

## Assoc. Prof. EDA ADAL KARAKAYA

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: AAK-9167-2020

ScopusID: 57193277685

Yoksis Researcher ID: 204830

### Education Information

Doctorate, Gaziantep University, Faculty of Engineering, Food Engineering, Turkey 2012 - 2019

Postgraduate, Gaziantep University, Faculty of Engineering, Food Engineering, Turkey 2009 - 2012

Undergraduate, Gaziantep University, Faculty of Engineering, Food Engineering, Turkey 2006 - 2009

### Academic Titles / Tasks

Assistant Professor, Cukurova University, Sağlık Bilimleri Fakültesi, Beslenme Ve Diyetetik, 2024 - Continues

Assistant Professor, Iskenderun Technical University, Faculty of Tourism, Gastronomy and Culinary Arts, 2020 - 2024

Research Assistant, Gaziantep University, Faculty of Engineering, Food Engineering, 2011 - 2020

### Academic and Administrative Experience

Erasmus Program Institutional Coordinator, Iskenderun Technical University, 2021 - 2024

Internship Coordinator, Iskenderun Technical University, 2021 - 2024

Mevlana Exchange Program Institutional Coordinator, Iskenderun Technical University, 2021 - 2024

Adaptation/Exemption Committee Member, Iskenderun Technical University, 2021 - 2024

University Executive Board Member, Iskenderun Technical University, 2020 - 2024

### Advising Theses

Adal Karakaya E., Çavdar H. K., Production of functional yogurt enriched with red beetroot pomace, Postgraduate, B.GÜLER(Student), 2024

Adal Karakaya E., İbanoğlu E., Preparation of beta-carotene enriched wheat germ oil capsules by complex coacervation and use in pasta production, Postgraduate, M.CAN(Student), 2023

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

1. Alteration of the Morphological and Physicochemical Characteristics of Corn and Wheat Starch via

### **Dry Heating with Whey Protein Isolates**

Adal Karakaya E., Aktar T., Çavdar H. K.

FOODS, vol.13, no.22, pp.3701-3719, 2024 (SCI-Expanded)

- II. **Modification of faba bean protein isolate by high-intensity ultrasound treatment: screening of physicochemical, thermal, and structural properties**  
Adal E.  
JOURNAL OF FOOD MEASUREMENT AND CHARACTERIZATION, vol.18, no.3, pp.2438-2449, 2024 (SCI-Expanded)
- III. **Optimization of Black Garlic Production Parameters using Response Surface Methodology: Assessment and Characterization of Bioactive Properties**  
Adal Karakaya E.  
JOURNAL OF APPLIED RESEARCH ON MEDICINAL AND AROMATIC PLANTS, vol.34, no.1, pp.1-8, 2023 (SCI-Expanded)
- IV. **Optimization of complex coacervation parameters for the production of encapsulated black garlic using response surface methodology**  
Sasmaz H. K., Adal E., Kadiroglu P., Selli S., Uzlasir T., Kelebek H.  
JOURNAL OF FOOD SCIENCE, vol.88, no.11, pp.4424-4439, 2023 (SCI-Expanded)
- V. **Comparative assessment of quality parameters and bioactive compounds of white and black garlic**  
Sasmaz H. K., Sevindik O., Adal E., Erkin O. C., SELLİ S., Kelebek H., Kadiroglu P.  
EUROPEAN FOOD RESEARCH AND TECHNOLOGY, vol.248, no.9, pp.2393-2407, 2022 (SCI-Expanded)
- VI. **Plant protein enrichment effect on the physical, chemical, microbiological, and sensory characteristics of yogurt**  
Bulut M., Adal E., Aktar T.  
JOURNAL OF FOOD PROCESSING AND PRESERVATION, vol.46, no.8, pp.1-10, 2022 (SCI-Expanded)
- VII. **Non-targeted approach to detect green pea and peanut adulteration in pistachio by using portable FT-IR, and UV-Vis spectroscopy**  
Menevseoglu A., Aykas D., Adal Karakaya E.  
JOURNAL OF FOOD MEASUREMENT AND CHARACTERIZATION, vol.15, no.2, pp.1075-1082, 2021 (SCI-Expanded)
- VIII. **Determining the Arrhenius kinetics of avocado oil: Oxidative stability under rancimat test conditions**  
Aktar T., Adal Karakaya E.  
FOODS, vol.8, no.7, pp.1-13, 2019 (SCI-Expanded)
- IX. **Heteroprotein Complex Formation of Bovine Lactoferrin and Pea Protein Isolate: A Multiscale Structural Analysis**  
Adal Karakaya E., Sadeghpour A., Connell S., Rappolt M., Ibanoglu E., Sarkar A.  
BIOMACROMOLECULES, vol.18, no.2, pp.625-635, 2017 (SCI-Expanded)

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

- I. **Effect of Freeze-Drying and Oven-Drying on Volatiles, Bioactive and Structural Properties of Hawthorn (Crataegus tanacetifolia) Fruit**  
KESKİN ÇAVDAR H., ADAL KARAKAYA E.  
AKADEMIK GIDA, vol.21, no.3, pp.202-210, 2023 (Scopus)
- II. **COMPLEX COACERVATION OF CHICKPEA PROTEIN ISOLATE AND PECTIN: EFFECT OF BIOPOLYMER RATIO AND pH**  
ADAL KARAKAYA E.  
GIDA, vol.47, no.6, pp.971-979, 2022 (Peer-Reviewed Journal)
- III. **Determining the Quality and Storage Stability of Pomegranate (Punica granatum L.) Seed Oil with Accelerated Shelf-Life Approach**  
ADAL KARAKAYA E., AKTAR KÜÇÜKASLAN T.  
TURKISH JOURNAL OF AGRICULTURE: FOOD SCIENCE AND TECHNOLOGY, vol.10, no.6, 2022 (Peer-Reviewed Journal)

- IV. **Effect of Roasting on Oxidative Stability of Pistachio Nut**  
ADAL E., ÖKSÜZLER F. T., EREN S.  
International Journal of Scientific and Technological Research, vol.5, no.5, pp.135-143, 2019 (Peer-Reviewed Journal)
- V. **Rosemary and Oregano Essential Oils as Natural Antioxidant to Preserve Pistachio Puree**  
ADAL E., EREN S.  
Journal of Food Science and Engineering, vol.9, pp.318-332, 2019 (Peer-Reviewed Journal)

## **Books & Book Chapters**

- I. **Fonksiyonel Gıdalar ve Sağlıklı Beslenme**  
ADAL KARAKAYA E.  
in: Temel Beslenme, SAVAŞ HASAN BASRİ, Editor, İstanbul Tıp Kitapevleri, pp.93-102, 2021
- II. **Microbial Inactivation by Ultrasound in the Food Industry**  
ADAL KARAKAYA E.  
in: Technological Developments in Food Preservation, Processing, and Storage, YIKMIŞ SEYDİ, Editor, IGI GLOBAL, USA, pp.86-96, 2020

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

- I. **ENCAPSULATION OF CHIA SEED OIL: EMULSION CHARACTERIZATION**  
ADAL KARAKAYA E.  
CUKUROVA 12th INTERNATIONAL SCIENTIFIC RESEARCHES CONFERENCE, Adana, Turkey, 9 - 12 March 2024
- II. **THE IMPORTANCE OF PLANT PROTEINS FOR BIOACTIVE ENCAPSULATION IN FOOD SYSTEMS**  
ADAL KARAKAYA E.  
16 th INTERNATIONAL İSTANBUL SCIENTIFIC RESEARCH CONGRESS ON LIFE, ENGINEERING, ARCHITECTURE, AND MATHEMATICAL SCIENCES, İstanbul, Turkey, 28 - 29 February 2024
- III. **PRODUCTION OF FUNCTIONAL YOGURT ENRICHED WITH VEGETABLE AND FRUIT WASTE**  
UĞURLU B. G., ADAL KARAKAYA E., KESKİN ÇAVDAR H.  
EJONS 16th INTERNATIONAL CONFERENCE ON MATHEMATICS, ENGINEERING, NATURAL & MEDICAL SCIENCES, Turkey, 11 - 13 November 2023
- IV. **Effect of Roasting on Oxidative Stability of Pistachio Nut Kernel (Pistachio Vera L.)**  
ADAL E., ÖKSÜZLER F. T., EREN S.  
Traditional foods from Adriatic to Caucasus, Macedonia, 24 - 26 October 2013
- V. **Emerging Technologies for the Improvement of Plant Protein Functionality in the Food System**  
ADAL KARAKAYA E.  
11TH INTERNATIONAL ISTANBUL SCIENTIFIC RESEARCH CONGRESS, İstanbul, Turkey, 15 - 17 October 2022
- VI. **Determination of Physicochemical Characteristics and Antioxidant Properties of Black and Fresh Garlic**  
Sasmaz H. K., SEVİNDİK O., ADAL KARAKAYA E., ERKİN Ö. C., KADİROĞLU KELEBEK P., SELLİ S., KELEBEK H.  
6th International Mediterranean Science and Engineering Congress, Antalya, Turkey, 25 - 27 October 2021
- VII. **Current Trends in Encapsulation: Applications in Food Science**  
ADAL E.  
2nd International Conference on Raw Materials to Processed Food, Turkey, 3 - 04 June 2021
- VIII. **Production of pasta enriched with encapsulated vitamin A added wheat germ oil**  
Yıldız M. C., ADAL KARAKAYA E., İBANOĞLU E.  
2nd International Eurasian Conference on Science, Engineering and Technology, Gaziantep, Turkey, 7 - 09 October 2020
- IX. **Effect of Enzymatic Hydrolysis on Surface Charge and Size of Pea Protein Isolate**

ADAL E., KÖKLÜ H. T., ÇAĞLAR N., İBANOĞLU Ş., İBANOĞLU E.

5rd International Congress on Engineering, Architecture and Design, İstanbul, Turkey, 21 - 22 December 2019

- X. **Food Texture: Perceiving, Sensing and Technological Applications**  
ADAL E., AKTAR KÜÇÜKASLAN T.  
5th International Congress on Engineering, Architecture and Design, İstanbul, Turkey, 21 - 22 December 2019
- XI. **Effect of Enzyme/Substrate Ratio and Hydrolysis Time on Degree of Hydrolysis of Pea Protein Isolate**  
KÖKLÜ H. T., ADAL E., ÇAĞLAR N., İBANOĞLU Ş., İBANOĞLU E.  
5rd International Congress on Engineering, Architecture and Design, Turkey, 21 - 22 December 2019
- XII. **Application of Supercritical Drying for Food Products**  
ADAL E.  
2nd Cilicia International Symposium on Engineering and Technology, Turkey, 10 - 12 October 2019
- XIII. **High Pressure Processing of Foods**  
ADAL E., AKTAR KÜÇÜKASLAN T.  
2nd Cilicia International Symposium on Engineering and Technology (CISSET 2019), Mersin, Turkey, 10 - 12 October 2019
- XIV. **Elzem Yağ Asitlerinin Zıt Yüklü Proteinler Kullanılarak Enkapsüle Edilmesi**  
ADAL E., İBANOĞLU Ş., İBANOĞLU E.  
UMTEB III. Uluslararası Mesleki ve Teknik Bilimler Kongresi, Turkey, 21 - 22 June 2018
- XV. **Use of Lactoferrin as Wall Material in Encapsulation**  
ADAL E., İBANOĞLU Ş., İBANOĞLU E.  
2nd International Congress on Multidisciplinary Studies, Adana, Turkey, 4 - 05 May 2018
- XVI. **Encapsulation of Omega Fatty Acids by Complex Coacervation**  
ADAL E., İBANOĞLU Ş., İBANOĞLU E.  
2nd International Congress on Multidisciplinary Studies, Turkey, 4 - 05 May 2018
- XVII. **Could Avocado be the New Alternative for Healthy Unsaturated Oil Source?**  
AKTAR T., ADAL E.  
International Conference on Raw Materials to Processed Foods, Antalya, Turkey, 11 - 13 April 2018
- XVIII. **Effect of Herbal Antioxidants on the Stability of Edible Oils: A Review**  
AKTAR T., ADAL E.  
ICAFOF 2018, İzmir, Turkey, 2 - 05 April 2018
- XIX. **CHARACTERISTIC COMPONENTS OF CISTUS: A REVIEW**  
AKTAR T., ADAL E.  
International GAP Agriculture and Livestock Congress, Şanlıurfa, Turkey, 25 - 27 April 2018
- XX. **A sustainable source of Omega-3 fatty acids: Algal oil**  
AKTAR T., ADAL E.  
International Conference on Raw Materials to Processed Foods, Antalya, Turkey, 11 - 13 April 2018
- XXI. **Antioxidant Activity and Oxidative Stability of Berry Seed Oils**  
İBANOĞLU E., ADAL E., İBANOĞLU Ş.  
5th International Conference on Food Security and Nutrition, Denmark, 9 - 11 April 2018
- XXII. **Fatty acid compositions and oxidative stability of berry and cherry seed oils by DSC and Rancimat methods**  
ADAL E., İBANOĞLU E.  
15th Euro Fed Lipid Congress: Oils, Fats, and Lipids: New Technologies and Applications for a Healthier Life, Uppsala, Sweden, 27 - 30 August 2017
- XXIII. **Uses of microencapsulated Omega3 fatty acid rich oils in food systems**  
ADAL E., İBANOĞLU Ş., İBANOĞLU E.  
15th Euro Fed Lipid Congress: Oils, Fats, and Lipids: New Technologies and Applications for a Healthier Life, Uppsala, Sweden, 27 - 30 August 2017
- XXIV. **Encapsulation of Berry Seed Oils by Complex Coacervation with Proteins**  
ADAL E., İBANOĞLU Ş., İBANOĞLU E.

International Conference on Agriculture, Forest, Food Sceinces and Technology (ICAFOF2017), Turkey, 15 - 17 May 2017

- XXV. **Influence of addition rosemary essential oil on oxidative stability of pistachio puree under accelerated conditions**  
ADAL E., EREN S.  
International Conference on Agriculture, Forest, Food Sceinces and Technology, Nevşehir, Turkey, 15 - 17 May 2017
- XXVI. **A Review of Perilla Seed Oil; a good source of plant based Omega 3 and Omega-6**  
AKTAR T., ADAL E.  
I. International Congress on Medicinal and Aromatic Plants "Natural and Healthy Life", Konya, Turkey, 9 - 12 May 2017
- XXVII. **Antioxidant activity, Phenolic Content, Fatty acid composition and Oxidative stability of berry seed oils**  
ADAL E., İBANOĞLU Ş., İBANOĞLU E.  
I. International Congress on Medicinal and Aromatic Plants "Natural and Healthy Life", Konya, Turkey, 9 - 12 May 2017
- XXVIII. **Microencapsulation of seed oil by heteroprotein complex coacervation**  
ADAL E., İBANOĞLU Ş., İBANOĞLU E.  
I. International Congress on Medicinal and Aromatic Plants "Natural and Healthy Life", Konya, Turkey, 9 - 12 May 2017
- XXIX. **Farklı Sıcaklıklardaki Kavurma İşleminin Antep Fıstığının Renk Değişimi Üzerindeki Etkisi**  
ADAL E., ÖKSÜZLER F. T., EREN S.  
İç Anadolu Bölgesi 2. Tarım ve Gıda Kongresi, Nevşehir, Turkey, 28 - 30 April 2015
- XXX. **Oxidation of Encapsulated Camelina Oil**  
ADAL E., MOILANEN H., ROCCHI E., DAMERAU A., LAMPI A. M., PIIRONEN V., PIAZZA L., JOUPPILA K.  
1st Congress on Food Structure Design, Portugal, 15 - 17 October 2014
- XXXI. **The effect of Oregano essential oil on shelf-life of pistachio nut puree.**  
ADAL E., EREN S.  
10th Euro Fed Lipid Congress, Krakow, Poland, 23 - 26 September 2012
- XXXII. **Shelf life prediction of pistachio puree using Rancimat method**  
ADAL E., EREN S.  
IFT Annual meeting and Food Expo., Las Vegas, United States Of America, 25 June 2012
- XXXIII. **Antep Fıstığı Yağının Yağ Asidi Kompozisyonunun ve Oksidatif Stabilitesinin Belirlenmesi**  
ADAL E., EREN S.  
1. Bitkisel Yağ Kongresi, Adana, Turkey, 12 - 14 April 2012
- XXXIV. **Effect of adding essential oil from Origanum onites on oxidative stability of pistachio paste**  
ADAL E., EREN S.  
9th Euro Fed Lipid Congress, Rotterdam, Netherlands, 18 - 21 September 2011
- XXXV. **The effects of natural antioxidants on prolonging shelf life of pistachio puree**  
ADAL E., EREN S.  
1st International Congress on Food Technology, Antalya, Turkey, 3 - 06 November 2010

## Supported Projects

Adal Karakaya E., TÜBİTAK - AB COST Project, Sustainable Network for agrofood loss and waste prevention, management, quantification and valorisation (FoodWaStop), 2023 - 2027

Özoğul F., ADAL KARAKAYA E., TÜBİTAK - AB COST Project, Promoting Innovation of ferMENTed fOods (PIMENTO), 2021 - 2025

Adal Karakaya E., TUBITAK Project, Siyah Sarımsak Üretim Koşullarının ve Enkapsülasyonunun Optimizasyonu, Biyoaktif, Aroma-Aktif Bileşimlerinin Karakterizasyonu ve Antikanser Özelliklerinin Saptanması, 2020 - 2023

Adal Karakaya E., TUBITAK Project, Frambuaz Ve Vişne Çekirdeđi Yađlarının Protein-Protein Kompleks Koaservasyon Yöntemi İle Enkapsüle Edilmesi Ve Fonksiyonel Makarna Üretiminde Kullanılması, 2018 - 2021  
Adal Karakaya E., TUBITAK Project, Bitki Antioksidanlarının Fıstık Füresi Raf Ömrüne etkilerinin Belirlenmesi ve Son Ürünün Kalite Parametrelerinin Geliştirilmesi, 2009 - 2011

## **Metrics**

Publication: 51

Citation (WoS): 171

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H-Index (Scopus): 5