

Asst. Prof. TOLGAHAN KOCADAĞLI

Personal Information

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Education Information

Doctorate, Hacettepe University, Fen Bilimleri Enstitüsü, Gıda Mühendisliği A.B.D., Turkey 2011 - 2016

Postgraduate, Hacettepe University, Fen Bilimleri Enstitüsü, Gıda Mühendisliği A.B.D., Turkey 2009 - 2011

Undergraduate, Hacettepe Üniversitesi, Mühendislik Fakültesi, Gıda Mühendisliği, Turkey 2003 - 2008

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Investigation and Kinetic Modelling of α -Dicarbonyl Compound Formation in Foods, Hacettepe Üniversitesi, Fen Bilimleri Enstitüsü, Gıda Mühendisliği (Dr), 2016

Postgraduate, Farklı pişirme uygulamaları ile fırıncılık ürünlerinde akrilamid oluşumunun sınırlandırılması, Hacettepe Üniversitesi, Fen Bilimleri Enstitüsü, Gıda Mühendisliği (YI) (Tezli), 2011

Research Areas

Food Engineering, Food Science, Food Chemistry, Engineering and Technology

Academic Titles / Tasks

Assistant Professor, Hacettepe Üniversitesi, Mühendislik Fakültesi, Gıda Mühendisliği Bölümü, 2019 - Continues

Research Assistant PhD, University of Reading, Department of Food and Nutritional Sciences, 2017 - 2018

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- Pea protein properties are altered following glycation by microwave heating**
ERTUĞRUL Ü., NAMLI S., TAŞ O., KOCADAĞLI T., GÖKMEN V., ŞÜMNÜ S. G., Oztop M. H.
LWT-FOOD SCIENCE AND TECHNOLOGY, vol.150, 2021 (Journal Indexed in SCI)
- Effects of Sprouting and Fermentation on Free Asparagine and Reducing Sugars in Wheat, Einkorn, Oat, Rye, Barley, and Buckwheat and on Acrylamide and 5-Hydroxymethylfurfural Formation during Heating**
Yiltirak S., KOCADAĞLI T., ÇELİK E. E., KANMAZ E. Ö., GÖKMEN V.
JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY, vol.69, no.32, pp.9419-9433, 2021 (Journal Indexed in SCI)

- III. **Targeted precursor addition to increase baked flavour in a low-acrylamide potato-based matrix**
Kocadagli T., Methven L., Kant A., Parker J. K.
FOOD CHEMISTRY, vol.339, 2021 (Journal Indexed in SCI)
- IV. **Time dependent change of ethanol consumption biomarkers, ethyl glucuronide and ethyl sulphate, after single dose ethanol intake**
Karacaoglu E., Odabasi A. B., AKÇAN R., TÜMER A. R., Lale A., KOCADAĞLI T., GÖKMEN V.
TURKISH JOURNAL OF BIOCHEMISTRY-TURK BIYOKIMYA DERGISI, vol.44, no.3, pp.379-387, 2019 (Journal Indexed in SCI)
- V. **Determination of serotonin in nuts and nut containing products by liquid chromatography tandem mass spectrometry**
YILMAZ C., Taş N. G., KOCADAĞLI T., GÖKMEN V.
Food Chemistry, vol.272, pp.347-353, 2019 (Journal Indexed in SCI)
- VI. **Evolution of surface temperature and its relationship with acrylamide formation during conventional and vacuum-combined baking of cookies**
Yıldız H. G., Palazoğlu T. K., Miran W., KOCADAĞLI T., GÖKMEN V.
Journal of Food Engineering, vol.197, pp.17-23, 2017 (Journal Indexed in SCI)
- VII. **Multiresponse kinetic modelling of Maillard reaction and caramelisation in a heated glucose/wheat flour system**
KOCADAĞLI T., GÖKMEN V.
FOOD CHEMISTRY, vol.211, pp.892-902, 2016 (Journal Indexed in SCI)
- VIII. **Effect of roasting and brewing on the antioxidant capacity of espresso brews determined by the QUENCHER procedure**
KOCADAĞLI T., GÖKMEN V.
Food Research International, vol.89, pp.976-981, 2016 (Journal Indexed in SCI)
- IX. **Effects of Sodium Chloride, Potassium Chloride, and Calcium Chloride on the Formation of alpha-Dicarbonyl Compounds and Furfurals and the Development of Browning in Cookies during Baking**
KOCADAĞLI T., GÖKMEN V.
JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY, vol.64, no.41, pp.7838-7848, 2016 (Journal Indexed in SCI)
- X. **Effect of Sodium Chloride on alpha-Dicarbonyl Compound and 5-Hydroxymethyl-2-furfural Formations from Glucose under Caramelization Conditions: A Multiresponse Kinetic Modeling Approach**
KOCADAĞLI T., GÖKMEN V.
JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY, vol.64, no.32, pp.6333-6342, 2016 (Journal Indexed in SCI)
- XI. **Formation of α -dicarbonyl compounds in cookies made from wheat, hull-less barley and colored corn and its relation with phenolic compounds, free amino acids and sugars**
KOCADAĞLI T., Žilić S., Taş N. G., Vančetović J., Dodig D., GÖKMEN V.
European Food Research and Technology, vol.242, no.1, pp.51-60, 2016 (Journal Indexed in SCI)
- XII. **Effects of baking conditions and dough formulations on phenolic compound stability, antioxidant capacity and color of cookies made from anthocyanin-rich corn flour**
Žilić S., KOCADAĞLI T., Vančetović J., GÖKMEN V.
LWT - Food Science and Technology, vol.65, pp.597-603, 2016 (Journal Indexed in SCI)
- XIII. **Investigation of α -dicarbonyl compounds in baby foods by high-performance liquid chromatography coupled with electrospray ionization mass spectrometry**
KOCADAĞLI T., GÖKMEN V.
Journal of Agricultural and Food Chemistry, vol.62, no.31, pp.7714-7720, 2014 (Journal Indexed in SCI)
- XIV. **Determination of melatonin and its isomer in foods by liquid chromatography tandem mass spectrometry**
KOCADAĞLI T., YILMAZ C., GÖKMEN V.
Food Chemistry, vol.153, pp.151-156, 2014 (Journal Indexed in SCI)
- XV. **Formation of melatonin and its isomer during bread dough fermentation and effect of baking**
YILMAZ C., KOCADAĞLI T., GÖKMEN V.

- Journal of Agricultural and Food Chemistry, vol.62, no.13, pp.2900-2905, 2014 (Journal Indexed in SCI)
- XVI. **Acrylamide and 5-hydroxymethylfurfural formation during baking of biscuits: NaCl and temperature-time profile effects and kinetics**
Van Der Fels-Klerx H., Capuano E., Nguyen H., ATAÇ MOGOL B., KOCADAĞLI T., Göncüoğlu Taş N., Hamzalioglu A., Van Boekel M., GÖKMEN V.
Food Research International, vol.57, pp.210-217, 2014 (Journal Indexed in SCI)
- XVII. **Effect of combining conventional frying with radio-frequency post-drying on acrylamide level and quality attributes of potato chips**
Koklamaz E., Palazoğlu T. K., KOCADAĞLI T., GÖKMEN V.
Journal of the Science of Food and Agriculture, vol.94, no.10, pp.2002-2008, 2014 (Journal Indexed in SCI)
- XVIII. **Effects of infusion conditions and decaffeination on free amino acid profiles of green and black tea**
KOCADAĞLI T., OZDEMIR K. S., GÖKMEN V.
FOOD RESEARCH INTERNATIONAL, vol.53, no.2, pp.720-725, 2013 (Journal Indexed in SCI)
- XIX. **Compositional, Nutritional, and Functional Characteristics of Instant Teas Produced from Low- and High-Quality Black Teas**
Alasalvar C., Pelvan E., Ozdemir K. S., KOCADAĞLI T., Mogol B. A., Pasli A. A., Ozcan N., Özçelik B., GÖKMEN V.
JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY, vol.61, no.31, pp.7529-7536, 2013 (Journal Indexed in SCI)
- XX. **Effect of Radio Frequency Postdrying of Partially Baked Cookies on Acrylamide Content, Texture, and Color of the Final Product**
Koray Palazoğlu T., Coşkun Y., Kocadağlı T., GÖKMEN V.
Journal of Food Science, vol.77, no.5, 2012 (Journal Indexed in SCI)
- XXI. **Model studies on the role of 5-hydroxymethyl-2-furfural in acrylamide formation from asparagine**
GÖKMEN V., KOCADAĞLI T., Göncüoğlu N., Mogol B. A.
Food Chemistry, vol.132, no.1, pp.168-174, 2012 (Journal Indexed in SCI)
- XXII. **Mitigation of acrylamide formation in cookies by using Maillard reaction products as recipe modifier in a combined partial conventional baking and radio frequency post-baking process**
KOCADAĞLI T., Koray Palazoğlu T., GÖKMEN V.
European Food Research and Technology, vol.235, no.4, pp.711-717, 2012 (Journal Indexed in SCI)
- XXIII. **In depth study of acrylamide formation in coffee during roasting: Role of sucrose decomposition and lipid oxidation**
KOCADAĞLI T., Göncüoğlu N., Hamzalioglu A., GÖKMEN V.
Food and Function, vol.3, no.9, pp.970-975, 2012 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **Adding Calcium to Foods and Effect on Acrylamide**
Tas N. G., Hamzalioglu A., KOCADAĞLI T., GÖKMEN V.
CALCIUM: CHEMISTRY, ANALYSIS, FUNCTION AND EFFECTS, vol.10, pp.274-290, 2016 (Refereed Journals of Other Institutions)

Books & Book Chapters

- I. **Metabolism of Acrylamide in Humans and Biomarkers of Exposure to Acrylamide**
KOCADAĞLI T., GÖKMEN V.
in: Acrylamide in Food Analysis Content and Potential Health Effects, Vural Gökmen, Editor, Elsevier Inc., pp.109-128, 2015

Refereed Congress / Symposium Publications in Proceedings

- I. **Effect of Sodium Chloride, Potassium Chloride and Calcium Chloride on the Flavour Formation during Heating of Wheat Flour Glucose Model System**
KOCADAĞLI T., Balagiannis D., GÖKMEN V., Parker J.
15th Weurman Flavour Research Symposium, Graz, Austria, 18 - 22 September 2017, pp.111-114
- II. **Effect of metal salts on the formation of aroma compounds and acrylamide during heating**
TAŞ N., KOCADAĞLI T., Balagiannis D., GÖKMEN V., Parker J.
Acrylamide - Regulatory and Industry Update, 16 October 2017
- III. **Radio Frequency and Vacuum Post-Baking Technologies to Mitigate Acrylamide Formation**
KOCADAĞLI T., ATAÇ MOGOL B., GÖKMEN V.
Acrylamide-Regulatory and Industry Update, United Kingdom, 16 October 2017
- IV. **Effect of Sodium Chloride, Potassium Chloride and Calcium Chloride on the Flavour Formation during Heating of Wheat Flour-Glucose Model System**
KOCADAĞLI T., Balagiannis D., GÖKMEN V., Parker J.
5th Nursten Postgraduate Flavour Symposium 2017, Belfast, United Kingdom, 29 - 30 June 2017
- V. **Effect of sodium chloride on dicarbonyl compounds and 5 hydroxymethyl 2 furfural formations from glucose under caramelization conditions A multiresponse kinetic modeling approach**
KOCADAĞLI T., GÖKMEN V.
1th Food Chemistry Conference - Shaping the Future of Food Quality, Health and Safety, 29 October - 01 November 2016
- VI. **THE EFFECT OF BAKING CONDITIONS AND DOUGH FORMULATIONS ON DICARBONYL COMPOUNDS FORMATION AND ANTHOCYANINS STABILITY IN COOKIES MADE FROM BLUE CORN FLOUR**
Zilic S., GÖKMEN V., KOCADAĞLI T., Vancetovic J., TAŞ N.
13th Congress of Nutrition, 26 - 28 October 2016
- VII. **Multiresponse kinetic modeling of 1 2 dicarbonyl compound formation in wheat flour glucose model dough system under dry heating conditions**
KOCADAĞLI T., GÖKMEN V.
EuroFoodChem XVIII, Spain, 13 - 16 October 2015
- VIII. **Multiresponse Kinetic Modeling of Dicarbonyl Compound Formation in Wheat Flour Glucose Model Dough System under Dry Heating Conditions**
KOCADAĞLI T., GÖKMEN V.
Euro Food Chem XVIII, 13 - 16 October 2015
- IX. **Multiresponse Kinetic Modeling of 1 2 Dicarbonyl Compound Formation in Wheat Flour Glucose Model Dough System under Dry Heating Conditions**
KOCADAĞLI T., GÖKMEN V.
12th International Symposium on Maillard Reaction, 1 - 04 September 2015
- X. **Changes in antioxidant activity of coffee during roasting and of volume fractions of espresso brew**
KOCADAĞLI T., GÖKMEN V.
Third International Congress on Cocoa Coffee and Tea, 22 - 25 June 2015

Supported Projects

Gökmen V., Kocadağlı T., Öztop H. M., TUBITAK Project, Bezelye ve Soya Proteinleri ile Nadir Şekerin (D-Psikoz) Mikrodalga Isıtma Tekniği Kullanarak Glikasyonu ve Glike Proteinlerin Fiziksel ve Kimyasal Özelliklerinin İncelenmesi, 2018 - 2019

GÖKMEN V., KOCADAĞLI T., Project Supported by Higher Education Institutions, Karamelizasyon Koşullarında Glukozdan Dikarbonil Bileşikleri ve 5-Hidroksimetil-2-furfural Oluşumuna Sodyum Klorürün Etkisi: Çok-Değişkenli Kinetik Modelleme Yaklaşımı, 2016 - 2017

KOCADAĞLI T., GÖKMEN V., Project Supported by Higher Education Institutions, Demleme Koşullarının ve Dekafeinizasyonun Siyah ve Yeşil Çaylarda Serbest Amino Asit Profili Üzerine Etkisi, 2015 - 2015

KOCADAĞLI T., GÖKMEN V., Project Supported by Higher Education Institutions, KURU ISITMA KOŞULLARINDA BUĞDAY

UNU-GLUKOZ MODEL SİSTEMİNDE 1,2-DİKARBONİL BİLEŞİKLERİ OLUŞUMUNUN ÇOK-DEĞİŞKENLİ KİNETİK MODELLENMESİ, 2015 - 2015

Patent

ATAÇ MOGOL B., KOCADAĞLI T., GÖKMEN V., Akrilamid içermeyen, fırınlanmış unlu mamul ve üretim yöntemi, Patent, CHAPTER A Human Needs, Initial Registration, 2015

Citations

Total Citations (WOS):521

h-index (WOS):13

Awards

Kocadağlı T., Hacettepe Üniversitesi Bilim Teşvik Ödülü 2019, Hacettepe Üniversitesi, June 2020

Kocadağlı T., RSC Food Group Junior Medal 2017, Royal Society Of Chemistry, February 2018