

# Özgeçmiş

## Kişisel Bilgiler

**Ad, Soyad**  
**Doğum Tarihi**  
**E-posta**  
**LinkedIn**  
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Cansu Ekin Gümüş  
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## Eğitim Bilgileri

**Doktora**  
(2012-2017)

**University of Massachusetts Amherst**  
Gıda Bilimi

**Yüksek Lisans**  
(2010-2012)

**Ankara Üniversitesi**  
Gıda Mühendisliği

**Lisans**  
(2006-2010)

**Ankara Üniversitesi**  
Gıda Mühendisliği

## İş Deneyimi

**2019 -**

**Ankara Üniversitesi**  
Gıda Mühendisliği Bölümü/ Dr. Öğr. Üyesi

**2017 – 2019**

**Hitit Üniversitesi- Çorum**  
Bilimsel Teknik Uygulama ve Araştırma Merkezi / Öğretim Görevlisi

**2014 – 2017**

**University of Massachusetts Amherst**  
Gıda Bilimi Bölümü / Araştırma Görevlisi

**2011 – 2012**

**Celal Bayar Üniversitesi- Manisa**  
Gıda Mühendisliği Bölümü / Araştırma Görevlisi

## Burslar ve Ödüller

**2018**

**Erasmus+ Personel Eğitim Alma Faaliyeti-** Avrupa Konseyi  
(Wageningen University&Research)

**2017**

**Öğrenci Başarı Bursu-** Phi Tau Sigma Gıda Bilimi Onursal Topluluğu  
**1.lık ödülü-** STEM Slam 3 dakikada bilim Yarışması/ UMass Amherst  
INFORMS (Yöneyelem Araştırma ve Yönetim Bilimi Enstitüsü)  
Öğrenci Birimi

**2016**

**Lisansüstü Öğrenci Bursu-** Kuzeydoğu Süt İşletmesi Birliği (NDA)  
**Tedarikçi Ödülü-** IFT Kuzeydoğu Şubesi (NEIFT)  
**Hans Kaunitz Ödülü-** Amerikan Yağ Kimyagerleri Birliği (AOCS)  
**Feeding Tomorrow Lisansüstü Öğrenci Bursu-** Gıda Teknologları  
Enstitüsü (IFT)

**2015**

**Lisansüstü Öğrenci Bursu-** NEIFT  
**Teranishi Bursu-** Amerikan Kimya Derneği- Tarım ve Gıda Kimyası  
Departmanı (ACS/AGFD)  
**1.lık ödülü-** IFT Eğitim, Gelişme & Sosyal yardım Lisansüstü Öğrenci  
Makale Yarışması  
**3.lük ödülü-** IFT Öğrenci Birliği *Developing Solutions for Developing Countries* Ürün Geliştirme Yarışması

**2012-2017**

**2010-2012**

**2011**

**Uluslararası Lisansüstü Öğrenim Bursu- MEB**

**Yurtçi Yüksek Lisans Bursu - TÜBİTAK**

**Yoğunlaştırılmış Almanca Kursu Bursu- Alman Akademik Değişim Birimi (DAAD)**

### Üyesi olunan kuruluşlar

- Yağ Bilimi ve Teknolojisi Derneği (YABİTED)
- Institute of Food Technologists (IFT)
- American Oil Chemists' Society (AOCS)
- American Chemical Society (ACS)
- European Federation for the Science and Technology of Lipids (EUROFED LIPID)
- Phi Tau Sigma- The Honor Society of Food Science and Technology
- ACS/Agriculture and Food Division (AGFD)

### Vasıflar

**Yabancı diller**

Türkçe (anadil), İngilizce (ileri seviye), Almanca (orta seviye)

**Bilgisayar**

Mac, Windows, SPSS, Microsoft Ofis Programları

**Laboratuvar**

-Statik ve dinamik ışık saçılımı (MasterSizer, ZetaSizer) ile tane büyüğünü ve yükü ölçümü  
-Konfokal (Eş odaklı) Mikroskop  
-Yüksek enerji yöntemiyle (Microfluidizer) emülsiyon üretimi  
-Diğer: Gaz Kromatografisi, SDS-PAGE, Spektrofotometri, Sprey kurutma

### Yayınlar:

Y1) **Gumus CE**, Davidov-Pardo G, and McClements DJ. (2016). "Lutein-enriched emulsion-based delivery systems: Impact of Maillard conjugation on physicochemical stability and gastrointestinal fate", *Food Hydrocolloids*, 60: 38-49.

Y2) McClements DJ, and **Gumus, CE**. (2016). "Natural Emulsifiers - Biosurfactants, Phospholipids, Biopolymers, and Colloidal Particles: Molecular and Physicochemical Basis of Functional Performance", *Advances in Colloid and Interface Science*, 234: 3-26.

Y3) Davidov-Pardo G, **Gumus CE**, and McClements DJ. (2016). "Lutein-enriched emulsion-based delivery systems: Influence of pH and temperature on physical and chemical stability", *Food Chemistry*, 196: 821-7.

Y4) **Gumus CE**, Decker EA, and McClements DJ. (2017). "Formation and Stability of w-3 Oil Emulsion-based Delivery Systems using Plant Proteins as Emulsifiers: Lentil, Pea, and Faba Bean proteins", *Food Biophysics*, 2 (12): 186-197.

Y5) **Gumus CE**, Decker EA, and McClements DJ. (2017). "Gastrointestinal Fate of Emulsion-based w-3 Oil Delivery Systems Stabilized by Plant Proteins: Lentil, Pea, and Faba Bean proteins", *Journal of Food Engineering*, 207: 90-98.

Y6) **Gumus CE**, Decker EA, and McClements DJ. (2017). "Impact of legume protein type and location on lipid oxidation in fish oil-in-water emulsions: Lentil, pea, and faba bean proteins", *Food Research International*, 100: 175-185.

Y7) **Gumus CE**, Yorulmaz A, and Tekin A. (2016). "Differentiation of Mechanically and Chemically Extracted Hazelnut Oils Based on their Sterol and Wax Profiles", *Journal of the American Oil Chemists' Society*, 93: 1625.

Y8) Walker RW, **Gumus CE**, Decker EA, and McClements DJ. (2017). "Improvements in the Formation and Stability of Fish oil-in-water Nanoemulsions using carrier oils: MCT, Thyme Oil, & Lemon Oil", *Journal of Food Engineering*, 211: 60-68.

Y9) Kadappan AS, Guo C, **Gumus CE**, Bessey A, Wood RJ, McClements DJ, and Liu Z. (2018). "The Efficacy of Nanoemulsion-Based Delivery to Improve Vitamin D Absorption: Comparison of in Vitro and in Vivo Studies", *Molecular nutrition & food research*, 1700836.

Sözlü Sunumlar:

S1) **Gumus, C. E.**, and McClements, D. J. "Clean Label, Natural Emulsifiers", *2017 AOCS Annual Meeting*, 30 April- 3 May 2017, Orlando, FL, USA.

S2) **Gumus, C. E.**, Decker EA, and McClements, D. J. "Influence of legume proteins on the lipid oxidation of omega-3 emulsions", *2017 AOCS Annual Meeting*, 30 April- 3 May 2017, Orlando, FL, USA.

S3) **Gumus, C. E.**, and McClements, D. J. "Influence of legume proteins on the gastrointestinal digestion of omega-3 emulsions", *ACS 253rd National Meeting*, 2-6 April 2017, San Francisco, CA, USA.

S4) **Gumus, C. E.**, and McClements, D. J. "Utilization of Novel Protein Sources as Emulsifiers to Encapsulate Functional Lipids", *14th Euro Fed Lipid Congress: "Fats, Oils and Lipids: Innovative Approaches towards a Sustainable Future"*, 18-21 September 2016, Ghent, BELGIUM.

S5) **Gumus, C. E.**, and McClements, D. J. "Legume proteins as alternative emulsifiers to encapsulate omega-3 oils", *ACS 252nd National Meeting*, 21-25 August 2016, Philadelphia, PA, USA.

S6) **Gumus, C. E.**, Davidov-Pardo, G., and McClements, D. J. "Influence of Maillard Conjugation on the Stability of Emulsion-based Delivery Systems: Lutein-enriched Corn Oil Emulsions at Different pH and Temperature Conditions", *107<sup>th</sup> AOCS Annual Meeting & Expo*, 1-4 May 2016, Salt Lake City, UT, USA.

S7) **Gumus, C. E.**, Barden, L., Vieira, S., McClements, D. J., Villeneuve, P. and Decker, E. A. "Lipid Oxidation in Low-Moisture Foods", *Cake Symposium*, 25-26 August 2014, Boston, MA, USA.

Poster Sunumları:

P1) **Gumus, C. E.**, Davidov-Pardo, G., and McClements, D. J. "Evaluation of physical and chemical stability of lutein-enriched corn oil emulsions under different pH and temperature conditions", *13<sup>th</sup> Euro Fed Lipid Congress: "Fats, Oils and Lipids: New Challenges in Technology, Quality Control and Health"*, 27-30 September 2015, Florence, ITALY.

P2) **Gumus, C. E.**, Barden, L., and Decker, E. A. "Comparison of Lipid Oxidation Behavior in Surface Oil vs. Total Lipid in Low-moisture Foods", *105<sup>th</sup> AOCS Annual Meeting & Expo*, 4-7 May 2014, San Antonio, TX, USA.

P3) **Gumus, C. E.**, Yorulmaz A., and Tekin A. "Comparison of Sterol and Wax Composition of Hazelnut Oils Obtained by Pressing or Solvent Extraction", *11<sup>th</sup> Euro Fed Lipid Congress and 30<sup>th</sup> ISF lecture series: "Oils, Fats and Lipids: New Strategies for a High Quality Future"*, 27-30 October 2013, Antalya, TURKEY.

P4) **Gumus, C. E.** "Rafinasyon İşleminde 3-MCPD oluşumu", *YABİTED 1. Bitkisel Yağ Kongresi*, 12-14 Nisan 2012, Adana, Türkiye.

P5) Balkan, C., Ozdemir, N., **Gumus, C. E.**, and Bayrak, A. "Pesticide Residues in Olive Oil", *AOCS World Conference on Oilseed Processing, Fat & Oils Processing, Biofuels & Applications*, 21-23 June 2011, Izmir, Turkey.