

Abbas Akbarzadeh



1 Personal Information

Full Name: Abbas Akbarzadeh

Place of Birth: Tehran

Date of Birth: May 31, 1970

Marital Status: Married, 2 children

Current Position: Member of Scientific Board of Water Research Institute

Director of the Tehran Higher Education and Research Complex

Work Address: No.43, Shadab Ave., Nejatollahi St., Tehran, Iran

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2 Education

Doctor of Philosophy (PhD) | Environmental Management (2006)

Master of Science | Environmental Engineering (1998)

Bachelor of Science | | Environmental Health Engineering (1994)

3 Work Experiences

A. Professional and executive activities

- Deputy Manager of Education at Institute for Energy and Hydro Technology (2018)
- Deputy Manager of Education at Tehran Higher Education and Research Complex (2016-2017)
- Head of the Water and Wastewater Research Center (2014-2016)
- Head of Hydraulics and Hydro-Environmental Engineering Research Center (2013-2014)
- Head of Water and Wastewater Research Center (2011-2013)
- Deputy Manager of Water Research Institute (2008-2011)
- Deputy Manager of Education and Research at HSE Faculty of Shahid Beheshti University of Medical Sciences (2007-2008)
- Manager of Research at Faculty of Occupational Health and Safety (2005-2008)
- CEO of Advanced Research Consulting Engineering Company (2001-2005)
- Supervisor of Water Chemical and Microbiological Laboratory at Faculty of Occupational Health and Safety (1994-1999)
- Labor Inspector Advisor at Qom Province (1998-1999)
- Environmental Health Technician at Environmental Health Office of Qeshm Island (1990-1991)

B. Teaching experience

a. BSc. And MSc. Courses

- Wastewater Treatment Plant Design
- Surface Water and Wastewater Collection Network Design
- Water Quality Principles
- General Knowledge on Environmental Health
- Environmental Management
- Wastewater Treatment Processes
- Application of Motor Pumps
- Chemistry and Biology of Water and Wastewater
- Environmental Pollutants
- Quality Management of Water Resources

b. Short-Term Courses

- HSE.MS
- ISO14001
- Wastewater Treatment Plant Design
- Safety at Laboratory
- Exploitation of Wastewater Treatment Plants
- Quality Management of Water Resources

“Over 1000 hours of short-term courses have been held”.

C. Supervised/Advised theses

No.	Title
1	Water resources quality protection through the nutrients management improvement (case study: the lake of Esteghlal dam)
2	An assessment of residual chlorine in water distribution networks using WATERGEMS software (case study: Khavar Shahr area)
3	Feasibility study of treating contaminated waters with excess nutrients using vetiveria sp.
4	A study on nitrate reduction from polluted waters using mechano-chemical activated red mud adsorbent
5	Performance evaluation of rotating biological contactor (RBC) in Resalat hospital wastewater treatment plant and optimization
6	Bio stimulation for on-site treatment of TPH from oil contaminated soil using vermicompost modification
7	Improving water quality on nutrients with approach to TMDL catchment (case study: Anzali international wetland)
8	Determination of trace amount of N-Nitro Di Methyl Amin (NDMA) in wastewater after separation and preconcentration through solid phase extraction
9	Liquid sodium silicate coagulant, techno-economic analysis in semi-industrial pilot scale with continuous flow via AHP method
10	Quality and quantity optimization water treatment sludge with coagulants using neuron network assessment (case study: Tehran water treatment plant No. 3, 4)
11	Desalination and wastewater treatment roadmap

No.	Title
12	Optimization of electrical and mechanical facilities of the institute for energy and hydro technology's buildings with the approach of intelligent building management system in operation and energy consumption
13	Operational feasibility studies on optimization of dispersed hybrid production units, taking into account the system for combined power, heat, cool and renewable energy sources, in order to determine the optimum energy production capacity in institute for energy and hydro technology
14	Comprehensive architectural design of a university with new approaches for the zero energy systems in the institute for energy and hydro technology
15	Daily economic planning in participation of renewable dispersed production units and combined power, heat and cool systems from the gas engine for the institute for energy and hydro technology with the possibility of selling extra electricity to the power grid
16	Reuse management and optimization of treated wastewater (case study: Arak wastewater treatment plant)

4 Fields of Teaching and Research Interests

- Water Treatment
- Wastewater Treatment
- Advanced Methods in Water Treatment
- Water Resources Management
- Renewable Energies
- Environmental Assessment and HSE Management
- Desalination of Sea Water and Brackish Water

5 Governmental/Institutional Permissions and Certificates

- 3rd Grade in Water Engineering, Water and Sewage Plants from Management and Planning Organization
- Technical Consultant and Safety Services License from the Ministry of Labor and Social Affairs (2004)
- License for the publication of the quarterly journal of advanced environmental research in the field of engineering from the Ministry of Culture and Islamic Guidance (2005)
- Member of Agricultural and Natural Resources Engineering Organization of Iran (2006)
- Standard Professional License from Iranian National Standard Organization (2012-2018)
- The Consulting Engineers' Privileged Rank from Agricultural and Natural Resources Engineering Organization of Iran (2012)

6 Acknowledgments

- Acknowledgment from Research Training Center of Tehran University in the Field of Scientific and Research Affairs (1994)
- Acknowledgment for Holding a Conference on Advanced Technologies of Water and Power Industry in Kermanshah (2005)
- Acknowledgment from Head of Faculty of Occupational Health and Safety for Acquiring License of the Environmental Trusted Laboratory (2007)
- Acknowledgment from Tehran Municipal Center for Holding a Conference on Entrepreneurship and its Role in Healthy City (2008)
- Acknowledgment from Deputy Manager of Education of Shahid Beheshti University for Significant Improvements in Research Affairs (2009)

- Acknowledgement from Head of Water Research Institute for Significant Improvement in Research and Investigation Affairs (2009)
- Acknowledgement from Secretary of Students' Scientific Association of HSE for Improvement of Students' Scientific Association (2009)
- Acknowledgment from Deputy Minister of Energy for Qualitative Improvement and Research Infrastructures Development at the Water Research Institute (2009)
- Acknowledgement from Head of Water Research Institute for Obtaining the First Rank among the Privileged Researchers (2010)
- Acknowledgment from Deputy Minister of Energy for Active Participation in Advancing the Goals of Institute (2010)
- Acknowledgment from Head of Water Research Institute for Acquiring License of the Environmental Trusted Laboratory (2010)
- Acknowledgment from Head of Water Research Institute for Establishment of Microbiology Laboratory of WRI (2011)
- Acknowledgement from Head of Water Research Institute for Obtaining the Second Rank among the Privileged Researchers (2012)
- Acknowledgement from Head of Water Research Institute for Qualitative Improvement and Development of Infrastructures of the Water and Wastewater Research Center (2013)
- Acknowledgment from the President of Institute for Energy and Hydro Technology for Holding a Conference on Non-Conventional Water Recourses, Challenges and Opportunities (2018)

7 Researches, Books and Publications

A. Published Papers in International/National Journals

No.	Paper Title	Journal Details				Place	Authors
		Name	Category	Year	Issue		
1	Survey and determination of Anzali wetland trophic state through geographic information systems (GIS)	Toxicological and Environmental Chemistry	ISI	2008	90(6)	UK	A. Akbarzadeh, H.A. Laghai, M. Monavari, Sh.A. Nezami, M. Shokrzadeh, and S.S. Saedi Saravi
2	Accuracy and uncertainty analysis of intelligent techniques for predicting longitudinal dispersion coefficient in rivers	Water and Wastewater	Scientific Paper	2010	21(3)	Iran	A. Akbarzadeh, R. Noori, A. Farokhnia, A. Khakpour, and M.S. Sabahi
3	Field studies to investigate the eutrophication problem in the Anzali wetland	Journal of Health System Research	Scientific Paper	2010	6(4)	Iran	A. Akbarzadeh, and M. Arbabi
4	Offering a proper framework to investigate water quality of the Atrak river	Iranian Journal of Health and Environment	Scientific Paper	2011	4(2)	Iran	R. Noori, F. Jafari, D. Forman Asgharzadeh, and A. Akbarzadeh
5	Comparison of surface functional groups and metal uptake efficiency of rice husk harvested from different climatic zones	Water Science & Technology IWA	ISI	2012	65(10)	UK	A.H. Matin, Sh.S. Khaloo, A. Akbarzadeh, and M. Riahi
6	Optimization of SBR system for enhanced biological phosphorus and nitrogen removal	International Journal of Environmental Health Engineering	Scientific Paper	2012	1(6)	Iran	M. Arbabi, A. Akbarzadeh, and A. Khodabakhshi
7	Qualitative research approaches for environmental sciences: a review	Journal of Environmental Sciences and Technology	Scientific Paper	2014	16(1)	Iran	P. Roudgarmi, and A. Akbarzadeh
8	Wastewater treatment using integrated anaerobic baffled reactor and Bio-rack wetland planted with Phragmites sp. and Typha sp.	Journal of Environmental Health Science & Engineering	ISI	2014	12(1)	Iran	Sh. Jamshidi, A. Akbarzadeh, K.S. Woo, and A. Valipour
9	Evaluation of the performance of Vetiveria Zizanioides in removing nutrients from wastewater	Water and Wastewater	Scientific Paper	2014	26(1)	Iran	A. Akbarzadeh, M. Vakhshouri, Sh. Jamshidi, and M. Khalesidoost

No.	Paper Title	Journal Details				Place	Authors
10	Nutrient uptake rate and removal efficiency of <i>Vetiveria Zizanioides</i> in contaminated waters	Pollution	ISC	2015	1(1)	Iran	A. Akbarzadeh, Sh. Jamshidi, and M. Vakhshouri,
11	Study of novel mechano-chemical activation process of red mud to optimize nitrate removal from water	Water Science & Technology IWA	ISI	2016	73(4)	UK	A. Alighardashi, H.R. Gharibi, Sh. Raygan, and A. Akbarzadeh
12	Investigation of seasonal variations in water quality of Karoon river using principal component and principal factor analyses	Environmental Researches	Scientific Paper	2016	7(14)	Iran	R. Nouri, M.R. Vesali Naseh, and A. Akbarzadeh
13	Using PCA combined SVM in the classification of eutrophication in Dez reservoir (Iran)	Environmental Engineering and Management Journal	ISI	2017	16(9)	Romania	S. Bashiri , A. Akbarzadeh , M. Zarrabi, K. Yetilmezsoy, M. Fingas, and M. Moosakhaani
14	Novel adsorptive mixed matrix membranes by embedding modified Montmorillonite with arginine amino acid into polysulfones for As(V) removal	Applied Clay Science	ISI	2017	144	Netherlands	E. Shokri, R. Yegani, and A. Akbarzadeh
15	Preparation and performance evaluation of high-density polyethylene/silica nanocomposite membranes in membrane bioreactor system	Biochemical Engineering Journal	ISI	2017	127	Netherlands	M. Amini, H. Etemadi, A. Akbarzadeh, and R. Yegani
16	Evaluation of sewage sludge for incineration (case study: Arak wastewater treatment plant)	Environmental Energy and Economic Research	Scientific Paper	2017	1(3)	Iran	A. Khalili, Sh. Jamshidi, M. Khalesidoust, M. Vesali Naseh, A. Akbarzadeh, M. Mamaghani Nejad, M. Mohebbi, and F. Sameni
17	Environmental effects of landfill sites on water resources (case study: Taleghan tourism area)	Water Resources System Management	ISC	2017	1(2)	Iran	A. Moghadam, A. Akbarzadeh, and H. Ziaei
18	Preparation of controlled porosity activated carbon from walnut shell for phenol adsorption	Desalination and Water Treatment	ISI	2018	130	USA	A. Akbarzadeh, M. Arbabi, and S. Hemati
19	Evaluation of the capability of the orthogonal decomposition method to determine the input to the neural network model for prediction of the monthly flow entering into the Alavian dam	Journal of Environmental Sciences and Technology	Scientific Paper	-	In press	Iran	S. Moazami, R. Nouri, A. Akbarzadeh, and M.R. Vesali Naseh

B. Published Papers in International/National Conferences

No.	Paper Title	Conference Details				Authors
		Name	Level	Place	Year	
1	The role of establishing safe community regulations in human societies	The 1 st Conference on Healthy Society	National	Iran, Tehran	2008	A. Akbarzadeh, M. Shokrzadeh, and M. Kazemian
2	Evaluation of the status of rural waste management in the villages of Tehran city	The 12 th National Conference on Environmental Health	National	Shahid Beheshti University of Medical Sciences	2009	A. Akbarzadeh, H. Tala, M. Manshourri, and S. Bashiri
3	Investigating the effects of implementing the "wastes management law" for mitigating the problems caused by hospital wastes in the hospitals of Tehran from the quantitative and qualitative view	The 2 nd International Conference on HSE	International	Iran, Tehran	2009	A. Akbarzadeh, H. Tala, and S. Bashiri
4	Using Remote sensing information in the form of a decision support system to make timely and correct decision in IWRM	The 2 nd International Conference on HSE	International	Iran, Tehran	2009	H. Sabbaghzadeh, A. Akbarzadeh, and M. Arbabi

No.	Paper Title	Conference Details				Authors
		Name	Level	Place	Year	
5	Plans for the localization of implementation water quality and quantity monitoring systems by remote sensing	The 2 nd International Conference on HSE	International	Iran, Tehran	2009	H. Sabbaghzadeh, M. Riahi, and A. Akbarzadeh
6	Measurement of nitrate and nitrite in leaf and stem of lettuce sampled from farmlands of Sari, Iran	The 46 th Congress of the European Societies of Toxicology	International	Germany	2009	A. Akbarzadeh, M. Shokrzadeh, and S.S. Saeedi Saravi
7	Investigation of a kind of modified bentonite clay efficiency on controlling algal bloom in Anzali wetland	The 11 th World Congress on Environmental Health	International	Canada	2010	A. Akbarzadeh
8	Effect of modified bentonite on phosphorus reduction from aquatic ecosystems	International Conference on Water and Wastewater	International	Iran	2011	A. Akbarzadeh, M. Manshouri, S. Bashiri, and M. Moradi
9	Investigation of the relation between physical and chemical parameters of Anzali wetland in wet and dry periods	The 5 th National Conference and Exhibition on Environmental Engineering	International	Iran, Tehran	2011	M.R. Vesali Naseh, A. Akbarzadeh, R. Nouri, H. Karbin, and M. Khalesi Doost
10	Investigating the surface adsorption factors in rice bran and its application in rapid removal of heavy metals including nickel, cadmium and copper in aqueous solutions	The 5 th National Conference and Exhibition on Environmental Engineering	International	Iran, Tehran	2011	Sh. Khalou, M. Torab Beygi, M. Riahi, and A. Akbarzadeh
11	Analyzing the relation between physical and chemical parameters of Anzali wetland	The 13 th Conference on Marine Industries	National	Iran, Kish	2011	M.R. Vesali Naseh, A. Akbarzadeh, R. Nouri, and H. Karbin
12	Investigating the traditional water storage structures in the Persian Gulf banks from the engineering and adaptation to the climate view	International Conference on Traditional Knowledge of Water Resources Management	International	Iran, Yazd	2012	A. Akbarzadeh, M. Riahi, and S. Fartoos
13	A tool for optimal water allocation of irrigation networks in real time	The 5 th International Perspective on Water Resources & The Environment	International	Morocco	2012	M. Riahi, H. Sabbaghzadeh, M. Delavar, and A. Akbarzadeh
14	Water resources management of reservoirs using on-line water quality and quantity monitoring systems	The 5 th International Perspective on Water Resources & The Environment	International	Morocco	2012	M. Riahi, M. Delavar, H. Sabbaghzadeh, and A. Akbarzadeh
15	Challenges and opportunities for integrated water resources management in Iran	The 5 th International Perspective on Water Resources & The Environment	International	Morocco	2012	M. Riahi, H. Sabbaghzadeh, M. Delavar, and A. Akbarzadeh
16	Determination of flood discharge and control Structures impacts on Environment by usage of developed environmental assessment models and comparing them in Astor dam	International Symposium on Dams for a Changing World	International	Japan, Kyoto	2012	A. Akbarzadeh, M. Riahi, S. Fartoos, and S. Partani
17	Engineering and climate compatibility aspects in traditional water storage structures around Persian Gulf	ICID: 63 rd IEC Meeting and 7 th Asian Regional Conference	International	Australia, Adelaide	2012	A. Akbarzadeh, M. Riahi, and S. Fartoos
18	Urban floods management	The 1 st Conference on Desalination of Brackish, Sea Water and Wastewater Treatment	National	Iran, Tehran	2012	A. Akbarzadeh
19	A review on removal of heavy metals, color and organic materials from wastewater using the micellar-enhanced ultrafiltration (MEUF) method	The 6 th National Conference & Exhibition on Environmental Engineering	National	Iran, Tehran	2012	N. Hamnabard, A. Akbarzadeh, and A. Valipour
20	Investigation of removal of heavy metals by water hyacinth plant	The 6 th National Conference & Exhibition on Environmental Engineering	National	Iran, Tehran	2012	A. Valipour, A. Akbarzadeh, M. Farshbaf Haghro, and N. Hamnabard
21	A review on the wastewater treatment by algae	The 1 st National Conference on Planning and Environmental Protection	National	Iran, Hamedan	2012	S. Poor Latifi, S. Estesnaei, M. Farshbaf Haghro, A. Akbarzadeh, and A. Khaksar
22	Introduction of Vetiveria Zizanioides as a new approach in sustainable development and efficient water resources management	The 2 nd National Conference on Planning and Environmental Protection	National	Iran, Hamedan	2013	A. Akbarzadeh, M. Vakhshouri, and M. Arbabi

No.	Paper Title	Conference Details				Authors
		Name	Level	Place	Year	
23	Evaluation of <i>Vetiveria Zizanioides</i> plant growth and phytoremediation under conditions of nutrition from various nitrogen compounds	The 2 nd National Conference on Sustainable Agricultural Development and Healthy Environment	National	Iran, Hamedan	2013	A. Akbarzadeh, and M. Vakhshouri
24	Investigation of changes in trend of nitrate concentration in Karaj aquifer and its relation with sewerage system	International Conference on Civil Engineering Architecture & Urban Sustainable Development	National	Iran, Tabriz	2013	N. Khodabakhshi, G.R. Asadollah Fardi, and A. Akbarzadeh
25	Use of alumina producing waste (red mud) as an adsorbent to remove nitrate from water	International Conference on Mining, Mineral Processing, Metallurgical and Environmental Engineering	National	Iran, Zanjan	2013	H. Gharibi, A. Alighardashi, Sh. Raygan, and A. Akbarzadeh
26	Water label scheme for washing machines as an approach to water resources conservation and clean industries development	The 1 st Conference and Exhibition on Environment, Energy & Clean Industry	National	Iran, Tehran	2013	A. Akbarzadeh, and Sh. Jamshidi
27	A pilot study on water loss estimation through minimum nightly flow measurement (case study: Niroy Daryaei Region, Tehran)	The 1 st Conference and Exhibition on Environment, Energy & Clean Industry	National	Iran, Tehran	2013	Sh. Jamshidi, and A. Akbarzadeh
28	Feasibility study of upgrading wastewater treatment plants using <i>Vetiveria</i> sp.	The 3 rd International Conference on Environmental Planning and Management	International	Iran, Tehran	2013	A. Akbarzadeh, Sh. Jamshidi, and M. Vakhshouri
29	Methodology of environmental impact assessment and selection of the best method	The 3 rd International Conference on Environmental Planning and Management	International	Iran, Tehran	2013	A. Akbarzadeh, M. Moosakhaani, and S. Bashiri
30	Characteristics improvement of red mud adsorbent by mechano-chemical activation	CHEMTECH '13 Chemical Engineering Conference on Chemical Processes	International	Turkey, Istanbul	2013	H. Gharibi, A. Alighardashi, Sh. Raygan, A. Akbarzadeh, and M. Fazeli
31	Evaluation of traditional water storage structures around Persian Gulf from engineering and climate compatibility aspects	International Commission on Irrigation and Drainage	International	India, New Delhi	2013	A. Akbarzadeh, M. Riahi, S. Fartoos, and K. Emami
32	Calculating the total maximum daily load (TMDL) of nutrients in the Anzali wetland watershed	The 1 st National Congress on Water Reuse	National	Iran, Tehran	2014	A. Akbarzadeh, S.A. Mirbagheri, S. Bashiri, and M. Moosakhaani
33	Reuse of wastewater with the aim of flood control and reduction of the erosion in river banks	The 1 st National Congress on Water Reuse	National	Iran, Tehran	2014	A. Akbarzadeh, M. Vakhshouri, and Sh. Jamshidi
34	Application of red mud adsorbent to remove contaminants from aqueous environments	The 5 th National Conference on Water Resources Management	National	Iran, Tehran	2014	H. Gharibi, A. Alighardashi, Sh. Raygan, A. Akbarzadeh, M. Fazeli, and A. Khaksar
35	Urban water use management using system dynamics modeling	The 5 th National Conference on Water Resources Management	National	Iran, Tehran	2014	Sh. Jamshidi, M.H. Niksokhan, and A. Akbarzadeh
36	Study of nitrate adsorption process on red mud; an emerging adsorbent obtained from industrial waste	The 8 th National Congress on Civil Engineering	National	Iran, Babol	2014	H. Gharibi, A. Alighardashi, Sh. Raygan, A. Akbarzadeh, and M. Fazeli
37	Study of mechano-chemical activation process of red mud waste to optimize nitrate removal from water	The 6 th IWA Eastern European Young Water Professionals Conference	International	Turkey, Istanbul	2014	H.R. Gharibi, A. Alighardashi, Sh. Raygan, A. Akbarzadeh, and Sh. Jamshidi
38	Wastewater collection systems impacts on groundwater pollution remediation (A case study)	The 41 st International Congress of the International Association of Hydrogeologists	International	Morocco	2014	A. Akbarzadeh, Sh. Jamshidi, M.R. Vesali Naseh, and H. Ziaei
39	Groundwater vulnerability assessment of Karaj aquifer based on drastic model	The 41 st International Congress of the International Association of Hydrogeologists	International	Morocco	2014	A. Akbarzadeh, S. Alimohammadi, H. Ziaei, Sh. Jamshidi, and M. Khalesidoost

No.	Paper Title	Conference Details				Authors
		Name	Level	Place	Year	
40	Quality assessment of Zanjan wastewater treatment plant effluent for agricultural reuse	The 2 nd National Congress on Water Reuse	National	Iran, Tehran	2015	H.R. Gharibi, and A. Akbarzadeh
41	ISO international standards and operational indicators in the water and wastewater industry	The 1 st National Conference On Sustainable Development in the Energy, Water, and Environment	National	Iran, Tehran	2015	A. Akbarzadeh, and Sh. Jamshidi
42	Groundwater vulnerability assessment of Karaj aquifer based on modified drastic method	The 10 th International Congress on Civil Engineering	National	Iran, Tabriz	2015	H. Zeiaee, A. Alighardashi, A. Akbarzadeh, and M. Khalesi Doust
43	Determination of effective quality parameters in water and wastewater tariffs in the agricultural sector	2 nd Iranian National Congress of Irrigation & Drainage	National	Iran, Isfahan	2016	Sh. Jamshidi, A. Akbarzadeh, and M. Ardestani
44	Technical investigation of establishing a hybrid dispersed unit at institute for energy and hydro technology	International Conference on Science of Computer and Electrical Engineering	International	Iran	2018	D. Tavakoli, A. Akbarzadeh, M. Arabzadeh, and M. Yousefian
45	Investigation of energy consumption management approaches in life cycle of zero energy buildings	International Congress on Avant-Garde Contemporary Architecture and Urbanism in Islamic Countries	International	Iran	2018	M.M. Zafarani, D. Tavakoli, A. Akbarzadeh, and M. Arabzadeh
46	Daily economic investigation in power generation sources in microgrid of institute for energy and hydro technology	The 3 rd International Conference on the New Horizons in the Electrical Engineering, Computer and Mechanical Engineering	International	Iran	2018	B. Rezaei, D. Tavakoli, A. Akbarzadeh, and M. Arabzadeh
47	A review of economic aspects in zero liquid technology (ZLD)	The 16 th Iranian National Congress of Chemical Engineering	National	Iran	2019	A. Akbarzadeh, M. Lotfi, and M. Abareshi

C. Books

No	Title	Book Type	Publication	Date of Last Publication	Publisher
1	Wastewater Engineering	Compilation	5	2005	Dibagaran, Iran
2	HSE Dictionary	Compilation	1	2008	Mehrazan, School of Occupational Health and Safety, Iran
3	Safety, Health, and Environmental Concepts for the Process Industry	Translation	1	2008	Research and Training Center for Occupational Health and Safety, Iran
4	Fundamentals of Firefighter Skills (Firefighter Field Guide)	Compilation	1	2009	Fanavaran, Shahid Beheshti, University of Medical Sciences
5	Industrial Wastewater Treatment	Translation	1	2012	Fadak Isatis, Iran
6	Upgrading and Retrofitting Water and Wastewater Treatment Plants	Translation	1	2014	Khaniran, Iran

8 Patented Inventions

- 1) Super aerator used in urban and industrial wastewater treatment
- 2) Bio fixed media used in urban and industrial wastewater treatment
- 3) Application of Iranian slag in wastewater treatment
- 4) Individual water purification system

“Note that super aerator and bio fixed media are commercially produced and considerably used in industry”.

9 Research Projects

No.	Project Name	Responsibility	Partners	Employer	Start/End Dates
1	Personal Protective Equipment (PPE) table required by trainees of Iran's technical and vocational training centers in different fields	Participating member	H. Tala	Iran's Technical and Vocational Training Organization	2006/20/02 to 2007/07/07
2	Translation of the book entitled "upgrading and retrofitting water and wastewater treatment plants"	Translator	Sh. Jamshidi	Ardabil Province Water and Wastewater Company	2013/29/01 to 2013/22/09
3	Water and wastewater equipment committee standards	Supervisor	-	Water Engineering Research Institute, Tarbiat Modares University	2013/21/03 to 2014/20/03
4	Monitoring and modeling the northern coasts of Iran	Project executive	A.H. Pourmandi, M. Babaei, and R. Kamalian	Ports & Maritime Organization Of Iran	2013/22/05 to 2014/22/05
5	Investigating waste solar dryers and providing pilot	Participating member	M. Khalesi Doost, M.R. Vesali Naseh, Sh. Jamshidi, H.R. Gharibi, and H. Ziaei	North Khorasan Province Water and Wastewater Company	2014/20/07 to 2015/20/07
6	Investigating the possible impacts of changes in the reservoir volume of Zayandehrood dam on its quality	Consultant	A. Khaksar, A. Kariman, A. Rashidi Mehrabadi, S.H. Hashemi, M.R. Vesali Naseh, M. Babaei, B. Zareie, T. Zati, F. Memarzadeh, and S. Estesnaei	Isfahan Regional Water Organization	2013/06/12 to 2014/06/08
7	Equipping test laboratory for micro hydro power plants	Project executive	R. Roshan, H.R. Fatholahzadeh, Lenjani, S. Akbarian, M. Forough Jafari, and P. Arasteh	Presidential Deputy for Science and Technology	2014/06/04 to 2014/08/12
8	Preparation of technical regulations for labeling of household water use (faucet, shower head and flush tank)	Participating member	R. Meidani, A.R. Ahmadi Motlagh, Sh. Jamshidi, M. Khalesi Doost, and A. Kariman	Deputy for Water and Wastewater, Ministry of Energy	2015/04/03 to 2015/03/06
9	A study on how to upgrade the wastewater treatment plant in Bojnourd to reduce nutrient loads, detergents, oil, and grease	Participating member	M.R. Vesali Naseh, M. Khalesi Doost, Sh. Jamshidi, H.R. Gharibi, and H. Ziaei	North Khorasan Province Water and Wastewater Company	2013/14/07 to 2015/20/07
10	Monitoring and modeling the southern coasts of Iran (Makran region)	Project executive	M. Babaei, A. Nikkhal, R. Kamalian, H. Khoshhravan, and H. Ardalan	Ports & Maritime Organization Of Iran	2014/28/09 to 2015/28/09
11	Investigation of water reaction, precipitation and zonation of heavy metals in Anzali wetland	Participating member	M.R. Vesali Naseh, A. Karbasi, A.H. Pourmandi, N. Jafari, H. Allahyar, and M.R. Amiri	Iran Water Resources Management	2012/13/02 to 2016/22/06
12	Effect of aquaculture farms wastewater on water quality parameters of Kabkian river and its self-purification	Project executive	Sh. Jamshidi, Z. Mehrabi, Z. Dehghani, and H. Ziaei	Kohgiluyeh and Boyer-Ahmad Regional Water Organization	2015/22/11 to 2016/22/08
13	Investigating the causes of reducing the discharge of a limited number of drinking water wells in Ardabil and providing corrective methods for implementation	Project executive	M. Khalesi Doost, Sh. Jamshidi, H. Sasani, F. Jafari, A. Heidari, S. Pourlatifi	Ardabil Province Water and Wastewater Company	2013/11/03 to 2016/06/10
14	Evaluation of different methods of disposal and burning sludge and their comparison in Iran and the world	Participating member	M. Khalesi Doost, M.R. Vesali Naseh, Sh. Jamshidi, H. Ziaei, and H.R. Gharibi	Markazi Province Water and Wastewater Company	2015/10/12 to 2016/19/12
15	Investigating the environmental effects of Alborz province landfill on district water resources	Project executive	H. Fouladfar, H. Sharifimaneh, A. Kariman, and H. Yousefi	Iran Water Resources Management	2014/15/07 to 2017/05/02
16	Feasibility study on power generation from the outlet stream of wastewater treatment plants of Iran (Case study: Shahrak-e Gharb wastewater treatment plant)	Supervisor	-	Energy Research Institute	2016/22/09 to 2017/22/09
17	National project for writing a strategic plan and roadmap for desalination technology	Project executive	Sh. Jamshidi, A. Kariman, and N. Jafari	Water and Wastewater Company of Iran	2014/01/03 to date

No.	Project Name	Responsibility	Partners	Employer	Start/End Dates
18	Urban, industrial and agricultural waste recycling science and technology project	Supervisor	M.R. Mehrnia	ATF commission of Ministry of Science, Research & Technology	2013/22/05 to date
19	National project for writing a strategic plan and roadmap for wastewater treatment technology	Project executive	Sh. Jamshidi, A. Kariman, and N. Jafari	Water and Wastewater Company of Iran	2014/01/03 to date

10 Courses, Workshops, Seminars

A. Participated

No.	Title	Duration	Organizer	Year
1	AutoCAD Software	30 hrs	Research Training Center of Tehran University	1994
2	Air Pollution Conference & Workshops	2 days	SWECO, AQCC, UNDP	1997
3	Computer Hardware	50 hrs	Amir Bahador Educational Complex	2000
4	7th National Conference on Environmental Health	30 hrs	Shahrekord University of Medical Sciences	2004
5	Business Communication	40 hrs	Iran Chamber of Commerce, Industries, Mines and Agriculture	2004
6	Modern Remediation Technologies	2 days	Environmental Research Center, Tarbiat Modares University	2005
7	International Project Management Conference	16 hrs	Isfahan University of Technology	2006
8	Sustainable Development towards Environmental Industrialization	2 days	Environmental Research Center, Tarbiat Modares University	2006
9	1st Seminar of Iran Scientific Web	1 day	Faculty of Electrical and Computer Engineering, Shahid Beheshti University	2007
10	General Quality Management Workshop	6 hrs	Shahid Beheshti University of Medical Sciences	2008
11	Network and Computer Security	8 hrs	Central Office of Security, Ministry of Health and Medical Education	2009
12	Creativity and Innovation Course	12 hrs	Shahid Beheshti University of Medical Sciences	2009
13	Conference on Health Promotion and Occupational Safety	2 days	School of Public Health, Tehran University of Medical Sciences	2009
14	6th International Conference on Strategic Management	16 hrs	Iran Strategic Management Society, Ministry of Science, Research and Technology	2009
15	Research Method Training Course	16 hrs	Research and Management Training Institute, Ministry of Energy	2010
16	Urban Water Management	3 days	Ministry of Melioration and Water Resources, Tajikistan	2010
17	Scientific Basis and Methodology of Cloud Seeding	6 hrs	Khuzestan Water and Power Organization	2010
18	Strategic Management and BSC Model	40 hrs	Iran Management Consultants Association	2010
19	Investigating and Measuring Harmful Physical Factors	8 hrs	Center of Research and Training of Occupational Safety and Health	2011
20	Wetlands and their Role in Integrated Water Resources Management	1 day	Iran Water Resources Management	2011
21	The 2nd Iranian National Conference on Applied Research in Water Resources	2 days	Zanjan Regional Water Organization	2011
22	Writing Base on ISI standard	8 hrs	MSI Academy	2011
23	Investigating and Measuring Harmful Chemical Factors	8 hrs	Center of Research and Training of Occupational Safety and Health	2011
24	Water Pollution, Prevention, Control and Abatement Strategies	4 days	Regional Centre on Urban Water Management	2011
25	Karst and Speleology in Evaporative Rocks with an Emphasis on Engineering and Environmental Issues	24 hrs	Water Research Institute, Ministry of Energy	2012
26	International Workshop on Transboundary Waters, Opportunities for Cooperation	1 day	International Center on Qanats and Historic Hydraulic Structures, Ministry of Energy	2012
27	World History of Water Management	5 days	UNESCO-IHE	2012
28	International Workshop and Conference on Desalination of Brackish, Sea Water and Wastewater Treatment	3 days	Iranian Research Organization for Science and Technology	2012
29	The 6 th National Conference and Exhibition on Environmental Engineering	5 days	Graduate Faculty of Environment, Tehran University	2012
30	Evolution and Innovation Course	36 hrs	Gilan Training Center, Institute for Energy and Hydro Technology	2013
31	Decision Making Techniques Course	36 hrs	Gilan Training Center, Institute for Energy and Hydro Technology	2013
32	Technical Workshop on the Role of Isotopes in Groundwater Management in Coastal and Inland Saline Areas	5 days	Water Research Institute	2013

No.	Title	Duration	Organizer	Year
33	Fire Extinguishing Course	4 hrs	Water Research Institute	2014
34	ISO 17025:2005	16 hrs	Direct Assessment Services	2014
35	Meeting of Desalination Technology and Water Purification System	4 hrs	Headquarters for the Development of Water Technologies, Droughts, Erosion and the Environment	2015
36	IMS Lead Audit	3 days	TUV International Academy	2015
37	Risk Management Internal Audit	3 days	TUV International Academy	2015
38	Organizational Knowledge Management	8 hrs	Gilan Training Center, Institute for Energy and Hydro Technology	2015
39	Fire Extinguishing Course	4 hrs	Water Research Institute	2015
40	Sea Water Desalination	5 days	Algerian Ministry of Water Resources and Environment	2016
41	Integrated Management System for Environmental Quality, Occupational Health and Safety	18 hrs	Tehran Higher Education and Research Complex, Institute for Energy and Hydro Technology	2016
42	Improving the Efficiency of Drinking Water Production	30 hrs	Tehran Higher Education and Research Complex, Institute for Energy and Hydro Technology	2016
43	Water Quality Control and Certification	18 hrs	Tehran Higher Education and Research Complex, Institute for Energy and Hydro Technology	2016
44	Quality Control and National and International Standards	18 hrs	Tehran Higher Education and Research Complex, Institute for Energy and Hydro Technology	2016
45	Principles of Wastewater Treatment Plant Maintenance (Active Sludge)	30 hrs	Tehran Higher Education and Research Complex, Institute for Energy and Hydro Technology	2016
46	Quality Function Develop (QFD)	12 hrs	Tehran Higher Education and Research Complex, Institute for Energy and Hydro Technology	2016
47	Technical Training Course in Microza MF/UF for Water & Wastewater Treatment	3 days	ASAHI KASEI Corporation, Japan	2016
48	Water Recycling & Reuse	1 day	UNESCO Regional Center on Urban Water Management	2017
49	The 1st Conference on the Future Studies of the Water and Wastewater Industry of the Country (Iran)	10 hrs	Iranian Association of Spatial Planning	2018
50	Project Navigator Training Workshop	1 day	Iran Renewable Energy Association	2018
51	The 3rd International Renewable Energy Conference	2 days	Iran Renewable Energy Association	2018

B. Taught/Executed

No.	Title	Duration	Organizer	Responsibility	Year
1	Workshop on Hospital Hazardous Wastes	1 day	Department of Environment	Teacher	2006
2	Courses on Occupational Safety and Health	594 hrs	Center of Research and Training of Occupational Safety and Health	Teacher	2006-2015
3	Seminar on Occupational Safety and Health	1 hr	School of Public Health and Safety, Shahid Beheshti University of Medical Sciences	Speaker	2007
4	Conference on Entrepreneurship Development and its Role in the Health of the City	1 day	School of Health, Safety and Environment, Shahid Beheshti University of Medical Sciences	Conference Secretary	2008
5	The 1st National Conference on Safety, Health and Environment	2 days	Center of Research and Training of Occupational Safety and Health	Member of Scientific Committee and Referee	2008
6	The 1st Conference in Tehran Safe Community	2 days	Institute for Environmental Research, Tehran University of Medical Sciences	Speaker	2008
7	Workshop on Investigating the Fluctuations of Caspian Sea Water	8 hrs	Gilan Ports and Maritime Administration, National Research Center of Caspian Sea	Teacher	2009
8	The 2nd Conference in Tehran Safe Community	2 days	Tehran's municipality	Member of Scientific Committee and Referee	2009
9	The 2nd International Conference on Safety, Health and Environment	2 days	Tehran	Member of Scientific Committee and Referee	2009
10	The 12th National Congress On Environmental Health	1 day	Shahid Beheshti University of Medical Sciences, Iranian Association of Environmental Health	Member of Scientific Committee	2009
11	Workshop on Marine Parameters Measurements	3 days	Gilan Ports and Maritime Administration, National Research Center of Caspian Sea	Teacher	2009

No.	Title	Duration	Organizer	Responsibility	Year
12	The 2nd Congress on Health Promotion and Occupational Safety	2 days	Tehran University of Medical Sciences, Iranian Health Education and Promotion Association	Member of Scientific Committee	2010
13	Training Course on Wastewater Treatment Principles	24 hrs	TAM Iran Khodro Company	Teacher	2010
14	The 1st International Conference on Water and Wastewater	2 days	Milad Tower Conference Hall	Member of Scientific Committee	2011
15	International Conference on Traditional Knowledge of Water Resources Management	3 days	International Center on Qanats and Historic Hydraulic Structures	Member of Scientific Committee	2011
16	The 3rd International Conference on Safety, Health and Environment	2 days	Tehran	Member of Scientific Committee	2011
17	Workshop on Collecting and Disposing Methods of Sludge from Urban Wastewater Treatment Plants	1 day	Water and Wastewater Research Center	Teacher	2012
18	International Workshop and Conference on Desalination of Brackish, Sea Water and Wastewater Treatment	3 days	Iranian Research Organization for Science and Technology	Key Speaker	2012
19	Workshop on Water Resources Quality Management, Control of Wastewater and Waste Residues in Urban and Rural Communities by the Method of Phytoremediation (Vetiveria Zizanioides Plant)	12 hrs	Water Research Institute	Teacher	2013
20	Workshop on Vetiveria Zizanioides Use in Quality Management of Water Resources and River Engineering	1 day	Tehran Regional Water Company	Teacher	2014
21	The 1st International Congress on Climate Changes, Social Responsibility and Future Generation	5 days	Milad Tower Conference Hall	Member of Scientific Committee and Panel Speaker	2014
22	Use of Red Mud to Remove Nitrate from Contaminated Water	4 hrs	Zanjan Province Water and Wastewater Company	Teacher	2014
23	International Conference on Science, Engineering and Technology for the Environment	2 days	Tehran University	Key Speaker, Member of Scientific and Organizing Committee	2015
24	Conference on Water and Sustainable Development and New Technologies for Water and Wastewater Treatment	1 day	Sahand University of Technology	Key Speaker, Member of Board of Directors	2017
25	Training Course on Monitoring and Environmental Analysis of Water Resources	30 hrs	Tehran Higher Education and Research Complex, Institute for Energy and Hydro Technology	Teacher	2017
26	Training Course on HSE	12 hrs	Tehran Higher Education and Research Complex, Institute for Energy and Hydro Technology	Teacher	2017
27	Training Course on Membrane Technology	8 hrs	Tehran Higher Education and Research Complex, Institute for Energy and Hydro Technology	Teacher	2017
28	Training Course on HSE Basics	36 hrs	Tehran Higher Education and Research Complex, Institute for Energy and Hydro Technology	Teacher	2017
29	Training Course on Welfare of Employees and Working Conditions	8 hrs	Tehran Higher Education and Research Complex, Institute for Energy and Hydro Technology	Teacher	2017
30	Training Course on Safety and Environmental Standards	18 hrs	Tehran Higher Education and Research Complex, Institute for Energy and Hydro Technology	Teacher	2018
31	Geopolitical Considerations for Water Supply from the Oman Sea (Specialized Symposium on the Feasibility of Utilizing the Oman Sea Capacity for Providing Water to the Iran)	1 day	Iranian Association of Spatial Planning	Panel Speaker	2018
32	Desalination Waste Management by ZLD Technology (Conference on Non-Conventional Water Recourses, Challenges and Opportunities)	1 day	Institute for Energy and Hydro Technology	Speaker	2018

11 Memberships in Educational, Research and Executive Board

No.	Title	Responsibility	Date	Notes
1	Research Council of the Faculty of Occupational Safety and Health	Member	2006	
2	Educational Council of School of Health, Safety and Environment, Shahid Beheshti University of Medical Sciences	Head	2008	
3	Executive Committee of the Research Council of Shahid Beheshti University of Medical Sciences	Member	2008	

No.	Title	Responsibility	Date	Notes
4	EDO Committee of School of Health, Safety and Environment, Shahid Beheshti University of Medical Sciences	Member	2008	
5	Research Council of Water Research Institute	Secretary	2009	
6	Human Resources Committee of Water Research Institute	Head	2009	
7	Policy and Technology Cooperation Headquarters in the Field of Research, Transfer and Development of Technology in Water and Wastewater Industry	Member	2011	
8	Occupational Safety and Health Committee, Water Research Institute	Member	2012	
9	Representative of the Water Research Institute at the Working Group on the Development of Technology in the Water and Wastewater Industry	Member	2012	
10	Setting-up Committee of Development Center of Science and Technology in Water and Wastewater Industry, Water Research Institute	Member	2013	
11	Compilation of Standard for Household Washing Machines (Determination of Criteria for Water Consumption and Water Labelling Instruction)	Secretary and Member	2014	
12	Service Activities and Exploitation of Drinking Water Supply and Sewage Collection Systems	The Chairman of ISIRI/TC224 Technical Committee	2014	Corresponding Committee of ISO International Committee
13	Research Committee of HSE Risk Management and Economics	Member	2014	
14	Treatment, Recycle, Reuse and Disposal of Sludge	The Chairman of ISIRI/TC224 Technical Committee	2014	Corresponding Committee of ISO International Committee
15	Strategic Committee for National Documentation of Water Recovery	Member	2015	
16	HSE Working Group of Water Research Institute	Head	2015	
17	Environment Committee of Applied Research Office, Iran Water Resources Management	Member	2016	
18	Compilation of Standard for Sanitary Tap Ware- Determination of Criteria for Water Consumption and Water Labelling Instruction	Secretary	2016	
19	Compilation of Standard for WC Pans and WC Suites- Determination of Criteria for Water Consumption and Water Labelling Instruction	Member	2016	
20	Compilation of Standard for Shower Outlets- Determination of Criteria for Water Consumption and Water Labelling Instruction	Member	2016	
21	Student Cultural Council of Institute for Energy and Hydro Technology	Secretary	2016	
22	Cultural Council of Institute for Energy and Hydro Technology	Member	2016	
23	Education Council of Tehran Higher Education and Research Complex, Institute for Energy and Hydro Technology	Head	2016	
24	Strategic Committee of EHSS, Ministry of Energy	Member	2016	
25	Research Working Group of Institute for Energy and Hydro Technology	Member	2017	
26	Technical Working Group for the Coordination of the Ministry of Energy Managers	Member	2017	
27	Working Group for Establishment of the Occupational-Organizational Education System of Ministry of Energy (Tehran Regional Working Group)	Member	2017	
28	Human Resources Executive Board of Institute for Energy and Hydro Technology	Member	2017	
29	Coordination Committee of Institute for Energy and Hydro Technology	Member	2017	
30	Reviewer Committee of the Water and Wastewater Industry Books	Member	2018	

12 Membership in Scientific and Professional Associations

- Iranian Association for Environmental Assessment (IAEA)
- Agricultural and Natural Resources Engineering Organization of Iran
- Iranian Society of Environmentalists (IRSEN)
- Iranian Society of Civil Engineers (ISCE)
- Iran Water and Wastewater Association (IWWA)
- Institute of Standards and Industrial Research of Iran (ISIRI)