

# Curriculum Vitae

Reza Darvishi



Email: [r.darvishi@yu.ac.ir](mailto:r.darvishi@yu.ac.ir)

Tel: (+98)9122473261

Mobile: (+98)9196862482

CITIZENSHIP: Iranian

## EDUCATION

---

2002-2006	Bachelor of Science (Chemical Engineering) Isfahan University of Technology, Isfahan, Iran  Thesis: Investigation of nano Montmorillonite/Polypropylene (Physical and Mechanical properties) GPA=17.25(Out Of 20)
2006-2009	Master of Science (Polymer Engineering) Amirkabir University of Technology, Tehran, Iran  Thesis: Simulation of maddok kneader in a single screw GPA=18.21 (out of 20)
2011-2015	Ph.D. (Polymer Engineering) Isfahan University of Technology Thesis: Non-isothermal suspension polymerization of VCM GPA=18.20 (out of 20)
2015-2016	Research postdoctorate (Polymer inclusion membrane), Isfahan University of Technology

### ➤ Honors:

- ✓ Ranked 1 among all undergraduate students of the Isfahan University of Technology
- ✓ Honor student, Isfahan University of Technology, 2001-2005
- ✓ Superior Ph.D. thesis, Isfahan University of Technology, 2014-2015
- ✓ Member of Iran's National Elites Foundation

### ➤ Publication

#### 📖 Book

- ✓ A.Sabbagh Alvani, Reza Darvishi, "Process and Machinery in Automotive Paint Shop" in Farsi, AmirKabir University of Technology, Tehran, Iran, 2008.
- ✓ Reza Darvishi , R. Bagheri, "modeling of Polymerization process" in Farsi

#### 📄 Papers

- R. Bagheri, **Reza Darvishi** "Study of the effect of natural weathering on the degradation of Polypropylene/ starch filled polymer containing photoinitiators by spectroscopic methods" Accepted, International Journal of plastic technology, 2015.
- R. Bagheri, **Reza Darvishi**, "Mechanical properties of a polyurethane/MMT nanocomposite featuring organ modification synthesized via in situ polymerizations". Rubber Chemistry and Technology, 2014.
- **Reza Darvishi**, Mohsen Nasr Esfahany, Rouhollah Bagheri, "Nonisothermal Suspension Polymerization of Vinyl Chloride for Enhanced Productivity", JOURNAL OF VINYL & ADDITIVE TECHNOLOGY—2015
- **Reza Darvishi**, Mohsen Nasr Esfahany, Rouhollah Bagheri," Investigation of the effect of non-isothermal suspension polymerization of vinyl Chloride on the fusion and degradation behavior of PVC" JOURNAL OF VINYL & ADDITIVE TECHNOLOGY—2015
- **Reza Darvishi**, Mohsen Nasr Esfahany, Rouhollah Bagheri," Investigation of the effects of non-isothermal suspension polymerization of Vinyl Chloride on resin properties" JOURNAL OF VINYL & ADDITIVE TECHNOLOGY—2015
- **Reza Darvishi**, Mohsen Nasr Esfahany, Rouhollah Bagheri," S-PVC morphology: a review", JOURNAL OF industrial and engineering chemistry research — 2015
- **Reza Darvishi**, Mohsen Nasr Esfahany, Rouhollah Bagheri," S-PVC morphology: a mechanistic approach" JOURNAL OF VINYL & ADDITIVE TECHNOLOGY—2015
- **Reza Darvishi**, Mohsen Nasr Esfahany, Rouhollah Bagheri, "Increasing PVC suspension polymerization productivity by Using PSO optimization algorithm "International Journal of Plastics Technology 20 (2), 219-230
- MJ Bijhanmanesh, N Etesami, **R Darvishi**, "Continuous dosing of fast initiator during vinyl chloride suspension polymerization: Thermal stability of PVC resin", Journal of Applied Polymer Science 134 (7)
- **Reza Darvishi**, R.Bagheri, M. Taherali, " In situ suspension polymerization Of VCM in the presence of Nano-CaCO<sub>3</sub>". Journal of Applied polymer science, 2016.

- M. Gerami, R. Bagheri, **R. Darvishi**, Investigation of isothermal and dynamic cure kinetics of epoxy resin / Nadic methyl anhydride / Dicyandiamide by Differential Scanning Calorimetry (DSC), Journal Thermal Analysis and Calorimetry.
- **R. Darvishi**, Preparation and characterization of a novel Calcium Conducting Polymer Inclusion Membranes: part I, Korean Journal of Chemical Engineering
- **R. Darvishi**, The Effects of Initiators Mixture on Suspension Polymerization of Vinyl Chloride and its Comparison with other Productivity-Enhancing Procedures Journal of Vinyl and Additive Technology
- **R. Darvishi**, A Combined Experimental and First-Principle Calculation (DFT Study) for In Situ Polymer Inclusion Membrane-Assisted Growth of Metal-Organic Frameworks (MOFs), Journal of Polymer Science
- **R. Darvishi**, H Moghadas, A Moshkriz Oxidized gum arabic cross-linked pectin/O-carboxymethyl chitosan: An antibiotic adsorbent hydrogel, Korean Journal of Chemical Engineering 39 (5), 1350-1360
- A Moshkriz, **R. Darvishi**, Preparation and characterization of polyurethane rubber/polypropylene-based thermoplastics vulcanizates nanocomposites with succinic anhydride intercalated layered double hydroxide, Polymers and Polymer Composites 30, 09673911221079126
- **R. Darvishi**, M Darvishi, A Moshkriz ,The Curing Kinetics of Multiscale [Ni (EDTA)]-2 Intercalated Zn-Al Layered Double Hydroxides: Glass Fiber–Epoxy Composite Prepreg International Journal of Polymer Science 2021, 1-22.
- **R. Darvishi**, MJ Bijhanmanesh, G Payam, In situ suspension polymerization of vinyl chloride/3-(trimethoxysilyl) propyl methacrylate (MPTMS)-intercalated Mg-Al-hydroxide layered double hydroxide: I. Grain properties, Polymers and Polymer Composites 29 (9\_suppl), S753-S767.
- E Pakizeh, **R. Darvishi**, investigation of adsorption of copper, zinc and cadmium metals by polymeric coagulant polyaluminum chloride based on density functional theory, Advanced Materials and New Coatings 10 (37), 2740-2747.
- A Moshkriz, **R. Darvishi**, A Barati, M Askari, S Mosleh, Preparation and evaluation of thermoplastic vulcanizate/organo-modified layered double hydroxide nanocomposite: Statistical modelling and optimization. Materials Today Communications 26, 102046.
- **R. Darvishi**, E Pakizeh, A Combined Experimental and First-Principle Calculation (DFT Study) for In Situ Polymer Inclusion Membrane-Assisted Growth of Metal-Organic Frameworks (MOFs), International Journal of Polymer Science 2020.
- **R. Darvishi**, A Moshkriz, A Barati ,Non-isothermal crystallization kinetics of thermoplastic vulcanizate based on polypropylene/polybutadiene rubber in the presence of polybutadiene modified with acrylic acid , Advanced Materials and New Coatings 8 (31), 2270-2278.
- A Mashkriz, **R. Darvishi**, A Barati, Preparation and investigation of mechanical properties of thermoplastic vulcanizate based on polypropylene/polybutadiene rubber in the presence of acrylic acid modified. Advanced Materials and New Coatings 8 (30), 2187-2180.

### **Iranian Patents**

- ✓ Increasing PVC suspension polymerization productivity—an industrial application using nonisothermal trajectory, in Petrochemical Research & Technology Company
- ✓ Superhydrophobic MOFs
- ✓ Superhydrophobic Sepiolite with step reaction
- ✓ Superhydrophobic Sepiolite with Chain reaction

### **Affiliation/Professional Membership**

- ✓ Member of Iranian Paint Council, Tehran, 2009-present;
- ✓ Member of the Board of Directors of the Iranian Color Society

### **Conference Presentations**

- ✓ M. Aboulhasani, Arefazar, **Reza Darvishi**, "An Investigation on the Extended Composite Droplet Morphology Of Ternary", 11<sup>th</sup> Chem. Eng. Conference, Tabriz, Iran
- ✓ **Reza Darvishi**, M. N.Esfahany, M. Bijanmaneh, N. Etesami, R. Bagheri "Increasing PVC suspension polymerization productivity by Using PSO optimization algorithm" ISPST conference, Tehran, Iran, 2014.
- ✓ **Reza Darvishi**, M. Taherali, R.Bagheri "The effect of nano-CaCo3 on PVC morphology prepared by in situ suspension polymerization". ISPST conference, Tehran, Iran, 2014.
- ✓ M. Bijanmanesh, N. Etesami, **Reza Darvishi**, Mohsen Nasr Esfahany "Investigation of Continuous Initiator Dosage on Productivity of S-PVC Polymerization" ISPST conference, Tehran, Iran, 2014.
- ✓ **Reza Darvishi**, Computational Study of Velocity Field in Maddock Kneader with CFD Method, Eurotech2011, Barcellona, Spain
- ✓ **Reza Darvishi** "Coil Coating" ICTTSC conference, Esfahan, Iran, 2013.
- ✓ **Reza Darvishi** "marine antifouling paint" ICTTSC conference, Tehran, Iran, 2016.

### **Comments**

- ✓ Completion of the intensive four-days-course in Paint and Polymer Research Center on polymers synthetic, 2010 at AmirKabir University of Technology, Tehran, Iran;
- ✓ Completion of the intensive 3-month-course in Paint and Polymer Research Center on Customs Clearance Procedures, 2010 at Amirkabir University of Technology, Tehran, Iran;
- ✓ Completion of the intensive 5-month-course in Iran Khodro Company on 6-Sigma, 2009, Tehran, Iran;

## EMPLOYMENT-HISTORY

---

March 2006 – Feb. 2009	Lecturer, University of Applied Science and Technology, Tehran, Iran
Feb 2008- Nov-2009	Color and Polymer Research Center (AmirKabir University of Technology), Tehran, Iran
March 2006 – Feb. 2009	Project Engineering, Iran Khodro Company, Tehran, Iran
Dec.2010- May 2011	Research and Development Membership, Gitipasand Co., Isfahan, Iran
Sep2011- 2012	Lecturer, Islamic Azad University of Shahreza
Sep2011- 2012	Lecturer and Polymerization Lab Expert, Isfahan University of Technology
Now	<b>Professor at Yasouj University</b>

## PERSONAL SKILLS

---

- ✓ **Self-Training** I have good practical knowledge and experience of computer skills and software, for example, Lamps, Gaussian 09, Material Studio, Hysys, B-jack, Aspen Plus, TXS, Akron's twin screw extruder, Lodovic, Matlab, Fluent, and Gambit

### **Problem Solving**

Ability to identify and analyze problems; look for alternative solutions; propose possible solutions and evaluate the ineffectiveness in order to achieve the required results. It is evidenced by my scientific publications and technical reports.

## INTENDED FIELD OF STUDY

- Polymerization process
- Polymers chemistry & physics (coating and adhesives)
- Polymer nanocomposites
- Modeling and simulation of kinetic polymerization

## SKILLS

- Internet and computer skills
- Specialist software "Fluent, Matlab, C<sup>+</sup>, Origin lab, ACD Lab, Gambit"

## INTERESTS

- Spending time with my family;
- Travel;
- Art and music;
- Modern literature;
- Languages and cultural diversity;
- Participating in social activities

## REFER

- Professor Rooholla Bagheri  
Chemical Engineering Department,  
Isfahan University of Technology, Isfahan, Iran  
Tel: +98 3115613  
[E-mail: bagheri@cc.iut.ac.ir](mailto:bagheri@cc.iut.ac.ir)
- Professor Mohsen Nasr Esfahani  
Chemical Engineering Department,  
Isfahan University of Technology,  
Isfahan, Iran Technology  
Tel: +98 3115606  
[E-mail: mnasr@cc.iut.ac.ir](mailto:mnasr@cc.iut.ac.ir)