



## **Adileh Ayati**

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### **Education:**

**Postdoctoral Researcher**, The Institute of Pharmaceutical Sciences (TIPS), Tehran University of Medical Science, October 2019, (Advisor Prof. Dr. A. Foroumadi)

**Ph.D. Medicinal Chemistry**, The Institute of Pharmaceutical Sciences (TIPS), Tehran University of Medical Sciences (TUMS), Tehran, Iran: (2013-2018), (Advisors Prof. Dr. A. Foroumadi, Prof. Dr. S. Emami)

**M.Sc., Organic Chemistry**, Islamic Azad University, Tehran- Shomal, Tehran, Iran: (2006-2008)

**B.Sc., Applied Chemistry**, Arak University, Arak, Iran: (2001-2006)

## **Experience:**

1- Design, Synthesis and anticonvulsant evaluation of arylalkyl azoles containing thiazole, 2007- 2008.

- Prof. Emami's Lab, Pharmaceutical Sciences Research Center, Faculty of Pharmacy, Mazandaran University of Medical Sciences, Sari, Iran.

2- Design and Synthesis of thiazoline incorporated chalconoid compounds as anticancer agents, 2008-2010.

- Prof. Emami's Lab, Pharmaceutical Sciences Research Center, Faculty of Pharmacy Mazandaran University of Medical Sciences, Sari, Iran.

3- Design and Synthesis of thiazole-thione compounds as tyrosinase inhibitors, 2010-2012.

- Prof. Emami's Lab, Pharmaceutical Sciences Research Center, Faculty of Pharmacy , Mazandaran University of Medical Sciences, Sari, Iran.

4- Evaluation of thiazole-thiones as tyrosinase inhibitors, 2012-2013.

- Prof. Emami's Lab, Pharmaceutical Sciences Research Center, Faculty of Pharmacy, Mazandaran University of Medical Sciences, Sari, Iran.

5- Design, Synthesis and anticancer evaluation of Aminothiazole derivatives incorporated coumarin, 2013-2015.

- Prof. Foroumadi's Lab The Institute of Pharmaceutical Sciences (TIPS), Tehran University of Medical Sciences (TUMS), Tehran, Iran.

6- Design, Synthesis and anticancer evaluation of Aminothiazoles incorporated chalkone, 2015 – 2018.

- Prof. Foroumadi's Lab, The Institute of Pharmaceutical Sciences (TIPS), Tehran University of Medical Sciences (TUMS), Tehran, Iran.

7- Design, Synthesis and anticancer evaluation of pyrimidine containing compounds with EGFR inhibitor activity, 2018-2019.

- Prof. Foroumadi's Lab The Institute of Pharmaceutical Sciences (TIPS), Tehran University of Medical Sciences (TUMS), Tehran, Iran.

8- Synthesis of different drugs such as Ticagrelor, Levetacetam, Quetiapine, ,Sitagliptin, Linagliptin, Metoprolol, Bisoprolol, .. 2019-2023.

- Anitibioticsazi Iran Company, Sari, Iran.

## **Publications:**

1-Nematollah Ahangar, **Adile Ayati**, Eskandar Alipour, Arsalan Pashapour Alireza Foroumadi, Saeed Emami, 1-[(2-Arylthiazol-4-yl)methyl]azoles as a New Class of Anticonvulsants: Design, Synthesis, In vivo Screening, and In silico Drug-like Properties Chemical Biology and Drug Design; 78: 844 (2011).

2- **Adile Ayati**, Saeed Emami, Straightforward synthesis of thiazoline-incorporated chalconoids from phenacyl halides, Molecular Diversity; 17(1):41-7 (2012).

3- **Adile Ayati**, Mehraban Falahati, Hamid Irannejad, Saeed Emami, Synthesis, in vitro antifungal evaluation and in silico study of 3-azoly-4-chromanone phenylhydrazones, DARU Journal of Pharmaceutical Sciences, 20;46 (2012).

4- **Adile Ayati**, Saeed Emami, Ali Asadipour, Abbas Shafiee, Alireza Foroumadi, Recent applications of 1,3-thiazole core structure in the identification of new lead compounds and drug discovery, European Journal of Medicinal Chemistry 97; 699 (2015).

5- **Adile Ayati**, Saeed Emami, Alireza Foroumadi, The importance of triazole scaffold in the development of anticonvulsant agents, European Journal of Medicinal Chemistry 109; 380 (2016).

6-**Adileh Ayati**, Rezvan Esmaeili, Setareh Moghimi, Tayebeh Oghabi Bakhshaiesh, Zahra Eslami, Keivan Majidzadeh, Maliheh Safavi, Saeed Emami, Alireza Foroumadi, Synthesis and biological evaluation of 4-amino-5-cinnamoylthiazoles as chalcone-like anticancer agents, European Journal of Medicinal Chemistry, 145; 404 (2018).

7- **Adileh Ayati**, Tayebeh Oghabi Bakhshaiesh, Setareh Moghimi, Rezvan Esmaeili, Keivan Majidzadeh-A, Maliheh Safavi, Loghman Firoozpour, Saeed Emami, Alireza Foroumadi, Synthesis and biological evaluation of new coumarins bearing 2,4 diaminothiazole-5-carbonyl moiety, European Journal of Medicinal Chemistry 155; 483 (2018).

8- **Adileh Ayati**, Saeed Emami, Setareh Moghimi, Alireza Foroumadi, Thiazole in the targeted anticancer drug discovery, Future Medicinal Chemistry, 11(15);1929-1952.(2019).

9- **Adileh Ayati**, Setareh Moghimi, Maliheh Safavi, Behjat Pouramiri, Alireza Foroumadi, A review on progression of epidermal growth factor receptor

(EGFR) inhibitors as an efficient approach in cancer targeted therapy, *Bioorganic Chemistry*, article in press, 99; 103811 (2019).

10- Behjat Pouramiri, Mahboobeh Zahedifar, **Adileh Ayati**, Farah Pouramiri, Mahdyeh Ahmadi, Design, synthesis and biological evaluation of new substituted benzofuran-based derivatives via C–H bond activation, *Journal of the Serbian chemical society*, 85; 1-11 (2020).

11- Mahsa Toolabi, Mona Khoramjouy, Ayoub Aghcheli, **Adileh Ayati**, Setareh Moghimi, Loghman Firoozpour, Soraya Shahhosseini, Rouhollah Shojaei, Ali Asadipour, Kouros Divsalar, Mehrdad Faizi, Alireza Foroumadi, Synthesis and radioligand-binding assay of 2,5-disubstituted thiadiazoles and evaluation of their anticonvulsant activities, *Archiv der Pharmazie*, (2020), doi10.1002/ardp.202000066.

12- Ayoub Aghcheli, Mahsa Toolabi, **Adileh Ayati**, Setareh Moghimi, Loghman Firoozpour, Tayebeh Oghabi Bakhshaiesh, Elahe Nazeri, Maryam Norouzbahari, Rezvan Esmaeili, Alireza Foroumadi, Design, synthesis, and biological evaluation of 1-(5-(benzylthio)-1,3,4 thiadiazol-2-yl)-3-phenylurea derivatives as anticancer agents, *Medicinal Chemistry Research*, (2020), doi.org/10.1007/s00044-020-02616-2.

13- **Adileh Ayati**, Setareh Moghimi, Mahsa Toolabi, Alireza Foroumadi, Pyrimidine-based EGFR TK inhibitors in targeted cancer therapy, *European Journal of Medicinal Chemistry*, 221, 113523. (2021)

14- Ali akbar Mariki, Akbar Anaeigoudari, Mahboobeh Zahedifar, Behjat Pouramiri, **Adileh Ayati**, Safa Lotfi, Design, Green Synthesis, and Biological Evaluation of New Substituted Tetrahydropyrimidine Derivatives as Acetylcholinesterase Inhibitors, *Polycyclic Aromatic Compounds*, (2021) doi.org/10.1080/10406638.2021.1933102.

15- Behjat Pouramiri, Seyed Reza Seyedhosseini, Mohammad Hadi Nematollahi, Sanaz Faramarz, Fatemeh Seyedi, **Adileh Ayati**, Green Synthesis and Anticancer Evaluation of Novel Chrysin Hydrazone Derivatives, *Polycyclic Aromatic Compounds*, (2021) doi.org/10.1080/10406638.2021.2011753.

16- Mahsa Toolabi, Fatemeh Safari, **Adileh Ayati**, Parnian Fathi, Setareh Moghimi, Somayeh Salarinejad, Roham Foroumadi, Shima Ketabforoosh, Alireza Foroumadi, Synthesis of novel 2-acetamide-5-phenylthio-1, 3, 4-thiadiazole-containing phenyl urea derivatives as potential VEGFR-2 inhibitors,

Archiv der Pharmazie, (2021), DOI: 10.1002/ardp.202100397.

17- Zaman Hasanvand, Rasoul Motahari, Hamid Nadri, Setareh Moghimi, Roham Foroumadi, **Adileh Ayati**, Tahmineh Akbarzadeh, Syed Nasir Abbas Bukhari, Alireza Foroumadi, Novel aminobenzofuran derivatives as multifunctional agents for the treatment of Alzheimer's disease, *Frontiers in Chemistry*, (2022).

18- Mehdi Valipour, Zahra Khatir Zakeri, Elaheh Abdollahi, **Adileh Ayati**, Recent applications of protoberberines as privileged starting materials for the development of novel broad-spectrum antiviral agents: A concise review (2017-2023)" *ACS Pharmacology & Translational Science*, (2023).

19- Mehdi Valipour, Zahra Zakeri khatir, **Adileh Ayati**, Asieh Hosseini, Mohammad Sheibani, Hamid Irannejad, Advances in the selective c-MET kinase inhibitors: Application of fused[5,6]-Bicyclic nitrogen-containing cores for anticancer drug design, *European Journal of Medicinal Chemistry* 284, 117177 (2025)

### **Presentation:**

- Seventh National Congress in Chemistry and Chemical Engineering of Iran emphasizing Iran's indigenous Technologies, Tehran, 2020.
- 4<sup>th</sup> National Congress on Chemistry and Nanochemistry from Research to Technology, Tehran, October, 2021.
- 5<sup>th</sup> National Congress on Chemistry and Nanochemistry from Research to Technology, Tehran, October, 2022.
- Fifth National Conference on Innovative and Technology in Biology and Chemistry of IRAN Tehran, February, 2022.

### **Research Experience and Interests:**

- Rational design and Synthesis of novel bioactive heterocyclic compounds as EGFR and c-Met kinase inhibitors by Molecular Modeling and Docking study.
- Rational design and Synthesis of novel bioactive heterocyclic containing compounds such as thiazole, thiadiazole, pyrimidine, coumarine ... as anti-cancer agents.
- Synthesis, purification and identification of approved drugs such as Sitagliptin, Linagliptin, Levetiracetam, Acyclovir, Quetiapine, Ticagrelor, Zolpidem and,...
- Virtual Screening and Molecular Modeling of Protein Kinase inhibitors.
- Antioxidant assay, Anti-cancer assay, Anti-tyrosinase assay.

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