



Kambiz Jahanbin

Date of birth: 14 September

1981 Citizenship: Iran

Current Address: Shahrood University of Technology, Faculty of Agricultural Engineering, Department of Food Science, Shahrood, Iran

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EDUCATION

2006- 2011

Ph.D. Degree in Food Science and Engineering

University of Tehran, Faculty of Biosystem Engineering,
Department of Food Science and Technology

Dissertation: Extraction and structural elucidation of Water-soluble Polysaccharides from *Acanthophyllum bracteatum* roots.

- GPA 18.57 (out of 20)
- Thesis score: 19.86 (out of 20)

2004 - 2006

M. S. Degree in Food Science and Technology

University of Tehran, Faculty of Biosystem Engineering,
Department of Food Science and Technology

Thesis: The study on interaction between Iranian traditional prepared Food and Aluminium strall packaging during shelf-life

- GPA 17.42 (out of 20)
- Thesis score: 19.45 (out of 20)

1999 - 2003

B. Sc. Degree in Food Science and Technology

Department of Food Science and Technology

- GPA 18.70 (out of 20)

PUBLICATIONS

Journal papers

- Azari-Anpar, M., Degraeve, P., Oulahal, N., Adt, I., **Jahanbin, K.**, Demarigny, Y., Assifaoui, A., and Tabatabaei Yazdi, F. (2022). Interaction of Escherichia coli heat-labile enterotoxin B-pentamer with exopolysaccharides from *Leuconostoc mesenteroides* P35: Insights from surface plasmon resonance and molecular docking studies. *Food Bioscience*, 102058.
- Arab, K., Ghanbarzadeh, B., Ayaseh, A., and **Jahanbin, K.** (2021). Extraction, purification, physicochemical properties and antioxidant activity of a new polysaccharide from *Ocimum album* L. seed. *International Journal of Biological Macromolecules* 180, 643-653.
- Salarbashi, D., **Jahanbin, K.**, Tafaghodi, M., and Fahmideh-Rad, E., (2021). *Prunus armeniaca* gum exudates: An overview on purification, structure, physicochemical properties, and applications. *Food Science & Nutrition* 9 (2), 1240-1255.
- Hafttananian, N., Zabihzadeh Khajavi, M., Farhoodi, M., **Jahanbin, K.**, and Ebrahimi Pure, A. (2021). Migration of nano-clay and nano-silica from low-density polyethylene nanocomposites into different food simulants. *Journal of Food Measurement and Characterization* 15 (5), 3893-3900.
- Haghghatpanah, N., Mirzaee, H., Khodaiyan, F., Kennedy, J. F., Aghakhani, A., Hosseini, S. S., and **Jahanbin, K.** (2020). Optimization and characterization of pullulan produced by a newly identified strain of *Aureobasidium pullulans*. *International journal of biological macromolecules* 152, 305-313.
- Hosseini, E., Rajaei, A., Tabatabaei, M., Mohsenifar, A., and **Jahanbin, K.** (2020). Preparation of Pickering Flaxseed Oil-in-Water Emulsion Stabilized by Chitosan-Myristic Acid Nanogels and Investigation of Its Oxidative Stability in Presence of Clove Essential Oil as Antioxidant. *Food Biophysics* 15 (2), 216-228.
- Benvidi, S. M. H., and **Jahanbin, K.** (2020). A new water-soluble polysaccharide from *Echinops pungens* Trautv roots. Part I. Isolation, purification, characterization and antioxidant activity. *International Journal of Biological Macromolecules* 161, 909-916.
- Samadlouie, H. R., **Jahanbin, K.**, and Jalali, P. (2020). Production, medium optimization, and structural characterization of an extracellular polysaccharide produced by *Rhodotorula minuta* ATCC 10658. *Food Science & Nutrition* 8 (9), 4957-4964.
- Rahgo, Z., Mojerlou, S., and **Jahanbin, K.** (2019). Statistical optimization of culture conditions for protein production by a newly isolated *Morchella fluvialis*. *BioMed*

Research International

- Beigi, M., and **Jahanbin, K.** (2019). A water-soluble polysaccharide from the roots of *Eremurus spectabilis* MB subsp. *spectabilis*: Extraction, purification and structural features. *International journal of biological macromolecules*, 128, 648-654. (IF: 4.784)
- **Jahanbin, K.** (2018). Structural characterization of a new water-soluble polysaccharide isolated from *Acanthophyllum acerosum* roots and its antioxidant activity. *International journal of biological macromolecules*, 107, 1227-1234. (IF: 4.784)
- Molaei, H., and **Jahanbin, K.** (2018). Structural features of a new water-soluble polysaccharide from the gum exudates of *Amygdalus scoparia* Spach (Zedo gum). *Carbohydrate Polymers*, 182, 98-105. (IF: 6.044)
- **Jahanbin, K.**, Abbasian, A., and Ahang, M. (2017). Isolation, purification and structural characterization of a new water-soluble polysaccharide from *Eremurus stenophyllus* (boiss. & buhse) baker roots. *Carbohydrate Polymers*, 178, 386-393. (IF: 6.044)
- Sahragard, N., and **Jahanbin, K.** (2017). Structural elucidation of the main water-soluble polysaccharide from *Rubus anatolicus* roots. *Carbohydrate Polymers*, 175, 610-617. (IF: 6.044)
- **Jahanbin, K.** and Beigi, M. (2017). Isolation and structural characterization of a glucomannan from *Eremurus persicus* roots. *Journal of Food Science & Technology*, 63 (14), 277-287.
- Shabani, H., Askari, G., **Jahanbin, K.**, and Khodaeian, F. (2016). Evaluation of physicochemical characteristics and antioxidant property of *Prunus avium* gum exudates. *International Journal of Biological Macromolecules*, 93, Part A, 436-441. (IF: 4.784)
- **Jahanbin, K.**, Hedayati, A.A., Hassan Nataj Niazie, E., and Hosseini, S.A. (2016). Application of a new polysaccharide extracted from the roots of *Acanthophyllum glandulosum* on health improvement of rainbow trout *Oncorhynchus mykiss* (Walbaum), exposed to mercury chloride. *Iranian Aquaculture Society Journal*. 3 (4). 43-58.
- Ghasemlou, M., Khodaiyan, F., **Jahanbin, K.**, Gharibzahedi, S. M. T., and Taheri, S. (2012). Structural investigation and response surface optimisation for improvement of kefiran production yield from a low-cost culture medium. *Food Chemistry*. 133 (2). 383-389. (IF: 5.399)
- **Jahanbin, K.**, Moini, S., Gohari, A.R., Emam-Djomeh, Z. and Masi, P. (2012). Isolation, purification and characterization of a new gum from *Acanthophyllum bracteatum* roots. *Food Hydrocolloids*. 27 (1). 14-21. (IF: 5.839)
- **Jahanbin, K.**, Gohari, A.R., Moini, S., Emam-Djomeh, Z. and Masi, P. (2011). Isolation, structural characterization and antioxidant activity of a new water-soluble polysaccharide from *Acanthophyllum bracteatum* roots. *International Journal of Biological Macromolecules*. 49. 567-572. (IF: 4.784)

- **Jahanbin, K.**, Hedayati, A.A., Moini, S., Gohari, A.R., Emam-Djomeh, Z., Esposito, A. and Bagheri, T. (2011). The first application of a new polysaccharide from *Acanthophyllum bracteatum* for the health improvement of Atlantic salmon exposed to mercury chloride. *Toxicology and Industrial Health*. 28 (4). 377-384. (IF: 1.635)
- Mumivand, H., Rustaii, A. R., **Jahanbin, K** and Dastan, D. (2010). Essential Oil Composition of *Pulicaria dysenterica* (L.) Bernh from Iran. *Journal of Essential Oil Bearing Plants*. 13 (6). 717-720. (IF: 0.681)
- **Jahanbin, K.**, Emam-Djomeh, Z. and Hamedi, M. (2009). Investigation of Color Change in Canned Chicken Kebab during Storage Period and under Accelerated Conditions. *Iranian, J. Biosystem Engineering*, Vol. 39, No. 1, PP, 103-109.

Books

- Moini, S., Jahanbin, K. (2014). *Principles of Food Preservation*. University of Tehran Press-3489.
- **Jahanbin, K.**, Nourbakhsh, H. (2012). *Food plant design & process engineering*. Shahrab publication.

SELECTED CONFERENCE PAPERS

- Isolation, structural characterization and antioxidant activity of a new water-soluble polysaccharide from *Acanthophyllum squarrosum* roots. 2nd National Congress on Medicinal Plants. Tehran, Iran, May 2013.
- Identification of a new water soluble polysaccharide from *Acanthophyllum Borsczowii* roots. 5th International Iranian Biology Conference. Kerman, Iran, September 2012.
 - Extraction, purification and characterization of a new Water-soluble polysaccharide from *Acanthophyllum pungens* roots. 26th International Carbohydrate Symposium (ICS2012). Madrid, Spain, July 2012.
 - The first application of a new prebiotic for the health Improvement of Atlantic salmon exposed to Mercury chloride. International Symposium on Marine Ecosystems & the issue of Marine Natural Products and their Bioactive Metabolites. Bogor, Indonesia, October 2011.
 - Thermal and rheological behavior of selected Iranian honeys. 2nd International ISEKI Food Conference, Milan, Italy, August-September 2011.
 - The first application of a new polysaccharide from *Acanthophyllum pungens* for the health improvement of Atlantic salmon exposed to mercury chloride. 11th International

Congress on Engineering and Food. Athens, Greece, May 2011.

- Extraction, purification and characterization of a new Water-soluble polysaccharide from the roots of *Acanthophyllum knorringianum*. 6th International CIGR Technical Symposium on Food Process, Bioprocessing and Food Quality Management. Nantes, France, April 2011.
- Extraction, purification and characterization of a new Water-soluble polysaccharide from *Acanthophyllum Bracteatum* roots. International Conference on Agricultural Extension, Putrajaya, Malaysia, October 2010.
- Shelf-life Determination of Baghalapolo (Iranian Traditional Food), International Conference on Food Science, Isfahan University and Technology, September 2006.
- Shelf- life Determination of Canned Chicken Kebab, International Conference on Food Science, Isfahan University and Technology, September 2006.
- Shelf-life Determination of Canned Fesenjan (Iranian Traditional Food), International Conference on Food Science, Isfahan University and Technology, September 2006.

PATENTS

- Jahanbin, K., Hedayati, A.A. "*The health improvement of Atlantic salmon using a new polysaccharide from Acanthophyllum bracteatum roots*" Iranian Patent, 74803, Apr. 28, 2012.
- Jahanbin, K. "*Isolation, purification and characterization of a new gum from Acanthophyllum bracteatum roots (application in food science)*" Iranian Patent, 71559, Sep. 19, 2011.

AWARDS AND HONORS

- Top student in B.Sc. course, GPA 18.70 (out of 20)
- Top student in Ph.D. course, GPA 18.57 (out of 20)
- Young Assistant Professor Award by Iranian National Elite Foundation. (2013)
- Honors patent awarded and qualified by Iranian National Elites Founadtion (2012)
- The 10th Sheikh-Bahai Technopreneurship Festival Award (2014)

COURSES TAUGHT

M.S. (2011-2017 at Shahrood University of Technology)

- Research methods in food science

- New methods of food preservation
- Chemistry of Carbohydrates
- Advanced Laboratory Analytical Methods
- Advances in Food Engineering
- Chemical and functional properties of food components

B.Sc.

- General Biochemistry (2011-2017 at Shahrood University of Technology)
- Food Engineering (2009-2011 at Islamic Azad University of Shahr-e-ghods)
- Cooling & Freezing of Foods (2008-2009 at Islamic Azad University of Sabzevar)

SKILLS AND QUALIFICATIONS

Languages

- Persian: Native
- English: Good
- Italian: Intermediate

Computer

- Microsoft Office, Statistical software, Internet & ...