September 2015
- VI. **EFFECT OF CU MMT ON THE ANTIBACTERIAL AND THERMAL PROPERTIES OF PLA**  
ÇAKMAN G., GEYİKÇİ F.  
Porous Powder Materials Symposium and Exhibition, İzmir, Turkey, 15 - 18 September 2015
- VII. **CMK 3 CARBON BASED ELECTROCATALYSTS FOR USE IN REJENERATIVE FUEL CELLS**  
FIÇICILAR B., ÇAKMAN G., NARİN N., GEYİKÇİ F.  
Porous Powder Materials Symposium and Exhibition, İzmir, Turkey, 15 - 18 September 2015
- VIII. **Effect of nano carbon electrocatalyst support on PEM ionic conductivity measurement performance**  
ÇAKMAN G., NARİN N., ŞENYER B., FIÇICILAR B.  
Nanoscience and Nanotechnology Conference (NanoTR11), Ankara, Turkey, 22 - 25 June 2015
- IX. **Biyobozunur Polimer Nanokompozit Malzeme Geliştirilmesi**  
ÇAKMAN G., NARİN N., DİLSİZ N.  
11.Ulusal Kimya Mühendisliği Kongresi, Eskişehir, Turkey, 2 - 05 September 2014

## Supported Projects

- Ceylan S., Seyfeli R. C., Kaya E. Y., ÇAKMAN G., Project Supported by Higher Education Institutions, Hurda lastiklerden entegre gazlaştırma/piroliz sistemi ile saflığı yüksek gaz ve sıvı ürün eldesi, 2024 - Continues
- Ceylan S., ÇAKMAN G., Kaya E. Y., Project Supported by Higher Education Institutions, Kenevir Lifinden Diyaliz Membranına Yönelik Selüloz Asetat Üretimi, 2023 - 2024
- Çakman G., Balcı F. S., Project Supported by Higher Education Institutions, Co-Ni/CMK3 Katalizörünün CO2 Metanasyon Reaksiyonunda Aktivitesinin İncelenmesi, 2022 - 2024
- Çakman G., Balcı F. S., TUBITAK Project, Düzenli Mezogözenekli Karbonların Sentezinde Donduruculu Kurutucu Ve Silika Uzaklaştırma Yönteminin Etkilerinin İncelenmesi, 2019 - 2021
- Geyikçi F., ÇAKMAN G., Project Supported by Higher Education Institutions, Düzenli Mezogözenekli Karbon Nanomalzemelerin Sentezi ve Uygulama Alanları, 2015 - 2017