

CURRICULUM VITAE

PERSONAL INFORMATION

Name: Seyedehzeinab (Zeinab) Faghih

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WORK ADDRESS

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EDUCATION

- **Shiraz University of Medical Sciences**, Shiraz, Iran Sep 2010-Feb 2016

Ph.D., Medicinal Chemistry.

Dissertation Title: “**DESIGN, MOLECULAR MODELING AND SYNTHESIS OF SOME NOVEL CARBAZOLE DERIVATIVES AS POTENTIAL β -SECRETASE (1) INHIBITORS**”

Supervisors: Dr. Zahra Rezaei, Dr. Seyed Mohammad Hossein Tabaei

- **Shiraz University**, Shiraz, Iran Sep 2006-Sep 2009

Master of Science, Organic Chemistry.

Dissertation Title: “**SYNTHESIS OF SOME NOVEL HETERO ALKYL OXIME DERIVATIVES AS POTENTIAL CHEMOTERAPEUTIC AGENTS**”.

Supervisor: Prof. Ali Khalafi-nezhad.

- **Esfahan University**, Esfahan, Iran Sep 2001-Sep 2005

BS, Chemistry.

LANGUAGE

- Persian: Fluent
- English: Fluent
 - Attendance in Teacher Training workshop (TTC) at Mehre-e-Taban Complex, Summer 2015

RESEARCH INTERESTS

- Molecular Modeling and Drug design
- Medicinal Chemistry
- Bioorganic and Bioinorganic Chemistry
- Synthesis and characterization of new organic compounds
- Improving new methodologies in the synthesis of organic compounds
- Drug Delivery

EXPERIENCE AND SKILLS

- Expert and strong at: Synthesis, Drug design, FT-IR Spectrometer, UV-Vis Spectrometer, Column Chromatography.
- **Basic:** HPLC, GC, ELISA, DPPH Antioxidant Assay, DNA Extraction, Cell Culture and MTT Assay.
- **Able to interpret:** Mass, NMR and IR spectra
- **Computer abilities:**
 - **Chemistry and Molecular Modelling Software:** Hyperchem, ChemOffice, QSAR, Autodock, MOE, Dragon.
 - **General Software:** MS. Word, MS. Excel, MS. PowerPoint, SPSS.

EXTERA-CURRICULUM AND MEMBERSHIP

- 2011-2016: Member of "Gifted Talent Office"; Shiraz University of Medical Sciences during PhD studies.
- 2011-2016: Representative of medicinal chemistry students in Shiraz University of Medical Sciences.
- 2015-2016: Chief of Cultural Committee in The Console of Post Graduate students of Shiraz University of Medical Sciences.
- 2014: Honor Ph.D. student of Shiraz University of Medical Sciences.
- 2014: Referee of the 18th seminar of Iranian pharmacy students, Tabriz.
- 2014: Referee of the 19th seminar of Iranian pharmacy students, Shiraz.
- 2005: Member of Scientific Association of Chemistry Department, Isfahan University.

TEACHING EXPERIENCES

- General Chemistry
- Organic Chemistry
- Medicinal Chemistry
- Analytical Chemistry
- Instrumental Analysis

THESIS SUPERVISOR

- Finished (2016-2019): **20** Pharm.D. Students
- Ongoing (2016-Present): **10** Pharm.D. Student and **1** Physical Chemistry Ph.D. Students

THESIS ADVISOR

- Finished (2015-2019): **12** Pharm.D. Students
- Ongoing (2016-Present): **4** Pharm.D. Students and **3** Medicinal Chemistry Ph.D. Students

CURRENT PROJECTS

- Design, synthesis and biological activity evaluations of novel carbazole derivatives as multifunctional agents for the treatment of Alzheimer's disease. (2 Subprojects)
- Design, synthesis and biological activity evaluations of novel quinazoline derivatives for the treatment of Alzheimer's disease. (1 Project)
- Synthesis and cytotoxicity Evaluation of some new quinazoline derivatives (7 Subprojects)
- Design and synthesis of new isatin derivatives as potential anticancer agents (2 Subprojects)
- Design, synthesis and antifungal evaluation of some novel azole derivatives (5 Subprojects)
- Design, synthesis and Biological evaluation of some new DCA derivatives as anti-cancer agents (2 Subprojects)
- Investigation of Cytotoxic activities of novel Au, Cu, Co, Ni, Pt and Pd complexes as potential anticancer agents (5 Subprojects)
- Drug delivery of anticancer drugs; *invitro* and *invivo* studies (2 Subprojects)
- Collaboration in the project of "Design and Synthesis of Bioactive Small Molecules for Potential Therapeutic Applications" with University of Toronto

PUBLICATIONS

1. **Three-Component Synthesis of Some Novel N-Heterocycle Methyl-O-oxime Ethers.**
Navid Soltani Rad*, Somayeh Behrouz, Abdo Reza Nekoei, **Zeinab Faghiih**, Ali Khalafi-Nezhad. *Synthesis*, **2011**; 24:4068–4076.
2. **Heteroalkyl oxime derivative can cause damage to bacterial DNA**
K. Abdolahi, S. Mohsenzadeh*, H. Mohabatkar, **Z. Faghiih**, A. Khalafi-Nezhad. *IJST*, A1. **2013**; 83-87.
3. **The binding of small carbazole derivative (P7C3) to protofibrils of the Alzheimer’s disease and β -secretase: Molecular dynamics simulation studies.**
Zeinab Faghiih, Masood Fereidoonnehzad, S. Mohammad Hossein Tabaei, Zahra Rezaei, Amin Reza Zolghadr*. *Chemical Physics*. **2015**; 459:31-39.
4. **Novel Approach Synthesis, Molecular Docking and Cytotoxic Activity Evaluation of N-phenyl-2,2-dichloroacetamide Derivatives as Anticancer Agents.**
M. Fereidoonnehzad, **Zeinab Faghiih**, Zahra Faghiih, A. Mojaddami, S. M. H. Tabaei, Z. Rezaei*. *Journal of Sciences, Islamic Republic of Iran*. **2016**;27(1):39-49.
5. **QSAR, molecular docking and protein ligand interaction fingerprint studies of N-phenyl dichloroacetamide derivatives as anticancer agents**
Masood Fereidoonnehzad, **Zeinab Faghiih**, Elham Jokar, Ayyub Mojaddami, Zahra Rezaei, Mehdi Khoshneviszadeh*. *Trends in Pharmaceutical Sciences (TIPS)*. **2016**;2(2):159-176.
6. **A comparative docking studies of dichloroacetate analogues on four isozymes of Pyruvate Dehydrogenase Kinase in humans.**
Masood Fereidoonnehzad, **Zeinab Faghiih**, Ayyub Mojaddami, Amirhossein Sakhteman, Zahra Rezaei*. *Indian Journal of Pharmaceutical Education and Research*. **2016**;50(2):S32-38.
7. **Comparison of docking procedures and its efficiency for Betasecretase, Aromatase and Pyruvate dehydrogenase kinase inhibitors.**
Zahra Rezaei, Masood Fereidoonnehzad, **Zeinab Faghiih**, Hossein Sadeghpur, Ayyub Mojaddami, Amirhossein Sakhteman*. *Trends in Pharmaceutical Sciences*. **2017**;3(1);31-42.
8. **Binding mode of triazole derivatives as aromatase inhibitors based on docking, protein ligand interaction fingerprinting, and molecular dynamics simulation studies.**
Ayyub Mojaddami, Amirhossein Sakhteman, Masood Fereidoonnehzad, **Zeinab Faghiih**, Atena Najdian, Soghra Khabnadideh, Hossein Sadeghpour, Zahra Rezaei*. *Research in pharmaceutical sciences*. **2017**;12(1):21-30.
9. **A comparative QSAR analysis, molecular docking and PLIF studies of some N-arylphenyl-2, 2-dichloroacetamide analogues as anticancer agents.**

Masood Fereidoonzehad, **Zeinab Faghiih**, Ayyub Mojaddami, Zahra Rezaei, Amirhossein Sakhteman*. Iranian Journal of Pharmaceutical Research. **2017**;16(3):981-98.

10. **Cytotoxic evaluation of some new and potent azole derivatives as antimicrobial agents.**
Zeinab Faghiih, Zahra Rezaei, Akram Jamshidzadeh, Zahra Faghiih, Naser Heidari, Soghra Khabnadideh*. Trends in Pharmaceutical Sciences. **2017**;3(3):143-8.
11. **Preparation, Docking, Antimicrobial and Cytotoxic Activities of 2-arylquinazolinones.**
Nasrin Rahmangebadi, Kamyar Zomorodian, Zahra Faghiih, **Zeinab Faghiih**, Soghra Khabnadideh, Issa Yavari*. Journal of Pharmaceutical Research International. **2017**;20(3):2231-919.
12. **Synthesis, Biological Evaluation, and Molecular Docking Studies on the DNA Binding Interactions of Platinum(II) Rollover Complexes Containing Phosphorus Donor Ligands.**
Masood Fereidoonzehad, Maryam Niazi, Mahnaz Shahmohammadi Beni, Shima Mohammadi, **Zeinab Faghiih**, Zahra Faghiih, and Hamid R. Shahsavari*. ChemMedChem. **2017**;12(6):456-65.
13. **Cyclometalated Platinum(II) Complexes Comprising 2-(Diphenylphosphino) pyridine and Various Thiolate Ligands: Synthesis, Spectroscopic Characterization, and Biological Activity.**
Masood Fereidoonzehad, Maryam Niazi, Zohreh Ahmadipour, Tabassom Mirzaee, **Zeinab Faghiih**, Zahra Faghiih, Hamid R Shahsavari*. European Journal of Inorganic Chemistry. **2017**;2107(15):2247-54.
14. **Cyclometalated Platinum (II) Complexes Bearing Bidentate O, O'-Di (alkyl) dithiophosphate Ligands: Photoluminescence and Cytotoxic Properties.**
Masood Fereidoonzehad, Babak Kaboudin, Tabassom Mirzaee, Reza Babadi Aghakhanpour, Mohsen Golbon Haghghi, **Zeinab Faghiih**, Zahra Faghiih, Zohreh Ahmadipour, Behrouz Notash, Hamid R Shahsavari*. Organometallics. **2017**;36(9):1707-17.
15. **Palladium (II) complexes based on Schiff base ligands derived from ortho-vanillin; synthesis, characterization and cytotoxic studies.**
Zeinab Faghiih, Abdollah Neshat*, Andrzej Wojtczak, Zahra Faghiih, Zahra Mohammadi, Solmaz Varestan. Inorganica Chimica Acta. **2018**;471:404-12.
16. **Synthesis, structural characterization, biological evaluation and molecular docking studies of new platinum (ii) complexes containing isocyanides.**
Masood Fereidoonzehad, Hamid R. Shahsavari*, Sedigheh Abedanzadeh, Ali Nezafati, Ali Khazali, Mojgan Babaghassabha, **Zeinab Faghiih**, Zahra Faghiih, Samira Bahemmat, and M. Hassan Beyzavi*. New Journal of Chemistry. **2018**;42(11):8681-8692.
17. **Cytotoxic effect of two novel platinum (II) complexes on breast cancer: an in vitro study**
Samad Akbarzadeh, Fatemeh Ebrahimi, **Zeinab Faghiih**, Ali Movahed, Zahra Faghiih*. Asian Pacific Journal of Cancer Biology. **2018** ;3(2):47-50.

18. **(Benzyl isocyanide) gold (I) pyrimidine-2-thiolate complex: Synthesis and biological activity.**
Masood Fereidoon nezhad, Hamid R Shahsavari*, Elaheh Lotfi, Mojgan Babaghasabha, Motahareh Fakhri, **Zeinab Faghiih**, Zahra Faghiih, M Hassan Beyzavi*. Applied Organometallic Chemistry. **2018**;32(3):e4200.
19. **Cytotoxic Activity of Some New Azole derivatives.**
Zeinab Faghiih, Zahra Rezaei, Akram Jamshidzadeh, Aboozar Keshavarz, Soghra Khabnadideh*. Asian Pacific Journal of Cancer Biology. **2018** ;3(3):79-82.
20. **Cover Image**
Masood Fereidoon nezhad, Hamid R Shahsavari*, Elaheh Lotfi, Mojgan Babaghasabha, Motahareh Fakhri, **Zeinab Faghiih**, Zahra Faghiih, M Hassan Beyzavi*. Applied Organometallic Chemistry. **2018**;32(3):e4326.
21. **Synthesis of some novel dibromo-2-arylquinazolinone derivatives as cytotoxic agents.**
Zeinab Faghiih, Nasrin Rahmannejadi, Razieh Sabet, Kamiar Zomorodian, Mohammad Asad, Soghra Khabnadideh*. Research in Pharmaceutical Sciences. **2019**;14(2):115-121.
22. **Synthesis and biological evaluation of thiolate gold (i) complexes as thioredoxin reductase (TrxR) and glutathione reductase (GR) inhibitors.**
Masood Fereidoon nezhad, Hasti Ahmadi Mirsadeghi, Sedigheh Abedanzadeh, Alireza Yazdani, Arsalan Alamdarlou, Mojgan Babaghasabha, Zainab Almansaf, **Zeinab Faghiih**, Zachary McConnell, Hamid R Shahsavari*, M Hassan Beyzavi*. New Journal of Chemistry. **2019**;43(33):13173-13182.
23. **Nano-SnCl₄/SiO₂ as a Catalyst for One-Pot Synthesis of Substituted 1H-Pyrazoles as Antifungal and Cytotoxic Agents**
Soghra Khabnadideh, **Zeinab Faghiih**, Leila Zamani*, Kamiar Zomorodian, Bi Bi Fatemeh Mirjalili, Hadi Moradi. Letters in Organic Chemistry. **2019**.
24. **Nano-SnCl₄.SiO₂: An efficient catalyst for synthesis of benzimidazole derivatives as antifungal and cytotoxic Agents.**
Leila Zamani¹, **Zeinab Faghiih*** , Kamiar Zomorodian, Bi Bi Fatemeh Mirjalili, Asghar Jalilian, Soghra Khabnadideh*.
Research in Pharmaceutical Sciences. **2019**; 14(6):496.
25. **Cytotoxic Activity of Some Spirooxindole-4H-pyran Derivatives**
Zeinab Faghiih, Zahra Faghiih, Masoomeh Divar, Soghra Khabnadideh*. Journal of Pharmaceutical Research International, **2019**; 1-6
26. **Synthesis and screening of Pyrimido[4,5-b]quinolins Catalyzed by Fe₃O₄@SiO₂ SnCl₄ as antifungal agents.**
Reza Araghi, BiBi Fatemeh Mirjalili, Soghra Khabnadideh, Kamiar zomorodian, **Zeinab Faghiih**, Hamidreza Arabi, Leila Zamani*. Iranian Journal of Pharmaceutical Research. **2019**; Accepted.
27. **Synthesis, molecular docking and cytotoxic activity evaluation of organometallic thiolated gold(I) complexes.**
Zeinab Faghiih, Alireza Yazdani Kachoei, Masood Fereidoon nezhad*. Iranian Journal of Pharmaceutical Research. **2019**; Accepted.

CONGRESS

- 1. The Role of Small Organic Compound on the Alzheimer's Amyloid Beta Peptide Aggregation by Molecular Dynamics Simulation.**
Z. Faghieh, M. Fereidoonzhad, Z. Rezaei, A. R. Zolghadr.
National student congress on pharmaceutical sciences, Mazandran, November 2014.
- 2. Design and development of less toxic dichloroacetate analogues as anticancer reagents by AutoDock 4.2 and descriptor analysis.**
Masood Fereidoonzhad, Zeinab Faghieh, Zahra Rezaei.
National student congress on pharmaceutical sciences, Mazandran, November 2014.
- 3. Dendrimers: From Therapeutic Purposes to Applications in Imaging and Nuclear Medicine**
M. Fereidoonzhad, S. Ranjbar, A. Mojaddami, Z. Faghieh, H. Sadeghpour.
Iranian Congress of Nuclear Medicine, Shiraz, Iran, May 1-3, 2013.
- 4. Developing new Oxime ether Derivatives of Azoles as Antifungal agents: Design, Synthesis, Molecular Docking and Biological Evaluation.**
Zeinab Faghieh, Masood Fereidoonzhad, Parham Shafiei, Kamyar zomorodian, Ali Khalafi-Nezhad, Zahra Rezaei. *2ed International and 4th Iranian Congress in Medical Mycology: From Bench to Bed, held from 18th to 20th of November, 2015, Shiraz, Iran.*
- 5. Design, molecular modeling, synthesis and cytotoxic activity evaluations of N-phenyl-2,2-dichloroacetamide derivatives as anticancer agents**
Masood Fereidoonzhad, Zeinab Faghieh, Ayyub Mojaddami, Zahra Rezaei. *19th Iranian Pharmacy Students Seminar, 6-9 October, 2015, Shiraz University of Medical Sciences, Faculty of Pharmacy.*
- 6. Design, Synthesis and Molecular Docking of Some Novel Hetero Alkyl Oxime Derivatives as Antifungal Agents**
Zeinab Faghieh, Masood Fereidoonzhad, Ayyub Mojaddami, Zahra Rezaei. *19th Iranian Pharmacy Students Seminar, 6-9 October, 2015, Shiraz University of Medical Sciences, Faculty of Pharmacy.*
- 7. Molecular Docking, QSAR and Molecular Dynamics Simulation studies of some Carbazole Derivatives as β -Secretase-1 inhibitors.**
Zeinab Faghieh, Masood Fereidoonzhad, Aminreza Zolghadr, Mehdi Khoshneviszade, Ayyub Mojaddami, Zahra Rezaei. *National student congress on pharmaceutical sciences, , December, 2015, Tehran, Iran.*
- 8. Design novel Aromatase inhibitors based on protein ligand interaction fingerprint (PLIF) and molecular dynamic (MD) simulation studies**
Ayyub Mojaddami, Masood Fereidoonzhad, Zeinab Faghieh, Amirhossein Sakhteman, Zahra Rezaei. *19th Iranian Pharmacy Students Seminar, 6-9 October, 2015, Shiraz University of Medical Sciences, Faculty of Pharmacy*

REFERENCES

- **Professor Ali Khalafi-nezhad** (Professor of Chemistry)

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- **Professor Zahra Rezaei** (Professor of Medicinal Chemistry)

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- **Professor Soghra Khabnadide** (Professor of Medicinal Chemistry)

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