



Professional Profile

A born with interest in science and technology researcher who is recently graduated from master degree of polymer science from Isfahan University of Technology, looking for secure a PhD position in order to utilize my current scientific skills and knowledge which is also very prominent for further development in the mentioned skills and knowledge. The main aim in my mind, which is a sort of propulsion for my movement, is the great enthusiasm I have for learning and finding new things, and I think this motivation is my companion from young ages to the last breath.

Education

- **Master Degree of Polymer Science** | Isfahan University of Technology | Sep 2017 - Oct 2020 | GPA: 3.28 out of 4 (15.41 out of 20) | University's GPA: 3.37 out of 4 (15.83 out of 20)

Curriculum: Polymerization Kinetics (Advanced), Bio-compatible Polymers and Degradation of Polymers, Advanced Mathematics in Polymer Engineering, Polymer Formation Processes, Polymeric Bio-composites, An Introduction to Surface Engineering of Polymers, Advanced Physical Chemistry of Polymers, Engineering Properties of Polymers

Dissertation title: Preparation & Characterization of Self-Healing Epoxy Coating by Nanocapsules, Poly(Styrene-co-Acrylonitrile) as Shell Containing Linseed Oil

Brief Explanation of Dissertation: After studying many researches on electrospray and self-healing coatings, first step was optimizing the variable parameters, then ensuring that the healing agent had been successfully encapsulated, and the final step was incorporating the nanocapsules in epoxy to evaluating the self-healing capability of the epoxy coating containing the nanocapsules.

What I have learned: How to plot diagrams and histograms perfectly, How to analyze SEM, FTIR plots, TEM, EIS plots and Polarization plots, How to create a coating on substrate by manual film applicator, How a researcher should be patient, How you can learn from the failures and so on.

- **Bachelor Degree of Polymer Engineering** | Islamic Azad University of Kashan | Sep 2009 - Aug 2014 | GPA: 3.30 out of 4 (15.49 out of 20)

Publications

Title: Development of smart epoxy coating through click reaction using a vegetable oil | Jun 2022

Journal: Progress in Organic Coatings | Elsevier

DOI link: <https://doi.org/10.1016/j.porgcoat.2022.106985>

Title: Improved properties of coating binder from palm oil-based oleic acid by copolymerizing with acrylate monomers | Feb 2020

Journal: Journal of Coatings Technology and Research | Springer

DOI link: <http://doi.org/10.1007/s11998-020-00321-8>

Title:The Effect of Aligned and Random PCL-Human Amniotic Membrane Powder Scaffolds on Retinal Tissue Engineering | Jan 2023 | My name has been mentioned in Acknowledgments

Journal:Advances in Materials Science and Engineering | Hindawi Pub. Corp.

DOI link:<https://doi.org/10.1155/2023/6377399>

Title:Using Electrospray as a Cost-Effective Method for Encapsulation of Linseed Oil as Healing Agent in Self-healing Coating | Ready to submit

Career Summary

Oct 2020 - Present

**Iran, Isfahan University of Technology
Research Assistant**

Outline

- Investigating some further research on my M.Sc. dissertation
- Do a new research on the self-healing coatings, using AESO as the healing agent and PMMA as the shell material for micro-capsules, and evaluating the self healing performance of the epoxy coating containing micro-capsules.
- Helping M.Sc. students of professor Saied Nouri Khorasani in fundamental concepts of research, technical data analysis, and plotting diagrams

Key Achievements

- Accomplishment of the mentioned project of self-healing coating and publishing the results in a good journal with high reputation in coatings which is mentioned in publication section.
- Preparing another research article about synthesizing polycaprolactone/fibrinogen/gelatin/polyaniline scaffolds for use in the central nervous system (spinal cord injury)

Languages

- Persian (native)
- Kurdish (native)
- English (advanced)
 - ❖ TOEFL iBT Overall Score: 98 | Test date: Jul 2022 | Exp. date: Jul 2024
 - ✓ Reading: 27
 - ✓ Listening: 27
 - ✓ Speaking: 20
 - ✓ Writing: 24
- German (elementry)

Fields of Interest

- | | |
|--------------------------|----------------------|
| • Self-healing materials | • Bio-based Polymers |
| • Polymer brushes | • Drug Delivery |
| • Organic coatings | • Tissue Engineering |
| • Surface treatment | • Wound Dressing |

Core Skills

- | | |
|--------------------------------------|---------------------------------------|
| • FTIR analysis | • SEM & TEM analysis |
| • Adobe Photoshop | • Microsoft Office |
| • Zview | • OrginPro |
| • EIS plots analysis (Nyquist, Bode) | • Polarization plots analysis (Tafel) |
| • Electrospray & Electrospinning | • Autocad (2D plans) |