

## Asst. Prof. İlker ACAR

### Personal Information

**Office Phone:** [+90 0442 231 4605](tel:+9004422314605)

**Email:** [ilker.acar@atauni.edu.tr](mailto:ilker.acar@atauni.edu.tr)

**Web:** <https://avesis.atauni.edu.tr/ilker.acar>

**Address:** Atatürk Üniversitesi Mühendislik Fakültesi Çevre Mühendisliği Bölümü 25240 ERZURUM

### International Researcher IDs

ScholarID: Y160-F4AAAAJ

ORCID: 0000-0001-9439-1580

Publons / Web Of Science ResearcherID: A-9757-2018

ScopusID: 57057383300

Yoksis Researcher ID: 37653

### Education Information

Doctorate, Middle East Technical University, Mühendislik/Fen Bilimleri, Maden Mühendisliği/Cevher Hazırlama, Turkey 2005 - 2013

Undergraduate, Kocaeli University, Mühendislik/Fen Bilimleri, Çevre Mühendisliği, Turkey 1998 - 2003

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, CHARACTERIZATION AND UTILIZATION POTENTIAL OF CLASS F FLY ASHES, Orta Doğu Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Maden Mühendisliği/Cevher Hazırlama, 2013

### Research Areas

Waste Water Collection and Treatment, Pollution Prevention and Waste Reduction, Hazardous Waste Management, Composites, Foam Materials, Polymeric Adsorbents, Surface Chemistry

### Academic Titles / Tasks

Assistant Professor, Ataturk University, Mühendislik Fakültesi, Çevre Mühendisliği, 2020 - Continues

Assistant Professor, Ataturk University, Oltu Yer Bilimleri Fakültesi, Petrol ve Doğalgaz Mühendisliği, 2013 - 2020

Research Assistant PhD, Selcuk University, Faculty Of Engineering, Department Of Mining Engineering, 2013 - 2013

Research Assistant, Middle East Technical University, Faculty Of Engineering, Department Of Mining Engineering, 2004 - 2013

## Academic and Administrative Experience

Atatürk Üniversitesi, Oltu Yer Bilimleri Fakültesi, Petrol ve Doğalgaz Mühendisliği, 2014 - 2018

Atatürk Üniversitesi, Oltu Yer Bilimleri Fakültesi, Petrol ve Doğalgaz Mühendisliği, 2014 - 2018

## Courses

Çevre Jeolojisi, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021

Petrol Üretim Teknikleri, Undergraduate, 2023 - 2024, 2022 - 2023, 2020 - 2021

Madencilik Sektöründen Kaynaklanan Atıklar ve Bertaraf Yöntemleri, Postgraduate, 2023 - 2024, 2022 - 2023

Petrol ve Doğal Gaz Mühendisliğine Giriş II, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020

Jeopolimerlerin Atıksu Arıtımında Kullanım Potansiyeli, Postgraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021

Çevre Mühendisliği Kimyasal Prosesler, Undergraduate, 2023 - 2024, 2022 - 2023

## Advising Theses

Acar İ., Modifiye zeolitler ile atıksulardaki kalıntı fosfatın giderimi, Postgraduate, Y.ATALAY(Student), 2023

Acar İ., Covid-19 pandemi sürecinin tıbbi atık karakteri üzerine etkisi ve geri kazanım alternatiflerinin araştırılması:

Bingöl ili örneği, Postgraduate, S.SAVAŞ(Student), 2023

## Jury Memberships

Post Graduate, INVESTIGATION OF CONCENTRATION POSSIBILITY OF ARTVIN-DEREICI COMPLEX SULFIDE ORE BY FLOTATION, Orta Doğu Teknik Üniversitesi, June, 2017

Post Graduate, CYANIDE LEACHING BEHAVIOR OF AN ARSENIC RICH REFRACTORY GOLD ORE, Orta Doğu Teknik Üniversitesi, February, 2017

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

- I. **Preparation of a surface modified fly ash-based geopolymer for removal of an anionic dye: Parameters and adsorption mechanism**  
Açıslı Ö., Acar İ., Khataee A.  
CHEMOSPHERE, vol.295, 2022 (SCI-Expanded)
- II. **Sintering properties of olivine and its utilization potential as a refractory raw material: Mineralogical and microstructural investigations**  
Acar İ.  
CERAMICS INTERNATIONAL, vol.46, no.18, pp.28025-28034, 2020 (SCI-Expanded)
- III. **A detailed examination on natural chromite as a heterogeneous catalyst in sono-Fenton process for removal of a cationic dye: Characterization and utilization potential**  
AÇIŞLI Ö., ACAR İ., DOĞAN E.  
DESALINATION AND WATER TREATMENT, vol.192, pp.315-326, 2020 (SCI-Expanded)
- IV. **Preparation of a fly ash-based geopolymer for removal of a cationic dye: Isothermal, kinetic and thermodynamic studies**  
Açıslı Ö., Acar İ., Khataee A.  
JOURNAL OF INDUSTRIAL AND ENGINEERING CHEMISTRY, vol.83, pp.53-63, 2020 (SCI-Expanded)
- V. **Mechano-chemical surface modification of calcite by wet-stirred ball milling**  
Acar İ., Açıslı Ö.  
APPLIED SURFACE SCIENCE, vol.457, pp.208-213, 2018 (SCI-Expanded)
- VI. **Recovery potentials of cenospheres from bituminous coal fly ashes**  
Acar İ., Atalay M. V.

FUEL, vol.180, pp.97-105, 2016 (SCI-Expanded)

VII. **Characterization of sintered class F fly ashes**

Acar İ., Atalay M. V.

FUEL, vol.106, pp.195-203, 2013 (SCI-Expanded)

## Articles Published in Other Journals

I. **Utilization potential of poultry litter ash as phosphorus-based fertilizer**

Acar İ.

Environmental Research & Technology, vol.6, no.2, pp.102-107, 2023 (Scopus)

II. **OLİVİNİN REFRAKTER HAMMADESİ OLARAK KULLANIMI İÇİN DEMİR İÇERİĞİNİN MANYETİK AYIRMA İLE AZALTILMASI**

ACAR İ.

Bilimsel Madencilik Dergisi, vol.60, no.1, pp.41-49, 2021 (Scopus)

III. **Investigation of Ferrochromium Wastes for their Hazardous Hexavalent Chromium Content**

Acar İ.

European Journal of Science and Technology, no.27, pp.204-209, 2021 (Peer-Reviewed Journal)

IV. **The Effects of Two Different Polymers on the Drilling Mud Properties**

Acar İ., Doğan E., Urhan F., Ak A. Ö.

Avrupa Bilim ve Teknoloji Dergisi, no.20, pp.479-484, 2020 (Peer-Reviewed Journal)

## Books & Book Chapters

I. **Porous Geopolymer Adsorbents For Removal Of Heavy Metals and Dyes: A Recent Overview**

Acar İ.

in: INTERNATIONAL RESEARCH IN ENGINEERING SCIENCES, BIDEÇİ, Alper, Editor, Platanus Publishing, Ankara, pp.441-476, 2023

II. **KÖMÜR HAZIRLAMA SEKTÖRÜ ATIK YÖNETİMİ**

ACAR İ.

in: Çevresel Açidan Sektörel Atık Yönetimi ve Uygulamaları II, Tosun İsmail, Ekinci Kamil, Editor, Nobel Akademik Yayıncılık, Ankara, pp.117-144, 2023

III. **Mineral Processing Laboratory Manual**

Gulsun Kılıç M., Ozun S., Sivrikaya O., Lule Senoz G. M., Aydın G., Acar C., Acar İ., Pekpak E., Sözeri H., Camalan M., et al.

METU Printing House, Ankara, 2010

## Refereed Congress / Symposium Publications in Proceedings

I. **Characterization of Poultry Litter Ash in Environmental Point of View**

ACAR İ.

6th EurAsia Waste Management Symposium, İstanbul, Turkey, 24 October 2022, vol.1, pp.255-259

II. **Current Progress on Porous Geopolymers for Adsorption of Heavy Metals**

ACAR İ.

6th EurAsia Waste Management Symposium, İstanbul, Turkey, 24 October 2022, vol.1, pp.724-730

III. **UTILIZATION POTENTIAL OF A SERPENTINE-RICH SAMPLE AS A REFRACTORY RAW MATERIAL**

Acar İ.

XIV International Mineral Processing and Recycling Conference, Belgrade, Serbia, 12 - 14 May 2021, vol.1, pp.240-244

- IV. HEXAVALENT CHROMIUM ANALYSIS OF A FERROCHROME SLAG**  
Acar İ.  
XIV International Mineral Processing and Recycling Conference, Belgrade, Serbia, 12 - 14 May 2021, vol.1, pp.245-250
- V. Characterization of an Olivine-Rich Chromite Tailing**  
ACAR İ.  
5th International Congress on Engineering and Technology Management, İstanbul, Turkey, 24 - 25 April 2021, pp.93-98
- VI. X-ray Photoelectron Spectroscopy Analysis of an Electric-Arc Furnace Dust**  
ACAR İ.  
5th International Congress on Engineering and Technology Management, İstanbul, Turkey, 24 - 25 April 2021, pp.70-75
- VII. Utilization Potential of Olivine Waste as Refractory Material**  
KESKİN A., KÖKSOY M., KARA H., ACAR İ., ACAR C.  
International Mineral Processing Conference Eurasia (IMPC 2019), Antalya, Turkey, 31 October - 02 November 2019, vol.1, pp.784-788
- VIII. Effect of Sodium Oleate on Hydrophobicity of Calcite**  
ACAR İ., AÇIŞLI Ö.  
XIII International Mineral Processing and Recycling Conference (IMPRC 2019), Belgrade, Serbia And Montenegro, 8 - 10 May 2019, vol.1, pp.234-238
- IX. Effect of Hydraulically Classified Fly Ash on Flowability and Strength of Mortar**  
ACAR İ., ROBL T. L., ATALAY M. Ü.  
The 16th International Mineral Processing Symposium, Antalya, Turkey, 23 - 25 October 2018, vol.1, pp.505-511
- X. Separation of ultrafine particles from class F fly ashes**  
ACAR İ., Robl T. L., ATALAY M. V.  
Mineral Engineering Conference (MEC), Swieradow Zdroj, Poland, 25 - 28 September 2016, vol.8
- XI. VARIATION OF CENOSPHERES IN BITUMINOUS COAL FLY ASHES**  
ACAR İ., ATALAY M. Ü.  
XVI Balkan Mineral Processing Congress, Belgrade, Serbia, 17 - 19 June 2015, vol.2, pp.861-867
- XII. Sintering characteristics of the two bituminous coal fly ashes**  
ACAR İ., ATALAY M. Ü.  
XIV. Balkan Mineral Processing Congress, Tuzla, Bosnia And Herzegovina, 14 - 16 June 2011, vol.1, pp.420-424
- XIII. Cleaning possibility of Çırpılar coal**  
SİVRİKAYA O., ACAR İ., ATALAY M. Ü.  
XIII. Balkan Mineral Processing Congress, Bükreş, Romania, 14 - 17 June 2009, vol.1, pp.333-336
- XIV. Washability characteristics of Mihaliççık coal**  
ACAR İ., SİVRİKAYA O., ATALAY M. Ü.  
The 11 th International Mineral Processing Symposium, Antalya, Turkey, 21 - 23 October 2008, vol.1, pp.719-725

## Expert Reports

### I. BİLİRKİŞİ RAPORU

Barik K., Komesli O. T., İncekara Ü., Çil V., Acar İ., Turan K., Akpınar İ.  
T.C. ERZURUM 2. İDARE MAHKEMESİ, pp.60, Bingöl, 2022

## Supported Projects

ACAR İ., Project Supported by Higher Education Institutions, Gözenekli Jeopolimerler ile Sulu Çözeltilerden Ağır Metal Giderimi, 2023 - Continues

YILDIZ E., YILMAZ M. T., EKMEKYAPAR TORUN F., CEYLAN Z., EREN Z., BAYHAN Y. K., KOCADAĞIŞTAN B., ACAR İ., BİLİCİ T., KOMESLİ O. T., et al., Project Supported by Higher Education Institutions, Çevre Mühendisliği Bölümü Ar-Ge Alt Yapısının İyileştirilmesi, 2023 - Continues

ACAR İ., ATALAY Y., Project Supported by Higher Education Institutions, Modifiye Zeolitler ile Atıksulardaki Kalıntı Fosfatın Giderimi, 2023 - 2024

ACAR İ., AÇIŞLI Ö., Project Supported by Higher Education Institutions, Ferrokrom Atığı Baca Tozundaki Tehlikeli Altı Değerlikli Krom İçeriğinin Fenton Prosesleri ile Giderim Potansiyelinin Araştırılması, 2021 - 2023

ACAR İ., GÜLMEZ Ö., BARIŞ Ö., Project Supported by Higher Education Institutions, Kromit Artıklarından Biyoliç ile Nikel Kazanım Potansiyeli, 2021 - 2022

ACAR İ., URHAN F., DOĞAN E., AK A. Ö., Project Supported by Higher Education Institutions, PAC-R ve POLY-VIS Polimerlerinin Sondaj Çamurunun Verimi ve Filtrasyonu Üzerine Etkilerinin İncelenmesi, 2019 - 2020

AÇIŞLI Ö., ACAR İ., DOĞAN E., Project Supported by Higher Education Institutions, Ultrasonik Fenton Prosesinde Kromit Minerali ile Boya Giderimi, 2018 - 2019

ACAR İ., AÇIŞLI Ö., DOĞAN E., Project Supported by Higher Education Institutions, Krom Artıklarının Refrakter Tuğla Hammaddesi Olarak Kullanım Potansiyeli, 2018 - 2019

AÇIŞLI Ö., ACAR İ., BİLİCİ Ö., DOĞAN E., BİLİCİ T., BOĞAZKESEN Ş., Project Supported by Higher Education Institutions, Rezervuar Simülasyon Laboratuvarı Kurulumu, 2018 - 2019

ACAR İ., BİLİCİ Ö., DOĞAN E., BİLİCİ T., ALACALI M., AÇIŞLI Ö., BOĞAZKESEN Ş., Project Supported by Higher Education Institutions, Sondaj Akışkanları Laboratuvarı Kurulumu, 2018 - 2019

AÇIŞLI Ö., ACAR İ., DOĞAN E., Project Supported by Higher Education Institutions, FE2O3/ORGANO-MMT KOMPOZİT MALZEMELERİNİN HAZIRLANMASI VE AZO BOYALARIN GİDERİM ETKİNLİĞİNİN ADSORPSİYON VE SONİKASYON METODU İLE İNCELENMESİ, 2015 - 2017

## Scientific Refereeing

Physicochemical Problems of Mineral Processing, SCI Journal, July 2018

Bilimsel Madencilik Dergisi, National Scientific Refreed Journal, April 2018

Physicochemical Problems of Mineral Processing, SCI Journal, January 2018

Fuel, SCI Journal, July 2017

Project Supported by Higher Education Institutions, June 2017

Bilimsel Madencilik Dergisi, National Scientific Refreed Journal, March 2017

INDIAN JOURNAL OF ENGINEERING AND MATERIALS SCIENCES, SCI Journal, November 2016

Bilimsel Madencilik Dergisi, National Scientific Refreed Journal, November 2016

24th International Mining Congress and Exhibition of Turkey, Other journals, January 2015

24th International Mining Congress and Exhibition of Turkey, Other journals, December 2014

## Metrics

Publication: 29

Citation (WoS): 158

Citation (Scopus): 184

H-Index (WoS): 6

H-Index (Scopus): 6

## Congress and Symposium Activities

The 16th International Mineral Processing Symposium, Attendee, Antalya, Turkey, 2018

Mineral Engineering Conference MEC2016, Attendee, --Seçiniz--, Poland, 2016

XVI Balkan Mineral Processing Congress, Attendee, Beograd, Serbia And Montenegro, 2015  
XIV. Balkan Mineral Processing Congress, Attendee, Tuzla, Bosnia And Herzegovina, 2011  
XIII. Balkan Mineral Processing Congress, Attendee, Bucuresti, Romania, 2009  
The 11 th International Mineral Processing Symposium, Attendee, Antalya, Turkey, 2008

## **Scholarships**

Bilim İnsanı Destekleme Burs Programı (BİDEB-2214), TUBITAK, 2011 - Continues  
Başarılı Öğrencileri Destekleme Burs Programı, Foundation, 1999 - Continues

## **Non Academic Experience**

University of Kentucky, Center for Applied Energy Research