

Asst. Prof. SİNEM KOÇER

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: N-8859-2019

ScopusID: 57219022914

Yoksis Researcher ID: 302839

Education Information

Doctorate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Turkey 2014 - 2018

Postgraduate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Turkey 2012 - 2013

Undergraduate, Yildiz Technical University, Faculty Of Chemical And Metallurgical Engineering, Department Of Bioengineering, Turkey 2008 - 2012

Foreign Languages

English

Dissertations

Doctorate, Theileriosis'in tedavisinde kullanılabilecek yeni bir ilaç adayı tespit etmek için kumarin türevlerinin Theileria annulata enolazını inhibisyon potansiyelinin araştırılması, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, 2017

Postgraduate, Fusobacterium nucleatum'un enolaz enzimini kodlayan genin klonlanması ve analizi, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, 2013

Research Areas

Pharmaceutical Biotechnology, Bioinformatics, Biotechnology, Microbial Biotechnology, Molecular Biology and Genetics, Genetic Engineering, Protein Engineering

Academic Titles / Tasks

Assistant Professor, Istanbul Yeni Yuzyil University, Faculty Of Pharmacy, Department Of Pharmaceutical Technology, 2019 - Continues

Academic and Administrative Experience

Fikri ve Sınai Mülkiyet Hakları Koordinatörlüğü Üyeliği, İstanbul Yeni Yuzyıl University, 2024 - Continues
Fikri ve Sınai Mülkiyet Hakları Değerlendirme Kurulu Üyeliği, İstanbul Yeni Yuzyıl University, 2024 - Continues
Üniversite Seçmeli Dersler Koordinatörlüğü Üyeliği, İstanbul Yeni Yuzyıl University, 2024 - Continues
Eczacılık Fakültesi Akreditasyon Komisyonu Üyeliği, İstanbul Yeni Yuzyıl University, Faculty Of Pharmacy, Department Of Pharmaceutical Technology, 2022 - Continues
Eğitim Öğretim Komisyonu Çep Alt Komisyonu Koordinatörlüğü, İstanbul Yeni Yuzyıl University, Faculty Of Pharmacy, Department Of Pharmaceutical Technology, 2022 - Continues
Eczacılık Fakültesi Staj Komisyonu Üyeliği, İstanbul Yeni Yuzyıl University, Faculty Of Pharmacy, Department Of Pharmaceutical Technology, 2022 - Continues
Eczacılık Fakültesi Eğitim Öğretim Komisyonu Üyeliği, İstanbul Yeni Yuzyıl University, Faculty Of Pharmacy, Department Of Pharmaceutical Technology, 2022 - Continues
Eczacılık Fakültesi Stratejik Planlama-İzleme - Değerlendirme ve Kalite Komisyonu Üyeliği, İstanbul Yeni Yuzyıl University, Faculty Of Pharmacy, Department Of Pharmaceutical Technology, 2022 - Continues
Member of University Quality Commission, İstanbul Yeni Yuzyıl University, Faculty Of Pharmacy, Department Of Pharmaceutical Technology, 2021 - Continues
Member of University Strategic Planning Commission, İstanbul Yeni Yuzyıl University, Faculty Of Pharmacy, Department Of Pharmaceutical Technology, 2019 - Continues
Head of Department, İstanbul Yeni Yuzyıl University, Faculty Of Pharmacy, Department Of Pharmaceutical Technology, 2019 - 2020

Courses

MOLEKÜLER MİKROBİYOLOJİ, Undergraduate, 2022-2023, 2020-2021, 2019-2020
BİYOGÜVENLİK, Undergraduate, 2022-2023, 2021-2022, 2020-2021, 2019-2020
MESLEKİ İNGİLİZCE II, Undergraduate, 2022-2023, 2021-2022
MESLEKİ İNGİLİZCE I, Undergraduate, 2022-2023
BİYOMOLEKÜLER ANALİZ TEKNİKLERİ, Undergraduate, 2022-2023, 2021-2022, 2020-2021, 2019-2020
FARMASÖTİK BİYOTEKNOLOJİ, Undergraduate, 2022-2023, 2021-2022, 2020-2021, 2019-2020
MESLEKİ İNGİLİZCE I-YENİ MÜFREDAT, Undergraduate, 2022-2023
MESLEKİ İNGİLİZCE IV, Undergraduate, 2022-2023, 2021-2022
MESLEKİ İNGİLİZCE III, Undergraduate, 2022-2023

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Public health challenges after the February 6 earthquakes: A comprehensive review of immediate and long-term impacts in Türkiye**
Koçer A. T., Akpek A., Vural A., Aslan A., Erkoç A., Özen A. M., Şahin A., Oktay A., Şenol A. A., Batıoğlu-Karaaltın A., et al.
International Journal of Disaster Risk Reduction, vol.114, 2024 (SCI-Expanded)
- II. **Identification of novel compounds against *Acinetobacter baumannii* 3-oxoacyl-[acyl-carrier-protein] synthase I (FabB) via comprehensive structure-based computational approaches**
Albayrak E., KOÇER S., MUTLU Ö.
Journal of Molecular Graphics and Modelling, vol.124, 2023 (SCI-Expanded)
- III. **Heterologous expression, purification, and partial characterisation of the apicoplast protein 3-oxoacyl-[acyl-carrier-protein] reductase from *Toxoplasma gondii***
Aygün C., KOÇER S., DANIŞ Ö., ÇUBUK S., MUTLU Ö.
Protein Expression and Purification, vol.202, 2023 (SCI-Expanded)
- IV. **Heterologous expression, biochemical characterisation and computational analysis of *Bacteroides fragilis* enolase**

Ugurel E., KOÇER S., Sariyer E., MUTLU Ö., Inci T. G., Ugurel O. M., Turgut-Balik D.
Computational Biology and Chemistry, vol.98, 2022 (SCI-Expanded)

- V. **Targeting SARS-CoV-2 Nsp12/Nsp8 interaction interface with approved and investigational drugs: an in silico structure-based approach**
MUTLU Ö., Ugurel O. M., Sariyer E., Ata O., Inci T. G., Ugurel E., KOÇER S., Turgut-Balik D.
Journal of Biomolecular Structure and Dynamics, vol.40, no.2, pp.918-930, 2022 (SCI-Expanded)
- VI. **Identification of potential inhibitors of Trichomonas vaginalis iron-containing superoxide dismutase by computer-aided drug design approach**
KOÇER S., MUTLU Ö.
Structural Chemistry, vol.32, no.5, pp.1873-1882, 2021 (SCI-Expanded)
- VII. **In vitro inhibition studies of coumarin derivatives on Bos taurus enolase and elucidating their interaction by molecular docking, molecular dynamics simulations and MMGB(PB)SA binding energy calculation**
Sariyer E., KOÇER S., DANIŞ Ö., Turgut-Balik D.
Bioorganic Chemistry, vol.110, 2021 (SCI-Expanded)
- VIII. **Hit identification against peptidyl-prolyl isomerase of Theileria annulata by combined virtual high-throughput screening and molecular dynamics simulation approach**
Spahi S., MUTLU Ö., Sariyer E., KOÇER S., Ugurel E., Turgut-Balik D.
Computational Biology and Chemistry, vol.89, 2020 (SCI-Expanded)
- IX. **Evaluation of the potency of FDA-approved drugs on wild type and mutant SARS-CoV-2 helicase (Nsp13)**
Ugurel O. M., MUTLU Ö., Sariyer E., KOÇER S., Ugurel E., Inci T. G., Ata O., Turgut-Balik D.
International Journal of Biological Macromolecules, vol.163, pp.1687-1696, 2020 (SCI-Expanded)
- X. **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., TOPUZOĞULLARI M., Sariyer E., Yuce-Dursun B., Turgut-Balik D.
Molecular Diversity, vol.24, no.4, pp.1149-1164, 2020 (SCI-Expanded)
- XI. **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, no.7-8, pp.732-739, 2019 (SCI-Expanded)
- XII. **A study of Bos taurus muscle specific enolase; biochemical characterization, homology modelling and investigation of molecular interaction using molecular docking and dynamics simulations**
Sariyer E., KOÇER S., DANIŞ Ö., Turgut-Balik D.
International Journal of Biological Macromolecules, vol.120, pp.2346-2353, 2018 (SCI-Expanded)
- XIII. **Comprehensive structural analysis of the open and closed conformations of Theileria annulata enolase by molecular modelling and docking**
MUTLU Ö., KOÇER S., Sariyer E., DANIŞ Ö., Yuce-Dursun B., TOPUZOĞULLARI M., Akbulut E., Turgut-Balik D.
Computational Biology and Chemistry, vol.64, pp.134-144, 2016 (SCI-Expanded)
- XIV. **Biochemical and in silico Characterization of Recombinant L-Lactate Dehydrogenase of Theileria annulata**
NURAL YAMAN B., ERDEMİR A., MUTLU Ö., KOÇER S., DANIŞ Ö., TOPUZOĞULLARI M., Turgut-Balik D.
Molecular Biotechnology, vol.58, no.4, pp.256-267, 2016 (SCI-Expanded)
- XV. **Cloning, expression and characterization of the gene encoding the enolase from Fusobacterium nucleatum**
KOÇER S., Cayir E., MUTLU Ö., NURAL YAMAN B., Sariyer E., TOPUZOĞULLARI M., Milward M., Cooper P., ERDEMİR A., Turgut-Balik D.
Applied Biochemistry and Microbiology, vol.52, no.1, pp.23-30, 2016 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

- I. **Salmonella enteritidis UDP-N-asetilglukozamin 1-karboksiviniltransferaz (MurA)'ının farklı homoloji modellerinin karşılaştırılması**
Koçer S., Koçer A. T.
7th International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2024), Ankara, Turkey, 02 October 2024
- II. **Hit identification against Acinetobacter baumannii FabB via virtual screening, molecular dynamics simulation, and free energy calculations**
ALBAYRAK E., KOÇER S., MUTLU Ö.
Royal Society of Chemistry, Chemical Biology Symposium 2022, Londrina, Brazil, 09 May 2022, vol.207890, pp.1-77
- III. **Drug repositioning to identify SARS-CoV-2 Nsp12/Nsp8 interaction interface inhibitors.**
MUTLU Ö., UĞUREL O. M., SARIYER E., ATA O., İnci T. G., Uğurel E., KOÇER S., BALIK D.
FEMS 2020 ONLINE CONFERENCE, Serbia, 28 - 31 October 2020
- IV. **Identification of Fusobacterium nucleatum 1-deoxy-D-xylulose 5-phosphate Reductoisomerase Inhibitor Candidates by Molecular Docking Analyses**
KOÇER S., BALIK D.
Bio-Türkiye-International Biotechnology Congress, 5 - 07 March 2020
- V. **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
- VI. **Evaluation of Plasmodium vivax and Theileria annulata LDH in Diagnosis**
İnci T. G., UĞUREL O. M., YAKARSÖNMEZ S., BALIK D.
Eurasian Congress of Molecular Biotechnology (ECOMB 2019), Trabzon, Turkey, 19 - 21 September 2019
- VII. **Bacteriodes Fragillis Enolaz İnhibitorü Belirlenmesine Yönelik Sanal Ligand Tarama Ve Moleküler Yanıştırma Çalışmaları**
Uğurel E., YAKARSÖNMEZ S., SARIYER E., MUTLU Ö., UĞUREL O. M., BALIK D.
31. Ulusal Kimya Kongresi, İstanbul, Turkey, 10 - 13 September 2019
- VIII. **Plasmodium vivax LDH'Inin Tanı Kiti Geliştirilmesi Amacıyla Saflaştırılması**
İnci T. G., UĞUREL O. M., YAKARSÖNMEZ S., BALIK D.
31. Ulusal Kimya Kongresi, İstanbul, Turkey, 10 - 13 September 2019
- IX. **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
- X. **A Structure-Based Drug Design Study Interactions of Bos taurus Enolase and Coumarin Derivatives Through Molecular Docking and Molecular Dynamic Simulation**
SARIYER E., YAKARSÖNMEZ S., DANIŞ Ö., BALIK D.
6th International BAU Drug Design Congress, Istanbul, Turkey, 13 - 15 December 2018
- XI. **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, Turkey, 27 - 30 October 2018
- XII. **Structural Modelling and Molecular Docking Analysis of Trichomonas vaginalis Iron-Containing Superoxide Dismutase towards Computer-Aided Drug Design**
KOÇER S., MUTLU Ö.
1st Eurasia Biochemical Approaches & Technologies (1. EBAT), Turkey, 27 - 30 October 2018
- XIII. **Biyo-Aktif Polimerler ile Biyolojik Moleküllere Dayalı Tanı ve Tedavi Yöntemlerinin Ultra-Hızlı Biyoortogonal Tepkimelerle Geliştirilmesi**
ATEŞ M. Y., ÇETİNKAYA A., YAKARSÖNMEZ S., UĞUREL O. M., BALIK D., ERCAN Ç., AKBAŞ F., KAHVECİ M. Ü.
6. Ulusal Biyomühendislik Öğrenci Kongresi, İstanbul, 5-6 Nisan 2018, Turkey, 5 - 06 April 2018

- XIV. **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
- XV. **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
- XVI. **Preparation of Concanavalin a Decorated P(PEGMA-co-NMAS) Polymeric Surfaces and Utilization in Bacterial Cell Detection**
DEVECİ G., YAKARSÖNMEZ S., BALIK D., KAHVECİ M. Ü.
APME 17 Advanced Polymers via Macromolecular Engineering, Ghent, Belgium, 21 - 25 May 2017
- XVII. **Cloning of Peptidyl Prolyl cis/trans Isomerase from Theileria annulata**
Spahi S., ERDEMİR A., YAKARSÖNMEZ S., SARIYER E., Uğurel E., Aktaş M., BALIK D.
IVEK 3 rd International Convention of Pharmaceuticals and Pharmacies, Istanbul, Turkey, 26 - 29 April 2017
- XVIII. **Using an Alternative System to Improve Expression Level of Recombinant Lactate Dehydrogenase from Plasmodium vivax**
İnci T. G., UĞUREL O. M., YAKARSÖNMEZ S., BALIK D.
IVEK 3 rd International Convention of Pharmaceuticals and Pharmacies, Istanbul, Turkey, 26 - 29 April 2017
- XIX. **Molecular docking analyses of coumarin derivatives as Theileria annulata enolase inhibitors**
YAKARSÖNMEZ S., MUTLU Ö., DANIŞ Ö., BALIK D.
5th International BAU-Drug Design Congress, Istanbul, Turkey, 19 October - 21 April 2017
- XX. **Comprehensive Computational Analysis of Theileria annulata Enolase by Comparative Modeling and Docking**
MUTLU Ö., YAKARSÖNMEZ S., SARIYER E., DANIŞ Ö., Yüce-Dursun B., TOPUZOĞULLARI M., AKBULUT E., BALIK D.
17th European Congress on Biotechnology, Krakow, Poland, 3 - 06 July 2016
- XXI. **Theileria annulata Enolaz Enziminin Uygun Stabilizatörler Kullanılarak Depolama Koşullarının Belirlenmesi**
YAKARSÖNMEZ S., DANIŞ Ö., MUTLU Ö., Yüce-Dursun B., TOPUZOĞULLARI M., AKBULUT E., SARIYER E., BALIK D.
4. Ulusal Moleküler Biyoloji ve Biyoteknoloji Kongresi, Afyon, 21 -24 Ağustos 2015., Turkey, 21 - 24 August 2015
- XXII. **Theileria annulata'nın Laktat Dehidrogenaz Enziminin Optimum pH Değerinin Belirlenmesi ve Termal Stabilitate Analizi**
NURAL YAMAN B., YAKARSÖNMEZ S., ERDEMİR A., BALIK D.
4. Ulusal Moleküler Biyoloji ve Biyoteknoloji Kongresi, Afyon, 21 -24 Ağustos 2015., Turkey, 21 - 24 August 2015
- XXIII. **Optimum pH Determination and Thermostability Analysis of Recombinant Fusobacterium nucleatum Enolase Enzyme**
YAKARSÖNMEZ S., NURAL YAMAN B., SARIYER E., BALIK D.
International Symposium on Molecular Chemistry, Istanbul, Turkey, 19 December 2014
- XXIV. **Fusobacterium nucleatum'ın enolaz enziminin yüksek saflıkta üretilmesi**
YAKARSÖNMEZ S., Çayır E., SARIYER E., BALIK D.
22. Ulusal Biyoloji Kongresi, Eskişehir, 23-27 Haziran 2014, Turkey, 23 - 27 June 2014
- XXV. **Kinetic evaluation of enolase enzyme from Fusobacterium nucleatum towards new drug design studies**
YAKARSÖNMEZ S., Çayır E., SARIYER E., BALIK D.
2nd International BAU-Drug Design Congress, Istanbul, Turkey, 17 - 19 April 2014
- XXVI. **Fusobacterium nucleatum Enolaz Enziminin Moleküler Modelinin Oluşturulması**
YAKARSÖNMEZ S., MUTLU Ö., BALIK D.
2. İlaç Kimyası, Üretimi, Teknolojisi ve Standardizasyonu Kongresi, Turkey, 21 - 23 March 2014
- XXVII. **Cloning and sequence analysis of enolase gene from Fusobacterium nucleatum**
YAKARSÖNMEZ S., Çayır E., SARIYER E., Milward M. R., Cooper P. R., BALIK D.
2nd International Congress of Molecular Biology Association of Turkey, Istanbul, Turkey, 22 - 23 November 2013

Supported Projects

Koçer S., Mutlu Ö., Akar S., Daniş Ö., Uğurel E., Uğurel O. M., İnci T. G., Balık D., Project Supported by Higher Education Institutions, In silico olarak tespit edilecek *T. annulata* laktat dehidrogenaz inhibitörlerinin in vitro olarak değerlendirilmesi, 2023 - 2025

Servi H., Daniş Ö., Gören N., Koçer S., Emergency R&D Project of Group A, *Gypsophila pallida* Stapf. ve Endemik *Gypsophila tuberculosa* Hub.-Mor. Taksonlarından Asetilkolinesteraz (AChE) ve Bütirikolinesteraz (BChE) Aktivite Yönlendirmeli Aktif Bileşiklerin İzolasyonu, 2023 - 2024

Koçer S., Mutlu Ö., Uğurel E., İnci T. G., Uğurel O. M., Topuzoğulları M., Sarıyer E., Balık D., Other International Funding Programs, *Neisseria Gonorrhoeae* DXR'sini Hedefleyen Yeni İnhibitörler, 2021 - 2024

Koçer S., Abamor E. Ş., Uğurel O. M., Atlı R., Mutlu Ö., İnci T. G., Uğurel E., Sarıyer E., Balık D., Project Supported by Higher Education Institutions, *Helicobacter pylori* enfeksiyonu için ilaç hedefi olarak FabI'nın rekombinant olarak eldesi ve analizi, 2021 - 2022

Koçer S., Mutlu Ö., Uğurel E., Sarıyer E., Balık D., Project Supported by Higher Education Institutions, *Bacteriodes fragilis* Enolazının in vitro ve in silico Analizi, 2018 - 2020

Koçer S., Sarıyer E., Yüce-Dursun B., Daniş Ö., Balık D., Project Supported by Higher Education Institutions, *Bos taurus* Enolaz Enziminin Yapıya Dayandırılmış İlaç Tasarımı Yönünde Yapısal, Moleküler ve Enzimatik Analizlerinin Yapılması, 2015 - 2017

Koçer S., Akbulut E., Yüce-Dursun B., Daniş Ö., Mutlu Ö., Sarıyer E., Topuzoğulları M., Balık D., TAGEM Tarımsal Araştırmalar ve Politikalar Genel Müdürlüğü Projesi, Theileriosis'in tedavisinde kullanılabilir yeni bir ilaç adayı tespit etmek için kumarin türevlerinin *Theileria annulata*'nın enolaz enzimini inhibisyon potansiyelinin araştırılması, 2014 - 2016

Metrics

Publication: 42

Citation (WoS): 73

Citation (Scopus): 87

H-Index (WoS): 4

H-Index (Scopus): 5