

Asst. Prof. HANDE GÜNAN

Personal Information

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Education Information

Doctorate, Hacettepe University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, Turkey 2011 - 2017

Postgraduate, Hacettepe University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, Turkey 2008 - 2011

Undergraduate, Hacettepe University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, Turkey 2004 - 2008

Dissertations

Doctorate, DEVELOPMENT OF A NEW HYBRID ADSORBENT WITH *Pichia stipitis* YEAST FOR LITHIUM(I) ADSORPTION, Hacettepe University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 2017

Postgraduate, Investigation of the usage of sugar beet pulp for bioethanol production, Hacettepe University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 2011

Research Areas

Chemical Engineering and Technology, Biotechnology, Biotechnological Processes and Fermentation Technology, Engineering and Technology

Academic Titles / Tasks

Assistant Professor, Hacettepe University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 2021 - Continues

Research Assistant, Hacettepe University, Mühendislik Fakültesi, Kimya Mühendisliği Bölümü, 2009 - 2021

Courses

Bilgisayar Programlama, Undergraduate, 2021 - 2022

Ayrırma İşlemleri, Undergraduate, 2021 - 2022

Sayısal Çözümleme, Undergraduate, 2021 - 2022

Atıkların Arıtılması, Undergraduate, 2021 - 2022

Biyoteknoloji II, Undergraduate, 2021 - 2022

Advising Theses

Aksu Z., Günan Yücel H., GIDA ATIKLARINDAN ÇEŞİTLİ ÖN İŞLEMLERLE ELDE EDİLEN BESİN ORTAMLARINDA Rhodotorula glutinis MAYASI İLE β -KAROTEN ÜRETİMİNİN İNCELENMESİ, Postgraduate, Ş.UĞURLU(Student), 2022

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Levan Production by *Paenibacillus polymyxa* Immobilized on Fe₃O₄@SiO₂ Nanoparticles Using Molasses Medium with Emphasis on the Bioactivity**
KOŞARSOY AĞÇELİ G., GÜNNAN YÜCEL H.
Journal of Polymers and the Environment, vol.31, no.12, pp.5355-5370, 2023 (SCI-Expanded)
- II. **Valorization of food wastes with a sequential two-step process for microbial β -carotene production: A zero waste approach**
Uğurlu Ş., Günan Yücel H., Aksu Z.
JOURNAL OF ENVIRONMENTAL MANAGEMENT, vol.340, pp.118003, 2023 (SCI-Expanded)
- III. **pH shifting effect on anionic dye removal by surfactant-modified sugar beet pulp: Modeling of column studies**
AKSU Z., Acar Yazgı Z., GÜNNAN YÜCEL H.
Journal of the Indian Chemical Society, vol.100, no.2, 2023 (SCI-Expanded)
- IV. **Synergistic effect of CTAB on Reactive Black 5 removal performance of *Candida tropicalis***
Demiray E., Günan Yücel H., Özkuzucu H. E., Ertuğrul Karatay S., Aksu Z., Dönmez G.
BIOREMEDIATION JOURNAL, vol.2021, no.-, pp.1-11, 2021 (SCI-Expanded)
- V. **Novel application of isolated *Micrococcus luteus* and *Bacillus pumilus* for Li⁺ ion biosorption: a comparative study**
GÜNNAN YÜCEL H., AKSU Z., Usta T., ERTUĞRUL KARATAY S., DÖNMEZ G.
PREPARATIVE BIOCHEMISTRY & BIOTECHNOLOGY, vol.51, no.9, pp.892-900, 2021 (SCI-Expanded)
- VI. **Lithium (I) biofortified *Dunaliella salina* as a potential functional nutrition supplement**
Yucel H. G., ERTUĞRUL KARATAY S., AKSU Z., DÖNMEZ G.
ALGAL RESEARCH-BIOMASS BIOFUELS AND BIOPRODUCTS, vol.56, 2021 (SCI-Expanded)
- VII. **A comparative investigation of lithium(I) biosorption properties of *Aspergillus versicolor* and *Kluyveromyces marxianus***
GÜNNAN YÜCEL H., AKSU Z., Yalçınkaya G. B., Karatay S. E., Dönmez G.
Water science and technology : a journal of the International Association on Water Pollution Research, vol.81, no.3, pp.499-507, 2020 (SCI-Expanded)
- VIII. **Enhancing lithium ion capture by using a negatively overcharged biomass-based hybrid adsorbent**
Günan-Yücel H., AKSU Z.
JOURNAL OF ENVIRONMENTAL CHEMICAL ENGINEERING, vol.7, no.5, 2019 (SCI-Expanded)
- IX. **Effect of surface modification of *Pichia stipitis* cells on lithium ion recovery**
Yucel H., AKSU Z.
NEW BIOTECHNOLOGY, vol.33, 2016 (SCI-Expanded)
- X. **Ethanol fermentation characteristics of *Pichia stipitis* yeast from sugar beet pulp hydrolysate: Use of new detoxification methods**
Yucel H., AKSU Z.
FUEL, vol.158, pp.793-799, 2015 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

- I. **Characterization of Surface Properties of Yeast Cells Before and After Surface Modification and Comparison of Their Lithium Ion Adsorption Capacities**
Günan Yücel H., Aksu Z.
The 12th Conference on Sustainable Development of Energy, Water and Environment Systems (SDEWES2017), Dubrovnik, Croatia, 4 - 08 October 2017
- II. **Bioethanol Production from Sugar Beet Pulp by *Pichia stipitis* Yeast: Kinetic Modeling of Dilute Acid Hydrolysis, Use of New Detoxification Methods and Investigation of Fermentation Parameters**
Günan Yücel H., Aksu Z.
The 12th Conference on Sustainable Development of Energy, Water and Environment Systems (SDEWES2017),

Dubrovnik, Croatia, 4 - 08 October 2017

III. Ethanol Production by *P. stipitis* from Hydrolyzed Sugar Beet Pulp

Günan Yücel H., Aksu Z.

7th Chemical Engineering Conference for Collaborative Research in Eastern Mediterranean Countries (EMCC-7), Athens, Greece, 27 April - 01 May 2012

Supported Projects

GÜNAN H., Project Supported by Higher Education Institutions, Türkiyedeki Tarımsal Atıklardan Biyoetanol Üretim Verimlerinin Karşılaştırılması, 2015 - Continues

AKSU Z., Erden İ. E., GÜNAN YÜCEL H., Project Supported by Higher Education Institutions, Bor Atıklarındaki Lityumun Derin Ötektik Çözücüler Kullanılarak Ekstraksiyon Yöntemi ile Geri Kazanımının İncelenmesi, 2022 - 2023

KOŞARSOY AĞÇELİ G., GÜNAN YÜCEL H., Project Supported by Higher Education Institutions, Melashı besiyerinde Fe₃O₄ nanopartiküllerine immobilize edilen mikroorganizmalardan levan üretimi ve üretilen levanın biyoaktivitesinin belirlenmesi, 2020 - 2022

GÜNAN H., HAMMAMCHİ H., AKSU Z., KOŞARSOY AĞÇELİ G., CİHANGİR N., Project Supported by Higher Education Institutions, Mikrobiyal Yöntemlerle Üretilen ZnO Nanopartikülleri ve Curdlan Biyopolimerinden Polimer Nanokompozit Malzeme Geliştirilmesi, 2020 - 2022

GÜNAN YÜCEL H., AKSU Z., Project Supported by Higher Education Institutions, Pichia stipitis Mayasıyla Şeker Pancarı Küşpesinden Biyoetanol Üretimi: Seyreltik Asit Hidrolizinin Kinetik Modellemesi, Yeni Zehir Giderme Yöntemlerinin Kullanımı ve Fermantasyonu Etkileyen Parametrelerin İncelenmesi, 2017 - 2017

AKSU Z., GÜNAN YÜCEL H., Project Supported by Higher Education Institutions, Maya Hücrelerinin Lityum(I) İyonu ile Etkileşiminin İncelenmesi ve Hücre Yüzey Modifikasyonunun Lityum(I) Adsorpsiyon Kapasitesine Etkisi, 2016 - 2017

AKSU Z., GÜNAN YÜCEL H., Project Supported by Higher Education Institutions, Pichia stipitis Hücreleri ile Lityum İyonu Geri Kazanımının İncelenmesi, 2016 - 2017

AKSU Z., GÜNAN YÜCEL H., Project Supported by Higher Education Institutions, Pichia stipitis Hücrelerinin Yüzey Modifikasyonunun Lityum İyon Geri Kazanımına Etkisi, 2016 - 2016

Metrics

Publication: 13

Citation (WoS): 44

Citation (Scopus): 52

H-Index (WoS): 2

H-Index (Scopus): 2