

## Asst. Prof. Ekrem SULUKAN

### Personal Information

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### International Researcher IDs

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### Education

Doctorate, Ataturk University, Fen Bilimleri Enstitüsü, Su Ürünleri Mühendisliği Anabilim Dalı, Turkey 2018 - 2022

Postgraduate, Ataturk University, Fen Bilimleri Enstitüsü, Su Ürünleri Mühendisliği Anabilim Dalı, Turkey 2013 - 2015

Undergraduate, Sinop University, Su Ürünleri Fakültesi, Su Ürünleri Mühendisliği, Turkey 2009 - 2012

### Research Areas

Seafood, Life Sciences

### Academic Positions

Assistant Professor, Ataturk University, Su Ürünleri Fakültesi, Su Ürünleri Temel Bilimleri, 2024 - Continues

### Journal articles indexed in SCI, SSCI, and AHCI

- I. Co-exposure effect of different colour of LED lights and increasing temperature on zebrafish larvae (*< i> Danio</i>< i> rerio:</i>*): Immunohistochemical, metabolomics, molecular and behaviour approaches  
Pir R., SULUKAN E., ŞENOL O., ATAKAY M., BARAN A., Kankaynar M., Yıldız E., SALİH B., CEYHUN S. B.  
SCIENCE OF THE TOTAL ENVIRONMENT, vol.951, 2024 (SCI-Expanded)
- II. Okadaic acid enhances NfKB, TLR-4, caspase 3, ERK ½, c-FOS, and 8-OHdG signaling pathways activation in brain tissues of zebrafish larvae  
Topal A., Oğuş H., Sulukan E., Çomaklı S., Ceyhun S. B.  
Fish and Shellfish Immunology, vol.149, 2024 (SCI-Expanded)
- III. Global warming and nanoplastic toxicity; small temperature increases can make gill and liver toxicity more dramatic, which affects fillet quality caused by polystyrene nanoplastics in the adult zebrafish model  
ŞENOL O., Sulukan E., BARAN A., BOLAT İ., TORAMAN E., ALAK G., YILDIRIM S., Bilgin G., CEYHUN S. B.  
SCIENCE OF THE TOTAL ENVIRONMENT, vol.892, 2023 (SCI-Expanded)
- IV. The anxiolytic and circadian regulatory effect of agarwood water extract and its effects on the next generation; zebrafish modelling  
Kankaynar M., Ceyhun H. A., Baran A., Sulukan E., Yıldırım S., Bolat İ., Toraman E., Nadaroğlu H., Arslan M., Ceyhun S. B.  
COMPARATIVE BIOCHEMISTRY AND PHYSIOLOGY C-TOXICOLOGY & PHARMACOLOGY, vol.269, 2023 (SCI-

- Expanded)
- V. **Antioxidant/protective effects of carob pod< i> (*Ceratonia*</i>< i> siliqua</i> L.) water extract against deltamethrin-induced oxidative stress/toxicity in zebrafish larvae**  
Ünal E., Sulukan E., Şenol O., Baran A., Nadaroğlu H., Kankaynar M., Kızıltan T., Ceyhun S. B.  
COMPARATIVE BIOCHEMISTRY AND PHYSIOLOGY C-TOXICOLOGY & PHARMACOLOGY, vol.267, 2023 (SCI-Expanded)
- VI. **Global warming and glyphosate toxicity (I): Adult zebrafish modelling with behavioural, immunohistochemical and metabolomic approaches**  
Sulukan E., Baran A., Şenol O., Kankaynar M., Yıldırım S., Bolat İ., Ceyhun H. A., Toraman E., Ceyhun S. B.  
SCIENCE OF THE TOTAL ENVIRONMENT, vol.858, 2023 (SCI-Expanded)
- VII. **Global warming and glyphosate toxicity (II): Offspring zebrafish modelling with behavioral, morphological and immunohistochemical approaches**  
Sulukan E., Baran A., Kankaynar M., Kızıltan T., Bolat İ., Yıldırım S., Ceyhun H. A., Ceyhun S. B.  
SCIENCE OF THE TOTAL ENVIRONMENT, vol.856, 2023 (SCI-Expanded)
- VIII. **Fluoride exposure causes behavioral, molecular and physiological changes in adult zebrafish< i> (*Danio*</i>< i> rerio)</i> and their offspring**  
Karaman M., Toraman E., Sulukan E., Baran A., Bolat İ., Yıldırım S., Kankaynar M., Ghosigharehagaji A., Budak H., Ceyhun S. B.  
ENVIRONMENTAL TOXICOLOGY AND PHARMACOLOGY, vol.97, 2023 (SCI-Expanded)
- IX. **Nano-sized polystyrene plastic particles affect many cancer-related biological processes even in the next generations; zebrafish modeling**  
Sulukan E., ŞENOL O., BARAN A., Kankaynar M., Yıldırım S., Kızıltan T., BOLAT İ., CEYHUN S. B.  
SCIENCE OF THE TOTAL ENVIRONMENT, vol.838, 2022 (SCI-Expanded)
- X. **Effects of the food colorant carmoisine on zebrafish embryos at a wide range of concentrations**  
Kızıltan T., Baran A., Kankaynar M., Şenol O., Sulukan E., Yıldırım S., Ceyhun S. B.  
ARCHIVES OF TOXICOLOGY, vol.96, no.4, pp.1089-1099, 2022 (SCI-Expanded)
- XI. **The synergic toxicity of temperature increases and nanopolystyrene on zebrafish brain implies that global warming may worsen the current risk based on plastic debris**  
Sulukan E., Baran A., Şenol O., Yıldırım S., Mavi A., Ceyhun H. A., Toraman E., Ceyhun S. B.  
SCIENCE OF THE TOTAL ENVIRONMENT, vol.808, 2022 (SCI-Expanded)
- XII. **The potential effect mechanism of high-fat and high-carbohydrate diet-induced obesity on anxiety and offspring of zebrafish**  
Turkoglu M., Baran A., Sulukan E., Ghosigharehagaji A., Yıldırım S., Ceyhun H. A., Bolat İ., Arslan M., Ceyhun S. B.  
EATING AND WEIGHT DISORDERS-STUDIES ON ANOREXIA BULIMIA AND OBESITY, vol.27, no.1, pp.163-177, 2022 (SCI-Expanded)
- XIII. **A versatile toxicity evaluation of ethyl carbamate (urethane) on zebrafish embryos: Morphological, physiological, histopathological, immunohistochemical, transcriptional and behavioral approaches**  
Sulukan E., Ghosigharehagaji A., BARAN A., YILDIRIM S., BOLAT İ., CEYHUN S. B.  
TOXICOLOGY LETTERS, pp.71-78, 2021 (SCI-Expanded)
- XIV. **An approach to evaluating the potential teratogenic and neurotoxic mechanism of BHA based on apoptosis induced by oxidative stress in zebrafish embryo (< i>Danio rerio</i>)**  
Baran A., Yıldırım S., Ghosigharehaghaji A., Bolat İ., Sulukan E., Ceyhun S. B.  
HUMAN & EXPERIMENTAL TOXICOLOGY, no.3, pp.425-438, 2021 (SCI-Expanded)
- XV. **Is sodium carboxymethyl cellulose (CMC) really completely innocent? It may be triggering obesity**  
Baran A., Sulukan E., Türkoğlu M., Ghosigharehagaji A., Yıldırım S., Kankaynar M., Bolat İ., Kaya M., Topal A., Ceyhun S. B.  
INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES, pp.2465-2473, 2020 (SCI-Expanded)
- XVI. **Polystyrene nanoplastics (20 nm) are able to bioaccumulate and cause oxidative DNA damages in the brain tissue of zebrafish embryo (*Danio rerio*)**  
Sökmen T. Ö., Sulukan E., Türkoğlu M., Baran A., Özkaraca M., Ceyhun S. B.  
NEUROTOXICOLOGY, pp.51-59, 2020 (SCI-Expanded)

- XVII. An approach to clarify the effect mechanism of glyphosate on body malformations during embryonic development of zebrafish <i>(Daino rerio)</i>  
 SULUKAN E., KOKTURK M., CEYLAN H., Beydemir S., Isik M., ATAMANALP M., CEYHUN S. B.  
 CHEMOSPHERE, pp.77-85, 2017 (SCI-Expanded)
- XVIII. Effects of glyphosate on juvenile rainbow trout (<i>Oncorhynchus mykiss</i>): Transcriptional and enzymatic analyses of antioxidant defence system, histopathological liver damage and swimming performance  
 Topal A., Atamanalp M., Uçar A., Oruc E., Kocaman E. M., Sulukan E., Akdemir F., Beydemir S., Kılinc N., Erdoğan O., et al.  
 ECOTOXICOLOGY AND ENVIRONMENTAL SAFETY, pp.206-214, 2015 (SCI-Expanded)

### **Articles Published in Other Journals**

- I. Green Synthesis Iron Oxide Nanoparticles (Fe@AV NPs) Induce Developmental Toxicity and Anxiety-Like Behavior in Zebrafish Embryo-Larvae  
 KÖKTÜRK M., Yiğit A., SULUKAN E.  
 Marine Science and Technology Bulletin, vol.12, no.1, pp.39-50, 2023 (Peer-Reviewed Journal)
- II. In Vivo Toxicity of Mixture Herbicides (Halaxifen methyl+Pyroxslam+Cloquintocet acid): Zebrafish Embryo and Larva Model  
 Sulukan E., Köktürk M.  
 İğdır Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.13, no.1, pp.617-627, 2023 (Peer-Reviewed Journal)

### **Papers Presented at Peer-Reviewed Scientific Conferences**

- I. INVESTIGATION OF GLOBAL WARMING-INDUCED DELTAMETHRIN TOXICITY IN A ZEBRAFISH MODEL  
 Sulukan E., Toraman E., Ceyhun S. B.  
 4th International Conference on Innovative Academic Studies, Konya, Turkey, 12 - 13 March 2024, pp.512-516, (Full Text)
- II. EFFECT OF GLYPHOSATE APPLIED UNDER TEMPERATURE STRESS ON ZEBRAFISH LIVER TOXICITY  
 Sulukan E., Toraman E., Ceyhun S. B.  
 ANADOLU 14TH INTERNATIONAL CONGRESS ON APPLIED SCIENCES, Gaziantep, Turkey, 16 - 18 February 2024, pp.247-252, (Full Text)
- III. ZEBRA BALIĞI MİKROENJEKSİYON YÖNTEMİ İLE GIDA KATKI MADDESİ OLARAK PEKTİN VE AMİDİYE PEKTİNİN ETKİLERİNİN ARAŞTIRILMASI  
 Baran A., Sulukan E., Türkoğlu M., Ghosigharehagaji A., Yıldırım S., Kankaynar M., Bolat İ., Kaya M., Ceyhun S. B.  
 9. VETERİNER GIDA HİJYENİ KONGRESİ, Antalya, Turkey, 04 November 2021, (Summary Text)
- IV. INVESTIGATION OF EFFECT ON WOUND HEALING OF VARIOUS PLANT EXTRACTS IN THE CELL CULTURE  
 TORAMAN E., GHOSIGHAREHAGHAJI A., SULUKAN E., ERDOĞAN O.  
 I. INTERNATIONAL CONGRESS on MEDICINAL and AROMATICPLANTS, Konya, Turkey, 10 - 12 May 2017, (Summary Text)
- V. INVESTIGATION OF EFFECT ON BCL2 GENES EXPRESSION AND CYTOTOXIC EFFECT OF BERBERIS VULGARIS PLANT ON CELL CULTURE  
 GHOSIGHAREHAGHAJI A., TORAMAN E., SULUKAN E., ERDOĞAN O.  
 I. INTERNATIONAL CONGRESS on MEDICINAL and AROMATIC PLANTS, Konya, Turkey, 10 - 12 May 2017, pp.702, (Summary Text)
- VI. *Elettaria cardamomum* (Kakule) bitkisinin prostat kanser hücreleri üzerindeki sitotoksik etkisinin ve morfolojik değişiminin araştırılması  
 Ghosigharehagaji A., TORAMAN E., Sulukan E., ERDOĞAN O.

- İVEK 3.Uluslararası İlaç ve Eczacılık Kongresi, İstanbul, Turkey, 26 - 29 April 2017, pp.441, (Summary Text)
- VII. **Elettaria cardamomum (Kakule) BİTKİNİN PROSTAT KANSER HÜCRELERİ ÜZERİNDEKİSİTOTOKSİK ETKİSİNİN VE MORFOLOJİK DEĞİŞİMİNİN ARAŞTIRILMASI**  
GHOSIGHAREHAGHAJI A., TORAMAN E., SULUKAN E., ERDOĞAN O.  
İVEK.3.ULUSLARARASI İLAÇ VE ECZACILIK KONGRESİ, İstanbul, Turkey, 26 - 29 April 2017, (Summary Text)
- VIII. **Helichrysum arenarium Bitki Ekstraktının Yara İyileşmesi Üzerindeki Etkisinin Hücre Kültüründe Araştırılması**  
TORAMAN E., GHOSIGHAREHAGHAJI A., SULUKAN E., ERDOĞAN O.  
İVEK.3.ULUSLARARASI İLAÇ VE ECZACILIK KONGRESİ, İstanbul, Turkey, 26 - 29 April 2017, (Summary Text)
- IX. **TOXIC EFFECTS OF GLYPHOSATE ON EMBRYONIC DEVELOPMENT OF ZEBRA FISH Danio rerio**  
CEYHUN S. B., Sulukan E.  
International Symposium on Fisheries and Aquatic Science, 3 - 06 November 2016, (Summary Text)
- X. **INVESTIGATION OF SOME PLANT EXTRACTS AND CANCER DRUGS OF THE CYTOTOXIC EFFECT OF BCL 2 BAX GENE EXPRESSION AND EFFECT ON CELL CULTURE**  
GHOSI GHAREHAGHAJI A., TORAMAN E., SULUKAN E., ERDOĞAN O.  
6.Multidisipliner Kanser Araştırma Kongresi, Konya, Turkey, 27 - 30 October 2016, vol.41, pp.1-144, (Full Text)
- XI. **Investigation of some plant extracts and cancer drugs of the cytotoxic effect of bcl 2- bax gene expression and effect on cell culture**  
TORAMAN E., GHOSIGHAREHAGHAJI A., SULUKAN E., ERDOĞAN O.  
6. Multidisipliner Kanser Araştırma Kongresi, Konya, Turkey, 27 - 30 October 2016, vol.41, pp.117, (Full Text)
- XII. **Investigation of some plant extracts and cancer drugs of the cytotoxic effect of bcl 2- bax gene expression and effect on cell culture**  
GHOSIGHAREHAGHAJI A., TORAMAN E., SULUKAN E., ERDOĞAN O.  
6. Multidisipliner Kanser Araştırma Kongresi, Konya, Turkey, 27 - 30 October 2016, vol.41, pp.117, (Full Text)
- XIII. **Investigation of some plant extracts and cancer drugs of the cytotoxic effect of Bcl 2 Bax gene expression and effect on cell culture**  
Ghosigharehaghaji A., TORAMAN E., Sulukan E., ERDOĞAN O.  
6.MULTİDİSİPLİNER KANSER ARAŞTIRMA KONGRESİ, Konya, Turkey, 27 - 30 October 2016, (Summary Text)
- XIV. **Glyfosfatın yavru gökkuşağı alabalığı (*Oncorhynchus mykiss*) büyümeye hormonu mRNA ekspresyonu üzerine etkileri.**  
TOPAL A., KOCAMAN E. M., ÇEÇEN A., PARLAK V., ARSLAN H., SULUKAN E., CEYHUN S. B.  
FABA 2013 Fisheries and Aquatic Sciences - Balıkçılık ve Akvatik Bilimler Sempozyumu, Erzurum, Turkey, 30 May - 01 June 2013, pp.521, (Summary Text)
- XV. **effect of glyphosphate on gh mrna expression of juvenile rainbow trout**  
TOPAL A., KOCAMAN E. M., Çeçen a., PARLAK V., ARSLAN H., SULUKAN E., CEYHUN S. B.  
Faba 2013 fisheries and aquatic science, Erzurum, Turkey, 30 May - 01 June 2013, (Summary Text)

## Funded Projects

Sulukan E., Köktürk M., Project Supported by Other Official Institutions, Sıcaklık stresi altında deltametrinin yetişkin zebra balıklarındaki toksik etkilerinin davranışsal, metabolik ve biyokimyasal analizler kullanılarak araştırılması., 2023 - 2025

Ceyhun S. B., Sökmen T. Ö., Yıldırım S., Ceyhun H. A., Baran A., Gür E., Sulukan E., TUBITAK Project, Floresan İşaretli Polistren Nanoplastik Parçacıkların Zebra Balığı Beynindeki Hücresel İnteraksiyonunun ve Muhtemel Hasar Mekanizmalarının Tespiti, 2023 - 2025

Ceyhun S. B., Kaya M., Topal A., Baran A., TUBITAK Project, Gıda Katkı Maddesi Olarak Kullanılan Sodyum Karboksümetil Selüloz (E 466) ve Pektinin (E440i, E440ii) Zebra Balığı Embriyoları Üzerine Gelişim Toksisitesinin İncelenmesi, 2019 - 2020

## **Peer Reviews in Scientific Publications**

THE SCIENCE OF THE TOTAL ENVIRONMENT , Journal Indexed in SCI-E, November 2023

ENVIRONMENTAL SCIENCES EUROPE, Journal Indexed in SCI-E, January 2023

## **Metrics**

Publication: 36

Citation (WoS): 486

Citation (Scopus): 650

H-Index (WoS): 11

H-Index (Scopus): 14

## **Congress and Symposium Activities**

BALKAN 7TH INTERNATIONAL CONFERENCE ON APPLIED SCIENCES, Attendee, Skopje, Macedonia, 2023

AICNHS 1st INTERNATIONAL CONFERENCE ON NEW HORIZONS IN SCIENCE, Attendee, Cairo, Egypt, 2023