



CURRICULUM VITÆ



Seyed Shayan Seif

CONTACT INFORMATION

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EDUCATION

Graduate	Ph.D. in Chemical Engineering School of Chemical Engineering, Faculty of Engineering, University of Tehran GPA: 19.33 / 20	2010 – 2016
Graduate	M.Sc. in Chemical Engineering, [Process Design] School of Chemical Engineering, Faculty of Engineering, University of Tehran GPA: 18.94 / 20	2008 – 2010
Undergraduate	B.Sc. in Chemical Engineering, [Refining / Petrochemical] School of Chemical Engineering, Faculty of Engineering, University of Tehran GPA: 15.79 / 20	2003 – 2008

DISSERTATIONS

Ph.D.	Catalytic Supercritical Water Gasification of Biomass for Hydrogen Production	Dr. Tavakoli
M.Sc.	Experimental Study of Finned Tubes Bonding Effect on Heat Transfer in HRSG Boilers	Dr. Hamidi
B.Sc.	Simulation of Magnesium Stearate Production Process Using Aspen Plus Simulator	Prof. Sotudeh

PROFESSIONAL CARRIERS AND ACTIVITIES

Senior Process Engineer	Nexo-Pro	2017 – Present
Project manager	Haami Project Payam Consultants Company	2015 – 2017
Project manager	ACECR, Tehran Branch	2010 – 2016
Instructor	Risk Management Workshops	2013 – Present
Instructor	Carbon Management Workshops	2014 – Present
Invited Instructor	Islamic Azad University, Tehran	2012 – 2017
Research assistant	Green Technologies Lab., University of Tehran	2011 – 2015
Teaching assistant	Faculty of Chemical Engineering, University of Tehran	2010 – 2013
Apprentice	Tehran Oil Refinery, Wastewater Treatment Plant	2008
Director	Scientific Association of Chemical Engineering Students	2007-2008

INDUSTRIAL PROJECTS

Project Title:	GHG Emission Evaluation from Natural Gas Distribution Network in Yazd Province		
Client:	Semnan Gas Company	Responsibility:	Project Manager
Contractor:	Oil, Gas & Petrochemical Center – ACECR	Date:	2017
Project Title:	Methanol Derivatives Screening and Feasibility Study		
Client:	Zagros Petrochemical Company	Responsibility:	Local Associate
Contractor:	Nexant Ltd.	Date:	2016 – 2017
Project Title:	Methanol Derivatives Screening and Feasibility Study		
Client:	ThinkXpert Company	Responsibility:	Technical Expert
Contractor:	Haami Project Payam Consultant Company	Date:	2016 – 2017
Project Title:	Assessment of Natural Gas Emission Reduction Potentials in Gas Distribution Network		
Client:	Isfahan Gas Company	Responsibility:	Project Manager
Contractor:	Haami Project Payam Consultant Company	Date:	2016 – 2017

Project Title:	GHG Emission Evaluation from Natural Gas Distribution Network in Yazd Province		
Client:	Yazd Gas Company	Responsibility:	Project Manager
Contractor:	Oil, Gas & Petrochemical Center – ACECR	Date:	2016 – 2017
Project Title:	HAZOP Study for Desalting Unit - Ramshir		
Client:	NISOC – National Iranian South Oil Company	Responsibility:	HAZOP Scribe
Contractor:	Hirgan Energy Eng. Company	Date:	2016
Project Title:	HAZOP Study for New Demercaptanization Unit in Ilam Gas Refinery Company		
Client:	Arian Tejarat Mana Company	Responsibility:	HAZOP Leader
Contractor:	Independently	Date:	2015
Project Title:	HAZOP Study for Vacuum Distillation Unit in Lavan Oil Refinery		
Client:	Laval Oil Refinery	Responsibility:	HAZOP Leader
Contractor:	Independently	Date:	2015
Project Title:	HAZOP Study for MDHD Unit		
Client:	Arya Sasol Polymer Company	Responsibility:	HAZOP Scribe
Contractor:	Independently	Date:	2015
Project Title:	HAZOP Study for Sure and Acid Gas Gathering from NGL and MIS Units		
Client:	NISOC – National Iranian South Oil Company	Responsibility:	HAZOP Scribe
Contractor:	Hirgan Energy Eng. Company	Date:	2015
Project Title:	Identification, Assessment and Education of Hazards and Development of a Comprehensive Procedure for Crisis Management, According to Risk Assessment		
Client:	East Azarbayjan Gas Company	Responsibility:	Executive Manager
Contractor:	Oil, Gas & Petrochemical Center – ACECR	Date:	2014 – 2016
Project Title:	HAZOP Study for Oil Production Unit – Chechme Khosh		
Client:	West Oil and Gas Production Company	Responsibility:	HAZOP Scribe
Contractor:	Famor Mehr Persia Company	Date:	2015
Project Title:	HAZOP Study for Oil Production Unit – Naft Shahr		
Client:	West Oil and Gas Production Company	Responsibility:	HAZOP Scribe
Contractor:	Famor Mehr Persia Company	Date:	2015
Project Title:	Hydrothermal Liquefaction of Oily, Biological and Chemical Sludge to Bio-Crude Oil in Isfahan Oil Refinery		
Client:	Asre Sarira Industrial Commercial Group	Responsibility:	Technical Manager
Contractor:	University of Tehran	Date:	2014 - 2016
Project Title:	Greenhouse Gas Emissions Evaluation from Gas Transmission Facilities in Iran		
Client:	NIGTC – National Iranian Gas Transmission Company	Responsibility:	Project Manager
Contractor:	ACECR + RIPI	Date:	2013 - 2014
Project Title:	Process Risk Assessment Using HAZOP and FMEA Techniques on Gas Distribution Network		
Client:	Guilan Gas Company	Responsibility:	Project Manager
Contractor:	Oil, Gas & Petrochemical Center – ACECR	Date:	2013 - 2014
Project Title:	Process Risk Assessment Using HAZOP Technique on Gas Distribution Network		
Client:	East Azarbayjan Gas Company	Responsibility:	HAZOP Scribe
Contractor:	Oil, Gas & Petrochemical Center – ACECR	Date:	2013
Project Title:	HAZOP Study for Desalting Unit – New KOOPAL and Pazanan		
Client:	NISOC – National Iranian South Oil Company	Responsibility:	HAZOP Scribe
Contractor:	Hirgan Energy Eng. Company	Date:	2013
Project Title:	HAZOP Study for LDPE Unit		
Client:	Arya Sasol Polymer Company	Responsibility:	HAZOP Scribe
Contractor:	Independently	Date:	2013
Project Title:	Feasibility Study of Renewable Energies as Alternative for Ship Fuel		
Client:	Daryaban Jonoub Iran Kish Ltd.	Responsibility:	Supervisor
Contractor:	University of Tehran	Date:	2013
Project Title:	Foresight on Petrochemical Industry of Iran		
Client:	NIPC – National Iranian Petrochemical Company	Responsibility:	Advisor
Contractor:	Independently	Date:	2013
Project Title:	Methane Emission Evaluation from Natural Gas Distribution Network in Khorasan Razavi		
Client:	Khorasan Razavi Gas Company	Responsibility:	Engineer
Contractor:	Oil, Gas & Petrochemical Center – ACECR	Date:	2010 – 2012

RESEARCH PROJECTS

- Hydrogen production using supercritical water gasification of waste biomass (Negah No Institute)
- Feasibility study of distillery wastewater treatment using supercritical water (University of Tehran)
- Feasibility study of petrochemical wastewater treatment using supercritical water (University of Tehran)
- Advanced materials production by supercritical fluid technology (University of Tehran)
- Process integration using pinch and exergy analysis
- Simulation of magnesium stearate production process using Aspen Plus simulator (University of Tehran)
- Feasibility study of integrated petrochemical refineries complexes in Iran
- Experimental investigation of fin-to-tube bonding effect on heat transfer characteristics of HRSG boilers in combined cycle power plants (Mapna Group)

CERTIFICATES

Safety Integrity Level (SIL) workshop	University of Tehran	2012
Designing of Natural Gas refineries workshop	University of Tehran	2011
Gambit & Fluent (CFD Simulation software)	University of Tehran	2009
PDMS (Simulation software)	University of Tehran	2009
Hysys (Simulation software)	University of Tehran	2009
Aspen Plus (Simulation software)	Behran Oil Company	2007

MEMBERSHIPS

- Iranian National Elites Foundation
- Iranian Energy Association (IEA), Associate Member
- Iranian Association of Chemical Engineering (IACHE), Associate Member
- Iranian Hydrogen and Fuel Cell Association (IHFCA), Associate Member
- Iranian Gas Engineering Association (IGEA), Dependent Member
- Iran Society of Engineering Education, Associate Member
- Alumni Association of Faculty of Engineering, University of Tehran, Member

PUBLICATIONS AND PAPERS

- [1] Sh. Seif, "Methods of Error Analysis in Safety Management of Processes and Investigation of Deviations in Operational Parameters", Third National Conference on Safety Engineering and HSE Management, March (2010), Tehran, Iran.
- [2] Sh. Seif, "Optimization of the Catalytic Epoxidation of Oleic Acid in Different Types of Reactors and Operating Conditions", National Conference of Chemical Engineering, March (2010), Islamshahr, Iran.
- [3] Sh. Seif, A.A. Hamidi, M. Faghedi, "An Experimental Investigation on Performance of Helically Serrated Finned-Tubes with Different Fin-to-Tube Bonding Extent in Forced Convection", International Conference on "Thermal Energy and Environment, March (2011), Madurai, India.
- [4] H. Fatoorehchi, H. Abolghasemi, Sh. Seif "Application of Integral Approximation Method to Study Heat Conduction in Triangular Fins", International Conference on Thermal Energy and Environment, March (2011), Madurai, India
- [5] Sh. Seif, A.A. Hamidi, M. Faghedi, "Experimental Determination of Thermal Contact Resistance of Helically Serrated Finned Tubes with Different Bonding Extents", 3rd Conference on Thermal Power Plants, October (2011), Tehran, Iran.
- [6] S. Yousefzadegan, Sh. Seif, M. Niknaam, A.M. Masoudi Ashtiani, Y. Kazemi Ashtiani, I. Pishbin, H. Sheikhani, "Methane Emission Evaluation from Natural Gas Distribution Network in Khorasan Razavi Province of Iran", 2nd Int. Conf. on Emerging Trends in Energy Conservation, February (2013), Tehran, Iran.
- [7] Sh. Seif, M. Niknaam, S. Yousefzadegan, A.M. Masoudi Ashtiani, Y. Kazemi Ashtiani, I. Pishbin, H. Sheikhani, "Methane Emission Measurement from Natural Gas Distribution Network in Khorasan Razavi Province of Iran", 1st Int. Conf. on Environmental Crises and its Solutions, February (2013), Kish, Iran.
- [8] Sh. Seif, O. Tavakoli, "Hydrogen Production Using Supercritical Water Gasification", 1st National Conference on Hydrogen (Production, Storage, Consumption), (2013), Isfahan, Iran.
- [9] N. Kazemi, O. Tavakoli, Sh. Seif, M. Nahangi, "Distillery Wastewater Treatment Using Hydrothermal Process", 3rd National Conference on Fuel, Energy and Environment, (2013), Tehran, Iran.
- [10] M. Nahangi, O. Tavakoli, Sh. Seif, N. Kazemi, "Petrochemical Wastewater Treatment Using Supercritical Water", 1st National Conference and Exhibition on Environment, Energy and Clean Industry, (2013), Tehran, Iran.

- [11] **Sh. Seif**, O. Tavakoli, "Supercritical Water Gasification of Biomass – Mapping of Knowledge on Thermodynamic Studies", 14th European Meeting on Supercritical Fluids, May (2014), Marseilles, France.
- [12] N. Kazemi, O. Tavakoli, **Sh. Seif**, M. Nahangi, "High-Strength Distillery Wastewater Treatment Using Catalytic Sub- and Supercritical Water", The Journal of Supercritical Fluids, (2015), Vol. 79, 74-80.
- [13] **Sh. Seif**, O. Tavakoli, H. Bahmanyar, Sh. Fatemi, "Subcritical Water Gasification of Biomass for Hydrogen Production – Gas Product Composition", the 15th Iranian National Congress of Chemical Engineering, Feb. (2015), Tehran, Iran.
- [14] **Sh. Seif**, O. Tavakoli, Sh. Fatemi, H. Bahmanyar, "Subcritical Water Gasification of Biomass for Hydrogen Production – Gasification Efficiency and Hydrogen Selectivity", the 15th Iranian National Congress of Chemical Engineering, Feb. (2015), Tehran, Iran.
- [15] **Sh. Seif**, O. Tavakoli, Sh. Fatemi, H. Bahmanyar, "Subcritical Water Gasification of Beet-based Distillery Wastewater for Hydrogen Production", The Journal of Supercritical Fluids, 104 (2015) 212-220.
- [16] **Sh. Seif**, Sh. Fatemi, O. Tavakoli, H. Bahmanyar, "Hydrogen Production through Hydrothermal Gasification of Industrial Wastewaters using Transition Metal Oxide Catalysts", The Journal of Supercritical Fluids, 114 (2016) 32-45.
- [17] Sh. Seif, S. Yousefzadegan, "Emission Estimation and Reduction of Methane in Iran's Distribution Network – Current Status and Development Recommendations", 1st International Conference on Climate Change, (2017), Tehran, Iran.
- [18] Sh. Seif, O. Tavakoli, "Hydrogen generation by supercritical water gasification of biomass: Process optimization", 4th Hydrogen and Fuel Cell Conference, May (2017), Tehran, Iran.