

ÖZAL MUTLU

ASST. PROF.

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Learning Knowledge

Doctorate
2009 - 2015

Marmara University, Institute for Graduate Studies in Pure and Applied Sciences,
Biyoloji (Dr), Turkey

Postgraduate
2007 - 2009

Yıldız Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Biyomühendislik (Dr), Turkey

Undergraduate
2002 - 2009

Abant İzzet Baysal Üniversitesi, Fen-Edebiyat Fakültesi, Biyoloji Bölümü, Turkey

Foreign Languages

English, C2 Mastery

Academic Titles / Tasks

Assistant Professor
2017 - Continues

Marmara University, Faculty Of Arts And Sciences, Biology

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- 1. Identification of benzamide inhibitors of histone deacetylase 1 from Babesia and Theileria species via high-throughput virtual screening and molecular dynamics simulations**
Gurboga M., Kugu G., Kamberaj H., MUTLU Ö.
PARASITOLOGY RESEARCH, 2021 (Journal Indexed in SCI)
- 2. Identification of potential inhibitors of Trichomonas vaginalis iron-containing superoxide dismutase by computer-aided drug design approach**
Kocer S., MUTLU Ö.
STRUCTURAL CHEMISTRY, 2021 (Journal Indexed in SCI)
- 3. Discovery and evaluation of inhibitory activity and mechanism of arylcoumarin derivatives on Theileria annulata enolase by in vitro and molecular docking studies**
Yakarsonmez S., Daniş Ö., Mutlu Ö., Topuzoğulları M., Sariyer E., Yuce-Dursun B., Turgut-Balik D.
MOLECULAR DIVERSITY, vol.24, no.4, pp.1149-1164, 2020 (Journal Indexed in SCI)
- 4. Evaluation of the potency of FDA-approved drugs on wild type and mutant SARS-CoV-2 helicase (Nsp13)**
Ugurel O., Mutlu Ö., Sariyer E., Kocer S., Ugurel E., Inci T., Ata O., Turgut-Balik D.
INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES, vol.163, pp.1687-1696, 2020 (Journal Indexed in SCI)
- 5. Preparation and antimicrobial properties of LL-37 peptide immobilized lignin/caprolactone polymer**

film

OGAN A., Yuce-Dursun B., Abdullah D., Beyler-Cigil A., KAHRAMAN M. V. , ÇAĞLAYAN P., BİRBİR M., MUTLU Ö., GÜLSOY N.

POLYMERS FOR ADVANCED TECHNOLOGIES, vol.31, no.10, pp.2222-2228, 2020 (Journal Indexed in SCI)

6. **Computational characterisation of *Toxoplasma gondii* FabG (3-oxoacyl-[acyl-carrier-protein] reductase): a combined virtual screening and all-atom molecular dynamics simulation study**
Aygün C., MUTLU Ö.
JOURNAL OF BIOMOLECULAR STRUCTURE & DYNAMICS, 2020 (Journal Indexed in SCI)
7. **Targeting SARS-CoV-2 Nsp12/Nsp8 interaction interface with approved and investigational drugs: an in silico structure-based approach**
Mutlu Ö., Ugurel O., Sariyer E., Ata O., İnci T., Ugurel E., Kocer S., Turgut-Balik D.
JOURNAL OF BIOMOLECULAR STRUCTURE & DYNAMICS, 2020 (Journal Indexed in SCI)
8. **Assessment of mitogen-activated protein kinases as therapeutic targets for the treatment of babesiosis and theileriosis**
MUTLU Ö.
TURKISH JOURNAL OF VETERINARY & ANIMAL SCIENCES, vol.44, no.3, pp.702-713, 2020 (Journal Indexed in SCI)
9. **Experimentation and analysis of powder injection molded Ti10Nb10Zr alloy: a promising candidate for electrochemical and biomedical application**
Yemisci I., MUTLU Ö., GÜLSOY N., Kunal K., Atre S., GÜLSOY H. Ö.
JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T, vol.8, no.6, pp.5233-5245, 2019 (Journal Indexed in SCI)
10. **Novel hydroxyapatite/graphene oxide/collagen bioactive composite coating on Ti16Nb alloys by electrodeposition**
Yılmaz E., Cakiroglu B., Gokce A., Findik F., GÜLSOY H. Ö. , GÜLSOY N., MUTLU Ö., Ozacar M.
MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS, vol.101, pp.292-305, 2019 (Journal Indexed in SCI)
11. **Functional analyses of dipeptide and pentapeptide insertions on *Theileria annulata* enolase by site-directed mutagenesis and in silico approaches**
Yakarsonmez S., Cengiz E. C. , MUTLU Ö., Turgut-Balik D.
BIOCHIMICA ET BIOPHYSICA ACTA-PROTEINS AND PROTEOMICS, vol.1867, pp.732-739, 2019 (Journal Indexed in SCI)
12. **Inhibitory effects of arylcoumarin derivatives on *Bacteroides fragilis* D-lactate dehydrogenase**
Ugurel E., Danış Ö., Mutlu Ö., Yuce-Dursun B., Gunduz C., Turgut-Balik D.
INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES, vol.127, pp.197-203, 2019 (Journal Indexed in SCI)
13. **Computational insight into the phthalocyanine-DNA binding via docking and molecular dynamics simulations**
Ozalp L., Erdem S. S. , Yuce-Dursun B., MUTLU Ö., Ozbil M.
COMPUTATIONAL BIOLOGY AND CHEMISTRY, vol.77, pp.87-96, 2018 (Journal Indexed in SCI)
14. **Introduction of novel thermostable alpha-amylases from genus *Anoxybacillus* and proposing to group the Bacillaceae related alpha-amylases under five individual GH13 subfamilies**
CİHAN A. Ç. , Yıldız E. D. , Sahin E., MUTLU Ö.
WORLD JOURNAL OF MICROBIOLOGY & BIOTECHNOLOGY, vol.34, no.7, 2018 (Journal Indexed in SCI)
15. **Functional and structural characterization of the pentapeptide insertion of *Theileria annulata* lactate dehydrogenase by site-directed mutagenesis, comparative modeling and molecular dynamics simulations**
ERDEMİR ÜSTÜNDAĞ A., MUTLU Ö.
JOURNAL OF MOLECULAR GRAPHICS & MODELLING, vol.74, pp.344-351, 2017 (Journal Indexed in SCI)
16. **Comprehensive structural analysis of the open and closed conformations of *Theileria annulata* enolase by molecular modelling and docking**
MUTLU Ö., Yakarsonmez S., Sariyer E., DANIŞ Ö., Yuce-Dursun B., Topuzogullari M., AKBULUT E., Turgut-Balik D.

COMPUTATIONAL BIOLOGY AND CHEMISTRY, vol.64, pp.134-144, 2016 (Journal Indexed in SCI)

17. **Biochemical and in silico Characterization of Recombinant L-Lactate Dehydrogenase of *Theileria annulata***
Nural B., ERDEMİR ÜSTÜNDAĞ A., MUTLU Ö., Yakarsonmez S., DANIŞ Ö., TOPUZOĞULLARI M., Turgut-Balik D.
MOLECULAR BIOTECHNOLOGY, vol.58, no.4, pp.256-267, 2016 (Journal Indexed in SCI)
18. **Effect of Zr, Nb and Ti addition on injection molded 316L stainless steel for bio-applications: Mechanical, electrochemical and biocompatibility properties**
Gülsoy H. Ö. , Pazarlioglu S. S. , Gülsoy N., Gundede B., Mutlu Ö.
JOURNAL OF THE MECHANICAL BEHAVIOR OF BIOMEDICAL MATERIALS, vol.51, pp.215-224, 2015 (Journal Indexed in SCI)
19. **GENOTOXIC EFFECTS OF BORIC ACID AND BORAX IN ZEBRAFISH, DANIO RERIO USING ALKALINE COMET ASSAY**
GÜLSOY N., Yavas C., MUTLU Ö.
EXCLI JOURNAL, vol.14, pp.890-899, 2015 (Journal Indexed in SCI)
20. **In Silico Molecular Modeling and Docking Studies on the Leishmanial Tryparedoxin Peroxidase**
Mutlu O.
BRAZILIAN ARCHIVES OF BIOLOGY AND TECHNOLOGY, vol.57, no.2, pp.244-252, 2014 (Journal Indexed in SCI)
21. **Single Mutation in Shine-Dalgarno-Like Sequence Present in the Amino Terminal of Lactate Dehydrogenase of Plasmodium Effects the Production of an Eukaryotic Protein Expressed in a Prokaryotic System**
ÇİÇEK M., MUTLU Ö., ERDEMİR ÜSTÜNDAĞ A., Ozkan E., Saricay Y., Turgut-Balik D.
MOLECULAR BIOTECHNOLOGY, vol.54, no.2, pp.602-608, 2013 (Journal Indexed in SCI)
22. **Molecular modeling, structural analysis and identification of ligand binding sites of trypanothione reductase from *Leishmania mexicana***
Mutlu O.
JOURNAL OF VECTOR BORNE DISEASES, vol.50, no.1, pp.38-44, 2013 (Journal Indexed in SCI)
23. **Kinetic Analysis of the Amino Terminal End of Active Site Loop of Lactate Deyhydrogenase from *Plasmodium Vivax***
MUTLU Ö., Turgut-Balik D.
BALKAN MEDICAL JOURNAL, vol.29, no.4, pp.364-369, 2012 (Journal Indexed in SCI)

Refereed Congress / Symposium Publications in Proceedings

1. **Investigation of *Bacteroides fragilis* Enolase Inhibitors Using in silico Methods**
Uğurel E., YAKARSÖNMEZ S., SARIYER E., MUTLU Ö., UĞUREL O. M. , BALIK D.
Eurasian Congress of Molecular Biotechnology (ECOMB 2019), Trabzon, Turkey, 19 - 21 September 2019
2. ***Bacteroides Fragillis* Enolaz Inhibitorü Belirlenmesine Yönelik Sanal Ligand Tarama Ve Moleküler Yanaştırma Çalışmaları**
Uğurel E., YAKARSÖNMEZ S., SARIYER E., MUTLU Ö., UĞUREL O. M. , BALIK D.
31. Ulusal Kimya Kongresi, İstanbul, Turkey, 10 - 13 September 2019
3. **Comparative Modelling and Molecular Dynamic Simulation of *Bacteriodes fragillis* Enolase**
Uğurel E., YAKARSÖNMEZ S., SARIYER E., MUTLU Ö., UĞUREL O. M. , BALIK D.
6th International BAU Drug Design Congress, Istanbul, Turkey, 13 - 15 December 2018
4. **Cloning, heterologous expression and purification of *Toxoplasma gondii* FabG (3-oxoacyl-[acyl-carrier-protein] reductase) enzyme**
Aygün C., YAKARSÖNMEZ S., MUTLU Ö.
1.Euroasia Biochemical Approaches Technologies Congress (EBAT 2018), Antalya, Turkey, 27 - 30 October 2018
5. **Structural modelling and molecular docking analysis of *Trichomonas vaginalis* iron-containing superoxide dismutase towards computer-aided drug design**
YAKARSÖNMEZ S., MUTLU Ö.

1. Euroasia Biochemical Approaches Technologies Congress (EBAT 2018), Antalya, Turkey, 27 - 30 October 2018
6. **Trichomonas vaginalis Tedavisinde in silico Analizlerle Yeni Aday İlaçların Belirlenmesi İçin 14-3-3 Proteininin Modellenmesi**
YAKARSÖNMEZ S., MUTLU Ö., BALIK D.
19. Uluslararası Katılımlı Ulusal Biyoteknoloji Kongresi, Eskişehir, 1 - 3 Aralık 2017., Turkey, 1 - 03 December 2017
7. **Molecular modelling and docking studies on 3-oxoacyl-[acyl-carrier-protein] reductase enzyme (FabG) of Toxoplasma gondii**
Aygün C., Mutlu Ö., Danış Ö.
The International Symposium on Chemistry via Computation, Applications on Molecular Motors, İstanbul, Turkey, 30 October 2017
8. **In silico Analyses of both Wild Type and Mutant TaPIN1 towards New Drug Discovery**
Spahi S., SARIYER E., MUTLU Ö., YAKARSÖNMEZ S., BALIK D.
5th International BAU-Drug Design Congress, Istanbul, Turkey, 19 - 21 October 2017
9. **Molecular docking analyses of coumarin derivatives as Theileria annulata enolase inhibitors**
Yakarsönmez S., Mutlu Ö., Danış Ö., Balık D.
5. International BAU Drug Design Congress, İstanbul, Turkey, 19 - 21 October 2017
10. **Analysis of the interaction interface of the possible protein kinase CK2-alpha 1 (CK2A1)-histone deacetylase 1/2 (HDAC1/2) complexes in Trypanosoma brucei by molecular dynamics**
MUTLU Ö., KAMBERAJ H.
15th International Congress of Protistology, 30 July - 04 August 2017
11. **Mitogen-activated protein kinases (MAPKs) as therapeutic targets for the treatment of Babesiosis and Theileriosis**
MUTLU Ö.
15th International Congress of Protistology, 30 July - 04 August 2017
12. **Functional classification of proteins having role in cellular response to nanoparticles: A proteome-wide and bioinformatics approach**
MUTLU Ö., GÜLSOY N.
1st International Conference of Applied Sciences, Engineering and Mathematics (ICASEM 2017), 5 - 07 May 2017
13. **Powder Injection Molded of Ti10Nb10Zr Alloy for Bio applications Electrochemical Properties and Biocompatibility**
yemişçi İ., GÜLSOY H. Ö., MUTLU Ö., GÜLSOY N.
worldPM2016, 9 - 13 October 2016
14. **Covalent immobilization of LL 37 onto lignin caprolactone based polymer and investigation of its antimicrobial activities**
OGAN A., YÜCE DURSUN B., Farah D. A., Ash B. C., ÇAĞLAYAN P., MUTLU Ö., KAHRAMAN M. V., GÜLSOY N., BİRBİR M.
FEBS, 3 - 08 September 2016
15. **Comprehensive computational analysis of Theileria annulata enolase by comparative modeling and docking**
Mutlu Ö., Yakarsönmez S., Sariyer E., Danış Ö., Yüce Dursun B., Topuzoğulları M., Akbulut E., Balık D.
17th European Congress on Biotechnology, Krakow, Poland, 3 - 06 July 2016, pp.171
16. **Structural characterization of the Trypanosoma brucei CK2A1 HDAC1 HDAC2 interactions by molecular modeling and protein protein docking**
MUTLU Ö.
Belgrade Bioinformatics 2016 Conference, 20 - 24 June 2016
17. **Protein interaction network construction and analysis using the quantitative proteomics data**
MUTLU Ö., GÜLSOY N.
Belgrade Bioinformatics 2016 Conference, Belgrad, Montenegro, 20 - 24 June 2016, pp.127
18. **Homology Modelling of Lactate Dehydrogenase from Theileria annulata**
NURAL B., ERDEMİR A., MUTLU Ö., BALIK D.
3rd International BAU-Drug Design Congress, 1 - 03 October 2015

19. **LL 37 Peptidinin Lignin Kaprolakton Polimerine İmmobilizasyonu ve Antimikrobiyal Özelliğinin İncelenmesi**
FARAH D., OGAN A., YÜCE DURSUN B., BEYLER ÇİĞİL A., KAHRAMAN M. V. , MUTLU Ö., GÜLSOY N., ÇAĞLAYAN P., BİRBİR M.
27. Ulusal Kimya Kongresi, Çanakkale, Turkey, 23 - 28 August 2015
20. **S MA057 LL 37 PEPTİDİNİN LİGNİN KAPROLAKTON POLİMERİNE İMMOBİLİZASYONU VE ANTİMİKROBİYAL ÖZELLİĞİNİN İNCELENMESİ**
DEKA A. F. , OGAN A., BEYLER ÇİĞİL A., KAHRAMAN M. V. , MUTLU Ö., YÜCE DURSUN B., GÜLSOY N., ÇAĞLAYAN P., BİRBİR M.
27. Ulusal Kimya Kongresi 23-28 Agustus 2015, Turkey, 23 - 28 August 2015
21. **Enhancing the corrosion resistance and biocompatibility of injection molded 316L stainless steel for Bio applications**
PAZARLIOĞLU S. S. , BÜŞRA G., MUTLU Ö., GÜLSOY N., GÜLSOY H. Ö.
16th International Scientific Congress, CNIC 2015, 22 - 24 June 2015
22. **Theileria annulata Enolaz Enziminin Uygun Stabilizatörler Kullanılarak Depolama Koşullarının Belirlenmesi**
YAKARSÖNMEZ S., DANIŞ Ö., MUTLU Ö., YÜCE DURSUN B., AKBULUT E., BALIK D.
Ulusal Moleküler Biyoloji ve Biyoteknoloji Kongresi, Turkey, 21 - 24 August 2015
23. **K7 ve K15 Kumarin Türevlerinin Bacteroides fragilis in D Laktat Dehidrogenazı Üzerine Olan Etkilerinin In silico ve Spektral Analizi**
UĞUREL E., DANIŞ Ö., MUTLU Ö., YÜCE DURSUN B., GÜNDÜZ C., BALIK D.
Ulusal Moleküler Biyoloji ve Biyoteknoloji Kongresi, Turkey, 21 - 24 August 2015
24. **Enhancing the Corrosion Resistance and Biocompatibility of Injection Molded 316L Stainless Steel for Bio applications**
PAZARLIOĞLU S. S. , Büşra G., MUTLU Ö., GÜLSOY N., GÜLSOY H. Ö.
16. International Scientific Congress CNIC 2015, 22 - 26 June 2015
25. **Structure Analysis and Cytotoxic Evaluation of the ZnO Nanoparticles on Human Dermal Fibroblast Cells**
MUTLU Ö., GÜLSOY N.
ICMIBE 2015: XIII International Conference on Medical Informatics and Biomedical Engineering, 26 - 27 February 2015
26. **Effect of Ti Nb and Zr Additives on Biocompatibility of Injection molded 316L Stainless Steel for Biomedical Application**
Büşra G., MUTLU Ö., GÜLSOY N.
ICMIBE 2015: XIII International Conference on Medical Informatics and Biomedical Engineering, 26 - 27 February 2015
27. **Effect of Ti Nb and Zr Additives on Biocompatibility of Injection molded 316L Stainless Steel for Biomedical Applications**
MUTLU Ö., GÜLSOY N.
Biomedical and Biological Engineering Conferences, 26 - 27 February 2015
28. **Determination of the inhibitory effect of some coumarin derivatives on Bacteroides fragilis D LDH**
UĞUREL E., DANIŞ Ö., MUTLU Ö., YÜCE DURSUN B., GÜNDÜZ C., BALIK D.
International Symposium on Molecular Chemistry, 14 - 16 December 2014
29. **Effects of residue deletions from pentapeptide insertion of enzyme lactate dehydrogenase from Plasmodium vivax**
MUTLU Ö., Turgut-Balik D.
European Biotechnology Congress, İstanbul, Turkey, 28 September - 01 October 2011, vol.22

2020 - Continues	Head of Department	Marmara University, Faculty Of Arts And Sciences, Biology
2019 - Continues	Fakülte Yönetim Kurulu Üyesi	Marmara University, Faculty Of Arts And Sciences, Biology
2019 - Continues	Deputy Head of Department	Marmara University, Faculty Of Arts And Sciences, Biology

Courses

Hayvan Fizyolojisi, Undergraduate, 2019 - 2020
Biyoinformatik, Undergraduate, 2020 - 2021
Hayvan Anatomisi, Undergraduate, 2020 - 2021
Parazitoloji, Undergraduate, 2019 - 2020
İlaç Keşfi ve Geliştirme, Undergraduate, 2019 - 2020
Yapısal Biyoinformatik, Postgraduate, 2019 - 2020
Hücre Kültürü Teknikleri, Undergraduate, 2018 - 2019

Advising Theses

Mutlu Ö., Toxoplasma gondii FabG (3-Oxoacyl-[Acyl-Carrier-Protein] Reductase) enziminin ilaç geliştirmeye yönelik olarak rekombinant üretimi, biyokimyasal, biyofiziksel ve In Silico analizi, Postgraduate, C.AYGÜN(Student), 2020

Memberships / Tasks in Scientific Organizations

The Astrobiology Society of Britain, Member, 2019 - Continues
Türk mikrobiyoloji cemiyeti, Member, 2013 - Continues
Biochemical Society (United Kingdom), Member, 2013 - Continues

Citations

Total Citations (WOS):65
h-index (WOS):5

Research Areas

Structural Biophysics, Biomolecules, Structural Biology, Bioinformatics, Parasitology, Evolution