

Curriculum Vitae

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Academic Position:

July 2011-present: Associate Professor, Departments of Quality Control, and center for nanotechnology in drug delivery, Shiraz University of Medical Sciences, Shiraz, Iran.

Education:

2004-2011 Ph.D. in Pharmaceutics, Faculty of pharmacy, Tehran University of Medical Sciences, Tehran, Iran.

1996-2003 Pharm D, Faculty of pharmacy, Shiraz University of Medical Sciences, Shiraz, Iran.

Research interests:

- 1- Development of polymeric nanoparticles for drug delivery
- 2- Development of inorganic nanoparticles for drug delivery
- 3- Using photo thermal therapy technique for cancer treatment
- 4- Quality control techniques for pharmaceutical dosage forms
- 5- Quality control techniques for antimicrobial agents
- 6- Pharmacokinetic studies of drug delivery systems

Publications:

1. Koochi Hosseinabadi O., Behnam M.A., Khoradmehr A., Emami F., **Sobhani Z.**, Dehghanian A.M., Dehghani, Firoozabadi A., Rahmanifar F., Vafaei H., Tamadon A.D., Tanideh N., Tamadon A., Benign prostatic hyperplasia treatment using plasmonic nanoparticles irradiated by laser in a rat model, *Biomedicine and Pharmacotherapy*, 2020: 127,110-118
2. **Sobhani Z.***, Khademi R., Behnam M.A., Akbarizadeh A.,R., Preparation and characterization of TiO₂-PEG NPs loaded doxorubicin. *Trends in Pharmaceutical Sciences*, 2019, 5(2): 93-102
3. Mosavat S.H., Jaberi A.R., **Sobhani Z.**, (...), Iraj, A., Moayedfard, A. Efficacy of Anise (*Pimpinella anisum* L.) oil for migraine headache: A pilot randomized placebo-controlled clinical trial, *J of Ethnopharmacology*, 2019, 236:155-160
4. Behnam M. A., Emami F., Dehghanian A.R. , **Sobhani Z.***, Application of Pegylated Titanium Dioxide Nanoparticles in Photothermal Therapy of Melanoma Cancer Model, *Iranian Journal of Basic Medical Sciences*, 2018, 21(11): 1133-1139
5. Zare M., Samani S.M., **Sobhani Z.***, Enhanced Intestinal Permeation of Doxorubicin Using Chitosan Nanoparticles. *Advanced Pharmaceutical Bulletin*, 2018, 8(30 ;411-417
6. Behnam M.A., Emami F., **Sobhani Z. ***, Koochi-Hosseinabadi O., Dehghanian A.R., Zebarjad S.M., Moghim M.H., Oryan A., Novel combination of silver nanoparticles and carbon nanotubes for plasmonic photo thermal therapy in melanoma cancer model. *Advanced Pharmaceutical Bulletin*, 2018, 8(1): 49-55
7. **Sobhani Z.**, Samani S.M., Montaseri H., Khezri E. Nanoparticles of chitosan loaded ciprofloxacin: Fabrication and antimicrobial activity. *Advanced Pharmaceutical Bulletin*, 2017, 7(3): 427-432
8. Nejabat M., Reza S.A., Zadmehr M., Yasemi M.Y., **Sobhani Z.** Efficacy of green tea extract for treatment of dry eye and meibomian gland dysfunction; a double-blind randomized controlled clinical trial study. *Journal of Clinical and Diagnostic Research*, 2017, 11(2): NC05-NC08
9. **Sobhani Z.**, Behnam M.A., Emami F., Dehghanian A., Jamhiri I. Photothermal therapy of melanoma tumor using multiwalled carbon nanotubes. *International Journal of Nanomedicine*, 2017, 12: 4509-4517

10. Farvadi F., Tamaddon A., **Sobhani Z.**, Abolmaali S.S. Polyionic complex of single-walled carbon nanotubes and PEG-grafted-hyperbranched polyethyleneimine (PEG-PEI-SWNT) for an improved doxorubicin loading and delivery: development and in vitro characterization. *Artificial Cells, Nanomedicine, and Biotechnology*, 2017, 45(5):855-863
11. **Sobhani Z.***, Montaseri H., Mohammadi Samani S., Ahmadi F., Assessment of intestinal permeability of paclitaxel in the presence of NSAIDs and P-glycoprotein inhibitors. *Trends in Pharmaceutical Sciences*. 2017, 3(4): 267-274
12. Mosavat S.H., Ghahramani L., **Sobhani Z**, Rahmanian Haghghi E., M., RostamiChaijan , Heydari M. The effect of leek (*Allium iranicum*(Wendelbo) Wendelbo) leaves extract cream on hemorrhoids patients: A double blind randomized controlled clinical trial. *European Journal of Integrative Medicine*, 2015, 7(6):669-673
13. Mosavat S.H., Ghahramani L., **Sobhani Z**, RahmanianHaghghi E., Heydari M., Topical *Allium ampeloprasum*SubspIranicum (Leek) Extract Cream in Patients With Symptomatic Hemorrhoids: A Randomized and Controlled Clinical Trial. *Journal of Evidence-Based Complementary & Alternative Medicine*, 2015, 20(2):132-136
14. Farvadi F., TamaddonA.M., AbolmaaliS.S., **SobhaniZ.**, YousefiG.H., Micellar stabilized single-walled carbon nanotubes for a pH-sensitive delivery of doxorubicin. *Researches in pharmaceutical sciences*, 2014, 9(1): 1-10
15. Montaseri H., Mohammadi-Samani S., Zarea B., **Sobhani Z.***, Ahmadi F., Enhanced oral bioavailability of paclitaxel by concomitant use of absorption enhancers and P-glycoprotein inhibitors in rats. *Journal of Chemotherapy*, 2013, 25(6): 355-361
16. Jahanbakhsh ., Atyabi F., Shanehsaz zadeh S., **Sobhani Z.**, Adeli M., Dinarvand R., Modified Gadonanotubes as a promising novel MRI contrasting agent. *DARU Journal of Pharmaceutical Sciences*, 2013, 21:53
17. Adeli M., Hakimpour F., Parsamanesh M., Kalantari M., **Sobhani Z.**, Atyabi F., Quantum dot-pseudopolyrotaxanesupramolecules as anticancer drug delivery systems. *Polymer*, 2011(52): 2401-2413
18. **Sobhani Z.**, Dinarvand R., Adeli M., Ghahremani M.H., Atyabi F., Increased paclitaxel cytotoxicity against cancer cell lines using a novel functionalized carbon nanotubes. *International Journal of Nanomedicine*, 2011(6): 705-719

19. Adeli M., Mirab N., Shafiee Alavidjeh M., **Sobhani Z.**, Atyabi F., Carbon nanotubes-graft-polyglycerol: Biocompatible hybrid materials for nanomedicine. *Polymer*, 2009(50): 3528-3536
20. **Sobhani Z.**, *Ph.D. Thesis*: Preparation and Evaluation of a Drug Delivery System by Using Modified Carbon Nanotubes with Polymer. Faculty of pharmacy, Tehran University of Medical Sciences, Tehran, Iran. 2011, *Supervised by*:
- Atyabi F., Pharm D., Ph.D., Faculty of pharmacy, Tehran University of Medical Sciences, Tehran, Iran.
 - Dinarvand R., Pharm D., Ph.D., Faculty of pharmacy, Tehran University of Medical Sciences, Tehran, Iran.
 - Adeli M. Ph.D. Department of Chemistry, Faculty of Science, Lorestan University, Khoramabad, Iran.
21. **Sobhani Z.**, *Pharm D. thesis*: Assessment of intestinal permeability of paclitaxel in the presence of NSAIDs and P-glycoprotein inhibitors. Faculty of pharmacy, Shiraz University of Medical Sciences, Shiraz, Iran. 2003, *Supervised by*:
- Montaseri H., Pharm D., Ph.D., Faculty of pharmacy, Shiraz University of Medical Sciences, Shiraz, Iran.
 - MohammadiSamani S., Pharm D., Faculty of pharmacy, Shiraz University of Medical Sciences, Shiraz, Iran.

Patents:

1. Atyabi F., Adeli M., **Sobhani Z.**, Dinarvand R., Ghahremani M.H., inventors of: Poly (citric acid) functionalized carbon nanotubes drug delivery system. *United States Patent Application Publication*, Dec. 23, 2010, US 2010/0324315 A1

Conference Presentations:

1. Kazemi M., Sobhani Z., Exosomes, microvesicles as diagnosis, therapeutics and drug delivery tools. Harmacy Updates. 2018, Tehran, Iran.
2. **Sobhani Z.**, Behnam M.A., Emami F., Dehghanian A.R., Application of thitanium dioxide in photo thermal therapy of cancer. The 8th International Congress on Nanoscience and Nanotechnology, July 2018, Moscow, Russia.
3. Sobhanian N., **Sobhani Z.**, Silica coated TiO₂ nanoparticles loaded doxorubicin using pH sensitive bond. The 8th International Congress on Nanoscience and Nanotechnology, July 2018, Moscow, Russia.
4. **Sobhani Z.**, Khademi R., Titanium dioxide nanoparticles as carrier for anticancer drug. The 15th Iranian Pharmaceutical Sciences Congress, October 2017, Hamadan, Iran.
5. Behnam M.A., Emami F., **Sobhani Z.**, Application of carbon nanotubes and thitanium dioxide in cancer photo thermal therapy. International Conference on Electrical Engineering, June 2016, Tehran, Iran.
6. Behnam M.A., Emami F., **Sobhani Z.**, Application of Plasmonic nanoparticles in cancer therapy. The 3rd National Conference and 1st International Conference on Applied Researches in Electrical, Mechanical and Mechatronics Engineering, February 2016, Tehran, Iran.
7. **Sobhani Z.**, Behnam M.A., Emami F., Inorganic nanoparticles for photo thermal therapy of cancer, The 14th Iranian Pharmaceutical Sciences Congress, December 2015, Tehran, Iran.
8. Ahmadi F, Mohammadi Samani S., **Sobhani Z.**, Karimaddini S., Preparation and evaluation of oral mucoadhesive gel of nystatin containing alginate microparticles. Poster presentation. The 1th Middle East and the 6th Iranian Controlled Release Conference, February 2014, Tehran, Iran
9. Tamaddon A.M., Farvadi F.S., Abolmaali S.S., **Sobhani Z.**, PEG frafited hyperbranched poly ethyleneimine- oxidized single walled carbon nanotubes for a sustained delivery of doxorubicin. Colloids & Nanomedicine Congress, July 2012, Amsterdam, Netherlands.

10. **Sobhani Z.**, Atyabi F., Dinarvand R., Adeli M., Drug delivery with a novel functionalized carbon nanotube for cancer treatment. Oral presentation, The 5th Iranian Controlled Release Conference, October 2011, Mashhad, Iran
11. **Sobhani Z.**, Atyabi F., Dinarvand R., Adeli M., Functionalized carbon nanotubes for anticancer drug delivery. Oral presentation, The 4th Iranian Controlled Release Conference, October 2009, Zanjan, Iran.
12. **Sobhani Z.**, Dinarvand R., Hamidi M., Sanati E., Preparation of poly vinyl alcohol nanoparticles using freezing-thawing process. Poster presentation, The 3th Iranian Conference of Novel drug Delivery Systems, June 2007, Tehran, Iran.
13. **Sobhani Z.**, Application of nanoparticles in vaccine delivery systems. Oral presentation, One-day Seminar on Nanotechnology and Its Applications in Medical Sciences, March 2006, Shiraz, Iran.
14. **Sobhani Z.**, Ahmadi F., Montaseri H., MohammadiSamani S., In vitro evaluation of paclitaxel intestinal permeability. Poster presentation, The 9th Iranian Pharmaceutical Students Seminar, May 2003, Tabriz, Iran.
15. Ahmadi F., **Sobhani Z.**, Montaseri H., MohammadiSamani S., Bioavailability of paclitaxel after oral administration to rat. Poster presentation, The 9th Iranian Pharmaceutical Students Seminar, May 2003, Tabriz, Iran.
16. **Sobhani Z.**, Ahmadi F., Montaseri H., PEG-PBLA nanoparticles as solubilizing system for paclitaxel. Poster presentation, The 8th Iranian Congress of Pharmaceutical Sciences, August 2002, Shiraz, Iran.
17. Ahmadi F., **Sobhani Z.**, Montaseri H., Evaluation of intestinal permeability of paclitaxel in the presence of HP β CD and nicotine amide by using ⁵¹Cr-EDTA technique. Poster presentation, The 8th Iranian Congress of Pharmaceutical Sciences, August 2002, Shiraz, Iran.
18. Zarea B., **Sobhani Z.**, Ahmadi F., Montaseri H., Effects of NSAIDs on the oral absorption of paclitaxel. Poster presentation, The 8th Iranian Congress of Pharmaceutical Sciences, August 2002, Shiraz, Iran.
19. Tabatabaei M.H., Dastmalchi A., **Sobhani Z.**, Enantiospecific synthesis of heterocycles from α -aminoacids. Poster presentation, The 6th Iranian Pharmaceutical Students Seminar, March 2000, Abadan, Iran.

Thesis supervised:

1. Farvadi F.,(Pharm.D.), 2012:Co-Supervisor, SWNT-COOH/mPEG-g-PEI for targeted delivery of doxorubicin in breast tumor cells, Faculty of Pharmacy, Shiraz
2. Firouzi M.R., (Pharm. D), 2013: Co-supervisor, Comparison of penicillin and ampicillin for injection domestic products and compare them with the productions abroad by microbial analysis method. International branch of Shiraz University of Medical Sciences.
3. Karimaddini S., (Pharm.D.), 2013:Co-Supervisor, Preparation and evaluation of oral mucoadhesive gel of nystatin containing alginate microparticles.International branch of Shiraz University of Medical Sciences.
4. Mansourian Sh., (Pharm.D.), 2014: Supervisor, Preparation and evaluation of alginate microparticles containing rifampin for pulmonary drug delivery. International branch of Shiraz University of Medical Sciences.
5. Bagheri S., (Pharm.D.), 2014: Supervisor, Preparation and evaluation of chitosan microparticles containing rifampin for pulmonary drug delivery.International branch of Shiraz University of Medical Sciences.
6. Khezri E., (Pharm.D.), 2014: Supervisor, Evaluation of antibacterial activity of chitosan nanoparticles containing ciprofloxacin hydrochloride.International branch of Shiraz University of Medical Sciences.
7. Arazi M.R., (Pharm.D.), 2014: Supervisor, Preparation and evaluation of chitosan nanoparticles containing sodium sulfacetamide.International branch of Shiraz University of Medical Sciences.
8. Rezaye H., (Pharm.D.), 2014: Supervisor, Modification of carbon nanotubes with chitosan as an antibiotic delivery system. International branch of Shiraz University of Medical Sciences.
9. Alishiri M., (Pharm.D.), 2014: Supervisor, Preparation and evaluation of buccal mucoadhesive tablet of nystatin.International branch of Shiraz University of Medical Sciences.

10. Mosavat S.H., (Ph.D.), 2015: Double blind randomized placebo- control trial of Allium Ampeloprasum susp. Iranian cream efficacy for the management of hemorrhoids with comprehensive review of anorectal disease in traditional Iranian medicine. Faculty of Medicine, Shiraz.
11. Neamati M., (Pharm.D.), 2015: Co-Supervisor, Preparation and evaluation of Gastro-floating and controlled-release granules and tablets contains Ranitidine hydrochloride, Aluminum hydroxide and Magnesium hydroxide. International branch of Shiraz University of Medical Sciences.
12. Behnam M.A., (MS), 2015: Co-Supervisor, Application of plasmonic nanoparticles for cancer therapy. Shiraz University of Technology
13. Zare M., (Pharm.D.), 2015: Supervisor, Preparation and evaluation of chitosan nanoparticle loaded doxorubicin for improving oral absorption. International branch of Shiraz University of Medical Sciences.
14. Khademi R., (Pharm.D.), 2017: Supervisor, Preparation and evaluation of Titanium dioxide nanoparticles coated with PEG contain doxorubicin. International branch of Shiraz University of Medical Sciences.
15. Kiani M.R., (Pharm.D.), 2018: Co-Supervisor, Formulation of liquid Single dose of ORS with Sumac, extracted from traditional Persian Pharmacy. Shiraz University of Medical Sciences.
16. Falahatzadeh M., (Pharm.D.), 2019: Co-Supervisor, Study of simple and compound medicaments for skin wound management and topical formulation of Zaroor-e-Arbae from traditional Persian Pharmacy. Shiraz University of Medical Sciences.
17. Mehrzad A.H., (Pharm D), 2019: Supervisor, Preparation of PEGylated carbon nanotubes loaded doxorubicin and evaluation the antimelanoma activity of it, with and without laser therapy, in comparison with doxorubicin solution. International branch of Shiraz University of Medical Sciences.
18. Najafin B., (Pharm D), 2019: Supervisor, Preparation of PEGylated titanium dioxide nanoparticles loaded doxorubicin and evaluation the antimelanoma activity of it, with and without laser therapy, in comparison with doxorubicin solution. International branch of Shiraz University of Medical Sciences.
19. Sobhanian N., (Pharm D), 2019: Supervisor, Preparation and characterization of Silica coated TiO₂ nanoparticles and bonding doxorubicin through pH sensitive bonds for drug delivery.