

# CURRICULUM VITAE

## **Kooshan Nayebzadeh, Ph.D.**

Assistant Professor

Department of Food Science and Technology,  
Faculty of Nutrition , Food Science and Technology  
Shahid Beheshti University of Medical Sciences

No.7, West Arghavan St., Farahzadi Blvd.

Tehran, Iran

P.O.Box:19395-4741

Telefax: +98 21 22376426

Mobile: +98 912 150 4215

E-mail:Knayebz@sbm.ac.ir

Nationality: Iran

Date of Birth: 18/09/1971

### *Educational Qualifications*

- 2001-2006    Ph.D.    Tehran University, Iran  
Food Science & Technology  
Emphasis: Food Technology & Processing  
Dissertation: Interaction of Protein and Polysaccharide on  
Rheological Properties, Surface structure and Microstructure of  
Protein Gel and Emulsion
- 1995-1998    M.Sc.    Ferdowsi Mashhad University, Iran  
Food Science & Technology  
Emphasis: Food Technology & Processing  
Thesis:Physiochemical and organoleptical Properties of Parvin
- 1990-1994    B.Sc.    Tehran University, Iran  
Food Science & Technology

### *Professional Experience*

- 2010- Present            **Assistant Professor**, Department of Food Science and Technology,  
Faculty of Nutrition , Food Science and Technology  
Shahid Beheshti University of Medical Sciences
- 2002-2010            **Research & Quality Control Deputy**, Mahram Production Group  
Co.
- 2005(March-August)    **Visiting Scholar**, Procter Department of Food Science,  
University of Leeds,UK.

## *University Teaching Experience*

### **Courses taught at Shaheed Beheshti University of Medical Science:**

Food Preservation Techniques (lecture; 2 credit) Taught Spring and Fall semester 2010-present  
Edible Oil Processing (lecture; 2 credit) Taught Spring and Fall semester 2010-present  
Cereal Technology (lecture; 2 credit) Taught Spring and Fall semester 2010-2012  
Treatment of Water and Wastewater (lecture; 2 credit) Taught Spring and Fall semester 2012-2014  
Novel Food Processing (lecture; 3 credit; postgraduate) Taught Fall semester 2010-present  
Advanced Edible Oil Processing (lecture; 2 credit; postgraduate) Taught Spring semester 2012-present  
Flavors Chemistry (lecture; 2 credit; postgraduate) Taught Fall semester 2011- present  
Seminar (lecture; 1credit; graduate and postgraduate) Taught Spring and Fall semester 2011-present

### *Awards & Honors*

- Shahid Beheshti University of Medical Sciences outstanding scientific board, 2011.
- Shahid Beheshti University of Medical Sciences outstanding scientific board, 2013.

### *Papers*

#### *Refereed Journal Articles*

\*= corresponding author

**Kooshan Nayebzadeh**, Jianshe Chen, Eric Dickinson, Thomas Moschakis. Surface structure smoothing effect of polysaccharide on a heat-set protein particle gel. *Langmuir*. 2006 10;22 (21):8873-80 .

**Kooshan Nayebzadeh**, Jianshe Chen, SM Mohammad Mousavi . Interactions of WPI and Xanthan in Microstructure and Rheological Properties of Gels and Emulsions. *International Journal of Food Engineering*. 2007, Vol. 3 : Iss. 4, Article 9.

**Kooshan Nayebzadeh**, S.Razavi, M.Habibi. Effect of soy milk substitution on physical, chemical and organoleptical properties of ice cream. *Journal of Agriculture Science of Iran*. 1999.

Elahe Omidbakhsh amiri & **Kooshan Nayebzadeh\*** & Mohammad Amin Mohammadifar. Comparativestudies of xanthan, guar and tragacanth gums on stability and rheological properties of fresh and stored ketchup. *Journal of Food Science and Technology*. 2015 52(11):7123–7132.

Mohsen Atefi, **Kooshan Nayebzadeh\***, Abdorreza Mohammadi. Using  $\beta$ -cyclodextrin and Arabic gum as wall materials for encapsulation of Saffron essential oil. *Iranian Journal of Pharmaceutical Research*. (2017), Volume 16, Issue 1, 93.

Leila Alizadeh, **Kooshan Nayebzadeh\***. A comparative study on the in vitro antioxidant activity of tocopherol and extracts from rosemary and *Ferulago angulata* on oil oxidation during deep frying of potato slices. *Journal of Food Science and Technology*. 2016, 53(1):611–620.

Mehrdad Haghshenas, Hedayat Hosseini, **Kooshan Nayebzadeh**, Behnoosh Shabkoochi Kakesh, Maryam Mahmoudzadeh, Rozita Komeyli Fonood. Effect of beta glucan and carboxymethyl cellulose on lipid oxidation and fatty acid composition of pre-cooked shrimp nugget during storage. *Food Science and Technology*. (2015) 1e6.

Maryam Enteshari & Abdorreza Mohammadi & **Kooshan Nayebzadeh** & Ebrahim Azadniya. Optimization of Headspace Single-Drop Microextraction Coupled with Gas Chromatography–Mass Spectrometry for Determining Volatile Oxidation Compounds in Mayonnaise by Response Surface Methodology. *Food Analytical Methods*. (2014), Volume 7, Issue 2, 438-448.

Reyhaneh Shahin, **Kooshan Nayebzadeh**, Leila Alizadeh, Abdorreza Mohammadi. Antioxidant effect of tocopherol and TBHQ on oil oxidation over the shelf life of mayonnaise. *Iranian Journal of Nutrition Science & Food Technology*.(2016), Volume 8, Issue 4, 227-236.

Mehrdad Haghshenas, Hedayat Hosseini, **Kooshan Nayebzadeh**, Amin Mosavi Khanghah, Behnoosh Shabkoochi Kakesh and Rozita Komeily Fonood. Production of Prebiotic Functional Shrimp Nuggets Using  $\beta$ -Glucan and Reduction of Oil Absorption by Carboxymethyl Cellulose: Impacts on Sensory and Physical Properties. *J Aquac Res Development*. 2014, 5:4.

Leila Alizadeh, **Kooshan Nayebzadeh**, Reyhaneh Shahin. Antioxidant effect of Rosemary and *Ferulago* extracts and synthetic TBHQ on oil oxidation during deep-frying. *Iranian Journal of Nutrition Science & Food Technology*.(2014), Volume 8, Issue 4, 135-143.

Sasan Delfan-Hosseini, **Kooshan Nayebzadeh**, Leila Mirmoghtadaie, Maryam Kavosi, Seyede Marzieh Hosseini. Effect of extraction process on composition, oxidative stability and rheological properties of purslane seed oil. *Food Chemistry*.222(2017) 61-66.

Arash Tondhoosh, **Kooshan Nayebzadeh**, Mohammad A. Mohamadifar, Aziz Homayouni-Rad and Hamid Hosseinoghli. Industrial Application of Different Heat Treatments and Cream Fat Contents for Improving the Spreadability of Butter. *Recent Patents on Food, Nutrition & Agriculture*, 2016, 8, 107-115.

### ***Conference Presentations***

Presenters are underlined

Nayebzadeh Kooshan.2016. Physicochemical characteristics of beverage emulsions containing crocetin as a functional ingredient of saffron. Reinventing the Food & Beverage Industry, May 09-10, New Orleans, USA. (oral presentation)

Maryam Enteshari, **Kooshan Nayebzadeh** and Sergio I. Martínez-Monteagudo.2017. Oxidative stability of Iranian ghee (butter oil) and soybean oil: A comparative study.USA(poster presentation)

Jianshe Chen, Eric Dickinson, Thomas Moschakis, **Kooshan Nayebzadeh**.Surface Texture: a feature in 2-Dimentionions or 3-Dimensions. 7<sup>th</sup> WCCE Glasgow.2006.

### ***Book Chapters***

Eric Dickinson, Jianshe Chen, Thomas Moschakis, **Kooshan Nayebzadeh**. Food colloids: self-assembly and material science. Surface topography of heat-set whey protein gels:Effect of added salt and xanthan gum. Chapter 33.RSC Publishing.2008.

### ***Students Mentored***

#### ***Graduate:***

2011-2013 Maryam Enteshari,2013: Determination of oil oxidation in mayonnaise during storage at two different temperatures by physic-chemical methods and headspace-liquid phase microextraction .M.Sc.Thesis.

2011-2013 Elahe Omidbakhsh,2013:Interaction of some of hydrocolloids on some of physicochemical, rheological and sensory properties of ketchup. M.Sc.Thesis.

2012-2014 Reyhaneh Shahin,2014: Comparison of synthetic and natural antioxidants effects on mayonnaise oxidation during storage. M.Sc.Thesis.

2012-2014 Leila Alizadeh,2014: Comparison of antioxidative effects of rosemary extract with synthetic antioxidant on oxidation during deep- frying. M.Sc.Thesis.

2013-2014 Sanaz Kazemipour,2015:Study of physicochemical, microbial & sensory properties of probiotic milk chocolate using microcapsulated Lactobacillus plantarum cells. M.Sc.Thesis.

2013-2015 Mozhddeh Setaei Mokhtari,2015:Evaluation effect of some parameters on lime juice Key variety delay bitterness during storage. M.Sc.Thesis.

2013-2015 Behnoosh Shabkoohi,2015: Effect of temperature, homogenization pressure and salt combination on the emulsifying, and microbial properties of pasteurized egg yolk. M.Sc.Thesis.

- 2013-2015 Arash Tondhoosh,2015:Effect of different heat treatment and fat content of pasteurized cream on physicochemical characteristics of butter in continuous churning M.Sc.Thesis
- 2014-2016 Leila Mehrandish,2016: Investigation effect of magnesium silicate and parameter of bleaching process on oxidative stability index of sunflower oil M.Sc.Thesis.
- 2014-2016 Farzaneh Khoshnavaz,2016: The effect of oil on the oxidative and sensory properties of mayonnaise. M.Sc.Thesis.
- 2014-2016 Mahdiyeh Derakhshani,2016:Effect of gellan (G),carboxymethylcellulose(CMC) and Sodium Alginate (SA) gums on the stability of suspended pulp particles in the orange nectar. M.Sc.Thesis.
- 2014-2016 Mohsen Atefi,2016: Study of Physicochemical properties of emulsion containing crocetin and saffron essential oils encapsulated Ph.D.Thesis.
- 2015-present Nooshin Amiri, MSc Student: The simultaneous effect of chitosan as preservative, antioxidant and stabilizer in mayonnaise. Ms student.
- 2015-present Leila Alizadeh, PhD candidate:Optimization of tocopherol and phytosterol recovery from edible oil deodorizer distillate by ion-exchange resin and determination of functional characteristics of extracted components.

### ***Research Interest***

- Edible Oil Processing and Formulation
- Oil Modification Processes
- Application of Edible Oils
- Food Preservation Methods
- Advanced Food Processing
- Food Rheology
- Food Emulsions
- Food Texture