

Tahere Taghizade Firozjaee

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<ul style="list-style-type: none"> • Bachelor of Civil Engineering - Civil Engineering, Noshirvani University of Technology, Babol, 2003-2007 • Master's Degree in Civil Engineering (Environment), Noshirvani University of Technology, Babol, 2008-2011 • PhD in Environmental Engineering (Water and Wastewater), University of Tehran, 2012-2017 • 	<p>Education</p>
<ul style="list-style-type: none"> • Assistant Professor in the Department of Water and Environmental Engineering, Faculty of Civil Engineering, Shahrood University of Technology- Sep. 2020-present • Visiting professor at the Department of Civil Engineering and the Department of Environmental Sciences, Mazandaran University, 2017-2019 • 	<p>Professional Experience</p>
<ul style="list-style-type: none"> • Cooperation with the Mazandaran Engineering System Organization (having a supervision and implementation employment license) • Cooperation with Tadbirab Khorasan Consulting Engineers with the field of design and implementation of water and wastewater treatment plants • Cooperate with trusted environmental laboratory • 	<p>Educational Experience</p>
<p>Bachelor's degree courses:</p> <ul style="list-style-type: none"> • Principles of water and sewage treatment engineering - water and sewage engineering and projects - environmental engineering - engineering hydrology - engineering statistics and probability - construction materials <p>Master's courses:</p> <ul style="list-style-type: none"> • Environmental Biotechnology - Principles of Water and Wastewater Treatment Engineering - Seminar 1 - Soil and Environment - Principles of Engineering and Waste Management - Wastewater Recycling and Reuse <p>PhD courses:</p> <ul style="list-style-type: none"> • Environmental biotechnology 	<p>Teaching Experience</p>
<ul style="list-style-type: none"> • Municipal and industrial wastewater treatment • Water treatment • Wastewater recycling technologies • Design of water and wastewater networks • Quality assessment of water resources 	<p>Expertise and skill</p>

<ul style="list-style-type: none"> • Skill in using software:DESIGN EXPERT, SWMM, STORM NET, EPANET, END NOT, AUTO CAD 	
<ul style="list-style-type: none"> • Doctoral thesis entitled "Removal of phenol from industrial wastewater in ACSTR reactor" - with the guidance of Dr. Qasim Najafpour - July 2016 • Master's thesis entitled "Removal of diazinon from aquatic environments by carbon nanotube/chitosan adsorbent" - with the guidance of Dr. Nasser Mehrdadi - June 2019 • 	Research Thesis
<ol style="list-style-type: none"> 1. Behnaz Latifian (2023), "Removal of lead heavy metal from aqueous environment by magnetic composite biochar-iron oxide nanoparticle (MNP-BC)", master's thesis, Shahrood University of Technology, Tahere Taghizade Firozjaee [Supervisor], 2. Seyed Mojtaba Mast Ali (2023), "Evaluation of the efficiency of atmospheric cold plasma technology in removing Rhodamine-B from the water environment", Master's thesis, Shahrood University of Technology, Tahere Taghizade Firozjaee [supervisor], 3. Negar Mohammadian (2024), "Investigating the efficiency of iron oxide nanoparticle biochar composite adsorbent (MNP-BC) in removing the antibiotic metronidazole from the aquatic environment, Master's thesis, Shahrood University of Technology, Tahere Taghizade Firozjaee [Supervisor] 4. Mehrdad Hasanabadi (2024), "Purification of organic compounds from wastewater using Fe-MOF catalyst (iron-based metal-organic framework) in the heterogeneous Sonofenton process", Master's thesis, Shahrood University of Technology, Tahere Taghizade Firozjaee [supervisor] 5. Mohammad Sepehvand (2024), "The use of water quality indicators in the assessment of physical, chemical and biological pollution of the Keshkan River and modeling with ArcGIS software", Master's thesis, Shahrood University of Technology, Tahere Taghizade Firozjaee [Supervisor] 6. Seyed Maliha Sajjadian (2024), "Quantitative and qualitative assessment of urban wastewater for its reuse in different uses in Shiraz city and providing a suitable model using AHP hierarchical analysis process", Master's thesis, Shahrood University of Technology. Tahere Taghizade Firozjaee [Supervisor] 	Thesis Supervisor
<ul style="list-style-type: none"> •Investigating the effectiveness of biochar composite adsorbent-iron oxide nanoparticles (BC-MNP) in removing the antibiotic metronidazole from the water environment, (2022), our contract between Shahrood University of Technology and Khorasan Razavi Regional Water Company 	Research projects
<p>Books:</p> <ol style="list-style-type: none"> 1. Tahere Taghizade Firozjaee, Farshad Golbabaei Kootenaei, Roudabeh Samiee Zafarghandi, Malihe Fallahnejad , Sludge reduction technologies in wastewater treatment plants - Publications of Shahrood University of Technology, In Parsian. 	Publications

2. **Tahere Taghizade Firozjaee**, Farshad Golbabaei Kootenaei, Hamed Hasanlou, Jafar Abdi, Water, The Environment and The Sustainable Development Goals, Water Recycling and Reuse (Chapter 19), Elsevier, November 24, 2023, ISBN: 9780443153549.

Journal Articles (ISI):

1. Negar Mohammadian, **Tahere Taghizade Firozjaee**, Jafar Abdi, Milad Moghadasi, Masoud Mirzaei., (2024) "PW12/Fe₃O₄/biochar nanocomposite as an efficient adsorbent for Metronidazole removal from aqueous solution: synthesis and optimization", *Surfaces and Interfaces*.
2. Behnaz Latifian, **Tahere Taghizade Firozjaee**, Jafar Abdi., (2023) "Synthesis of biochar-iron oxide magnetic nanocomposite for efficient and rapid removal of Pb (II) heavy metal from water", *Water Practice & Technology*.
3. Atieh Fahimi Bandpey, Jafar Abdi, **Tahere Taghizade Firozjaee.**, (2023) "Improved estimation of dark fermentation biohydrogen production utilizing a robust Categorical Boosting machine-learning algorithm", *International Journal of Hydrogen Energy*.
4. **Tahere Taghizade Firozjaee**, Naser Mehrdadi, Majid Baghdadi, Gholam Reza Nabi Bidhendi., (2020) "FIXED-BED COLUMN STUDY OF DIAZINON ADSORPTION ON THE CROSS-LINKED CHN-CNT", *Environmental Engineering and Management Journal*.
5. **Tahere Taghizade Firozjaee**, Naser Mehrdadi, Majid Baghdadi, Gholam Reza Nabi Bidhendi (2017) "The removal of diazinon from aqueous solution by chitosan/carbon nanotube adsorbent", *Desalination and Water Treatment*
6. **Tahere Taghizade Firozjaee**, Ghasem D.Najafpour, Ali Asgari, Maryam Khavarpour., (2012) "BIOLOGICAL TREATMENT OF PHENOLIC WASTEWATER IN AN ANAEROBIC CONTINUOUS STIRRED TANK REACTOR", *Chemical Industry & Chemical Engineering Quarterly*.
7. Zeinab Bakhshia, Ghasem Najafpour, Esmaeel Kariminezhada, Roya Pishgara, Nafise Mousavi, **Tahere Taghizade Firozjaee.**, (2011) " Growth kinetic models for phenol biodegradation in a batch culture of Pseudomonas putida " *Environmental Technology*.

Scientific research journal Articles:

1. **Tahere Taghizade Firozjaee**, Farshad Golbabaei Kootenaei, Yadollah Aghdoud Chaboki, (2024) "An overview of the sources, impacts, and management techniques of microplastics in the marine environment", *International Journal of Maritime Technology*.
2. Mohammad Moonesun, Mehdi Ajami, **Tahere Taghizade Firozjaee**, (2023) "Jask-Mashhad freeway; Revivalist of the eastern half of Iran and Makoran coast", *International journal of Maritime Policy*.
3. Negar Mohammadian, **Tahere Taghizade Firozjaee**, Jafar Abdi (2023) "A Review of Biochar as a Stable Adsorbent for Removing Antibiotics from Wastewater", *Journal of Water and Wastewater*.
4. Majid Baghdadi1, Mohammad Javan, **Tahere Taghizade Firozjaee**,

- Nioushasadat Haji Seyed Javadi, Mahshid Mortazavi, Ali Torabian, Pooneh Saeidi, Gholamreza Darvishi (2021) "Enhancement of pharmaceuticals treatment on activated sludge process by magnetic activated carbon pretreatment system", *Journal of Applied Research in Water and Wastewater*.
5. Hasan Aminirad, Ozeair Abessi, Farshad Golbabaei Kootenaei, Mohammad Amin Mirrezaei, **Tahere Taghizade Firozjaee**, Pooneh Saeidi, Gholamreza Darvishi (2021) "Investigation of self-purification capacity and water quality of Haraz river during dry and wet season", *Journal of Applied Research in Water and Wastewater (JARWW)*.
 6. **Tahere Taghizade Firozjaee**, Naser Mehrdadi, Majid Baghdadi, Gholam Reza Nabi Bidhendi., (2018) "Application of Nanotechnology in Pesticides Removal from Aqueous Solutions - A review", *International Journal of Nanoscience and Nanotechnology*.
 7. **Tahere Taghizade Firozjaee**, Ghasem D.Najafpour, Maryam Khavarpour, Zeinab Bakhshi, Roya Pishgar., (2011) "Phenol Biodegradation Kinetics in an Anaerobic Batch Reactor", *Iranica Journal of Energy & Environment (IJEE)*.
 8. **Tahere Taghizade Firozjaee**, "Disposal of waste from nuclear ships and submarines and environmental monitoring and control of radioactive materials in naval ports" *Journal of Marine Engineering*, 1402, In Parsian
 9. Farshad Golbabaei Kootenaei, Naser Mehrdadi, **Tahere Taghizade Firozjaee**., Atieh Fahimi Bandapi, Hadi Walhi Rikande "Investigating the appropriate method of sludge dewatering in sewage treatment plants using the hierarchical analysis process (Case study: Sewage treatment plant in the south of Tehran) *Water and sustainable development journal - Ferdowsi University of Mashhad, Iran*, 1401, In Parsian
 10. Mohaddeh Golzadeh, Fatemeh Kardel, **Tahere Taghizade Firozjaee**., "Removal of ciprofloxacin antibiotic using potassium ferrate together with Fe(VI)-US ultrasound waves", *Health System Research Journal - Isfahan University, Iran*, 2018, In Parsian
 11. **Tahere Taghizade Firozjaee**, "Investigating the performance of carbon nanotube/chitosan adsorbent to remove diazinon pesticide from aquatic environments" *Health System Research Journal - University of Isfahan, Iran*, 2016, In Parsian

International and national congresses Articles:

- 1- Mehdi Ajami, Mohammad Moonesun, **Tahere Taghizade Firozjaee**, (2024), The transparency of the oceans; A threat to the future of naval submarines, *Global Maritime Congress*.
- 2- Mohammad Moonesun, Mehdi Ajami, **Tahere Taghizade Firozjaee**, (2024), AUVs housing methods in naval submarines, *Global Maritime Congress*.
- 3- **Tahere Taghizade Firozjaee**, Ghasem D.Najafpour, Zeinab Bakhshi, Roya Pishgar and Nafise Mousavi, Phenol Biodegradation Kinetics in an Anaerobic Batch Reactor, *World Environmental and Water Resources Congress*, California, May 22-26, 2011, ASCE Conf. Proc. doi:[http://dx.doi.org/10.1061/41173\(414\)448](http://dx.doi.org/10.1061/41173(414)448).
- 4- Nafise Mousavi, Ghasem D.Najafpour, Zeinab Bakhshi, Roya Pishgar, **Tahere Taghizade**, Performance of Anaerobic Baffled Reactor (ABR) For The Treatment of Phenolic Wastewater With The Aid of Biological Sludge, *International Conference*

on Environment 2010 (ICENV 2010), Penang, Malaysia, 3 December 2010, pp. (1-8).

- 5- Roya Pishgar, Ghasem D. Najafpour, Nafise Mousavi, Zeinab Bakhshi, **Tahere Taghizade**, Biodegradation of Phenol in An Anaerobic Batch Reactor Using Mixed Culture in Presence of Supplementary Substrate, Proceedings of the WasteSafe 2011 – *2nd International Conference on Solid Waste Management in the Developing Countries*, 13-15 February 2011, Khulna, Bangladesh, pp. (1-8).
- 6- Nayyereh Doulatabadi, **Tahere Taghizade Firozjaee**, Fatemeh Kardel, "Review of atmospheric dust identification and characterization methods", 6th National Conference on Environmental Engineering and Management, 2024, **In Parsian**
- 7- Kianoosh Salek, **Tahere Taghizade Firozjaee**, "Review of PFAS removal methods using various types of absorbents" 3rd National Conference on Environmental Engineering and Management, 2024, **In Parsian**
- 8- Negar Mohammadian, **Tahere Taghizade Firozjaee**, Jafar Abdi "Removing emerging pollutants from wastewater using advanced treatment methods, 4th Congress of Iran Water and Sewerage Science and Engineering, 2022, **In Parsian**
- 9- Negar Mohammadian, **Tahere Taghizade Firozjaee**, Jafar Abdi "Evaluation of engineered biochar as a low-cost and sustainable adsorbent for removing antibiotics from water, National Conference on Environmental Challenges: Green Industry and Mining, 2022, **In Parsian**
- 10- **Tahere Taghizade Firozjaee**, Behnaz Latifian, Farshad Golbabai Kotnai "Investigation of various methods of removal of heavy metals from wastewater" 3rd National Conference on Environmental Engineering and Management, 2021, **In Parsian**
- 11- **Tahere Taghizade Firozjaee**, Amir Ghasemi Moghadam, Maleeha Sajjadian "Investigation of plant remediation mechanisms in removing pollutants from the environment (review article)" Second International Conference and Fifth National Conference on Protection of Natural Resources and Environment, 2021, **In Parsian**
- 12- **Tahere Taghizade Firozjaee**, Behnaz Latifian "Evaluation of the performance and mechanisms of the electrochemical system for the treatment of landfill leachate, 2020, **In Parsian**
- 13- Farshad Golbabai Kotnai, **Tahere Taghizade Firozjaee**, Nasser Mehrdadi, Mohammad Javad Amiri, "Potential effects of micro and nanoplastics on environmental pollution and human health", 2nd International Conference on Science and Nanotechnology, University of Tehran, 2020, **In Parsian**
- 14- **Tahere Taghizade Firozjaee**, Nasser Mehrdadi, Ali Tarabian "Knowledge of pesticides and review of their removal methods from water resources" National Water Recycling Conference; A basic strategy for water crisis management, 2013, **In Parsian**
- 15- Qhasem Najafpour, **Tahere Taghizade Firozjaee**, "The use of hybrid purification methods to remove phenolic compounds from industrial wastewaters", 4th Conference and Specialized Exhibition of Environmental Engineering, 2019, **In Parsian**

- **Environmental Progress and sustainable energy (ISI)**
- **Environmental Monitoring and Assessment (ISI)**
- **Environmental Engineering Science (ISI)**
- **Journal of Environmental Health Science and Engineering (ISI)**
- **Water Science and Technology (ISI)**

**Reviewer
Experience**

- **Environmental Resources Research (ISC)**
- **Journal of Water and Wastewater (ISC)**
- **Journal of Applied Research in Water and Wastewater (ISC)**
- **•Omran Sharif Journal (in persian)**
- **•Marine Engineering Journal(in persian)**