

Curriculum Vitae (CV)



Samin Hamidi, Ph.D

Assistant Professor of Medicinal Chemistry

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Education

- 2016: Post-Doc in Medicinal Chemistry, Tabriz University of Medical Sciences, Tabriz, Iran
- 2015: Ph.D. in Medicinal Chemistry, Tabriz University of Medical Sciences, Tabriz, Iran

Professional Positions and Employment

- 2024- present: Assistant Professor, Research Center of Psychiatry and Behavioral Sciences, Tabriz University of Medical Sciences, Tabriz, Iran
- 2016- 2023: Assistant Professor, Food and Drug Safety Research Center, Tabriz University of Medical Sciences, Tabriz, Iran
- 2024-present: Member of Research Council of Dental and Periodontal Research Center, Tabriz University of Medical Sciences, Tabriz, Iran
- Member of the Iranian Chemical Society
- 2016-present: Designer of in-service training exam questions of staff
- 2016-2020: Head of Pharmaceutical Quality Control Laboratory, Tabriz Food and Drug Deputy, Tabriz, Iran
- 2016-2020: Pharmaceutical Quality Control Inspector

Honors and Awards

- Outstanding National Researcher in National Student Research Committee in 2015
- Certificate of Appreciation as a head of Pharmaceutical Control laboratory, Tabriz Food and Drug Deputy, 201⁹
- Certificate of Appreciation as a head of Pharmaceutical Control laboratory, Tabriz Food and Drug Deputy, 201[^]

Teaching

Lectures and courses in:

- Practical General Chemistry
- Organic Chemistry
- Analytical Chemistry

- Practical Physicochemical Control of Drugs
- Validation of Laboratory Methods
- Uncertainty of Analytical Methods

Selected Publications

- Abdollahi, K., Hamidi, S., Monajjemzadeh, F., Zamani-Kalajahi, M., Nemati, M. and Sheykhizadeh, S., 2024. Efficient and straightforward spectrophotometric analysis of 5-hydroxymethylfurfural (HMF) using citrate@ Fe₃O₄ nanoparticles as an adsorbent. *Journal of Pharmaceutical and Biomedical Analysis*, 241, pp.115963.
- Zamani-Kalajahi, M., Hamidi, S., Nemati, M. and Siahi-Shadbad, M.R., 2024. Determination of vancomycin in plasma with a magnetite amino silica adsorbent prepared from rice husks and high-performance liquid chromatography—tandem mass spectrometry (HPLC-MS/MS). *Instrumentation Science & Technology*, 52(1), pp.91-107.
- Salatin, S., Montazersaheb, S., Farjami, A. and Hamidi, S., 2023. Nanoparticle-based delivery platforms for the enhanced oral delivery of peptides/proteins. *Therapeutic Delivery*, 14(12), pp.795-815.
- Safdari, A., Monajjemzadeh, F. and Hamidi, S., 2023. Investigating the possibility of N-Nitrosodimethylamine (NDMA) in famotidine containing products. *Journal of Drug Delivery Science and Technology*, 88, pp.104908.
- Jahed, F.S., Hamidi, S., Zamani-Kalajahi, M. and Siahi-Shadbad, M., 2023. "Biomedical applications of silica-based aerogels: a comprehensive review." *Macromolecular Research*, pp.1-20.
- Safdari, A., Monajjemzadeh, F., Hamidi, S. 2023. "Investigating the possibility of N-Nitrosodimethylamine (NDMA) in famotidine containing products." *Journal of Drug Delivery Science and Technology*, 88, pp.104908.
- Hamidi, S., Monajjemzadeh, F., Siahi-Shadbad, M., Khatibi, S.A. and Farjami, A., 2023. "Antibacterial activity of natural polymer gels and potential applications without synthetic antibiotics." *Polymer Engineering & Science*, 63(1), pp.5-21.
- Khatibi, S.A., Hamidi, S. and Siahi-Shadbad, M.R., 2022. "Application of liquid-liquid extraction for the determination of antibiotics in the foodstuff: recent trends and developments." *Critical reviews in analytical chemistry*, 52(2), pp.327-342.
- Hamidi, S. and Zamani-Kalajahi, M., 2021. "Hydrogels as Novel and Efficient Materials in Sorbent-Based Sample Preparation Techniques.", *Critical Reviews in Analytical Chemistry*, pp.1-14.
- Jahed, F.S., Hamidi, S. and Nemati, M., 2021. "Colorimetric Assay for Copper Ion Based on

Silver Nanoparticles Functionalized with 1, 3-Dimethyl Benzotriazolium Iodide.” *Analytical and Bioanalytical Chemistry Research*, 8(4), pp.505-513.

- Hamidi, S., Nemati, M. and Lotfipour, F., 2021. ”Simultaneous determination of synthetic dyes in gummy candy using novel mesoporous magnetic graphene oxide zein aerogel followed by a high performance liquid chromatography.”, *Journal of microbiology, biotechnology and food sciences*, 11(3), pp.e3785-e3785.
- Khatibi, S.A., Hamidi, S. and Siahi-Shadbad, M.R., 2021. ”Current trends in sample preparation by solid-phase extraction techniques for the determination of antibiotic residues in foodstuffs: a review.”, *Critical reviews in food science and nutrition*, 61(20), pp.3361-3382.
- Hamidi, S., 2021. ”Assessment of Undeclared Synthetic Drugs in Dietary Supplements in an Analytical View: A Comprehensive Review.”, *Critical Reviews in Analytical Chemistry*, pp.1-11.
- Hamidi, S., Taghvimi, A. and Mazouchi, N., 2021. ”Micro solid phase extraction using novel adsorbents.” *Critical Reviews in Analytical Chemistry*, 51(2), pp.103-114.
- Khaledi, S., Jafari, S., Hamidi, S., Molavi, O. and Davaran, S., 2020. ”Preparation and characterization of PLGA-PEG-PLGA polymeric nanoparticles for co-delivery of 5-Fluorouracil and Chrysin.”, *Journal of Biomaterials Science, Polymer Edition*, 31(9), pp.1107-1126.
- Jahed, F.S. and Hamidi, S., 2020. Applications of surface plasmon resonance in human health Care. *Nanomedicine*, 15(19), pp.1823-1827.
- Jahed, F.S., Hamidi, S., Ghaffary, S. and Nejati, B., 2020. ”Dispersive micro solid phase extraction of busulfan from plasma samples using novel mesoporous sorbent prior to determination by HPLC-MS/MS.”, *Journal of Chromatography B*, 1145, p.122091.
- Taghvimi, A., Hamidi, S., Javadzadeh, Y., Dastmalchi, S. and Tabibiazar, M., 2020. ”Magnetic nano-carbon core shell as potent mixed hemimicelle solid phase extraction strategy for determination of acrylamide from potato chips coupled by high-performance liquid chromatography.”, *Journal of the Iranian Chemical Society*, 17, pp.817-823.
- Taghvimi, A., Hamidi, S. and Javadzadeh, Y., 2019. ”Mixed hemimicelle magnetic dispersive solid-phase extraction using carbon-coated magnetic nanoparticles for the determination of tramadol in urine samples.” *Journal of separation science*, 42(2), pp.582-590.
- Hamidi, S., Azami, A. and Aghdam, E.M., 2019. ”A novel mixed hemimicelles dispersive microsolid phase extraction using ionic liquid functionalized magnetic graphene oxide/polypyrrole for extraction and pre-concentration of methotrexate from urine samples followed by the spectrophotometric method.” *Clinica Chimica Acta*, 488, pp.179-188.
- Jahed, F.S., Hamidi, S. and Nemati, M., 2018. ”Dopamine-Capped Silver Nanoparticles as a Colorimetric Probe for On-Site Detection of Cyclosporine.”, *ChemistrySelect*, 3(47), pp.13323-13328.
- Hamidi, S., 2018. ”Drug detection in biological specimens: recent colorimetric methods.” *Bioanalysis*, 10(3), pp.127-130.

- Hamidi, S., Alipour-Ghorbani, N. and Hamidi, A., 2018. "Solid phase microextraction techniques in determination of biomarkers." *Critical Reviews in Analytical Chemistry*, 48(4), pp.239-251.
- Jouyban, A. and Hamidi, S., 2017. "Dispersive micro-solid-phase extraction using carbon-based adsorbents for the sensitive determination of verapamil in plasma samples coupled with capillary electrophoresis." *Journal of separation science*, 40(16), pp.3318-3326.
- Hamidi, S. and Jouyban, A., 2015. "Capillary electrophoresis with UV detection, on-line stacking and off-line dispersive liquid-liquid microextraction for determination of verapamil enantiomers in plasma." *Analytical Methods*, 7(14), pp.5820-5829.
- Massoumi, B., Abdollahi, M., Fathi, M., Entezami, A.A. and Hamidi, S., 2013. "Synthesis of novel thermoresponsive micelles by graft copolymerization of N-isopropylacrylamide on poly(E-caprolactone-Co-A-Bromo-E-Caprolactone) as macroinitiator via ATRP.", *Journal of Polymer Research*, 20, pp.1-8.

Book Chapters

1. Parvin Abedi Ghobadlou, Arezou Taghvimi, Samin Hamidi, Sevinc Kurbanoglu, Chapter 20. Electrochemical Devices for Determination of Amino Acids, Editor: Dr. J.G. Manjunatha, *Real-Time Applications Of Advanced Electrochemical Devices*, IOPS Publisher, In Press February 2024
2. Arezou Taghvimi, Samin Hamidi, Sevinc Kurbanoglu, Yousef Javadzadehe, Chapter 4: Electrochemical Sensing Devices for Determination of Hormones Editor: Dr. J.G. Manjunatha, *REAL-TIME APPLICATIONS OF ADVANCED ELECTROCHEMICAL DEVICES*, IOPS Publisher, In Press February 2024
3. Ghobadloo, P.A., Keles, G., Yarman, A., Hamidi, S., Kurbanoglu, S., Chapter 13: Determination of amino acids and other clinically significant molecules at surfactant-based electrochemical sensors and biosensors, *Surfactant Based Electrochemical Sensors and Biosensors Elsevier Science Oxford/ Amsterdam*, Jamballi G. Manjunatha, Chaudhery Mustansar Hussain, Editor, 2024, In Press

International Conferences

- A comprehensive review of multilayer structures for enhanced wound recovery. The 7th International Congress on BioMedicine (ICB), Tehran, 2023
- The use of magnetic nanoparticles for sample preparation of biomarkers related to human diseases, The 7th International Congress on BioMedicine (ICB), Tehran, 2023
- Investigation of amino acid profile in prostate cancer patients by liquid chromatography equipped with tandem mass detector, The 6th International Congress on BioMedicine (ICB), Tehran, 2022

- Biomedical applications of silica-based aerogels: A review, The 6th International Congress on BioMedicine (ICB), Tehran, 2022
- Determination of vitamins B1 and B6 in infant formula and food supplement samples using magnetic Mg/Fe layered double hydroxide nanoadsorbent before liquid chromatography-tandem mass spectrometry, 21th International Chemistry Congress, 2022, Azerbaijan Shahid Madani University, Tabriz, Iran, 2022
- Determination of vancomycin in plasma samples using magnetic solid-phase extraction coupled to liquid chromatography-tandem mass spectrometry, 21th International Chemistry Congress, 2022, Azerbaijan Shahid Madani University, Tabriz, Iran, 2022
- Inventing a bacteriocidal porous cryogel for immediate disinfection of contaminated water on site, 21th International Chemistry Congress, 2022, Azerbaijan Shahid Madani University, Tabriz, Iran, 2022
- Investigation of amino acid profiles for prostate cancer biomarkers using magnetic dispersive solid-phase extraction, 21th International Chemistry Congress, 2022, Azerbaijan Shahid Madani University, Tabriz, Iran, 2022
- Using Electrocoagulation For the Removal of Propofol From the Aqueous Solutions; Application of Response Surface As An Experimental Design Method, 11th International Chemical Engineering Congress, Fouman, Iran, 2020

Doctorate Theses Supervision

- Zohreh Hamed Behzad. **Pharm. D.** Formulation of polymer-based skin patches to investigate clonidine drug release.
- Mona Karouglu. **Pharm. D.** Investigating the stability of minoxidil in the presence and absence of progesterone in a mixture of buffer solvents and alcohol under conditions of storage at room temperature, refrigerated and accelerated.

- Parisa Ahmadi. **Ph.D.** Design and fabrication of electrospun fibers of beta-cyclodextrin-based polymers and investigation of their applicability as the heavy metal adsorbent in the water samples
- Zahra Esmaili. **Pharm. D.** Comparative investigation of the antimicrobial effects of cerium complex with black and green tea extracts
- Dena Najafi. **Pharm. D.** Investigation the antimicrobial properties of alginate hydrogel with curcumin.
- Sana Babazadeh. **Pharm. D.** Investigating of the antimicrobial properties of pectine polymer with polyphenolic bioactive materials.
- Bahar Habibi. **Dentistry.** Investigating the antibacterial property of *Urtica dioica* plant extract loaded in hydrogel.
- Kolsoum Abdollahi. **Pharm. D.** Quantification of 5-hydroxymethylfurfural as a quality control indicator in pharmaceutical products based on carbohydrate content, using magnetic microextraction method coupled with spectrophotometry.
- Faezeh Karimpour. **Pharm. D.** Development of solid-phase microextraction method using magnetic adsorbent to determine the amount of vitamin B1 in infant formula.
- Amin Safdari. **Pharm. D.** Probability of Nitroso dimethylAmine presence and its quantification in Famotidine dosage forms
- Ali Zaer. **Pharm. D.** Development of dispersive micro-solid-phase extraction method using carbon-based adsorbent for determination of dexamethasone in sport supplement
- Sahra Valizad. **Pharm. D.** Assessment the blood level of intravenous Busulfan and association with toxicity and survival following allogeneic hematopoietic cell transplantation in Iranian adults
- Amin Nejati. **Pharm. D.** Determination of glutamine in athletic glutamine supplements available in Iran Drug market
- Ali Feyzi. **Pharm. D.** Determination of creatine in the creatine supplements available in the Iranian market

Theses Advisory

- Ebad Amri. **Pharm. D.** Optimization of thiamine biosynthesis in different microorganisms by RSM method.
- Golsa Barfi. **Pharm. D.** Evaluation of antimicrobial effects of Cerium complex prepared using *Tanacetum kotschyi* extract.
- Farnaz Najafi. **M.Sc.** Assessing the effect of postbiotics obtained from *Lactobacillus plantarum* on the amount of lead and cadmium in milk.
- Amin Khatibi. **Post-Doc.** Determination of β -lactams, in foodstuff using dispersive liquid–liquid microextraction and liquid chromatography–tandem mass spectrometry
- Samira Khaleidi. **M.Sc.** Preparation of Polymeric Nanoparticles Based on Polyethylene Glycol - Poly (Lactide-Glycolide) PLGA-PEG-PLGA Containing 5-Fluorouracil and Chrysin anticancer drugs and evaluation in HT29 colon cancer cell line

Book Chapters

1. Ghobadloo, P.A., Taghvimi, A., Hamidi, S., Kurbanoglu, S., Chapter 20. Electrochemical Devices for Determination of Amino Acids, Editor: Dr. J.G. Manjunatha, Real-time applications of advanced electrochemical devices, IOPS Publisher, In Press February 2024
2. Taghvimi, A., Hamidi, S., Kurbanoglu, S., Javadzadehe, Y., Chapter 4. Electrochemical Sensing Devices for Determination of Hormones Editor: Dr. J.G. Manjunatha, Real-time applications of advanced electrochemical devices, IOPS Publisher, In Press February 2024
3. Ghobadloo, P.A., Keles, G., Yarman, A., Hamidi, S., Kurbanoglu, S., Chapter 13. Determination of amino acids and other clinically significant molecules at surfactant-based electrochemical sensors and biosensors, Surfactant Based Electrochemical Sensors and Biosensors Elsevier Science Oxford/ Amsterdam, Jamballi G. Manjunatha, Chaudhery Mustansar Hussain, Editor, 2024, In Press

Research interests

- Pharmaceutical Chemistry
- Drug Delivery
- Point of Care Medicine
- Personalized Medicine
- Analysis and Bioanalysis
- Polymeric Materials