

Curriculum Vitae

First Name: Somaye

Last Name: Karimian

E-mail: s_karimian@sums.ac.ir
karimiansheida@gmail.com



Academic Education:

PhD. Medicinal Chemistry, School of Pharmacy, Shiraz University of Medical Sciences, Shiraz, Iran. (*February, 2016- September, 2022*)

“Design, Molecular Modeling, Synthesis and Biological effect Evaluation of Novel Derivatives of Imidazole-1, 3, 5- triazine hybrids as acetylcholinesterase and *beta*-secretase inhibitors (BACE1) for Treatment of Alzheimer's Disease”

MSc. Organic Chemistry, Persian Gulf University, Bushehr, Iran. (*September, 2008- March, 2011*)

“Application of Ionic Liquids and Silica-banded Ionic Liquid in Protection of Hydroxyl and Amino Groups and the Synthesis of Acridine Derivatives”

BSc. Chemistry, Shahid Chamran University, Khuzestan, Iran. (*February, 2004- September, 2008*)

A Brief List of Key Publications:

1. “New benzimidazole–indole–amide derivatives as potent α -glucosidase and acetylcholinesterase inhibitors” Narges Naimi, Somaye Karimian, Navid Dastyafteh, Mild Noori, Maryam Mohammadi-Khanaposhtani, Armin Dadgar, Bagher Larijani, Vahid Lotfi, İlhami Çelik, Aydın Aktaş, Nastaran Sadeghian, Parham Taslimi, Mohammad Mahdavi, *Archiv der Pharmazie*, 2025.
2. “Design of novel benzimidazole-propane hydrazide derivatives as α -glucosidase and α -amylase inhibitors: in vitro and in silico studies” Shiva Mohammadzadeh, Somaye Karimian, Navid Dastyafteh, Milad Noori, Fatemeh Doraghi, Maryam Mohammadi-Khanaposhtani, Bagher Larijani, Mohammad Mahdavi, Nastaran Sadeghian, Aydın Aktaş, Parham Taslimi, İlhami Gulçin, *Medicinal Chemistry Research*, 2024

3. “The cyclization and functionalization reactions involving N-phenacylpyridinium salts” Fatemeh Doraghi, Azam Serajian, Somaye Karimian, Bagher Larijani & Mohammad Mahdavi, *Chemical Papers*, 2024
4. “2-Vinylaniline in the synthesis of heterocycles: Recent advances” Fatemeh Doraghi, Hamed Navid, Somaye Karimian, Bagher Larijani, Mohammad Mahdavi, *Journal of Heterocyclic Chemistry*, 2024.
5. “Recent Progress in Application of Amidines towards Synthesis of N-Heterocyclic Compounds” Fatemeh Doraghi, Somaye Karimian, Hamed Navid, Mehdi Ghanbarlou, Bagher Larijani, Mohammad Mahdavi, *Monatshefte für Chemie-Chemical Monthly*, 2024.
6. “Recent Advances in Synthesis and Transformations of 1, 2, 3-Benzotriazinones” Fatemeh Doraghi, Somaye Karimian, Bagher Larijani, Mohammad Mahdavi, *Journal of Organometallic Chemistry*, 2024.
7. “Developments in Organocatalysis Transformations of Unsaturated Pyrazolones”, Fatemeh Doraghi, Farzad Gilaninezhad, Somaye Karimian, Bagher Larijani, Mohammad Mahdavi, *current organic synthesis*, 2024
8. “Recent Progress in Transformations of Azepine/Oxazepine/Thiazepine Derivatives”, Fatemeh Doraghi, Mahmoud Ameli, Somaye Karimian, Bagher Larijani, Mohammad Mahdavi, *ChemistrySelect*, 2024.
9. “Recent advances in ring-opening reactions of 2-substituted donor-acceptor cyclopropanes under metal catalysis”, Fatemeh Doraghi, Somaye Karimian, Omid Hosseinchi Qareaghaj, Mohammad Javad Karimi, Bagher Larijani, Mohammad Mahdavi, *Journal of Organometallic Chemistry*, 2024
10. “Recent Advances in 2-Aminobenzyl Alcohols: Synthesis of N-Heterocycles” Fatemeh Doraghi, Farzad Gilaninezhad, Somaye Karimian, Amir Mohammad Mahdavian, Bagher Larijani, Mohammad Mahdavi, *Advanced Synthesis & Catalysis*, 2024.
11. “Recent Advances in the Use of 2-Aminobenzyl Alcohols in the Synthesis of Quinolines, Quinazolines and Other N-Heterocycles”, fatemeh doraghi, Farzad Gilaninezhad, Somaye karimian, Amir Mohammad Mahdavian, bagher larijani, Mohammad Mahdavi, *Advanced Synthesis & Catalysis*, 2024.
12. “Decarboxylative 1, 3-dipolar cycloadditions of L-proline”, Fatemeh Doraghi, Azam Serajian, **Somaye Karimian**, Mehdi Ghanbarlou, Fatemeh Moradkhani, Bagher Larijani, Mohammad Mahdavi, *RSC advances*, 2024.

13. “Benzylidene-*N*-phenylhydrazine-1-carboxamide Derivatives as Tyrosinase Inhibitors: Design, Preparation, Molecular Docking, and Biological Activity”, Halleh Hamedifar, Somaye Karimian, Maryam Kabiri, Azam Bagheri, Mina Zarei, Ali Moazzam, Mohammad Mahdavi, Nima Sepehri, Mehdi Khoshneviszadeh, , *ChemistrySelect*, **2023**.
14. “Recent Progress in Application of Propargylic Alcohols in Organic Syntheses” Fatemeh Doraghi, Amir Mohammad Mahdavian, Somaye Karimian, Bagher Larijani, Mohammad Mahdavi, *Advanced Synthesis & Catalysis*, **2023**.
15. “Advances and Applications of 2-Alkynylbenzaldoxime as a Valuable Synthetic Framework for Synthesizing N-Heterocycles” Fatemeh Doraghi, Somaye Karimian, Omid Hosseini Qareaghaj, Bagher Larijani, Mohammad Mahdavi, *Tetrahedron*, **2023: 133491**.
16. “2-Azidobenzaldehyde: a versatile scaffold for the generation of N-heterocyclic compounds” Fatemeh Doraghi, Somaye Karimian, Seyedeh pegah Aledavoud, Ali Amini, Bagher Larijani, Mohammad Mahdavi, *Journal of Molecular Structure*, **2023**.
17. “3-Phenacylideneoxindoles in Organic Synthesis: Recent Developments” Fatemeh Doraghi, Mohammad Javad Karimi, Bahareh Bari, Somaye Karimian, Bagher Larijani, Mohammad Mahdavi, *Tetrahedron Letters*, **2023**.
18. “Synthesis and biological evaluation of benzimidazoles/1,3,5-triazine-2,4-diamine hybrid compounds: a new class of multifunctional Alzheimer targeting agents” Somaye Karimian, Mohsen Shekouhy, Somayeh Pirhadi, Aida Iraj, Mahshid Attarroshan, Najmeh Edraki, Mehdi Khoshneviszadeh, *New Journal of Chemistry*, **2022, 46, 15567–15584**.
19. “Design, Synthesis, *in Vitro*, and *in Silico* Studies of Chlorophenylquinazolin-4(3*H*)-One Containing Different Aryl Acetohydrazides as Tyrosinase Inhibitors” Mirhamed Hajimiri, Mohammad Khosravikia, Mehdi Khoshneviszadeh, Keyvan Pedrood, Seyedeh Zahra Hosseini, Mohammad Sadegh Asgari, Somayeh Pirhadi, Mahshid Attarroshan, Koroush Mobaraki, Samanesadat Hosseini, Hossein Behnammanesh, Mahmood Biglar, Somayeh Karimian, Hossein Rastegar, Haleh Hamedifar, Bagher Larijani, Mohammad Mahdavi, Aida Iraj, *Chemistry & Biodiversity*, **2022**.
20. “Design, synthesis, and biological evaluation of symmetrical azine derivatives as novel tyrosinase inhibitors” Somaye Karimian, Fatemeh Kazemi, Mahshid Attarroshan, Maryam Gholampour, Shiva Hemmati, Amirhossein Sakhteman,

- Yasaman Behzadipour, Maryam Kabiri, Aida Iraj, Mehdi Khoshneviszadeh, *BMC Chemistry*, 2021, 15, 1–11.
21. “4H-benzochromene derivatives as novel tyrosinase inhibitors and radical scavengers: synthesis, biological evaluation, and molecular docking analysis” Somaye Karimian, Sara Ranjbar, Mahsa Dadfar, Mahsima Khoshneviszadeh, Maryam Gholampour, Amirhossein Sakhteman, Mehdi Khoshneviszadeh, *Molecular Diversity*, 2021, 25, 2339-2349.
 22. “Rational Design, Synthesis, In Vitro, and In Silico Studies of Dihydropyrimidinone Derivatives as β -Glucuronidase Inhibitors” Somaye Karimian, Yasaman Moghdani, Mahsima Khoshneviszadeh, Somayeh Pirhadi, Aida Iraj, Mehdi Khoshneviszadeh, *Journal of Chemistry*, 2021.
 23. “Potent antiproliferative active agents: novel bis Schiff bases and bis spiro β -lactams bearing isatin tethered with butylene and phenylene as spacer and DNA/BSA binding behavior as well as studying molecular docking” Mohammad Bashiri, Aliasghar Jarrahpour, S Masoud Nabavizadeh, Somaye Karimian, Banafsheh Rastegari, Elahe Haddadi, Edward Turos, *Medicinal Chemistry Research*, 2021, 30, 258-284.
 24. “Polyethylene glycol-bonded triethylammonium *L*-prolinate: a new biodegradable amino-acidbased ionic liquid for the one-pot synthesis of bis(pyrazolyl)methanes as DNA binding agents” Reza Kordnezhadian, Mohsen Shekouhy, Somaye Karimian, Zohreh Tavaf, Saeed Malek-Hosseini, Mohammad Bagher Shahsavani, Zahra Amirghofran, Reza Yousefi, Ali Khalafi-Nezhad, *New Journal of Chemistry*, 2020, 44, 16995-17012.
 25. “The synthesis and biological evaluation of nucleobases/tetrazole hybrid compounds: A new class of phosphodiesterase type 3 (PDE3) inhibitors” Mohsen Shekouhy, Somaye Karimian, Ali Moaddeli, Zeinab Faghieh, Yousef Delshad, Ali Khalaf-Nezhad, *Bioorganic & Medicinal Chemistry*, 2020, 28, 115540-115549.
 26. “DBU-functionalized MCM-41-coated nanosized hematite (DBU-F-MCM-41-CNSH): A new magnetically separable basic nanocatalyst for the synthesis of some nucleoside-containing heterocycles” Reza Kordnezhadian, Mohsen Shekouhy, Somaye Karimian, Ali Khalafi-Nezhad, *Journal of Catalysis*, 2019, 380, 91-107.
 27. “*N*-Boc Protection of Amines Using Silica Propyl(*N*-methyl) Imidazolium Chloride as an Efficient and Reusable Catalyst” Somaye Karimian, Hassan Tajik, *Iranian Journal of Science and Technology, Transactions A: Science*, 2016, 40, 267-274.

28. "Synthesis of 1,8-Dioxo-Decahydroacridines using Pyridinium Hydrogen Sulfate Ionic Liquid as a Green, Efficient and Reusable Catalyst" Somaye Karimian, Hassan Tajik, *Letters in Organic Chemistry*, 2016, 13, 163-170.
29. "N-Protection of amines using pyridinium 2,2,2-trifluoroacetate ionic liquid as an efficient and reusable catalyst" Somaye Karimian, Hassan Tajik, *Chinese Chemical Letters*, 2014, 25, 218-220.
30. "A New Highly Efficient Method for the Catalyst-Free Synthesis of Conjoined Twins 1,6-Dioxaspiro Derivatives Through Double Reaction of Carbon Dioxide in One Reaction" Hassan Tajik, Khodabakhsh Niknam, Somayeh Karimian, *Iranian Journal of Catalysis*, 2013, 3, 107-113.

Participation in Conferences:

1. "Design, synthesis and biological evaluation of tyrosinase inhibitors: symmetrical azine derivatives" Somaye Karimian, Fatemeh Kazemi, Mehdi Khoshneviszadeh, *Iranian pharmaceutical science congress (IPSC), November 16-19, 2021, School of Pharmacy, Mashhad University of Medical Sciences, Mashhad, Iran*. (Poster)
2. "QSAR and molecular modeling study of 4-(thiazol-5-yl) benzoic acid derivatives as potent protein kinase CK2 inhibitors" Somaye Karimian, Razieh Sabet, Amirhossein Sakhteman, Mehdi Khoshneviszadeh, *Iranian pharmaceutical science congress (IPSC), November 6-8, 2019, faculty of pharmacy, Kermanshah, Iran*. (Poster)
3. "Design and synthesis of derivatives of Ethyl 3-amino-1-aryl-1H-benzo[f]chromene-2-carboxylate as inhibitors of the tyrosinase" Somaye Karimian, Niloofar Nikeghbali, Amirhossein Sakhteman, Mehdi Khoshneviszadeh, *Iranian pharmaceutical science congress (IPSC), November 6-8, 2019, faculty of pharmacy, Mashhad, Iran*. (Poster)
4. "Design, synthesis and biological evaluation of derivatives 4H-benzochromene as tyrosinase inhibitors" Somaye Karimian, Mahsa Dadfar, Mehdi Khoshneviszadeh. *6th Student Seminar, faculty of pharmacy, Shiraz University of Medical Sciences, Shiraz, Iran. December 2019*. (Poster)
5. "N-protection of amines using ionic liquids: pyridinium 2,2,2-trifluoroacetate as an efficient and reusable catalyst" Somaye Karimian, Hassan Tajik. *First United Arab*

Emirates Conference on Pure and Applied Chemistry, 1-3 March 2011, AUS: American University of Sharjah. (Poster)

6. “Using silica-propyl imidazoliumtriflate for the activation of HMDS in the efficient silylation of alcohols” Somaye Karimian, Hassan Tajik. *15th Iranian Chemistry Congress, 4-6 September 2011, Bu-Ali Sina University, Hamedan, Iran.* (Poster)
7. “Activation of HMDS with ionic liquids: pyridinium 2,2,2-trifluoroacetate as an efficient and reusable catalyst for the silylation of alcohols” Somaye Karimian, Hassan Tajik. *17th Iranian Seminar of Organic Chemistry, 13-15 October 2010, Mazandaran University, Babolsar, Iran.* (Poster)
8. “Protection of Alcohols” Somaye Karimian, Hassan Tajik. *6th Student Seminar of Chemistry, Persian Gulf University, Bushehr, Iran. 19-20 May 2011.* (Poster)
9. “Domino Reaction in the Chemistry” Somaye Karimian. *4th Student Seminar of Chemistry, Persian Gulf University, Bushehr, Iran. 19-20 May 2009.* (Lecture)