Faezeh Ahmadi

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Education

M.Sc. in chemical Engineering, *Sahand University of Technology* Sept 2013-Sept 2015
GPA: (3.34 / 4.0)
Thesis: Investigation of ZrO_2 Addition on $CuO/ZnO/Al_2O_3$ Nanocatalyst Performance Used in Steam Reforming of Methanol
Supervisor: Professor Mohammad Haghighi

B.Sc. Chemical Engineering, University of Mohaghegh Ardabili(UMA) Sept 2006 - Sept2010
GPA: (2.43 / 4.0)
Thesis: Investigation of Types of Water Hardness and its Impact on Industrial Facilities
Supervisor: Professor Mariana Moshashaie

Research Interest

- Heterogeneous Catalysis
- Environmental Engineering
- Hydrogen Production

Academic Experience

- **Research Assistant, *University of Science and Technology of Mazandaran*** 2017 - Present
  Manage Research Team, Extensive Experience in Laboratory Skills, Leading Scientific Projects
- **Teaching Assistant, *University of Science and Technology of Mazandaran*** 2017 - Present
  Chemistry Laboratory,
  Mass and Energy Balance
  Introduction to chemical Engineering
  Heat Transfer
- **Research Assistant, *Catalysis Research Center, Sahand University of Technology*** 2013 - 2015
  Conducting Research in heterogeneous Catalysis
- **Teaching Assistant, *University of Mohaghegh Adrabili*** 2009
  Physics Laboratory

Job Experience

- **Production Manager *DANAREF Company,*** 2017-present
  Conducting Research in heterogeneous Catalysis
- **Health and Safety Expert,Pouya Pakhsh Company(food and cosmetic distribution)** 2015-2017
  Monitoring the quality control of food, public health

Publications

- Ajamein, H., & **Ahmadi, F**. (**in preparation**). Heterogeneous catalysis for water treatment: Carbon-based catalysts for heavy metals removal.
- **Ahmadi, F**., Haghighi, M., & Ajamein, H. (**in preparation**). Preparation of $CuO/ZnO/ZrO_2/Al_2O_3$ nanocatalyst for steam methanol reforming process [**Patent**].
- **Ahmadi, F**., Haghighi, M., & Ajamein, H. (2016). Sonochemically assisted co-precipitation synthesis of $CuO/ZnO/ZrO_2/Al_2O_3$ nanocatalyst for fuel cell grade hydrogen production via steam methanol reforming. Journal of Molecular Catalysis A: Chemical, 417, 145–158. https://doi.org/10.1016/j.molcata.2016.05.027

- Motevallian Seyyedi, A., Haghighi, M., & **Ahmadi, F**. (2016, March). Improving the performance of atmospheric hydrogen production by hydrocracking process on CZA modified nanocatalyst using various surface activators. *1st National Conference on Refining Processes*, Tabriz, Iran.
- ***Ahmadi, F**., Haghighi, M., & Ajamein, H. (2015, September). Influence of ultrasound power on physicochemical properties and catalytic performance of $CuO/ZnO/ZrO_2/Al_2O_3$ nanocatalyst used in hydrogen production via methanol reforming. 3rd Hydrogen & Fuel Cell Conference (HFCC3), Iranian Research Organization for Science & Technology (IROST), Tehran, Iran. https://civilica.com/doc/595431*
- ***Ahmadi, F**., Haghighi, M., & Ajamein, H. (2015, July). Application of sonochemical synthesis of $CuO/ZnO/ZrO_2/Al_2O_3$ nanocatalyst for hydrogen production by the steam methanol reforming process.* Iranian Inorganic Chemistry Conference*, Azarbaijan Shahid Madani University, Iran.*
- ***Ahmadi, F**., Haghighi, M., & Ajamein, H. (2015, July). Co-precipitation synthesis of ZrO_2-doped $CuO/ZnO/Al_2O_3$ nanocatalyst used in steam reforming of methanol.* Iranian Inorganic Chemistry Conference*, Azarbaijan Shahid Madani University, Iran.*
- ***Ahmadi, F**., Haghighi, M., & Ajamein, H. (2015, September). Influence of ultrasound power on physicochemical properties and catalytic performance of $CuO/ZnO/ZrO_2/Al_2O_3$ nanocatalyst used in hydrogen production via methanol reforming. 3rd Hydrogen & Fuel Cell Conference (HFCC3), Iranian Research Organization for Science & Technology (IROST), Tehran, Iran. https://civilica.com/doc/595431*

Test scores

IELTS (Academic): **6.5** (Overall score) **Listening:** 7.5, **Writing:** 6.0, **Speaking:** 7.0, **Reading:** 6.0 **Test date:** Aug 2024

Skills

Software	**Aspen HYSYS**
Lab Instrument Skills	Material characterization XPS, XRD, EDX, SEM, BET, FTIR, Gas Chromatography
Editor	Microsoft Office - OneNote

Awards and Honors

- Received a **full tuition waiver** from Sahand University of Technology 2013
- Received a **full tuition waiver** from University of Mohaghegh Ardabili. 2006

Workshop & Congress

- Patents Registration, Sahand University of Technology 2014
- Electronic Resources and Databases, Sahand University of Technology 2013
- HYSYS Software, University of Mohaghegh Ardabili 2007

Certification

- Introduction to Nanotechnology, Sahand University of technology, Tabriz, Iran 2015
- Commercialization of Nanotechnology in the Field of Medicine. Sahand University of Technology 2015
- Safety of Working with Chemicals, Sahand University of Technology 2014

References

- Prof. Mohammad Haghighi ,Founder and director of reactor and catalyst research center(RCRC), faculty of chemical engineering, Sahand University of Technology, Tabriz, Iran
  Email: haghighi@sut.ac.ir, mhaghighip@yahoo.com
- Amir Heydari, Associate Professor, Chemical Engineering Group, Faculty of Engineering, University of Mohaghegh Ardabili, Ardabil – Iran ,Email: Heydari@uma.ac.ir
- Javad Rahbar Shahrouzi ,Associate Professor, Chemical Engineering Group, faculty of chemical engineering, Sahand University of Technology, Tabriz, Iran, Email: shahrouzi@sut.ac.ir