

Sultan Qaboos University
College of Engineering



جامعة السلطان قابوس
كلية الهندسة



CURRICULUM VITAE (CV)



Dr. Zeinab Yavari

Assistant Professor in Architectural Engineering
Civil and Architectural Engineering Department
Sultan Qaboos University

Not:

SQU = Sultan Qaboos University, Muscat, Oman.

<u>GENERAL INFORMATION</u>	
Name	ZEINAB YAVARI
Date of Birth	1985
Place of Birth	Islamic Republic of Iran
Current position	Assistant Professor in Architectural Engineering at Sultan Qaboos University, Muscat, Oman
College and Department	College of Engineering, Department of Civil & Architectural Engineering (CAED)
Years of teaching and research experience	10+ years (Iran, Oman)
Telephone No.	+968 2414 3752
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Honors and awards

- Hafiz of Quran
- Strategic Grants (His Majesty Trust Fund). Sultan Qaboos University-2024
- Elected student in Ph.D. Ministry of health (University level) 2015
- Elected student in Ph.D. Ministry of health (University level) 2016
- Elected student in Ph.D. Ministry of health (University level) 2017
- Elected professor at ministry of health (University level) 2012
- Top presentation of article in international conference, 2010
- Ranked top talent in M.Sc. program without entrance national exam at ministry of health, 2009
- Ranked first in M.Sc. Program Ministry of health (University level) 2008
- Ranked first in B.Sc. Ministry of health (University level), 2007
- Ranked first in Quran competition at ministry of Health (2008, 2010, 2013, 2015)
- Active member of the Red Crescent Society

EDUCATION AND EMPLOYMENT INFORMATION

Education:

- 2017, Ph.D. Environmental Health Engineering, Isfahan University of Medical Sciences. Thesis title “Evaluation the removal of endocrine steroid hormones using moving bed bio erector (MBBR)”.
- 2011, M.Sc. Environmental Health engineering, Tehran University of Medical Sciences, Thesis title “Feasibility of Microbial Fuel Cell (MFC) for electricity generation from synthetic wastewater”.

Employment:

- *Assistant professor*, Department of Civil and architectural, College of engineering, Sultan Qaboos University, Sultanate of Oman. 2021-on going
- *Quality Assurance and Accreditation Committee (CE Program)*, Department of Civil and architectural, College of engineering, Sultan Qaboos University, Sultanate of Oman. 2021-on going
- *Postgraduate Studies & Research Committee (Environmental Engineering Coordinator)*, Department of Civil and architectural, College of engineering, Sultan Qaboos University, Sultanate of Oman. 2021-on going
- *Risk Management committee (Coordinator)*, Department of Civil and architectural, College of engineering, Sultan Qaboos University, Sultanate of Oman. 2023- on going
- *Publication/Web Committee (Coordinator)*, Department of Civil and architectural, College of engineering, Sultan Qaboos University, Sultanate of Oman. 2021-on going
- *Seminars and Publicity committee (Coordinator)*, Department of Civil and architectural, College of engineering, Sultan Qaboos University, Sultanate of Oman. 2021-2022
- *Examination + Appeal Committee (Coordinator)*, Department of Civil and architectural, College of engineering, Sultan Qaboos University, Sultanate of Oman. 2022-2023

- ***Assistant professor***, Department of environmental health, School of health, Shahid Sadoughi University of medical sciences. Yazd. IRAN.2018-2021
- ***Deputy of vice chancellor***, College of Abarkouh, Shahid Sadoughi University of Medical Sciences ,Yazd, Iran.2019-2021
- ***Representative of Vice chancellor***. College of Abarkouh, Shahid Sadoughi University of Medical Sciences ,Yazd, Iran.2019-2021
- ***Head of department of environmental health engineering***, College of Abarkouh, Shahid Sadoughi University of medical sciences. 2019-2021
- ***Electronic log book Committee***, Shahid Sadoughi University of Medical Sciences ,Yazd, Iran.2019-2021
- ***Education and Graduate Committee***, Shahid Sadoughi University of medical sciences. 2019-2021
- ***Online and Electronic Examination Committee***, Shahid Sadoughi University of medical sciences. 2019-2021
- ***Lecturer***, Qom University of medical sciences, 2011-2014.
- ***Quranic consultor***. Qom university of medical sciences, 2011-2012

TEACHING AND LEARNING

Active Participation in University Teaching & Learning

Teaching

❖ *Sultan Qaboos University)OMAN)*

Code Course	Title	Level	Semester
CIVL5186	Water and wastewater management	Undergraduate	FL2021,FL2022, FL2024
CIVL4136	Environmental Engineering I	Undergraduate	FL2021,SP2022,FL202, FL2023, FL2024
CIVL5326	Environmental Engineering II	Undergraduate	SP2022,SP2023,SP2024
CIVL6760	Solid waste management	Postgraduate	SP2022,SP2023
CIVL6750	Air pollution control engineering	Postgraduate	FL2022, FL2024
CIVL6780	Contaminant transport processes	Postgraduate	SP2023,SP2024

❖ *Shahid Sadoughi University of medical sciences (IRAN)*

Water treatment	Modeling in environmental health
Process for water and wastewater treatment	Industrial wastewater
Fluid mechanics	Disinfections and application
Hydraulics	Environmental chemistry
Medical literatures search	Wastewater treatment
Research methodology	Air pollution

❖ *Qom University of Medical Sciences (IRAN)*

Process for water and wastewater treatment	Disinfections and application
Fluid mechanics	Environmental chemistry
Water treatment	Wastewater treatment

Workshop Teaching:

1. **Title:** Microplastics in Wastewater: Understanding Their Journey and Enhancing Treatment Efficiency, **Location:** KISR, 2024, Kuwait.
2. **Title:** Microplastic Pollution in Municipal solid waste: Sources, Fate, and Environmental Implications. **Location:** Be'ah Company, 2024, OMAN.

3. **Title:** Microplastic: Fate and Removal Efficiency in Wastewater Treatment Plants. **Location:** NAMA Water resources, 2024, OMAN
4. **Title:** Microplastic Pollution: Sources, Fate, and Risk Assessment in the Environment. **Location:** Environmental Authority, 2024, OMAN

Academic Supervision

❖ Main supervisor of Ph.D theses

1. **Title:** Air Quality Assessment in Sohar Port, Oman: Integrating Monitoring, Parameters, and Modeling for Sustainability. **Student name:** Mohammed Ambusaidi. In progress
2. **Title:** A Comprehensive Study on Microplastic Detection in Compost for Enhanced Solid Waste Management. **Student name:** Abrar Al Amri. In progress

❖ Co-supervisor of Ph.D. theses:

1. **Title:** Microbial electro synthesis as novel biotechnology for CO₂ sequestration and renewable resource recovery for zero carbon emission. **Student name:** Noor Al Balushi. In progress
2. **Title:** Enhancing methane production in a novel bio -electrochemical anaerobic digestion and Emission potential. **Student name:** Zahra Al-Hasani. In progress

❖ Main supervisor of MSc theses

1. **Title:** An integrated approach to enhance the desalination process: Coupling solar cell process with microbial desalination cells. **Student name:** Fatemah Al-Qais. Completed, Fall 2022
2. **Title:** Degradation of sulfamethoxazole using UV-LED/chlorine followed by activated carbon adsorption: Optimization and Modeling by Artificial Intelligent. **Student name:** Marwa Al Mahdouri. Completed, Fall 2022
3. **Title:** The Removal Efficiency and Risk Analysis of Microplastics in Wastewater Treatment Plants in Oman. **Student name:** Abrar Mohammed Saif Al-Aamri. Completed, Spring 2023

4. **Title:** Degradation of Amoxicillin and Ibuprofen by Activated Carbon and Potassium Persulfate from Wastewater: RSM and Machine learning. **Student name:** Maysoun Abu-Amra. Completed, Spring 2023
5. **Title:** Sono-electro-Fenton process enhanced by persulfate for highly efficient of Sulfamethoxazole from aqueous solutions: Process optimization, kinetic and mechanism. **Student name:** Eman Muhye Adeen, Completed, Spring 2024
6. **Title:** Monitoring and detection of priority pollutants in water resources: A case study Wadi Dayqah Dam. **Student name:** Tasnim Al Shaqsi. In progress
7. **Title:** Monitoring and detection of Microplastics in water resources: A case study Wadi Dayqah Dam. **Student name:** Fathiya Al Yahyai. In progress
8. **Title:** "Short-term prediction of particulate matter (PM) concentration based on traffic and meteorological data with deep learning model". **Student name:** Rashid AL Badi. In progress

❖ ***Co-supervisor of MSc theses:***

1. **Title:** Assessment of the Efficiency, Energy Usage, and Greenhouse Gas Emissions of Various Capacities and Technologies in Sewage Treatment Plants in Oman. **Student name:** Mundher Al Amri. In progress
2. **Title:** Improving grit blasting waste management by six-sigma method - A case for the oil and gas industries. **Student name:** Ahmed Al Abri. Completed, Fall 2022
3. **Title:** Influence of enzymes on biogas generation using conductive material assisted thermophilic anaerobic digester. **Student name:** Izdehar Al Lawati. Completed, Fall 2023
4. **Title:** Investigation of Residual Chlorine Dissipation in Drinking Water Systems. **Student name:** Arwa Al Sukaiti. Completed, Fall 2023

❖ ***Students and Peer Evaluation:***

- Constantly excellent student evaluation. Average in the last evaluated three years (all courses are valid): "This instructor is a good teacher": 3.6/4; "Overall Score": 3.6/4.
- Peer review of Teaching
- Examiner for Civil Program Cooperative Training (CIVL5002) students
- Examiner for Research project I (CIVL5993)

❖ *Introducing and Developing New Courses*

Postgraduate Courses:

- Special topic in Environmental Engineering, CIVL 6700 (Advanced Analytical Techniques for Environmental Applications), MSc level, Fall2023

Program(s) Coordinator

- Environmental Engineering program Coordinator- Academic year:2021-2022
- Environmental Engineering program Coordinator- Academic year:2022-2023
- Environmental Engineering program Coordinator- Academic year:2023-2024
- Environmental Engineering program Coordinator- Academic year:2024-2025

Curricula revision

- Contribution on the Curricula Modernizing Committee: Bench Marking Sub-committee (Environmental Engineering Program), CAED, SQU, spring 2023.

❖ *Development of Delivery of Teaching*

1. Using technology in teaching

- ❖ Online textbooks
- ❖ live video streaming platforms (from YouTube to streaming public events)
- ❖ Multi Media Lessons (Podcasts, Recorded lectures, Digital take-home lessons)
- ❖ Learning Management Systems (Moodle, Google Meet)
- ❖ Power Points
- ❖ Software (Excel, MATLAB)

2. Diversity in teaching

- Active Learning Techniques:
 - Discussion
 - Problem solving using real data
 - Brain writing and brainstorming
 - Science Experiments
 - Group Projects
 - The one-minute paper (for postgraduate students)
 - Debates (for postgraduate students)

❖ *Attendance at training courses that are related to teaching*

- Attendance in Workshop “***Learning from Within: Peer Review's Role in Teacher Professional Development***”, (CETL), SQU. February 25 – 29, 2024
- Attendance in Workshop “***Assessment and Rubric Design***”. (CETL), SQU. March 10, 2024- April 11, 2024
- Attendance in Workshop “***Teaching Critical Thinking***”. (CETL). SQU. February 02, 2024- March 07, 2024
- Attendance in Workshop “***Course Design***”. (CETL). SQU. April 14, 2024- May 26, 2024
- Attendance in Workshop “***Case Study as a teaching strategy (part1)***”. (CETL). SQU. October 02, 2023
- Attendance in Workshop “***Introduction to CHETL and Educational Philosophy Course***”. (CETL).SQU. September 17, 2023- October 21, 2023
- Attendance in Workshop “***Outcome Based Learning Objectives***”. (CETL), SQU. October 22, 2023- November 25, 2023
- Attendance in Workshop “***Pedagogy Models & Instructional Strategies***”. (CETL), SQU. October 26, 2023- December 23, 2023
- Attendance in Workshop “***Customizing Your Teaching to Outcome-based Learning, Assessment, and Active Learning***”. (CETL), SQU. October 12, 2023
- Attendance in Workshop “***Assessments policies & procedures***”. (CETL), SQU. September 14, 2023
- Attendance in Workshop “***Quality of Teaching in SQU***”. (CETL), SQU. September 13, 2023
- Attendance in Workshop “***The Future of Teaching in SQU***”. (CETL), SQU. September 12, 2023
- Attendance in Workshop “***Course projects: practical, Comprehensive and fair***”. (CETL), SQU, 15 March 2023.
- Attendance in “***Delivering Results with JoVE***” SQU, 9 Feb 2023.
- Attendance in Workshop “***Integrated course design through active learning***”. (CETL), SQU, September 6-24, 2022.
- Attendance in Workshop “***Start setting up the Course, add learning resources and add communication activities***”. (CET). SQU, spring 2022.
- Attendance in “***New Faculty Orientation Program***”. (CETL), SQU, 13-15 September, 2021.
- Attendance in Workshop “***Peer review Assessment in teaching: College of Nursing experience***”. (CETL), SQU, 16 December. 2021.
- Attendance in Workshop “***Promoting active learning through student assessments tools and strategies***”. (CETL), SQU, 11 November 2021.
- Attendance in Workshop “***Webinar on the essentials of Academic Advising***”. SQU, 11 November 2021.

- Attendance in Workshop “*Active learning: the key to student learning*”. (CETL), SQU, 23 September 2021
- Attendance in Workshop “*Integrated course design through active learning*”. (CETL)
- Attendance in Workshop “*Peer review Assessment in teaching: College of Nursing experience*”. (CETL)
- Attendance in Workshop “*Active learning: the key to student learning*”. (CETL)
- Attendance in Workshop “*Promoting active learning through student assessments tools and strategies*”. (CETL)
- Attendance in Workshop “*Course projects: practical, Comprehensive and fair*”. (CETL)
- Attendance in Workshop “*Webinar on the essentials of Academic Advising*”.
- Attendance in Workshop “*Start setting up the Course, add learning resources and add communication activities*”. (CET)
- Attendance in “*JoVE webinar*”

❖ *Additional Evidence of Excellence in Teaching*

1. Peer reviewer of Teaching for a colleague, Water resources, SP2024
2. Peer reviewer of Teaching for a colleague, AREN5403, SP2022
3. Examiner for Civil Program Cooperative Training (CIVL5002) 3 students, Fall2021, Fall2022
4. Examiner for Research project I (CIVL5993), Fall 2022
5. Examiner for Research project I (CIVL5994), Spring 2023

❖ *Participating in/Organizing Scientific Trips for Students*

1. Organizing and conducting field trip Seeb STP, FL2024, CIVL5186(Water and wastewater management)
2. Organizing and conducting field trip Bushar STP, FL2024, CIVL5186(Water and wastewater management)
3. Organizing and conducting field trip for Al Amerat landfill, SP2024, CIVL5326 (Environmental Engineering II)
4. Organizing and conducting field trip for Al Amerat landfill, SP2023, CIVL5326 (Environmental Engineering II), CIVL6760 (Solid waste management)
5. Organizing and conducting field trip for Wadi Dayqah Dam SP2023, CIVL6780(Contaminant Transport Processes)

6. Organizing and conducting field trip for Composting plant, SP2023, CIVL5326(Environmental Engineering II), CIVL6760 (Solid waste management)
7. Organizing and conducting field trip for Healthcare waste site, SP2023, CIVL5326(Environmental Engineering II), CIVL6760 (Solid waste management)
8. Organizing and conducting field trip for Al Amerat landfill, SP2022, CIVL5326 (Environmental Engineering II), CIVL6760 (Solid waste management)
9. Organizing and conducting field trip Seeb STP, FL2022, CIVL5186(Water and wastewater management)
10. Organizing and conducting field trip Bushar STP, FL2022, CIVL5186(Water and wastewater management)
11. Organizing and conducting field trip Seeb STP, FL2021, CIVL5186(Water and wastewater management)
12. Organizing and attending field trip Bushar STP FL2021, CIVL5186(Water and wastewater management)

❖ ***Student Academic Advising***

Number of Advisees for each academic year.

- 9 Students for academic year 2021-2022
- 14 students for academic year 2022-2023
- 13 Students For academic year 2023-2024

❖ ***Number of students who got out of probation:***

- Musaab Mohammed Rashid Al Kalbani 126986- FL2023
- Hussein Asim Tareh Al Bahrani 131251-FL2023
- Sulaiman Said Sulaiman Al Muqbali 133406-FL2023

RESEARCH

Published Research in Refereed Journals

1. 1. Abrar Al Amri, **Zeinab Yavari (Corresponding)**, Mohammad Reza Nikoo “The Occurrence and Detection of MicroPlastics: Different Treatment Technologies Adopted for Wastewater Treatment Plants in Oman”. Journal of Chemosphere. 2024
2. Farzaneh Mohammadi, **Zeinab Yavari (Corresponding)**, Mohammad Reza Nikoo, Ali Al-Nuaimi, Hossein Karimi. “Machine learning model optimization for removal of steroid hormones from wastewater” Journal of Chemosphere. 2023
3. Ehsanifar M, Rafati M, **Yavari Z.** “Indoor air pollution and behavioral factors affecting to COVID-19 transition”. Journal of Community Med Health Solutions. 2022.
4. Ehsanifar M, **Yavari Z,** Motaghedifar MR, Rezaei M. “Risk of activation of human viruses lurking in ambient following COVID-19 prevention supplies excessive use”. Journal of Community Med Health Solutions. 2022.

5. Mojtaba Ehsanifar, **Zeinab Yavari**, Mehravar Rafati. "Exposure to urban air pollution particulate matter: neurobehavioral alteration and hippocampal inflammation". Environmental Science and Pollution Research. 2022.
6. Farzaneh Mohammadi, **Zeinab Yavari***, Farideh Mohammadi, Somaye Rahimi. "Prediction the Performance of Full Scale Wastewater Treatment Plant with AB Process Using Artificial Neural Network and Genetic Algorithm". International Journal of Environmental Health Engineering. 2022. (**Corresponding Author**)
7. **Zeinab Yavari**, Farzaneh Mohammadi, Mohammad Mehdi Amin. "Determination the biochemical kinetics of natural and synthetic estrogens in moving bed Bioreactor". International Journal of Environmental Health Engineering. 2021.
8. Farideh Mohammadi, Farzaneh Mohammadi, **Zeinab Yavari** "Characterization of the cylindrical electrospun Nano fibrous polysulfone membrane for hemodialysis with modelling approach" Medical & Biological Engineering & Computing. 2021.
9. Farzaneh Mohammadi, Hamidreza Pourzamani, Hossein Karimi, **Zeinab Yavari**. "Artificial neural network and logistic regression modelling to characterize COVID-19 infected patients in local areas of Iran" Biomedical Journal. 2021.
10. Determination the biochemical kinetics of natural and synthetic estrogens in moving bed Bioreactor. **Z Yavari**, F Mohammadi, MM Amin. International Journal of Environmental Health Engineering. 2021
11. Farzaneh Mohammadi, Bijan Bina, Hossein Karimi, Somayeh Rahimi, **Zeinab Yavari**. "Modeling and sensitivity analysis of the alkylphenols removal via moving bed biofilm reactor using artificial neural networks: Comparison of levenberg marquardt and particle swarm optimization training algorithm". Biochemical Engineering Journal. 2020. (**Corresponding Author**)
12. Artificial neural network and logistic regression modelling to characterize COVID-19 infected patients in local areas of Iran. F Mohammadi, **Z Yavari.*** H Karimi, M Mohammadi, M Mohammadi, .Biomedical journal. 2020. (**Corresponding Author**)
13. Anxiety and Depression Following Diesel Exhaust Nano-Particles Exposure in Male and Female Mice, MB Mojtaba Ehsanifar, **Zeinab Yavari** , Mohammad Karimian. Journal of Neurophysiology and Neurological Disorders. 2020
14. The occurrence, fate, and distribution of natural and synthetic hormones in different types of wastewater treatment plants in Iran. MM Amin, B Bina, A Ebrahimi, **Z Yavari***, F Mohammadi, S Rahimi. Chinese Journal of Chemical Engineering (**Corresponding Author**)
15. Dental caries prevalence among Schoolchildren in Urban and Rural areas of Qom Province, Central part of Iran. M Khazaei, AH Mahvi, RF Fard, H Izanloo, **Z Yavari,*** HR Tashayoei Middle-East J Sci Res. 2013
16. Biodegradation of natural and synthetic estrogens in moving bed bioreactor. MM Amin, B Bina, K Ebrahim, **Z Yavari***, F Mohammadi. Chinese Journal of Chemical Engineering. 2018
17. Determination of 4-nonylphenol and 4-tert-octylphenol compounds in various types of wastewater and their removal rates in different treatment processes in nine wastewaters. B Bina, F Mohammadi, MM Amin, HR Pourzamani, **Z Yavari.*** Chinese Journal of Chemical Engineering. 2018
18. Adsorption of EDTA from aqueous solution using HDTMA-modified zeolite. M Khazaei, MET Sillanpää, **Z Yavari***, M Savadkoobi, K Ghadiri, AH Mahvi. Middle-East J. Sci. Res. 2015
19. Artificial Neural Network Modeling of Cr (VI) Biosorption from Aqueous Solutions. Farzaneh Mohammadi, **Zeynab Yavaria**, Somaye Rahimi, Majid Hashemib. Journal of Water Chemistry and Technology. 2019

20. Adsorption of lead from aqueous solution by modified beech sawdust. HR Tashauoei, S Hashemi, R Ardani, **Z Yavari**, M Asadi-Ghalhari. Journal of Safety, Environment, and Health Research. 2016
21. Evaluation of the effects of AlkylPhenolic compounds on kinetic parameters in a moving bed biofilm reactor. F Mohammadi, B Bina, MM Amin, HR Pourzamani, **Z Yavari**, MR Shams. The Canadian Journal of Chemical Engineering. 2018
22. Evaluation of the effects of AlkylPhenolic compounds on kinetic coefficients and biomass activity in MBBR by means of respirometric techniques. B Bina, F Mohammadi, MM Amin, HR Pourzamani, **Z Yavari**. Chinese journal of chemical engineering. 2018
23. Using Generation 3 Polyamidoamine Dendrimer as Adsorbent for the Removal of Pentavalent Arsenic from Aqueous Solutions. **Z Yavari**, MM Amin, H Izanloo, S Rahimi, F Mohamadi. Journal of Environmental Health and Sustainable Development. 2016
24. Electricity generation from synthetic wastewater treatment in microbial fuel cell. **Z Yavari**, , K Naddafi, H Izanloo, M Khazae, Qom University of Medical Sciences Journal 2013
25. Performance of Microbial Fuel Cell for Wastewater Treatment and Electricity Generation. MK **Z. Yavaria** *, H. Izanlooa, K. Naddafib, H.R. Tashauoeic. International Journal of Renewable Energy Development. 2013
26. Upgrading the effluent quality of an aerated lagoon with horizontal roughing filtration. R Nabizadeh, K Naddafi, M Khazaei, RF Fard, H Izanloo, **Z Yavari**. Environment Protection Engineering. 2015
27. Characterization of the cylindrical electrospun nanofibrous polysulfone membrane for hemodialysis with modelling approach. F Mohammadi, F Mohammadi, **Z Yavari**. Medical & Biological Engineering & Computing 2021
28. Application of artificial neural network (ANN) in Biosorption modeling of Chromium (VI) from aqueous solutions. F Mohammadi, S Rahimi, **Z Yavari**. Iranian Journal of Health and Environment. 2016

Research Project as Principle Investigator (PI)/Co- Principle Investigator (Co-PI)

No.	Title	Institution	Role	Year	Status
	Quantification, Qualification and Risk assessment of Microplastic in wastewater treatment plants: Different technology in OMAN	Sultan Qaboos University	HMTF grant Principle Investigator (PI)	2024	In Progress
	Occurrence and distribution of organic and inorganic pollutants in water reservoir: A Case study Wadi Dayqah Dam	Sultan Qaboos University	Internal grant (IG)	2024	In Progress
	Reservoir Water Quality Improvement Using Optimized Strategic Selective Withdrawal and Hypolimnetic Aeration Considering Climate Changes: A Case Study, Wadi Dayqah Dam, Oman	Sultan Qaboos university	CO-INVESTIGATORS	2021	In progress
	Sono-electro-Fenton process enhanced by persulfate for highly efficient of Sulfamethoxazole from aqueous solutions: kinetic and mechanism	Sultan Qaboos university	Fund Deanship (PI)	2021	Completed
	The effects of prenatal exposure to diesel engine exhaust particles on TLR2 and TLR4 expression in of adult male offspring hippocampus	Yazd university of medical sciences	Research project (PI)	2020	Completed
	Assessment the effect of air pollution caused by traffic on the level of anxiety and depression in adult mice	Yazd university of medical sciences	Research project (PI)	2020	Completed
	Investigating the effects of air pollution on oxidative stress and gene expression of inflammatory cytokines in the hippocampus of mice.	Yazd university of medical sciences	Research project (PI)	2020	Completed
	Optimization of MBBR reactor for removal efficiency of steroid hormones	Yazd university of medical sciences	Research project (PI)	2020	Completed

Optimization and modeling of removal efficiency of Arsenic from aquatic water by PAMAM	Yazd university of medical sciences	Research project (PI)	2020	Completed
Biodegradation of natural and synthetic estrogens in moving bed bioreactor	Isfahan university of medical sciences	Research project (PI)	2017	Completed
Evaluation of the effects of AlkylPhenolic compounds on kinetic Parameters in Moving Bed Biofilm Reactor	Isfahan university of medical sciences	Research project (Co-PI)	2016	Completed
Using Generation 3 Polyamidoamine Dendrimer (PAMAM G3) as adsorbent for the Removal of Pentavalent Arsenic from Aqueous Solutions	Isfahan university of medical sciences	Research project (PI)	2014	Completed
Adsorption of EDTA from Aqueous Solution Using HDTMA-Modified Zeolite	Qom university of medical sciences	Research project (PI)	2013	Completed
Sorption of Lead from Aqueous Solution by Modified Beech Sawdust	Qom university of medical sciences	Research project (Co-PI)	2012	Completed
Nitrate Removal from Water Using Granules Ferric Hydroxide Absorbent	Qom university of medical sciences	Research project (Co-PI)	2011	Completed
Microbial Fuel Cell (MFC) for Energy generation and wastewater treatment	Tehran university of medical sciences	Research project (PI)	2010	Completed
Biological quality of bottle - of water	Tehran university of medical sciences	Research project (PI)	2009	Completed

Conferences:

1. Eeman.K.Muhi Aldeen., **Zeinab Yavari**. “*Exploring Advanced Oxidation Processes for Sulfamethoxazole Removal from Aqueous Solution using Sono-Electro-Fenton (SEF) Technique*”. 17th Annual International Conference on the Challenges in Environmental Science & Engineering. **(Oral Presentation)** Pula, Croatia. Oct. 2024
2. **Zeinab Yavari**, Abrar Al Amri. Mohammad Reza Nikoo “*The Occurrence and Detection of MicroPlastics: Different Treatment Technologies Adopted for Wastewater Treatment Plants in Oman*” “International Summit on Environmental Science and Engineering **(Oral Presentation)**. Aguste 2023. Greece
3. **Zeinab Yavari**, Abrar Al Amri. Mohammad Reza Nikoo “*Towards Air Quality Improvement via Various Renewable Energy Approaches*” International Conference on Air Pollution and Climate Change **(Oral Presentation)**. Jan 2023. Oman
4. **Zeinab Yavari**, Fatemah Yousef Ghaleb Al-Qais, Mohammad Reza Nikoo. “*An Integrated Approach to Enhance the Desalination Process: Coupling Solar Cell Desalination with Microbial Desalination Cell*”. International Conference on Air Pollution and Climate Change **(Oral Presentation)**. Jan 2023. Oman
5. **Zeinab Yavari**, Farzaneh Mohammadi. Mohammad Reza Nikoo. “*Machine Learning Model Optimization for Removal of Steroid Hormones from wastewater: 15th International Conference Challenges in Environmental Science & Engineering (Oral Presentation)*. Dec. 2022.UAE.
6. Using respirometric techniques for investigation of the effects of AlkylPhenolic compounds on kinetic coefficients and biomass activity in Moving Bed Bio Reactor. 3 rd. International Conference on Environmental Health, **(Poster presentation)**. Tehran, IRAN. 2020
7. **Zeinab Yavari**, Biodegradation of natural and synthetic estrogens in moving bed bioreactor, Rome, Italy.2020 **(Oral presentation)**
8. **Zeinab Yavari**, Biodegradation of Estrogens using Moving Bed Bio-Reactor (MBBR).2016. **(Oral presentation)** 1st International and 19th National Conference on Environmental Health, Tehran, IRAN. 2016
9. **Zeinab Yavari**, Kinetic Coefficients Determination of Steroid Hormones in Moving Bed Biofilm Reactor (MBBR) by Respirometric Method. 1st International and 19th National Conference on Environmental Health. 2016. (Oral presentation). Tehran, IRAN. 2016

10. **Zeinab Yavari**, Energy Generation and Wastewater Treatment using Microbial Fuel Cell (MFC). **(Oral presentation)**. 2nd International Conference on Innovations in Engineering and Technology (ICCET) “Malaysia. 2014
11. **Zeinab Yavari**, Survey of performance microbial fuel cell for wastewater treatment and electricity generation. **(Oral presentation)**. IEEE conference on power engineering and renewable energy. Thailand. 2012.
12. **Zeinab Yavari**, Electricity generation from synthetic wastewater treatment in microbial fuel cell. 8th international conferences of energy. **(Oral presentation)**. IRAN. Tehran. 2012
13. **Zeinab Yavari**, Desalination of brackish water by microbial desalination cell with electricity generation. **(Poster presentation)**. IRAN. Tehran. 2012
14. **Zeinab Yavari**, Removal of granular ferric hydroxide (GFH) from water. **(Poster presentation)**. National Conference of clean water. IRAN. Tehran. 2013
15. **Zeinab Yavari**, Using of Polyamidoamine Dendrimer (PAMAM G3) for the Removal of Pentavalent Arsenic from Aqueous Solutions. **(Poster presentation)**. 18th National conference of environmental health. IRAN. Shiraz. 2015
16. **Zeinab Yavari**, Prediction the performance of full-scale wastewater treatment plant with artificial neural network and genetic algorithm. **(Poster presentation)**. 18th National conference of environmental health. IRAN. Shiraz. 2015
17. **Zeinab Yavari**, Investigation the IAWQ Model (ASM1) Using Full Scale Wastewater Treatment Plant. **(Poster presentation)**. Environmental Engineering Conference. IRAN. Tehran. 2016
18. **Zeinab Yavari**, Management of Collection, Transfer, and Disposal of Medical Waste (Case Study in West Azerbaijan Province). 5th National Conference on Waste Management. IRAN. Tehran. 2012
19. **Zeinab Yavari**, Using of MFC for electricity generation and wastewater treatment. 1st environmental remediation technologies Conference. IRAN. Tehran. 2011

Research interest:

- Microplastics (Detection, Extraction)
- Biological and chemical wastewater treatment
- Removal of micro pollutants from environment
- Endocrine disruptive compounds (EDCs)
- Moving bed bio reactor (MBBR)
- Modeling in Environmental Health engineering
- Microbial Fuel Cell (MFC)
- Microbial Desalination Cell (MDC)
- Solar cell
- Renewable energy
- Biotechnology & Biochemical
- Biogas and biofuel

Technical skill

Instrument

- Gas chromatography followed with mass spectrometry (GC–MS)
- High Performance Liquid Chromatography (HPLC)
- **Atomic Absorption (AA) Spectrophotometer**
- **Inductively coupled plasma (ICP) Spectrophotometer**
- FTIR
- SEM
- Respirometer
- Spectrophotometer
- **UV-Visible spectroscopy**
- **Fluorescence Spectroscopy**
- D.R 5000
- polymerase chain reaction (PCR) (Preliminary)

Microbial Analysis

Total Coliform (TC)
Fecal Coliform (FC)
Heterotrophic plate count (HPC)

Physico-chemical

- dispersive liquid-liquid micro extraction (DLLME)
- solid phase extraction (SPE)
- silylation of EDC
- Derivatisation of EDC
- Chemical Oxygen Demand (COD)
- Biochemical Oxygen Demand (BOD)
- Total Suspended Solids (TSS)

- Volatile Suspended Solids (VSS)
- Phenol
- Carbohydrate

Microscopic Techniques:

- Electronic microscop
- Light microscopy
- Fluorescent microscopy
- Stereomicroscopy

Software

- Microsoft Office
- MATLAB
- SPSS
- Mendely
- End Note
- GIS
- Water Gems
- EPANET
- Sewer CAD
- Auto CAD

Reviewer

- Water research
- Chemosphere
- Environmental pollution
- Science of the total environment
- Microchemical journal
- International Journal of Research and Innovation in Social Science (IJRISS)
- Journal of chemical technology and biotechnology
- Journal of Water Process Engineering
- Journal of Health System Research
- International Journal of Environmental Health Engineering(IJEHE)
- Journal of Environmental Health and Sustainable Development
- Journal of Safety, Environment, and Health Research (JSEHR)
- Archive of Hygiene science

language

- Persian (native)
- English (good)
- French (basic)
- Arabic (basic)

References

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