

## Hashem Andishmand

Ph.D in Food Safety & Hygiene, Assistant Professor Shahid Sadoughi University of Medical Sciences, Yazd, Iran.



### Contact Address

Tel: +98 3531492149 Mobile: +98 9147631612

Email: [Andishmand.hashem@gmail.com](mailto:Andishmand.hashem@gmail.com)

Birth date/Marital status Aug 31, 1990, Tabriz, Iran.

### Web pages

Google scholar (h-index: 12):

<https://scholar.google.com/citations?user=SaTTB68AAAAJ&hl=en>

Scopus (h-index: 10):

<https://www.scopus.com/authid/detail.uri?authorId=57192887286>

## Education

2019-2023	<p>Ph.D., Food Safety &amp; Hygiene Tabriz University of Medical Sciences, Tabriz, Iran</p> <p><b>Area of Expertise:</b> Food safety, Functional foods, Nano-encapsulation, Targeted delivery systems, Nanocarriers.</p> <p><b>Dissertation title:</b> Optimization and extraction of pomegranate peel extract, its nanophytosomal encapsulation and investigation of anti-mold, physico-chemical and sensory properties of yogurt enriched with it</p> <p><b>Thesis GPA:</b> 20</p>
2013-2016	<p>MSc., Food Science &amp; Technology (Quality Control) Tabriz University of Medical Sciences, Tabriz, Iran</p> <p><b>Thesis title:</b> Design and preparation of complex delivery system formed from pectin and chitosan for encapsulation of resveratrol</p> <p><b>Thesis GPA:</b> 19.16</p>
2010-2013	<p>BSc., Food Science &amp; Technology (Quality Control) Shahid Beheshti University of Medical Sciences, Tehran, Iran</p>

## Teaching Experiences

Year(s)	Course name	Target group
2024 & 2025	Microbial food infections and poisoning	MSc. students
2024 & 2025	Packaging safety in the food industry	MSc. students
2024 & 2025	Hygiene and food poisoning	BSc. students
2024 & 2025	Food hygiene	BSc. students
2024 & 2025	Grain, fruit and vegetable safety	MSc. students
2024 & 2025	Principles of food conversion and processing	MSc. students
2024 & 2025	Food safety management systems	MSc. students
2024 & 2025	Research principles and article writing methods	MSc. students
2024 & 2025	Principles of food inspection and hygiene	MSc. students
2024 & 2025	Safety and quality of meat and meat products	MSc. students
2024 & 2025	Food microbiology	MSc. students
2022&2023	Grain Technology	BSc. students

## Cooperation with Foreign Researchers

Prof. Michael R. Hamblin

Laser Research Centre, Faculty of Health Science, University of Johannesburg, Doornfontein 2028, South Africa.

[hamblin@helix.mgh.harvard.edu](mailto:hamblin@helix.mgh.harvard.edu)

Prof. Ki Hyun Kim

School of Pharmacy, Sungkyunkwan University, Suwon, South Korea

[khkim83@skku.edu](mailto:khkim83@skku.edu)

## Publications

1. **Hashem Andishmand**, Sodeif Azadmard-Damirchi, Hamed Hamishehkar, Mohammadali Torbati, Mohammad Saeed Kharazmi, Geoffrey p. Savage, Chen Tan, Seid Mahdi Jafari. Nano-delivery systems for encapsulation of phenolic compounds from pomegranate peel. **Advances in Colloid and Interface Science**. 2023:102833. Impact Factor: 15.6, CiteScore: 23.7, Q1. (Published).

2. Mohammad Yousefi, **Hashem Andishmand**, Elham Assadpour, Ali Barzegar , Mohammad Saeed Kharazmi, Seid Mahdi Jafari. Nanoliposomal delivery systems of natural antibacterial compounds; properties, applications, and recent advances. **Critical review in food science and nutrition**. 2023;1-14. doi: 10.1080/10408398.2023.2170318. Impact Factor: 10.2, CiteScore: 23.6, Q1. (Published).
3. **Hashem Andishmand**, Mahnaz Tabibiazar, Mohammad Amin Mohammadifar, Hamed Hamishehkar. Pectin-zinc-chitosan-polyethylene glycol colloidal nano-suspension as a food grade carrier for colon targeted delivery of resveratrol. **International journal of biological macromolecules**. 2017;97:16-22. Impact Factor: 8.2, CiteScore: 14.50, Q1. (Published).
4. **Hashem Andishmand**, Mohammad Yousefi, Nahideh Jafari, Sodeif Azadmard-Damirchi, Aziz Homayouni-Rad, Mohammadali Torbati, Hamed Hamishehkar. Designing and fabrication of colloidal nano-phytosomes with gamma-oryzanol and phosphatidylcholine for encapsulation and delivery of polyphenols rich extract from pomegranate peel. **International journal of biological macromolecules**. Impact Factor: 8.2, CiteScore: 14.50, Q1.( Published).
5. **Hashem Andishmand (corresponding author)**, Behzad Masoumi, Mohammadali Torbati, Aziz Homayouni-Rad, Sodeif Azadmard-damirchi, *Hamed Hamishehkar*. Ultrasonication/dynamic maceration-assisted extraction method as a novel combined approach for recovery of phenolic compounds from pomegranate peel. **Food science & Nutrition**. Impact Factor: 3.9. CiteScore: 6.7, Q1. (Published).
6. Amirhossein Abedini, Samira Dakhili, Sara Bazzaz, Saba Kamaladdin Moghaddam, Maryam Mahmoudzadeh, **Hashem Andishmand (corresponding author)**. **Fortification of chocolates with high value-added plant-based substances: recent trends, current challenges, and future prospects**. **Food Science & Nutrition**. 2023. Impact Factor: 3.9, CiteScore: 6.7, Q1. (Published).
7. **Hashem Andishmand**, Hamed Hamishehkar, Afshin Babazadeh, Arezou Taghvimi, Mohammad Amin Mohammadifar, Mahnaz Tabibiazar. A colon targeted delivery system for resveratrol enriching in pH responsive-model. **Pharmaceutical Sciences**. 2016;23(1):42-9. Impact Factor: 1.7, CiteScore: 2.2, Q2. (Published).
8. Mir-Michael Mousavi, Fardin Javanmardi, **Hashem Andishmand**, Mojtaba Momeni, Mansour Mahmoudpour. Vortex and ultrasound-assisted surfactant-enhanced emulsification microextraction for the determination of pesticide residues in honey using gas chromatography–mass spectrometry. **Journal of Analytical Chemistry**. 2020;75:1153-61. Impact Factor: 1.1, CiteScore: 1.9. Q3. (Published).

9. Alireza Ebrahimi, **Hashem Andishmand**, Chen Huo, Sajed Amjadi, Sima Khezri, Hamed Hamishehkar, Maryam Mahmoudzadeh, Ki Hyun Kim. Glycomacropeptide: a comprehensive understanding of its major biological characteristics and purification methodologies. **Comprehensive Reviews in Food Science and Food Safety**. Impact Factor: 14.8, CiteScore: 21.7, Q1. (Published).
10. Shiva Kheiriabad, Amir Jafari, Simin Namvar Aghdash, Jafar Ezzati Nazhad Dolatabadi, **Hashem Andishmand (corresponding author)**, Seid Mahdi Jafari. Advanced nanomaterials applications in biomedicine, pharmaceuticals, agriculture, and food industry. **BioNanoScience**. Impact Factor: 3, CiteScore: 5.9, Q2. (Published).
11. Mohammadreza Rostami, Nima Beheshtizadeh, ElhamLak Mazaheri, Ghazal Mirzaei, **Hashem Andishmand**, Alireza Mafi, Zahra Esfandiari, Vahid Safavizadeh, Elham Assadpour, Mahmood Alizadeh Sani, Hamed Ahari, Seid Mahdi Jafari. Recent trends on the food and biomedical applications of Resveratrol-loaded nano/micro carriers. **Food Bioscience**. Impact Factor: 5.2, CiteScore: 5.6, Q2. (Published).
12. Karim Esazadeh, Jafar Ezzati Nazhad Dolatabadi, **Hashem Andishmand (corresponding author)**, Hossein Mohammadzadeh-Aghdash, Mansour Mahmoudpour, Mohammad Naemi Kermanshahi, Yousef Roosta. An overview on cyto-genotoxicity and biological aspects of multifunctional food antioxidants. **Food Science & Nutrition**. Impact Factor: 3.5, CiteScore: 7.4, Q1. (Published).
13. Hossein Majidzadeh, Mostafa Araj-Khodaei, Ayuob Aghanejad, Maryam Ghaffari, Amir Jafari, Jafar Ezzati Nazhad Dolatabadi, **Hashem Andishmand (corresponding author)**, Michael R. Hamblin. PAMAM dendrimers based co-delivery of methotrexate and berberine for targeting of HeLa cancer cells. **Toxicology Reports**. CiteScore: 7.6, Q1. (Published).
14. Sara Bahrami, **Hashem Andishmand**, Zahra Pilevar, Fataneh Hashempour-baltork, Mohammadali Torbati, Manouchehr Dadgarnejad, Hossein Rastegar, Seyed Ali Mohammadi, Sodeif Azadmar d-Damirchi. Innovative perspectives on bacteriocins: advances in classification, synthesis, mode of action, and food industry applications. **Journal of Applied Microbiology**. Impact Factor: 3.2, CiteScore: 7.3, Q2. (Published).

15. **Hashem Andishmand**, Behzad Masoumi, Mohammadreza Rostami, Jalal Sadeghizadeh-Yazdi, Jafar Ezzati Nazhad Dolatabadi, Elham Khalili Sadrabad, Maryam Mahmoudzadeh, Seid Mahdi Jafari. Pharmacodynamics, pharmacokinetics and cell signaling pathways of pomegranate peel extract. **Phytochemistry Reviews**. Impact Factor: 7.3, CiteScore: 16.30, Q1. (Published).

16. Kave Koorehpaz, **Hashem Andishmand** , Behzad Masoumi , Elham Assadpour , Mohammad Yousefi , Yan Li , Seid Mahdi Jafari. A review of the effects of cold plasma on reducing the allergenicity of food proteins; principles, mechanisms and applications. **International journal of biological macromolecules**. Impact Factor:8.5, CiteScore: 10.3, Q1. (Published).

17. Mansour Mahmoudpour, Zahra Karimzadeh, Mohsen Zaheri, Reza Yekta, **Hashem Andishmand**, Jafar Ezzati Nazhad Dolatabadi. Exploring the interactions between bovine serum albumin and sodium propionate through multi-spectroscopic and molecular docking analyses. **International journal of biological macromolecules**. Impact Factor:8.5, CiteScore: 10.3, Q1. (Published).

18. Mohammad Yousefi, **Hashem Andishmand**, Reza Abedi-Firoozjah, Sirous, Khorram, Alireza Ostadrahimi. Detoxification of Aflatoxin B1 on Dried White Mulberry (Morus alba L.) Using Dielectric Barrier Discharge Plasma. **Journal of Food Quality and Hazards Control**. CiteScore: 1.5, Q3. (Published).

### Some of My Research Projects

No.	Title	Role
1	Production and evaluation of packaging films based on gelatin/polyvinyl alcohol integrated with carbon nanoparticles derived from persimmon skin and manganese oxide to increase the shelf life of red meat	Executor
2	Production and evaluation of packaging films based on carboxymethyl cellulose/ kappa carrageenan integrated with carbon nanoparticles derived from garlic peel waste and zinc oxide to increase the shelf life of red meat	Executor
3	Design of a two-layer film based on gelatin-bacterial nanocellulose containing a complex of beta-cyclodextrin-red grape anthocyanin extract and ginger essential oil nanoliposomes as a packaging system for shrimp and fish	Executor

4	Investigation of the physical, chemical and antimicrobial properties of chitosan-based films containing algae-derived zinc oxide nanoparticles and eutectic plasticizer	Executor
5	Investigating the effect of probiotic strains <i>Lactobacillus helveticus</i> and <i>Lactobacillus plantarum</i> on the ability to produce wheat-based fermented beverages	Executor

## Oral Presentations

1) **Hashem Andishmand**, Mohammadali Torbati, Mahnaz Tabibiazar. The relationship between food production, climate change, sustainable food and food security. **9<sup>th</sup> International Conference on Food Industry Sciences, Organic Farming and Food Security**. 11 March 2022, Tbilisi, Georgia.

2) **Hashem Andishmand (corresponding author)**, Mohammadali Torbati, Lida Andishmand. Alternatives to hypochlorite washing systems for the decontamination of agricultural Products. **10<sup>th</sup> International Conference on Food Industry Sciences, Organic Farming and Food Security**. 26 May 2022. Budapest, Hungary.

3) **Hashem Andishmand**, Mohammadali Torbati, Maryam Mahmoudzadeh. Pesticide alternatives in crop cultivation and the challenges ahead. **10<sup>th</sup> International Conference on Food Industry Sciences, Organic Farming and Food Security**. 26 May 2022. Budapest, Hungary.

4) **Hashem Andishmand (corresponding author)**, Mohaddeseh Badpeima, Lida Andishmand. A review of modern and conventional methods in designing and fabrication of nanocarriers based on polysaccharide complex for micro/nanoencapsulation of bioactive compounds. **17<sup>th</sup> International Conference on Food Industry Sciences, Organic Farming and Food Security**. 2024. Tbilisi, Georgia.

## Poster

1) Mohaddeseh Badpeyma, Fatemeh Sistani, **Hashem Andishmand**, Alireza Sedaghat, Majid Khadem-Rezaiyan, Ahmad Bagheri Moghaddam. Ultrasonographic-measurement gastric antral area compared with aspirated tube feed volume in critically ill patients: a cohort study. **The 1<sup>th</sup> International Congress of Iranian Society of Nutrition**. 2024. Esfahan, Iran.

## Work experiences

- Assistant Professor, School of Public Health, Shahid Sadoughi University of Medical Sciences, Yazd, Iran.

- Member of the Research Council of the Food Health and Safety Research Center, Shahid Sadoughi University of Medical Sciences, Yazd, Iran.

- Director of Research and Development, Pars Vera Isatis Company.

### **Reviewer for International Journals**

1. Arabian Journal of Chemistry. Impact Factor: 6, CiteScore: 11, Q1.
2. European Journal of Medicinal Chemistry. Impact Factor: 6.7, CiteScore: 12.1, Q1.
3. ACS Omega. Impact Factor: 4.1, CiteScore: 5.9, Q2.
4. BioImpacts. Impact Factor: 2.6, CiteScore: 5.2, Q2
5. Advanced Pharmaceutical Bulletin
6. Zeitschrift für Naturforschung C
7. Journal of Nutrition, Fasting and Health
8. Pharmaceutical Sciences
9. Phytochemistry Reviews
10. Scientific Reports
11. Food BioScience
12. Journal of Food Quality and Hazard Control

### **Languages**

Turkish: Native

Persian: Native

English: Upper Intermediate

### **Research Interest**

- Food fortification and functional food formulation
- Design and preparation of nanocarriers
- Design and fabrication of active and intelligent packaging to increase the quality and safety of food products
- Cytotoxicity of food additives
- Role of cold plasma in eliminating toxins.

