

Curriculum Vitae



I. Personal Information:

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II. Publications:

a. ISI Journal Publications:

[1] ***D. Iranshahi***, E. Pourazadi, K. Paymooni, M.R. Rahimpour, *A novel dynamic membrane reactor concept with radial-flow pattern for reacting material and axial-flow pattern for sweeping gas in catalytic naphtha reformers*, ***AIChE Journal***, 58 (2012) 1230-1247.

Impact Factor: 2.261

[2] M.R. Rahimpour, ***D. Iranshahi***, E. Pourazadi, K. Paymooni, A.M. Bahmanpour, *The aromatic enhancement in the axial-flow spherical packed-bed membrane naphtha reformers in the presence of catalyst deactivation*, ***AIChE Journal***, 57 (2011) 3182-3198.

Impact Factor: 2.261

[3] ***D. Iranshahi***, A.M. Bahmanpour, E. Pourazadi, M.R. Rahimpour, *A comparative study on optimised and non-optimised axial flow, spherical reactors in naphtha*

reforming process, *Canadian Journal of Chemical Engineering*, 90 (2012) 1102-1111.

Impact Factor: 0.748

[4] **D. Iranshahi**, E. Pourazadi, K. Paymooni, M.R. Rahimpour, A. Jahanmiri, B. Moghtaderi, A dynamic membrane reactor concept for naphtha reforming, considering radial-flow patterns for both sweeping gas and reacting materials, *Chemical Engineering Journal*, 178 (2011) 264-275.

Impact Factor: 3.461

[5] **D. Iranshahi**, R. Rafiei, M. Jafari, S. Amiri, M. Karimi, M.R. Rahimpour, Applying New Kinetic and Deactivation Models in Simulation of a Novel Thermally Coupled Reactor in Continuous Catalytic Regenerative Naphtha Process, *Chemical Engineering Journal*, 229 (2013) 153-176.

Impact Factor: 3.461

[6] **D. Iranshahi**, E. Pourazadi, K. Paymooni, M.R. Rahimpour, Utilizing DE optimization approach to boost hydrogen and octane number in a novel radial-flow assisted membrane naphtha reactor, *Chemical Engineering Science*, 68 (2012) 236-249.

Impact Factor: 2.431

[7] **D. Iranshahi**, S. Amiri, M. Karimi, R. Rafiei, M. Jafari, M.R. Rahimpour, Modeling and Simulation of a Novel Membrane Reactor in Continuous Catalytic Regenerative (CCR) Naphtha Reformer Accompanied with Detailed Description of Kinetic, *Energy & Fuels*, (2013).

Impact Factor: 2.721

[8] M.R. Rahimpour, **D. Iranshahi**, E. Pourazadi, K. Paymooni, Evaluation of optimum design parameters and operating conditions of axial- and radial-flow tubular naphtha reforming reactors, using the differential evolution method, considering catalyst deactivation, *Energy and Fuels*, 25 (2011) 762-772.

Impact Factor: 2.721

[9] **D. Iranshahi**, M.R. Rahimpour, K. Paymooni, E. Pourazadi, Utilizing DE optimization approach to boost hydrogen and octane number, through a combination of radial-flow spherical and tubular membrane reactors in catalytic naphtha reformers, *Fuel*, (2013).

Impact Factor: 2.721

[10] M.R. Rahimpour, **D. Iranshahi**, E. Pourazadi, A.M. Bahmanpour, Boosting the gasoline octane number in thermally coupled naphtha reforming heat exchanger reactor using de optimization technique, *Fuel*, (2012).

Impact Factor: 3.602

[11] M.R. Rahimpour, ***D. Iranshahi***, K. Paymooni, E. Pourazadi, *Enhancement in research octane number and hydrogen production via dynamic optimization of a novel spherical axial-flow membrane Naphtha reformer*, ***Industrial and Engineering Chemistry Research***, 51 (2012) 398-409.
Impact Factor: 2.237

[12] ***D. Iranshahi***, A.M. Bahmanpour, K. Paymooni, M.R. Rahimpour, A. Shariati, *Simultaneous hydrogen and aromatics enhancement by obtaining optimum temperature profile and hydrogen removal in naphtha reforming process; A novel theoretical study*, ***International Journal of Hydrogen Energy***, 36 (2011) 8316-8326.
Impact Factor: 4.054

[13] ***D. Iranshahi***, A.M. Bahmanpour, E. Pourazadi, M.R. Rahimpour, *Mathematical modeling of a multi-stage naphtha reforming process using novel thermally coupled recuperative reactors to enhance aromatic production*, ***International Journal of Hydrogen Energy***, 35 (2010) 10984-10993.
Impact Factor: 4.054

[14] ***D. Iranshahi***, M. Jafari, R. Rafiei, M. Karimi, S. Amiri, M.R. Rahimpour, *Optimal design of a radial-flow membrane reactor as a novel configuration for continuous catalytic regenerative naphtha reforming process considering a detailed kinetic model*, ***International Journal of Hydrogen Energy***, 38 (2013) 8384-8399.
Impact Factor: 4.054

[15] ***D. Iranshahi***, E. Pourazadi, A.M. Bahmanpour, M.R. Rahimpour, *A comparison of two different flow types on performance of a thermally coupled recuperative reactor containing naphtha reforming process and hydrogenation of nitrobenzene*, ***International Journal of Hydrogen Energy***, 36 (2011) 3483-3495.
Impact Factor: 4.054

[16] ***D. Iranshahi***, E. Pourazadi, K. Paymooni, A.M. Bahmanpour, M.R. Rahimpour, A. Shariati, *Modeling of an axial flow, spherical packed-bed reactor for naphtha reforming process in the presence of the catalyst deactivation*, ***International Journal of Hydrogen Energy***, 35 (2010) 12784-12799.
Impact Factor: 4.054

[17] ***D. Iranshahi***, E. Pourazadi, K. Paymooni, M.R. Rahimpour, *Enhancement of aromatic production in naphtha reforming process by simultaneous operation of isothermal and adiabatic reactors*, ***International Journal of Hydrogen Energy***, 36 (2011) 2076-2085.
Impact Factor: 4.054

[18] ***D. Iranshahi***, M.R. Rahimpour, A. Asgari, *A novel dynamic radial-flow, spherical-bed reactor concept for naphtha reforming in the presence of catalyst deactivation*, ***International Journal of Hydrogen Energy***, 35 (2010) 6261-6275.

Impact Factor: 4.054

[19] M.R. Rahimpour, **D. Iranshahi**, A.M. Bahmanpour, *Dynamic optimization of a multi-stage spherical, radial flow reactor for the naphtha reforming process in the presence of catalyst deactivation using differential evolution (DE) method*, ***International Journal of Hydrogen Energy***, 35 (2010) 7498-7511.

Impact Factor: 4.054

[20] M.R. Rahimpour, **D. Iranshahi**, E. Pourazadi, A.M. Bahmanpour, *A comparative study on a novel combination of spherical and membrane tubular reactors of the catalytic naphtha reforming process*, ***International Journal of Hydrogen Energy***, 36 (2011) 505-517.

Impact Factor: 4.054

[21] **D. Iranshahi**, K. Paymooni, A. Goosheneshin, M. Rahimpour, *Hydrogen and octane boosting through a novel configuration consists of isothermal and membrane naphtha reforming reactors- A comparative study*, ***Petroleum and Coal***, 54 (2012) 157-173.

Impact Factor: - , ISSN: 13377027

[22] M. Arabpour, M.R. Rahimpour, **D. Iranshahi**, S. Raeissi, *Evaluation of maximum gasoline production of Fischer-Tropsch synthesis reactions in GTL technology: a discretized approach*, ***Journal of Natural Gas Science & Engineering***, 9 (2012) 209-219.

Impact Factor: - , ISSN: 18755100

[23] M.R. Rahimpour, M. Arabpour, **D. Iranshahi**, S. Raeissi, *Utilization of cyclohexanol dehydrogenation in a novel thermally coupled reactor for Fischer-Tropsch synthesis in gas to liquid technology*, ***Journal of Natural Gas Science and Engineering***, 9 (2012) 138-148.

Impact Factor: - , ISSN: 18755100

[24] M.R. Rahimpour, M.R. Dehnavi, F. Allahgholipour, **D. Iranshahi**, S.M. Jokar, *Assessment and comparison of different catalytic coupling exothermic and endothermic reactions: A review*, ***Applied Energy***, 99 (2012) 496-512.

Impact Factor: 5.106

[25] M.R. Rahimpour, M. Jafari, **D. Iranshahi**, *Progress in catalytic naphtha reforming process: A review*, ***Applied Energy***, 109 (2013) 79-93.

Impact Factor: 5.106

[26] E. Pourazadi, R. Vakili, **D. Iranshahi**, A. Jahanmiri, M.R. Rahimpour, *Optimal design of a thermally coupled fluidised bed heat exchanger reactor for hydrogen*

production and octane improvement in the catalytic naphtha reformers, *Canadian Journal of Chemical Engineering*, 91 (2012) 54-65.

Impact Factor: 0.748

[27] V. Meidanshahi, A.M. Bahmanpour, ***D. Iranshahi***, M.R. Rahimpour, *Theoretical investigation of aromatics production enhancement in thermal coupling of naphtha reforming and hydrodealkylation of toluene*, *Chemical Engineering and Processing: Process Intensification*, 50 (2011) 893-903.

Impact Factor: 1.924

[28] E. Pourazadi, ***D. Iranshahi***, M.R. Rahimpour, A. Jahanmiri, *Incorporating multi-membrane tubes for simultaneous management of H₂/HC and hydrogenation of nitrobenzene to aniline in naphtha heat exchanger reactor*, *Chemical Engineering Journal*, 184 (2012) 286-297.

Impact Factor: 3.461

[29] R. Vakili, P. Setoodeh, E. Pourazadi, ***D. Iranshahi***, M.R. Rahimpour, *Utilizing differential evolution (DE) technique to optimize operating conditions of an integrated thermally coupled direct DME synthesis reactor*, *Chemical Engineering Journal*, 168 (2011) 321-332.

Impact Factor: 3.461

[30] M.R. Rahimpour, E. Pourazadi, ***D. Iranshahi***, A.M. Bahmanpour, *Methanol synthesis in a novel axial-flow, spherical packed bed reactor in the presence of catalyst deactivation*, *Chemical Engineering Research and Design*, 89 (2011) 2457-2469.

Impact Factor: 1.968

[31] R. Rafiei, S. Amiri, A. Mirvakili, ***D. Iranshahi***, M.R. Rahimpour, *Decalin Loop in an Optimized Thermally Coupled Dual Methanol Reactor Using Differential Evolution (DE) Strategy*, *Energy & Fuels*, 26 (2012) 5858-5871.

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[32] S. Amirabadi, S. Kabiri, R. Vakili, ***D. Iranshahi***, M.R. Rahimpour, *Differential Evolution Strategy for Optimization of Hydrogen Production via Coupling of Methylcyclohexane Dehydrogenation Reaction and Methanol Synthesis Process in a Thermally Coupled Double Membrane Reactor*, *Industrial and Engineering Chemistry Research*, 53 (2013) 1508-1522.

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[33] M.R. Rahimpour, R. Vakili, E. Pourazadi, A.M. Bahmanpour, ***D. Iranshahi***, *Enhancement of hydrogen production via coupling of MCH dehydrogenation reaction and methanol synthesis process by using thermally coupled heat exchanger reactor*, *International Journal of Hydrogen Energy*, 36 (2011) 3371-3383.

Impact Factor: 4.054

[34] M.R. Rahimpour, R. Vakili, E. Pourazadi, **D. Iranshahi**, K. Paymooni, *A novel integrated, thermally coupled fluidized bed configuration for catalytic naphtha reforming to enhance aromatic and hydrogen productions in refineries*, **International Journal of Hydrogen Energy**, 36 (2011) 2979-2991.
Impact Factor: 4.054

[35] A. Gooshehneshtin, R. Maleki, **D. Iranshahi**, M.R. Rahimpour, A. Jahanmiri, *Simultaneous production and utilization of methanol for methyl formate synthesis in a looped heat exchanger reactor configuration*, **Journal of Natural Gas Chemistry**, 21 (2012) 661-672.
Impact Factor: 1.348

[36] D. Iranshahi, M. Karimi, S. Amiri, M. Jafari, R. Rafiei, M.R. Rahimpour, *Modeling of naphtha reforming unit applying detailed description of kinetic in continuous catalytic regeneration process*, **Chemical Engineering Research and Design**, (2014).

[37] M. Karimi, M.R. Rahimpour, R. Rafiei, M. Jafari, D. Iranshahi, A. Shariati, *Reducing environmental problems and increasing saving energy by proposing new configuration for moving bed thermally coupled reactors*, **Journal of Natural Gas Science and Engineering**, 17 (2014) 136-150.

b. Conference Publications:

b-1: Abroad

- [1] V. Meidanshahi, A.M. Bahmanpour, M.R. Rahimpour, ***D. Iranshahi***, *Investigation of the Naphtha Reforming Process and Hydrodealkylation of Toluene In a Novel Optimized Membrane Coupled Reactor*, in: AIChE Spring Meeting and 7th Global Congress on Process Safety, 11AIChE, Chicago, IL, 2011.
- [2] M.R. Rahimpour, M.R. Gholipour, M. Shokrollahiyancheshmeh, M.R. Dehnavi, S. Amirabadi, ***D. Iranshahi***, *A novel recuperative configuration for enhancement of ethylene oxide production via integration of ethylene oxidation process and cyclohexane dehydrogenation*, in: AIChE Annual Meeting, 11AIChE, Minneapolis, MN, 2011.
- [3] M.R. Rahimpour, ***D. Iranshahi***, M.R. Dehnavy, F. Allahgholipour, *A review of techniques for the process integration of coupling exothermic and endothermic reactions*, in: AIChE Spring Meeting and 7th Global Congress on Process Safety, 11AIChE, Chicago, IL, 2011.
- [4] M.R. Rahimpour, ***D. Iranshahi***, E. Pourazadi, *Octane boosting in a membrane assisted radial flow naphtha reactor, using de optimization technique*, in: AIChE Spring Meeting and 7th Global Congress on Process Safety, 11AIChE, Chicago, IL, 2011.

b-2: Domestic-English

[1] P. Setoodeh, P. Parvasi, ***D. Iranshahi***, M. Taheri, *Simulation of a Metal Foam Heat Exchanger Using Differential Evolution (DE)*, in: 1st International Conference on Heat Exchanger application in Oil & Energy Industries, Tehran, Iran, 2009.

[2] G. Amoabedini, A. Zolfaghari, J. Malakootikhah, ***D. Iranshahi***, *Adsorption of Ni (II) Ions from Industrial Wastewater by Magnetite Nanoparticles*, in: First International Conference on "Advances in Wastewater Treatment and Reuse", Tehran University, 2010.

b-3: Domestic-Persian

[۱] راضیه رفیعی، محسن کریمی، میترا جعفری، شهرام امیری، داوود ایرانشاهی، محمدرضا رحیم پور؛ بررسی میزان افزایش آروماتیک و هیدروژن تولیدی در واکنش گرماگیر نفتا ریفرمینگ با بسترمترک، بر اثر کوپل شدن با واکنش گرمای تولید گوگرد تری اکسید؛ اولین همایش ملی کاتالیست های صنعتی؛ شیراز، ۱۳۹۱

[۲] راضیه رفیعی، شهرام امیری، میترا جعفری، محسن کریمی، داوود ایرانشاهی، محمدرضا رحیم پور، سونا رئیسی؛ بررسی میزان افزایش آروماتیک و هیدروژن تولیدی در واکنش گرماگیر نفتا ریفرمینگ با بسترمترک بر اثر کوپل شدن با واکنش گرمای تولید آنیلین؛ دومین همایش ملی نفت، گاز و پتروشیمی؛ گچساران، ۱۳۹۱

[۳] شهرام امیری، راضیه رفیعی، محسن کریمی، میترا جعفری، داوود ایرانشاهی، محمد رضا رحیم پور، سونا رئیسی؛ بکارگیری همزمان تکنولوژی غشا و مفهوم کوپلینگ واکنشهای گرمای و گرماگیر در فرآیند نفتا ریفرمینگ با احیای پیوسته کاتالیست برای افزایش میزان محصولات آروماتیکی؛ اولین همایش ملی کاتالیست های صنعتی؛ شیراز، ۱۳۹۱

[۴] میترا جعفری، محسن کریمی، راضیه رفیعی، شهرام امیری، داوود ایرانشاهی، محمدرضا رحیم پور، علیرضا شریعتی؛ مدلسازی واکنش نفتا ریفرمینگ در راکتور کاتالیستی پیوسته با جریان شعاعی؛ دومین همایش ملی نفت، گاز و پتروشیمی؛ گچساران، ۱۳۹۱

[۵] داوود ایرانشاهی؛ اثر مخرب نانو ذرات بر سلامتی، ایمنی و بهداشت محیط زیست؛ دومین کنفرانس تخصصی مهندسی محیط زیست؛ دانشگاه تهران، ۱۳۸۷

[۶] داوود ایرانشاهی، قاسم عموعابدینی، جواد ملکوتی خواه، سید احمد مرتضوی، حمیده احتسابی؛ اثرات زیست محیطی نانو ذرات؛ دومین کنفرانس تخصصی مهندسی محیط زیست؛ دانشگاه تهران، ۱۳۸۷

[۷] جواد ملکوتی خواه، قاسم عموعابدینی، داوود ایرانشاهی، سید احمد مرتضوی، محمد کاظم کوهی، حمید قنبری؛ خطرات، ریسک ها و سم شناسی نانوذرات؛ دومین کنفرانس تخصصی مهندسی محیط زیست؛ دانشگاه تهران، ۱۳۸۷

