

# MESUT İŞIK

## ASSOC. PROF.

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: ABG-4558-2020

ScopusID: 56597706300

Yoksis Researcher ID: 252801



### Learning Knowledge

Doctorate  
2012 - 2016

Ataturk University, Fen Bilimleri Enstitüsü, Biyokimya (Dr), Turkey

Postgraduate  
2010 - 2012

Erzincan Binali Yıldırım University, Fen Bilimleri Enstitüsü, Kimya (YI) (Tezli),  
Turkey

Undergraduate  
2006 - 2010

Inonu University, Fen-Edebiyat Fakültesi, Kimya Bölümü, Turkey

### Dissertations

Postgraduate, Helichrysum plicatum DC. ve Phlomis pungens L. bitkilerinin antioksidan aktivitelerinin mukayesesi,  
Erzincan Binali Yıldırım University, Fen Bilimleri Enstitüsü, Kimya (YI) (Tezli), 2012

### Supported Projects

1. İŞIK M., ÇİFTÇİ B., TUTAR A., KOÇYİĞİT Ü. M., TÜRKEŞ C., YILMAZ R. F., KIRBOĞA K. K., BEYDEMİR Ş., Project Supported by Higher Education Institutions, Anti-Nörodejeneratif Potansiyele Sahip Yeni BODIPY Türevlerinin Sentezi ve Karakterizasyonu: In Vitro /In Silico Biyolojik Çalışmalar, 2023 - Continues
2. İşik M., Akpinar Borazan A., Küfrevoğlu Ö. İ., TUBITAK Project, Immobilization and Characterization of Bovine Carbonic Anhydrase Enzyme on Iron Oxide Magnetic Nanoparticles: Investigation of Potential Applicability in CO2 Removal, 2024 - 2025
3. İşik M., Tuney Kızılıkaya İ., Ünal D., Söyüüt H., Beydemir Ş., TUBITAK Project, Makroalg Tabanlı Karbonik Anhidraz İzoenzimlerinin Saflaştırılması, İmmobilizasyonu ve Karakterizasyonu, 2022 - 2023
4. İŞIK M., Project Supported by Higher Education Institutions, Silikon Tabanlı Hassas, Kararlı Yerli ve Milli Sıcaklık Sensörü Üretilimi, 2018 - 2020
5. İŞIK M., Project Supported by Higher Education Institutions, Propolis ve Bazı Tıbbi Bitkilerin Antioksidan Özellikleri ve Bunların Asetilkolinesteraz ve Paraoksonaz Enzim Aktivitesi Üzerine İn Vitro Etkilerinin İncelenmesi, 2018 - 2019
6. İŞIK M., BEYDEMİR Ş., Project Supported by Higher Education Institutions, İnsan Serumundan Paraoksonaz (PON1) Enziminin Saflaştırılması ve Bazı Sulfonamid Türevlerinin Enzim Aktivitesi Üzerine İn Vitro Etkilerinin İncelenmesi, 2016 - 2017
7. BEYDEMİR Ş., İŞIK M., Project Supported by Higher Education Institutions, Alzheimer tipi demans hastalarında ve

kardiyovasküler hastalığı olan kişilerde serum eritrosit ve lökosit asetilkolinesteraz ve lökosit kolin asetiltransferaz enzimlerinin aktivitelerinin ve bu enzimlerin mononükleer lökositlerde MNL mRNA expresyon seviyelerinin araştırılması, 2014 - 2016

Published journal articles indexed by SCI, SSCI, and AHCI

1. **Interactions of novel 1,3-diaryltriazene-sulfamethazines with carbonic anhydrases: Kinetic studies and in silico simulations**  
Lolak N., TÜRKEŞ C., Akocak S., Duran H. E., IŞIK M., Durgun M., BEYDEMİR \$.  
Archives of Biochemistry and Biophysics, vol.761, 2024 (SCI-Expanded)
2. **Synthesis,  $\alpha$ -Glucosidase,  $\alpha$ -Amylase, and Aldol Reductase Inhibitory Activity with Molecular Docking Study of Novel Imidazo[1,2-a]pyridine Derivatives**  
Kaya B., ACAR ÇEVİK U., ÇİFTÇİ B., Duran H. E., TÜRKEŞ C., IŞIK M., BOSTANCI H. E., KAPLANCIKLİ Z. A., BEYDEMİR \$.  
ACS Omega, vol.9, no.42, pp.42905-42914, 2024 (SCI-Expanded)
3. **Dynamics of small molecule-enzyme interactions: Novel benzenesulfonamides as multi-target agents endowed with inhibitory effects against some metabolic enzymes**  
Güleç Ö., TÜRKEŞ C., Arslan M., IŞIK M., Demir Y., Duran H. E., Fırat M., KÜFREVİOĞLU Ö. İ., BEYDEMİR \$.  
Archives of Biochemistry and Biophysics, vol.759, 2024 (SCI-Expanded)
4. **Explainable artificial intelligence in the design of selective carbonic anhydrase I-II inhibitors via molecular fingerprinting**  
KIRBOĞA K. K., IŞIK M.  
Journal of Computational Chemistry, vol.45, no.18, pp.1530-1539, 2024 (SCI-Expanded)
5. **Antioxidant, antidiabetic effects and polyphenolic contents of propolis from Siirt, Turkey**  
Ören E., Tuncay S., Toprak Y. E., Fırat M., Toptancı İ., Karasakal Ö. F., IŞIK M., Karahan M.  
Food Science and Nutrition, vol.12, no.4, pp.2772-2782, 2024 (SCI-Expanded)
6. **Isolation of phenolic compounds from eco-friendly white bee propolis: Antioxidant, wound-healing, and anti-Alzheimer effects**  
Necip A., Demirtaş İ., Tayhan S. E., IŞIK M., Bilgin S., Turan İ. F., İpek Y., BEYDEMİR \$.  
Food Science and Nutrition, vol.12, no.3, pp.1928-1939, 2024 (SCI-Expanded)
7. **Effect of fentanyl and remifentanil on neuron damage and oxidative stress during induction neurotoxicity**  
TAGHIZADEHGHALEHJOUGHİ A., Naldan M. E., Yeni Y., GENÇ S., HACİMÜFTÜOĞLU A., IŞIK M., Necip A., BOLAT İ., YILDIRIM S., BEYDEMİR \$., et al.  
Journal of Cellular and Molecular Medicine, vol.28, no.4, 2024 (SCI-Expanded)
8. **Design and Synthesis of Pyrazole Carboxamide Derivatives as Selective Cholinesterase and Carbonic Anhydrase Inhibitors: Molecular Docking and Biological Evaluation**  
Durgun M., Akocak S., Lolak N., Topal F., KOÇYİĞİT Ü. M., TÜRKEŞ C., IŞIK M., BEYDEMİR \$.  
Chemistry and Biodiversity, vol.21, no.2, 2024 (SCI-Expanded)
9. **Phenolic Content Analysis of Two Species Belonging to the Lamiaceae Family: Antioxidant, Anticholinergic, and Antibacterial Activities**  
Ndhlala A. R., IŞIK M., KAVAZ YÜKSEL A., Dikici E.  
Molecules, vol.29, no.2, 2024 (SCI-Expanded)
10. **Evaluation of the relationship among gene expressions and enzyme activities with antioxidant role and presenilin 1 expression in Alzheimer's disease**  
IŞIK M., Tunç A., Duran H. E., Naldan M. E., Yılmaz A., KOÇAK M. N., BEYDEMİR \$.  
Journal of Cellular and Molecular Medicine, vol.27, no.21, pp.3388-3394, 2023 (SCI-Expanded)
11. **Novel bis-ureido-substituted sulfaguanidines and sulfisoxazoles as carbonic anhydrase and acetylcholinesterase inhibitors**  
Lolak N., Akocak S., Durgun M., Duran H. E., Necip A., TÜRKEŞ C., IŞIK M., BEYDEMİR \$.

- Molecular Diversity, vol.27, no.4, pp.1735-1749, 2023 (SCI-Expanded)
12. **Synthesis and Characterization of Novel 1,3-Diaryltriazene-Substituted Sulfaguanidine Derivatives as Selective Carbonic Anhydrase Inhibitors: Biological Evaluation, in Silico ADME/T and Molecular Docking Study**  
Akocak S., Lolak N., Duran H. E., IŞIK M., TÜRKEŞ C., Durgun M., BEYDEMİR \$.  
Chemistry and Biodiversity, vol.20, no.8, 2023 (SCI-Expanded)
13. **CVD22: Explainable artificial intelligence determination of the relationship of troponin to D-Dimer, mortality, and CK-MB in COVID-19 patients**  
KIRBOĞA K. K., KÜÇÜKSİLLE E. U., NALDAN M. E., IŞIK M., Gülcü O., Aksakal E.  
Computer Methods and Programs in Biomedicine, vol.233, 2023 (SCI-Expanded)
14. **Anticholinergic, Antioxidant, and Antibacterial Properties of Vitex Agnus-Castus L. Seed Extract: Assessment of Its Phenolic Content by LC/MS/MS**  
KAVAZ YÜKSEL A., IŞIK M., Dikici E., YÜKSEL M.  
Chemistry and Biodiversity, vol.19, no.10, 2022 (SCI-Expanded)
15. **Phenolic Profile and Antioxidant, Anticholinergic, and Antibacterial Properties of Corn Tassel**  
Al-Khayri J. M., KAVAZ YÜKSEL A., YÜKSEL M., IŞIK M., Dikici E.  
Plants, vol.11, no.15, 2022 (SCI-Expanded)
16. **AChE mRNA expression as a possible novel biomarker for the diagnosis of coronary artery disease and Alzheimer's disease, and its association with oxidative stress**  
IŞIK M., BEYDEMİR \$.  
Archives of Physiology and Biochemistry, vol.128, no.2, pp.352-359, 2022 (SCI-Expanded)
17. **Oxidative Stress and Changes of Important Metabolic Gene Expressions as a Potential Biomarker in the Diagnosis of Atherosclerosis in Leukocytes**  
IŞIK M., Tunç A., BEYDEMİR \$.  
Brazilian Journal of Cardiovascular Surgery, vol.37, no.4, pp.481-487, 2022 (SCI-Expanded)
18. **Novel inhibitors with sulfamethazine backbone: synthesis and biological study of multi-target cholinesterases and α-glucosidase inhibitors**  
TÜRKEŞ C., Akocak S., IŞIK M., Lolak N., Taslimi P., Durgun M., GÜLÇİN İ., Budak Y., BEYDEMİR \$.  
Journal of Biomolecular Structure and Dynamics, vol.40, no.19, pp.8752-8764, 2022 (SCI-Expanded)
19. **Biological effects of bis-hydrazone compounds bearing isovanillin moiety on the aldose reductase**  
Yapar G., Esra Duran H., Lolak N., Akocak S., TÜRKEŞ C., Durgun M., IŞIK M., BEYDEMİR \$.  
Bioorganic Chemistry, vol.117, 2021 (SCI-Expanded)
20. **Phytochemical, phenolic profile, antioxidant, anticholinergic and antibacterial properties of Epilobium angustifolium (Onagraceae)**  
KAVAZ YÜKSEL A., Dikici E., YÜKSEL M., IŞIK M., TOZOĞLU F., KÖKSAL E.  
Journal of Food Measurement and Characterization, vol.15, no.6, pp.4858-4867, 2021 (SCI-Expanded)
21. **Conducting polymer-based electrochemical biosensor for the detection of acetylthiocholine and pesticide via acetylcholinesterase**  
Akdag A., IŞIK M., Göktas H.  
Biotechnology and Applied Biochemistry, vol.68, no.6, pp.1113-1119, 2021 (SCI-Expanded)
22. **Phytochemicals Analysis and Some Bioactive Properties of Erica manipuliflora Salisb. (EMS); Antibacterial, Antiradical and Anti-lipid Peroxidation**  
KAVAZ YÜKSEL A., Dikici E., YÜKSEL M., IŞIK M., TOZOĞLU F., KÖKSAL E.  
Iranian Journal of Pharmaceutical Research, vol.20, no.4, pp.422-434, 2021 (SCI-Expanded)
23. **Synthesis, Characterization, and Inhibition Study of Novel Substituted Phenylureido Sulfaguanidine Derivatives as α-Glycosidase and Cholinesterase Inhibitors**  
Akocak S., Taslimi P., Lolak N., IŞIK M., Durgun M., Budak Y., TÜRKEŞ C., GÜLÇİN İ., BEYDEMİR \$.  
Chemistry and Biodiversity, vol.18, no.4, 2021 (SCI-Expanded)
24. **The impact of some phenolic compounds on serum acetylcholinesterase: kinetic analysis of an enzyme/inhibitor interaction and molecular docking study**  
IŞIK M., BEYDEMİR \$.

- Journal of Biomolecular Structure and Dynamics, vol.39, no.17, pp.6515-6523, 2021 (SCI-Expanded)
25. **Soluble ST2 as a potential biomarker in pericardial fluid of coronary artery patients**  
Dikme R., Padak M., IŞIK M., Koyuncu İ., Temiz E., Aydin M. S., Göç Ö.  
Brazilian Journal of Cardiovascular Surgery, vol.36, no.5, pp.677-684, 2021 (SCI-Expanded)
26. **Mannich reaction derived novel boron complexes with amine-bis(phenolate) ligands: Synthesis, spectroscopy and in vitro/in silico biological studies**  
Kılıç A., Beyazsakal L., IŞIK M., TÜRKES C., Necip A., Takım K., BEYDEMİR \$.  
Journal of Organometallic Chemistry, vol.927, 2020 (SCI-Expanded)
27. **Synthesis, characterization, biological evaluation, and in silico studies of novel 1,3-diaryltriazene-substituted sulfathiazole derivatives**  
IŞIK M., Akocak S., Lolak N., Taslimi P., TÜRKES C., GÜLÇİN İ., Durgun M., BEYDEMİR \$.  
Archiv der Pharmazie, vol.353, no.9, 2020 (SCI-Expanded)
28. **Phytochemical Analysis of Paliurus spina-christi Fruit and Its Effects on Oxidative Stress and Antioxidant Enzymes in Streptozotocin-Induced Diabetic Rats**  
Takım K., IŞIK M.  
Applied Biochemistry and Biotechnology, vol.191, no.4, pp.1353-1368, 2020 (SCI-Expanded)
29. **Synthesis, characterization, inhibition effects, and molecular docking studies as acetylcholinesterase,  $\alpha$ -glycosidase, and carbonic anhydrase inhibitors of novel benzenesulfonamides incorporating 1,3,5-triazine structural motifs**  
Lolak N., Akocak S., TÜRKES C., Taslimi P., IŞIK M., BEYDEMİR \$., GÜLÇİN İ., Durgun M.  
Bioorganic Chemistry, vol.100, 2020 (SCI-Expanded)
30. **Molecular docking and investigation of 4-(benzylideneamino)- and 4-(benzylamino)-benzenesulfonamide derivatives as potent AChE inhibitors**  
IŞIK M., Demir Y., Durgun M., TÜRKES C., Necip A., BEYDEMİR \$.  
Chemical Papers, vol.74, no.5, pp.1395-1405, 2020 (SCI-Expanded)
31. **High Stability of Immobilized Acetylcholinesterase on Chitosan Beads**  
IŞIK M.  
ChemistrySelect, vol.5, no.15, pp.4623-4627, 2020 (SCI-Expanded)
32. **Benzenesulfonamide derivatives containing imine and amine groups: Inhibition on human paraoxonase and molecular docking studies**  
IŞIK M., BEYDEMİR \$., Demir Y., Durgun M., TÜRKES C., Nasır A., Necip A., Akkuş M.  
International Journal of Biological Macromolecules, vol.146, pp.1111-1123, 2020 (SCI-Expanded)
33. **Benzenesulfonamide derivatives as potent acetylcholinesterase,  $\alpha$ -glycosidase, and glutathione S-transferase inhibitors: biological evaluation and molecular docking studies**  
Taslimi P., IŞIK M., Türkcan F., Durgun M., TÜRKES C., GÜLÇİN İ., BEYDEMİR \$.  
Journal of Biomolecular Structure and Dynamics, pp.1-12, 2020 (SCI-Expanded)
34. **Synthesis, characterisation, biological evaluation and in silico studies of sulphonamide Schiff bases**  
Durgun M., TÜRKES C., IŞIK M., Demir Y., Saklı A., Kuru A., GÜZEL A., BEYDEMİR \$., Akocak S., Osman S. M., et al.  
Journal of Enzyme Inhibition and Medicinal Chemistry, vol.35, no.1, pp.950-962, 2020 (SCI-Expanded)
35. **The Binding Mechanisms and Inhibitory Effect of Intravenous Anesthetics on AChE In Vitro and In Vivo: Kinetic Analysis and Molecular Docking**  
IŞIK M.  
Neurochemical Research, vol.44, no.9, pp.2147-2155, 2019 (SCI-Expanded)
36. **Phenolic compounds inhibit the aldose reductase enzyme from the sheep kidney**  
Demir Y., IŞIK M., GÜLÇİN İ., BEYDEMİR \$.  
Journal of Biochemical and Molecular Toxicology, vol.31, no.9, 2017 (SCI-Expanded)
37. **Oxidative stress and mRNA expression of acetylcholinesterase in the leukocytes of ischemic patients**  
IŞIK M., BEYDEMİR \$., Yılmaz A., Naldan M. E., Aslan H. E., GÜLÇİN İ.  
Biomedicine and Pharmacotherapy, vol.87, pp.561-567, 2017 (SCI-Expanded)
38. **An approach to clarify the effect mechanism of glyphosate on body malformations during embryonic development of zebrafish (*Danio rerio*)**

- Sulukan E., Köktürk M., CEYLAN H., BEYDEMİR Ş., IŞIK M., ATAMANALP M., CEYHUN S. B.  
Chemosphere, vol.180, pp.77-85, 2017 (SCI-Expanded)
39. High enzymatic activity preservation of malate dehydrogenase immobilized in a Langmuir-Blodgett film and its electrochemical biosensor application for malic acid detection  
Gür B., IŞIK M., DAĞCI KIRANŞAN K., ALANYALIOĞLU M., Beydemir Ş., Meral K.  
RSC Advances, vol.6, no.83, pp.79792-79797, 2016 (SCI-Expanded)
40. Changes in the anti-oxidant system in adult epilepsy patients receiving anti-epileptic drugs  
IŞIK M., Demir Y., Kirici M., Demir R., ŞİMŞEK F., Beydemir Ş.  
Archives of Physiology and Biochemistry, vol.121, no.3, pp.97-102, 2015 (SCI-Expanded)
41. Determination of antioxidant properties of *Gypsophila bitlisensis* bark  
IŞIK M., KORKMAZ M., Bursal E., GÜLÇİN İ., KÖKSAL E., Tohma H.  
International Journal of Pharmacology, vol.11, no.4, pp.366-371, 2015 (SCI-Expanded)

### Articles Published in Other Journals

1. Investigation of antibacterial and antifungal properties of benzene sulfonamide derivatives by experimental and computational studies  
Kapısu Ö., Rudrapal M., GÜL Ü. D., Rathod S. S., IŞIK M., Durgun M., Khan J.  
Chemical Physics Impact, vol.9, 2024 (Scopus)
2. Design, Synthesis and Cholinesterase Inhibitory Activity of Novel 1,3,4-Thiadiazole Derivatives  
KAYA B., ÇEVİK U. A., ÇİFTÇİ B., IŞIK M., KAPLANCIKLİ Z. A., KILINÇ N., BEYDEMİR Ş.  
Cumhuriyet Science Journal, vol.45, no.3, pp.503-509, 2024 (Peer-Reviewed Journal)
3. Carvacrol Protect Hippocampal Neurons Against Hydroxychloroquine-Induced Damage: In Vitro Study  
YILMAZ A., HACİMÜFTÜOĞLU A., ÇİÇEK B., IŞIK M., NECİP A., TAGHIZADEHGHALEHJOUGHİ A.  
Recent Trends in Pharmacology, vol.1, no.1, pp.16-26, 2023 (Peer-Reviewed Journal)
4. *Abelmoschus esculentus* (Bamya Çiçeği) Çiçeğinin Fitokimyasal Profili, Antioxidan, Antikolinerjik ve Antibakteriyel Özellikleri  
KAVAZ YÜKSEL A., DİKİCİ E., YÜKSEL M., IŞIK M.  
KSU TARIM VE DOGA DERGİSİ-KSU JOURNAL OF AGRICULTURE AND NATURE, vol.25, no.6, pp.1205-1215, 2022  
(Peer-Reviewed Journal)
5. LC-MS/MS Analysis, Antioxidant Properties and Inhibition Effect on Some Important Metabolic Enzymes of *Nicotiana rustica* L  
NECİP A., IŞIK M., GÜZEL A., TAKIM K., KAYGISIZ F.  
KSU TARIM VE DOGA DERGİSİ-KSU JOURNAL OF AGRICULTURE AND NATURE, vol.24, no.5, pp.930-938, 2021  
(ESCI)
6. The role of the Cellular Antioxidant Defense System on Oxidative Stress in Acute Appendicitis  
TEMİZ A., IŞIK M., ALBAYRAK Y., DURAN H. E., ASLAN A., DEMİR Y., ALBAYRAK A., ÖZDEMİR Y., BEYDEMİR Ş.  
Hacettepe Journal of Biology and Chemistry, vol.49, no.1, pp.69-78, 2021 (Peer-Reviewed Journal)
7. Serum Katalaz, Miyeloperoksidaz ve Paraoksonaz 1 Üzerine Bazı Bitki Ekstraklarının In Vitro Etkisi  
KİRMİT A., IŞIK M.  
Harran Üniversitesi Tıp Fakültesi Dergisi, vol.17, no.1, pp.127-132, 2020 (Peer-Reviewed Journal)
8. Anticholinergic, Antioxidant Activity and LC-MS/MS analysis of Ethanol Extract from *Salvia officinalis* L.  
IŞIK M.  
International Journal of Life Sciences and Biotechnology, vol.3, no.1, pp.51-61, 2020 (Peer-Reviewed Journal)
9. The In vivo Effect of Anesthetic Drugs on Some Enzyme Activity and Biological Parametres  
NALDAN M. E., IŞIK M., DEMİR Y., DURAN H. E., BEYDEMİR Ş., KARA D., TUNÇ A.  
Turkish Journal Of Science and Health, vol.1, no.2, pp.9-19, 2020 (Peer-Reviewed Journal)
10. Bioactivities of *Hypericum Perforatum* L and *Equisetum Arvense* L fractions obtained with different

## **solvents**

NECİP A., İŞIK M.

International Journal of Life Sciences and Biotechnology, vol.2, no.3, pp.221-230, 2019 (Peer-Reviewed Journal)

11. **Effect of Antioxidants as Preservatives in the Outer and Inner Shells of Watermelon (*Citrullus Lanatus*)**

İŞIK M.

İğdır Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.9, no.3, pp.1460-1466, 2019 (Peer-Reviewed Journal)

12. **Antioxidant Activity and Total Phenolic/Flavonoid Contents of *Phlomis pungens L.***

İŞIK M., DİKİCİ E., TOHMA H., KÖKSAL E.

Hacettepe Journal of Biology and Chemistry, vol.3, no.45, pp.425-433, 2017 (Peer-Reviewed Journal)

13. **İmidacloprid ve Lambda cyhalothrin in *Capoeta capoeta umbra* Böbrek Dokusunda Glikoz 6 Fosfat Dehidrogenaz Enzimi Üzerine In Vitro Etkileri**

KIRICI M., KIRICI M., İŞIK M., ATAMANALP M.

Türkiye Tarımsal Araştırmalar Dergisi, vol.2, no.1, pp.8-14, 2015 (Peer-Reviewed Journal)

## **Books & Book Chapters**

1. **Recent Advances in Molecular Biology and Biochemistry**

İşik M. (Editor)

Biyomit Publisher, İstanbul, 2023

2. **Enfeksiyon Hastalıklarında Oksidatif Stresin Rolü**

Çiftci B., Kirboğa K. K., İşik M.

in: Mikrobiyolojiye Güncel Yaklaşımlar, Prof. Dr. Mahmut Baykan, Prof. Dr. Rıza Dündar, Prof. Dr. Alper Karagöz, Editor, Bizim Büro Basımevi, Ankara, pp.1-15, 2023

3. **Cholinesterases and Their Inhibitors**

İŞIK M.

in: Hydrolases, Sajjad Haider, Editor, IntechOpen, London, pp.1, 2022

## **Refereed Congress / Symposium Publications in Proceedings**

1. **An Overview of Artificial Intelligence and Explainability in Pharmacovigilance**

Kirboğa K. K., Çiftci B., İşik M.

2ND INTERNATIONAL CONFERENCE ON ENGINEERING, NATURAL AND SOCIAL SCIENCES, Konya, Turkey, 4 - 06 April 2023, pp.415-422

2. **Synthesis and Characterization of Novel Triazol-Oksadiazol-Sulfonamid Derivatives: Determination of Their Antidiabetic and Radical Scavenging Activities**

İŞIK M., TÜRKEŞ C., ARSLAN M., FIRAT M., BEYDEMİR Ş.

4th Eurasia Biochemical Approaches & Technologies (EBAT) Congress, Antalya, Turkey, 3 - 06 November 2022, pp.63

3. **Investigation of In Vitro and In Silico Effects of Brown Algae Extracts on Cholinergic Enzymes Activity**

ÜNAL D., İŞIK M., TÜRKEŞ C., KIZILKAYA İ., BEYDEMİR Ş.

4th Eurasia Biochemical Approaches & Technologies (EBAT) Congress, Antalya, Turkey, 3 - 06 November 2022, pp.28

4. **Designing enzymes and pathways using artificial intelligence for metabolicengineering**

Kirboğa K. K., İşik M.

2nd International Conference on Engineering and Applied Natural Sciences, Konya, Turkey, 10 October 2022

5. **Synthesis, Characterization, Biological Evaluation and Molecular Docking Studies of Novel Azoimine Compounds with Sulfisoxazole Backbone**

- IŞIK M., LOLAK N., AKOCAK S., DURAN H. E., TÜRKEŞ C., DURGUN M., BEYDEMİR \$.  
3rd Eurasia Biochemical Approaches & Technologies Congress (EBAT), Antalya, Turkey, 4 - 07 November 2021
6. **Elimination of Possible Effects of Chloroquine on Neuron-HUVEC Culture with Ginseng**  
YILMAZ A., ÇİÇEK B., HACIMÜFTÜOĞLU A., TAGHIZADEHGHALEHJOUGHİ A., IŞIK M., NECİP A.  
1ST INTERNATIONAL DR. SAFİYE ALI MULTIDICIPLINARY STUDIES CONGRESS IN HEALTH SCIENCES, Turkey, 06 August 2021
7. **Purification and Characterization of the Carbonic Anhydrase Enzyme From Pamous Argenteus Gill Tissue And The Effect Of Some Metal Ions On Enzyme Activity**  
Taslimi P., IŞIK M.  
6th International Conference On Engineering Natural Sciences, 24 - 26 January 2020
8. **Neuroprotective and Antioxidant Effects of Artemisia Absinthium L.**  
IŞIK M.  
2nd Eurasia Biochemical Approaches Technologies (2. EBAT) Congress, Antalya, Turkey, 26 - 29 October 2019
9. **Biological activity and phytochemical content of aqueous and methanol extracts obtained from Achillea millefolium L. (Asteraceae)**  
IŞIK M.  
Euroasia 4. International Congress On Applied Sciences, Kiev, Ukraine, 27 - 29 September 2019
10. **Investigation Effects of Some Sulfonamide Derivatives on Paraoxonase-1 Activity**  
IŞIK M., BEYDEMİR \$., DEMİR Y., DURGUN M., NECİP A.  
1st InternationalTechnology Sciences and Design Symposium, Giresun, Turkey, 27 - 29 June 2018
11. **In Vitro Inhibition of Acetylcholinesterase Enzyme with Local Anesthetics**  
TÜRKES C., IŞIK M., DEMİR Y., BEYDEMİR \$.  
1st InternationalTechnology Sciences and Design Symposium, 27 - 29 June 2018
12. **Oxidative Stress Biomarkers in Coronary Artery and Cerebrovascular Disease**  
IŞIK M., BEYDEMİR \$., TUNÇ A.  
4th International Congress on Applied Biological Sciences, Eskişehir, Turkey, 3 - 05 May 2018
13. **Determination of mRNA expression in the leukocytes of coronaryartery and cerebrovascular patients**  
IŞIK M., TUNÇ A., BEYDEMİR \$.  
7th International Molecular Biology and Biotechnology Congress, Konya, Turkey, 25 - 27 April 2018
14. **Why There is No Difference in Antioxidant Levels Between Acute Perforated and Suppurative Appendicitis?**  
Temiz A., IŞIK M., ALBAYRAK Y., Aslan H. E., Aslan A., Demir Y., Atasoy G., ALBAYRAK A., Özdemir Y., BEYDEMİR \$.  
1st International Congress On Cancer Ion Channels (IONCC2017), 21 - 23 September 2017
15. **DNA Damage During Extracorporeal Circulation**  
DİKME R., Andaç M. H., AYDIN M. S., GÖÇ Ö., PADAK M., IŞIK M., EZHAR K., BAKAR Y.  
1st International Congress On Cancer Ion Channels (IONCC2017), 21 - 23 September 2017
16. **Biosensor Applications of Enzyme Immobilized to Cationic Octadecylamine by Langmuir-Blodgett Techniques**  
GÜR B., DAĞCI KIRANŞAN K., IŞIK M., BEYDEMİR \$., ALANYALIOĞLU M., ONGANER Y.  
International Congress on Semiconductor Materials and Devices, Konya, Turkey, 17 - 19 August 2017, pp.99
17. **Anti-Cancer Effect Of 4-(3,5-Dikloro-2-Hidrosibenzilamino) Benzensulfonamit on Ht-29 (Colon Adenocarcinoma Cells)**  
KOYUNCU İ., GÖNEL A., DURGUN M., IŞIK M., AKDAĞ A., PADAK M., NECİP A., DİKME R., BEKTAŞ İ., GÖÇ Ö.  
International Congress on Fundamental and Applied Sciences, Sarajevo, Bosnia And Herzegovina, 21 - 25 August 2017
18. **Synthesis of The 4-(2-Aminoethyl)-Benzenesulfonamide Derivatives and Inhibitory Activity Against Human PON1**  
DEMİR Y., IŞIK M., DURGUN M., NECİP A., aslan h. e., BEYDEMİR \$.  
International Congress on Fundamental and Applied Sciences, 21 - 25 August 2017

19. **Investigation Effects of Some Sulfonamide Derivatives on ACHE Enzyme**  
İŞIK M., BEYDEMİR Ş., DEMİR Y., DURGUN M., NECİP A.  
International Congress on Fundamental and Applied Sciences, 21 - 25 August 2017
20. **ANTIOXIDANT ACTIVITIES OF ROSA CANINA SPECIES COLLECTED FROM TURKEY**  
İŞIK M., KANBUR H., DİKİCİ E., TOZOĞLU F., BEYDEMİR Ş., GÜLÇİN İ., KÖKSAL E.  
1st International Congress on Medical and Aromatic Plants, 10 - 12 May 2017
21. **Determination of Antioxidant Activitiy of Verbascum Stepporum Extract Obtained with Different Solvents**  
İŞIK M., AKDAĞ A., KOYUNCU İ., NECİP A., AYKANAT A.  
International Conference on Agriculture, Forest, Food Sciences and Technologies, Nevşehir, Turkey, 15 - 17 May 2017
22. **Antioxidant Activity of Centaurea Staphiana**  
KOYUNCU İ., AKDAĞ A., İŞIK M., NECİP A., DİKME R.  
International Conference on Agriculture, Forest, Food Sciences and Technologies, Nevşehir, Turkey, 15 - 17 May 2017
23. **Determination Of Total Phenolic, Total Flavanoid, Condensed Tannins And Antioxidant Activity Of Karaçalı Fruits (Paliurus Spina Christi)**  
TAKIM K., İŞIK M., NECİP A.  
I.International Congress On Medicinal And Aromatic Plants, 10 - 12 May 2017
24. **Determination of the Antioxidant Activity of Haplophyllum Buxbaumii Plant in Different Solvents**  
KOYUNCU İ., NECİP A., BEKTAŞ İ., İŞIK M., AKDAĞ A., GÖÇ Ö.  
I. International Congress On Medicinal And Aromatic Plants, Konya, Turkey, 10 - 12 May 2017
25. **Evaluation of the Antioxidant Capacity and Phenolic Content of Juniae Mesopotamica Extract Obtained with Different Solvents**  
NECİP A., İŞIK M., AKDAĞ A., KOYUNCU İ., AYKANAT A., DİKME R.  
I. International Congress On Medicinal And Aromatic Plants, Konya, Turkey, 10 - 12 May 2017
26. **Antioxidant activity in various extracts of Haplophyllum ptilostylum and alcea acaulis**  
AKDAĞ A., Aykanat A., Akçiçek D., KOYUNCU İ., İŞIK M., PADAK M.  
I.International Congress On Medicinal And Aromatic Plants, 10 - 12 May 2017
27. **Antioxidant Activities of Rosa Canina Species Collected From Turkey**  
İŞIK M., KANBUR H., DİKİCİ E., TOZOĞLU F., BEYDEMİR Ş., GÜLÇİN İ., KÖKSAL E.  
I.International Congress On Medicinal And Aromatic Plants, 9 - 12 May 2017
28. **Salisilaldimin türevinin antikanser özelliklerinin incelenmesi**  
KOYUNCU İ., GÖNEL A., İŞIK M., BEYDEMİR Ş., KILIÇ A., DURGUN M., NECİP A.  
IVEK 3rd International Convention of Pharmaceuticals and Pharmacies, 26 - 29 April 2017
29. **Asetilkolinesteraz enzim aktivitesi üzerine bazı fenolikbileşiklerin in vitro etkilerinin incelenmesi**  
BEYDEMİR Ş., İŞIK M.  
IVEK 3rd International Convention of Pharmaceuticals and Pharmacies, İstanbul, Turkey, 26 - 29 April 2017
30. **Kemoterapötik ajanlar olarak binükleer bor-florür kompleksi**  
KOYUNCU İ., GÖNEL A., İŞIK M., BEYDEMİR Ş., DURGUN M., DİKME R.  
IVEK 3rd International Convention of Pharmaceuticals and Pharmacies, İstanbul, Turkey, 26 - 29 April 2017
31. **Immobilization of Malate Dehydrogenase Enzyme by Langmuir Blodgett Techniqueand Its Biosensor Applications**  
GÜR B., MERAL K., İŞIK M., DAĞCI KIRANŞAN K., ALANYALIOĞLU M., BEYDEMİR Ş.  
2nd INTERNATIONAL TURKIC WORLD CONFERANCE ON CHEMICAL SCIENCES AND TECHNOLOGIES(2nd ITWCCST), 26 - 30 October 2016
32. **Gypsophila Bitlisensis'in Antioksidant Özelliklerinin Belirlenmesi**  
İŞIK M., KORKMAZ M., BURSAL E., GÜLÇİN İ., KÖKSAL E., TOHMA H.  
27. Ulusal Kimya Kongresi, Çanakkale, Turkey, 23 - 28 August 2015
33. **Kardiyovasküler Hastalarda HDL, Triglicerit ve Kolesterol Seviyesinin Paraoksonaz-1 enzimi ile MDA Düzeyi Üzerine Etkisi**

- DEMİR Y., İŞIK M., DURAN H. E., ARAZ A., BEYDEMİR \$.  
 4. Ulusal Moleküler Biyoloji ve Biyoteknoloji Kongresi, Turkey, 21 - 24 August 2015
34. **HDL ve LDL Seviyesi Farklı Olan Grupların Serumlarında Asetilkolinesteraz ve Protein Karbonil Düzeyinin Belirlenmesi**  
 İŞIK M., DURAN H. E., DEMİR Y., BEYDEMİR \$.  
 4. Ulusal Moleküler Biyoloji ve Biyoteknoloji Kongresi, Turkey, 21 - 24 August 2015
35. **Kardiyovasküler Hastalarda HDL ve Trigliserid Seviyesinin Serum GST Aktivitesi ve Total Tiyol Miktarı Üzerine Etkisinin İncelenmesi**  
 DURAN H. E., DEMİR Y., İŞIK M., BEYDEMİR \$.  
 4. Ulusal Moleküler Biyoloji ve Biyoteknoloji Kongresi, Turkey, 21 - 24 August 2015
36. **Alzheimer Tipi Demans Hastalarında Serum ve Eritrosit Asetilkolinesteraz Enzim Aktivitesinin Araştırılması ve Bu Enzimin Lökositlerde mRNA Expresyon Seviyesinin Belirlenmesi**  
 İŞIK M., BEYDEMİR \$.  
 4. Ulusal Moleküler Biyoloji ve Biyoteknoloji Kongresi, Turkey, 21 - 24 August 2015
37. **Aldoz Redüktaz Enziminin Koyun Böbreğinden Kısmı Olarak Saflaştırılması ve Bazı Fenolik Bileşiklerin Enzim Aktivitesi Üzerine Etkilerinin İncelenmesi**  
 DEMİR Y., İŞIK M., KILINÇ N., BEYDEMİR \$.  
 15. ULUSAL KROMATOGRAFİ KONGRESİ, Turkey, 08 April 2018 - 10 April 2015
38. **Investigation of the Effects of Antiepileptic Drugs on PON1, GST and AChE activities in Serum of Adult Patients with Epilepsy**  
 İŞIK M., DEMİR Y., BEYDEMİR \$., DEMİR R., ŞİMŞEK F.  
 III. International Congress of the Molecular Biology Association, İzmir, Turkey, 10 - 12 September 2014

## Academic and Administrative Experience

2022 - Continues	<b>Member of the Senate</b>	Bilecik Seyh Edebali University, Mühendislik Fakültesi, Biyomühendislik
2022 - Continues	<b>Director of Vocational School</b>	Bilecik Seyh Edebali University, Mühendislik Fakültesi, Biyomühendislik
2022 - Continues	<b>BAP Coordinator</b>	Bilecik Seyh Edebali University, Mühendislik Fakültesi, Biyomühendislik
2016 - 2020	<b>Head of Department</b>	Harran University, Sağlık Hizmetleri MYO, Eczane Hizmetleri Programı
2017 - 2019	<b>University Executive Board Member</b>	Harran University, Sağlık Hizmetleri MYO

## Courses

- Biyokimya, Undergraduate, 2023 - 2024  
 Metabolizma, Postgraduate, 2023 - 2024  
 Biochemistry, Undergraduate, 2023 - 2024  
 Danışmanlık (I.Yarıyıl), Postgraduate, 2019 - 2020  
 İleri Biyokimya II, Postgraduate, 2019 - 2020  
 BİYOKİMYA, Associate Degree, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017  
 Danışmanlık (IV.Yarıyıl), Postgraduate, 2019 - 2020  
 TİBBİ BİYOKİMYA, Associate Degree, 2019 - 2020, 2018 - 2019, 2017 - 2018

KİMYA-I, Undergraduate, 2019 - 2020, 2018 - 2019  
TOKSİKOLOJİ II, Associate Degree, 2019 - 2020, 2018 - 2019, 2017 - 2018  
TOKSİKOLOJİ, Associate Degree, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017  
TEMEL BÝOKÝMYA, Associate Degree, 2019 - 2020, 2018 - 2019, 2017 - 2018  
Danışmanlık (III.Yarıyıl), Postgraduate, 2019 - 2020  
Uzmanlık Alan Dersi (II.Yarıyıl), Postgraduate, 2019 - 2020  
Danışmanlık (II.Yarıyıl), Postgraduate, 2019 - 2020  
KİMYA-II, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018  
TEMEL KİMYA, Associate Degree, 2019 - 2020, 2018 - 2019  
TEMEL BÝLGÝ TEKNOLOJÝLERİ, Associate Degree, 2019 - 2020, 2018 - 2019, 2017 - 2018  
İleri Biyokimya 1, Postgraduate, 2019 - 2020  
Enzim İmmobilizasyon Yöntemleri, Postgraduate, 2019 - 2020  
Yüksek Lisans Tez Çalışması, Postgraduate, 2019 - 2020  
KİMYA, Associate Degree, 2019 - 2020, 2016 - 2017  
Enzim Kinetiği, Postgraduate, 2019 - 2020  
Uzmanlık Alan Dersi (IV.Yarıyıl), Postgraduate, 2019 - 2020  
Uzmanlık Alan Dersi (III.Yarıyıl), Postgraduate, 2019 - 2020  
Uzmanlık Alanı Dersi (I.Yarıyıl), Postgraduate, 2019 - 2020  
TOKSİKOLOJİ I, Associate Degree, 2019 - 2020, 2018 - 2019, 2017 - 2018  
AĞIZ VE DÝŞ BÝOKÝMÝASI, Associate Degree, 2018 - 2019  
YAZ STAJI (30 İŞ GÜNÜ), Associate Degree, 2018 - 2019, 2017 - 2018  
TEMEL BÝLGÝ TEKNOLOJÝSİ, Associate Degree, 2017 - 2018, 2016 - 2017  
ECZANE TEKNÝKERLİĞÝUYGULAMALARI II, Associate Degree, 2017 - 2018  
İlaç Şekilleri, Associate Degree, 2016 - 2017

## Advising Theses

IŞIK M., Bütirilkolinesteraz Enzimi İçin İletken Polimer Tabanlı Elektrokimyasal Biyosensör Geliştirilmesi, Postgraduate, Ş.İSTEGÜN(Student), Continues

## Tasks In Event Organizations

Güngör E. B., Özcan K., IŞIK M., 2. Bilecik Bilim Şenliği, Science / Art Camp or Summer School Organization, Bilecik, Turkey, Ekim 2023  
Özan K., IŞIK M., 1. Endüstriyel Sürdürülebilirlik ve Yeşil Dönüşüm Çalışayı, Workshop Organization, Bilecik, Turkey, Ekim 2023  
Güngör E. B., Özcan K., IŞIK M., 1. Bilecik Bilim Şenliği, Science / Art Camp or Summer School Organization, Bilecik, Turkey, Mayıs 2022  
İşik M., I. Ulusal Elektrokimya ve Biyosensör Uygulamaları Çalışayı, Workshop Organization, Bilecik, Turkey, Kasım 2021

## Research Areas

Health Sciences, Natural Sciences, Engineering and Technology