

*Curriculum Vitae*

# Hadis Ebrahimi

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## Education

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| 2014 - 2017 | <b>M.Sc.</b> , Chemical Engineering, Amirkabir University of Technology, Tehran, Iran (GPA: 3.8/4).<br><i>Thesis</i> : Methanol to olefins conversion over nano Al-MCM-41 catalyst: catalyst preparation and performance evaluation. |
| 2009 - 2013 | <b>B.Sc.</b> , Chemical Engineering, Isfahan University of Technology, Isfahan, Iran (GPA: 3.4/4).<br><i>Senior Project</i> : Improved heat transfer through nano-fluid heat exchangers.   |

## Research Experiences

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| 2014 - 2017 | <b>Amirkabir University of Technology</b> <span style="float: right;">Tehran, Iran</span> <ul style="list-style-type: none"><li>• Modeling of methanol to propylene process over a fixed monolithic catalyst bed considering diffusion and reaction. (Supervised by: Prof. R. Hallaj)</li><li>• Natural gas sweetening process designed by non-amine methods. (Supervised by: Dr. M. Soleymani)</li><li>• Adiabatic flame temperature calculation for ethane combustion using MATLAB®. (Supervised by: Dr. M. Rahmani)</li></ul> |
| 2009 - 2013 | <b>Isfahan University of Technology</b> <span style="float: right;">Isfahan, Iran</span> <ul style="list-style-type: none"><li>• Simulation of sulfuric acid plant by Aspen HYSYS. (Supervised by: Dr. M. Amiri)</li><li>• Modeling MTO process in a fixed bed reactor. (Supervised by: Prof. M. Ghoreishi)</li></ul>  |

## Awards and Honors

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| 2014 |  | <i>Waived from Ph.D. entrance exam</i> , Amirkabir University of Technology, Tehran, Iran. |
| 2014 |  | <i>Ranked top 0.5%</i> , Nationwide M.Sc. entrance exam.                                   |
| 2009 |  | <i>Ranked top 0.5%</i> , Nationwide B.Sc. entrance exam.                                   |

## Teaching Assistantship

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| 2013 |  | <i>Unit Operations in Chemical Engineering</i> , Isfahan University of Technology. |
| 2012 |  | <i>Kinetics and Reactor Design</i> , Isfahan University of Technology.             |
| 2010 |  | <i>Material and Energy Balances</i> , Isfahan University of Technology.            |

## Special Training

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| 2012 |  | <i>Industrial Training</i> , Hamedan National Iranian Oil Company, June-Augus 2012, Hamdan, Iran.    |
| 2012 |  | <i>The 12<sup>th</sup> Electric Utility Chemistry Workshop</i> , Amirkabir University of Technology. |

## Skills and Competences

### Analytical

- Experienced in materials and catalysts characterization techniques, such as BET, FT-IR, XRD, SEM-EDAX, XPS, and ICP.
- Proficient in catalyst preparation, such as molecular sieves and zeolites.
- Skillful in experimental design to evaluate heterogeneous catalysts.

### Computer

- *Process modeling* : ApenHYSYS, Aspen Plus
- *Math*: MATLAB  $\mathfrak{S}$ , Design Expert  $\mathfrak{S}$
- *General* : Microsoft Office (Word, Powerpoint, Excel, Visio, Publisher), Adobe (Photoshop, Acrobat)

## Professional Membership

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| 2009 - 2017 |  | The Iranian society of Chemical Engineering. |
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## Languages

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|---------|--|---------------|
| Farsi   |  | Mother tongue |
| English |  | Fluent        |

## Publications

### Journal Papers

1. **H. Ebrahimi**, H. Roohollahi, R Halladj, and S Askari, "Investigation of synthesis of mesoporous MCM-41 nanoparticles supported with Aluminum using D-optimal experimental Design for particle size as response", *Journal of Materials Chemistry and Physics* (under review, 2018).
2. R. Halladj, Ph.D, H. Roohollahi, **H. Ebrahimi**, and S. Askari, " An overall experimental analysis: the effects of synthesis parameters over the range-order degree of mesopore channels in nano-sized Al-MCM-41 " *Journal of Materials Chemistry and Physics* (under review, 2018).

### Conference Presentation

3. **H. Ebrahimi**, R. Halladj, H. Rohollahi, and S. Askari. "Molecular sieve MCM-41: synthetization and characterization", *2<sup>nd</sup> National Conference of Green Engineering and Technologies for a Sustainable Future*, Amirkabir University of Technology, Tehran, Iran, 2016.

### References (available upon request)

1. **Prof. Roein Halladj**  
Chemical Engineering Department,  
Amirkabir University of Technology,  
Tehran, Iran  
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2. **Prof. Hamid Modarres**  
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