

# Prof. EMİNE YAĞMUR

## Personal Information

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## International Researcher IDs

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Publons / Web Of Science ResearcherID: AAH-2821-2020

ScopusID: 10039033000

Yoksis Researcher ID: 110042

## Education Information

Doctorate, Ankara University, Fen Bilimleri Enstitüsü, Kimya Mühendisliği (Dr), Turkey 1997 - 2003

Postgraduate, Ankara University, Fen Bilimleri Enstitüsü, Kimya Mühendisliği (YI) (Tezli), Turkey 1994 - 1997

Undergraduate, Ankara University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, Turkey 1990 - 1994

## Foreign Languages

English, B2 Upper Intermediate

## Certificates, Courses and Trainings

Vocational Training, E-SPresso Training Course "Gas Sorption: Theory And Applications", Anton Paar, 2024

## Dissertations

Doctorate, Türk linyitlerinin mikrodalga ışınım enerjisi ile hidrojen verici ortamda sıvılaştırılmasına katalizörlerin etkisi, Ankara University, Fen Bilimleri Enstitüsü, Kimya Mühendisliği (Dr), 2003

Postgraduate, Metillemenin kömürlerin şişme oranı ve çözünürlüğüne etkisi, Ankara University, Fen Bilimleri Enstitüsü, Kimya Mühendisliği (YI) (Tezli), 1997

## Research Areas

Chemical Engineering and Technology, Electrochemical Processes, Environmental Chemistry and Technology, Fuels and Combustion Technology

## Academic Titles / Tasks

Professor, Ankara University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 2023 - Continues

Associate Professor, Ankara University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 2014 - 2023

Assistant Professor, Ankara University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 2008 - 2014

Research Assistant, Ankara University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 1995 - 2008

## Academic and Administrative Experience

Deputy Head of Department, Ankara University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 2019 - 2022

Vice Dean, Ankara University, Mühendislik Fakültesi, 2013 - 2019

Deputy Head of Department, Ankara University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 2010 - 2012

## Courses

Physical Chemistry, Undergraduate, 2024 - 2025

Thermodynamics, Undergraduate, 2022 - 2023

Termodinamik, Undergraduate, 2021 - 2022

Mühendislik Termodinamiği, Postgraduate, 2022 - 2023

Engineering Thermodynamics, Undergraduate, 2022 - 2023

Mühendislik Termodinamiği, Undergraduate, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010

Proses Tasarımı I, Undergraduate, 2014 - 2015, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010

Kömür Teknolojisi, Postgraduate, 2014 - 2015, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009

Proses Tasarımı II, Undergraduate, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009

## Advising Theses

Yağmur E., Süperkapasitör için esnek ve kendi kendini iyileştirebilen hidrojel elektrolit sentezi ve karakterizasyonu, Postgraduate, A.OYMAK(Student), 2024

Yağmur E., Atık biyokütleden manyetik aktif karbon üretimi ve adsorpsiyon kapasitesinin incelenmesi, Postgraduate, S.KARASARI(Student), 2023

YAĞMUR E., Mikrodalga enerji ile kimyon bitkisinden aktif karbon üretimi ve karakterizasyonu, Postgraduate, R.YAŞAR(Student), 2017

YAĞMUR E., Linyit ve biyokütle karışımından aktif karbon üretimi ve karakterizasyonu, Postgraduate, M.ERDEM(Student), 2015

YAĞMUR E., Çay atığından üretilen aktif karbon ile sulu çözeltilerinden ağır metallerin giderimi, Postgraduate, T.DENİZ(Student), 2014

YAĞMUR E., Selüloz, hemiselüloz ve ligninden aktif karbon üretimi, Postgraduate, B.TİRYAKİ(Student), 2013

YAĞMUR E., Sudaki fenolik kirleticilerin farklı adsorplayıcılara adsorpsiyonu ve katının mikrodalga rejenerasyonu, Postgraduate, S.TÜRKOĞLU(Student), 2010

## Jury Memberships

Post Graduate, Post Graduate, Hacettepe Üniversitesi, January, 2024

Appointment to Academic Staff-Assistant Professorship, Appointment to Academic Staff-Assistant Professorship, Gazi Üniversitesi, January, 2024

Post Graduate, Post Graduate, Gazi Üniversitesi, December, 2023

Post Graduate, Post Graduate, Gazi Üniversitesi, July, 2023

Post Graduate, Post Graduate, Ankara Üniversitesi, June, 2023

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Ankara Üniversitesi, December,

2022

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Ankara Üniversitesi, February, 2022

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

- I. **Oleaster (*Elaeagnus angustifolia* L.) fruit peel as a novel natural separator in supercapacitors**  
Gökçe Y., Yağmur E., Yağlıkçı S., Banford A., Aktaş Z.  
Journal of Industrial and Engineering Chemistry, vol.132, pp.212-219, 2024 (SCI-Expanded)
- II. **Production of demineralised high quality hierarchical activated carbon from lignite and determination of adsorption performance using methylene blue and p-nitrophenol: The role of surface functionality, accessible pore size and surface area**  
Chalil Oglou R., GÖKÇE Y., YAĞMUR E., AKTAŞ Z.  
Journal of Environmental Management, vol.345, 2023 (SCI-Expanded)
- III. **Highly stable Megalopolis lignite based N and S self-doped hierarchically porous activated carbons for high performance supercapacitors and ash content effects on performance**  
Oglou R. C., GÖKÇE Y., YAĞMUR E., Ghobadi T. G. U., AKTAŞ Z.  
JOURNAL OF ENERGY STORAGE, vol.46, 2022 (SCI-Expanded)
- IV. **Adsorption behaviour of high performance activated carbon from demineralised low rank coal (Rawdon) for methylene blue and phenol**  
GÖKÇE Y., YAĞLIKÇI S., YAĞMUR E., Banford A., AKTAŞ Z.  
JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING, vol.9, no.2, 2021 (SCI-Expanded)
- V. **Does high sulphur coal have the potential to produce high performance - low cost supercapacitors?**  
YAĞLIKÇI S., GÖKÇE Y., YAĞMUR E., Banford A., AKTAŞ Z.  
SURFACES AND INTERFACES, vol.22, 2021 (SCI-Expanded)
- VI. **Characteristics and comparison of activated carbons prepared from oleaster (*Elaeagnus angustifolia* L.) fruit using KOH and ZnCl<sub>2</sub>**  
YAĞMUR E., GÖKÇE Y., Tekin S., SEMERCİ N. I., AKTAŞ Z.  
FUEL, vol.267, 2020 (SCI-Expanded)
- VII. **The performance of sulphur doped activated carbon supercapacitors prepared from waste tea**  
YAĞLIKÇI S., GÖKÇE Y., YAĞMUR E., AKTAŞ Z.  
ENVIRONMENTAL TECHNOLOGY, vol.41, no.1, pp.36-48, 2020 (SCI-Expanded)
- VIII. **Investigation of supercapacitor performance of the biomass based activated carbon modified with nitric acid**  
GÜRTEİN İNAL İ. I., GÖKÇE Y., YAĞMUR E., AKTAŞ Z.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.35, no.3, pp.1243-1255, 2020 (SCI-Expanded)
- IX. **Examination of gas and solid products during the preparation of activated carbon using phosphoric acid**  
YAĞMUR E., GÜRTEİN İNAL İ. I., GÖKÇE Y., Ghobadi T. G. U., Aktar T., AKTAŞ Z.  
JOURNAL OF ENVIRONMENTAL MANAGEMENT, vol.228, pp.328-335, 2018 (SCI-Expanded)
- X. **The supercapacitor performance of hierarchical porous activated carbon electrodes synthesised from demineralised (waste) cumin plant by microwave pretreatment**  
GÜRTEİN İNAL İ. I., Holmes S. M., YAĞMUR E., Ermumcu N., Banford A., AKTAŞ Z.  
JOURNAL OF INDUSTRIAL AND ENGINEERING CHEMISTRY, vol.61, pp.124-132, 2018 (SCI-Expanded)
- XI. **The relative performance of microwave regenerated activated carbons on the removal of phenolic pollutants**  
YAĞMUR E., Turkoglu S., Banford A., AKTAŞ Z.  
JOURNAL OF CLEANER PRODUCTION, vol.149, pp.1109-1117, 2017 (SCI-Expanded)
- XII. **The effect of process parameters on the carbon dioxide based production of activated carbon from**

### **lignite in a rotary reactor**

Karaman I, YAĞMUR E., Banford A., AKTAŞ Z.

FUEL PROCESSING TECHNOLOGY, vol.118, pp.34-41, 2014 (SCI-Expanded)

- XIII. **Comparison of activated carbon produced from natural biomass and equivalent chemical compositions**  
Tiryaki B., YAĞMUR E., Sanford A., AKTAŞ Z.  
JOURNAL OF ANALYTICAL AND APPLIED PYROLYSIS, vol.105, pp.276-283, 2014 (SCI-Expanded)
- XIV. **Preparation of activated carbon from autohydrolysed mixed southern hardwood**  
YAĞMUR E., Tunc M. S., Banford A., AKTAŞ Z.  
JOURNAL OF ANALYTICAL AND APPLIED PYROLYSIS, vol.104, pp.470-478, 2013 (SCI-Expanded)
- XV. **Preparation of low cost activated carbons from various biomasses with microwave energy**  
YAĞMUR E.  
Journal of Porous Materials, vol.19, no.6, pp.995-1002, 2012 (SCI-Expanded)
- XVI. **Preparation and characterisation of activated carbon from waste tea using K<sub>2</sub>CO<sub>3</sub>**  
Gurten İ. I., Ozmak M., YAĞMUR E., AKTAŞ Z.  
BIOMASS & BIOENERGY, vol.37, pp.73-81, 2012 (SCI-Expanded)
- XVII. **A novel method for production of activated carbon from waste tea by chemical activation with microwave energy**  
YAĞMUR E., Ozmak M., AKTAŞ Z.  
FUEL, vol.87, no.15-16, pp.3278-3285, 2008 (SCI-Expanded)
- XVIII. **Effect of CuO receptor on the liquid yield and composition of oils derived from liquefaction of coals by microwave energy**  
YAĞMUR E., ŞİMŞEK E. H., AKTAŞ Z., Togrul T.  
ENERGY CONVERSION AND MANAGEMENT, vol.49, no.11, pp.3043-3050, 2008 (SCI-Expanded)
- XIX. **Reactions of coal model compounds in tetralin using microwave energy: Effects of catalysts**  
Eray E., Yagmur E., ŞİMŞEK E. H., Alibeyli R., Togrul T.  
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, vol.28, no.13, pp.1203-1214, 2006 (SCI-Expanded)
- XX. **Effect of demineralization process on the liquefaction of Turkish coals in tetralin with microwave energy: Determination of particle size distribution and surface area**  
Yagmur E., Simsek E. H., Aktas Z., Togrul T.  
Fuel, vol.84, no.18, pp.2316-2323, 2005 (SCI-Expanded)
- XXI. **Part 1. The effect of microwave receptors on the liquefaction of Turkish coals by microwave energy in a hydrogen donor solvent**  
Yagmur E., Togrul T.  
ENERGY & FUELS, vol.19, no.6, pp.2480-2487, 2005 (SCI-Expanded)
- XXII. **The effect of swelling pretreatment on the coal liquefaction in tetralin with microwave energy**  
Agun N., Yagmur E., Simsek E. H., Togrul T.  
Energy Sources, vol.27, no.12, pp.1105-1115, 2005 (SCI-Expanded)
- XXIII. **Effect of O-methylation on solubility and swelling of coals**  
Yagmur E., Cicek B., Olcay A.  
FUEL PROCESSING TECHNOLOGY, vol.67, no.3, pp.191-204, 2000 (SCI-Expanded)

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

- I. **ÖNİŞLEM GÖRMÜŞ TÜRK KÖMÜRLERİNİN MİKRODALGA ENERJİ ETKİSİ İLESİVILAŞTIRILMASI  
LIQUEFACTION OF PRETREATED TURKISH COALS WITH MICROWAVE ENERGY**

Zervent R., Yağmur E., Şimşek E. H., Togrul T.

Journal of Engineering and Natural Sciences Mühendislik ve Fen Bilimleri Dergisi, vol.2, no.2006, pp.122-131, 2006 (ESCI)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Evaluation of EVA foam wastes from solar panel manufacturing processes in energy storage application**  
GÖKÇE Y., Duman H., Kök A. E., YAĞLIKÇI S., YAĞMUR E.  
11th International Conference on Sustainable Solid Waste Management (RHODES 2024), Rodos, Greece, 19 - 22 June 2024
- II. **The Performance of Sulphur Doped Activated Carbon Supercapacitors Prepared from Waste Tea**  
YAĞLIKÇI S., GÖKÇE Y., YAĞMUR E., AKTAŞ Z.  
6. European Conference on Renewable Energy Systems, 25 - 27 June 2018
- III. **Synthesis, Characterization and Investigation of Electrochemical Behavior of Activated Carbon-Iron Nanoparticle Composite**  
Çabuk N., Gökçe Y., Gürten İnal İ. I., Yağmur E., Aktaş Z.  
2. Ulusal Karbon Konferansı, İstanbul, Turkey, 16 March 2018
- IV. **Effects of Demineralisation Process on the Activated Carbon Prepared from Rawdon Coal**  
YAĞLIKÇI S., GÖKÇE Y., YAĞMUR E., AKTAŞ Z.  
3rd International Conference Porous Powder Materials Symposium (PPM2017), 12 - 15 September 2017
- V. **Supercapacitor performance of the activated carbons produced from waste tea and lignite mixtures**  
GÜRTEEN İNAL İ. I., GÖKÇE Y., YAĞMUR E., AKTAŞ Z.  
3rd International Conference Porous and Powder Materials Symposium and Exhibition, 12 - 15 September 2017
- VI. **Preparation of activated carbon from cumin cuminum cyminum and its adsorption performance**  
BAYKAN Y., GÖKÇE Y., YAĞMUR E., AKTAŞ Z.  
12th International Conference on Materials Chemistry (MC12), York, Sierra Leone, 20 - 23 July 2015
- VII. **Nitric acid modified activated carbons as electrode materials for supercapacitors**  
GÖKÇE Y., GÜRTEEN İNAL İ. I., YAĞMUR E., AKTAŞ Z.  
12th International Conference on Materials Chemistry (MC12), 20 - 23 July 2015
- VIII. **Methylene Blue and Phenol Adsorption of Activated Carbon Modified by Microwave Heating**  
Gökçe Y., Yağmur E., Aktaş Z.  
1. Ulusal Karbon Konferansı, İstanbul, Turkey, 12 - 13 March 2015
- IX. **Activated carbon and hemicellulose extract from hardwoods**  
Tunc M. S., YAĞMUR E., Banford A., AKTAŞ Z., Van Heiningen A.  
International Bioenergy and Bioproducts Conference 2015: Leveraging Forest Biomass for Next Generation Fuels and Chemicals, IBBC 2015, Georgia, United States Of America, 28 - 30 October 2015, pp.297-308
- X. **Surface modification of biomass based activated carbon with chitosan**  
GÖKÇE Y., YAĞMUR E., AKTAŞ Z.  
2nd International Surface Treatment Symposium, 25 - 27 June 2014
- XI. **Surface Modification of Activated Carbons Produced from Tea Waste with HNO<sub>3</sub>**  
Gökçe Y., Yağmur E., Aktaş Z.  
Ulusal Kimya Mühendisliği Kongresi 10, İstanbul, Turkey, 3 - 06 September 2012
- XII. **Preparation of nanohydroxyapatite chitosan composite film using spin coating technique**  
BAYKAN Y., GÖKÇE Y., YAĞMUR E., AKTAŞ Z.  
3rd International Conference Advanced Composite Materials Engineering COMAT, 27 - 29 October 2010, vol.1, pp.69-72
- XIII. **ÇAY FABRİKASI ATIĞININ PİROLİZİ**  
TİFTİK B. E., YAĞMUR E., ŞİMŞEK E. H., TOGRUL T.  
UKMK7, Yedinci Ulusal Kimya Mühendisliği Kongresi, Eskişehir, Turkey, 5 - 08 September 2006
- XIV. **O METİLLEME ÖNİSLEMİNİN KÖMÜRLERİN KÖMÜRLERİN MİKRODALGA ENERJİ İLE SIVILAŞTIRILMASI ÜZERİNE ETKİSİ**  
ENGİN T. S., YAĞMUR E., ŞİMŞEK E. H.  
UKMK7, Yedinci Ulusal Kimya Mühendisliği Kongresi, Eskişehir, Turkey, 5 - 08 September 2006
- XV. **MİKRODALGA İLE KÖMÜR SIVIŞTIRILMASINA DEMİNERALİZASYONUN ETKİSİ**

YAĞMUR E., ŞİMŞEK E. H., AKTAŞ Z., TOGRUL T.

UKMK6, Altıncı Ulusal Kimya Mühendisliği Konresi, İzmir, Turkey, 7 - 10 September 2004

XVI. **BİYOKÜTLE VE PLASTİK ATIKLARIN ISIL BOZUNDURULMASI**

ÇAKMAK T., YAĞMUR E., ŞİMŞEK E. H., BİLGESÜ A. Y.

UKMK6, Altıncı Ulusal Kimya Mühendisliği Konresi, İzmir, Turkey, 7 - 10 September 2004

XVII. **TUNÇBİLEK LİNYİTİNİN MİRODALGA ENERJİ İLE TETRALİNDE SIVILAŞTIRILMASINA ÖNİŞLEMİN ETKİSİ**

ZERVENT R., YAĞMUR E., ŞİMŞEK E. H., TOGRUL T.

UKMK5, Beşinci Ulusal Kimya Mühendisliği Kongresi, Ankara, Turkey, 2 - 05 September 2002, pp.1-2

XVIII. **KÖMÜR MODEL BİLEŞİKLERİNİN MİKRODALGA ENERJİ İLE TETRALİNDE TEPKİME MEKANİZMASININ İNCELENMESİ**

ERAY E., YAĞMUR E., ŞİMŞEK E. H., ALİBEYLİ R., TOGRUL T.

UKMK5, Ulusal Kimya Mühendisliği Kongresi, Ankara, Turkey, 2 - 05 September 2002, pp.1-2

XIX. **KÜTAYHA SEYİTÖMER VE MUĞLA YATAĞAN LİNYİTLERİNİN HİDROJENASYON MEKANİZMASININ MİKRODALGA ENERJİ ETKİSİ İLE İNCELENMESİ**

ŞİMŞEK E. H., YAĞMUR E., ŞENELT A.

UKMK2, Ulusal Kimya Mühendisliği Kongresi, İstanbul, Turkey, 9 - 13 September 1996, pp.1323-1327

## Supported Projects

Yağmur E., Project Supported by Higher Education Institutions, Synthesis and characterization of flexible and self-healing hydrogel electrolyte for supercapacitor, 2023 - 2024

Yağmur E., Gürten Inal I. I., Gökçe Y., Aktaş Z., Project Supported by Higher Education Institutions, The Use of Biomass-Based Activated Carbons as Electrode Materials in Electrochemical Double-Layer Capacitors, 2014 - 2016

## Scientific Refereeing

Industrial Thesis Project, Ankara University, Turkey, December 2023

## Metrics

Publication: 48

Citation (WoS): 942

Citation (Scopus): 1128

H-Index (WoS): 15

H-Index (Scopus): 16