



**TAGEM**  
R&D AND INNOVATION

CENTRAL FISHERIES RESEARCH INSTITUTE  
SUMAE / TRABZON

## ESEN ALP ERBAY, Ph.D

### Food Engineer

#### EDUCATION

- PhD**  
2016-2021  
Recep Tayyip Erdoğan Univ.  
Department of Fishing and Processing
- MSc**  
2006-2008  
Atatürk University  
Department of Food Engineering
- Bachelor's Degree**  
2002-2006  
Atatürk University  
Department of Food Engineering
- LANGUAGE**  
English KPDS 81

#### CAREER

- 2011 Food Engineer Central Fisheries Research Institute, SUMAE - TRABZON
- 2008-2011 Engagement Director/ Food Engineer, Private Sector, İSTANBUL

#### ABOUT ME

She has been working as a project leader and researcher in several projects in the institute since 2011. She worked as a technical editor in the Turkish Journal of Fisheries and Aquatic Sciences, the SCI indexed journal of the institute, between the years 2011-2018. And she has been working as a manager editor since 2018. She is also the manager editor of Aquatic Food Studies, one of the institute journals that started publishing in 2021.

In 2018, she participated in the laboratory studies of the nanotechnology working group at the Instituto de Agroquímica y Tecnología de Alimentos (IATA) in Valencia, Spain. She has good command of English and intermediate level of German.

#### CONTACT

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#### ■ **PROJECTS**

##### ■ **Projects Conducted**

1. TAGEM - Development and Farming of Protection Strategy of Sturgeon – Researcher (2011-2013)
2. TAGEM - Preliminary Study for Fish Gen Bank: Cryoprsvation - Researcher (2011-2013)
3. TAGEM - Determination of Storage Stability and Consumer Acceptance of Some Smoked Fish Species in Eastern Black Sea – Researcher (2013-2015)
4. TAGEM - Determination of Quality Criterias and Shelf Life of Trout Coated with Whey Protein Isolated Nanocomposite Films – Project Leader (2014-2015)
5. TAGEM - Examination of Oxidative Stability of Microencapsulated Anchovy Oil by Adding Natural Antioxidants – Researcher (2015-2017)
6. TAGEM - Use of Alternative Marinating Sources in Utilization of Anchovies - Researcher (2016-2017)
7. TAGEM - Antimicrobial effects of Lactoferrin - Fish Gelatine Nanofiber Membranes - Project Leader (2017-2018)
8. TAGEM - Possibilities of using some phytobiotic added diets in nutrition of Black sea trout (*Salmo trutta labrax* Pallas, 1811) – Researcher (2017-2020)

##### ■ **Ongoing Projects**

1. TAGEM - The Effect of Ultrasound Assisted Protein Hydrolyzate Production and the Possibility of Use in Some Processed Foods – Researcher (2019-2022)
2. TAGEM - Establishment of Turkish Traditional Cheese Inventory - Researcher (2021-2024)

#### ■ **PUBLICATIONS**

##### ■ **INTERNATIONAL ARTICLES AND PAPERS**

##### ■ **Articles Published in International Indexed Journals (SCI, SCI-Expanded )**

**Alp-Erbay, E., Figueroa-Lopez, K. J., Lagaron, J. M., Çağlak, E., & Torres-Giner, S. 2019. The impact of electrospun films of poly ( $\epsilon$ -caprolactone) filled with nanostructured zeolite and silica microparticles on in vitro histamine formation by *Staphylococcus aureus* and *Salmonella* Paratyphi A. Food Packaging and Shelf Life, 22, 100414. <https://doi.org/10.1016/j.fpsl.2019.100414>**



## ESEN ALP ERBAY, Ph.D Food Engineer

**TAGEM**  
R&D AND INNOVATION

**Alp-Erbay, E.,** Yesilsu, A.F., Türe, M., 2019. Fish Gelatin Antimicrobial Electrospun Nanofibers for Active Food-Packaging Applications. Journal of Nano Research 56, 80-97. <https://doi.org/10.4028/www.scientific.net/JNanoR.56.80>

**Alp-Erbay, E.,** Dağtekin, B. B. G., Türe, M., Yeşilsu, A. F., & Torres-Giner, S. 2017. Quality improvement of rainbow trout fillets by whey protein isolate coatings containing electrospun poly ( $\epsilon$ -caprolactone) nanofibers with *Urtica dioica* L. extract during storage. LWT-Food Science and Technology, 78, 340-351. <https://doi.org/10.1016/j.lwt.2017.01.002>

Çankırılıgil E. C., Berik N., **Alp Erbay E.,** 2020. Optimization of Hydrolization Procedure for Amino Acid Analysis in Fish Meat with HPLC-DAD by Response Surface Methodology (RSM). Ege Journal of Fisheries and Aquatic Sciences (Accepted).

**Alp, E.,** Aksu, M., İ. 2010. Effects of water extract of *Urtica dioica* L. and modified atmosphere packaging on the shelf life of ground beef. Meat Science (86): 468-473. <https://doi.org/10.1016/j.meatsci.2010.05.036>

Aksu, M.İ., **Alp, E.** 2012. Effects of Sodium Tripolyphosphate and Modified Atmosphere Packaging on the Quality Characteristics and Storage Stability of Ground Beef. Food Technology and Biotechnology 50 (1) 81–87.

Yesilsu, A.F., **Alp-Erbay, E.,** Dagtekin, B.B., Dagtekin, M., Ozyurt, G., & Benjakul, S. 2021. Effect of Partial Replacement of NaCl with KCl on Quality of Marinated Anchovies, Journal of Aquatic Food Product Technology, <https://doi.org/10.1080/10498850.2021.1936325>

Aydin, İ., Öztürk, R. Ç., Polat, H., Beken, A. T., Terzi, Y., Özel, O. T., **Alp- Erbay, E...** & Küçük, E. 2021. Sperm characteristics of wild-caught and hatchery-reared turbot, *Scophthalmus maximus*, originated from the Black Sea. Journal of Applied Ichthyology.

### Articles Published in Other International Journals

**Alp -Erbay, E.,** Yeşilsu, A.F., 2021. Fish Protein and Its Derivatives: Functionality, Biotechnology and Health Effects. Aquatic Food Studies, 1(1), AFS-13. <https://doi.org/10.4194/AFS-13>

Yeşilsu, A.F., Özyurt, G., Dağtekin, M., & **Alp-Erbay, E.** 2019. Wild Fish vs. Farmed Fish: Consumer Perception in Turkey. Aquaculture Studies, 19, 37-43. [http://doi.org/10.4194/2618-6381-v19\\_1\\_04](http://doi.org/10.4194/2618-6381-v19_1_04)

Yesilsu, A.F., Ture, M., **Alp-Erbay, E.,** Dagtekin, B.B., Eroglu, O. 2018. Identification of Lactic Acid Bacteria from Spoiled Marinated Anchovy (*Engraulis encrasicolus*) Using 16S rRNA Gene Sequence Analysis. Genetics of Aquatic Organisms, 2: 11-15. [http://doi.org/10.4194/2459-1831-v2\\_1\\_05](http://doi.org/10.4194/2459-1831-v2_1_05)

Çankırılıgil E. C., **Alp- Erbay, E.,** 2017. Effect of different thawing techniques on color of Black Sea trout (*Salmo labrax* PALLAS, 1814) fillets. International Journal of Agriculture, Environment and Food Sciences. 1 (1): 27-32. <http://dergipark.gov.tr/jaefs/issue/33546/348552>.

**Alp-Erbay, E.,** Yesilsu, A.F., Türe, M., 2019. Fish Gelatin Antimicrobial Electrospun Nanofibers for Active Food-Packaging Applications. Journal of Nano Research. 56, 80-97. <https://doi.org/10.4028/www.scientific.net/JNanoR.56.80>



## ESEN ALP ERBAY, Ph.D

### Food Engineer



#### ■ International Papers, Seminars, etc.

- Alp-Erbay, E., & Yesilsu, A.F.** 2019. Functionalization of Electrospun Biopolymer Nanofibers with Molecular Sieving Particles for Entrapment of Biogenic Amines for Active Food Packaging Applications. 3th International Conference on Agriculture, Food, Veterinary and Pharmacy Sciences, April, 16-18, 2019, Trabzon, Turkey (Sözlü).
- Alp-Erbay, E., & Yesilsu, A.F.** 2019. Fabrication and Optimization of Poly ( $\epsilon$ -caprolactone) /Rosemary Extract Electrospun Nanofibers by Electrospinning Using Response Surface Methodology for Active Food Packaging Applications. 3th International Conference on Agriculture, Food, Veterinary and Pharmacy Sciences, April, 16-18, 2019, Trabzon, Turkey (Sözlü).
- Kutlu, S., Balcik Misir, G., Dagtekin, M., Yesilsu, A.F., **Alp-Erbay, E.**, & Erteken, A. 2019. Determination of Consumer Preferences on Trout, Seabass, Shad, and Bonito Smoked with Beech and Oak Sawdust. 3th International Conference on Agriculture, Food, Veterinary and Pharmacy Sciences, April, 16-18, 2019, Trabzon, Turkey (Sözlü)
- Alp-Erbay, E.**, 2016. Electrospun Nanofiber Based Drug Delivery Systems: Food Applications. 12th International Nanoscience and Nanotechnology Conference (NanoTR-12), Gebze Technical University, 3-5 June 2016, Darica in Kocaeli, Turkey.
- Cankiriligil, E.C., **Alp -Erbay, E.**, 2016. Effect of Different Thawing Techniques on Color of Black Sea Trout (*Salmo trutta labrax*) Fillets. FABA 2016, International Symposium on Fisheries and Aquatic Sciences, 3-5 November 2016, Antalya-Turkey
- Kutlu, S., Yeşilsu, A.F., Mısır-Balçık, G., **Alp, E.**, Erteken, A., Türe, M., Dağtekin, M., 2015. Determination of Storage Stability of Hot Smoked Atlantic Bonito and Trout with Different Wood Chips. 1st International Conference on Sea and Coastal Development in the Frame of Sustainability, (Macodesu-2015), 18-20 September 2015, Trabzon, Turkey. Abstract Book, p:189. (Poster).
- Kutlu, S., Dağtekin, M., Mısır-Balçık, G., Yeşilsu, A.F., **Alp, E.**, Erteken, A., 2015. Determination of Consumer Trends on Shad a Seabass Smoked with Beech and Oak Sawdust. 1st International Conference on Sea and Coastal Development in the Frame of Sustainability, (Macodesu-2015), 18-20 September 2015, Trabzon, Turkey. Abstract Book, p:186. (Poster).
- Alp, E.**, Yeşilsu, A.F., Gözü-Dağtekin, B.B., Türe, M., 2014. Electrospinning Parameters to Obtain Nanaofibers from Stinning Nettle (*Urtica dioica* L.) to Reinforce Edible Coatings for Fish: A Novel Method. International Symposium on Fisheries and Aquatic Sciences, 25-27, September 2014, Trabzon, Turkey, Symposium Abstract Book, 462-463. (Poster).
- Alp, E.**, Aksu, M.İ., 2013. Traditional Fishery Product in Black Sea: Anchovy. The second International Symposium on Traditional Foods from Adriatic to Caucasus, 24-26 October 2013 Struga (Ohrid Lake)/Macedonia. TFP\_2182, 323pp.



## ESEN ALP ERBAY, Ph.D

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#### ▪ NATIONAL ARTICLES AND PAPERS

#### ▪ International Papers, Seminars, etc.

Polat, H., İ. Aydın., E. Küçük., O. T. Özel., Alp, E., 2014. Kalkan Balığında (*Psetta maxima*) Fotoperiyod Yöntemiyle Erken Dönemde Elde Edilen Spermin Özellikleri. 31/05-02/06. 2014 X. Doğu Anadolu Su Ürünleri Sempozyumu, Elazığ. (Poster).

Akbulut B., S. Kutlu, Aksungur N., E. Çakmak, Yeşilsu A.F. ve Alp, E., 2013. Sivriburun Mersin Balıklarında Besleme Sıklığının Büyüme, Yem Değerlendirme, Et Verimi ve Et Kalitesine Etkisi. 17. Ulusal Su Ürünleri Sempozyumu, 3-6 Eylül, 2013, İstanbul. Bildiri Özetleri Kitabı.

#### ▪ OTHER PUBLICATIONS

#### ▪ Ph.D. Thesis, Master Thesis, Reports, Books etc.

Master Thesis : The effects of *Urtica dioica* L. and modified atmosphere packaging on quality properties and shelf life of minced beef

Ph.D Thesis :Production of nanocomposite film from electrospun nanofibers by electrospinning method and use as active packaging material in fish sauce

#### ▪ Awards /Prizes

Best “Thesis Article” prize by Atatürk University Institute of Science and Technology in the year 2010

Best “Thesis Article” prize by Atatürk University University Agriculture Faculty, Department of Food Engineering, in the year 2010

#### ▪ Editorial

#### Ongoing

Turkish Journal of Fisheries and Aquatic Sciences – Manager Editor (2018-)

Aquatic Food Studies – Manager Editor (2021-)

#### Past

Turkish Journal of Fisheries and Aquatic Sciences – Technical Editor (2011-2018)



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#### Trainings

<u>Title of the Training</u>	<u>Start</u>	<u>Ending</u>	<u>Unit</u>
Fatty Acid Analysis	12.07.2011	13.07.2011	Ankara Food Control Lab.
EU Grant Funds and Project Cycle Management	10.06.2013	14.06.2013	TCD Company
Editor and Writer Seminar	27.05.2015	27.05.2015	TUBİTAK
Use of Biosensors for Food Safety and Quality Control	16.01.2017	20.01.2017	IAMZ-CIHEAM / Spain
Electrospinning for Food/ Nanotechnology for Food Packaging	05.02.2018	25.03.2018	IATA-CSIC / Spain
Food Sustainability Assessment: A Methodological Approach	15.02.2021	24.02.2021	IAMZ-CIHEAM / Spain

#### Social Networks

Google Akademik	: <a href="https://scholar.google.com.tr/citations?user=2cOwL_0AAAAJ&amp;hl=tr">https://scholar.google.com.tr/citations?user=2cOwL_0AAAAJ&amp;hl=tr</a>
Researchgate	: <a href="https://www.researchgate.net/profile/Esen-Alp-Erbay">https://www.researchgate.net/profile/Esen-Alp-Erbay</a>
ORCID	: <a href="https://orcid.org/0000-0001-5486-7425">https://orcid.org/0000-0001-5486-7425</a>
LinkedIn	: <a href="https://www.linkedin.com/in/esen-a-86798443">https://www.linkedin.com/in/esen-a-86798443</a>