رزومه

نام: زرین

نام خانوادگی: نصری

سمت: دانشیار پژوهشی

سوابق تحصیلی:

مقطع تحصیلی	رشته تحصیلی	گرایش	دانشگاه	سال اخذ مدرک
لیسانس	مهندسی شیمی	پتروشیمی	دانشگاه صنعتی امیرکبیر	۱۳۶۶
فوق لیسانس	مهندسی شیمی	-	دانشگاه صنعتی امیرکبیر	۱۳۷۱
دکتری	مهندسی شیمی	پدیده های انتقال	دانشگاه صنعتی امیرکبیر	۱۳۸۷

سوابق شغلی:

سازمان	شروع	خاتمه	سمت
پژوهشگاه صنعت نفت	۱۳۶۷	۱۳۶۸	پژوهشگر
سازمان پژوهشهای علمی و صنعتی ایران	۱۳۷۱	تاکنون	عضو هیات علمی

عناوین پروژه های تحقیقاتی:

A) *Academic Projects*

1- Activation of Bentonite (Bachelor Project).
2- Mathematical & Experimental Dynamic Simulation of Distillation Towers (Master Project).
3- Mathematical Simulation of Two-Phase Flow in Porous Media with Considering Asphaltene Deposition by Network Models (PHD project).

B) *Iranian Oil Industry Research Center*

1- Cumene supply survey.

C) *Iranian Research Organization for Science & Technology*

1- Project Supervision and Execution

Title of Project	Position	Type of Project
Kinetic Investigation of Isoamyl Acetate Production, Simulation and Optimization of the Unit using Artificial Intelligence in order to Reduce Energy Consumption	Executor	Research
Design and Upgrading a Reactive Dividing Wall Column (RDWC) on a Pilot Scale to Synthesize Isoamyl Acetate	Executor	Research , Pilot plant
Upgrading Vacuum Residue of Oil Refinery using ZSM-5 Catalysts	Executor	Research
Experimental optimization study and simulation of hydrocarbon fuels desulfurization using ultrasonic assisted process	Supervisor	Research
Optimization and Kinetic Study of Vacuum Residue Upgrading Process by Catalytic Cracking Using Reinforced ZSM-5 Catalysts	Supervisor	Research
Heavy Petroleum Vacuum Residue Upgrading using Microwave Irradiation Technology	Executor	Research
Design, Simulation, Construction and Installation of a DWC Distillation Unit (Petlyuk Configuration) to Upgrade Energy Efficiency	Executor	Research , Pilot plant
Heavy Crude Oil Upgrading using Microwave Irradiation	Executor	Research
Study on Energy Efficiency Upgrading in Distillation Towers and its Attachments in Oil and Gas Refineries	Executor	Research
Access to Extraction Technology of Antioxidant-Enriched Date Palm (Phoenix dactylifera) and its application assessment for food industry (Lab Scale Unit and Processing at Pilot Plant)	Executor	Research , Pilot plant
Design of a Multi-Stage Countercurrent Extraction Unit for Extraction of Active Components from Medicinal Plants and Experimental Survey at Multi-Stage Medicinal Plant Extraction Unit of Chemical Technologies Department	Executor	Research , Pilot plant

Access to Rosemary Extract Technology as an Additive in Food Industry	Executor	Research , Pilot plant
Design and Provision of Construction Drawings for a Multipurpose Distillation Tower	Executor	Pilot plant
DataBase on Iranian Chemical Industries	Executor	Research
Engineering Documentation of a Multipurpose Countercurrent Extraction Unit for Medicinal Plants	Supervisor	Pilot plant
Design of a Natural Gas Converter with application of High Temperature Fuel Cells	Supervisor	Pilot plant
Extraction of Plants Essential Oil using Controlled Pressure Drop Method	Supervisor	Research , Pilot plant
Extraction of Cellulose from Straw	Supervisor	Pilot plant
Sodium Hyposulfite	Supervisor	Pilot plant
Gelatine	Supervisor	Pilot plant
Sulfasalazine	Supervisor	Pilot plant
Cardboard from Agricultural Wastes	Supervisor	Pilot plant
Mercaptobenzothiazole	Supervisor	Pilot plant
Animal Food from Agricultural Wastes	Supervisor	Research
Cast Coated Paper	Supervisor	Research
CFD Simulation of Nye Tray Hydraulics to Upgrade Energy Efficiency in Distillation Columns	Supervisor	Research
Effect of operating parameters on upgrading heavy crude oil using microwave irradiation	Supervisor	Research
Dynamic Simulation of Underground Gas Storage in Depleted Gas Reservoirs	Supervisor	Research

2- Project Expertise
3- Expertise on Khwarizmi International Award Projects

سوابق تدریس:

1) Advanced Numerical Methods
2) Transport Phenomena
3) Advanced Mathematics in Chemical Engineering
4) Fluid Flow in Porous Media
5) Advanced Oil Refinery Processes
6) Process Equipment Design

زمینه های تحقیقاتی مورد علاقه:

- Simulation and Modeling
- Separation Processes (Extraction, Distillation,…)
- Energy Efficiency in Chemical Processes
- Upgrading of Gas and Oil Processes
- Process Design

داوری نشریه های علمی معتبر:

1- lranian Journal of Hydrogen & Fuel Cell
2- Journal of Petroleum Science and Engineering
3- Journal of Food Sciences and Technologies
4- Journal of Petroleum Science and Technology

انتشارات (ترجمه کتاب):

1- Heavy and Extra-Heavy Oil Upgrading Technologies
By: James G. Speight
"Gulf Professional Publishing, Elsevier"

انتشارات (مقالات مجلات معتبر علمی – پژوهشی):

1. Z.Nasri , B.Dabir , M.R.Golkar, "Experimental and Theoretical Study of Effective Operating Parameters on Performance of Static and Dynamic Distillation Towers", AmirKabir Journal of Science & Technology, vol.6, No.24, Win.1994, pp 329-347.
2. Z.Nasri, "Classification of Iranian Economic Activities in Foundry Industries", Rikhtegary, Journal of Iranian Foundrymen's Society, Dec, 2001, pp 11-18.
3. Z.Nasri, "Evaluation of Different Methods for Sand Reclamation in Foundry Industry", Rikhtegary, Journal of Iranian Foundrymen's Society, Sum, 2002, pp 38-50.
4. Z.Nasri, "Investigation on Quality of Wastewater in Iranian Industries", Water & Wastewater, vol.40, Win. 2002, pp 57-67.

5. Z.Nasri, "Paper Process", Roshd, No. 63.
6. Z.Nasri, "Statistical Investigation on Iranian Rubber and Plastic Industries", Baspar, Journal of Science & Technology of polymers, coatings, adhesives and resins, No. 19, 2001.
7. Nasri, Z.; Dabir, B., "A Thermodynamic Model for Asphaltene and Wax Precipitation Simultaneously using Multi-Solid Method", Amirkabir Journal of Science and Technology, No. 69, 1387.
8. Nasri, Z.; Dabir, B., "Effect of Asphaltene Deposition on Oil Reservoirs Performance including Two-Phase Flow", Journal of the Japan Petroleum Institute, Vol. 52, No. 1, 2009.
9. Nasri, Z.; Dabir, B., "Modeling of carbonate oil reservoirs in imbibition displacement with considering asphaltene deposition", Journal of Petroleum Science and Engineering, 70 (2010) 273–281.
10. Z. Nasri , B.Dabir, "Network modeling of asphaltene deposition during two-phase flow in carbonate", Journal of Petroleum Science and Engineering, 116 (2014), 124-135.
11. M. Mozafari, Z. Nasri "Operational Conditions Effects on Iranian Heavy Oil Upgrading using Microwave Irradiation", Journal of Petroleum Science and Engineering, Vol. 151, March 2017, p 40-48.
12. Zarrin Nasri, M. Mozafari **"**Multivariable statistical analysis and optimization of Iranian heavy crude oil upgrading using microwave technology by response surface methodology (RSM) ",Journal of Petroleum Science and Engineering, 161 (2018), 427-444.
13. Z. Nasri, "Process Conditions Optimization for Extraction of Total Phenolic Contents and Antioxidant Activity of Methanolic Extract of an Iranian Date using Response Surface Methodology (RSM)", Innovative Food Technologies (JIFT), 5 (1396), 319-347 (in Persian).
14. Z. Nasri, "Multistage counter-current and cross-current processes for antioxidant and phenolic components extraction from Rosmarinous Officinalis (Rosmary) plant at pilot plant scale)", Innovative Food Technologies (JIFT), 5 (1397), 427-446 (in Persian).
15. Sadegh Abbasnia, Zarrin Nasri, Mohammad Najafi "Comparison of the mass transfer and efficiency of Nye tray and sieve tray by computational fluid dynamics", Separation and Purification Technology, 215 (2019), 276-286.
16. Zarrin Nasri, " Upgrading vacuum distillation residue of oil refinery using microwave irradiation", Chemical Engineering & Processing: Process Intensification 146 (2019) 107675, pp: 1-15.
17. Hazhir Ghahremani, Zarrin Nasri*, Mohammad Hassan Eikani, " Ultrasound-assisted oxidative desulfurization (UAOD) of Iranian heavy crude oil: Investigation of process variables", Journal of Petroleum Science and Engineering, 204 (2021) pp: 1-9.
18. Zarrin Nasri, "Particle size and root diameter effects on the extraction of glycyrrhizic acid from licorice using ultrasonic: Full factorial experimental design and response surface methodology", Iranian Food Science and Research

Journal, Vol. 18, No. 2, June. July. 2022, p. 179- 194, DOI: 10.22067/ifstrj.2020.89460. (In Persian).

19. Zarrin Nasri, " Effect of Operational and Structural Parameters in Dividing Wall Column Distillation Energy Efficiency for Separation of Methanol, Isopropanol, and N-Butanol", Gas Processing Journal, Vol. 9, No. 1, 2021, pp. 109 - 140.
20. Zarrin Nasri*, "SARA fractions evaluation during microwave-assisted upgrading of an oil refinery vacuum residue: effects of operational conditions", Petroleum Science and Technology, vol. 39 (2021), No. 17-18, pp: 718-738.
21. Seyed Mohsen Hashemi, Alireza Salehirad*, Zarrin Nasri, "Preparation of zeolite A by inorganic complex precursor route for efficient elimination of heavy metal cations from aqueous solutions", Inorganic and Nano-Metal Chemistry, 2023, VOL. 53, NO. 1, 66–77, https://doi.org/10.1080/24701556.2021.1980040.
22. Hazhir Ghahremani, Zarrin Nasri*, Mohammad Hassan Eikani, "Application of response surface methodology (RSM) for optimizing and statistical analysis of ultrasound-assisted oxidative desulfurization (UAOD) of an Iranian heavy crude oil", Petroleum Science and Technology, Published online: 01 Feb 2023, pp. 1-21, https://doi.org/10.1080/10916466.2023.2168696.
23. Mohammad Aryaeinezhad, Zarrin Nasri* & Behrooz Roozbehani, "Oil refinery residue upgrading using ZSM-5 catalyst: statistical analysis and optimization with response surface methodology", Petroleum Science and Technology, Published Online: 15 Dec 2022, pp. 1-25. https://doi.org/10.1080/10916466.2022.2154363.
24. Mohammad Aryaeinezhad, Zarrin Nasri*, Behrooz Roozbehani, "Synthesis and modification ZSM-5 catalyst using microwaves and its application in upgrading Iranian oil refinery residue", Journal of Analytical and Applied Pyrolysis, Volume 174, September 2023, 106107, P. 1-12. https://doi.org/10.1016/j.jaap.2023.106107.

انتشارات (کنفرانس های علمی ملی و بین المللی):

1. Z.Nasri, B.Dabir, "Modeling of Wax and Asphaltene Precipitation Simultaneously by using Multi-Solid Method", WSEAS International Conferences, Venice, Italy, November 21-24, 2007.
2. Nasri, Z.; Dabir, B., "Two-Phase Flow in Oil Reservoirs with considering Asphaltene Deposition", Presented in "Application of CFD in Chemical Engineering Conference", Razi University, Kermanshah, Iran, 2008.
3. Ardakani, M. A.; Nasri, Z.; Anvari, A., "Measurement Methods of Wind Flow to Optimize Wind Equipments with Emphasis on Hot Wire Anemometry", Presented in "Wind Energy and its application Conference", Zabol University, Zabol, Iran, 2008.
4. Ardakani, M. A.; Anvari, A.; Nasri, Z.;, "Review on Wind Tunnel Application in Wind Energy ", Presented in "Wind Energy and its application Conference", Zabol University, Zabol, Iran, 2008.

5. Nasri, Z., "Worldwide Fuel Cell Industry Survey", The First National Conference on Hydrogen & Fuel Cell, Iran University of Science and Technology, January 20-21, 2009.
6. Nasri, Z., "Japan Fuel Cell Industry Survey", The First National Conference on Hydrogen & Fuel Cell, Iran University of Science and Technology, January 20-21, 2009.
7. Nasri, Z., "Optimization of Extraction Process of Lemon Balm (Melissa Officinalis)", National Congress on Medicinal Plants, Sari University, Iran. March 2-3, 2011.
8. Nasri, Z., "Technology Development of Multi-Stage Countercurrent Extraction Method for Extraction of Active Components from Medicinal Plants", National Congress on Medicinal Plants, Sari University, Iran. March 2-3, 2011.
9. Nasri, Z., "Application and Production Methods of Rosemary Plant Extract and its Antioxidants as Processed Meats Additives", The 20th National Conference on Food Industries, Sharif University, Iran. November 18-23, 2011.
10. Nasri, Z., "Extraction Process for Production of Purified Carnosic Acid as a Natural Antioxidant", National Congress on Medicinal Plants, Kish, Iran. May 16-17, 2011.
11. Nasri, Z., "Extraction of Antioxidants from Rosmarinus Officinalis Plant using Ultrasound Process", National Congress on Medicinal Plants, Kish, Iran. May 16-17, 2011.
12. Nasri, Z., "Effect of Plant Particle Size on Extraction of Rosmarinic Acid from Iranian Rosmary and Lemon Balm Plants ", National Congress on Medicinal Plants, Kish, Iran. May 16-17, 2011.
13. Nasri, Z., “Process Conditions Optimization of Rosmarinic Acid Extraction from Iranian Lemon Balm (Melissa Officinalis) Plant using Response Surface Methodology”, Engineering and Applied Science (2013 ICEAS), Tokyo, Japan, March, 15-17, 2013.
14. Nasri, Z., “Operational Conditions Effects on Extraction Yield of Antioxidants from Iranian Rosemary Plant”, the 3rd European Conference of Chemical Engineering (ECCE’12), Paris, France, Dec, 2-4, 2012.
15. Nasri, Z., “Effect of Temperature on Antioxidant Components Extraction from Date Fruit”, The 1st National e-Conference on Novel Food Sciences, Sistan and Balouchestan Science and Technology Park, Iran, July, 2014.
16. Nasri, Z., “Operation Parameters Influence on Total Extract from Phoenix dactylifera L. ”, The 1st National e-Conference on Novel Food Sciences, Sistan and Balouchestan Science and Technology Park, Iran, July, 2014.
17. Nasri, Z., “Effect of Color Removal on Date Extract Antioxidant Specifications”, The 1st National e-Conference on Novel Food Sciences, Sistan and Balouchestan Science and Technology Park, Iran, July, 2014.
18. Nasri, Z., “A Comprehensive Study on Antioxidants Extraction from Rosemary Plant”, The 1st National e-Conference on Novel Food Sciences, Sistan and Balouchestan Science and Technology Park, Iran, July, 2014.

19. M. Mozafari, Z. Nasri "A review on the application of microwaves in the production and upgrading of heavy crude oil", The International Conference on New Researches in Engineering Sciences, Tehran University, Iran, 14 & 15 March 2016.
20. M. Mozafari, Z. Nasri "Experimental study on heating of Iranian heavy crude oil by microwave irradiation", The International Conference on New Researches in Engineering Sciences, Tehran University, Iran, 14 & 15 March 2016.
21. S. Abbas Nia, Z. Nasri, "CFD Simulation of Nye Tray Hydraulics", 3th International Conference on New Research Achievements in Chemistry & Chemical Engineering, 24, Sep, 2016.
22. S. Abbas Nia, Z. Nasri, "Study on Mass Transfer and Efficiency of a Nye Tray using Computational Fluid Dynimics (CFD)", 3th International Conference on New Research Achievements in Chemistry & Chemical Engineering, 24, Sep, 2016.
23. Zarrin Nasri, "Application of Microwave Technology in Asphaltene and Viscosity Reduction of Iranian Vacuum Residue", 155 th International Conference on Innovative Engineering Technologies (ICIET), 12th-13th March, 2017, Jakarta, Indonesia.
24. Zarrin Nasri, "Iranian Refinery Vacuum Residue Upgrading using Microwave Irradiation: Effects of Catalyst Type and Amount", ICOGPE 2018: 20th Int. Conf. on Oil, Gas and Petrochemical Engineering, Mar 05-06, 2018 Rome Italy.
25. Zarrin Nasri, "Simulation of Dividing Wall Distillation Column (DWC) as a process integration method to upgrade energy efficiency for separation of a three-component feed", First National Conference of Optimizing in Renewable Energies, Apr 23, 2020, Jundi Shapur University of Technology, Dezful, Iran.
26. Zarrin Nasri, "Energy Consumption Optimization of Dividing Wall Column Distillation (DWC) for Separation of Butanol, Pentanol, and Hexanol", 5th International Biennial Conference on Oil, Gas, and Petrochemical Engineering. Persian Gulf University, Bushehr, Iran .17-18 December 2024.
27. Zarrin Nasri, "Optimization of Pressure Swing Distillation (PSD) Process for Production of Anhydrous Ethanol using RSM", 5th International Biennial Conference on Oil, Gas, and Petrochemical Engineering. Persian Gulf University, Bushehr, Iran .17-18 December 2024.
28. Zarrin Nasri, "The effects of Iranian dates fruit varieties on the total phenolic compounds and antioxidant activity of the extracts", The 30th Iranian Seminar of Organic Chemistry February 7-9, 2025, Iran University of Science and Technology, Tehran, Iran.

مهمترین دوره های آموزشی:

1- A short specialized training course on management of engineering & executive projects.

2- Computer networks.

3- Project management.

4- ISO 9000 series standard.

5- HYSIS software.

6- AutoCad software.

7- Computer programming with Fortran, C and C++ languages.

8- PROII software.

9- Database softwares (Excel & Access).

10- Visual Basic.

11-Computer programming with MATLAB.

12-FLUENT software.

13- ASPEN software.

14- Aspen-BJAC software

15- Comfar software

16- Matlab (Genetic Algorithm & Neural Network)