

Curriculum Vitae

Last update: † Jan 2023



SUMMARY

Team-oriented, creative and technically-experienced pharmaceutical Nano - biocomposite seeking research and developing position.

(Post doctorate) Nanotechnology Research Center, School of Pharmacy, Mashhad University of Medical Sciences, Mashhad 91775-1365, Iran

Personal details

Name: Davoud

Gender: Male

Date of birth: 1.5.1984

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Surname: Salarbashi

Marital status: Single

Citizenship: Iran

Academic qualifications

-Postdoctoral researcher, Nanotechnology Research Center, School of Pharmacy, Mashhad University of Medical Sciences, Mashhad, Iran.2016-2017

-PhD of Food Science and Technology, GPA: 17.19 out 20, Faculty of Agriculture, Ferdowsi University of Mashhad 2016 .Title thesis: Production and determination the properties of Bio-Nano composite film on Soybean soluble polysaccharides for use in packaging

Professional Experiences

- Assistant professor, Department of Nutrition & Biochemistry, School of Medicine, Gonabad University of Medical Sciences, Gonabad, Iran.2017-۲۰۲

- Postdoctoral Research Associate, Nanotechnology Research Center, School of Pharmacy, Mashhad University of Medical Sciences, Mashhad, Iran.2016-2017.

Objectives and major Interests

- Nanobiocomposite & immigration of nanoparticle
- Phytochemical Analysis
- Evaluation of biological properties of herbal extracts.
- Oral formulation nano-Curcumin effects on body.

Work Experiences and skills

1. Teaching Biochemistry, Food Chemistry, Food engineering, Food microbiology, Principles of Engineering, Energy transfer.

Teaching Food Packaging lesson in Hashemi Nejad University, Mashhad, Iran, 2013.

2. Teaching Coding & labeling of Food Packaging lesson in Part lastic university, Mashhad, Iran, 2012.

3. Teaching General Microbiology lesson in Hashemi Nejad University, Mashhad, Iran, 2012

4. Teaching Food Microbiology lesson in Hashemi Nejad University, Mashhad, Iran, 2011 & 2013.

5. Teaching Food Chemistry, Food Microbiology and Food Processing lessons in Mehr Gostar Shargh Institute, 2010

6. Ability to analyze and synthesis relevant data, and identify research directions

7. Extensive computer training, confident user of Microsoft office (MS Word, MS PowerPoint, etc.) and statistical software's (SAS, SPSS, Minitab, etc.)

8. Skilled at learning new concepts quickly, working well under pressure, and communicating ideas clearly and effectively

9. Familiar with response surface modeling using Design Expert software.

10. Ability to develop effective relationships with people at all levels (e.g. students, academic Staff and members of the public), including respectful and confidential communication.

11. setting up Nutrition and Food Science department in Gonabad medical university.

Membership Organization

- Agriculture and Natural Resources Engineering Organization, Iran

Language Skills

- General Revised GRE:**

Verbal score: 131

Quantitative: 149

Analytical writing 2.0

Overall: 140

Conference publications

1. Yasaei Mehrgrdy.G.R, **Salarbashi.D**, Ghanbari Shendi.E. Measurement of Lead and Cadmium Concentrations in traditional Kashk, *EuroFoodChem XVII, Istanbul,TURKEY May 7-10th, 2013.(Oral)*
2. Optimization of ultrasound-assisted extraction of phenolic compounds From *Plomidoschema Parviflorum* by response surface methodology and its impact on the stability of soybean oil. *20th National Congress of Food Science and Technology - Sharif University, Tehran, Iran. September 2011.* (Poster presentation).
3. Heydari.M, Mortazavi.S.A, Blourian.S, **Salarbashi.D**, Farsani.Z. Assessment of antioxidant activity of *Plomidoschema Parviflorum* methanolic extract and use in soybean oil. *20th National Congress of Food Science and Technology - Sharif University, Tehran, Iran. September 2011.* (Poster presentation).
4. **Salarbashi.D***, Rezaei.K, Rajaei.A, Karimkhani,M.H, Ahmadi.A. (2011).Effect of duration time of the ultrasound-assisted extraction on the total phenolic and anti-radical capacity of extracts from *Achillea beibrestinii*. *12th ICB and 4th ICBMB (12th Iranian Congress of Biochemistry & 4th International Congress of Biochemistry & Molecular Biology)* Mashhad, Iran 6-9 September 2011. (Presentation at Electronic poster session).
5. **Salarbashi.D***, Hadad Khodaparast.M.H, Nouri.B. "Study on enrichment of sponge cake with Soya flour". (Presented as poster presentation at the *1st International Congress on Food Technology* will be held from 03 to 06 November 2010, *Akdeniz University, Antalya, Turkey*).
6. **Salarbashi.D***, Hadad Khodaparast.M.H, Mansouri.A.R." Effect of wheat bug damage on the physical dough properties and semi flat bread baking quality of different Iranian wheat cultivars".(Presented as poster presentation at the *1st International Congress on Food Technology* will be held from 03 to 06 November 2010, *Akdeniz University, Antalya, Turkey*).
7. **Salarbashi.D***, Hadad Khodaparast.M.H. "Potential hazards of nitrate in drinking water and Ways to remove it and".(Poster presented at the *National Conference on Food Safety & Beverage*, 12-13 October 2010,Mazandaran University of medical sciences, *Mazandaran, Iran*)
8. **Salarbashi.D***, Hadad Khodaparast.M.H."Potential hazards of virus in drinking water and Ways to remove it and". (Poster presented at the *National Conference on Food Safety & Beverage*, 12-13 October 2010, Mazandaran University of medical sciences, *Mazandaran, Iran*).
9. **Salarbashi.D***."Evaluation of the safety of foods derived from genetically modified (GM) agriculture product". (Poster presented in the *Regional Conference of Food Industry*, 4 March 2008, Islamic Azad University of Quchan Branch, Quchan, Iran).
10. **Salarbashi.D***,Physical and antimicrobial properties of solouble soybean polysaccharide/nano clay Na bionanocomposite".(Poster presented at the *first international NLRCS congress*, 6-8 September 2017,Mashhad University of medical sciences, *Mashhad, Iran*)
11. **Salarbashi.D***,"Preparation of a eco-friendly nanocomposite from solouble soybean polysaccharide /closite 30B and evaluation of its antimicrobial and antimold activities".(Poster presented at the *first international NLRCS congress*, 6-8 September 2017,Mashhad University of medical sciences, *Mashhad, Iran*)
12. **Salarbashi.D***,"Development of a soluble soybean polysaccharide /SiO₂ bionanocomposite appereance, mechanical and anti-mold properties".(Poster presented at the *first*

international NLRCS congress, 6-8 September 2017, Mashhad University of medical sciences, **Mashhad, Iran**).

۱۳. **Salarbashi.D**, Mohsen Tafaghodi, Seyyed Mohammad aboutorabzade birjand, Jafar Hajavi Determination and characterization toxicity effect of TiO₂ nanoparticles on different cell lines. 8th (E-Poster presented at International E-congress on Nanosciences and Nanotechnology (**ICNN 2021**) February 17-18, 2021, Mashhad University of Medical Sciences, **Mashhad, Iran**.)

publications

Refereed Journal Articles

1. Sina Majidi, Jebrail Movaffagh, Hossein Kamali, Azadeh Shahroodi, Mohsen Tafaghodi, **Salarbashi.D***, (2022) **Development and characterization of sumatriptan-loaded soy bean polysaccharide nanofiber using electrospinning technique**. Volume 78, December 2022, 103940.) Journal of Drug Delivery Science and Technology
2. **Salarbashi.D***, Mohsen Tafaghodi, Omid Rajabi, Bibi Sedigheh Fazli Bazzaz, Vahid Soheili. (2022). Journal of food safety. Soluble soybean polysaccharide/TiO₂ nanocomposites: Biological activity, release behavior, biodegradability, and biosafety. <https://doi.org/10.1111/jfs.13024> - Wiley Online Library
3. **Salarbashi.D***; Bazeli.J; Fahmideh Rad.E (2020). An update on the new achievements in the nanocapsulation of anthocyanins. *Nanomedicine Journal (NMJ)*, Volume 7, Issue 2, Pages 87-97
4. **Salarbashi.D***, Mohsen Tafaghodi, Mojtaba Heydari-Majd. Fabrication of curcumin-loaded soluble soy bean polysaccharide/TiO₂ nanoparticles bio-nanocomposite for improved antimicrobial activity. *Nanomedicine Journal (NMJ)*. DOI:10.22038/nmj.2020.16156
5. Ahmad Rajaei, **Salarbashi.D***, Najmeh Asrari, Bibi Sedigheh Fazly Bazzaz, Seyyed Mohammad Aboutorabzade, Rezvan Shaddel. (2020) **Antioxidant, antimicrobial, and cytotoxic activities of extracts from the seed and pulp of Jujube (Ziziphus jujuba) grown in Iran**. *Food Science & Nutrition*
6. **Salarbashi. D***, Jahanbin.k, Tafaghodi.M, Fahmideh-Rad.E Prunus armeniaca gum exudates: An overview on purification, structure, physicochemical properties, and applications. (2020). *Food Science and Nutrition* .DOI: 10.1002/fsn3.2107.
7. **Salarbashi.D ***, Mohsen Tafaghodi, Bibi Sedigheh Fazly Bazzaz, Seyyed Mohammad aboutorabzade , Morteza Fathi. pH-sensitive soluble soybean polysaccharide/SiO₂ incorporated with curcumin for intelligent packaging applications. (2021). *Food Science and Nutrition*
8. **Salarbashi.D***, Bazeli.J, Fahime-Rad.E (2019) Fenugreek seed gum: Biological properties, chemical modifications, and structural analysis- A review. *International Journal of Biological Macromolecule*. 2019 Jul 2;138:386-393. doi: 10.1016/j.ijbiomac.2019.07.006.
9. Abolfazl shakeri, Gilda D'Urso; Seyedeh Faezeh Taghizadeh; Sonia Piacente; Saeed Norouzi; Vahid Soheili; Javad Asili; **Davoud Salarbashi***. (۲۰۱۹) LC-ESI/LTQOrbitrap/MS/MS and GC-MS profiling of *Stachys parviflora* L. and evaluation of its biological activities. *Journal of Pharmaceutical and Biomedical Analysis* 168 (2019) 209–216

10. Salarbashi.D, Javad Bazeli, Mohsen Tafaghodi. (2019)Environment-friendly green composites based on soluble soybean polysaccharide: A review. *International Journal of Biological Macromolecules*, **122**, (216-223).

11. Salarbashi.D*,Tafaghodi.M, Fazly Bazzaz.B.S. (2018). Soluble soybean polysaccharide/TiO₂ bionanocomposite film for food application. *Carbohydrate Polymers*. **Volume 186**, Pages 384-393 <https://doi.org/10.1016/j.carbpol.2017.12.081>

12. Salarbashi.D*,Tafaghodi.M, Fazly Bazzaz.B.S , Jafari.B. (2018)Characterization of soluble soybean (SSPS) polysaccharide and development of eco-friendly SSPS/ TiO₂ nanoparticle bionanocomposites. *International Journal of Biological Macromolecules* (*IJBIOMAC*).

Volume 112, June 2018, Pages 852-861. <https://doi.org/10.1016/j.ijbiomac.2018.01.182>.

13. Salarbashi.D*, Tafaghodi. (2018). An update on physicochemical and functional properties of newly seed gums. *Volume 119*, (1240-1247). *International Journal of Biological Macromolecules* (*IJBIOMAC*) (pii: S0141-8130(18)31412-0. doi: 10.1016/j.ijbiomac.2018.06.161).

14. Salarbashi.D*, Mohsen Tafaghodi, Bibi Sedigheh Fazly Bazzaz, Seyyed Mohammad aboutorabzade birjand. (2018)Characterization of a green nanocomposite prepared from soluble soy bean polysaccharide/ Cloisite 30B and evaluation of its toxicity. (pii: S0141-8130(18)32001-4. doi: 10.1016/j.ijbiomac.2018.07.183).*International Journal of Biological Macromolecules* (*IJBIOMAC*)

15. Malaekheh.B, Salarbashi.D*. (2018)Encapsulation and delivery of curcumin using some carbohydrate based system. *Volume5,Issue2,Page 57-61*. DOI: 10.22038/NMJ.2018.005.001. *Nanomedicine Journal (NMJ)*.

16. Salarbashi.D*, Shahidi Noghabib.M, Fazly Bazzaz.B.S, Shahabi-Ghahfarrokhi.I, Jafari.B, (2017) Eco-friendly soluble soybean polysaccharide/ nanoclay Na⁺ bionanocomposite: properties and characterization. *Carbohydrate Polymers*. **169** (524–532)

17. Salarbashi.D*, Seyed Ali Mortazavi , Mostafa Shahidi Noghabi, Bibi Sedigheh Fazly Bazzaz, Naser Sedaghat, Mohammad Ramezani, Iman Shahabi-Ghahfarrokhi. (2016). Development of new active packaging film made from a soluble soybean polysaccharide incorporated ZnO nanoparticles. *Carbohydrate Polymers*. **140**, Pages 220-227

18. Salarbashi.D*, Seyed Ali Mortazavi , Mostafa Shahidi Noghabic, Bibi Sedigheh Fazly Bazzazd, Naser Sedaghat, Mohammad Ramezani, Iman Shahabi-Ghahfarrokhi. (2015). Development of new active packaging film made from a soluble soybean polysaccharide incorporated ZnO nanoparticles. *140:220-227*.DOI: 10.1016/j.carbpol.2015.12.043. *Carbohydrate Polymers*.

19. Salarbashi.D, Tajik.S, Ghasemlou.M, Shojaee-Aliabadi.S, Khaksar.R, Hamid Moayyed, Shahidi Noghabi.M. . (2014). Development of new active packaging film made from a soluble soybean Polysaccharide incorporated Zataria multiflora Boiss and Mentha pulegium Essential oils .*Food Chemistry*. **146** (2014) 614–622

20. Salarbashi.D, Tajik.S,Ghasemlou.M, Shojaee-Aliabadi.S, Khaksar.R, Shahidi Noghabi.M.(2013). Characterization of an edible composite Film Based on Soluble soybean polysaccharide and Zataria multiflora Boiss and Mentha pulegium essential oils with improved antimicrobial Properties. *Carbohydrate Polymers*, **98**(1), 1127-1136

21. **Salarbashi.D***, Attaran Dowom.S, Fazli Bazzaz.B.S, Khanzadeh.F*, Soheili.V (2016). Evaluation, Prediction and Optimization the UAE Method by Response Surface Methodology Antioxidant and Biological Properties of *Stachys Parviflora L.* *Iranian Journal of Basic Medical Sciences (IJBMS)*.
22. **Salarbashi, D***, Fazly Bazzaz, B.S , Karimkhani, M.M. , Sabeti Noghabi, Z., Khanzadeh, F, Sahebkar, A.(2014) Oil stability index and biological activities of *Achillea biebersteinii* and *Achillea wilhelmsii* extracts as influenced by various ultrasound intensities. *Industrial Crops and Products*. 55(2014)163-172.
23. Heydarimajd.M , Rajaei.A *, **Salarbashi, D.**, Mortazavi.S.A, Bolourian.S Optimization of ultrasonic-assisted extraction of phenolic compounds from bovine pennyroyal (*Phlomischema parviflorum*) leaves using response surface methodology. *industrial crops and products.*(2014) *Volume 57, , Pages 195-202*
24. **Salarbashi.D***, Khanzadeh.F, Mohamadi.M, Hosseini.S.M, Rajaei.A, Darayi.A*. (2014) "Prediction the extraction yield using artificial neural network and response surface methodology: Ultrasound-assisted extraction from *Achillea berbresteinii*. *Quality Assurance and Safety of Crops & Foods*, ISSN: 1757-8361 (Print), 1757-837X (Online). DOI 10.3920/QAS2013.0245.
25. **Salarbashi ***, Fazly-Bazzaz .B.S, Sahebkar.A, Karimkhani.M.M, Ahmadi.A (2011) Investigation of optimal extraction, antioxidant and antimicrobial activities of *Achillea biebersteinii* and *A. wilhelmsii*. *Pharmaceutical Biology*, DOI: 10.3109/13880209.2012.662235.
26. Ahmadi.A, Milani.E, Madadlou.A, Mortazavi.S.A, Rezaei Mokarram.R, **Salarbashi.D.** (2012) Synbiotic yog-ice cream produced via incorporation of microencapsulated *Lactobacillus acidophilus* (La-5) and fructooligosaccharide. *Food Science and Biotechnology*, DOI 10.1007/s13197-012-0679-y
27. **Salarbashi.D***, Mortazavi.S.A, Rezae.K, Rajaei.A, Karimkhani.M.M.(2011) Optimization of ultrasound-assisted extraction of phenolic compounds From *Achillea beibrestinii* by response surface methodology. *Food Science and Biotechnology*, DOI 10.1007/s10068-012-0131-0.
28. **Salarbashi.D**, Ghani .A*, Asili.A. (2013) Essential Oil Composition of *Pulicaria gnaphalodes* (Vent.) Boiss. Growing in Iran. *Journal of Essential Oil Bearing Plants (JEOBP)*, 16:2, 252-256, DOI:10.1080/0972060X.2013.794036
29. **Salarbashi.D**, Asili.J, Mohtashami.S*, Kaboli Farshchi.H.(2014). Composition of Essential Oil of *Oxytropis kuchanensis* from Iran. *Chemistry of Natural Compounds*. DOI: 10.1007/s10600-014-0897-9. ISSN: 00093130.
30. **Salarbashi.D**, Emami.S.A, Iranshahy.M*, Asili.J. (2013) Essential Oil Composition of Aerial Parts of *Stachys parviflora* Linn. From Iran. *Journal of Essential Oil Bearing Plants (JEOBP)*, 16:2, 261-264, DOI:10.1080/0972060X.2013.793982.

1. An update on new developed nanoencapsulation systems to enhance bioactivity of some essential oils (Thyme, Lippia sidoides, Eucalyptus staigeriana, and Eucalyptus citriodora essential oils). A Review.

Award & Grants

1. Iran national science foundation. Presidency of Islamic republic of Iran. Chemistry Grant. 2018 (<http://en.isnf.org>)
2. Deputy of Research, Ministry of Health and Medical education of Iran.2018
3. Deputy of Research, Ministry of Health and Medical education of Iran.2020
4. Deputy of Education, Ministry of Health and Medical education of Iran.2019
5. Iranians national foundation of Elites membership 2014. (<http://en.bmn.ir/>)
6. Iranians national foundation of Elites Grant. 2014

Patent

1. Iranian patent No: 7783, June 2013.” **Production of antimicrobial biodegradable packaging from soybean waste polysaccharide**”
2. Iranian patent No:, Feb 2015.” : **Production of nano composite film packaging based on soluble soybean polysaccharide and nanoclay to be used in food packaging**”

Educational workshops

1. **Practical Bioinformatics.** 3RD Iranian Agricultural Biotechnology Congress, Mashhad, Iran, September 2012.
2. **Polymerase Chain Reaction (PCR).** 12th ICB and 4th ICBMB (12th Iranian Congress of Biochemistry & 4th International Congress of Biochemistry & Molecular Biology) Mashhad, Iran, September 2011.
3. **Single Cell Gel Electrophoresis (SCGE, Comet) Assay.** 12th ICB and 4th ICBMB (12th Iranian Congress of Biochemistry & 4th International Congress of Biochemistry & Molecular Biology)Mashhad, Iran September 2011.
4. **Nutritional Biochemistry** 12th ICB and 4th ICBMB (12th Iranian Congress of Biochemistry & 4th International Congress of Biochemistry & Molecular Biology) Mashhad, Iran Teachers: *Prof.Angelo Azzi* and *Dr.Gordone ferns.* September 2011.
5. **ANCA Testing and utility.** 12th ICB and 4th ICBMB (12th Iranian Congress of Biochemistry & 4th International Congress of Biochemistry & Molecular Biology) Mashhad, Iran. Teacher: *Dr.Ronald A Booth.* September 2011.
6. **Price transmission in Agriculture market.** University of Ferdowsi Mashhad, Iran October 2010.
7. **Super critical Fluid Co2 and Subcritical Water Extraction Technology** Khorasan Razavi Research center of Food science and Technology, Mashhad, Iran. Teacher: *Prof.Eshtiaghi.M.N*

8. **New Technologies in Food science (Ultrasound,PEF,etc.)** Khorasan Razavi Research center of Food science and Technology, Mashhad, Iran. Teacher: *Prof.Eshtiaghi.M.N*
9. **Nutrition in ICU.** (at the *first international NLRCS congress*, 6-8 September 2017,Mashhad University of medical sciences, *Mashhad, Iran*)
10. **How to write a scientific text and how to promote scientific level of journal?** .(at the *first international NLRCS congress*, 6-8 September 2017,Mashhad University of medical sciences, *Mashhad, Iran*)
11. **How to write a scientific text and how to deal with rejected papers?** .(at the *first international NLRCS congress*, 6-8 September 2017,Mashhad University of medical sciences, *Mashhad, Iran*)

Cooperation as a reviewer of international scientific journals

1. Journal of Global Antimicrobial Resistance (publisher: PubMed)
2. Food Chemistry (publisher: Elsevier) 3. Pharmaceutical Biology (publisher: Elsevier)

Current projects

1. Evaluation of oral formulation nano-Curcumin effect on ovarian hyperstimulatory syndrome and follicular development in IO patients with PCOS.
2. The relation of malnutrition with depression, anxiety and urinary oxidative stress index (8-OHdG) in primary school students in Gonabad
3. Use of Prunus armeniaca gum exudates (PAGE) in control release of curcumin from nanoparticles based PAGE.
4. Production of nanofibers from soluble soybean polysaccharide containing clove oil by electrospinning method and its antimicrobial properties.
5. Control release properties of Sumatriptan from SSPS based fabricate by electro spinning
6. Antimicrobial, antioxidant and anti-inflammatory properties of Thyme essential oil encapsulated in chitosan-capric acid and chitosan-stearic acid nanogels.
7. Development of long-wetting Calendula-based multi-lamellar liposomal formulations for dermatitis
8. Assessment of nano clay particles migration from soluble soybean polysaccharide/nano clay active packaging into Food by graphite furnace atomic absorption spectrometry
9. Novel Active Surface Prepared by Embedded Functionalized Clays in an Acrylate Coating and soluble soybean polysaccharide and investigation of releasing nanonano particle in food simulant
10. Assessment of engineered nanoparticles migration from soluble soybean polysaccharide/nanoparticles composite packaging into food simulants by fluorescent labeling

11. Phytochemistry analysis extract of Ziziphus Jujuba.

Referees

1. **Mohsen Tafaghodi (Pharm.D., Ph.D.)**

Professor in Pharmaceutics, Nanotechnology Research Center, School of Pharmacy, Mashhad University of Medical Sciences, Mashhad, Iran. Tel (Office): **+98-5131801337**

2. **B.S. Fazly Bazzaz, Ph.D.**

Professor of Pharmaceutical Microbiology Head, Department of Medicinal Chemistry, School of Pharmacy; Biotechnology Research Center; Mashhad University of Medical Sciences Mashhad, Iran Cell phone: +98-9151114199 Tel (Office): +98-5131801337 E-mail: fazlis@mums.ac.ir Address: School of Pharmacy, P.O.Box 91775-1365, Mashhad, Iran