

Curriculum Vitae

Zahra Alsadat Emami Meybodi

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Education:

- Ph.D. student in polymer engineering at Iran Polymer and Petrochemical Institute, Tehran, Iran, 2012 – 2018.
Thesis title: "Investigation on mechanical and rheological properties of gelatin alginate hydroxyapatite nanocomposite hydrogels." Under supervision of Prof. Ehsani and Prof. Zandi
- M.Sc. in polymer Engineering at Iran Polymer and Petrochemical Institute, Tehran, Iran, 2010 -2012 (GPA of 17.50 out of 20).
Thesis title: "Preparation and evaluation of drug releasing biodegradable polymeric networks based on dextran." Under supervision of Prof. Imani and Prof. Atai.
- B.Sc. in polymer engineering at Amirkabir University of Technology (Tehran Polytechnic), Tehran, Iran, 2006 – 2010. (GPA of 15.89 out of 20).
Thesis title: "Preparation and investigation of rheological properties of PP/modified clay nanocomposites." Under supervision of Prof. Nadokdast.

Research Experiences:

- PostDoctoral Researcher in Department of Materials Science and Engineering at Sharif University of Technology, Tehran, Iran, 2021-now.
- Research assistance in Department of Macromolecular Science and Engineering at Case Western Reserve University, Cleveland, Ohio, 2012 – 2014.
- Research Assistant in the project titled "Development and characterization of diclofenac based wound dressing", Principle Investigator: Dr. S.M. Taghizadeh, Iran Polymer and Petrochemical Institute, 2012.

Journal Papers:

1. Kohkhezri, A. Simchi, Zandi, Emami, " Fabrication and characterization of Biocompatible Dual-crosslinked Electrospun PCL-PVA/Pectin Core-Shell Nanofibers Containing Two-Dimensional Ti₃C₂Tx_x-(MXene) Capable as a potential of drug delivery systems", under preparation.
2. Moradi, A, Es-haghi, H., Haghgoo, M., Emami, Z., Hashemabadi, S.H., "Thermal Characterization of Eicosane/Graphite nanocomposite based phase change material", Phase Transition, Submitted.
3. H. Tohidi, N. Maleki, A. Simchi, F. Mohandes, Z. Emami, L. Fassina, F. Naro, B. Conti and F. Barbagallo, "An electroconductive, thermosensitive, and injectable chitosan/Pluronic/gold-decorated cellulose nanofiber hydrogel as an efficient carrier for regeneration of cardiac tissue", *Materials*, 15, 5122, 2022.
4. Z.Emami, M. Ehsani, M. Zandi, R. Foudazi, H. Daemi, MH. Ghanian "Modified hydroxyapatite nanoparticles to improve nanocomposite hydrogels based oxidized alginate-gelatin", *Carbohydrate Polymer Technologies and Applications*, <https://doi.org/10.1016/j.carpta.2021.100056> .
5. Z.Emami, M. Ehsani, M. Zandi, R. Foudazi, "Controlling alginate oxidation conditions for making alginate-gelatin hydrogels", *Carbohydrate Polymers*, 198 (2018) 509–517.
6. Z. Emami, Q. Meng, G. Pircheraghi, I. Manas-Zloczower, "Use of surfactants in cellulose nanowhisker/epoxy nanocomposites: effect on filler dispersion and system properties", *Cellulose*, 1-16, 2015.
7. Z. Emami, M. Imani, M. Atai, "Kinetics of dextran crosslinking by epichlorohydrin: a rheometry and equilibrium swelling study", *Carbohydrate Polymers*. 1792-8, 2013.

Conference Papers:

1. Z.Emami, M. Ehsani, M. Zandi, R. Foudazi, "Controlling alginate oxidation conditions and preparation and characterization of nanocomposite hydrogels based on oxidized alginate"

35th International Conference of the Polymer Processing Society, PPS-35, 26 - 30 May 2019, Izmir, Turkey.

2. Z.Emami, M. Ehsani, M. Zandi, R. Foudazi, "Study the Schiff-base reaction in the alginate-gelatin hydrogels *"4th International Conference on Biomedical Polymers & Polymeric Biomaterials, 15-18 July 2018, Kraków, Poland.*
3. Z.Emami, M. Ehsani, M. Zandi, "Preparation and characterization of oxidized alginate biopolymer: Effects of oxidation conditions" *12th International Seminar on Polymer Science and Technology, Islamic Azad University, Tehran, Iran, 2-5 November 2016*
4. L. Yue, A. Patel, Z. Emami, Q. Meng, D. Pedrazzoli, I. Manas- Zloczower, "Challenges in mixing biofillers in polymeric systems" *31th International Conference of the Polymer Processing Society, PPS-31, South Korea, Jeju City, 7 - 11 June 2015.*
5. G. Pircheraghi, T. Powell, L. Yue, Z. Emami, V. Solouki Bonab, Q. Meng and I. Manas-Zloczower, "Challenges in nanocomposites: mixing and interfacial interactions (Keynote)", *30th International Conference of the Polymer Processing Society, PPS-31, USA, Cleveland, 8 - 12 June, 2014.*
6. Z. Emami, M. Imani, M. Atai, "Kinetics of dextran crosslinking by epichlorohydrin: a rheometry and equilibrium swelling study", *Asia/Australia Regional Meeting of the Polymer Processing Society, Iran, Kish Island, 14-17 November, 2011.*
7. Z. Emami, M. Imani, M. Atai, "Viscometric investigation of chain conformation and crosslinking of dextran in dilue aqueous solutions", *7th International Chemical Engineering Congress & Exihibition(IACHE), Iran, Kish Island, 21-24 November, 2011.*

Research Interest:

- Bio based polymers and hydrogels
- nanobiothenology
- Functionalization and surface modification
- Physical and mechanical properties of soft matters
- Smart and sensitive hydrogels