

## Prof. ÜNSAL AÇIKEL

### Personal Information

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### Courses

Kim.Müh.Tas. - I, Undergraduate, 2019 - 2020  
Uzmanlık Alan Dersi, Postgraduate, 2019 - 2020  
Katalizleme, Doctorate, 2019 - 2020  
Seminer Dersi, Doctorate, 2019 - 2020  
Kim.Müh.Tas. - II, Undergraduate, 2018 - 2019  
Kim.Müh.Tas. - II, Undergraduate, 2018 - 2019  
Bitirme Ödevi, Undergraduate, 2019 - 2020  
İleri Isı Aktarımı, Postgraduate, 2019 - 2020  
Seminer Dersi, Postgraduate, 2018 - 2019  
Kimya Mühendisliğine Giriş, Undergraduate, 2018 - 2019  
Uzmanlık Alan Dersi, Doctorate, 2019 - 2020  
Bitirme Ödevi, Undergraduate, 2018 - 2019  
Kimya Mühendisliği Ekonomisi, Undergraduate, 2018 - 2019  
Tez Çalışması, Postgraduate, 2018 - 2019  
Tez Çalışması, Doctorate, 2018 - 2019  
Mühendislik Projeleri, Undergraduate, 2017 - 2018  
Kim.Müh.Lab. - II, Undergraduate, 2016 - 2017  
Kimya Mühendisliğine Giriş, Undergraduate, 2016 - 2017  
Mühendislik Projeleri, Undergraduate, 2017 - 2018  
Kimya Mühendisliği Ekonomisi, Undergraduate, 2017 - 2018  
Kim.Müh.Tas. - I, Undergraduate, 2017 - 2018  
İleri Kimyasal Tepkime Mühendisliği, Postgraduate, 2013 - 2014  
Kim Müh.Ekonomisi, Undergraduate, 2014 - 2015  
Kim.Müh.Lab. - II, Undergraduate, 2011 - 2012  
Kimyasal Tepkime Müh. - II, Undergraduate, 2011 - 2012  
Polimer Kim., Undergraduate, 2012 - 2013  
FizikoKimya Lab., Undergraduate, 2012 - 2013  
Kimyasal Tepkime Müh. - II, Undergraduate, 2011 - 2012  
Statik, Undergraduate, 2012 - 2013  
Temel Bilgisayar Bilimleri, Undergraduate, 2010 - 2011  
Kimyasal Tepkime Müh. - I, Undergraduate, 2011 - 2012  
Analitik Kimya Lab., Undergraduate, 2010 - 2011  
Kimyasal Tekn. Lab., Undergraduate, 2010 - 2011  
Analitik Kimya Lab., Undergraduate, 2010 - 2011  
Kimyasal Tepkime Müh. - I, Undergraduate, 2011 - 2012  
Mukavemet, Undergraduate, 2009 - 2010  
Enstrümental Anlz.Lab., Undergraduate, 2009 - 2010  
Analitik Kimya, Undergraduate, 2010 - 2011

Analitik Kimya, Undergraduate, 2010 - 2011  
Mukavemet, Undergraduate, 2009 - 2010  
Malzeme, Undergraduate, 2009 - 2010  
Malzeme, Undergraduate, 2009 - 2010  
Kim Müh.Ekonomisi, Undergraduate, 2009 - 2010  
Kimyasal Tekn. Lab., Undergraduate, 2009 - 2010  
Kim. Müh. Lab. - I, Undergraduate, 2007 - 2008  
Kim. Tepk.Müh. - II, Undergraduate, 2005 - 2006  
Kim. Tepk.Müh. - I, Undergraduate, 2005 - 2006  
Kim. Tepk.Müh. - I, Undergraduate, 2005 - 2006  
Temel Bilgisayar Bilimleri, Undergraduate, 2003 - 2004

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

- I. **Effect of Thermal, Acid and Alkaline Pretreatments on Biogas Production from Cattle Manure**  
YILMAZ A., BAŞKAN G., AÇIKEL Ü.  
Waste and Biomass Valorization, 2024 (SCI-Expanded)
- II. **Comparison of the bioaccumulation and biosorption of copper ions by Rhizopus delemar and Candida lipolytica**  
BAŞKAN G., AÇIKEL Ü.  
Bioremediation Journal, 2024 (SCI-Expanded)
- III. **Removal of oxytetracycline hydrochloride from aqueous solutions using natural zeolite**  
**Oksitetrasiklin hidroklorürün doğal zeolit ile sulu çözeltilerden giderimi**  
Başkan G., AÇIKEL Ü., Levent M.  
Journal of the Faculty of Engineering and Architecture of Gazi University, vol.38, no.3, pp.1505-1517, 2023 (SCI-Expanded)
- IV. **Investigation of adsorption properties of oxytetracycline hydrochloride on magnetic zeolite/Fe3O4 particles**  
Baskan G., AÇIKEL Ü., LEVENT M.  
ADVANCED POWDER TECHNOLOGY, vol.33, no.6, 2022 (SCI-Expanded)
- V. **Intake of divalent copper and nickel onto natural zeolite from aqueous solutions: a study in mono- And dicomponent systems**  
Tekn B., AÇIKEL Ü.  
Turkish Journal of Chemistry, vol.46, no.4, pp.1042-1054, 2022 (SCI-Expanded)
- VI. **Efficient adsorption of Basic Blue 41 from textile wastewaters by natural and magnetically modified Manisa-Gordes clinoptilolite**  
Mersin G., AÇIKEL Ü., LEVENT M.  
CHEMICAL ENGINEERING AND PROCESSING-PROCESS INTENSIFICATION, vol.169, 2021 (SCI-Expanded)
- VII. **Anaerobic digestion of sugar beet pulp after acid thermal and alkali thermal pretreatments**  
ŞENOL H., AÇIKEL Ü., Oda V.  
BIOMASS CONVERSION AND BIOREFINERY, vol.11, no.3, pp.895-905, 2021 (SCI-Expanded)
- VIII. **Anaerobic digestion of cattle manure, corn silage and sugar beet pulp mixtures after thermal pretreatment and kinetic modeling study**  
ŞENOL H., AÇIKEL Ü., DEMİR S., Oda V.  
FUEL, vol.263, 2020 (SCI-Expanded)
- IX. **Removal of tetracycline by biocomposites synthesized with immobilization of Rhizopus delamar and Candida types**  
Kip F., AÇIKEL Ü.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.34, no.3, pp.1418-1426, 2019 (SCI-Expanded)

- X. **Investigation of inhibition kinetics of Zn(II) Ions on the acid phosphatase activity and growth of R-deleamar and Zn(II) bioaccumulation**  
AÇIKEL Ü., ERŞAN M.  
DESALINATION AND WATER TREATMENT, vol.57, no.8, pp.3689-3699, 2016 (SCI-Expanded)
- XI. **Synthesis of hydroxyapatite/clay and hydroxyapatite/pumice composites for tetracycline removal from aqueous solutions**  
ERŞAN M., GÜLER Ü. A., AÇIKEL Ü., SARIOĞLU CEBECİ M.  
PROCESS SAFETY AND ENVIRONMENTAL PROTECTION, vol.96, pp.22-32, 2015 (SCI-Expanded)
- XII. **STUDY OF LIPASE ENZYME ACTIVITY WITH Candida utilis YEAST IN DIFFERENT MEDIA CONDITION**  
KEKLİKÇİOĞLU ÇAKMAK N., AÇIKEL Ü.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.30, no.3, pp.475-485, 2015 (SCI-Expanded)
- XIII. **OPTIMIZATION OF ACID PHOSPHATASE PRODUCTION AND ZN(II) BIOACCUMULATION by R. deleamar USING RESPONSE SURFACE METHOD**  
ERŞAN M., AÇIKEL Ü.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.29, no.2, pp.321-329, 2014 (SCI-Expanded)
- XIV. **EFFECTS OF STIRRING AND AERATION RATES ON LIPASE PRODUCTION AND GROWTH OF R. DELEMAR IN THE MEDIA CONTAINING GLUCOSE OR MOLASSES SUCROSE AND PFC**  
Sag Acikel Y., ERŞAN M., AÇIKEL Ü.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.28, no.4, pp.811-818, 2013 (SCI-Expanded)
- XV. **Comparison of heavy metal uptake capacities of growing, resting and dead cells of R. deleamar via acid phosphatase activity**  
ERŞAN M., AÇIKEL Ü.  
NEW BIOTECHNOLOGY, vol.29, 2012 (SCI-Expanded)
- XVI. **Effects of stirring and aeration rates on lipase production and growth of R. deleamar**  
ERŞAN M., AÇIKEL Ü., SAĞ AÇIKEL Y.  
NEW BIOTECHNOLOGY, vol.29, 2012 (SCI-Expanded)
- XVII. **Equilibrium, hysteresis and kinetics of cadmium desorption from sodium-feldspar using rhamnolipid biosurfactant**  
AŞCI Y., AÇIKEL Ü., SAĞ AÇIKEL Y.  
ENVIRONMENTAL TECHNOLOGY, vol.33, no.16, pp.1857-1868, 2012 (SCI-Expanded)
- XVIII. **The effects of the composition of growth medium and fermentation conditions on the production of lipase by R. deleamar**  
AÇIKEL Ü., ERŞAN M., SAĞ AÇIKEL Y.  
TURKISH JOURNAL OF BIOLOGY, vol.35, no.1, pp.35-44, 2011 (SCI-Expanded)

## Articles Published in Other Journals

- I. **The Effects of Heavy Metals and Molasses on Enzyme Activity of Candida Yeast**  
MERSİN G., Açikel Ü.  
Cumhuriyet Science Journal, vol.44, no.3, pp.497-503, 2023 (Peer-Reviewed Journal)
- II. **Adsorption Isotherms for Removal of Heavy Metal Ions (Copper and Nickel) from Aqueous Solutions in Single and Binary Adsorption Processes**  
Tekin B., AÇIKEL Ü.  
Gazi University Journal of Science, vol.36, no.2, pp.495-509, 2023 (Scopus)
- III. **ZnO-Kitosan Kompoziti ile Ağır Metal Giderimi**  
TOPAL CANBAZ G., AÇIKEL Ü., SAĞ AÇIKEL Y.  
Avrupa Bilim ve Teknoloji Dergisi, no.35, pp.603-609, 2022 (Peer-Reviewed Journal)

- IV. **PRODUCTION OF Candida BIOMASSES FOR HEAVY METAL REMOVAL FROM WASTEWATERS**  
Mersin G., AÇIKEL Ü.  
TRAKYA UNIVERSITY JOURNAL OF NATURAL SCIENCES, vol.22, no.1, pp.67-76, 2021 (ESCI)
- V. **Evsel Organik Atıklardan Biyogaz Üretiminin İncelenmesi**  
ŞENOL H., AÇIKEL Ü.  
Bitlis Eren Üniversitesi Fen Bilimleri Dergisi, vol.8, no.1, pp.132-142, 2019 (Peer-Reviewed Journal)
- VI. **Investigation of Adsorption of Cu (II) Heavy Metal with Bentonite**  
ŞENOL H., AÇIKEL Ü.  
Bitlis Eren Üniversitesi Fen Bilimleri Dergisi, vol.7, no.2, pp.231-242, 2018 (Peer-Reviewed Journal)
- VII. **Farklı Ham Sığır Gübresi/Mezbaha atıkları Karışım Oranlarının Biyogaz Üretimi Üzerindeki Etkisinin Araştırılması**  
ŞENOL H., ELİBOL E. A., AÇIKEL Ü., YALÇIN A.  
bitlis eren üniversitesi fen bilimleri dergisi, vol.7, no.1, pp.11-21, 2018 (Peer-Reviewed Journal)
- VIII. **The Investigation of Ni (II) Removal by Biocomposite Synthesized with the Immobilization of Candida Utilis on Chitosan**  
KİP F., AÇIKEL Ü.  
Cumhuriyet Science Journal, vol.39, no.2, pp.469-476, 2018 (Peer-Reviewed Journal)
- IX. **Biyogaz Üretimi İçin Ankara'nın Başlıca Organik Atık Kaynakları**  
ŞENOL H., ELİBOL E. A., AÇIKEL Ü., ŞENOL M.  
Bitlis Eren Üniversitesi Fen Bilimleri Dergisi, vol.6, no.2, pp.15-28, 2017 (Peer-Reviewed Journal)
- X. **Türkiye'de Biyogaz Üretimi İçin Başlıca Biyokütle Kaynakları**  
ŞENOL H., ELİBOL E. A., AÇIKEL Ü., ŞENOL M.  
Bitlis Eren Üniversitesi Fen Bilimleri Dergisi, vol.6, no.2, pp.81-92, 2017 (Peer-Reviewed Journal)
- XI. **Investigation of Acid Orange 74 Dye Adsorption with Anaerob Activated Sludge**  
TOPAL G., AÇIKEL Ü., SAĞ AÇIKEL Y.  
International Journal of Food and Biosystems Engineering, vol.4, no.1, pp.91-96, 2017 (Peer-Reviewed Journal)
- XII. **2016'da Türkiye'de Kanatlı Hayvanlardan Üretilebilecek Biyogaz ve Elektrik Enerji Potansiyeli**  
ŞENOL H., ELİBOL E. A., AÇIKEL Ü., ŞENOL M.  
Bitlis Eren Üniversitesi Fen Bilimleri Dergisi, vol.6, no.1, pp.1-11, 2017 (Peer-Reviewed Journal)
- XIII. **Removal of Tetracycline by Candida utilis-Polyacrylonitrile Biocomposites**  
KİP F., AÇIKEL Ü.  
International Journal of Food and Biosystems Engineering, vol.4, no.1, pp.82-90, 2017 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Phenol Removal from Aqueous Environments with ZnO Nanoparticles Produced from Onion Peel Wastes by Green Synthesis**  
TOPAL CANBAZ G., AÇIKEL Ü., SAĞ AÇIKEL Y.  
5 th EurAsia Waste Management Symposium, 26 - 28 October 2020
- II. **Green Synthesis of ZnO Nanoparticles from Onion Peel Wastes**  
TOPAL CANBAZ G., AÇIKEL Ü., SAĞ AÇIKEL Y.  
5 th EurAsia Waste Management Symposium, 26 - 28 October 2020
- III. **Experimental Investigation of Biogas Production in Organic Garbage Waste**  
ÖZBİLGİN F., AÇIKEL Ü., ELİBOL E. A., DEMİR S., YALÇIN A., ŞENOL H.  
1. INTERNATIONAL TECHNOLOGICAL SCIENCES AND DESIGN SYMPOSIUM, 27 June 2018
- IV. **FARKLI TARIMSAL ATIKLAR VE SIĞIR GÜBRESİ KARIŞIMLARINDAN BİYOGAZ ÜRETİMİNİN İNCELENMESİ**  
ŞENOL H., TOPAL CANBAZ G., AÇIKEL Ü., DEMİR S., YALÇIN A., CEBECİ M. U.  
IV. Uluslararası Katılımlı Anadolu Enerji Sempozyumu, 18 - 20 April 2018
- V. **BİRTAKIM ÇEŞİTLİ MUTFAK ATIKLARI VE SIĞIR GÜBRESİ KARIŞIMLARINDAN MEZOFİLİK**

## **ŞARTLARDA BİYOGAZ ÜRETİMİNİN İNCELENMESİ**

DEMİR S., AÇIKEL Ü., TOPAL CANBAZ G., YALÇIN A., ELİBOL E. A., ŞENOL H.

IV. Uluslararası Katılımlı Anadolu Enerji Sempozyumu, 18 - 20 April 2018

## **VI. ULTRASONİK ÖNİŞLEM UYGULANARAK MISIR KOÇANI VE SIĞIR GÜBRESİ KARIŞIMINDAN BİYOGAZ ÜRETİMİNİN İNCELENMESİ**

ELİBOL E. A., AÇIKEL Ü., DEMİR S., YALÇIN A., TOPAL CANBAZ G., ŞENOL H.

IV. Uluslararası Katılımlı Anadolu Enerji Sempozyumu, 18 - 20 April 2018

## **VII. KARADENİZ BÖLGESİNİN İLLERE GÖRE MUTFAK ATIKLARINDAN ÜRETİLEBİLECEK BİYOGAZ POTANSİYELİNİN BELİRLENMESİ**

ŞENOL H., ELİBOL E. A., AÇIKEL Ü., DEMİR S., TOPAL CANBAZ G., ŞENOL M.

IV. Uluslararası Katılımlı Anadolu Enerji Sempozyumu, 18 - 20 April 2018

## **VIII. Green Synthesis of Nanoparticles and Their Applications**

TOPAL CANBAZ G., KEKLİKCİOĞLU ÇAKMAK N., KÜÇÜKYAZICI M., AÇIKEL Ü.

International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2018), 26 - 27 April 2018

## **IX. Equilibrium and Thermodynamic Studies for Adsorption of Heavy Metal on TiO<sub>2</sub>/Activated Sludge**

TOPAL CANBAZ G., KEKLİKCİOĞLU ÇAKMAK N., KÜÇÜKYAZICI M., AÇIKEL Ü.

International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2018), 26 - 27 April 2018

## **X. Equilibrium and Thermodynamic Studies for Adsorption of Cu(II) on Activated Sludge**

TOPAL CANBAZ G., AÇIKEL Ü., SAĞ AÇIKEL Y.

International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2018), 26 - 27 April 2018

## **XI. Photocatalytic TiO<sub>2</sub> Nanoparticles**

KEKLİKCİOĞLU ÇAKMAK N., TOPAL CANBAZ G., EROĞLU A., AÇIKEL Ü.

International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2018), 26 - 27 April 2018

## **XII. Biosynthesis of Silver Nanoparticles by *Persea Americana***

TOPAL CANBAZ G., AÇIKEL Ü., SAĞ AÇIKEL Y.

International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2018), 26 - 27 April 2018

## **XIII. Removal of dye materials from wastewater with nanomaterials**

TOPAL G., KEKLİKCİOĞLU ÇAKMAK N., eroğlu a., AÇIKEL Ü.

International Advanced Researches and Engineering Congress, 16 November - 29 December 2017

## **XIV. Investigation of Acid Orange 74 Dye Adsorption with Anaerob Activated Sludge**

TOPAL G., AÇIKEL Ü., SAĞ AÇIKEL Y.

3rd FaBE 2017 - International Conference on Food and Biosystems Engineering, 1 - 04 June 2017

## **XV. Removal of Tetracycline by *Candida utilis*-Polyacrylonitril Biocomposites**

AÇIKEL Ü., KİP F.

3rd FaBE 2017, international Journal of Food and Biosystems Engineering, 1 - 04 June 2017

## **XVI. Granit ile Cu(II) adsorpsiyonu**

TOPAL G., AÇIKEL Ü.

12. Ulusal Kimya Mühendisliği Kongresi, Turkey, 23 - 26 August 2016

## **XVII. REMOVAL OF Cu II AND Ni II IONS FROM WASTEWATER BY CANDIDA SPECIES**

Mersin G., AÇIKEL Ü.

Desalination for the Environment, Clean Water and Energy, 22 - 26 May 2016

## **XVIII. Comparative adsorption of metal ion and anionic dye with activated sludge**

TOPAL G., AÇIKEL Ü.

World Multidisciplinary Earth Sciences Symposium, 7 - 11 September 2015

## **XIX. The detection lipase activity and microbiological quality of sterile milk**

ERŞAN M., CAN Ö. P., AÇIKEL Ü., DÜĞENCİ F.

44. World Chemistry Congress, İstanbul, Turkey, 11 August 2013
- XX. **Cevap Yüzey Yöntemi Kullanarak Hidroksiapatit Kil Kompoziti ile Cu II Giderimi İçin Optimum Deneysel Koşullarının Belirlenmesi**  
ERŞAN M., AÇIKEL Ü., ALTINOK Y., DÜĞENÇİ F.  
26. Ulusal Kimya Kongresi, Muğla, Turkey, 01 October 2012
- XXI. **Rhizopus delemar ın üreyen yaş ve kuru hücrelerinin Ni II biyosorpsiyon kapasitelerinin karşılaştırılması**  
ERŞAN M., AÇIKEL Ü.  
10. Ulusal Kimya Mühendisliği Kongresi, İstanbul, Turkey, 03 September 2012
- XXII. **Rhizopus delemar ile asit fosfataz üretiminin incelenmesi**  
ERŞAN M., AÇIKEL Ü.  
10. Ulusal Kimya Mühendisliği Kongresi, İstanbul, Turkey, 03 September 2012
- XXIII. **Effects of stirring and aeration rates on lipase production and growth of R delemar**  
ERŞAN M., AÇIKEL Ü., SAĞ AÇIKEL Y.  
15TH European Congress on Biotechnology, İstanbul, Turkey, 23 June 2012
- XXIV. **Comparison of heavy metal uptake capacities of growing resting and dead cells of R delemar via acid phosphatase activity**  
ERŞAN M., AÇIKEL Ü.  
15TH European Congress on Biotechnology, İstanbul, Turkey, 23 June 2012
- XXV. **Lipaz Enzimi Aktivitesine Başlangıç Sakkaroz Derişiminin ve Ortamda Bulunan Bakır II ve Nikel II İyonlarının Etkisi**  
KEKLİKCİOĞLU ÇAKMAK N., AÇIKEL Ü.  
25. Ulusal Kimya Kongresi, Erzurum, Turkey, 27 June - 02 July 2011
- XXVI. **Candida Utilis in Lipaz Enzimi Aktivitesine Başlangıç Sakkaroz Derişiminin ve Aktivatör Yağların Etkisi**  
KEKLİKCİOĞLU ÇAKMAK N., AÇIKEL Ü.  
9. Ulusal Kimya Mühendisliği Kongresi, Ankara, Turkey, 22 - 25 June 2010
- XXVII. **R delemar mantarı ile asit fosfataz üretim koşullarının incelenmesi**  
ERŞAN M., AÇIKEL Ü.  
9. Ulusal Kimya Mühendisliği Kongresi, Ankara, Turkey, 22 June 2010
- XXVIII. **Candida utilis ve Rhizopus delemar mikroorganizmalarının lipaz enzimi üretiminin karşılaştırmalı incelenmesi**  
ERŞAN M., KEKLİKCİOĞLU ÇAKMAK N., AÇIKEL Ü., SAĞ AÇIKEL Y.  
23. Ulusal Kimya Kongresi, Sivas, Turkey, 16 - 20 June 2009
- XXIX. **Effects of surfactants activators and inhibitors on lipase production by R delemar**  
AÇIKEL Ü., ERŞAN M., SAĞ AÇIKEL Y.  
Somerset Symposium, Ankara, Turkey, 14 May 2007

## Metrics

Publication: 63

Citation (WoS): 108

Citation (Scopus): 43

H-Index (WoS): 3

H-Index (Scopus): 2