PERSONAL DETAILS:

Elham Rezaee

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  No. 2660, Vali-e-Asr Ave., Tehran 1991953381, Iran

CURRENT OCCUPATION:

Assistant Professor (November 2014 to present)
Department of Pharmaceutical chemistry, Shahid Beheshti University of Medical Sciences, School of Pharmacy, Tehran, Iran

EDUCATION:

• ***PhD of Medicinal Chemistry***
Shahid Beheshti University of Medical Science, School of Pharmacy, Tehran, Iran
(Sep. 2009 to June 2014)

- PhD dissertation: Design and synthesis of novel small molecules as enzyme inhibitors entitled "Design, molecular modeling, synthesis and biological evaluation of new amide compounds as soluble epoxide hydrolase inhibitors (sEHI)", under supervision of Dr. Seyed Abbas Tabatabaei, Dr. Mehrdad Faizi and Dr. Soraya Shahhosseini.

• ***Doctor of Pharmacy***

Shahid Beheshti University of Medical Science, School of Pharmacy, Tehran, Iran
(Jan. 2003 to Sep. 2009)

- Pharm.D. thesis: Design and synthesis of novel small molecules as agonists entitled "Design and synthesis of 2-Substituted-5-(4-chloro-2-phenoxy) phenyl-1.3.4-oxadiazole derivatives as new benzodiazepine receptor ligands", under supervision of Dr. Seyed Abbas Tabatabaei.

RESEARCH EXPERIENCE/SKILLS:

A) Lab skills:

- **Design of novel small molecules as enzyme inhibitors and receptor agonists**

Using SAR studies
Using Computational Methods (using Hyperchem, Autodock4, AutodockVina, Glide and SYBYL softwares)

- **Synthesis of novel small molecules**

Using conventional laboratory methods
Using Microwave Methods
Using analytical methods (Column Chromatography, HPLC)

- **Biological evaluation of novel Enzyme inhibitors**

Using enzymatic kit

B) Supervision and Mentoring

- **PhD Students' Projects:**

Entitled: "Design, Molecular Modeling, Synthesis and Evaluation of Novel Heterocyclic Amide Derivatives as Soluble Epoxide Hydrolase Inhibitors." (May 2016 to present)

Entitled: "Design, Synthesis and Biological Evaluation of Novel Heterocyclic Derivatives as Inhibitors of Dipeptidyl peptidase-4 " (May 2017 to present)

Entitled: "Design and Synthesis of Novel Amide, Urea and Heterocyclic Derivatives as Fatty acid amide hydrolase Inhibitors ". (January 2018 to present)

Entitled: "Design, Synthesis and Biological Evaluation of Novel Heterocyclic Derivatives as EGFR tyrosine kinase Inhibitors ". (March 2018 to present)

- **Pharm D. Students' Projects:**

Entitled: "Design and Synthesis of 4-amino-3,5-diphenyl-1,2,4-triazole Derivatives as Novel Benzodiazepine Receptor Ligands."

Entitled: "Design and Synthesis of 2-(diphenylmethyledene)malonic acid Derivatives as Anti-HIV Agents."

Entitled: "Synthesis of Novel Amide 2-phenyl-1,3,4-oxadiazole Derivatives as Soluble Epoxide Hydrolase Inhibitors."

Entitled: "Synthesis of Novel Amide 3-phenylglutaric Acid as Soluble Epoxide Hydrolase Inhibitors."

Entitled: "Synthesis of Diphenyl-1,3,4-Oxadiazole Derivatives as Novel Benzodiazepine Receptor Ligands."

Entitled: "Design and Synthesis of Novel Amide 4,6-diphenyl pyrimidine-2-(1H)one Derivatives as Soluble Epoxide Hydrolase Inhibitors."

Entitled: "Design and Synthesis of Novel Amide 1,2,3-triazole Derivatives as Soluble Epoxide Hydrolase Inhibitors."

Entitled: "Design and Synthesis of spiro 2-aminopyrimidinone Derivatives as Inhibitors of Dipeptidyl peptidase-4 " (May 2017 to present)

Entitled: "Design and Synthesis of Novel Amide 1,3,4-oxadiazole Derivatives as Soluble Epoxide Hydrolase Inhibitors."
Entitled: "Design and Synthesis of Novel isoindoline-1,3-dione Derivatives as Soluble Epoxide Hydrolase Inhibitors."

Entitled: "Synthesis of 4,6-diphenyl pyrimidine-2-(1H)one Derivatives as Novel Benzodiazepine Receptor Ligands."

Entitled: "Design and Synthesis of 1,2,4-oxadiazole Derivatives as Acetylcholine Eterase Inhibitors."

C) Grants:

Entitled: "Design, synthesis and binding assay of 3,5-diphenyl-4H-1,2,4-triazol-4-amine derivatives as novel benzodiazepine receptor ligands."
Awarded funding from Iran National Science Foundation (INSF), 2014

Entitled: "Novel inhibitors of soluble epoxide hydrolase as potentially new antihypertensive agents: design, synthesis and biological evaluation."
Awarded funding from National Institute for Medical Research Development (NIMAD), 2018

Entitled: "Design, Synthesis and Biological Evaluation of Novel EGFR Tyrosine Kinase Inhibitors as Anticancer Agents."
Awarded funding from NIMAD, 2018

Entitled: "Novel agonists of benzodiazepine receptors: Design, synthesis, binding assay and pharmacological evaluation of 4,6-diphenylpyrimidin-2-ol derivatives."
Awarded funding from NIMAD, 2018

D) Journals Reviewe

Iranian Journal of Pharmaceutical Research (2014 to present)
Iranian Journal of Pharmaceutical Sciences (2014 to present)
Iranian Pharmacy Students' Seminar (December 2017)

TEACHING EXPERIENCE:

Shahid Beheshti University of Medical Science, School of Pharmacy *(May 2012 to present).*

- **PhD. Level:**

Advanced Medicinal Chemistry
Practical Medicinal Chemistry
Advanced Organic Chemistry

- **Doctor of Pharmacy Level:**

General Principles Chemistry
Organic Chemistry
Practical Organic Chemistry
Analatycal Chemistry
Medicinal Chemistry

International Shahid Beheshti University of Medical Science, School of Pharmacy *(January 2017 to present)*.

The below courses particularly are presented in English.

- **Doctor of Pharmacy Level:**

Practical General Principles Chemistry (in English)
Organic Chemistry (in English)
Practical Organic Chemistry (in English)

PUBLICATIONS:

1. Design, Synthesis and Biological Evaluation of Some Oxadiazole Derivatives as Novel Amide-Based Inhibitors of Soluble Epoxide Hydrolase.

Letters in Drug Design & Discovery, 2014, 11, 721-730.
Elham Rezaee Zavareh, Mahdi Hedayati, Laleh Hoghooghi Rad, Azin Kiani, Soraya Shahhosseini, Mehrdad Faizi and Sayyed Abbas Tabatabai*.

2. Design, Synthesis and Biological Evaluation of 4-Benzamidobenzoic Acid Hydrazide Derivatives as Novel Soluble Epoxide Hydrolase Inhibitors
Iranian Journal of Pharmaceutical Research, 2014, 13, 51-59.
Elham Rezaee Zavareh, Mahdi Hedayati, Laleh Hoghooghi Rad, Soraya Shahhosseini, Mehrdad Faizi and Sayyed Abbas Tabatabai.

3. A Rapid HPLC Method for Determination of Zolpidem and its Degradation Product in Tablet Using Monolithic Column
Journal of chromatographic sciences**,** 2015, 1-4.
Elham Rezaee zavareh, Azin Kiani, Zahra sheikholeslam, Alireza Shafaati, Sayyed Abbas Tabatabai*.

4. Novel agonists of benzodiazepine receptors: design, synthesis, binding assay and pharmacological evaluation of 1,2,4-triazolo[1,5-a]pyrimidinone and 3-amino-1,2,4-triazole derivatives

Bioorganic and Medicinal Chemistry, 2015, 23, 480–487

Mehrdad Faizi, Sara Dabirian, Hamed Tajali, Fatemeh Ahmadi, **Elham Rezaee Zavareh**, Soraya Shahhosseini, Sayyed Abbas Tabatabai*.

5. Evaluation of Anxiolytic, Sedative-hypnotic and Amnesic Effects of Novel 2-phenoxy phenyl-1,3,4-oxadizole Derivatives Using Experimental Models
Iranian Journal of Pharmaceutical Research, 2015, 14, 51-57
Sayyed Abbas Tabatabai, **Elham Rezaee Zavareh**, Hamed Reyhanfard, Bagher Alinezhad, Bijan Shafaghi, Majid Sheikhha, Abbas Shafiee, Mehrdad Faizi*.

6. Novel soluble epoxide hydrolase inhibitors with a dihydropyrimidinone scaffold: design, synthesis and biological evaluation
Medicinal Chemistry Communications 2016, 7, 2128-2135
Elham Rezaee, Mahdi Hedayati, Laleh Hoghooghi Rad, Soraya Shahhosseini, Mehrdad Faizi and Sayyed Abbas Tabatabai*.

7. Novel 4-thiazolidinone derivatives as agonist of benzodiazepine receptors: design, synthesis and pharmacological evaluation
EXCLI Journal**,** 2017, 16, 52-62
Mehrdad Faizi, Reza Jahani, Seyed Abbas Ebadi, Sayyed Abbas Tabatabai, **Elham Rezaee**, Mehrnaz Lotfaliei, Mohsen Amini, Ali Almasirad*.

8. Investigation of the binding mode of 1, 3, 4-oxadiazole derivatives as amide-based inhibitors for soluble epoxide hydrolase (sEH by molecular docking and MM-GBSA).
Eur Biophys J, 1188
Leila Karami, Ali Akbar Saboury*, **Elham Rezaee**, Sayyed Abbas Tabatabai

9. A Cu-Catalyzed Synthesis of Functionalized Quinazolines from Isocyanides and Aniline-tri- and dichloroacetonitrile Adduct via Intramolecular C-H Activation Reactions
SYNLETT, 2017, 28, 12
Manijeh Nematpour, **Elham Rezaee**, Sayyed Abbas Tabatabai*, Mehdi Jahani.

10. Highly regioselective, base-catalyzed, biginelli-type reaction of aldehyde, phenylacetone and urea/thiourea kinetic vs. thermodynamic control
Journal of Sulfur Chemistry, 2018, 39, 151–163
Manijeh Nematpour, **Elham Rezaee**, Mehdi Jahani and Sayyed Abbas Tabatabai*.

11. Isolation and Characterization of Novel Phage Displayed scFv Fragment for Human Tumor Necrosis Factor Alpha and Molecular Docking Analysis of Their Interactions
Iranian Journal of Pharmaceutical Research**,** 2018, 17, 743-752
Hossein Safarpour, Morteza Shahmirzaie, **Elham Rezaee**, Mahmood Barati, Mohammad Reza Safarnejad, Farshad H. Shirazi*.

12. Synthesis of functionalized benzothiadiazine 1,1-dioxide derivativesvia intramolecular CAH activation reactions of trichloroacetamidine and benzenesulfonyl chloride
Tetrahedron Letters, 2018, 59, 2054-205
Manijeh Nematpour, **Elham Rezaee**, Mehdi Jahani and Sayyed Abbas Tabatabai.

13. A new route for the synthesis of functionalized benzothiadiazine 1,1-dioxide derivatives via intramolecular C-H activation reactions of N,N′,N″-trisubstituted guanidines and benzenesulfonylchloride
Journal of Sulfur Chemistry, 1-10
Maryam Nazari, Manijeh Nematpour, **Elham Rezaee**, Mehdi Jahani, Sayyed Abbas Tabatabai*.

14. 2D & 3D-QSAR study on novel piperidine and piperazine derivatives as acetylcholinesterase enzyme inhibitors
Current Computer-Aided Drug Design**, 14, 391-397**
Maryam Nazari, Sayyed Abbas Tabatabai, **Elham Rezaee***.

15. Novel group of imidazole derivatives as atypical selective cyclooxygenase-2 inhibitors: design, synthesis and biological evaluation
Iranian Journal of Pharmaceutical Research, 17,78-86
Azin Kiani, **Elham Rezaee**, Sayyed Abbas Tabatabai*.

16. Ultrasound-assisted synthesis of highly functionalized benzo [1, 3] thiazine via Cu-catalyzed intramolecular C-H activation reaction from isocyanides, aniline-benzoyl(acetyl) isothiocyanate adduct
Ultrasonics – Sonochemistry, 50, 1-5.
Manijeh Nematpour, **Elham Rezaee**, Mehdi Jahani, Sayyed Abbas Tabatabai*.

17. One-pot synthesis of highly functionalized benzo [1,3] thiazin via Cu-catalyzed intramolecular C-H activation reactions from isocyanides, aniline and heterocumulenes
Journal of the Chinese Chemical Society, 66(11):1537-41
Hossein Fasihi , Manijeh Nematpour, **Elham Rezaee**, Mehdi Jahani and Sayyed Abbas Tabatabai*.

18. Novel One Pot Synthesis of Functionalized Quinolines from Isocyanides, Aniline and Acetylene dicarboxylate via Cu-Catalyzed Intramolecular C-H Activation Reactions
Journal of Heterocyclic Chemistry, 56(4):1254-9.
Manijeh Nematpour, **Elham Rezaee**, Mehdi Jahani and Sayyed Abbas Tabatabai*.

19. Cu-catalyzed synthesis of functionalized benzo [1, 3] selenazin from intramolecular C-H activation reactions isocyanides, aniline-acyl isoselenocyanate adduct
Journal of the Iranian Chemical Society, 16(3):603-8.
Manijeh Nematpour, **Elham Rezaee**, Mehdi Jahani and Sayyed Abbas Tabatabai*.

20. Quantitative Structure Activity Relationships Study of Soluble Epoxide Hydrolase Inhibitors Using MLR, ANN, CoMFA and CoMSIA Methods
ChemistrySelect, 4, 6348 –6353
Maryam Nazari, Sayyed Abbas Tabatabai, and Elham Rezaee*

21. Design, Synthesis and Biological Activity of 4,6-disubstituted Pyridin-2(1H)-ones as Novel Inhibitors of Soluble Epoxide Hydrolase
IJPR, 18 (4): 1759-1769
Leila Hajazi, Elham Rezaee*, Sayyed Abbas Tabatabai*

22. Novel amide derivatives of 3 phenylglutaric acid as potent soluble epoxide hydrolase inhibitors
Molecular Diversity. 2019 Dec 23:1-9.
Elham Rezaee, Somayeh Minaei Amrolah, Maryam Nazari, Sayyed Abbas Tabatabai

23. Quinazoline-4 (3H)-one Derivatives as Novel and Potent Inhibitors of Soluble Epoxide Hydrolase: Design, Synthesis and Biological Evaluation
Bioorganic Chemistry, p.103736
Leila Hajazi, Elham Rezaee*, Sayyed Abbas Tabatabai*

24. Design, Synthesize and Biological Evaluation of Novel Urea Soluble Epoxide Hydrolase Inhibitors
Nashrieh Shimi va Mohandesi Shimi Iran (accepted)
Elham Rezaee, Mahdi Hedayati, Laleh Hoghooghi Rad, Sayyed Abbas Tabatabai*.

CONFERENCE PRESENTATIONS:

3rd International BAU DRUG design Congress

13th Iranian Pharmaceutical Sciences Congress

16th Iranian Pharmacy Students Seminar

HONORS and AWARDS

Ranked as a top student among graduate students of 2009, school of pharmacy Shahid Beheshti University of Medical Sciences, Tehran, Iran.

Ranked as a top student among graduate students of 2014, Department of Pharmaceutical chemistry, Shahid Beheshti University of Medical Sciences, Tehran, Iran.
Ranked 4st in the Basic Medical Science exam (2005).

Ranked 2nd in the national Ph.D test (2009).

Ranked 1st in the Comprehensive Progression Exam, College of Pharmacy, (2011).

Ranked as a top pharmacist (2010).

Awarded the first Ph.D. student prize in 9st Permanent Secretariat of Education Festival shahid Motahari (2014).

Dean’s Honorary Award from educational and development center (ADDC).

Outstanding Graduate Student Instructor, **Shahid Beheshti University of Medical Science, School of Pharmacy, 20XX**

Awarded National Merit Scholarship, **Shahid Beheshti University of Medical Science,** 2002