

# Fatemeh Rafieian

## Personal details

Nationality	Iranian
Gender	F
E-mail	Farafieian61@gmail.com

## Professional experience

### - Postdoctoral Researcher

Department of Food Science and Technology, University of Tehran, Tehran, Iran (2018- present).

### - Lecturer

Department of Food Science and Technology, Azad University, Iran (2014-2016 and 2006-2010).

## Education

### - Ph.D. in Food Science and Technology

Isfahan University of Technology, Isfahan, Iran (2010-2014).

### - M.Sc. in Food Science and Technology

Isfahan University of Technology, Isfahan, Iran (2004-2006).

### - B.Sc. in Food Science and Technology

Isfahan University of Technology, Isfahan, Iran (2000-2004).

## Publications

1. **F.Rafieian**, M. Mousavi, A. Dufresne, Q. Yu. Polyethersulfone membrane embedded with amine functionalized microcrystalline cellulose for heavy metal removal from wastewater. International Journal of Biological Macromolecules.2020; Published online.

2. **F. Rafieian**, M. Mousavi, Q. Yu, M. Jonoobi. Amine functionalization of microcrystalline cellulose assisted by (3-chloropropyl)triethoxysilane. International Journal of Biological Macromolecules. 2019; 130: 280-287.

3. **F. Rafieian**, M. Jonoobi, Q. Yu. A novel nanocomposite membrane containing modified cellulose nanocrystals for copper ions removal and dye adsorption from water. Cellulose. 2019; 26: 3359-3373.

4. A. Ashori, **F. Rafieyan**, F. Kian, M. Jonoobi, K. Rezaei Tavabe. Effect of cellulose nanocrystals on performance of polyethersulfone nanocomposite membranes using electrospinning technique. *Polymer Composites*. 2018; 40 (S1), E835-E841.
5. S. Salehpour, **F. Rafieian**, M. Jonoobi, K. Oksman. Effects of molding temperature, pressure and time on polyvinyl alcohol nanocomposites properties produced by freeze drying technique. *Industrial Crops and Products*. 2018; 121(1): 1-9.
6. **F. Rafieian**, M. Hosseini, M. Jonoobi, Q. Yu. Development of hydrophobic nanocellulose-based aerogel via chemical vapor deposition for oil separation. *Cellulose*. 2018; 25(8): 4695-4710.
7. S. Salehpour, M. Jonoobi, M. Ahmadzadeh, V. Siracusa, **F. Rafieian**. Biodegradation and ecotoxicological impact of cellulose nanocomposites in municipal solid waste composting. *International Journal of Biological Macromolecules*. 2018; 111: 264-270.
8. S. Makzoom, M. Jonoobi, **F. Rafieyan**, H. Pourzamani. Evaluation of di (2-ethylhexyl) phthalate removal efficiency from aqueous solution by cellulose nanofiber. *Desalination and Water Treatment*. 2017; 77: 229-236.
9. **F. Rafieian**. The effect of carboxylated nanocrystalline cellulose on the thermomechanical and barrier properties of cysteine cross linked gliadin nanocomposite. *Cellulose*. 2015; 22(2): 1175-1188.
10. **F. Rafieian**, J. Keramat, M. Shahedi. Physicochemical properties of gelatin extracted from chicken deboner residue. *LWT-Journal of Food Science and Technology*. 2015; 64(2): 1370-1375.
11. **F. Rafieian**. Fabrication and characterization of carboxylated cellulose nanocrystals reinforced glutenin nanocomposite. *Cellulose*. 2014; 21(6): 4167-4180.
12. **F. Rafieian**, M. Shahedi, J. Keramat, J. Simonsen. Mechanical, thermal and barrier properties of nano-biocomposite based on gluten and carboxylated cellulose nanocrystals. *Industrial Crops and Products*. 2014; 53: 282-288.
13. **F. Rafieian**, M. Shahedi, J. Keramat, J. Simonsen. Thermomechanical and morphological properties of nanocomposite films from wheat gluten matrix and cellulose nanofibrils. *Journal of Food Science*. 2014; 79(1): 100-107.

14. **F. Rafeian**, J. Keramat, M. Kadivar. Optimization and modeling of gelatin extraction from chicken deboner residue using response surface methodology (RSM). *Journal of Food Science and Technology*. 2013; 50(2): 374-380.

## Conference

---

- **Rafeian, F.** (2014). In vivo toxicity of cellulose nanofibrills on mice. 7<sup>th</sup> International conference on nanomaterials - research and application, Prague, Czech Republic.

- **Rafeian, F.**, Keramat, J. (2013). Optimization and modeling of gluten based bionanocomposite preparation. Nanotech conference, Venice, Italy.

## Projects

---

- **Rafeian, F.** (2018-present). Synthesis of chemically modified microcrystalline cellulose/polyethersulfone membrane with the aim of heavy metal removal from water. Post-doctoral project, University of Tehran, Iran.

- **Rafeian, F.** (2013-2015). In vivo and in vitro toxicity of cellulose nanofibrills. Research project, Shahrekord University of Medical Sciences, Iran.

- **Rafeian, F.** (2012-2014). Investigating the mechanical, thermal and barrier properties of gluten, glutenin and gliadin films reinforced with carboxylated cellulose nanocrystals. Ph.D. thesis, Isfahan University of Technology, Iran.

- **Rafeian, F.** (2005-2006). Optimization and modeling of gelatin extraction from chicken deboner residue and investigating the physicochemical properties of the extracted gelatin. M.Sc. thesis, Isfahan University of Technology, Iran.

- Activity as an adviser in:

- Makzoom, S. (2016-2017). Evaluation of di (2-ethylhexyl) phthalate removal efficiency from aqueous solution by cellulose nanofiber. M.Sc. thesis, Isfahan University of Medical Sciences, Iran.

- Rabie, M. (2016-2017). A new formulation for a low fat mayonnaise sauce. M.Sc. thesis, University of Tehran, Iran.

- Asadi, S. (2015-2017). New approach for the starch-based nanocomposites preparation. M.Sc. thesis, Azad University, Iran.

- Aghadavoudi, M. (2015-2017). Fast and effective synthesis of polymer nanocomposites based on chicken deboner residue gelatin/cellulose nanofibers. M.Sc. thesis, Azad University, Iran.
- Hosseini Khorasgani, M. (2015-2016). Preparation of hydrophobic cellulose aerogel via chemical vapor deposition. M.Sc. thesis, Azad University, Iran.

## **Teaching activity**

---

- Food Chemistry
- Analytical Chemistry
- Food Preservation
- Chemical Safety of Food

## **Honors and awards**

---

- The first place among the accepted students of agricultural college at Isfahan University of Technology, 2000.