Curriculum Vitae

Soheila Shokrollahzadeh, Ph.D.

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EDUCATION

1998 - 2004	Ph.D., Chemical Eng.-Biotechnol., Amirkabir University of Technology (AUT), Tehran, Iran.
2002 - 2003	Ph. D. student (guest), Chemical Eng. (Biotechol.), School of Biosciences and Process Technology, Växjö Univ., Växjö, Sweden.
1992 - 1994	M. Sc., Chemical Eng., Tehran Univ. (TU), Tehran, Iran.
1984 - 1988	B.Sc., Chemical Eng., Sharif University of Technology (SUT), Tehran, Iran.

EXPERIENCE

2014-2016	Vice-deputy director of technology development, Iranian Research Organization for Science and Technology IROST), Tehran, Iran.
2014-2016	Director general of technology support and knowledge management office, IROST, Tehran, Iran.
2014	Scientific co-chair of 2nd International Training Workshop, Conference, and Exhibition on Desalination, October 20-22, Tehran, Iran.
2013-Present	Director in charge and editorial board member of Advances in Environmental Technology (AET) journal.
2013- Present	Research Deputy Director of Regional Desalination and Environmental Center, Iranian Research Organization for Science and Technology (IROST), Tehran, Iran.
2010-2012 2021-Present	Head of Green Chemical Technologies Group, Institute of Chemical Technologies, Iranian Research Organization for Science and Technology (IROST), Tehran, Iran.
2005- Present	Referee and scientific committee member of Khwarizmi International Award (Chemical- and Nano-Technology subdivisions), IROST, Iran.
2005- Present	Referee of research projects and inventions
2005- 2007	Head of Chemical and Environmental Engineering Group, Institute of Chemical Technologies, Iranian Research Organization for Science and Technology (IROST), Tehran, Iran.
2005- 2007, 2010-2012	Member of Scientific Committee, Institute of Chemical Technologies, IROST, Tehran, Iran.

1994 – Present	Faculty member, Department of Chemical Technologies, IROST, Tehran, Iran
1991-1994	Senior expert of technology transfer, Industrial Communication Office, IROST, Tehran, Iran.
1989-1991	Research expert, Engineering Office, IROST, Tehran, Iran.
1988-1989	Process engineer, Rezvani Consultant Eng. Co., Tehran, Iran.

RESEARCH EXPERIENCE

Research Projects

2020-present	Deep eutectic solvent based on choline chloride as a draw solute in forward osmosis embrane process for water sesalination: preparation and performance
2018-2020	Quantitative and qualitative assessment of industrial and non-industrial water and wastewater, existing technologies and their application in water and wastewater treatment of Parsian Gas Refinery (Bench-Scale)
2017-2018	Reduction of water consumption in power plants using novel membrane technologies (Detailed Program)
2017- 2019	Biological and biodegradation properties of different strains of Genoderma genus, collected from Hyrcanian forests (Lab-scale)
2015-2017	Fabrication of a thin film nanocomposite (TFN) forward osmosis membrane with nanofibers as porous support layer (Lab scale)
2014-2017	Investigation on the use of power plant cooling water as feed water of a reverse osmosis system (Pilot scale)
2013-2014	Water desalination by forward osmosis- laboratory studies (Mini-pilot scale)
2012-2013	Removal of phenol from wastewater by catalytic ozonation (Bench-scale)
2012-2013	Extraction of pomegranate seed oil from pomegranate wastes and its stabilization by microencapsulation (Bench scale)
2011-2013	Extraction of essential oils by instant controlled pressure drop process (Pilot scale)
2011-2013	Study on feasible treatments of industrial wastewaters produced in Parsian Gas Refinery and suggesting appropriate process for reuse of treated wastewaters (Bench scale)
2009-2011	Modification of solid-liquid extraction pilot plant located in department of chemical technologies (Semi industrial)
2009-2011	Improvement of the efficiency of biological wastewater treatment of Abadan Petrochemical Company (Industrial scale)
2009-2011	Study on possible re-use of biologically-treated wastewater of Abadan Petrochemical Company (Industrial scale)
2008-2010	Biodegradation of polynuclear aromatic hydrocarbons using native microorganisms (Bench Scale)
2006-2007	Study on strategic plan of biotechnology research in gas industry (Theoretical)
2005-2006	Identification of pollutants in wastewater influent of biological treatment plant of Abadan Petrochemical Plant and analysis of microbial diversity (Lab scale)

2004-2006	Experimental study of superheated water extraction (Bench scale)
2004-2006	Extraction of aromatic compounds from AW-406 solvent used for extraction of edible oils and pilot plant design (Lab scale)
2000-2004	Construction, installation and start up of multi-purpose solid-liquid extraction unit (Semi-Industrial)
2002	Manufacturing of manganese acetate from manganese ore (Lab scale)
1998-1999	Recovey of Tartaric acid and Raschell salt from grape pomace (Lab scale)
1998-2000	Conversion of Ethylene dichloride to Ethylene amines (Bench scale)
1997-1998	Preparation of active (chemical and electrochemical) Manganese dioxide (Lab scale)
1994-1996	Zinc oxide from Zinc ores by non-electrochemical methods (Lab scale)
1991-1992	Chlorination of natural gas (methane) to chloromethanes (Pilot scale)

Research Supervisory Experience

2016- present	National plan for drafting a strategic plan and roadmap for water desalination
2013-present	Projects from Iran National Science Foundation
	Projects from Presidential Deputy for Science and Technology
2013- present	Projects from Technology Incubator, IROST
2012-2013	Evaluation of Fe/Cr/Cu Catalyst performance in high pressure water-gas shift reactionn (Bench scale)
2011-2013	Fabrication of 10 kW polymeric fuel cell tester (Pilot scale)
2010	Water purification filter (Lab scale)
2005-2010	Design, construction and evaluation of washing and leaching machine of olive oil from olive seeds
2006-2008	Study of sodium chloride inhibition limits in biological treatment of industrial wastewater (Lab scale)
2005-2008	Basic design of authothermal reforming (ATR) process (Pilot scale)
2004-2008	Recovery of tocopherols from by-products of vegetable oil refining and know-how compilation (Pilot scale)
1999-2001	Conversion of natural gas to synthesis gas by partial oxidation process, scale: pilot plant.
1999-2001	Multipurpose pilot plant for manufacturing Ferrous fumarate (pharmaceutical grade), …in capacity of 100 kh/day (Pilot scale)
1999-2001	Preparation of chlorine gas and sodium hydroxide by diaphragm electrolysis process in capacity of 1 tonnes/day (Industrial scale)
1996-1998	Preparation of chlorine gas and sodium hydroxide by diaphragm electrolysis process (Bench scale)
1995-1999	Extraction of Tannin from oak fruit (Semi-industrial scale)
1990-1991	Preparation of Citric acid by fermentation process (Bench scale)

TEACHING AND GRADUATE STUDENTS

2019-present	Supervisor, PhD thesis, Inorganic Chemistry, "Synthesis of core-shell magnetic particles and study of its application as draw solution in forward osmosis process", Islamic Azad University, Tehran, Iran.
2018-present	Supervisor, MSc thesis, Chemical Engineering, " Investigating the effect of carbon nanotubes in polymer composite membrane structure on the separation of biomass containing oil from water", University of Sistan and Baluchestan, Zahedan, Iran.
2018-present	Advisor, MSc thesis, Chemical Engineering, "Investigating the effect of pH on auto-flocculation of microalgae and the main mechanism to increase its harvesting ", University of Sistan and Baluchestan, Zahedan, Iran.
2018-present	Supervisor, PhD thesis, Chemical Engineering, "Investigating of fouling mechanism and membrane performance for dewatering of microalgae biomass cultivated in municipal wastewater by forward osmosis", University of Sistan and Baluchestan, Zahedan, Iran.
2018-present	Supervisor, MSc thesis, Chemical Engineering,"Investigation of the effect of pH on self-coagulation and clotting of microalgae and the dominant mechanism with the aim of increasing harvest", University of Sistan and Baluchestan, Zahedan, Iran.
2017-present	Supervisor, MSc thesis, Chemical Engineering, "Wastewater treatment using fresh water microalgae: Investigation the effect of culture media conditions on microalgae growth and wastewater treatment", University of Sistan and Baluchestan, Zahedan, Iran.
2017-present	Supervisor, PhD thesis, Chemical Engineering, "The removal process of pharmaceutical pollutants from aqueous system using Ganoderma Lucidium algae", IROST, Tehran, Iran
2016-present	Supervisor, PhD thesis, Chemical Engineering, "Investigation of Forward osmosis membrane process for water desalination by computational fluid dynamic (CFD)" IROST, Tehran, Iran
2015-present	Supervisor, PhD thesis, Chemical Engineering, "Hybrid process of advanced oxidation process and surfactant usage in water pretreatment of reverse osmosis membrane for preventing biofouling" , IROST, Tehran, Iran
2015-2016	Supervisor, PhD thesis, Environmental Engineering, "Investigating the effect of pressure in water desalination using Forward osmosis", IROST, Tehran, Iran
2013-2015	Supervisor, MSc project, "Catalystic ozonation with nano-Zinc oxid/ perlite", IROST, Tehran, Iran
2013-2015	Supervisor, MSc project, "Synthesis of Mn_3O_4/ Fe_3O_4 nanocomposite as catalyst for degradation of phenol in water by ozonation", IROST, Tehran, Iran
2013-2015	Supervisor, MSc project, "Biodegradation of chlorinated hydrocarbon in aqueous phase using Sphingopyxis sp. aerobic bacteria in a fixed-bed bioreactor", IROST, Tehran, Iran
2013-2015	Supervisor, MSc project, "Fabrication of graphene oxide-polysulfone nanofiltration membrane for water and wastewater applications", IROST, Tehran, Iran
2013-2019	Supervisor, PhD thesis, "Treatment of saline hydrocarbon wastewater using osmotic membrane bioreactor", IROST, Tehran, Iran
2013-2018	Supervisor, PhD thesis, "Study on water and energy recovery in reverse osmosis desalination unit using power plant cooling water as feed water", IROST, Tehran, Iran
2013-2014	Supervisor, MSc project, "Study of Internal concentration polarization phenomenon in forward osmosis process", University of Sistan and Baluchestan, Zahedan, Iran

2013-present	Instructor, "Microbiology and biochemical reactors", PhD and MSc courses, Chemical engineering, IROST
2013-present	Instructor, "Water and Wastewater Treatment", MSc course, Chemical engineering, IROST
2013-2014	Supervisor, MSc project, “Investigation the effect of nanostructures addition on polyamide/polysulfone thin film composite membrane performance in forward osmosis", Isfahan University, Isfahan, Iran
2013-2014	Supervisor, MSc project, "The enhancement of performance of polyamide/polysulfone (PA/PSF) thin film composite membrane in forward osmosis process using substrate modification", Isfahan University, Isfahan, Iran
2012-2013	Instructor, "Membrane processes", PhD course, Chemical engineering, IROST
2009-2013	Supervisor, PhD thesis, "Improvement of nanosilver particles produced by filamentous fungi", Chemical engineering department, Tarbiat Modarres University, Tehran, Iran.
2009-2011	Advisor, MSc project, "Study on microbial resources in extraction of enzyme lipase and enzymatic production of biodiesel", Chemical engineering department, Amirkabir University of Technology, Tehran, Iran.
2009-2011	Advisor, MSc project, "Enzymatic production of biodiesel using Rhizopus fungus", Chemical engineering department, Amirkabir University of Technology, Tehran, Iran
2006-2008	Supervisor, MSc project, "Use of immobiliuzed enzyme for production of biodiesel", Chemical engineering department, Amirkabir University of Technology, Tehran, Iran.
2006-2008	Advisor, MSc project, "Role of microbial cells immobilized on natural support in removal of mercury from synthetic type of industrial wastewater", Chemical engineering department, Amirkabir University of Technology, Tehran, Iran.
2002-1st semester	Instructor, "Biotechnology Introductory Course (MOP811) – Biochem. Eng. Fundamentals", M.Sc. level, School of Biosciences and Process Technology, Växjö Univ., Växjö, Sweden.

PATENTS and INVENTIONS

April 2018	“Synthesis of Fe_3O_4 and Mn_3O_4 / Fe_2O_3 magnetic nanocatalysts containing pyridine diamine and pyridine dicarboxylic acid ligands for catalytic ozonation in purification of aqueous solutions”, No. 95497, Inventors: Soheila Shokrollahzadeh, Maryam Ranjbar, Marzieh Bayat.
May 2017	“Catalytic ozonation using nano zinc oxide/expanded perlite”, No. 92181, Inventors: Maryam Ranjbar, Soheila Shokrollahzadeh, Masoud Abassi.
Sep 2016	“Use of graphene oxide-embedded polysulfone thin film composite membrane in reverse osmosis”, No.89663, Inventors: Soheila Shokrollahzadeh, Nikta Askari, Shabnam Sheshmani
Sep 2016	“Stabilization of pomegranate oil with microencapsulation technology as a food supplement”, No.86683, Fereshteh Golmohammad, Mohammad Hasan Eikani, Soheila Shokrollahzadeh, Alireza Sedrpoushan
June 2009	"A process for preparation of active manganese dioxide for using in dry batteries", No. 59722, Inventor: S. Shokrollahzadeh
June 2009	"Purification of manganese ore by acid process and carbonation of it for production of manganese carbonate", No. 59723, Inventor: S. Shokrollahzadeh

Jan 2011	"Enzymatic transesterification of canola oil in a solvent-free media to produce biodiesel", No. 57493, Inventors: M. Hajar, S. Shokrollahzadeh, F. Vahabzadeh, Amirkabir University
Feb 2011	"Biodiesel production from canola oil in a enzymatic fixed-bed bioreactor", No. 57920, Inventors: M. Hajar, F. Vahabzadeh, S. Shokrollahzadeh, Amirkabir University
Feb 2008	"Manganese acetate from manganese ore", No. 57001, Inventors: D. Sadeghi Fateh, D., S. Shokrollahzadeh

PUBLICATIONS

Refereed Journals

1. Khazaie, F., Shokrollahzadeh,S., Bide, Y., Sheshmani, Sh., Shahvelayati, A.S. (2021) High-Flux sodium alginate sulfate draw solution for water recovery from saline waters and wastewaters via forward osmosis, *Chemical Engineering Journal*, 417, 129250, DOI: 10.1016/j.cej.2021.129250.
2. Badali Varzaghani, N., Shokrollahzadeh, S., Farazmand, A. (2021) Degradation of tetrachloroethene using aerobic *Sphingopyxis ummariensis* bacteria in a gas-recycling fixed-bed bioreactor, *Journal of Environmental Chemical Engineering*, 9, 105098, DOI:10.1016/j.jece.2021.105098.
3. Khazaie, F., Shokrollahzadeh,S., Bide, Y., Sheshmani, Sh., Shahvelayati, A.S. (2021) Forward osmosis using highly water dispersible sodium alginate sulfate coated-Fe_3O_4 nanoparticles as innovative draw solution for water desalination, *Process Safety and Environmental Protection*, 146, 789-799.DOI:10.1016/j.psep.2020.12.010.
4. Karamad Yazdanabad, S., Samimi, A., Shokrollahzadeh, S., Mohebbi-Kalhori, D., Moazami, N., Ibáñez González, M. J., Mazzuca Sobczuk, T., Grima E. M. (2021) Microalgae biomass dewatering by forward osmosis: review and critical challenges, *Algal Research*56, 102323, DOI: doi.org/10.1016/j.algal.2021.102323.
5. Parastar, M., Sheshmani, Sh., Shokrollahzadeh (2020) Cross-linked chitosan into graphene oxide-iron(III) oxide hydroxide as nano-biosorbent for Pd(II) and Cd(II) removal, *International Journal of Biological Macromolecules*, 166, 229-237. DOI:10.1016/j.ijbiomac.2020.10.160
6. Khazaie, F., Sheshmani, Sh., Shokrollahzadeh,S., Shahvelayati, A.S. (2020) Desalination of saline water via forward osmosis using magnetic nanoparticles covalently functionalized with citrate ions as osmotic agent, *Environmental Technology*, Published online. DOI:10.1080/09593330.2020.1866087.
7. Bide, Y., Shokrollahzadeh, S. (2020) Toward tailoring of a new draw solute for forward osmosis process: branched poly (deep eutectic solvent)-decorated magnetic nanoparticles, *Journal of Molecular Liquids*, 320, 114409, DOI:10.1016/j.molliq.2020.114409.
8. Pishgar, Z., Samimi, A., Mohebbi-Kalhori, D., Shokrollahzadeh, S. (2020) Comparative study on the harvesting of marine *Chlorella vulgaris* microalgae from a dilute slurry using autoflocculation-sedimentation and electrocoagulation-flotation methods, *International Journal of Environmental Research*, 14, 615-628. DOI:10.1007/s41742-020-00277-y.
9. Nematzadeh, M., Shokrollahzadeh,S., Samimi, A., Mohebbi-Kalhori, D. (2020) Synergistic effect of amino-acids and metal salts as draw solutions to enhance the performance of fertilizer-drawn forward osmosis, *Environmental Science: Water Research and Technology*, 6, 3121-3131.
10. Ahmadizadeh, R., Shokrollahzadeh, S., Latifi, S.M., Samimi, A., Pendashteh, A. (2020) Application of halophilic microorganisms in osmotic membrane bioreactor (OMBR) for reduction of volume and organic load of produced water, *Journal of Water Process Engineering*, 37, 101422, DOI: 10.1016/j.jwpe.2020.101422.
11. Shokrollahzadeh, S., Bide, Y., Gholami, S. (2020) Enhancing Forward Osmosis Performance via an Oligomeric Deep Eutectic Solvent as a Draw Solute, *Desalination*, 491, 114473, DOI: 10.1016/j.desal.2020.114473
12. Baniamerian, H., Tsapekos, P., Alvarado-Morales, M., Shokrollahzadeh, S., Safavi, M., Angelidaki, I. (2020) Effect of surfactants on photocatalytic toxicity of TiO_2-based nanoparticles toward *Vibrio fischeri* marine bacteria, *Inorganic Chemistry Communications*, 116, 107936, DOI: 10.1016/j.inoche.2020.107936.

13. Baniamerian, H., Tsapekos, P., Alvarado-Morales, M., Shokrollahzadeh, S., Safavi, M., Angelidaki, I. (2020) Anti-algal activity of Fe_2O_3-TiO_2 photocatalyst on *Chlorella vulgaris* species under visible light irradiation, *Chemosphere*, 242, DOI: 10.1016/chemosphere.2019.125119.
14. Nematzadeh, M., Samimi, A., Shokrollahzadeh, S., Mohebbi-Kalhori, D. (2019) Bentazon removal from aqueous solution by reverse osmosis; optimization of effective parameters using response surface methodology, *Advances in Environmental Technology*, 4, 193-201. DOI: 10.22104/aet.2020.4228.1209.
15. Badali, N., Shokrollahzadeh, S., Farazmand, A. (2019) Biodegradation of tetrachloroethylene by a newly isolated aerobic Spjingopyxix ummariensis VR13, *Korean Journal of Chemical Engineering*, 36(8), 1305-1312, DOI:10.1007/s11814-019-0303-1.
16. Ahmadizadeh, R., Shokrollahzadeh, S., Latifi, S.M. (2019) Mass transfer study in saline water treatment by forward osmosis process, *Advances in Environmental Technology*, 3, 141-148.
17. Bahoosh, M., Kashi, E., Shokrollahzadeh, S., Rostami, Kh. (2019) Comparison the performance of different reverse osmosis membrane modules by CFD modeling, *Iranian Journal of Chemical Engineering*,16 (1), 101-116.
18. Shokrollahzadeh, S., Abassi, M., Ranjbar, M. (2019) A new nano-ZnO/Perlite as an efficient catalyst for catalytic ozonation of azo dye, *Journal of Environmental Engineering Research*, 24(3), 513-520, DOI:10.4491/eer.2018.322.
19. Baniamerian, H., Safavi, M., Alvarado-Morales, M., Tsapekos, P., Angelidaki, I., Shokrollahzadeh, S. (2018) Photocatalytic inactivation of Vibrio fischeri using Fe_2O_3-based TiO_2 nanoparticles, *Environmental Research*, 166, 497-506. DOI:10.1016/j.envres.2018.06.011.
20. Shokrollahzadeh, S., Tajik, S. (2018) Fabrication of thin film composite forward osmosis membrane using electrospun polysulfone/polyacrylonitrile blend nanofibers as porous substrate, *Desalination*, 425, 68-76.
21. Shokrgozar Eslah, S., Shokrollahzadeh, S., Moini Jazani, O., Samimi, A. (2018) Forward osmosis water desalination: Fabrication of graphene oxide-polyamide/polysulfone thin film nanocomposite membrane with high water flux and low reverse salt diffusion, *Separation Science and Technology*, 53(3), 573-583. DOI: 10.1080/01496395.2017.1398261.
22. Hamedi, S., Ghaseminezhad, M., Shokrollahzadeh, S., Shojaosadati, S.A. (2017) Controlled biosynthesis of silver nanoparticles using nitrate reductase enzyme induction of filamentous fungus and their antibacterial evaluation, *Artificial Cells, Nanomedicine, and Biotechnology*, 45 (8), 1588-1596. DOI: 10.1080/21691401.2016.1267011.
23. Hamedi, S., Shojaosadati, S.A., Shokrollahzadeh, S., Hashemi-Najafabadi, S. (2017) Controlled green synthesis of silver nanoparticles using culture supernatant of filamentous fungus, *Iranian journal of Chemistry and Chemical Engineering, 36 (5), 33-42.*
24. Baniamerian, H., Shokrollahzadeh, S. (2016) Improvement in photocatalysts and photocatalytic reactors for water and wastewater treatment: A review, *Journal of Particle Science & Technology*, 2, 119-140.
25. Hamedi, S., Shojaosadati S.A., Shokrollahzadeh S., Hashemi-Najafabadi, S. (2017) Mechanism study of silver nanoparticle production using *Neurospora intermedia*, *IET Nanobiotechnology*, 11, 2, 157-163 (DOI: 10.1049/iet-nbt.2016.0038).
26. Tajik, S., Moini Jazani, O., Shokrollahzadeh, S., Latifi, M. (2016) Thin film nanocomposite forward osmosis membrane prepared by graphene oxide embedded PSf substrate, *Journal of Particle Science & Technology*, 2, 103-117.
27. Nematzadeh, M., Samimi, A., Shokrollahzadeh, S. (2016) Application of sodium bicarbonate as draw solution in forward osmosis desalination: influence of temperature and linear flow velocity, *Desalination and Water Treatment*, 57, 20784-20791.
28. Sheshmani, Sh., Akhundi Nematzadeh, M., Shokrollahzadeh, S., Ashori, A. (2015) Preparation of graphene oxide/chitosan/FeOOH nanocomposite for the removal of Pb(II) from aqueous solution, *International Journal of Biological Macromolecules*, 80, 475-480.
29. Shokrollahzadeh, S., Azizmohseni, F., Golmohamad, F. (2015) Characterization and kinetic study of PAH–degrading *Sphingopyxis ummariensis* bacteria isolated from a petrochemical wastewater treatment plant, *Advances in Environmental Science and Technology*, 1, 1-9.
30. Nematzadeh, M., Samimi, A., Shokrollahzadeh, S., Behzadmehr, A. (2015) Performance of potassium bicarbonate and calcium chloride draw solutions for desalination of saline water using forward osmosis, *Transport Phenomenae in Nano and Micro Scales*, 3, 29-36.
31. Hamedi, S., Shojaosadati, S.A., Shokrollahzadeh, S., Hashemi-Najafabadi, S. (2014) Extracellular biosynthesis of silver nanoparticles using a novel and non-pathogenic fungus, *Neurospora intermedia:* Controlled synthesis and antibacterial activity, *World Journal of Microbiology and Biotechnology*, 30, 693–704.

32. Shokrollahzadeh, S., Golmohammad, F., Shokouhi, H. (2012) Study of Sphingopyxis Isolates in Degradation of Polycyclic Aromatic Hydrocarbons, *Chemical Engineering Transactions*, Vol. 27, 55-59.
33. Hamedi, S., Ghaseminezhad, S.M., Shojaosadati, S.A., Shokrollahzadeh, S. (2012) Comparative study on silver nanoparticles properties produced by green methods, *Iranian Journal of Biotechnology*, Vol 10, No. 3, 191-197.
34. Hajar, M., Shokrollahzadeh, S., Vahabzadeh, F. (2011) Role of the Castor Oil Extracted from Seeds of *Ricinus Communis* for Biodiesel Formation using Novozym 435, *World Academy of Science and Technology*, 77, 2011, 746-749.
35. Shokrollahzadeh, S., Golmohammad, F. (2011) Evaluation of wastewater treatment plant in pollution control of petrochemical industries: A case study: of Abadan Petrochemical Company, *Environmental Sciences*, Vol 8, No 2, 83-94.
36. Bashardoost, R., Vahabzadeh, F., Shokrollahzadeh, S., Monazzami, A. (2010) Sorption performance of live and heat-inactivated loofa-immobilized *Phanerochaete chrysosporium* in mercury removal from aqueous solution, *Iranian Journal of Chemistry and Chemical Engineering (IJCCE)*, 29, 4, 2010.
37. Hajar, M., Vahabzadeh, F., Shokrollahzadeh, S. (2010) Empirical Modeling of the Enzymatic Methanolysis of Canola Oil, *Scientia Iranica, Transaction C,* Vol 17, No.1, 97-105.
38. Hajar, M., Shokrollahzadeh, S., Vahabzadeh, F., Monazzami, A. (2009) Solvent-free methanolysis of canola oil in a packed-bed reactor with use of Novozym 435 plus loofa, *Enzyme and Microbial Technology*,45, 188-194.
39. Eikani, M.H., Golmohammad, F., Shokrollahzadeh, S., Mirza, M., Rowshanzamir, S. (Nov/Dec 2008) Superheated water extraction of *Lavandula latifulia* Medik volatiles: comparison with conventional techniques, *Journal of Essential Oil Research*, 20, 482-487.
40. Hajar, M., Vahabzadeh, F., Shokrollahzadeh, S. (2008) Study on Reaction Parameters in Lipase-Catalyzed Methanolysis of Plant Oil, *Chemical Engineering Transactions*, Vol. 14, 295-300.
41. Shokrollahzadeh, S., Sadeghi Fateh, D., Shokouhi, H., Shahvelayati, A., Golmohammad, F. (2008) Liquid Extraction of Aromatic Hydrocarbon by Tetrahydrofurfuryl Alcohol, an Environmentally Friendly Solvent, *Journal of Applied Sciences*, 8 (7), 1320-1324.
42. Shokrollahzadeh, S., Azizmohseni, F., Golmohammad, F., Shokouhi, H., Khademhaghighat, F. (2008) Biodegradation potential and bacterial diversity of a petrochemical wastewater treatment plant in Iran, *Bioresource Technology*, 99(14), 6127-6133.
43. Shokrollahzadeh, S., Bonakdarpour, B.,Vahabzadeh, F., Sanati, M. (2007) Growth kinetics and Pho84 phosphate transporter activity of *Saccharomyces cerevisiae* under phosphate-limited conditions, *Journal of Industrial Microbiology and. Biotechnology*, 34, 17-25.
44. Shokrollahzadeh, S., Vahabzadeh, F., Bonakdarpour, B., Sanati, M., Persson, B.L. (2005) Characterization of Phosphate Membrane Transport in *Saccharomyces cerevisiae* CEN.PK113-5D Under Low-Phosphate Conditions Using Aerobic Continuous Culture, *Iranian Journal of Chemistry and Chemical Engineering (IJCCE)*, 24, 1, 41-51.

RESEARCH INTERESTS

- Chemical and Environmental engineering (water and wastewater treatment processes, water desalination, reuse of treated wastewater)
- Environmental Biotechnology
- Membrane Processes, Forward Osmosis