

CURRICULUM VITAE OF JALAL DEGHANNYA

(December 06, 2024)



1. Personal data

- Address:

Department of Food Science and Technology
Faculty of Agriculture
University of Tabriz
Tabriz, 51666-16471
Iran

- Contact Information:

Tel: +98 41 3399 2063
Fax: +98 41 3335 6005
Email: jdehghannya@yahoo.com

- Marital Status: Married

2. Higher Education

Ph.D. (Bioresource Engineering - Food Process Engineering): 2004-2008, McGill University, Canada

(Thesis Title: Mathematical modeling of airflow, heat and mass transfer during forced convection cooling of produce in ventilated packages)

M.Sc. (Agricultural Engineering - Food Science and Technology): 2000-2002, University of Tehran, Iran

(Thesis Title: Evaluation of osmo-coating process on drying of apple)

B.Sc. (Agricultural Engineering - Food Science and Technology): 1993-1997, University of Tabriz, Iran

3. Professional (Industrial and Academic) Experiences

January 01, 2020 – Present (Full Time)	Professor Department of Food Science and Technology University of Tabriz, Tabriz, Iran
January 01, 2019 – December 31, 2019 (Full Time)	Visiting Academic (Visiting Professor) Department of Bioresource Engineering McGill University, Montreal, Canada
September 10, 2018 – December 31, 2018 (Full Time)	Professor Department of Food Science and Technology University of Tabriz, Tabriz, Iran
January 04, 2014 – September 09, 2018 (Full Time)	Associate Professor Department of Food Science and Technology University of Tabriz, Tabriz, Iran
February 02, 2009 – January 03, 2014 (Full Time)	Assistant Professor Department of Food Science and Technology University of Tabriz, Tabriz, Iran
May 1997- April 2003 (Full Time)	Food Engineer: Production manager and technical supervisor in two different food companies in Iran (extruded cereal products and dried fruit snacks)

4. Research Interests

- 4.4** Experimental and computer-aided food process design: Product and process optimization through mathematical modeling and computer simulation for enhanced food safety, quality and stability
- 4.3** Enhancement of heat and mass transfer phenomena in food products during processing (Drying, Frying, Cooling, etc.)
- 4.2** Properties of foods
- 4.1** Postharvest Engineering (sorting, packaging, temperature management, transporting, and storing of food materials)

5. Honors and Awards

- 5.7** July, 2014. EurAgEng Outstanding Paper Awards nominee as one of ten out of all the papers published in the "Biosystems Engineering" journal in 2012 and 2013, Zurich, Switzerland (July 7, 2014) to the following paper: "**Dehghannya, J.**, Ngadi, M., & Vigneault, C. (2012). Transport phenomena modelling during produce cooling for optimal package design: Thermal sensitivity analysis. *Biosystems Engineering*, 111(3), 315-324."
- 5.6** May, 2011. Recipient of a joint appreciation letter from the Governor of Kurdistan Province, Iran and Head of Agricultural Organization of Kurdistan Province, Iran for consultations to give solutions and directions in the construction of precooling systems for strawberries.
- 5.5** July 2009. Ranked 1st (top 1%) for teaching excellence in "Introduction to Food Packaging" course, Faculty of Agriculture, University of Tabriz, Iran.
- 5.4** June 2008. Awarded Alma Mater Travel Grant to attend ASABE (American Society of Agricultural and Biological Engineers) Annual International Meeting, Providence, Rhode Island, USA, June 29 - July 2, 2008.
- 5.3** September 2004. Awarded a scholarship (covering all tuition fees and living expenses, totaling approximately \$100,000.00) by the Ministry of Science, Research and Technology of Iran to pursue graduate studies (Ph.D. Degree) in Bioresource (Food Process) Engineering at McGill University, Canada.
- 5.2** September 2002. Ranked 3rd in the highly competitive National Ph.D. Entrance Exam in Food Science and Technology (top 1%).
- 5.1** September 2000. Ranked 7th in the highly competitive National Masters Entrance Exam in Food Science and Technology (top 1%).

6. Professional Responsibilities

- 6.17** Design of exam questions for the prestigious National Ph.D. Entrance Exam in Food Science and Technology annually in Iran (October 2016 - Present)
- 6.16** Member of the Editorial Board, Journal of Food Research, University of Tabriz, Tabriz, Iran (April 2016 – Present)
- 6.15** Director of faculty website, Faculty of Agriculture, University of Tabriz, Tabriz, Iran (November 2015 - Present)

- 6.14** Member of the elected committee for faculty appointment, Department of Food Science and Technology, University of Tabriz, Tabriz, Iran (May 2014 – Present)
- 6.13** Design of exam questions for the highly competitive National Masters Entrance Exam in Food Science and Technology on an annual basis in Iran (From October 2010 - Present)
- 6.12** Member of the elected committee for faculty scientific promotion, Department of Food Science and Technology, University of Tabriz, Tabriz, Iran (September 2010 – Present)
- 6.11** Member of the General Council, Department of Food Science and Technology, University of Tabriz, Tabriz, Iran (February 2009 - Present)
- 6.10** Member of the Graduate Studies Council, Department of Food Science and Technology, University of Tabriz, Tabriz, Iran (February 2009 - Present)
- 6.9** Assessment of several patents and research projects, University of Tabriz, Tabriz, Iran (February 2009 - Present)
- 6.8** Educational Supervisor for graduate students, Department of Food Science and Technology, University of Tabriz, Tabriz, Iran (February 2009 - Present)
- 6.7** Peer reviewer for various Journals in Iran (February 2009 - Present):
- 6.7.1** Agricultural Mechanization (In Persian)
 - 6.7.2** Food Hygiene (In Persian)
 - 6.7.3** Journal of Food Research (In Persian)
 - 6.7.4** Innovative Food Science and Technologies (In Persian)
 - 6.7.5** Iranian Food Science and Technology Research Journal (In Persian)
 - 6.7.6** Journal of Food Science and Technology (In Persian)
 - 6.7.7** Research and Innovation in Food Science and Technology (In Persian)
- 6.6** Peer reviewer for International Journals (February 2009 - Present):
- 6.6.1** Applied Thermal Engineering
 - 6.6.2** CIGR Journal
 - 6.6.3** Critical Reviews in Food Science and Nutrition
 - 6.6.4** Drying Technology
 - 6.6.5** European Journal of Lipid Science and Technology
 - 6.6.6** Food and Bioprocess Technology
 - 6.6.7** Food Chemistry
 - 6.6.8** Food Science and Biotechnology
 - 6.6.9** Food Science & Nutrition
 - 6.6.10** Innovative Food Science and Emerging Technologies
 - 6.6.11** International Journal of Fruit Science
 - 6.6.12** International Journal of Green Energy
 - 6.6.13** International Journal of Heat and Mass Transfer
 - 6.6.14** International Journal of Refrigeration

- 6.6.15** International Journal of Thermal Sciences
- 6.6.16** Journal of Food Measurement & Characterization
- 6.6.17** Journal of Food Processing and Preservation
- 6.6.18** Journal of Food Science
- 6.6.19** Journal of Microwave Power and Electromagnetic Energy
- 6.6.20** Journal of Thermal Science
- 6.6.21** LWT - Food Science & Technology
- 6.6.22** Materials Today Communications
- 6.6.23** Powder Technology
- 6.6.24** Transactions of the ASABE (American Society of Agricultural and Biological Engineers)

- 6.5** Educational Supervisor for undergraduate students, Department of Food Science and Technology, University of Tabriz, Tabriz, Iran (September 2009 – September 2013)

- 6.4** Member of the Consulting Editorial Board, Journal of Food Research, University of Tabriz, Tabriz, Iran (February 2009 – February 2013)

- 6.3** Initiator of "Food Process Engineering" Ph.D. Program (Recruited students for the first time), Department of Food Science and Technology, University of Tabriz, Tabriz, Iran (January, 2012)

- 6.2** Initiator of "Food Process Engineering" Master's Program (Recruited students for the first time), Department of Food Science and Technology, University of Tabriz, Tabriz, Iran (September, 2010)

- 6.1** Participation in the design and lab setup, Food Biophysics and Engineering Laboratory, Department of Food Science and Technology, University of Tabriz, Tabriz, Iran (September, 2010)

7. Courses taught (University of Tabriz, Tabriz, Iran)

7.1 Bachelor's Program

- 7.1.7** Introduction to Food Plant Design (3 Credits): January 2013 – Present
- 7.1.6** Job Training (2 Credits) (Every Summer from Summer 2009 – Present)
- 7.1.5** Introduction to Food Engineering I (2 Credits): September 2009 – January 2016
- 7.1.4** Introduction to Food Engineering III (2 Credits): September 2010 – January 2016
- 7.1.3** Introduction to Food Engineering II (2 Credits): January 2010 – September 2015
- 7.1.2** Introduction to Food Packaging (2 Credits): January 2009 – January 2013
- 7.1.1** Seminar (1 Credit): January 2009, January 2012

7.2 Master's Program

7.2.9 Research Methods (2 Credits): September 2022 – Present

7.2.8 Heat and Mass Transfer in Food Engineering (3 Credits): September 2014 - Present

7.2.7 Application of Computational Software in Food Engineering (3 Credits): September 2014 – Present

7.2.6 Seminar (1 Credit): September 2009 – Present

7.2.5 Introduction to Modeling (2 Credits): January 2011 – September 2017

7.2.4 Advanced Food Engineering (3 Credits): September 2009 – September 2014

7.2.3 Food Engineering Calculations (2 Credits): September 2011 – September 2014

7.2.2 Fuzzy Logic and Neural Networks Modeling (3 Credits): January 2015 – January 2016

7.2.1 Advanced Food Packaging (2 Credits): January 2009 – January 2013

7.3 Ph.D. Program

7.3.6 Modeling and Simulation of Food Processing (2 Credits): January 2020 – Present

7.3.5 Advanced Transfer Phenomena in Food Engineering (2 Credits): September 2019 – Present

7.3.4 Process Control in Food Engineering (2 Credits): September 2019 – January 2020

7.3.3 Engineering Characteristics of Food Processing Equipment (2 Credits): January 2012 – September 2019

7.3.2 Design and Modeling of Food Processing Unit (3 Credits): September 2012 – September 2019

7.3.1 National and International Food Systems and Policies (2 Credits): September 2010 – September 2011

8. Supervision of Graduate Students (University of Tabriz, Tabriz, Iran)

M.Sc

Ph.D

Number of students graduated under my supervision	50	5
Number of students graduated under my advisement	16	2
Number of graduate students currently under my supervision	7	1
Number of graduate students currently under my advisement	0	0

8.1 Supervision of Ph.D. Students (In progress)

8.1.1

Student Name: Ms. Afsaneh Safari

Thesis Title: Two-phase modeling of transport phenomena in laminar and turbulent flows during deep-fat frying of potato strips considering surface to volume ratio and position of the strips inside oil

Thesis Supervisor(s): **Dr. Jalal Dehghannya**

Thesis Advisor(s): Dr. Babak Ghanbarzadeh

8.2 Supervision or Advisement of Master's Students (In progress)

8.2.7

Student Name: Ms Hourieh Falaki-Tabrizi

Thesis Title: Assessing the off time of intermittent infrared waves with constant application time during drying of turnip

Thesis Supervisor(s): **Dr. Jalal Dehghannya**

Thesis Advisor(s): Dr. Hossein Ghaffari

8.2.6

Student Name: Ms Fariba Hedaiat

Thesis Title: Investigating the application time of intermittent infrared waves with constant off time during drying of black radish

Thesis Supervisor(s): **Dr. Jalal Dehghannya**

Thesis Advisor(s): Dr. Hossein Ghaffari

8.2.5

Student Name: Ms Nazdar Shojaee

Thesis Title: Effect of the pulse ratio of waves with constant off time during drying of kohlrabi using alternating infrared

Thesis Supervisor(s): **Dr. Jalal Dehghannya**

Thesis Advisor(s): Dr. Hossein Ghaffari

8.2.4

Student Name: Ms Parinaz Moazzeni-Gholizeh

Thesis Title: Comparison of the effect of different pretreatments on drying of carrot by infrared-assisted hot air: Evaluation of drying kinetics and functional properties of product

Thesis Supervisor(s): 1) Dr. Saeed Dadashi, 2) **Dr. Jalal Dehghannya**

Thesis Advisor(s): Dr. Hossein Ghaffari

8.2.3

Student Name: Mr Hamoun Alizade-Shafigh

Thesis Title: Effect of wave off time with constant pulse ratio during sugar beet drying using alternating infrared

Thesis Supervisor(s): **Dr. Jalal Dehghannya**

Thesis Advisor(s): Dr. Hossein Ghaffari

8.2.2

Student Name: Ms Elham Nabizadeh-YakhForouzan

Thesis Title: Influence of infrared pulse ratio with constant application time during drying of potato using combined intermittent infrared – hot air method on quantitative and qualitative characteristics

Thesis Supervisor(s): **Dr. Jalal Dehghannya**

Thesis Advisor(s): Dr. Hossein Ghaffari

8.2.1

Student Name: Ms Samaneh Fazeli

Thesis Title: Encapsulation and release of vitamin D and calcium in a printable food matrix with textural properties appropriate for Dysphagia people

Thesis Supervisor(s): 1) Dr. Saeed Dadashi, **2) Dr. Jalal Dehghannya**

Thesis Advisor(s): Dr Mehdi Farhoudi

8.3 Supervision or Advisement of Ph.D. Students (Completed)

8.3.7

Student Name: Ms. Sahra Bashiri

Thesis Title: Investigation of physiochemical properties of nanostructured lipid carriers containing cinnamon essential oil and zinc coated with chitosan

Thesis Defense Date: October 21, 2020

Thesis Supervisor(s): 1) Dr. Babak Ghanbarzadeh, 2) Dr Ali Ayaseh

Thesis Advisor(s): 1) Dr. Ali Ehsani, **2) Dr. Jalal Dehghannya**

8.3.6

Student Name: Ms. Leila Abolghasemi-Fakhri

Thesis Title: The effects of nano zinc oxide on oxo-biodegradability, migration of styrene monomer and physicochemical properties of polystyrene – clay nanocomposite films

Thesis Defense Date: September 09, 2018

Thesis Supervisor(s): 1) Dr. Babak Ghanbarzadeh, **2) Dr. Jalal Dehghannya**

Thesis Advisor(s): 1) Dr Farhang Abbasi, 2) Dr Heidar Ranjbar

8.3.5

Student Name: Mr. Enaiyat-Allah Naghavi

Thesis Title: Numerical simulation and experimental investigation of momentum, heat and mass transfer considering moving boundary problem during deep-fat frying of potato strips coated with various hydrocolloids

Thesis Defense Date: September 08, 2018

Thesis Supervisor(s): **Dr. Jalal Dehghannya**

Thesis Advisor(s): Dr. Babak Ghanbarzadeh

8.3.4

Student Name: Mr. Abdorrahman Ghaderi

Thesis Title: Mathematical modeling of momentum, heat and mass transfer by two approaches of direct numerical simulation and porous media during deep fat frying of potato strips under different conditions

Thesis Defense Date: September 08, 2018

Thesis Supervisor(s): **Dr. Jalal Dehghannya**

Thesis Advisor(s): Dr. Babak Ghanbarzadeh

8.3.3

Student Name: Mr. Jaber Soleimani

Thesis Title: Modeling nanosilver and nanotitanium dioxide ions migration from polystyrene based nanocomposite films into food simulants

Thesis Defense Date: December 25, 2017

Thesis Supervisor(s): **1) Dr. Jalal Dehghannya**, 2) Dr. Babak Ghanbarzadeh

Thesis Advisor(s): 1) Dr. Sima Baheri, 2) Dr. Saeed-Mohammad Sorouraddin

8.3.2

Student Name: Ms. Habibeh Nalbandi

Thesis Title: Numerical and experimental study of strawberry precooling by forced air system

Thesis Defense Date: December 17, 2014

Thesis Supervisor(s): 1) Dr. Hamid Reza Ghasemzadeh, 2) Dr. Seiiid-Sadegh Seiiidlou-Heris

Thesis Advisor(s): **1) Dr. Jalal Dehghannya**, 2) Dr. Faramarz Ranjbar, 3) Dr. Mousa Mohammadpour-Fard

8.3.1

Student Name: Mr. Hadi Almasi

Thesis Title: Production of antioxidant active nanocomposite films based on polylactic acid/modified cellulose nanofiber for prolonging the shelf life of edible oil

Thesis Defense Date: September 22, 2013

Thesis Supervisor(s): 1) Dr. Babak Ghanbarzadeh, **2) Dr. Jalal Dehghannya**

Thesis Advisor(s): 1) Dr. Ali Akbar Entezami, 2) Dr. Asghar Khosroshahi Asl

8.4 Supervision or Advisement of Master's Students (Completed)

8.4.66

Student Name: Mr Mahdi Habibi-Ghods

Thesis Title: Computer simulation of moisture and temperature profiles during combined drying of potatoes with intermittent microwave and convective hot-air at low temperature: Investigating the pulse ratio of waves with fixed off time

Thesis Defense Date: July 13, 2024

Thesis Supervisor(s): **Dr. Jalal Dehghannya**

Thesis Advisor(s): -

8.4.65

Student Name: Mr Amir Kamkari

Thesis Title: The effect of cold plasma pretreatment on drying efficiency of red beetroot by intermittent microwave-hot air hybrid dryer method: Assessing of drying kinetic and physicochemical properties of the product

Thesis Defense Date: September 19, 2023

Thesis Supervisor(s): 1) Dr. Saeed Dadashi, 2) Dr. Maryam Khakbaz Heshmati,

Thesis Advisor(s): **1) Dr. Jalal Dehghannya, 2) Dr Yousef Ramezani**

8.4.64

Student Name: Ms Shadi Ghandiha

Thesis Title: Microencapsulation of bioactive compounds from Cornelian Cherry fruits using spray drying process: Stabilization of compounds, process optimization and evaluation of physicochemical and functional properties

Thesis Defense Date: February 15, 2023

Thesis Supervisor(s): 1) Dr. Saeed Dadashi, 2) Dr. Maryam Khakbaz Heshmati,

Thesis Advisor(s): **Dr. Jalal Dehghannya**

8.4.63

Student Name: Ms Sepideh Farhoudi

Thesis Title: Influence of microwave applied time with constant pulse ratio during drying of zucchini using intermittent microwave – convective hot air on quantitative and qualitative attributes

Thesis Defense Date: February 07, 2022

Thesis Supervisor(s): **Dr. Jalal Dehghannya**

Thesis Advisor(s): Dr. Saeed Dadashi

8.4.62

Student Name: Ms Sevda Rastgou Oskouee

Thesis Title: Influence of microwave pulse ratio with constant applied time during drying of red beetroot using intermittent microwave – convective hot air on quantitative and qualitative attributes

Thesis Defense Date: February 07, 2022

Thesis Supervisor(s): **1) Dr. Jalal Dehghannya, 2) Dr. Saeed Dadashi**

8.4.61

Student Name: Ms Niloufar ZanghZarrin

Thesis Title: Drying of pomegranate (*Punica granatum* L.) juice by foam mat method using microwave dryer and investigation of the product qualitative and functional characteristics

Thesis Defense Date: January 31, 2022

Thesis Supervisor(s): 1) Dr. Maryam Khakbaz Heshmati, **2) Dr. Jalal Dehghannya**

Thesis Advisor(s): Dr. Saeed Dadashi

8.4.60

Student Name: Ms Shamsi Karami

Thesis Title: Effect of osmotic pretreatment and edible coatings on the drying kinetics and qualitative properties of dried strawberry in hot air-infrared dryer: Experimental and numerical study

Thesis Defense Date:

Thesis Supervisor(s): 1) Dr. Saeed Dadashi, **2) Dr. Jalal Dehghannya**

Thesis Advisor(s): Dr. Maryam Khakbaz Heshmati

8.4.59

Student Name: Ms Zahra Panahdoust

Thesis Title: The effect of simultaneous osmotic dehydration and ultrasound pretreatment on deep-fat frying of potato strips: Numerical simulation of heat and mass transfer and evaluation of product quality

Thesis Defense Date: March 19, 2022

Thesis Supervisor(s): 1) Dr. Saeed Dadashi, **2) Dr. Jalal Dehghannya**

Thesis Advisor(s): Dr. Maryam Khakbaz Heshmati

8.4.58

Student Name: Mr Ebrahim Zomorodi

Thesis Title: Investigation of drying method impact on the qualitative and functional characteristics of potato powder produced by foam mat method using microwave, hot air and hybrid dryers

Thesis Defense Date: November 08, 2021

Thesis Supervisor(s): 1) Dr. Maryam Khakbaz Heshmati, 2) Dr. Saeed Dadashi

Thesis Advisor(s): **Dr. Jalal Dehghannya**

8.4.57

Student Name: Ms Neghin Hamidpour-Janfeshan

Thesis Title: Numerical simulation of heat and mass transfer and experimental study of deep-fat frying of potato strips: Effect of microwave and coating pre-treatments on qualitative properties

Thesis Defense Date: September 22, 2021

Thesis Supervisor(s): 1) Dr. Saeed Dadashi, **2) Dr. Jalal Dehghannya**

Thesis Advisor(s): Dr. Maryam Khakbaz Heshmati

8.4.56

Student Name: Ms Nafishe Nimgaz-Javid

Thesis Title: Numerical simulation of heat and mass transfer and qualitative study of deep-fat frying of potato pretreated with osmotic dehydration and coating

Thesis Defense Date: September 22, 2021

Thesis Supervisor(s): 1) Dr. Saeed Dadashi, 2) Dr. Maryam Khakbaz Heshmati

Thesis Advisor(s): **Dr. Jalal Dehghannya**

8.4.55

Student Name: Ms Zahra HajiMohammadi

Thesis Title: The effect of simultaneous osmotic dehydration and microwave pretreatment on heat and mass transfer and functional properties of deep-fat fried potato

Thesis Defense Date: September 22, 2021

Thesis Supervisor(s): 1) Dr. Saeed Dadashi, **2) Dr. Jalal Dehghannya**

Thesis Advisor(s): Dr. Maryam Khakbaz Heshmati

8.4.54

Student Name: Ms Maryam Ataee

Thesis Title: Computer simulation and experimental investigation of broccoli pulp foam mat drying process in hybrid dryer (convective hot air-microwave)

Thesis Defense Date: May 26, 2021

Thesis Supervisor(s): 1) Dr. Maryam Khakbaz Heshmati, **2) Dr. Jalal Dehghannya**

Thesis Advisor(s): Dr. Saeed Dadashi

8.4.53

Student Name: Ms Aynaz Ghaffarian

Thesis Title: Numerical modeling of potato pulp drying by foam mat method using hybrid dryer (hot air – microwave) and investigation of the product qualitative and functional characteristics

Thesis Defense Date: January 11, 2021

Thesis Supervisor(s): 1) Dr. Maryam Khakbaz Heshmati, **2) Dr. Jalal Dehghannya**

Thesis Advisor(s): Dr. Saeed Dadashi

8.4.52

Student Name: Ms Maryam Azadi

Thesis Title: Experimental and numerical study of carrot pulp drying by foam mat method using hybrid dryer (hot air – microwave) and investigation of the product qualitative and functional characteristics

Thesis Defense Date: January 11, 2021

Thesis Supervisor(s): 1) Dr. Maryam Khakbaz Heshmati, **2) Dr. Jalal Dehghannya**

Thesis Advisor(s): Dr. Saeed Dadashi

8.4.51

Student Name: Ms Chonour Khandani

Thesis Title: Modeling and simulation of heat and mass transfer during drying of potato with different geometries (oval and rectangle) using hybrid dryer (microwave- infrared-convective hot air) and study on quality attributes of dehydrated products

Thesis Defense Date: October 21, 2020

Thesis Supervisor(s): 1) Dr. Maryam Khakbaz Heshmati, **2) Dr. Jalal Dehghannya**

Thesis Advisor(s): Dr. Saeed Dadashi

8.4.50

Student Name: Mr Hadi Dousti

Thesis Title: Computer simulation and experimental investigation of unripe grape juice (Abe Ghureh) foam mat drying process using hybrid method (infrared - convective hot air) and study on quality attributes of product

Thesis Defense Date: October 21, 2020

Thesis Supervisor(s): 1) Dr. Saeed Dadashi, **2) Dr. Jalal Dehghannya**

Thesis Advisor(s): Dr. Narmella Asefi

8.4.49

Student Name: Ms Fatemeh Fereidouni

Thesis Title: Heat and mass transfer modeling during foam mat drying of tomato pulp using combined infrared - hot air dryer and evaluation of qualitative and functional properties of product

Thesis Defense Date: October 21, 2020

Thesis Supervisor(s): 1) Dr. Saeed Dadashi, **2) Dr. Jalal Dehghannya**

Thesis Advisor(s): Dr. Narmella Asefi

8.4.48

Student Name: Ms Fatemeh Ranjbari

Thesis Title: Encapsulation of antocianin enriched *hibiscus* extract by nano-niosome for Preparing of functional drink

Thesis Supervisor(s): 1) Dr. Babak Ghanbarzadeh

Thesis Advisor(s): 1) Dr. Maryam Khakbaz Heshmati, **2) Dr. Jalal Dehghannya**

8.4.47

Student Name: Ms Kosar Mohammadi

Thesis Title: The effects of different stabilizers on physicochemical properties of galic acid loaded niosoms

Thesis Supervisor(s): 1) Dr. Babak Ghanbarzadeh, 2) Dr. Akram Pezeshki-Najafabadi

Thesis Advisor(s): **1) Dr. Jalal Dehghannya**

8.4.46

Student Name: Ms Atefeh Danandeh-Oskouee

Thesis Title: Experimental study and numerical simulation of lime juice powder production with foam mat method using hot air dryer under infrared and evaluation of product quality

Thesis Supervisor(s): 1) Dr. Saeed Dadashi, **2) Dr. Jalal Dehghannya**

Thesis Advisor(s): Dr. Narmella Asefi

8.4.45

Student Name: Ms Mahsa Ershadfarkar

Thesis Title: Production and investigation of functional characteristics of black raspberry powder with foam mat drying using hybrid dryer (convective hot air - infrared): Experimental and numerical study

Thesis Supervisor(s): 1) Dr. Saeed Dadashi, **2) Dr. Jalal Dehghannya**

Thesis Advisor(s): Dr. Narmella Asefi

8.4.44

Student Name: Ms Fatemeh HamzeZadeh

Thesis Title: Heat and mass transfer modeling during drying of potato using microwave – convective hot air and infrared – convective hot air combined methods and study on quality attributes of dehydrated products

Thesis Supervisor(s): 1) Dr. Maryam Khakbaz Heshmati, **2) Dr. Jalal Dehghannya**

Thesis Advisor(s): Dr. Saeed Dadashi

8.4.43

Student Name: Ms Somaieh Farzi

Thesis Title: Heat and mass transfer modeling during drying of apple using microwave – convective hot air and infrared – convective hot air combined methods and study on quality attributes of dehydrated products

Thesis Supervisor(s): 1) Dr. Maryam Khakbaz Heshmati, **2) Dr. Jalal Dehghannya**

Thesis Advisor(s): Dr. Saeed Dadashi

8.4.42

Student Name: Ms Sahar Paveie

Thesis Title: Heat and mass transfer modeling during drying of apple using hybrid method (microwave – infrared – convective hot air) and study on quality attributes of dehydrated products

Thesis Supervisor(s): 1) Dr. Maryam Khakbaz Heshmati, **2) Dr. Jalal Dehghannya**

Thesis Advisor(s): Dr. Hamed Baghban

8.4.41

Student Name: Mr Hadi Dehghani Khiavi

Thesis Title: Heat and mass transfer modeling during drying of potato using hybrid method (microwave – infrared – convective hot air) and study on quality attributes of dehydrated products

Thesis Supervisor(s): 1) Dr. Maryam Khakbaz Heshmati, **2) Dr. Jalal Dehghannya**

Thesis Advisor(s): Dr. Hamed Baghban

8.4.40

Student Name: Ms Golnaz Bahrieh

Thesis Title: Computer simulation of red beetroot foam mat drying process and investigation of the qualitative and functional characteristics of product

Thesis Supervisor(s): 1) Dr. Saeed Dadashi, **2) Dr. Jalal Dehghannya**

Thesis Advisor(s): Dr. Hossein Ghaffari

8.4.39

Student Name: Mr Reza Kamali

Thesis Title: Computer simulation of green banana foam mat drying process and investigation of the qualitative and functional characteristics of product

Thesis Defense Date: September 09, 2018

Thesis Supervisor(s): 1) Dr. Saeed Dadashi, **2) Dr. Jalal Dehghannya**

Thesis Advisor(s): Dr. Hossein Ghaffari

8.4.38

Student Name: Ms Shadi Kadkhodaei

Thesis Title: Drying of potato slices pretreated with ultrasound by continuous microwave, intermittent microwave and hot air and investigating their effect on product characteristics

Thesis Defense Date: February 07, 2018

Thesis Supervisor(s): **1) Dr. Jalal Dehghannya**, 2) Dr. Maryam Khakbaz Heshmati

Thesis Advisor(s): Dr. Babak Ghanbarzadeh

8.4.37

Student Name: Ms Elahe Aghazadeh-Khooe

Thesis Title: Influence of ultrasound pretreatment and intermittent microwave – forced convective hot air on quantitative and qualitative characteristics in apple drying

Thesis Defense Date: February 07, 2018

Thesis Supervisor(s): **1) Dr. Jalal Dehghannya**, 2) Dr. Maryam Khakbaz Heshmati

Thesis Advisor(s): Dr. Babak Ghanbarzadeh

8.4.36

Student Name: Ms Seyedeh-Reihaneh Seyed-Tabatabaee

Thesis Title: Investigation of coupled intermittent microwave - convective hot air with ultrasound pretreatment for carrot drying

Thesis Defense Date: February 07, 2018

Thesis Supervisor(s): **1) Dr. Jalal Dehghannya**, 2) Dr. Maryam Khakbaz Heshmati

Thesis Advisor(s): Dr. Babak Ghanbarzadeh

8.4.35

Student Name: Mr Reza Fattahi

Thesis Title: Physico-chemical and antimicrobial properties of edible films containing nano-emulsion and macro-emulsion essential oils of cinnamon

Thesis Defense Date: February 05, 2018

Thesis Supervisor(s): 1) Dr. Babak Ghanbarzadeh, **2) Dr. Jalal Dehghannya**

Thesis Advisor(s): Dr. Hossein Samadi-Kafil

8.4.34

Student Name: Mr Mehdi Pourahmad

Thesis Title: Computer simulation and experimental investigation of lemon juice foam mat drying process

Thesis Defense Date: September 06, 2017

Thesis Supervisor(s): **1) Dr. Jalal Dehghannya**, 2) Dr. Babak Ghanbarzadeh

Thesis Advisor(s): Dr. Hossein Ghaffari

8.4.33

Student Name: Ms Somaieh Bozorgchi-Esfanghereh

Thesis Title: Microwave-assisted convective hot air drying of potato and its effect on some quality attributes of dehydrated products

Thesis Defense Date: February 08, 2017

Thesis Supervisor(s): **Dr. Jalal Dehghannya**

Thesis Advisor(s): Dr. Maryam Khakbaz Heshmati

8.4.32

Student Name: Ms. Paria Farshad

Thesis Title: Application of intermittent microwave - convective hot air in drying of apple

Thesis Defense Date: February 08, 2017

Thesis Supervisor(s): **Dr. Jalal Dehghannya**

Thesis Advisor(s): Dr. Maryam Khakbaz Heshmati

8.4.31

Student Name: Mr. Seiiied-Hamed Hosseinlar

Thesis Title: Application of intermittent microwave - convective hot air technique in drying of quince

Thesis Defense Date: February 08, 2017

Thesis Supervisor(s): **Dr. Jalal Dehghannya**

Thesis Advisor(s): Dr. Maryam Khakbaz Heshmati

8.4.30

Student Name: Mr. Peiman Ghasemi

Thesis Title: The formulation of active emulsion coating based on carboxymethyl cellulose and sodium caseinate for increasing bread baguette's shelf life

Thesis Defense Date: February 16, 2016

Thesis Supervisor(s): Dr. Babak Ghanbarzadeh

Thesis Advisor(s): 1) Dr. Reza Rezaei-Mokarram, **2) Dr. Jalal Dehghannya**

8.4.29

Student Name: Ms. Seiiiede-Nasim Alavi-Derakhshan

Thesis Title: Study on rheological properties of diet dairy dessert Masghati by different models

Thesis Defense Date: August 18, 2015

Thesis Supervisor(s): 1) Dr. Babak Ghanbarzadeh, **2) Dr. Jalal Dehghannya**

Thesis Advisor(s): 1) Dr. Javad Hesari, 2) Dr. Mahmoud Sowti-Khiabani

8.4.28

Student Name: Ms. Nazila Abdollahi-Kazeminezhad

Thesis Title: Study on rheological properties of reduced-calorie Palda dessert by different models

Thesis Defense Date: February 09, 2015

Thesis Supervisor(s): 1) Dr. Babak Ghanbarzadeh, **2) Dr. Jalal Dehghannya**

Thesis Advisor(s): 1) Dr. Ali Ayaseh, 2) Dr. Reza Rezaei-Mokarram

8.4.27

Student Name: Ms. Samira Mohamad-alinejhad

Thesis Title: Simultaneous effect of ultrasound waves various frequencies with constant time during frying process of potato strips

Thesis Defense Date: January 03, 2015

Thesis Supervisor(s): **Dr. Jalal Dehghannya**

Thesis Advisor(s): Mr. Seyyed-Hossein Jalali

8.4.26

Student Name: Ms. Sara Haghju

Thesis Title: Evaluation of colloidal and antioxidant properties of nanoliposomes loaded with nettle (*Urtica dioica* L.) extract

Thesis Defense Date: August 24, 2014

Thesis Supervisor(s): Dr. Babak Ghanbarzadeh

Thesis Advisor(s): 1) Dr. Hamed Hamishekar, **2) Dr. Jalal Dehghannya**

8.4.25

Student Name: Ms. Shafagh Karimi

Thesis Title: The comparison and description of temperature and concentration effects on flow and thixotropy behaviors of Iranian and Brazilian orange juices by rheological models

Thesis Defense Date: February 16, 2014

Thesis Supervisor(s): Dr. Babak Ghanbarzadeh

Thesis Advisor(s): **1) Dr. Jalal Dehghannya**, 2) Dr. Ali Ayaseh

8.4.24

Student Name: Ms. Fereshteh Dalvandi

Thesis Title: Effect of active edible coating containing extracts of black pepper seeds (*Piper nigrum*) and Turmeric (*Curcuma longa*) and vacuum packaging on the shelf life of chicken fillets

Thesis Defense Date: February 12, 2014

Thesis Supervisor(s): 1) Dr. Babak Ghanbarzadeh, 2) Dr. Hedayat Hosseini

Thesis Advisor(s): 1) Dr. Reza Rezaei-Mokarram, **2) Dr. Jalal Dehghannya**

8.4.23

Student Name: Ms. Soiaz Sadoughizadeh Asl

Thesis Title: Production and optimization of nano-liposomes containing lysozyme

Thesis Defense Date: September 09, 2013

Thesis Supervisor(s): 1) Dr Mahmoud Sowti-Khiabani, 2) Dr. Babak Ghanbarzadeh

Thesis Advisor(s): 1) Dr. Yousef Javadzadeh, **2) Dr. Jalal Dehghannya**

8.4.22

Student Name: Ms Sahra Bashiri

Thesis Title: Production of nano-liposomes containing beta-carotene to enrich a beverage model

Thesis Defense Date: September 07, 2013

Thesis Supervisor(s): 1) Dr. Babak Ghanbarzadeh, **2) Dr. Jalal Dehghannya**

Thesis Advisor(s): 1) Dr. Hamed Hamishekar, 2) Dr. Reza Rezaei-Mokarram

8.4.21

Student Name: Ms. Zhila Ranjzad

Thesis Title: Influence of β -cyclodextrin and sodium chloride on mass transfer phenomena during deep-fat frying of potato slices

Thesis Defense Date: August 28, 2013

Thesis Supervisor(s): **Dr. Jalal Dehghannya**

Thesis Advisor(s): Dr. Babak Ghanbarzadeh

8.4.20

Student Name: Mr. Sajjad Alizadeh-Zeinab

Thesis Title: Evaluation of mass transfer phenomena during deep-fat frying of potato slices pretreated with blanching and edible coatings

Thesis Defense Date: August 28, 2013

Thesis Supervisor(s): **1) Dr Jalal Dehghannya**, 2) Dr Mahmoud Sowti-Khiabani

8.4.19

Student Name: Mr. Mehdi Barmour

Thesis Title: Influence of ultrasound, microwave and osmotic dehydration pretreatments on mass transfer phenomena during deep-fat frying of potato slices

Thesis Defense Date: August 27, 2013

Thesis Supervisor(s): 1) Dr. Jalal Dehghannya, 2) Dr. Babak Ghanbarzadeh

8.4.18

Student Name: Ms. Elham Razaghpour

Thesis Title: Modeling oil uptake and moisture loss during deep-fat frying of potato slices pretreated with blanching and ultrasound

Thesis Defense Date: August 27, 2013

Thesis Supervisor(s): Dr. Jalal Dehghannya

Thesis Advisor(s): Dr. Babak Ghanbarzadeh

8.4.17

Student Name: Mr Taher Ostadali

Thesis Title: Antimicrobial and physical characteristics of bioactive nanocomposite films based on nanosilver - natural nanoclays - Starch

Thesis Defense Date: May 14, 2013

Thesis Supervisor(s): Dr. Babak Ghanbarzadeh

Thesis Advisor(s): 1) Dr. Jalal Dehghannya, 2) Dr. Reza Rezaei-Mokarram

8.4.16

Student Name: Mr. Rasoul Ghorbani

Thesis Title: Effect of simultaneous utilization of ultrasound and osmotic dehydration on quantitative and qualitative indexes during plum drying

Thesis Defense Date: February 09, 2013

Thesis Supervisor(s): 1) Dr. Jalal Dehghannya, 2) Dr. Seied-Sadegh Seiedlou- Heris

Thesis Advisor(s): Dr. Babak Ghanbarzadeh

8.4.15

Student Name: Mr. Hamed Bagheri-Darvish-Mohammad

Thesis Title: Evaluation of mass transfer phenomena during deep-fat frying of potato slices pretreated with ultrasound and microwave

Thesis Defense Date: February 09, 2013

Thesis Supervisor(s): Dr. Jalal Dehghannya

Thesis Advisor(s): 1) Dr. Babak Ghanbarzadeh, 2) Dr. Mahmoud Sowti-Khiabani

8.4.14

Student Name: Ms. Tavoos Ronaghi

Thesis Title: Mass transfer phenomena during deep-fat frying of potato slices pretreated with ultrasound and edible coating

Thesis Defense Date: February 09, 2013

Thesis Supervisor(s): Dr. Jalal Dehghannya

Thesis Advisor(s): 1) Dr. Babak Ghanbarzadeh, 2) Dr. Mohammad Moghaddam-Vahed

8.4.13

Student Name: Ms. Lida Abedpour

Thesis Title: Mass transfer phenomena during deep-fat frying of potato slices pretreated with ultrasound and osmotic dehydration

Thesis Defense Date: February 09, 2013

Thesis Supervisor(s): **Dr. Jalal Dehghannya**

Thesis Advisor(s): Dr. Mohammad Moghaddam-Vahed

8.4.12

Student Name: Ms. Neghin Pouresmaeel

Thesis Title: Migration of adipate and phthalate plasticizers from polyethylene terephthalate bottles into mineral water

Thesis Defense Date: February 06, 2013

Thesis Supervisor(s): Dr. Babak Ghanbarzadeh

Thesis Advisor(s): **1) Dr. Jalal Dehghannya, 2) Dr. Mirali Farajzadeh**

8.4.11

Student Name: Mr. Reza Rostami-Barouji

Thesis Title: Simultaneous heat and mass transfer simulation during convection drying of pretreated carrot slices

Thesis Defense Date: February 03, 2013

Thesis Supervisor(s): **1) Dr. Seied-Sadegh Seiedlou- Heris, 2) Dr. Jalal Dehghannya**

8.4.10

Student Name: Ms. Nasrin Jamshidi-Kalajahi

Thesis Title: Physical properties of modified starch-polyvinyl alcohol bio-nanocomposite films containing cellulose nanocrystals and titanium dioxide nanoparticles by response surface methodology

Thesis Defense Date: November 21, 2012

Thesis Supervisor(s): **1) Dr. Babak Ghanbarzadeh, 2) Dr. Jalal Dehghannya**

Thesis Advisor(s): **1) Dr. Ali Akbar Entezami, 2) Dr. Mahmoud Sowti-Khiabani**

8.4.9

Student Name: Ms. Ladan Rahimi

Thesis Title: Migration of phthalate and adipate esters from polyethylene terephthalate into a lemon juice simulant

Thesis Defense Date: September 10, 2012

Thesis Supervisor(s): **1) Dr. Babak Ghanbarzadeh, 2) Dr. Jalal Dehghannya**

Thesis Advisor(s): **1) Dr. Mirali Farajzadeh, 2) Dr. Ali Akbar Entezami**

8.4.8

Student Name: Ms. Masoumeh Akrami

Thesis Title: Production of casein complexes-gum arabic as carriers of beta carotene in water based drinks

Thesis Defense Date: September 09, 2012

Thesis Supervisor(s): **1) Dr. Babak Ghanbarzadeh, 2) Dr. Rasoul Dinarvand**

Thesis Advisor(s): **1) Dr. Reza Rezaei-Mokarram, 2) Dr. Jalal Dehghannya**

8.4.7

Student Name: Ms. Mina Akbarian

Thesis Title: Formulation optimization of edible coatings and osmotic solutions during osmotic dehydration and drying of quince by response surface methodology

Thesis Defense Date: September 04, 2012

Thesis Supervisor(s): Dr. Babak Ghanbarzadeh

Thesis Advisor(s): 1) Dr Mahmoud Sowti-Khiabani, **2) Dr. Jalal Dehghannya**

8.4.6

Student Name: Mr. Enayat – Allah Naghavi

Thesis Title: Mass transfer phenomena and shrinkage during deep-fat frying of potato strips pretreated with ultrasound and drying

Thesis Defense Date: September 04, 2012

Thesis Supervisor(s): **1) Dr. Jalal Dehghannya**, 2) Dr. Babak Ghanbarzadeh

Thesis Advisor(s): Dr. Reza Rezaei-Mokarram

8.4.5

Student Name: Ms. Monavar Tahmasebipour-Dizgah

Thesis Title: Effect of simultaneous utilization of ultrasound and edible coating on quantitative and qualitative indexes during grape drying

Thesis Defense Date: September 04, 2012

Thesis Supervisor(s): **1) Dr. Jalal Dehghannya**, 2) Dr. Seiiid-Sadegh Seiiidlou- Heris

Thesis Advisor(s): Dr. Babak Ghanbarzadeh

8.4.4

Student Name: Mr. Gholamraze Kazemi-Eslamian

Thesis Title: Preparation and characterization of bio-nanocomposite films based on starch-zinc oxide and starch-zeolite

Thesis Defense Date: July 11, 2012

Thesis Supervisor(s): 1) Dr. Babak Ghanbarzadeh, 2) Dr. Masoumeh Khatamian

Thesis Advisor(s): **Dr. Jalal Dehghannya**

8.4.3

Student Name: Ms. Ronak Gholami

Thesis Title: Modeling moisture absorption and water vapor permeability in starch bio-nanocomposite films containing nanocrystals of cellulose and clay

Thesis Defense Date: July 01, 2012

Thesis Supervisor(s): 1) Dr. Babak Ghanbarzadeh, **2) Dr. Jalal Dehghannya**

Thesis Advisor(s): Dr. Ali Akbar Entezami

8.4.2

Student Name: Ms. Fatemeh Karimi

Thesis Title: Modeling thin-layer drying kinetics of banana

Thesis Defense Date: May 29, 2011

Thesis Supervisor(s): **1) Dr. Jalal Dehghannya**, 2) Dr. Babak Ghanbarzadeh

Thesis Advisor(s): Dr. Shahin Rafiee

8.4.1

Student Name: Ms. Leila Abolghasemi-Fakhri

Thesis Title: Physicochemical properties of carboxymethyl cellulose bio-nanocomposite films containing nanoclay and cellulose nanocrystals

Thesis Defense Date: February 06, 2011

Thesis Supervisor(s): 1) Dr. Babak Ghanbarzadeh, 2) Dr. Jalal Dehghannya

Thesis Advisor(s): Dr. Ali Akbar Entezami

9. Scientific Reports and Seminars

9.1 Scientific Reports

Author of several scientific reports across various disciplines such as:

9.1.5 Active and smart food packaging systems

9.1.4 Novel strategies for controlled releasing of volatiles in food packaging

9.1.3 Investigating the gravity effect on cooling rate through room cooling of horticultural produce

9.1.2 Measurement of apple and tomato respiration rate using a novel respirometer system

9.1.1 Mathematical modeling of momentum and heat transfer for optimal design of chilled food display cabinets (short communication)

9.2 Seminars

Presenter of several seminars such as “Innovations in Food Packaging Engineering” and “Smart Technology for Food Packaging” among others. Department of Bioresource Engineering, McGill University, Montreal, QC, Canada.

10. Participation in empowerment workshops for faculty members

10.2

Training workshop about history and philosophy of science (HPS)

Date of workshop: August 2013

Activity hours: 16 hours

Organizer: University of Tabriz, Tabriz, Iran

10.1

Training workshop about principles and techniques of teaching skills

Date of workshop: From November 04, 2009 to December 09, 2009

Activity hours: 38 hours

Organizer: University of Tabriz, Tabriz, Iran

11. Publications

11.1 Publication Summary

Number of Refereed Book Chapters:	2
Number of Refereed Journal Publications:	71
Number of Refereed Journal Publications (In Persian):	75
Number of Non-Refereed Journal Publications:	7
Number of International Conference Proceedings:	12
Number of National Conference Proceedings (In Persian):	35

11.2 Refereed Book Chapters

- 11.2.2 Dehghannya, J.**, Azarpazhooh, E., Naghavi, E.-A., & Mujumdar, A. S. (2018). Drying of Proteins. In P. K. Nema, B. P. Kaur & A. S. Mujumdar (Eds.), *Drying Technologies for Foods: Fundamentals and Applications, Edition 1, Part II* (Chapter 5). Boca Raton, FL: CRC Press (ISBN 9781138733084).
- 11.2.1 Ngadi, M., & Dehghannya, J.** (2010). Modeling microbial inactivation by pulsed electric field. In M. M. Farid (Ed.), *Mathematical Modeling of Food Processing* (pp. 559-573). Boca Raton, FL: CRC Press (ISBN: 978-1-4200-5351-7).

11.3 Refereed Journal Publications

- 11.3.71 Kamkari, A., Dadashi, S., Heshmati, M.K., Dehghannya, J., & Ramezan, Y.** (2024). The effect of cold plasma pretreatment on drying efficiency of beetroot by intermittent microwave-hot air (IMHA) hybrid dryer method: Assessing drying kinetic, physical properties, and microstructure of the product. *LWT - Food Science and Technology* 212, 117010.
- 11.3.70 Kamali, R., Dadashi, S., Dehghannya, J., & Ghaffari, H.** (2024). Production of banana powder using foam-mat drying: influence of ovalbumin concentrations on structural, physicochemical and computational characterization. *Journal of Food Measurement and Characterization*, DOI: 10.1007/s11694-024-02952-6.
- 11.3.69 Kalajahi, N.J., Ghanbarzadeh, B., Dehghannya, J., & Ostadrahimi, A.** (2024). The physicomachanical optimization and antimicrobial properties of the ϵ -polylysine/ZnO nanoparticles loaded active packaging films. *Food and Humanity* 3, 100401.
- 11.3.68 Safari, A., Dehghannya, J., & Ghanbarzadeh, B.** (2024). Two-phase (solid–fluid) coupled transfer phenomena modeling during frying of potato slices: Effect of the product surface-to-volume ratio. *Journal of Thermal Analysis and Calorimetry* 149, 3181-3196.
- 11.3.67 Hasheminya, S.-M., & Dehghannya, J.** (2024). Development and characterization of kefir-gelatin bio-nanocomposites containing *Zhumeria majdae* essential oil nanoemulsion to use as active food packaging in sponge cakes. *International Journal of Biological Macromolecules* 279, 135120.

- 11.3.66 Ghaderi, A., Dehghannya, J., & Ghanbarzadeh, B. (2024). Effect of oil type on momentum, heat, and mass transfer during deep-fat frying of potato strips: Numerical and experimental study. *Potato Research*. [https://doi.org/ 10.1007/s11540-024-09768-3](https://doi.org/10.1007/s11540-024-09768-3).
- 11.3.65 Dehghannya, J., & Ngadi, M. (2024). The application of glass transition temperature in the frying of starchy foods: A review. *Food Reviews International* 40(7), 1980-1998.
- 11.3.64 Heshmati, M.K., Khiavi, H.D., Dehghannya, J., & Baghban, H. (2023). 3D simulation of momentum, heat and mass transfer in potato cubes during intermittent microwave-convective hot air drying. *Heat and Mass Transfer* 59, 239-254.
- 11.3.63 Hasheminya, S.-M., Dehghannya, J., & Ehsani, A. (2023). Development of basil seed mucilage (a heteropolysaccharide) – Polyvinyl alcohol biopolymers incorporating zinc oxide nanoparticles. *International Journal of Biological Macromolecules* 253, 127342.
- 11.3.62 Hasheminya, S.-M., & Dehghannya, J. (2023). Physicochemical, thermal and rheological characterization of novel biopolymer gum exudate from *Astragalus sarcocolla*. *Journal of Polymers and the Environment* 31, 965-975.
- 11.3.61 Ershadfarkar, M., Dadashi, S., Dehghannya, J., & Khakbaz Heshmati, M. (2023). Effect of combined convective hot air and far-infrared radiation on physico-chemical aspects of black raspberry powder produced by foam mat method. *Heliyon* 9(8), e19166.
- 11.3.60 Dehghannya, J., Rastgou-Oskuei, S., & Dadashi, S. (2023). Influence of pulsed microwave on betacyanins, betaxanthins and physical properties during drying of red beetroot. *Applied Food Research* 3(1), 100305.
- 11.3.59 Dehghannya, J., & Ngadi, M. (2023). The application of pretreatments for producing low-fat fried foods: A review. *Trends in Food Science & Technology* 140, 104150.
- 11.3.58 Dehghannya, J., Farhoudi, S., & Dadashi, S. (2023). Investigation of microwave application time with constant pulse ratio on drying of zucchini. *Food Science & Nutrition* 11(8), 4794-4811.
- 11.3.57 Bahriye, G., Dadashi, S., Dehghannya, J., & Ghaffari, H. (2023). Influence of processing temperature on production of red beetroot powder as a natural red colorant using foam-mat drying: Experimental and modeling study. *Food Science & Nutrition* 11(11), 6955-6973.
- 11.3.56 Kamali, R., Dadashi, S., Dehghannya, J., & Ghaffari, H. (2022). Numerical simulation and experimental investigation of foam-mat drying for producing banana powder as influenced by foam thickness. *Applied Food Research* 2, 100075.
- 11.3.55 Hasheminya, S.-M., Dehghannya, J., Ganbarov, K., & Samadi Kafil, H. (2022). Development and structural characterization of novel biomaterial polymeric films based on the mucilage extracted from *Salvia mirzayanii* seed gum incorporated with zinc oxide nanoparticles. *Journal of Food Measurement and Characterization* 16, 3042-3053.
- 11.3.54 Hasheminya, S.-M., & Dehghannya, J. (2022). Development and characterization of *Foriepiea subpinnata* (Ledeb.) Baill essential oil and its nanoemulsion using ultrasound. *Food and Bioprocess Technology* 15, 2531-2546.
- 11.3.53 Hasheminya, S.-M., & Dehghannya, J. (2022). Non-thermal processing of black carrot juice using ultrasound: Intensification of bioactive compounds and microbiological quality. *International Journal of Food Science & Technology* 57, 5848-5858.
- 11.3.52 Ghaderi, A., Dehghannya, J., & Ghanbarzadeh, B. (2022). Multiphase flow, heat and mass transfer modeling during frying of potato: effect of food sample to oil ratio. *International Journal of Food Engineering* 18(5), 337-358.

- 11.3.51 Kamali, R., Dadashi, S., **Dehghannya, J.**, & Ghaffari, H. (2021). Production of green banana powder using foam-mat drying as influenced by drying air temperature: Experimental and 3D numerical study. *Journal of Food Process Engineering* 44(6), e13703.
- 11.3.50 Hasheminya, S.-M., & **Dehghannya, J.** (2021). Chemical composition, antioxidant, antibacterial, and antifungal properties of essential oil from wild *Heracleum rawianum*. *Biocatalysis and Agricultural Biotechnology* 31, 101913.
- 11.3.49 Hasheminya, S.-M., & **Dehghannya, J.** (2021). Development and characterization of novel edible films based on *Cordia dichotoma* gum incorporated with *Salvia mirzayanii* essential oil nanoemulsion. *Carbohydrate Polymers* 257, 117606.
- 11.3.48 Fakhri, L.A., Ghanbarzadeh, B., **Dehghannya, J.**, Hosseini, M., & Dadashi, S. (2021). Photo-catalytic and biotic degradation of polystyrene packaging film: Effect of zinc oxide photocatalyst nanoparticles and nanoclay. *Chemosphere* 283, 130972.
- 11.3.47 Fakhri, L.A., Ghanbarzadeh, B., **Dehghannya, J.**, & Dadashi, S. (2021). Central composite design based statistical modeling for optimization of barrier and thermal properties of polystyrene based nanocomposite sheet for packaging application. *Food Packaging and Shelf Life* 30, 100725.
- 11.3.46 **Dehghannya, J.**, Seyed-Tabatabaei, S.-R., Khakbaz Heshmati, M., & Ghanbarzadeh, B. (2021). Influence of three stage ultrasound—intermittent microwave—hot air drying of carrot on physical properties and energy consumption. *Heat and Mass Transfer* 57, 1893-1907.
- 11.3.45 **Dehghannya, J.**, & Ngadi, M. (2021). Recent advances in microstructure characterization of fried foods: Different frying techniques and process modeling. *Trends in Food Science & Technology* 116, 786–801.
- 11.3.44 Hasheminya, S.-M., & **Dehghannya, J.** (2020). Composition, phenolic content, antioxidant and antimicrobial activity of *Pistacia atlantica* subsp. *kurdica* hulls' essential oil. *Food Bioscience* 34, 100510.
- 11.3.43 Hasheminya, S.-M., & **Dehghannya, J.** (2020). Novel ultrasound-assisted extraction of kefirin biomaterial, a prebiotic exopolysaccharide, and investigation of its physicochemical, antioxidant and antimicrobial properties. *Materials Chemistry and Physics* 243, 122645.
- 11.3.42 Fattahi, R., Ghanbarzadeh, B., **Dehghannya, J.**, Hosini, M., & Falcone, P. (2020). The effect of macro and nano-emulsions of cinnamon essential oil on the properties of edible active films. *Food Science & Nutrition* 8, 6568-6579.
- 11.3.41 **Dehghannya, J.**, Aghazade-Khoie, E., Khakbaz Heshmati, M., & Ghanbarzadeh, B. (2020). Influence of ultrasound intensification on the continuous and pulsed microwave during convective drying of apple. *International Journal of Fruit Science* 20(S3), S1751–S1764.
- 11.3.40 Bashiri, S., Ghanbarzadeh, B., Ayaseh, A., **Dehghannya, J.**, Ehsani, A., & Adun, P. (2020). Essential oil-loaded nanostructured lipid carriers: The effects of liquid lipid type on the physicochemical properties in beverage models. *Food Bioscience* 35, 100526.
- 11.3.39 Bashiri, S., Ghanbarzadeh, B., Ayaseh, A., **Dehghannya, J.**, & Ehsani, A. (2020). Preparation and characterization of chitosan-coated nanostructured lipid carriers (CH-NLC) containing cinnamon essential oil for enriching milk and anti-oxidant activity. *LWT - Food Science and Technology* 119, 108836.

- 11.3.38 Liberty, J.T., **Dehghannya, J.**, & Ngadi, M.O. (2019). Effective strategies for reduction of oil content in deep-fat fried foods: A review. *Trends in Food Science & Technology* 92, 172-183.
- 11.3.37 Hasheminya, S.-M., Mokarram, R.R., Ghanbarzadeh, B., Hamishekar, H., Kafil, H.S., & **Dehghannya, J.** (2019). Development and characterization of biocomposite films made from kefiran, carboxymethyl cellulose and *Satureja Khuzestanica* essential oil. *Food Chemistry* 289, 443-452.
- 11.3.36 Hasheminya, S.-M., Mokarram, R.R., Ghanbarzadeh, B., Hamishekar, H., Kafil, H.S., & **Dehghannya, J.** (2019). Influence of simultaneous application of copper oxide nanoparticles and *Satureja Khuzestanica* essential oil on properties of kefiran-carboxymethyl cellulose films. *Polymer Testing* 73, 377-388.
- 11.3.35 Hasheminya, S.-M., & **Dehghannya, J.** (2019). Green synthesis and characterization of copper nanoparticles using *Eryngium caucasicum* Trautv aqueous extracts and its antioxidant and antimicrobial properties. *Particulate Science and Technology* 38(8), 1019-1026.
- 11.3.34 **Dehghannya, J.**, Pourahmad, M., Ghanbarzadeh, B., & Ghaffari, H. (2019). A multivariable approach for intensification of foam-mat drying process: Empirical and three-dimensional numerical analyses. *Chemical Engineering & Processing: Process Intensification* 135, 22-41.
- 11.3.33 **Dehghannya, J.**, Pourahmad, M., Ghanbarzadeh, B., & Ghaffari, H. (2019). Heat and mass transfer enhancement during foam-mat drying process of lime juice: Impact of convective hot air temperature. *International Journal of Thermal Sciences* 135, 30-43.
- 11.3.32 **Dehghannya, J.**, Kadkhodaei, S., Heshmati, M.K., & Ghanbarzadeh, B. (2019). Ultrasound-assisted intensification of a hybrid intermittent microwave - hot air drying process of potato: Quality aspects and energy consumption. *Ultrasonics* 96, 104-122.
- 11.3.31 Abolghasemi-Fakhri, L., Ghanbarzadeh, B., **Dehghannya, J.**, Abbasi, F., & Adun, P. (2019). Styrene monomer migration from polystyrene based food packaging nanocomposite: Effect of clay and ZnO nanoparticles. *Food and Chemical Toxicology* 129, 77-86.
- 11.3.30 Naghavi, E.-A., **Dehghannya, J.**, & Ghanbarzadeh, B. (2018b). Effect of hydrocolloid type on transfer phenomena during deep-fat frying of coated potato strips: Numerical modeling and experimental analysis. *Computers and Electronics in Agriculture* 154, 382-399.
- 11.3.29 Naghavi, E.-A., **Dehghannya, J.**, & Ghanbarzadeh, B. (2018a). 3D computational simulation for the prediction of coupled momentum, heat and mass transfer during deep-fat frying of potato strips coated with different concentrations of alginate. *Journal of Food Engineering* 235, 64-78.
- 11.3.28 Soleimani, J., Ghanbarzadeh, B., **Dehghannya, J.**, Islami, S.B., & Sorouraddin, S.M. (2018). Simulation of nanosilver migration from polystyrene nanocomposite into food simulants. *Advances in Nano Research* 6(3), 243-255.
- 11.3.27 Nezhad, N.A.K., Ghanbarzadeh, B., & **Dehghannya, J.** (2018). Flow and viscoelastic behavior of Iranian starch-based low calorie dessert (Palda). *Journal of Food Measurement and Characterization* 12(1), 301-310.
- 11.3.26 Mohammadalinejad, S., & **Dehghannya, J.** (2018). Effects of ultrasound frequency and application time prior to deep-fat frying on quality aspects of fried potato strips. *Innovative Food Science & Emerging Technologies* 47, 493-503.

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11.4 Refereed Journal Publications (In Persian)

Number of refereed journal publications in Persian are over 70. Abstracts of the most papers are available in English (Please follow the link below each reference).

- 11.4.75 Nalbandi, H., Seiedlou Heris, S.S., **Dehghannya, J.**, & Rostami, R. (2023). Simulation of three-dimensional heat and mass transfer phenomena during convectional drying of carrot. *Journal of Researches in Mechanics of Agricultural Machinery* 27.
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- 11.4.74 Ghaderi, A., **Dehghannya, J.**, Ghanbarzadeh, B., (2022). Effect of oil type and potato to oil ratio on temperature distribution, moisture loss and oil absorption during the

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(<https://fsct.modares.ac.ir/article-7-57388-en.html>)
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(https://foodresearch.tabrizu.ac.ir/article_14314.html?lang=en)
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(<https://fsct.modares.ac.ir/article-7-37508-en.html>)
- 11.4.66** Soleymani, J., Ghanbarzadeh, B., & **Dehghannya, J.**, (2018). The effect on titanium dioxide and silver nanoparticles on the mechanical and thermophysical properties of nanocomposite used in the food packaging. *Journal of Food Research*, 28(3), 101-110.
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- 11.4.4** Fakhri, L. A., Ghanbarzadeh, B., **Dehghannya, J.**, & Entezami, A. A. (2012). Biodegradable carboxymethyl cellulose films modified by polyvinyl alcohol and cellulose nanowhiskers: Part II. Thermal, water vapor permeability and surface hydrophilicity properties. *Iranian Journal of Biosystem Engineering*, 43(1), 65-72.
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11.5 Non-Refereed Journal Publications

- 11.5.7** Nalbandi, H., Ghasemzadeh, H.R., Seiedlou, S., Rangbar, F., & **Dehghannya, J.** (2014). Mathematical modeling of airflow and heat transfer during forced-air cooling of strawberries. *ISESCO Journal of Science and Technology*, 10(17), 69-76.
- 11.5.6** Hasheminya, S.-M., & **Dehghannya, J.** (2013). Investigation of basic factors influencing rice losses in Iran. *International Journal of Agriculture and Crop Sciences*, 5(19), 2190-2192.
- 11.5.5** Hasheminya, S.-M., & **Dehghannya, J.** (2013). An overview on production and applications of gellan biopolymer. *International Journal of Agriculture and Crop Sciences*, 5(24), 3016-3019.
- 11.5.4** Hasheminya, S.-M., & **Dehghannya, J.** (2013). Processing industries: valuable strategy for reducing rice losses. *International Journal of Farming and Allied Sciences*, 2(15), 498-500.
- 11.5.3** Hasheminya, S.-M., & **Dehghannya, J.** (2013). Spray dryers: Applications, performance, essential parts and classifications. *International Journal of Farming and Allied Sciences*, 2(19), 756-759.
- 11.5.2** Hasheminya, S.-M., & **Dehghannya, J.** (2013). Strategies for decreasing aflatoxin in livestock feed and milk. *International Research Journal of Applied and Basic Sciences*, 4(6), 1506-1510.
- 11.5.1** Hasheminya, S.-M., & **Dehghannya, J.** (2013). An overview of genetically modified food products: Benefits, risks, health safety and related regulations. *International Research Journal of Applied and Basic Sciences*, 4(3), 724-727.

11.6 International Conference Proceedings

- 11.6.12** Ershadfarkar, M., Dadashi, S., **Dehghannya, J.**, (2019). The basic principles of infrared drying, In *International Congress on Science and Engineering*, Nov. 17-18, 2019, University of Tokyo, Japan.
- 11.6.11** Ershadfarkar, M., Dadashi, S., **Dehghannya, J.**, (2019). The effect of foam mat drying on the properties and quality of powder, In *International Congress on Science and Engineering*, Nov. 17-18, 2019, University of Tokyo, Japan.
- 11.6.10** Ershadfarkar, M., Dadashi, S., **Dehghannya, J.**, (2019). The role of modeling in the hot air drying process, In *International Congress on Science and Engineering*, Nov. 17-18, 2019, University of Tokyo, Japan.

- 11.6.9** Gholami, R., **Dehghannya, J.**, Ghanbarzadeh, B., & Entezami, A.-A. (2012). Modeling water vapor absorption and permeability in starch-MMT nanocomposites. *4th International Congress on Nanoscience and Nanotechnology (ICNN)*. Sep 8 - Sep 10, 2012. Institute of Nanoscience and Nanotechnology, University of Kashan, Kashan, Iran.
- 11.6.8** Gholami, R., **Dehghannya, J.**, Ghanbarzadeh, B., & Entezami, A.-A. (2012). Modeling water vapor absorption and permeability in starch-NCC nanocomposites. *4th International Congress on Nanoscience and Nanotechnology (ICNN)*. Sep 8 - Sep 10, 2012. Institute of Nanoscience and Nanotechnology, University of Kashan, Kashan, Iran.
- 11.6.7** **Dehghannya, J.**, Ngadi, M., & Vigneault, C. (2008). Optimization of cooling performance in vented packages containing stacked spherical produce *Northeast Agricultural and Biological Engineering Conference (NABEC)*, July 27 - July 30, 2008, Aberdeen, Maryland, USA.
- 11.6.6** **Dehghannya, J.**, Ngadi, M., & Vigneault, C. (2008). Mathematical modeling of transport phenomena as a package design tool for forced-air precooling of produce. *American Society of Agricultural and Biological Engineers (ASABE) Annual International Meeting*, June 29 - July 2, 2008, Providence, Rhode Island, USA.
- 11.6.5** **Dehghannya, J.**, Ngadi, M., & Vigneault, C. (2008). Simulation of airflow during forced-air precooling of bulk produce in vented package. *International Congress of Engineering and Food (ICEF 10)*, April 20-24, 2008, Vina del Mar, Chile.
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- 11.6.3** **Dehghannya, J.**, Ngadi, M., & Vigneault, C. (2007). Mathematical modeling of momentum, heat and mass transfer for optimal package design in forced-air precooling of fruits and vegetables. *Northeast Agricultural and Biological Engineering Conference (NABEC)*, July 29 - August 1, 2007, Wooster, Ohio, USA, Paper # 07-010.
- 11.6.2** **Dehghannya, J.**, Ngadi, M., Emam-Djomeh, Z., & Sotudeh-Gharebagh, R. (2005). Evaluation of osmo-coating process on dehydration of apple slices. *Proceedings of the IADC 2005 – 3rd Inter American Drying Conference*, August 21-23, 2005, Montreal, Canada, Paper # I-3
- 11.6.1** Emam-Djomeh, Z., **Dehghannya, J.**, & Gharabagh, R. S. (2005). Evaluation of osmotic process in combination with coating on drying of apple slices. *XI Polish Drying Symposium*, September 13-16, 2005, Poznań, Poland, Paper # L7.

11.7 National Conference Proceedings (In Persian)

- 11.7.35** Kamkari, A., Dadashi, S., Khakbaz Heshmati, M., **Dehghannya, J.**, Dehghani, M. (2021). A review on cold plasma microbial decontamination mechanism, its effect on food quality and its generation (Poster Presentation) In *27th National Iranian Food Science and Technology Congress*, Feb. 2-3, 2021, Agricultural Sciences and Natural Resources University of Khuzestan, Ahvaz, Iran.
- 11.7.34** Fereidouni, F., Dadashi, S., **Dehghannya, J.** (2021). Investigation of the effect of temperature on drying kinetics of tomato pulp powder produced by the foam mat

- method (Oral Presentation), In *27th National Iranian Food Science and Technology Congress, Feb. 2-3, 2021*, Agricultural Sciences and Natural Resources University of Khuzestan, Ahvaz, Iran.
- 11.7.33** Ershadfarkar, M., Dadashi, S., **Dehghannya, J.**, Heshmati, M.K., (2019). The impact of air velocity during foam-mat drying of raspberry on functional properties of resulting powder, In *3rd International and 26th National Iranian Food Science and Technology Congress, Sept. 17-19, 2019*, Tarbiat Modares University, Tehran, Iran.
- 11.7.32** Ershadfarkar, M., Dadashi, S., **Dehghannya, J.**, Heshmati, M.K., (2019). Influence of infrared power on the production of raspberry powder during foam-mat drying, In *3rd International and 26th National Iranian Food Science and Technology Congress, Sept. 17-19, 2019*, Tarbiat Modares University, Tehran, Iran.
- 11.7.31** Ershadfarkar, M., Dadashi, S., **Dehghannya, J.**, Heshmati, M.K., (2019). Production of raspberry fruit powder using foam-mat drying: Effect of convective hot air temperature, In *3rd International and 26th National Iranian Food Science and Technology Congress, Sept. 17-19, 2019*, Tarbiat Modares University, Tehran, Iran.
- 11.7.30** Ershadfarkar, M., Dadashi, S., **Dehghannya, J.**, Heshmati, M.K., (2019). Infrared interaction with foods in food processing, In *The 3rd Annual International Conference on Food Science and Industries, May 21, 2019*, AICF2019, Tehran, Iran.
- 11.7.29** Ershadfarkar, M., Dadashi, S., **Dehghannya, J.**, Heshmati, M.K., (2019). The basic principles of foam mat drying and its application in food processing, In *The 3rd Annual International Conference on Food Science and Industries, May 21, 2019*, AICF2019, Tehran, Iran.
- 11.7.28** Kamali, R., Dadashi, S., **Dehghannya, J.**, Ghaffari, H., (2019). Impact of convective hot air temperature on foam-mat drying process of green banana: Experimental and 3D numerical study, In *3rd International and 26th National Iranian Food Science and Technology Congress, Sept. 17-19, 2019*, Tarbiat Modares University, Tehran, Iran.
- 11.7.27** Kamali, R., Dadashi, S., **Dehghannya, J.**, Ghaffari, H., (2019). Numerical modeling of heat and mass transfer during foam-mat drying of green banana: Effect of ovalbumin concentrations, In *3rd International and 26th National Iranian Food Science and Technology Congress, Sept. 17-19, 2019*, Tarbiat Modares University, Tehran, Iran.
- 11.7.26** Hasheminya, S.-M., **Dehghannya, J.**, (2019). Bacteriocins: Natural preservatives and food safety promoters (In Persian), In *3rd International and 26th National Iranian Food Science and Technology Congress, Sept. 17-19, 2019*, Tarbiat Modares University, Tehran, Iran: Article Code: cong26-00150005.
- 11.7.25** Hasheminya, S.-M., **Dehghannya, J.**, (2019). Effect of essential oils on fungal food contaminants, ergosterol and aflatoxins B1, B2, G1 and G2 (In Persian), In *3rd International and 26th National Iranian Food Science and Technology Congress, Sept. 17-19, 2019*, Tarbiat Modares University, Tehran, Iran: Article Code: cong26-00150005.
- 11.7.24** Hasheminya, S.-M., **Dehghannya, J.**, (2019). Evaluation of antibacterial activity of essential oil of *Heracleum persicum* fruit (In Persian), In *3rd International and 26th National Iranian Food Science and Technology Congress, Sept. 17-19, 2019*, Tarbiat Modares University, Tehran, Iran: Article Code: cong26-00150005.
- 11.7.23** Farshad, P., **Dehghannya, J.**, Khakbaz Heshmati, M. (2016). Application of intermittent microwave – convective hot air technique during drying of apple and investigation of effective factors on shrinkage. In *1st International & 24th National*

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- 11.7.21** Hosseiniar, S.-H., **Dehghannya, J.**, Khakbaz Heshmati, M. (2016). Application of intermittent microwave – convective hot air technique with osmotic pretreatment during drying of quince fruit and investigation of its shrinkage trend. In *1st International & 24th National Food Science and Technology Congress, Oct 18 - 20, 2016. Tarbiat Modares University, Tehran, Iran.*
- 11.7.20** Hosseiniar, S.-H., **Dehghannya, J.**, Khakbaz Heshmati, M. (2016). Drying of quince fruit applying intermittent microwave – convective hot air technique and its effect on rehydration of dried product. In *1st International & 24th National Food Science and Technology Congress, Oct 18 - 20, 2016. Tarbiat Modares University, Tehran, Iran.*
- 11.7.19** Hosseiniar, S.-H., **Dehghannya, J.**, Khakbaz Heshmati, M. (2016). Effect of osmotic dehydration – intermittent microwave – convective hot air technique on effective moisture diffusion coefficient during drying of quince fruit. In *1st International & 24th National Food Science and Technology Congress, Oct 18 - 20, 2016. Tarbiat Modares University, Tehran, Iran.*
- 11.7.18** Hosseiniar, S.-H., **Dehghannya, J.**, Khakbaz Heshmati, M. (2016). Effect of osmotic pretreatment on bulk density of quince fruit during intermittent microwave – convective hot air drying. In *1st International & 24th National Food Science and Technology Congress, Oct 18 - 20, 2016. Tarbiat Modares University, Tehran, Iran.*
- 11.7.17** Akbarian, M., Ghanbarzadeh, B., Sowti, M., **Dehghannya, J.** (2013). Optimum immersion time of quince slices during osmotic dehydration and shrinkage modeling during drying. In *21th National Congress of Food Science and Technology, Oct 29 - Oct 31, 2013. Shiraz University, Shiraz, Iran: Article Code: HN 10100980072.*
- 11.7.16** Alizadeh-Zeinab, S., **Dehghannya, J.**, Sowti-Khiyabani, M. (2013). Apparent density kinetics of potatoes pretreated by blanching and edible coatings during frying. In *21th National Congress of Food Science and Technology, Oct 29 - Oct 31, 2013. Shiraz University, Shiraz, Iran: Article Code: HN 10111160720.*
- 11.7.15** Alizadeh-Zeinab, S., **Dehghannya, J.**, Sowti-Khiyabani, M. (2013). The effect of blanching and edible coatings on shrinkage of potatoes during frying. In *21th National Congress of Food Science and Technology, Oct 29 - Oct 31, 2013. Shiraz University, Shiraz, Iran: Article Code: HN 10111160719.*
- 11.7.14** Barmour, M., **Dehghannya, J.**, Ghanbarzadeh, B. (2013). The effect of ultrasound, microwave and osmotic dehydration on apparent density of potatoes during frying. In *21th National Congress of Food Science and Technology, Oct 29 - Oct 31, 2013. Shiraz University, Shiraz, Iran: Article Code: HN 10111420704.*
- 11.7.13** Barmour, M., **Dehghannya, J.**, Ghanbarzadeh, B. (2013). The effect of ultrasound, microwave and osmotic dehydration on shrinkage of potatoes during frying. In *21th National Congress of Food Science and Technology, Oct 29 - Oct 31, 2013. Shiraz University, Shiraz, Iran: Article Code: HN 10111420703.*
- 11.7.12** Gholami, R., Ghanbarzadeh, B., **Dehghannya, J.**, Entezami, A. A. (2013). The physical properties of nanocomposites based on potato starch - nanocrystalline cellulose

- (NCC). In *21th National Congress of Food Science and Technology, Oct 29 - Oct 31, 2013*. Shiraz University, Shiraz, Iran: Article Code: HN 10113471353.
- 11.7.11** Ghorbani, R., **Dehghannya, J.**, Seiedlou-Heris, S.-S., Ghanbarzadeh, B. (2013). The effect of ultrasound and osmotic dehydration on apparent density changes during drying of plums. In *21th National Congress of Food Science and Technology, Oct 29 - Oct 31, 2013*. Shiraz University, Shiraz, Iran: Article Code: HN 10105530443.
- 11.7.10** Ghorbani, R., **Dehghannya, J.**, Seiedlou-Heris, S.-S., Ghanbarzadeh, B. (2013). The effect of ultrasound and osmotic dehydration on drying kinetics of plums. In *21th National Congress of Food Science and Technology, Oct 29 - Oct 31, 2013*. Shiraz University, Shiraz, Iran: Article Code: HN 10105530444.
- 11.7.9** Ghorbani, R., **Dehghannya, J.**, Seiedlou-Heris, S.-S., Ghanbarzadeh, B. (2013). The effect of ultrasound and osmotic dehydration on shrinkage rate during drying of plums. In *21th National Congress of Food Science and Technology, Oct 29 - Oct 31, 2013*. Shiraz University, Shiraz, Iran: Article Code: HN 10105530445.
- 11.7.8** Hasheminya, S.-M., **Dehghannya, J.** (2013). A review of dietary fibers and their applications. In *21th National Congress of Food Science and Technology, Oct 29 - Oct 31, 2013*. Shiraz University, Shiraz, Iran: Article Code: HN 10113051127.
- 11.7.7** Hasheminya, S.-M., **Dehghannya, J.** (2013). A review of hydrocolloid gels: Functional characteristics and dynamics and mechanics of formation and destruction of their structure. In *21th National Congress of Food Science and Technology, Oct 29 - Oct 31, 2013*. Shiraz University, Shiraz, Iran: Article Code: HN 10113051128.
- 11.7.6** Rahimi, L., Ghanbarzadeh, B., **Dehghannya, J.** (2013). Migration of DEHA from polyethylene terephthalate to lemon juice simulant through optimized liquid - liquid micro-extraction In *21th National Congress of Food Science and Technology, Oct 29 - Oct 31, 2013*. Shiraz University, Shiraz, Iran: Article Code: HN 10107500616.
- 11.7.5** Ranjzad, Z., **Dehghannya, J.**, Ghanbarzadeh, B. (2013). Changes in moisture loss during frying of potatoes with the addition of beta-cyclodextrin and sodium chloride to oil. In *21th National Congress of Food Science and Technology, Oct 29 - Oct 31, 2013*. Shiraz University, Shiraz, Iran: Article Code: HN 10112480961.
- 11.7.4** Ranjzad, Z., **Dehghannya, J.**, Ghanbarzadeh, B. (2013). The effect of beta-cyclodextrin and sodium chloride on oil uptake during frying of potatoes. In *21th National Congress of Food Science and Technology, Oct 29 - Oct 31, 2013*. Shiraz University, Shiraz, Iran: Article Code: HN 10112480962.
- 11.7.3** Razzagh-Pour, E., **Dehghannya, J.**, Ghanbarzadeh, B. (2013). The effect of ultrasound and blanching on kinetics of oil uptake during frying of potato pieces. In *21th National Congress of Food Science and Technology, Oct 29 - Oct 31, 2013*. Shiraz University, Shiraz, Iran: Article Code: HN 10104730696.
- 11.7.2** Razzagh-Pour, E., **Dehghannya, J.**, Ghanbarzadeh, B. (2013). Moisture content kinetics of potatoes pretreated with ultrasound and blanching during frying. In *21th National Congress of Food Science and Technology, Oct 29 - Oct 31, 2013*. Shiraz University, Shiraz, Iran: Article Code: HN 10104730698.
- 11.7.1** Almasi, H., Ghanbarzadeh, B., **Dehghannya, J.** (2012). Hydrophilic properties and structural characteristics of nanocrystalline cellulose modified by fatty acid. In *14th Iranian National Chemical Engineering Congress (IChEC 14), Oct 16 - Oct 18, 2012*. Sharif University of Technology, Tehran, Iran: Article Code: 10127.