



PROFILE

- Full professor in the field of Chemical Engineering
- Strong background in both teaching and research in the field of industrial and operation engineering, energy saving in chemical and petrochemical processing with focus on design and optimization of thermal equipment, energy integration of oil, emission reduction, gas processing, and petrochemical processes
- Experienced in the development of laboratories in chemical engineering department and research institutes
- Provided assistant to graduate studies and cooperated effectively with research teams
- Extensive experience in teaching, assisting, supervising Master and PhD students in funded research programs
- Taught clean energy technologies for undergrad and graduate students
- License Professional Engineering Ontario (PEO) and EIT member

EDUCATION & QUALIFICATIONS

Ph.D. in Chemical Engineering , UMIST, Manchester, UK.	1997
M.Sc. in Chemical Engineering , Tehran Poly-technique, Iran.	1988
B.Sc. in Chemical Engineering , Tehran Poly-technique, Iran.	1986

EMPLOYMENT HISTORY

Research Director (RIPI) & Visiting Professor

Chemical Engineering Department of Ryerson University 2011- present

- Conduct scientific researches and data analysis
- Industrial site visits and consulting as trouble-shooter
- Co-Supervise research post graduate students
- Upgrade the knowledge in process engineering and heat transfer and energy saving
- Prepare technical and scientific publication for international journals

Member of Board of Managing Director

Research Institute of petroleum Industry (RIPI), Iran 2011- present

Member of Research Council of RIPI, Iran 2011- present

Member of Board Iranian Association of Chemical Engineering (AIChE), Iran 2011- present

M.R. JAFARI NASR

nasrmrj@ripi.ir

Member of Board of Iran Gas Institute (IGI), Iran	2015- present
Research Manager of National Petrochemical Company, Iran	2006- 2011
Head of Chemical Process Research Group	
National Petrochemical Company (NIOC)	2002-2006
Deputy Head of Gas Research Division and Head of Modeling & Simulation Department	
National Iranian Oil Company (NIOC)	2000-2002
Research Associate (Postdoctoral position) Manchester University of Science and Technology (UMIST), Department of Chemical Engineering, UK	1997-1998
Senior Engineer in Process Design Gas Division, Research Institute of Petroleum Industry, National Iranian Oil Company, Iran	1987 –1993
Process Design Engineer Research Center of National Defense Industries, Iran	1986 –1987
Lecturer Tehran Universities & Oil, Gas and Petrochemical Plants, Iran	1998 – Present
<u>Taught the following courses</u>	
<ul style="list-style-type: none">• Process Integration and Energy Saving of Chemical and Petrochemical Processes Refinery Processes• Clean Energy Technologies• Heat Exchanger Fouling and the Ways of Fouling Mitigation• Advanced Convective Heat Transfer• Pinch Technology• Refinery Optimization• Refinery Processing• Applied Heat Transfer and Fired Heater Design• Heat Transfer Enhancement (HTE Technology)• Heat Exchanger Design• Advanced Mathematics for Chemical Engineering• Applied Mathematics for Chemical Engineering• Gas Conversion Technologies• Design of Chemical Processes• De-bottlenecking of Chemical Processes• Optimization of Chemical Processes• Conceptual Design for Chemical Engineers• Process Engineering• Process Design	

- Drying Phenomena for Chem. Eng.

JOURNAL PUBLICATIONS & CONFERENCE PAPERS:

JOURNAL PAPRES

1. M.R.J. Nasr and M. Yazdizadeh, "A New Catalyst for Production of Furfural from Bagasse", Royal Society of Chemistry, RSC, in Press, May 2016.
2. M.R. J. Nasr and Z. Fazeli, "Investigation of the Effect of Wick's Diameter on Thermal Performance of heat Pipes", Iranian Chemical Engineering Journal, vol. 15, No. 84, page 17-27, 2016.
3. M.R.J. Nasr and M. Kokhaei, "Simulation and Analysis of Integrated Reforming Combined Cycle", Journal of Farayand No, vol. 51, page 112-137, Autumn 2016.
4. M.R.J. Nasr, S. Saeb and M. Ghadimi, "Performance Enhancement of Air Cooler Using Turbulators", Journal of Mechanical Engineering Transaction of the ISME, vol. 1, No. 17, page 107-124, Summer 2015.
5. M.R.J. Nasr, K. Bakhtari and I. Khoshrou, " Modeling and Optimization of Cooling Water Consumption in the Multi-stage Flash Distillation Process", Journal of Applied Research in Chemistry (JARC), vol. 9, No. 1, Spring 2015.
6. M.R.J. Nasr and A. Balaei, " Analysis of Fouling in HVAC Heat Exchangers by CFD", Iran J. Chem. and Chem. Eng. (JICChE), vol. 34, No. 3, page 49-58, 2015.
7. M.R.J. Nasr and H. Ghanbar Kharkhani, " Thermal and Hydraulic Analysis of Wavy Fin Plate Heat Exchangers", Iran J. Chem. and Chem. Eng. (JICChE), vol. 34, No. 1, page 77-103, 2015.
8. M.R.J. Nasr and A. Kazemi, "Effect of Nano fluid application on Thermal Performance of Thermosyphon Reboilers", Iran J. Chem. and Chem. Eng. (JICChE), vol. 34, No. 3, page 83-89, 2015.
9. M.R.J. Nasr, A. Habibi and et al., " Thermo-Hydraulic Behavior Modeling of Passive Heat Transfer Enhancement Techniques Using a Soft Computing Approach", Chem. Eng. Comm., vol. 201, 53-71, 2014.
10. M.R.J. Nasr, M. Yazdizadeh, H. Nourbakhsh, "A Solution Model for Predicting Asphaltene Precipitation", Iran. J. Chem.Chem. Eng., vol. 33, no. 1, 2014.
11. M.R. J. Nasr, M. Amidpour and M. H. Khodaie, "An Optimization Approach to Refinery Steam Management with Consideration of CO₂ Emission", Journal of Science & Petroleum Technology, no.3, page 45-53, Nov. 2014.
12. M.R.J. Nasr, S. Farahmand and F. Farahbod, "Novel Plan of Triethylen Glycol Regeneration Packed Tower for Energy and Cost Saving" Accepted and in press in The Canadian Journal of Chemical Engineering, vol.89, June, 2011
13. M.R.J. Nasr, R. Golhosseini, A. Naderifar and A. Rezaei "Reaction Engineering Studies of Homogeneous Rhodium-catalyzed Methanol Carbonylation in a laboratory semi-batch reactor", in press, Interl. Journal of Chemical Reactor Engineering ", IJCRE, USA, 2011.
14. M.R.J. Nasr, A. Bloorchi "A model for fouling of plate-and-frame heat exchangers in food industry ", in press, John Wiley & Sons, Ltd, Asia-Pac. J. Chem. Eng. 2011.
15. M.R.J. Nasr, R. Behfar, "A Novel Design for Evaporative Fluid Coolers" Accepted and in press in Journal of Enhanced Heat Transfer, JEHT, 2012.
16. M.R.J. Nasr, R. Behfar, "Enhanced Evaporative Fluid Coolers" Applied Thermal Engineering Journal, ATE-30, 2746-2752, 2010.
17. M.R.J. Nasr, A. Habibi, "Heat Transfer Coefficient and Friction Factor Prediction of Corrugated Tubes Combined with Twisted Tubes Using Artificial Neural Network Analysis" Heat Transfer Engineering journal, 31(1), 59-69, 2010.

18. M.R.J. Nasr, A. Habibi, "Heat Transfer Enhancement by Coil Wire Insert Using Artificial Neural Network Analysis" *Applied Thermal Engineering Journal, ATE*, vol. 30, 143-151, 2010.
19. M.R.Jafari Nasr, F. Motevasseli "Non-Newtonian Fluid Flow Analysis Using CFD in Plate and Frame Heat Exchangers" *Petroleum research*, Vol. 18 No. 58, Autumn & Winter 2009.
20. M.R.J. Nasr, Afshin Mahdavi "Modeling and Optimization of Gasoline Blending Process in Bandar Abbas Refinery Using Linear Programming", *Farayanno*, 19 Issue, April-May, 2009.
21. M.R.J. Nasr, D.Rashtchian, A.A.Kazemzadeh, "Optimization of Oil Refinery Distillation Units for Maximum Naphtha (Gasoline) Production", *Farayanno*, 18 Issue, Feb.-Mar. 2009.
22. M.R.J. Nasr, A. Shafeghat, "Fluid Flow Analysis and Extension of Rapid Design algorithm for Helical Baffle Heat Exchangers", *Applied thermal Engineering Journal, ATE*, vol. 28, 1324-1332, 2008.
23. M.R.J. Nasr and M. Nabavi, "Fouling Mitigation of Crude Oil Preheat Trained Based on Thermo-Hydraulic Fouling Models to Maximize Heat Recovery", *Journal of Petroleum Science and Engineering*, page 16-26, vol 17, winter 2008.
24. M.R.J. Nasr, M. Amidpour and R. Salari, "Modeling of Hydrogen Distribution Network in Oil Refineries", *Farayand No, No.8, May, 2007*.
25. M. R. J. Nasr, M. Saiedan "Rapid design algorithm in plate heat exchangers and modifying performance index" *Journal of Petroleum Science and Engineering*, vol. 17, page 13-24, 2007.
26. M.R.J. Nasr and H. Mahdipour and etal., "Rigorous Dynamic Simulation of an Industrial Tray Column, Considered Liquid Flow Regime and Efficiency of Trays", *Chemical Engineering Research and Design*, vol. 85(A8) 1101-1111, 2007.
27. M. Korramanesh, M. Amidpour, M.R.J. Nasr. "Application of Process Decomposition In Multi-Stream Plate Fin Heat Exchanger Design To Use in Heat Recovery Networks", *Chem. Eng. and Processing*, 46, 941-954, 2007.
28. H. Pahlavanzadeh, M.R.J. Nasr, H. Mozaffari, "Experimental Study of Thermo-Hydraulic And Fouling Performance Of Enhanced Heat Exchangers" *Interl. Commu.in heat and mass transfer*, vol. 34, 907-916, 2007.
29. M.R.J. Nasr, S.H. Alaei, "A New Algorithm for Design, Simulation and Optimization of Enhanced Air Coolers", *Journal of Enhanced Heat Transfer*, 14(2) 147-160, USA, spring, 2007.
30. M.R.J. Nasr and Sabouri Shirazi "Spiral Plate Heat Exchangers" *Heat exchanger*, No 2, Spring 2007.
31. M.R.J. Nasr and etal., "Kinetic Study of Acetic Acid Synthesis Using Ir-Catalyzed Homogeneous Methanol Carbonylation Process", *Research on Science and Engineering of Petroleum*, Autumn and Winter, vol.16, No. 54 2007.
32. M.R.J. Nasr and etal., "Investigation of Energy Saving in H2O2 Production Unit Using H2O2 Pilot Plant", *Research on Science and Engineering of Petroleum*, Autumn and Winter, vol.16, No. 54 2007.
33. M.R.J. Nasr, M. Majidi Givi, "Modeling Crude Oil Fouling in Preheat Exchangers of Refinery Distillation Unit", *Applied Thermal Engineering, ATE*, 1572-1577, June 2006.
34. M.R.J. Nasr and etal., "Kinetic Study of Catalytic Hydrolysis Reaction of Methyl Acetate to acetic Acid and Methanol", *Iranian Journal of Science & Technology (IJST)*, vol. 30, No. B5, Aug., 2006.
35. M.R.J. Nasr, M.Tahmasebi, "Application of Heat Transfer Enhancement on Vertical Thermosyphone Reboilers Using Tube Inserts", *Heat Transfer Engineering Journal*, 27(6), 58-65, 2006.
36. M.R.J. Nasr and M. Majidi, "Application of Threshold Model with Various Tube Wall Temperatures for Crude Oil Preheat Train Fouling", *Iranian Journal of Chemistry & Chemical Eng. IJCCE*, vol.26, No.3, 2006.

37. M.R.J. Nasr and A. Kalantari, " Surface Selection and Optimum Design of Plate Fin Heat Exchangers", Research on Science and Engineering of Petroleum, Journal Publication of RIPI, page 34-49, vol. 16, No.53, Spring and Summer 2006.
38. M.R. J. Nasr, E. Arbaban, "Static Mixers and Appraisal of their Performance on Heat Exchanger's Application", Farayand No, The Journal of National Iranian Petroleum Refinery and Distributions Co. (NIPDC), No.3, page 18-24, 2006.
39. M.R.J. Nasr, A. Shafeghat, "Rapid Design Algorithm for New Technology: Shell and Tube Heat Exchangers with Helical Baffles", Research on Science and Engineering of Petroleum, Journal Publication of RIPI, Autumn and Winter, vol.15, No. 52, 2006.
40. M.R.J. Nasr and M.Majidi Givi, "Evaluation of the Crude Oil Fouling on Preheat Exchangers of Crude Distillation Unit Performance and Proposing a New Model for Fouling Formation", Journal of School of Eng., Ferdowsi University of Mashad, page 1-19, vol. 18, No. 2, 2006.
41. M.R.J. Nasr, H. Pahlavanzadeh, H. Mozaffari, "CFD Analysis of Heat Transfer Enhancement", Iran's Chem. Eng. Journal, IChEJ. No.16, Tehran-Iran, July 2005.
42. M.R.J. Nasr and M. Majidi Givi, "Investigation of Crude Oil Fouling on Performance of Preheat Exchangers of Crude Distillation Unit", Research on Science and Engineering of Petroleum, Journal Publication of RIPI, page 1-10, vol. 14, No.50, Autumn and Winter 2005.
43. M.R.J. Nasr and M.Majidi Givi, "Effect of Fouling Factor on the Required Area and Cost of Preheat Exchanger of Atmospheric Distillation Unit", Research on Science and Engineering of Petroleum, Journal Publication of RIPI, page 2-15, vol. 14, No.49, Spring and Summer 2004.
44. M.R.J. Nasr and M. Shahroodi, "Retrofitting of Heat Exchanger Network Using Heat Transfer Enhancement and Developed Algorithm To Searching the Potential of the Enhancement Devices" Iranian Journal of Chemistry and Chemical Engineering, IJCCE, 51-64, vol. 23, No.2, Winter 2004.
45. M.R.J. Nasr and M.Tahmasebi, "Simulation of Enhanced Thermosyphon Reboilers", Selected Paper, published in PRES2004
46. M.R.J. Nasr, and A.Zoghi, "Full Analysis of Low Finned Tube Heat Exchangers", Int. Iranian Eng. Journal, page 217-232, Sept., 2003.
47. M.R.J. Nasr and et al. "Mass Transfer Study in Auto-circulation Reactor for H₂S Removal of Acid Gas Streams", Research on Science and Engineering of Petroleum, Journal Publication of RIPI, page 28-45, vol. 12, No.46, Winter 2003.
48. M.R.J. Nasr and M.Shahroodi, "Application of Heat Transfer Enhancement (HTE) Technique In Preheat Train Of Tehran Oil Refinery" Research on Science and Engineering of Petroleum, Journal Publication of RIPI, page 34-49, vol. 13, No.47, Spring and Summer 2003.
49. M.R.J. Nasr, and et al. "Kinetics Study and Modeling of Single Step H₂S Removal Using Chelated Iron Solution in an Airlift Reactor", Journal of School of Eng., vol.14, No.2, Ferdowsi University of Mashad, Iran, 2002.
50. M.R.J. Nasr, and et al., "Investigation of Hydrodynamic Parameters in an Internal Loop Airlift Reactor for Single Step Hydrogen Sulfide Removal from Acid Gas Streams" Iranian Journal of Science & Technology, School of Eng Shiraz, Iran, vol. 28, No.B6, 2002.
51. M.R.J. Nasr and et al. "Kinetic and Modeling of Single Step H₂S Removal Using Chelated Iron Solution in an Air Lift Reactor Removal", pp.171-187, Journal of School of Eng., Vol.14, No.2." 2002.

52. M.R.J. Nasr, G.T. Polley, "Should You Use Enhanced Tubes", Chemical Engineering Progress, CEP, pp.45-50, April 2002.
53. M.R.J. Nasr and G.T. Polley, "An Algorithm for Cost Comparison of Optimized Shell- and-Tube Heat Exchangers with Tube Inserts and Plain Tubes", Chemical Engineering & Technology, CET, 3, pp.146-151, 2000.
54. M.R.J. Nasr and G.T. Polley, "Derivation of Charts for the Approximate Determination of the Area Requirements of Heat Exchanger Using Plain and Low Finned Tube Bundles", Chemical Engineering & Technology, CET, 1 Part A, pp.46-54, 2000.
55. M.R.J. Nasr and G.T. Polley, "Extension of Rapid Sizing Algorithm for Shell-and-Tube Heat Exchangers with Tube-side Pressure Drop Constraint and Multi-passes", Chemical Engineering & Technology, CET, Part B, pp.141-150, 2000.
56. M. Abedinzadegan and M.R. J. Nasr "Performance of a Venture Jet Scrubber for H₂S Removal by Iron-Complex Solutions", Chemical Engineering and Technology, CET, 18, 166-170, 1995.
57. G.T. Polley, M.R.J. Nasr, and A. Terronova, "Determination and Application of the Benefits of Heat Transfer Enhancement", Trans., IChemE, vol.72, Part A, pp.616-620, Sept., 1994.
58. M.Abedinzadegan and M.R.J. Nasr "A Mathematical Model Describing the ARI Auto circulation Reactor for Low Temperature Conversion of H₂S to Sulfur Chemical Engineering & Technology, CET.,17, pp.141-3, 1994.
59. M.Abedinzadegan and M.R.J. Nasr "Studies on One Step H₂S Removal, Aims and Design Criteria for a Pilot Plant", Iranian J. of Chemistry and Chemical Engineering, IJCC.,11, (1), pp.1-7, (English version), 1992.
60. M.Abedinzadegan and M.R.J. Nasr "Reactor Modeling of Low Temperature Sulfur Recovery from Hydrogen Sulfide", Tahghigh, Quarterly Bulletin of National Iranian Oil Company, Research Institute, 1, 3, pp. 72-84, 1992.
61. M.R.J. Nasr and M.Abedinzadegan, "Computer Design of Bubble Column Reactor for Oxidative Reaction of Fe+2", Tahghigh, Quarterly Bulletin of National Iranian Oil Company, Research Institute, 1, 1, pp.6-11, 1992.

CONFERENCE PAPERS:

1. M.R.J. Nasr, F. Khalili, " Simulation of ASI Impeller in two Phase System by CFD", 9th Int. Chem. Eng. Congress (IChEC), 26-28 Dec. 2015, Shiraz, Iran.
2. M.R.J. Nasr, I. Khosrou, "Integration of MSFD Desalination Process to the Solar DSG", 9th Int. Chem. Eng. Congress (IChEC), 26-28 Dec. 2015, Shiraz, Iran.
3. M.R.J.Nasr, M. Yazdizadeh, "Investigation of Furfural Production in Present of NaCl+ H₂SO₄ as Catalyst", 9th Int. Chem. Eng. Congress (IChEC), 26-28 Dec. 2015, Shiraz, Iran.
4. M.R.J. Nasr, M. Soultanpour, " Energy Utilization in NGL Recovery Plants", 21th World Petroleum Congress, WPC, June 15-19, Moscow, Russia, 2014.
5. M.R.J. Nasr, S. Jafarifar, "Thermal analysis of the oblong twisted tube evaporative fluid coolers by Rapid Design Algorithm", The 8thInternational Chemical Engineering Congress & Exhibition (IChEC 2014), Kish, 24-27February, Iran, 2014.
6. M.R.J. Nasr, M. Fallahiyekta, "Application of wire coil inserts and CNT nanofluid on design parameters of shell and tube heat exchanger", The 8thInternational Chemical Engineering Congress & Exhibition (IChEC 2014), Kish, 24-27February, Iran, 2014.
7. M.R.J. Nasr, A. Balaie, "Modeling of Particulate Deposition in HVAC Heat Exchangers Using CFD Analysis", The 8thInternational Chemical Engineering Congress & Exhibition (IChEC 2014), Kish, 24-27February, Iran, 2014.

8. M.R.J. Nasr, M. Saber, "Performance Evaluation of Nanofluids Application in Heat Exchangers, The 8th International Chemical Engineering Congress & Exhibition (IChEC 2014), Kish, 24-27 February, Iran, 2014.
9. M.R.J. Nasr, M. Fallahiyekta, et al, "An Experimental Study on Thermal Conductivity of Nanofluids", ICMEM Conference, August 8-9, Toronto, Canada 2013.
10. M.R.J. Nasr, "Process Improvement for Energy Optimization Case Study Methanol Plant", 10th Petrochemical Forum, 13-14 May Tehran, Iran, 2013.
11. M.R.J. Nasr, S. Sahebdehfar, M. Daftari, "Petrochemical-refinery Integration as an Approach to Competing Hydrocarbon Market", 9th Interl. Petrochemical Forum, Tehran, Iran, 11-12 May 2011.
12. M.R.J. Nasr, M. Ravanchi, S. Sahebdehfar, and M. Daftari "Petrochemical Refinery Integration", 20th, The World Petroleum Congress, Doha, Qatar, 4-8 Dec., 2011.
13. M.R.J. Nasr, S. Sahebdehfar, and M. Daftari "DME, the Alternative Multi-purpose Multi-source Fuel of the future", 20th, The World Petroleum Congress, Doha, Qatar, 4-8 Dec., 2011.
14. M.R.J. Nasr and P. Daylami "CO₂ Reduction and Energy Saving in Methanol Plant", The 3rd IUPAC Green Chemistry, Ottawa, 23-27, Aug. 2010.
15. M.R. J. Nasr and H. Eghbal "Optimization of FCC Reactor by Lumped Modeling", 8th, world chemical engineering conference (WCC8), Montreal, 23-27, Aug. 2009.
16. M.R. J. Nasr and R. Behfar "Rapid Design Algorithm for Evaporative Fluid Coolers, 8th, world chemical engineering conference (WCC8), Montreal, 23-27, Aug. 2009.
17. M.R. J. Nasr and F. Motavasseli "Non-Newtonian Fluid Flow Analysis Using CFD in Plate & Frame Heat Exchangers", 8th, world chemical engineering conference (WCC8), Montreal, 23-27, Aug. 2009.
18. M.R. J. Nasr and et al., "Scale up Methodology; A Key of Achieve Know-How of Industrial chemical processes", Conference on Eng. Education in 2025, 12-13 May. 2009, University College of Eng., Univ. of Tehran.
19. M.R. J. Nasr and V. Haddadi, L. Rasouli "New Approach to Eng education", Presented in Conference on Eng. Education in 2025, 12-13 May. 2009, University College of Eng., Univ. of Tehran.
20. M.R.J. Nasr, A.Salem, M.Rostami "Design and Fluid Flow Analysis of Helix Heat Exchangers" IChEC 2008, Kish Island, I.R. Iran, 2-5 Jan., 2008.
21. M.R. J. Nasr and H. Khodaei, "Optimization of Steam Network in Tehran Oil Refinery" ESL-IE-08, Industrial Energy Technology Conference, New Orleans, Louisiana, May, 2008.
22. M.R.J. Nasr, M.AMMIDPOUR, M. H. KHOSHGOFTAR , R. SALARY, "Hydrogen Integration Evaluation between HTGR Power Plants and Oil Refineries" IChEC 2008, Kish Island, I.R. Iran, 2-5 Jan., 2008.
23. M.R.J. Nasr, D. Rashtchian , A. A. Kazemzadeh "Optimization of Distillation Units of Oil Refineries for Maximum Gasoline Production" IChEC 2008, Kish Island, I.R. Iran, 2-5 Jan., 2008.
24. M.R. J. Nasr, M. AMIDPOUR, H. KHODAIE "Simulation and Optimization of Steam Network in Petroleum Refineries" IChEC 2008, Kish Island, I.R. Iran, 2-5 Jan., 2008.
25. M.R. J. Nasr, Gh.R.Rastgouy Haghi, M.Khoshnoodi, "Design of Spiral-Plate Heat Exchanger Using Rapid Design Algorithm" IChEC 2008, Kish Island, I.R. Iran, 2-5 Jan., 2008.
26. M.R. J. Nasr, A. Shafeghat "Fluid Flow Analysis and Extension of Rapid Design Algorithm for Helical Baffle Heat Exchangers" IChEC 2008, Kish Island, I.R. Iran, 2-5 Jan., 2008.
27. M. R. Jafari Nasr, H. Pahlavanzadeh , S. H. Mozaffari "Experimental study of fouling mitigation and heat transfer enhancement with wire coil inserts" IChEC 2008, Kish Island, I.R. Iran, 2-5 Jan., 2008.

28. M. R. J. Nasr, M. Saiedan "New Algorithm for Design and Optimization of Plate and Frame Heat Exchangers" IChEC 2008, Kish Island, I.R. Iran, 2-5 Jan., 2008.
29. M. R. J. Nasr, M.T.Ashtiany, A. Mohammadrezaee, A. Vatani "A General View on the Effects of Iodide salts in Iridium Catalyst in Methanol Carbonylation Process" IChEC 2008, Kish Island, I.R. Iran, 2-5 Jan., 2008.
30. M. R. J. NASR, M.GHARAEI, R. ARGHANDEH "Modeling and Optimization of the Refinery Steam Network by Pinch Analysis Approach" IChEC 2008, Kish Island, I.R. Iran, 2-5 Jan., 2008.
31. IChEC 2008, Kish Island, I.R. Iran, 2-5 Jan., 2008.
32. M.R. Jafari Nasr, M.Amidpour and R.Salary "Hydrogen Network Design in Oil Refineries With Capital Investment Limitation." IChEC 2008, Kish Island, I.R. Iran, 2-5 Jan., 2008.
33. M.R. J. Nasr and et al., "The Solubility of Rhodium Salt on Kinetic Study of Homogeneous Rhodium-Catalyst Methanol Carbonylation to Acetic Acid", present in CHISA2008, Prague, Czech Republic, August 2008.
34. M.R. J. Nasr and et al., "Fluid Flow Analysis Using CFD in Corrugated Plate and Frame Heat Exchangers", present in CHISA2008, Prague, Czech Republic, August 2008.
35. M.R. J. Nasr and et al., "Design and Optimization of Plate and Frame Heat Exchangers with Rapid Design Algorithm", present in CHISA2008, Prague, Czech Republic, August 2008.
36. M.R. J. Nasr and M.Amidpour and B.Rashidian, "Modeling of Transient Response of the Thermosyphon Heat Pipes", presented in CHOAS2008, International Conference, June 3-6, Chania, Crete Greece, 2008.
37. M.R.J. Nasr and I.Nazeran, R.Nikfarjam, "Design and Construction of Flare for Mahshar Research Center", presented in 1st IPC, Conference, June, Tehran- Iran, 2008.
38. M.R.J. Nasr and et al., "Challenges and Remedies for Technology Transfer-MTP Process as a Live Case Study", 3th Conference on Technology Development in the Oil Industry, 22-24 Feb., Tehran-Iran, 2008.
39. M.R.J. Nasr and L.Rasouli, V.Haddadi, "Experiences of International Cooperation in Petrochemical Research & Technology Company", 3th Conference on Technology Development in the Oil Industry, 22-24 Feb., Tehran-Iran, 2008.
40. M.R.J. Nasr, M.H. Khosghoftar and M.Amidpour, "Reduction of CO2 Emission from Isfahan Crude Oil Distillation Unit with Heat Integration", presented at the second international conference on modeling, simulation and applied optimization, the petroleum institute, Abu Dhabi, UAE, March 24-27, 2007.
41. M.R.J. Nasr, M.Amidpour and R.Salari, "Modeling, Simulation and Optimization of Hydrogen Distribution Network in Oil Refineries", presented at the second international conference on modeling, simulation and applied optimization, the petroleum institute, Abu Dhabi, UAE, March 24-27, 2007.
42. M.Amidpour, A.H.Sabouri and M.R.J. Nasr, "A New Problem Decomposition Algorithm for Heat Integration Retrofit", presented at the second international conference on modeling, simulation and applied optimization, the petroleum institute, Abu Dhabi, UAE, March 24-27, 2007.
43. M.R. J. Nasr, M.H. Khosghoftar and M.Amidpour, "Evaluation of Thermal Coupling Between Crude Distillation and Delayed Cooking Units", presented at the second international conference on modeling, simulation and applied optimization, the petroleum institute, Abu Dhabi, UAE, March 24-27, 2007.
44. M.R. J. Nasr, "NPC and Energy Saving of Petrochemical Plants", keynote speaker of first conference on energy conservation of petrochemical plants", Tehran, 25-26 Dec., 2006.
45. M.R.J. Nasr and et al, "Hydrogen management in oil refineries", Chemical Engineering Congress, CHEMCA, Australia, Sept., 2006.

46. M.R.J. Nasr, M.Khoshnoodi and S. Nourbakhsh, "Application of Heat Pipes for Energy Efficiency of Petrochemical Plant", presented at the first international conference on energy management & planning, faculty of energy, university of Tehran, Tehran, 20-21 June, 2006.
47. M.R.J. Nasr, "NPC and Energy Saving of Petrochemical Plants", keynote speaker of first conference on energy conservation of petrochemical plants", Tehran, 25-26 Dec.,2006.
48. M.R.J. Nasr and et al, "Dynamic Modeling of Methyl Acetate Hydrolysis in Packed bed Reactor and Determination of Axial Dispersion Coefficient", 11th National Chem. Eng. Conf., Tarbiat Modaress University, Tehran, Iran Oct., 2006.
49. M.R.J. Nasr, Amidpour M., and Salary, "Modeling, Simulation and Optimization Hydrogen Network", 11th National Chem. Eng. Conf., Tarbiat Modaress University, Tehran, Iran Oct., 2006.
50. M.R.Jafari Nasr and Nourbakhsh S., "Heat Recovery from Flue Gas Streams of Power plant of Razi Petrochemical Company", 11th National Chem. Eng. Conf., Tarbiat Modaress University, Tehran, Iran Oct., 2006.
51. M.R.J. Nasr, Nourbakhsh S., and Sfarayeni M. "Determination of Optimum Diameter of Two Phase Closed Loop Thermosyphone Heat Exchangerseat ", 11th National Chem. Eng. Conf., Oct., 2006, Tarbiat Modaress University, Tehran, Iran.
52. M.R.J. Nasr and Khoshgoftar M.H., "Thermal Coupling of Crude Distillation Unit and Delay Coking to Save Energy ", 11th National Chem. Eng. Conf., Tarbiat Modaress University, Tehran, Iran Oct., 2006.
53. M.R.J. Nasr and Khoshgoftar M.H., "CO2 Reduction of Isfahan Petroleum Refinery Using Heat Integration", 11th National Chem. Eng. Conf., Tarbiat Modaress University, Tehran, Iran Oct., 2006.
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PUBLISHED BOOKS

- **Advance Engineering Mathematics**, M. R. J. Nasr, Azad University Tehran, Science & Research Unit, Tehran, Iran, Summer 2016.

- **Heat Exchanger Enhancement**, RIPI Publishing Center, March 2011

Authors: Reza Nasr, S.H. Alaie

In this book the new technologies to solve the main challenges for industrial applications of heat exchangers are revealed. How to increase the heat transfer coefficients, mitigate the fouling problem and so on are discussed in detail.

- **Heat Integration for Energy Saving of Oil, Gas and Petrochemical**

Processes, RIPI Publishing Center, March 2010

Authors: Reza Nasr, A.H. Kazemzadeh

The methodologies for energy saving and heat recovery techniques such as process integration, pinch technology are reviewed in this book. The book includes some interesting industrial case studies for readers.

- **Heat Exchanger Fouling**, RIPI Publishing Center, March 2011

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The book reviews all aspects of fouling challenges for thermal equipments including heat exchangers, air coolers and so on. The mechanisms and classification of fouling are discussed. The modeling of fouling is described and a new model for crude oil fouling developed by author is explained.

HONOURS & AWARDS

- 1-Selected Scientist by Ministry of Science, Research and Technology, Iran, Tehran, 2009.
- 2-Selected Lecturer of Azad University, Oil & Gas Dept., Tehran, Iran, 2009.
- 3-Winner of the best selected paper published 2005-2006 in RIPI journal under the title of" Helical Baffle Heat Exchanger as an Innovative Technology to Enhance Heat Transfer in Shell and Tube Heat Exchangers".
- 4-Winner of 2004 First Rank of Research Honor Medal, submitted by Minister of Science and Higher Education (MCHE), winter 2004, Tehran, Iran.
- 5-The winner of the best selected paper presented in 9th national Iranian chemical engineering congress, Tehran, Nov., 2004, Iran.
- 6-The winner of the best selected paper presented in 8th national Iranian chemical engineering congress, Mashad, Oct., 2003, Iran.
- 7-The winner of 2003 Second Rank of Research Honor Medal, submitted by Minister of Science and Higher Education (MCHE), winter 2003, Tehran, Iran.
- 8-The winner of the best paper published in Tahghigh, journal of research institute of petroleum industry, RIPI, 2003, Tehran, Iran.
- 9-The winner of 10th International Heat Transfer Conference for the best paper presented in industrial session,1994, Paris, France.
- 10- The winner of 3rd Iranian Oil, Gas and Petrochemical Congress, for the best paper presented, 1992, Eng. Session, Isfahan, Iran.