

Curriculum Vitae

Name: Seyedeh Sharareh Sajadi Kouchesfehani

Title: Assistant Professor

Special field of research: Bio-electrochemistry, electrochemical nanobiosensors

Date and place of birth: 27 Mar. 1981, Tehran, Iran

Nationality: Iranian

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Address: Department of biology, Roudehen branch, Islamic Azad University, Roudehen, Iran

Academic Education:

- Ph.D., Biophysics, Institute of Biochemistry and biophysics, University of Tehran, Tehran, Iran, 2011.
 - M.Sc., Biophysics, Institute of Biochemistry and Biophysics, University of Tehran, Tehran, Iran, 2006.
 - B.Sc., Marine Biology, Faculty of Science, Gilan University, Rasht, Iran, 2003.
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Publications:

Peer reviewed papers

5. **S. Sajjadi**, H. Ghourchian, H.A. Rafiee-Pour and P. Rahimi, “*Choline oxidase electron transfer promotion using ionic-liquid/NH₂-MWCNTs nano-composite*”, **Journal of Iranian Chemical Society**, Volume 9, Number 2 (2012) 111-119.
4. P. Rahimi, H. Ghourchian and **S. Sajjadi**, “*Effect of hydrophilicity of room temperature ionic liquids on the electrochemical and electrocatalytic behavior of choline oxidase*”, **Analyst**, Volume 137, (2012) 471-475.

3. **S. Sajjadi**, H. Ghourchian and P. Rahimi, "Different behavior of single and multi wall carbon nanotubes for studying electrochemistry and electrocatalysis of choline oxidase", **Electrochimica acta**, Volume 56, Issue 26 (2011) 9542-9548.

2. E. Tahmasbpour Marzony, M. Kamali, M. Saadati, A.H. Keihan, A.A. Imani Fooladi, and **S. Sajjadi**, "Single multiplex PCR assay to identify the shiga toxin" **African Journal of Microbiology Research** Volume 5, Issue 14 (2011), 1794-1800.

1. **S. Sajjadi**, H. Ghourchian and H. Tavakoli, "Choline-Oxidase as a selective recognition element for determination of paraoxon", **biosensors and Bioelectronics**, Volume 24, Issue 8 (2009) 2509-2514.

Submitted manuscripts:

2. A.H. Keihan and **S. Sajjadi*** "Improvement of the electrochemical and electrocatalytic behavior of prussian blue/carbon nanotubes composite via ionic liquid treatment" (2012).

1. **S. Sajjadi**, H. Ghourchian and P. Rahimi, "Performance of functional groups on carbon nanotubes in choline oxidase electrochemical signal transduction" (2012).

Conference Proceedings:

Refereed Full Paper

1. Z. Kamal, M. Ghaffari Sharaf, **S. Sajjadi**, M. Kamali, A.H. Keihan, H. Attar, "Development and assessment of a coupling strategy to obtain oligonucleotide-magnetic nanoparticle conjugates for biodetection", Proceeding of 2nd international conference on nanoscience and technology (ICNST 2011), Singapore. **Oral presentation**, 14-15 October 2011.

Refereed Abstracts

18. **S. Sajjadi** and A.H. Keihan, "Enhancement of the electrochemical performance of prussian blue/carbon nanotubes composite via ionic liquid treatment", 9th International Symposium on Micro and Nanosystem technologies (EMNT2012), Linz, Austria, **Oral presentation**, 15-17 August 2012.

17. **S. Sajjadi**, H. Ghourchian, A.H. Keihan "Development of an electrochemical biosensor for organophosphate monitoring using carbon nanotube ionic liquid modified electrode" 63rd Annual Meeting of the International Society of Electrochemistry, Prague, Czech Republic, **poster presentation**, 19-24 August 2012.

16. A.H. Keihan, M. Ghaffarisharaf, **S. Sajjadi**, H. Ghourchian, "*Amperometric Choline Biosensor Based on Choline Oxidase Immobilized on Prussian blue/Carbon Nanotube/Ionic Liquid Hybrid Coated Electrode*" 63rd Annual Meeting of the International Society of Electrochemistry, Prague, Czech Republic, **poster** presentation, 19-24 August **2012**.
15. Z. Kamal, M. Ghaffari Sharaf, **S. Sajjadi**, M. Kamali, A.H. Keihan, H. Attar, "*A Novel Simple Method to Obtain Oligonucleotide Probe-Modified Magnetic Nanoparticle*" 4th International conference on Nanostructures (ICNS4), Kish Island, Iran, **Poster** presentation, 12-14 March **2012**.
14. **S. Sajjadi**, A. Barkhordari, A.H. Keihan, M. Ghaffarisharaf, H. Ghourchian, "*Ionic-liquid/bamboo-like carbon nanotube as a highly sensitive nano-composite for choline biosensing*". 2nd International Conference in Bio-Sensing Technology, Amsterdam, the Netherlands, **Poster** presentation, 10-12 October **2011**.
13. **S. Sajjadi**, H.Ghourchian, "*Direct Electrochemistry of Choline Oxidase on Single Wall Carbon Nanotube and Its Biosensing Application*", the 3rd International Congress on Nanoscience and Nanotechnology, Shiraz, Iran, **poster** presentation, 9-11 November **2010**.
12. **S. Sajjadi**, H.Ghourchian, A. Keyhan, "*Electron-transfer properties of different carbon nanotube materials for application in choline biosensor*", The Eight International symposium on Electrochemical Micro & Nanosystem Technologies, Cannes Mandelieu, France, **oral** presentation, 21-24 September, **2010**.
11. **S. Sajjadi**, H. Rafiee-Pour, P. Rahimi, H. Ghourchian, A. Keyhan, "*Electrochemistry and Electrocatalysis of Choline Oxidase Based on Ionic-liquid/NH₂-MWCNTs Nano-composite*", 61st annual meeting of international society of electrochemistry, Nice, France, **poster** presentation, 26 September-1October **2010**.
10. H. Ghourchian, P. Rahimi, **S. Sajjadi**, "Carbon Nanotubes Ionic Liquid Nanocomposites as Biocompatible Matrixes for Enzyme Based Electrochemical Biosensors", 61st annual meeting of international society of electrochemistry, Nice, France, poster presentation, 26 September - 1October 2010.
9. **S. Sajjadi**, H. Ghourchian, "Carbon nanotube/ionic liquid composite for choline biosensing", the third "Applications of Nanotechnology in Medicine and Biomedical Sciences" conference, Tehran, Iran, Oral presentation, 23rd to 25th of Feb, 2010.
8. **S. Sajjadi**, H.A. Rafiee-Pour, P. Rahimi, H. Ghourchian, A. Keyhan, "*Direct electrochemistry of choline oxidase at carbon nanotube-ionic liquid modified electrode*" 8th Iranian Biennial Seminar of Electrochemistry, Sanandaj, Kordestan, July 14-16, 2009.
7. **S. Sajjadi**, "A new selective paraoxon biosensor", The First Regional Symposium on Bioelectrochemistry, Tehran, Iran, Oral presentation, Oct. 13-15, 2008.

6. **S. Sajjadi**, H. Ghourchian, "A new organophosphorus biosensor based on choline oxidase inhibition", The First Regional Symposium on Bioelectrochemistry, Tehran, Iran, Poster, Oct. 13-15, 2008.
 5. **S. Sajjadi**, H. Ghourchian, Development of biosensor based on inhibitory effect of paraoxon on choline oxidase activity, The 9th Iranian Congress in Biochemistry, & the 2nd International Congress of Biochemistry and Molecular Biology, Shiraz, Oct. 29-Nov. 1, 2007, P 575, P 870.
 4. **S. Sajjadi**, H. Ghourchian, "Choline-Oxidase based biosensor for paraoxon determination" Istanbul, Turkey, 24-29 June, The 31th FEBS congress, V. 237, Supplement1, June 2006, PP. 807.
 3. **S. Sajjadi**, H. Ghourchian, "A biosensor for determination of Organophosphorous compounds", 8th Iran Biophysical Chemistry Conference, University of Sistan & Bluchestan, 11-13 March, 2008.
 2. **S. Sajjadi**, H. Ghourchian, Choline oxidase biosensor for detection of paraoxon, 7th Iranian Biophysical Chemistry Conference, Research Institute for Fundamental Science, Tabriz University, Tabriz, Iran, 18-19 July, 2006.
 1. **S. Sajjadi**, H. Ghourchian, Characterization of an amperometric choline biosensor, 7th Iranian Biophysical Chemistry Conference, Research Institute for Fundamental Science, Tabriz University, Tabriz, Iran, 18-19 July, 2006.
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Attending In Workshop and Training Courses:

Winter Course on Biophysics & Biochemistry Simulation, 2008, joint with Barcelona National Computing Center & Institute of Biochemistry and Biophysics, University of Tehran, 12 Feb. to 12 March. Iran

Membership of scientific societies:

- International society of electrochemistry
 - Iran Society of Biophysical Chemistry
 - Pool of young bioelectrochemists
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Teaching:

Courses Taught:

1. at Islamic Azad University, Roudehen Branch (Since 2009):

- *Biophysics*
- *Radiation Biology*
- *Biochemistry*
- *Biostatistics*
- *Specialized Biology texts*

2. at Baqiyatallah University of Medical Sciences (M.Sc), 2011:

- *Biophysics*

3. at Islamic Azad University, Science and Research Branch (M.Sc), 2012:

- *Research methods*

Students:**Supervised (M.Sc.):**

A. Barkhordari (2011) [Joint supervision with Dr M. Kamali]

“Comparing the electron transfer choline oxidase on three different carbon nanotubes”

Thesis consultation (M.Sc.):

Z. Kamal (2011) [Under supervision of Dr H. Attar and Dr M. Kamali]

Honors:

1- Winner of the young scientist prize of the first regional symposium on Bioelectrochemistry, 2008.

2- Graduated with a first-class Ph.D. degree, 2011

3. Graduated with a first-class B.Sc. degree, 2003.

3- First Grade in M.Sc. Entrance Exam of Azad University in Iran, 2003