

Curriculum Vitae

Personal information:

First name: *Seyyed Mohammad*

Last name: *Mousavi*

Birth Date: 5 Jun 1978

Nationality: Persian

Present Job Title: Associate Professor

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Biotechnology Group, Chemical Engineering Department, Tarbiat Modares University, Tehran, Iran

Education:

- * Ph.D. in Chemical Engineering (2003-2007), Sharif University of Technology, Tehran, Iran.
- * M.Sc. in Chemical Engineering (2000-2002), Sharif University of Technology, Tehran, Iran.
- * B.Sc. in Chemical Engineering (1996-2000), Shahid Bahonar University of Kerman, Kerman, Iran.

Interests:

*** *Industrial Biotechnology:***

- *Bioleaching*
- *Bioremediation*
- *Biodesulfurization*
- *Wastewater Treatment*

*** *Food Biotechnology***

*** *CFD Simulation and Mathematical Modeling of Biological Phenomena***

*** *Statistical Modeling and Optimization of Biochemical Processes***

Teaching experience:

- * *Modeling and Simulation of Biological Phenomena (M.Sc Course)*
- * *Process Optimization (M.Sc and Ph.D Course)*
- * *Environmental Biotechnology (Ph.D Course)*
- * *Specific Discussions (Ph.D Course)*

Number of completed industrial projects: *I performed 10 projects for different industries.*

Number of graduated students:

M.Sc Students: Supervisor: 25 and Advisor: 15

Ph.D Students: Supervisor: 3, Under supervision: 5 and Advisor: 13

Publications:

Books:

- * “*Biochemical Engineering*”, by Shigeo Katoh and Fumitaki Yushida, translated, **Tarbiat Modares University publisher, 2012.**
- * “*Mass transfer from fundamentals to modern industrial applications*”, by Koichi Asano, translated, **Tarbiat Modares University publisher, Tehran, 2011.**
- * “*Modeling in transport phenomena*” by Ismail Tousan, translated, **Sharif University publisher, Tehran, 2010.**
- * “*General Microbiology and Biochemistry*”, **Sanjesh publisher, Tehran, 2004.**
- * “*Applied Mathematics in Chemical Engineering*”, **Sanjesh publisher, Tehran, 2004.**

Book chapters:

- 1- A. Jafari, **S.M. Mousavi**, H. Motesaffi, H. Roohian, H. Hamed Sangari, “*Simulation of Hydrodynamics and Mass Transfer in a Valve Tray Distillation Column Using Computational Fluid Dynamics Approach*”, In: *Advanced Topics in Mass Transfer*, Chapter 13, pp. 265-280, 2011, Published by **InTech Publisher (Croatia)**.
- 2- T. Amani, **S.M. Mousavi**, M. Nosrati, “*CFD Simulation of Syntrophic Anaerobic Digestion of Volatile Fatty Acids in a Continuous Stirred Reactor*”. In: *Engineering Applications of Computational Fluid Dynamics*, Chapter 11, pp. 403-435, 2011, Published by **International Energy and Environment Foundation**.
- 3- **S.M. Mousavi**, A. Jafari, S. Yaghmaei, M. Vossoughi, I. Turunen, “*Experimental Investigation and Simulation of Ferrous Biooxidation and Flow Hydrodynamics in a Bubble Column Bioreactor using CFD Approach*”, In: *Current Themes in Engineering Technologies*, Ao, Sio-Iong, Amouzegar, Mahyar A., Chen, Su-Shing (Eds.), Published by **American Institute of Physics (AIP)**, pp. 68-82, 2008.
- 4- **S.M. Mousavi**, “*Investigation of Single Phase Approximation and Mixture Model on Flow Behaviour and Heat Transfer of a Ferrofluid using CFD Simulation*”, In: *Advances in Computational Algorithms and Data Analysis*, Ao, Sio-Iong; Rieger, Burghard; Chen, Su-Shing (Eds.), Published by **Springer**, pp. 495-507, 2008.

National Patents:

- 1- M. Arshadi, **S.M. Mousavi**, “*Recovery of gold, copper and nickel from discarded mobile phone PCBs using Acidithiobacillus ferrooxidans and Bacillus megaterium*”, Registration No.: 85826, 2015. **Evaluated by: Iranian Research Organization for Science and Technology.**

- 2- S.O. Rastegar, **S.M. Mousavi**, S.A. Shojaosadati, **2014**, “Bioleaching of Vanadium from Power Plants Residuals”.
- 3- M. Motaghd, **S.M. Mousavi**, S.A. Shojaosadati, S.O. Rastegar, **2014**, “Bioleaching of Platinum and Rhenium from Refinery Spent Catalyst using a Cyanogenic Bacterium”.
- 4- O. Ravanshad, **S.M. Mousavi**, S.A. Shojaosadati, **2014**, “A New Method for Hydrolysis of Microalgae”.
- 5- F. Rezvani, S. Hashemi-Najafabadi, **S.M. Mousavi**, S.A. Shojaosadati, S. Saharkhiz, **2012**, “Phenol Removal from Industrial Wastewater using Soybean Hulls in a Packed Bed Bioreactor”.

Papers:

- 1- **S.M. Mousavi**, S. Yaghmaei, M. Vossoughi, A. Jafari, and S. A. Hoseini, **2005**, “Comparison of Bioleaching Ability of Two Native Mesophilic and Thermophilic Bacteria on Copper Recovery from Chalcopyrite Concentrate in an Airlift Bioreactor”, ***Hydrometallurgy***, **80**, 1-2, pp 139-144. (Impact factor: 2.027)
- 2- **S.M. Mousavi**, A. Jafari, S. Yaghmaei, M. Vossoughi, and R. Roostaazad, **2006**, “Bioleaching of low-grade sphalerite using a column reactor”, ***Hydrometallurgy***, **82**, 1-2, pp 75-82. (Impact factor: 2.027)
- 3- **S.M. Mousavi**, S. Yaghmaei , F. Salimi, and A. Jafari, **2006**, “Influence of process variables on biooxidation of ferrous sulfate by an indigenous *Acidithiobacillus ferrooxidans*.Part I: Flask experiments”, ***Fuel***, **85**,17-18, pp 2555-2560. (Impact factor: 3.248)
- 4- **S.M. Mousavi**, A. Jafari, S. Yaghamei, M. Vossoughi and P. Sarkomaa, **2006**, “Computer simulation of fluid motion in a porous bed using a volume of fluid method: Application in heap leaching”, ***Minerals Engineering***, **19**, 10, pp 1077-1083. (Impact factor: 1.352)
- 5- **S.M. Mousavi**, S. Yaghmaei, M. Vossoughi , A. Jafari, and R. Roostaazad, **2006**, “Zinc Extraction from Iranian Low-Grade Complex Zinc-Lead Ore by Two Native Microorganisms: *Acidithiobacillus ferrooxidans* and *Sulfobacillus*”, ***International Journal of Mineral Processing***, **80**, 2-4, pp 238-243. (Impact factor: 1.304)
- 6- **S.M. Mousavi**, M. Vossoughi, S. Yaghmaei, and A. Jafari, **2006**, “Copper Recovery from Chalcopyrite Concentrate by an Indigenous *Acidithiobacillus ferrooxidans* in an Air-Lift Bioreactor”, ***Iranian Journal of Chemistry and Chemical Engineering***, **25**, 3, pp 21-26. (Impact factor: 0.25)
- 7- **S.M. Mousavi**, I. Alemzadeh, and M. Vossoughi, **2006**, “Use of Modified Bentonite for Phenolic Adsorption in Treatment of Olive Oil Mill Wastewater”, ***Iranian Journal of Science and Technology***, **30**, B5, pp 613-619. (Impact factor: 0.375)

- 8- A. Jafari, P. Zamankhan, and **S.M. Mousavi**, 2006, "Computer simulation of flocs interactions: Application in fiber suspension", *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 292, 2-3, pp 99-109. (Impact factor: 2.359)
- 9- A. Jafari, P. Zamankhan, **S.M. Mousavi**, and K. Henttinen, 2006, "Multiscale modeling of fluid turbulence and flocculation in fiber suspensions", *Journal of Applied Physics*, 100, 3. (DOI information: 10.1063/1.2218034)
- 10- S.A. Hosseini, S. Yaghmaei, **S.M. Mousavi**, and A. Jadidi, 2006, "Biodesulfurization of Dibenzothiophene by a Newly Isolated Thermophilic Bacteria Strain", *Iranian Journal of Chemistry and Chemical Engineering*, 25, 3, pp 65-71. (Impact factor: 0.25)
- 11- **S.M. Mousavi**, S. Yaghmaei, M. Vossoughi, A. Jafari, R. Roostaazad, and I. Turunen, 2007, "Bacterial leaching of low-grade ZnS concentrate using indigenous mesophilic and thermophilic strains", *Hydrometallurgy*, 85, 1, pp 59-65. (Impact factor: 2.027)
- 12- **S.M. Mousavi**, S. Yaghmaei, and A. Jafari, 2007, "Influence of process variables on biooxidation of ferrous sulfate by an indigenous *Acidithiobacillus ferrooxidans*. Part II: Bioreactor experiments", *Fuel*, 86, 7-8, pp 993-999. (Impact factor: 3.248)
- 13- **S.M. Mousavi**, S. Yaghmaei, M. Vossoughi, and A. Jafari, 2007, "Efficiency of copper bioleaching of two mesophilic and thermophilic bacteria isolated from chalcopyrite concentrate of Kerman -Yazd regions in Iran", *Scientia Iranica*, 14, 2, pp 180-184. (Impact factor: 0.242)
- 14- **S.M. Mousavi**, S. Yaghmaei, A. Jafari, M Vossoughi, and Z. Ghobadi, 2007, "Optimization of ferrous biooxidation rate in a packed bed bioreactor using Taguchi approach", *Chemical Engineering & Processing: Process Intensification*, 46, 10, pp 935-940. (Impact factor: 1.924)
- 15- **S.M. Mousavi**, P. Zamankhan, and A. Jafari, 2008, "Computer simulations of sodium formate solution in a mixing tank", *Communications in Nonlinear Science and Numerical Simulation*, 13, 2, pp 380-399. (Impact factor: 2.806)
- 16- **S.M. Mousavi**, S. Yaghmaei, M. Vossoughi, R. Roostaazad, A. Jafari, M. Ebrahimi, O. Habibollahnia Chabok, and I. Turunen, 2008, "The effects of Fe (II) and Fe (III) concentration and initial pH on microbial leaching of low-grade sphalerite ore in a column reactor", *Bioresource Technology*, 99, pp 2840-2845. (Impact factor: 4.98)
- 17- A. Jafari, **S.M. Mousavi**, and P. Kolari, 2008, "Numerical investigation of blood flow. Part I: In microvessel bifurcations", *Communications in Nonlinear Science and Numerical Simulation*, 13, pp 1615-1626. (Impact factor: 2.806)

- 18- **S.M. Mousavi**, A. Jafari, S. Yaghmaei, M. Vossoughi, and I. Turunen, **2008**, “Experiments and CFD simulation of ferrous biooxidation in a bubble column bioreactor”, *Computers & Chemical Engineering*, **32**, pp 1681-1688. (Impact factor: 2.404)
- 19- A. Jafari, T. Tynjala, **S.M. Mousavi**, P. Sarkomaa, **2008**, “CFD simulation and evaluation of controllable parameters effect on thermomagnetic convection in ferrofluids using Taguchi technique” *Computers & Fluids*, **37**, pp 1344-1353. (Impact factor: 1.810)
- 20- A. Jafari, T. Tynjala, **S.M. Mousavi**, P. Sarkomaa, **2008**, “Simulation of heat transfer in a ferrofluid using computational fluid dynamics technique” *International Journal of Heat and Fluid Flow*, **29**, pp 1197-1202. (Impact factor: 1.927)
- 21- A. Jafari, **S.M. Mousavi**, and P. Kolari, **2009**, “Numerical investigation of blood flow. Part II: In capillaries”, *Communications in Nonlinear Science and Numerical Simulation*, **14**, pp 1396-1402. (Impact factor: 2.806)
- 22- A. Jafari, **S.M. Mousavi**, K. Pietarinen and P. Sarkomaa, **2008**, “Modeling and CFD simulation of flow behavior and dispersivity through randomly packed bed reactors”, *Chemical Engineering Journal*, **144**, pp 476-482. (Impact factor: 3.681)
- 23- R. Dehghan, M. Noaparast, M. Kolahdoozan, **S.M. Mousavi**, **2008**, “Statistical evaluation and optimization of factors affecting the leaching performance of a sphalerite concentrate”, *International Journal of Mineral Processing*, **89**, pp 9-16. (Impact factor: 1.304)
- 24- **S.M. Mousavi**, A. Jafari, S. Chegini, and I. Turunen, **2009**, “CFD simulation of mass transfer and flow behaviour around a single particle in bioleaching process”, **44**, 696-703, *Process Biochemistry*. (Impact factor: 2.627)
- 25- M. Soleimani , S. Hosseini, R.Roostaazad , J. Petersen, **S.M. Mousavi**, A. Kazemi Vasiri, **2009**, “Microbial leaching of a low-grade sphalerite ore using a draft tube fluidized bed bioreactor”, *Hydrometallurgy*, **99**(3-4), pp 131-136. (Impact factor: 2.027)
- 26- B. Ebrahimi, S.A. Shojaosadati, S.O. Raanaie, **S.M. Mousavi**, **2010**, “Optimization and evaluation of acetylcholine esterase immobilization using response surface methodology”, *Process Biochemistry*, **45**(1), pp 81-87. (Impact factor: 2.627)
- 27- J. V.Mehrabani, M. Noaparast, **S.M. Mousavi**, R. Dehghan, **2010**, "Process optimization and modelling of sphalerite flotation from a low grade Zn-Pb ore using response surface methodology", *Separation and Purification Technology*, **72**, 242-249. (Impact factor: 2.921)
- 28- J. V.Mehrabani, M. Noaparast, **S.M. Mousavi**, R. Dehghan, E. Rasooli, H. Hajizadeh, **2010**, “Depression of pyrite in the flotation of high pyrite low grade lead-zinc ore using *Acidithiobacillus ferrooxidans*”, *Minerals Engineering*, **23**(1), pp 10-16. (Impact factor: 1.352)

- 29- B. Ebrahimi, S.A. Shojaosadati, **S.M. Mousavi**, 2010, “*Evaluation and optimization of factors affecting the performance of a flow-through system based on immobilized acetylcholine esterase as a biosensor*”, **15**, pp383-391, **Biotechnology and Bioprocess Engineering**. (Impact factor: 1.278)
- 30- B. Ebrahimi, S.A. Shojaosadati, **S.M. Mousavi**, 2010, “*A new changeable bioreactor for organophosphate detection in a flow-through system*”, **8(3)**, pp138-145, **Iranian Journal of Biotechnology**.
- 31- M. Hashemi, S.H. Razavi, S.A. Shojaosadati, **S.M. Mousavi**, K. Khajeh, and M. Safari, 2010, “*Development of a solid-state fermentation process for production of an alpha amylase with potentially interesting properties*”, **110(3)**, 333–337, **Journal of Bioscience and Bioengineering**. (Impact factor: 1.793)
- 32- **S.M. Mousavi**, S.A. Shojaosadati, J. Golestani, F. Yazdian, 2010, “*CFD simulation and optimization of effective parameters for the biomass production in a propeller loop bioreactor using Taguchi method*” **49**, 1249–1258, **Chemical Engineering & Processing: Process Intensification**. (Impact factor: 1.924)
- 33- S.O. Rastegar, **S.M. Mousavi**, S.A. Shojaosadati, S. Sheibani, 2011, “*Optimization of petroleum refinery effluent treatment in a UASB reactor using response surface methodology*”, **197**, 26–32, **Journal of Hazardous Materials**. (Impact factor: 4.553)
- 34- M. Hashemi, **S.M. Mousavi**, S.H. Razavi, S.A. Shojaosadati, 2011, “*Mathematical modeling of biomass and alpha-amylase production kinetics by Bacillus sp. in solid-state fermentation based on solid dry weight variation*” **53**, 159–164, **Biochemical Engineering Journal**. (Impact factor: 2.769)
- 35- F. Amiri, S. Yaghmaei, **S.M. Mousavi**, 2011, “*Bioleaching of tungsten-rich spent hydrocracking catalyst using Penicillium simplicissimum*”, **102**, 1567–1573, **Bioresource Technology**. (Impact factor: 4.98)
- 36- T. Amani, M. Nosrati, **S.M. Mousavi**, 2011, “*Using enriched cultures for elevation of anaerobic syntrophic interactions between acetogens and methanogens in a high-load continuous digester*”, **102**, 3716–3723, **Bioresource Technology**. (Impact factor: 4.98)
- 37- F. Amiri, S. Yaghmaei, **S.M. Mousavi**, 2011, “*Comparison of different methods in bioleaching of tungsten rich spent hydro-cracking catalyst using adapted Penicillium simplicissimum BBRC-20019*” **Chemical Engineering Transactions**, Volume **21**, Editor J. J. Klemeš, H. L. Lam, P. S. Varbanov.
- 38- T. Amani, M. Nosrati, **S.M. Mousavi**, R.K. Kermanshahi, 2011, “*Modeling and statistical optimization of mesophilic anaerobic digestion of volatile fatty acids using enriched cultures*”, **8(1)**, 83-96, **International Journal of Environmental Science and Technology**. (Impact factor: 3.051)

- 39- R. Mafi Gholami, S.M. Borghei, **S.M. Mousavi**, 2011, “*Bacterial leaching of a spent Mo–Co–Ni refinery catalyst using Acidithiobacillus ferrooxidans and Acidithiobacillus thiooxidans*”, ***Hydrometallurgy***, **106**, 26-31. (Impact factor: 2.027)
- 40- M. Soleimani, J. Petersen, R. Roostaazad, S. Hosseini, **S.M. Mousavi**, A. Najafi, A. Kazemi Vasiri, 2011, “*Leaching of a zinc ore and concentrate using the Geocoat™ technology*”, ***Minerals Engineering***, **24**, 64–69. (Impact factor: 1.352)
- 41- M. Hashemi, S.H. Razavi, S.A. Shojaosadati, **S.M. Mousavi**, 2011, “*The potential of brewer’s spent grain to improve the production of α -amylase by Bacillus sp.KR-8104 insubmerged fermentation system*”, ***New Biotechnology***, **28**, 165-172. (Impact factor: 2.756)
- 42- B. Ebrahimi, S.A. Shojaosadati, P. Daneshgar, P. Norouzi, **S.M. Mousavi**, 2011, “*Performance evaluation of fast Fourier-transform continuous cyclic-voltammetry pesticide biosensor*”, ***Analytica Chimica Acta***, **687**, 168-176. (Impact factor: 4.144)
- 43- M. Hashemi, S.A. Shojaosadati, S.H. Razavi, **S.M. Mousavi**, 2011, “*Evaluation of Ca-independent α -amylase production by Bacillus sp. KR-8104 in submerged and solid state fermentation systems*”, **9(3)**, pp188-196, ***Iranian Journal of Biotechnology***.
- 44- J. V.Mehrabani, **S.M. Mousavi**, M. Noaparast, 2011, “*Evaluation of the replacement of NaCN with Acidithiobacillus ferrooxidans in the flotation of high-pyrite, low-grade lead-zinc ore*”, **80**, 202-208, ***Separation and Purification Technology***. (Impact factor: 2.921)
- 45- F. Amiri, **S.M. Mousavi**, S. Yaghmaei, 2011, “*Enhancement of bioleaching of a spent Ni/Mo hydroprocessing catalyst by Penicillium simplicissimum*”, **80**, 566-576, ***Separation and Purification Technology***. (Impact factor: 2.921)
- 46- F. Amiri, S. Yaghmaei, **S.M. Mousavi**, S. Sheibani, 2011, “*Recovery of metals from spent refinery hydrocracking catalyst using adapted Aspergillus niger*”, **109**, 65-71, ***Hydrometallurgy***. (Impact factor: 2.027)
- 47- T. Tavassoli, **S.M. Mousavi**, S.A. Shojaosadati, H. Salehizadeh, 2012, “*Asphaltene biodegradation using microorganisms isolated from oil samples*”, **93**, 142-148, ***Fuel***. (Impact factor: 3.248)
- 48- R. Mafi Gholami, **S.M. Mousavi**, S.M. Borghei, 2012, “*Process optimization and modeling of heavy metals extraction from a molybdenum rich spent catalyst by Aspergillus niger using response surface methodology*”, **18**, 218-224, ***Journal of Industrial and Engineering Chemistry***. (Impact factor: 1.977)
- 49- T. Amani, M. Nosrati, **S.M. Mousavi**, 2012, “*Response surface methodology analysis of anaerobic syntrophic degradation of volatile fatty acids in an upflow anaerobic sludge bed reactor inoculated with enriched cultures*”, **17**, 133-144, ***Biotechnology and Bioprocess Engineering***. (Impact factor: 1.278)

- 50- M. Hashemi, S.A. Shojaosadati, S.H. Razavi, **S.M. Mousavi**, K. Khajeh, M. Safari, **2012**, "The efficiency of temperature-shift strategy to improve the production of alpha amylase by *Bacillus* sp. in a solid state fermentation system", **5**, 1093-1099, *Food and Bioprocess Technology: An International Journal*. (Impact factor: 3.703)
- 51- H. Motesshafi, **S.M. Mousavi**, S.A. Shojaosadati, **2012**, "The possible mechanisms involved in nanoparticles biosynthesis", **18**, 2046-2050, *Journal of Industrial and Engineering Chemistry*. (Impact factor: 1.977)
- 52- F. Amiri, **S.M. Mousavi**, S. Yaghmaei, M. Barati, **2012**, "Bioleaching kinetics of a spent refinery catalyst using *Aspergillus niger* at optimal condition" *Biochemical Engineering Journal*, **67**, 208–217. (Impact factor: 2.769)
- 53- D. Mazaheri, S.A. Shojaosadati, **S.M. Mousavi**, P. Hejazi, S. Saharkhiz, **2012**, "Bioethanol production from carob pods by solid-state fermentation with *Zymomonas mobilis*", *Applied Energy*, **99**, 372–378. (Impact factor: 5.106)
- 54- T. Amani, M. Nosrati, **S.M. Mousavi**, **2012**, "Analysis of the Syntrophic Anaerobic Digestion of Volatile Fatty Acids Using Enriched Cultures in a Fixed-Bed Reactor", *Water Environment Research*, **84**, 460-472. (Impact factor: 0.883)
- 55- F. Rezvani, S. Hashemi-Najafabadi, **S.M. Mousavi**, S.A. Shojaosadati, S. Saharkhiz, **2012**, "Optimization of the removal of phenol by soybean seedcoats using response surface methodology", *Water Science and Technology*, **66**, 2229-2236. (Impact factor: 1.122)
- 56- M. Hashemi, **S.M. Mousavi**, S.H. Razavi, S.A. Shojaosadati, **2013**, "Comparison of submerged and solid state fermentation systems effects on the catalytic activity of *Bacillus* sp. KR-8104 α -amylase at different pH and temperatures", **43**, 661–667, *Industrial Crops and Products*. (Impact factor: 2.468).
- 57- I. Asghari, **S.M. Mousavi**, F. Amiri, S. Tavassoli, **2013**, "Bioleaching of spent refinery catalysts: A review", **19**, 1069-1081, *Journal of Industrial and Engineering Chemistry*. (Impact factor: 2.145)
- 58- E. Amini, M.R. Mehrnia, **S.M. Mousavi**, N. Mostoufi, **2013**, "Experimental Study and Computational Fluid Dynamics Simulation of a Full-Scale Membrane Bioreactor for Municipal Wastewater Treatment Application", **52**, 9930-9939, *Industrial and Engineering Chemistry Research*. (Impact factor: 2.206).
- 59- F. Gerayeli, F. Ghjavand, **S.M. Mousavi**, S. Yaghmaei, F. Amiri, **2013**, "Screening and optimization of effective parameters in biological extraction of heavy metals from refinery spent catalysts using a thermophilic bacterium", **118**, 151-161, *Separation and Purification Technology*. (Impact factor: 2.894).

- 60- F. Hoobakht, F. Ganji, E. Vasheghani-Farahani, **S.M. Mousavi**, 2013, “*Eudragit RS PO nanoparticles for sustained release of pyridostigmine bromide*”, 15:1912, *Journal of Nanoparticle Research*. (Impact factor: 2.175).
- 61- S.E. Hashemi, A. Rezaee, M.R. Nikodel, H. Ganjidost, **S.M. Mousavi**, 2013, “*Equilibrium and kinetic studies of the adsorption of sodium dodecyl sulfate from aqueous solution using bone char*”, 109, 433–446, *Reaction Kinetics and Mechanisms and Catalysis*. (Impact factor: 1.104).
- 62- M. Motaghed, **S.M. Mousavi**, S.O. Rastegar, S.A. Shojaosadati, 2014, “*Platinum and rhenium extraction from a spent refinery catalyst using Bacillus megaterium as a cyanogenic bacterium: Statistical modeling and process optimization*”, 171, 401-409, *Bioresource Technology*. (Impact factor: 5.06).
- 63- M. Arshadi, **S.M. Mousavi**, 2014, “*Simultaneous recovery of Ni and Cu from computer-printed circuit boards using bioleaching: Statistical evaluation and optimization*”, 174, 233-242, *Bioresource Technology*. (Impact factor: 5.06).
- 64- S.O. Rastegar, **S.M. Mousavi**, S.A. Shojaosadati, 2014, “*Cr and Ni recovery during bioleaching of dewatered metal-plating sludge using Acidithiobacillus ferrooxidans*”, 167, 61-68, *Bioresource Technology*. (Impact factor: 5.06).
- 65- N. Nasirpour, **S.M. Mousavi**, S.A. Shojaosadati, 2014, “*A novel surfactant-assisted ionic liquid pretreatment of sugarcane bagasse for enhanced enzymatic hydrolysis*”, 169, 33-37, *Bioresource Technology*. (Impact factor: 5.06).
- 66- M. Ijadi Bajestani, **S.M. Mousavi**, S.A. Shojaosadati, 2014, “*Bioleaching of heavy metals from spent household batteries using Acidithiobacillus ferrooxidans: Statistical evaluation and optimization*”, 132, 309-316, *Separation and Purification Technology*. (Impact factor: 3.065).
- 67- M. Shahrabi-Farahani, S. Yaghmaei, **S.M. Mousavi**, F. Amiri, 2014, “*Bioleaching of heavy metals from a petroleum spent catalyst using Acidithiobacillus thiooxidans in a slurry bubble column bioreactor*”, 132, 41-49, *Separation and Purification Technology*. (Impact factor: 3.065).
- 68- I. Asghari, **S.M. Mousavi**, 2014, “*Effects of key parameters in recycling of metals from petroleum refinery waste catalysts in bioleaching process*”, 13, 139–161, *Reviews in Environmental Science and Bio/Technology*. (Impact factor: 2.263).
- 69- S.O. Rastegar, **S.M. Mousavi**, M. Rezaei, S.A. Shojaosadati, 2014, “*Statistical evaluation and optimization of effective parameters in bioleaching of metals from molybdenite concentrate using Acidianus brierleyi*”, 20, 3096-3101, *Journal of Industrial and Engineering Chemistry*. (Impact factor: 2.063).

- 70- L. Omidvar Langroudi, H. Palavanzadeh, **S.M. Mousavi**, 2014, “Statistical evaluation of a liquid desiccant dehumidification system using RSM and theoretical study based on the effectiveness NTU model”, **20**, 2975-2983, *Journal of Industrial and Engineering Chemistry*. (Impact factor: 2.063).
- 71- J. V. Mehrabani, S.Z. Shafaei, M. Noaparast, **S.M. Mousavi**, 2014, “Bioleaching of high pyrite carbon-rich sphalerite preflotation tailings”, **71**, 4675–4682, *Environmental Earth Sciences*. (Impact factor: 1.572).
- 72- Z. Noori Felegari, B. Nematdoust Haghi, Gh. Amoabediny, **S.M. Mousavi**, M. Amouei Torkmahalleh, 2014, “An optimized integrated process for the bioleaching of a spent refinery processing catalysts”, **8**, 621-634, *International Journal of Environmental Research*. (Impact factor: 1.993).
- 73- P. Mavaddat, **S.M. Mousavi**, E. Amini, H.R. Azargoshasb, S.A. Shojaosadati, 2014, “Modeling and CFD-PBE simulation of an airlift bioreactor for PHB production”, **9**, 562-573, *Asia-Pacific Journal of Chemical Engineering*. (Impact factor: 0.623).
- 74- S. Kheradmandnia, **S.M. Mousavi**, S. Hashemi-Najafabadi, S.A. Shojaosadati, 2014, “Modelling and CFD simulation of hydrodynamics and mass transfer in a miniature bubble column bioreactor”, **2**, 223-242, *International Journal of Engineering and Technology Sciences*.
- 75- S.E. Hashemi, A. Rezaee, **S.M. Mousavi**, M.R. Nikodel, H. Ganjiidoust, 2014, “Optimization of pyrene removal from contaminated soil by electrokinetic remediation process”, **1**, 16-22, *Iranian Journal of Health, Safety and Environment*.
- 76- H. Vaheed, **S.M. Mousavi**, S.A. Shojaosadati, H. Galip, 2014, “Evaluation of Ethanol Production from Tannin-Reduced Carob Pod Extracts by *Zymomonas mobilis*”, **1**, 8-19, *Journal of Renewable Energy and Environment*.
- 77- M. Mansourirad, M. Razzaghi Kashani, **S.M. Mousavi**, 2014, “Biological Reclaiming of Recycled Rubber and Its Effect on Mechanical Properties of New Rubber Vulcanizates”, **27**, 395-407, *Iranian Journal of Polymer Science and Technology*.
- 78- M. R. Samadzadeh Yazdi, M. Abdollahy, **S.M. Mousavi**, A. khodadadi, 2014, “Bioleaching of chalcopryrite concentrate of Mazraeh copper ore using thermophilic bacterium *Acidianus brierleyi*”, **6**, 31-44, *Journal of Separation Science and Engineering*.
- 79- M. Arshadi, **S.M. Mousavi**, 2015, “Enhancement of simultaneous gold and copper extraction from computer printed circuit boards using *Bacillus megaterium*”, **175**, 315-324, *Bioresource Technology*. (Impact factor: 4.917).

- 80- M. Hashemi, S.A. Shojaosadati, S.H. Razavi, **S.M. Mousavi**, 2015, “*Different catalytic behavior of α -amylase in response to the nitrogen substance used in the production phase*”, **21**, 772-778, *Journal of Industrial and Engineering Chemistry*. (Impact factor: 4.179).
- 81- Z. Shokri, M. R. Fazeli, M. Ardjmand, **S.M. Mousavi**, K. Gilani, 2015, “*Factors affecting viability of *Bifidobacterium bifidum* during spray drying*”, 23:7, *DARU Journal of Pharmaceutical Sciences*, (Impact factor: 1.654).
- 82- T. Amani, M. Nosrati, **S.M. Mousavi**, Sh. Elyasi, 2015, “*Study of microbiological and operational parameters in thermophilic syntrophic degradation of volatile fatty acids in an upflow anaerobic sludge blanket reactor*”, **3**, 507-514, *Journal of Environmental Chemical Engineering*.
- 83- S. Mehrabi, S. A. Shojaosadati, **S.M. Mousavi**, M. Hashemi, 2015, “*Folate Measurement in Fortified Flour by Tri-enzyme Extraction and Microbiological Assay*”, **12**, 51-59, *Journal of Food Science and Technology*.
- 84- R. Heidari, **S.M. Mousavi**, A. Jafari, S.O. Rastegar, 2015, “*Hydrodynamics Investigation of Refinery Effluent Treatment in a UASB Reactor Using CFD Technique*”, **1**, 57-66, *Water Reuse*.
- 85- H. Azargoshasb, **S.M. Mousavi**, T. Amani, A. Jafari, M. Nosrati, 2015, “*Three-phase CFD simulation coupled with population balance equations of anaerobic syntrophic acidogenesis and methanogenesis reactions in a continuous stirred bioreactor*”, **27**, 207-217, *Journal of Industrial and Engineering Chemistry*. (Impact factor: 4.179).
- 86- S. Kheradmandnia, S. Hashemi-Najafabadi, S.A. Shojaosadati, **S.M. Mousavi**, K. Malek Khosravi, 2015, “*Development of parallel miniature bubble column bioreactors for fermentation process*”, **90**, 1051-1061, *Journal of Chemical Technology and Biotechnology*. (Impact factor: 2.738).
- 87- D. Mazaheri, S.A. Shojaosadati, P. Hejazi, **S.M. Mousavi**, 2015, “*Bioethanol production performance in a packed bed solid-state fermenter: evaluation of operational factors and intermittent aeration strategies*”, **65**, 351-357, *Annals of Microbiology*. (Impact factor: 1.232).
- 88- S.O. Rastegar, **S.M. Mousavi**, S.A. Shojaosadati, 2015, “*Bioleaching of an oil-fired residual: process optimization and nanostructure $\text{NaV}_6\text{O}_{15}$ synthesis from the bioleachate*”, **5**, 41088–41097, *RSC Advances*. (Impact factor: 3.289).
- 89- N. Nasirpour, **S.M. Mousavi**, S.A. Shojaosadati, 2015, “*A study on cell surface hydrophobicity, growth and metabolism of *Zymomonas mobilis* influenced by PEG as a pretreatment agent*”, **5**, 48176–48180, *RSC Advances*. (Impact factor: 3.289).

- 90- M. Arshadi, **S.M. Mousavi**, 2015, “Multi-objective optimization of heavy metals bioleaching from discarded mobile phone PCBs: Simultaneous Cu and Ni recovery using *Acidithiobacillus ferrooxidans*”, 147, 210-219, *Separation and Purification Technology*. (Impact factor: 3.299).
- 91- F. Rezvani, H.R. Azargoshasb, O. Jamialahmadi, S. Hashemi-Najafabadi, **S.M. Mousavi**, S.A. Shojaosadati, 2015, “Experimental study and CFD simulation of phenol removal by immobilization of soybean seed coat in a packed-bed bioreactor”, 101, 32-43, *Biochemical Engineering Journal*. (Impact factor: 2.463).
- 92- N. Nasirpour, **S.M. Mousavi**, S.A. Shojaosadati, 2015, “Biodegradation potential of hydrocarbons in petroleum refinery effluents using a continuous anaerobic-aerobic hybrid system”, 32(5), 874-881, *Korean Journal of Chemical Engineering*. (Impact factor: 1.408).
- 93- A. Jafari, A. Shahmohammadi, **S.M. Mousavi**, 2015, “CFD investigation of gravitational sedimentation effect on heat transfer of a nano-ferrofluid”, 34(1), 87-96, *Iranian Journal of Chemistry and Chemical Engineering* (Impact factor: 0.307).
- 94- M. Rasouli, Y. Ajabshirchi, **S.M. Mousavi**, M. Nosrati and S. Yaghmaei, 2015, “Process optimization and modeling of anaerobic digestion of cow manure for enhanced biogas Yield in a mixed plug-flow reactor using response surface methodology”, 12(3), 2333-2344, *Biosciences Biotechnology Research Asia*.
- 95- S.O. Rastegar, **S.M. Mousavi**, S.A. Shojaosadati, R. Sarraf Mamoori, 2015, “Bioleaching of V, Ni, and Cu from residual produced in oil fired furnaces using *Acidithiobacillus ferrooxidans*”, 157, 50–59, *Hydrometallurgy* (Impact factor: 2.290).
- 96- P. Shahsavarzadeh-Jangi, S.A. Shojaosadati, S. Hashemi-Najafabadi, **S.M. Mousavi**, 2015, “Assessment of bioavailability of crude oil in three different agricultural soils”, 12(1)3-12, *Iranian Journal of Chemical Engineering*.
- 97- S. Moradi, S.H. Razavi, **S.M. Mousavi**, S.M.T. Gharibzahedi, 2015, “Optimization and partial purification of a high activity lipase synthesized by a newly isolated *Acinetobacter* from offshore waters of the Caspian Sea under solid-state fermentation”, 5, 12052–12061, *RSC Advances* (Impact factor: 3.289).
- 98- E. Amini, M.R. Mehrnia, **S.M. Mousavi**, H. Azami, N. Mostoufi, 2015, “Investigating the effect of sparger configuration on the hydrodynamics of a full-scale membrane bioreactor using computational fluid dynamics”, 5, 105218–105226, *RSC Advances* (Impact factor: 3.289).
- 99- N. Bahaloo Horeh, **S.M. Mousavi**, S.A. Shojaosadati, 2016, “Bioleaching of valuable metals from spent lithium-ion mobile phone batteries using *Aspergillus niger*”, 320, 257-266, *Journal of Power Sources* (Impact factor: 6.333).

- 100- P. Rasoulnia, **S.M. Mousavi**, 2016, "Maximization of organic acids production by *Aspergillus niger* in a bubble column bioreactor for V and Ni recovery enhancement from power plant residual ash in spent-medium bioleaching experiments", **216**, 729–736, *Bioresource Technology* (Impact factor: 4.917).
- 101- F. Vakilchap, **S.M. Mousavi**, S.A. Shojaosadati, 2016, "Role of *Aspergillus niger* in recovery enhancement of valuable metals from produced red mud in Bayer process", **218**, 991–998, *Bioresource Technology* (Impact factor: 4.917).
- 102- H. Moteshafii, M. Hashemi, **S.M. Mousavi**, M. Mousivand, 2016, "Characterization of produced xylanase by *Bacillus subtilis* D3d newly isolated from apricot phyllosphere and its potential in pre-digestion of BSG", **37**, 251-260, *Journal of Industrial and Engineering Chemistry* (Impact factor: 4.179).
- 103- P. Rasoulnia, **S.M. Mousavi**, S.O. Rastegar, H.R Azargoshasb, 2016, "Fungal leaching of valuable metals from a power plant residual ash using *Penicillium simplicissimum*: Evaluation of thermal pretreatment and different bioleaching methods", **52**, 309–317, *Waste Management* (Impact factor: 3.829).
- 104- P. Rasoulnia, **S.M. Mousavi**, 2016, "V and Ni recovery from a vanadium-rich power plant residual ash using acid producing fungi: *Aspergillus niger* and *Penicillium simplicissimum*", **6**, 9139–9151, *RSC Advances* (Impact factor: 3.289).
- 105- S.O. Rastegar, **S.M. Mousavi**, S.A. Shojaosadati, T. Gu, 2016, "Bioleaching of fuel-oil ash using *Acidithiobacillus thiooxidans* in shake flasks and a slurry bubble column bioreactor", **6**, 21756–21764, *RSC Advances* (Impact factor: 3.289).
- 106- H. Moteshafii, **S.M. Mousavi**, M. Hashemi, 2016, "Enhancement of xylanase productivity using industrial by-product under solid suspended fermentation in a stirred tank bioreactor with dissolved oxygen constant control strategy", **6**, 35559–35567, *RSC Advances* (Impact factor: 3.289).
- 107- H. Jamshidian, S.A. Shojaosadati, F. Vilaplana, **S.M. Mousavi**, M.R. Soudi, 2016, "Characterization and optimization of schizophyllan production from date syrup", **92**, 484-493, *International Journal of Biological Macromolecules* (Impact factor: 3.138).
- 108- A.R. Majdi Nasab, S.M. Soleymani, M. Nosrati, **S.M. Mousavi**, 2016, "Performance evaluation of a modified step-feed anaerobic/anoxic/oxic process for organic and nutrient removal", **24**, 394-403, *Chinese Journal of Chemical Engineering* (Impact factor: 1.207).
- 109- M.A. Mohammad Mirzaie, M. Kalbasi, **S.M. Mousavi**, B. Ghobadian, 2016, "Statistical evaluation and modeling of cheap substrate-based cultivation medium of *Chlorella vulgaris* to enhance microalgae lipid as new potential feedstock for biolubricant", **46(4)**, 368-375, *Preparative Biochemistry and Biotechnology*, (Impact factor: 1.114).

- 110- M.A. Mohammad Mirzaie, M. Kalbasi, **S.M. Mousavi**, B. Ghobadian, **2016**, “*Investigation of mixotrophic, heterotrophic and autotrophic growth of *Chlorella vulgaris* under agricultural waste medium*”, **46(2)**, **150-156**, ***Preparative Biochemistry and Biotechnology***, (Impact factor: 1.114).
- 111- H.R Azargoshasb, **S.M. Mousavi**, O. Jamialahmadi, S.A. Shojaosadati, S.b Mousavi, **2016**, “*Experiments and a three-phase computational fluid dynamics (CFD) simulation coupled with population balance equations of a stirred tank bioreactor for high cell density cultivation*”, **94**, **20–32**, ***Canadian Journal of Chemical Engineering*** (Impact factor: 1.066).
- 112- A. Mohammadpour, M. A. Akhavan Behabadi, M. Ebrahimzadeh, M. Raisee, A. R. MajdiNasab, M. Nosrati, **S.M. Mousavi**, **2016**, “*Optimization of energy consumption and mass transfer parameters in a surface aeration vessel*”, **88(4)**, **355-366**, ***Water Environment Research*** (Impact factor: 0.659).
- 113- M. Yaghoobi, S. Hashemi-Najafabadi, M. Soleimani, E. Vasheghani-Farahani, **S.M. Mousavi**, **2016**, “*Osteogenic Differentiation and Mineralization on Compact Multilayer nHA-PCL Electrospun Scaffolds in a Perfusion Bioreactor*”, **14(2)**: **e1382**, ***Iranian Journal of Biotechnology*** (Impact factor: 0.309).
- 114- A. Abdollah, M. Abdollahy, A. Khodadadi, **S.M. Mousavi**, **2016**, “*Biological pretreatment of refractory gold ores using *Phanerochaete chrysosporium**”, **34(3)**, **49-59**, ***Iranian Journal of Chemistry and Chemical Engineering***.
- 115- M. Arshadi, **S.M. Mousavi**, P. Rasoulnia, “*Enhancement of simultaneous gold and copper recovery from discarded mobile phone PCBs using *Bacillus megaterium*: RSM based optimization of effective factors and evaluation of their interactions*”, **In Press**, ***Waste Management*** (Impact factor: 3.829).
- 116- M.A. Mohammad Mirzaie, M. Kalbasi, B. Ghobadian, **S.M. Mousavi**, “*Statistical evaluation and modeling of cheap substrate-based cultivation medium of *Chlorella vulgaris* to enhance microalgae lipid as new potential feedstock for biolubricant*”, **In Press**, ***Journal of Applied Phycology***, (Impact factor: 2.372).
- 117- J. Vazifeh Mehrabani, S.Z. Shafaei, M. Noaparast, **S.M. Mousavi**, “*Bioleaching of different Pyrites and Sphalerite in the presence of graphite*”, **In Press**, ***Geomicrobiology Journal*** (Impact factor: 1.402).
- 118- S.O. Rastegar, **S.M. Mousavi**, S.A. Shojaosadati, S. Sheibani, “*Kinetic constant determination of petroleum refinery effluent treatment in a UASB reactor using RSM*”, **In Press**, ***Environmental Engineering and Management Journal***. (Impact factor: 1.008).
- 119- M. Baniasadi, **S.M. Mousavi**, H. Zilouei, S.A. Shojaosadati, S.O. Rastegar “*Statistical Evaluation and Process Optimization of Biotreatment of Polycyclic Aromatic Hydrocarbons in Bioreactor*”, **In Press**, ***Environmental Engineering and Management Journal***. (Impact factor: 1.008).

Selected papers in national conferences:

- 1- **S.M. Mousavi**, S. Yaghmaei, M. Vossoughi, A. Jafari, and M.S. Jafari, “*Copper Recovery from Chalcopyrite Concentrate by Indigenous Mesophilic and Thermophilic Bacteria*”, **10th Iranian Chemical engineering congress**, November 23-25, 2005, Zahedan, Iran.
- 2- **S.M. Mousavi**, S. Yaghmaie, and S.A. Hosseini, “*Biohydrometalurgy: Best selection in economic and technology*”, **9th Iranian Chemical engineering congress**, November 23-25, 2004, Tehran, Iran.
- 3- S.A. Hosseini, S. Yaghmaie, **S.M. Mousavi**, and A. Jadidi, “*Isolation of a New Indigenous Thermophilic Strain and Investigation of Its Ability toward Biodesulfurization*”, **9th Iranian Chemical engineering congress**, November 23-25, 2004 (Opted as one the best papers in congress by the congress jury), Tehran, Iran.
- 4- **S.M. Mousavi**, I. Alemzadeh, and M. Vossoughi, “*Modification of Mineral Clays with Quaternary Ammonium Compounds as Adsorbent of Phenol and Phenolic Compounds from Olive Mill Wastewater*”, **13th National Congress on Food Industries**, October 24-25, 2002, Tehran, Iran.

Selected papers in international conferences:

- 1- **S.M. Mousavi**, I. Alemzadeh, and M. Vossoughi, “*Modification of Mineral Clays by Hexadecyltrimethyl Ammonium as Adsorbent of Fatty acids and Resin acids from Wastewater*”, **5th International Conference and Exhibition on CHEMISTRY IN INDUSTRY**, October 14-16, 2002, Bahrain.
- 2- **S.M. Mousavi**, M. Vossoughi, and S. Yaghmaie, “*Modeling of Copper Recovery from Sulfide Minerals by Native Thiobacillus ferrooxidans in a Fluidized Bed Bioreactor*”, **International Biohydrometallurgy Symposium conference**, September 25-29, 2005, Cape Town, South Africa.
- 3- **S.M. Mousavi**, M. Vossoughi, and S. Yaghmaei, “*Copper Recovery from Chalcopyrite Concentrate by an Indigenous Acidithiobacillus ferrooxidans with an Airlift Bioreactor*”, **Bio and Hydromet '05 Conference**, May 14-16, 2005, Cape Town, South Africa.
- 4- **S.M. Mousavi**, P. Zamankhan, S. Yaghamei, A. Jafari, and A. Jarrahan, “*Detailed Modeling of Heap Type Reactors Used in Metal Extraction Processes*” **Computational Modelling in Mineral Processing Conference**, November 7-9, 2005, Cape Town, South Africa.

- 5- **S.M. Mousavi**, S. Yaghmaei, M. Vossoughi, and A. Jafari, "Comparison of Bioleaching Ability of Two Native Mesophilic and Thermophilic Bacteria on Copper Recovery from Chalcopyrite Concentration: in Airlift Bioreactor and Shake Flask" 10th Mediterranean Congress of Chemical Engineering, **November 15-18, 2005, Barcelona, Spain.**

- 6- A. Jafari, P. Zamankhan, **S.M. Mousavi**, and P. Kolari "Modeling of Blood Flow in Microvessels" **EMBEC'05-THE 3rd EUROPEAN MEDICAL AND BIOLOGY ENGINEERING CONFERENCE**, November 20-25, 2005, Prague, Czech Republic.

- 7- A. Jafari, **S.M. Mousavi**, P. Kolari, and P. Zamankhan, "Simulation of Blood Flow through a Microvessel Branching" **The Fourth IASTED International Conference on BIOMEDICAL ENGINEERING ~BioMED 2006~ (pp. 31-38)**, February 15-17, 2006, Innsbruck, Austria.

- 8- **S.M. Mousavi** and P. Zamankhan, "LARGE EDDY SIMULATIONS OF A BRINE-MIXING TANK", **25th International Conference on Offshore Mechanics and Arctic Engineering (OMAE 2006, paper number: 92082)**, June 4-9, 2006, Hamburg, Germany.

- 9- A. Jafari, P. Zamankhan, **S.M. Mousavi**, K. Pietarinen, and P. Sarkomaa, "Investigation of Flow Dynamics in Porous Media using Computer Simulation", **20th annual European Simulation and Modeling Conference (ESM'2006, paper code: FLUID-03, pp. 157-163)**, October 23-25, 2006 - LAAS, Toulouse, France.

- 10- **S.M. Mousavi**, A. Jafari, S. Yaghmaei, M. Vossoughi, I. Turunen, M.R. Kamali, and P. Sarkomaa, "CFD Simulation of concentration profiles and velocity field. Application: in bioleaching process", **17th European Symposium on Computer Aided Process Engineering (ESCAPE17, paper code: T4-458)**, May 27-30, 2007, Bucharest, Romania.

- 11- A. Jafari, T. Tynjälä, **S.M. Mousavi**, and P. Sarkomaa, "CFD Simulation of heat transfer in ferrofluids", **European Congress of Chemical Engineering -6 (ECCE-6)**, September 16-21, 2007, Copenhagen, Denmark.

- 12- H. Yousefi, **S.M. Mousavi**, A. Jafari, A. Soleymani, "Prediction of biological ferrous oxidation rate using artificial neural network", **North-American Simulation Technology Conference (NASTEC'08)**, August 13-15, 2008, Montreal (Quebec), Canada.

- 13- A. Jafari, **S.M. Mousavi**, T. Tynjala, P. Sarkomaa, "CFD Simulation of Gravitational Sedimentation and Clustering Effects on Heat Transfer of a Nano-ferrofluid", **Progress in Electromagnetics Research Symposium (PIERS 2009)**, March 23-27, 2009, Beijing, China.

Awards

* Scholarship from the Ministry of Science, Research and Technology, Tehran, Iran (2003-2007)

- * Research grant from Academy of Finland, Helsinki, Finland (2005-2006)
- * Scholarship from the Centre for International Mobility (CIMO), Helsinki, Finland (2006)
- * Academic Scholarship, Lappeenranta University of Technology, Lappeenranta, Finland (2006-2007)
- * Research grant from Academy of Finland, Helsinki, Finland (2007)

Membership associations:

- * Member of Iranian chemical engineering association
- * Member of Iranian food engineering association
- * Member of Iranian nanotechnology association

Reviewer of the following journals:

- *Applied Microbiology and Biotechnology*
- *Biochemical Engineering Journal*
- *Bioresource Technology*
- *Biotechnology Progress*
- *Chemical Engineering Journal*
- *Chemical Engineering & Processing: Process Intensification*
- *Critical Reviews in Biotechnology*
- *Fuel*
- *Hydrometallurgy*
- *Iranian Journal of Biotechnology*
- *Iranian Journal of Chemical Engineering*
- *Iranian Journal of Chemistry & Chemical Engineering*
- *Iranian Journal of Polymer Science and Technology*
- *Iranian Journal of water & wastewater*
- *Journal of Industrial and Engineering Chemistry*
- *Journal of Hazardous Materials*
- *Journal of Nanotechnology*
- *Process Biochemistry*
- *Separation and Purification Technology*
- ...