

Ayuob Aghanejad

Ph.D, Nuclear pharmacy

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Radiopharmacist with experience in laboratory procedures, radiopharmaceuticals quality control procedures, radiation safety, drug design, multi-steps synthetic organic chemistry and nano biomedicine. Expertise in tracking and quantifying radiation methods in biological and environmental systems, including coursework in radiochemistry, radiobiology, and radiation dosimetry.

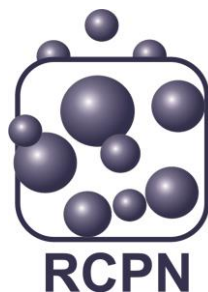
EDUCATION

PhD, Nuclear pharmacy

Tehran University of Medical Sciences, Faculty of Pharmacy

SKILLS

- Synthesis of radiolabelled organic chemicals, purification, filming, electrophoresis and confirming by HPLC, Familiar with scientific search tools, Familiarity with contemporary separation and structure determination techniques transition metal-catalyzed organic reactions and their applications.
- Develop and optimize radiolabeling techniques using various isotopes and various ligands, analytical methods, and formulations for new compounds
- Expert in modern multi-step synthetic organic chemistry, medicinal chemistry and inorganic complexation for radiopharmaceutical applications.



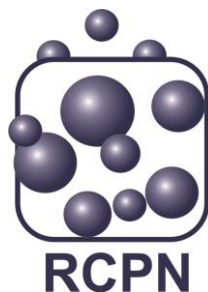
- Expert in pharmaceutical chemistry and drug discovery.
- Background in p positron emission tomography (PET), single-photon emission computed tomography (SPECT), radiation safety and familiarity with cyclotron and reactor processes
- Supervise radiopharmacy operation, dispense & distribute radiopharmaceuticals properly and accurately, quality control tests on prepared products and manually record results
- Actively participate in maintaining a safe work environment by completing required
- Participates and ensures execution of aseptic techniques, including sterility test and pyrogenic testing per company standard operating procedures

Technical Expertise

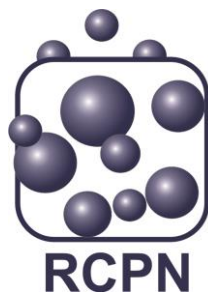
- Instrumentation of UV-Vis, NMR, FT-IR, Potentiostat Galvanostat, DSC, gamma & beta spectroscopy, thin layer chromatography scanner
- Analysis and purification of organic compounds by HPLC (Analytical & preparative), LC-MS, troubleshooting these machines, planar chromatography (TLC and prep TLC), gas chromatography and affinity chromatography.
- Perform required tests on equipment (e.g. dose calibrator constancy and survey meter checks) and manually record results.

Publications

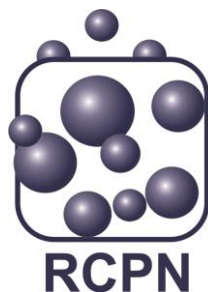
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2. M. Saberian, H. Hamzeiy, A. Aghanejad and D. Asgari, *BioImpacts*, 2011, **1**, 31-36.
3. L. Barghi, A. Aghanejad, H. Valizadeh, J. Barar and D. Asgari, *Advanced Pharmaceutical Bulletin*, 2012, **2**, 119-122.
4. A. Hamidi, M. R. Rashidi, D. Asgari, A. Aghanejad and S. Davaran, *Bulletin of the Korean Chemical Society*, 2012, **33**, 2181-2186.
5. A. Aghanejad, A. R. Jalilian, A. Bahrami-Samani, S. Shirvani-Arani and S. Moradkhani, *Iranian Journal of Nuclear Medicine*, 2014, **22**, 40-45.
6. A. Aghanejad, A. R. Jalilian, Y. Fazaeli, B. Alirezapoor, M. Pouladi, D. Beiki, S. Maus and A. Khalaj, *Scientia Pharmaceutica*, 2014, **82**, 29-42.
7. A. Aghanejad, A. R. Jalilian, Y. Fazaeli, D. Beiki, B. Fateh and A. Khalaj, *Journal of Radioanalytical and Nuclear Chemistry*, 2014, **299**, 1635-1644.
8. N. Vahidfar, A. R. Jalilian, Y. Fazaeli, A. Aghanejad, A. Bahrami-Samani, B. Alirezapour, M. Erfani, D. Beiki and A. Khalaj, *Radiochimica Acta*, 2014, **102**, 659-668.



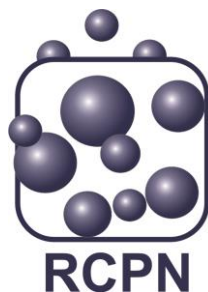
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10. M. Fathi, J. Barar, A. Aghanejad and Y. Omid, *BioImpacts*, 2015, **5**, 159-164.
11. A. Mirzaei, A. R. Jalilian, A. Aghanejad, M. Mazidi, H. Yousefnia, G. Shabani, K. Ardaneh, P. Geramifar and D. Beiki, *Nuclear Medicine and Molecular Imaging*, 2015, **49**, 208-216.
12. A. Aghanejad, A. R. Jalilian, S. Maus, H. Yousefnia, P. Geramifar and D. Beiki, *Iranian Journal of Nuclear Medicine*, 2016, **24**, 29-36.
13. J. Barar, A. Aghanejad, M. Fathi and Y. Omid, *BioImpacts*, 2016, **6**, 49-67.
14. S. Same, A. Aghanejad, S. A. Nakhjavani, J. Barar and Y. Omid, *BioImpacts*, 2016, **6**, 169-181.
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18. A. Aghanejad, H. Babamiri, K. Adibkia, J. Barar and Y. Omid, *BioImpacts*, 2018, **8**, 117-127.
19. A. Aghanejad and Y. Omid, in *Noble Metal-Metal Oxide Hybrid Nanoparticles: Fundamentals and Applications*, 2018, DOI: 10.1016/B978-0-12-814134-2.00025-5, pp. 535-547.
20. Y. Arteshi, A. Aghanejad, S. Davaran and Y. Omid, *European Polymer Journal*, 2018, **108**, 150-170.
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24. S. Khajeh, M. R. Tohidkia, A. Aghanejad, T. Mehdipour, F. Fathi and Y. Omid, *Artificial Cells, Nanomedicine and Biotechnology*, 2018, **46**, 1082-1090.
25. E. D. Abdolahinia, S. Nadri, R. Rahbarghazi, J. Barar, A. Aghanejad and Y. Omid, *Life Sciences*, 2019, **231**.
26. A. Aghanejad and Y. Omid, in *Noble Metal-Metal Oxide Hybrid Nanoparticles: Fundamentals and Applications*, 2019, DOI: 10.1016/B978-0-12-814134-2.00025-5, pp. 535-547.
27. M. Akbarzadeh Khiavi, A. Safary, A. Aghanejad, J. Barar, S. H. Rasta, A. Golchin, Y. Omid and M. H. Somi, *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 2019, **572**, 333-344.



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31. Y. Arteshi, A. Aghanejad, S. Davaran and Y. Omid, *International Journal of Polymeric Materials and Polymeric Biomaterials*, 2020, **69**, 437-448.
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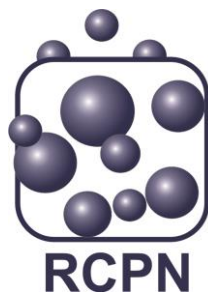
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Patents

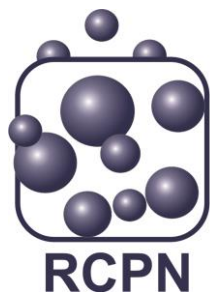
1. **Aghanejad, A.**, Khalaj, A., Synthesis of plerixafor active pharmaceutical ingredient (API) Iranian Patent Numbered as (2016)
2. Ghiyasvand, S., Davaran, S., **Aghanejad, A.**, Development of Smart Amphiphilic Polymeric Nanoparticles Contain insulin, Iranian Patent Numbered as 59979 (July, 2009).
3. Davaran, S., **Aghanejad, A.**, Salehi, R., Mashinchian, O., Moghoe, M. and Dehghan, GR., Development of Polymeric Nanoparticles Contain *Farnesiferol-C* as Anticancer Agent, Iranian Patent Numbered as 56417 and Iranian Research Organization for Science & Technology (IROST) as 415.1445 (January, 2009).
4. Davaran, S., **Aghanejad, A.**, Salehi, R., Rashidi, M., Moghoe, M., Javadzade, Y., Development of Polymeric Nanoparticles Contain Dexamethasone for Eye drug delivery system, Iranian Patent Numbered as 56418 (January, 2009).
5. Asgari, D., **Aghanejad, A.**, Davaran, S., Synthesis of Erlotinib hydrochloride as Anticancer Drug, Iranian Patent Numbered as 50667 (July, 2008).
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Presentations

1. **A Aghanejad.** Synthesis and Biological Evaluation of ^{68}Ga -AMD3100 as a Possible PET Imaging Tracer for Cardiovascular Disease. International Conference on Integrated Medical Imaging in Cardiovascular Diseases (IMIC 2016), International Atomic Energy Agency (IAEA)



2. **A Aghanejad**, A R Jalilian, S Maus, H Yousefnia, S Moradkhani, M Pouladi. Optimized production and quality control of ^{68}Ga -DOTATATE for small clinical trials. 45th Annual Scientific Meeting of the Australian and New Zealand Society of Nuclear Medicine. April 2015.
3. AR Jalilian, A Mirzaei, **A Aghanejad**, M Mazidi, H Yousefnia, G Shabani, K Ardaneh, P Geramifar, D Beiki. Preparation and Evaluation of ^{68}Ga -ECC as a PET Renal Imaging Agent. April 2015.
4. **A. Aghanejad**, A R. Jalilian. Synthesis and evaluation of [^{68}Ga]-plerixafor for PET imaging of human colorectal carcinoma. 18th Iranian Congress of Nuclear Medicine (ICNM 2014), November 2014.
5. **A. Aghanejad**, A R. Jalilian, Y. Fazaeli, B. Alirezapour, M. Pouladi, D. Beiki, A. Khalaj Synthesis and Evaluation of [^{67}Ga]-AMD3100; a novel imaging agent for targeting chemokine receptor CXCR4. 18th Iranian Congress of Nuclear Medicine (ICNM 2014), November 2014.
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8. H. Yousefnia, **A. Aghanejad**, A. Mirzaei, R. Enayati, AR. Jalilian, S. Zolghadri Production, Quality Control and Biodistribution Assessment of ^{111}In -BPAMD as a New Bone Imaging Agent. ICECECE 2014: 16th International Conference on Electrical, Computer, Electronics and Communication Engineering.
9. Leila Barghi, Davoud Asgari, Hadi Valizadeh, **Ayuob Aghanejad**, Jaleh Barar, An improved synthesis of erlotinib, tyrosine kinase inhibitor. 1st International Pharmacy Graduation Projects Symposium (IPGPS-1) in Nicosia, Turkish Republic of Northern Cyprus, 2012.
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11. Hemmati, S., **Aghanejad, A.**, Imanzade, G., Synthesis of new steroid derivatives with reactive functional groups at C-17 (methyl keton, nitrile, heterocyciles), The 11th Iranian Pharmaceutical Science Congress' (2008).



Scientific Awards & Honors

Top student on 23th Iranian PhD candidacy exam for pharmaceutical sciences degrees, June 2011.

Young investigator award for best scientific paper in Radiopharmacy, 18th Iranian Congress of Nuclear Medicine (ICNM 2014), November 2014.