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EDUCATION

Post Doctoral, *2002-2004*
Faculty of Pharmacy, University of Toronto,
"Controlled Release Delivery Systems"

Doctor of Philosophy, *1996*
Department of Chemical Engineering, University of Toronto,
Dissertation: "Composites of Hydrophilic and Hydrophobic Polymers in Controlled Release Delivery Systems"

Master of Science, *1991*
Department of Chemical Engineering, Sharif University of Technology, Iran,
Thesis: "A New Equation of State Based on Perturbation Theory"

Bachelor of Science, *1989*
Department of Chemical Engineering, Sharif University of Technology, Iran,

SELECTEDPUBLICATIONS

- P.Noohi, Mj Abdekhodaie, Yl cheng, Computational modeling of intraocular gas dynamics, Physical Biology, 2015
- Hosseinizand, M Ebrahimi, MJ Abdekhodaie, Agitation increases expansion of cord blood hematopoietic cells and promotes their differentiation into myeloid lineage, Cytotechnology, 1-10, 2015
- ZM Khamene, MJ Abdekhodaie, Diffusional release of a dispersed solute from a cylindrical polymeric matrix into an infinite external volume, Applied Mathematics and Computation, 676-685, 259,2015
- MJ Abdekhodaie, J Cheng, XY Wu, Effect of formulation factors on the bioactivity of glucose oxidase encapsulated chitosan–alginate microspheres: In vitro investigation and mathematical model prediction,Chemical Engineering Science,4-12, 125, 2015.

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- M Saadatmand, MJ Abdekhodaie, MR Pishvaie, F Farhadi, An Efficient Numerical Method and Parametric Study for Electrolyte Transport in the Renal Medulla, Journal of Biomedical Science and Engineering, 2014.
- M Sadeghi, C Held, C Ghotbi, MJ Abdekhodaie, G Sadowski, Thermodynamic Properties of Aqueous Glucose–Urea–Salt Systems, Journal of Solution Chemistry, 1110-1131, 43(6), 2014.
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- M Karimi, A Shojaei, A Nematollahzadeh, MJ Abdekhodaie, Column study of Cr (VI) adsorption onto modified silica–polyacrylamide microspheres composite, Chemical Engineering Journal, 280-288, 22, 210, 2012.
- M Sadeghi, C Held, A Samieenasab, C Ghotbi, MJ Abdekhodaie, ., Thermodynamic properties of aqueous salt containing urea solutions, Fluid Phase Equilibria, 71-79*, 11, 325, 2012.
- A Nematollahzadeh, MJ Abdekhodaie, A Shojaei, Submicron nanoporous polyacrylamide beads with tunable size for verapamil imprinting, Journal of Applied Polymer Science, 189-199, 125(1), 2012.

- M Sadeghi, C Ghotbi, MJ Abdekhodaie, Activity coefficient prediction for binary and ternary aqueous electrolyte solutions at different temperatures and concentrations, Journal of solution chemistry, 75-88, 41(1), 2012.

- N Haghjou, M Soheilian, MJ Abdekhodaie, Sustained release intraocular drug delivery devices for treatment of uveitis, Journal of ophthalmic & vision research, 317, 6(4), 2011.

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- Salviri A., Liu Q., Abdekhodaie M.J., Wu X.Y, "Novel modified starch-xanthan gum hydrogels for controlled drug delivery: Synthesis and characterization" Carbohydrate Polymers, 79, 898-907 (2010)
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- Abdekhodaie M.J. and Wu X.Y., “Drug release from ion-exchange micro spheres; mathematical modeling and experimental verification”, Biomaterials, 29 1654-1663, (2008)
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- Abdekhodaie M.J. and Wu X.Y., “Drug loading onto ion-exchange micro spheres; mathematical modeling and experimental verification”, Biomaterials, 27, 19 (2006)
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- Abdekhodaie M.J. and Cheng Y-L., "Drug release mechanisms from composite matrices, I) Theoretical issues", Scientia Iranica, 9, 1, (2002)
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- Abdekhodaie M.J., "Drug release from silicone polymer matrices containing an osmotic agent or a water swelling additive", Iranian J. Sci. and Technology, 26, B2, (2002)
- Abdekhodaie M.J. and Hemmati A.A., "Influence of formulation parameters on the release of diclofenac sodium from matrices with...", Iranian J. Chemistry and Chem. Eng., 21, 2, (2002)
- Abdekhodaie M.J., "Diffusional release of a solute from a rectangular polymer reservoir into a finite external volume" J. Membrane Sci., 174 (2000)
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- Abdekhodaie M.J., "Applications of chemical engineering in pharmacy and medicine", Iranian J. Chemistry and Chemical Eng., 18, 2 (2000)
- Abdekhodaie M.J. and Cheng Y-L., "Diffusional release of a dispersed solute from a planar and spherical matrices into a finite external volume" J. Controlled Release, 43 (1997)
- Abdekhodaie M.J. and Cheng Y-L., “Diffusional release of a solute from a sphererical polymer matrix", J. Membrane Sci., 115 (1996)

RESEARCH INTERESTS

- **Controlled Release Delivery Systems.**
- **Mathematical Modeling and Computer Simulation.**
- **Molecular Imprinting Technology**
- **Artificial Organs**