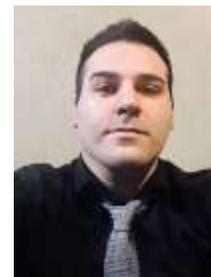


---

# SEYEDAHMAD HOSSEINZADE



Male \* Born in 1987 \* (+32) 497144421 \* [Seyedahmad.hosseinzadeh@ugent.be](mailto:Seyedahmad.hosseinzadeh@ugent.be)  
Address: Meersstraat 16- 9000 Ghent- Belgium

I am professional researcher in Bioscience Engineering with specialty in hydroponic water management and treatment. I have a strong ability in research, team working and meeting deadlines. I am a curious, hard-working, determined and flexible person who likes challenges.

**Special focus:** Water Management and Treatment - Sustainable Agriculture, Chemical and Environmental Engineering

## Education

<b>Research assistant (PhD) in Bioscience Engineering</b> Ghent university (Belgium)	2015- present
<b>M. Sc. in Chemical Engineering</b> Sistan and Baluchestan University (Iran)	2010 - 2012
<b>B. Sc. in Chemical Engineering</b> Mazandaran University (Iran)	2005 - 2010

---

## Professional Experience

<b>Research Assistant</b> , Ghent University, Bioscience Engineering, Department of Green Chemistry and Technology	July.2015- present
<ul style="list-style-type: none"><li>➤ Characterization and removal of phytotoxic compounds from recirculating water in closed hydroponic systems in order to extend the lifespan of nutrient solution and improve the sustainability using advance oxidation (UV/O<sub>3</sub>, UV/H<sub>2</sub>O<sub>2</sub>, UV/TiO<sub>2</sub>), adsorption processes (biochar, Activated carbon, Ion exchange resin), membrane filtration (nanofiltration), slow sand filtration.</li><li>➤ Developed new methods, techniques, collected data, analyzed and interpreted data.</li><li>➤ Cost estimation of each treatment technique in bench scale and translate into large scale in order to find out most cost-effective technique.</li><li>➤ Optimization of the process parameters to achieve optimum efficiency and cost.</li><li>➤ Supervised three international (exchange program) master students and one domestic master student from Zhejiang University (China-2018), Catania University-(Italy-2017), Ghent University (Belgium-2016), and Catania University (Italy-2015). Designed the experiments, worked closely with master students and trained them how to manage the time (to meet deadlines), collect the data accurately and report them.</li><li>➤ Participated in several scientific research projects in the area of water management and treatment and sustainable development.</li><li>➤ External collaborations with other departments and academic institutions (i.e Department of Materials, Textiles and Chemical Engineering).</li></ul>	

- Collaboration with Zhejiang University (China) – Production of biochar from waste material in China and evaluation of its performance on hydroponic water treatment as an inexpensive and efficient technique (Summer2018- FWO scholarship).
- Published several papers in high quality peer reviewed journals and presented at international scientific conferences (i.e. Spain, Belgium).

**Working at company (Fish Farming company, Iran)**

2013- 2015

- In charge of Investigation of Water quality and probable poisonous pollutant in Resources & farms of fish breeding.
- Calibrated instruments and analyzed samples (COD, BOD, DO, GC-MS, EC, pH).
- Tested for microorganisms and contaminants based on standards.
- Worked in a team environment and independently as well to acquire data, analyze and interpret results.
- Wrote daily and monthly reports based on regular water analysis.

**Teaching Assistant** , Azad University of Sari (Iran)  
General chemistry, Mathematics

2011 - 2013

**M. Sc. in Chemical Engineering**

2010 - 2012

Taught with English as the language of instruction the following courses:

Modeling and Simulation, Process Optimization, Advanced Fluid Dynamics, Advanced Thermodynamics, Advanced Reactor kinetics and Design, Advanced Engineering Mathematics.

Thesis title: Fabrication of thin film Nanocomposite membrane for Pepsin and NOM removal and modification (through functionalized TiO<sub>2</sub> nanoparticles) of microporous membranes to enhance membrane surface hydrophilicity.

I was selected as a part of the University-Industry joint project entitled “Treatment of oily wastewater using self-made and commercial nanofiltration membranes”.

2009 - 2010

<https://www.sciencedirect.com/science/article/pii/S0011916410005497>

**Internship** at Borzouyeh Petrochemical Company (Iran)

Summer 2009

Worked as Site Engineer.

**B. Sc. in Chemical Engineering**

2005 - 2010

Thesis title: Treatment of oily wastewater using self-made and commercial nanofiltration membranes.

**PUBLICATIONS** (peer-reviewed journals)

- 
1. **Hosseinzadeh, S.**, Verheust, Y., Bonarrigo, G., & Van Hulle, S. Closed hydroponic systems: operational parameters, root exudates occurrence and related water treatment (2017). Reviews in Environmental Science and Bio/Technology, 1-21.
  2. **Hosseinzadeh, S.**, Bonarrigo, G., Verheust, Y., Roccaro, P., & Van Hulle, S. (2017). Water reuse in closed hydroponic systems: comparison of GAC adsorption, ion exchange and ozonation processes to treat recycled nutrient solution. Aquacultural Engineering.

3. **Hosseinzadeh, S.**, Liu, Z., De Graeve J., BKheet M., Libbrecht W., De Clercq J and Stijn Van Hulle(2019) Recirculating water treatment in closed hydroponic systems: assessment of granular activated carbon and soft templated mesoporous carbon for adsorptive removal of root exudates (just accepted, Environmental Processes Journal, DOI: [10.1007/s40710-019-00347-0](https://doi.org/10.1007/s40710-019-00347-0)).

4. **Hosseinzadeh, S** et al., Effect of UV/H<sub>2</sub>O<sub>2</sub> on root exudates removal and nutrient solution recovery in hydroponic lettuce (Submitted, 2018).

5. Liu, Z., **Hosseinzadeh, S.**, Wardenier, N., Verheust, Y., Chys, M., & Van Hulle, S. (2018). Combining ozone with UV and H<sub>2</sub>O<sub>2</sub> for the degradation of micropollutants from different origins: lab-scale analysis and optimization. Environmental Technology, 1-16.

6. Liu, Z., Wardenier, N., **Hosseinzadeh, S.**, Verheust, Y., De Buyck, P. J., Chys, M., & Van Hulle, S. (2018). Degradation of bisphenol A by combining ozone with UV and H<sub>2</sub>O<sub>2</sub> in aqueous solutions: mechanism and optimization. Clean Technologies and Environmental Policy, 20(9), 2109-2118.

7. **Hosseinzadeh, S** et al., "Treatment of oily wastewater produced by washing of gasoline reserving tanks Using self-made and commercial nanofiltration membranes", Desalination , Volume 265, Issues 1–3, 15 January 2011, Pages 190–198

---

## Skills

**Experimental SKILLS:** Rich experience in working with analytical instruments such as HPLC, GC/MS, FTIR, UV/vis, COD, BOD, DO, pH, EC and etc.

**COMPUTER SKILLS:** Microsoft Word, Microsoft Excel, MATLAB, Corel Draw.

**PERSONAL SKILLS:** Organized, analytical thinker, accurate, leadership and team work skills, communication skills, project scheduling, and business process improvement.

## Miscellaneous

- Available immediately.
  - Driving license B.
- 

## References

---

Prof. Stijn Van Hulle Faculty of Bioscience Engineering <a href="mailto:Stijn.VanHulle@UGent.be">Stijn.VanHulle@UGent.be</a>	Ghent university (Belgium)
--	----------------------------

Dr. Masoud Jabbari Faculty of Mechanical, Aerospace & Civil Engineering <a href="mailto:M.Jabbari@Manchester.ac.uk">M.Jabbari@Manchester.ac.uk</a>	Manchester university (UK)
--	----------------------------

Dr. Wim Audenaert Faculty of Bioscience Engineering <a href="mailto:Wim.Audenaert@AM-TEAM.com">Wim.Audenaert@AM-TEAM.com</a>	Ghent university (Belgium), CEO & co-founder (AM-TEAM)
--	---

---