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Education Information

Doctorate, Hacettepe University, Fen Bilimleri Enstitüsü, Biyoloji (Biyoteknoloji), Turkey 2009 - 2016

Postgraduate, Hacettepe University, Fen Bilimleri Enstitüsü, Biyoloji (Biyoteknoloji), Turkey 2006 - 2009

Undergraduate, Hacettepe University, Fen Fakültesi, Biyoloji, Turkey 2002 - 2006

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, FARKLI KLEBSİELLA TÜRLERİ İLE SİYANÜR BİYİYİKİMİNİN ARAŞTIRILMASI, Hacettepe Üniversitesi, Fen Fakültesi, Biyoloji Bölümü, 2015

Postgraduate, Klebsiella suşlarının antibiyotik dirençliliğinin ve plazmid profillerinin araştırılması ve tiplendirilmesi, Hacettepe Üniversitesi, Fen Fakültesi, Biyoloji Bölümü, 2009

Research Areas

Life Sciences, Biotechnology, Microbial Biotechnology, Microbiology, Bacteriology, Natural Sciences

Academic Titles / Tasks

Research Assistant PhD, Hacettepe University, Fen Fakültesi, Biyoloji Bölümü, 2016 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

- Eco-friendly Production of Bacterial Cellulose with Komagataeibacter intermedius Strain by Using Jasminum sambac and Camellia sinensis Plants**
AVCIOĞLU N. H.
Journal of Polymers and the Environment, 2023 (SCI-Expanded)
- Biofilm formation of C. albicans on occlusal device materials and antibiofilm effects of chitosan and**

eugenol

ÖZARSLAN M., AVCIOĞLU N. H., Bilgili Can D., Çalışkan A.

Journal of Prosthetic Dentistry, 2023 (SCI-Expanded)

- III. **Comparison of the petroleum removal efficiencies and plasmid profiles of clinical and environmental *Klebsiella pneumoniae* strains**
Ozyurek S. B., Avcioglu N. H.
INTERNATIONAL JOURNAL OF ENVIRONMENTAL SCIENCE AND TECHNOLOGY, vol.19, no.10, pp.9791-9800, 2022 (SCI-Expanded)
- IV. **Optimization and physicochemical characterization of bacterial cellulose by *Komagataeibacter nataicola* and *Komagataeibacter maltaceti* strains isolated from grape, thorn apple and apple vinegars**
Greser A. B., AVCIOĞLU N. H.
ARCHIVES OF MICROBIOLOGY, vol.204, no.8, 2022 (SCI-Expanded)
- V. **Effect of different polishing techniques on surface properties and bacterial adhesion on resin-ceramic CAD/CAM materials**
ÖZARSLAN M., Bilgili Can D., AVCIOĞLU N. H., ÇALIŞKAN S.
CLINICAL ORAL INVESTIGATIONS, vol.26, no.8, pp.5289-5299, 2022 (SCI-Expanded)
- VI. **Bacterial cellulose: recent progress in production and industrial applications**
AVCIOĞLU N. H.
WORLD JOURNAL OF MICROBIOLOGY & BIOTECHNOLOGY, vol.38, no.5, 2022 (SCI-Expanded)
- VII. **Mycoremediation potential of *Aspergillus ochraceus* NRRL 3174**
BİLEN ÖZYÜREK S., AVCIOĞLU N. H., SEYİS BİLKAY I.
ARCHIVES OF MICROBIOLOGY, vol.203, no.10, pp.5937-5950, 2021 (SCI-Expanded)
- VIII. **COMPARISON OF BACTERIAL CELLULOSE PRODUCTION BY KOMAGATAEIBACTER INTERMEDIUS STRAIN USING LAVANDULA ANGUSTIFOLIA, ROSA CANINA AND TILIA CORDATA PLANTS AS LOW-COST MEDIA**
AVCIOĞLU N. H., Sevim C., Alver E. N., Donmez S., Bilkay I. S.
CELLULOSE CHEMISTRY AND TECHNOLOGY, vol.55, no.9-10, pp.1029-1041, 2021 (SCI-Expanded)
- IX. **Optimization and physicochemical characterization of enhanced microbial cellulose production with a new Kombucha consortium**
AVCIOĞLU N. H., Birben M., SEYİS BİLKAY I.
Process Biochemistry, vol.108, pp.60-68, 2021 (SCI-Expanded)
- X. **Biological Treatment of Cyanide by Using *Klebsiella pneumoniae* Species**
AVCIOĞLU N. H., BILKAY I. S.
FOOD TECHNOLOGY AND BIOTECHNOLOGY, vol.54, no.4, pp.450-454, 2016 (SCI-Expanded)
- XI. **Higher Biofilm Formation by Multi-Drug Resistant *K-pneumoniae* and *K-rhinoscleromatis* Strains and Effects of Lemon and Ginger Essential Oils on Biofilm Formation**
ŞAHAL G., AVCIOĞLU N. H., BILKAY I. S.
INDIAN JOURNAL OF PHARMACEUTICAL EDUCATION AND RESEARCH, vol.50, no.2, 2016 (SCI-Expanded)
- XII. **Antibiotic resistance, multidrug resistance and enterobacterial repetitive intergenic consensus polymerase chain reaction profiles of clinically important *Klebsiella* species**
AVCIOĞLU N. H., BILKAY I. S.
ASIAN BIOMEDICINE, vol.10, no.1, pp.41-47, 2016 (SCI-Expanded)
- XIII. **ANTIBIOFILM EFFECTS of Citrus limonum and Zingiber officinale Oils on BIOFILM FORMATION of *Klebsiella ornithinolytica*, *Klebsiella oxytoca* and *Klebsiella terrigena* SPECIES**
AVCIOĞLU N. H., ŞAHAL G., BILKAY I. S.
AFRICAN JOURNAL OF TRADITIONAL COMPLEMENTARY AND ALTERNATIVE MEDICINES, vol.13, no.6, pp.61-67, 2016 (SCI-Expanded)
- XIV. **Comparative assessment of five clinical *Klebsiella* isolates in terms of antibiotic resistance and plasmid profiles**
AVCIOĞLU N. H., BILKAY I. S.

TURKISH JOURNAL OF BIOCHEMISTRY-TURK BIYOKIMYA DERGISI, vol.40, no.6, pp.448-455, 2015 (SCI-Expanded)

XV. **Determination of Antibiotic Resistance and Plasmid DNA Profiles of Escherichia coli Strains Isolated from Clinical Materials**

OZBAKIR G., AVCIOĞLU N. H., BILKAY I. S.

INTERNATIONAL JOURNAL OF AGRICULTURE AND BIOLOGY, vol.12, no.5, pp.724-728, 2010 (SCI-Expanded)

Articles Published in Other Journals

- I. **Use of Heat-killed Aspergillus ochraceus NRRL 3174 Discs as Biosorbent for petroleum Removal**
Avcioğlu N. H., Bilen Özyürek S., Seyis Bilkay I.
Hittite Journal of Science and Engineering, vol.10, no.3, pp.219-228, 2023 (Peer-Reviewed Journal)
- II. **The Role of Aspergillus parasiticus NRRL:3386 Strain on Petroleum Biodegradation and Biosorption Processes**
Bilen Özyürek S., Avcioğlu N. H.
European Journal of Biology, vol.79, no.2, pp.144-150, 2020 (Peer-Reviewed Journal)
- III. **Cyanide Removal in Electroplating, Metal Plating and Gold Mining Industries' Wastewaters by Using Klebsiella pneumoniae and Klebsiella oxytoca Species**
Avcioğlu N. H., Seyis Bilkay I.
European Journal of Biology, vol.78, no.1, pp.5-10, 2019 (Peer-Reviewed Journal)
- IV. **Microbial Removal of Cyanide Compounds and Soil Cyanide by Klebsiella oxytoca**
Avcioğlu N. H., Seyis Bilkay I.
Hacettepe Journal of Biology and Chemistry, vol.45, no.4, pp.523-531, 2017 (Peer-Reviewed Journal)
- V. **Investigation of Biofilm Formation in Clinically Acquired Escherichia coli Strains**
AVCIOĞLU N. H., ŞAHAL G., SEYİS BİLKAY I.
HACETTEPE JOURNAL OF BIOLOGY AND CHEMISTRY, vol.43, no.1, pp.43-48, 2015 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **Investigation of Plasmid DNA Profiles of Potential Bacterial Strains for Crude Oil and Cyanide Removal**
Avcioğlu N. H., Bilen Özyürek S., Seyis Bilkay I.
International Eurasian Conference on Biological and Chemical Sciences, Ankara, Turkey, 26 - 27 April 2018, pp.712
- II. **Bioremediation of crude oil by Aspergillus parasiticus**
Bilen Özyürek S., Avcioğlu N. H.
2nd International Eurasian Conference on Biological and Chemical Sciences, Ankara, Turkey, 28 - 29 June 2019, pp.478
- III. **Cyanide Degradation Efficiencies of Bacterial Consortia Isolated from Waste Mud Pit**
Avcioğlu N. H., Bilen Özyürek S., Seyis Bilkay I.
International Eurasian Conference on Biological and Chemical Sciences, Ankara, Turkey, 26 - 27 April 2018, pp.672
- IV. **Comparison of Petroleum Removal by Clinically and Environmentally Isolated Klebsiella pneumoniae Strains**
Bilen Özyürek S., Avcioğlu N. H., Seyis Bilkay I.
International Eurasian Conference on Biological and Chemical Sciences, Ankara, Turkey, 26 - 27 April 2018, pp.681
- V. **Biosorption of Crude Oil by Different Fungal Strains**
Bilen Özyürek S., Avcioğlu N. H., Seyis Bilkay I.
International Eurasian Conference on Biological and Chemical Sciences, Ankara, Turkey, 26 - 27 April 2018, pp.680
- VI. **Cyanide removal by different fungal species**
AVCIOĞLU N. H.
European Biotechnology Congress, Dubrovnik, Croatia, 25 - 27 May 2017, vol.256

- VII. **Investigation of the Different Physiological Conditions on Petroleum Biodegradation by *Rhodotorula mucilaginosa***
Bilen Özyürek S., Avcioğlu N. H., Seyis Bilkay I.
7th Congress of European Microbiologists, Valencia, Spain, 9 - 13 July 2017
- VIII. **Investigation of Cyanide Tolerance in *Micrococcus luteus***
Avcioğlu N. H., Bilen Özyürek S.
7th Congress of European Microbiologists, Valencia, Spain, 9 - 13 July 2017
- IX. **Efficiency of Drilling Fluid Isolated Bacteria on Cyanide Treatment**
Avcioğlu N. H., Bilen Özyürek S., Seyis Bilkay I.
7th Congress of European Microbiologists, Valencia, Spain, 9 - 13 July 2017
- X. **Crude Oil Biodegradation by *Micrococcus luteus* ATCC 4698**
Bilen Özyürek S., Avcioğlu N. H.
7th Congress of European Microbiologists, Valencia, Spain, 9 - 13 July 2017
- XI. **Cyanide Treatment With Oil Field Isolated Bacteria**
AVCIOĞLU N. H., BİLEN ÖZYÜREK S., SEYİS BİLKAY I.
International Scientific Conference on Applied Sciences, Antalya, Turkey, 27 - 30 September 2016
- XII. ***Klebsiella pneumoniae* ve *Klebsiella oxytoca* Suşları ile Ham Petrol Biyoyıkımının Araştırılması**
Bilen Özyürek S., Avcioğlu N. H., Seyis Bilkay I.
18. Ulusal Biyoteknoloji Kongresi, Konya, Turkey, 18 - 19 December 2015
- XIII. ***Escherichia coli* Suşlarında Antibiyotik Dirençliliğinin ve Biyofilm Oluşumunun Araştırılması**
ŞAHAL G., AVCIOĞLU N. H., SEYİS BİLKAY I.
22. Ulusal Biyoloji Kongresi, Turkey, 23 - 27 June 2014
- XIV. **Klinik *Klebsiella ornithinolytica* *Klebsiella oxytoca* ve *Klebsiella terrigena* izolatlarında biyofilm oluşumunun araştırılması**
AVCIOĞLU N. H., ŞAHAL G., SEYİS BİLKAY I.
22. Ulusal Biyoloji Kongresi, Turkey, 23 - 27 June 2014
- XV. **Investigation of Biofilm Formation in Clinical Strains of *Klebsiella pneumoniae* and *Klebsiella rhinoscleromatis***
ŞAHAL G., AVCIOĞLU N. H., SEYİS BİLKAY I.
International Conference on Agricultural, Biotechnology, Biological and Biosystems Engineering, 15 - 16 May 2014

Supported Projects

- BİLEN ÖZYÜREK S., AVCIOĞLU N. H., SEYİS BİLKAY I., Project Supported by Higher Education Institutions, FUNGUSLARIN MİKOREMEDİASYON POTANSİYELLERİNİN PETROL BİYODEGREDASYONU BİYOSORPSİYONU VE BİYOSÜRFEKTAN ÜRETİMİ AÇISINDAN DEĞERLENDİRİLMESİ, 2019 - 2021
- SEYİS BİLKAY I., BİRBEN M., AVCIOĞLU N. H., Project Supported by Higher Education Institutions, Mikrobiyal Selülozun Siyanür ve Boya Gideriminde Kullanımının Araştırılması, 2017 - 2020
- AVCIOĞLU N. H., Project Supported by Higher Education Institutions, SONDAJ ÇAMURUNDAN İZOLE EDİLEN BAKTERİLERİN SİYANÜR ARITIMINA ETKİSİ, 2017 - 2017
- AVCIOĞLU N. H., Project Supported by Higher Education Institutions, Farklı Fungus Türleri ile Siyanürün Uzaklaştırılması, 2017 - 2017
- AVCIOĞLU N. H., Project Supported by Higher Education Institutions, Beş Farklı Klinik *Klebsiella* Türünün Antibiyotik Dirençliliği ile Plazmid Profillerinin Karşılaştırmalı Olarak Değerlendirilmesi, 2016 - 2017
- AVCIOĞLU N. H., SEYİS BİLKAY I., Project Supported by Higher Education Institutions, Fungal Kaynaklar ile Siyanür Biyoyıkımının İncelenmesi, 2016 - 2017
- AVCIOĞLU N. H., SEYİS BİLKAY I., Project Supported by Higher Education Institutions, Siyanür Uzaklaştırılmasına *Proteus mirabilis*in Etkisi, 2016 - 2016
- AVCIOĞLU N. H., Project Supported by Higher Education Institutions, 18. Ulusal Biyoteknoloji Kongresi, 2015 - 2016
- SEYİS BİLKAY I., AVCIOĞLU N. H., Project Supported by Higher Education Institutions, Farklı *Klebsiella* Türleri ile Siyanür

Biyoyıkımın Araştırılması, 2015 - 2016

SEYİS BİLKAY I., AVCIOĞLU N. H., Project Supported by Higher Education Institutions, KLEBSİELLA PNEUMONİAE VE KLEBSİELLA ORNİTHİNOLYTİCA TÜRLERİ İLE SİYANÜR BİYOYİKİMİNİN ARAŞTIRILMASI, 2014 - 2015

Scientific Refereeing

JOURNAL OF FOOD PROCESSING AND PRESERVATION, SCI Journal, February 2021

Metrics

Publication: 36

Citation (WoS): 71

Citation (Scopus): 69

H-Index (WoS): 3

H-Index (Scopus): 5

Congress and Symposium Activities

2nd International Eurasian Conference on Biological and Chemical Sciences, Attendee, Ankara, Turkey, 2019

International Eurasian Conference on Biological and Chemical Sciences, Attendee, Ankara, Turkey, 2018

7th Congress of European Microbiologists, Attendee, Valencia, Spain, 2017

European Biotechnology Congress, Attendee, Dubrovnik, Croatia, 2017

International Scientific Conference on Applied Sciences, Attendee, Antalya, Turkey, 2016

18. Ulusal Biyoteknoloji Kongresi, Attendee, Konya, Turkey, 2015