

Res. Asst. PhD ORKUN PİNAR

Personal Information

Email: orkun.pinar@marmara.edu.tr

Web: <https://avesis.marmara.edu.tr/orkun.pinar>

International Researcher IDs

ScholarID: ptcgNJAAAAAJ

ORCID: 0000-0001-9133-3502

Publons / Web Of Science ResearcherID: Z-3719-2019

ScopusID: 57188993094

Yoksis Researcher ID: 159413

Biography

2011 yılından bugüne kadar Marmara Üniversitesi Biyomühendislik Bölümünde Araştırma Görevlisi olarak görev yapmakta olan Orkun Pinar, 2006 yılında Ege Üniversitesi Biyomühendislik lisans programından mezun olmuştur. 2009 yılında İstanbul Teknik Üniversitesi, Moleküler Biyoloji-Genetik ve Biyoteknoloji programında yüksek lisans eğitimini tamamlamış, yine aynı bölümde 2017 yılında ise doktora derecesini almıştır. 2017 yılında ise Arizona State Üniversitesi'nde 3 aylık bir doktora sonrası araştırması gerçekleştirmiştir.

Araştırma görevliliği süresince "General Biology for Engineers", "Microbiology for Bioengineers", "Molecular Biology and Genetics", "Biochemistry", "Bioprocess Design" ve "Bioengineering Laboratory I-II" gibi laboratuvar derslerinde asistan olarak görev yapmıştır. 2017 yılından beri ise Marmara Üniversitesi bünyesinde "Molecular Biology and Genetics", "Protein Engineering", "Recombinant DNA Technology", "Industrial and Environmental Biotechnology", "General Biology for Engineers" gibi lisans ve "Eukaryotic Biotechnology", "Methods in Biotechnology" gibi lisansüstü derslerini vermektedir. Başka kurumlarda da "Industrial Genetics and Bioengineering (Okan Üniversitesi, Genetik ve Biyomühendislik Bölümü)" gibi lisans derslerini vermiştir.

Çalışma ve bilimsel ilgi alanları arasında, mikrobiyal genetik, rekombinant DNA Teknolojisi, doğal ve rekombinant enzim üretimleri, biyopolimer üretimi, enzimatik hidroliz, fermentasyon teknolojileri ve biyoproses tasarımı yer almaktadır.

Ayrıca biyolojik temelli malzemeleri, yeşil kimya ve sürdürülebilirlik prensipleriyle üreten, yenilikçi bir Ar-Ge firması olan "Bacpolyzyme Biyomühendislik" spin-off şirketinin 2 ortağından biridir.

Education Information

Post Doctorate, Lappeenranta University of Technology, School of Engineering , Separation Science, Finland 2022 - Continues

Post Doctorate, Arizona State University, School of Molecular Sciences , United States Of America 2017 - 2017

Doctorate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Moleküler Biyoloji-Genetik Ve Biyoteknoloji (Dr), Turkey 2009 - 2017

Undergraduate, Anadolu University, Faculty Of Business Administration, Department Of Business, Turkey 2004 - 2014

Postgraduate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Moleküler Biyoloji-Genetik Ve Biyoteknoloji (YI) (Tezli), Turkey 2006 - 2009

Undergraduate, Ege University, Faculty Of Engineering, Biyomühendislik Bölümü, Turkey 2002 - 2006

Foreign Languages

English, C2 Mastery

Dissertations

Doctorate, Cloning of a cDNA encoding laccase from *coriolopsis polyzona* MUCL 38443 and expression in *Pichia pastoris*, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Moleküler Biyoloji-Genetik Ve Biyoteknoloji (Dr), 2017
Postgraduate, The effect of global control elements on the expression of *ywfH* gene in *B. subtilis*, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Moleküler Biyoloji-Genetik Ve Biyoteknoloji (YI) (Tezli), 2009

Research Areas

Process and Reactor Design, Biochemistry, Biotechnology, Microbiology, Molecular Biology and Genetics

Academic Titles / Tasks

Research Assistant PhD, Marmara University, Faculty of Engineering, Bioengineering, 2011 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **A two-step purification platform for efficient removal of Fab-related impurities: A case study for Ranibizumab**
Tatli O., Oz Y., Dingiloglu B., Yalcinkaya D., Basturk E., Korkmaz M., Akbulut L., Hatipoglu D., Kirmacoglu C., Akgun B., et al.
Heliyon, vol.9, no.11, 2023 (SCI-Expanded)
- II. **Valorization of shrimp waste by obligate alkaliphilic *Bacillus marmarensis***
Canpulat M., Pinar O., Yilmaz Serçinoğlu Z., Kazan D.
BIOMASS CONVERSION AND BIOREFINERY, no. , pp.1-11, 2022 (SCI-Expanded)
- III. **Valorization of pea pod, celery root peel, and mixed-vegetable peel as a feedstock for biocellulose production from *Komagataeibacter hansenii* DSM 5602**
Bozdag G., PİNAR O., GÜNDÜZ O., KAZAN D.
BIOMASS CONVERSION AND BIOREFINERY, 2021 (SCI-Expanded)
- IV. **Investigation of the physiology of the obligate alkaliphilic *Bacillus marmarensis* gmbe 72t considering its alkaline adaptation mechanism for poly(3-hydroxybutyrate) synthesis**
Atakav Y., PİNAR O., KAZAN D.
Microorganisms, vol.9, no.2, pp.1-15, 2021 (SCI-Expanded)
- V. **Techno-economic analysis of caffeine and catechins production from black tea waste**
SAYAR N. A., DURMAZ ŞAM S., PİNAR O., Serper D., SARIYAR AKBULUT B., KAZAN D., SAYAR A. A.
Food And Bioproducts Processing, vol.118, pp.1-12, 2019 (SCI-Expanded)
- VI. **Bioethanol Production From Turkish Hazelnut Husk Process Design and Economic Evaluation**
SAYAR N. A., PİNAR O., KAZAN D., SAYAR A. A.
WASTE AND BIOMASS VALORIZATION, vol.10, no.4, pp.909-923, 2019 (SCI-Expanded)
- VII. **Assessment of poly(3-hydroxybutyrate) synthesis from a novel obligate alkaliphilic *Bacillus marmarensis* and generation of its composite scaffold via electrospinning**
ÖZGÖREN CAN T., PİNAR O., Bozdag G., Denizci A. A., GÜNDÜZ O., Hatir P. C., KAZAN D.
INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES, vol.119, pp.982-991, 2018 (SCI-Expanded)
- VIII. **Retro-techno-economic evaluation of acetic acid production using cotton stalk as feedstock**

SAYAR N. A., KAZAN D., PİNAR O., SARIYAR AKBULUT B., SAYAR A. A.

JOURNAL OF MATERIAL CYCLES AND WASTE MANAGEMENT, vol.20, no.4, pp.2077-2088, 2018 (SCI-Expanded)

- IX. **Production and characterization of electrospun fish sarcoplasmic protein based nanofibers**
ŞAHİN Y. M., Su S., Ozbek B., YÜCEL S., PİNAR O., KAZAN D., OKTAR F. N., EKREN N., GÜNDÜZ O.
Journal of Food Engineering, vol.222, pp.54-62, 2018 (SCI-Expanded)
- X. **Assessment of hazelnut husk as a lignocellulosic feedstock for the production of fermentable sugars and lignocellulolytic enzymes**
PİNAR O., Karaosmanoglu K., SAYAR N. A., KULA C., KAZAN D., SAYAR A. A.
3 BIOTECH, vol.7, 2017 (SCI-Expanded)
- XI. **Heterologous expression and characterization of a high redox potential laccase from Coriolopsis polyzona MUCL 38443**
Pinar O., Tamerler C., Yazgan Karatas A.
TURKISH JOURNAL OF BIOLOGY, vol.41, no.2, pp.278-295, 2017 (SCI-Expanded)
- XII. **Enzyme mixture production from Pycnoporus sanguineus DMSZ 3024 using a lignocellulosic waste, Hazelnut husk: A case study for laccase and cellulase**
PİNAR O., Kochan B., SAYAR N. A., Karaos-Manoglu K., KAZAN D.
NEW BIOTECHNOLOGY, vol.31, 2014 (SCI-Expanded)
- XIII. **Production of industrial enzymes for feed industry**
Sogut M. S., Ozturk N. C., Ozturk H. U., Pinar O., Ipek F. M., Cayir E., Gokce A., Karasu D., Ozturk D. C., Ozturk Y., et al.
NEW BIOTECHNOLOGY, vol.29, 2012 (SCI-Expanded)

Articles Published in Other Journals

- I. **A Preliminary Study on Purification and Characterization of Lipase(s) Produced by Cryptococcus Diffluens D44**
Büyük E., Pinar O.
International Journal of Advances in Engineering and Pure Sciences, vol.35, no.2, pp.203-212, 2023 (Peer-Reviewed Journal)
- II. **Determination of the Significance of the Most Effective Nutrients on Lipase Production from Cryptococcus albidus D24**
URAS A., PİNAR O., KAZAN D.
International Journal of Advances in Engineering and Pure Sciences, vol.34, no.2, pp.217-228, 2022 (Peer-Reviewed Journal)
- III. **Complete Genome Sequence of a cellulose-producing bacteria Komagataeibacter oboediens BPZTR01**
PİNAR O., Bozdağ G., Yemişer İ., Büyük E., KAZAN D.
Genetics Applications, vol.4, no.1, pp.38, 2020 (Peer-Reviewed Journal)
- IV. **Immobilization of amylase from Bacillus subtilis SDP1 isolated from the Rhizosphere of Acacia cyanophylla Lindey**
Bal E., PİNAR O., KAZAN D., Öztürk H. Ü., SAYAR A. A.
Electronic Journal of Biology, 2016 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **Bölüm 14: Endüstriyel Biyoteknoloji ve Biyoyakıtlar**
KAZAN D., PİNAR O.
in: Güncel Biyoteknoloji ve Uygulamaları, Munis DÜNDAR, Haydar BAĞIŞ, Editor, M Grup / Erciyes Üniversitesi Yayınları, Kayseri, pp.295-322, 2017

Refereed Congress / Symposium Publications in Proceedings

- I. **Valorization of Shrimp Waste: Enzyme and Silver Nanoparticle Production through Co-Culture Fermentation**
YILMAZ SERÇİNOĞLU Z., CANPULAT M., PİNAR O., KAZAN D.
IV. International Enzyme and Bioprocess Days, Kars, Turkey, 7 September - 09 December 2023, pp.59
- II. **Valorisation of shrimp waste via *Bacillus marmarensis* -obligate alkaliphilic bacterium- for protease production**
Canpulat M., Yılmaz Serçinoğlu Z., Pinar O., Kazan D.
13th International Conference on Protein Stabilization / ProtStab2021 , Plovdiv, Bulgaria, 7 - 09 October 2021, pp.34
- III. **Purification and Characterization of Sugar Ester Producing Lipase from *Cryptococcus diffluens* D44**
BÜYÜK E., PİNAR O., YALÇIN H. T., Atabay Taşkent Z., ÖZALP Y., KAZAN D., Taşkent D.
International Eurasian Conference on Biotechnology and Biochemistry (BioTechBioChem 2020), 16 - 18 December 2020
- IV. **A New Bio-Cellulose Based Lateral Flow Assay Design For Commercial Protein Detection**
Mişe A., PİNAR O., KAZAN D.
International Marmara Sciences Congress (Spring 2020), 19 - 20 July 2020
- V. **Purification and characterization of lipase produced by *Cryptococcus* strain isolated from petroleum sludge: Assessment of its application in industry area**
BÜYÜK E., YALÇIN H. T., PİNAR O., KAZAN D.
2nd International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2019), 28 - 29 June 2019
- VI. **Development of a promising electrospun bacterial cellulose-PHB scaffold for tissue engineering**
BOZDAĞ G., CAN T., PİNAR O., GÜNDÜZ O., KAZAN D.
18th European Congress On Biotechnology, 1 - 04 July 2018
- VII. **Lipase production from *Cryptococcus albidus* D24 using disposed automotive oil**
URAS A., PİNAR O., BÜYÜK E., BULDAĞ Ö., TOPAL H., YILDIZ D. B., YALÇIN H. T., KAZAN D.
18th European Congress On Biotechnology, 1 - 04 July 2018
- VIII. **Growth Medium Optimization of *Cryptococcus albidus* D24 lipase by statistical design of experiments**
URAS A., PİNAR O., SAYAR N. A., KAZAN D., SAYAR A. A.
42nd FEBS Congress, Kudus, Indonesia, 10 - 14 September 2017
- IX. **Utilization of PHB from *Bacillus marmarensis* GMBE 72T DSM21297 as scaffold**
ÖZGÖREN T., Bozdağ G., Şirin B., Çimenoglu Ç., PİNAR O., Denizci A. A., KAZAN D.
FEBS, 3 - 08 September 2016, vol.283
- X. **PHB kaynağı *Bacillus marmarensis* GMBE 72T DSM 21297**
ÖZGÖREN T., PİNAR O., Bozdağ G., Denizci A. A., Utkan G., KAZAN D.
VI. Ulusal Polimer Bilim ve Teknolojisi Kongresi, Turkey, 4 - 07 September 2016
- XI. **Poly(3-hydroxybutyrate) kaynağı *Bacillus marmarensis* GMBE 72T(DSM 21297)**
ÖZGÖREN T., BOZDAĞ G., PİNAR O., DENİZCİ A., KAZAN D.
VI. Ulusal Polimer Bilim ve Teknolojisi Kongresi, Turkey, 4 - 07 September 2016
- XII. **Poli 3 hidroksibütirat kaynağı *Bacillus marmarensis* GMBE 72T DSM 21297**
ÖZGÖREN T., PİNAR O., Bozdağ G., Denizci A. A., Utkan G., KAZAN D.
VI. Ulusal Polimer Bilim ve Teknolojisi Kongresi, Ankara, Turkey, 4 - 07 September 2016
- XIII. **Utilisation of poly 3 hydroxybutyrate from *Bacillus marmarensis* GMBE 72T DSM21297 as scaffold**
ÖZGÖREN T., Şirin B., Çimenoglu Ç., PİNAR O., DENİZCİ A. A., KAZAN D.
41st FEBS Congress, Aydın, Turkey, 3 - 08 September 2016
- XIV. **Assessment of the effects of medium composition on growth, lipid accumulation and lipid profile of *Chlorella vulgaris* as a biodiesel feedstock**
Coban E. K., Gencoglu C., Kirman D., PİNAR O., KAZAN D., SAYAR A. A.
4th International Conference on Renewable Energy Research and Applications (ICRERA), Palermo, Italy, 22 - 25

November 2015, pp.793-796

- XV. **Optimization of process parameters for enzymatic hydrolysis of hazelnut husk**
YILMAZ SERÇİNOĞLU Z., PİNAR O., SAYAR N. A., KAZAN D.
BEC 2015 VII. Bioengineering Congress, İzmir, Turkey, 19 - 21 November 2015
- XVI. **Effect of Different Carbon Sources on the Production of Poly(3-hydroxybutyrate) from *Bacillus marmarensis* GMBE 72T**
ÖZGÖREN T., PİNAR O., AKIN D., UTKAN G., KAZAN D.
VII. Bioengineering Congress (BEC), 19 - 21 November 2015
- XVII. **Optimization of process parameters for enzymatic hydrolysis of hazelnut husk**
YILMAZ Z., PİNAR O., SAYAR N. A., KAZAN D.
VIIth International Bioengineering Congress (BEC 2015), İzmir, Turkey, 19 - 21 November 2015
- XVIII. **Effect of Different Carbon Sources on the Production of Poly 3 hydroxybutyrate PHB from *Bacillus marmarensis* GMBE 72T**
ÖZGÖREN T., PİNAR O., Denizci A. A., Utkan G., KAZAN D.
BEC 2015, İzmir, Turkey, 19 - 21 November 2015
- XIX. **Response of the *Bacillus marmarensis* GMBE 72T to extreme conditions Poly 3hydroxybutyrate**
ÖZGÖREN T., PİNAR O., Denizci A. A., KAZAN D.
40 th FEBS Congress, The Biochemical Basis of Life, Berlin, Germany, 4 - 09 July 2015
- XX. **Response of novel *Bacillus marmarensis* GMBE 72T to extreme conditions: Poly (3-hydroxybutyrate)**
ÖZGÖREN T., PİNAR O., DENİZCİ A. A., UTKAN G., KAZAN D.
40th FEBS Congress, Berlin, Germany, 4 - 09 July 2015
- XXI. **Enzyme mixture production from *Pycnoporus sanguineus* DMSZ 3024 using a lignocellulosic waste, Hazelnut husk: A case study for laccase and cellulase**
PİNAR O., KOÇHAN B., SAYAR N. A., KARAOSMANOĞLU K., KAZAN D.
16th European Congress on Biotechnology, 13 - 16 July 2014
- XXII. **Cloning and Expression of *xynA* Gene from Xylanase Secreting *Bacillus pumilus* YMNX25**
İPEK F. M., PİNAR O., SAVAŞAN SÖĞÜT M., KARASU D., ÇAYIR E., ÖZTÜRK N., DENİZCİ A. A., C ÖZTÜRK D., KAZAN D., MANDACI S.
International Enzymes for Biocatalysis Workshop, Arel Üniversitesi, İstanbul, Turkey, 3 - 05 June 2014
- XXIII. **Site-directed mutation on T1 site of a *Pycnoporus sanguineus* laccase**
TETİK B., KURT GÜR G., PİNAR O., TAMERLER C., KARATAŞ A.
The 5th Congress of European Microbiologists (FEMS 2013), Leipzig, Germany, 12 - 15 November 2013
- XXIV. **Hydrolysis of Hazelnut Husk by Using Commercial Enzymes for the Production of Fermentable Sugar**
KARAOSMANOĞLU K., PİNAR O., SAYAR N. A., KAZAN D.
VIth International Bioengineering Congress (IBEC 2013), İzmir, Turkey, 12 - 15 November 2013
- XXV. **Isolation and Cloning of a Laccase specific gene from the White-Rot Fungus *Coriolopsis polyzona* MUCL 38443**
PİNAR O., TETİK B., TAMERLER C., KARATAŞ A.
The 5th Congress of European Microbiologists (FEMS 2013), Leipzig, Germany, 21 - 25 July 2013
- XXVI. **Cloning, overexpression and characterization of the *Bacillus* phytase encoding gene, *YMNphyA*, in *E. coli***
SAVAŞAN SÖĞÜT M., GÖKÇE A., ÖZTÜRK Y., MANDACI S., ÇAYIR E., KARASU D., PİNAR O., ÖZTÜRK H. Ü., ÖZTÜRK N., DENİZCİ A. A., et al.
European Biotechnology Congress 2013, Bratislava, Slovakia, 16 - 18 May 2013
- XXVII. **Identification of laccase gene-specific sequences from the white-rot fungus *Coriolopsis polyzona* MUCL 38443**
PİNAR O., TETİK B., VARIŞLI E., TAMERLER C., KARATAŞ A.
15th European Congress on Biotechnology, İstanbul, Turkey, 23 - 26 September 2012
- XXVIII. **Beyaz Çürükçül Küf Mantarı *Coriolopsis polyzona* MUCL 38443'den Lakkaza Özgü Sekanslarının Tanımlanması**

PİNAR O., TETİK B., VARIŞLI E., TAMERLER C., KARATAŞ A.

17. Ulusal Biyoteknoloji Kongresi, İstanbul, Turkey, 23 - 26 September 2012

XXIX. Production of industrial enzymes for feed industry

SAVAŞAN SÖĞÜT M., ÖZTÜRK N., ÖZTÜRK H. Ü., PİNAR O., İPEK F. M., ÇAYIR E., GÖKÇE A., KARASU D., C ÖZTÜRK D., ÖZTÜRK Y., et al.

15th European Congress on Biotechnology, İstanbul, Turkey, 23 - 26 September 2012

XXX. The effects of insertional inactivation of Spo0A and AbrB genes on the expresion of ywfH gene in B. subtilis

PİNAR O., ÜNLÜ E. C., İRİGÜL Ö., KURT GÜR G., KÖROĞLU T. E., KARATAŞ A.

XII. International Congress of Bacteriology and Applied Microbiology, 5 - 09 August 2008

XXXI. Optimization of Pycnoporus sanguineus Methylophilic Yeast lcc1 gene Expression in Pichia pastoris

KURT GÜR G., PİNAR O., KARATAŞ A., TAMERLER C.

XII. International Congress of Bacteriology and Applied Microbiology, İstanbul, Turkey, 5 - 09 August 2008

XXXII. The effects of codY regulatory gene on the expression profile of B. subtilis

TAYRAN H., PİNAR O., İRİGÜL Ö., KURT GÜR G., KÖROĞLU T. E., KARATAŞ A.

XII. International Congress of Bacteriology and Applied Microbiology, 5 - 09 August 2008

XXXIII. The Effect of yvfI Null Mutation on the Expression of ywfH gene in Bacillus subtilis

PİNAR O., KURT GÜR G., İRİGÜL Ö., KARATAŞ A.

33rd FEBS Congress 11th IUBMB Conference, 28 June - 03 July 2008

Supported Projects

Kazan D., Pinar O., Büyük E., Project Supported by Higher Education Institutions, Petrol Çamurundan İzole Edilen Cryptococcus Türünden Üretilen Lipaz Enziminin Safılaştırılması, Karakterizasyonu Ve İlaç Endüstrisi İçin Kullanılabilirliğinin İncelenmesi, 2018 - 2022

Pinar O., Project Supported by Higher Education Institutions, Cryptococcus albidus D24'den Atık Otomotiv Yağı kullanılarak Lipaz Üretimi, 2018 - 2020

Kazan D., Sariyar Akbulut B., Pinar O., TUBITAK Project, Biosimilar Ranibizumab: Its domestic development and production, 2016 - 2020

Kazan D., TUBITAK Project, Fındık Zürafundan Enzimatik Hidroliz İle Fermente Edilebilen Şekerlerin Üretimi, 2013 - 2014

Karataş A., Pinar O., Project Supported by Higher Education Institutions, Coriolopsis Polyzona'dan Lakkaz Cdna'larının Klonlanması, Pichia Pastoris Suşunda İfade Edilmesi Ve Rekombinant Lakkazların Karakterizasyonu, 2012 - 2013

Karataş A., EU Supported Other Project, Development And Characterization Of New Biocatalists By Rational And Random Mutagenesis Of Laccases From Different Sources, 2008 - 2013

Sarıyar Akbulut B., Mandacı S., Pinar O., Kazan D., TUBITAK Project, Production of Industrial Enzymes For Feed Industry, 2008 - 2012

Patent

Pinar O., Kazan D., Yem katkısı olarak kullanılmak üzere ksilanaz enzimi üretimi ve bu enzimden toz preparat ve kaplanmış ürün elde edilmesi yöntemi, Patent, CHAPTER A Human Needs, The Invention Registration Number: 2014 04579 , Standard Registration, 2019

Metrics

Publication: 51

Citation (WoS): 82

Citation (Scopus): 85

H-Index (WoS): 6

H-Index (Scopus): 6

Awards

Pinar O., Teknoloji Geliştirme Ödülü, Tübitak, June 2013

Non Academic Experience

TÜBİTAK MARMARA ARAŞTIRMA MERKEZİ

İstanbul Büyükşehir Belediyesi-Çevre Koruma Daire Başkanlığı