Curriculum Vitae 2020

1-Personal Information

Family Name: Hormozi
First Name: Faramarz
Date of Birth: 1968 July 19
Place of Birth: Gorgan-Iran
Marital Status: Married
Nationality: Iranian

Address: Faculty of Chemical, Petroleum, and Gas Engineering, Semnan University,
P.O. Box: 35196–45399
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2-Education

- *PhD. Amir Kabir University* Tehran, Iran (2001)

Main Subject: Gas liquid two phase flow, Agitated Vessel, Laser Doppler Anemometry and CFD modeling.

Thesis: Experimental Investigation and CFD Modeling of Two-Phase Flows in an Agitated Vessel.

- *MSc. Tehran University Tehran, IRAN (1995)*

Main Subject: Evaluation of the Rheology and Kinetics Reaction of polymers.

Thesis: Investigation of the Curing Kinetics and Rheological Behavior of Epoxy.

- *BSc. Tehran University Tehran, IRAN (1992)*

3-Research Interest

- ☑ Process Engineering
- ☑ Transport Phenomena (Heat transfer)
- ☑ Computation Fluid Dynamics Modeling
- ☑ Nano fluid Rheology and Heat transfer
- ☑ Boiling Heat transfer (flow and pool boiling)
- ☑ Hydrogen Production and Purification

4-Experience

2002-Now Member of academic staff

2005-2013	vice president for Research and Technology
2014-2016	Vice-Chairman for Education, Nano Tech. Faculty
2016-2019	Dean of Nano Tech. Faculty
2019-Now	Dean of Faculty of Chemical, Petroleum, and Gas Engineering

5- *Teaching Courses*

PhD: Transport Phenomena, Convection Heat transfer, Special Topic, Two Phase Flow.

MS: Advance Fluid Mechanic, Computation Fluid Dynamics, Advance Reactor Design

Bs: Fluid Mechanic, Chemical Process Control,

6- Skills

Chemical Process Engineering, Equipment Design , pilot plant research.
Chemical Process Control,

7- Journal Paper

2020

A second law analysis for turbulent convective flow through panel type radiator equipped with vortex generators
M Hemmat, F Hormozi
Journal of Thermal Analysis and Calorimetry, 1-11

Abilities of porous materials for energy saving in advanced thermal systems
S Rashidi, F Hormozi, MH Doranehgard
Journal of Thermal Analysis and Calorimetry, 1-16

Second law analysis for nanofluid flow in mini-channel heat sink with finned surface: a study on fin geometries
M Azadi, E Hosseinirad, F Hormozi, S Rashidi
Journal of Thermal Analysis and Calorimetry 140 (4), 1883-1895

Design improvement in a stepped solar still based on entropy generation minimization
S Ashtiani, F Hormozi
Journal of Thermal Analysis and Calorimetry 140 (3), 1095-1106

Energy harvesting materials: overview
S Rashidi, N Karimi, F Hormozi
Elsevier

Potentials of boiling heat transfer in advanced thermal energy systems
S Rashidi, F Hormozi, MM Sarafraz
Journal of Thermal Analysis and Calorimetry, 1-22

Fundamental and subphenomena of boiling heat transfer
S Rashidi, F Hormozi, MM Sarafraz
Journal of Thermal Analysis and Calorimetry, 1-18

Heat Transfer Improvement in a Wavy Vortex Generator Miniature Channel Using Nanofluids
E Hosseinirad, F Hormozi
Heat Transfer Engineering, 1-22

Classifications of Porous Materials for Energy Applications
S Rashidi, JA Esfahani, F Hormozi
Elsevier

2019
Effects of splitter shape on thermal-hydraulic characteristics of plate-pin-fin heat sink (PPFHS)
E Hosseinirad, M Khoshvaght-Aliabadi, F Hormozi
International Journal of Heat and Mass Transfer 143, 118586

Evaluation of heat transfer and pressure drop in a mini-channel using transverse rectangular vortex-generators with various non-uniform heights
E Hosseinirad, M Khoshvaght-Aliabadi, F Hormozi
Applied Thermal Engineering 161, 114196

Energy saving in thermal energy systems using dimpled surface technology–A review on mechanisms and applications
S Rashidi, F Hormozi, B Sundén, O Mahian
Applied Energy 250, 1491-1547

Prediction of Al_2O_3–water nanofluids pool boiling heat transfer coefficient at low heat fluxes by using response surface methodology
H Salehi, F Hormozi
Journal of Thermal Analysis and Calorimetry 137 (3), 1069-1082

Optimization of thermal and hydraulic performance of nanofluids in a rectangular miniature-channel with various fins using response surface methodology
Z Sarbazi, F Hormozi
Journal of Thermal Analysis and Calorimetry 137 (3), 711-733

A numerical investigation on H2 separation by a conical palladium membrane
FM Ghohe, F Hormozi
International Journal of Hydrogen Energy 44 (21), 10653-10665

Hydrogen production from steam reforming of ethanol over Ni-Co bimetallic catalysts and MCM-41 as support
T Nejat, P Jalalinezhad, F Hormozi, Z Bahrami
Journal of the Taiwan Institute of Chemical Engineers 97, 216-226

Thermal performance enhancement in a miniature channel using different passive methods
E Hosseinirad, F Hormozi
Journal of Thermal Analysis and Calorimetry 135 (3), 1849-1861

Three-Dimensional Numerical Study on Thermal-Hydraulic Performance of Twisted Mini-Channel Using Al_2O_3-H_2O Nanofluid
E Hosseinirad, M Khoshvaght-Aliabadi, F Hormozi
Heat Transfer Engineering, 1-17

An experimental study on the spray characteristics of pressure nozzle in a fluid bed granulation
M Sanaei-Moghadam, M Jahangiri, F Hormozi
Particulate Science and Technology 37 (1), 39-50

An experimental study on hydraulic and thermal performances of hybrid nanofluids in mini-channel

S Hashemzadeh, F Hormozi
Journal of Thermal Analysis and Calorimetry, 1-13

2018

Potential applications of inserts in solar thermal energy systems–a review to identify the gaps and frontier challenges
S Rashidi, MH Kashefi, F Hormozi
Solar Energy 171, 929-952

Numerical study of silica-water based nanofluid nucleate pool boiling by two-phase Eulerian scheme
H Salehi, F Hormozi
Heat and Mass Transfer 54 (3), 773-784

Performance intensification of miniature channel using wavy vortex generator and optimization by response surface methodology: MWCNT-H2O and Al2O3-H2O nanofluids as coolant fluids
E Hosseinirad, F Hormozi
Chemical Engineering and Processing-Process Intensification 124, 83-96

2017

Use of experimental design to investigate the coating process of sodium bicarbonate in a conical fluidized bed
M Sanaie-Moghadam, F Hormozi, M Jahangiri
Powder technology 319, 210-220

Low-frequency vibration for fouling mitigation and intensification of thermal performance of a plate heat exchanger working with CuO/water nanofluid
MM Sarafraz, V Nikkhah, SA Madani, M Jafarian, F Hormozi
Applied Thermal Engineering 121, 388-399

Influence of shape, number, and position of horizontal minifins on thermal-hydraulic performance of minichannel heat sink using nanofluid
E Hosseinirad, F Hormozi
Heat Transfer Engineering 38 (9), 892-903

New correlations to predict the thermal and hydraulic performance of different longitudinal pin fins as vortex generator in miniature channel: Utilizing MWCNT-water and Al2O3 …
E Hosseinirad, F Hormozi
Applied Thermal Engineering 118, 199-213

Convective heat transfer and pressure drop study on nanofluids in double-walled reactor by developing an optimal multilayer perceptron artificial neural network
AM Ghahdarijani, F Hormozi, AH Asl
International Communications in Heat and Mass Transfer 84, 11-19

On the convective thermal performance of a CPU cooler working with liquid gallium and CuO/water nanofluid: A comparative study
MM Sarafraz, A Arya, F Hormozi, V Nikkhah
Applied Thermal Engineering 112, 1373-1381

OPTIMIZATION OF SODIUM PERCARBONATE GRANULATION PROCESS IN A TOP SPRAY CONICAL FLUIDIZED BED
S TAVAKOLI, F HORMOZI
NASHRIEH SHIMI VA MOHANDESI SHIMI IRAN (PERSIAN) 36 (1), 193-205

Thermal behavior of aqueous iron oxide nano-fluid as a coolant on a flat disc heater under the pool boiling condition
E Salari, SM Peyghambarzadeh, MM Sarafraz, F Hormozi, V Nikkhah
Heat and Mass Transfer 53 (1), 265-275

2016

An experimental investigation on the effects of surfactants on the thermal performance of hybrid nanofluids in helical coil heat exchangers
F Hormozi, B ZareNezhad, HR Allahyar
International Communications in Heat and Mass Transfer 78, 271-276

Thermal performance of a counter-current double pipe heat exchanger working with COOH-CNT/water nanofluids
MM Sarafraz, F Hormozi, V Nikkhah
Experimental Thermal and Fluid Science 78, 41-49

Using conical reactor to improve efficiency of ethanol steam reforming
TK Dehkordi, F Hormozi, M Jahangiri
International Journal of Hydrogen Energy 41 (38), 17084-17092

Boiling heat transfer of alumina nano-fluids: role of nanoparticle deposition on the boiling heat transfer coefficient
E Salari, M Peyghambarzadeh, MM Sarafraz, F Hormozi
Periodica Polytechnica Chemical Engineering 60 (4), 252-258

Experimental investigation on the thermal performance of a coiled heat exchanger using a new hybrid nanofluid
HR Allahyar, F Hormozi, B ZareNezhad
Experimental Thermal and Fluid Science 76, 324-329

Investigation on heat transfer and pressure drop of copper–water nanofluid flow in plain and perforated channels
M Khoshvaght-Aliabadi, F Hormozi
Experimental Heat Transfer 29 (4), 427-444

An empirical study on vortex-generator insert fitted in tubular heat exchangers with dilute Cu–water nanofluid flow
M Khoshvaght-Aliabadi, MH Akbari, F Hormozi
Chinese journal of chemical engineering 24 (6), 728-736

Pool boiling heat transfer of water/γ-alumina micro-fluids around the horizontal cylinder
V Nikkhah, F Hormozi
Heat and Mass Transfer 52 (4), 763-772

Pool boiling heat transfer to aqueous alumina nano-fluids on the plain and concentric circular micro-structured (CCM) surfaces
MM Sarafraz, F Hormozi, SM Peyghambarzadeh
Experimental Thermal and Fluid Science 72, 125-139

Heat transfer, pressure drop and fouling studies of multi-walled carbon nanotube nano-fluids inside a plate heat exchanger
MM Sarafraz, F Hormozi
Experimental Thermal and Fluid Science 72, 1-11

On the fouling formation of functionalized and non-functionalized carbon nanotube nano-fluids under pool boiling condition
MM Sarafraz, F Hormozi, M Silakhori, SM Peyghambarzadeh
Applied Thermal Engineering 95, 433-444

Experimental investigation on the pool boiling heat transfer to aqueous multi-walled carbon nanotube nanofluids on the micro-finned surfaces
MM Sarafraz, F Hormozi
International Journal of Thermal Sciences 100, 255-266

Boiling thermal performance of TiO2 aqueous nanofluids as a coolant on a disc copper block
E Salari, SM Peyghambarzadeh, MM Sarafraz, F Hormozi
Periodica Polytechnica Chemical Engineering 60 (2), 106-122

Experimental study of stability of deionized water based copper oxide nanofluid and achievement to the optimal stability conditions
GM KAMAL, SAH Zamzamian, F Hormozi
JOURNAL OF MECHANICAL ENGINEERING AMIRKABIR (AMIRKABIR) 48 (1), 9-12

Thermal performance and viscosity of biologically produced silver/coconut oil nanofluids
MM Sarafraz, A Arya, V Nikkhah, F Hormozi
Chemical and biochemical engineering quarterly 30 (4), 489-500

Al2O3–water nanofluid inside wavy mini-channel with different cross-sections
M Khoshvaght-Aliabadi, SEH Rad, F Hormozi
Journal of the Taiwan Institute of Chemical Engineers 58, 8-18

Critical heat flux and pool boiling heat transfer analysis of synthesized zirconia aqueous nano-fluids
MM Sarafraz, T Kiani, F Hormozi
International Communications in Heat and Mass Transfer 70, 75-83

Experimental Study of the Stability of Deionized Water Based Copper Oxide Nanofluid and Achievement to the Optimal Stability Conditions
M Kamalgharibi, SAH Zamzamian, F Hormozi
Amirkabir Journal of Mechanical Engineering 48 (1), 17-30

Experimental studies on the stability of CuO nanoparticles dispersed in different base fluids: influence of stirring, sonication and surface active agents
M Kamalgharibi, F Hormozi, SAH Zamzamian, MM Sarafraz
Heat and Mass transfer 52 (1), 55-62

Comparatively experimental study on the boiling thermal performance of metal oxide and multi-walled carbon nanotube nanofluids
MM Sarafraz, F Hormozi
Powder Technology 287, 412-430

Application of Nano-Fluids to Heat Transfer Enhancement in Double-Walled Reactor
AM Ghahdarijani, F Hormozi, AH Asl
J Chem Eng Process Technol 7, 1-8

2015

Comparative analysis on thermal–hydraulic performance of curved tubes: Different geometrical parameters and working fluids
M Khoshvaght-Aliabadi, M Tavasoli, F Hormozi
Energy 91, 588-600

Application of spherical copper oxide (II) water nano-fluid as a potential coolant in a boiling annular heat exchanger
V Nikkhah, MM Sarafraz, F Hormozi
Chemical and biochemical engineering quarterly 29 (3), 405-415

Heat transfer enhancement by using copper–water nanofluid flow inside a pin channel
M Khoshvaght-Aliabadi, F Hormozi
Experimental Heat Transfer 28 (5), 446-463

Intensification of forced convection heat transfer using biological nanofluid in a double-pipe heat exchanger
MM Sarafraz, F Hormozi

Experimental Thermal and Fluid Science 66, 279-289

Upward Flow Boiling to DI-Water and Cuo Nanofluids Inside the Concentric Annuli.
MM Sarafraz, F Hormozi, SM Peyghambarzadeh, N Vaeli
Journal of Applied Fluid Mechanics 8 (4)

Reduction kinetics of cobalt oxide powder by methane in a fluidized bed reactor
S Shirchi, B Khoshandam, F Hormozi
Journal of the Taiwan Institute of Chemical Engineers 51, 171-176

Corrigendum to ‘‘Experimental studies on the effect of water contaminants in convective boiling heat transfer’’[Ain Shams Eng. J. 5 (2)(2014) 553–568]
MM Sarafraz, F Hormozi
Ain Shams Engineering Journal 6 (2), 723

Role of nanofluid fouling on thermal performance of a thermosyphon: Are nanofluids reliable working fluid?
MM Sarafraz, F Hormozi, SM Peyghambarzadeh
Applied Thermal Engineering 82, 212-224

Pool boiling heat transfer to dilute copper oxide aqueous nanofluids
MM Sarafraz, F Hormozi
International Journal of Thermal Sciences 90, 224-237

Determination of stationary region boundary in multiple reference frames method in a mixing system agitated by Helical Ribbon Impeller using CFD
M Sanaie-Moghadam, M Jahangiri, F Hormozi
Journal of Heat and Mass Transfer Research 2 (1), 31-37

Experimental study of Cu–water nanofluid forced convective flow inside a louvered channel
M Khoshvaght-Aliabadi, F Hormozi, A Zamzamian
Heat and Mass Transfer 51 (3), 423-432

Heat transfer of Cu–water nanofluid in parallel, corrugated, and strip channels
M Khoshvaght-Aliabadi, F Hormozi
Journal of Thermophysics and Heat Transfer 29 (4), 747-756

Performance of a plate-fin heat exchanger with vortex-generator channels: 3D-CFD simulation and experimental validation
M Khoshvaght-Aliabadi, S Zangouei, F Hormozi
International Journal of Thermal Sciences 88, 180-192

Heat Transfer of Cu–Water Nanofluid in Parallel, Corrugated, and Strip Channels
F Hormozi, M Khoshvaght-Aliabadi
AIAA: American Institute of Aeronautics and Astronautics

Drying kinetics of coated sodium percarbonate particles in a conical fluidized bed dryer
S Hematian, F Hormozi
Powder technology 269, 30-37

Particulate fouling of CuO–water nanofluid at isothermal diffusive condition inside the conventional heat exchanger-experimental and modeling
V Nikkhah, MM Sarafraz, F Hormozi, SM Peyghambarzadeh
Experimental Thermal and Fluid Science 60, 83-95

2014

Mixing enhancement in a passive micromixer with convergent–divergent sinusoidal microchannels and different ratio of amplitude to wave length

MK Parsa, F Hormozi, D Jafari
Computers & Fluids 105, 82-90

Experimental study on the thermal performance and efficiency of a copper made thermosyphon heat pipe charged with alumina–glycol based nanofluids
MM Sarafraz, F Hormozi
Powder technology 266, 378-387

Nucleate pool boiling heat transfer characteristics of dilute Al2O3–ethyleneglycol nanofluids
MM Sarafraz, F Hormozi
International Communications in Heat and Mass Transfer 58, 96-104

Thermal performance and efficiency of a thermosyphon heat pipe working with a biologically ecofriendly nanofluid
MM Sarafraz, F Hormozi, SM Peyghambarzadeh
International Communications in Heat and Mass Transfer 57, 297-303

Experimental determination of bubble size in solution of surfactants of the bubble column
M Asari, F Hormozi
Global Journal of Research In Engineering

Reforming Integrated with Oxidation in Micro-Heat Exchanger Reactor with Circular Micro-Channels
F Hormozi, E Omidbakhsh Amiri, H Jelveh
Iranian Journal of Hydrogen & Fuel Cell 1 (2), 65-74

Effects of geometrical parameters on performance of plate-fin heat exchanger: vortex-generator as core surface and nanofluid as working media
M Khoshvaght-Aliabadi, F Hormozi, A Zamzamian
Applied Thermal Engineering 70 (1), 565-579

Sedimentation and convective boiling heat transfer of CuO-water/ethylene glycol nanofluids
MM Sarafraz, F Hormozi, M Kamalgharibi
Heat and Mass Transfer 50 (9), 1237-1249

Experimental studies on the effect of water contaminants in convective boiling heat transfer
MM Sarafraz, F Hormozi
Ain Shams Engineering Journal 5 (2), 553-568

Experimental study on the influence of SO_2 gas injection to pure liquids on pool boiling heat transfer coefficients
MM Sarafraz, F Hormozi, SM Peyghambarzadeh, E Salari
Heat and Mass Transfer 50 (6), 747-757

New correlations for wavy plate-fin heat exchangers: different working fluids
M Khoshvaght Aliabadi, F Hormozi, E Hosseini Rad
International Journal of Numerical Methods for Heat & Fluid Flow 24 (5 …

Experimental and CFD modeling of fluid mixing in sinusoidal microchannels with different phase shift between side walls
MK Parsa, F Hormozi
Journal of Micromechanics and Microengineering 24 (6), 065018

Role of channel shape on performance of plate-fin heat exchangers: experimental assessment
M Khoshvaght-Aliabadi, F Hormozi, A Zamzamian
International Journal of Thermal Sciences 79, 183-193

Convective boiling and particulate fouling of stabilized CuO-ethylene glycol nanofluids inside the

annular heat exchanger
MM Sarafraz, F Hormozi
International Communications in Heat and Mass Transfer 53, 116-123

Wavy channel and different nanofluids effects on performance of plate-fin heat exchangers
M Khoshvaght-Aliabadi, A Zamzamian, F Hormozi
Journal of Thermophysics and Heat Transfer 28 (3), 474-484

Performance analysis of mass transfer of hollow fiber hemodialyser with ultrafiltration and varied dialysate concentration
M Kamali, F Hormozi, G Karimi
2nd Middle East Conference on Biomedical Engineering, 216-219

Application of thermodynamic models to estimating the convective flow boiling heat transfer coefficient of mixtures
MM Sarafraz, F Hormozi
Experimental Thermal and Fluid Science 53, 70-85

Methanol steam reforming integrated with oxidation in a conical annulus micro-reactor
EO Amiri, F Hormozi, B Khoshandam
International Journal of Hydrogen Energy 39 (2), 761-769

Scale formation and subcooled flow boiling heat transfer of CuO–water nanofluid inside the vertical annulus
MM Sarafraz, F Hormozi
Experimental Thermal and Fluid Science 52, 205-214

Experimental studies on the pward convective boiling flow to DI-water and CuO nanofluids inside the annulus
M Sarafraz, S Peyghambarzadeh, F Hormozi, N Vaelim
Journal of Applied Fluid Mechanics 9

Forced convective and nucleate flow boiling heat transfer to alumnia nanofluids
MM Sarafraz, F Hormozi
Periodica Polytechnica Chemical Engineering 58 (1), 37-46

DEVELOPMENT OF HIGH-SPEED PHOTOGRAPHY AND IMAGE PROCESSING METHOD FOR THE CHARACTERIZATION OF BUBBLES IN A BUBBLE COLUMN
H ASADI, F HORMOZI
NASHRIEH SHIMI VA MOHANDESI SHIMI IRAN (PERSIAN) 32 (470), 71-80

Nucleate pool boiling heat transfer characteristics of dilute Al_2O_3-ethyleneglycol nanofluids
M Sarafraz, F Hormozi
Elsevier

Wavy Channel and Different Nanofluids Effects on Performance of Plate-Fin Heat Exchangers
F Hormozi, M Khoshvaght-Aliabadi, A Zamzamian
AIAA: American Institute of Aeronautics and Astronautics

Qualitative investigation of the convective boiling heat transfer of dilute Al2O3-water/glycerol solution inside the vertical annuli
M Sarafraz, F Hormozi
Bulg Chem Commun 46, 645-651

Experimental analysis of thermal–hydraulic performance of copper–water nanofluid flow in different plate-fin channels
M Khoshvaght-Aliabadi, F Hormozi, A Zamzamian
Experimental thermal and fluid science 52, 248-258

2013

Effect of wave-and-lance length variations on performance of wavy and offset strip plate-fin heat exchangers
M Khoshvaght-Aliabadi, F Hormozi
Arabian Journal for Science and Engineering 38 (12), 3515-3529

Performance analysis of plate-fin heat exchangers: different fin configurations and coolants
MK Aliabadi, F Hormozi
Journal of Thermophysics and Heat Transfer 27 (3), 515-525

Effects of surfactant on bubble size distribution and gas hold-up in a bubble column
M Asari, F Hormozi
Am J Chem Eng 1 (2), 50-58

2011

3D-CFD simulation and neural network model for the j and f factors of the wavy fin-and-flat tube heat exchangers
M Khoshvaght Aliabadi, M Gholam Samani, F Hormozi, A Haghighi Asl
Brazilian Journal of Chemical Engineering 28 (3), 505-520

Effect of Wave Amplitude on Thermal Performance of the Wavy-Fin-Plate Compact Heat Exchanger: A Numerical Study and Presentation of New Correlations
SE Hosseinirad, AM KHOSHVAGHT, F Hormozi
JOURNAL OF SEPARATION AND TRANSPORT PHENOMENA (JOURNAL OF SCHOOL OF …

2010

Computational Fluid Dynamics Modeling of a Fluid Catalytic Cracking Atomizer
V Abdolkarimi, F Hormozi, AJ Jolodar
Journal of chemical engineering of Japan 43 (4), 363-373

2009

SUBCRITICAL WATER EXTRACTION OF ESSENTIAL OILS FROM *ZATARIA MULTIFLORA* BOISS
M Khajenoori, AH Asl, F Hormozi, MH Eikani, HN Bidgoli
Journal of food process engineering 32 (6), 804-816

Proposed models for subcritical water extraction of essential oils
M Khajenoori, AH Asl, F Hormozi
Chinese journal of chemical engineering 17 (3), 359-365

亚临界水萃取植物精油的模型 (英文)
M Khajenoori, AH Asl, F Hormozi
Chinese Journal of Chemical Engineering, 3

2008

Eulerian Modeling of a Circulating Fluidized Bed, including Mean Particle Diameter
E Omidbakhsh, F Hormozi, A HAGHIGHI

Experimental investigation on the thermal performance and new correlation for thermal conductivity of aqueous copper oxide-doped MCM-41 nanofluids
FM Kiaee, Z Bahrami, F Hormozi
Journal of Thermal Analysis and Calorimetry, 1-13

Design improvement in a stepped solar still based on entropy generation minimization
S Ashtiani, F Hormozi
Journal of Thermal Analysis and Calorimetry, 1-12

۱-مجری طرح کلان ملی ایجاد دانش فنی خالص سازی سیلیکون خورشیدی و احداث پایلوت تولیدی در کشور

۲-مجری ایجاد آزمایشگاه تحقیقاتی هیدروژن و پیل سوختی

۳ - مجری پروژه طراحی و ساخت میکروراکتور پر شده (دانشگاه سمنان) ۱۳۸۸

۴-مجری پروژه بهینه سازی مصرف انرژی در واحد تبلور نمک (شرکت نمک کوهسار) ۱۳۸۷

۵-مجری پروژه طراحی و ساخت برج بستر سیال (دانشگاه سمنان) ۱۳۸۶

۶ - مدیر پروژه راه کارهای توسعه فناوری صنایع گچ (سازمان صنایع و معادن استان سمنان) ۱۳۸۶

۷ - مدیر پروژه راه کارهای توسعه فناوری صنایع نمک (سازمان صنایع و معادن استان سمنان) ۱۳۸۶

۸ - مجری پروژه مدل سازی اثر درجه حرارت محیط روی آزمایش مقاومت نشتی در لوله های شبکه پلی اتیلن گاز (شرکت گاز استان سمنان) ۱۳۸۴

۹ - مجری پروژه اثر کسر حجمی و ابعاد حباب های گاز در برج حباب (دانشگاه سمنان) ۱۳۸۴

۱۰ - ایجاد دانش فنی نیمه صنعتی تولید تترااستیل استیلن دی آمین (TAED) به سفارش صنایع شیمیایی اصفهان (حمایت از ماده ۴۵ توسط وزارت علوم، تحقیقات و فناوری) ۱۳۸۲

۱۱ - برآورد فنی و اقتصادی تولید اسیدبنزوئیک و مشتقات آن – شرکت گسترش پتروشیمی ایران ۱۳۸۱

۱۲ - طراحی، ساخت و راه‌اندازی واحد نیمه صنعتی تولید HF با راکتور از نوع (Buss Kneader) ۱۳۸۱

۱۳ - برآورد فنی و اقتصادی طرح های اسانس مواد شوینده، مشتقات اسیدهای چرب و تولید رنگدانه های معدنی برای شرکت آناسیمین ۱۳۸۰

۱۴ - استخراج مواد با ارزش از ضایعات چای شرکت یانید سرخ ۱۳۷۹

۱۵ - طراحی، ساخت، نصب و راه اندازی واحد تولید سوپرآمید (شرکت گلان) ۱۳۷۹

۱۶ - طراحی و نصب و راه اندازی واحد چند منظوره النوکمیکال برای شرکت گلشو ۱۳۷۷

۱۷ - **ایجاد دانش فنی تولید کوکونات فتی اسید دی اتانول آمید در مقیاس نیمه صنعتی (برنامه ملی تحقیقات) ۱۳۷۶**

۱۸ - **طراحی و ساخت راکتور پنج هزار لیتری چند منظوره برای شرکت پاکسان ۱۳۷۵**

۱۹ - طراحی واحد نیمه صنعتی چندمنظوره استخراج مواد موثر از گیاهان دارویی و معطر(پژوهشکده گیاهان دارویی) ۱۳۷۵

۲۰ - تولید دی اکسید کلر در مقیاس نیمه صنعتی برای شرکت اطعمه پارس ۱۳۷۴

۲۱ - همکاری در ایجاد واحد نیمه صنعتی تولید منوکلروبنزن – صنایع دفاع ۱۳۷۳