

## Asst. Prof. BURÇE ATAÇ MOGOL

### Personal Information

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### International Researcher IDs

ORCID: 0000-0002-1117-030X

Publons / Web Of Science ResearcherID: B-3233-2013

ScopusID: 36625831500

Yoksis Researcher ID: 60442

### Education Information

Doctorate, Hacettepe University, Fen Bilimleri Enstitüsü, Gıda Mühendisliği, Turkey 2009 - 2014

Postgraduate, Hacettepe University, Fen Bilimleri Enstitüsü, Gıda Mühendisliği, Turkey 2006 - 2009

Undergraduate, Hacettepe University, Mühendislik Fakültesi, Gıda Mühendisliği, Turkey 2001 - 2006

### Foreign Languages

English, C1 Advanced

### Research Areas

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

### Academic Titles / Tasks

Assistant Professor, Hacettepe University, Mühendislik Fakültesi, Gıda Mühendisliği Bölümü, 2018 - Continues

Assistant Professor, Hacettepe University, Mühendislik Fakültesi, Gıda Mühendisliği Bölümü, 2015 - 2018

Research Assistant, Hacettepe University, Mühendislik Fakültesi, Gıda Mühendisliği Bölümü, 2008 - 2015

### Courses

Mühendislik Termodinamiği, Undergraduate, 2016 - 2017

Technical Drawing, Undergraduate, 2016 - 2017

Bilgi Teknolojileri, Postgraduate, 2016 - 2017

Bilgisayar ve Programlama, Undergraduate, 2016 - 2017

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

- I. **Assessment of acrylamide content in corn-based snack products marketed in Serbia**  
Zilic S., Saric B., ATAÇ MOGOL B., Kravic N., Hamzalioglu A., Simic M., Nikolic V., GÖKMEN V.  
JOURNAL OF FOOD COMPOSITION AND ANALYSIS, 2024 (SCI-Expanded)
- II. **Fluidized bed roasting modifying the microstructure of cocoa nibs and improving cocoa butter quality**  
Peña-Correa R. F., Mogol B. A., Fogliano V.  
JAOCS, Journal of the American Oil Chemists' Society, vol.100, no.10, pp.815-827, 2023 (SCI-Expanded)
- III. **Digestion and gut-microbiota fermentation of cocoa melanoidins: An in vitro study**  
Peña-Correa R. F., Wang Z., Mesa V., ATAÇ MOGOL B., Martínez-Galán J. P., Fogliano V.  
Journal of Functional Foods, vol.109, 2023 (SCI-Expanded)
- IV. **Fluidized-Bed-Roasted Cocoa Has Different Chemical Characteristics than Conventionally Roasted Cocoa**  
Peña-Correa R. F., ATAÇ MOGOL B., Frygas C., Fogliano V.  
Journal of Agricultural and Food Chemistry, vol.71, no.26, pp.10203-10211, 2023 (SCI-Expanded)
- V. **The impact of roasting on cocoa quality parameters**  
Pena-Correa R. F., ATAÇ MOGOL B., Fogliano V.  
CRITICAL REVIEWS IN FOOD SCIENCE AND NUTRITION, 2022 (SCI-Expanded)
- VI. **Fluidized bed roasting of cocoa nibs speeds up processing and favors the formation of pyrazines**  
Pena-Correa R. F., ATAÇ MOGOL B., van Boekel M. A. J. S., Fogliano V.  
INNOVATIVE FOOD SCIENCE & EMERGING TECHNOLOGIES, vol.79, 2022 (SCI-Expanded)
- VII. **Mitigation of acrylamide formation during malt processing**  
Basinci F., ATAÇ MOGOL B., Guler S., GÖKMEN V., Koxsel H.  
JOURNAL OF CEREAL SCIENCE, vol.106, 2022 (SCI-Expanded)
- VIII. **Acrylamide in Corn-Based Thermally Processed Foods: A Review**  
Zilic S., Nikolic V., ATAÇ MOGOL B., Hamzalioglu A., Tas N., KOCADAĞLI T., Simic M., GÖKMEN V.  
JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY, vol.70, no.14, pp.4165-4181, 2022 (SCI-Expanded)
- IX. **Mitigation of acrylamide in baked potato chips by vacuum baking and combined conventional and vacuum baking processes**  
Akkurt K., ATAÇ MOGOL B., GÖKMEN V.  
LWT-FOOD SCIENCE AND TECHNOLOGY, vol.144, 2021 (SCI-Expanded)
- X. **Modulation of gastrointestinal digestion of beta-lactoglobulin and micellar casein following binding by (-)-epigallocatechin-3-gallate (EGCG) and green tea flavanols**  
Donmez O., ATAÇ MOGOL B., GÖKMEN V., Tang N., Andersen M. L., Chatterton D. E. W.  
FOOD & FUNCTION, vol.11, no.7, pp.6038-6053, 2020 (SCI-Expanded)
- XI. **Furan**  
ATAÇ MOGOL B., GÖKMEN V.  
CHEMICAL HAZARDS IN THERMALLY-PROCESSED FOODS, pp.87-105, 2019 (SCI-Expanded)
- XII. **Syneresis and rheological behaviors of set yogurt containing green tea and green coffee powders**  
Donmez O., ATAÇ MOGOL B., GÖKMEN V.  
JOURNAL OF DAIRY SCIENCE, vol.100, no.2, pp.901-907, 2017 (SCI-Expanded)
- XIII. **Effect of chitosan on the formation of acrylamide and hydroxymethylfurfural in model, biscuit and crust systems**  
Mogol B. A., GÖKMEN V.  
FOOD & FUNCTION, vol.7, no.8, pp.3431-3436, 2016 (SCI-Expanded)
- XIV. **Thermal process contaminants: acrylamide, chloropropanols and furan**  
Mogol B. A., GÖKMEN V.  
CURRENT OPINION IN FOOD SCIENCE, vol.7, pp.86-92, 2016 (SCI-Expanded)
- XV. **Effect of vacuum-combined baking of cookies on acrylamide content, texture and color**  
Palazoglu T. K., COSKUN Y., Tuta S., Mogol B. A., GÖKMEN V.  
EUROPEAN FOOD RESEARCH AND TECHNOLOGY, vol.240, no.1, pp.243-249, 2015 (SCI-Expanded)
- XVI. **Mitigation of acrylamide and hydroxymethylfurfural in biscuits using a combined partial**

- conventional baking and vacuum post-baking process: Preliminary study at the lab scale**  
ATAÇ MOGOL B., GÖKMEN V.  
INNOVATIVE FOOD SCIENCE & EMERGING TECHNOLOGIES, vol.26, pp.265-270, 2014 (SCI-Expanded)
- XVII. **Formation of Monochloropropane-1,2-diol and Its Esters in Biscuits during Baking**  
ATAÇ MOGOL B., Pye C., Anderson W., Crews C., GÖKMEN V.  
JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY, vol.62, no.29, pp.7297-7301, 2014 (SCI-Expanded)
- XVIII. **Computer vision-based analysis of foods: A non-destructive colour measurement tool to monitor quality and safety**  
ATAÇ MOGOL B., GÖKMEN V.  
JOURNAL OF THE SCIENCE OF FOOD AND AGRICULTURE, vol.94, no.7, pp.1259-1263, 2014 (SCI-Expanded)
- XIX. **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., Hamzalıoğlu A., Van Boekel M., GÖKMEN V.  
Food Research International, vol.57, pp.210-217, 2014 (SCI-Expanded)
- XX. **Processing Treatments for Mitigating Acrylamide Formation in Sweetpotato French Fries**  
Van-Den Truong V. T., Pascua Y. T., Reynolds R., Thompson R. L., PALAZOĞLU T. K., ATAÇ MOGOL B., GÖKMEN V.  
JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY, vol.62, no.1, pp.310-316, 2014 (SCI-Expanded)
- XXI. **Kinetics of Furan Formation from Ascorbic Acid during Heating under Reducing and Oxidizing Conditions**  
ATAÇ MOGOL B., GÖKMEN V.  
JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY, vol.61, no.42, pp.10191-10196, 2013 (SCI-Expanded)
- XXII. **Raising agents strongly influence acrylamide and HMF formation in cookies and conditions for asparaginase activity in dough**  
Kukurova K., Ciesarova Z., ATAÇ MOGOL B., Acar O. C., GÖKMEN V.  
EUROPEAN FOOD RESEARCH AND TECHNOLOGY, vol.237, no.1, pp.1-8, 2013 (SCI-Expanded)
- XXIII. **Role of curcumin in the conversion of asparagine into acrylamide during heating**  
HAMZALIOĞLU B. A., ATAÇ MOGOL B., Lumaga R. B., Fogliano V., GÖKMEN V.  
AMINO ACIDS, vol.44, no.6, pp.1419-1426, 2013 (SCI-Expanded)
- XXIV. **Nano-encapsulation improves thermal stability of bioactive compounds Omega fatty acids and silymarin in bread**  
Mogol B., GÖKMEN V., SHIMONI E.  
AGRO FOOD INDUSTRY HI-TECH, vol.24, no.3, pp.62-65, 2013 (SCI-Expanded)
- XXV. **Phytochemicals and health benefits of dried apricots**  
Göncüoğlu N., ATAÇ MOGOL B., GÖKMEN V.  
DRIED FRUITS: PHYTOCHEMICALS AND HEALTH EFFECTS, pp.226-242, 2013 (SCI-Expanded)
- XXVI. **Nutritional and Functional Characteristics of Seven Grades of Black Tea Produced in Turkey**  
Serpén A., Pelvan E., Alasalvar C., ATAÇ MOGOL B., Yavuz H. T., GÖKMEN V., Özcan N., Özçelik B.  
JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY, vol.60, no.31, pp.7682-7689, 2012 (SCI-Expanded)
- XXVII. **Rapid determination of amino acids in foods by hydrophilic interaction liquid chromatography coupled to high-resolution mass spectrometry**  
GÖKMEN V., Serpen A., ATAÇ MOGOL B.  
ANALYTICAL AND BIOANALYTICAL CHEMISTRY, vol.403, no.10, pp.2915-2922, 2012 (SCI-Expanded)
- XXVIII. **Effects of different grain mixtures on Maillard reaction products and total antioxidant capacities of breads**  
Serpén A., GÖKMEN V., ATAÇ MOGOL B.  
JOURNAL OF FOOD COMPOSITION AND ANALYSIS, vol.26, pp.160-168, 2012 (SCI-Expanded)
- XXIX. **Development of functional bread containing nanoencapsulated omega-3 fatty acids**  
GÖKMEN V., ATAÇ MOGOL B., Lumaga R. B., Fogliano V., Kaplun Z., Shimoni E.  
JOURNAL OF FOOD ENGINEERING, vol.105, no.4, pp.585-591, 2011 (SCI-Expanded)
- XXX. **Inhibition of enzymatic browning in actual food systems by the Maillard reaction products**

ATAÇ MOGOL B., Yildirim A., GÖKMEN V.

JOURNAL OF THE SCIENCE OF FOOD AND AGRICULTURE, vol.90, no.15, pp.2556-2562, 2010 (SCI-Expanded)

XXXI. **Computer vision-based image analysis for rapid detection of acrylamide in heated foods**

GÖKMEN V., ATAÇ MOGOL B.

QUALITY ASSURANCE AND SAFETY OF CROPS & FOODS, vol.2, no.4, pp.203-207, 2010 (SCI-Expanded)

XXXII. **Multiple-stage extraction strategy for the determination of acrylamide in foods**

GÖKMEN V., Morales F. J., ATAÇ MOGOL B., Serpen A., Arribas-Lorenzo G.

JOURNAL OF FOOD COMPOSITION AND ANALYSIS, vol.22, no.2, pp.142-147, 2009 (SCI-Expanded)

## Books & Book Chapters

### I. **Phytochemicals and health benefits of dried apricots**

TAŞ N., ATAÇ MOGOL B., GÖKMEN V.

in: Dried Fruits Phytochemicals and Health Effects, Cesarettin Alasalvar, Fereidoon Shahidi, Editor, Wiley-Blackwell, Newfoundland, pp.226-239, 2013

## Refereed Congress / Symposium Publications in Proceedings

### I. **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

### II. **Acrylamide and HMF formations in chitosan containing model systems during heating**

ATAÇ MOGOL B., GÖKMEN V.

12th International Symposium on the Maillard Reaction, Japan, 1 - 04 September 2015

### III. **Kinetic modeling of the formation of acrylamide and HMF in biscuits**

Van der Fels Klerx H., Nguyen H., ATAÇ MOGOL B., Capuano E., KOCADAĞLI T., TAŞ N., HAMZALIOĞLU B. A.  
EuroFoodChem XVII, 7 - 10 May 2013

### IV. **High resolution mass spectrometry analysis of reaction products and intermediates formed in carbonyl-asparagine model system during heating**

ATAÇ MOGOL B., TAŞ N., KOCADAĞLI T., GÖKMEN V.

11th International Symposium on the Maillard Reaction "Centenary of the Maillard Reaction Discovery (1912-2012)", 16 - 20 September 2012

### V. **Regeneration of frying oils by using adsorbent resins**

TAŞ N., ATAÇ MOGOL B., GÖKMEN V.

ICEF 2011 International Congress on Engineering and Food, 22 - 26 May 2011

### VI. **Removal of hydroxymethylfurfural from frying oil by using adsorbent resin**

TAŞ N., ATAÇ MOGOL B., GÖKMEN V.

2. Gıda Güvenliği Kongresi, 9 - 10 December 2010

### VII. **HMF formation in dried apricots**

TAŞ N., ATAÇ MOGOL B., DURMAZ G., GÖKMEN V.

5th Central European Congress on Food, 19 - 22 May 2010

### VIII. **Effect of repeated use of frying oils on the formation of harmful compounds**

ATAÇ MOGOL B., TAŞ N., KOCADAĞLI T., DURMAZ G., GÖKMEN V.

VII. International Nutrition and Dietetics Congress, 14 - 18 April 2010

## Supported Projects

Taşgın M. E., Ataç Mogol B., Gökmen V., Bek A., TÜBİTAK - AB COST Project, Tahıllarda Asparajin ve Tahıl Ürünlerinde

Akrilamid Tespiti İçin Tasınabilir Bir SERS Cihazı Gelistirilmesi (AcrySERS), 2024 - 2027

Ataç Mogol B., Gökmen V., Hamzaloğlu B. A., TÜBİTAK International Bilateral Joint Cooperation Program Project, Controlling toxic effects of acrylamide during digestion and metabolism of thermal processed foods. , 2023 - 2025

ATAÇ MOGOL B., Project Supported by Higher Education Institutions, Kitosanın bisküvi ve ekmek kabuğu sistemlerinde akrilamid oluşumu üzerine etkisi, 2017 - 2018

ATAÇ MOGOL B., Project Supported by Higher Education Institutions, Fırınlanmış patates cipslerinde akrilamid oluşum kinetiğinin incelenmesi, 2017 - 2018

ATAÇ MOGOL B., Project Supported by Higher Education Institutions, Gıdaların rengiyle enerji yoğunluğu arasındaki ilişkinin bilgisayar tabanlı görüntü işleme ile araştırılması, 2016 - 2016

ATAÇ MOGOL B., Project Supported by Higher Education Institutions, 12. Uluslararası Maillard Reaksiyonu Sempozyumu, 2015 - 2015

## Metrics

Publication: 41

Citation (WoS): 703

Citation (Scopus): 907

H-Index (WoS): 17

H-Index (Scopus): 19

## Non Academic Experience

Wageningen University

Hacettepe Üniversitesi