

## Assoc. Prof. Mine AKSOY

### Personal Information

Web: <https://avesis.atauni.edu.tr/maksoy>

### International Researcher IDs

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Yoksis Researcher ID: 114587

### Biography

He was born in 1984 in Erzurum. He completed his primary and high school education in Erzurum. She graduated from Atatürk University, Department of Chemistry in 2003 and completed university education in 2007. He received his master's degree in Biochemistry from Atatürk University, Faculty of Science. In the same year, he is continuing his PhD education in Department of Biochemistry in Department of Chemistry, Science Faculty of Atatürk University.

### Education Information

Doctorate, Ataturk University, Fen Bilimleri Enstitüsü, Kimya/Biyokimya, Turkey 2010 - 2016

Postgraduate, Ataturk University, Fen Bilimleri Enstitüsü, Turkey 2007 - 2010

Undergraduate, Ataturk University, Fen Fakültesi, Kimya, Turkey 2003 - 2007

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, BAZI FLAVONOİDLERİN ANTiOKSiDAN KAPASİTELERİNİN BELİRLENMESİ VE İNSAN ERİTROSİTLERİN DEN SAFLAŞTIRILAN GLUTATYON S-TRANSFERAZ ENZİM AKTİVİTESİ ÜZERİNE İNHİBİSYON ETKİLERİNİN İNCELENMESİ, Atatürk Üniversitesi, Fen Fakültesi, Kimya/Biyokimya, 2016

Postgraduate, TERMOFİLİK BREVİBACİLLUS BREVIS BAKTERİSİNDEN PEKTİN LİYAZ ENZİMİNİN SAFLAŞTIRILMASI, KARAKTERİZASYONU ve BİTKİSEL YAĞ ELDESİNDE KULLANABİLİRLİĞİNİN İNCELENMESİ, Atatürk Üniversitesi, Fen Fakültesi, Kimya/Biyokimya, 2010

### Research Areas

Chemistry, Biochemistry, Enzyme Kinetics, Natural Sciences

### Academic Titles / Tasks

Associate Professor, Ataturk University, Fen Fakültesi, Kimya, 2022 - Continues

## Academic and Administrative Experience

Member of Department FEDEK Commission, Ataturk University, Fen Fakültesi, Kimya, 2022 - Continues

Deputy Head of Department, Ataturk University, Fen Fakültesi, Kimya, 2022 - Continues

## Courses

Kimya, Undergraduate, 2023 - 2024

Biyokimya Lab, Undergraduate, 2022 - 2023

Biyokimya, Undergraduate, 2022 - 2023

Besin Kimyası, Undergraduate, 2022 - 2023

Biyokimya, Undergraduate, 2021 - 2022

Proje I, Undergraduate, 2021 - 2022

Biyokimya Laboratuvarı, Undergraduate, 2021 - 2022

Genel Kimya Laboratuvarı, Undergraduate, 2018 - 2019

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Synthesis of quinazoline derivatives with new phenolic moieties: in vitro and in silico evaluations as alternative polyphenol oxidase inhibitors**  
Öztürk C., Tokali F. S., Öztekin A., Kalay E., Karagöz Y., AKSOY M.  
Chemical Papers, vol.78, no.15, pp.8321-8332, 2024 (SCI-Expanded)
- II. **A safe alternative synthesis of primary carbamates from alcohols; *in vitro* and *in silico* assessments as an alternative acetylcholinesterase inhibitors**  
Atmaca U., Aksoy M., Oztekin A.  
JOURNAL OF BIOMOLECULAR STRUCTURE & DYNAMICS, vol.41, no.17, pp.8191-8200, 2023 (SCI-Expanded)
- III. **Some indazoles as alternative inhibitors for potato polyphenol oxidase**  
Ozturk C., Bayrak S., Demir Y., Aksoy M., Alim Z., Özdemir H., Küfrevioğlu Ö. İ.  
BIOTECHNOLOGY AND APPLIED BIOCHEMISTRY, vol.69, no.5, pp.2249-2256, 2022 (SCI-Expanded)
- IV. **Prolidase activity in aqueous and serum samples of cataract cases with Pseudoexfoliation syndrome**  
Çalışkan B., Serhat Özaslan M., Aksoy M., Salman İ.  
EXPERIMENTAL EYE RESEARCH, vol.214, 2022 (SCI-Expanded)
- V. **Using of group-based selected flavonoids as alternative inhibitors for potato polyphenol oxidase**  
Aksoy M., Öztekin A.  
JOURNAL OF FOOD BIOCHEMISTRY, vol.45, no.4, 2021 (SCI-Expanded)
- VI. **A study on the effects of inhibition mechanism of curcumin, quercetin, and resveratrol on human glutathione reductase through in vitro and in silico approaches**  
Güller P., Karaman M., Güller U., Aksoy M., Küfrevioğlu Ö. İ.  
Journal of Biomolecular Structure and Dynamics, vol.39, no.5, pp.1744-1753, 2021 (SCI-Expanded)
- VII. **The Construction and Testing of an Amperometric Biosensor for Oxidized Glutathione with Glutathione Reductase Immobilized on Reduced Graphene Oxide Paper Modified with Cobalt Sulphur**  
Aksoy M., Kiransan K.  
CHEMISTRYSELECT, vol.5, no.44, pp.13925-13935, 2020 (SCI-Expanded)
- VIII. **A novel polyphenol oxidase immobilized polyglycine/reduced graphene oxide composite electrode for sensitive determination of catechol**  
Dağcı Kiranşan K., Aksoy M.  
JOURNAL OF APPLIED ELECTROCHEMISTRY, vol.50, no.8, pp.863-873, 2020 (SCI-Expanded)
- IX. **A new insight into purification of polyphenol oxidase and inhibition effect of curcumin and quercetin on potato polyphenol oxidase**

- AKSOY M.  
PROTEIN EXPRESSION AND PURIFICATION, vol.171, 2020 (SCI-Expanded)
- X. **Purification of tea leaf (*Camellia sinensis*) polyphenol oxidase by using affinity chromatography and investigation of its kinetic properties**  
Ozturk C., AKSOY M., KÜFREVİOĞLU Ö. İ.  
JOURNAL OF FOOD MEASUREMENT AND CHARACTERIZATION, vol.14, no.1, pp.31-38, 2020 (SCI-Expanded)
- XI. **Inhibition effects of pesticides on glutathione-S-transferase enzyme activity of Van Lake fish liver**  
Ozaslan M. S., Demir Y., AKSOY M., KÜFREVİOĞLU Ö. İ., Beydemir S.  
JOURNAL OF BIOCHEMICAL AND MOLECULAR TOXICOLOGY, vol.32, no.9, 2018 (SCI-Expanded)
- XII. **Inhibition of human erythrocyte glutathione S-transferase by some flavonoid derivatives**  
AKSOY M., Kufrevioglu I.  
TOXIN REVIEWS, vol.37, no.3, pp.251-257, 2018 (SCI-Expanded)
- XIII. **Purification of glutathione S-transferase from Van Lake fish (*Chalcalburnus tarichii* Pallas) muscle and investigation of some metal ions effect on enzyme activity**  
AKSOY M., Ozaslan M. S., KÜFREVİOĞLU Ö. İ.  
JOURNAL OF ENZYME INHIBITION AND MEDICINAL CHEMISTRY, vol.31, no.4, pp.546-550, 2016 (SCI-Expanded)

### Articles Published in Other Journals

- I. **Inhibitor Effects of Some Artificial Tears Drops on Human Carbonic Anhydrase Enzyme-II (hCA-II)**  
ÇALIŞKAN B., AKSOY M.  
İğdır Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.13, no.2, pp.941-947, 2023 (Peer-Reviewed Journal)
- II. **Investigation of Some Metabolic Enzyme Activities in Samples of Serum and Humor Aqueous of Cataract Cases with Pseudoexfoliation Syndrome**  
ÇALIŞKAN B., AKSOY M., ÖZASLAN M. S., Akyol Salman i.  
Türk Doğa ve Fen Dergisi, vol.12, no.1, pp.163-170, 2023 (Peer-Reviewed Journal)
- III. **Bazı Doğal Bileşikler ve Benzeniyol ile Polifenol Oksidaz İnhibisyonu Yoluyla Enzimatik Kararmanın Önlenmesi**  
AKSOY M.  
European Journal of Science and Technology, no.20, pp.723-727, 2020 (Peer-Reviewed Journal)

### Refereed Congress / Symposium Publications in Proceedings

- I. **Synthesis of Quinazoline Derivatives with New Phenolic Moieties; In Vitro and In Silico Evaluations as Alternative Catechol Oxidase Inhibitors**  
Öztürk C., Tokalı F., Öztekin A., Kalay E., Aksoy M.  
4 th EURASIA BIOCHEMICAL APPROACHES & TECHNOLOGIES (EBAT) CONGRESS, Antalya, Turkey, 3 - 06 November 2022, pp.244
- II. **Investigation of Inhibition Effect of Organosulfur Plant Extracts on Polyphenol Oxidase Activity**  
Aksoy M., Bayrak S.  
3th EBAT, Antalya, Turkey, 4 - 07 November 2021, pp.18-19
- III. **INHIBITION EFFECT OF FLAVONOIDS DERIVATES ON HUMAN ERYTHROCYTE GLUTATHIONE S-TRANSFERASE**  
AKSOY M.  
2nd INTERNATIONAL APPLIED SCIENCES CONGRESS, 27 March 2021
- IV. **Ev Yapımı Sirke Türleriyle Enzimatik Kararmanın Önlenmesi**  
AKSOY M.  
31. Ulusal Kimya Kongresi, 10 September 2019
- V. **Polifenol Oksidaz Enziminin Bazı Kalkon Türleriyle İnhibisyonu**

YILMAZ C., BAYRAK S., AKSOY M., KÜFREVİOĞLU Ö. İ.

European Conference on Science, Art Culture, 19 - 22 April 2018

- VI. **FLEXIBLE AND FREESTANDING CATALASE-Fe<sub>3</sub>O<sub>4</sub>/REDUCED GRAPHENE OXIDE HYBRIDE PAPER: ENZYMATIC HYDROGEN PEROXIDE SENSOR APPLICATIONS**  
DAĞCI KIRANŞAN K., AKSOY M., TOPÇU E.  
International DNA Day and Genom Congress, 24 - 28 April 2017
- VII. **Inhibition of Human Erythrocyte Glutathione S-Transferase by Some Flavonoids Derivates**  
AKSOY M., KÜFREVİOĞLU Ö. İ.  
INTERNATIONAL DNA DAY AND GENOME CONGRESS (IDDGC) 2017, 24 - 28 April 2017
- VIII. **Flexible and Electrically Conductive Fe<sub>3</sub>O<sub>4</sub> rGO Paper Electrode and Its Catalytical Application**  
DAGCI K., TOPÇU E., AKSOY M., ALANYALIOĞLU M.  
Graphene Turkey, 20 - 21 October 2016
- IX. **İnsan Eritrositlerinden Saflaştırılan Glutatyon S-Transferaz Enzim Aktivitesi Üzerine Kurkumin, Kuersetin ve Resveratrol Fenolik Bileşiklerinin İnhibisyon Etkilerinin İncelenmesi**  
AKSOY M., GÜLLER P., GÜLLER U., KÜFREVİOĞLU Ö. İ.  
16. Kromatografi Kongresi, Turkey, 31 August - 02 September 2016
- X. **İnsan eritrositlerinden saflaştırılan glutatyon S transferaz enzim aktivitesi üzerine kurkumin kuersetin ve resveratrol fenolik bileşiklerinin inhibisyon etkilerinin incelenmesi**  
AKSOY M., GÜLLER P., GÜLLER U., KÜFREVİOĞLU Ö. İ.  
16. Kromatografi Kongresi, Turkey, 31 August - 02 September 2016
- XI. **İnsan eritrositlerinden saflaştırılan Glutatyon redüktaz enzimi aktivitesi üzerine bazı fenolik bileşiklerin etkilerinin incelenmesi**  
GÜLLER U., AKSOY M., GÜLLER P., KÜFREVİOĞLU Ö. İ.  
16. Kromatografi Kongresi, Turkey, 31 August - 02 September 2016
- XII. **In Situ Synthesized rGO Fe<sub>3</sub>O<sub>4</sub> Magnetic Nanocomposites for Immobilization of Carbonic Anhydrase**  
AKSOY M., DAĞCI K., KÜFREVİOĞLU Ö. İ.  
11th International Conference on Protein Stabilisation, 9 - 11 May 2016
- XIII. **In Situ Synthesized rGO Fe<sub>3</sub>O<sub>4</sub> Magnetic Nanocomposites for Immobilization of Carbonic Anhydrase**  
AKSOY M., DAĞCI K., KÜFREVİOĞLU Ö. İ.  
11th International Conference on Protein Stabilisation, İstanbul, Turkey, 9 - 11 May 2016
- XIV. **In Vitro Antioxidant Profiles of Some Flavonoids**  
AKSOY M., GÜLÇİN İ., KÜFREVİOĞLU Ö. İ.  
International Conference on Advances in Natural and Applied Sciences (ICANAS), Antalya, Turkey, 21 - 23 April 2016, vol.1726
- XV. **INVESTIGATION OF THE EFFECTS OF EXTRACTS FROM SOME DIURETICS PLANTS ON THE ACTIVITY OF HUMAN ERYTHROCYTES CARBONIC ANHYDRASE II**  
AKSOY M., TAŞER P., GÜLLER U., KÜFREVİOĞLU Ö. İ., ÇİFTÇİ M.  
MESMEP 2015, Antalya, Turkey, 22 - 25 April 2015
- XVI. **Glutatyon S Transferaz Enziminin Van Balığı Kas Dokusundan Saflaştırılması ve Bazı Metal İyonlarının Enzim Aktivitesi Üzerine Etkilerinin İncelenmesi**  
AKSOY M., SERHAT Ö., KÜFREVİOĞLU Ö. İ.  
KROMATOGRAFİ 2015, Turkey, 8 - 10 April 2015
- XVII. **Glutatyon S Transferaz enziminin van balığı kas dokusundan saflaştırılması ve bazı metal iyonlarının enzim aktivitesi üzerine etkilerinin incelenmesi**  
AKSOY M., ÖZASLAN S., KÜFREVİOĞLU Ö. İ.  
15.Ulusal Kromatografi Kongresi, Turkey, 8 - 10 April 2015
- XVIII. **İnsan eritrosit glutatyon redüktaz enziminin saflaştırılması ve bazı fenolik maddelerin enzim aktivitesi üzerine inhibisyon etkisinin incelenmesi**  
AKSOY M., GÜLÇİN İ., KÜFREVİOĞLU Ö. İ.  
Kromatografi 2013, Bursa, Turkey, 19 - 22 June 2013, pp.192
- XIX. **İnsan Eritrosit Glutatyon Redüktaz Enziminin Saflaştırılması ve 2 florofenol 3 florofenol 4 florofenol**

## **Bileşiklerinin Enzim Aktivitesi Üzerine İnhibisyon Etkisinin İncelenmesi**

AKSOY M., ÖİRFAN K., GÜLÇİN İ.

KROMATOĞRAFİ 2013, Turkey, 5 - 07 June 2013

## **XX. Investigation of inhibitory effect of phenol 2 fluorophenol and 3 fluorophenol on carbonic anhydrase isoenzymes I and II The 9th International Conference on the Carbonic Anhydrase CA**

AKSOY M., ANNAKAYA P., HAN H., GÜLÇİN İ., KÜFREVİOĞLU Ö. İ.

The 9th International Conference on the Carbonic Anhydrase (CA), Antalya, Turkey, 11 - 15 April 2012

## **Supported Projects**

AKSOY M., ERDEM KIZILTUNÇ H., ŞAKİROĞLU H., Project Supported by Higher Education Institutions, BROKOLİDEN Brassica oleracea L var Italica GLUTATYON STRANSFERAZIN SAFLAŞTIRILMASI KARAKTERİZASYONU VE BAZI HERBİSİT TÜREVLERİNİN ENZİM AKTİVİTESİ ÜZERİNE ETKİLERİNİN İNCELENMESİ, 2021 - 2023

AKSOY M., BAYRAK S., Project Supported by Higher Education Institutions, Polifenol oksidaz aktivitesi üzerine organosülfürlü bitki ekstraktlarının inhibisyon etkisinin incelenmesi ve sülfür içeriği ile inhibisyon etkisi arasındaki ilişkinin belirlenmesi, 2021 - 2023

AKBULUT N., MENZEK A., DAŞTAN A., EKİNCİ D., KILIÇ H., ÖZDEMİR H., KAZAZ C., SARAÇOĞLU N., ONGANER Y., ŞAHİN E., et al., Project Supported by Higher Education Institutions, Kimya Bölümünün Akademik Araştırma Potansiyelinin Geliştirilmesi, 2019 - 2021

AKSOY M., DAĞCI KIRANŞAN K., Project Supported by Higher Education Institutions, Glutatyon Redüktaz İmmobilize Esnek GrafenCoS Kğıt Elektrotun Hazırlanması Karakterizasyonu ve Glutatyon Tayininde Kullanılabilirliğinin Spektrofotometrik ve Elektrokimyasal Olarak Araştırılması, 2018 - 2019

DAĞCI KIRANŞAN K., AKSOY M., Project Supported by Higher Education Institutions, KATALAZ İMMOBİLİZASYONU İÇİN GRAFEN/FE3O4 NANAOKOMPOZİT KAĞIT ELEKTROTLARIN HAZIRLANMASI VE AMPEROMETRİK UYGULAMALARININ ARAŞTIRILMASI, 2016 - 2018

KÜFREVİOĞLU Ö. İ., AKSOY M., ÖZASLAN M. S., Project Supported by Higher Education Institutions, GLUTATYON S-TRANSFERAZ ENZİMİNİN VAN GÖLÜ BALIĞI (CHALCALBURNUS TARİCHİ PALLAS) KARACİĞERİNDEN SAFLAŞTIRILMASI, TARIM İLACI OLARAK KULLANILAN BAZI PESTİSİTLERİN VE KİMYASALLARIN ENZİM AKTİVİTESİ ÜZERİNE ETKİLERİNİN İNCELENMESİ, 2015 - 2017

KÜFREVİOĞLU Ö. İ., AKSOY M., Project Supported by Higher Education Institutions, TORTUM ELMASINDAN POLİFENOL OKSİDAZ ENZİMİNİN SAFLAŞTIRILMASI KARAKTERİZASYONU VE BAZI KİMYASALLARIN ETKİSİNİN İNCELENMESİ, 2013 - 2016

ŞAKİROĞLU H., AKSOY M., Project Supported by Higher Education Institutions, BAZI FLAVONOİD VE ŞALKONLARIN ANTİOKSİDAN VE ANTİRADİKAL KAPASİTELERİNİN BELİRLENMESİ, İNSAN KARBONİK ANHİDRAZ I VE II İZOENZİMLERİNİN İNHİBİSYON ETKİLERİNİN İNCELENMESİ, 2012 - 2015

## **Scientific Refereeing**

TUBITAK Project, 1002 - Quick Support Program, Ataturk University, Turkey, November 2023

INDUSTRIAL CROPS AND PRODUCTS, Journal Indexed in SCI-E, January 2023

PROCESS BIOCHEMISTRY, Journal Indexed in SCI-E, December 2022

PROCESS BIOCHEMISTRY, SCI Journal, July 2021

PROCESS BIOCHEMISTRY, SCI Journal, May 2021

JOURNAL OF FOOD BIOCHEMISTRY, SCI Journal, March 2021

JOURNAL OF FOOD BIOCHEMISTRY, SCI Journal, June 2020

JOURNAL OF FOOD BIOCHEMISTRY, SCI Journal, March 2020

Journal of Biochemical and Molecular Toxicology, SCI Journal, July 2018

Project Supported by Higher Education Institutions, May 2018

Journal of Biochemical and Molecular Toxicology, SCI Journal, February 2018

## Tasks In Event Organizations

Kılıç H., Aksoy M., Atasever A., 4th Eurasia Biochemical Approaches & Technologies (EBAT) Congress, Scientific Congress, Turkey, Kasım 2022

Kılıç H., AKSOY M., 3rd EURASIA BIOCHEMICAL APPROACHES & TECHNOLOGIES (EBAT) CONGRESS, Scientific Congress, Antalya, Turkey, Kasım 2021

## Metrics

Publication: 38

Citation (WoS): 205

Citation (Scopus): 215

H-Index (WoS): 8

H-Index (Scopus): 7

## Congress and Symposium Activities

European Conference On Science, Art & Culture, Attendee, Antalya, Turkey, 2018

International Dna Day And Genome Congress, Attendee, Kırşehir, Turkey, 2017

3rd Emerging 2D Materials& Graphene Conference, Attendee, Turkey, 2016

Kromatografi Kongresi, Attendee, Malatya, Turkey, 2016

11th International Conference on Protein Stabilisation, Attendee, İstanbul, Turkey, 2016

International Conference on Advances in Natural and Applied Sciences, Attendee, Turkey, 2016

Kromatografi Kongresi, Attendee, Uşak, Turkey, 2015

2nd Mediterranean Symposium on Medicinal and Aromatic Plants, Attendee, Turkey, 2015

Kromatografi Kongresi, Attendee, Bursa, Turkey, 2013

9th International Conference on Carbonic Anhydrase (CA), Attendee, Antalya, Turkey, 2012

23. Ulusal Kimya Kongresi, Attendee, Sivas, Turkey, 2009