Curriculum Vitae

Last name: Mortazavi

First name: Seyedeh Maryam

E-mail: mmortazavi@sbmu.ac.ir and seyedehmaryam_mortazavi@yahoo.com

Address: School of Pharmacy, Shahid Beheshti University of Medical Sciences, Tehran, Iran

University educations

Doctor of Pharmacy (PharmD) (February 2008- September 2013)

- From: School of Pharmacy, Shahid Beheshti University of Medical Sciences, Tehran, Iran
- **Thesis title:** Formulation of propranolol hydrochloride buccoadhesive tablet and evaluation of its physicochemical properties
- Thesis rating: Distinguished (honor) Grade: 20 out of 20.
- Supervisor: Professor Seyed Alireza Mortazavi

PhD in Pharmaceutics (September 2013- August 2019)

- From: School of Pharmacy, Shahid Beheshti University of Medical Sciences, Tehran, Iran
- Thesis title: Investigation the possibility of skin penetration enhancement of KTTKS through terpene- peptide conjugation using cyclic and linear terpenes
- Thesis rating: Distinguished (honor) Grade: 20 out of 20.
- Supervisors: Professor Hamid Reza Moghimi and Professor Farzad Kobarfard

Honors and award

- First rank among 38 PharmD students in Shahid Beheshti University of Medical Sciences
- First rank among 4 PhD students in Shahid Beheshti University of Medical Sciences
- First student of Iran in National Board of Pharmacy (2010)
- First student of Iran in PhD entrance exam (2013)
- First student in pharmaceutics board exam (2015) in Shahid Beheshti University of Medical Sciences
- Chosen as the "Top student of Shahid Beheshti School of pharmacy" by Iranian Association of Pharmacists (2013).
- Chosen as the "Top student of Shahid Beheshti School of pharmacy" in the fifth Shahid Beheshti University of Medical Sciences Annual Educational Festivals (2010).
- Chosen as the "Top student of Shahid Beheshti School of pharmacy" in the sixth Shahid Beheshti University of Medical Sciences Annual Educational Festivals (2011).
- Member of Iran's National Elites Foundation (From 2010 until now)

Book (as a compiler)

• **Mortazavi S.M** and Gandomkarzadeh M. Review of Pharmaceutical. Mahbubi A and Mortazavi S.A, editors. Etminan, 2018.

Book (as an editor)

• Moghimi H.R, Mortazavi S.A and Mortazavi S.M. The translation of the Aulton's Pharmaceutics: The Design and Manufacture of Medicines. Etminan, 2022.

Book chapter (as an author)

- Zarei N, Tabatabaei MS, **Mortazavi SM**, Moghimi HR. An overview of wound healing: wound types and current therapeutics. In: Barabadi H, Mostafavi E, editors. Bioengineered Nanomaterials for Wound Healing and Infection Control: Elsevier; 2022
- Mahboubi A, Moghimi H.R, Mortazavi S.M, Gorji-bahri G, Gandomkarzadeh M. Chapter 3 Overcoming antimicrobial resistance by nanoparticles. In: Saravanan M, Barabadi H, Mostafavi
 E, Webster T, editors. Emerging Nanomaterials and Nano-Based Drug Delivery Approaches to
 Combat Antimicrobial Resistance: Elsevier; 2022: 57-96.
- Mortazavi SM, Moghimi HR, Maibach HI. Chemical Modification: An Important and Feasible Method for Improving Peptide and Protein Dermal and Transdermal Delivery. In: Dragićević N, Maibach HI, editors. Percutaneous Absorption: CRC Presss; 2021:459-68.
- Moghimi HR, Mortazavi SM, Maibach HI. Drug Permeation through Burn Eschar: Possibilities and Improvements. In: Dragićević N, Maibach HI, editors. Percutaneous Absorption: CRC Presss; 2021:929-40.

Book chapter (as a translator)

 Mortazavi S.A, Mortazavi, S.M. Pulmonary drug delivery. In: Moghimi H.R, Mortazavi S.A and Mortazavi S.M, editors. Aulton's Pharmaceutics: The Design and Manufacture of Medicines. Etminan; 2022

Papers

- Rasouli M, Hosseinzadeh S, **Mortazavi SM**, Fattahi R, Ranjbari J, Soleimani M. Do Carboxymethyl Cellulose and Pal-KTTKS Make Bacterial Cellulose a Superior Wound Dressing or Skin Scaffold? Polym.-Plast. Technol. Mater. 2023; 62(8)
- Ghandali E, Hosseini SM, Moghimi HR, Khademi-kalantari K, Talebian Moghadam S, Baghban AA, Mortazavi SM. A comparative evaluation of aluminum chloride hexahydrate gel iontophoresis versus tap water iontophoresis in people with primary palmar hyperhidrosis: A randomized clinical trial. Indian J. Dermatol. Venereol. Leprol. 2023; 30: 1-7
- Mortazavi S.M, Moghimi H.R. Skin permeability, a dismissed necessity for anti-wrinkle peptide performance. Int J Cosmet Sci. 2022; 44 (2): 232-248.
- Salehi N, **Mortazavi S.M**, Moghimi H.R. Investigating the Changes in Cream Properties Following Topical Application and Their Influence on the Product Efficiency. Iran J Pharm Res. (2022); 21 (1): e123946
- Mortazavi S.M, Kobarfard F, Manafi A, Moghimi H.R, Maibach H.I. Terpene Conjugation: A Novel Approach for Topical Peptide Delivery. J Cosmet Sci. (2021); 72 (5): 547-556
- Mortazavi S.M and Mortazavi S.A. Propranolol Hydrochloride Buccoadhesive Tablet: Development and In-vitro Evaluation. Iran J Pharm Res, (2020); 19 (2): 22-33
- Ghandali E, Hosseini SM, Moghimi HR, khademi-kalantari k, Moghadam ST, Baghban AA, and Mortazavi SM. Intrartester reliability of sympathetic skin responses in subjects with primary palmar hyperhidrosis. J Bodyw Mov Ther. (2020); 24 (4): 57-62
- **Mortazavi S.M**, Kobarfard F, Maibach H.I and Moghimi H.R. Effect of palmitic acid conjugation on physicochemical properties of peptide KTTKS: A preformulation study. J Cosmet Sci, (2019); 70 (6): 299-312.

Conferences

- Khajeh Amiri Y, Mosayebnia M, Kobarfard F, Moghimi HR, Mortazavi SM. Synthesis of GHK-octanoic acid conjugate as a new anti-wrinkle agent using solid-phase peptide synthesis. 6th International Congress of Pharmacy-Update. Pharmaceutical Sciences Research Center. 2023 Oral presentation
- Pourrashidi K, Mortazavi SM, **Mortazavi SA**. Evaluation of the effects of different polymers on improving the properties of gelatin-based pastilles. Pharmaceutical Sciences Research Center. 2022 Oral presentation

- Kiyani R, **Mortazavi SM**, Mortazavi A. Formulation and evaluation of fast dissolving film of bisoprolol fumarate. 5th International Congress of Pharmacy-Update. Pharmaceutical Sciences Research Center. 2022. <u>Abstract</u>
- Mortazavi S.M, Kobarfard F and Moghimi H.R (2018). Synthesis and preformulation studies of KTTKS and Pal-KTTKS as anti-wrinkle peptides. The 1st International Congress of Pharmacy Updates, 6-8 February 2018, Tehran, Iran. <u>Oral presentation.</u>
- **Mortazavi S.M** and Mortazavi S.A (2013). Formulation of Propranolol Hydrochloride Buccoadhesive Tablet. The 5th International Conference on Drug Discovery and Therapy, 18-21 February 2013, Dubai, UAE. <u>Poster presentation</u>
- Mortazavi S.M and Mortazavi S.A. Evaluation of HPMC-K4M and Carbopol 934p for Preparation of Matrixic System of Propranolol Hydrochloride (2013). The 2nd National Seminar on the Role of Medical Basic Sciences on Health Promotion, 25-26 February, Tehran, Iran. Poster presentation
- Namini N, **Mortazavi S.M** and Moghimi H.R (2017). Influence of buffer, pH and preparation method on physicochemical properties of solid lipid nanoparticles (SLNs). The 15th Iranian Pharmaceutical Sciences Congress, 17-19 October, Hamedan, Iran. <u>Poster presentation</u>.
- Salehi N, **Mortazavi S.M** and Moghimi H.R (2017). Formulation changes after topical application of creams: a new finding for an ancient system. The 15th Iranian Pharmaceutical Sciences Congress, 17-19 October, Hamedan, Iran. Poster presentation.
- Najafi-Mosleh S, Mortazavi S.M and Moghimi H.R (2017). Investigating the effects of applied dose on stability and behavior of topical gels. The 15th Iranian Pharmaceutical Sciences Congress, 17-19 October, Hamedan, Iran. <u>Poster presentation</u>.

Thesis

- Iraj Davoudi. Formulation and in vitro evalution of otic Ciprofloxacin Hydrocortisone suspension (2022-2023). Supervisors: Mortazavi A, Mahboubi A, **Mortazavi SM**
- Khajeh Amiri Y. Synthesis of GHK-octanoic acid conjugate and assessment of its permeability through an epidermal membrane model (2022-2023). Supervisors: Mosayebnia M and Moghimi HR. Advisors: Kobarfard F, and **Mortazavi SM**.
- Kiyani R. Formulation and physicochemical evaluation of fast dissolving bisoprolol fumarate oral film by solvent casting and electrospinning methods (2020-2021). Supervisors: Mortazavi A, and Mortazavi SM
- Pourrashidi K. Formulation and Physicochemical Characteristics of Monte Lucas Oral Pastels.
 (2020-2021). Supervisors: Mortazavi A, and Mortazavi SM. Advisor: Hashemi S

- Salehi N. Investigating the changes in creams properties following topical application and their influence on the products efficiency (2017-2018). Supervisor: Moghimi H.R and Advisor: Mortazavi S.M
- Namini.N. Formulation of urea solid lipid nanoparticle (SLN) gel and evaluation of its hydration effect in rats (in-vivo) (2017-2018). Supervisor: Moghimi H.R and Advisors: Abufazeli R and Mortazavi S.M.
- Fatahi E. Mechanistic evaluation of effects of drug properties, microneedle and its applying methods on drug delivery across burned tissues (2018-2019). Supervisor: Moghimi H.R and Ghorbani F and Advisor: **Mortazavi S.M**.
- Talaie S. Formulation of biodegradable tissue adhesives. Supervisor: Moghimi H.R and Advisors: Forutan M and Mortazavi S.M.
- Sheikhfalah M.T. Formulation and evaluation of physicochemical properties of cetirizine fast dissolving oral film (2018-2019). Supervisor: Mortazavi S.A and advisor: **Mortazavi S.M**
- Nezafati F. Formulation of pharmaceutical gum containing basil seeds mucilage for reduction of mouth dryness (2018-2019). Supervisors: Mojab F and Mortazavi S.A and advisor: Mortazavi S.M

Part-time Industry

- Consultant (2015-2020): Dorsa Darou Pharmaceutical Company, and Noor Research and Educational Institute (TAVAN), Tehran, Iran.
- Consultant (2019-2020): Tosan Darou Pharmaceutical company, Teharan, Iran.
- Expert on Knowledge-Based Pharmaceuticals Identification (2013-2014): Magfa company, Tehran, Iran

Some Complementary Courses, Certificates and Experiences

- Classes, Seminars and Workshops of 1st International Nano School. 1-3 March 2015. Pharmaceutical Sciences Research Center at Shahid Beheshti University of Medical Sciences, Tehran, Iran.
- 1st International Marketing Conference on Knowledge-Based Industries. 10 July 2016. Iranian Marketing Research Association. Tehran, Iran.

- Course of reference manager "Endnote". 1 January 2012. Shahid Beheshti University of Medical Sciences, Tehran, Iran.
- Collaboration as reviewer with Iranian Journal of Pharmaceutical Research
- Collaboration as reviewer with Iranian Journal of Pharmaceutical Sciences

Research Interests and Activities

- Enhancement of peptide skin permeation through chemical modification
- Design of novel dermal and transdermal drug delivery systems (transdermal patches, SLNs,
- mironeedles)
- Development and evaluation of bioadhesive drug delivery systems
- Study of skin absorption mechanism of permeants and nanoparticles
- Skin delivery of peptides and proteins
- Formulation of cosmetic products, especially sunscreens and face masks
- Drug delivery to or through the oral cavity

Professional Skills

- Conventional formulation design (solids, semisolids, and liquids)
- Novel formulation design (SLNs, liposomes, and noisomes) specially for skin delivery
- Peptide synthesis through SPPS strategy (e.g. cosmetic peptides)
- Thermal analysis (TGA and DSC)
- Rheological Analysis
- Analysis of interfaces properties (surface tension, critical micelle concentration)