

# **Curriculum Vitae**

**Katayoun Derakhshandeh**

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KatayounDerakhshandeh



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Objective:

- Associated Professor of Pharmaceutics, Faculty of Pharmacy, Kermanshah University of Medical Sciences, Kermanshah, Iran
- Head of Department of Pharmaceutics, Faculty of Pharmacy, Kermanshah University of Medical Sciences, Kermanshah, Iran
- Head of Nano Drug Delivery Research Center, Faculty of Pharmacy, Kermanshah University of Medical Sciences, Kermanshah, Iran
- Vice-chancellor for Education Affairs, Faculty of Pharmacy, Kermanshah University of Medical Sciences, Kermanshah, Iran
- Vice-chancellor for Education Affairs, Faculty of Pharmacy, Hamadan University of Medical Sciences, Hamadan, Iran
- Faculty President, Faculty of Pharmacy, Hamadan University of Medical Sciences, Hamadan, Iran

Education:

- Diploma of Experimental Sciences (۱۹۹۰-۱۹۹۴): National Organization for Development of Exceptional Talents (NODET also known as SAMPAD in Persian), Hamedan, Iran.
- Success to pass medical college exam, Fatemieh University of Medical Sciences, in ۱۹۹۳
- Graduated from pharmacy college, Azad university as the first student in ۱۹۹۹
- Passed exam of PhD of pharmaceutics as the third student in ۱۹۹۹
- Graduated from College of Pharmacy, ShaheedBeheshti University in PhD degree in ۲۰۰۶

#### Experience:

- Researcher of R&D pharmaceutical company of Iran Daru from ۱۹۹۸ until ۲۰۰۲
- Skilled in all aspects of medication preparation and pharmacy operation
- Formulation of conventional drugs and modification of prior formulations in company
- Formulation of new drug delivery systems in college and company
- Skilled in analysis and assay of drugs with HPLC, UV, GC, Atomic absorption and TLC
- Skilled in animal operation like cannulation and pharmacokinetic investigation in lab animals
- Expert to statistical experiment like Design expert (factorial experimental design)
- Have experience in bioequivalency testing of oral drugs
- Expert to micro and nanocarriers formulation

#### Publications:

- ۱- Zarghi A, Derakhshandeh K, Shafiee A. Synthesis and calcium antagonist activity of new ۱,۴-dihydropyridines containing nitrobenzylimidazolyl substituent in guinea-pig ileal smooth muscle. *Boll.Chim.Farmac.* ۲۰۰۲; ۱۴۱: ۱۵-۲۰.
- ۲- Derakhshandeh K\*. Effect of antioxidants in anti solar formulations in *Razi drug magazine.* ۲۰۰۰.
- ۳- Derakhshandeh K, Dadashzadeh S. Liquid chromatographic quantitation of the lactone and the total of lactone and carboxylate forms of ۹-nitrocamptothecin in human plasma. *J Chromatogr B.* ۲۰۰۵; ۸۱۸(۲): ۱۹۹-۲۰۴.
- ۴- Derakhshandeh K, Erfan M, Dadashzadeh S. Encapsulation of ۹-nitrocamptothecin, a novel anticancer drug, in biodegradable nanoparticles: factorial design, characterization and release kinetics. *Eur J Pharm biopharm.* ۲۰۰۷; ۶۶: ۳۴-۴۱.
- ۵- Dadashzadeh S, Derakhshandeh K, Shirazi F.H., ۹-Nitrocamptothecin polymeric nanoparticles: Cytotoxicity and pharmacokinetic studies of lactone and total forms of drug in rats. *Anticancer Drugs.* ۲۰۰۸ Sep; ۱۹(۸): ۸۰۵-۱۱.

٦- Derakhshandeh K\*, Sohrabi A. Pharmacokinetic study and comparative bioavailability of two Nelfinavir tablet formulations in Iranian healthy volunteers after a low dose administration. *International journal of Clinical Pharmacology and therapeutics*. ٢٠٠٩ July ٤٩١-٤٩٨.

٧- Derakhshandeh K\*, Dadashzadeh S., Soheili M. Preparation and *in vitro* characterization of ٩-nitrocamptothecin-loaded long circulating nanoparticles for delivery in cancer patients. *International Journal of Nanomedicine*. ٢٠١٠. July ٤٦٣-٤٧١.

٨- Derakhshandeh K\*, Mohebbi M. Oral bioavailability and pharmacokinetic study of cetirizine HCl in Iranian healthy volunteers. *Research in Pharmaceutical Sciences*. ٢٠٠٩, No. ٤(٢), P: ١١٣-١٢١.

٩- Derakhshandeh K\*, Fashi M, Seifoleslami S. Thermosensitive Pluronic® hydrogel: prolonged injectable formulation for drug abuse. *Drug Design, Development and Therapy*. ٢٠١٠, No. ٤, P: ٢٥٥-٢٦٢.

١٠- Derakhshandeh K\*, Soleimani M. Formulation and *in vitro* evaluation of nifedipine controlled release tablet: influence of a combination of hydrophilic and hydrophobic matrix forms. *Asian Journal of Pharmaceutics*. ٢٠١٠; ٤(٤), ١٨٥-١٩٣.

١١- Derakhshandeh K\*, Nikmohammadi M, Hosseinalizadeh A. Factorial effect of process parameters on pharmaceutical characteristics of biodegradable PLGA microparticles. *International Journal of Drug Delivery*. ٢٠١١; ٣: ٣٢٤-٣٣٤

١٢- Derakhshandeh K\*, Hochhaus G, Dadashzadeh S. *In vitro* cellular uptake and transport study of ٩-nitrocamptothecin PLGA nanoparticles across Caco-٢ cell monolayer model. *Iranian Journal of Pharmaceutical Research*. ٢٠١١; ١٠ (٣): ٤٢٥-٤٣٤.

١٣- Derakhshandeh K\*, Nikmohammadi M, Hosseinalizadeh A. The effects of PLGA microparticles on intestinal absorption of P-glycoprotein substrate by the everted rat intestinal sac model. *Archives of Pharmacal Research*. ٢٠١١ (٣٤), ١٩٨٩-١٩٩٧.

۱۴- Kashanian S, HematiAzandariyani, Derakhshandeh K\*. New surface-modified solid lipid nanoparticles using N-glutarylPhosphatidylethanolamine as the outer shell. International Journal of Nanomedicine. ۲۰۱۱ (۶), ۲۳۹۳ – ۲۴۰۱.

۱۵- Moradi M., Karimian B., Derakhshandeh K., Fashi M., Samadzadeh B., Bardideh A. Efficacy of IntraurethralMitomycin C Hydrogel in Prevention from Anterior Urethral Stricture Recurrence After Internal Urethrotomy. Urology. Supplement ۲۰۱۱, ۷۸(۳), S۱۱۶.

۱۶- Madaeni S.S, Derakhshandeh K, Ahmadi S, Vatanpour V, Zinadini S. Effect of modified multi-walled carbon nanotubes on release characteristics indomethacin from symmetric membrane coated tablets. Journal of Membrane Science. ۳۸۹ (۲۰۱۲) ۱۱۰-۱۱۶.

۱۷- Derakhshandeh K\*, Hamed Z, Karimi M, Amiri M, Ahmadi F. Formulation Optimization of Low Bioavailable Drug Loaded Alginate Microparticles Using Artificial Neural Networks. Journal of Reports in Pharmaceutical Sciences. ۲۰۱۲, ۱(۱). ۴۱-۵۱.

۱۸- Derakhshandeh K\*, Fathi S. Role of chitosan nanoparticles in the oral absorption of Gemcitabine. International Journal of Pharmaceutics. ۲۰۱۲ Aug ۱۴. ۱۷۲-۱۷۷.

۱۹- Derakhshandeh K\*, Haghkhah M, Amiri M. Study of the copolymer structure effect on physicochemical characteristics and invitro stability of PLGA-PEG nanoparticles loaded ۹-nitrocamptothecin. Journal of Reports in Pharmaceutical Sciences, ۲۰۱۲, Vol ۱(۲), ۹۹-۱۰۹.

۲۰- Derakhshandeh K\*, Afshari M, Hosseinzadeh L. Nanocarrier of anticancer drugs. European Journal of Pharmaceutical Sciences. Volume ۵۰, Supplement ۱, ۳۰ September ۲۰۱۳, Pages ۱-۲۳۴

۲۱. Afshari M, Derakhshandeh K\*, Hosseinzadeh L. Characterisation, cytotoxicity and apoptosis studies of methotrexate-loaded PLGA and PLGA-PEG nanoparticles. Journal of Microencapsulation. ۲۰۱۴; ۳۱(۳): ۲۳۹-۲۴۵.

۲۲. Derakhshandeh K\*, Ghasemnejad berenji M. Development and optimization of buspirone oral osmotic pump tablet. Research in Pharmaceutical Sciences. ۲۰۱۴; ۹(۴): ۲۳۳-۲۴۱.

۲۳. Derakhshandeh K\*, Abdollahipour R. Oral mucoadhesive paste of Triamcinolone Acetonide and Zinc Sulfate: Preparation and in vitro physicochemical characterization. Journal of Reports in Pharmaceutical Sciences. ۲۰۱۴, ۳(۲), ۱۱۵-۱۲.

۲۴. Ahmadi F, Derakhshandeh K., Hoseinzadeh L., Jalalizadeh A. Encapsulation in PLGA-PEG ۵% enhances ۹- Nitrocamptothecin mediated cytotoxicity to human ovarian carcinoma cell line through apoptosis pathway. Research in Pharmaceutical Sciences. April ۲۰۱۵; ۱۰(۲): ۱۶۱-۱۶۸

۲۵. Shahlaei M., Andisheh H., Derakhshandeh K., Sadrjavadi K. A novel method for simultaneous determination of codeine and acetaminophen in plasma by combination of UV-Vis spectroscopy and artificial neural network. Journal of Reports in Pharmaceutical Sciences. ۲۰۱۴, ۳(۲), ۱۴۱-۱۵۸.

۲۶. Derakhshandeh K\*, Bahrami G., Mohammadi B., Alizadeh E. Oral bioavailability and pharmacokinetic study of Clarithromycin in different dosage forms in Iranian healthy volunteers. Journal of Bioequivalence & Bioavailability. ۲۰۱۴, ۶(۶): ۲۰۶-۲۱۱.

۲۷. Derakhshandeh K\*, Heidarian Sh, Adibi H, Hosseinzadeh L. Active targeted nanoparticles: Preparation, physicochemical characterization and *in vitro* cytotoxicity effect. Research in Pharmaceutical Sciences. June ۲۰۱۵; ۱۰(۳): ۲۴۱-۲۵۱

۲۸. Hossein Kavoussi, Mansour Rezaei, Katayoun Derakhshandeh, Alireza Moradi, Ali Ebrahimi, Harif Rashidian, Reza Kavoussi Clinical Features and Drug Characteristics of Patients with Generalized Fixed Drug Eruption in the West of Iran (۲۰۰۵-۲۰۱۴). Dermatology Research and Practice, ۲۰۱۵ (۲۳۶۷۰۳)

۲۹. Karoon Shahebrahimi, Rozita Naseri, Tahereh Sadat Kalantarian, Mehrali Rahimi, Farid Najafi, Katayoun Derakhshandeh, Azam Sharifi. Effects of Levothyroxine Treatment on Lipid Profile in Subclinical Hypothyroidism: A Randomized Clinical Trial. Galen Medical Journal, ۲۰۱۵. ۴(۲).

۳۰. Nikandish N, Hosseinzadeh L, Hemati Azandaryani A, Derakhshandeh K\*. The role of nanoparticle in brain permeability: An in-vitro BBB model. Iranian Journal of Pharmaceutical Sciences. ۲۰۱۶; ۱۵(۲): ۴۰۳-۴۱۳.

۳۱. Derakhshandeh K, Berenjian K. Proven Health Benefits of Curcumin as a medicinal herb. *Int J of Trop Med*. ۲۰۱۶. Accepted.

۳۲. Mahmoudreza Moradi, Katayoun Derakhshandeh, Babak Karimian, Mahtab Fasihi Safety and efficacy of Intraurethral Mitomycin C Hydrogel for prevention of post-traumatic anterior urethral stricture recurrence after internal urethrotomy. *Journal of Injury and Violence Research*, ۲۰۱۶. ۸(۲).

۳۳. Derakhshandeh K, Karimi M, Hemati Azandaryani A, Bahrami G, Ghanbari K. Pharmacokinetic study of furosemide incorporated PLGA microspheres after oral administration to rat. *Iran J Basic Med Sc*. ۲۰۱۶; ۱۹(۱۰): ۱۰۴۹-۱۰۵۰.

۳۴. Elyasi, A., Soheili, M., Setayeshi, K., Honarmand, S., Derakhshandeh, K. Adhesion prevention by peritoneal administration of herbal hydrogel. *Biomedical and Pharmacology Journal*. ۲۰۱۷; ۱۷۹-۱۸۹.

۳۵. Bijari, N., Ghobadi, S., Derakhshandeh, K. Irinotecan binds to the internal cavity of beta-lactoglobulin: A multi-spectroscopic and computational investigation. *Journal of Pharmaceutical and Biomedical Analysis*. ۲۰۱۷; ۱۳۹: ۱۰۹-۱۱۰

۳۶. Hemati Azandaryani, A., Derakhshandeh, K., Arkan, E. Electrospun nanobandage for hydrocortisone topical delivery as an antipsoriasis candidate. *International Journal of Polymeric Materials and Polymeric Biomaterials*. ۲۰۱۷: ۱-۹

۳۷. Hemati Azandaryani, A., Kashanian, S., Derakhshandeh, K. Folate Conjugated Hybrid Nanocarrier for Targeted Letrozole Delivery in Breast Cancer Treatment. *Pharmaceutical Research*. ۲۰۱۷; ۳۴(۱۲), ۲۷۹۸-۲۸۰۸.

۳۸. Hemati Azandaryani, A., Derakhshandeh, K., Arkan, E. Electrospun nanobandage for hydrocortisone topical delivery as an antipsoriasis candidate. *International Journal of Polymeric Materials and Polymeric Biomaterials*. ۲۰۱۸; ۶۷(۱۱), pp. ۶۷۷-۶۸۰

۳۹. Azandaryani, A.H., Kashanian, S., Shahlaei, M., Motiei, M., Moradi, S. A Comprehensive Physicochemical, In Vitro and Molecular Characterization of Letrozole Incorporated Chitosan-Lipid Nanocomplex. ۲۰۱۹; ۳۶(۴), ۶۲

۴۰. Bijari, N., Ghobadi, S., Derakhshandeh, K.  $\beta$ -lactoglobulin-irinotecan inclusion complex as a new targeted nanocarrier for colorectal cancer cells. *Research in Pharmaceutical Sciences*. ۲۰۱۹; ۱۴(۳), pp. ۲۱۶-۲۲۷

۴۱. Fathian kolahkaj, F., Derakhshandeh, K., Khaleseh, F., (...), Mansouri, K., Khazaei, M. Active targeting carrier for breast cancer treatment: Monoclonal antibody conjugated epirubicin loaded nanoparticle. *Journal of Drug Delivery Science and Technology*. ۲۰۱۹; ۵۳, ۱۰۱۱۳۶.
۴۲. Kurd, M., Malvajerd, S.S., Rezaee, S., Hamidi, M., Derakhshandeh, K. Oral delivery of indinavir using mPEG-PCL nanoparticles: Preparation, optimization, cellular uptake, transport and pharmacokinetic evaluation. *Artificial Cells, Nanomedicine and Biotechnology*. ۲۰۱۹; ۴۷(۱), pp. ۲۱۲۳-۲۱۳۳

#### **Book:**

۱. Applied artificial neural networks: from associative memories to biomedical applications, *In Artificial neural networks*, Edited by Kenji Suzuki, ۲۰۱۱; ۹۳-۱۲۲.
۲. سیستمهای دارورسانی نانو. انتشارات دانشگاه علوم پزشکی همدان ۱۳۹۵
۳. Active-targeted Nanotherapy as Smart Cancer Treatment, *In Smart Drug Delivery System Book* ۲۰۱۶; Chapter ۴.

#### **Presentations:**

- ۱- Derakhshandeh K, Zarghi A, Shafiee A. Synthesis of new nifedipine like calcium channel blocker and evaluation of it on smooth muscle of guinea pig ileum. *1<sup>st</sup> Iranian Medical Sciences Postgraduate students Conferences*, Tehran ۲۰۰۰.
- ۲- Derakhshandeh K. Photodynamic therapy of cancer in IRAN, *1<sup>st</sup> International Pharmaceutical Technology Symposium IPTS*, Istanbul-Turkey, ۲۰۰۲.
- ۳- Derakhshandeh K, Ghassabian S. New method for assay of vitamins D<sup>۳</sup>, E in complex matrix of VW. Protein powder with HPLC, *1<sup>st</sup> Seminar of Methodology In Pharmaceutical Sciences*, Tehran ۲۰۰۱.
- ۴- Derakhshandeh K. Topic effects of beta-carotene as herbal antioxidant on skin the *7<sup>th</sup> International Seminar on Hygienic & Cosmetics Industries*, Tehran ۲۰۰۰.
- ۵- Derakhshandeh K. Aromatherapy and skin, the *۶<sup>th</sup> International Seminar on Hygienic & Cosmetics Industries*, Tehran ۲۰۰۱.



٦- Derakhshandeh K, Bolourchian N, Dadashzadeh S. The influence of surfactants on the release of an anionic drug from hydrophobic matrices, *the 1<sup>st</sup> National Conference on Novel Drug Delivery Systems*, Tehran, ٢٠٠٣.

٧- Derakhshandeh K, Hochhaus G, Dadashzadeh S. Preparation of ٩-nitrocamptothecin polymeric nanoparticle by solvent evaporation method, a new anticancer drug carrier. *International symposium on the role of adsorbed films and particulate systems in nano and biotechnologies*. Hilton University of Florida Conference center Gainesville, FL. USA. August ٢٤-٢٦, ٢٠٠٥. (Oral presentation)

٨- Derakhshandeh K, Dadashzadeh S. Factorial design, physicochemical characterization of ٩-Nitrocamptothecin polymeric nanoparticle. *Third International Nanomedicine and Drug Delivery Symposium*. Baltimore, Maryland, USA. September ٢٦-٢٧, ٢٠٠٥.

٩- Derakhshandeh K, Dadashzadeh S, Hochhaus G. Uptake and transport study of polymeric nanoparticle by Caco-٢ cell monolayer. *The ١٠<sup>th</sup> Iranian pharmaceutical Sciences Conference (IPSC ٢٠٠٦)*. Tehran, Iran, August ٢١-٢٤, ٢٠٠٦. (oral presentation)

١٠- Dadashzadeh S, Derakhshandeh K, Shirazi F H. The effect of nanoparticle encapsulation on in-vivo protection and disposition of ٩-nitrocamptothecin lactone and total forms in rats. Barcelona ٢٠٠٨ ٦<sup>th</sup> World Meeting on Pharmaceutics, Biopharmaceutics and Pharmaceutical Technology. Barcelona, Spain. ٧-١٠ April ٢٠٠٨.

١١- Derakhshandeh K, Hosseinalizadeh A, Nikmohammadi M. Encapsulation of furosemide in biodegradable microparticles: factorial design characterization and release study. ١١<sup>th</sup> Iranian Pharmaceutical Science Conference. Kerman, Iran. August ١٨-٢١, ٢٠٠٨.

١٢- Derakhshandeh K, Dadashzadeh S, Hochhaus G. Uptake and transport study of ٩ polymeric nanoparticle by Caco-٢ cell monolayer. ١١<sup>th</sup> Iranian Pharmaceutical Science Conference. Kerman, Iran. August ١٨-٢١, ٢٠٠٨. (oral presentation)

۱۳- Derakhshandeh K, Hosseinalizadeh A, Nikmohammadi M. Study on oral absorption of furosemide biodegradable microparticle in intestinal sac model. ۱۱<sup>th</sup> Iranian Pharmaceutical Science Conference. Kerman, Iran. August ۱۸-۲۱, ۲۰۰۸.

۱۴- Derakhshandeh K, Hamed Z. Formulation, characterization and release studies of furosemide encapsulated alginate microparticles. ۱۱<sup>th</sup> Iranian Pharmaceutical Science Conference. Kerman, Iran. August ۱۸-۲۱, ۲۰۰۸.

۱۵- Derakhshandeh D, Dadashzadeh S, Hochhaus G. Role of nanoparticle carrier in cellular uptake and absorption transport of ۹-nitrocamptothecin a potent anticancer drug. Log P ۲۰۰۹, Institute of ETH., Zurich, Swiss. ۲۰۰۹

۱۶- Derakhshandeh K, Hosseinalizadeh A, Nikmohammadi M. Development of rat intestinal sac model for study on oral absorption of microparticulated drug delivery systems. The ۱۴<sup>th</sup> seminar of Iranian pharmacy students. Ahvaz, Iran ۲۰۰۸.

۱۷- Derakhshandeh K, Nikmohammadi M, Hosseinalizadeh A. Factorial effect of process parameters on pharmaceutical characteristics of biodegradable PLGA microspheres. The ۱۴<sup>th</sup> seminar of Iranian pharmacy students. Ahvaz, Iran ۲۰۰۸.

۱۸- Derakhshandeh K, Hamed Z. Furosemide – loaded alginate microparticles prepared by ionotropic external gelation technique. The ۱۴<sup>th</sup> seminar for Iranian pharmacy students. Ahvaz, Iran ۲۰۰۸.

۱۹- Derakhshandeh K, Bahrami G, Afazeli S. In vivo and in vitro performance of controlled release pellets of theophylline. The ۴<sup>th</sup> Iranian controlled release conference. Zanjan, Iran. October ۲۰۰۹. (Oral presentation)

۲۰- Hosseinalizadeh A, Derakhshandeh K, Nikmohammadi M. Evaluation of PLGA microparticles to overcome intestinal drug transport limited absorption of p-glycoprotein substrate. The ۴<sup>th</sup> Iranian controlled release conference. Zanjan, Iran. October ۲۰۰۹. (oral presentation)

۲۱- Derakhshandeh K, Fashi M. Preparation and characterization of a novel drug delivery

system for a potent antiaddiction drug; naltrexone thermosensitive hydrogel. The 4<sup>th</sup> Iranian controlled release conference. Zanjan, Iran. October 2009.

22- Derakhshandeh K, Amiri A, Hamed Z, Karimi M. Formulation and physicochemical characterization of class III biopharmaceutical classification system (BCS) drugs loaded biodegradable microparticles using Artificial Neural Network statistical method. The 12<sup>th</sup> Iranian Pharmaceutical Sciences Conference. Zanjan, Iran. 2<sup>nd</sup> – 5<sup>th</sup> August 2010.

23- Derakhshandeh K, Hamed Z, Karimi M. Plasma concentration profile of Furosemide loaded microparticles following oral administration to rats. The 12<sup>th</sup> Iranian Pharmaceutical Sciences Conference. Zanjan, Iran. 2<sup>nd</sup> – 5<sup>th</sup> August 2010.

24- Derakhshandeh K, Oral mucoadhesive of triamcinolone acetonide and zinc sulfate: Preparation and in vitro physicochemical characterization. The 12<sup>th</sup> Iranian Pharmaceutical Sciences Conference. Zanjan, Iran. 2<sup>nd</sup> – 5<sup>th</sup> August 2010.

25- Derakhshandeh K, Formulation and invitro evaluation of extended release matrix tablet of nifedipine: influence of combination of hydrophilic and hydrophobic matrix forms. The 12<sup>th</sup> Iranian Pharmaceutical Sciences Conference. Zanjan, Iran. 2<sup>nd</sup> – 5<sup>th</sup> August 2010.

26- Derakhshandeh K, Hosseinalizadeh A, Nikmohammadi. Evaluation of PLGA microparticle toll to overcome intestinal limited absorption of P-glycoprotein substrate by everted rat intestinal sac model. Asian Federation for pharmaceutical sciences. Fukuoka. 2009

27- Katayoun Derakhshandeh, 1<sup>st</sup> Iranian Cosmeceutical Conference. Isfahan, Iran, 16-18 May 2012.

28- Katayoun Derakhshandeh, Majid Afshari, Leila Hosseinzadeh. Characterization, cytotoxicity and apoptosis studies of PLGA and PLGA-PEG nanoparticles as carrier of anticancer drugs. 6<sup>th</sup> BBBB international conference, from drug discovery and formulation strategies to pharmacokinetic – pharmacodynamic, Athenes, Greece, 26-28 Sep 2013.

29- Katayoun Derakhshandeh, Abbas Hemati Azandaryani. Cell cytotoxicity of active targeted mAb coupled loaded nanoacarrrier. Kish, Iran, March, 2010.

۳۰- Katayoun Derakhshandeh, Abbas Hemati Azandaryani, Shamsi Heidarian. Preparation and *in vitro* cytotoxicity evaluation of PLGA folate conjugated nanoparticles. Asian nano congress. Kish, Iran, March, ۲۰۱۰.

۳۱- Farnaz Khaleseh, Fatemeh Fathian, Abbas Hemati Azandaryani, Katayoun Derakhshandeh\*. Liposomes conjugated monoclonal antibody as a potent carrier for targeting drug delivery. Kish, Iran, March, ۲۰۱۰.

۳۲- Fatemeh Fathian<sup>۱</sup>, Katayoun Derakhshandeh<sup>۱\*</sup>, Abbas Hemati Azandaryani<sup>۲</sup>, Farnaz Khaleseh. Monoclonal antibody conjugated nanoparticle for active targeting breast cancer. Kish, Iran, March, ۲۰۱۰.

#### Awards:

۱. Top graduated student of pharmacy college
۲. Graduated studies Scholarship, Iran Daru Company ۱۹۹۹-۲۰۰۳
۳. Graduated studies Scholarship, Ministry of Health and Medical Sciences of IRAN, ۲۰۰۴-۲۰۰۶
۴. PhD student Scholarship by Ministry of Health and Medical Sciences of IRAN in Department of Pharmaceutics, College of Pharmacy, University of Florida, USA, ۲۰۰۵-۲۰۰۶
۵. Distinguished as a young researcher by the ministry of Health and Medical Sciences of IRAN. ۲۰۰۸
۶. Best PhD thesis award by the Iranian association of pharmaceutical sciences. ۲۰۰۸
۷. Special award for PhD thesis by Iranian Nanotechnology Initiative. ۲۰۰۸
۸. Top academic teacher in ۲۰۰۹ by Kermanshah University of Medical Sciences.
۹. Top researches in ۲۰۰۹ by Kermanshah University of Medical Sciences.
۱۰. Top researches in ۲۰۱۰ by Kermanshah University of Medical Sciences.
۱۱. Top researches in ۲۰۱۱ by Kermanshah University of Medical Sciences.
۱۲. Top academic teacher in ۲۰۱۳ by Kermanshah University of Medical Sciences.
۱۳. Top researches in ۲۰۱۴ by Kermanshah University of Medical Sciences

#### Affiliations:

۱. Member of American Association of Pharmaceutical Scientists (AAPS). ۲۰۰۵
۲. Member of Pharmacy Society of IRAN
۳. Member of Iranian Nanotechnology society
۴. Member of pharmaceutical science research network, Ministry of Health and Medical sciences of IRAN.

#### A course taught

- Pharmaceutical theoretical courses (I to V).
- Practical Pharmaceutics (I to V)
- Biopharmacy and pharmacokinetic
- Cosmetic courses
- Physicochemical control of pharmaceutical dosage forms

#### Research interests

- Clinical and experimental studies on drugs absorption and metabolism by cell culture and in situ models.
- Application of pharmacokinetic principles in development of colloidal carrier systems.[nanoparticles with emphasis on anticancer therapy].
- Bioequivalency study of drugs.
- Design of chromatography methods in analysis drugs in vitro and In vivo environment.
- Formulation of new drug delivery systems with emphasis of Micro and Nanoparticles.

#### Supervision of thesis:

۱. Evaluation of oral absorption of Furosemide loaded microparticles by rat intestinal sac model
۲. Preparation and characterization of Furosemide loaded microparticles and evaluation of its oral absorption by Caco-۳ cell monolayer
۳. Preparation and physicochemical characterization of naltrexone thermosensitive hydrogel  
Preparation and physicochemical characterization of naltrexone thermosensitive hydrogel
۴. Formulation and in vitro evaluation of nifedipine controlled release tablet: influence of combination of hydrophilic and hydrophobic matrix forms
۵. Formulation and physicochemical characterization of triamcinolone acetonide and zinc sulfate oral mucoadhesive in treatment of oral ulcer symptoms

٦. Preparation and Survey of physicochemical characteristics of ٩-nitrocamptothecin PLGA-PEG nanoparticles
٧. Solid Lipid Nanoparticles preparation by using modified Phosphatidylethanolamine as an outer shell
٨. Evaluation of surfactant effect on membrane efficacy of indomethacin oral osmotic pump
٩. Studying the efficacy of intraurethral Mitomycin C Hydrogel in the prevention of stricture recurrence in patients undergoing internal urethrotomy for anterior urethral strictures.
١٠. Formulation and physicochemical characterization of the biopharmaceutics classification system (BCS) class III and IV drug loaded biodegradable microparticles
١١. The invitro survey of the biopharmaceutics classification system (BCS) class III and IV drugs loaded biodegradable microparticles following oral administration to rats
١٢. The effect of copolymer composition on physicochemical characteristics and cytotoxicity effects of PLGA-PEG nanoparticles loaded ٩-nitrocamptothecin
١٣. Role of chitosan nanoparticles in the oral absorption of gemcitabine
١٤. Preparation, physicochemical characterization and in vitro cytotoxicity effect of folate targeted nanoparticles
١٥. Effect of modified multi-walled carbon nanotubes on release characteristics of indomethacin from symmetric membrane coated tablets
١٦. ....