

## **Asst. Prof. AYÇA AYDOĞDU**

### **Personal Information**

**Email:** ayca.aydogdu@comu.edu.tr

### **Education Information**

Doctorate, Middle East Technical University, Graduate School Of Natural And Applied Sciences, Turkey 2014 - 2019

Postgraduate, Middle East Technical University, Graduate School Of Natural And Applied Sciences, Turkey 2011 - 2014

Undergraduate, Middle East Technical University, Faculty Of Engineering, Department Of Food Engineering, Turkey 2006 - 2011

### **Dissertations**

Doctorate, DEVELOPMENT OF NANOFIBER BASED ACTIVE PACKAGING MATERIAL BY ELECTROSPINNING TECHNIQUE AND FOOD VALIDATION, Middle East Technical University, Graduate School Of Natural And Applied Sciences, 2019

Postgraduate, Microwave-Infrared Combination Drying of Eggplants, Middle East Technical University, Graduate School Of Natural And Applied Sciences, 2014

### **Research Areas**

Food Engineering

### **Academic Titles / Tasks**

Assistant Professor, Canakkale Onsekiz Mart University, Çanakkale Uygulamalı Bilimler Fakültesi, 2020 - Continues

Research Assistant, Middle East Technical University, Faculty Of Engineering, Department Of Food Engineering, 2012 - 2018

### **Academic and Administrative Experience**

Assistant Manager of Research and Application Center, Canakkale Onsekiz Mart University, Çanakkale Uygulamalı Bilimler Fakültesi, Gıda Teknolojisi, 2020 - Continues

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

- I. **Stereolithography (SLA) 3D printing of ascorbic acid loaded hydrogels: A controlled release study**  
Karakurt I., Aydogdu A., Cikrikci S., Orozco J., Lin L.  
INTERNATIONAL JOURNAL OF PHARMACEUTICS, vol.584, 2020 (SCI-Expanded)
- II. **Characterization of curcumin incorporated guar gum/orange oil antimicrobial emulsion films**  
Aydogdu A., Radke C. J., Bezci S., Kirtil E.  
INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES, vol.148, pp.110-120, 2020 (SCI-Expanded)

- III. **Enhancing oxidative stability of walnuts by using gallic acid loaded lentil flour based electrospun nanofibers as active packaging material**  
Aydogdu A., YILDIZ E., AYDOĞDU Y., ŞÜMNÜ S. G., ŞAHİN S., Ayhan Z.  
FOOD HYDROCOLLOIDS, vol.95, pp.245-255, 2019 (SCI-Expanded)
- IV. **Zero-field nuclear magnetic resonance of chemically exchanging systems**  
Barskiy D. A., Taylen M. C. D., Marco-Rius I., Kurhanewicz J., Vigneron D. B., Cikrikci S., Aydogdu A., Reh M., Pravdivtsev A. N., Hoevener J., et al.  
NATURE COMMUNICATIONS, vol.10, 2019 (SCI-Expanded)
- V. **Fabrication of gallic acid loaded Hydroxypropyl methylcellulose nanofibers by electrospinning technique as active packaging material**  
Aydogdu A., ŞÜMNÜ S. G., ŞAHİN S.  
CARBOHYDRATE POLYMERS, vol.208, pp.241-250, 2019 (SCI-Expanded)
- VI. **Nanostructured poly(lactic acid)/soy protein/HPMC films by electrospinning for potential applications in food industry**  
Aydogdu A., YILDIZ E., Ayhan Z., AYDOĞDU Y., ŞÜMNÜ S. G., ŞAHİN S.  
EUROPEAN POLYMER JOURNAL, vol.112, pp.477-486, 2019 (SCI-Expanded)
- VII. **Utilization of lentil flour as a biopolymer source for the development of edible films**  
Aydogdu A., KIRTIL E., ŞÜMNÜ S. G., ÖZTOP H. M., AYDOĞDU Y.  
JOURNAL OF APPLIED POLYMER SCIENCE, vol.135, no.23, 2018 (SCI-Expanded)
- VIII. **Development of novel pea flour-based nanofibres by electrospinning method**  
OĞUZ S., Tam N., Aydogdu A., ŞÜMNÜ S. G., ŞAHİN S.  
INTERNATIONAL JOURNAL OF FOOD SCIENCE AND TECHNOLOGY, vol.53, no.5, pp.1269-1277, 2018 (SCI-Expanded)
- IX. **A novel electrospun hydroxypropyl methylcellulose/polyethylene oxide blend nanofibers: Morphology and physicochemical properties**  
Aydogdu A., ŞÜMNÜ S. G., ŞAHİN S.  
CARBOHYDRATE POLYMERS, vol.181, pp.234-246, 2018 (SCI-Expanded)
- X. **Effects of addition of different fibers on rheological characteristics of cake batter and quality of cakes**  
Aydogdu A., ŞÜMNÜ S. G., ŞAHİN S.  
JOURNAL OF FOOD SCIENCE AND TECHNOLOGY-MYSORE, vol.55, no.2, pp.667-677, 2018 (SCI-Expanded)
- XI. **Influence of solution properties and pH on the fabrication of electrospun lentil flour/HPMC blend nanofibers**  
Tam N., OĞUZ S., Aydogdu A., ŞÜMNÜ S. G., ŞAHİN S.  
FOOD RESEARCH INTERNATIONAL, vol.102, pp.616-624, 2017 (SCI-Expanded)
- XII. **Visualisation of cakes differing in oil content with magnetic resonance imaging**  
KIRTIL E., Tonyali B., Aydogdu A., Bulut E. Y., Tatar B. C., ÖZTOP H. M.  
INTERNATIONAL JOURNAL OF FOOD PROPERTIES, vol.20, 2017 (SCI-Expanded)
- XIII. **Effects of Microwave-Infrared Combination Drying on Quality of Eggplants**  
Aydogdu A., ŞÜMNÜ S. G., ŞAHİN S.  
FOOD AND BIOPROCESS TECHNOLOGY, vol.8, no.6, pp.1198-1210, 2015 (SCI-Expanded)

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

- I. **Zero-Field NMR of Quadrupolar Nuclei and Exchanging Systems**  
BARSKIY D. A., REH M., ÇIKRIKCI S., AYDOĞDU A., BLANCHARD J., BUDKER D., PINES A.  
HYP18- An International Conference on Nuclear Hyperpolarization, 2 - 05 September 2018
- II. **Investigation of physical properties and moisture sorption behaviour of different marshmallow formulations**  
KIRTIL E., AYDOĞDU A., ÖZTOP H. M.

III. International Conference of Agricultural and Food Engineering, 23 - 25 August 2016

III. **Effects of legume flours on batter rheology and cake physical quality**

AYDOĐDU A., Özkahraman C., ŞÜMNÜ S. G., ŞAHİN S.

III. International Conference on Agricultural and Food Engineering, Malaysia, 23 - 25 August 2016

IV. **The Effect of Microwave Infrared Combination Drying on Quality of Osmotically Dehydrated Eggplants**

AYDOĐDU A., SERVET GÜLÜM Ş., ŞAHİN S.

4th International Conference and Exhibition on Food Processing and Technology, 10 - 12 August 2015

## **Activities in Scientific Journals**

Çanakkale Onsekiz Mart Üniversitesi Fen Bilimleri Enstitüsü Dergisi, Assistant Editor/Section Editor, 2020 - Continues

## **Metrics**

Publication: 17

Citation (WoS): 158

Citation (Scopus): 180

H-Index (WoS): 7

H-Index (Scopus): 8