



ORKUN PINAR, Ph.D.

CURRICULUM VITAE

PERSONAL INFORMATION

Working Address : ¹Marmara University Goztepe Campus, Faculty of Engineering, Department of Bioengineering, 34722, Istanbul, Turkey.
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Birth date and place : 19.06.1984, İzmir, Turkey.

Nationality : Turkish

AREA(S) of INTEREST

Microbial genetics, bacteriology, recombinant DNA technology, microbial expression systems, enzyme production, biopolymer production, fermentation technologies, bioprocess design.

LANGUAGES

- Turkish (native)
- English (proficient)

EDUCATION

- **2009-2017**, İstanbul Technical University (İstanbul-Turkey): Molecular Biology, Genetics and Biotechnology Ph.D. Programme, Ph.D.
- **2006-2009**, İstanbul Technical University (İstanbul-Turkey): Molecular Biology, Genetics and Biotechnology Master Programme, M.Sc.
- **2004-2014**, Anadolu University (Open University): Faculty of Business Administration, Department of Business Administration, B.Sc.
- **2002-2006**, Ege University (İzmir-Turkey): Faculty of Engineering, Department of Bioengineering, B.Sc.

WORK EXPERIENCES

- **May 2019 – Still**, BacPolyZyme Bioengineering Ltd. Şti., Partner.
- **March 2011 - Still**, Marmara University, Faculty of Engineering, Bioengineering Department, Research assistant.
- **January 2009 - February 2011**, TÜBİTAK MARMARA RESEARCH CENTER, Genetic Engineering and Biotechnology Institute (GEBİ), Enzyme and Microorganism Molecular Genetics Laboratory, Researcher.
- **July 2007 - January 2009**, İstanbul Metropolitan Municipality - İstanbul Technical University Collaboration, “Microbial analysis of sea water” team (İstanbul coasts), Researcher.
- **June 2005 - July 2005**, Anadolu Efes Beverage Group, İzmir Efes Pilsen Factory, Trainee.

PRACTICAL LABORATORY SKILLS

- Recombinant DNA Technology (Cloning, PCR techniques, RACE etc.)
- Fermentation Technologies
- Homologous/Heterologous Expression Systems
- Native/Recombinant Enzyme Production
- DNA and Protein Extraction Techniques
- Protein Purification Techniques
- Bioprocess Design
- Spectrophotometric Techniques (UV spectroscopy etc.)
- Electrophoresis (SDS/NATIVE-PAGE, Agarose Gel Electrophoresis etc.)
- 16S rRNA Gene Sequencing for Bacterial Identification

PATENT

- **Patent:** "Production of xylanase enzyme to be used as feed additives and the methods of obtaining powdered and coated products of this enzyme", Turkey, 2014/04579.

SCIENTIFIC PAPERS

- Sayar, N.A., **Pinar, O.**, Kazan, D. and Sayar, A.A., 2019. Bioethanol Production from Turkish Hazelnut Husk Process Design and Economic Evaluation. Waste and Biomass Valorization, pp.1-15.
- Özgören, T., **Pinar, O.**, Bozdağ, G., Denizci, A.A., Gündüz, O., Hatır, P.Ç. and Kazan, D., 2018. Assessment of poly (3-hydroxybutyrate) synthesis from a novel obligate alkaliphilic *Bacillus marmarensis* and generation of its composite scaffold via electrospinning. International Journal of Biological Macromolecules, 119, pp.982-991.
- Sahin, Y.M., Su, S., Ozbek, B., Yücel, S., **Pinar, O.**, Kazan, D., Oktar, F.N., Ekren, N. and Gunduz, O., 2018. Production and characterization of electrospun fish sarcoplasmic protein based nanofibers. Journal of Food Engineering, 222, pp.54-62.
- Sayar, N.A., Kazan, D., **Pinar, O.**, Akbulut, B.S. and Sayar, A.A., 2018. Retro-techno-economic evaluation of acetic acid production using cotton stalk as feedstock. Journal of Material Cycles and Waste Management, 20(4), pp.2077-2088.
- **Pinar, O.**, Karaosmanoğlu, K., Sayar, N.A., Kula, C., Kazan, D. and Sayar, A.A., 2017. Assessment of hazelnut husk as a lignocellulosic feedstock for the production of fermentable sugars and lignocellulolytic enzymes. 3 Biotech, 7(6), pp.367.
- **Pinar, O.**, Behar, C.T. and Karataş, A., 2017. Heterologous expression and characterization of a high redox potential laccase from *Corioloopsis polyzona* MUCL 38443. Turkish Journal of Biology, 41(2), pp.278-291.
- Bal, E., **Pinar, O.**, Kazan, D., Öztürk, H. U. and Sayar, A. A. (2016). Immobilization of α -amylase from *Bacillus subtilis* SDP1 isolated from the Rhizosphere of Acacia cyanophylla Lindey. Electronic Journal of Biology, 12(2).

BOOK CHAPTER

- Kazan, D., **Pinar, O.** Bölüm 14: Endüstriyel Biyoteknoloji ve Biyoyakıtlar, Güncel Biyoteknoloji ve Uygulamaları (2017), Erciyes Üniversitesi Yayınları, ISBN: 978-605-67442-0-4. (in Turkish).

ORAL PRESENTATION

- Beyaz Çürükçül Küf Mantarı *Corioloopsis polyzona* MUCL 38443'den Lakkaza Özgü Sekansların Tanımlanması", 17th National Biotechnology Congress, 23-26 September 2012, İstanbul, Turkey (in Turkish).

AWARD

- **"Technology Development Award"** with "Production of Industrial Enzymes for Feed Industry" Project. TUBITAK Marmara Research Center in the context of Research and Support Awards.

THESES

- **Ph.D. Thesis:** "Cloning of the Laccase cDNA from *Corioloropsis polyzona* MUCL 38443 and Expression in *Pichia Pastoris*."
- **MSc. Thesis:** "The Effect of Global Control Elements on the Expression of ywfH Gene in *B. subtilis*."
- **BSc. Thesis:** "The Identification of the Taxonomy of Cyanobacteria and Micro Algae by Molecular Biology Methods."

POSTERS AND ABSTRACTS

- Esra Büyük, H. Tansel Yalçın, **Orkun Pinar**, Dilek Kazan, "Purification and characterization of lipase produced by *Cryptococcus* strain isolated from petroleum sludge: Assessment of its application in industry area", 2nd International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2019), 28-29 June 2019, Ankara, Turkey.
- Uras, A., **Pinar, O.**, Büyük, E., Buldağ, Ö., Topal, H., Yildiz D.B., Yalçın, H.T., Kazan, D., "Lipase production from *Cryptococcus albidus* D24 using disposed automotive oil", 18th European Congress On Biotechnology, 1-4 July, 2018, Geneva, Switzerland.
- Bozdağ, G., Özgoren, T., **Pinar, O.**, Gündüz, O., Kazan, D., "Development of a promising electrospun bacterial cellulose-PHB scaffold for tissue engineering", 18th European Congress On Biotechnology, 1-4 July 2018, Geneva, Switzerland.
- Uras, A., **Pinar, O.**, Sayar, N.A., Kazan, D., Sayar, A. A. "Growth Medium Optimization of *Cryptococcus albidus* D24 lipase by statistical design of experiments", 42nd FEBS Congress, 10-14 September 2017, Jerusalem, Israel.
- Ghirlanda, G., Ozkan, B., **Pinar, O.** and Kazan, C., "Engineering Antiviral Lectins by Computer-Guided Design and Evolution", 31st Annual Symposium of The Protein Society, 24-27 July 2017, Montreal, Canada.
- T. Ozgoren, B. Sirin, Ç. Çimenoglu, **O. Pinar**, A. A. Denizci, Kazan D. "Utilisation of poly(3-hydroxybutyrate) from *Bacillus marmarensis* GMBE 72T (DSM21297) as scaffold", 41st FEBS Congress (The FEBS Journal 283), Molecular and Systems Biology for a Better Life, 3-8 September, 2016, Ephesus, Kuşadası, Aydın, Turkey.
- Ecem Kaplan Çoban, Ceren Gençoğlu, Doğançan Kirman, **Orkun Pinar**, Dilek Kazan, Ahmet Alp Sayar. "Assessment of the effects of medium composition on growth, lipid accumulation and lipid profile of *Chlorella vulgaris* as a biodiesel feedstock", 4th International Conference on Renewable Energy Research and Applications, 22-25 October 2015, Palermo, Italy.
- Tugba Ozgoren, **Orkun Pinar**, Aziz Akın Denizci, Guldem Utkan, Dilek Kazan. "Effect of different carbon sources on the production of poly (3-hydroxybutyrate) from *Bacillus marmarensis* GMBE 72T". VIIth International Bioengineering Congress (BEC 2015), 19-21 October 2015, İzmir, Turkey.
- Zeynep Yılmaz, **Orkun Pinar**, Nihat Alpogu Sayar, Dilek Kazan. "Optimization of process parameters for enzymatic hydrolysis of hazelnut husk", VIIth International Bioengineering Congress (BEC 2015), 19-21 October 2015, İzmir, Turkey.
- Ozgoren T., **Pinar O.**, Denizci A.A., Utkan G., Kazan D. "Response of novel *Bacillus marmarensis* GMBE 72T to extreme conditions: Poly (3- hydroxybutyrate)", 40th FEBS Congress, 4-9 July 2015, Berlin, Germany.
- **Orkun Pinar**, Başak Koçhan, Nihat Alpogu Sayar, Kübra Karaosmanoğlu, Dilek Kazan. "Enzyme mixture production from *Pycnoporus sanguineus* DMSZ 3024 using a lignocellulosic waste, Hazelnut husk: A case study for laccase and cellulose", 16th European Congress on Biotechnology, 13-16 July 2014, Edinburgh, Scotland.
- Ipek, FM., **Pinar, O.** Sogut, MS., Karasu, D., Cayir, E., Ozturk, N.C., Denizci, AA., Ozturk, DC., Kazan, D. and Mandaci, S., "Cloning and Expression of xynA Gene from Xylanase Secreting *Bacillus pumilus* YMNX25", International Enzymes for Biocatalysis Workshop, Arel University, 03-05 June 2014, İstanbul, Turkey.

POSTERS AND ABSTRACTS

- Kübra Karaosmanoğlu, **Orkun Pinar**, Nihat A. Sayar, Dilek Kazan. Hydrolysis of Hazelnut Husk by Using Commercial Enzymes for the Production of Fermentable Sugar, VIth International Bioengineering Congress (IBEC 2013), 12-15 October 2013, Kuşadası, Aydın, Turkey.
- Tetik, B., Gür-Kurt, G., **Pinar, O.**, Tamerler, C., Yazgan-Karatas, A. Site-directed mutation on T1 site of a *Pycnoporus sanguineus* laccase, The 5th Congress of European Microbiologists (FEMS 2013), 21-25 July 2013, Leipzig, Germany.
- **Pinar, O.**, Tetik, B., Kurt-Gur, G., Tamerler, C., Yazgan-Karatas, A. "Isolation and Cloning of a Laccase specific gene from the White-Rot Fungus *Coriopsis polyzona* MUCL 38443", The 5th Congress of European Microbiologists (FEMS 2013), 21-25 July 2013, Leipzig, Germany.
- Melis Savasan Sogut, Abdulmecit Gokce, Yavuz Ozturk, Sevnur Mandaci, Ebru Cayir, Deniz Karasu, **Orkun Pinar**, H Umit Ozturk, Nurcin Celik Ozturk, A Akin Denizci, Dilek Coskuner Ozturk. "Cloning, overexpression and characterization of the *Bacillus* phytase encoding gene, YMNphyA, in *E. coli*". European Biotechnology Congress 2013 (Current Opinion in Biotechnology, Volume 24, p 95), 16-18 May 2013, Bratislava, Slovakia.
- **Pinar, O.**, Tetik, B., Varışlı, E., Tamerler, C., Yazgan-Karatas, A. 2012. "Beyaz Çürükçül Küf Mantarı *Coriopsis polyzona* MUCL 38443'den Lakkaza Özgü Sekansların Tanımlanması", 17th National Biotechnology Congress, 23-26 September 2012, İstanbul, Turkey (in Turkish).
- Melis S. Sogut, Nurcin C. Ozturk, H. Umit Ozturk, **Orkun Pinar**, Fatih M. Ipek, Ebru Cayir, Abdulmecit Gokce, Deniz Karasu, Dilek C. Ozturk, Yavuz Ozturk, A. Akin Denizci, Bengu Ozturk, Banu Bahar, Naze G. Avci, Burak Ayan, Dilek Kazan, Yonca A. Duman, Sayit Sargin, Sevket Karacanli, Cengizhan Mizrak, A. Ugur Catli, Kamil Kucukyilmaz, Hatice K. Guvenmez, Burhan Arıkan, Mehmet Bozkurt, Ferda Seyhan, Berna S. Akbulut, A. Altan Erarslan, Gaye Ongen, Sadik Dincer, Engin Yenice, Sevnur Mandaci. "Production of industrial enzymes for feed industry", 15th European Congress on Biotechnology (New Biotechnology, Volume 29), 23-26 September 2012, İstanbul, Turkey.
- **Pinar, O.**, Tetik, B., Varışlı, E., Tamerler, C., Yazgan-Karatas, A. "Identification of laccase gene-specific sequences from the white-rot fungus *Coriopsis polyzona* MUCL 38443", 15th European Congress on Biotechnology (New Biotechnology, Volume 29), 23-26 September 2012, İstanbul, Turkey.
- Tayran, H., **Pinar, O.**, İrigül, Ö., Gür, K., G., Köroğlu, T., E., Karataş, Y., A. "The effects of *codY* regulatory gene on the expression profile of *B. subtilis*", XII. International Congress of Bacteriology and Applied Microbiology, International Unions of Microbiological Society (IUMS), 5-9 August 2008, İstanbul, Turkey.
- **Pinar, O.**, Ünlü, E., C., İrigül, Ö., Gür, K., G., Köroğlu, T., E., Karataş, Y., A., "The effects of insertional inactivation of *Spo0A* and *AbrB* genes on the expression of *ywfH* gene in *B. subtilis*", XII. International Congress of Bacteriology and Applied Microbiology, International Unions of Microbiological Society (IUMS), 5-9 August 2008, İstanbul, Turkey.
- Gür, K., G., **Pinar, O.**, Karataş, Y., A., Tamerler, C., "Optimization of *Pycnoporus sanguineus* Methylophilic Yeast *lcc1* gene Expression in *Pichia pastoris*", XII. International Congress of Bacteriology and Applied Microbiology, International Unions of Microbiological Society (IUMS), 5-9 August 2008, İstanbul, Turkey.
- **Pinar, O.**, Gür, K., G., İrigül, Ö., Karataş, Y., A. "The Effect of *yvfI* Null Mutation on the Expression of *ywfH* gene in *Bacillus subtilis*", 33rd FEBS Congress & 11th IUBMB Conference, 28 June-3 July 2008, Athens, Greece.

SELECTED CONGRESS, COURSES AND SYMPOSIUM ATTANDANCE

- Proteomics Bioinformatics Workshop and Congress attendance for “X Annual Congress of the European Proteomics Association, 22-25 June 2016, Istanbul, Turkey.
- Workshop for “New Horizons in Biocatalysis for Biomaterials (Biocat-Mat), 8-12 April 2014, İzmir, Turkey.
- Course on SuperPro Designer and SchedulePro, 24-25 October 2013, TU Delft, Delft, Netherland.
- RNA based Molecular Methods Workshop, September 2011, Boğaziçi University-Istanbul Technical University, İstanbul, TURKEY.
- EMBO Young Scientist Forum, Boğaziçi University, 20-22 February 2008, İstanbul, Turkey.
- Gene Therapy Symposium”, Yeditepe University, 2-3 Kasım 2007, İstanbul, Turkey.

COURSES in UNIVERSITY

- BIOE2002.1/ BIOE202.1/ BIOE2102.1 - Molecular Biology and Genetics (Department of Bioengineering, Marmara University)
- BIOE401/BIOE4001 - Recombinant DNA Technology (Department of Bioengineering, Marmara University)
- BIOE4023 - Protein Engineering (Department of Bioengineering, Marmara University)
- GBM 422 - Industrial Genetics and Bioengineering II (Genetics and Bioengineering Department, Okan University)

GIVEN TRAINING and LABORATORY ASSISTANCE

- “General Biology Laboratory”, “Microbiology for Bioengineers Laboratory”, “Molecular Biology and Genetics Laboratory”, “Biochemistry”, “Bioprocess Design Laboratory” and “Bioengineering Laboratory I-II”. March 2011-2016, Marmara University, Faculty of Engineering, Department of Bioengineering, Laboratory Assistant.
- “Molecular Genetics Techniques: Site Directed Mutagenesis, DNA and Protein Applications”, 24-28 August 2009, TÜBİTAK MARMARA RESEARCH CENTER, Genetic Engineering and Biotechnology Institute (GEBI), Enzyme and Microorganism Molecular Genetics Laboratory.
- “Microorganism Molecular Genetics Applications”, 05-09 July 2010, TÜBİTAK MARMARA RESEARCH CENTER, Genetic Engineering and Biotechnology Institute (GEBI), Enzyme and Microorganism Molecular Genetics Laboratory. Laboratory Assistant.

COMPUTER SKILLS

- SuperPro Designer
- Bioinformatic Tools
- Microsoft Office