

Curriculum Vitae

1. Personal Information

First Name	Ghasem	Address (home):	33 Katoozian Alley (East 30 th), South Allameh Street, Saadat Abad, Postal Code: 1999700000, Tehran, Iran
Last Name	Rezanejade Bardajee		
Date of Birth	23 Aug 1977	Address (work):	Payame Noor Univ., Tehran, Iran
Place of Birth	Shiraz, Iran	Tel.	+98 21 88575258
ID	229-318273-8		+98 912 288 5374
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a. B. Sc. Degree (as a Top Student)

University of Shiraz, Shiraz, Iran	Pure Chemistry	GPA: 16.32/20	1995-1999
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b. M.Sc. Degree (as a Top Student)

University of Tehran, Tehran, Iran	Organic Chemistry	GPA: 16.72/20	1999-2002
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Supervisor:

Prof. Hooshang Pirelahi

M.sc Thesis:

Synthesis and photoinduced rearrangements of some 4*H*-thiopyran-1,1-dioxides to their bicyclic derivatives

c. Ph.D. Degree (as a Top Student)

Sharif University of Technology, Tehran, Iran	Organic Chemistry	GPA: 17.71/20	2002-2006
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Supervisors:

Prof. Firouz Matloubi Moghaddam; Prof. Ali Pourjavadi

Ph.D. Thesis:

1. Investigation on some solid supported (CuSO₄, KF/Al₂O₃,...) organic reactions (protection, Michael addition, sulfoxide-elimination, γ -pyrone synthesis,...) with or without microwave assistance
2. Polysaccharide modification via graft copolymerization under gamma-irradiation

d. Sabbatical Leave

University of Toronto, Toronto, Canada	Nanomaterials and Polymer (Synthesis and Physical Organic Chemistry)	2004-2005
University of Toronto, Toronto, Canada	Nanomaterials and Polymer (Synthesis and Physical Organic Chemistry)	Summer 2012

Supervisor:

Professor Mitchel A. Winnik

3. **Research Area**

- a. Surface modification of fluorescent semiconductor nanocrystals or quantum dots
- b. Synthesis and spectroscopic properties of new functional dyes
- c. Synthesis of bio-based superabsorbent hydrogels and their applications in drug delivery systems
- d. Metal complexes loaded on SBA-15 as a novel nano-catalyst in organic transformations

4. **Current Position**

Payame Noor University	Nanomaterials, Polymer and Organic Synthesis	Assistant Professor-2007-2011
Payame Noor University	Nanomaterials, Polymer and Organic Synthesis	Associate Professor-2011 to 2015
Payame Noor University	Nanomaterials, Polymer and Organic Synthesis	Professor-2015 to present

Address (Work): Department of Chemistry, Payame Noor University, 19395-4697, Tehran, Iran

Selected Publications in Polymer Chemistry, Nanomaterials and Organic Synthesis Area

1. Bardajee G. R., Hooshyar Z., Probing the interaction of a new synthesized CdTe quantum dots with human serum albumin and bovine serum albumin by spectroscopic methods, *Materials Science and Engineering: C* **2016**, 62, 806-815.
2. Bardajee G. R., Hooshyar Z., Fluorescence enhancement of glutathione capped CdTe/ZnS quantum dots by embedding into cationic starch for sensitive detection of rifampicin, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy* **2017**, 173, 144-150.
3. Hooshyar Z., Bardajee G. R., Dianatnejad N., Optical and structural properties of hydrophilic CdTe quantum dots in cationic starch polymeric matrix, *Starch/Stärke* **2016**, 68, 213-219.
4. Bardajee G. R., Hooshyar Z., One-pot synthesis of biocompatible superparamagnetic iron oxide nanoparticles/hydrogel based on salep: Characterization and drug delivery, *Carbohydrate Polymers* **2014**, 101, 741-751.
5. Bardajee G. R., Hooshyar Z., Asli M. J., Shahidi F. E., Dianatnejad N., Synthesis of a novel supermagnetic iron oxide nanocomposite hydrogel based on graft copolymerization of poly((2-dimethylamino)ethyl methacrylate) onto salep for controlled release of drug, *Materials Science and Engineering C* **2014**, 36, 277-286.
6. Bardajee G. R., Hooshyar Z., Shafagh P., Ghasvand S., Kakavand N., Combined spectroscopic and molecular docking techniques to study interaction of Zn (II) DiAmsar with serum albumins, *Journal of Luminescence* **2014**, 156, 55-62.
7. Farahani B. V., Bardajee G. R., Rajabi F. H., Hooshyar Z., Study on the interaction of Co (III) DiAmsar with serum albumins: Spectroscopic and molecular docking methods, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy* **2015**, 135, 410-416.
8. Samadpour M., Bardajee G. R., Ghasvand S., Shafagh P., Transition metal doping for enhancing quantum dot sensitized solar cells performance, *Journal of Physics D: Applied Physics* **2015**, 48, 95101-95107.
9. Bardajee G. R. et al., Simple and efficient syntheses of novel benzo[4,5]imidazo[1,2-a]pyridine derivatives, *Tetrahedron Letters* **2015**, 56, 743-746.
10. Soleyman R., Bardajee G. R., Pourjavadi A., Varamesh A., Hydrolyzed salep/gelatin-polyacrylamide as a novel highly micro/nano-porous superabsorbent hydrogel: synthesis, optimization and investigation on swelling behavior, *Scientia Iranica* **2015**, 22, 883-893.
11. Bardajee G. R., Hooshyar Z., Mizani F., Improving optical properties of CdTe quantum dots by a new multidentate biopolymer based on salep, *Materials Science in Semiconductor Processing* **2014**, 19, 89-94.
12. Mohammadi M., Bardajee G. R., Noroozi Pesyan, N., A novel method for the synthesis of benzothiazole heterocycles catalyzed by copper-diamsar complex loaded on SBA-15 in water media, *RSC Advances* **2014**, 4, 62888-62894.
13. Farahani B. V., Bardajee G. R., Rajabi F. H., Hooshyar Z., Molecular docking and spectroscopy study on the interaction of serum albumins with iron (III) diamine sarcophagine, *Australian Journal of Chemistry* **2015**, 68, 999-1010.

14. Bardajee G. R., Microwave-assisted solvent-free synthesis of fluorescent naphthalimide dyes, *Dyes and Pigments* **2013**, *99*, 52-58.
15. Bardajee G. R., Malakooti R., Abtin I., Atashin H., Rostami I., Palladium Schiff-base complex loaded SBA-15 as a novel nanocatalyst for the synthesis of 2,3-disubstituted quinoxalines and pyridopyrazine derivatives, *Microporous and Mesoporous Materials* **2013**, *169*, 67-74.
16. Bardajee G. R., Hooshyar, Z., Jafarpour F., Antibacterial and optical properties of a new water soluble CdSe quantum dots coated by multidentate biopolymer, *Journal of Photochemistry and Photobiology A: Chemistry* **2013**, *252*, 46-52.
17. Bardajee G. R., Hooshyar Z., Khanjari M., Dye fluorescence quenching by newly synthesized silver nanoparticles, *Journal of Photochemistry and Photobiology A Chemistry* **2013**, *276*, 113-121.
18. Bardajee G. R., Hooshyar Z., Rastgo F., Kappa carrageenan-g-poly (acrylic acid)/SPION nanocomposite as a novel stimuli-sensitive drug delivery system, *Colloid and Polymer Science* **2013**, *291*, 2791-2803.
19. Bardajee G. R., Hooshyar Z., A novel biocompatible magnetic iron oxide nanoparticles/hydrogel based on poly (acrylic acid) grafted onto starch for controlled drug release, *Journal of Polymer Research* **2013**, *20*, 298-310.
20. Bardajee G. R., Hooshyar Z., Novel potentially biocompatible nanoporous hydrogel based on poly ((2-dimethylaminoethyl) methacrylate) grafted onto salep: synthesis, swelling behavior and drug release study, *Journal of Polymer Research* **2013**, *20*, 67-74.
21. Bardajee G. R., Hooshyar Z., Shahidi F. E., Synthesis and characterization of a novel Schiff-base/SBA-15 nanoadsorbent for removal of methylene blue from aqueous solutions, *International Journal of Environmental Science and Technology* **2014**, *11*, 4-15.
22. Bardajee G. R., Hooshyar Z., Optical properties of water soluble CdSe quantum dots modified by a novel biopolymer based on sodium alginate, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy* **2013**, *114*, 622-626.
23. Bardajee G. R., Hooshyar Z., Rezanezhad H., Guerin G., Optical properties of water-soluble CdTe quantum dots passivated by a biopolymer based on poly((2-dimethylaminoethyl) methacrylate) grafted onto κ-carrageenan, *ACS Applied Materials and Interfaces* **2012**, *4*, 3517-3525.
24. Bardajee G. R., Hooshyar Z., Rezanezhad H., A novel and green biomaterial based silver nanocomposite hydrogel: Synthesis, characterization and antibacterial effect, *Journal of Inorganic Biochemistry* **2012**, *117*, 367-373.
25. Bardajee G. R., Hooshyar, Z., Zehtabi, F., Pourjavadi A., A superabsorbent hydrogel network based on poly ((2-dimethylaminoethyl) methacrylate) and sodium alginate obtained by gamma-radiation: Synthesis and characterization, *Iranian Polymer Journal* **2012**, *21*, 829-836.
26. Bardajee G. R., Hooshyar Z., Kabiri F., Preparation and investigation on swelling and drug delivery properties of a novel silver/salep-g-poly(acrylic acid) nanocomposite hydrogel, *Bulletin of the Korean Chemical Society* **2012**, *33*, 2635-2641.
27. Bardajee G. R., Hooshyar Z., Rostami I., Hydrophilic alginate based multidentate biopolymers for surface modification of CdS quantum dots, *Colloids and Surfaces B: Biointerfaces* **2011**, *88*, 202-207.
28. Bardajee G. R., Pourjavadi A., Ghavami S., Soleyman R., UV-prepared salep-based nanoporous hydrogel for controlled release of tetracycline hydrochloride in colon, *Journal of Photochemistry and Photobiology B: Biology* **2011**, *102*, 232-240.
29. Bardajee G. R., Vancaeyzeele C., Haley J. C., Alice Y. Li, Winnik M. A., Synthesis, characterization, and energy transfer studies of dye-labeled poly(butyl methacrylate) latex particles prepared by miniemulsion polymerization, *Polymer* **2007**, *48*, 5839-5849.
30. Lin W., Fritz K., Guerin G., Bardajee G. R., Winnik M. A., Highly luminescent lead sulfide nanocrystals in organic solvents and water through ligand exchange with poly(acrylic acid), *Langmuir* **2008**, *24*, 8215-8219.