



RAMIN KARIMZADEH

POSITION DETAILS

Professor in Faculty of Chemical Engineering - Tarbiat Modares University

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Work Office Address: Chemical Engineering Dept., Tarbiat Modares University,
Tehran, Iran, Post Box: 14155-4838

Work Office Tel. No.: +98 21 8288 3315

Laboratory Tel. No.: +98 21 8288 3967 (Cracking & Catalysis Lab.)

EDUCATION

- *Ph.D. in Chemical Engineering, 2001, Tarbiat Modares University,*
Ph.D. thesis: Olefin Production by Catalytic Steam Cracking of Hydrocarbons.
(Supported by Linde Germany, and executed in Linde R&D division)
- *M.Sc. in Chemical Engineering, 1991, Tarbiat Modares University*
M.Sc. dissertation: Modeling and Simulation of Steam Cracking of Naphtha by
Radical Mechanism.
- *B.Sc. in Chemical Engineering, 1988, Shiraz University*

TEACHING EXPERIENCES

- Advanced Reactor Design.
- Computer Aided Process Design.
- Advanced Mathematics.
- Furnace Design.

RESEARCH AREAS

- Olefin Technology
- Catalytic Cracking (to produce light olefins and Gasoline)
- Upgrading of Heavy Oil (Gasoline Production and using in olefin unit as feedstock)

RESEARCH EXPERIENCES

Worked as **executive** in the following projects:

TMU ¹ for NPC-RT ² 2005 – 2007	Basic design of gas fired and electrical pilot plants for steam cracking furnaces – liquid and gaseous feedstocks.
TMU for NPC-RT 2006 – 2008	Severity control for thermal cracking furnaces based upon the optimization of controllable factors
TMU for NPC-RT 2008 – 2009	Alternative feedstocks for naphtha cracking furnaces.
TMU for NIORDC 2008- 2010	Petroleum residue upgrading to a naphtha fraction suitable for olefin plants. <u>(This project now extended for Gasoil and Naphtha production)</u>
TMU for NPC-RT 2012-2013	Ethylene and propylene production by steam catalytic cracking of LPG.
TMU for NPC-RT 2013-2014	Seperation of asphaltene from pyrolysis fuel oil via a chemical-physical method.
TMU for NPC-RT 2012-2013	Construction and start up a gas fired liquid/gas steam cracking furnace equipped with 108 burners
TMU for Morvarid Co. 2015	Modeling and simulation of Morvarid olefin furnaces.
TMU for Morvarid Co. 2015	Design of sampling system for Morvarid olefin furnaces.

Worked as **senior research assistant** in majority of the following joint projects:

TMU for NPC-RT	Basic design of an industrial ethane cracking furnace.
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¹ Tarbiat Modares University

² National Petrochemical Company – Research & Technology

TMU <i>for</i> NPC-RT	Package preparation for modeling and simulation of steam cracking furnaces.
TMU <i>for</i> NPC-RT	Process design of an olefin unit with gas and liquid feedstock.
TMU <i>for</i> TPC ³	Influence of C4 cut recycle on the products and run length of steam cracking furnaces.
NPC-RT <i>for</i> MPC ⁴	Replacing the DMDS ⁵ by H ₂ S as a steam cracking coke inhibitor for Marun olefin unit.

INDUSTRIAL EXPERIENCES

Worked as **consultant** in the following industrial companies:

- Linde R&D division.
- Abadan olefin plant
- Amir Kabir olefin plant
- Arak olefin plant
- National Petrochemical Company Research and Technology (NPC-RT)
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HONORS

Tarbiat Modares University, 2002	Premier researcher.
Tarbiat Modares University, 2007	Safety considerations in Cracking and Catalyst Lab.
Tarbiat Modares University, 2008	Premier researcher.

JORNAL REVIEW

³ Tabriz Petrochemical Company

⁴ Marun Petrochemical Company

⁵ Dimethyl Disulfide

Applied Catalysis A

Catalysis Letters

Chemical Engineering Communications

Chemical Engineering Research and Design

Chemical Engineering Technology

Chemistry Chemical Eng J

Fuel Processing Technology

Industrial & Engineering Chemistry Research

International Journal for Numerical Methods in Fluids

International Journal of Hydrogen Energy

J of Chemical Engineering Data

J of Industrial Engineering Chemistry Research

Journal of Molecular Catalysis A

PUBLICATIONS

Journals:

1. J. Towfighi, A. Niaei, R. Karimzadeh, "Development of Kinetic model of Thermal Cracking of Naphtha", *Iranian J. of Chem. and Chem. Eng.*, 1373, 13(1), 68-75(Language in Persian).
2. J. Towfighi, G. Saedi, R. Mihail, R. Karimzadeh, "Modeling and Simulation of Propane Pyrolysis Furnace With Molecular Kinetics & Coke Formation", *Iranian Journal of Science & Technology*, **1994**, Vol. 18, p. 3.
3. M. Sadrameli, A. Haghighi Asl, R. Karimzadeh, "Three Dimentional Tube Skin Temperature Results in the Thermal Cracking Coils", *International J. of Engineering Science*, **1997**, 8(2.a), p. 67.
4. J. Towfighi, M. Karimaei, R. Karimzadeh, "Application of Dynamic Programming Method in Optimal Control of Light Hydrocarbons pyrolysis Reactors", *Scientia Iranica*, **1998**, Vol.3-5, pp. 148-155.
5. J. Towfighi, S. Z. Mirnezami, R. Karimzadeh, "Design and Modeling of Stirred Tank Bioreactors for Production of S.C.P. From Methanol",

- International *J. of Eng. Science*, **1378**, 10(4), pp. 117-139 (Language in Persian)
6. J. Towfighi, R. Karimzadeh, A. Niaei, G. Saedi, S. Hoseini, Modeling and Simulation of the Pyrolysis Reactions and Coke Deposition in Industrial Ethane Cracker, *J. of Modarres*, **2002**, Vol. 10, pp. 82-90
 7. J. Towfighi, H. Zimmermann, R. Karimzadeh, M. M. Akbarnejad, Steam Cracking of Naphtha in Packed Bed Reactors. *Ind. Eng. Chem. Res.* **2002**, 41, 1419-1424
 8. Niaei, J. Towfighi, S. M. Sadrameli, R. Karimzadeh, The combined simulation of heat transfer and pyrolysis reactions in industrial cracking furnaces, *Applied Thermal Engineering*, 24 (**2004**) 2251-2265
 9. J. Towfighi, R. Karimzadeh, M. Sadrameli, A. Niaei, G. Saedi, S. Hoseini, M. Mofarahi, B. Mokhtarani, SHAHAB-A PC-Based Software of steam cracking furnaces(Ethane and Naphtha), *Iranian Journal of Chemical Engineering*, **2004**, 1(2), pp. 55-69.
 10. J. Towfighi, A. Niaei, R. Karimzadeh, G. Saedi "Systematics and modelling Representations of LPG Thermal cracking for Olefin production", *Korean J. Chem. Eng.*, 23(1), 8-16 (**2006**)
 11. M. Pakizeh, M.M. Omidkhah, R. Karimzadeh, A. Zarringhalam, Study of catalytic effect, growth time and effective surface materials on the Silica-Polymer Catalyst, *Science Technology of Polymer*, **2006**, 20, 2, pp. 147-153(Persian)
 12. M. V. Kolaei, R. Karimzadeh, S. A. Shojaosadati, J. Towfighi, Modeling of single cell protein production from cheese whey using tanks-in-series model, *Iranian Journal of Biotechnology*, Vol. 5, No. 2, April **2007**.
 13. M. Ghashghaee, R. Karimzadeh, Dynamic Modeling and Simulation of Steam Cracking Furnaces. *Chem. Eng. Technology*, **2007**, 30, No. 7, 835-843.
 14. R. Karimzadeh, A. Hematian, M. R. Omidkhah, The Effect of Coil Configuration on Run Length of Thermal Cracking Reactors, *International Journal of Chemical Reactor Engineering*, Volume 5, **2007**, The Berkeley Electronic Press.
 15. R. Karimzadeh, M. Ghashghaee, Design of a Flexible Pilot Plant Reactor for The Steam Cracking Process, *Chem. Eng. Technology*, **2008**, No. 2, 1-10

16. Ghavam Rahmani, Ramin Karimzadeh, Jafar Towfighi, Meysam Hoseinnia, Development of Coke formation Kinetics in Steam Cracking of Gas Oil. *Amir Kabir J.*, **2008**, 69, pp. 49-57,(Persian).
17. Mohamadalizadeh, J. Towfighi, R. Karimzadeh, Modeling of catalytic coke formation in thermal cracking reactors., *J. Anal. Appl. Pyrolysis*, 82, **2008**, 134-139
18. S. Z. Abghari, J. Towfighi., R. Karimzadeh, M. R. Omidkhah, Determination of yield distribution in olefin production by thermal cracking of atmospheric gasoil". *Korean J. Chem. Eng.*, 25(4), **2008**, 681-692
19. B. Mokhtarani, R. Karimzadeh, M. H. Amini, S. Darvish Manesh, Partitioning of Ciprofloxacin in aqueous two-phase system of poly(ethylene glycol) and sodium sulphate, *Biochemical Engineering Journal* 38, **2008**, 241-247
20. S. Z. Abghari, J. Towfighi, R. Karimzadeh, M. M. Omidkhah, Application of response surface methodology in study of the Product Yield Distribution of thermal cracking of atmospheric gasoil, *Scientia Iranica*, **2008**, Vol. 15, No. 4, pp 457-468
21. A. Mirolieaei, F. Shahraki, R. Karimzadeh, Investigation on Fluid flow in Transfer Line Exchanger of Thermal Cracking Furnaces, *Iranian Chemical Engineering Journal*, 8(41), 2009, 3-13(Persian)
22. Mokhtari-Hosseini Zahra, Vasheghani-Farahani Ebrahim Shojaosadati S. Abbas, Karimzadeh Ramin, Media Selection for Poly(hydroxybutyrate) Production from methanol by *Methylobacterium Exorquens* DSMZ 1340, *Iran. J. Chem. Chem. Eng.* 28 (3), **2009**, 45-52
23. Zahra B. Mokhtari-Hosseini , Ebrahim Vasheghani-Farahani, Ali Heidarzadeh-Vazifekhoran, S. Abbas Shojaosadati, Ramin Karimzadeh, Kianoush Khosravi Darani, Statistical media optimization for growth and PHB production from Methanol by a methylotrophic bacterium, *Bioresource Technology* 100, **2009**, 2436-2443
24. Zahra Beagom Mokhtari-Hosseini, Ebrahim Vasheghani-Farahani, Seyed Abbas Shojaosadati, Ramin Karimzadeh, Effect of feed composition on PHB production from methanol by HCDC of *Methylobacterium extorquens* (DSMZ 1340) *J. Chem Technol Biothechnol* 2009; 84: 1136-1139
25. Ramin Karimzadeh, Hamid Reza Godini, Mohammad Ghashghaei, Flowsheeting of steam cracking furnaces, *Chemical engineering research and design*, 87, **2009**, 36-46

26. B. Asgharpour, R. Karimzadeh, M.R. Omidkhah, Performance of data reconciliation on olefin reactor parameters using least square, Cauchy and M-estimator, *Chemistry and Chemical Engineering J.* 27(3), 1378, 41-60 (Language in Persian)
27. Ramin Karimzadeh, Mohammad Ghashghaee and Mohsen Nouri, Effect of Solvent Dearomatization and Operating Conditions in Steam Pyrolysis of a Heavy Feedstock, *Energy & Fuels* **2010**, 24, 1899–1907
28. Maryam Borghei , Ramin Karimzadeh , Alimorad Rashidi , Nosrat Izadi , Kinetics of methane decomposition to CO_x-free hydrogen and carbon nanofiber over Ni-Cu/MgO catalyst, *International journal of hydrogen energy* 35, **2010**, 9479-9488
29. H. R. Godini, H. Arellano-Garcia, M. Omidkhah, R. Karimzadeh, and G. Wozny Model-Based Analysis of Reactor Feeding Policies for Methane Oxidative Coupling, *Ind. Eng. Chem. Res.* **2010**, 49, 3544–3552
30. Mohammad Ghashghaee, Ramin Karimzadeh, Evolutionary model for computation of pore-size distribution in microporous solids of cylindrical pore structure, *Microporous and Mesoporous Materials* 138, **2011**, 22–31
31. Mohammad Ghashghaee, Ramin Karimzadeh, Multivariable optimization of thermal cracking severity, *Chem. Eng. Res. Des.* 89 (**2011**) 1067–1077
32. Nazi Rahimi, Ramin Karimzadeh, Catalytic cracking of hydrocarbons over Modified ZSM-5 Zeolites to produce light olefins: a review, *Applied Catalysis A: General* 398 (**2011**) 1–17
33. Reza Asgharzadeh Shishavan, Mohammad Ghashghaee, Ramin Karimzadeh, Investigation of kinetics and cracked oil structural changes in thermal cracking of Iranian vacuum residues, *Fuel Processing Technology* , 92 (**2011**) 2226–2234
34. Seyed Mahdi Jazayeri, Ramin Karimzadeh, Experimental Investigation of Initial Coke Formation over Stainless Steel, Chromium, and Iron in Thermal Cracking of Ethane with Hydrogen Sulfide as an Additive, *Energy & Fuels*, **25** (**2011**), 4235-4247
35. Nosrat Izadia; Alimorad Rashidia; Maryam Borgheib; Ramin Karimzadehb; Atefe Tofigha, Synthesis of carbon nanofibres over nanoporous Ni-MgO catalyst: influence of the bimetallic Ni-(Cu, Co, Mo) MgO catalysts, *Journal of Experimental Nanoscience*, Vol. 7, No. 2, March–April 2012, 160-173

36. Elham S. Moosavi, Seyed A. Dastgheib, Ramin Karimzadeh, Adsorption of Thiophenic Compounds from Model Diesel Fuel Using Copper and Nickel Impregnated Activated Carbons, *Energies*; 5, 2012, 4233-4250
37. Ali Reza Miroliaei, Farhad Shahraki, Hossein Atashi, Ramin Karimzadeh, Comparison of CFD results and experimental data in a fixed bed Fischer-Tropsch synthesis reactor, *Journal of Industrial and Engineering Chemistry* 18 (2012) 1912-1920
38. S. Abbasi Aliabadi, R. Karimzadeh, M. Ghashghaee, R. Asgharzadeh, The effect of operation conditions and feedstock on sulfur content of liquid product of thermal cracking of vacuum residue and kinetic modeling of sulfur compounds reactions, *Pajooresh Naft*, 22(70) 1391, 3-21 (language in Persian)
39. Mohammad Ghashghaee, Ramin Karimzadeh, Applicability of protolytic mechanism to steady-state heterogeneous dehydrogenation of ethane revisited, *Microporous and Mesoporous Materials* 170 (2013) 318-330
40. Abbas Mohammadi, Mohammadreza Omidkhah, Ramin Karimzadeh, Ali Haghtalab, Structural modeling of petroleum fractions based on mixture viscosity and Watson K factor Korean J. Chem. Eng. 30(2), (2013) 465-473
41. Nazi Rahimi, Ramin Karimzadeh, A Mathematical Procedure for Deriving Overall Rate Equations Based on the Theory of Complex Reactions: Application to Analysis of Catalytic Cracking of n-Butane over Zeolites, *Chemical Engineering Science* 93 (2013) 326-340
42. Moein Jafari Fesharaki, Mohammad Ghashghaee, Ramin Karimzadeh, Comparison of four nanoporous catalysts in thermocatalytic upgrading of vacuum residue *J. Anal. Appl. Pyrolysis* 102(2013) 97-102
43. Kafi Nazanin, Haghighi Asl Ali, Karimzadeh Ramin, Modeling of catalytic coke formation rate in thermal cracking of ethane with H₂S, *Iranian Chemical Engineering Journal* 11, 64 (2013) 75-84 (Persian Language)
44. Meysam Hajheidari, Mohammad Ghashghaee, Ramin Karimzadeh, Olefins production from LPG via dehydrogenative cracking over three ZSM-5 catalysts, *Journal of Scientific & Industrial Research*, 72, December(2013), 760-766
45. Nazi Rahimi, Ramin Karimzadeh, Seyed Mahdi Jazayeri, Kamran Danaie Nia, An empirical investigation of the influence of sulfur additives on the catalytic rate

- of coke deposition and CO formation in the steam cracking of LPG over Incoloy 600 and stainless steel, *Chemical Engineering Journal*, 238 (2014) 210-218
46. S. M. Jazayeri, R Karimzadeh, A Surface Kinetic Model for Coke Deposition Over Stainless Steel, Chromium, and Iron During Ethane Pyrolysis, *Petroleum Science and Technology*, 32(7)(2014), 821-829
 47. Elham S. Moosavi, Ramin Karimzadeh, Seyed Abbas Ahmadi, 4,6-Dimethylbenzothiophene adsorption by activated carbon fiber, *International Journal of Chemical and Environmental Engineering*, April 2004, Volume 5, No.2, pp. 76-78
 48. Sajad Bahramian, Ramin Karimzadeh, Olefin Unit Modeling by Shortcut Equations, (Persian Language), *Iranian Chemical Engineering Journal*, 13(76) 2015,23-32
 49. Elham S. Moosavi, Nader Rezaei and Ramin Karimzadeh, Numerical Computer Algorithm for Pore Size Distribution Analysis of Activated Carbons Based on Local Density Functional Theory, *THE CANADIAN JOURNAL OF CHEMICAL ENGINEERING*, Vol. 92, October 2014, 1739-1748
 50. Nazi Rahimi, Ramin Karimzadeh, Journal of Analytical and Applied Pyrolysis, Kinetic modeling of catalytic cracking of C4 alkanes over La/HZSM-5 catalysts in light olefin production, 115(2015) 242-254
 51. Bijan Barghi, Ramin Karimzadeh, Kinetic modeling based on complex reaction theory for n-butane catalytic cracking over HZSM-5 Reac Kinet Mech Cat (2015) 116:507–522
 52. Leyla Vafi, Ramin Karimzadeh, Effect of phosphorus on methane production in LPG catalytic cracking over modified-structure ZSM-5, *Journal of Natural Gas Science and Engineering* 27 (2015) 751 -756
 53. Elham Sadat Moosavi, Ramin Karimzadeh, Adsorption of Thiophenic Compounds by OFG-Tailored Fiber and Activated Carbons, *Separation Science and Technology*, 50: 1940–1951, 2015
 54. A novel method for enhancing the stability of ZSM-5 zeolites used for catalytic cracking of LPG: Catalyst modification by dealumination and subsequent silicon loading, *Chinese Journal of Catalysis*, 37(2016),628–635
 55. Leyla Vafi, Ramin Karimzadeh, LPG catalytic cracking over the modified ZSM-5 by activated carbon and carbon nanotube templates: Synthesis, morphology and performance of catalysts, *Journal of Natural Gas Science and Engineering* 32 (2016) 1-9

56. N. Rahimi, D. Moradi, M. Sheibak, E. Moosavi, R. Karimzadeh The influence of modification methods on the catalytic cracking of LPG, over lanthanum and phosphorus modified HZSM-5 catalysts, *Microporous and Mesoporous Materials* 234 (2016) 215-223
57. Masoume Rostami, Masoud Mofarahi, Ramin Karimzadeh, Davoud Abedi, Preparation and Characterization of Activated Carbon –Zeolite Composite for Gas Adsorption Separation of CO₂/N₂ System, *Chemical Engineering Data*
58. *Bijan Barghi, Ramin Karimzadeh*, Modeling of ZnZSM-5 deactivation during liquefied petroleum gas catalytic cracking in the presence of steam, *Reac Kinet Mech Cat*, 2016,120:753-773
59. Reza Khoshbin, Ramin Karimzadeh, The beneficial use of ultrasound in free template synthesis of nanostructured ZSM-5 zeolite from rice husk ash used in catalytic cracking of light naphtha: Effect of irradiation power, *Advanced Powder Technology*, 28 (2017) 973–982
60. Reza Khoshbin, Ramin Karimzadeh, Synthesis of mesoporous ZSM-5 from rice husk ash with ultrasound assisted alkali-treatment method used in catalytic cracking of light naphtha, *Advanced Powder Technology*, 28 (2017) 1888–1897
61. Reza Khoshbin, Ramin Karimzadeh, Thermodynamic Analysis of Thermal Cracking of Ethane for Light Olefins Production, *J. of fuel and combustion*, No. 2,1394, 59-69 (Persian language)
62. Roya Pouria, Leyla Vafi, Ramin Karimzadeh, Propane catalytic cracking on pretreated La-ZSM-5 zeolite during calcination for light olefins production, *JOURNAL OF RARE EARTHS*, Vol. 35, No. 6, Jun. 2017, 542-550
63. Sareh Asadi, Leyla Vafi, Ramin Karimzadeh, Catalytic cracking of propane over impregnated mesoporous ZSM-5: A strategy to change product distribution by sequential modification, *Microporous and Mesoporous Materials* 255 (2018) 253-260
64. Shima oruji, Reza Khoshbin and Ramin Karimzadeh, Thermodynamic Modeling of Gasoline Production Process through Thermal Cracking of Heavy Hydrocarbons, *J. of fuel and combustion*, No. 1,1396, 75-85 (Persian language)
65. Ravandi Reza, Khoshbin Reza, Karimzadeh Ramin, Synthesis of free template ZSM-5 catalyst from rice husk ash and co-modified with lanthanum and phosphorous for catalytic cracking of naphtha, *Journal of Porous Matreial*

66. Alamdari Amin, Karimzadeh Ramin, Faradaic number as a criterion for the promotion effect of external electric field on heterogeneous oxidative cracking of liquefied petroleum gas on ZSM-5 supported catalyst, Reaction Kinetics, Mechanisms and Catalysis
67. Alamdari Amin, Karimzadeh Ramin, Statistical optimization using central composite design for the oxidative dehydrogenation process of LPG fuel on Fe/HZSM-5 in the presence of external electric field, J. of fuel and combustion, No. 2,1396, 93-112 (Persian language)
68. Abbasizadeh Saeed, Karimzadeh Ramin, Effects of cobalt in activity reduction of close aluminums in the HZSM-5 framework and its role in enhancing light olefins production in Catalytic cracking of LPG fuel J. of fuel and combustion, No. 2,1396, 41-52 (Persian language)
69. Moradi Milad, Karimzadeh Ramin, Moosavi Elham Sadat, Modified and ion exchanged clinoptilolite for the adsorptive removal of sulfur compounds in a model fuel: New adsorbents for desulfurization, Fuel 217 (2018) 467–477
70. Mitra Akhtari Zavareha., Ahmed Aly Daa Mohammed Sarhan, Ramin Karimzadeh, Ramesh Singh Al/ Kuldip Singh, Analysis of corrosion protection behavior of Al₂O₃-TiO₂ oxide ceramic coating on carbon steel pipes for petroleum industry. Ceramics International 44 (2018) 5967–5975
71. Saeed Abbasizadeh, Ramin Karimzadeh, Effect of framework single and close (pairs and un-pairs) aluminum atoms on phosphorous modification of HZSM-5 in cracking of liquefied petroleum gas to ethylene and propylene, Microporous and Mesoporous Materials 266 (2018) 132–140
72. Mitra Akhtari Zavareh, Ehsan Doustmohamadi, Ahmed Sarhan, Ramin Karimzadeh, Pooria Moozarm Nia, Ramesh Singh Al/Kulpid Singh, Ceramics International, (2018)
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74. Abedi Mohammad Ali, Karimzadeh Ramin, Abbasizadeh Saeed, Desulfurizing a model fuel using γ -Al₂O₃ and Ni/ γ -Al₂O₃ adsorbents and determining their corresponding isotherms, No. 3,1396, 51-64 (Persian language)
75. Elham sadat Moosavi, Mahtab Gharibi, Ramin Karimzadeh, Behnaz Asbaghi, Soulmaz Sayedshahabi, Sina Alizad, Majid Zare “Asphaltene free Fraction Production of Olefin Pyrolysis Fuel Oil by Combination of Chemical–Physical Methods” Journal of Chemical and Petroleum

Proceedings:

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2. J. Towfighi, H. Nazari, R. Karimzadeh, "Simulation of Light Hydrocarbons Pyrolysis Using RadicalMechanism", APCCHE / CHEMECA 93, , 1993, Melbourne, Australia
3. M.M. Akbarnejad, Towfighi J., Sharifi H., R. Karimzadeh , "Design and Build up a FCC pilot and Simulation of FCC Unit of Abadan Refinery ", 8th Congress of Oil, Gas and Petrochemical, 1997, Theran,
4. J. Towfighi, S. Kavakebi, R. Karimzadeh, "Optimal Control of Thermal Cracking Reactors", 2nd NationalCongress of Chemical Engineering, 1997, Theran,
5. H. Aghaei, J.Towfighi, R. Karimzadeh, "Investigation of Conversion ReductionIn Shiraz Petrochemical Complex Lime Kilns", 2 ed International and 8 th NationalCongress of Chemistry & Chemical Engineering, 1997, Kerman,
6. J.Towfighi, R.Karimzadeh, M. Keshavarz, "Computer Generation of Reaction Schemese for Thermal Cracking of Hydrocarbons", Proceeding of Third National Congress Chemical Eng., 1998, P. 284, Ahvaz.
7. J. Towfighi and R. Karimzadeh, "Modeling and Simulation of Thermal Cracking of Heavy Hydrocarbons with Radical Mechanism", Proceeding of Third National Congress Chemical Eng., 1998, P. 809, Ahvaz.
8. M. Sadrameli, H. Zahmatkesh, J.Towfighi, R. Karimzadeh, "Process Design of Amir Kabir Olefin Palnt", Proceeding of Olefin Congress, 1999, Tehran.
9. J. Towfighi, A. Niaei, R. Karimzadeh "Inhibition of Coke Formation in Thermal Cracking of Hydrocarbons", Proceeding of 4th National Congress of Chemical Eng., 1999, P.326-331, Tehran
10. J. Towfighi, A. Niaei, R. Karimzadeh, "Coke Formation and the Role of Inhibitors on Coke Reduction", Proceeding of Olefin Congress,1999, Tehran,
11. J. Towfighi, A. Niaei, M. Sadrameli, R. Karimzadeh, "The combined simulation of Reaction Kinetics and Radiant Box in Industrial Naphtha Crackers", The 13th International Symposium in Transport Phenomena ,Victoria, Canada, 14-18 July, 2002
12. J. Towfighi, A. Niaei, R. Karimzadeh, G. Saedi, S. Hoseini " Modeling and Simulation of the Pyrolysis Reactions and Coke Deposition in Industrial

Thane Cracker" 15th International Congress of Chemical and Process Engineering, 25-29 Aug 2002, Praha, Czech Republic.

13. J. Towfighi, A. Niaei, R. Karimzadeh, " Simulation of the Pyrolysis Reactions and Coke Deposition in Industrial LPG Cracking Furnaces" 9th APPCCHE Congress and CHEMECA 2002, Newsland
14. J. Towfighi, R. Karimzadeh, M. Sadrameli, A. Niaei, M. Mofarahi, B. Mokhtarani, G. Saedi, S. Hoseini, " SHAHAB-PC Software for Simulation of Steam Cracking Furnaces (Ethane-Naphtha) ", 7th National Iranian Chemical Engineering Congress, University of Tehran, 28-31 October, 2002
15. R. Karimzadeh, J. Towfighi, H. Zimmermann " Modeling and Simulation of Naphtha in a Reactor Consisting of a Tube Equipped with a Ceramic Rod ", 7th National Iranian Chemical Engineering Congress, University of Tehran, 28-31 October, 2002
16. J. Towfighi, A. Niaei, R. Karimzadeh " Investigation of the Pyrolysis Reactions of LPG and Coke Formation in Industrial Crackers", 7th National Iranian Chemical Engineering Congress, University of Tehran, 28-31 October, 2002
17. R. Karimzadeh, J. Towfighi, H. Zimmermann. Using ceramic rod to increase ethylene and propylene yields of steam cracking of Naphtha. 8th National Iranian Chemical Engineering Congress, University of Mashad, 22-24 October, 2003
18. J. Towfighi, A. Niaei, R. Karimzadeh. Investigation the cocracking of C4-Cut raffinate and naphtha in industrial cracker(Tabriz Petrochemical Co.) . 8th National Iranian Chemical Engineering Congress, University of Mashad, 22-24 October, 2003
19. J. Towfighi, M. Alizadeh, R. Karimzadeh. Modeling of catalytic coke in steam cracking furnaces. 8th National Iranian Chemical Engineering Congress, University of Mashad, 22-24 October, 2003
20. R. Karimzadeh, J. Towfighi, H. Zimmermann., Steam cracking of naphtha in a novel reactor. 8th National Iranian Chemical Engineering Congress, University of Mashad, 22-24 October, 2003
21. M. Khoshtinat, J. Towfighi, R. Karimzadeh, M. Dehghani ,Kinetics of Deactivation of the Catalyst Cu/ZnO/Al₂O₃ in steam reforming of Methanol, 9th Congress of Iranian Chemical Engineering, Nov. 2004, Elm-Sanat University
22. Hematian, R. Karimzadeh, M. Omidkhah, Effect of Coil Configuration on Performance of Steam Cracking Reactors. 10th Iranian Chemical Engineering Congress, 2005, Sistan Baluchestan University, Zahedan, Iran

23. M. Gharanjic, F. Shahraki, R. Karimzadeh, Modeling and Simulation of Steam Reforming Reactors in Tehran Refinery. 10th Iranian Chemical Engineering Congress, 2005, Sistan Baluchestan University, Zahedan, Iran.
24. N. Sahebamei, R. Karimzadeh, Severity Control of Steam Cracking Reactors, 10th Iranian Chemical Engineering Congress, 2005, Sistan Baluchestan University, Zahedan, Iran.
25. Mehdi Leali, Ramin Karimzadeh, Optimization of Operating Condition of Thermal Cracking of Propane and Propylene, 11th National Congress of Iranian Chemical Engineering, Tarbiat Modares University, Tehran, 7-9 Azar 1385
26. Nadia Sahebamee, Ramin Karimzadeh, Severity Control in Reactor of Thermal Cracking of Propane, 11th National Congress of Iranian Chemical Engineering, Tarbiat Modares University, Tehran, 7-9 Azar 1385
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