

## Asst. Prof. MUSTAFA FİNÇAN

### Personal Information

**Office Phone:** [+90 352 207 6666](tel:+903522076666) Extension: 32728

**Email:** mfincan@erciyes.edu.tr

**Web:** <https://avesis.erciyes.edu.tr/mfincan/>

### International Researcher IDs

ORCID: 0000-0002-9394-6449

Publons / Web Of Science ResearcherID: A-3658-2016

ScopusID: 6508367535

Yoksis Researcher ID: 190748

### Education Information

Doctorate, Lund University, The Faculty Of Engineering, Food Engineering, Sweden 1998 - 2003

Postgraduate, Middle East Technical University, Faculty Of Engineering, Gıda Mühendisliği, Turkey 1995 - 1997

Undergraduate, Ege University, Faculty Of Engineering, Gıda Mühendisliği, Turkey 1988 - 1993

### Foreign Languages

Norwegian, B2 Upper Intermediate

Danish, B1 Intermediate

English, C1 Advanced

Swedish, C1 Advanced

### Dissertations

Doctorate, Bitki dokusuna vurgulu elektrik alan uygulaması,, Lund University, „, Gıda Mühendisliği, 2003

Postgraduate, Akuşkan gıdaların vurgulu elektrik alanı ile prosesi, Lund University, The Faculty Of Engineering, Food Engineering, 1999

Postgraduate, Minimal işlem görmüş tatlı kirazların modifiye edilmiş atmosfer altında paketlenmesinde bazı polimerik malzemelerin uygunluğu, , Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Gıda Mühendisliği, 1997

### Research Areas

Food Engineering, Food Technology, Fruits, Vegetables and Nuts, Food Processing (pasteurisation, sterilisation, refrigeration, lyophilisation, etc.), Engineering and Technology

### Academic Titles / Tasks

Assistant Professor, Erciyes University, Mühendislik Fakültesi, Gıda Mühendisliği, 2018 - Continues

Assistant Professor, Erciyes University, Mühendislik Fakültesi, Gıda Mühendisliği, 2006 - 2018

## **Academic and Administrative Experience**

Erciyes University, 2021 - Continues

## **Courses**

Mesleki Yabancı Dil, Undergraduate, 2013 - 2014  
Yabancı Dil II, Undergraduate, 2013 - 2014  
Gıda Endüstrisinde Kalite ve Güvenlik Sistemleri, Postgraduate, 2013 - 2014  
Meyve ve Sebze İşleme Teknolojisi, Undergraduate, 2013 - 2014  
Emerging Food Technologies, Postgraduate, 2014 - 2015  
Meyve Suyu ve Gazlı İçecekler Teknolojisi, Undergraduate, 2010 - 2011

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

- I. **Visualization of the frequency effect of pulsed electric field on enzymatic browning of peel ground tissue**  
Ayub M., Fincan M.  
FOOD AND BIOPRODUCTS PROCESSING: TRANSACTIONS OF THE INSTITUTION OF OF CHEMICAL ENGINEERS, PART C, vol.142, no.November 2023, pp.82-93, 2023 (SCI-Expanded)
- II. **Extractability of phenolics from spearmint treated with pulsed electric field**  
Fincan M.  
JOURNAL OF FOOD ENGINEERING, vol.162, pp.31-37, 2015 (SCI-Expanded)
- III. **Pulsed electric field treatment for solid-liquid extraction of red beetroot pigment**  
FİNÇAN M., DeVito F., Dejmek P.  
Journal of Food Engineering, vol.64, no.3, pp.381-388, 2004 (SCI-Expanded)
- IV. **Pulsed electric field treatment for solid-liquid extraction of red beetroot pigment: mathematical modelling of mass transfer**  
Chalermchat Y., Fincan M., Dejmek P.  
JOURNAL OF FOOD ENGINEERING, vol.64, no.2, pp.229-236, 2004 (SCI-Expanded)
- V. **Pulsed electric field treatment for solid-liquid Pulsed electric field treatment for solid-liquid extraction of red beetroot pigment**  
FİNÇAN M., De Vito F., Dejmek P.  
JOURNAL OF FOOD ENGINEERING, vol.60, no.3, pp.381-388, 2004 (SCI-Expanded)
- VI. **Effect of osmotic pretreatment and pulsed electric field on the viscoelastic properties of potato tissue**  
FİNÇAN M., Dejmek P.  
JOURNAL OF FOOD ENGINEERING, vol.59, pp.169-175, 2003 (SCI-Expanded)
- VII. **In situ visualization of the effect of a pulsed electric field on plant tissue**  
FİNÇAN M., Dejmek P.  
JOURNAL OF FOOD ENGINEERING, vol.55, no.3, pp.223-230, 2002 (SCI-Expanded)

## **Articles Published in Other Journals**

- I. **ŞEKER EKSTRAKSİYONUNDA VURGULU ELEKTRİK ALAN UYGULAMA POTANSİYELİNİN DEĞERLENDİRİLMESİ**  
İŞGÜZAR E. E., Fincan M.  
GIDA, vol.48, no.3, pp.545-561, 2023 (Peer-Reviewed Journal)
- II. **Vurgulu elektrik alan ön işlemi ile dereotundan fenoliklerin ekstraksiyonu: dondurup çözündürme, ısıl işlem, mikrodalga ön işlemleri ve solvent ekstraksiyonu ile karşılaştırılması**

- Fincan M., ÇİFTÇİ Y.  
Gıda, vol.46, no.6, pp.1343-1357, 2021 (Peer-Reviewed Journal)
- III. Meyve ve sebzelerin kurutulmasında ön işlem olarak vurgulu elektrik alan kullanımı**  
Fincan M., ÇİFTÇİ Y.  
Gıda, vol.46, no.4, pp.830-847, 2021 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **Potential application of pulsed electric fields for improving extraction of plant pigments**  
FİNÇAN M.  
in: Handbook of Electroporation, Miklavcic D., Editor, Springer International Publishing, -, pp.1-22, 2017
- II. **Potential application of pulsed electric fields for improving extraction of plant pigments**  
FİNÇAN M.  
in: Handbook of Electroporation, Miklavcic D., Editor, Springer International Publishing, pp.2171-2192, 2017

## Refereed Congress / Symposium Publications in Proceedings

- I. **THE EFFECT OF FREQUENCY ON THE DISINTEGRATION AND DRYING OF ZUCCHINI TISSUE BY PULSED ELECTRIC FIELD (PEF) PRETREATMENT**  
Fincan M., Gök F. Z.  
4TH INTERNATIONAL BLACK SEA MODERN SCIENTIFIC RESEARCH CONGRESS, Rize, Turkey, 6 - 07 June 2023,  
pp.358
- II. **THE EFFECT OF PULSED ELECTRIC FIELD (PEF) PRETREATMENT ON THE DRYING BEHAVIOR OF GINGER**  
Fincan M., Çiftçi Y.  
4TH INTERNATIONAL BLACK SEA MODERN SCIENTIFIC RESEARCH CONGRESS, Rize, Turkey, 6 - 07 June 2023,  
pp.750
- III. **Induction of enzymatic browning in banana peels by pulsed electric field**  
Ayub M., Fincan M.  
International Congress on Innovation Technologies & Engineering , İzmir, Turkey, 2 - 04 September 2022, pp.176
- IV. **Effect of reversible electroporation on vacuum impregnation of fresh spearmint leaves with ascorbic acid**  
FİNÇAN M., Yaşar Ş., SARIOĞLU K.  
1st World Congress on Electroporation, Pulsed Electric Fields in Biology, Medicine, Food and Environmental Technologies, Portoroz, Slovenia, 6 - 10 September 2015, pp.127
- V. **Effects of pulsed electric field pretreatment on solid-liquid extraction of phenolics from fresh spearmint leaves**  
FİNÇAN M.  
Electroporation Workshop 2015 : from basics knowledge to industry, Toulouse, France, 14 - 15 April 2015, vol.0,  
no.0
- VI. **Kinetics of conductivity decrease after reversible electropermeabilization of spearmint leaf, effects of the pulse variables and measurement frequency**  
FİNÇAN M., Yaşar Ş.  
The Electroporation-based Technologies for Biorefinery Workshop, Co-organised by COST Action TD1104, Compiegne, France, 27 - 28 January 2015, pp.36
- VII. **Effects of Different Pulse Electric Field Parameters on Electropermeabilization of Fresh Rose Petals**  
FİNÇAN M., Gündoğdu F., Oskaybaş B., Avcı Ş.  
Bioelectrochemistry 2013, 12th Topical Meeting of the International Society of Electrochemistry & XXII International Symposium on Bioelectrochemistry and Bioenergetics of the Bioelectrochemical Society, Bochum,

- Germany, 1 - 04 March 2013, pp.247
- VIII. **Pulsed Electric Field-induced disintegration of fresh Rose petals for vacuum distillation of essential oils**  
FİNÇAN M., Gundoğdu F.  
Electroporation based Technologies and Treatments, International scientific workshop and postgraduate course, Slovenia, 1 - 04 November 2012, pp.117
- IX. **Pulsed electric field treatment for mechanical expression of leaf (Parsley) juice,BAB proje no FBY-11-3800**  
Özgür A., Gundoğdu F., FİNÇAN M.  
International Conference Bio & Food Electrotechnologies (BFE 2012), Italy, 1 - 04 October 2012, pp.63
- X. **Pulsed Electric Field Treatment for Mechanical Expression of Leaf Parsley Juice**  
ÖZGÜR A., GÜNDÖĞDU F., FİNÇAN M.  
Proceeding of the International Conference Bio & Food Electrotechnologies, BFE 2012, Salerno, Italy, 26 - 28 September 2012, pp.63
- XI. **PEF-induced permeabilization of fresh plant leaves (mint, parsley, thyme, basil and dill) for solid liquid-extraction of phenolics**  
FİNÇAN M., Aydin Z., Oba Ş., Hayta M.  
5th International Conference on the Food Factory for the Future 2010, Sweden, 1 - 04 June 2010
- XII. **A comparative study on pulsed electric field-induced permeabilization of different plant tissues**  
Aydin Z., Etgü H., Akşit H., Hayta M., FİNÇAN M.  
International Conference on Bio and Food Electrotechnologies, France, 1 - 04 October 2009, pp.174
- XIII. **Effect of pulsed electric field on extraction of pigment from red beetroot**  
Fincan M., DeVito F., Dejmek P.  
International Symposium on Future Technologies for Food Production and Future Food Scientists, Gothenburg, Sweden, 2 - 04 June 2003, pp.107
- XIV. **Changes in Plant Tissue After Pulsed Electric Field Treatment**  
FİNÇAN M., DEJMEK P.  
Food Structure and Functionality Symposium, 93rd AOCS Meeting, Montreal, Canada, 5 - 08 May 2002
- XV. **Changes in plant tissue after pulsed electric field (PEF) treatment**  
FİNÇAN M., Dejmek P.  
Food Structure and Functionality Symposium, 93rd AOCS Meeting, Montréal, Canada, 1 - 04 May 2002
- XVI. **Visualisation of internal mass transport in onion epidermis after PEF**  
FİNÇAN M., Dejmek P.  
2nd Joint IFT/EFFoST Non-thermal processing workshop, Berlin, Germany, 1 - 04 December 2001
- XVII. **Conductivity changes and membrane permeabilisation by phenosafranine accumulation in rape cell sediment subjected to pulsed electric field**  
FİNÇAN M., DEJMEK P.  
European Conference on Emerging Food Science and Technology, Tampere, Finland, 22 November 1999, pp.100
- XVIII. **Monitoring of PEF-permeabilization in cultured rape cells and potato tissue through conductivity changes and phenosafranine diffusion**  
FİNÇAN M., Dejmek P.  
European Conference on Emerging Food Science and Technology, Tampere, Finland, 1 - 04 November 1999
- XIX. **A comparative study for pulsed electric field induced cellular permeabilization of different plant tissues**  
Aydin Z., Etgü H., Akşit H., Demirtaş I., HAYTA M., Fincan M.  
International Conference on Bio and Food Electrotechnologies, Compigne, France, 22 - 23 October 0009

## Other Publications

- I. **SİYAH ÇAY ÜRETİMİ İÇİN BİR YÖNTEM**

Fincan M., Aldemir S.  
Technical Report, pp.1853, 2021

## Supported Projects

FİNÇAN M., EU Framework Program Project, Elektroporasyon Kaynaklı Teknoloji Ve Uygulama Geliştirilmesi İçin Avrupa Çalışma Ağı, COST aksiyonu, 2012 - Continues

Fincan M., İşgürar E. E., Project Supported by Higher Education Institutions, Vurgulu Elektrik Alan Ön İşlemi İle Sarımsağın Yaşlandırılması Ve Kurutulması Yöntemin Fonksiyonel Özellikleri Artırmadaki Potansiyelinin Değerlendirilmesi, 2023 - 2025

FİNÇAN M., Project Supported by Higher Education Institutions, Maydanoz yapraklarına vurgulu elektrik alanı uygulamasının çift dişli-vidalı presde maydanoz suyu eldesine etkileri; Verim, bazı kalite ve durultma özelliklerinin incelenmesi, 2011 - 2014

FİNÇAN M., TUBITAK Project, Taze Yaprağımsı (Tıbbi, Şifali, Yenilebilir) Bitkilerdeki Fonksiyonel Biomolekülerin Sıvı-Katı Sistemde Vurgulu Elektrik Alanı İle Ekstraksiyonu, 2009 - 2010

## Patent

Fincan M., SİYAH ÇAY ÜRETİMİ İÇİN BİR YÖNTEM, Patent, CHAPTER B Implementation of Operations; Transport, The Invention Recourse Number: 2019/22271 , Standard Registration, 2019

## Student Project

R & D Project, Elma dokusunun vurgulu elektrik alan yolu enzymatik esmerleştirilmesi ve 'siyah elma çayı' geliştirilmesinde potansiyelinin incelenmesi, Erciyes University, Mühendislik Fakültesi, Gıda Mühendisliği, Turkey, 2020 - 2023

R & D Project, Kabağın düşük sıcaklıkta kurutulmasında vurgulu elektrik alan (VEA) ön işleminin etkisi, Erciyes University, Mühendislik Fakültesi, Gıda Mühendisliği, Turkey, 2020 - 2023

R & D Project, The potential application of pulsed electric field (PEF) for stimulating enzymatic browning in banana peel for utilization as black tea, Erciyes University, Mühendislik Fakültesi, Gıda Mühendisliği, Turkey, 2020 - 2022

## Memberships / Tasks in Scientific Organizations

The Bioelectrochemical Society, BES, Member, 2013 - Continues

The International Society of Electrochemistry, ISE, Member, 2013 - Continues

Elektroporasyon Kaynaklı Teknoloji Ve Uygulama Geliştirilmesi İçin Avrupa Çalışma Ağı, Board Member, 2012 - Continues

## Scientific Refereeing

International Journal of Food Engineering, Other Indexed Journal, February 2017

TUBITAK Project, June 2015

TUBITAK Project, June 2012

TUBITAK Project, September 2011

July 2010

Journal of Food Engineering, SCI Journal, August 2002

## **Metrics**

Publication: 32

Citation (WoS): 392

Citation (Scopus): 518

H-Index (WoS): 5

H-Index (Scopus): 5

## **Congress and Symposium Activities**

Elektroporasyon Kaynaklı Teknoloji Ve Uygulama Geliştirilmesi İçin Avrupa Çalışma Ağı, COST aksiyonu, Yönetim kurulu toplantısı, Attendee, Portoroz, Slovenia, 2015

Electroporation Workshop 2015 : from basics knowledge to industry, Attendee, Toulouse, France, 2015

Elektroporasyon Kaynaklı Teknoloji Ve Uygulama Geliştirilmesi İçin Avrupa Çalışma Ağı, COST aksiyonu, Yönetim kurulu toplantısı, Attendee, Toulouse, France, 2015

The Electroporation-based Technologies for Biorefinery Workshop, Co-organised by COST Action TD1104, Attendee, Compiègne, France, 2015

Elektroporasyon Kaynaklı Teknoloji Ve Uygulama Geliştirilmesi İçin Avrupa Çalışma Ağı, COST aksiyonu, Yönetim kurulu ve Çalışma gurubu toplantısı, Attendee, Copenhagen, Denmark, 2014

The Workshop on Guidance Paper on Reporting Electroporation and Pulsed Electric Fields-based Treatments and Therapies, Attendee, Copenhagen, Denmark, 2014

Elektroporasyon Kaynaklı Teknoloji Ve Uygulama Geliştirilmesi İçin Avrupa Çalışma Ağı, COST aksiyonu, Yönetim kurulu toplantısı, Attendee, Bochum, Germany, 2013

Food & Biobased Research, Wageningen UR, Attendee, Wageningen, Netherlands, 2013

International Conference Bio & Food Electrotechnologies (BFE 2012), Attendee, Salerno, Italy, 2012

Elektroporasyon Kaynaklı Teknoloji Ve Uygulama Geliştirilmesi İçin Avrupa Çalışma Ağı, COST aksiyonu, Çalışma gurubu toplantısı, Attendee, Salerno, Italy, 2012

Elektroporasyon Kaynaklı Teknoloji Ve Uygulama Geliştirilmesi İçin Avrupa Çalışma Ağı, COST aksiyonu, Yönetim kurulu toplantısı, Attendee, Brüksel, Belgium, 2012

5th International Conference on the Food Factory for the Future 2010, Attendee, Göteborg, Sweden, 2010

International Conference on Bio and Food Electrotechnologies, Attendee, Compiègne, France, 2009

## **Non Academic Experience**

Aarhus Karlshamn AB, Alba Handels AB, Dalby

Lund University

Tetra Pak AB, Lund

Oylum, Kayseri