Academic CV

Saeid Azizian

Department of Physical Chemistry

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EDUCATION

	Year	University
Ph.D. (Physical Chemistry)	1997-2000	Sharif University of Technology, Tehran, Iran
M.Sc. (Physical Chemistry)	1995-1997	Sharif University of Technology, Tehran, Iran
B.Sc. (Chemistry)	1991-1995	Bu-Ali Sina University, Hamedan, Iran

PROFESSIONAL MEMBERSHIPS

Associate Editor of: *Journal of the Iranian Chemical Society*

RESEARCH INTREST

Surface chemistry, experimental and theoretical aspects of adsorption, preparation of nanostructured adsorbents, superhydrophobic surfaces.

Supervised thesis:

i) Graduate M.Sc
   1- Afshin Hydarpour
   2- Nowrouz Bashavard
   3- Mohamad Chahardoli
   4- Ali Hajian
   5- Zahra Niknam
   6- Zahra Afshari
   7- Maryam Khoshnood
   8- Shila Jafari
   9- Mahtab Hejazifar
   10- Zahra Emami

11- Mahsa Bagheri
12- Maryam Khosravi
13- Elham Mosayebi
14- Mahbobeh Abolhasanzadeh
15- Nastaran Bakhtiari
16- Fahimeh Torkamani
17- Mahsa Fayazi
18- Reza Dalvand
19- Fatemeh Rafiei Moghadam

ii) Graduate Ph.D
1- Dr. Hadis Bashiri
2- Dr. Rahimeh Naviri Fallah
3- Dr. Bahareh Yahyaei
4- Dr. Monireh Haerifar
5- Dr. Tahereh Fereidooni Moghadam
6- Dr. Effat Kianpour

TEACHING

Under graduate: Physical Chemistry I and II, General Chemistry I
Postgraduate: Surface Chemistry, Advanced Physical Chemistry, Advanced Chemical Kinetics, Liquid Phase Kinetics.

RESEARCH VISITOR

Japan
From 4 June 2004 to 16 Sep. 2004
Professor Makoto Aratono's laboratory
Laboratory of Physical Chemistry of Interface
Department of Chemistry
Faculty of Sciences
Kyushu University
Fukuoka

USA
From 3 Nov. 2006 to 3 Dec. 2006
Professor Gerald G. Fuller's laboratory
Department of Chemical Engineering
Stanford University
California

China
From 25 March 2010 to 7 Apr. 2010
Professor D. Zhao laboratory
Department of Material Chemistry
Fudan University
Shanghai

Germany
From 11 Aug. 2016 to 18 Sep. 2016
Professor H.Y. Butt laboratory
Max-Planck Institute for Polymer Research
Mainz

PUBLICATIONS

1) Moghadam, F.R., **Azizian, S.**, Kianpour, E., Yarie, M., Bayat, M. Zolfigol, M.A. (2017) Green fuel through green route by using task-specific and neutral phosphonium ionic liquid: A joint experimental and theoretical study, *Chemical Engineering Journal*, Accepted Manuscript.
2) Moghadam, T.F., **Azizian, S.**, Wettig, S. (2017) Effect of spacer length on the interfacial behavior of N,N′-bis(dimethylalkyl)-α,ω-alkanediammonium dibromide gemini surfactants in the absence and presence of ZnO nanoparticles, *Journal of Colloid and Interface Science*, 486, pp. 204-210.
3) Khosravi, M., **Azizian, S.** (2017) Preparation of superhydrophobic and superoleophilic nanostructured layer on steel mesh for oil-water separation, *Separation and Purification Technology*, 172, pp. 366-373.
4) Fayazi, M., **Azizian, S.** (2016) Catalytic degradation of methyl violet without light irradiation using nanostructured CuS. *Journal of Molecular Liquids,* 224, pp. 763-767.
5) Moradi, S., **Azizian, S.** (2016) Preparation of nanostructured carbon covered sand for removal of methyl violet from water, *Journal of Molecular Liquids,* 219, pp. 909-913 .
6) Khosravi, M., **Azizian, S.** (2016) A new kinetic model for absorption of oil spill by porous materials, *Microporous Mesoporous Materials*, 230, pp. 25-29.
7) Kianpour, E., **Azizian,S.**, Yarie, M., Zolfigol, M.A., Bayat, M. (2016) A task-specific phosphonium ionic liquid as an efficient extractant for green desulfurization of liquid fuel: An experimental and computational study, *Chemical Engineering Journal*, 295, pp. 500-508.
8) Mosayebi, E., **Azizian, S.** (2016) Study of copper ion adsorption from aqueous solution with different nanostructured and microstructured zinc oxides and zinc hydroxide loaded on activated carbon cloth, *Journal of Molecular Liquids*, 214, pp. 384-389.

9) Zolfigol, M.A., Ayazi-Nasrabadi, R., Baghery, S., Khakyzadeh, V., **Azizian, S**. (2016) Applications of a novel nano magnetic catalyst in the synthesis of 1,8-dioxo-octahydroxanthene and dihydropyrano[2,3-c]pyrazole derivatives, *Journal of Molecular Catalysis A: Chemical,* 418–419, pp. 54-67.
10) Kianpour, E., **Azizian, S**. (2016) Optimization of dispersed carbon nanoparticles synthesis for rapid desulfurization of liquid fuel, *Petroleum Science* 13, pp.146–154.
11) Torkamani, F., **Azizian, S.** (2016) Green and simple synthesis of Ag nanoparticles loaded onto cellulosic fiber as efficient and low-cost catalyst for reduction of 4-nitrophenol, *Journal of Molecular Liquids*, 214, pp. 270-275.
12) Uslu, H., Datta, D., **Azizian, S.** (2016) Separation of chromium (VI) from its liquid solution using new montmorillonite supported with amine based solvent, *Journal of Molecular Liquids*, 215, pp. 449-453.
13) Khosravi, M., **Azizian, S.** (2015) Synthesis of a novel highly oleophilic and highly hydrophobic sponge for rapid oil spill cleanup, *ACS Appl. Mater. Interfaces*, 7 (45), pp. 25326–25333.
14) Khosravi, M., **Azizian, S**. (2015) Synthesis of Fe_3O_4 flower-like hierarchical nanostructures with high adsorption performance toward dye molecules, *Colloids and Surfaces A: Physicochemical and Engineering Aspects* 482, pp. 438-446.
15) Bakhtiari, N., **Azizian, S.**, Alshehri, S.M., (...),Malgras, V., Yamauchi, Y. (2015) Study on adsorption of copper ion from aqueous solution by MOF-derived nanoporous carbon, *Microporous and Mesoporous Materials*, 217, pp. 173-177.
16) Fallah, R.N., **Azizian, S.**, Dwivedi, A.D.,Sillanpää, M. (2015) Adsorptive desulfurization using different passivated carbon nanoparticles by PEG-200, *Fuel Processing Technology*, 130 (C), pp. 214-223.
17) Kyzas, G.Z., **Azizian, S.**, Kostoglou, M. (2015) Novel approaches in designing natural/synthetic materials for environmental applications, *Advances in Materials Science and Engineering*, 2015, 820854.
18) Yahyaei, B., **Azizian, S.**, Mohammadzadeh, A.,Pajohi-Alamoti, M. (2015) Chemical and biological treatment of waste water with a novel silver/ordered mesoporous alumina nanocomposite, *Journal of the Iranian Chemical Society*, 12 (1), pp. 167-174.
19) Uslu, H., Yankov, D., Wasewar, K.L., **Azizian, S.**, Ullah, N., Ahmad, W. (2015) Separation of organic and inorganic compounds for specific applications, *Journal of Chemistry*,628952.
20) Moghadam, T.F., **Azizian, S.**, Wettig, S. (2015) Synergistic behaviour of ZnO nanoparticles and gemini surfactants on the dynamic and equilibrium oil/water interfacial tension, *Physical Chemistry Chemical Physics*, 17, pp.7122-7129.

21) Mosayebi, E., **Azizian, S.**,Hajian, A. (2015) Synthesis of nanostructured and microstructured ZnO and $Zn(OH)_2$ on activated carbon cloth by hydrothermal and microwave-assisted chemical bath deposition methods, *Superlattices and Microstructures*, 81, pp. 226-232.
22) Bakhtiari, N., **Azizian, S.** (2015) Adsorption of copper ion from aqueous solution by nanoporous MOF-5: A kinetic and equilibrium study, *Journal of Molecular Liquids*, 206, pp. 114-118.
23) Kianpour, E., **Azizian, S.** (2015) Polyethylene glycol as a green solvent for effective extractive desulfurization of liquid fuel at ambient conditions, *Fuel*, 137, pp.36-40.
24) Khosravi, M., Yahyaei, B.,**Azizian, S.** (2014) Adsorption of Bismarck Brown by Iron Oxide Nanosphere and Its Modified Form, *Journal of Dispersion Science and Technology*, 35 (8), pp.1135-1142.
25) Kianpour, E., **Azizian, S.** (2014) Optimization of one-step and one-substrate synthesis of carbon nanodots by microwave pyrolysis, *RSC Advances*, 4, pp. 40907-40911.
26) Yahyaei, B., **Azizian, S.** (2014) Rapid adsorption of binary dye pollutants onto the nanostructred mesoporous alumina, *Journal of Molecular Liquids*, 99, pp.88-95.
27) Moghadam, T.F., **Azizian, S.** (2014) Synergistic effect of ZnO nanoparticles and triblock copolymer surfactant on the dynamic and equilibrium oil-water interfacial tension, *Soft Matter*, 10, pp. 6192-6197.
28) Bagheri, M., **Azizian, S.,**Jaleh, B., Chehregani, A. (2014) Adsorption of Cu(II) from aqueous solution by micro-structured ZnO thin films, *Journal of Industrial and Engineering Chemistry*, 20, pp. 2439-2446.
29) Moghadam, T.F., **Azizian, S.** (2014) Effect of ZnO nanoparticles on the interfacial behavior of anionic surfactant at liquid/liquid interfaces, *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 457, pp. 333-339.
30) Ghaedi, M., Nasab, A.G.,Khodadoust, S., Rajabi, M., **Azizian, S.** (2014) Application of activated carbon as adsorbents for efficient removal of methylene blue: Kinetics and equilibrium study, *Journal of Industrial and Engineering Chemistry*, 20, pp. 2317-2324.
31) Khosravi, M., **Azizian, S.** (2014) Adsorption of anionic dyes from aqueous solution by iron oxide nanospheres, *Journal of Industrial and Engineering Chemistry*, 20, pp. 2561-2567.
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35) Fallah, R.N., **Azizian, S.**,Reggers, G., (...), Meynen, V., Yperman, J. (2014) Effect of aromatics on the adsorption of thiophenic sulfur compounds from model diesel fuel by activated carbon cloth, *Fuel Processing Technology*, 119, pp. 278-285.
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43) Haerifar, M., **Azizian, S.** (2013) Mixed surface reaction and diffusion-controlled kinetic model for adsorption at the solid/solution interface, *Journal of Physical Chemistry C*, 117, pp. 8310-8317.

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64) **S. Azizian**, H. Bashiri, (2009) A new isotherm for multisite occupancy adsorption of binary gaseous mixtures, *Langmuir*, 25, pp. 2309–2312.
65) **S. Azizian**, H. Bashiri, A.G. Volkov, (2009), Derivation of Azizian-Volkov isotherm based on statistical thermodynamics, *Colloids and Surfaces A*, 335, pp. 28–32.
66) **S. Azizian**, M. Haerifar, H. Bashiri, (2009), Adsorption of methyl violet onto granular activated carbon: Equilibrium, kinetics and modelling, *Chemical Engineering Journal*, 145, pp. 36-41.
67) **S. Azizian**, (2008) Comments on “Biosorption isotherms, kinetics and thermodynamics” review, *Separation and Purification Technology*, 63, pp. 249-250.
68) **S. Azizian**, H. Bashiri, (2008) Description of desorption kinetics at the solid/solution interface based on the statistical rate theory, *Langmuir*, 24, pp. 13013–13018.
69) **S. Azizian**, H. Bashiri, (2008) Adsorption kinetics at the solid/solution interface: statistical rate theory at initial times of adsorption and close to equilibrium, *Langmuir*, 24, pp. 11669–11676.
70) **S. Azizian**, H. Bashiri, H. Iloukhani, (2008), Statistical rate theory approach to kinetics of competitive adsorption at the solid/solution interface, The *Journal of Physical Chemistry C,*112, pp. 10251–10255.

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72) **S. Azizian** and N.Bashavard, (2008) Surface tension of dilute solutions of alkanes in cyclohexanol. *Journal of Chemical Engineering Data*, 53, pp. 2422-2425.

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93) **S. Azizian** and F.Gobal, (2003) Investigation of the energetics of the decomposition of azomthane on Pd(111): a UBI-QEP approach, *Surface Review and Letters*, 10(6), pp. 895-901.

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